

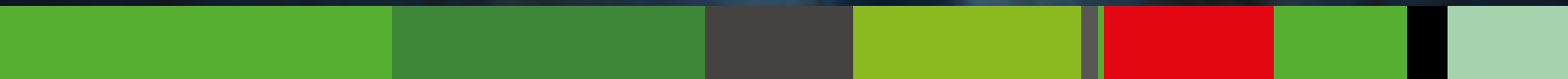
**KUKKO // Pull forward**



**FOR OVER 100 YEARS  
THE NUMBER 1 IN THE WORLD**



**THE SPECIALIST FOR NON-DESTRUCTIVE REMOVING**





# TABLE OF CONTENTS

## GUIDING PRINCIPLES



Preface .....	5
Modular system .....	6
KUKKO Original .....	8
Logistics .....	10
Sustainability .....	12
Branches .....	14
Omnipresence .....	16
Digital Support .....	18
KUKKO Live .....	20
Power of the drive .....	22
The KUKKO numbering system .....	24

## PULLING



External .....	28
Internal .....	218
Separating .....	270
Removing .....	290

## AUTOMOTIVE



Ball joint extractor .....	328
Wiper arm pullers .....	344
Hub pullers .....	350
Steering wheel pullers .....	360
Pullers for camshaft gears .....	364
Cylinder extractors .....	368
Other automotive tools .....	376

## CUTTING & LOOSENING



Nut splitter .....	396
Drive technology .....	402
Thread repair .....	411
Disk cutters .....	412
Gasket cutters .....	413
Soft scrapers .....	414
Punching and cutting .....	415
Screw extractors .....	429
Nozzle reamer set .....	434

## PRESSING & INSERTING



Ball bearing installation .....	442
Press frames for silent bushes .....	445
Hydraulic kingpin press .....	446

## GRIPPING & HOLDING



Clamp jaws .....	453
All-steel screw clamps .....	457
Malleable cast iron screw clamps .....	463
Pole screw clamps .....	472
C-Clamps .....	473
Clamps .....	474
Vises .....	479
Flange spreaders .....	480
Universal spreaders .....	481
Pliers .....	481
Tool holder .....	487
Riveting machine .....	488
Chisel holder .....	489



## SCREW & DRIVE



Watchmaker's screwdriver .....	494
Europeans .....	497
Allen keys .....	498
Screwdrivers .....	503
Strike wrenches .....	506

## SIGN & LABEL



Strike number sets .....	512
Strike letter sets .....	516
Hand stamps & type holders .....	523
Wheel stamps .....	529
Stencils .....	531
Sealing tools .....	532
Tool tags .....	535

## CHECK & MEASURE



Pneumatic test case .....	539
---------------------------	-----

## STORAGE & PRESENTATION



Boxes (empty) .....	545
Workshop trolleys .....	549
Battery charging cabinets .....	552
Tool cabinets .....	552
Wall panels .....	553
Sales walls .....	563

## HAMMERING



Soft-face hammers SELECTHOR .....	571
Soft-face hammers .....	573

## CARE & SAFETY



Straps .....	578
Safety covers .....	579
Fall protections .....	580
Special grease for spindles .....	581
Bio-multi-oil .....	582

## INDEX



Explanation of the icons .....	583
Imprint .....	587





# PREFACE

Dear business partners,

We are proud to present to you this manual, which for the first time offers a compendium of our collected knowledge on extraction. We have compiled the application areas, usage instructions, benefits, and the most important product features for over 1,000 original products. Additionally, the overarching functions for all product groups of the four extraction principles: External, Internal, Separation, and Disassembly, as well as all other activities, are explained.

The accumulated know-how from over 100 years of successful entrepreneurship is unique in its breadth of knowledge. As the inventor of the puller tool and a global solution developer, we are committed to progress and are taking a step ahead, especially in challenging times. Embedded in the K+K Swiss group headquartered in Ranzo, Switzerland, the flagship brand KUKKO benefits from the legal, financial, and economic stability of the Swiss company. This allows the procurement and logistics chains to be ensured quickly and efficiently through our three logistics centers in Europe, Asia, and the USA. At the same time, this global corporate structure provides the best conditions to engage with our worldwide customers locally and serve them with a tailored product offering.

We thank you for your trust in our premium tools and look forward to any suggestions to further develop our products and services.

Sincerely,



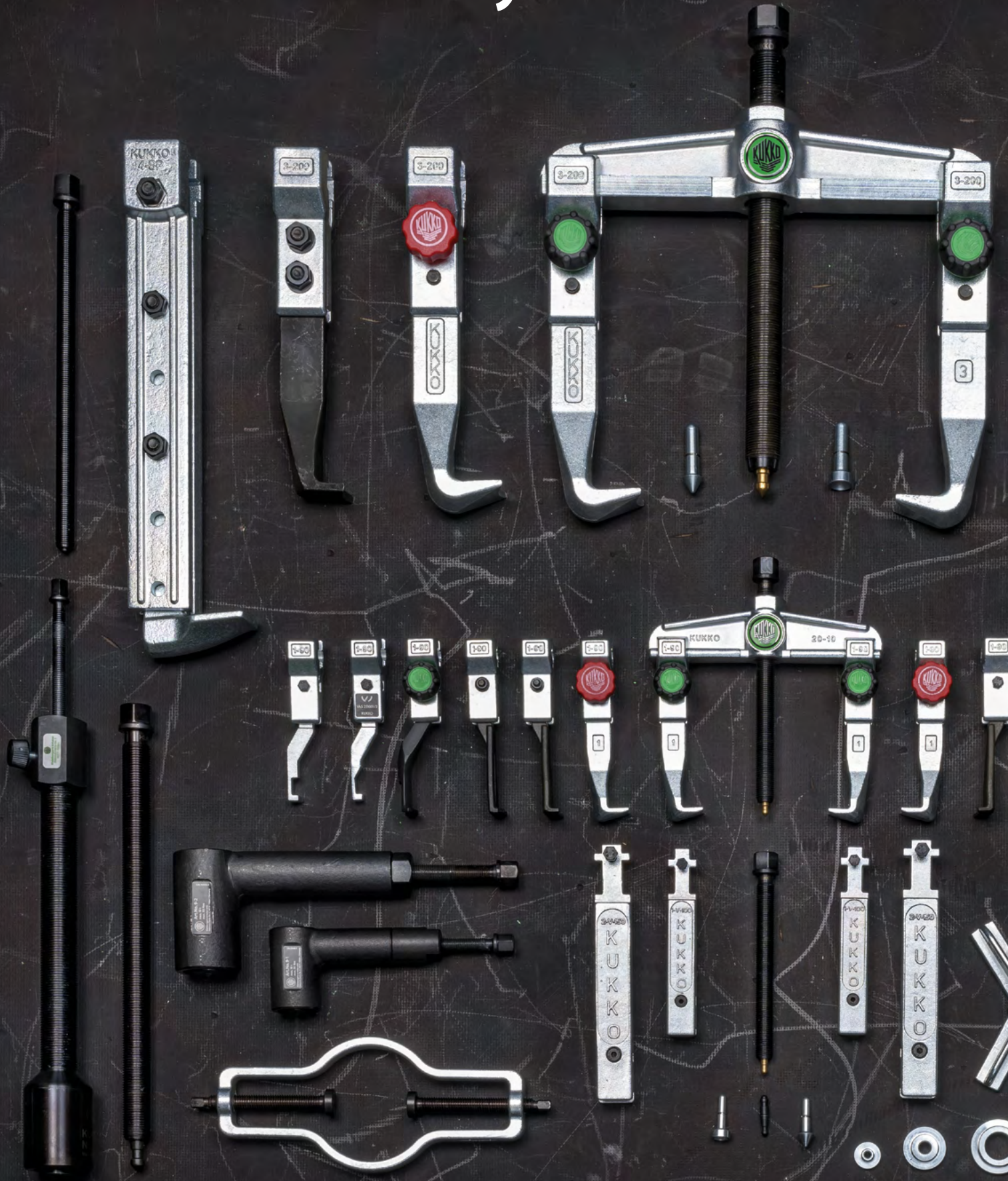
Michael Kleinbongartz  
CEO K+K Swiss AG  
Owner KUKKO oHG



Max Alfred Kleinbongartz  
Managing Director K+K Swiss AG  
Partner KUKKO oHG



# KUKKO, the inventor of the modular system





## Worldwide largest assortment diversity

As a specialist in pullers, KUKKO has made it its mission to develop the right tool for every pulling situation.

Since no pulling process is the same as another, the KUKKO range includes the most diverse pullers in various designs and sizes. Thanks to this diverse product selection, any component can be disassembled or assembled. Whether external extraction, internal extraction, separation, or disassembly – KUKKO finds the perfect solution for any challenge. And if the right puller is not immediately available for a specific requirement, it can be assembled in the form of an upgrade with just a few manual steps.

The modular system has been continuously developed throughout the entire company history and thus represents a special unique selling point.

Thanks to limitless mix & match, 150 types of pullers can be combined in 500 variants. The core is always the spindle, which gives the puller its power. Various jaw types and their extensions, 2-jaw and 3-jaw crossbars, and reversible spindle tips make the composition of the puller perfect.

The user is thus presented with nearly endless possibilities to solve their individual application case with a special or universal puller.





# The originals from KUKKO - Unique in design, function, and use







## Perfection in Form and Function

The entire tool range from KUKKO is characterized by a unique product design. From the high-quality material selection to the processing and the color choice of the KUKKO company logo, each individual product embodies the brand's typical pioneering spirit and a lot of love for detail. For over a century, even laypeople can recognize KUKKO originals at first glance. Green is the corporate color and makes all KUKKO products shine uniquely.

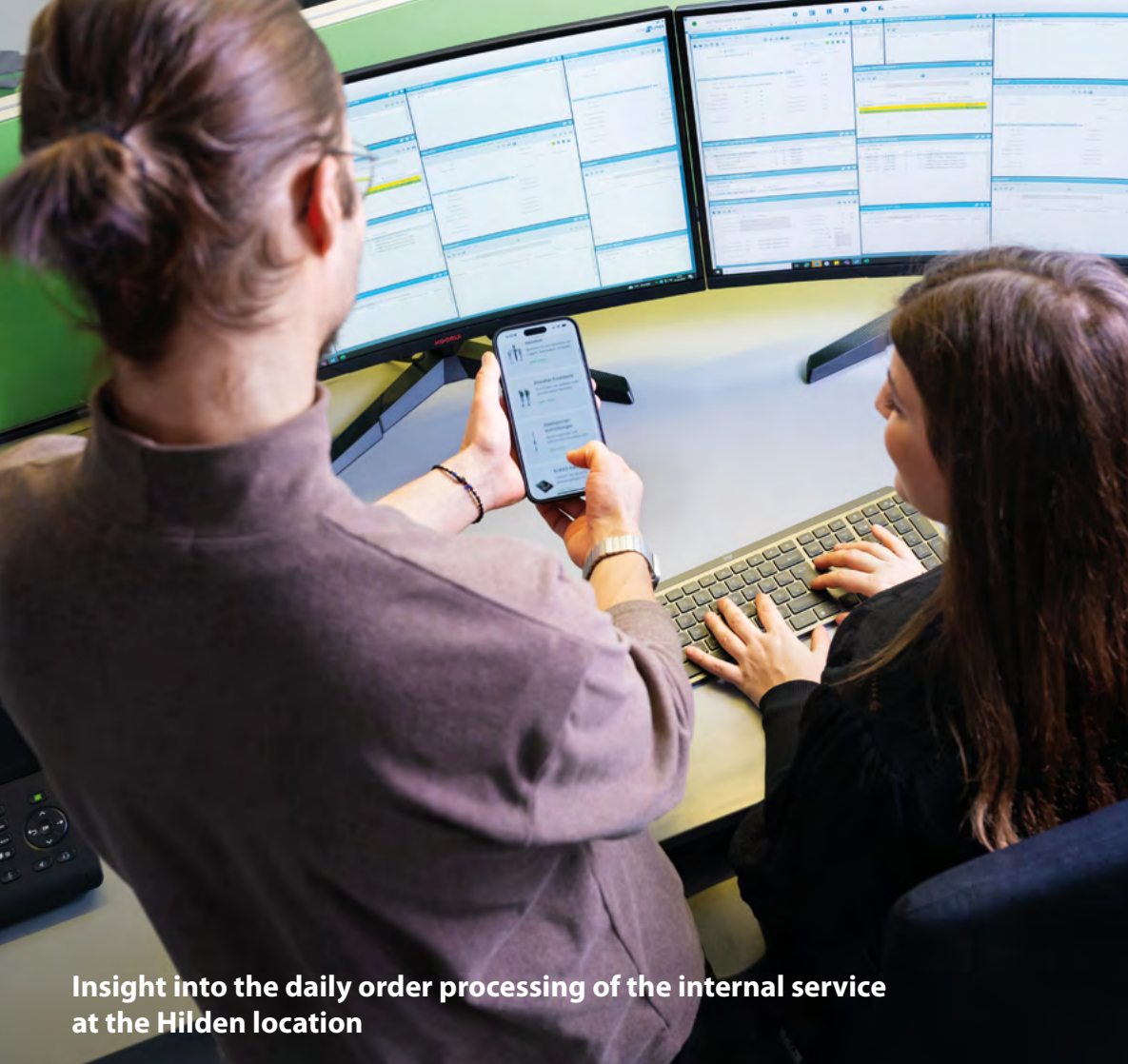
### Outstanding Originals

All KUKKO originals have been DIN EN ISO 9001 certified since 1995. This certification applies to the areas of development, manufacturing, and distribution of pullers and special tools, as well as the distribution of specialty tools. Additionally, all products are labeled with their own type plate. This labeling is a reflection of KUKKO's high sustainability promise and guarantees decades of durability. At the same time, customers can be 100% sure that they have purchased a quality product from KUKKO with this safety promise. Any form of counterfeiting or product piracy is excluded. Furthermore, registration with KUKKO can be done via the serial number to secure a lifetime support guarantee. The individual component number guarantees a quick and smooth processing of reorders or complaints.

### Ergonomics at the Highest Level

The quality tools from KUKKO also convince in terms of haptics. First-class processing and the guarantee of the highest safety standards minimize the risk of injury. The products fit ergonomically well in the hand and are characterized by outstanding user-friendliness. The label includes the following information: item number, serial number, QR code, name and address of the manufacturer, product dimensions, and the most important Technical attributes.





**Insight into the daily order processing of the internal service at the Hilden location**



**Fully automated**



**Daily shipping directly from the KUKKO headquarters in Hilden**



**Daily overnight Cologne-Bonn**





packaging of up to 500 packages per hour

# Logistics

## KUKKO takes procurement and delivery logistics to the next level

Our logistical connection to three own hubs in America, Asia, and Europe ensures complete procurement and distribution security.

The latest achievement in optimizing the entire material, procurement, and logistics flow is a fully automated packing machine. The overall control from the production side is centrally managed through the ERP system. The interface between the packing machine and ERP is organized via a socket server. Through this setup, all data (shipping, picking, hazard warnings, dimensions) is processed in real time and reported to external logistics partners and customs.

This consolidates all relevant data and information (image of the package's contents, commercial invoice, export documents) from the machine to the shipping partners. At the same time, all data is also communicated to customers and trading partners.

By significantly minimizing throughput times and error sources, the entire procurement and logistics process, including material flow, is reduced by 30% in cost and time.



shipping via the global UPS system, here at Airport.



# Sustainability is an integral part of KUKKO's DNA.

Over 100,000 bees are busy honey producers at the location of the headquarters in Hilden.



A proprietary KUKKO with a 20% saving on



Active resource conservation with a waste recovery rate of over 80%



Mission 2030:





# 100,000 diligent bees testify to the grounds of the KUKKO factory and an attested SAQ.

The multifunctional application possibilities combined with an extraordinary range of spare parts and accessories make KUKKO pullers indispensable tools for every user.

By choosing an original product from KUKKO, not only are current application cases covered, but the pullers have also been handed down to the next generation.

This form of sustainability, practiced for a century, explains why you still find pullers in workshops that have been in use for over 50 years. It's no wonder that the motto in the industry is "Once KUKKO, always KUKKO."

The sustainable value creation begins with the careful selection of raw materials. Resource-saving use of materials and products, as well as reducing energy consumption, are other important aspects.

A particular gain in ecological economics is the custom packaging cartons per shipment. This prevents oversizes and reduces shipping costs. Thanks to the complete avoidance of plastic and the exclusive use of 100% recycled filling material, KUKKO reduces its CO2 footprint by over five tons annually.

Another marker of consistent due diligence is demonstrated by the leading member organization of the automotive industry – AIAG – through the SUPPLIER ASSURANCE. KUKKO meets the globally recognized sustainability standard of the automotive industry in areas such as human rights, working conditions, occupational safety, corporate ethics, environmental, and supplier management with SAQ 5.0.

**combined heat and power plant supplies 30% of the required electricity and achieves total heating energy.**



**70% recycling rate**





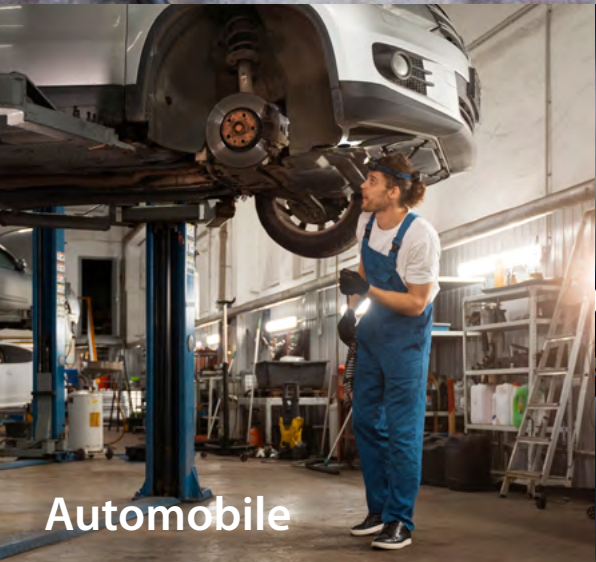
Drive Technology



Industry



Motorcycle



Automobile



Energy



Shipbuilding



Rail



Electric



Construction industry



Steel construction



Carpentry



Agriculture





**Commercial Vehicles**



**Aviation**



**Timber construction**



**Craftsmanship**

# BRANCHES

KUKKO offers solutions for all industries. Both global challenges and local requirements are addressed. The pullers from KUKKO are used in countless productions and workshops, ensuring that everything remains in motion. The range extends from large hydraulic solutions for the repair of industrial machines to precision tools for intricate tasks, such as in watchmaking.





team.polska@kukko.com



team.italia@kukko.com



team.benelux@kukko.com



team.usa@kukko.com



team.dach@kukko.com



team.asia@kukko.com



team.nordic@kukko.com



team.france@kukko.com



Inventory at the

From top left to bottom right: Waldemar Just, Vanessa Annunziata, Timo Langenberg, Greg Genevro, Jan Bartos, Yongchao Gu, Ole Schmidt, Hans-Peter Broekhuis





# Omnipresence at KUKKO

Always up-to-date,  
transparent and personal!

We at KUKKO are always here for you. With our local branches in America, Europe, and Asia, you have local contacts available worldwide.

Regardless of office hours, we offer you various digital services. Through customer-specific shares, you receive our current **price lists and product availabilities**:



Furthermore, we **provide a detailed product data sheet** for each of our over 3,000 items. These data sheets contain all product information, including technical features, technical drawings, and photos.

Our **complete catalog** with all products can be accessed via the following QR code:

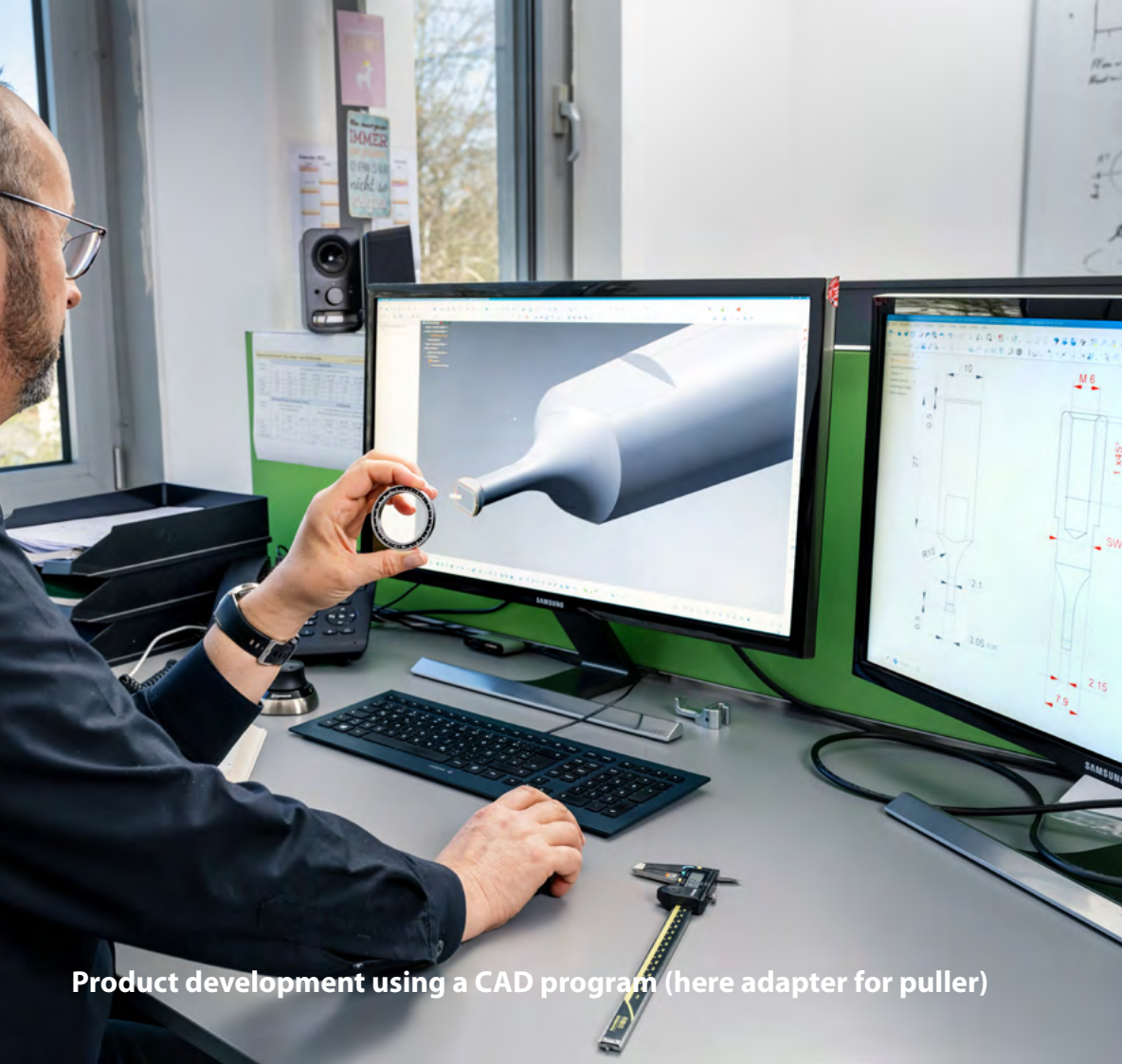


To stay up-to-date with all product news, promotions, or events, subscribe to our **newsletter** here:

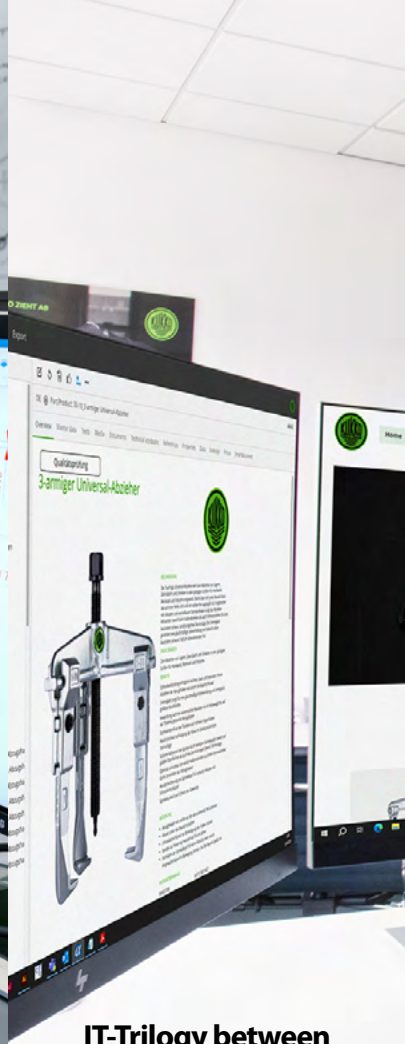


push of a button





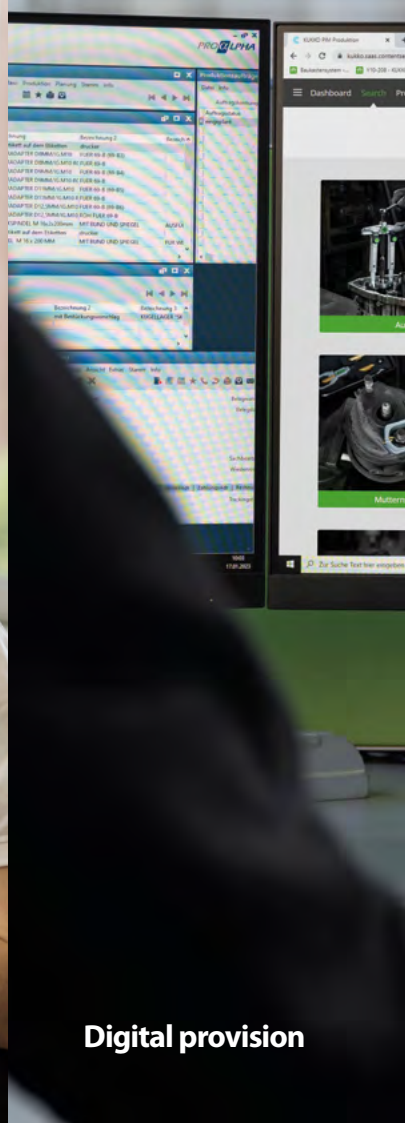
Product development using a CAD program (here adapter for puller)



IT-Trilogy between



IT-supported consulting in personal customer contact

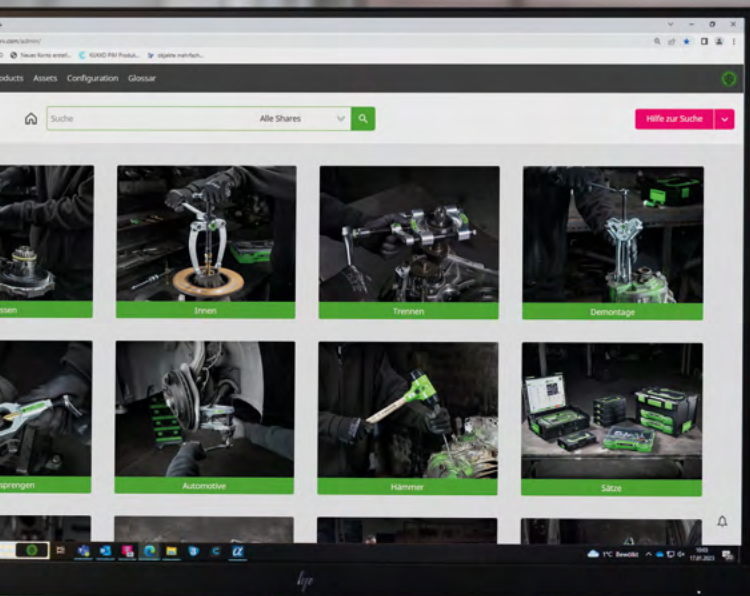


Digital provision





ERP, PIM and Website



of customer shares

# Digital Support

A consistent focus on digital process control ensures long-term corporate success

With all the passion for the production of analog pullers, KUKKO lives with a digital spirit and relies on a multimedia-oriented communication strategy. This intertwines the internal IT and its systems with the outward-visible media. The central control system is always the Enterprise Resource Planning (ERP) system. Directly connected to it is the Product Information Management (PIM) database with over 3,000 items. Both platforms feed all communicative media and touchpoints such as websites, newsletters, print media, and configurators, ensuring a continuous update of all product features.

This synchronization provides optimal support to sales in the sales process. Additionally, the centralized master data management facilitates operational handling in over 100 countries worldwide in customer support.

If you would like to benefit from our digital support, please contact the global contacts directly:







Consultation on board the demo vehicle



Order at the



Eye-catching displays to boost sales



Company-owned





**workplace in industry, workshop or in trade**



**stage on demo vehicles in global use**

# KUKKO Live

## There is no Business like Showbusiness

Driven by the spirit of the solution developer, KUKKO focuses on a user-oriented and practically tested presentation of the products.

With a fully equipped showroom in the Hildener headquarters, a spacious area is provided for the transfer of know-how, application consulting, and sales management. Both 3-D animations and demo tables serve to train existing and new trading partners and customers. Individual as well as sequential training sessions can be booked.

For mobile use at the customer's site, a company fleet of fully equipped demo vehicles is available. The mobile consultants on four wheels operate worldwide and ensure comprehensive insight into KUKKO's diverse product portfolio, regardless of spatial restrictions. Thus, customers and trading partners benefit from the exclusive know-how of the inventor of pullers, even in the smallest space.

To shine directly at the point of sale, KUKKO offers a variety of supporting POS media. These range from the smallest demo applications, through pre-ordered or individually customizable displays and sample cases, to demo vehicles and complete sales walls. Thus, a suitable sales presentation is ensured for every individual situation at the POS. And should the modularity of the POS program not meet customer-specific requests, KUKKO always finds a solution.

Any questions regarding POS activities will be gladly answered by our global contacts:





KUKKO // Pull forward

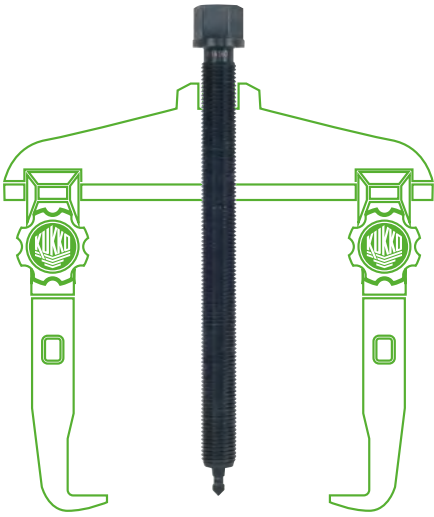


# THE POWER OF THE DRIVE





## MECHANICAL



The combination of spindle and thread guarantees a particularly precise pulling off, with the manual operation of the spindle providing a tactile control of the pulling process.

### BENEFIT:

All KUKKO spindles are made from a single piece of steel. Another special feature is the dual spindle tip - round or pointed - for processing different surfaces.



Mechanical tension  
force up to

**10 t**

## HYDRAULIC SPINDLE



Series  
8-0

Series  
8

Series  
800

Series  
8-HP

The fat-hydraulic spindles are suitable for pulling particularly tight bearings, gears, and discs with a pulling force of up to 20 t. Thanks to the integrated grease hydraulics, no external pump is required.

### BENEFIT:

Hydraulic spindles guarantee easy and controlled pulling of particularly tight parts with minimal effort.



Medium tension  
force up to

**20 t**

## OIL HYDRAULIC



Series  
YRE

Series  
YRH



Series  
YRM

Hydraulic hollow piston cylinders are used with the KUKKO hydraulic program. When used as pressure or tension cylinders, they enable force-saving, versatile work even in difficult pulling situations.

### BENEFIT:

The infinitely adjustable force guarantees controlled and safe work while utilizing the full performance potential.



Particularly high tensile  
& compressive force up to

**75 t**



# THE KUKKO NUMBERING SYSTEM

The 2-jaw and 3-jaw universal pullers with sliding, always parallel jaws of the series 20 and 30 can be combined with various types of jaws – in different lengths. For the clear assignment of pullers to the corresponding jaws, KUKKO has introduced a user-friendly and self-explanatory numbering system.

## Which jaws fit on which puller?

- On all pullers of size -1 and -10 → the jaws that start with 1- fit
- On all pullers of sizes -2 and -20 → the jaws, which start with 2- fit
- To all pullers of size -3 and -30 → the jaws that start with 3- fit
- For all pullers of sizes -4 and -40 → the pullers with 3- at the beginning also fit the jaws

## Example:

- 20-2** → has the jaws 2-150-P
- also fit: 2-151-P; 2-152-P; 2-153-P
- also fit long jaws like: 2-300-P; 2-301-P; 2-302-P; 2-303-P

# EXPLANATION OF THE NUMBERING SYSTEM

## 20-10 20-10 Size of the crossbar

The number after the dash in the item number indicates with which jaws the crossbar can be combined.

## 1-90-P

### Pulling Jaws

The item numbers of the pulling jaws begin with this number.

## 1-V-100-P

### Extensions

The item numbers of the optional extensions also start with the same number.

## -P -S

The letter at the end of the item number indicates whether it is a pair (-P) or a set (-S) for the jaws and extensions.

## 1

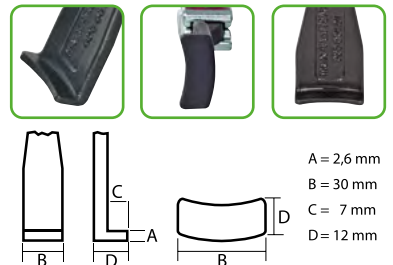
### The claw

is also marked with this number.

## Hook Types:

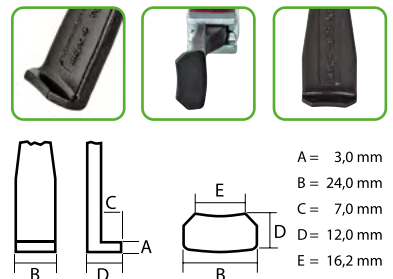
### S

### Narrow Hooks



### S-T

### Extremely narrow hooks



S-T-jaws


S-jaws



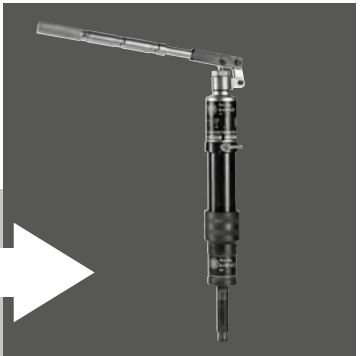
# SYSTEMATICS OF ITEM NUMBERS

## COMPATIBILITY SPINDLE AND HYDRAULIC SERIES 8-HP

The hydraulic spindles of series 8-HP carry the diameter of the thread with the last two digits of the item number, thus establishing the reference to the mechanical spindle.




<b>Item No. Spindle</b>	Spindle	Ø a mm	b mm
	6	21	170
<b>Art.No. Hydraulic spindle</b>	Hydraulic spindle with hand pump	Ø a mm	
	8-HP-6	21	



## COMPATIBILITY SPINDLE AND HYDRAULIC SERIES 8-0

The hydraulic spindles of series 8-0 carry the diameter of the thread with the last two digits of the item number, thus providing a reference to the mechanical spindle.




<b>Item No. Spindle</b>	Spindle	Ø a mm	b mm
	6	21	170
<b>Art.No. Hydraulic spindle</b>	Long hydraulic spindle	Ø a mm	
	8-0-6	21	




## COMPATIBILITY SPINDLE AND POWERNUT

All mechanical spindles and Power Nuts are equipped with a speaking item number. Both item numbers include the diameter of the thread and thus allow for a quick assignment of the matching Power Nut to the respective spindle.



<b>Item No. Spindle</b>	Spindle	Ø a mm	b mm
	6	26	300
<b>Art.No. Powernut</b>	Power nut	Ø a mm	SW mm
	67	26	46



### ABBREVIATIONS:

Ø a = thread pitch of the spindle  
b = thread length of the spindle

Ø a = thread pitch of the spindle





External extraction



Internal extraction



Separation



Removing







# PULLING

Since 1919, KUKKO has specialized in the development, manufacturing, and optimization of pullers, which continue to be the core business today.

With 150 types of pullers and 500 sizes available, the pioneer of pulling presents a unique assortment variety.

The activities of pulling include:

- External extraction
- Internal extraction
- Bearing separator
- Disassembly











# EXTERNAL EXTRACTION

During external extraction, the part to be removed, which is located on a shaft and is freely accessible from the outside, is grasped with the jaws from the outside. By tightening the spindle, the component is fixed. Subsequently, the hexagon at the spindle head is activated with an actuation tool until the component is released.





KUKKO // Pull forward



SERIES 20 | 30 | 11

# UNIVERSAL PULLER





# DEPLOYMENT

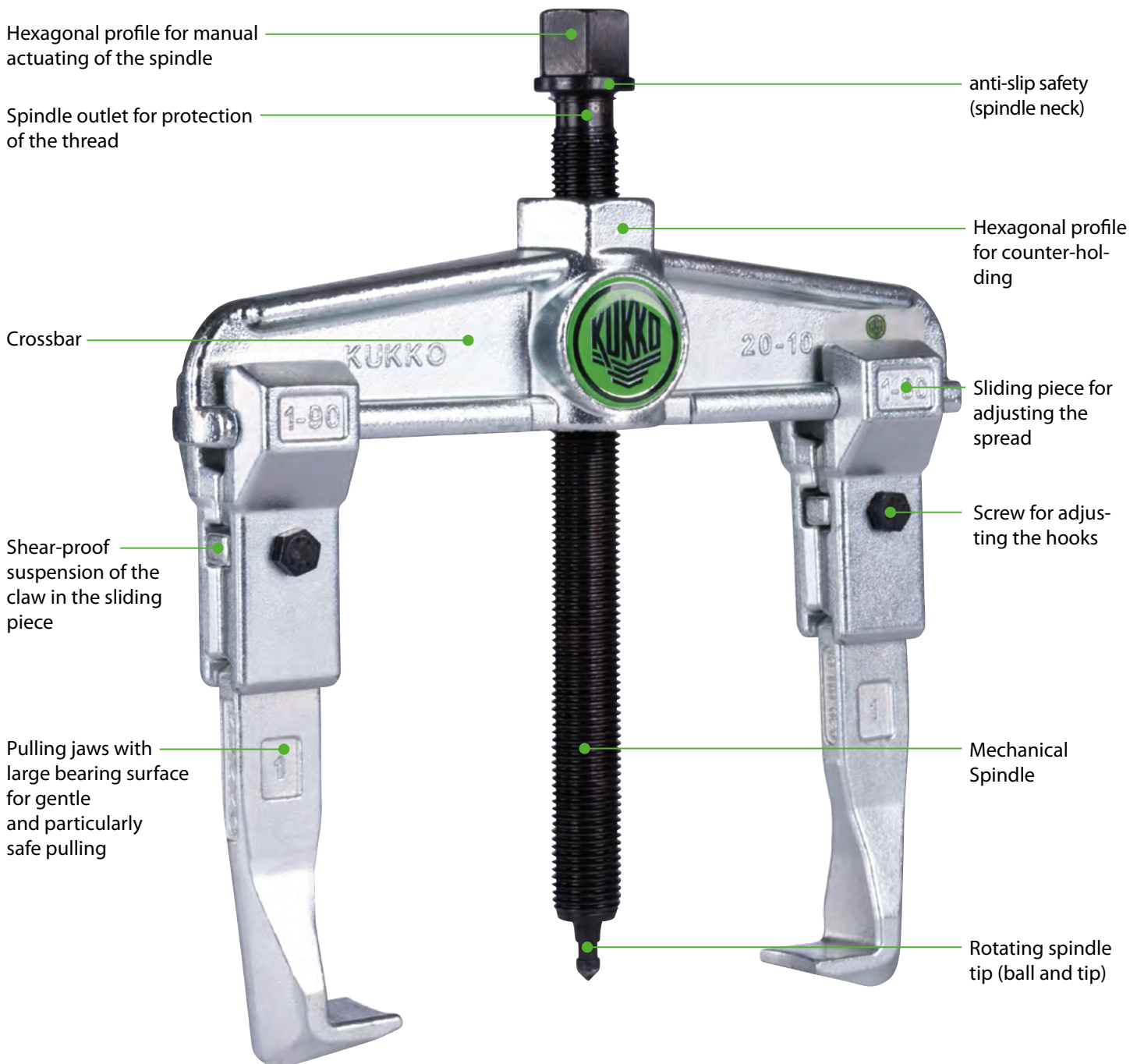
As a specialist in external extraction, KUKKO is the number 1 worldwide in terms of non-destructive disassembly. Since no extraction process is the same as another, choosing the right puller is a crucial factor. KUKKO offers the perfect solution for every specific pulling situation. The 2-jaw and 3-jaw universal pullers are used for extracting bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the release of any component that sits on a shaft and is freely accessible from the outside.



## Benefits

- Application also for eccentric components using freely movable puller jaws sliding on the crossbar.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Variable adjustment for different spans (depending on the model)
- Safe mounting of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- 3-jaw provides an even force distribution and allows for greater extraction forces (series 11 & 30)

# ASSEMBLY OF A UNIVERSAL PULLER





# FEATURES OF THE SERIES

## SERIES 20

2-jaw universal puller



20-10

The 2-jaw universal pullers of series 20 can be used universally even in confined spaces.

## SERIES 30

3-jaw universal puller



30-10

Thanks to the 3-jaw design, the pullers of series 30 provide an even distribution of force, enabling even greater pulling forces.

## SERIES 11

Extra powerful, 3-jaw universal puller with adjustable reach

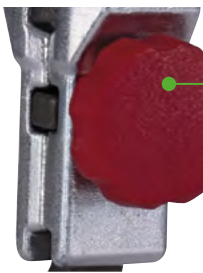


11-1-AV

The extra strong universal pullers of series 11 guarantee due to their massive construction the pulling of particularly heavy components.

# VARIANTS OF THE SERIES

### Series 20+ / 30+



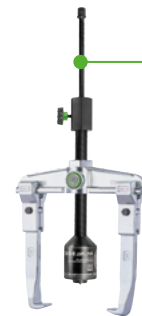
Simple, manual release of the jaws by knurling

### Series 20+S / 30+S & 20-S / 30-S / 20+S-T / 30+S+T & 20-S-T / 30-S-T



Narrow (Fig.) and extremely narrow hooks for tight and hard-to-reach gaps

### Series 20-Classic-B / 20+B / 30-Classic-B and 30+B



The hydraulic spindle achieves an average tensile force of up to 20 t.

### Series 20x / 30x



Optimized form of the quick adjustment with ideal haptics

### Series 20-AV / 20-5/11



Extra powerful crossbar

Adjustable Depth Puller

### Series 20-AV / 20-5/11



Hydraulic Spindle 8-HP with hand pump for up to 12 t tension force



# BOX SETS

The K-2030 series puller sets are equipped with universally applicable 2-jaw and 3-jaw pullers. Thanks to the diverse combination possibilities with hooks, crossbars, and extensions, the sets are used across various industries. Due to their exceptional quality, ergonomics, functionality, and user comfort, the K-2030 series has been awarded the Plus X Award as the Product of the Year 2022.



**K-2030-20-S**



**K-2030-10+S**



**K-2030-1+A**

**EXCELLENT WITH THE PLUS X AWARD**

<b>PLUS X AWARD</b> <small>2021/2022   Ausgezeichnet für:</small>	<b>PLUS X AWARD®</b> <small>ausgezeichnet als:</small>
High Quality Bedienkomfort Funktionalität Ergonomie <small>www.plusxaward.de</small>	<b>BESTES PRODUKT DES JAHRES 2022</b> <small>www.plusxaward.de</small>

# THE MODULAR SYSTEM

The modular building block system is KUKKO's unique selling point. Thanks to limitless Mix&Match, 150 types of pullers can be combined in 500 variations. The centerpiece is always the spindle, which gives the puller its power. Various types of jaws and their extensions, 2-jaw and 3-jaw crossbars, and reversible spindle tips make the composition of the puller perfect. This offers users nearly endless possibilities to master their individual application case.



# APPLICATION EXAMPLES



Removing a gear wheel with the 20-10



Removing a gear from a shaft with the 30-10+



The 30-10+S-C with extended, narrow jaws when removing a ball bearing



# PRODUCT DETAILS



## SERIES 20-CLASSIC 2-JAW UNIVERSAL PULLER










### Technical attributes

The 2-jaw universal puller is used for extracting bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It can loosen any component that sits on a shaft and is freely accessible from the outside. Equipped with robust and adjustable standard jaws, the puller all-around ensures particularly safe, non-destructive disassembly when performing external extraction as well as internal extraction.

### Benefits

- Screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
20-1	-009433	0 - 90 0 - 3 5/8	100 4	100 - 120 3 15/16 - 4 3/4	17 11/16	80 59.01	45	4.5 4.96	1,35 2,977	24-A, 24-B, 20-ST, 24-C
20-10	-009921	0 - 130 0 - 5	100 4	95 - 160 3 3/4 - 6 5/16	17 11/16	80 59.01	45	4.5 4.96	1,42 3,131	K-2030-10, 20-ST
20-2	-009501	0 - 160 0 - 6	162 6	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	60	6 6.61	3,1 6,836	24-B, 20-ST, 24-C
20-20	-010088	0 - 200 0 - 8	162 6	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	60	6 6.61	3,22 7,100	K-2030-20, K-2030-20-B, 20-ST
20-3	-009686	0 - 250 0 - 10	210 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	300 221.28	85	8.5 9.37	7,185 15,843	20-ST
20-30	-010163	0 - 350 0 - 14	200 8	180 - 440 7 1/16 - 17 5/16	27 1 1/16	300 221.28	85	8.5 9.37	7,525 16,593	-
20-4	-009761	15 - 520 9/16 - 21	209 8	200 - 590 7 7/8 - 23 1/4	36 1 7/16	400 295.04	120	12 13.23	14 30,870	-
20-40	-411861	15 - 650 9/16 - 26	300 12	200 - 710 7 7/8 - 27 15/16	36 1 7/16	400 295.04	120	12 13.23	16,36 36,074	-
20-1-2	-466311	0 - 90 0 - 3 5/8	200 8	70 - 140 2 3/4 - 5 1/2	17 11/16	80 59.01	45	4.5 4.96	1,985 4,377	-
20-1-25	-914362	0 - 90 0 - 3 5/8	250 10	70 - 140 2 3/4 - 5 1/2	17 11/16	80 59.01	45	4.5 4.96	8,5 18,743	-
20-1-4	-989643	0 - 90 0 - 3 5/8	400 16	70 - 140 2 3/4 - 5 1/2	17 11/16	80 59.01	45	4.5 4.96	3,13 6,902	-
20-10-2	-466496	0 - 120 0 - 5	200 8	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	45	4.5 4.96	2,13 4,697	K-2030-10
20-10-25	-908682	0 - 120 0 - 5	250 10	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	45	4.5 4.96	2,45 5,402	K-2030-10
20-10-4	-989650	0 - 120 0 - 5	400 16	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	45	4.5 4.96	3,435 7,574	-
20-2-3	-466564	3,2 - 160 1/8 - 6	300 12	100 - 220 3 15/16 - 8 11/16	22 7/8	11 8.11	70	7 7.72	4,38 9,658	-
20-20-3	-466649	3,2 - 200 1/8 - 8	300 12	100 - 260 3 15/16 - 10 1/4	22 7/8	11 8.11	70	7 7.72	4,655 10,264	K-2030-20, K-2030-20-B
20-3-25	-901188	0 - 250 0 - 10	250 10	80 - 340 3 1/8 - 13 3/8	27 1 1/16	300 221.28	85	8.5 9.37	7,52 16,582	-
20-3-3	-466724	0 - 250 0 - 10	300 12	180 - 340 7 1/16 - 13 3/8	27 1 1/16	15 11.06	100	10 11.02	8,1 17,861	-
20-3-4	-467066	0 - 250 0 - 10	400 16	180 - 340 7 1/16 - 13 3/8	27 1 1/16	15 11.06	100	10 11.02	9,75 21,499	-
20-3-5	-467301	0 - 250 0 - 10	500 20	180 - 340 7 1/16 - 13 3/8	27 1 1/16	15 11.06	100	10 11.02	10,57 23,307	-
20-30-3	-466809	0 - 350 0 - 14	300 12	180 - 440 7 1/16 - 17 5/16	27 1 1/16	15 11.06	100	10 11.02	5,52 12,172	-
20-30-4	-467141	0 - 350 0 - 14	400 16	180 - 440 7 1/16 - 17 5/16	27 1 1/16	15 11.06	100	10 11.02	9,62 21,212	-
20-30-5	-467486	0 - 350 0 - 14	500 20	180 - 440 7 1/16 - 17 5/16	27 1 1/16	15 11.06	100	10 11.02	10,875 23,979	-
20-4-3	-466984	15 - 520 9/16 - 21	300 12	200 - 590 7 7/8 - 23 1/4	36 1 7/16	45 33.19	150	15 16.53	15,28 33,692	-
20-4-4	-467226	15 - 520 9/16 - 21	400 16	200 - 590 7 7/8 - 23 1/4	36 1 7/16	45 33.19	150	15 16.53	16,79 37,022	-
20-4-5	-467554	15 - 520 9/16 - 21	500 20	200 - 590 7 7/8 - 23 1/4	36 1 7/16	45 33.19	150	15 16.53	16,6 36,603	-
20-40-4	-730641	15 - 650 9/16 - 26	400 16	200 - 710 7 7/8 - 27 15/16	36 1 7/16	45 33.19	150	15 16.53	17,67 38,962	-
20-40-5	-731976	15 - 650 9/16 - 26	500 19 4/8	200 - 710 7 7/8 - 27 15/16	36 1 7/16	45 33.19	150	15 16.53	15,8 34,839	-
20-5	-009846	0 - 750 0 - 30	400 16-27	340 - 1000 13 3/8 - 39 3/8	41 1 5/8	650 479.44	150	15 16.53	47 103,635	-



## PRODUCT DETAILS

### SERIES 20-AV 2-JAW UNIVERSAL PULLER WITH ADJUSTABLE REACH










The 2-jaw universal puller with adjustable reach is used for pulling bearings, gears, and discs in all common sizes for trades, workshops, and industry. The 20-5 is the largest of its kind in the world, making it the most powerful puller in the 20 series. It can loosen any component that sits on a shaft and is freely accessible from the outside. The puller adapts to any pulling situation due to its individually adjustable spread and reach, ensuring a particularly safe, non-destructive disassembly during both external extraction and internal extraction.

#### Benefits

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components through freely movable jaws gliding on the crossbar
- Variable adjustment for any span between 0 mm – 750 mm as well as reach depth between 500 mm – 750 mm
- Secure attachment of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>20-4-AV</b>	-706233	0 - 520 0 - 21	500 19 11/16	200 - 590 7 7/8 - 23 1/4	36 1 7/16	400 295.04	120	12 13.23	2,74 6,042
<b>20-40-AV</b>	-973222	0 - 650 0 - 26	500 19 11/16	200 - 710 7 7/8 - 27 15/16	36 1 7/16	400 295.04	120	12 13.23	2 4,410
<b>20-5-AV</b>	-545313	0 - 750 0 - 29 1/2	750 29 1/2	340 - 1.000 13 3/8 - 39 3/8	41 1 5/8	650 479.44	150	15 16.53	45 99,225



## PRODUCT DETAILS



### SERIES 20-CLASSIC-B 2-JAW UNIVERSAL PULLER WITH ADJUSTABLE JAWS AND HYDRAULIC SPINDLE









The 2-jaw universal puller with adjustable jaws and hydraulic spindle is used for the particularly safe removal of extremely tight bearings, gears, and discs in all common sizes for trades, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 15 t. This allows you to loosen any component that is seated on a shaft and is freely accessible from the outside. For pulling operations with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used.

#### Benefits

- Screw connection allows easy loosening and especially tight fastening of the jaws with an allen key
- The hydraulic spindle guarantees easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle has a rotating spindle tip for secure placement on smooth surfaces and during centering.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
<b>20-2-B</b>	-885815	11 - 160 7/16 - 6 5/16	150 5 7/8	100 - 220 3 15/16 - 8 11/16	15 11.06	100	10 11.02	4,52 9,967	-
<b>20-20-B</b>	-885846	11 - 200 7/16 - 7 7/8	160 6 5/16	100 - 260 3 15/16 - 10 1/4	15 11.06	100	10 11.02	4,9 10,805	K-2030-20-B
<b>20-3-B</b>	-885891	0 - 250 0 - 9 13/16	200 7 7/8	180 - 340 7 1/16 - 13 3/8	20 14.75	120	12 13.23	9,525 21,003	-
<b>20-30-B</b>	-885945	0 - 350 0 - 13 3/4	200 7 7/8	180 - 440 7 1/16 - 17 5/16	20 14.75	120	12 13.23	9,665 21,311	-
<b>20-4-B</b>	-885983	5,4 - 520 3/16 - 20 1/2	200 7 7/8	200 - 590 7 7/8 - 23 1/4	45 33.19	150	15 16.53	20 44,100	-
<b>20-40-B</b>	-886010	5,4 - 650 3/16 - 25 9/16	300 11 13/16	200 - 710 7 7/8 - 27 15/16	45 33.19	150	15 16.53	24,12 53,185	-
<b>20-2-3-B</b>	-885808	3,2 - 160 1/8 - 6 5/16	300 11 13/16	100 - 220 3 15/16 - 8 11/16	15 11.06	100	10 11.02	5,6 12,348	-
<b>20-20-3-B</b>	-885839	3,2 - 200 1/8 - 7 7/8	300 11 13/16	100 - 260 3 15/16 - 10 1/4	15 11.06	100	10 11.02	5,835 12,866	K-2030-20-B
<b>20-3-3-B</b>	-885860	0 - 250 0 - 9 13/16	300 11 13/16	180 - 340 7 1/16 - 13 3/8	20 14.75	120	12 13.23	10,24 22,579	-
<b>20-3-4-B</b>	-885877	0 - 250 0 - 9 13/16	400 15 3/4	180 - 340 7 1/16 - 13 3/8	20 14.75	120	12 13.23	11,34 25,005	-
<b>20-3-5-B</b>	-885884	0 - 250 0 - 9 13/16	500 19 11/16	180 - 340 7 1/16 - 13 3/8	20 14.75	120	12 13.23	12,285 27,088	-
<b>20-30-3-B</b>	-885914	0 - 350 0 - 13 3/4	300 11 13/16	180 - 440 7 1/16 - 17 5/16	20 14.75	120	12 13.23	10,7 23,594	-
<b>20-30-4-B</b>	-885921	0 - 350 0 - 13 3/4	400 15 3/4	180 - 440 7 1/16 - 17 5/16	20 14.75	120	12 13.23	11,765 25,942	-
<b>20-30-5-B</b>	-885938	0 - 350 0 - 13 3/4	500 19 11/16	180 - 440 7 1/16 - 17 5/16	20 14.75	120	12 13.23	12,815 28,257	-
<b>20-4-3-B</b>	-885952	15 - 520 9/16 - 20 1/2	300 11 13/16	200 - 590 7 7/8 - 23 1/4	45 33.19	150	15 16.53	17,8 39,249	-
<b>20-4-4-B</b>	-885969	15 - 520 9/16 - 20 1/2	400 15 3/4	200 - 590 7 7/8 - 23 1/4	45 33.19	150	15 16.53	18,9 41,675	-
<b>20-4-5-B</b>	-885976	15 - 520 9/16 - 20 1/2	500 19 11/16	200 - 590 7 7/8 - 23 1/4	45 33.19	150	15 16.53	23,89 52,677	-
<b>20-40-4-B</b>	-885990	15 - 650 9/16 - 25 9/16	400 15 3/4	200 - 710 7 7/8 - 27 15/16	45 33.19	150	15 16.53	20,3 44,762	-
<b>20-40-5-B</b>	-886003	15 - 650 9/16 - 25 9/16	500 19 11/16	200 - 710 7 7/8 - 27 15/16	45 33.19	150	15 16.53	25,69 56,646	-



## PRODUCT DETAILS

### SERIES 20-H 2-JAW PULLER WITH HYDRAULIC SPINDLE








The 2-jaw universal puller with hydraulic spindle is suitable for pulling particularly stubborn bearings, gears, and discs with a pulling force of up to 20 t. Thanks to the integrated grease hydraulic, no external pump is required. The manually extendable lever arm can be swiveled 360°. The flexible connection thread on the spindle allows for the mounting of numerous puller tools from the KUKKO range, depending on thread size.

#### Benefits

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components through freely movable jaws gliding on the crossbar
- Variable adjustment for any span between 0 mm – 750 mm as well as reach depth between 210 mm – 750 mm
- Fat hydraulic spindle ensures easy and controlled removal of tightly seated parts with minimal effort.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
20-3-H	-786839	0 - 250 0 - 9 13/16	210 8 1/4	180 - 340 7 1/16 - 13 3/8	120	12 13.23	7,53 16,604
20-30-H	-786914	0 - 350 0 - 13 3/4	210 8 1/4	180 - 440 7 1/16 - 17 5/16	120	12 13.23	8,375 18,467
20-4-H	-227981	15 - 520 9/16 - 20 1/2	209 8 1/4	200 - 590 7 7/8 - 23 1/4	120	12 13.23	24,21 53,383
20-40-H	-732218	15 - 650 9/16 - 25 9/16	300 11 13/16	200 - 710 7 7/8 - 27 15/16	120	12 13.23	28,29 62,379
20-5-H	-228063	105 - 750 4 1/8 - 29 1/2	750 29 1/2	340 - 1.000 13 3/8 - 39 3/8	120	20 22.05	54 119,070

### K-2030-20 15-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW)









The 15-piece Universal Puller Set of the Series 2030 is used for 2-jaw and 3-jaw pulling of large bearings, gears, discs, etc. in craft, industry, and workshop. The Series 2030 impresses with its diverse combination possibilities. The kit allows the assembly of 7 different variants through the combination of puller jaws and extensions. The robust design is particularly suitable for large and heavy applications in industry and commercial vehicles.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
K-2030-20	-123252	10 - 200 3/8 - 7 7/8	600 23 5/8	100 - 260 3 15/16 - 10 1/4	22 7/8	70	7 7.72	14,575 32,138	621220, 621355, 600-17, 2-150-S, 2-300-S, 2-V- 150-P, 30-20-T, 2-150-E, 2-300-E, 20-20-T, 30-20-T3



## PRODUCT DETAILS



### K-2030-10 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW)









The 13-piece Universal Puller Set from the 2030 series is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in craftsmanship, industry, and workshops. The 2030 series impresses with its diverse combination options. The kit allows for the assembly of 8 different variants through the combination of puller jaws and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-2030-10	-974748	0 - 130 0 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	60	6 6.61	9,19 20,264	20-10, 30-10-T, 614250, 1-190-S, 1-250-S

### K-2030-20-B 16-PIECE HYDRAULIC UNIVERSAL PULLER SET (2-JAW AND 3-JAW)








The 16-piece universal puller set from series 2030 is used for hydraulic, 2-jaw and 3-jaw pulling of large bearings, gears, disks, etc. in craft, industry, and workshop. The series 2030 impresses with its diverse combination options. The assembly set allows the combination of hydraulics, puller jaws, and extensions to create 14 different variants. The powerful design is particularly suitable for large and heavy applications in industry and commercial vehicles.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#					Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-2030-20-B	-123269	10 - 200 3/8 - 7 7/8	600 23 5/8	100 - 260 3 15/16 - 10 1/4	100	10 11.02	15,94 35,148	621220, 621355, 600-17, 8-0-621, 2-150-S, 2-300-S, 2-V-150-S, 30-20-T3, 2-150-E, 2-300-E, 20-20-T, 30-20-T3

## PRODUCT DETAILS

### 20-ST SALES DISPLAY FOR 2-JAW UNIVERSAL PULLERS












The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers are used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that is seated on a shaft and freely accessible from the outside. Equipped with robust and adjustable standard jaws, the puller all-rounder ensures particularly safe, non-destructive disassembly both during external extraction and internal extraction.

#### Benefits

- The sales and workshop stand provides an organized storage and presentation of the 2-jaw pullers.
- The screw connection allows for easy loosening and particularly tight fastening of the Abzugshaken with a hex key.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-ST</b>	-010248	630 24 13/16	250 9 13/16	330 12 1	0 - 250 0 - 9 13/16	210 8 1/4	100 - 340 3 15/16 - 13 3/8	300 221.28	85	8.5 9.37	2,16 4,763	20-1, 20-10, 20-2, 20-20, 20-3, 20-STL

### SERIES 20-P 2-JAW UNIVERSAL PULLER WITH ADJUSTABLE JAWS IN SET










The 2-jaw universal puller with adjustable jaws is used for particularly safe pulling of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. With the equipment of 2 pairs of jaws in various lengths, pulling processes with diverse combinations and depths are made possible. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside.

#### Benefits

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Variable adjustment for any spread between 0 mm – 350 mm

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-10-P3</b>	-267611	9 - 130 3/8 - 5 1/8	350 13 3/4	95 - 160 3 3/4 - 6 5/16	17 11/16	80 59.01	45	4.5 4.96	3,97 8,754	K-2030-10
<b>20-20-P2</b>	-003004	10 - 200 3/8 - 7 7/8	300 11 13/16	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	60	6 6.61	5,95 13,120	K-2030-20, K-2030-20-B
<b>20-30-P3</b>	-003011	0 - 350 0 - 13 3/4	400 15 3/4	180 - 440 7 1/16 - 17 5/16	27 1 1/16	300 221.28	85	8.5 9.37	17,1 37,706	-



## PRODUCT DETAILS



### SERIES 20-S 2-JAW UNIVERSAL PULLER WITH NARROW EXTRACTOR JAWS










The 2-jaw universal puller with narrow jaws is used for safely removing bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It allows for the release of any component that is mounted on a shaft and is freely accessible from the outside. The narrow jaws ensure that even tight and poorly accessible spaces can be reached.

#### Benefits

- Narrow jaws grip optimally in tight and hard-to-reach places.
- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
20-1-S	-757396	11 - 90 7/16 - 3 5/8	100 4	70 - 140 2 3/4 - 5 1/2	17 11/16	35 25.82	25	2.5 2.76	1,245 2,745	20-ST-S
20-10-S	-757471	4 - 120 3/16 - 5	100 4	70 - 180 2 3/4 - 7 1/16	17 11/16	35 25.82	25	2.5 2.76	1,365 3,010	K-2030-10-S, 20-ST-S
20-2-S	-727368	16 - 160 5/8 - 6	150 6	100 - 220 3 15/16 - 8 11/16	22 7/8	120 88.51	50	5 5.51	3,5 7,718	20-ST-S
20-20-S	-727443	16 - 200 5/8 - 8	150 6	100 - 260 3 15/16 - 10 1/4	22 7/8	120 88.51	50	5 5.51	3,285 7,243	K-2030-20-S, 20-ST-S
20-3-S	-727511	21 - 250 13/16 - 10	200 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	90	9 9.92	6,81 15,016	20-ST-S
20-30-S	-727696	21 - 350 13/16 - 14	200 8	180 - 440 7 1/16 - 17 5/16	27 1 1/16	250 184.40	90	9 9.92	7,38 16,273	-

### SERIES K-2030-20-S 15-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH NARROW PULLER JAWS









The 15-piece universal puller set with narrow jaws from series 2030 is used for 2-jaw and 3-jaw pulling of large bearings, gears, disks, etc. for tight and difficult-to-access spaces in crafts, industry, and workshops. The series 2030 impresses with its versatile combination options. The kit allows for the assembly of 14 different variants through the combination of puller jaws and extensions. The robust design is particularly suitable for large and heavy applications in industry and commercial vehicles.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-2030-20-S	-123276	10 - 200 3/8 - 7 7/8	600 23 5/8	100 - 260 3 15/16 - 10 1/4	22 7/8	50	5 5.51	14,5 31,973	621220, 621355, 600-17, 2-151-S, 2-301-S, 2-V- 150-P, 30-20-T, 2-151-E, 20-20-T, 30-20-T3, 2-301-E

## PRODUCT DETAILS

### SERIES K-2030-10-S 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH NARROW PULLER JAWS









The 13-piece universal puller set with narrow puller jaws from series 2030 is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in tight and hard-to-reach spaces in craft, industry, and workshop. The series 2030 convinces with its numerous combination options. The kit enables the assembly of 8 different variants through the combination of puller jaws and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-2030-10-S	-306181	0 - 130 0 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	30	3 3.31	8,92 19,669	20-10-S, 614250, 30-10-T, 1-191-S, 1-251-S

### SERIES 20-ST-S SALES DISPLAY FOR 2-JAW UNIVERSAL PULLERS WITH NARROW JAWS











The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with narrow puller jaws are used for the safe removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The narrow puller jaws ensure that even tight and difficult-to-access spaces can be reached.

#### Benefits

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Narrow jaws grip optimally in tight and hard-to-reach spots.
- The screw connection allows for easy loosening and particularly tight fastening of the jaws with a hex key.
- Application also with eccentric components through freely movable puller hooks sliding on the crossbar.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
20-ST-S	-906282	630 24 13/16	250 9 13/16	330 12 1	4 - 250 3/16 - 9 13/16	200 7 7/8	70 - 340 2 3/4 - 13 3/8	250 184.40	70	7 7.72	19,67 43,372	20-1-S, 20-10-S, 20-2-S, 20-20-S, 20-3-S, 20-STL



## PRODUCT DETAILS



### SERIES 20-SP 2-JAW UNIVERSAL PULLER WITH NARROW JAWS IN SET










The 2-jaw universal puller with narrow, adjustable jaws is used for safely removing bearings, gears, and discs in all common sizes for craftsmanship, workshops, and industry. The equipment with three pairs of jaws in various lengths allows for extraction processes with diverse combinations and depths. This enables the loosening of any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure access to even tight and poorly accessible spaces.

#### Benefits

- Narrow puller jaws grip optimally in tight and hard-to-reach areas.
- Screw connection allows for easy loosening and particularly tight fastening of the jaws with a hex key.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-10-SP</b>	-461514	11 - 120 7/16 - 4 3/4	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	35 25.82	25	2.5 2.76	3,69 8,136	K-2030-10-S
<b>20-20-SP</b>	-701856	26 - 200 1 1/32 - 7 7/8	300 11 13/16	100 - 260 3 15/16 - 10 1/4	22 7/8	120 88.51	50	5 5.51	5,83 12,855	K-2030-20-S
<b>20-30-SP</b>	-701931	21 - 350 13/16 - 13 3/4	400 15 3/4	180 - 440 7 1/16 - 17 5/16	27 1 1/16	250 184.40	70	7 7.72	16,68 36,779	-

### SERIES 20-S-T 2-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW JAWS










The 2-jaw universal puller with extremely narrow jaws and trapezoidal support surface on the claw is used for the safe removal of transmission gears, bearings, sprockets, synchronizer bodies, and similar components. This allows for the loosening of any component that is seated on a shaft and is accessible from the outside. The special design of the jaws ensures that even very tight and poorly accessible gaps can be reached.

#### Benefits

- The extremely slim design of the puller jaws grips optimally in tight and hard-to-reach places.
- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-1-S-T</b>	-321641	16 - 90 5/8 - 3 9/16	100 3 15/16	70 - 140 2 3/4 - 5 1/2	17 11/16	35 25.82	25	2.5 2.76	1,18 2,602	-
<b>20-10-S-T</b>	-201097	16 - 120 5/8 - 4 3/4	100 3 15/16	70 - 180 2 3/4 - 7 1/16	17 11/16	35 25.82	25	2.5 2.76	1,32 2,911	K-2030-10-S-T

## PRODUCT DETAILS

### SERIES K-2030-10-S-T 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH EXTREMELY NARROW PULLER JAWS









The 13-piece universal puller set with extremely narrow jaws of series 2030 is used for 2-jaw and 3-jaw pulling of gearbox gears, bearings, pinions, synchronizers, etc., for extremely tight and poorly accessible intermediate spaces in crafts, industry, and workshops. The series 2030 impresses with its diverse combination options. The kit allows for the assembly of 8 different variants by combining jaws and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-2030-10-S-T	-852022	0 - 130 0 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	30	3 3.31	8,85 19,514	20-10-S-T, 30-10-T, 614250, 1-194-E, 1-254-E

### SERIES 20-SP-T 2-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW JAWS IN SET










The 2-jaw universal puller with extremely narrow, adjustable jaws and trapezoidal support surface on the claw is used for safely removing gear wheels, bearings, pinions, synchronizer bodies, and similar components. The equipment is supplied with 3 pairs of jaws in different lengths, allowing removal processes with various combinations and reach depths. This allows for the removal of any component that is mounted on a shaft and is freely accessible from the outside. The extremely narrow jaws ensure that even very tight and poorly accessible gaps can be reached.

#### Benefits

- The extremely slim design of the puller jaws grips optimally in tight and hard-to-reach places.
- The screw connection allows easy loosening and particularly tight tightening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
20-10-SP-T	-321658	16 - 120 5/8 - 4 3/4	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	35 25.82	25	2.5 2.76	3,74 8,247	K-2030-10-S-T



## PRODUCT DETAILS



### SERIES 20+ 2-JAW UNIVERSAL PULLER WITH QUICKLY ADJUSTABLE JAWS










The 2-jaw universal puller is used for extracting bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It can loosen any component that sits on a shaft and is freely accessible from the outside. Equipped with robust and adjustable standard jaws, the puller all-around ensures particularly safe, non-destructive disassembly when performing external extraction as well as internal extraction.

#### Benefits

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding
- Variable adjustment for any spread between 0 mm – 350 mm

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
20-1+	-644771	9 - 90 3/8 - 3 5/8	100 4	100 - 120 3 15/16 - 4 3/4	17 11/16	80 59.01	45	4.5 4.96	1,27 2,800	K-2030-1+A, K-20-1+S-T, K-20-1-2+B, 20-ST+, 20+ST+S, K-20-15
20-10+	-644856	10 - 130 3/8 - 5	100 4	95 - 160 3 3/4 - 6 5/16	17 11/16	80 59.01	45	4.5 4.96	1,44 3,175	K-2030-10+, 20-ST+
20-10+2	-773310	10 - 130 3/8 - 5 1/8	200 7 7/8	95 - 160 3 3/4 - 6 5/16	17 11/16	80 59.01	45	4.5 4.96	2,145 4,730	K-2030-10+, 20+ST+S
20-2+	-644931	10 - 160 3/8 - 6	162 6	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	60	6 6.61	3,45 7,607	K-20-1-2+B, 20-ST+, K-20-15
20-2+3	-773327	10 - 160 3/8 - 6 5/16	300 11 13/16	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	60	6 6.61	4,615 10,176	20+ST+S
20-20+	-645013	10 - 200 3/8 - 8	162 6	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	60	6 6.61	3,315 7,310	K-2030-20+S, K-2030-20+S+B, 20-ST+
20-3+	-645198	0 - 250 0 - 10	210 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	300 221.28	85	8.5 9.37	7,5 16,538	20-ST+
20-30+	-645273	0 - 350 0 - 14	200 8	180 - 440 7 1/16 - 17 5/16	27 1 1/16	300 221.28	85	8.5 9.37	7,51 16,560	-

### SERIES 20+B 2-JAW UNIVERSAL PULLER WITH QUICKLY ADJUSTABLE JAWS AND HYDRAULIC SPINDLE









The 2-jaw universal puller with quickly adjustable jaws and hydraulic spindle is used for particularly safe and user-friendly extraction of extremely tight bearings, gears, and discs in all common sizes for craft, workshop, and industry. The hydraulic spindle achieves an average pulling force of a maximum of 12 t. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. For extraction processes with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used.

#### Benefits

- Simple manual release of the puller jaws via hand knob (Quick Adjust Technology)
- The hydraulic spindle guarantees easy and controlled removal of particularly stubborn parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
20-2+B	-885792	11 - 160 7/16 - 6 5/16	150 5 7/8	100 - 220 3 15/16 - 8 11/16	15 11.06	100	10 11.02	4,665 10,286	K-20-1-2+B, K-20-15
20-20+B	-885822	11 - 200 7/16 - 7 7/8	160 6 5/16	100 - 260 3 15/16 - 10 1/4	15 11.06	100	10 11.02	4,26 9,393	K-2030-20+S+B
20-3+B	-885853	0 - 250 0 - 9 13/16	200 7 7/8	180 - 340 7 1/16 - 13 3/8	20 14.75	120	12 13.23	8,9 19,625	-
20-30+B	-885907	0 - 350 0 - 13 3/4	200 7 7/8	180 - 440 7 1/16 - 17 5/16	20 14.75	120	12 13.23	9,625 21,223	-

## PRODUCT DETAILS

### SERIES K-2030-10+S+T 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW)



The 13-piece universal puller set from series 2030 is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in tight and hard-to-reach spaces in crafts, industry, and workshops. The series 2030 impresses with its versatile combination options. The kit allows for the assembly of 24 different variants by combining 3 different types of puller jaws and several extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						max. Zugkraft	max. Zugkraft		Bestandteile
		mm	mm	mm	mm	kN	t	kg	
K-2030-10+S+T	4021176100765	0 - 130	350	70 - 180	17	60	6	9	30-10-T, 614250, 20-10+S, 1-192-S, 1-255-S

### SERIES K-2030-10+ 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH QUICK-ADJUSTABLE JAWS



The 13-piece universal puller set with quickly adjustable jaws of the 2030 series is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in crafts, industry, and workshops. The 2030 series impresses with its versatile combination options. The set allows for the assembly of 8 different variants through the combination of jaws and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the given pull-off situation, easily adjustable and configurable for a variety of applications.
- With 2-jaw or 3-jaw, you are always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-2030-10+	-001697	0 - 130 0 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	60	6 6.61	9,26 20,418	30-10-T, 614250, 1-192-S, 1-252-S, 20-10+





## PRODUCT DETAILS

### SERIES K-2030-1+A 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH NARROW, QUICKLY ADJUSTABLE JAWS









The 13-piece universal puller set (2-jaw and 3-jaw) with narrow, quickly adjustable puller jaws from series 2030 is used for pulling bearings, gears, discs, etc. in tight and hard-to-reach spaces in crafts, industry, and workshops. The series 2030 impresses with its versatile combinations. The kit allows for the assembly of 8 different variants by combining puller jaws and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-2030-1+A	-242311	9 - 90 3/8 - 3 9/16	200 7 7/8	100 - 120 3 15/16 - 4 3/4	17 11/16	45	4.5 4.96	4,755 10,485	600-17, 20-1-T, 30-1-T, 614160, 1-V-100-S, 1-92-S, 1-93-S

### SERIES K-20-1-2+B 14-PIECE UNIVERSAL PULLER (2-JAW) SET WITH QUICK ADJUSTMENT, HYDRAULIC SPINDLE, AND EXTENSIONS



The 14-piece universal puller set with quick adjustment, hydraulic spindle, and extensions from the K-20-1-2+B series is used for 2-jaw pulling of normal and particularly seized bearings, gears, discs, etc. in crafts, industry, and workshops. The series impresses with its diverse design possibilities. The "6 in 1" kit allows the assembly of 6 different puller models through the combination of hydraulics, puller jaws, and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through the hooks for different spans, you are always flexible in use.

#### Technical attributes

#					Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-20-1-2+B	-935923	0 - 160 0 - 6 5/16	0 - 300 0 - 11 13/16	100 - 220 3 15/16 - 8 11/16	100	10 11.02	0 0,000	20-1+, 20-2+, 8-0-621, 600-17, 1-192-P, 2-302-P

## PRODUCT DETAILS

### SERIES K-20-15 12-PIECE UNIVERSAL PULLER AND SEPARATOR SET











The 12-piece Universal Puller and Separator Set of the K-20-15 series is used for hydraulic pulling and separating of ball bearings, roller bearings, inner rings, and other flush-mounted parts in crafts, industry, and workshops. The kit allows the assembly of 7 different puller models through the combination of puller jaws and extensions. Together with the separating devices of the 15 series and the hydraulic spindle, various combination options arise for optimal use in changing pulling situations.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- The hydraulic spindle enables gentle and safe extraction.

#### Technical attributes

#								Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kN	t/US t. sh.	kg/lb	
<b>K-20-15</b>	-367311	9 - 160 3/8 - 6 5/16	0 - 312 0 - 12 5/16	100 - 220 3 15/16 - 8 11/16	68 - 244 2 11/16 - 9 5/8	260 10 1/4	22 - 115 7/8 - 4 1/2	100	10 11.02	21,61 47,650	600-17, 8-0-621, 15-2, 18-2, 20-1+, 20-2+, 1-192-P, 2-302-P

### SERIES 20-ST+ SALES DISPLAY FOR 2-JAW UNIVERSAL PULLERS WITH QUICK- ADJUSTABLE JAWS












The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers are used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that is seated on a shaft and freely accessible from the outside. Equipped with robust and adjustable standard jaws, the puller all-rounder ensures particularly safe, non-destructive disassembly both during external extraction and internal extraction.

#### Benefits

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- The screw connection allows for easy loosening and particularly tight fastening of the Abzugshaken with a hex key.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	Nm/ ft lb	kN	t/ US t. sh.	kg/lb	
<b>20-ST+</b>	-668944	630 24 13/16	250 9 13/16	330 12 1	0 - 250 0 - 9 13/16	210 8 1/4	100 - 340 3 15/16 - 13 3/8	300 221.28	85	8.5 9.37	2,2 4,851	20-STL, 20-1+, 20-10+, 20-2+, 20-20+, 20-3+





## PRODUCT DETAILS

### SERIES 20+S 2-JAW UNIVERSAL PULLER WITH NARROW, QUICK-ADJUSTABLE EXTRACTOR JAWS










The 2-jaw universal puller with narrow, quickly adjustable jaws is used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for the loosening of any component seated on a shaft and freely accessible from the outside. The narrow jaws ensure that even tight and hard-to-reach gaps can be accessed.

#### Benefits

- Narrow pulling jaws grip optimally in tight and hard-to-reach places.
- Simple manual release of the {Abzugshaken} using hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-1+S</b>	-756221	4 - 90 3/16 - 3 5/8	100 4	70 - 140 2 3/4 - 5 1/2	17 11/16	35 25.82	25	2.5 2.76	1,27 2,800	KS-2030-1-193xS, K-2030-1+A, KS- 2030-1-193+S, 20-ST+S
<b>20-10+S</b>	-756306	4 - 120 3/16 - 5	100 4	70 - 180 2 3/4 - 7 1/16	17 11/16	35 25.82	25	2.5 2.76	1,42 3,131	K-2030-10+S, 20- ST+S, 20+ST+S
<b>20-2+S</b>	-756481	16 - 160 5/8 - 6	150 6	100 - 220 3 15/16 - 8 11/16	22 7/8	120 88.51	50	5 5.51	3,4 7,497	20-ST+S, 20+ST+S
<b>20-20+S</b>	-756559	16 - 200 5/8 - 8	150 6	100 - 260 3 15/16 - 10 1/4	22 7/8	120 88.51	50	5 5.51	3,3 7,277	K-2030-20+S, K-2030-20+S+B, 20-ST+S
<b>20-3+S</b>	-756634	21 - 250 13/16 - 10	200 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	90	9 9.92	6,885 15,181	20-ST+S
<b>20-30+S</b>	-756719	21 - 350 13/16 - 14	200 8	180 - 440 7 1/16 - 17 5/16	27 1 1/16	250 184.40	90	9 9.92	7,37 16,251	-

### SERIES K-2030-10+S 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH NARROW, QUICK-ADJUSTING JAWS









The 13-piece universal puller set with narrow, quick-adjustable jaws from series 2030 is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in tight and hard-to-reach spaces in craftsmanship, industry, and workshops. The series 2030 impresses with its versatile combination options. The kit allows for the assembly of 8 different variants by combining the jaws and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>K-2030-10+S</b>	-120060	0 - 130 0 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	30	3 3.31	8,5 18,743	20-10+S, 30-10-T, 614250, 1-193-S, 1-253-S

## PRODUCT DETAILS

### SERIES K-2030-20+S 15-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH TWO DIFFERENT PULLER JAW TYPES









The 15-piece universal puller set with two different types of puller jaws from series 2030 is used universally for 2-jaw and 3-jaw extraction of gearbox gears, bearings, sprockets, and synchronizers in crafts, industry, and workshops. The series 2030 impresses with its diverse combination possibilities. This set includes the basic equipment of 2-jaw and 3-jaw pullers needed for universal work. Additionally, the set is equipped with two variants of puller jaws to provide even more possibilities in application. The robust design is particularly suitable for large and heavy applications in industry and commercial vehicles and enables the assembly of 14 different variants.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>K-2030-20+S</b>	-058677	10 - 200 3/8 - 7 7/8	260 10 1/4	150 - 600 5 7/8 - 23 5/8	22 7/8	50	5 5.51	14,76 32,546	621220, 621355, 2-152-P, 2-153-P, 2-302-P, 2-V-150-P, 20-20-T, 30-20-T3, 30-20-T3, 600-17, 20-30-T

### SERIES K-2030-20+S+B 16-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH TWO DIFFERENT TYPES OF PULLER JAWS AND HYDRAULIC SPINDLE








The 16-piece universal puller set, featuring two different types of jaws and a hydraulic spindle of the series 2030, is used for universal applications in the 2-jaw and 3-jaw pulling of gearbox gears, bearings, sprockets, and synchronizers in craft, industry, and workshops. The series 2030 impresses with its versatile combination options. This set includes the basic equipment of 2-jaw and 3-jaw pullers needed for universal work. Additionally, the set is equipped with two variants of jaws to provide even more possibilities in application. The robust design is particularly suitable for large and heavy applications in industry and commercial vehicles, allowing for the assembly of 28 different variants.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.

#### Technical attributes

#					Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>K-2030-20+S+B</b>	-487422	10 - 200 3/8 - 7 7/8	260 10 1/4	150 - 600 5 7/8 - 23 5/8	100	10 11.02	14,22 31,355	621220, 621355, 2-152-P, 2-153-P, 2-302-P, 2-V-150-P, 8-0-621, 20-20-T, 30-20-T3, 600-17





## PRODUCT DETAILS

### SERIES KS-2030-1-193+S 9-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH NARROW JAWS









The 9-piece Universal Puller Set with narrow puller jaws from the series KS-2030-1-193+S is used for pulling bearings, gears, discs, etc. in tight and hard-to-reach spaces in crafts, industry, and workshops. The kit allows switching between 2-jaw and 3-jaw pullers and different jaws, resulting in 4 different variations.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Narrow puller jaws optimally grip in tight and hard-to-reach places.
- Simple manual release of jaws using hand knob (Quick Adjust Technology)

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>KS-2030-1-193+S</b>	-967399	0 - 90 0 - 3 9/16	0 - 200 0 - 7 7/8	70 - 140 2 3/4 - 5 1/2	17 11/16	45	4.5 4.96	4,22 9,305	20-1+S, 1-193-S, 1-93-E, 30-1-T

### SERIES K-20-1+S-T 8-PIECE UNIVERSAL PULLER (2-JAW) SET WITH EXTENSIONS









The 8-piece universal puller set with extensions is used for universal applications in the 2-jaw removal of gearbox gears, bearings, sprockets, and synchronizers in all common sizes for craft, workshop, and industry. This allows loosening any component seated on a shaft and freely accessible from the outside. Equipped with robust and adjustable standard jaws, the puller all-rounder ensures a particularly safe, non-destructive disassembly during both external and internal extraction. This set enables the assembly of 4 different puller models through variable combinations of standard and S-jaws and extensions, thereby ensuring maximum universal application.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The screw connection allows easy loosening and especially tight fastening of the jaws with a hex key.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>K-20-1+S-T</b>	-102608	0 - 90 0 - 3 9/16	0 - 200 0 - 7 7/8	70 - 140 2 3/4 - 5 1/2	17 11/16	45	4.5 4.96	2,64 5,821	20-1+S, 1-95-P, 1-V-100-P, 1-92-P

## PRODUCT DETAILS

### SERIES 20-ST+S SALES DISPLAY FOR 2-JAW UNIVERSAL PULLER WITH NARROW, QUICKLY ADJUSTABLE JAWS












The display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with narrow, quick-adjusting jaws are used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows any component that is on a shaft and freely accessible from the outside to be loosened. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed.

#### Benefits

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Narrow jaws grip optimally in tight and hard-to-reach spots.
- Simple manual release of the jaws via hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	Nm/ ft lb	kN	t/ US t. sh.	kg/lb	
<b>20-ST+S</b>	-998812	630 24 13/16	250 9 13/16	330 12 1	4 - 250 3/16 - 9 13/16	200 7 7/8	70 - 340 2 3/4 - 13 3/8	250 184.40	70	7 7.72	19,87 43,813	20-1+S, 20-10+S, 20-2+S, 20-20+S, 20-3+S, 20-STL

### SERIES 20+SP 2-JAW UNIVERSAL PULLER WITH NARROW, QUICKLY ADJUSTABLE JAWS IN SET










The 2-jaw universal puller with narrow, quickly adjustable extractor jaws is used for safely and user-friendly extracting of bearings, gears, and discs in all common sizes for craftsmanship, workshops, and industry. Equipped with three pairs of extractor jaws in various lengths, extraction processes with diverse combinations and depths are made possible. This allows for the removal of any component seated on a shaft that is freely accessible from the outside. The narrow extractor jaws ensure that tight and poorly accessible spaces can also be reached.

#### Benefits

- Narrow jaws grip optimally in tight and hard-to-reach places.
- Simple manual release of the {Abzugshaken} using hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-10+SP</b>	-181061	16 - 120 5/8 - 4 3/4	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	35 25.82	25	2.5 2.76	3,875 8,544	K-2030-10+S
<b>20-20+SP</b>	-181078	16 - 200 5/8 - 7 7/8	300 11 13/16	100 - 260 3 15/16 - 10 1/4	22 7/8	120 88.51	50	5 5.51	5,96 13,142	-
<b>20-30+SP</b>	-181085	21 - 350 13/16 - 13 3/4	400 15 3/4	180 - 440 7 1/16 - 17 5/16	27 1 1/16	250 184.40	70	7 7.72	18,12 39,955	-



## PRODUCT DETAILS

### SERIES 20+S-T 2-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW, QUICKLY ADJUSTABLE JAWS










The 2-jaw universal puller with extremely narrow, quickly adjustable jaws and trapezoidal support surfaces on the claw is used for safely and user-friendly pulling of transmission gears, bearings, sprockets, synchronizer bodies, and similar components. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The trapezoidal support surfaces of the claw ensure that even very tight and hard-to-reach spaces are accessible.

#### Benefits

- The extremely slim design of the jaws optimally engages in extremely tight and hard-to-reach spots.
- Simple manual release of the {Abzugshaken} using hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-1+S-T</b>	-321344	16 - 90 5/8 - 3 9/16	100 3 15/16	70 - 140 2 3/4 - 5 1/2	17 11/16	35 25.82	25	2.5 2.76	1,215 2,679	K-20-1+S-T
<b>20-10+S-T</b>	-321368	16 - 120 5/8 - 4 3/4	100 3 15/16	70 - 180 2 3/4 - 7 1/16	17 11/16	35 25.82	25	2.5 2.76	1,35 2,977	K-2030-10+S-T

### SERIES K-2030-10+S-T 13-PIECE UNIVERSAL PULLER SET (2-JAW AND 3-JAW) WITH EXTREMELY NARROW, QUICK-ADJUSTING JAWS









The 13-piece universal puller set with extremely narrow, quickly adjustable jaws of series 2030 is used for the 2-jaw and 3-jaw pulling of gear wheels, bearings, sprockets, synchronizers, etc. for extremely tight and hard-to-reach spaces in craft, industry, and workshop. The series 2030 impresses with its diverse combination possibilities. The kit enables the assembly of 8 different variants by combining jaws and extensions.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through two- or three-jaw design, you are always flexible in use.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>K-2030-10+S-T</b>	-001710	0 - 130 0 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	30	3 3.31	8,91 19,647	20-10+S-T, 30-10-T, 614250, 1-195-S, 1-255-S

## PRODUCT DETAILS

### SERIES 20+ST+S SALES DISPLAY FOR 2-JAW UNIVERSAL PULLER WITH NARROW, QUICKLY ADJUSTABLE JAWS












The display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with narrow, quick-adjusting jaws are used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows any component that is on a shaft and freely accessible from the outside to be loosened. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed.

#### Benefits

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Narrow puller jaws grip optimally in tight and inaccessible places.
- Simple manual release of the jaws via hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	Nm/ ft lb	kN	t/ US t. sh.	kg/lb	
<b>20+ST+S</b>	-773303	630 24 13/16	250 9 13/16	216 8 1/2	9 - 160 3/8 - 6 5/16	300 11 13/16	100 - 220 3 15/16 - 8 11/16	150 110.64	60	6 6.61	16,27 35,875	20-1+, 20-10+S, 20-2+S, 20-10+2, 20-2+3, 20-STL

### SERIES 20X 2-JAW UNIVERSAL PULLER WITH QUICKLY ADJUSTABLE JAWS










The 2-jaw universal puller with quickly adjustable jaws is used for extracting bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It can release any component sitting on a shaft and freely accessible from the outside. Equipped with robust standard jaws and hand knobs for maximum operating comfort, this all-rounder puller ensures particularly safe, very user-friendly, and non-destructive disassembly during both external extraction and internal pulling.

#### Benefits

- Simple, manual solution of the Jaw clamps using hand knobs (Quick Adjust Technology)
- Optimized quick adjustment form guarantees an exceptionally good haptics (even with wet or oily hands)
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 0 mm – 350 mm

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>20-1x NEW</b>	-041471	9 - 90 3/8 - 3 9/16	100 3 15/16	100 - 120 3 15/16 - 4 3/4	17 11/16	80 59.01	65	6.5 7.17	1,315 2,900	20x-ST
<b>20-10x NEW</b>	-041464	10 - 130 3/8 - 5 1/8	100 3 15/16	95 - 160 3 3/4 - 6 5/16	17 11/16	80 59.01	65	6.5 7.17	1,46 3,219	20x-ST
<b>20-2x NEW</b>	-041495	10 - 160 3/8 - 6 5/16	162 6 3/8	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	80	8 8.82	3,65 8,048	20x-ST
<b>20-20x NEW</b>	-041488	10 - 200 3/8 - 7 7/8	162 6 3/8	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	80	8 8.82	3,395 7,486	20x-ST, K- 2030-20xS
<b>20-3x NEW</b>	-041525	0 - 250 0 - 9 13/16	210 8 1/4	180 - 340 7 1/16 - 13 3/8	27 1 1/16	300 221.28	105	10.5 11.57	1,325 2,922	20x-ST
<b>20-30x NEW</b>	-041518	0 - 350 0 - 13 3/4	200 7 7/8	180 - 440 7 1/16 - 17 5/16	27 1 1/16	300 221.28	105	10.5 11.57	1,325 2,922	-



## PRODUCT DETAILS



### SERIES 30-CLASSIC 3-JAW UNIVERSAL PULLER










The 3-jaw universal puller is used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It allows you to loosen any component that sits on a shaft and is freely accessible from the outside. Equipped with robust and adjustable standard jaws, the puller all-rounder ensures particularly safe, non-destructive disassembly both during external extraction and internal extraction. The 3-jaw design guarantees even load distribution and thus a particularly secure hold on the part being pulled.

#### Benefits

- Screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding

#### Technical attributes








#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
30-1	-013393	0 - 90 0 - 3 5/8	100 4	70 - 140 2 3/4 - 5 1/2	17 11/16	80 59.01	60	6 6.61	1,53 3,374	-
30-10	-013621	0 - 130 0 - 5	100 4	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	60	6 6.61	1,59 3,506	K-2030-10
30-2	-013478	0 - 160 0 - 6	150 6	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	70	7 7.72	3,815 8,412	-
30-20	-013706	0 - 200 0 - 8	150 6	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	70	7 7.72	4,14 9,129	K-2030-20, K-2030-20-B
30-3	-013546	0 - 250 0 - 10	200 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	100	10 11.02	9,615 21,201	-
30-30	-303005	105 - 375 4 1/8 - 14	200 8	180 - 440 7 1/16 - 17 5/16	36 1 7/16	250 184.40	150	15 16.53	17,43 38,433	-
30-4	-303302	105 - 375 4 1/8 - 15	200 8	200 - 590 7 7/8 - 23 1/4	36 1 7/16	500 368.80	150	15 16.53	17,88 39,425	-
30-40	-303319	125 - 520 4 15/16 - 21	200 8	200 - 710 7 7/8 - 27 15/16	41 1 5/8	500 368.80	150	15 16.53	22,64 49,921	-
30-5	-303326	87 - 650 3 7/16 - 26	300 8	290 - 740 11 7/16 - 29 1/8	41 1 5/8	650 479.44	200	20 22.05	31,71 69,921	-
30-1-2	-730726	0 - 90 0 - 3 5/8	200 8	70 - 140 2 3/4 - 5 1/2	17 11/16	80 59.01	60	6 6.61	2,445 5,391	-
30-10-2	-730801	0 - 130 0 - 5	200 8	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	60	6 6.61	2,63 5,799	K-2030-10
30-2-3	-730986	5 - 160 3/16 - 6	300 12	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	70	7 7.72	5,565 12,271	-
30-20-3	-731068	5 - 200 3/16 - 8	300 12	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	70	7 7.72	5,98 13,186	K-2030-20, K-2030-20-B
30-3-25	-901256	0 - 250 0 - 10	250 10	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	100	10 11.02	10,195 22,480	-
30-3-3	-731143	0 - 250 0 - 10	300 12	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	100	10 11.02	11,305 24,928	-
30-3-4	-731228	0 - 250 0 - 10	400 16	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	100	10 11.02	12,86 28,356	-
30-3-5	-731303	0 - 250 0 - 10	500 20	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	100	10 11.02	14,385 31,719	-

## PRODUCT DETAILS

### SERIES 30-CLASSIC-B 3-JAW UNIVERSAL PULLER WITH ADJUSTABLE JAWS AND HYDRAULIC SPINDLE










#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	Nm	kN	t/US t. sh.	kg/lb	
30-2-B	-886317	0 - 160 0 - 6 5/16	150 5 7/8	100 - 220 3 15/16 - 8 11/16	15 11.06	12	100	10 11.02	5,48 12,083	-
30-20-B	-886348	0 - 200 0 - 7 7/8	150 5 7/8	100 - 260 3 15/16 - 10 1/4	15 11.06	12	100	10 11.02	5,695 12,557	K-2030-20-B
30-3-B	-886393	0 - 250 0 - 9 13/16	200 7 7/8	180 - 340 7 1/16 - 13 3/8	20 14.75	15	120	12 13.23	11,45 25,247	-
30-30-B	-303104	0 - 375 0 - 14 3/4	200 7 7/8	180 - 440 7 1/16 - 17 5/16	45 33.19	45	150	15 16.53	11,1 24,476	-
30-2-3-B	-886300	5 - 160 3/16 - 6 5/16	300 11 13/16	100 - 220 3 15/16 - 8 11/16	15 11.06	12	100	10 11.02	5,6 12,348	-
30-20-3-B	-886331	5 - 200 3/16 - 7 7/8	300 11 13/16	100 - 260 3 15/16 - 10 1/4	15 11.06	12	100	10 11.02	7,38 16,273	K-2030-20-B
30-3-3-B	-886362	0 - 250 0 - 9 13/16	300 11 13/16	180 - 340 7 1/16 - 13 3/8	20 14.75	15	120	12 13.23	10,8 23,814	-
30-3-4-B	-886379	0 - 250 0 - 9 13/16	400 15 3/4	180 - 340 7 1/16 - 13 3/8	20 14.75	15	120	12 13.23	14,73 32,480	-
30-3-5-B	-886386	0 - 250 0 - 9 13/16	500 19 11/16	180 - 340 7 1/16 - 13 3/8	20 14.75	15	120	12 13.23	16,41 36,184	-

### SERIES 30-P 3-JAW UNIVERSAL PULLER SET



#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
30-10-P3	-111136	0 - 130 0 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	60	6 6.61	5,335 11,764	K-2030-10
30-20-P2	-111150	5 - 200 3/16 - 7 7/8	300 11 13/16	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	70	7 7.72	7,635 16,835	K-2030-20, K-2030-20-B
30-3-P3	-111174	0 - 250 0 - 9 13/16	400 15 3/4	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	100	10 11.02	23,86 52,611	-

The 2-jaw universal puller with adjustable jaws and hydraulic spindle is used for particularly safe pulling of extremely stuck bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 12 t. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. For pulling operations with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used. The 3-jaw design guarantees an even load distribution, providing particularly secure hold on the component being pulled.

#### Benefits

- The screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces
- Hydraulic spindle ensures easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited space conditions that require direct access to the component, the mechanical spindle can be used.

The 3-jaw universal puller with adjustable jaws is used for safely removing bearings, gears, and discs in all common sizes for crafts, workshops, and industry. With its three pairs of jaws in different lengths, various combinations and depths of pull-out processes are possible. This allows any component seated on a shaft and accessible from the outside to be removed. The 3-jaw design guarantees even load distribution and thus a particularly secure grip on the part being removed.

#### Benefits

- Screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding



## PRODUCT DETAILS



### SERIES 30-S 3-JAW UNIVERSAL PULLER WITH NARROW JAWS










The 3-jaw universal puller with narrow jaws is used for safely removing bearings, gears, and discs in all common sizes for craft, workshop, and industry. It allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure that even tight and poorly accessible spaces can be reached. The 3-jaw design guarantees an even load distribution and thus a particularly secure hold on the part being pulled.

#### Benefits

- Narrow puller jaws grip optimally in tight and hard-to-reach areas.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Screw connection allows easy loosening and very tight tightening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
30-1-S	-727771	8 - 90 5/16 - 3 5/8	100 4	70 - 140 2 3/4 - 5 1/2	17 11/16	40 29.50	30	3 3.31	1,335 2,944	-
30-10-S	-728198	8 - 130 5/16 - 5	100 4	70 - 180 2 3/4 - 7 1/16	17 11/16	40 29.50	30	3 3.31	1,52 3,352	K-2030-10-S
30-2-S	-727856	16 - 160 5/8 - 6	150 6	100 - 220 3 15/16 - 8 11/16	22 7/8	120 88.51	50	5 5.51	3,78 8,335	-
30-20-S	-727931	16 - 200 5/8 - 8	150 6	100 - 260 3 15/16 - 10 1/4	22 7/8	120 88.51	50	5 5.51	4,08 8,996	K-2030-20-S
30-3-S	-728013	2 - 250 1/16 - 10	200 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	390 287.66	135	13.5 14.88	9,365 20,650	-

### SERIES 30-SP 3-JAW UNIVERSAL PULLER WITH NARROW JAWS IN SET







The 3-jaw universal puller with narrow, adjustable jaws is used for safely pulling bearings, gears, and discs. The inclusion of three pairs of jaws in various lengths allows for pulling operations with different combinations and depths. This makes it possible to release any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure that even tight and hard-to-reach spaces are accessible. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being pulled.

#### Benefits

- The extremely slim design of the jaws optimally engages in extremely tight and hard-to-reach spots.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Screw connection allows easy loosening and very tight tightening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. Tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
30-10-SP	-463839	8 - 130 5/16 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	40 29.50	30	3 3.31	5,11 11,268	K-2030-10-S
30-20-SP	-728273	11 - 200 7/16 - 7 7/8	300 11 13/16	100 - 260 3 15/16 - 10 1/4	22 7/8	120 88.51	50	5 5.51	7,66 16,890	K-2030-20-S
30-3-SP	-728358	2 - 250 1/16 - 9 13/16	400 15 3/4	180 - 340 7 1/16 - 13 3/8	27 1 1/16	220 162.27	70	7 7.72	23,67 52,192	-

## PRODUCT DETAILS

### SERIES 30-S-T 3-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW JAWS










The 3-jaw universal puller with extremely narrow jaws and trapezoidal support surface at the claw is used for securely pulling gear wheels, bearings, sprockets, synchronizers, and similar components. This allows for the loosening of any component mounted on a shaft that is freely accessible from the outside. The special design of the jaws ensures that even very tight and hard-to-reach spaces can be accessed. The 3-jaw design guarantees a uniform load distribution and thus a particularly secure grip on the part being pulled.

#### Benefits

- The extremely slim design of the jaws is optimal for tight and hard-to-reach places.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>30-1-S-T</b>	-321689	13 - 90 1/2 - 3 9/16	100 3 15/16	70 - 140 2 3/4 - 5 1/2	17 11/16	40 29.50	30	3 3.31	1,335 2,944	-
<b>30-10-S-T</b>	-321696	13 - 130 1/2 - 5 1/8	100 3 15/16	70 - 180 2 3/4 - 7 1/16	17 11/16	40 29.50	30	3 3.31	1,475 3,252	K-2030-10-S-T

### SERIES 30-SP-T 3-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW JAWS IN SET










The 3-jaw universal puller with extremely narrow, adjustable jaws and trapezoidal support surface on the claw is used for safely pulling gear wheels, bearings, pinions, synchronizer bodies, and similar components. Equipped with three pairs of jaws in different lengths, it enables pulling operations with various combinations and depths. This allows for the removal of any component that is on a shaft and freely accessible from the outside. The extremely narrow jaws ensure that even very tight and hard-to-reach spaces can be accessed. The 3-jaw design guarantees an even load distribution, providing a particularly secure grip on the part being pulled.

#### Benefits

- The extremely slim design of the puller jaws grips optimally in tight and hard-to-reach places.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Screw connection allows easy loosening and very tight tightening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>30-10-SP-T</b>	-770272	13 - 130 1/2 - 5 1/8	350 13 3/4	70 - 180 2 3/4 - 7 1/16	17 11/16	40 29.50	30	3 3.31	5,055 11,146	K-2030-10-S-T



## PRODUCT DETAILS



### SERIES 30+ 3-JAW UNIVERSAL PULLER WITH QUICK-ADJUSTABLE EXTRACTOR JAWS










The 3-jaw universal puller with quickly adjustable jaws is used for pulling bearings, gears, and discs in all common sizes for craft, workshop, and industry. It allows for loosening any component that sits on a shaft and is freely accessible from the outside. Equipped with robust standard jaws and practical hand knobs, the puller all-rounder ensures a particularly safe, user-friendly, and non-destructive disassembly both for external extraction and internal extraction. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being pulled.

#### Benefits

- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>30-1+</b>	-731488	0 - 90 0 - 3 5/8	100 4	70 - 140 2 3/4 - 5 1/2	17 11/16	80 59.01	60	6 6.61	1,46 3,219	K-2030-1+A
<b>30-10+</b>	-731556	0 - 130 0 - 5	100 4	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	60	6 6.61	1,6 3,528	K-2030-10+
<b>30-2+</b>	-731631	0 - 160 0 - 6	150 6	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	70	7 7.72	3,8 8,379	-
<b>30-20+</b>	-731716	0 - 200 0 - 8	150 6	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	70	7 7.72	4,8 10,584	K-2030-20+S, K-2030-20+S+B
<b>30-3+</b>	-731891	0 - 250 0 - 10	200 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	100	10 11.02	8,8 19,404	-
<b>30-30+</b>	-303333	105 - 375 4 1/8 - 14 3/4	200 7 7/8	180 - 440 7 1/16 - 17 5/16	36 1 7/16	250 184.40	150	15 16.53	1,635 3,605	-

### SERIES 30+B 3-JAW UNIVERSAL PULLER WITH QUICKLY ADJUSTABLE EXTRACTOR JAWS AND HYDRAULIC SPINDLE









The 3-jaw universal puller with quickly adjustable jaws and hydraulic spindle is used for particularly safe and user-friendly extraction of extremely stuck bearings, gears, and disks in all common sizes for trade, workshop, and industry. The hydraulic spindle achieves an average pulling force of up to 15 t. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. For extraction operations with pulling forces of up to 10 t and/or in confined spaces, the mechanical spindle can be used. The 3-jaw design ensures even load distribution and thus a particularly secure grip on the part to be extracted.

#### Benefits

- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- Fat hydraulic spindle guarantees an easy and controlled removal of particularly stubborn parts with little effort.
- In limited space conditions that require direct access to the component, the mechanical spindle can be used.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>30-2+B</b>	-886294	0 - 160 0 - 6 5/16	150 5 7/8	100 - 220 3 15/16 - 8 11/16	15 11.06	100	10 11.02	5,345 11,786	-
<b>30-20+B</b>	-886324	0 - 200 0 - 7 7/8	150 5 7/8	100 - 260 3 15/16 - 10 1/4	15 11.06	100	10 11.02	5,64 12,436	K-2030-20+S+B
<b>30-3+B</b>	-886355	0 - 250 0 - 9 13/16	200 7 7/8	180 - 340 7 1/16 - 13 3/8	20 14.75	120	12 13.23	11,43 25,203	-
<b>30-30+B</b>	-303067	0 - 375 0 - 14 3/4	200 7 7/8	180 - 440 7 1/16 - 17 5/16	45 33.19	150	15 16.53	19 41,895	-

## PRODUCT DETAILS

### SERIES 30+S 3-JAW UNIVERSAL PULLER WITH NARROW, QUICK-ADJUSTABLE JAWS










The 3-jaw universal puller with narrow, quick-adjustable jaws is used for the safe and user-friendly extraction of bearings, gears, and disks in all common sizes for crafts, workshops, and industry. It allows for the removal of any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure that even tight and difficult-to-access spaces can be reached. The 3-jaw design guarantees even load distribution and thus a particularly secure grip on the part being removed.

#### Benefits

- Narrow puller jaws grip optimally in tight and hard-to-reach places.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Simple manual release of the puller jaws via hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>30-1+S</b>	-756894	8 - 90 5/16 - 3 5/8	100 4	70 - 140 2 3/4 - 5 1/2	17 11/16	40 29.50	30	3 3.31	1,46 3,219	KS-2030-1-193xS, K-2030-1+A, KS-2030-1-193+S
<b>30-10+S</b>	-756979	8 - 130 5/16 - 5	100 4	70 - 180 2 3/4 - 7 1/16	17 11/16	40 29.50	30	3 3.31	1,54 3,396	K-2030-10+S
<b>30-2+S</b>	-757051	16 - 160 5/8 - 6	150 6	100 - 220 3 15/16 - 8 11/16	22 7/8	120 88.51	50	5 5.51	3,785 8,346	-
<b>30-20+S</b>	-757136	16 - 200 5/8 - 8	150 6	100 - 260 3 15/16 - 10 1/4	22 7/8	120 88.51	50	5 5.51	4,12 9,085	K-2030-20+S, K-2030-20+S+B
<b>30-3+S</b>	-757211	2 - 250 1/16 - 10	200 8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	390 287.66	135	13.5 14.88	9,3 20,507	-

### SERIES 30+S-T 3-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW, QUICKLY ADJUSTABLE JAWS










The 3-jaw universal puller with extremely narrow, quickly adjustable jaws and trapezoidal support surfaces at the claw is used for the safe and user-friendly removal of gearbox gears, bearings, pinions, synchronizers, and similar components. This allows any component that is seated on a shaft and is freely accessible from the outside to be removed. The trapezoidal support surfaces of the claw ensure that very tight and hard-to-reach gaps are also accessible. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being removed.

#### Benefits

- The extremely slim design of the jaws optimally engages in extremely tight and hard-to-reach spots
- 3-jaw provides an even distribution of forces and enables greater pulling forces.
- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>30-1+S-T</b>	-321320	13 - 90 1/2 - 3 9/16	100 3 15/16	70 - 140 2 3/4 - 5 1/2	17 11/16	40 29.50	30	3 3.31	1,345 2,966	-
<b>30-10+S-T</b>	-321337	13 - 130 1/2 - 5 1/8	100 3 15/16	70 - 180 2 3/4 - 7 1/16	17 11/16	40 29.50	30	3 3.31	1,535 3,385	K-2030-10+S-T



## PRODUCT DETAILS

### SERIES 30X 3-JAW UNIVERSAL PULLER WITH QUICK-ADJUSTABLE EXTRACTOR JAWS










The 3-jaw universal puller with quickly adjustable jaws is used for pulling bearings, gears, and discs in all common sizes for craft, workshop, and industry. It allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. Equipped with robust standard jaws and hand knobs for maximum user comfort, the puller all-rounder ensures particularly safe, user-friendly, and non-destructive disassembly both for external extraction and internal extraction. The 3-jaw design guarantees an even load distribution and thus particularly secure grip on the part being pulled.

#### Benefits

- Simple, manual solution of the Jaw clamps using hand knobs (Quick Adjust Technology)
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>30-1x</b> <b>NEW</b>	-041549	0 - 90 0 - 3 9/16	100 3 15/16	70 - 140 2 3/4 - 5 1/2	17 11/16	80 59.01	80	8 8.82	1,56 3,440	-
<b>30-10x</b> <b>NEW</b>	-041532	0 - 130 0 - 5 1/8	100 3 15/16	70 - 180 2 3/4 - 7 1/16	17 11/16	80 59.01	80	8 8.82	1,715 3,782	-
<b>30-2x</b> <b>NEW</b>	-041563	0 - 160 0 - 6 5/16	150 5 7/8	100 - 220 3 15/16 - 8 11/16	22 7/8	150 110.64	90	9 9.92	4,025 8,875	-
<b>30-20x</b> <b>NEW</b>	-041556	0 - 200 0 - 7 7/8	150 5 7/8	100 - 260 3 15/16 - 10 1/4	22 7/8	150 110.64	90	9 9.92	4,44 9,790	K-2030-20x5
<b>30-3x</b> <b>NEW</b>	-041587	0 - 250 0 - 9 13/16	200 7 7/8	180 - 340 7 1/16 - 13 3/8	27 1 1/16	250 184.40	120	12 13.23	8,8 19,404	-
<b>30-30x</b> <b>NEW</b>	-041570	105 - 375 4 1/8 - 14 3/4	200 7 7/8	180 - 440 7 1/16 - 17 5/16	36 1 7/16	250 184.40	170	17 18.74	17,43 38,433	-

### SERIES 11-A EXTRA POWERFUL, 3-JAW UNIVERSAL PULLER



The extra-strong 3-jaw universal puller is used for pulling heavy bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It allows you to loosen any component that is mounted on a shaft and is freely accessible from the outside. Equipped with robust and adjustable standard jaws, the solid construction of the puller ensures powerful, non-destructive disassembly during both external extraction and internal extraction. The 3-jaw design guarantees even load distribution and thus a particularly secure grip on the part to be pulled.

#### Benefits

- Screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Variable adjustment to any spread between 105 mm – 650 mm

#### Technical attributes

#							Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>11-0-A</b>	-005886	105 - 375 4 1/8 - 14 3/4	200 7 7/8	220 - 500 8 11/16 - 19 11/16	36 1 7/16	500 368.80	150	15 16.53	17,99 39,668
<b>11-0-A3</b>	-729263	105 - 375 4 1/8 - 14 3/4	300 11 13/16	220 - 500 8 11/16 - 19 11/16	36 1 7/16	500 368.80	150	15 16.53	19,5 42,998
<b>11-0-A4</b>	-729348	105 - 375 4 1/8 - 14 3/4	400 15 3/4	220 - 500 8 11/16 - 19 11/16	36 1 7/16	500 368.80	150	15 16.53	18,6 41,013
<b>11-0-A5</b>	-729423	105 - 375 4 1/8 - 14 3/4	500 19 11/16	220 - 500 8 11/16 - 19 11/16	36 1 7/16	500 368.80	150	15 16.53	22,78 50,230
<b>11-1-A</b>	-075421	125 - 520 4 15/16 - 20 1/2	200 7 7/8	280 - 600 11 1/32 - 23 5/8	41 1 5/8	650 479.44	200	20 22.05	22,72 50,098
<b>11-1-A3</b>	-729591	125 - 520 4 15/16 - 20 1/2	300 11 13/16	280 - 600 11 1/32 - 23 5/8	41 1 5/8	650 479.44	200	20 22.05	24,34 53,670
<b>11-1-A4</b>	-729676	125 - 520 4 15/16 - 20 1/2	400 15 3/4	280 - 600 11 1/32 - 23 5/8	41 1 5/8	650 479.44	200	20 22.05	28 61,740
<b>11-1-A5</b>	-729751	125 - 520 4 15/16 - 20 1/2	500 19 11/16	280 - 600 11 1/32 - 23 5/8	41 1 5/8	650 479.44	200	20 22.05	27,57 60,792
<b>11-2-A</b>	-006203	155 - 650 6 1/8 - 25 9/16	200 7 7/8	290 - 740 11 7/16 - 29 1/8	41 1 5/8	650 479.44	200	20 22.05	25 55,125
<b>11-2-A3</b>	-706158	155 - 650 6 1/8 - 25 9/16	300 11 13/16	290 - 740 11 7/16 - 29 1/8	41 1 5/8	650 479.44	200	20 22.05	26,25 57,881
<b>11-2-A4</b>	-729836	155 - 650 6 1/8 - 25 9/16	400 15 3/4	290 - 740 11 7/16 - 29 1/8	41 1 5/8	650 479.44	200	20 22.05	26 57,330
<b>11-2-A5</b>	-729911	155 - 650 6 1/8 - 25 9/16	500 19 11/16	290 - 740 11 7/16 - 29 1/8	41 1 5/8	650 479.44	200	20 22.05	27,6 60,858

## PRODUCT DETAILS

### SERIES 11-AV EXTRA STRONG, 3-JAW UNIVERSAL PULLER WITH ADJUSTABLE REACH










The extra robust 3-jaw universal puller with adjustable reach is used for removing heavy bearings, gears, and discs in all common sizes for craft, workshop, and industry. It allows for loosening any component that sits on a shaft and is freely accessible from the outside. The solid construction of the puller adapts to any pulling situation with its individually adjustable spread and reach, guaranteeing powerful, damage-free disassembly both for external extraction and internal extraction. The 3-jaw design ensures even weight distribution and thus a particularly secure grip on the part to be pulled.

#### Benefits

- Screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components via freely movable, sliding jaws on the traverse.
- Variable adjustment to any spread between 37 mm – 650 mm and reach depth between 300 mm – 450 mm

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force	Max. tractive force	 kg/lb
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>11-0-AV</b>	-730078	37 - 375 1 7/16 - 15	450 12-20	220 - 500 8 11/16 - 19 11/16	36 1 7/16	500 368.80	150	15 16.53	23,1 50,936
<b>11-1-AV</b>	-730153	57 - 520 2 1/4 - 21	450 12-20	280 - 600 11 1/32 - 23 5/8	41 1 5/8	650 479.44	200	20 22.05	3,39 7,475
<b>11-2-AV</b>	-730238	87 - 650 3 7/16 - 26	450 12-20	290 - 740 11 7/16 - 29 1/8	41 1 5/8	650 479.44	200	20 22.05	34 74,970

### SERIES 11-B EXTRA POWERFUL, 3-JAW UNIVERSAL PULLER WITH HYDRAULIC SPINDLE










The extra strong, 3-jaw universal pullers with hydraulic spindle are used for pulling off heavy, particularly stubborn bearings, gears, and discs in all common sizes for craft, workshop, and industry. The hydraulic spindle achieves an average pulling force of up to 20 t. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. Equipped with robust standard jaws, the massive construction of series 11-B ensures powerful, non-destructive disassembly during both external extraction and internal pulling. The 3-jaw design guarantees even load distribution and therefore a particularly secure grip on the part being pulled.

#### Benefits

- Screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- The hydraulic spindle ensures an easy and controlled withdrawal of particularly stubborn parts with minimal effort.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force	Max. tractive force	 kg/lb
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>11-0-B</b>	-075346	105 - 375 4 1/8 - 14 3/4	200 7 7/8	220 - 500 8 11/16 - 19 11/16	17 11/16	45 33.19	150	15 16.53	22,7 50,054
<b>11-1-B</b>	-006128	125 - 520 4 15/16 - 20 1/2	200 7 7/8	280 - 600 11 1/32 - 23 5/8	17 11/16	30 22.13	200	20 22.05	29,24 64,474
<b>11-2-B</b>	-006388	155 - 650 6 1/8 - 25 9/16	200 7 7/8	290 - 740 11 7/16 - 29 1/8	17 11/16	30 22.13	200	20 22.05	29,5 65,048
<b>11-3-B</b>	-706073	155 - 650 6 1/8 - 25 9/16	300 11 13/16	290 - 740 11 7/16 - 29 1/8	17 11/16	30 22.13	200	20 22.05	32,54 71,751



## PRODUCT DETAILS



### SERIES 11-BV EXTRA STRONG 3-JAW UNIVERSAL PULLER WITH ADJUSTABLE REACH AND HYDRAULIC SPINDLE










The extra-strength, 3-jaw universal pullers with adjustable reach depth and hydraulic spindle are used for pulling off heavy, particularly stuck bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 20 tons. This allows for the release of any component that sits on a shaft and is accessible from the outside. The robust design of the puller adapts to any pulling situation through its individually adjustable span and reach depth and guarantees powerful, damage-free disassembly both in external extraction and internal extraction. The 3-jaw design ensures even load distribution and thus a particularly secure hold on the part being pulled.

#### Benefits

- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- The hydraulic spindle guarantees easy and controlled removal of particularly tightly fitted parts with minimal effort.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
<b>11-0-BV</b>	-730313	37 - 375 1 7/16 - 14 3/4	450 17 11/16	220 - 500 8 11/16 - 19 11/16	17 11/16	45 33.19	150	15 16.53	31,19 68,774
<b>11-1-BV</b>	-730498	57 - 520 2 1/4 - 20 1/2	450 17 11/16	280 - 600 11 1/32 - 23 5/8	17 11/16	30 22.13	200	20 22.05	33,15 73,096
<b>11-2-BV</b>	-730566	87 - 650 3 7/16 - 25 9/16	450 17 11/16	290 - 740 11 7/16 - 29 1/8	17 11/16	30 22.13	200	20 22.05	35 77,175

### 219-1 CLAMP FOR 2-JAW PULLERS








The clamp for 2-jaw pullers is used for stability support during extraction processes with extensions. This ensures that the extractor jaws are pressed especially firmly against the part being pulled to prevent slipping of the jaws.

#### Benefits

- Maximum stability support during pulling



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	
<b>219-1</b>	-777776	40 - 190 1 9/16 - 7 1/2	8 5/16	0,77 1,698	20-1, 20-10

# PRODUCT DETAILS

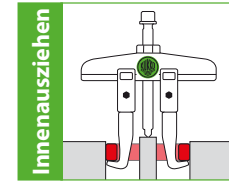
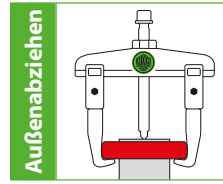
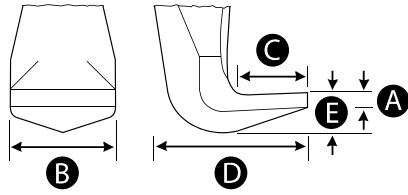


## SERIES 0-E 1 JAWS (SINGLE)

The single standard puller jaws are suitable for universal pullers. The robust design of the jaws ensures particularly safe pulling of bearings, gears and discs.

### Benefits

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



### Technical attributes

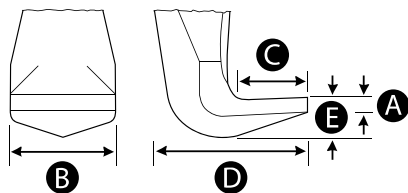
#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-90-E	-001253	100	132	10	31	20	15	3	0,28
		4	5 3/16	3/8	1 1/4	13/16	9/16	1/8	0,617
1-190-E	-001581	200	232	10	31	20	15	3	0,54
		7 7/8	9 1/8	3/8	1 1/4	13/16	9/16	1/8	1,191
1-250-E	-001826	250	282	10	31	20	15	3	0,665
		10	11 1/8	3/8	1 1/4	13/16	9/16	1/8	1,466
1-400-E	-975646	400	432	10	31	20	15	3	0,6
		15 3/4	17 1/64	3/8	1 1/4	13/16	9/16	1/8	1,323
2-150-E	-002328	150	193	9	40	24	18	4	0,6
		5 7/8	7 5/8	3/8	1 9/16	15/16	11/16	3/16	1,323
2-300-E	-002656	300	343	9	40	24	18	4	1,175
		11 13/16	13 1/2	3/8	1 9/16	15/16	11/16	3/16	2,591
3-200-E	-003158	200	255	20	67	35	37	4	1,63
		7 7/8	10 1/32	13/16	2 5/8	1 3/8	1 7/16	3/16	3,594
3-250-E	-901225	250	300	20	67	35	37	4	2,08
		9 13/16	11 13/16	13/16	2 5/8	1 3/8	1 7/16	3/16	4,586
3-300-E	-003493	300	350	20	67	35	37	4	2,085
		12	13 3/4	13/16	2 5/8	1 3/8	1 7/16	3/16	4,597
3-400-E	-003721	400	450	20	67	35	37	4	2,62
		16	17 11/16	13/16	2 5/8	1 3/8	1 7/16	3/16	5,777
3-500-E	-004063	500	550	20	67	35	37	4	3,14
		20	21 5/8	13/16	2 5/8	1 3/8	1 7/16	3/16	6,924

## SERIES 0-P 2 STANDARD JAWS

The pair of two standard jaws is suitable for 2-jaw universal pullers. The robust jaws guarantee a particularly secure removal of bearings, gears, and discs.

### Benefits

- The movable, sliding jaws on the crossbar allow for the extraction of eccentric components.



### Technical attributes

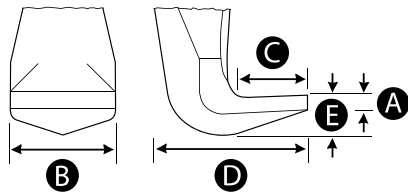
#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-90-P	-001338	100	132	10	31	20	15	3	0,555
		4	5 3/16	3/8	1 1/4	13/16	9/16	1/8	1,224
1-190-P	-001666	200	232	10	31	20	15	3	1,12
		8	9 1/8	3/8	1 1/4	13/16	9/16	1/8	2,470
1-250-P	-001901	250	282	10	31	20	15	3	1,36
		10	11 1/8	3/8	1 1/4	13/16	9/16	1/8	2,999
1-400-P	-975660	400	432	10	31	20	15	3	2,12
		15 3/4	17 1/64	3/8	1 1/4	13/16	9/16	1/8	4,675
2-150-P	-002403	150	193	9	40	24	18	4	1,24
		6	7 5/8	3/8	1 9/16	15/16	11/16	3/16	2,734
2-300-P	-002731	300	343	9	40	24	18	4	2,4
		12	13 1/2	3/8	1 9/16	15/16	11/16	3/16	5,292
3-200-P	-003233	200	255	20	67	35	37	4	3,27
		8	10 1/32	13/16	2 5/8	1 3/8	1 7/16	3/16	7,210
3-250-P	-901232	250	300	20	67	35	37	4	3,725
		9 13/16	11 13/16	13/16	2 5/8	1 3/8	1 7/16	3/16	8,214
3-300-P	-003561	300	350	20	67	35	37	4	4,5
		12	13 3/4	13/16	2 5/8	1 3/8	1 7/16	3/16	9,923
3-400-P	-003806	400	450	20	67	35	37	4	5,33
		16	17 11/16	13/16	2 5/8	1 3/8	1 7/16	3/16	11,753
3-500-P	-004148	500	550	20	67	35	37	4	6,7
		20	21 5/8	13/16	2 5/8	1 3/8	1 7/16	3/16	14,774



## PRODUCT DETAILS



### SERIES 0-S STANDARD PULLER JAWS (SET)












The set of three standard jaws is suitable for 3-jaw universal pullers. The robust jaws guarantee particularly safe removal of bearings, gears, and discs.

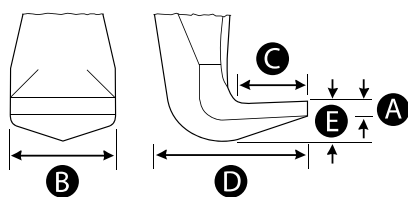
#### Benefits

- The movable, sliding jaws on the crossbar allow for the removal of eccentric components.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-90-S	-001413	100 4	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,835 1,841
1-190-S	-001741	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,685 3,715
1-250-S	-002083	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	2,04 4,498
1-400-S	-975684	400 15 3/4	432 17 1/64	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	3,48 7,673
2-150-S	-002571	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	1,84 4,057
2-300-S	-002816	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	3,78 8,335
3-200-S	-003318	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	3,28 7,232
3-250-S	-901249	250 9 13/16	300 11 13/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	5,695 12,557
3-300-S	-003646	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	6,46 14,244
3-400-S	-003981	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	8,5 18,743
3-500-S	-004223	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	9,89 21,807

### SERIES 1-E 1 NARROW PULLER JAWS (SINGLE)












The single, narrow pulling jaw is suitable for universal pullers. Thanks to the design of the pulling jaw, even tight and hard-to-reach spaces can be accessed.

#### Benefits

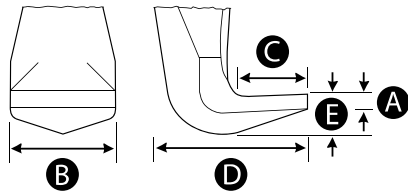
- With the movable puller jaws sliding on the crossbar, even eccentric components can be removed.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-91-E	-340253	100 4	127 5	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,245 0,540
1-191-E	-461101	200 7 7/8	227 8 15/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,53 1,169
1-251-E	-461361	250 10	277 10 7/8	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,645 1,422
1-401-E	-984990	400 16	427 16 13/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,62 1,367
2-151-E	-702846	150 5 7/8	180 7 1/16	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	0,58 1,279
2-301-E	-703003	300 11 13/16	330 12 1	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	1,24 2,734
3-201-E	-726453	200 8	244 9 5/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	1,8 3,969
3-301-E	-726606	300 12	340 13 3/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	0 0,000
3-401-E	-726866	400 16	440 17 5/16	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	2,95 6,505
3-501-E	-727023	500 20	540 21 1/4	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	3,035 6,692

# PRODUCT DETAILS

## SERIES 1-P 2 NARROW PULLER JAWS












The pair of two narrow jaws is suitable for 2-jaw universal pullers. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed.

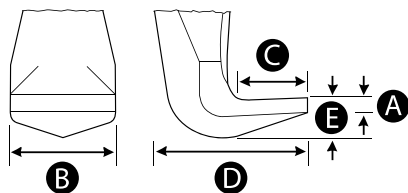
### Benefits

- Through the freely movable, gliding jaws on the crossbar, even eccentric components can be removed.

### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-91-P	-434716	100 4	127 5	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,515 1,136
1-191-P	-461286	200 8	227 8 15/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	1,75 3,859
1-251-P	-461446	250 10	277 10 7/8	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	1,305 2,878
1-401-P	-985010	400 16	427 16 13/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	2,75 6,064
2-151-P	-702921	150 6	186 7 5/16	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	1,25 2,756
2-301-P	-703188	300 12	336 13 1/4	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	2,535 5,590
3-201-P	-726521	200 8	244 9 5/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	3,175 7,001
3-301-P	-726781	300 12	340 13 3/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	4,28 9,437
3-401-P	-726941	400 16	440 17 5/16	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	5,89 12,987
3-501-P	-727108	500 20	540 21 1/4	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	6,555 14,454

## SERIES 1-S NARROW PULLER JAWS (SET)












The set of three narrow jaws is suitable for 3-jaw universal pullers. The narrow jaws ensure that even tight and hard-to-reach spaces are accessible.

### Benefits

- Through the freely movable jaws gliding on the crossbar, eccentric components can also be pulled off.

### Technical attributes

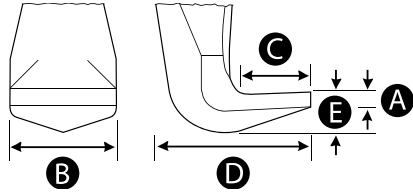
#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-91-S	-497834	100 4	127 5	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,755 1,665
1-191-S	-497919	200 8	227 8 15/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	1,605 3,539
1-251-S	-498091	250 10	277 10 7/8	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	2,08 4,586
1-401-S	-985034	400 16	427 16 13/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	3,24 7,144
2-151-S	-728686	150 6	186 7 5/16	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	1,78 3,925
2-301-S	-728761	300 12	336 13 1/4	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	3,645 8,037
3-201-S	-728846	200 8	244 9 5/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	5,485 12,094
3-301-S	-728921	300 12	340 13 3/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	6,39 14,090
3-401-S	-729003	400 16	440 17 5/16	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	7,86 17,331
3-501-S	-729188	500 20	540 21 1/4	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	10,1 22,271



## PRODUCT DETAILS



### SERIES 2-E 1 QUICK-ADJUSTABLE JAW HOOK (SINGLE)



The single, quickly adjustable standard jaws are suitable for universal pullers. The robust construction of the jaws guarantees particularly safe and user-friendly removal of bearings, gears, and discs.

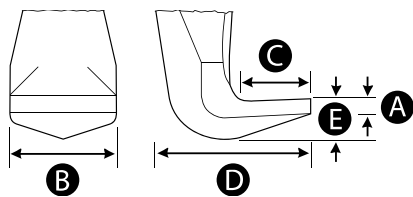
#### Benefits

- The freely movable extraction jaws sliding on the crossbar can also be used to extract eccentric components.
- Thanks to the knurling, a tool-free, quick release or relocation of the jaws is enabled.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-92-E	-669101	100 3 15/16	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,28 0,617
1-192-E	-975608	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,49 1,080
1-252-E	-975622	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,56 1,235
2-152-E	-669286	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	0,605 1,334
2-302-E	-733611	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	0 0,000
3-202-E	-669361	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	1,62 3,572
3-302-E	-976148	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	2,1 4,631
3-402-E	-976162	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	2,46 5,424
3-502-E	-976186	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	4,04 8,908

### SERIES 2-P QUICK-ADJUSTABLE STANDARD JAWS (PAIR)



The pair of two quick-adjustable standard jaws is suitable for 2-jaw universal pullers. The robust jaws guarantee particularly safe and user-friendly removal of bearings, gears, and disks.

#### Benefits

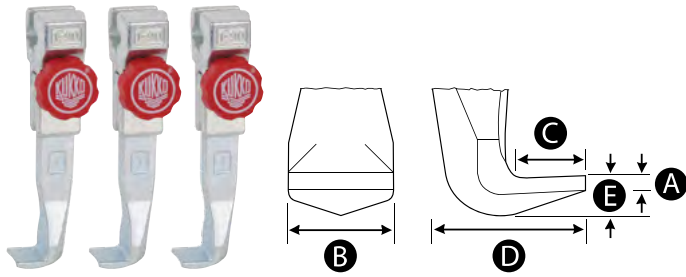
- The movable puller jaws that glide on the crossbar allow for the removal of eccentric components as well.
- Through the knurl, a tool-free, quick solution or movement of the jaws is made possible.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-92-P	-732393	100 4	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,58 1,279
1-192-P	-973611	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,17 2,580
1-252-P	-973673	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,41 3,109
2-152-P	-973765	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	1,26 2,778
2-302-P	-973819	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	2,59 5,711
3-202-P	-732706	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	3,33 7,343
3-302-P	-973932	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	4,505 9,934
3-402-P	-974014	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	5,505 12,139
3-502-P	-974137	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	6,35 14,002

## PRODUCT DETAILS

### SERIES 2-S 3 QUICK-ADJUSTABLE STANDARD JAWS (SET)












The set of three quickly adjustable standard jaws is suitable for 3-jaw universal pullers. The robust jaws guarantee particularly safe and user-friendly removal of bearings, gears, and discs.

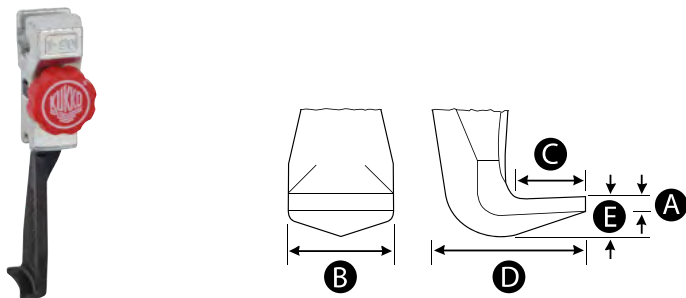
#### Benefits

- Through the freely movable, sliding jaws on the crossbar, even eccentric components can be pulled off.
- Thanks to the knurling, it enables tool-free, quick loosening or moving of the jaws.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-92-S	-973741	100 4	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,92 2,029
1-192-S	-973635	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,86 4,101
1-252-S	-973697	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	2,35 5,182
2-152-S	-973772	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	2,075 4,575
2-302-S	-973833	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	3,775 8,324
3-202-S	-973895	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	4,94 10,893
3-302-S	-973956	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	6,64 14,641
3-402-S	-974038	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	8,14 17,949
3-502-S	-974151	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	9,89 21,807

### SERIES 3-E 1 NARROW, QUICK-ADJUSTABLE JAW HOOK (SINGLE)












The slim, quickly adjustable jaw is suitable for universal pullers. Thanks to the slim design of the jaws, even tight and hard-to-reach spaces can be accessed.

#### Benefits

- The movable extracting jaws, which glide along the crossbar, can also extract eccentric components.
- Thanks to the knurling, a tool-free, quick release or relocation of the jaws is possible.

#### Technical attributes

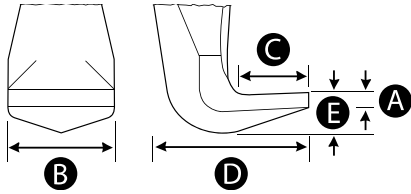
#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-92-S	-973741	100 4	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,92 2,029
1-192-S	-973635	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,86 4,101
1-252-S	-973697	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	2,35 5,182
2-152-S	-973772	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	2,075 4,575
2-302-S	-973833	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	3,775 8,324
3-202-S	-973895	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	4,94 10,893
3-302-S	-973956	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	6,64 14,641
3-402-S	-974038	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	8,14 17,949
3-502-S	-974151	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	9,89 21,807



## PRODUCT DETAILS



### SERIES 3-P NARROW, QUICKLY ADJUSTABLE JAWS (PAIR)












The pair of two narrow, quickly adjustable pulling jaws is suitable for 2-jaw universal pullers. The narrow pulling jaws ensure that even tight and hard-to-reach spaces can be accessed.

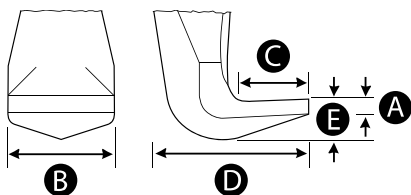
#### Benefits

- Through the freely movable, sliding jaws on the crossbar, even eccentric components can be pulled off.
- Thanks to the knurling, tool-free, quick loosening or moving of the jaws is made possible.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-93-P	-973352	100 4	127 5	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,53 1,169
1-193-P	-324208	200 8	227 8 15/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	1,095 2,414
1-253-P	-973710	250 10	277 10 7/8	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	1,34 2,955
2-153-P	-973789	150 6	186 7 5/16	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	1,37 3,021
2-303-P	-973857	300 12	336 13 1/4	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	2,58 5,689
3-203-P	-973901	200 8	244 9 5/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	3,16 6,968
3-303-P	-973970	300 12	340 13 3/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	4,265 9,404
3-403-P	-974052	400 16	440 17 5/16	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	6,155 13,572
3-503-P	-974175	500 20	540 21 1/4	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	6,51 14,355

### SERIES 3-S 3 NARROW, QUICK-ADJUSTABLE JAWS (SET)












The set of three narrow, quickly adjustable jaws is suitable for 3-jaw universal pullers. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed.

#### Benefits

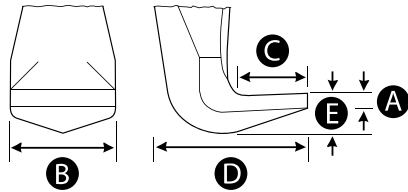
- The freely movable pulling jaws, which glide on the crossbar, can also be used to remove eccentric components.
- Thanks to the knurling, a tool-free, quick release or movement of the trigger jaws is possible.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-93-S	-973758	100 4	127 5	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	0,85 1,874
1-193-S	-973659	200 8	227 8 15/16	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	1,62 3,572
1-253-S	-973734	250 10	277 10 7/8	3 1/8	14 9/16	30 1 3/16	7 1/4	3 1/8	2,18 4,807
2-153-S	-973796	150 6	186 7 5/16	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	2,03 4,476
2-303-S	-973871	300 12	336 13 1/4	4 3/16	19 3/4	32 1 1/4	8 5/16	4 3/16	3,745 8,258
3-203-S	-973918	200 8	244 9 5/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	5,435 11,984
3-303-S	-973994	300 12	340 13 3/8	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	4,265 9,404
3-403-S	-974076	400 16	440 17 5/16	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	7,85 17,309
3-503-S	-974199	500 20	540 21 1/4	6,5 1/4	52 2 1/16	35 1 3/8	17 11/16	6,5 1/4	1,35 2,977

## PRODUCT DETAILS

### SERIES 4-E 1 EXTREMELY NARROW PULLING HOOK (SINGLE)













The individual, extremely narrow puller jaws are suitable for universal pullers. The trapezoidal support surface of the jaws ensures that even very tight and hard-to-reach gaps are accessed.

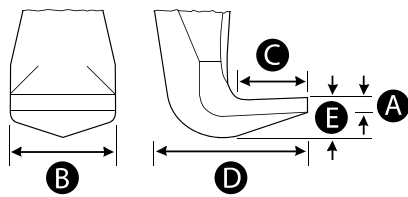
#### Benefits

- Through the freely movable jaws gliding on the crossbar, eccentric components can also be pulled off.

#### Technical attributes

#										
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>1-94-E</b>	-321573	100 3 15/16	127 5	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	0,25 0,551
<b>1-194-E</b>	-321375	200 7 7/8	227 8 15/16	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	0,45 0,992
<b>1-254-E</b>	-321474	250 9 13/16	277 10 7/8	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	0,62 1,367

### SERIES 4-P EXTREMELY NARROW PULLER JAWS (PAIR)













The pair of two extremely narrow jaws is suitable for 2-jaw universal pullers. The trapezoidal support surface of the claw ensures that even very tight and hard-to-reach gaps can be accessed.

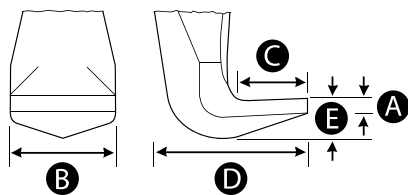
#### Benefits

- Through the freely movable jaws gliding on the crossbar, even eccentric components can be removed.

#### Technical attributes

#										
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>1-94-P</b>	-852039	100 3 15/16	127 5	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	0,49 1,080
<b>1-194-P</b>	-321399	200 7 7/8	227 8 15/16	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	1,06 2,337
<b>1-254-P</b>	-321498	250 9 13/16	277 10 7/8	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	1,26 2,778

### SERIES 4-S 3 EXTREMELY NARROW PULLER JAWS (SET)













The set of three extremely narrow jaws is suitable for 3-jaw universal pullers. The trapezoidal contact surface of the claw ensures that even very tight and hard-to-reach gaps are accessed.

#### Benefits

- By using the freely movable, sliding jaws on the crossbar, eccentric components can also be pulled off.

#### Technical attributes

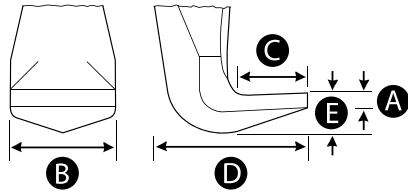
#										
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>1-94-S</b>	-321580	100 3 15/16	127 5	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	0,72 1,588
<b>1-194-S</b>	-321412	200 7 7/8	227 8 15/16	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	1,56 3,440
<b>1-254-S</b>	-484520	250 9 13/16	277 10 7/8	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8	3 1/8	1,89 4,167





## PRODUCT DETAILS

### SERIES 5-E 1 EXTREMELY NARROW, QUICK-ADJUSTABLE JAW HOOK (SINGLE)



The single, extremely narrow, quickly adjustable puller jaws are suitable for universal pullers. The trapezoidal support surfaces of the claw ensure that even very tight and difficult-to-reach spaces can be accessed.

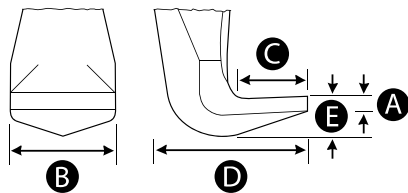
#### Benefits

- Through the freely movable, sliding jaws on the crossbar, even eccentric components can be removed.
- Thanks to the knurling, a tool-free, quick solution or repositioning of the jaws is made possible.

#### Technical attributes

#										
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-95-E	-321597	100 3 15/16	127 5	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		0,24 0,529
1-195-E	-321429	200 7 7/8	227 8 15/16	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		0,45 0,992
1-255-E	-321528	250 9 13/16	277 10 7/8	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		0,62 1,367

### SERIES 5-P EXTREMELY NARROW, QUICKLY ADJUSTABLE TRIGGER JAWS (PAIR)



The pair of two extremely narrow, quickly adjustable extractor jaws is suitable for 2-jaw universal pullers. The trapezoidal support surfaces of the claw ensure that even very tight and hard-to-reach gaps are accessible.

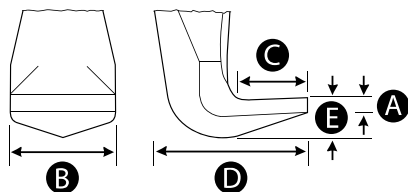
#### Benefits

- The movable, sliding extraction jaws on the crossbar can also be used to extract eccentric components.
- Thanks to the knurl, a tool-free, quick release or movement of the trigger hooks is made possible.

#### Technical attributes

#										
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-95-P	-321610	100 3 15/16	127 5	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		0,505 1,114
1-195-P	-321443	200 7 7/8	227 8 15/16	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		1,08 2,381
1-255-P	-321542	250 9 13/16	277 10 7/8	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		1,32 2,911

### SERIES 5-S 3 EXTREMELY NARROW, QUICKLY ADJUSTABLE JAWS (SET)



The set of three extremely narrow, quick-adjustable jaws is suitable for 3-jaw universal pullers. The trapezoidal contact surface of the claw ensures that even very tight and poorly accessible gaps can be reached.

#### Benefits

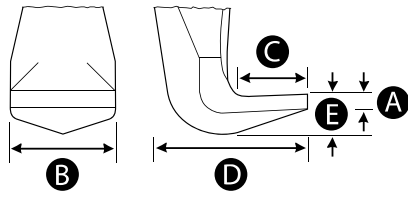
- The movable puller jaws gliding on the crossbar allow for the extraction of eccentric components.
- Thanks to the knurl, a tool-free, quick release or movement of the jaws is made possible.

#### Technical attributes

#										
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-95-S	-321634	100 3 15/16	127 5	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		0,81 1,786
1-195-S	-321467	200 7 7/8	227 8 15/16	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		1,95 4,300
1-255-S	-321566	250 9 13/16	277 10 7/8	3 1/8	12 1/2	24 15/16	7 1/4	3 1/8		2,095 4,619

## PRODUCT DETAILS

### SERIES 2-EX 1 QUICK-ADJUSTING JAW HOOK (SINGLE)












The individual, quickly adjustable standard jaw is suitable for universal pullers. The robust design of the jaws guarantees a particularly safe removal of bearings, gears, and discs. The green hand knobs ensure maximum operating comfort and allow for quick, tool-free loosening and fastening of the jaws, even with wet or oily hands.

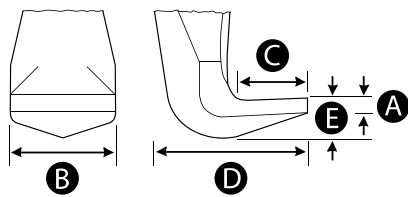
#### Benefits

- Through the freely movable, gliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurled surface, a quick, tool-free release or adjustment of the jaws is possible.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>1-92-Ex NEW</b>	-061240	100 3 15/16	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,28 0,617
<b>1-192-Ex NEW</b>	-061189	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,49 1,080
<b>1-252-Ex NEW</b>	-061202	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,56 1,235
<b>2-152-Ex NEW</b>	-061271	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	0,605 1,334
<b>2-302-Ex NEW</b>	-061295	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	0 0,000
<b>3-202-Ex NEW</b>	-426094	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	1,62 3,572
<b>3-302-Ex NEW</b>	-061325	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	2,1 4,631
<b>3-402-Ex NEW</b>	-262678	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	2,46 5,424
<b>3-502-Ex NEW</b>	-262685	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	4,04 8,908

### SERIES 2-PX QUICK-ADJUSTABLE STANDARD JAWS (PAIR)












The pair of two quickly adjustable standard puller jaws is suitable for 2-jaw universal pullers. The robust jaws guarantee particularly safe removal of bearings, gears, and discs. The green hand knobs ensure maximum user comfort and allow for quick, tool-free loosening or fastening of the jaws, even with wet or oily hands.

#### Benefits

- Through the freely movable jaws gliding on the crossbar, eccentric components can also be pulled off.
- Through the knurl, a tool-free, quick release or movement of the jaws is made possible.

#### Technical attributes

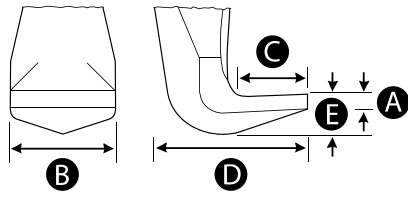
#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>1-92-Px NEW</b>	-061257	100 4	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,58 1,279
<b>1-192-Px NEW</b>	-061172	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,17 2,580
<b>1-252-Px NEW</b>	-061219	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,41 3,109
<b>2-152-Px NEW</b>	-061288	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	1,26 2,778
<b>2-302-Px NEW</b>	-061318	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	2,59 5,711
<b>3-202-Px NEW</b>	-426100	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	3,33 7,343
<b>3-302-Px NEW</b>	-061332	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	4,55 10,033
<b>3-402-Px NEW</b>	-061349	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	5,55 12,238
<b>3-502-Px NEW</b>	-061356	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	6,35 14,002



## PRODUCT DETAILS



### SERIES 2-SX 3 QUICK-ADJUSTABLE STANDARD JAWS (SET)












The set of three quickly adjustable standard jaws is suitable for 3-jaw universal pullers. The robust jaws guarantee particularly secure removal of bearings, gears, and disks. The green hand knobs provide maximum operating comfort and enable - even with wet or oily hands - a quick, tool-free loosening or fastening of the jaws.

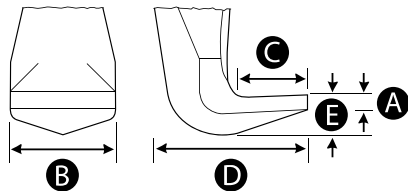
#### Benefits

- The movable, gliding jaws on the crossbar can also remove eccentric components.
- Thanks to the knurled surfaces, tool-free, quick release or repositioning of the jaws is enabled.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>1-92-Sx NEW</b>	-061264	100 4	132 5 3/16	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	0,92 2,029
<b>1-192-Sx NEW</b>	-061196	200 8	232 9 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	1,86 4,101
<b>1-252-Sx NEW</b>	-061233	250 10	282 11 1/8	10 3/8	31 1 1/4	20 13/16	15 9/16	3 1/8	2,35 5,182
<b>2-152-Sx NEW</b>	-061363	150 6	193 7 5/8	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	2,75 6,064
<b>2-302-Sx NEW</b>	-061370	300 12	343 13 1/2	9 3/8	40 1 9/16	24 15/16	18 11/16	4 3/16	3,775 8,324
<b>3-202-Sx NEW</b>	-061387	200 8	255 10 1/32	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	4,94 10,893
<b>3-302-Sx NEW</b>	-061394	300 12	350 13 3/4	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	6,64 14,641
<b>3-402-Sx NEW</b>	-061400	400 16	450 17 11/16	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	8,14 17,949
<b>3-502-Sx NEW</b>	-061417	500 20	550 21 5/8	20 13/16	67 2 5/8	35 1 3/8	37 1 7/16	4 3/16	9,89 21,807

### SERIES SP-E 1 PULLER WITH ADJUSTABLE LENGTH (SINGLE)












The single, robust, height-adjustable puller jaw guarantees particularly safe removal of bearings, gears, and discs. The hook length can be individually adjusted in the range of 400-700 mm.

#### Benefits

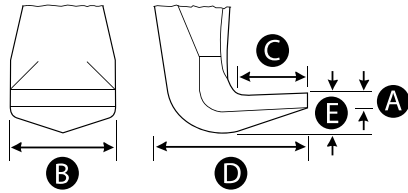
- Through the freely movable, sliding jaws on the crossbar, even eccentric components can be pulled off.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>4-SP-E</b>	-004551	500 19 11/16	565 22 1/4	25 1	85 3 3/8	45 1 3/4	50 1 15/16	7 1/4	4,34 9,570
<b>5-SP-E</b>	-004896	700 27 9/16	770 30 5/16	37 1 7/16	105 4 1/8	61 2 3/8	60 2 3/8	7 1/4	10,5 23,153
<b>5-SP-E-1</b>	-892318	700 27 9/16	437 17 3/16	37 1 7/16	105 4 1/8	61 2 3/8	60 2 3/8	7 1/4	4,82 10,628

## PRODUCT DETAILS

### SERIES SP-P ADJUSTABLE LENGTH PULLER HOOKS (PAIR)












The pair of two height-adjustable puller jaws is suitable for 2-jaw pullers. The robust puller jaws guarantee a particularly safe removal of bearings, gears, and discs.

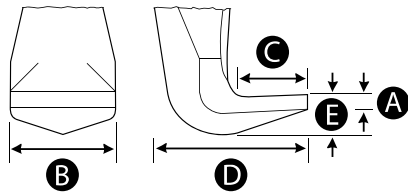
#### Benefits

- Through the freely movable jaws gliding on the crossbar, even eccentric components can be removed.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
4-SP-P	-004636	500 19 11/16	565 22 1/4	25 1	85 3 3/8	45 1 3/4	50 1 15/16	7 1/4	8,965 19,768
5-SP-P	-004971	700 27 9/16	770 30 5/16	37 1 7/16	105 4 1/8	61 2 3/8	60 2 3/8	7 1/4	22,21 48,973

### SERIES SP-S 3 ADJUSTABLE PULLER JAWS












The set of three height-adjustable puller jaws is suitable for 3-jaw pullers. The robust puller jaws guarantee a particularly safe removal of bearings, gears, and disks.

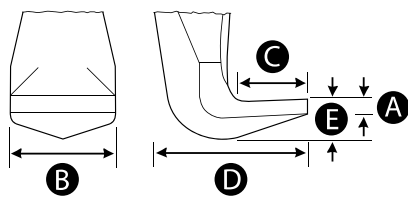
#### Benefits

- Through the freely movable, gliding {Traverse} puller jaws, even eccentric components can be pulled off.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
4-SP-S	-004711	500 19 11/16	565 22 1/4	25 1	85 3 3/8	45 1 3/4	50 1 15/16	7 1/4	13,65 30,098

### SERIES 6-P STANDARD JAWS FOR 20-10-V (PAIR)












The pair of jaws is suitable for 2-jaw pullers for gear wheels of series 20-10-V. The robust jaws guarantee a particularly safe pulling of gear wheels.

#### Benefits

- Through the movable puller jaws sliding on the crossbar, eccentric components can also be removed.

#### Technical attributes

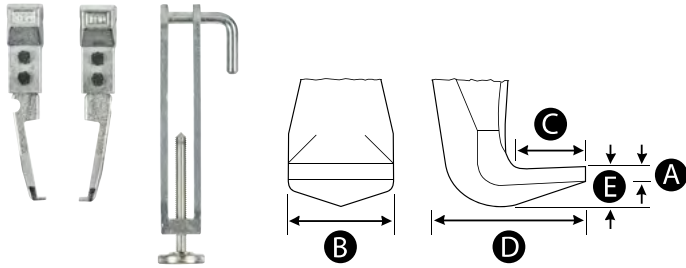
#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-96-P	-001031	100 3 15/16	123,5 4 7/8	2,2 1/16	10,5 7/16	21 13/16	6 1/4	2,2 1/16	0,46 1,014





## PRODUCT DETAILS

### SERIES 1-96/219-V STANDARD JAWS FOR 20-10-V WITH LOCKING CLAMP (PAIR)












The pair of puller jaws with clamp is suitable for 2-jaw pullers for gear wheels of series 20-10-V. The robust puller jaws guarantee a particularly safe removal of gear wheels.

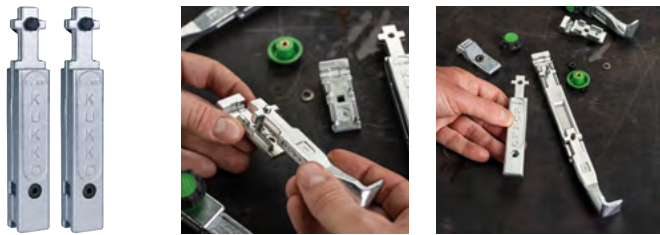
#### Benefits

- The mobile puller jaws, which glide along the crossbar, can also be used to extract eccentric components.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
1-96/219-V	-793073	100 3 15/16	123,5 4 7/8	2,2 1/16	10,5 7/16	21 13/16	6 1/4	2,2 1/16	0,75 1,654

### SERIES V-P 2 JAWS EXTENSIONS (PAIR)






The pair of jaws extensions is used to increase the reach. This allows components that are particularly deep on a shaft to be grasped. The extensions can be combined in any way and thus adapted to the required reach.

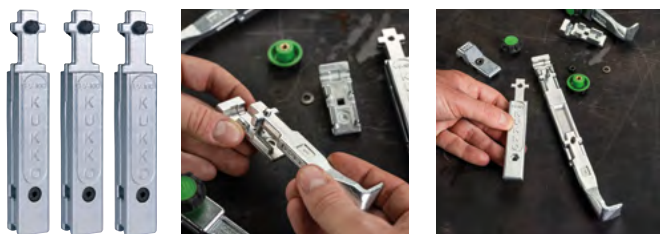
#### Benefits

- Unlimited extension of reach
- Cross-referencing allows for increased power uptake and relieves the screw.
- Compatible with various hook types

#### Technical attributes

#			
	EAN	mm/inch	kg/lb
1-V-100-P	-985058	100 3 15/16	0,565 1,246
1-V-150-P	-985089	150 5 7/8	0,85 1,874
2-V-150-P	-985201	150 5 7/8	1,195 2,635

### SERIES V-S 3 PULLER EXTENSIONS (SET)






The set of Pulling jaws extensions is used to extend the reach. This allows for the gripping of components that are seated particularly deep on a shaft. The extensions can be combined with each other as desired and thus adapted to the required reach.

#### Benefits

- Unlimited Extension of Reach
- Cross reception enables increased force intake and relieves the screw.
- Compatible with various hook types

#### Technical attributes

#			
	EAN	mm/inch	kg/lb
1-V-100-S	-985065	100 3 15/16	0,84 1,852
1-V-150-S	-985096	150 5 7/8	1,205 2,657
2-V-150-S	-985218	150 5 7/8	1,775 3,914

# PRODUCT DETAILS

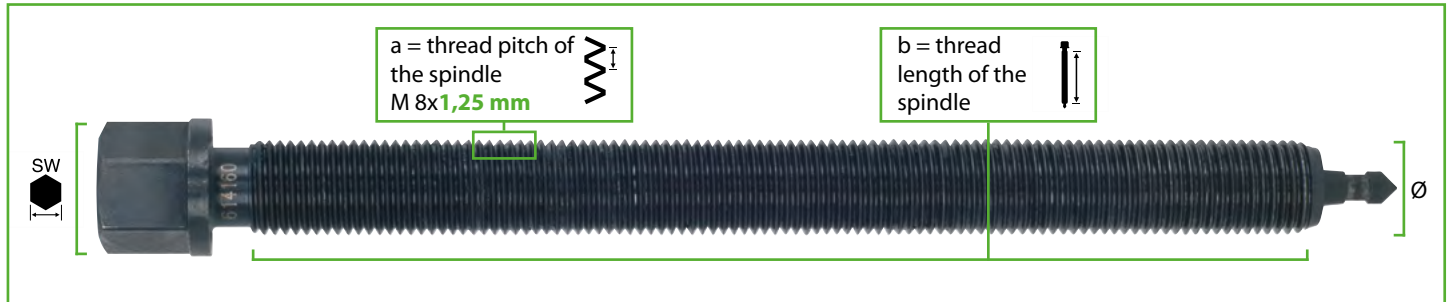
## SERIES 6 MECHANICAL PRESSURE SPINDLE



The mechanical pressure spindle is the heart of every KUKKO puller. It achieves a maximum pulling force of 10 t. The manual operation of the spindle allows for a sensitive control of the extraction process. The fine thread also ensures perfect power transmission. A reversible spindle tip enables a secure placement of the spindle on both smooth surfaces and centrings.

### Benefits

- Optimal gliding properties in the thread groove thanks to special coating
- Ideal adaptation of the spindle to the shaft through two-sided spindle tip



### Technical attributes

#		Ø			SW	#		Ø			SW
	EAN	mm/inch	mm/inch		mm/inch		EAN	mm/inch	mm/inch		mm/inch
608080	-176241	8 5/16	80 3 1/8	M 8x1,25	T-handle	618175	-056215	18 11/16	175 6 7/8	M 18x1,5	19 3/4
608130	-481086	8 5/16	130 5 1/8	M 8x1,25	T-handle	618210	-113048	18 11/16	210 8 1/4	M 18x1,5	19 3/4
609087	-102493	9 3/8	87 3 7/16	M 9x1,25	T-handle	621130	-124358	20,955 13/16	130 5 1/8	G 1/2" / 14	22 7/8
609105	-101403	9 3/8	105 4 1/8	M 9x1,25	T-handle	621170	-067181	20,955 13/16	170 6 11/16	G 1/2" / 14	22 7/8
610070	-362446	10 3/8	75 2 15/16	M 10x1,5	13 1/2	621220	-268373	20,955 13/16	220 8 11/16	G 1/2" / 14	22 7/8
610094	-122118	10 3/8	94 3 11/16	M 10x1,5	T-handle	621300	-765346	20,955 13/16	300 11 13/16	G 1/2" / 14	22 7/8
610110	-433726	10 3/8	120 4 3/4	M 10x1,5	8 5/16	621355	-236228	20,955 13/16	355 13 1	G 1/2" / 14	22 7/8
610120	-910005	10 3/8	120 4 3/4	M 10x1,5	13 1/2	623150	-018961	22,911 7/8	150 5 7/8	G 5/8" / 14	24 15/16
612080	-238468	12 1/2	85 3 3/8	M 12x1,5	13 1/2	623170	-124501	22,911 7/8	170 6 11/16	G 5/8" / 14	24 15/16
612110	-112881	12 1/2	110 4 5/16	M 12x1,5	13 1/2	623230	-074684	22,911 7/8	230 9 1/16	G 5/8" / 14	24 15/16
612130	-077081	12 1/2	130 5 1/8	M 12x1,5	13 1/2	623260	-113123	22,911 7/8	260 10 1/4	G 5/8" / 14	24 15/16
612150	-790201	12 1/2	150 5 7/8	M 12x1,5	13 1/2	623325	-125263	22,911 7/8	325 12 13/16	G 5/8" / 14	24 15/16
612200	-056208	12 1/2	210 8 1/4	M 12x1,75	13 1/2	623360	-814976	22,911 7/8	360 14 3/16	G 5/8" / 14	24 15/16
614135	-074271	14 9/16	135 5 5/16	M 14x1,5	17 11/16	623450	-832796	22,911 7/8	450 17 11/16	G 5/8" / 14	24 15/16
614160	-112966	14 9/16	160 6 5/16	M 14x1,5	17 11/16	626300	-765360	26,441 1 1/32	300 11 13/16	G 3/4" / 14	27 1 1/16
614200	-838576	14 9/16	200 7 7/8	M 14x1,5	17 11/16	626400	-125423	26,441 1 1/32	400 15 3/4	G 3/4" / 14	27 1 1/16
614242	-910012	14 9/16	240 9 7/16	M 14x1,5	17 11/16	626500	-765377	26,441 1 1/32	500 19 11/16	G 3/4" / 14	27 1 1/16
614250	-306709	14 9/16	250 9 13/16	M 14x1,5	17 11/16	633400	-765384	33,249 1 5/16	400 15 3/4	G 1" / 11	36 1 7/16
616202	-264351	16 5/8	185 7 5/16	M 16x2,0	17 11/16	633500	-893452	33,249 1 5/16	500 19 11/16	G 1" / 11	36 1 7/16
616270	-480829	16 5/8	270 10 5/8	M 16x2,0	17 11/16	633600	-866388	33,249 1 5/16	600 23 5/8	G 1"	36 1 7/16
616325	-480904	16 5/8	325 12 13/16	M 16x2,0	17 11/16	637350	-893469	37,897 1 1/2	350 13 3/4	G 1" 1/8	41 1 5/8
616220	-420856	16 5/8	220 8 11/16	M 16x1,5	17 11/16	637500	-895609	37,897 1 1/2	500 19 11/16	G 1" 1/8	41 1 5/8
618068	-123771	18 11/16	58 2 5/16	M 18x1,5	19 3/4	637600	-169236	37,897 1 1/2	600 23 5/8	1.1/8"	41 1 5/8
618105	-073779	18 11/16	105 4 1/8	M 18x1,5	19 3/4	638300	-059230	38,1 1 1/2	322 12 11/16	W 1.1/2"	24 15/16



## PRODUCT DETAILS



### SERIES 844-626 MECHANICAL SPINDLE








The mechanical spindle allows for easy and controlled removal of particularly stubborn parts through impact force. Additionally, it guarantees exceptionally good sliding properties in the thread. The fine thread ensures an ideal power transmission. The exact force required for the removal is generated.

#### Benefits

- Light and controlled removal of particularly stubborn parts through impact action

#### Technical attributes

#	 EAN	 mm/inch	 W	 mm/inch	 kg/lb
844-626	-032851	200 7 7/8	W 1 1/2"-16	24 15/16	1,405 3,098

### SERIES 800-626 MECHANICAL IMPACT SHOCK SPINDLE








The mechanical impact spindle enables easy and controlled extraction of particularly seized parts through impact force. Additionally, the spindle guarantees particularly good sliding properties in the thread groove. The fine thread ensures ideal power transmission. Exactly the required force for extraction is generated.

#### Benefits

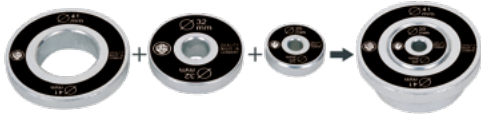
- Light and controlled removal of particularly stuck parts through impact action

#### Technical attributes

#	 EAN	 mm/inch	 W	 mm/inch	 kg/lb
800-626	-969980	280 11 1/32	W 1 1/2"-16	30 1 3/16	2,105 4,642

## PRODUCT DETAILS

### SERIES 600-17 UNIVERSAL PRESSURE PIECE SET (3-PIECE)






The pressure piece kit is used to stabilize the pressure spindle on a hollow shaft. The kit includes a total of three pressure pieces that have different diameters and can be combined with each other. Thanks to their step-shaped silhouette, the pressure pieces fit perfectly on the hollow shaft. Depending on the size, the different pressure pieces can also be nested together to achieve the exact diameter of the shaft.

#### Benefits

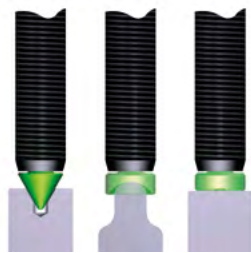
- Adjustment possibility for the spindle in hollow shaft



#### Technical attributes

#	 EAN	 mm/inch	 kg/lb	Included in the set
600-17	-914188	20; 32; 41 13/16; 1 1/4; 1 5/8	0,11 0,243	K-20-15

### SERIES K-600 REVERSABLE SPINDLE TIP











The reversible pressure piece set is considered the optimal addition for KUKKO pressure spindles with interchangeable tips and can be used for any mounting position. For individual adjustment to the shaft, the pressure piece is inserted into the spindle. It is possible to choose between different pressure pieces (e.g., with a flat or concave bearing surface). The set also includes a 3-piece universal pressure piece set for stepwise adjustment on hollow shafts, as well as a magnetic mini-LED.

#### Benefits

- Every installation position can be covered.
- Dual spindle tip for smooth surfaces and centering

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb	
<b>K-600-A</b>	-833960	20; 32; 41 13/16; 1 1/4; 1 5/8	6,4 1/4	34 1 5/16	33 1 5/16	38 1 1/2	0,61 1,345	612080, 612110, 612130, 612150, 612200, 614135, 614160, 614200, 614242, 614250
<b>K-600-B</b>	-833977	20; 32; 41 13/16; 1 1/4; 1 5/8	10,4 7/16	48 1 7/8	48 1 7/8	52 2 1/16	0,705 1,555	616202, 616270, 616325, 616220, 618105, 618175, 618210
<b>K-600-C</b>	-833984	20; 32; 41 13/16; 1 1/4; 1 5/8	12,5 1/2	61 2 3/8	59 2 5/16	68 2 11/16	0 0,000	620172, 621130, 621170, 621220, 621300, 621355, 623150, 623170, 623230, 623260, 623325, 623360, 623450, 626300, 626400, 626500
<b>K-600-D</b>	-833991	20; 32; 41 13/16; 1 1/4; 1 5/8	18,9 3/4	64 2 1/2	62 2 7/16	78 3 1/16	0 0,000	633400, 633500, 633600, 637350, 637500, 637600

## PRODUCT DETAILS



### SERIES 8-0 HYDRAULIC SPINDLE








The hydraulic spindle of series 8-0 is the motor of the puller and achieves a pulling force of 12 t. The hydraulic spindle is suitable for removing particularly stubborn bearings, gears, and discs that cannot be loosened with pure muscle power. Thanks to integrated fat-hydraulic, no external pump is required.

#### Benefits

- The hydraulic spindle enables easy and controlled removal of particularly stubborn parts with minimal effort.

#### Technical attributes

#	 EAN				Max. tensile force	Max. tractive force	
			mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
8-0-621	-774263	G 1/2"	10 3/8	15 11.06	100	10 11.02	1,57 3,462
8-0-626	-774270	G 3/4"	12 1/2	20 14.75	120	12 13.23	1,94 4,278

### SERIES 8 LONG HYDRAULIC SPINDLE








The fat hydraulic spindle of series 8 is the motor of the puller and achieves an average pulling force of 20 t. The hydraulic spindle is suitable for pulling off particularly stubborn bearings, gears, and discs that cannot be loosened by pure muscle power. Thanks to integrated fat-hydraulics, no external pump is required.

#### Benefits

- The hydraulic spindle guarantees easy and controlled removal of particularly stuck parts with minimal effort.
- Hydraulic spindle doubles the manual pulling force by 100%

#### Technical attributes

#	 EAN				Max. tensile force	Max. tractive force	
			mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
8-1-B	-034596	G1"	10 3/8	45 33.19	150	15 16.53	7,655 16,879
8-1-F	-034671	G1"	10 3/8	45 33.19	150	15 16.53	8,79 19,382
8-2-K	-034831	G 1 1/8"	10 3/8	30 22.13	200	20 22.05	9,795 21,598
8-2-M	-034916	G 1 1/8"	10 3/8	30 22.13	200	20 22.05	11,14 24,564



## PRODUCT DETAILS

### SERIES 8-HP HYDRAULIC SPINDLE WITH HAND LEVER OPERATION







The hydraulic spindle with hand lever operation is suitable for pulling off particularly stubborn bearings, gears, and discs with a pulling force of up to . Thanks to the integrated grease hydraulics, no external pump is required. The manually extendable lever arm of the pump can be pivoted 360°. The flexible connection thread on the spindle allows for the mounting of various puller tools from the KUKKO range, depending on the thread size. By using an extension and pressure piece, the hydraulic spindle can be adjusted to various installation situations.

#### Benefits

- The hydraulic spindle guarantees easy and controlled extraction of particularly stubborn parts with minimal effort.
- Significant reduction of disassembly times due to simple and quick handling
- With extension pieces, the range of the hydraulic spindle can be adjusted to the respective requirements.

#### Technical attributes

#				Max. tensile force	Max. tractive force	
	EAN		mm/inch	kN	t/US t. sh.	kg/lb
8-HP-621 NEW	-182242	G 1/2"	52 2 1/16	40	4 4.41	7,2 15,876
8-HP-623 NEW	-182259	G 5/8"	52 2 1/16	60	6 6.61	5,56 12,260
8-HP-626 NEW	-182273	G 3/4"	52 2 1/16	120	12 13.23	8,82 19,448
8-HP-633 NEW	-182280	G 1"	52 2 1/16	120	12 13.23	7,46 16,449
8-HP-637 NEW	-182297	G 1 1/8"	52 2 1/16	150	15 16.53	8,07 17,794
8-HP-800 NEW	-182303	W 1 1/2"	52 2 1/16	200	20 22.05	12,54 27,651

### SERIES K-8-HP HYDRAULIC SPINDLE WITH HAND LEVER OPERATION IN L-BOXX WITH FIXED RING






The hydraulic spindle with hand lever operation in the case is suitable for pulling off particularly stubborn bearings, gears, and discs with a pulling force of up to 21 t. Thanks to the integrated grease hydraulic, no external pump is required. The lever arm of the pump can be swiveled 360°. With the help of the fixing ring, the hydraulic spindle can also be used with components with standard through holes.

#### Benefits

- The hydraulic spindle guarantees easy and controlled removal of particularly fixed parts with low effort.
- Significant reduction of dismantling times through easy and quick handling
- By using extension pieces, the reach of the hydraulic spindle can be adapted to the respective requirements.

#### Technical attributes

#				Max. tensile force	Max. tractive force
	EAN		mm/inch	kN	t/US t. sh.
K-8-HP-621 NEW	-041396	G 1/2"	52 2 1/16	40	4 4.41
K-8-HP-623 NEW	-041402	G 5/8"	52 2 1/16	60	6 6.61
K-8-HP-626 NEW	-041419	G 3/4"	52 2 1/16	120	12 13.23
K-8-HP-633 NEW	-041426	G 1"	52 2 1/16	120	12 13.23
K-8-HP-637 NEW	-041440	G 1 1/8"	52 2 1/16	150	15 16.53
K-8-HP-800 NEW	-041457	W 1 1/2"	52 2 1/16	200	20 22.05

## PRODUCT DETAILS



### SERIES 800 SHORT HYDRAULIC SPINDLE









The fat-hydraulic spindle of the 800 series is the motor of the puller and achieves an average pulling force of 20 t. With this, particularly stuck bearings, gears, and discs can be effortlessly dismantled. As a true powerhouse, the spindle impresses with a compact design, ease of use, and portability. The spindle is ribbed on the sides to provide particularly good grip for the fingers when repositioning. Due to its favorable installation dimensions, the spindle can be used universally. Thanks to integrated fat-hydraulics, no external pump is required.

#### Benefits

- The hydraulic spindle guarantees easy and controlled extraction of particularly seized parts with minimal effort.
- Hydraulic spindle doubles the manual pulling force by 100 %

#### Technical attributes

#	 EAN		 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 mm/inch	 kg/lb
<b>800</b>	-034343	W 1.1/2"-16(55°;16Gang)	10 3/8	40 29.50	100	10 11.02	13 1/2	1,46 3,219
<b>801</b>	-784446	W 1.1/2"-16(55°;16Gang)	10 3/8	70 51.63	150	15 16.53	19 3/4	1,47 3,241
<b>802</b>	-784514	M40x1,5	10 3/8	100 73.76	200	20 22.05	19 3/4	1,55 3,418
<b>804</b>	-456787	W 1.1/2"-16(55°;16Gang)	10 3/8	70 51.63	150	15 16.53	19 3/4	1,475 3,252

### SERIES 800-0 SPINDLE EXTENSIONS






The spindle extension is used to extend the spindle for the system series 800. It allows for quick adjustment to various requirements. Depending on the application, the extensions are available in different sizes.

#### Benefits

- Quick adaptation to the respective pull-off situation thanks to spindle extension

#### Technical attributes

#	 EAN	 mm/inch	 kg/lb
<b>800-050</b>	-031113	50 1 15/16	0,13 0,287
<b>800-100</b>	-031298	100 3 15/16	0,335 0,739
<b>800-150</b>	-031373	150 5 7/8	0,54 1,191

## PRODUCT DETAILS

### SERIES 9 HYDRAULIC ADDITIONAL PRESSES








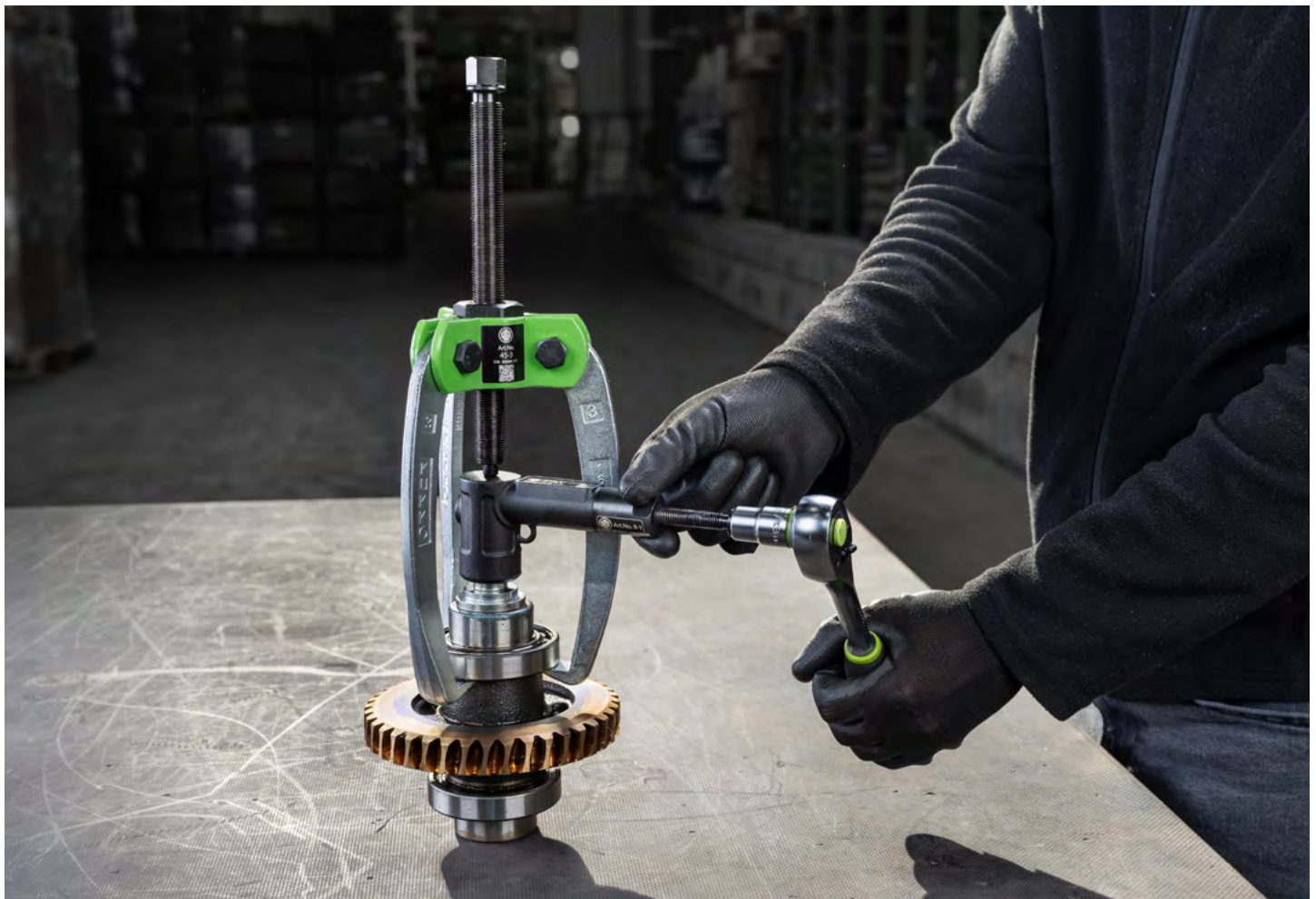
The hydraulic additional press is used to increase the pressure capacity of mechanical pullers for particularly stubborn bearings, gears, and disks. With the hydraulic additional press, pulling forces of up to 30 t can be achieved.

#### Benefits

- Hydraulic additional press ensures easy and controlled removal of particularly stubborn parts with little effort.
- Eyelets for attaching a fall protection system as well as for tool organization with tool brands, issue cards, or electronic systems.
- Automatic system pulls the piston back into the starting position

#### Technical attributes

#					Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
9-1	-005053	60 2 3/8	10 3/8	35 25.82	100	10 11.02	0,825 1,819	-
9-2	-005138	87 3 7/16	15 9/16	50 36.88	150	15 16.53	1,88 4,145	K-226-4/12
9-3	-924408	113 4 7/16	7 1/4	35 25.82	300	30 33.07	5,16 11,378	-



Removing a gear with the 47-1-A



KUKKO // Pull forward



SERIES 120 | 130

# UNIVERSAL PULLER "VARIO"



# DEPLOYMENT

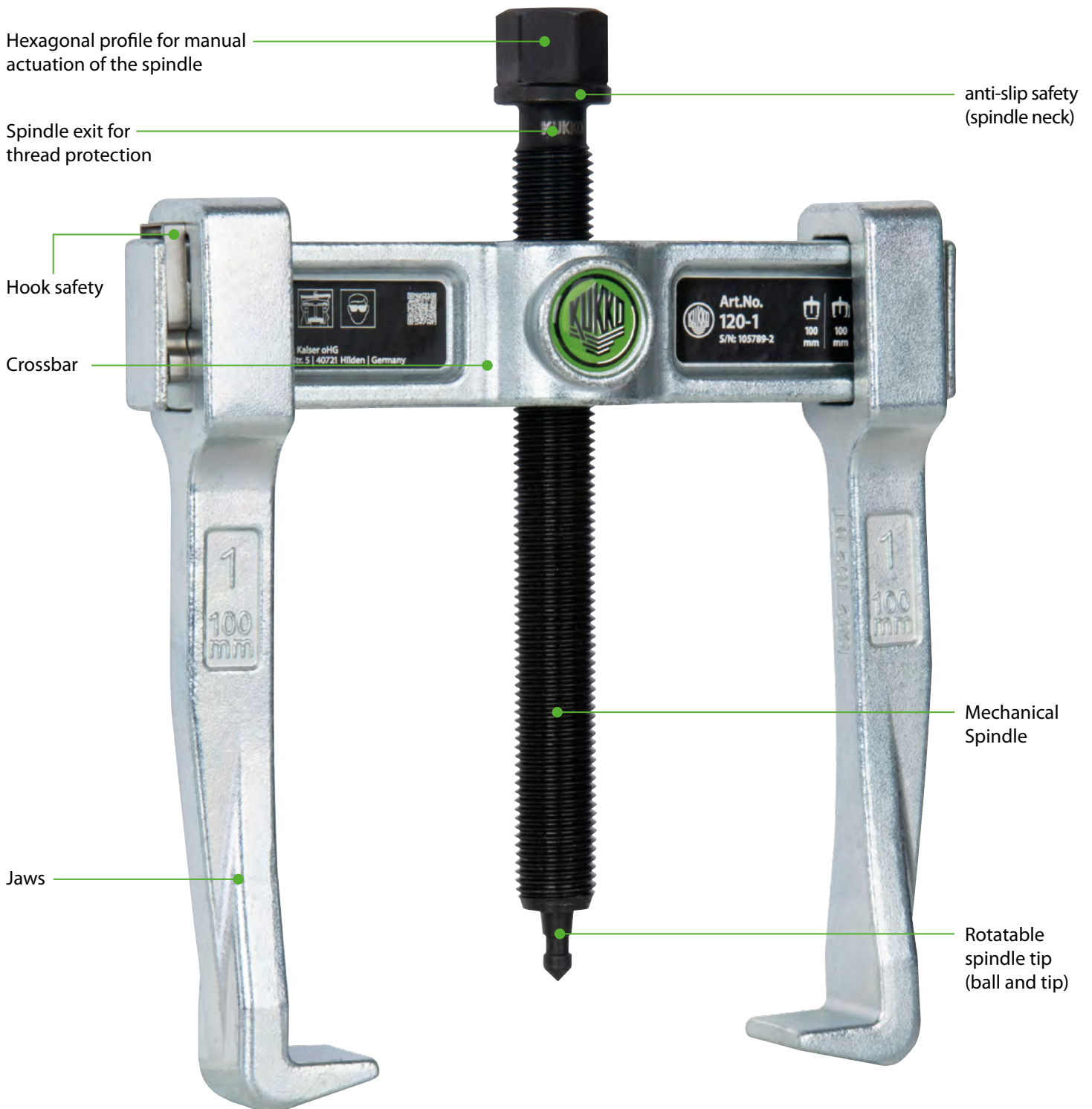
The 2- and 3-arm universal pullers "Vario" with spring-loaded hook safety device from the 120 and 130 series are suitable for pulling bearings, gears and pulleys that are mounted on a shaft and are freely accessible from the outside. The hook safety catch prevents the puller legs from slipping off the crosshead.



## Benefits

- By pressing down the hook safety mechanism, a particularly fast turning of the jaws is guaranteed.
- The hook safety prevents the puller jaws from slipping off the crossbar.
- Application also for eccentric components using freely movable puller jaws sliding on the crossbar.
- Variable adjustment for different spans (depending on the model)
- Safe positioning of the spindle through a rotating spindle tip on both smooth surfaces and during centering (Switch Technology)

## ASSEMBLY OF A UNIVERSAL PULLER „VARIO“





## FEATURES OF THE SERIES

### SERIES 120

**2-jaw universal puller with  
spring-loaded hook safety**



**120-10**

The 2-jaw universal pullers of series 20 are universally applicable even in confined spaces.

### SERIES 130

**3-jaw universal puller with  
spring-loaded hook safety**



**130-10**

Thanks to the 3-jaw design, the pullers in series 30 ensure an even distribution of force, thereby allowing for even greater pulling forces.

## APPLICATION EXAMPLES



Removing a gear wheel with the 120-10



## PRODUCT DETAILS

### SERIES 120 2-JAW UNIVERSAL PULLER "VARIO" WITH SPRING SAFETY DEVICE










The 2-jaw universal puller "VARIO" with spring-loaded safety device is used to remove bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It can loosen any component that sits on a shaft and is freely accessible from the outside. Equipped with robust, always parallel jaws, the puller ensures particularly safe, damage-free disassembly both for external extraction and internal extraction. The safety device prevents the jaws from slipping off the crossbar.

#### Benefits

- The safety device protects against the slipping of the puller jaws from the crossbar.
- By pressing the safety lock, a particularly fast inversion of the jaws is guaranteed.
- Application also for eccentric components through free-moving, sliding puller jaws on the crossbar.
- Adjustment to any span between 10 mm – 350 mm

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
120-1	-918551	20 13/16 - 3 15/16	100 3 15/16	100 - 130 3 15/16 - 5 1/8	17 11/16	80 59.01	30	3 3.31	1,06 2,337	120-ST
120-10	-918599	20 - 150 13/16 - 5 7/8	100 3 15/16	100 - 180 3 15/16 - 7 1/16	17 11/16	80 59.01	30	3 3.31	1,16 2,558	120-ST
120-2	-918636	20 - 150 13/16 - 5 7/8	150 5 7/8	100 - 180 3 15/16 - 7 1/16	17 11/16	80 59.01	30	3 3.31	1,28 2,822	120-ST
120-20	-918674	10 - 250 3/8 - 9 13/16	150 5 7/8	130 - 300 5 1/8 - 11 13/16	24 15/16	100 73.76	30	3 3.31	3,5 7,718	120-ST
120-3	-918711	10 - 250 3/8 - 9 13/16	200 7 7/8	125 - 300 4 15/16 - 11 13/16	24 15/16	100 73.76	30	3 3.31	3,84 8,467	120-ST
120-30	-918759	10 - 350 3/8 - 13 3/4	200 7 7/8	125 - 400 4 15/16 - 15 3/4	24 15/16	120 88.51	40	4 4.41	5,025 11,080	-

### SERIES 130 3-JAW UNIVERSAL PULLER "VARIO" WITH SPRING-LOADED SAFETY










The 3-jaw universal puller "VARIO" with spring-loaded anti-slip safety is used for removing bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that is mounted on a shaft and is freely accessible from the outside. Equipped with robust, always parallel puller jaws, the puller ensures a particularly safe, non-destructive disassembly whether for external extraction or internal removal. The anti-slip safety prevents the puller jaws from slipping off the crossbar. The 3-jaw design guarantees an even load distribution, thereby providing a particularly secure hold on the part to be removed.

#### Benefits

- Fall protection protects against the jaws sliding off the crossbar.
- By pressing down the safety latch, a particularly fast flipping of the jaws is guaranteed.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.

#### Technical attributes

#							Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
130-10	-918834	20 - 150 13/16 - 5 7/8	100 3 15/16	100 - 180 3 15/16 - 7 1/16	17 11/16	80 59.01	30	3 3.31	1,24 2,734
130-2	-918872	20 - 150 13/16 - 5 7/8	150 5 7/8	100 - 180 3 15/16 - 7 1/16	17 11/16	80 59.01	30	3 3.31	1,75 3,859
130-20	-918919	20 - 260 13/16 - 10 1/4	150 5 7/8	120 - 300 4 3/4 - 11 13/16	24 15/16	110 81.14	35	3.5 3.86	4,28 9,437
130-3	-918957	20 - 260 13/16 - 10 1/4	200 7 7/8	120 - 300 4 3/4 - 11 13/16	24 15/16	110 81.14	35	3.5 3.86	5,365 11,830

## PRODUCT DETAILS



### SERIES 120-ST SALES DISPLAY FOR 2-JAW UNIVERSAL PULLER "VARIO" WITH SPRING-LOADED END SAFETY












The display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers "VARIO" with spring-loaded anti-slip safety are used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that is mounted on a shaft and is accessible from the outside. Equipped with robust, always parallel jaws, the puller ensures particularly safe, damage-free disassembly during both external extraction and internal pulling. The anti-slip safety prevents the jaws from slipping off the crossbar.

#### Benefits

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- The safety device protects against the slipping of the puller jaws from the crossbar.
- By pressing down the anti-slip safety, a particularly fast rotation of the jaws is guaranteed.
- Application also with eccentric components through freely movable, sliding puller jaws on the crossbar.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	Nm/ ft lb	kN	t/ US t. sh.	kg/lb	
<b>120-ST</b>	-961489	630 24 13/16	250 9 13/16	316 12 7/16	20 - 250 13/16 - 9 13/16	200 7 7/8	100 - 300 3 15/16 - 11 13/16	85 62.70	30	3 3.31	14,79 32,612	120-1, 120-10, 120-2, 120-20, 120-3, 20-STL

## PRODUCT DETAILS

### SERIES 130-P 2-JAW PULLER (PAIR)












The pair of two jaws is suitable for the 2-jaw universal puller "VARIO". The robust jaws guarantee a particularly safe, non-destructive disassembly.



#### Benefits

- Through the freely movable, sliding jaws on the crossbar, even eccentric components can be pulled off.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>0-100-P</b>	-002243	105 4 1/8	148,5 5 7/8	9 3/8	32 1 1/4	21 13/16	16 5/8	4 3/16	0,425 0,937
<b>0-148-P</b>	-001093	155 6 1/8	198,5 7 13/16	9 3/8	32 1 1/4	21 13/16	16 5/8	4 3/16	0,48 1,058
<b>0-150-P</b>	-003073	150 5 7/8	215,6 8 1/2	15 9/16	43 1 11/16	28 1 1/8	18 11/16	4 3/16	1,24 2,734
<b>0-200-P</b>	-004483	205 8 1/16	270,6 10 5/8	15 9/16	43 1 11/16	28 1 1/8	20 13/16	4 3/16	1,54 3,396

### SERIES 130-S 3 JAWS (SET)












The set of three jaws is suitable for the 3-jaw universal puller "VARIO". The robust jaws guarantee a particularly safe, non-destructive disassembly.

#### Benefits

- Through the freely movable puller jaws gliding on the crossbar, even eccentric components can be pulled off.

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>0-100-S</b>	-001062	105 4 1/8	148,5 5 7/8	9 3/8	32 1 1/4	21 13/16	16 5/8	4 3/16	0,561 1,237
<b>0-148-S</b>	-001109	155 6 1/8	198,5 7 13/16	9 3/8	32 1 1/4	21 13/16	16 5/8	4 3/16	0,72 1,588
<b>0-150-S</b>	-001123	150 5 7/8	215,6 8 1/2	15 9/16	43 1 11/16	28 1 1/8	18 11/16	4 3/16	1,89 4,167
<b>0-200-S</b>	-001147	205 8 1/16	270,6 10 5/8	15 9/16	43 1 11/16	28 1 1/8	20 13/16	4 3/16	2,12 4,675



KUKKO // Pull forward



SERIES 110

# UNIVERSAL PULLER "TECHNO" WITH LOCKING PIN



# DEPLOYMENT

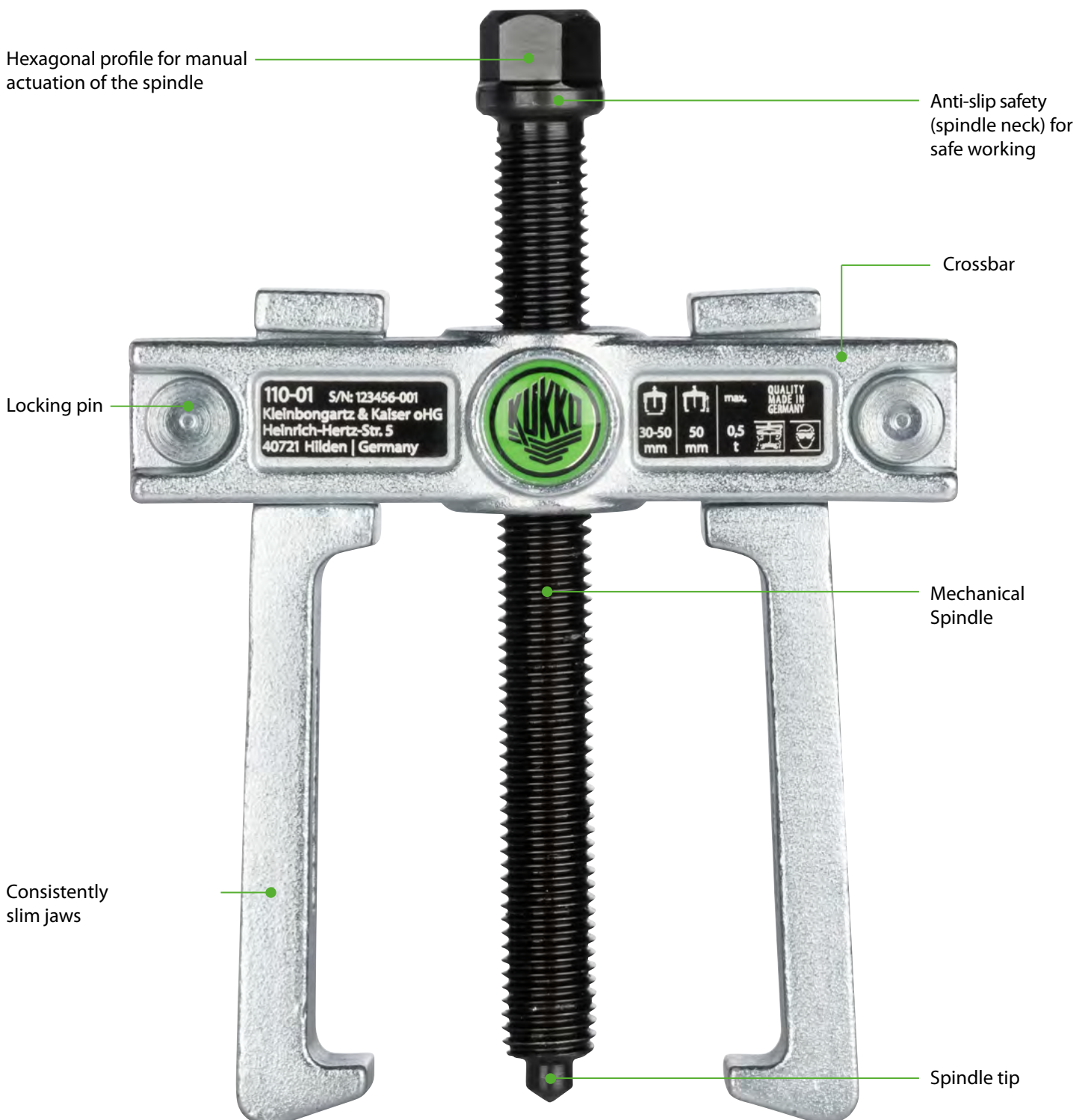
The 2-jaw universal puller "Techno" is used for disassembling various components (e.g., ball bearings, gears, discs, etc.) in workshops and agriculture. The two locking pins prevent the puller jaws from slipping off the crossbar and thus guarantee a particularly safe pulling process.



## Benefits

- The locking pin protects against the jaws slipping off the crossbar.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.
- Spindle exit to protect the thread

# ASSEMBLY OF THE UNIVERSAL PULLER "TECHNO"





# locking pin



The locking pins ensure that the puller jaws cannot slip off the crossbar. Additionally, the removable pin allows for a quick reversal of the jaws, making the puller universally applicable.



Removable safety pin



The spring-loaded ball secures the pin against slipping out.



The locking pin has been inserted.

## APPLICATION EXAMPLES



Removing a pulley from a machine gearbox with the 110-02



Removing a pulley from a washing machine motor with the 110-01



Removing a hub from a steering knuckle with the 110-2



## PRODUCT DETAILS

### SERIES 110 2-JAW UNIVERSAL PULLER "TECHNO" WITH LOCKING PIN










The 2-jaw universal puller "Techno" with locking pin is used for pulling bearings, gears, and discs in all common sizes for agriculture and workshops. It allows for loosening any component that sits on a shaft and is freely accessible from the outside. Equipped with consistently parallel and slender puller jaws, the puller ensures particularly safe, non-destructive disassembly during both external extraction and internal pulling. The locking pin prevents the puller jaws from slipping off the crossbar.

#### Benefits

- The locking pin prevents the jaws from slipping off the crossbar.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench
- Spindle outlet to protect the thread

#### Technical attributes

#							Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>110-01</b>	-923753	22 - 50 7/8 - 1 15/16	50 1 15/16	45 - 55 1 3/4 - 2 3/16	10 3/8	12 8.85	5	0.5 0.55	0,265 0,584
<b>110-02</b>	-923760	22 - 85 7/8 - 3 3/8	50 1 15/16	45 - 90 1 3/4 - 3 9/16	10 3/8	12 8.85	10	1 1.10	0,31 0,684
<b>110-1</b>	-923777	28 - 100 1 1/8 - 3 15/16	100 3 15/16	80 - 105 3 1/8 - 4 1/8	17 11/16	35 25.82	20	2 2.20	1,18 2,602
<b>110-10</b>	-923784	33 - 120 1 5/16 - 4 3/4	100 3 15/16	90 - 140 3 9/16 - 5 1/2	17 11/16	35 25.82	20	2 2.20	1,255 2,767
<b>110-2</b>	-923791	42 - 165 1 5/8 - 6 1/2	150 5 7/8	100 - 190 3 15/16 - 7 1/2	19 3/4	100 73.76	50	5 5.51	2,46 5,424
<b>110-20</b>	-923807	52 - 200 2 1/16 - 7 7/8	150 5 7/8	115 - 230 4 1/2 - 9 1/16	19 3/4	80 59.01	40	4 4.41	2,645 5,832
<b>110-3</b>	-923814	62 - 250 2 7/16 - 9 13/16	200 7 7/8	140 - 280 5 1/2 - 11 1/32	22 7/8	120 88.51	60	6 6.61	4,88 10,760
<b>110-4</b>	-956317	152 - 350 5 1 - 13 3/4	250 9 13/16	230 - 380 9 1/16 - 14 15/16	22 7/8	150 110.64	70	7 7.72	6,21 13,693

KUKKO // Pull forward



SERIES 200-U | 200-UM

# UNIVERSAL PULLER FOR AGRICULTURE AND WORKSHOP





# DEPLOYMENT

Due to its particularly robust design, the 2-jaw universal puller "Economy" is the ideal choice for pulling operations in agriculture as well as in workshops. Thanks to the versatile combination set of puller jaws, various components in all common sizes can be disassembled without damage.



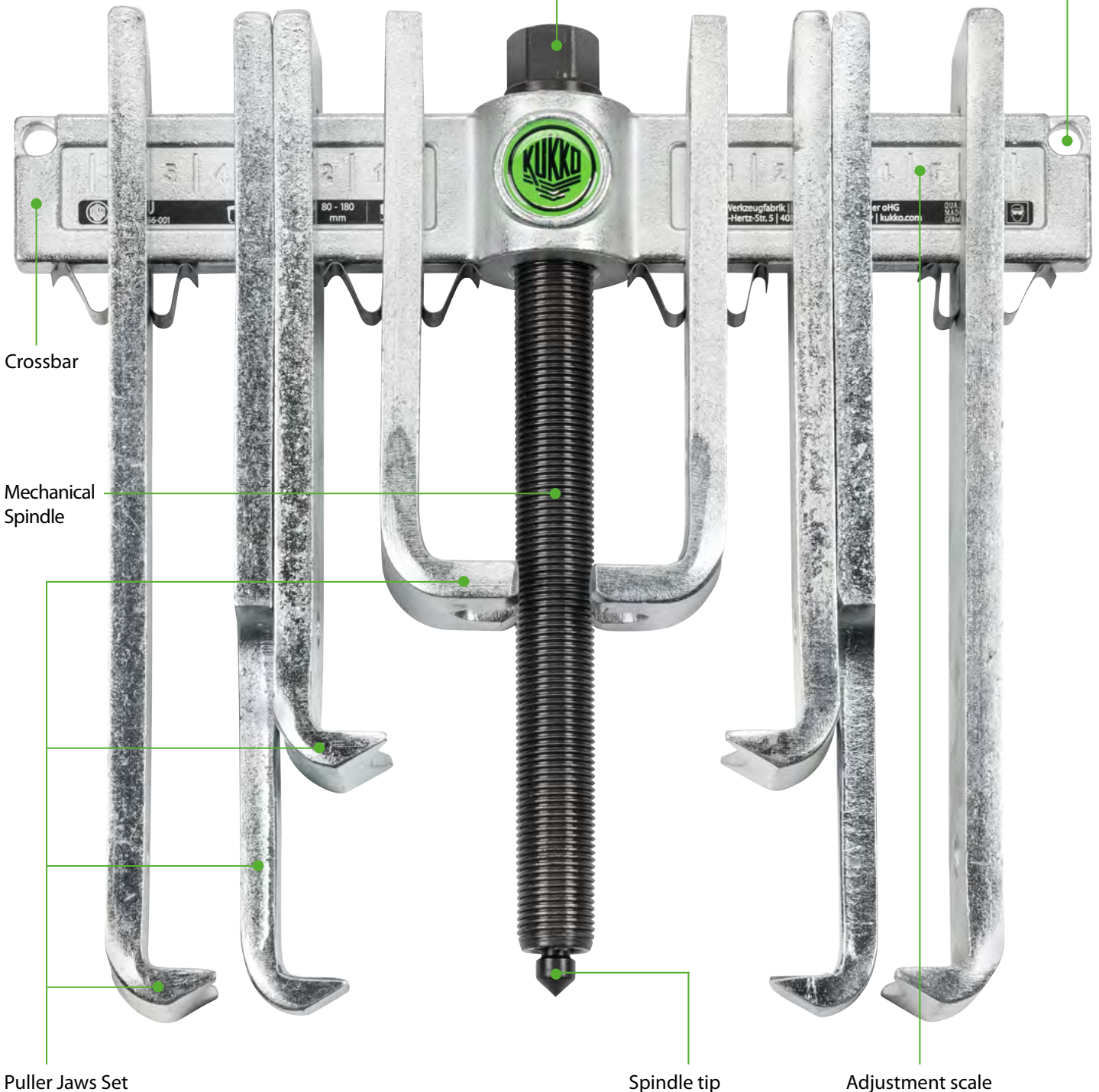
## Benefits

- Multifunctional use thanks to four different puller jaw pairs for individual adjustment to the respective reach
- Puller jaws can be connected via a screw connection up to a reach of 580 mm.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Safe positioning of the spindle through a rotating spindle tip on both smooth surfaces and during centering (Switch Technology)

## ASSEMBLY OF A UNIVERSAL PULLER USING THE EXAMPLE 200-U

Hexagonal profile for manual actuation of the spindle

Eyelet for a safety device



Puller Jaws Set

Spindle tip

Adjustment scale



# FEATURES OF THE SERIES

## SERIES 200-U

### 2-jaw universal puller "Economy"



The 2-jaw universal puller can be individually adjusted to the respective reach by the differently long jaws.

## SERIES 200-UM

### 2-jaw universal puller "Economy" in metal case



The 2-jaw universal puller "Economy" is also available in an extremely robust protective and transport case made of metal.

# APPLICATION EXAMPLES



The puller jaws are placed on the crossbar; a scale on the crossbar facilitates the correct adjustment of the distances.



The puller jaws can be connected to each other via a screw connection.



The 2-jaw universal puller "Economy" with extended puller jaws for increased reach depth.

## PRODUCT DETAILS

### SERIES 200-U 2-JAW UNIVERSAL PULLER "ECONOMY" WITH DIFFERENTLY LONG PULLER JAWS IN THE SET









The 2-jaw universal puller "Economy" with a versatile combination puller jaw set is used for pulling bearings, gears, and discs in all common sizes in agriculture and workshops. It can loosen any component that is on a shaft and is freely accessible from the outside. The different lengths of the puller jaws allow the puller to be individually adjusted to the respective reach.

#### Benefits

- Multifunctional use thanks to four different pairs of jaws for individual adjustment to the respective reach
- Pulling jaws can be connected via screw connection up to a reach depth of 580 mm.
- Optional convertible from an external puller to an internal extractor by flipping the jaws.
- Secure attachment of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)

#### Technical attributes

#				SW 		Max. tractive force	Max. tensile force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	t/US t. sh.	kN	kg/lb
<b>200-U</b>	-025433	0 - 250 0 - 9 7/8	180 7 1/8	22 7/8	120 88.51	5 5.51	50	6,96 15,347

### SERIES 200-UM 2-JAW UNIVERSAL PULLER "ECONOMY" WITH DIFFERENTLY LONG PULLER JAWS IN A SET IN A METAL CASE








The 2-jaw universal puller "Economy" with a versatile combination of puller jaw set is used for pulling bearings, gears, and discs in all common sizes in agriculture and workshops. This allows for the loosening of any component mounted on a shaft and freely accessible from the outside. With the various lengths of puller jaws, the puller can be individually adjusted to the respective reach.

#### Benefits

- Multifunctional use thanks to four different pairs of jaws for individual adjustment to the respective reach
- Pulling jaws can be connected via screw connection up to a reach depth of 580 mm.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Safe setting up of the spindle using a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)

#### Technical attributes

#				SW 	Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb
<b>200-UM</b>	-025501	0 - 250 0 - 9 7/8	180 7 1/8	22 7/8	50	5 5.51	8,92 19,669





KUKKO // Pull forward



SERIES 41 | 42

# PULLER WITH SWIVELING JAW ARMS





# DEPLOYMENT

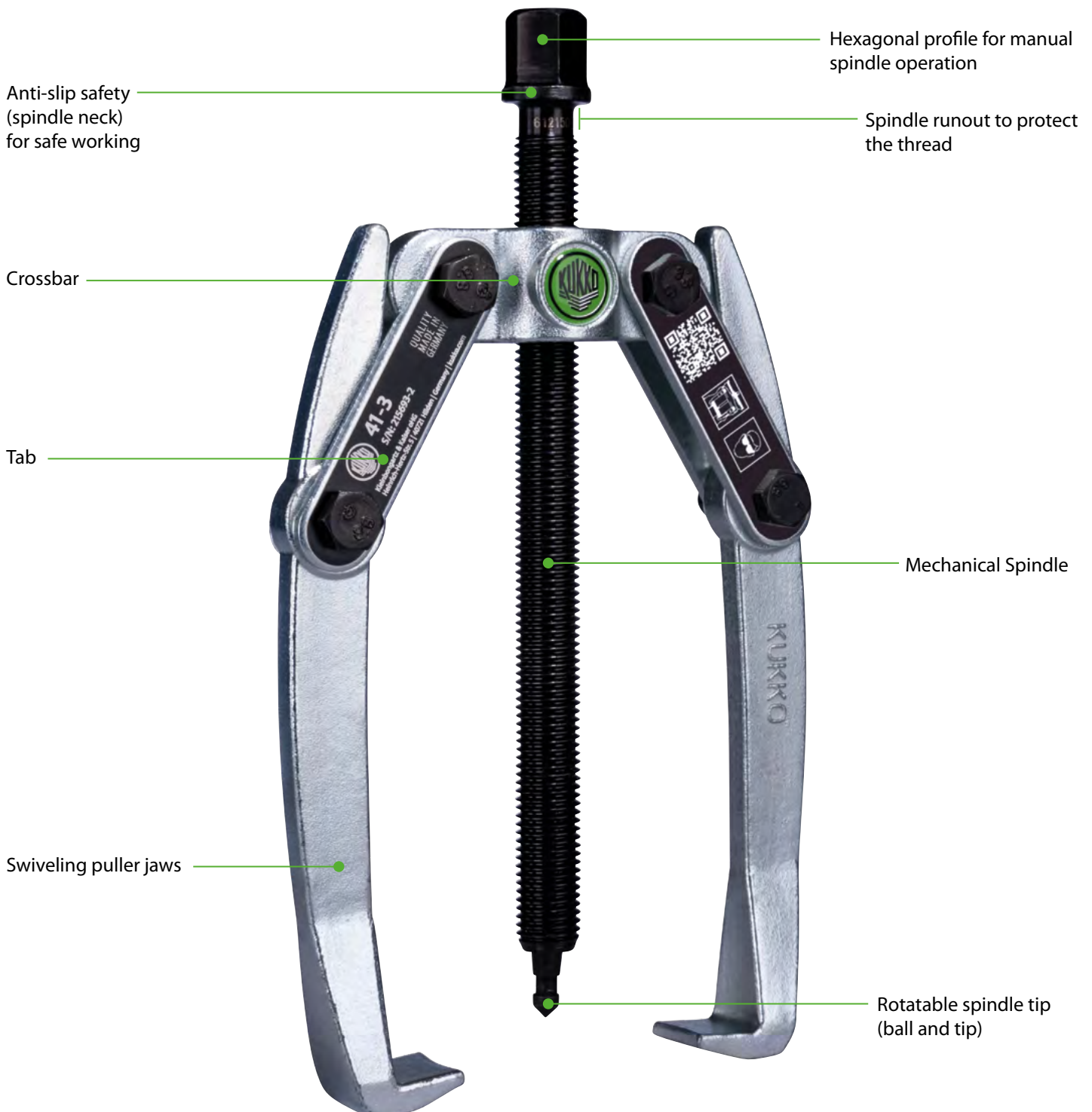
The universal pullers of series 41 and 42 are suitable for non-destructive disassembly of various components (such as gears, ball bearings, pulleys, etc.). The swiveling jaws guarantee maximum freedom of movement for individual adjustment to the desired spread and depth, thereby allowing extraction in confined spaces.



## Benefits

- Swiveling jaws enable work in confined spaces while simultaneously allowing for individual adjustment to the spread and reach.
- Secure setup of the spindle through the rotatable spindle tip on both smooth surfaces and during centering (applies from size 41-3)
- Integrated, free-moving pin on the T-handle guarantees manual spindle drive in the tightest of spaces (applies up to size 41-2)
- 3-jaw ensures an even distribution of force and enables greater pull-off forces (series 41-B and 42-B)

## ASSEMBLY OF A UNIVERSAL PULLER USING EXAMPLE 41-3



# FEATURES OF THE SERIES

## SERIES 41

2-jaw universal puller with T-handle



41-1

The 2-jaw universal puller with free-moving pin on the T-handle is suitable for pulling operations in tight spaces. When delicately operating the spindle manually, exactly the force required for pulling is generated.

## SERIES 41

2-jaw universal puller with hexagon



41-3

Due to its 2-arm design, the 41 series is suitable for pulling operations in restricted ambient conditions. The hexagon on the spindle head enables maximum power transmission.

## BAUREIHE 41-B

2-jaw universal puller with hydraulic spindle



41-5-B

The hydraulic spindle ensures easy and controlled removal of particularly tightly seated components with minimal effort.

## SERIES 42

3-jaw universal puller with T-handle



42-2

The benefit of the series 42 is the 3-jaw design, which allows for a particularly even force distribution. This results in even higher pull-off forces.

## SERIES 42

2-jaw universal puller with hexagon



42-3

In addition to the advantage of the 3-jaw design, the puller features a dual spindle tip that allows for the processing of a wide variety of surfaces.

## BAUREIHE 42-B

2-jaw universal puller with hydraulic spindle



42-5-B

The 42-B series guarantees a more even distribution of force and effortless removal of particularly stubborn components using the hydraulics, thanks to its 3-jaw design.



# APPLICATION EXAMPLES



Removing a pump wheel from a water pump on the car with the 41-2



Dismantling a deflection pulley from a machine component with the 42-3



Ball bearing disassembly from a drive shaft flange with hydraulic spindle



Removing a small ball bearing from an E-motor shaft with the 41-0



## PRODUCT DETAILS



### SERIES 41 2-JAW UNIVERSAL PULLER WITH SWIVELING JAWS









The 2-jaw universal puller with swiveling jaws is used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It allows for the loosening of any component that sits on a shaft and is externally accessible. The swiveling jaws also provide maximum freedom of movement for individual adjustment to the respective spread and depth, even in restricted environmental conditions. Within series 41, there are various versions of the puller. The compact model 41-0 features a hexagon drive and a flat pressure piece on the spindle. The models 41-1 and 41-2 have a freely movable T-handle instead of the hexagon, allowing for work in tight spaces. Starting from size 41-3, the pullers are equipped with a hexagon drive and a dual spindle tip. This allows for the largest pulling forces to be achieved (3 to 7 tons).

#### Benefits

- Swiveling puller jaws allow for work in tight spaces while simultaneously providing individual adjustment for spread and reach.
- Anti-slip safety (spindle neck) at the spindle head for safe work with wrench
- Spindle outlet for thread protection
- Safe setup of the spindle via a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology) (applies from size 41-3).

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
41-0	-362859	0 - 60 1/2 - 2 3/8	40 1 5/8	13 1/2	25 18.44	10	1 1.10	0,25 0,551
41-1	-015038	0 - 65 1/2 - 2 5/8	65 2 5/8	T-handle	0.00	10	1 1.10	0,22 0,485
41-2	-015113	0 - 80 1/2 - 3 3/16	80 3 3/16	T-handle	0.00	15	1.5 1.65	0,25 0,551
41-3	-787829	0 - 90 5/8 - 4	120 4 3/4	13 1/2	40 29.50	30	3 3.31	0,66 1,455
41-4	-836268	0 - 130 3/4 - 5 1/8	160 6 3/8	17 11/16	85 62.70	50	5 5.51	1,38 3,043
41-5	-836343	0 - 180 1 1/32 - 7 1/8	200 7 7/8	22 7/8	150 110.64	70	7 7.72	3,28 7,232

### SERIES 41-B 2-JAW UNIVERSAL PULLER WITH SWIVELING JAWS AND HYDRAULIC SPINDLE








The 2-jaw universal puller with swiveling jaws and hydraulic spindle is used for pulling bearings, gears and discs in all common sizes for crafts, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 10 t. This allows for loosening any component that is mounted on a shaft and is freely accessible from the outside. The swiveling jaws also provide maximum freedom of movement for individual adaptation to the respective spread and depth, even under restricted environmental conditions. For pulling operations in tight spaces, the mechanical spindle can be utilized.

#### Benefits

- Swiveling puller jaws allow for work in tight spaces while simultaneously providing individual adjustment for spread and reach.
- The hydraulic spindle guarantees easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle features a rotatable spindle tip for safe placement on smooth surfaces and during centering.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
41-5-B	-887345	0 - 180 1 1/32 - 7 1/8	200 7 7/8	15 11.06	100	10 11.02	4,875 10,749

## SERIES 42 3-JAW UNIVERSAL PULLER WITH SWIVELING JAWS









The 3-jaw universal puller with swiveling jaws is used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It allows for the loosening of any component that is mounted on a shaft and accessible from the outside. The swiveling jaws also provide maximum freedom of movement for individual adaptation to the respective spread and depth, even in restricted environmental conditions. The 3-jaw design guarantees an even weight distribution and thus a particularly secure hold on the part being pulled. Within series 42, there are various designs of the puller. Up to model 41-2, the puller is equipped with a T-handle and a flat pressure piece for work in tight spaces. Starting from model 42-3, the puller features a hexagon drive and a dual spindle tip. This allows for achieving the highest pulling forces (3 to 7 tons).

### Benefits

- Swiveling puller jaws allow for work in tight spaces while simultaneously providing individual adjustment for spread and reach.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Anti-slip safety (spindle neck) at spindle head for safe working with wrench.
- Spindle outlet to protect the thread.

### Technical attributes

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
42-0	-362026	0 - 60 1/2 - 2 3/8	40 1 5/8	13 1/2	25 18.44	15	1.5 1.65	0,27 0,595
42-1	-015298	0 - 65 1/2 - 2 5/8	65 2 5/8		0.00	15	1.5 1.65	0,295 0,650
42-2	-015373	0 - 80 1/2 - 3 3/16	80 3 3/16		0.00	15	1.5 1.65	0,33 0,728
42-3	-787904	0 - 90 5/8 - 4	120 4 3/4	13 1/2	40 29.50	30	3 3.31	0,87 1,918
42-4	-836428	0 - 130 3/4 - 5 1/8	160 6 3/8	17 11/16	85 62.70	50	5 5.51	2,8 6,174
42-5	-836596	0 - 180 1 1/32 - 7 1/8	200 7 7/8	22 7/8	150 110.64	70	7 7.72	4,295 9,470

## SERIES 42-B 3-JAW UNIVERSAL PULLER WITH SWIVELING JAWS AND HYDRAULIC SPINDLE








The 3-jaw universal puller with swiveling jaws and hydraulic spindle is used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 10 tons. This allows any component that is mounted on a shaft and accessible from the outside to be loosened. The swiveling jaws also provide maximum freedom of movement for individual adjustment to the respective spread and depth, even in restricted surroundings. The 3-jaw design guarantees a uniform load distribution and therefore a particularly secure grip on the part to be removed. For pulling operations in confined spaces, the mechanical spindle can be used.

### Benefits

- Swiveling puller jaws allow for work in tight spaces while simultaneously providing individual adjustment for spread and reach.
- The hydraulic spindle guarantees easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle features a rotatable spindle tip for secure placement on smooth surfaces and during centering.

### Technical attributes

#					Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
42-5-B	-887352	0 - 180 1 1/32 - 7 1/8	200 7 7/8	15 11.06	100	10 11.02	5,695 12,557



KUKKO // Pull forward



SERIES 46 | 47

# HEAVY PULLER WITH SWIVELING PULLER JAWS AND COMBO CROSSBAR





# DEPLOYMENT

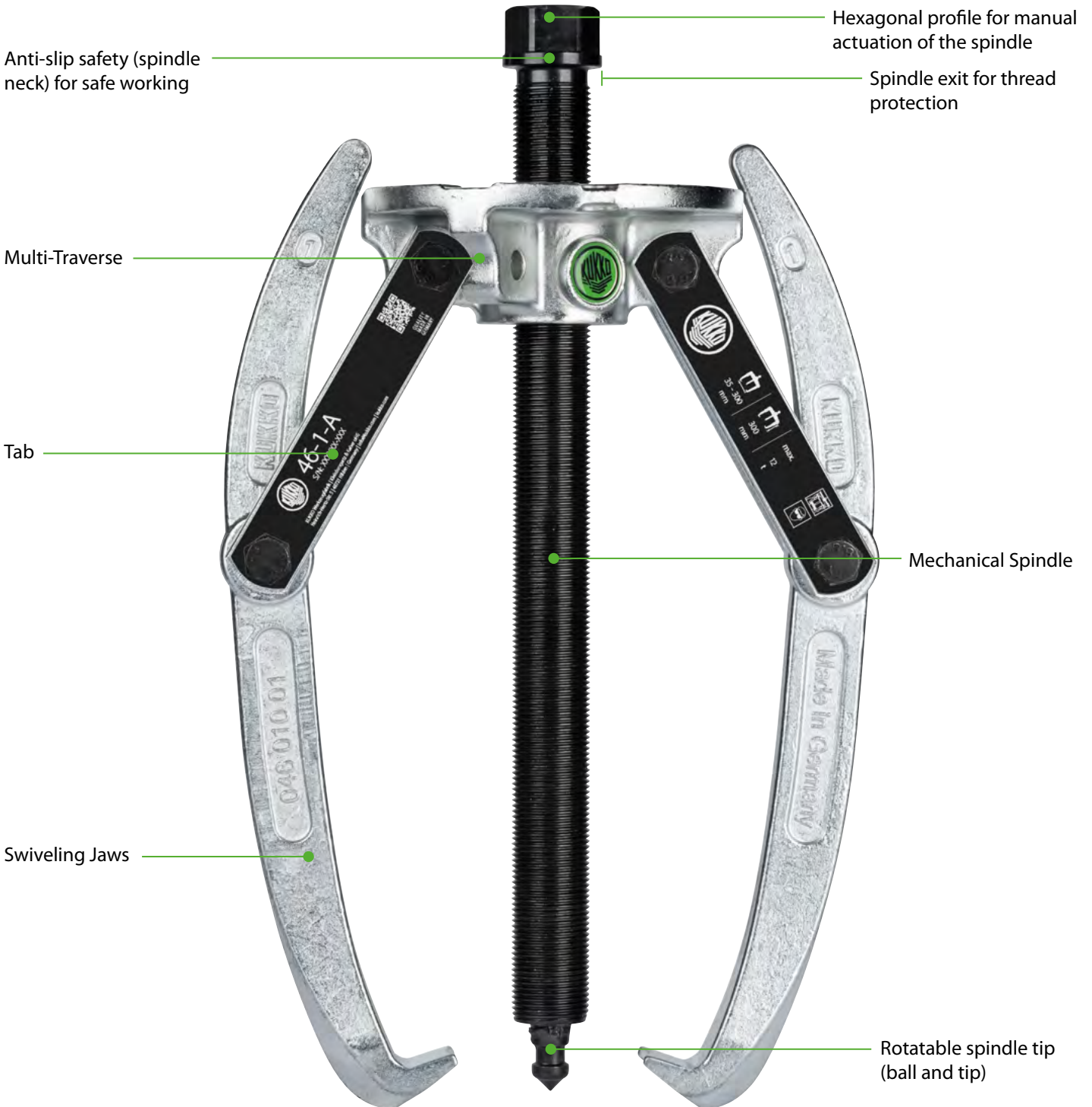
There are pull processes that must be performed in tight spaces. To grasp installed parts, the heavy pullers of the series 46 and 47 are equipped with swiveling puller jaws. These guarantee maximum freedom of movement for individual adjustment to the desired spread and reach.



## Benefits

- Swiveling jaws enable work in tight spaces while simultaneously allowing individual adjustment to the spread and depth.
- Kombi-crossbar can be used in both 2-jaw and 3-jaw configurations.
- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.
- Spindle runout to protect the thread
- 3-jaw design ensures an even force distribution and allows for greater extraction forces (series 47)

# BUILD-UP



# FEATURES OF THE SERIES



## SERIES 46



The series 46 is suitable for pulling operations in restricted environmental conditions. The swiveling puller jaws guarantee precise adjustment of the required spread and reach.

## SERIES 47



The series 47 is also used in restricted environmental conditions. Thanks to the 3-jaw design, an even more uniform power distribution occurs.

## SERIES 46-B



The series 46-B is recommended for extraction processes under restricted environmental conditions, where a medium pulling force of 15 t can be achieved with minimal effort.

## SERIES 47-B



The series 47-B is used in confined space conditions and offers the advantages of hydraulics and 3-jaw design.

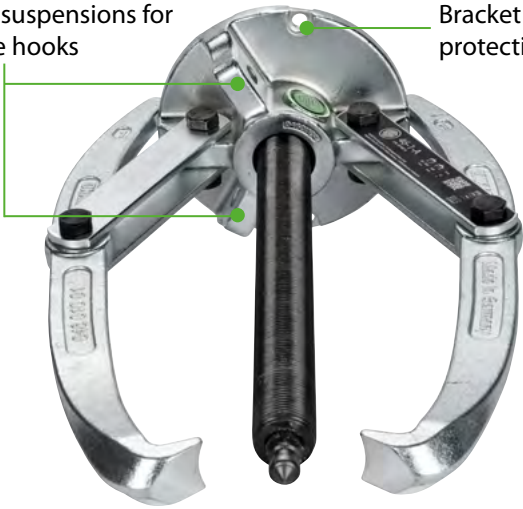
# MULTI-TRAVERSE - FROM 2 TO 3



## SERIES 46

Free suspensions for more hooks

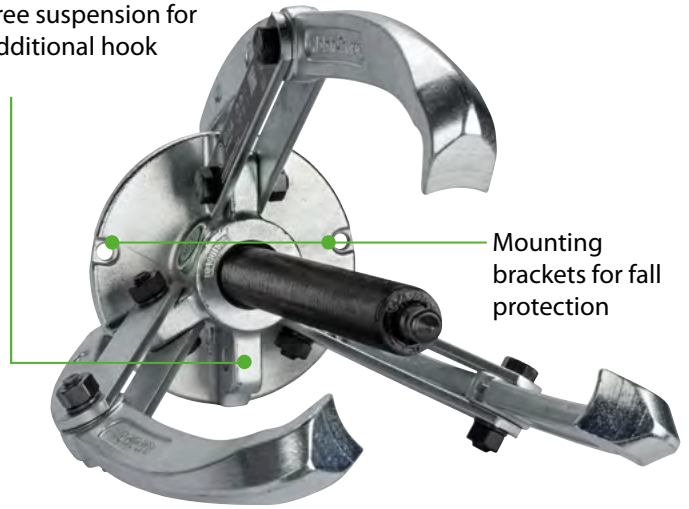
Bracket for fall protection



## SERIES 47

Free suspension for additional hook

Mounting brackets for fall protection



The combination crossbar has the advantage that it can be used as a 2-jaw or 3-jaw puller. Depending on the installation situation, the puller can be converted with just a few manual steps. Another special feature of the combination crossbar is the brackets for the fall protection (series 660).

## APPLICATION EXAMPLES



Removing a gear with the 47-1-A



## PRODUCT DETAILS



### SERIES 46 HEAVY, 2-JAW UNIVERSAL PULLER WITH SWIVELING PULLER JAWS AND COMBINATION CROSSBAR









The heavy, 2-jaw universal puller with swiveling jaws and combination crossbar is used to extract large bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It allows for the loosening of any component that sits on a shaft and is accessible from the outside. The swiveling jaws also ensure maximum freedom of movement for individual adjustment to the respective spread and depth, even in constrained environmental conditions. Thanks to the combination crossbar, the puller can be used as both a 2-jaw and a 3-jaw puller.

#### Benefits

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used in both 2-jaw and 3-jaw versions.
- Anti-slip safety (spindle neck) at spindle head for safe working with wrench.
- Spindle outlet to protect the thread

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>46-1-A</b>	-016936	0 - 300 1 3/8 - 11 7/8	300 11 7/8	36 1 7/16	450 331.92	120	12 13.23	10,125 22,326
<b>46-2-A</b>	-017193	0 - 500 1 3/8 - 19 3/4	450 17 3/4	36 1 7/16	450 331.92	120	12 13.23	12,235 26,978

### SERIES 46-B HEAVY, 2-JAW UNIVERSAL PULLER WITH SWIVELING PULLER JAWS, COMBINATION CROSSBAR, AND HYDRAULIC SPINDLE








The heavy, 2-jaw universal puller with swiveling puller jaws, combination crossbar, and hydraulic spindle is used for pulling large, particularly stuck bearings, gears, and discs in all common sizes for trades, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 15 t. This allows for the loosening of any component that sits on a shaft and is accessible from outside. For pulling processes with pulling forces of up to 10 t and/or in confined spaces, the mechanical spindle can be used. The swiveling puller jaws also provide maximum freedom of movement to individually adjust to the respective spread and depth, even under restricted environmental conditions. Thanks to the combination crossbar, the puller can be used both as a 2-jaw and a 3-jaw puller.

#### Benefits

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used as both a 2-jaw and a 3-jaw.
- Hydraulic spindle ensures easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited space conditions that require direct access to the component, the mechanical spindle can be used.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>46-1-B</b>	-017018	0 - 300 1 3/8 - 11 7/8	300 11 7/8	450 331.92	150	15 16.53	19,22 42,380
<b>46-2-B</b>	-017278	0 - 500 1 3/8 - 19 3/4	450 17 3/4	450 331.92	150	15 16.53	16 35,280

## PRODUCT DETAILS

### SERIES 47 HEAVY 3-JAW UNIVERSAL PULLER WITH SWIVELING PULLER JAWS AND COMBINATION CROSSBAR









The heavy 3-jaw universal puller with pivoting puller jaws and combination crossbar is used to pull large bearings, gears, and discs in all common sizes for craft, workshop, and industry. It can release any component that sits on a shaft and is freely accessible from the outside. The pivoting puller jaws provide maximum freedom of movement for individual adaptation to the respective spread and depth, even in restricted environmental conditions. The 3-jaw design guarantees an even load distribution, ensuring particularly secure grip on the part being pulled. Thanks to the combination crossbar, the puller can also be used as a 2-jaw model.

#### Benefits

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used as both a 2-jaw and a 3-jaw.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Anti-slip safety (spindle neck) for safe working with wrench

#### Technical attributes

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
47-1-A	-017681	0 - 300 1 3/8 - 11 7/8	300 11 7/8	36 1 7/16	450 331.92	120	12 13.23	12,25 27,011
47-2-A	-017841	0 - 500 1 3/8 - 19 3/4	450 17 3/4	36 1 7/16	450 331.92	120	12 13.23	14,68 32,369

### SERIES 47-B HEAVY 3-JAW UNIVERSAL PULLER WITH SWIVELING PULLER JAWS, COMBINATION CROSSBAR, AND HYDRAULIC SPINDLE








The heavy 3-jaw universal puller with swiveling jaws, combination crossbar, and hydraulic spindle is used to pull large, particularly stuck bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 15 tons. This allows any component located on a shaft and freely accessible from the outside to be loosened. For pulling processes with a pulling force of up to 10 tons and/or in confined spaces, the mechanical spindle can be used. The swiveling jaws also provide maximum freedom of movement for individual adjustment to the respective spread and depth, even in restricted environmental conditions. Thanks to the combination crossbar, the puller can be used as both a 2-jaw and 3-jaw tool. The 3-jaw design guarantees an even load distribution and thus a particularly secure hold on the part being pulled.

#### Benefits

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used as both a 2-jaw and a 3-jaw.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Fat hydraulic spindle guarantees easy and controlled removal of particularly stubborn parts with minimal effort.

#### Technical attributes

#					Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
47-1-B	-017766	0 - 300 1 3/8 - 11 7/8	300 11 7/8	45 33.19	150	15 16.53	20,92 46,129
47-2-B	-017926	0 - 500 1 3/8 - 19 3/4	450 17 3/4	45 33.19	150	15 16.53	20,14 44,409



KUKKO // Pull forward



SERIES 201 | 202 | 203

# PULLING TOOL





# DEPLOYMENT

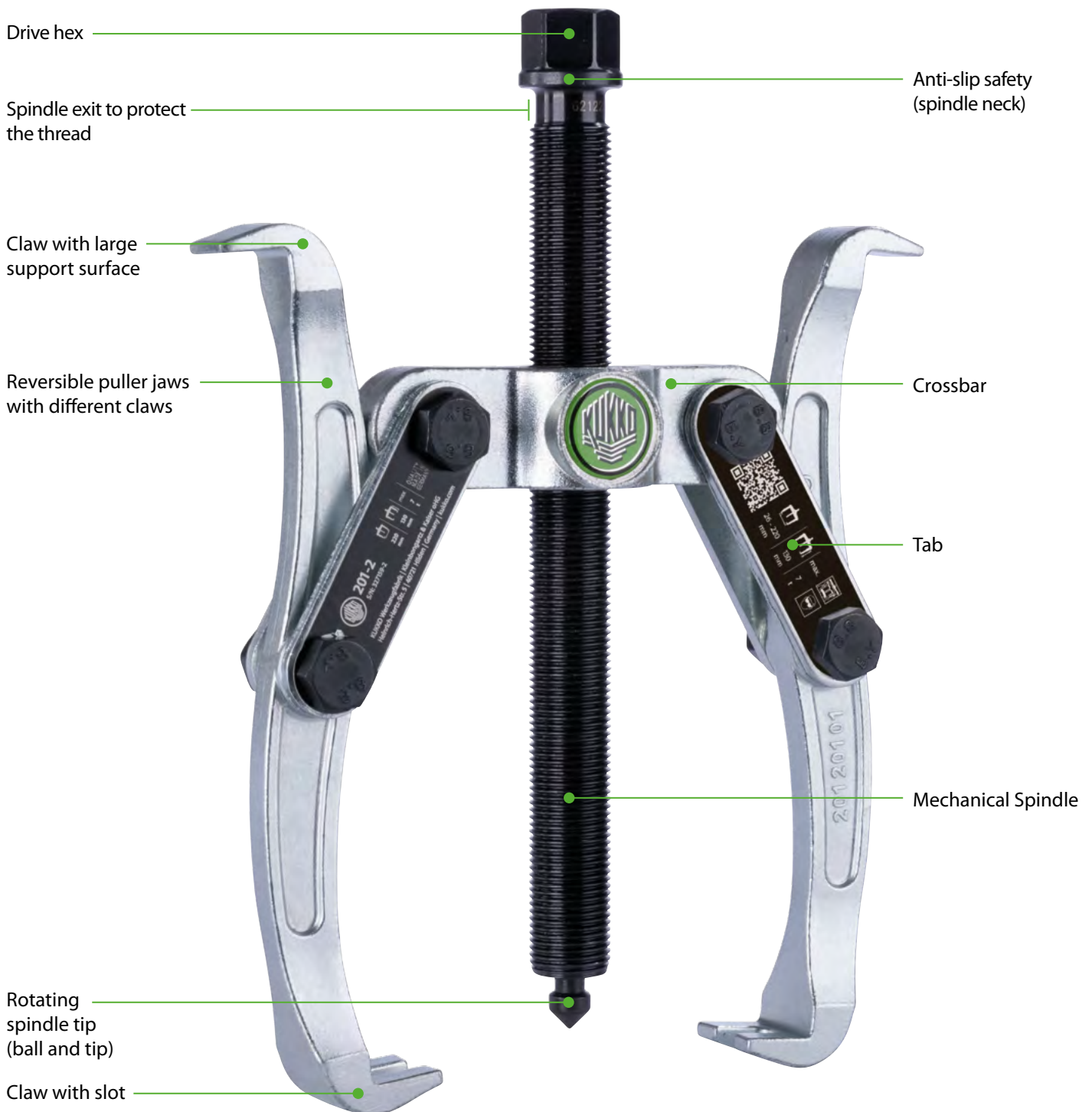
The 2-jaw and 3-jaw pullers are equipped with oscillating and reversible jaws and are used for centric extraction of bearings, gears, and discs in all common sizes for craftsmanship, workshop, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The oscillating jaws with adjustable reach guarantee maximum flexibility and are applicable on both sides. Depending on the version, the claw shape varies.



## Benefits

- Adjustable and 180° rotatable jaws for individual adjustment of the reach
- Oscillating jaws offer a variety of adjustment options
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off
- 3-jaw ensures an even force distribution and allows for greater pulling forces (series 202 and 203)
- Thanks to the combination crossbar, the puller can be used for 2-jaw and 3-jaw pulling (series 203)

## ASSEMBLY OF A PULLER USING THE EXAMPLE OF THE 201-2



# FEATURES OF THE SERIES

## SERIES 201

2-jaw puller with oscillating and reversible puller jaws



201-1

The 201 series is suitable for extraction processes in restricted environmental conditions. The oscillating and reversible jaws guarantee various adjustment options for the jaws.

## SERIES 202

3-jaw puller with oscillating and reversible jaws



202-2

The benefit of the series 202 is the 3-jaw design, which allows for a particularly even distribution of force. This enables even higher pull-out forces.

## SERIES 203

3-jaw puller with oscillating and reversible jaws and crossbar



203-4

The special feature of the series 203 is the combination crossbar, which allows the puller to be used for both 2-jaw and 3-jaw pulling.

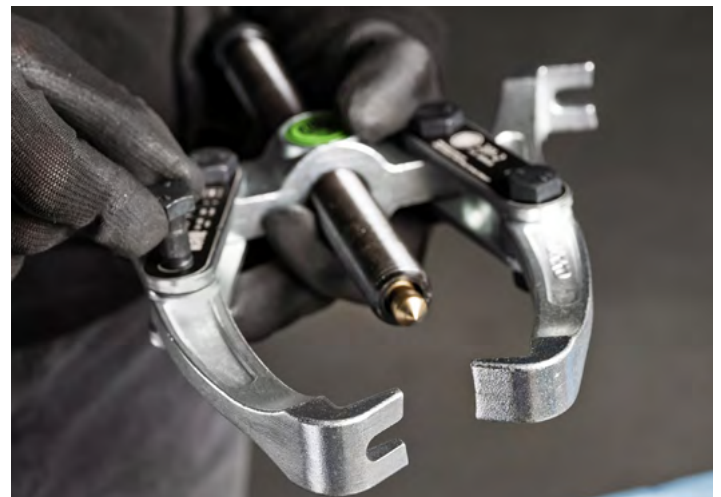
# MULTI-CROSSBAR AND REVERSIBLE CLAWS



Multi-Traverse with 3 hooks



Multi-Traverse with 2 Haken



The reversible puller arms and various claw shapes guarantee maximum flexibility when pulling.



# APPLICATION EXAMPLES



The oscillating jaws of the series 201, 202, and 203 can be perfectly positioned on the part to be pulled out.



The multiple drilling of the jaws allows for quick adjustment to the desired reach



3-jaw puller with combination crossbar for the removal of a gear from an electric motor



Thanks to the combination crossbar, the 203-0 can also be used for 2-jaw pulling after a short conversion.



## PRODUCT DETAILS



### SERIES 201 2-JAW TAB PULLER WITH OSCILLATING, REVERSIBLE PULLER JAWS









The 2-jaw puller with oscillating and reversible jaws is used for centric pulling of bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The oscillating jaws with adjustable reach are applicable on both sides. Depending on the design, the claw shape varies.

#### Benefits

- Adjustable and 180° rotatable puller jaws for individual adjustment of the reach.
- Oscillating puller jaws offer versatile adjustment options
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off

#### Technical attributes

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
201-0	-026423	0 - 100 5/8 - 3 7/8	75 3	13 1/2	25 18.44	15	1.5 1.65	0,43 0,948
201-1	-026591	0 - 150 3/4 - 5 7/8	85 3 3/8	17 11/16	75 55.32	50	5 5.51	0,86 1,896
201-2	-026676	0 - 220 1 1/32 - 8 5/8	130 5 1/8	22 7/8	150 110.64	70	7 7.72	2,44 5,380
201-3	-026751	0 - 300 1 1/2 - 11 7/8	260 10 1/4	27 1 1/16	250 184.40	100	10 11.02	5,28 11,642
201-4	-026836	0 - 380 1 1/2 - 15	300 11 7/8	27 1 1/16	250 184.40	100	10 11.02	5,62 12,392

### SERIES 202 3-JAW PULLER WITH OSCILLATING, REVERSIBLE JAWS









The 3-jaw puller with oscillating and reversible jaws is used for centralized extraction of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows the loosening of any component that sits on a shaft and is freely accessible from the outside. The oscillating jaws with adjustable reach can be applied on both sides. Depending on the design, the claw shape varies. The 3-jawed design ensures even load distribution and a particularly safe grip on the part being extracted.

#### Benefits

- Adjustable and 180° rotatable puller jaws for individual adjustment of the reach.
- Oscillating puller jaws offer a variety of adjustment options
- Pulling jaws with different claw shapes for flexible working.
- Claw end with slot provides support for screw for additional support when pulling off

#### Technical attributes

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
202-0	-027093	0 - 100 5/8 - 3 7/8	75 3	13 1/2	25 18.44	15	1.5 1.65	0,59 1,301
202-1	-027178	0 - 150 3/4 - 5 7/8	85 3 3/8	17 11/16	75 55.32	50	5 5.51	1,17 2,580
202-2	-027253	0 - 220 1 1/32 - 8 5/8	130 5 1/8	22 7/8	150 110.64	70	7 7.72	2,98 6,571
202-3	-027338	0 - 300 1 3/16 - 11 7/8	260 10 1/4	27 1 1/16	250 184.40	100	10 11.02	6,775 14,939
202-4	-027413	0 - 380 1 3/16 - 15	300 11 7/8	27 1 1/16	250 184.40	100	10 11.02	7,135 15,733

## PRODUCT DETAILS

### SERIES 203 3-JAW PULLER WITH OSCILLATING, REVERSIBLE PULLER JAWS AND COMBINATION CROSSBAR









Hook with slot  
for the articles  
203-2 and 203-3

The 2-jaw and 3-jaw puller with crossbar features oscillating and reversible jaws and is used for centric pulling of bearings, gears, and disks in all common sizes for craft, workshop, and industry. This allows for the removal of any component that sits on a shaft and is freely accessible from the outside. The swiveling jaws with adjustable spread are applicable on both sides. Depending on the design, the claw shape varies. Thanks to the crossbar, the puller can be used as both a 2-jaw and 3-jaw tool. The 3-jaw configuration ensures an even load distribution and thus a particularly secure grip on the part being extracted.

#### Benefits

- Thanks to the combination crossbar, the puller can be used for 2-jaw and 3-jaw pulling.
- Adjustable and 180° rotatable puller jaws for individual adaptation of the reach.
- Oscillating jaws offer a variety of adjustment options.
- Pulling arms with different jaw shapes for flexible working.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
203-0	-027666	0 - 120 5/8 - 4 3/4	75 3	13 1/2	25 18.44	15	1.5 1.65	0,66 1,455	-
203-1	-027741	0 - 180 3/4 - 7 1/8	85 3 3/8	17 11/16	75 55.32	50	5 5.51	1,26 2,778	224-678
203-2	-027826	0 - 280 1 1/32 - 11 1/32	130 5 1/8	22 7/8	150 110.64	70	7 7.72	3,1 6,836	224-677, 224-678
203-3	-027901	0 - 350 1 1/2 - 13 3/4	260 10 1/4	27 1 1/16	250 184.40	100	10 11.02	6,86 15,126	-
203-4	-028083	0 - 400 1 1/2 - 15 3/4	300 11 7/8	27 1 1/16	250 184.40	100	10 11.02	7,225 15,931	-



Extraction process of a camshaft gear with the 118-0 using the single-finger claws.



KUKKO // Pull forward



SERIES 205 | 206 | 207

# HEAVY LIFTING PULLER





# DEPLOYMENT

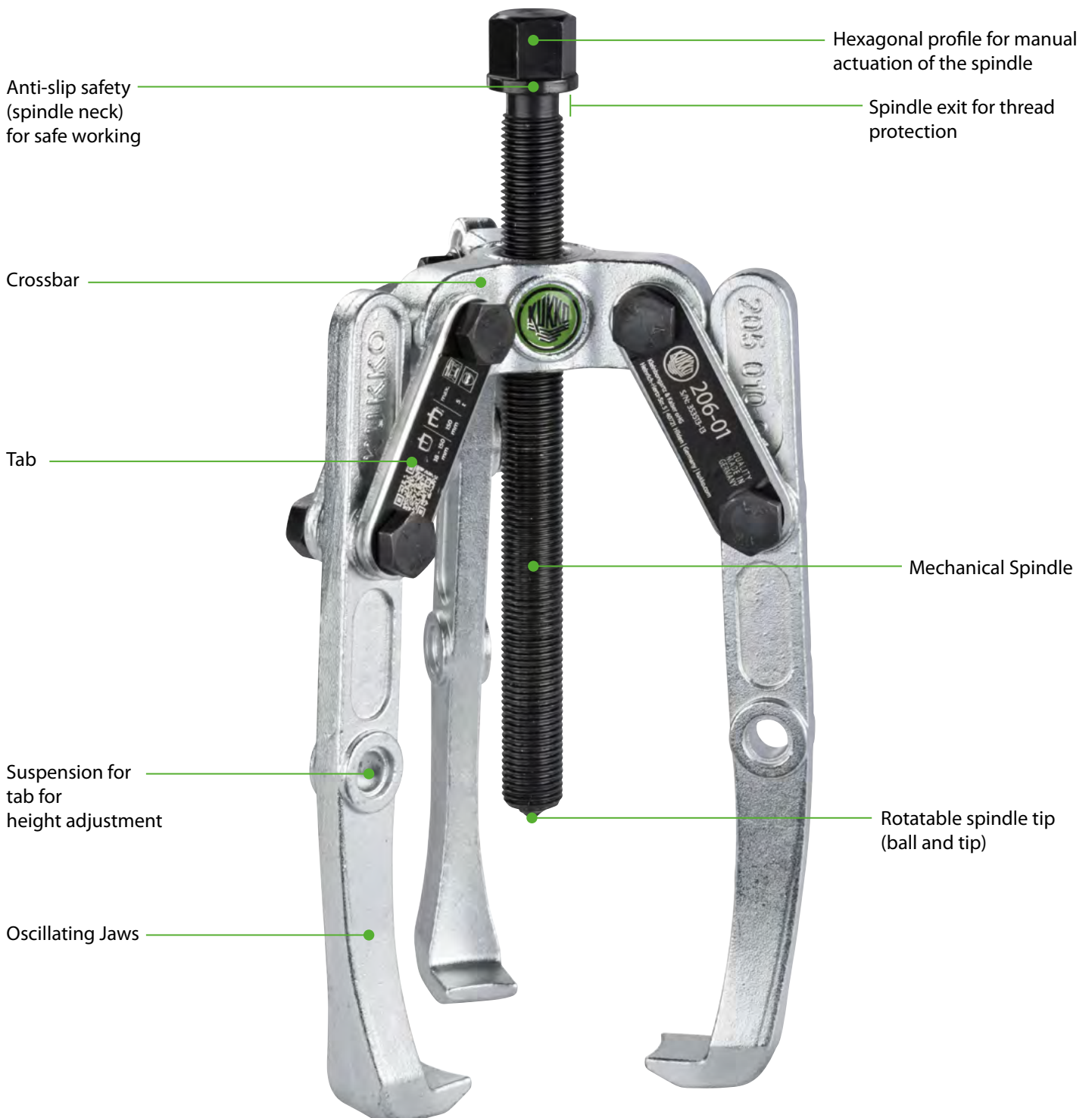
The heavy pullers are equipped with oscillating jaws. The advantage of these swinging jaws is that they can be adapted to various installation situations – even in confined spaces. This guarantees maximum maneuverability for individual adjustment to the desired spread. Additionally, the reach can be individually adjusted via suspensions on the jaws.



## Benefits

- Adjustable puller jaws for individual adjustment of reach
- Oscillating jaws offer a variety of adjustment options
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off
- Thanks to the combination crossbar, the puller can be used for 2-jaw and 3-jaw pulling (series 207)
- 3-jaw design ensures an even force distribution and allows for greater pulling forces (series 206 and 207)

## ASSEMBLY OF A TAB PULLER



# FEATURES OF THE SERIES

## SERIES 205

### 2-jaw puller



205-00

The series 205 is suitable for extraction processes in restricted environmental conditions. The oscillating and height-adjustable jaws guarantee precise setting of the required spread and reach.

## SERIES 206

### 3-jaw puller



206-01

The benefit of the 206 series is the 3-arm design, which enables particularly even force distribution. This enables even higher pull-off forces.

## SERIES 207

### 3-jaw puller with crossbar



207-1

The special feature of the 207 series is the combination crossbar, which allows the puller to be used for both 2-jaw and 3-jaw extraction.

## SERIES 205-B

### 2-jaw hydraulic puller



205-1-B

## SERIES 206-B

### 3-jaw hydraulic puller



206-02-B

## SERIES 207-B

### 3-jaw hydraulic puller with combo crossbar



207-1-B

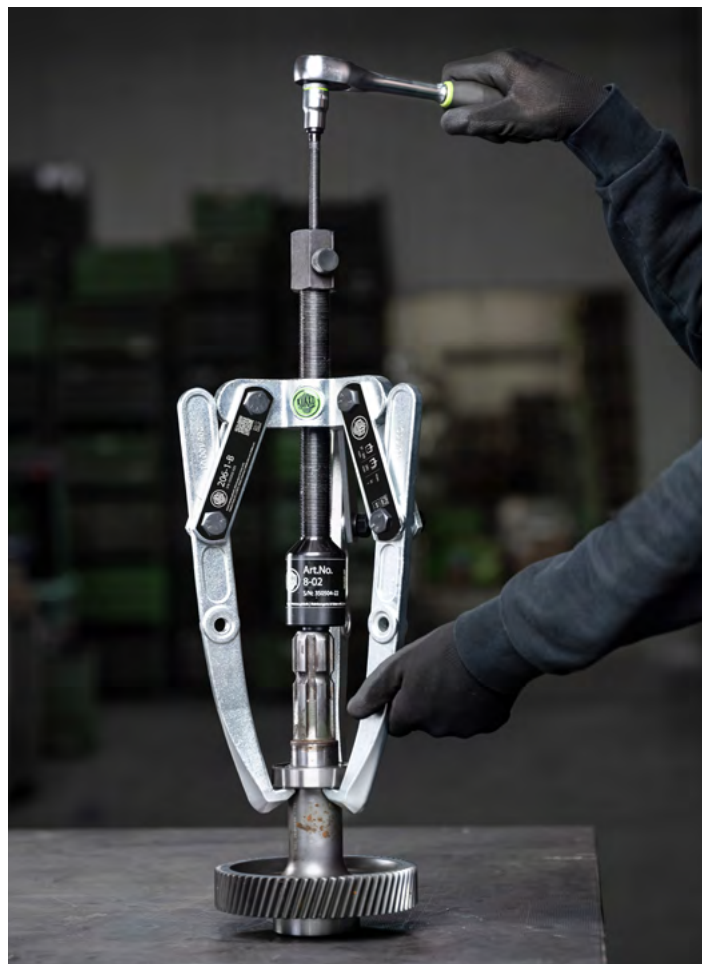
The pullers are also available with a hydraulic spindle that achieves a pulling force of up to 15 t. The hydraulic spindle guarantees easy and controlled extraction of particularly seized components with minimal effort.



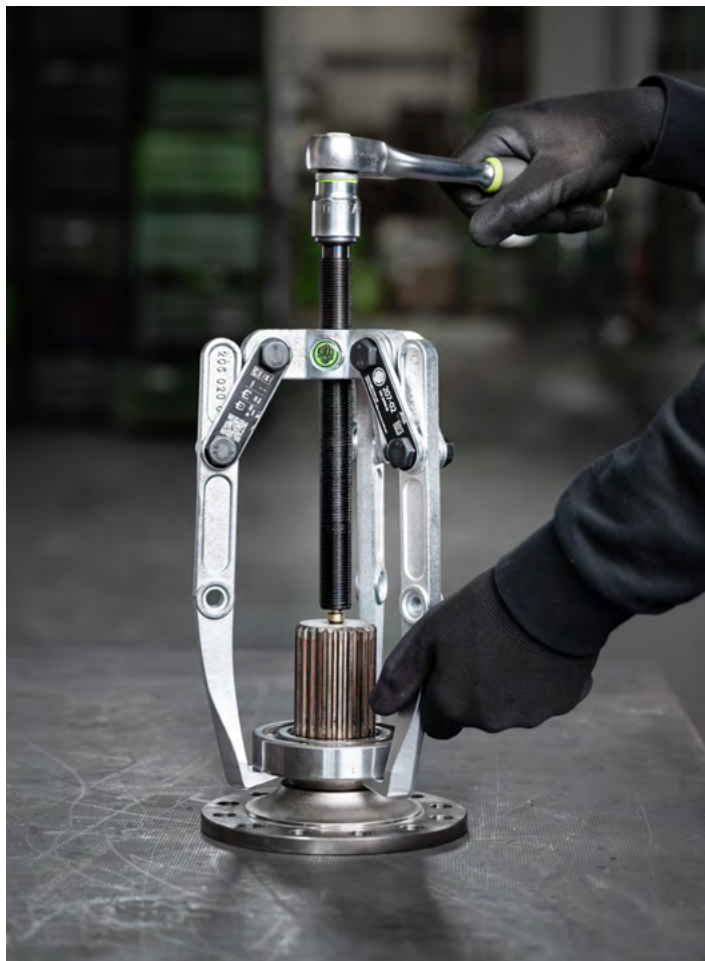
# APPLICATION EXAMPLES



Expansion of a gear wheel with the 205-01



Dismantling a ball bearing from a gear shaft using the hydraulic tabs puller 206-1-B



Removing a ball bearing with the heavy tab puller 207-02



Removing a gear with the heavy tab puller 207-2



## PRODUCT DETAILS



### SERIES 205 HEAVY 2-JAW PULLER WITH OSCILLATING AND HEIGHT- ADJUSTABLE PULLER JAWS









The heavy, 2-jaw puller with oscillating and height-adjustable jaws is used for the central extraction of large bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for loosening any component that is mounted on a shaft and accessible from the outside. The oscillating jaws adapt to any installation situation and can be universally used due to the adjustable reach. Depending on the version, the claw shape varies.

#### Benefits

- Adjustable puller jaws for individual adaptation of the reach.
- Oscillating puller jaws offer a variety of adjustment options
- Pulling jaws with different claw shapes for flexible working.
- Claw end with slot provides support for screw for additional support when pulling off

#### Technical attributes

#				SW 		Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>205-00</b>	-028571	0 - 100 5/8 - 3 7/8	100 3 7/8	13 1/2	50 36.88	35	3.5 3.86	0,485 1,069
<b>205-01</b>	-028656	0 - 150 3/4 - 5 7/8	150 5 7/8	17 11/16	120 88.51	50	5 5.51	1,35 2,977
<b>205-02</b>	-028731	0 - 250 1 1/32 - 9 7/8	220 8 5/8	22 7/8	150 110.64	70	7 7.72	2,545 5,612
<b>205-1</b>	-028816	0 - 300 1 1/2 - 11 7/8	280 11 1/32	27 1 1/16	280 206.53	100	10 11.02	5,5 12,128
<b>205-2</b>	-028991	0 - 400 1 1/2 - 15 3/4	400 15 3/4	27 1 1/16	300 221.28	100	10 11.02	6,71 14,796
<b>205-3</b>	-029073	0 - 500 1 1/2 - 19 3/4	540 21	27 1 1/16	320 236.03	120	12 13.23	8,545 18,842

### SERIES 206 HEAVY, 3-JAW PULLER WITH OSCILLATING AND HEIGHT- ADJUSTABLE JAWS









The heavy 3-jaw puller with oscillating and height-adjustable jaws is used for centric extraction of large bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows you to remove any component sitting on a shaft that is freely accessible from the outside. The oscillating jaws adapt to any installation situation and are universally applicable due to the adjustable reach. Depending on the design, the shape of the jaws varies. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being pulled.

#### Benefits

- Adjustable puller jaws for individual adjustment of reach depth
- Oscillating puller jaws offer a variety of adjustment options
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off

#### Technical attributes

#				SW 		Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>206-00</b>	-029158	0 - 100 5/8 - 3 7/8	100 3 7/8	13 1/2	50 36.88	35	3.5 3.86	0,65 1,433
<b>206-01</b>	-029233	0 - 150 3/4 - 5 7/8	150 5 7/8	17 11/16	120 88.51	50	5 5.51	1,42 3,131
<b>206-02</b>	-029318	0 - 250 1 1/32 - 9 7/8	220 8 5/8	22 7/8	150 110.64	70	5 5.51	3,36 7,409
<b>206-1</b>	-029493	0 - 300 1 1/2 - 11 7/8	280 11 1/32	27 1 1/16	280 206.53	100	10 11.02	7,25 15,986
<b>206-2</b>	-029561	0 - 450 1 1/2 - 15 3/4	400 15 3/4	27 1 1/16	300 221.28	100	10 11.02	8,845 19,503
<b>206-3</b>	-029646	0 - 500 1 1/2 - 19 3/4	540 21	27 1 1/16	320 236.03	120	12 13.23	12,75 28,114

## SERIES 207 HEAVY, 3-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE PULLER ARMS AND COMBINED CROSSBAR









The heavy 2-jaw or 3-jaw puller with oscillating, height-adjustable pulling jaws and combination crossbar is used for concentric extraction of large bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It can loosen any component that sits on a shaft and is freely accessible from the outside. The oscillating pulling jaws adapt to any installation situation and are universally applicable due to the adjustable reach. Thanks to the combination crossbar, the puller can be used in both 2-jaw and 3-jaw configurations. Depending on the design, the claw shape differs. The 3-jaw feature ensures even load distribution and thus a particularly secure grip on the part being extracted.

### Benefits

- Adjustable Puller Jaws for Individual Adjustment of Reach Depth
- Oscillating puller jaws offer a variety of adjustment options
- Pulling jaws with different claw shapes for flexible working.
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling.

### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>207-00</b>	-029721	0 - 120 5/8 - 4 3/4	100 3 7/8	13 1/2	50 36.88	35	3.5 3.86	0,73 1,610
<b>207-01</b>	-029806	0 - 200 3/4 - 7 7/8	150 5 7/8	17 11/16	120 88.51	50	5 5.51	1,495 3,296
<b>207-02</b>	-029981	0 - 300 1 1/32 - 11 7/8	220 8 5/8	22 7/8	150 110.64	70	7 7.72	3,46 7,629
<b>207-1</b>	-030048	0 - 400 1 1/2 - 15 3/4	280 11 1/32	27 1 1/16	280 206.53	100	10 11.02	7,45 16,427
<b>207-2</b>	-030123	0 - 450 1 1/2 - 17 3/4	400 15 3/4	27 1 1/16	300 221.28	100	10 11.02	9,04 19,933
<b>207-3</b>	-030208	0 - 550 1 1/2 - 21 5/8	540 21	27 1 1/16	320 236.03	120	12 13.23	12,045 26,559

## PRODUCT DETAILS



### SERIES 205-B HEAVY, 2-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE PULLER ARMS AND HYDRAULIC SPINDLE








The heavy, 2-jaw puller with oscillating, height-adjustable puller arms and hydraulic spindle is used for central extraction of large, particularly stubborn bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 12 t. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. For pulling operations with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used. The oscillating puller arms adapt to any installation situation and are universally applicable due to the adjustable reach depth. Depending on the design, the claw shape differs.

#### Benefits

- Adjustable puller jaws for individual reach adjustment
- Oscillating puller jaws offer a variety of adjustment options
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off

#### Technical attributes

#					Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>205-02-B</b>	-886072	0 - 250 1 1/32 - 9 7/8	220 8 5/8	15 11.06	100	10 11.02	4,295 9,470
<b>205-1-B</b>	-886089	0 - 300 1 1/2 - 11 7/8	280 11 1/32	20 14.75	120	12 13.23	7,595 16,747
<b>205-2-B</b>	-886096	0 - 400 1 1/2 - 15 3/4	400 15 3/4	20 14.75	120	12 13.23	8,978 19,796
<b>205-3-B</b>	-886102	0 - 500 1 1/2 - 19 3/4	540 21 1/4	20 14.75	120	12 13.23	10,46 23,064

### SERIES 206-B HEAVY 3-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE JAWS AND HYDRAULIC SPINDLE








The heavy, 3-jaw puller with oscillating, height-adjustable puller arms and hydraulic spindle is used for centrally pulling large, especially seized bearings, gears, and discs in all common sizes for craft, industry, and workshop. The hydraulic spindle achieves an average pulling force of up to 12 t. This allows for the loosening of any component that is mounted on a shaft and is freely accessible from the outside. For pulling processes with a pulling force of up to 10 t and/or in confined space conditions, the mechanical spindle can be used. The oscillating puller arms adapt to any installation situation and are universally applicable due to the adjustable reach. Depending on the design, the claw shape differs. The 3-jaw design guarantees even load distribution and thus a particularly safe hold on the part to be pulled.

#### Benefits

- Adjustable puller jaws for individual reach adjustment
- Oscillating puller jaws offer a variety of adjustment options
- Pulling jaws with different claw shapes for flexible working.
- Claw end with slot provides support for screw for additional support when pulling off

#### Technical attributes

#					Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>206-02-B</b>	-886119	0 - 250 1 1/32 - 9 7/8	220 8 5/8	15 11.06	100	10 11.02	5,24 11,554
<b>206-1-B</b>	-412448	0 - 300 1 1/2 - 11 7/8	280 11 1/32	20 14.75	120	12 13.23	9,285 20,473
<b>206-2-B</b>	-886126	0 - 450 1 1/2 - 15 3/4	400 15 3/4	20 14.75	120	12 13.23	9,42 20,771
<b>206-3-B</b>	-886133	0 - 500 1 1/2 - 19 3/4	540 21 1/4	20 14.75	120	12 13.23	14,095 31,079



## PRODUCT DETAILS

### SERIES 207-B HEAVY, 3-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE PULLER ARMS, COMBINATION CROSSBAR, AND HYDRAULIC SPINDLE








The heavy, 2-jaw or 3-jaw puller with oscillating, height-adjustable jaws, combo crossbar, and hydraulic spindle is used for centric removal of large, particularly stuck bearings, gears, and discs in all common sizes for craft, industry, and workshop. The hydraulic spindle achieves an average pulling force of a maximum of 12 t. This allows for loosening any component that is seated on a shaft and is freely accessible from the outside. For pulling operations with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used. The oscillating jaws adapt to any installation situation and are universally applicable due to the adjustable reach. Thanks to the combo crossbar, the puller can be used as both a 2-jaw and 3-jaw puller. Depending on the design, the claw shape differs. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being pulled.

#### Benefits

- Adjustable puller jaws for individual reach adjustment
- Oscillating puller jaws offer a variety of adjustment options
- Puller jaws with different claw shapes for flexible working
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
<b>207-02-B</b>	-886140	0 - 300 1 1/32 - 11 7/8	170 6 3/4	15 11.06	100	10 11.02	4,99 11,003
<b>207-1-B</b>	-886157	0 - 400 1 1/2 - 15 3/4	230 9 1/16	20 14.75	120	12 13.23	9,405 20,738
<b>207-2-B</b>	-886164	0 - 450 1 1/2 - 17 3/4	350 13 3/4	20 14.75	120	12 13.23	10,8 23,814
<b>207-3-B</b>	-886171	0 - 550 1 1/2 - 21 5/8	490 19 3/8	20 14.75	120	12 13.23	14,31 31,554

KUKKO // Pull forward



SERIES 208 | 209

# PULLER "ECONOMY"





# DEPLOYMENT

The 2-jaw and 3-jaw pullers "Economy" of series 208 and 209 are equipped with oscillating, height-adjustable jaws. The curved and swiveling jaws adapt to any installation situation. In addition, the adjustability of the spread and reach offers maximum flexibility when pulling.



## Benefits

- Adjustable puller jaws for individual adjustment of the reach thanks to multiple drilling in the puller jaws.
- Oscillating jaws offer a variety of adjustment options
- Puller arms with different claw shapes for flexible working (depending on model size)
- Safe mounting of the spindle through a swiveling spindle tip on both smooth surfaces and during centering (does not apply to items 208-0 and 209-0)
- 3-jaw ensures an even distribution of force and allows for greater pulling forces (series 209)
- Hydraulic spindle guarantees an easy and controlled removal of particularly stuck parts with little effort (item number 208-2-B and 209-2-B)

## ASSEMBLY OF A TAB PULLER USING EXAMPLE 208-0





# FEATURES OF THE SERIES



## SERIES 208



The 2-jaw puller "Economy" is suitable for pulling processes under restricted environmental conditions. The oscillating and height-adjustable jaws guarantee a precise adjustment of the spread and reach.

## SERIES 208 (HYDRAULIC)



The 2-jaw puller "Economy" with hydraulic spindle guarantees easy pulling of particularly stubborn components without great effort. The 2-jaw design allows operation in confined spaces.

## SERIES 209



The 3-jaw puller "Economy" guarantees a particularly even distribution of force, allowing for even higher pulling forces. The oscillating and height-adjustable puller jaws ensure precise adjustment of the spread and reach.

## SERIES 209 (HYDRAULIC)



The 3-jaw puller "Economy" with hydraulic spindle ensures easy removal of particularly stubborn components without much effort. The 3-jaw design also provides even force distribution.

# APPLICATION EXAMPLES



Removing a ball bearing from a shaft using the 208-01.



Removing a fan wheel with the 209-0.



Removing the handwheel from a shut-off valve with the 209-02.



Conversion for adjusting the reach depth and span using the example of the 208-01.

## PRODUCT DETAILS



### SERIES 208 2-JAW PULLER "ECONOMY" WITH OSCILLATING AND HEIGHT- ADJUSTABLE PULLER JAWS







The 2-jaw puller "Economy" with oscillating and height-adjustable jaws is used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The oscillating and curved jaws adapt to any installation situation and are universally applicable due to the adjustable reach and spread.



#### Benefits

- Adjustable puller jaws for individual adaptation of the reach due to multiple drilling in the puller jaws.
- Oscillating puller jaws offer a variety of adjustment options.
- Safe installation of the spindle with a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.

#### Technical attributes

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>208-01</b>	-432408	0 - 170 3/4 - 6 3/4	95 4 7/8	17 11/16	20 14.75	20	2 2.20	1 2,205
<b>208-02</b>	-432651	0 - 230 3/4 - 9 1/16	150 7 1/2	22 7/8	50 36.88	25	2.5 2.76	2,49 5,490
<b>208-0</b>	-432248	12 - 100 1 3/16 - 3 7/8	50 3 7/8	13 1/2	20 14.75	10	1 1.10	0,5 1,103
<b>208-2-B</b>	-432811	64 - 400 4 3/8 - 15 3/4	225 15 3/4	12 1/2	20 14.75	120	12 13.23	0 0,000



## PRODUCT DETAILS

### SERIES 209 3-JAW PULLER "ECONOMY" WITH OSCILLATING AND HEIGHT- ADJUSTABLE JAWS

The 3-jaw puller "Economy" with oscillating and height-adjustable jaws is used for pulling bearings, gears, and discs in all common sizes for craft, workshop, and industry. The oscillating and curved jaws adapt to any installation situation and are universally applicable due to the adjustability of the reach and spread. The 3-jaw design ensures an even load distribution, providing a particularly secure hold on the part being pulled.



209-01  
209-02







209-0

209-2-B

#### Benefits

- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating puller jaws offer a variety of adjustment options
- Secure setup of the spindle through a rotatable spindle tip both on smooth surfaces and during centering (Switch Technology)
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>209-01</b>	-432576	0 - 170 3/4 - 6 3/4	95 4 7/8	17 11/16	20 14.75	20	2 2.20	1,32 2,911
<b>209-02</b>	-432736	160 - 230 7 7/8 - 9 1/16	150 7 1/2	22 7/8	50 36.88	25	2.5 2.76	3,1 6,836
<b>209-0</b>	-432323	12 - 100 1 3/16 - 3 7/8	50 3 7/8	13 1/2	20 14.75	10	1 1.10	0,485 1,069
<b>209-2-B</b>	-432996	64 - 450 4 3/8 - 19 3/4	400 15 3/4		45 33.19	150	15 16.53	15,45 34,067

KUKKO // Pull forward



SERIES 201-S | 202-S  
**FAN WHEELS & SHIP SCREWS**



# DEPLOYMENT

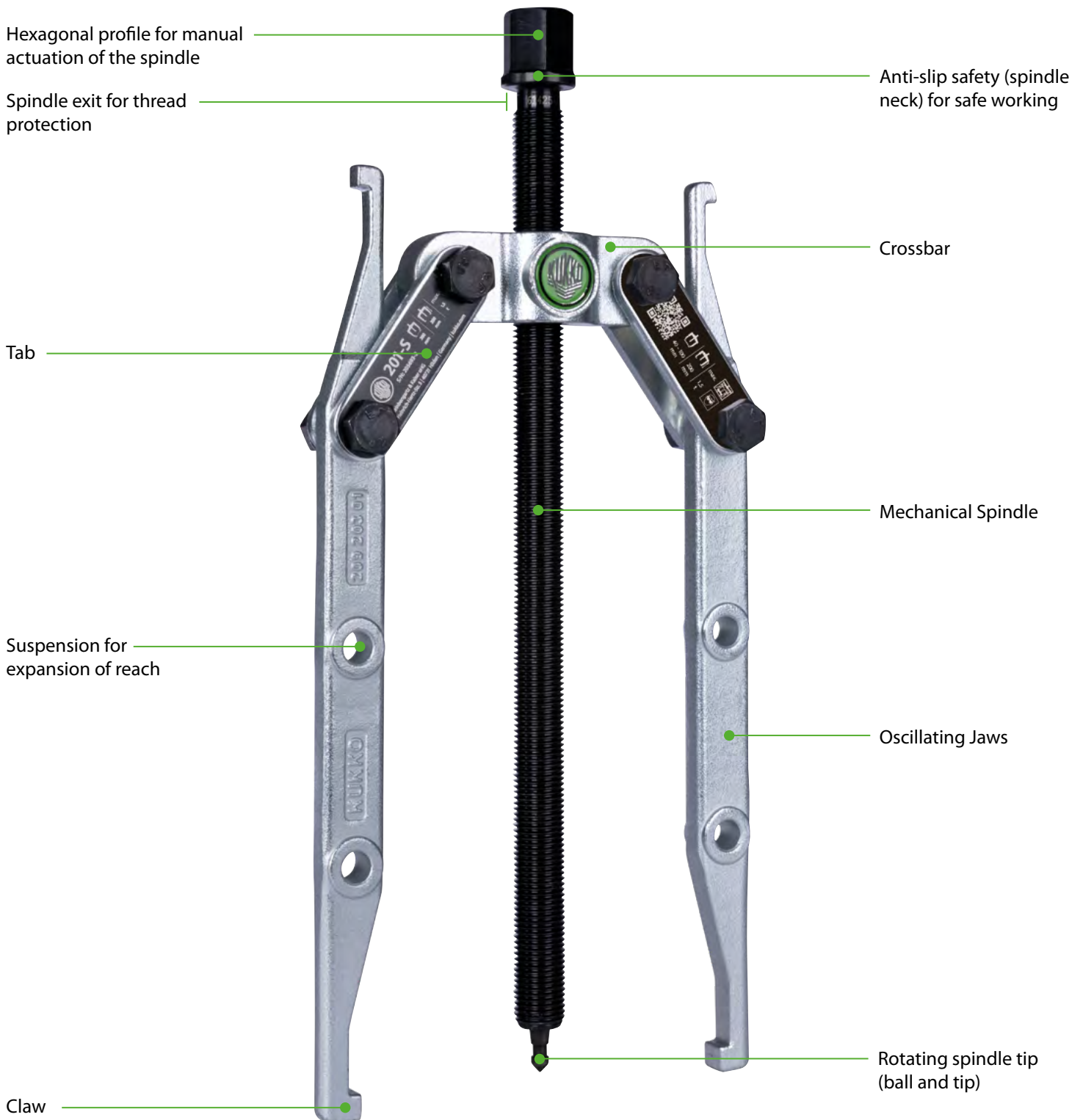
Thanks to the particularly slim design of the jaws, the tab puller is used for disassembling fan wheels. The swiveling legs adapt to any installation situation. Additionally, the jaws are rotatable by 180° and can be used on both sides, providing various claw sizes.



## Benefits

- Adjustable puller jaws for individual adjustment of the reach thanks to multiple drilling in the puller jaws.
- Oscillating jaws offer a variety of adjustment options
- Jaws are rotatable by 180° and can be used on both sides.
- Jaws with different claw sizes for flexible working
- 3-jaw ensures an even distribution of force and enables greater pulling forces (series 202-S)

## ASSEMBLY OF A PULLER USING THE EXAMPLE 201-S





# FEATURES OF THE SERIES

## SERIES 201-S



The 2-jaw puller for fan wheels is universally applicable even in tight spaces.

## SERIES 202-S



The 3-jaw puller for fan wheels ensures an even distribution of force and thereby allows for even greater pulling forces.

# APPLICATION EXAMPLES



The multi-drilling in the puller jaws guarantees an individual adjustment to the reach.



By rotating the jaws 180°, a different claw size can be pulled off.

## PRODUCT DETAILS

### SERIES 201-S 2-JAW PULLER FOR FAN WHEELS WITH OSCILLATING AND HEIGHT- ADJUSTABLE PULLER JAWS



The 2-jaw puller with oscillating and height-adjustable jaws is used for pulling fan wheels and propellers in all common sizes for crafts, workshops, and industry. Thanks to the particularly slim design, the jaws grip through the two slots and capture the flange of the fan. The oscillating jaws adapt to every installation situation and are universally applicable due to the adjustable reach. In addition, the jaws are 180° rotatable and can be used on both sides, allowing for different claw sizes depending on the space below the part to be pulled.

#### Benefits

- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating puller jaws offer a variety of adjustment options.
- Jaws are rotatable by 180° and can be used on both sides.
- Puller jaws with varying claw sizes for flexible work

#### Technical attributes

#				SW 		Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
201-S	-026911	11 - 200 3/4 - 7 7/8	200 7 7/8	17 11/16	30 22.13	15	1.5 1.65	1,16 2,558

### SERIES 202-S 3-JAW PULLER FOR FAN WHEELS WITH OSCILLATING AND HEIGHT- ADJUSTABLE PULLER JAWS









The 3-jaw puller with oscillating and adjustable-length jaws is used for removing fan wheels and ship screws in all common sizes for crafts, workshops, and industry. Thanks to the particularly slim design, the jaws grip through the two slots and engage the flange of the fan. The oscillating jaws adapt to any installation situation and can be universally used thanks to the adjustable gripping depth. Additionally, the jaws can be rotated 180° and used on both sides, allowing for different jaw sizes depending on the space below the part to be removed. The 3-jaw design ensures even load distribution and thus a particularly secure hold on the part to be removed.

#### Benefits

- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating puller jaws offer a variety of adjustment options.
- The jaws are rotatable by 180° and can be used on both sides.
- Jaws with different claw sizes for flexible work

#### Technical attributes

#				SW 		Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
202-S	-027581	11 - 200 3/4 - 7 7/8	200 7 7/8	17 11/16	35 25.82	20	2 2.20	1,74 3,837



KUKKO // Pull forward



SERIES 43 | 44 | 45

# PULLER WITH FORCE-AMPLIFYING AND SELF-CENTERING JAWS





# DEPLOYMENT

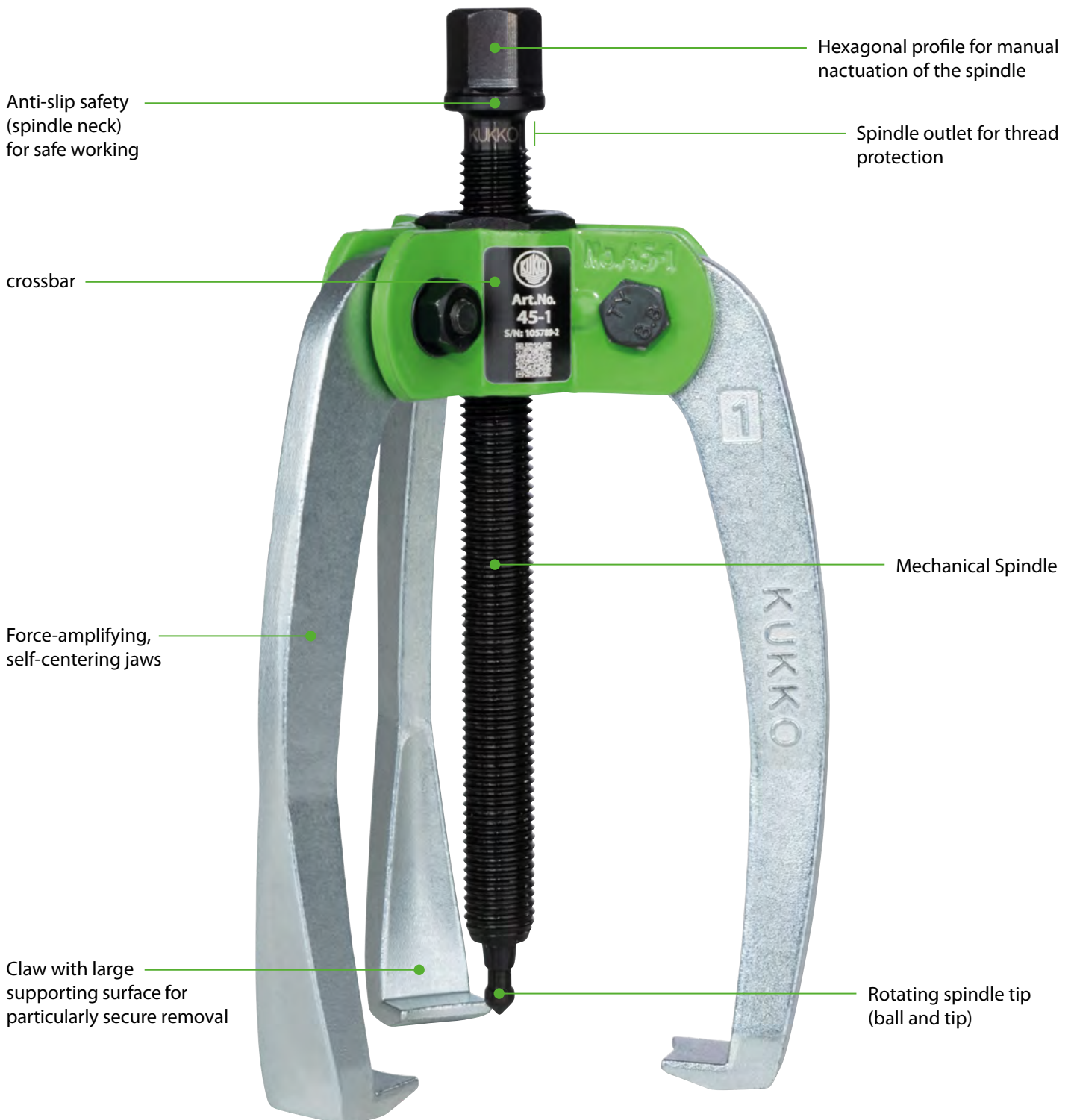
This product group includes both the handy small part pullers of series 43 and 43-1, as well as the particularly robust industrial pullers of series 44 and 45. The common feature of these pullers lies in the force-amplifying, self-centering jaws that are positioned by manually tightening the spindle.



## Benefits

- Self-centering of the puller jaws by manual tightening of the spindle (Autogrip Technology)
- The slim design of the puller jaws allows access to hard-to-reach areas (series 43 and 43-1)
- Integrated, freely movable pen on the T-handle guarantees a manual spindle drive in the tightest spaces (series 43 and 43-1)
- Safe setup of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology) (Series 44 and 45)
- 3-jaw design ensures an even distribution of forces and allows for greater pulling forces (series 43-1 and 45)

## ASSEMBLY OF A PULLER USING EXAMPLE 45-1



# FEATURES OF THE SERIES



## SERIES 43



The handy 2-jaw puller from series 43 is used for feelingly pulling small components. The slim design and the freely movable pin on the T-handle guarantee extraction in the tightest spaces.

## SERIES 43-10



The compact, 3-jaw puller of series 43-1 features the same characteristics as series 43. Additionally, the 3-jaw design ensures a more even force distribution and greater pulling forces.

## SERIES 44



The robust 2-jaw industrial pullers of series 44 are used for powerful extraction of larger components. As the spindle pressure builds up, the part to be pulled is increasingly enclosed by the interconnected puller jaws.

## SERIES 45



The robust, 3-jaw industrial pullers of series 45 have the same functionality as series 44. The difference lies in the 3-jaw design, which achieves a more even distribution of force and greater pulling forces.



## HYDRAULIC UPGRADE: SPINDLE REPLACEMENT FOR THE 45-8

With just a few adjustments, the mechanical spindle can be removed and replaced with a hydraulic spindle. This is demonstrated here using the example of the puller 45-8:



45-8 with mechanical spindle



Removing the mechanical spindle



Inserting the hydraulic spindle



45-8 with hydraulic spindle



# APPLICATION EXAMPLES



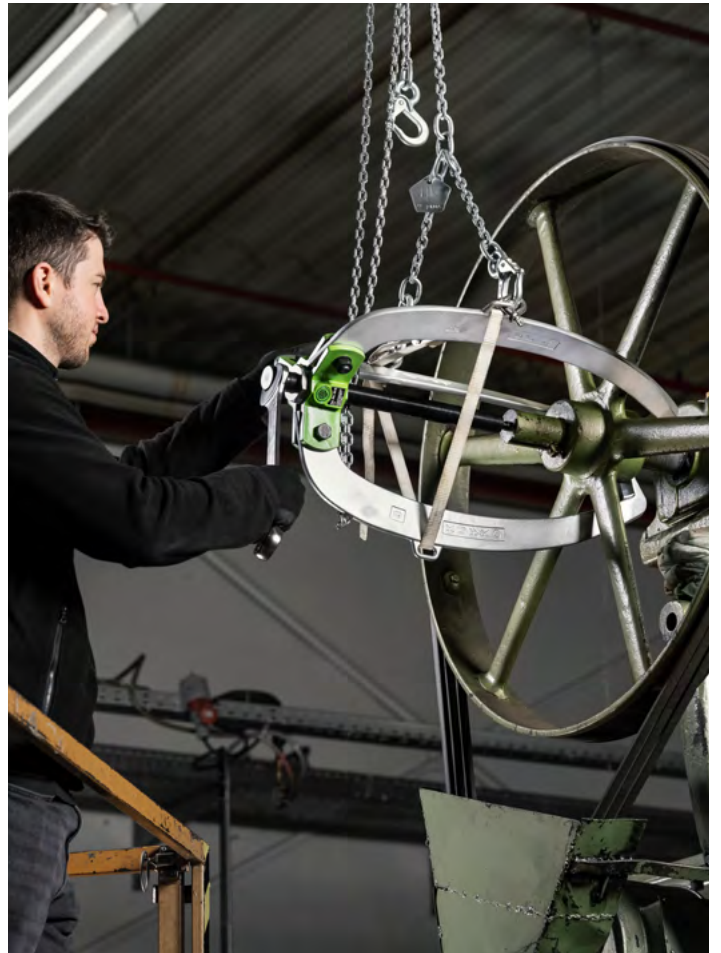
Removing a pulley with the 45-8 using a mechanical spindle. The puller is connected to the URANUS for locking and holding.



Removing a pulley with the 45-8 with hydraulic spindle



Use of the 45-8 with a safety tarp



An additional tension belt secures the jaws

## PRODUCT DETAILS

### SERIES 43 HANDY, 2-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS







The handy 2-jaw puller with force-amplifying and self-centering jaws is used for the sensitive removal of small bearings, gears, and discs in tight, hard-to-reach spaces. The compact and space-saving design of the puller, with narrow jaws that widen towards the claw, is particularly suitable for electric motors. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in the tightest of spaces.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle ensures manual spindle drive in tight spaces
- The slim design of the jaws allows access to hard-to-reach areas.
- No additional tool is needed for the pulling process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
43-1	-015458	0 - 60 3/8 - 2 3/4	50 2 3/4	10	1 1.10	0,22 0,485	24-A, K-142/4, 24-B, K-142/6, K-22-A
43-2	-015861	0 - 70 3/8 - 2 3/8	70 2	10	1 1.10	0,24 0,529	-
43-3	-015946	0 - 80 3/8 - 3 3/16	80 3 3/16	10	1 1.10	0,265 0,584	-

### SERIES 43-10 HANDY, 3-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS







The handy 3-jaw puller with force-amplifying and self-centering jaws is used for the sensitive extraction of small bearings, gears, and discs in tight, hard-to-access spaces. The compact and space-saving design of the puller, with narrow jaws that widen towards the claw, is particularly suitable for electric motors. The freely movable pin on the T-handle ensures comfortable, one-handed tightening of the spindle in the tightest spaces.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, free-moving pin on the T-handle guarantees manual spindle drive in tight spaces
- The slim design of the jaws allows access to hard-to-reach places.
- No additional tool is required for the pulling process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
43-11	-015526	0 - 60 3/8 - 2 3/8	50 2	15	1.5 1.65	0,275 0,606
43-12	-015601	0 - 70 3/8 - 2 3/4	70 2 3/4	15	1.5 1.65	0,35 0,772
43-13	-015786	0 - 80 3/8 - 3 3/16	80 3 3/16	15	1.5 1.65	0,335 0,739



## PRODUCT DETAILS



### SERIES 43-0 HANDY 2-JAW AND 3-JAW PULLER WITH FORCE-AMPLIFYING AND SELF-CENTERING PULLER JAWS







The handy 2-jaw and 3-jaw puller with force-amplifying and self-centering pulling jaws is used for feelingly removing small bearings, gears, and discs in tight, hard-to-reach spaces. The compact and space-saving design of the puller with narrow jaws that widen towards the claw is particularly suitable for electric motors. The freely movable pin on the T-handle ensures comfortable, one-handed tightening of the spindle in the tightest spaces.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle ensures manual spindle drive in tight spaces

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Included in the set</b>
<b>43-0-1</b>	-023330	0 - 60 3/8 - 2 3/8	50 2	10	1 1.10	0,215 0,474	27-A
<b>43-0-11</b>	-023347	0 - 60 3/8 - 2 3/8	50 2	15	1.5 1.65	0,285 0,628	-

### SERIES 44 HANDY 2-JAW INDUSTRIAL PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS











The handy 2-jaw industrial puller with force-amplifying and self-centering jaws is used for pulling bearings, gears, and discs in all common sizes for craft, workshop, and industry. It allows for the removal of any component seated on a shaft and freely accessible from the outside. When the spindle pressure is built up, the part to be pulled is increasingly gripped tighter by the interconnected jaws.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Safe setup of the spindle through a swiveling spindle tip on both smooth surfaces and during centering (Switch Technology)
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench
- Spindle outlet to protect the thread

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 M	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	
<b>44-1</b>	-016028	0 - 100 1/2 - 3 7/8	100 3 7/8	13 1/2	M12 x 1,5	50 36.88	30	3 3.31	0,525 1,158	-
<b>44-2</b>	-016103	0 - 120 3/4 - 4 3/4	120 4 3/4	17 11/16	M14 x 1,5	85 62.70	50	5 5.51	1 2,205	-
<b>44-3</b>	-016288	0 - 160 7/8 - 6 3/8	160 6 3/8	19 3/4	M18 x 1,5	140 103.26	60	6 6.61	1,9 4,190	-
<b>44-4</b>	-016363	0 - 250 7/8 - 9 7/8	200 7 7/8	24 15/16	G 5/8 inch	190 140.14	70	7 7.72	3,28 7,232	8-HP-623, K-8-HP-623
<b>44-5</b>	-815133	45 - 300 1 3/4 - 11 13/16	250 9 7/8	27 1 1/16	G 3/4 inch	200 147.52	95	9.5 10.47	5,2 11,466	8-HP-626, K-8-HP-626, 8-0-626
<b>44-6</b>	-815218	55 - 375 2 3/16 - 14 3/4	280 11	27 1 1/16	G 3/4 inch	200 147.52	95	9.5 10.47	5,32 11,731	8-HP-626, K-8-HP-626, 8-0-626
<b>44-7</b>	-007125	40 - 450 1 9/16 - 17 11/16	380 14 15/16	36 1 7/16	G 1 inch	400 295.04	120	12 13.23	11,86 26,151	8-HP-633, K-8-HP-633, 8-1-B, 8-1-F
<b>44-8</b>	-007132	100 - 650 3 15/16 - 25 9/16	500 19 11/16	36 1 7/16	G 1 inch	450 331.92	150	15 16.53	14,5 31,973	8-HP-633, K-8-HP-633, 8-1-B, 8-1-F



## PRODUCT DETAILS

### SERIES 45 HANDY, 3-JAW INDUSTRIAL PULLER WITH FORCE-AMPLIFYING, SELF- CENTERING PULLER JAWS



45-1  
45-2  
45-3  
45-4









45-5  
45-6  
45-7  
45-8

The compact 3-jaw industrial puller with force-amplifying and self-centering jaws is used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. It allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. When the spindle pressure is built up, the part to be pulled is increasingly gripped by the interconnected jaws. The 3-jaw design ensures an even load distribution, providing a particularly secure hold on the part to be removed.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Safe positioning of the spindle through a rotatable spindle tip on both smooth surfaces and during centerings (Switch Technology)
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.

#### Technical attributes

#							Max. tensile force	Max. tractive force		
	EAN	mm/inch	mm/inch	mm/inch		Nm/ft lb	kN	t/US t. sh.	kg/lb	
45-1	-016448	0 - 100 1/2 - 3 7/8	100 3 7/8	13 1/2	M12 x 1,5	50 36.88	40	4 4.41	0,665 1,466	-
45-2	-016516	0 - 120 3/4 - 4 3/4	120 4 3/4	17 11/16	M14 x 1,5	120 88.51	60	6 6.61	1,124 2,478	-
45-3	-016691	0 - 160 7/8 - 6 3/8	160 6 3/8	19 3/4	M18 x 1,5	180 132.77	80	8 8.82	2,45 5,402	-
45-4	-016776	0 - 250 7/8 - 9 7/8	200 7 7/8	24 15/16	G 5/8 inch	200 147.52	95	9.5 10.47	4,18 9,217	8-HP-623, K-8-HP-623
45-5 NEW	-815393	45 - 300 1 3/4 - 11 13/16	250 9 13/16	27 1 1/16	G 3/4 inch	200 147.52	95	9.5 10.47	6,51 14,355	8-HP-626, K-8-HP-626, 8-0-626
45-6 NEW	-815478	55 - 375 2 3/16 - 14 3/4	280 11 1/32	27 1 1/16	G 3/4 inch	200 147.52	95	9.5 10.47	6,95 15,325	8-HP-626, K-8-HP-626, 8-0-626
45-7 NEW	-821646	40 - 450 1 9/16 - 17 11/16	380 14 15/16	36 1 7/16	G 1 inch	400 295.04	120	12 13.23	15,75 34,729	8-HP-633, K-8-HP-633, 8-1-B, 8-1-F
45-8 NEW	-007149	100 - 650 3 15/16 - 25 9/16	500 19 11/16	36 1 7/16	G 1 inch	450 331.92	150	15 16.53	19,71 43,461	8-HP-633, K-8-HP-633, 8-1-B, 8-1-F

KUKKO // Pull forward



SERIES 482 | 483 | 48

# HANDY PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING, AND CLAMPING PULLER JAWS



# DEPLOYMENT

The handy 2-jaw and 3-jaw pullers with force-amplifying, self-centering and tensioning puller jaws are used for pulling bearings, gears, and discs in tight and difficult-to-access spaces. The integrated force amplification with spring mechanism increases the clamping force in proportion to the pulling force. With the tightening of the spindle, the puller jaws are automatically centered.



## Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, freely movable pen on the T-handle guarantees manual spindle drive in tight spaces.
- The slim design of the jaws allows access to hard-to-reach places.
- The thread form allows for quick tightening of the spindle, as fewer rotations are required (series 482).
- The hexagon on the spindle is suitable for operation with powered tools (482-3 to 482-5, 483-3 to 483-5)

## ASSEMBLY OF A PULLER USING THE EXAMPLE 482-3





# FEATURES OF THE SERIES

## SERIES 482

2-jaw puller  
with self-centering jaws



The handy, 2-jaw puller from the 482 series is used for disassembling hard-to-reach components.

## SERIES 483

3-jaw puller  
with self-centering jaws



Thanks to the 3-jaw design, the pullers of series 483 provide a uniform distribution of force and thus enable even greater pulling forces.

## SERIES 48

Single-handed puller

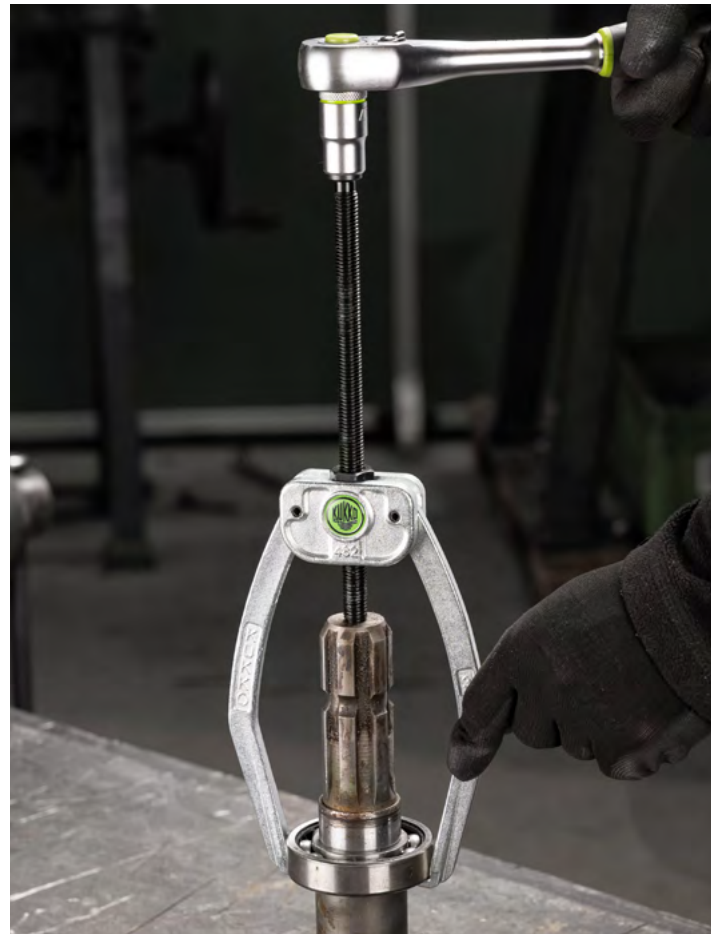


The handy, 2-jaw puller with self-centering jaws is used for removing battery terminals.

# APPLICATION EXAMPLES



Positioning the puller jaws on the component to be disassembled



Dismantling of a ball bearing from a gear wheel

## PRODUCT DETAILS

### SERIES 482 HANDY, 2-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING, CLAMPING PULLER JAWS









The handy 2-jaw puller with force-amplifying, self-centering, and gripping jaws is used for removing bearings, gears, and discs in tight and hard-to-reach spaces. It allows for the removal of any component that sits on a shaft and is freely accessible from the outside. The built-in force amplification with spring mechanism increases the clamping force proportionally to the pulling force. By tightening the spindle, the jaws are automatically centered. The freely moving pin on the T-handle ensures a comfortable, one-handed tightening of the spindle in confined spaces.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- An integrated, free-moving pin at the T-handle ensures manual spindle drive in the tightest spaces.
- The slim design of the jaws allows access to poorly accessible areas.
- The thread design allows for a quick tightening of the spindle, as fewer rotations are required.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
482-1	-479779	0 - 60 5/8 - 2 3/8	40 1 5/8	T-handle	0.00	15	1.5 1.65	0,235 0,518	K-482
482-2	-479854	4 - 85 3/4 - 3 3/8	90 4	T-handle	0.00	15	1.5 1.65	0,36 0,794	K-482
482-3	-479939	4 - 150 3/4 - 5 7/8	150 5 7/8	13 1/2	35 25.82	25	2.5 2.76	0,875 1,929	K-482
482-4	-480096	0 - 200 3/4 - 7 7/8	200 7 7/8	17 11/16	40 29.50	30	3 3.31	1,68 3,704	-
482-5	-480171	0 - 250 3/4 - 9 7/8	250 9 7/8	17 11/16	40 29.50	30	3 3.31	1,92 4,234	-

### SERIES 483 HANDY 3-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING, CLAMPING PULLER JAWS









The handy 3-jaw puller with force-amplifying, self-centering, and straining jaws is used for pulling bearings, gears, and discs from tight and hard-to-reach spaces. This allows you to loosen any component that sits on a shaft and is freely accessible from the outside. The integrated force amplification with spring mechanism increases the clamping force proportionally to the pulling force. Tightening the spindle automatically centers the jaws. The 3-jaw design guarantees even load distribution and thus ensures a particularly secure grip on the part being pulled.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- The slim design of the jaws enables access to difficult-to-reach areas.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.

#### Technical attributes

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
483-2	-480331	4 - 85 3/4 - 3 3/8	90 4	T-handle	0.00	15	1.5 1.65	0,425 0,937
483-3	-480416	4 - 150 3/4 - 5 7/8	150 5 7/8	13 1/2	35 25.82	25	2.5 2.76	1,16 2,558
483-4	-480584	0 - 200 3/4 - 7 7/8	200 7 7/8	17 11/16	40 29.50	30	3 3.31	1,72 3,793
483-5	-480669	0 - 250 3/4 - 9 7/8	250 9 7/8	17 11/16	40 29.50	30	3 3.31	2,395 5,281

## PRODUCT DETAILS

### **K-482** **3-PIECE, HANDY PULLER (2-JAW) SET**



The 3-piece, handy puller with force-amplifying, self-centering, and tensioning jaws in the set is used for 2-jaw extraction of bearings, gears, and discs in tight and hard-to-reach spaces. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The integrated force amplification with spring mechanism increases the clamping force proportional to the extracting force. By tightening the spindle, the jaws are automatically centered. The freely movable T-handle on the spindle head ensures manual tightening of the spindle in confined spaces. The set includes three different sizes for use with varying spread and depths.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The slim design of the jaws allows access to hard-to-reach areas.

#### Technical attributes

#					Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>K-482</b>	-123245	0 - 150 0 - 5 7/8	0 - 150 0 - 5 7/8	13 1/2	25	2.5 2.76	2,44 5,380	482-1, 482-2, 482-3







KUKKO // *Pull forward*



SERIES 844-B | 845-B

# PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS AND HYDRAULIC SPINDLE



# DEPLOYMENT

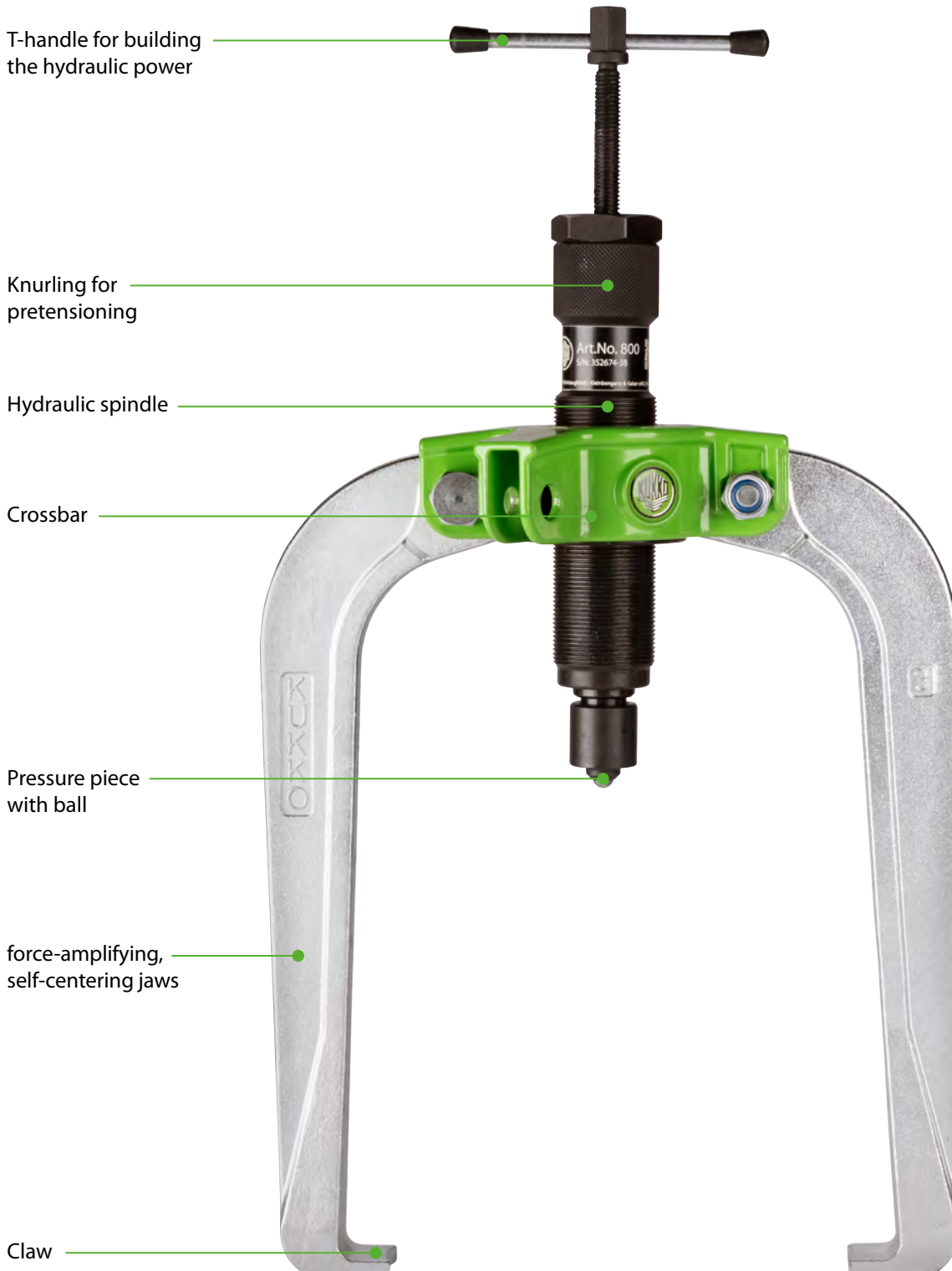
The handy 2-jaw and 3-jaw pullers with force-amplifying, self-centering jaws and hydraulic spindle are used for pulling particularly stubborn bearings, gears, and discs in all common sizes for craft, workshop, and industry. When tightening the spindle, the jaws are automatically centered.



## Benefits

- Self-centering of the puller jaws by manual tightening of the spindle (Autogrip Technology)
- Spindle extensions enable a quick adjustment to a wide variety of requirements
- The hydraulic spindle guarantees a light and controlled extraction of particularly stuck parts with low effort.
- The slim design of the jaws allows access to hard-to-reach places.

## ASSEMBLY OF A PULLER USING THE EXAMPLE 844-3-B



Cross section of the hydraulic spindle 800



## FEATURES OF THE SERIES

### SERIES 844-B



The fat-hydraulic spindle of series 800 is the motor of the puller and achieves a pulling force of 10 t. The spindle is ribbed on the sides to provide particularly good grip for fingers when repositioning.

### SERIES 845-B



The 3-jaw design guarantees an even load distribution and thus provides a particularly secure grip on the part being pulled off.

## APPLICATION EXAMPLES



Tensioning the puller by screwing in the hydraulic spindle at the knurling.



Actuation of the T-handle for the construction of hydraulic power

## PRODUCT DETAILS

### SERIES 844-B HANDY 2-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS AND HYDRAULIC SPINDLE








The handy 2-jaw puller with force-amplifying, self-centering puller jaws and hydraulic spindle is used for extracting particularly stubborn bearings, gears, and discs in all common sizes for craft, workshop, and industry applications. When the spindle is tightened, the puller jaws are automatically centered. The hydraulic spindle of series 800 is the motor of the puller and achieves a pulling force of 10 t. As a true powerhouse, the spindle stands out with a compact design, ease of use, and portable application. The spindle is ribbed on the sides to provide a particularly good grip for fingers when repositioning.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Spindle extensions allow for a quick adaptation to a wide range of requirements.
- The hydraulic spindle guarantees easy and controlled removal of especially stuck parts with little effort.
- The slim design of the jaws allows access to hard-to-reach places.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
844-1-B	-031601	26 - 100 2 - 3 7/8	100 3 7/8	40 29.50	100	10 11.02	3,39 7,475	845-150, 845-855, 845-858, 845-851
844-2-B	-031946	51 - 150 3 - 5 7/8	150 5 7/8	40 29.50	100	10 11.02	4,045 8,919	845-150, 845-855, 845-858, 845-851
844-3-B	-032448	39 - 150 3 - 5 7/8	250 9 7/8	40 29.50	100	10 11.02	4,92 10,849	845-851, 845-855, 845-858, 845-250
844-4-B	-076091	64 - 200 3 7/8 - 7 7/8	200 7 7/8	40 29.50	100	10 11.02	4,9 10,805	845-250, 845-855, 845-858, 845-851
844-5-B	-032776	96 - 250 5 1/8 - 9 7/8	250 9 7/8	40 29.50	100	10 11.02	5,12 11,290	845-250, 845-851, 845-855, 845-858

### SERIES 845-B HANDY 3-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS AND HYDRAULIC SPINDLE








The handy 3-jaw puller with force-amplifying, self-centering jaws and hydraulic spindle is used for pulling especially tight-fitting bearings, gears, and discs in all common sizes for crafts, workshops, and industry. By tightening the spindle, the jaws are automatically centered. The hydraulic spindle of the 800 series is the motor of the puller and achieves a pulling force of 10 t. As a true power wonder, the spindle impresses with its compact design, easy usability, and portable application. The spindle is ribbed on the sides to provide a particularly good grip for fingers when repositioning. The 3-jaw design guarantees an even load distribution and thus a particularly secure hold on the part to be pulled off.

#### Benefits

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Spindle extensions allow for a quick adaptation to a wide range of requirements.
- The hydraulic spindle guarantees easy and controlled removal of especially stuck parts with little effort.
- The slim design of the jaws allows access to hard-to-reach places.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
845-1-B	-033278	26 - 100 2 - 3 7/8	100 3 7/8	40 29.50	100	10 11.02	4,11 9,063	845-150, 845-855, 845-858, 845-851
845-2-B	-033438	75 - 150 3 - 5 7/8	150 5 7/8	40 29.50	100	10 11.02	2 4,410	845-150, 845-855, 845-858, 845-851
845-3-B	-033681	39 - 150 3 - 5 7/8	250 9 7/8	40 29.50	100	10 11.02	5,99 13,208	845-250, 845-851, 845-855, 845-858
845-4-B	-033841	64 - 200 3 7/8 - 7 7/8	200 7 7/8	40 29.50	100	10 11.02	5,96 13,142	845-250, 845-855, 845-858, 845-851
845-5-B	-034008	96 - 250 5 1/8 - 9 7/8	250 9 7/8	40 29.50	100	10 11.02	6,6 14,553	845-851

## PRODUCT DETAILS



### 845-150 11-PIECE HYDRAULIC "4 PULLER" SET WITH SELF-CENTERING JAWS







The 11-piece hydraulic "4 Puller" set with self-centering jaws is used for pulling bearings, gears, discs, etc. in crafts, industry, and workshops. The set includes pullers, hydraulic spindle, jaws, as well as 2-jaw and 3-jaw combo crossbars that can be combined into four different pullers through the easily interchangeable, multiple combinable individual parts.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- Pullers of series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily exchangeable and combinable individual parts and supplements.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
845-150	-717871	26 - 150 1 1/32 - 5 7/8	0 - 150 0 - 5 7/8	100	10 11.02	9,66 21,300	800, 845-004, 844-020, 800-050, 800-100, 844-100, 844-150

### 845-250 15-PIECE, HYDRAULIC "6 PULLER" SET WITH SELF-CENTERING JAWS







The 15-piece hydraulic "6 Puller" set with self-centering jaws is used for pulling bearings, gears, discs, etc. in craft, industry, and workshops. The set includes pullers, hydraulic spindle, hooks, as well as 2-jaw and 3-jaw combination crossbars that can be combined into six different pullers through easily interchangeable, multifunctional individual components.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The pullers of the series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily exchangeable and combinable individual parts and supplements.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
845-250	-717956	39 - 250 1 9/16 - 9 13/16	0 - 250 0 - 9 13/16	100	10 11.02	15,57 34,332	800, 845-004, 844-020, 800-050, 800-100, 800-150, 844-200, 844-250, 844-251



## PRODUCT DETAILS

### 845-851 21-PIECE HYDRAULIC "10 PULLER" SET WITH SELF-CENTERING JAWS







The 21-piece hydraulic "10 Puller" set with self-centering puller jaws is used for pulling bearings, gears, discs, etc. in crafts, industry, and workshops. The set includes pullers, hydraulic spindles, jaws, as well as 2-jaw and 3-jaw combo crossbars, which can be combined into ten different pullers through the easily interchangeable, multiple combinable individual parts.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The pullers of the series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily exchangeable and combinable individual parts and supplements.

#### Technical attributes

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
845-851	-172854	26 - 250 1 1/32 - 9 13/16	0 - 250 0 - 9 13/16	100	10 11.02	19,72 43,483	800, 845-004, 844-020, 800-050, 800-100, 800-150, 844-100, 844-150, 844-200, 844-250, 844-251

### 845-855 29-PIECE HYDRAULIC UNIVERSAL PULLER SET










The 29-piece hydraulic universal puller set with separating device and self-centering jaws from series 845-855 is used for pulling and separating bearings, gears, discs, etc. in crafts, industry, and workshops. As a set of the modular series 800, it provides various hydraulic pulling options while maintaining modularity. The set includes not only the required pulling device and additional tension bolt extensions but also the corresponding modules for 2-jaw and 3-jaw pulling and separating. With the ten different pullers included in the set, high adaptability is ensured, especially for external extraction.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Through the ten different pullers, spans of 50-250 mm are covered, making suitable pullers available for most pulling situations.

#### Technical attributes

#							Max. tensile force	Max. Tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
845-855	-172939	26 - 250 1 1/32 - 9 13/16	0 - 250 0 - 9 13/16	85 - 270 3 3/8 - 10 5/8	780 30 11/16	25 - 155 1 - 6 1/8	100	10 11.02	37 81,585	800, 800-050, 800-100, 800-150, 844-020, 844-100, 844-150, 844-200, 844-250, 844-251, 845-004, Y-215-3, 818-820, 818-250, 818-280

## PRODUCT DETAILS



### 845-858 34-PIECE HYDRAULIC UNIVERSAL PULLER SET











The 34-piece hydraulic universal puller and extractor set with self-centering puller jaws and separating device from series 845-858 is used for pulling, separating, and internal extraction of bearings, gears, disks, etc. in crafts, industry, and workshops. As a set of the modular system series 800, it allows for various hydraulic pulling options while maintaining consistent modularity. The set includes not only the required puller device and additional puller extensions but also the corresponding modules for 2-jaw and 3-jaw pulling, internal extraction, and separating pulling, providing suitable options for most pulling situations. The ten different pullers included in the set ensure high adaptability, especially during external extraction.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Through the ten different pullers, spans of 50-250 mm are covered, thus making suitable pullers available for most extraction situations.

#### Technical attributes

#								Max. tensile force	Max. Tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kN	t/ US t. sh.	kg/lb	
845-858	-173011	26 - 250 1 1/32 - 9 13/16	0 - 250 0 - 9 13/16	30 - 180 1 3/16 - 7 1/16	85 - 270 3 3/8 - 10 5/8	780 30 11/16	25 - 155 1 - 6 1/8	100	10 11.02	37 81,585	800, 800-050, 800-100, 800-150, 844-020, 844-100, 844-150, 844-200, 844-250, 844-251, 845-004, Y-215-3, 818-820, 818-250, 818-280, 818-021

## PRODUCT DETAILS

### SERIES 820 2-JAW PULLER WITH HYDRAULIC SPINDLE (TENSION FORCE UP TO 10 T)








The 2-jaw puller with hydraulic spindle is used for safely pulling particularly stubborn bearings, gears, and discs in all common sizes for handcraft, workshop, and industry. The hydraulic spindle of series 800 is the motor of the puller and achieves a tension force of 10 t. As a true powerhouse, the spindle impresses with a compact design, easy usability, and portable application. The spindle is ribbed on the sides to provide particularly good grip for the fingers when resetting.

#### Benefits

- The screw connection allows for easy loosening and particularly tight tightening of the puller jaws with a hex key.
- The hydraulic spindle guarantees easy and controlled pulling of particularly stubborn parts with minimal effort.
- Application also for eccentric components through free-moving, sliding puller jaws on the crossbar.
- Variable adjustment for any spread between 85 mm – 225 mm

#### Technical attributes

#					Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>820-0</b>	-173684	85 - 225 3 3/8 - 8 7/8	225 8 7/8	40 29.50	100	10 11.02	7,24 15,964	818-215

### 818-215 20-PIECE, HYDRAULIC BEARING REMOVING AND INSTALLATION SET











The 8883-piece hydraulic bearing puller and extractor set of the series 818-215 is used for pulling and internal extraction of ball bearings, roller bearings, inner rings, and other flush-mounted parts in craft, industry, and workshop, when there is not enough space for puller jaws. As a set of the modular series 800, it enables various hydraulic pulling possibilities while maintaining modularity. The set includes, in addition to the necessary puller device and complementary pull bolt extensions, also the matching modules for 2-jaw pulling, internal extraction, and separator pulling, providing suitable options for most pulling situations.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The hydraulics enable high pulling performance with low effort.

#### Technical attributes

#								Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
<b>818-215</b>	-173271	85 - 225 3 3/8 - 8 7/8	225 8 7/8	30 - 180 1 3/16 - 7 1/16	85 - 270 3 3/8 - 10 5/8	780 30 11/16	22 - 155 7/8 - 6 1/8	100	10 11.02	27,12 59,800	800, 800-050, 800-100, 800-150, 818-250, 818-279, 818-280, 818-820, 820-225-P, Y-215-2, Y-215-3, 818-021



KUKKO // Pull forward



SERIES 12

# PULLER "ALLIGATOR" WITH FIXED PULLER JAWS



# DEPLOYMENT

The 3-jaw puller "Alligator" with fixed puller jaws and anti-slip safety is used for pulling particularly tightly seated bearings, gears, discs, etc. in all common sizes for crafts, workshops, and industry. This allows any component that sits on a shaft and is freely accessible from the outside to be loosened. By tightening the key, the puller jaws are automatically centered and securely clamped. This prevents slipping and movement of the jaws.



## Benefits

- The Alligator translation guarantees that the jaws can only be opened and closed by operating the adjustment key.
- The key ensures a force-amplifying fixation of the puller without slipping or deviating of the jaws.
- Self-centering of the jaws by tightening the key
- Safe setup of the spindle through a rotating spindle tip on both smooth surfaces and during centering (Switch Technology)
- Anti-slip safety (spindle neck) for safe working with wrench

## ASSEMBLY OF THE PULLER USING EXAMPLE 12-1

Hexagonal profile for manual operation of the spindle

Spindle exit for thread protection

Adjustment key to adjust the span for a tight fit

Rotating spindle tip (ball and tip)

Anti-slip safety (spindle neck) for safe working

Mechanical Spindle

Crossbar

Swiveling Jaws





# FEATURES OF THE SERIES



## SERIES 12



The 3-jaw puller "Alligator" with fixed puller jaws and anti-slip safety is used for pulling particularly seized bearings, gears, and discs.

## SERIES 12-A



The 3-jaw puller "Alligator" with adjustable puller jaws is equipped with a hook support on the inside and outside. This makes it versatile for use as an external extractor as well as an internal extractor.

# APPLICATION EXAMPLES



Removing a pulley from a car generator



Dismantling a ship propeller with the 12-2



## PRODUCT DETAILS

### SERIES 12 3-JAW PULLER "ALLIGATOR" WITH FIXED JAWS AND ANTI-SLIP SAFETY









The 3-jaw puller "Alligator" with fixed jaws and anti-slip safety is used for pulling particularly stubborn bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for loosening any component that is seated on a shaft and is freely accessible from the outside. By tightening the key, the puller jaws are forced to be centered and tightened securely. This prevents slipping or movement of the jaws.

#### Benefits

- The Alligator puller guarantees that the jaws can only be opened and closed by operating the tensioning key.
- The key ensures a force-strong fixing of the puller without dropping off or deviating of the jaws.
- Self-centering of the jaws by tightening the key
- Safe positioning of the spindle through the rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>12-1</b>	-006616	0 - 100 3/4 - 3 7/8	100 3 7/8	17 11/16	180 132.77	80	8 8.82	1,24 2,734
<b>12-2</b>	-006791	9 - 150 1 3/8 - 5 7/8	125 4 7/8	19 3/4	190 140.14	90	9 9.92	1,72 3,793
<b>12-3</b>	-006876	16 - 200 2 - 7 7/8	165 6 1/2	24 15/16	250 184.40	100	10 11.02	3,5 7,718

### SERIES 12-A 3-JAW PULLER WITH ADJUSTABLE EXTRACTOR JAWS FOR INTERNAL AND EXTERNAL EXTRACTION









The 3-jaw puller with adjustable puller jaws for external and internal extraction is used for pulling bearings, gears, discs, etc. in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that either sits on a shaft and is freely accessible from the outside or is fitted internally and thus needs to be pulled differently. The models are equipped with one jaw support on the inside and the outside, allowing them to be used for both external pulling and internal extraction.

#### Benefits

- The cross hooks ensure maximum stability for suspending the jaws in the sliding piece (Armlock Technology)
- The three-jaw design ensures even load distribution and a particularly secure hold.
- Smooth adjustment of the symmetrically tensioning arms to the required spread with a key allows for variable application.
- Also usable as a mobile press

#### Technical attributes

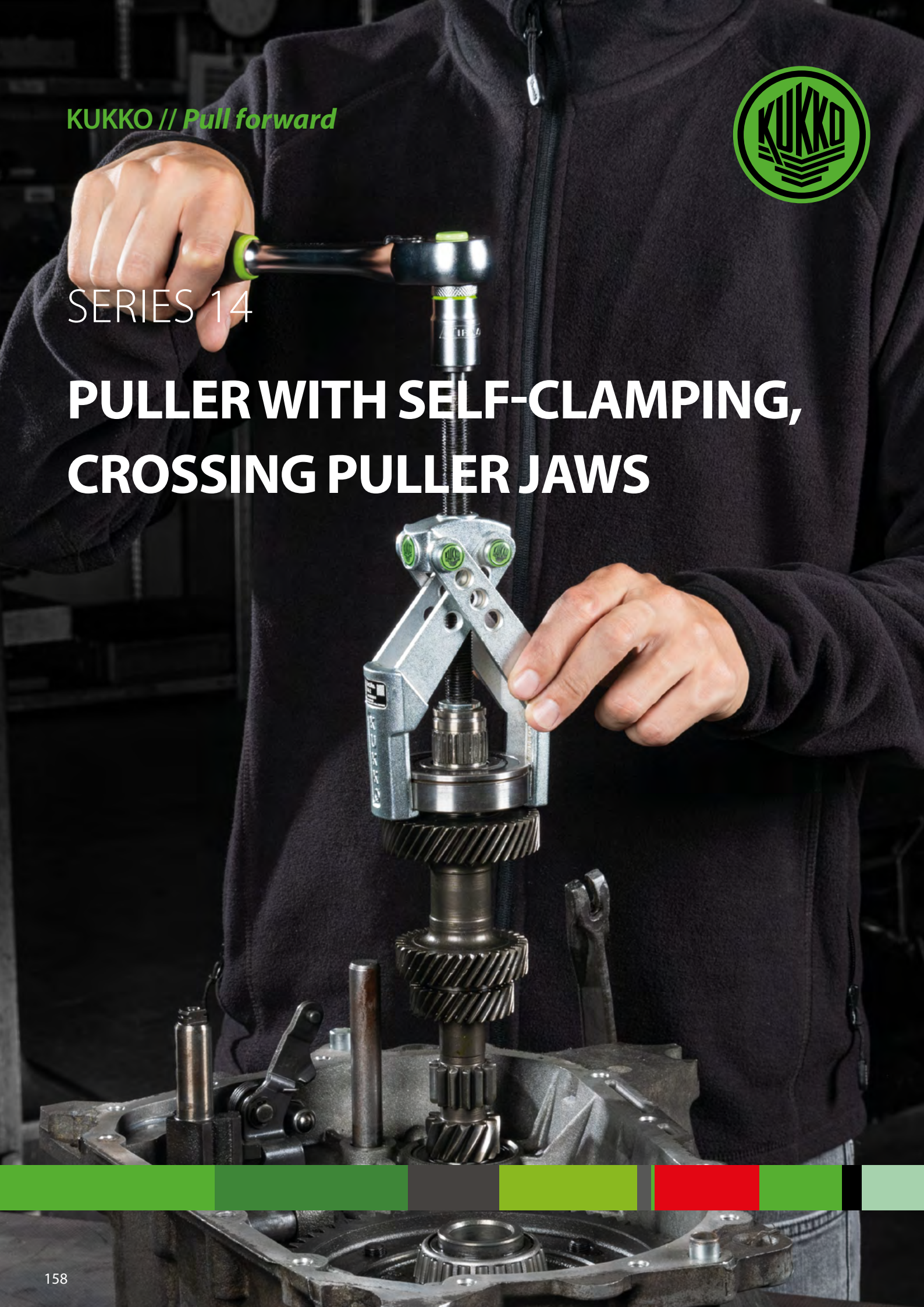
#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>12-4</b>	-850509	0 - 250 0 - 9 7/8	225 8 7/8	27 1 1/16	300 221.28	100	10 11.02	11,99 26,438
<b>12-5</b>	-850684	0 - 350 0 - 13 3/4	275 10 7/8	27 1 1/16	300 221.28	100	10 11.02	13,485 29,734
<b>12-6</b>	-850769	0 - 450 0 - 17 3/4	300 11 7/8	36 1 7/16	280 206.53	150	15 16.53	32,5 71,663
<b>12-7</b>	-850844	0 - 650 0 - 25 5/8	350 13 3/4	36 1 7/16	280 206.53	150	15 16.53	40 88,200

KUKKO // *Pull forward*



SERIES 14

# PULLER WITH SELF-CLAMPING, CROSSING PULLER JAWS





# DEPLOYMENT

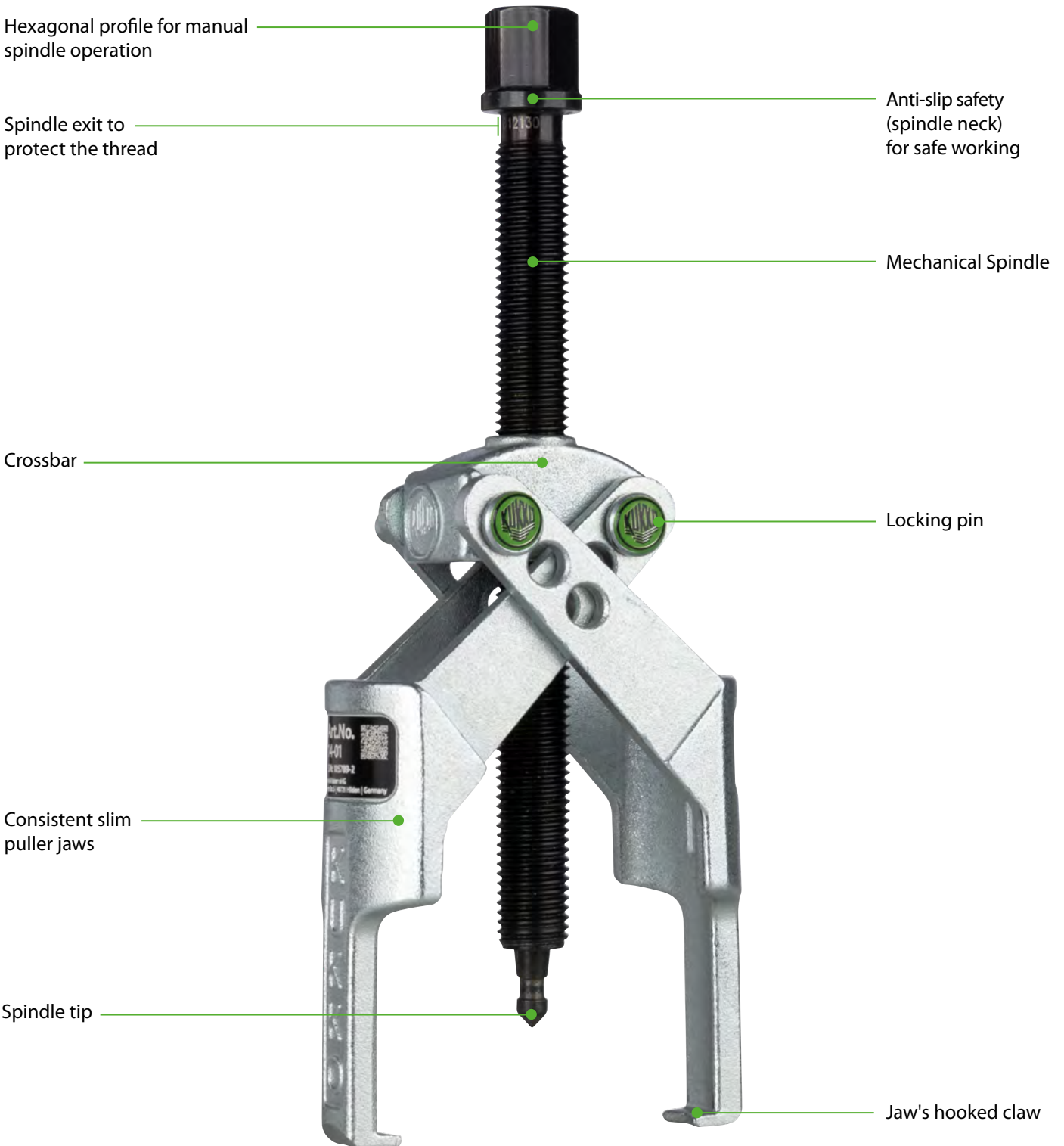
The special feature of the series 14 is the intersecting puller jaws with hooked claws. During the pulling process, the scissor-like hook guidance presses the hooked claws against the part to be pulled off. This allows even the tightest gaps between sprockets, bearings, and similar components to be reached. Furthermore, the pullers are characterized by an extremely high span range due to their design.



## Benefits

- Quick and easy assembly of the jaws
- Extremely high span range due to variable mounting of the jaws
- Span width and reach depth can be individually adjusted.
- In cramped conditions, the two puller jaws can first be mounted, and in the second step, they can be secured with a crossbar and retaining pins.

## ASSEMBLY OF THE PULLER USING EXAMPLE 14-1





# locking pin



The self-locking stopping pins guarantee a quick and easy adjustment for variable spread ranges. Spread and reach can be individually adjusted.



Manually removable locking pins



New combining of the individual components and reversing the jaws



The legs are adjusted and the locking pin is inserted.

## APPLICATION EXAMPLES



The scissor-like hook guide ensures a secure hold. The claws encompass the pulley.



Removing a ball bearing from a gearbox shaft.



The uncrossing of the puller jaws greatly increases the span range.

## PRODUCT DETAILS

### SERIES 14 2-JAW PULLER WITH SELF-CLAMPING, CROSSING PULLER JAWS









The 2-jaw puller with self-gripping, intersecting puller arms is used for extracting sprockets, pulleys, bearings, and similar components in tight spaces. Self-locking retaining pins ensure quick and easy adjustment for variable spread ranges. The puller is self-gripping and simple to handle. During the pulling process, the scissor-like arm guidance firmly presses the claws against the part to be pulled. This provides a secure hold at all times.

#### Benefits

- Fast and easy assembly of the jaws
- Extremely high spread range due to variable mounting of the jaws
- Span width and span depth can be individually adjusted.
- In confined spaces, the two jaws can be mounted first and then fixed in the second step with a crossbar and retaining pins.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>14-1</b>	-455421	0 - 100 1/4 - 3 7/8	85 3 3/8	13 1/2	50 36.88	25	2.5 2.76	0,475 1,047
<b>14-2</b>	-248443	2 - 140 3/8 - 5 1/2	125 4 7/8	17 11/16	80 59.01	35	3.5 3.86	1,6 3,528
<b>14-3</b>	-248511	5 - 140 5/8 - 5 1/2	160 6 3/8	17 11/16	100 73.76	45	4.5 4.96	1,28 2,822

### SERIES 14-S 2-JAW PULLER WITH NARROW, SELF-CLAMPING, CROSSING PULLER JAWS









The 2-jaw puller with narrow, self-gripping, intersecting jaws is used for extracting sprockets, pulleys, bearings, and similar components in tight spaces. Self-locking retaining pins ensure quick and easy adjustment for variable span ranges. The puller is self-gripping and easy to handle. During the extraction process, the scissor-like arm guidance presses the claws firmly against the part being pulled. This ensures a secure grip at all times.

#### Benefits

- Fast and easy assembly of the jaws
- Extremely high spread range due to variable mounting of the jaws
- Span width and span depth can be individually adjusted.
- In confined spaces, the two jaws can be mounted first and then fixed in the second step with a crossbar and retaining pins.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>14-01</b>	-459559	0 - 100 1/4 - 3 7/8	85 3 3/8	13 1/2	30 22.13	10	1 1.10	0,45 0,992
<b>14-02 NEW</b>	-774300	0 - 140 1/4 - 5 1/2	125 6 3/8	17 11/16	30 22.13	10	1 1.10	1,06 2,337
<b>14-03</b>	-460111	0 - 140 1/4 - 5 1/2	160 6 3/8	17 11/16	40 29.50	20	2 2.20	1,12 2,470



KUKKO // Pull forward



SERIES 112 | 113

# PULLER FOR ROLLING BEARINGS WITH CONE KNOB





# DEPLOYMENT

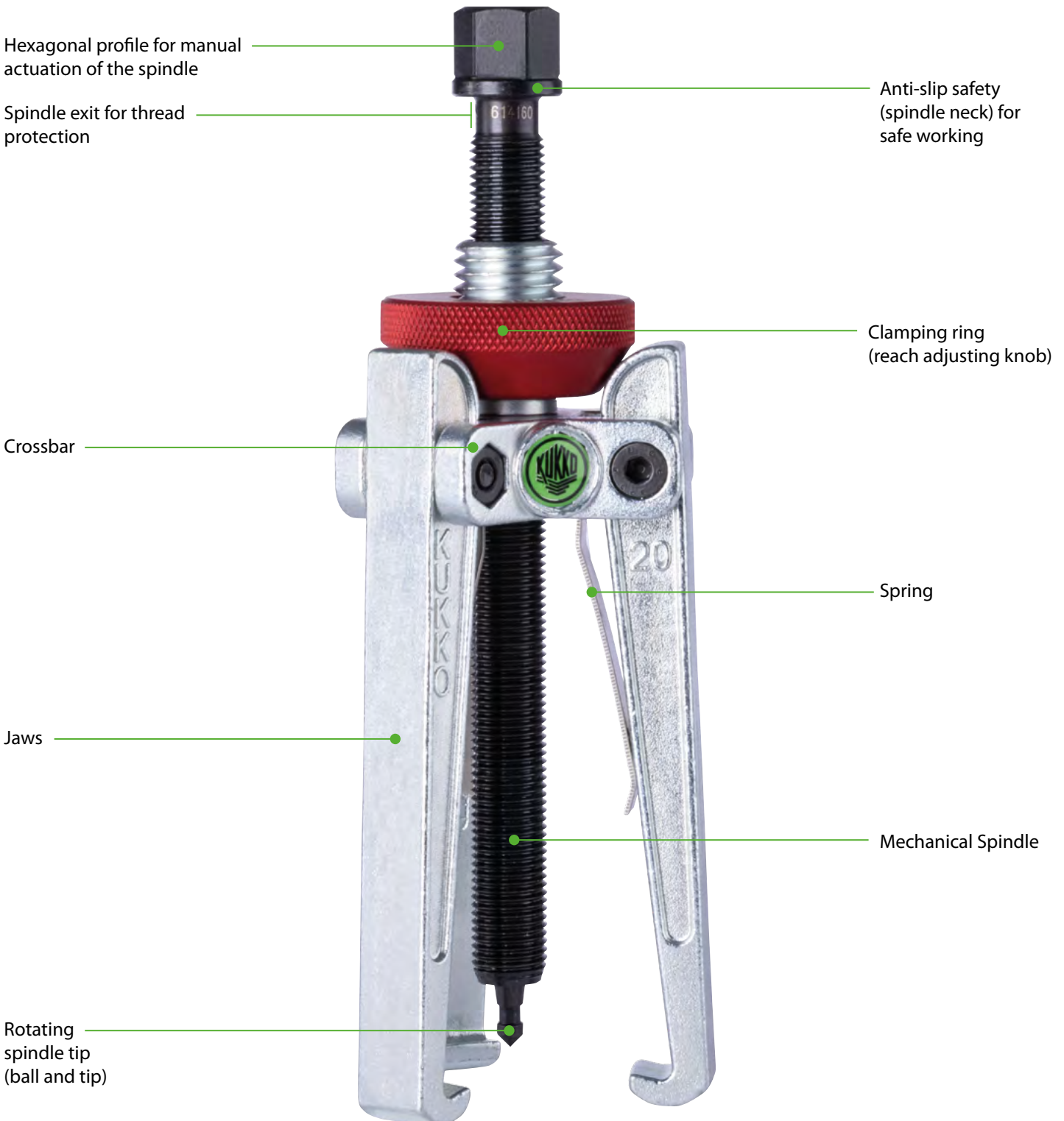
The 2-jaw and 3-jaw pullers with cone knobs have been developed for the proper removal of rolling bearings in collaboration with a Scandinavian ball bearing manufacturer. Both the proportions and the consistently straight puller jaws are specifically tailored to the requirements for concentric pulling of small and medium-sized bearings.



## Benefits

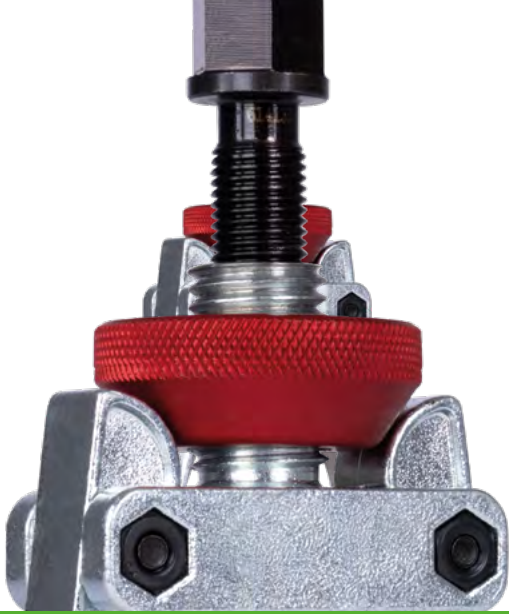
- Automatic self-centering of the jaws by tightening the clamping ring
- The clamping ring and suspension ensure a force-locking fixation of the puller without skipping or deviating of the jaws.
- Claw-shaped leg end encompasses the bearing in a shape-fitting manner.
- In identical pulling processes, the spread only needs to be set once.
- Spindle exit to protect the thread

## ASSEMBLY OF A PULLER USING EXAMPLE 113-3



## FEATURES OF THE SERIES

### SERIES 112



The central manual fixation via the user-friendly Spannring ensures that the shaft's bearing seat and the bearing are removed safely and gently.

### SERIES 113

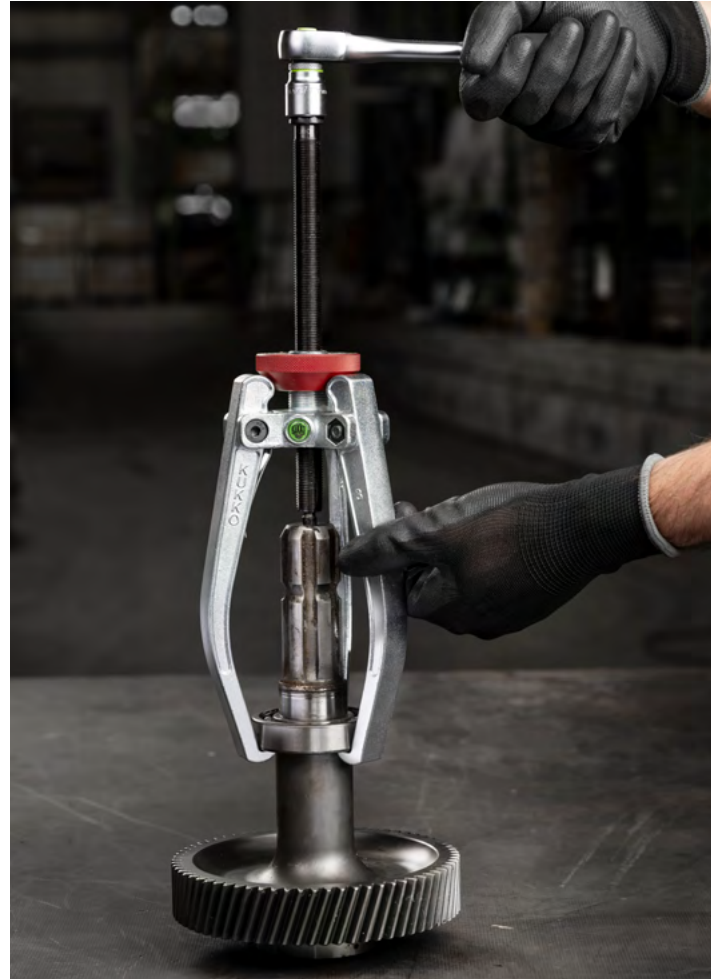


The central manual fixation via the user-friendly Spannring ensures that the shaft's bearing seat and the bearing are removed safely and gently. The 3-jaw design guarantees an even load distribution and thus provides a particularly secure hold on the part being pulled off.

## APPLICATION EXAMPLES



The 2-jaw puller 112-20 with cone knob during the extraction of a ball bearing on a water pump



The 3-jaw puller 113-3 with cone knob when extracting a ball bearing from a gearbox

## PRODUCT DETAILS

### SERIES 112 2-JAW PULLER FOR BALL BEARINGS (SWEDISH MODEL) WITH CONE KNOB



The 2-jaw puller with cone knob is designed for the proper removal of rolling bearings in collaboration with a Scandinavian ball bearing manufacturer. Both the proportions of the puller and the consistently straight puller jaws are specially tailored to meet the requirements for centralized pulling of small and medium bearings under limited environmental conditions. This helps prevent possible damage to the bearing and bearing seat during removal. The springs ensure a synchronous opening and closing of the puller jaws, making handling easier and allowing for even more efficient work. The combination of the tightened reach adjusting knob and the spring element prevents the puller from slipping and ensures a particularly firm hold at all times. At the same time, the fixation of the jaws by the cone knob speeds up and simplifies the work during consistent pulling processes with identical spread.

#### Benefits

- Automatic self-centering of the jaws by tightening the tension ring
- The tension ring and spring ensure a force-fitting fixation of the puller without slipping or deflection of the jaws.
- Claw-shaped leg end grasps the bearing in a form-fit manner.

#### Technical attributes

#						<b>Max. tensile force</b>	<b>Max. tractive force</b>	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>112-1</b>	-418143	0 - 55 3/8 - 2 3/16	45 1 3/4	13 1/2	25 18.44	15	1.5 1.65	0,405 0,893
<b>112-10</b>	-418891	0 - 65 3/8 - 2 5/8	70 2 3/4	13 1/2	25 18.44	15	1.5 1.65	0,46 1,014
<b>112-2</b>	-419218	0 - 90 5/8 - 4	70 2 3/4	17 11/16	55 40.57	30	3 3.31	0,86 1,896
<b>112-20</b>	-420283	0 - 100 5/8 - 3 7/8	100 3 7/8	17 11/16	55 40.57	30	3 3.31	0,945 2,084
<b>112-3</b>	-420368	3 - 185 1 - 7 1/4	165 6 1/2	17 11/16	65 47.94	40	4 4.41	2,17 4,785

### SERIES 113 3-JAW PULLER FOR ROLLING BEARINGS (SWEDISH MODEL) WITH CONE KNOB









The 3-jaw puller with cone knob has been developed for the proper extraction of rolling bearings in collaboration with a Scandinavian ball bearing manufacturer. Both the proportions of the puller and the consistently straight puller jaws are specifically tailored to the requirements for centric pulling of small and medium-sized bearings under limited environmental conditions. This prevents potential damage to the bearing and bearing seat during extraction. The springs guarantee a synchronous opening and closing of the puller jaws, enabling easier handling and even more efficient working. The combination of a tightened reach adjusting knob and spring element prevents the puller from slipping and ensures a particularly firm hold at all times. At the same time, the fixation of the jaws is accelerated and facilitated by the cone knob, making work easier when performing consistent pulling operations with an identical spread. The 3-jaw design guarantees an even load distribution and thus a particularly secure hold on the part to be pulled.

#### Benefits

- Automatic self-centering of the jaws by tightening the tension ring
- The tension ring and spring ensure a force-fitting fixation of the puller without slipping or deflection of the jaws.
- Claw-shaped leg end grasps the bearing in a form-fit manner.

#### Technical attributes

#						<b>Max. tensile force</b>	<b>Max. tractive force</b>	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>113-20</b>	-422423	1 - 125 3/4 - 4 7/8	100 3 7/8	17 11/16	45 33.19	30	3 3.31	1,23 2,712
<b>113-3</b>	-422751	3 - 185 1 - 7 1/4	165 6 1/2	17 11/16	60 44.26	40	4 4.41	2,94 6,483

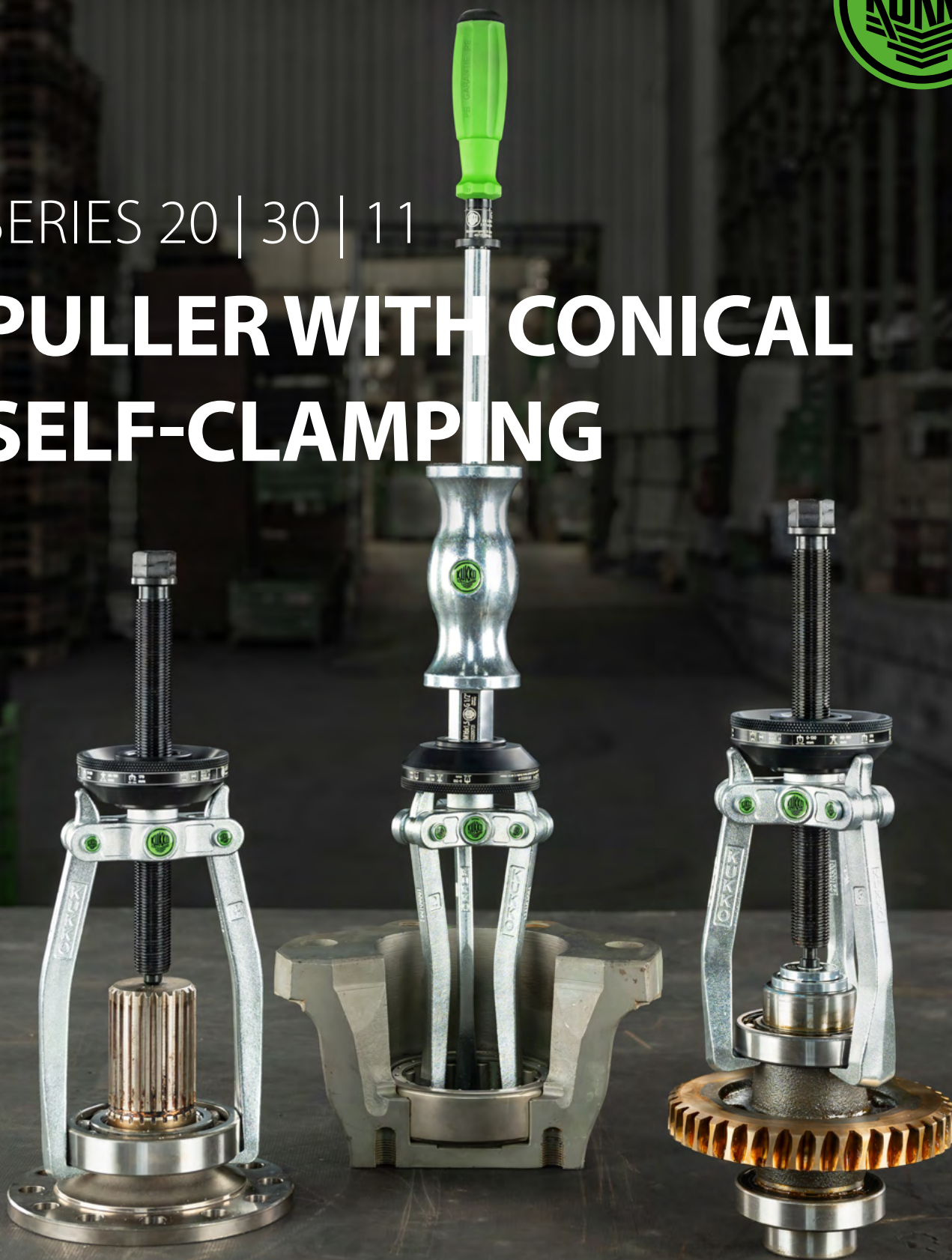


KUKKO // Pull forward



SERIES 20 | 30 | 11

# PULLER WITH CONICAL SELF-CLAMPING



# DEPLOYMENT

The 2- and 3-arm pullers with conical self-clamping of the 220 and 221 series are used for the centric removal of bearings, gears and washers in all standard sizes for trade, workshop and industry. They can be used to remove any component that sits on a shaft and is freely accessible from the outside. The puller legs are automatically centered when the clamping cone is tightened. The desired clamping width can be set by operating the clamping cone. The puller legs can also be pre-tensioned using the cone to prevent them from slipping. Can be used both as an external puller and an internal puller (in combination with a slide hammer) by simply turning the puller legs and the clamping cone. Depending on the model, there are puller legs of different lengths, resulting in a total of 24 possible applications.



## Benefits

- Self-centering of the legs by tightening the clamping cone
- Clamping cone regulates the setting of the desired clamping depth
- Can optionally be converted from an external puller to an internal puller by turning the puller legs and the clamping cone

# ASSEMBLY OF A UNIVERSAL PULLER CONICAL SELF-CLAMPING



# FEATURES OF THE SERIES

## SERIES 220

**2-jaw universal puller  
with conical self-clamping**



**220-1**

The 2-arm pullers with conical self-clamping of the 220-0 series can be used universally even in confined spaces. The pullers are available in four different sizes. Depending on the model the pullers have different puller legs for even more specific processing of the workpiece.

## SERIES 221

**3-jaw universal puller  
with conical self-clamping**



**221-1**

Thanks to the 3-arm design, the pullers in the 221-0 series ensure an even distribution of force and thus enable even greater pulling forces. The pullers are available in four different sizes. Depending on the model the pullers have different puller legs for even more specific processing of the workpiece.

## SERIES 220 / 221



**220+**

The 2- and 3-arm pullers with conical self-clamping in a case are used for the centric extraction of bearings, gears and washers. They can be used to This allows any component that sits on a shaft and is freely accessible from the outside. When the clamping cone is tightened the puller legs are automatically centered. The desired clamping width can be set by operating the clamping cone. clamping width can be set. Can be used both as an external puller as well as an internal puller by simply turning the puller legs and the clamping cone.

## SERIES X-SB-224



**224-676**

The equipped tool cabinets made of sturdy solid sheet metal are used to store tools safely and clearly. The tool cabinet contains various pullers and cut-off devices, a slide hammer device, two 3-arm pullers with interchangeable hooks and various internal pullers with counter support. The range is therefore suitable for external and internal stripping as well as for separating.



# STEP-BY-STEP INSTRUCTIONS FOR CONVERTING THE 220-1



Removing the clamping cone



Removing the socket pins



Turning the puller legs



Inserting the socket pins



Mounting the clamping cone rotated by 180°

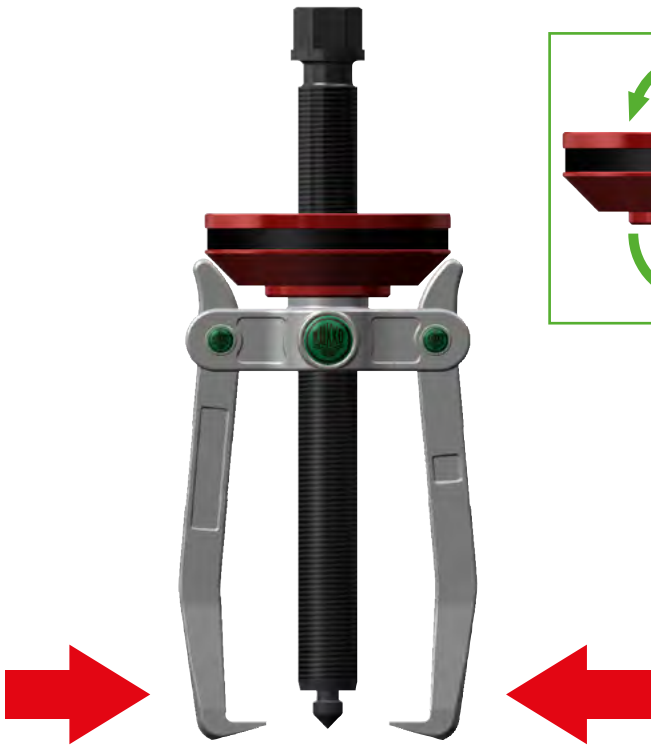


The internal extractor is ready for use

# APPLICATION EXAMPLES

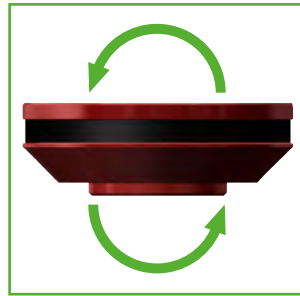
The puller legs are pretensioned exclusively via the clamping cone. The cone sits on an external thread on the cross on the crosshead and has no contact with the spindle. The mechanical spindle is used to generate the pulling force.

## External extraction:



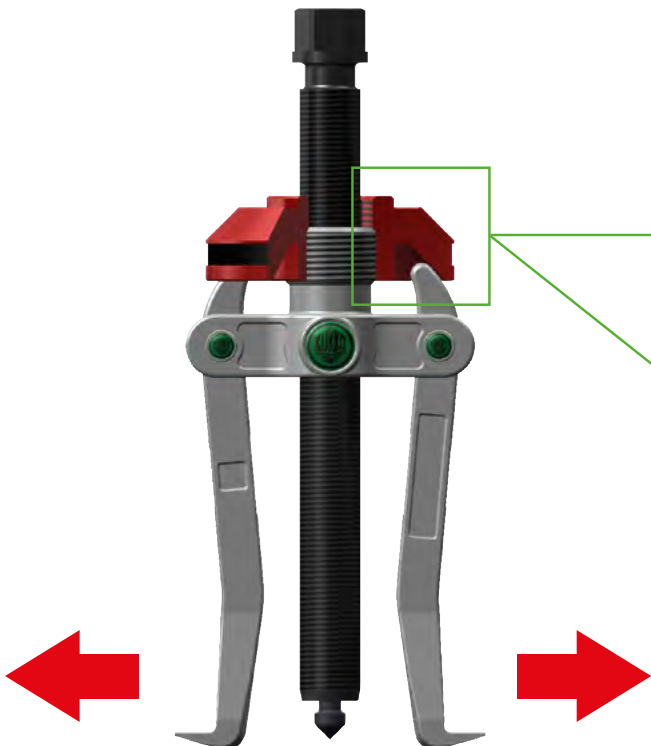
By tightening the clamping cone, the puller legs are guided inwards as the outer cone presses against the legs.

## Repositioning:

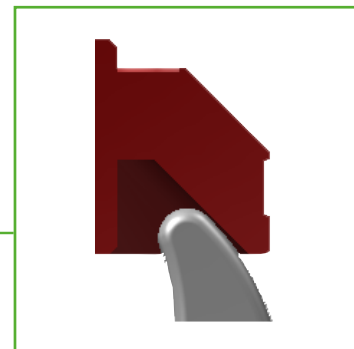


The clamping cone is rotated by 180°. The legs can be removed and reversed by loosening the bolts.

## Internal extraction:



The puller legs are guided outwards via the inner cone. This serves to pretension the legs to prevent them from slipping.



Detailed view: During internal extraction, the extractor legs are guided outwards through the inner contour of the clamping cone.



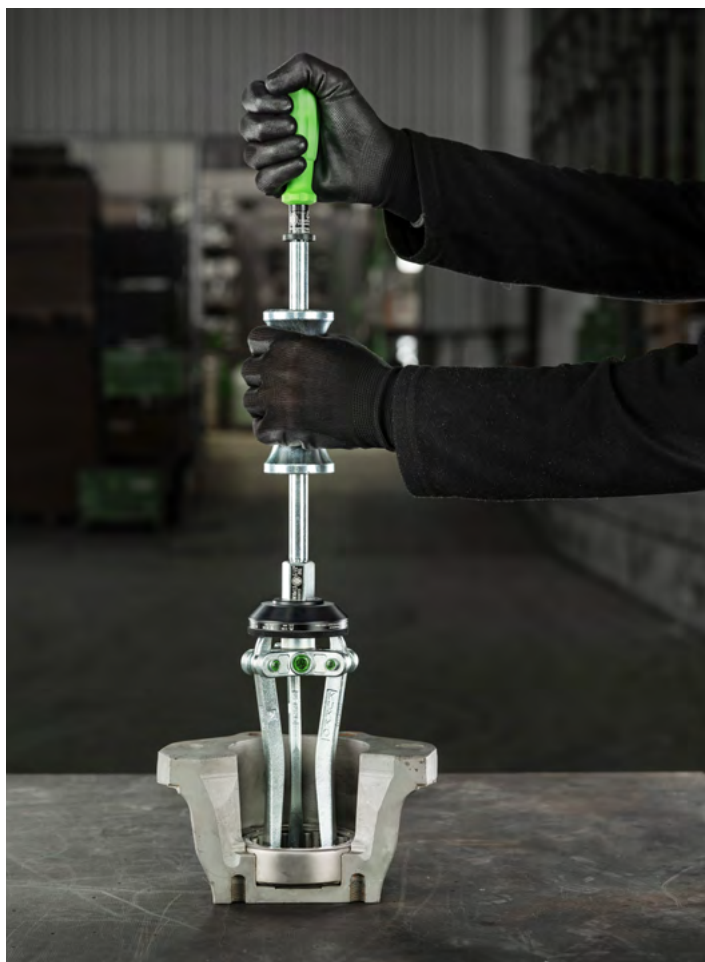
# APPLICATION EXAMPLES



External removal of a ball bearing from a drive shaft



External removal of a ball bearing from a gear shaft



Internal extraction of a ball bearing from a housing



The 224-676 tool cabinet offers secure storage



## PRODUCT DETAILS



### SERIES 220-0 2-JAW PULLER WITH CONICAL SELF-TENSIONING










Hook with slot  
by the articles  
220-1 and 220-3

The 2-jaw pullers with conical self-tensioning are used for the concentric removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows any component seated on a shaft and freely accessible from the outside to be released. By tightening the tension cone, the puller jaws are automatically centered. The desired span can be adjusted by operating the tension cone. Additionally, the puller jaws can be pre-tensioned using the cone to prevent possible slipping. Usable as both external extractor and internal extractor (in combination with a sliding hammer or counter stay) by simply reversing the puller jaws and tension cone.

#### Benefits

- Self-centering of the jaws by tightening the tension cone
- The clamping cone regulates the setting of the desired reach.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>220-1</b> <b>NEW</b>	-080128	0 - 120 0 - 4 3/4	120 4 3/4	60 - 150 2 3/8 - 5 7/8	22 7/8	120 88.51	50	5 5.51	2,45 5,402	K-220-221-A
<b>220-2</b> <b>NEW</b>	-080135	0 - 150 0 - 5 7/8	170 6 11/16	60 - 180 2 3/8 - 7 1/16	22 7/8	120 88.51	50	5 5.51	2,45 5,402	224-178, K-220-221-A
<b>220-3</b> <b>NEW</b>	-080142	0 - 120 0 - 4 3/4	120 4 3/4	60 - 150 2 3/8 - 5 7/8	22 7/8	120 88.51	50	5 5.51	2,45 5,402	K-220-221-A
<b>220-4</b> <b>NEW</b>	-080159	0 - 150 0 - 5 7/8	170 6 11/16	60 - 180 2 3/8 - 7 1/16	22 7/8	150 110.64	70	7 7.72	2,45 5,402	K-220-221-A

## SERIES 221-0 3-JAW PULLER WITH CONICAL SELF-TENSIONING










Hook with slot  
by the articles  
221-1 and 221-3

The 3-jaw pullers with conical self-tensioning are used for the centric removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. With the tightening of the tension cone, the puller jaws are automatically centered. By operating the tension cone, the desired spread can be adjusted. Additionally, the puller jaws can be pre-tensioned using the cone to avoid possible slipping. Usable as both an external puller and an internal extractor (in combination with a sliding hammer or a counter stay) by simply reversing the puller jaws and the tension cone. The 3-jaw design ensures an even load distribution and thus a particularly secure hold on the part being removed.

### Benefits

- Self-centering of the jaws by tightening the tension cone
- The clamping cone regulates the setting of the desired reach.

### Technical attributes

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
<b>221-1</b> <b>NEW</b>	-080166	0 - 120 0 - 4 3/4	120 4 3/4	60 - 150 2 3/8 - 5 7/8	22 7/8	130 95.89	65	6.5 7.17	2,45 5,402	K-220-221-A
<b>221-2</b> <b>NEW</b>	-080173	0 - 150 0 - 5 7/8	170 6 11/16	60 - 180 2 3/8 - 7 1/16	22 7/8	130 95.89	65	6.5 7.17	2,45 5,402	224-178, K-220-221-A
<b>221-3</b> <b>NEW</b>	-080180	0 - 120 0 - 4 3/4	120 4 3/4	60 - 150 2 3/8 - 5 7/8	22 7/8	130 95.89	65	6.5 7.17	2,45 5,402	K-220-221-A
<b>221-4</b> <b>NEW</b>	-080197	0 - 150 0 - 5 7/8	170 6 11/16	60 - 180 2 3/8 - 7 1/16	22 7/8	150 110.64	70	7 7.72	2,45 5,402	K-220-221-A

## PRODUCT DETAILS



### 220+ UNIVERSAL PULLER WITH SLIDING HAMMER











The 2-jaw and 3-jaw pullers with conical self-tensioning are used for concentric pulling of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the removal of any component that sits on a shaft and is freely accessible from the outside. With the tightening of the tension cone, the puller jaws are automatically centered. By operating the tension cone, the desired spread can be set. Additionally, the puller jaws can be pre-tensioned using the cone to prevent possible slipping. Usable as both external extractors and internal extractors (in combination with a sliding hammer) by simply reversing the puller jaws and the tension cone.

#### Benefits

- The internal puller can be designed either as a 2-jaw or 3-jaw tool, providing a flexible grip for the respective part.
- The jaws self-center and secure themselves tightly to the part being pulled off.
- The cone-directed span width adjustment makes the universal puller also variable depending on the size of the part and allows for quick adjustment to the pulling situation.

#### Technical attributes

#									Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg	kg/lb	
<b>220+ NEW</b>	-009754	0 - 150 0 - 5 7/8	170 6 11/16	60 - 180 2 3/8 - 7 1/16	500 19 11/16	250 9 13/16	1.7	10,855 23,935	K-220



## PRODUCT DETAILS

### 224-676 49-PIECE TOOL CABINET









The perforated, 49-piece tool cabinet 224-676 made of sturdy sheet metal is used for the safe and orderly storage of tools. The tool cabinet includes various puller and separator devices, a sliding hammer device, two 3-jaw pullers with interchangeable hooks, as well as different internal extractors along with counter stays. This makes the range suitable for external extraction, internal extraction, and separator pulling. The perforated matrix on the back panel provides enough space for mounting tool holders. The tool cabinet features lockable doors with a cylinder lock, as well as a maximum load capacity of 50 kg. The high-quality steel cabinets can be flexibly integrated into various work environments and thus adapt to individual requirements.

#### Benefits

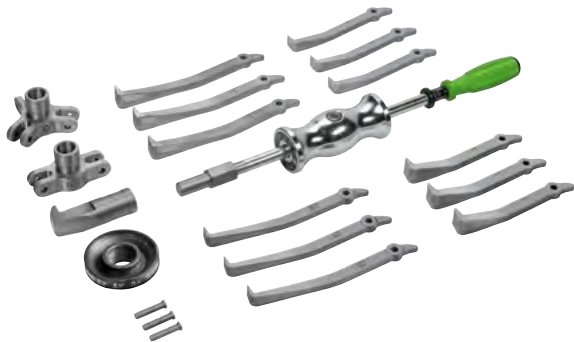
- Self-centering of the jaws by pulling the tension cone.
- Self-centering of the jaws by pulling the tension cone.
- The tension cone regulates the setting of the desired reach.
- Optional convertible from an external puller to an internal extractor by flipping the jaws and the tension cone.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	<b>Number of doors</b>	 kg/lb	<b>Components</b>
<b>224-676 NEW</b>	-042072	750 29 1/2	225 8 7/8	650 25 9/16	50	2	42,8 94,374	022-206, 22-0-17, 15-00, 15-2, 203-1, 203-2, 21-2, 21-4, 21-5, 21-6, 68-0, 68-2, GA7-10, X-SB-65x75

## PRODUCT DETAILS

### **SERIES 224-178 PULLER SET WITH SLIDING HAMMER**











The 20-piece puller set with sliding hammer 224-178 is used for the centric removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. When tightening the clamping cone, the puller jaws are automatically centered. By operating the clamping cone, the desired spread can be set. In addition, the puller jaws can be pre-tensioned using the cone to prevent possible slipping. Usable as both an external puller and internal extractor by simply reversing the puller jaws and the clamping cone. The various sizes of puller jaws allow for universal application possibilities. The sliding hammer guarantees contactless and gentle extraction when no support surface is present.

#### Benefits

- By modifying the puller jaws, various pulling methods are ensured.
- The internal puller can be designed either as a 2-jaw or 3-jaw tool, providing a flexible grip for the respective part.
- The jaws self-center and secure themselves tightly to the part being pulled off.

#### Technical attributes

#								Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	kg	mm/inch	mm/inch	t/US t. sh.	kg/lb	
<b>224-178</b>	-446603	0 - 150	0 - 170	60 - 180	1.7	250	500		7,4	221-3, 22-0+17,
<b>NEW</b>		0 - 5 7/8	0 - 6 11/16	2 3/8 - 7 1/16		9 13/16	19 11/16	0.00	16,317	220-1-T, 221-1-T

## PRODUCT DETAILS

### SERIES 224-675 38-PIECE PULLER SET WITH SLIDING HAMMER













The 38-piece universal puller set with sliding hammer 224-675 is used for concentric pulling, internal pulling, and separating bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The set includes various pullers and separator devices, a sliding hammer device, two 2-jaw and one 3-jaw puller, as well as different internal extractors along with counter stays. The range impresses with its multifunctional application possibilities and is suitable for external pulling, internal extraction, as well as for separation pulling. 38-teilige, The 38-piece universal puller set with sliding hammer 224-675 is used for concentric pulling, internal pulling, and separating bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The set includes various pullers and separator devices, a sliding hammer device, two 2-jaw and one 3-jaw puller, as well as different internal extractors along with counter stays. The range impresses with its multifunctional application possibilities and is suitable for external pulling, internal extraction, as well as for separation pulling.

#### Benefits

- By modifying the puller jaws, various pulling methods are ensured.
- The internal puller can be designed either as a 2-jaw or 3-jaw tool, providing a flexible grip for the respective part.
- The jaws self-center and secure themselves tightly to the part being pulled off.

#### Technical attributes

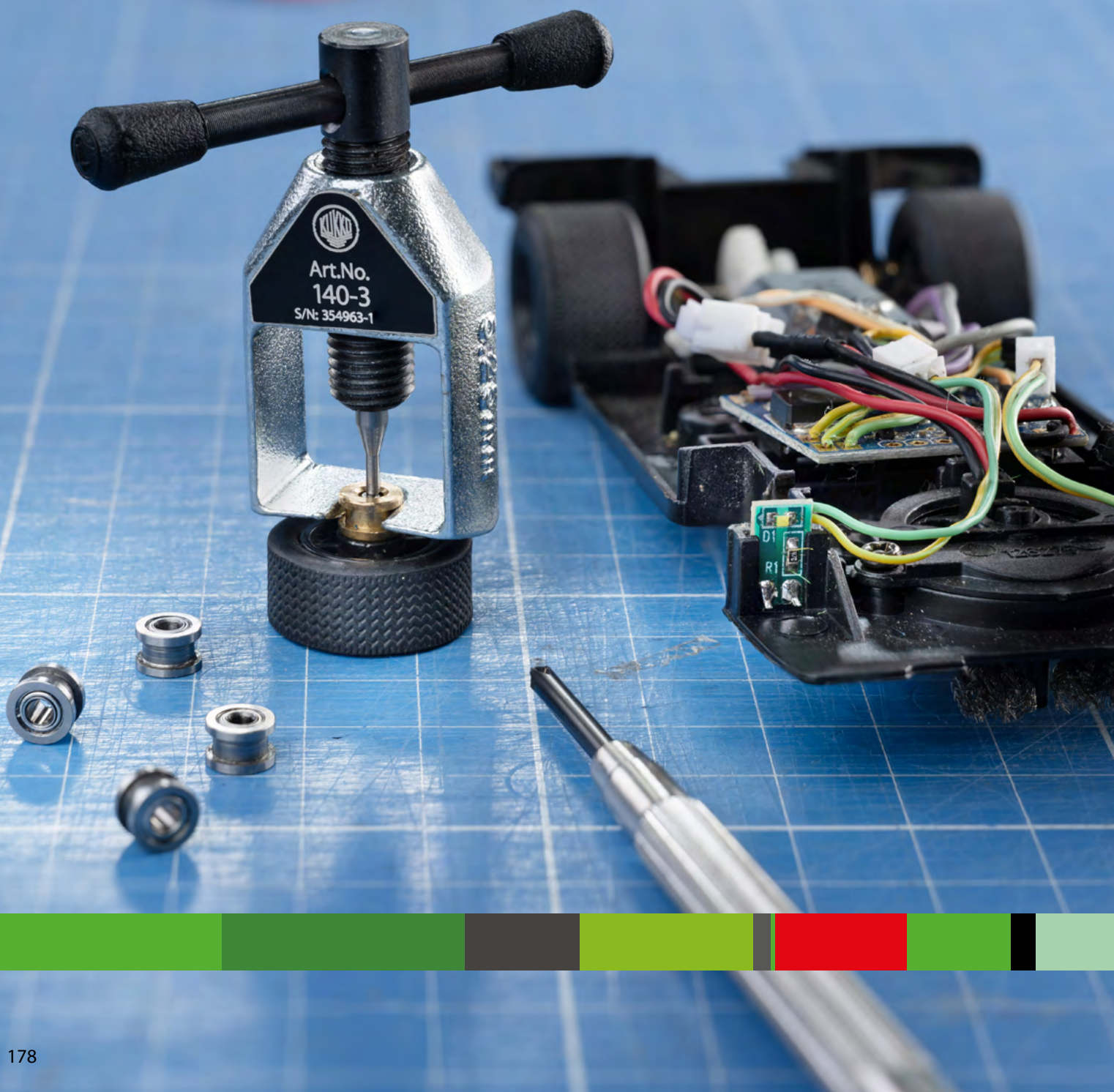
#										Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg	mm/ inch	mm/ inch	kN	t/ US t. sh.	kg/lb	
<b>224-675</b> <b>NEW</b>	-061158	0 - 400	280	14 - 150	0 - 280	6 - 115	1.7	250	470	130	13	28,1	207-1, 201-1,
		0 - 15 3/4	11 1/32	9/16 - 5 7/8	0 - 11 1/32	1/4 - 4 1/2		9 13/16	18 1/2		14.33	61,961	201-2, 220-3, 221-3, 21-2, 21-4, 21-5, 21-6, 68-0, 68-2, 15-00, 15-2, GA7-10, 220-1-T, 221-1-T, 22-0-17, G-22, 022-206



KUKKO // Pull forward



# SERIES 140 | MICRO MICRO PULLER



# DEPLOYMENT

Micro pullers are used when even the smallest components need to be disassembled. This includes, for example, the removal of pressure gauges, speedometer cables, watches, or similar components. The micro puller is also frequently used in model building.



## Benefits

- Integrated, freely movable pen on the T-handle guarantees manual spindle drive in tight spaces.
- Handy compact design for precise work in tight spaces
- Narrow gripping jaws reach even the tightest spaces.
- Magnetic closure ensures a quick exchange of the spindle tip (series 140)

# ASSEMBLY OF A MICRO PULLER



# SWAP OF THE SPINDLE TIP



The spindle tip of the micro puller is magnetically connected to the spindle, allowing for effortless exchange. Simply pull out the spindle tip and replace it with another. This exchangeability makes the puller even more versatile.

# APPLICATION EXAMPLES



Removing a ball bearing from a model car tire with the 140-3



## PRODUCT DETAILS



### SERIES MICRO MICRO PULLER FOR SMALL PARTS AND MODEL BUILDING








The micro puller is used for removing speedometer cables, pressure gauges, clocks, and similar parts. Especially in model making, the small parts puller is a helpful and reliable tool. The handy and space-saving model features narrow gripping jaws and a particularly fine spindle tip, making it suitable for very tight, hard-to-reach areas. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in confined spaces.

#### Benefits

- Integrated, free-moving pin on the T handle ensures manual spindle drive in the tightest spaces
- Compact and handy design for precise work in tight spaces
- Narrow gripping jaws reach even the tightest spaces.

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
<b>MICRO</b>	-974755	2,5 - 10 1/8 - 3/8	10 3/8	1 1/32	0,085 0,187

### SERIES 140 MICRO PULLER FOR SMALL PARTS AND MODEL BUILDING








The micro puller is used for removing speedometer cables, pressure gauges, clocks, and similar parts. Especially in model making, the small parts puller is a helpful and reliable tool. The handy and space-saving model features narrow jaws that are particularly suitable for tight, hard-to-reach areas. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in cramped spaces. The spindle tip can be easily replaced using a magnetic closure.

#### Benefits

- Integrated, free-moving pin on the T handle ensures manual spindle drive in the tightest spaces
- Compact and handy design for precise work in tight spaces
- Narrow gripping jaws reach even the tightest spaces.

#### Technical attributes

#						Included in the set
	EAN	mm/inch	mm/inch	mm/inch	kg/lb	
<b>140-1</b>	-266720	2,5 - 10 1/8 - 3/8	10 3/8	0,9, 1,3, 1,8 1/16	0,35 0,772	140-S
<b>140-2</b>	-266737	3,5 - 15 3/16 - 5/8	15 5/8	0,9, 1,3, 1,8, 2,0 1/16	0,4 0,882	140-S
<b>140-3</b>	-266751	5,5 - 18 1/4 - 3/4	18 3/4	0,9, 1,3, 1,8, 2,0, 3,0 1/16, 1/8	0,35 0,772	140-S



## PRODUCT DETAILS

### 140-S 11-PIECE MICRO PULLER SET FOR SMALL PARTS AND MODEL BUILDING








The 11-piece micro puller set is used for pulling speedometer cables, pressure gauges, clocks, and similar parts. Especially in model building, the small parts puller is a helpful and reliable tool. The handy and space-saving design features narrow jaws that are particularly suitable for tight, hard-to-reach areas. The free-moving T-handle on the spindle head ensures manual tightening of the spindle in confined spaces. The set includes three sizes of puller bodies and five different spindle tips for assembling 15 different variants. The spindle tips can be easily changed using a magnetic closure.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Narrow gripping jaws reach even the tightest spaces

#### Technical attributes

#						Components
	EAN	mm/inch	mm/inch	mm/inch	kg/lb	
140-S	-951138	2,5 - 18 1/8 - 11/16	18 11/16	0,9, 1,3, 1,8, 2,0, 3,0 1/16, 1/16, 1/16, 1/16, 1/8	0,625 1,378	140-1, 140-2, 140-3



Removing a ball bearing from a model car tire with the 140-3



KUKKO // Pull forward



SERIES 204 | 210

# SEPARATING AND BEARING PULLER



# DEPLOYMENT

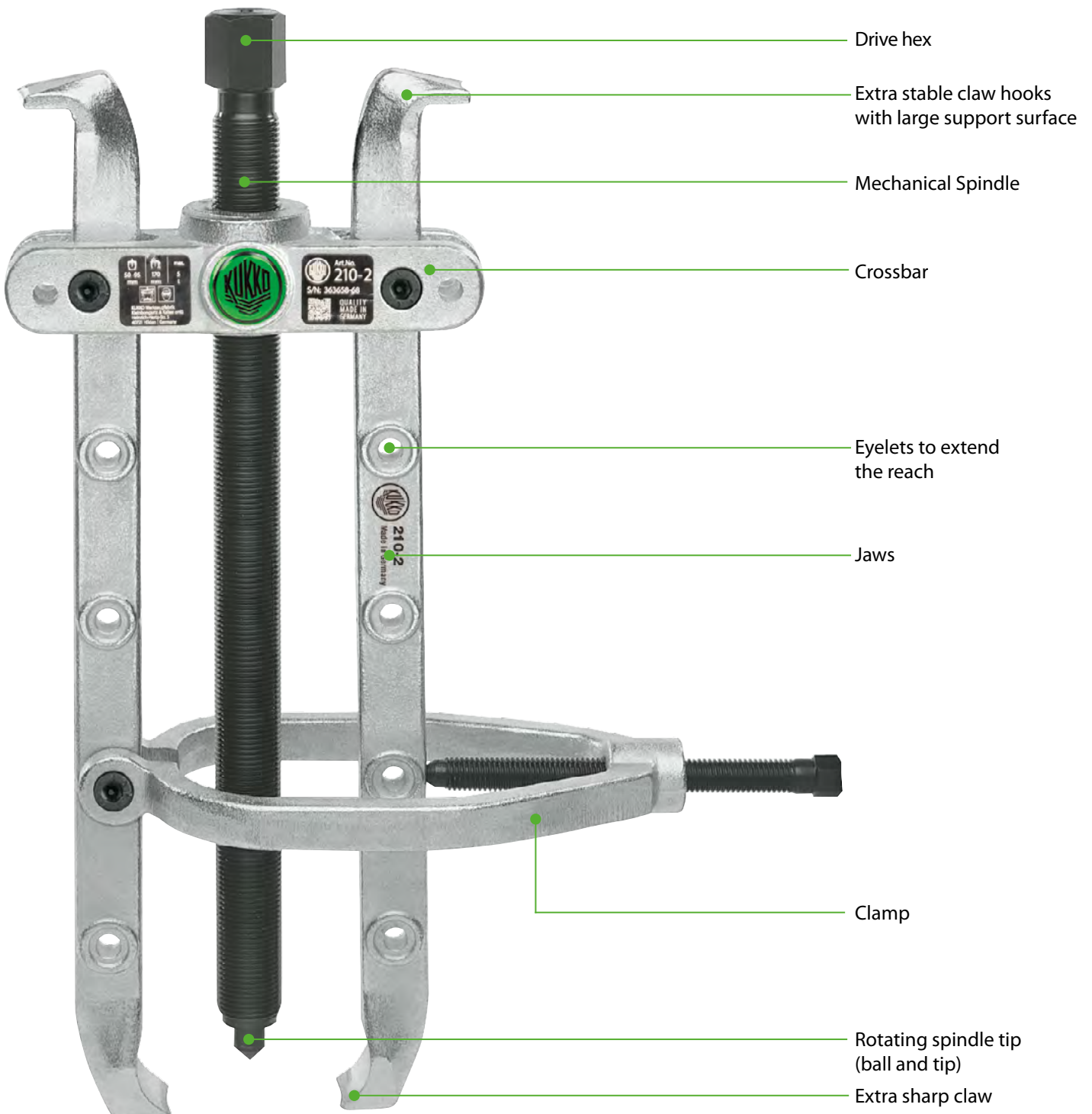
The 2-jaw pullers with lateral clamp of series 204 and 210 are used for pulling particularly stubborn or flat-lying components. A typical application example in the automotive field is the replacement of wheel bearings. In this case, it can happen that the inner ring of the bearing remains on the shaft. The sharp claws of the puller engage under the part to be pulled and free it even before the actual pulling process. At the same time, the lateral clamp increases the contact pressure of the puller jaws.



## Benefits

- The side clamp ensures that the jaws are pressed particularly firmly against the part to be pulled off.
- Twofold force application from above and the side guarantees a 100% secure grip
- Extra sharp claws of the puller jaws release the part to be removed even before the actual pulling process.
- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.
- Spindelauslauf zum Schutz des Gewindes

# ASSEMBLY OF A SEPARATING PULLER





## FEATURES OF THE SERIES

### SERIES 204

2-jaw bearing puller  
with side clamp



204-0 (with T-Handle)

The 2-jaw bearing puller with side clamp and separating claw is used to pull flush mounted ball bearings, bearing rings, and workpieces. The special claw shape of the puller jaws grips beneath the part to be removed when tightening the clamp and already releases this before the actual pulling process.

### SERIES 210

2-jaw puller "Cobra"  
with adjustable reach and side clamp



210-1

The 2-jaw bearing separator "Cobra" has jaws that can rotate 180° and are applicable on both sides. One side has normal puller claws, while the other side features special separating claws. Thanks to the multiple holes in the jaws, different reach depths can be adjusted for flexible working.

## EXTENSION OF SPREAD AND REACH



The drillings in the crossbar allow an individual adjustment of the spread and depth.



By reversing the puller jaws, the claws can be changed to fit the application.

# SPECIAL APPLICATION: BEARING REPLACEMENT



First, the puller of the series 225-SK is used to remove the dust cap from the wheel hub.



Thanks to the large support surface of the bearing puller (series 204-V), the adapter fits perfectly on the hollow shaft.



The inner ring of the bearing can then be easily removed from the wheel bearing.

## APPLICATION EXAMPLES



Removing a ball bearing from a crankshaft of a chainsaw with the 204-0



The clamp firmly presses the puller jaws against the part to be removed.



Puller legs with different jaw shapes on the 210-1



Removing a tapered roller bearing from a gearbox shaft using the 210-3



## PRODUCT DETAILS



### SERIES 204-0 2-JAW BEARING PULLER "COBRA" WITH LATERAL CLAMPING JAW AND SEPARATING CLAW









The 2-jaw puller "Cobra" with side clamp and separating claw is used for pulling flush-mounted ball bearings, bearing rings, and workpieces. The special claw shape of the puller jaws grips underneath the part to be pulled when tightening the clamp and loosens it already before the actual pulling process. At the same time, the clamp increases the pressing force of the puller jaws manifold and thereby prevents slippage of the puller. By tightening the clamp, the sharp claws of the puller jaws grip under the part to be pulled and release it, already before the actual pulling process. The freely movable pin on the T-handle guarantees comfortable, one-handed tightening of the spindle in tight spaces.

#### Benefits

- Integrated, freely movable pin on the T-handle guarantees manual spindle drive in the tightest of spaces.
- The side clamp ensures that the puller jaws are pressed particularly tightly against the part being pulled off.
- Double force application from above and side guarantees 100% secure grip
- The slim design of the jaws allows access to hard-to-reach places.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Included in the set</b>
<b>204-0</b>	-028168	12 - 50 1 - 2	70 2 3/4	T-handle	0.00	10	1 1.10	0,69 1,521	27-A
<b>204-02 NEW</b>	-339516	26 - 90 1 5/8 - 4	100 3 7/8	22 7/8	75 55.32	40	4 4.41	1,985 4,377	K-204-V-210-1

### SERIES 204 2-JAW BEARING PULLER WITH FIXED ARMS AND L ATERAL CLAMPING LEVER









The 2-jaw bearing puller "Cobra" with side clamp is used for pulling particularly stuck ball bearings, bearing rings, and workpieces. With this, it is possible to loosen any component that is mounted on a shaft and is freely accessible from the outside. Thanks to the clamp, the contact pressure of the puller jaws is increased manifold. When the clamp is tightened, the sharp claws of the puller jaws grip underneath the part to be pulled off and loosen it even before the actual pulling process.

#### Benefits

- The lateral clamp ensures that the puller jaws are pressed particularly firmly against the part to be pulled off.
- The slim design of the jaws allows access to hard-to-reach places.
- Double force application from above and sideways guarantees a 100% secure grip.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Included in the set</b>
<b>204-1</b>	-028243	6 - 80 1 3/16 - 3 3/16	90 4	19 3/4	100 73.76	50	5 5.51	1,385 3,054	K-127-A/6
<b>204-2</b>	-028328	16 - 100 1 5/8 - 3 7/8	100 3 7/8	22 7/8	120 88.51	60	6 6.61	2,4 5,292	-
<b>204-3</b>	-028403	6 - 150 2 - 5 7/8	140 5 1/2	24 15/16	175 129.08	75	7.5 8.27	3,16 6,968	-



## PRODUCT DETAILS

### SERIES 210 2-JAW BEARING SEPARATOR "COBRA" WITH ADJUSTABLE REACH AND SIDE CLAMP









The 2-jaw bearing separator "Cobra" with adjustable reach and side clamp is used for pulling off flat-mounted bearings, gear wheels, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The puller jaws are rotatable by 180° and can be applied on both sides. One side has standard puller claws, while the other side features special separator claws. Thanks to the multiple drill holes in the puller jaws, different reaches can be set for flexible working. The side clamp increases the pressure of the puller jaws manifold and thus prevents the puller from slipping.

#### Benefits

- Adjustable and 180° rotatable jaws for individual adjustment of the reach due to multiple drilling in the jaws.
- Puller jaws with different support surfaces for flexible work
- The side clamp ensures that the puller jaws are pressed particularly tightly against the part to be pulled.
- Double force application from above and sideways guarantees 100% secure grip

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Included in the set</b>
<b>210-1</b>	-030383	20 - 95 2 - 3 3/4	170 6 3/4	22 7/8	100 73.76	50	5 5.51	2,645 5,832	K-204-V-210-1
<b>210-2</b>	-030468	20 - 135 2 - 5 3/8	270 10 5/8	24 15/16	140 103.26	80	8 8.82	4,325 9,537	-
<b>210-3</b>	-030536	20 - 150 2 - 5 7/8	325 12 7/8	24 15/16	200 147.52	100	10 11.02	4,64 10,231	-

KUKKO // Pull forward



SERIES 225

# PULLER WITH SELF-CENTERING JAWS



# DEPLOYMENT

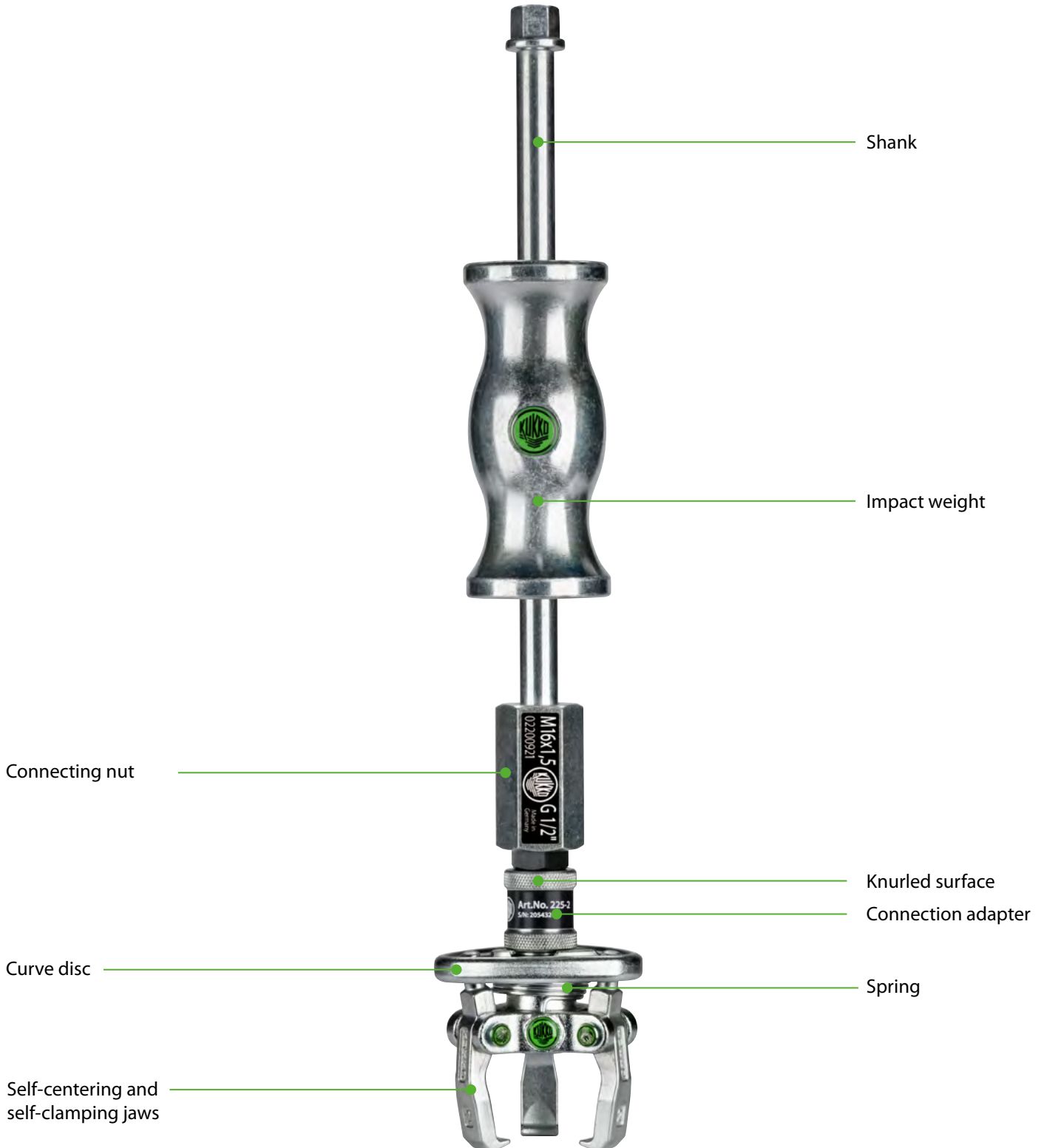
The 3-jaw pullers of series 225 with self-centering puller jaws are used for pulling bearings, gears, and discs. The specially shaped puller jaws are connected by a spring. This ensures a self-tensioning of the puller jaws and prevents possible slipping during the pulling process. Thanks to the quick-release mechanism, the jaws can be attached to the part to be pulled off in no time.



## Benefits

- The spring ensures self-tensioning of the puller jaws.
- Dowel pins ensure a quick replacement of the jaws.
- 3-jaw ensures an even distribution of force and allows for greater withdrawal forces.

## ASSEMBLY OF A PULLER USING THE EXAMPLE 225-2-G





# FEATURES OF THE SERIES

## SERIES 225

**3-jaw puller  
with self-centering jaws**



**225-1**

The 3-jaw puller with self-centering jaws is used for pulling bearings, gears, and discs. This allows you to release any component that is sitting on a shaft and is freely accessible from the outside.

## SERIES 225-G

**3-jaw puller  
with sliding hammer**



**225-2**

The 3-jaw puller with self-centering puller jaws and sliding hammer is used for pulling bearings, gears, and discs. The sliding hammer ensures a space-saving and simultaneously material-friendly extraction.

## SERIES 225-SK

**3-jaw puller  
with self-centering jaws**



**225-SK-2**

The 3-jaw puller with self-centering, extra fine puller jaws is used for the safe and damage-free removal of seated hub caps, wheel covers, as well as dust and grease caps.

## SERIES 225-SK-G

**3-jaw puller  
with self-centering jaws**



**225-SK-G-2**

The extra fine jaws enable the removal of plugged hub caps, wheel covers as well as dust and grease caps. The sliding hammer guarantees space-saving and at the same time material-friendly extraction.

## SERIES 225-S

**Puller set  
with thread adapters**



**225**

The bolt removal device set with thread adapters of series 225 is used for extracting bolts, e.g. brake shoe bolts or spring bolts on trucks.

# SPECIAL APPLICATION: WHEEL BEARING REPLACEMENT



First, the puller of the series 225-SK is used to remove the dust cap from the wheel hub.



Thanks to the large support surface of the bearing puller (series 204-V), the adapter fits perfectly on the hollow shaft.



The inner ring of the bearing can then be easily removed from the wheel bearing.

## APPLICATION EXAMPLES



Setting the puller on the part to be pulled off



Attaching the 3-K grip G-22 to the sliding hammer



Connecting the sliding hammer via the thread adapter of the puller



Dismantling a pulley from a transmission part

## PRODUCT DETAILS



### SERIES 225-G 3-JAW PULLER WITH SELF-CENTERING JAWS AND SLIDING HAMMER










The 3-jaw puller with self-centering jaws and sliding hammer is used for pulling bearings, gears, and discs. The sliding hammer ensures space-saving and at the same time material-friendly extraction. This allows you to loosen any component that sits on a shaft and is freely accessible from the outside. The specially shaped jaws are connected by a spring. This provides a self-tensioning of the jaws and prevents possible slipping during the pulling process. Thanks to the quick release, the jaws can be quickly applied to the component to be pulled. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part to be pulled.

#### Benefits

- The spring ensures self-tensioning of the puller jaws.
- Socket pin ensure a quick exchange of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Sliding hammer requires no impact surface and guarantees a gentle extraction.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>225-1-G</b>	-080043	18,4 - 50 1 3/16 - 2	35 1 3/8	370 14 9/16	250 9 13/16	1.7	60	6 6.61	3,88 8,555
<b>225-2-G</b>	-080050	58 - 90 2 3/4 - 3 1/2	35 2 3/16	370 14 9/16	250 9 13/16	1.7	60	6 6.61	3,995 8,809
<b>225-3-G</b>	-080067	38 - 70 2 - 2 3/4	35 1 3/8	370 14 9/16	250 9 13/16	1.7	60	6 6.61	3,98 8,776

### SERIES 225-0 3-JAW PULLER WITH SELF-CENTERING JAWS







The 3-jaw puller with self-centering jaws is used for extracting bearings, gears, and discs. It allows for the removal of any component that is mounted on a shaft and is freely accessible from the outside. The specially shaped jaws are connected to a spring. This ensures self-tensioning of the jaws and prevents possible slipping during the extraction process. Thanks to the quick-release mechanism, the jaws can be attached to the component to be pulled in no time. The 3-jaw design guarantees even load distribution and thus a particularly secure grip on the part being extracted.

#### Benefits

- The spring ensures self-tensioning of the jaws.
- Socket pin ensure a quick exchange of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>225-1</b>	-123405	18,4 - 50 1 3/16 - 2	35 1 3/8	60	6 6.61	1,12 2,470
<b>225-2</b>	-123412	58 - 90 2 3/4 - 3 1/2	35 2 3/16	60	6 6.61	1,235 2,723
<b>225-3</b>	-123429	38 - 70 2 - 2 3/4	35 1 3/8	60	6 6.61	1,22 2,690



## PRODUCT DETAILS

### SERIES 225-SK-G 3-JAW PULLER WITH SELF-CENTERING JAWS AND SLIDING HAMMER










The 3-jaw puller with self-centering jaws and sliding hammer is used for the safe and damage-free removal of pressed-on hub caps, wheel covers, and dust and grease caps. The sliding hammer ensures a space-saving and material-saving extraction. The specially shaped jaws are connected with a spring. This provides self-tensioning of the jaws and prevents possible slippage during the pulling process. Thanks to the quick-release mechanism, the jaws can be easily applied to the component to be pulled. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed. The 3-jaw design guarantees even load distribution and thus a particularly secure grip on the part to be pulled.

#### Benefits

- The spring ensures self-tensioning of the jaws.
- Socket pin ensure a quick exchange of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Narrow puller jaws grip optimally in tight and hard-to-reach places.

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg	kg/lb
225-SK-G	-080074	24 15/16	65 2 9/16	370 14 9/16	250 9 13/16	1.7	1,09 2,403

### SERIES 225-SK 3-JAW PULLER WITH SELF-CENTERING JAWS







The 3-jaw puller with self-centering jaws is used for the safe and damage-free removal of pushed-on hub caps, wheel covers, as well as dust and grease caps. The specially shaped jaws are connected with a spring, providing a self-tensioning effect and preventing possible slipping during the pulling process. Thanks to the quick-release mechanism, the jaws can be quickly attached to the part to be removed. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed. The 3-jaw design guarantees an even load distribution, providing particularly secure hold on the part to be removed.

#### Benefits

- The spring ensures self-tensioning of the jaws.
- The dowel pins ensure a quick replacement of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Narrow puller jaws grip optimally in tight and hard-to-reach places.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
225-SK	-324215	65 2 9/16	24 15/16	1,09 2,403

## PRODUCT DETAILS



### SERIES 225-S THREAD ADAPTER PULLER SET










The bolt extraction device set with thread adapters of series 225-S is used for extracting bolts such as brake shoe bolts or spring bolts on commercial vehicles. It includes a kg impact hammer in solid design as well as a set with 7 different thread inserts to be prepared for any extraction situation.

#### Benefits

- The large impact hammer allows you to pull out even very stubborn bolts.
- The two handles allow for good handling
- Versatile use due to the wide selection of different thread sizes

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg	 nominal dimension	 nominal dimension	 kg/lb
225	-019470	700 27 9/16	280 11 1/32	8	M8x1, M10x1, M14x1,5, M14, M16x1,5, M16, M20x1,5	M16x1,5, G1/2	11,02 24,299



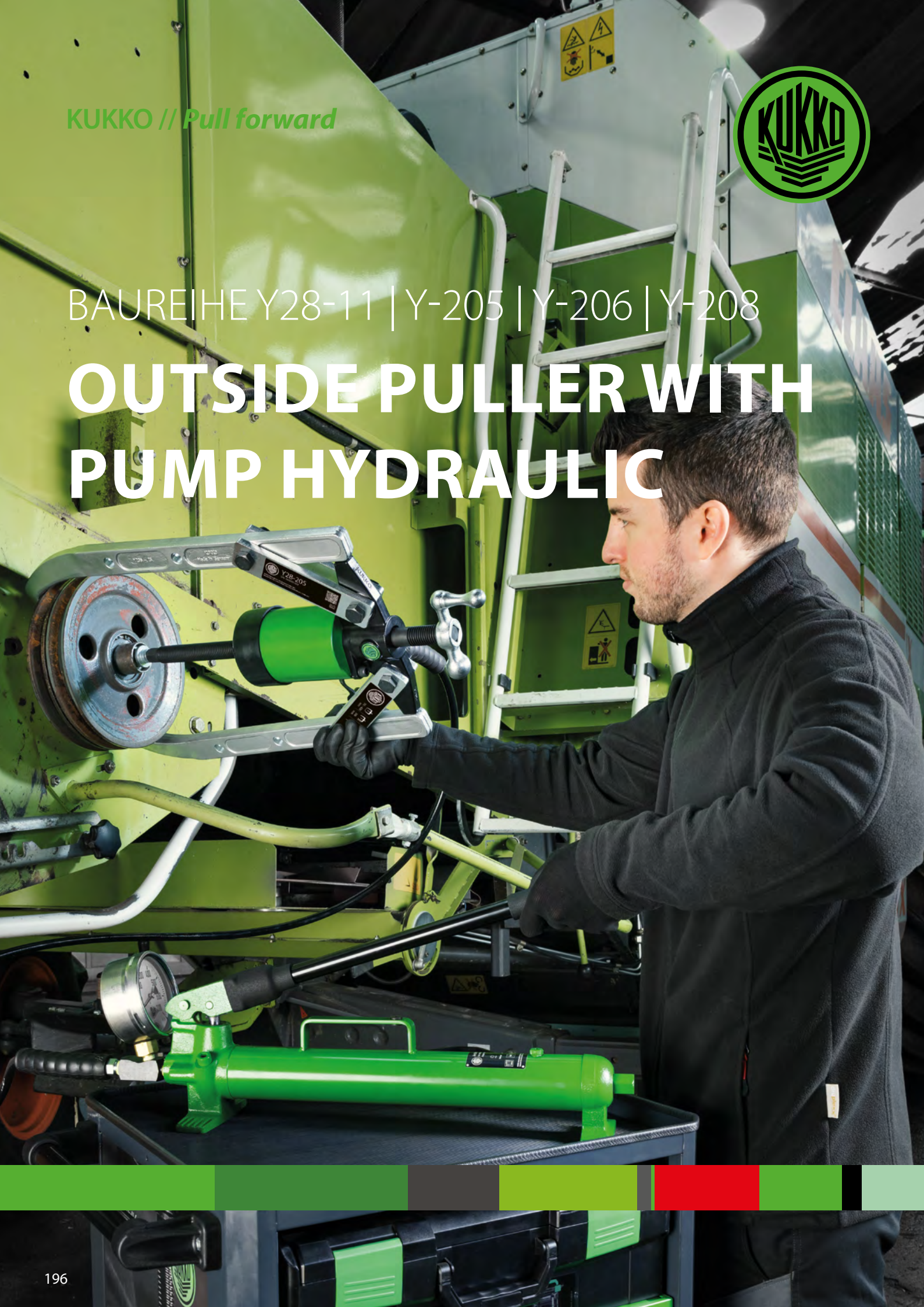


KUKKO // *Pull forward*



BAUREIHE Y28-11 | Y-205 | Y-206 | Y-208

# OUTSIDE PULLER WITH PUMP HYDRAULIC



# DEPLOYMENT

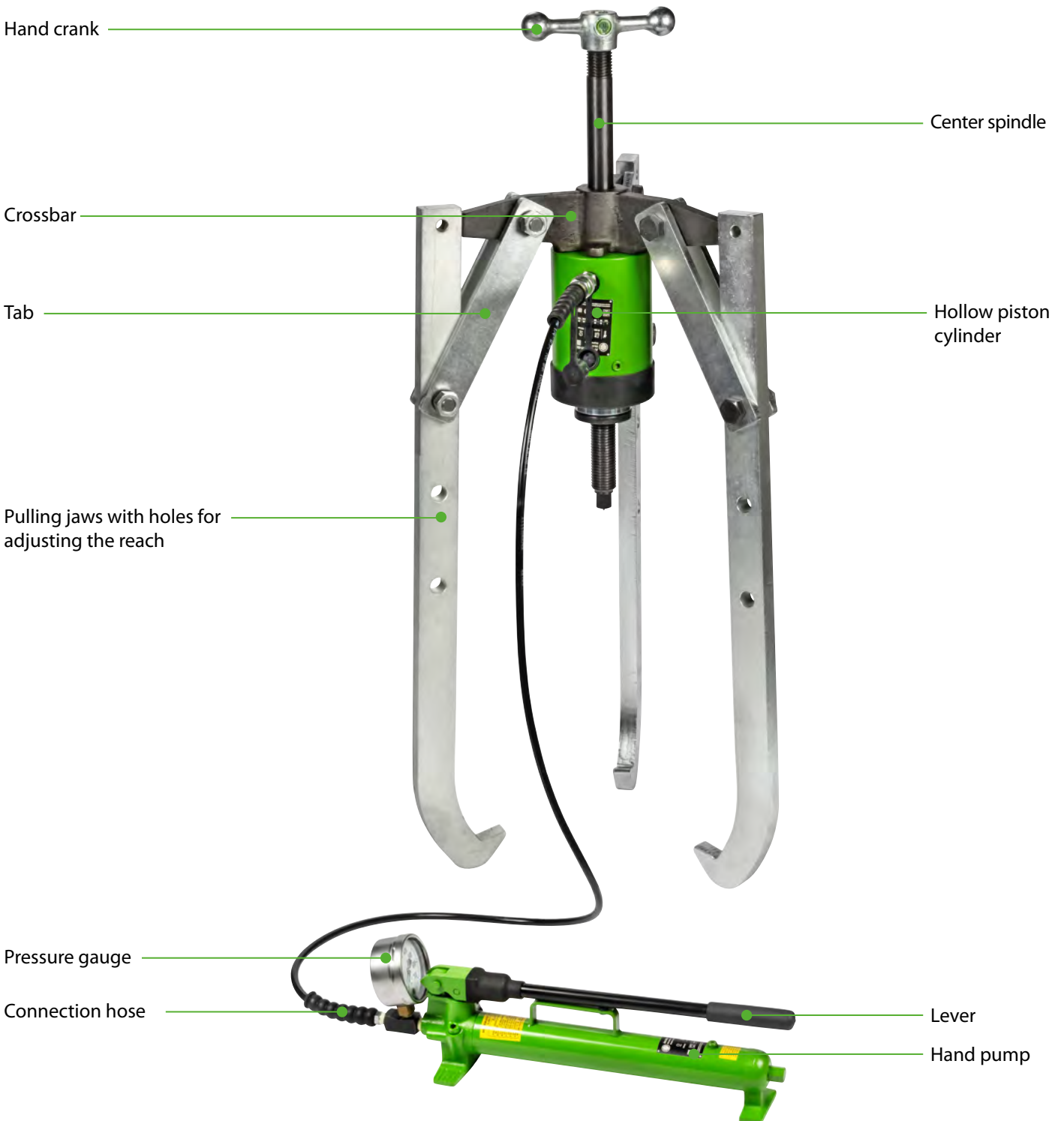
The hydraulic pullers from KUKKO are capable of solving even extreme pulling problems. The continuously adjustable power enables controlled and safe operation while utilizing the full performance potential of the pullers. Whenever manual force reaches its limits, the hydraulic system ensures maximum power transfer.



## Benefits

- The hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stubborn parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach thanks to multiple drilling in the puller jaws.
- Oscillating puller jaws offer a variety of adjustment options (series Y-205, Y-206, and Y-208)
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw applications (series Y-208)

## ASSEMBLY OF A PULLER WITH HYDRAULIC PUMP





# FEATURES OF THE SERIES

## BAUREIHE Y28-11

Hydraulic, extra powerful 3-jaw puller



Y28-11

The hydraulic, extra-powerful 3-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling particularly stubborn bearings, gears, and discs in all common sizes. The hydraulic hollow piston cylinder achieves a high tension force. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being pulled.

## SERIES Y-205

Hydraulic 2-jaw puller



Y-205

The hydraulic 2-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling particularly large and seized bearings, gears, and discs in all common sizes. The hydraulic hollow piston cylinder achieves a high tension force. The oscillating jaws adapt to any installation situation and are universally applicable due to the adjustability of the reach.

## SERIES Y-206

Hydraulic 2-jaw and 3-jaw puller



Y-206

The hydraulic 2-jaw and 3-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for removing particularly large and stubborn bearings, gears, and discs in all common sizes. The hydraulic hollow piston cylinder achieves high tension force. The oscillating jaws adapt to any installation situation and are universally applicable due to the possibility of adjusting the reach. The 3-jaw design ensures even load distribution and thus a particularly secure hold.

## SERIES Y-208

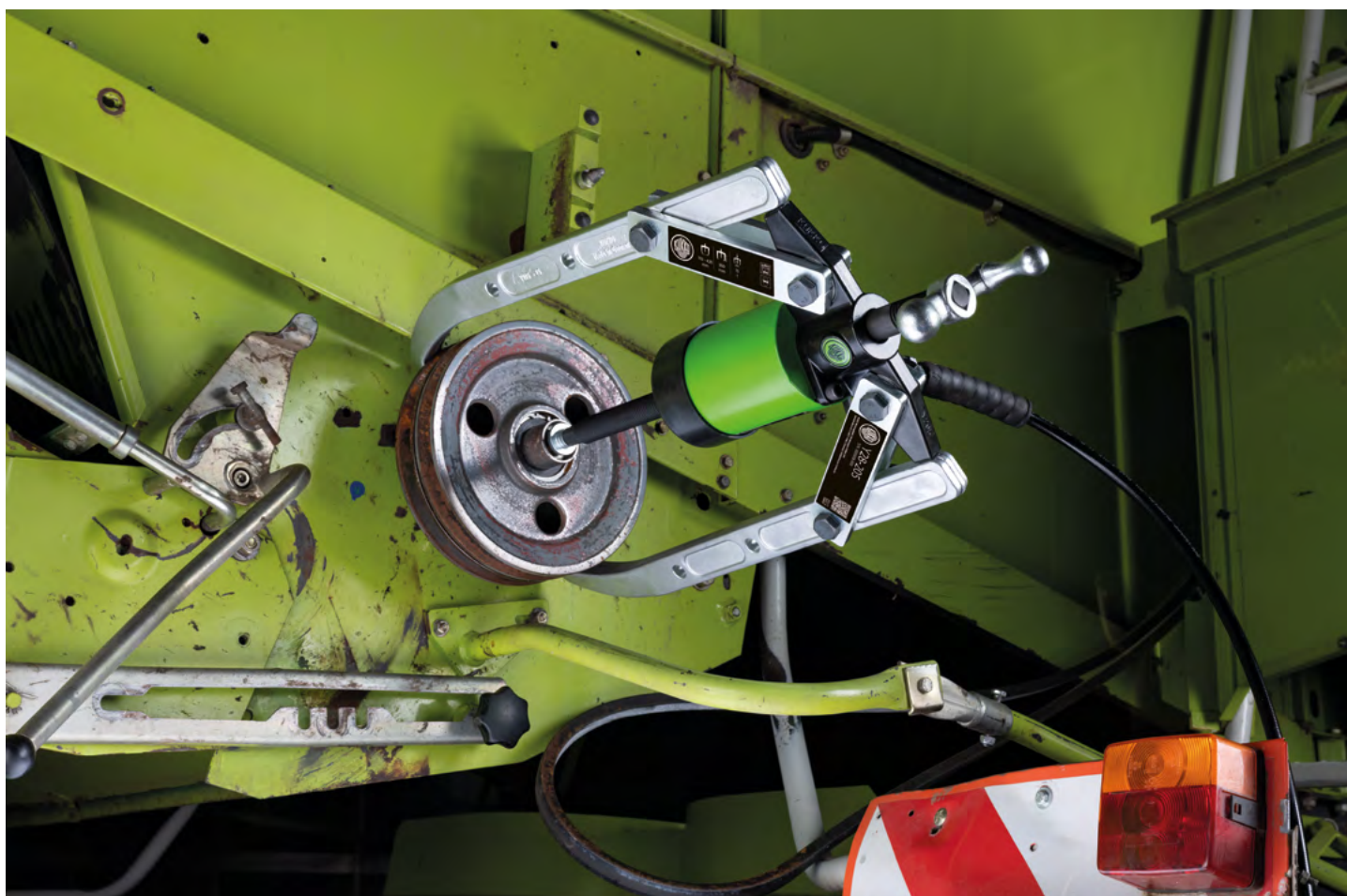
Hydraulic 3-jaw combination puller



Y-208

The hydraulic 3-jaw puller with adjustable reach, hydraulic pressure cylinder for pump drive, and combination crossbar is designed for pulling particularly large and stubborn bearings, gears, and discs in all common sizes. The hydraulic pressure cylinder achieves high tension force. The oscillating jaws adapt to any installation situation and are universally applicable due to the adjustable reach. Thanks to the combination crossbar, the puller can be used as both a 2-jaw and a 3-jaw puller.





External extraction of a pulley on a combine harvester with the hydraulic puller Y28-205



External extraction of a pulley on a combine harvester with the hydraulic puller Y28-205

## PRODUCT DETAILS



### SERIES Y28-11 HYDRAULIC, EXTRA POWERFUL, 3-JAW PULLER WITH ADJUSTABLE REACH AND HOLLOW PISTON CYLINDER









The hydraulic, extra-strong 3-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling particularly stubborn bearings, gears, and discs in all standard sizes for crafts, workshops, and industry. The hydraulic hollow piston cylinder achieves a high pulling force of up to 20 t. This allows you to loosen any component that is mounted on a shaft and is freely accessible from the outside. The robust design of the puller adapts to every pulling situation thanks to its individually adjustable spread and reach, ensuring a powerful, damage-free disassembly both during external extraction and internal extraction. The 3-jaw design guarantees an even load distribution, providing a particularly secure grip on the part being pulled.

#### Benefits

- A hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- 3-jaw provides an even distribution of force and allows for greater pulling forces.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 bar	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
Y28-11-0	-469725	0 - 375 0 - 14 3/4	500 19 11/16	280 - 600 11 1/32 - 23 5/8	700	200	20 22.05	29 63,945
Y28-11-1	-711640	0 - 520 0 - 20 1/2	500 19 11/16	280 - 600 11 1/32 - 23 5/8	700	200	20 22.05	33 72,765
Y28-11-2	-711657	0 - 650 0 - 25 9/16	500 19 11/16	290 - 740 11 7/16 - 29 1/8	700	200	20 22.05	38 83,790

### SERIES Y-205 HYDRAULIC, EXTRA POWERFUL, 3-JAW PULLER WITH ADJUSTABLE REACH AND HOLLOW PISTON CYLINDER



The hydraulic 2-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling particularly large and seized bearings, gears, and discs in all common sizes for trade, workshop, and industry. The hydraulic hollow piston cylinder achieves a high pulling force of up to 50 t. This allows for the loosening of any component that is mounted on a shaft and is freely accessible from the outside. The oscillating jaws adapt to any installation situation and can be universally used due to the adjustable reach.

#### Benefits

- A hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating puller jaws offer a variety of adjustment options.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 bar	 kg/lb
Y28-205	-036088	0 - 420 0 - 16 9/16	300 11 13/16	200	20 22.05	700	21,5 47,408
Y28-215	-833915	0 - 420 0 - 16 9/16	600 23 5/8	200	20 22.05	700	26 57,330
Y38-205	-037078	0 - 700 0 - 27 9/16	520 20 1/2	300	30 33.07	700	41 90,405
Y58-205	-038068	0 - 1.000 0 - 39 3/8	700 27 9/16	500	50 55.12	700	90 198,450
Y58-215	-854675	0 - 1.000 0 - 39 3/8	1.200 47 1/4	500	50 55.12	700	0 0,000



## PRODUCT DETAILS

### SERIES Y-206 HYDRAULIC, EXTRA POWERFUL, 3-JAW PULLER WITH ADJUSTABLE REACH AND HOLLOW PISTON CYLINDER








The hydraulic 2-jaw and 3-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling particularly large and stuck bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The hydraulic hollow piston cylinder achieves a high pulling force of up to 50 t. This allows for the release of any component that sits on a shaft and is freely accessible from the outside. The oscillating jaws adapt to any installation situation and can be used universally due to the adjustable reach. The 3-jaw design guarantees an even load distribution and therefore a particularly secure grip on the part being pulled. If only a little space is available around the part to be pulled, the included 2-jaw crossbar can be used.

#### Benefits

- Hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating jaws offer a variety of adjustment options.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.

#### Technical attributes

#					Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	bar	kN	t/US t. sh.	kg/lb	
<b>Y28-206</b>	-036248	0 - 500 0 - 19 11/16	300 11 13/16	700	20	20 22.05	31,48 69,413	Y28-256, Y28-200
<b>Y38-206</b>	-037238	0 - 900 0 - 35 7/16	520 20 1/2	700	30	30 33.07	54 119,070	Y38-356, Y38-300
<b>Y58-206</b>	-038228	0 - 1.200 0 - 47 1/4	700 27 9/16	700	50	50 55.12	125 275,625	Y58-556, Y58-500
<b>Y28-216</b>	-833922	0 - 500 0 - 19 11/16	600 23 5/8	700	20	20 22.05	37 81,585	-
<b>Y58-216</b>	-854682	0 - 1.200 0 - 47 1/4	1.200 47 1/4	700	50	50 55.12	0 0,000	-

### SERIES Y-208 HYDRAULIC, EXTRA POWERFUL, 3-JAW PULLER WITH ADJUSTABLE REACH AND HOLLOW PISTON CYLINDER








The hydraulic 2-jaw and 3-jaw puller with adjustable reach, hydraulic pressure cylinder for pump drive and combination crossbar is used for pulling particularly large and stuck bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The hydraulic pressure cylinder achieves a pulling force of max. 10 t. This makes it possible to loosen any component that is mounted on a shaft and accessible from the outside. The oscillating jaws adapt to any installation situation and are universally applicable due to the adjustability of the reach. Thanks to the combination crossbar, the puller can be used as both a 2-jaw and a 3-jaw puller. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being pulled.

#### Benefits

- Hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating jaws offer a variety of adjustment options.
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling.

#### Technical attributes

#					Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	bar	kN	t/US t. sh.	kg/lb
<b>Y08-208</b>	-461774	0 - 250 0 - 9 13/16	215 8 7/16	625	45	4.5 4.96	5,39 11,885
<b>Y18-208</b>	-461699	0 - 500 0 - 19 11/16	500 19 11/16	561	100	10 11.02	17,41 38,389



## PRODUCT DETAILS



### SERIES YX8-X00 18-PIECE, HYDRAULIC UNIVERSAL PULLER SET












The 18-piece hydraulic universal puller sets of series YXB-X00 are used for pulling, separating, and internal extraction of particularly large and tightly seated bearings, gears, discs, etc. in industry and commercial vehicles. The set requires no additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers, separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for every situation.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the metal box, the completeness of the set can be easily overviewed.

#### Technical attributes

#									Max. tensile force	Max. Tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	bar	kN	t/ US t. sh.	kg/lb	
<b>Y28-200</b>	-870828	50 - 500 1 15/16 - 19 11/16	0 - 300 0 - 11 13/16	30 - 180 1 3/16 - 7 1/16	25 - 155 1 - 6 1/8	135 - 300 5 5/16 - 11 13/16	1.000 39 3/8	700	200	20 22.05	85 187,425	Y-221-E, YHP-325, Y-215-3, YDB- 27E, YRH-202, Y20-180, Y20- 206, Y218-06-P, Y218-08-P, Y218- 31-P, Y218-33, Y205-20, Y218- 10, Y218-11, Y20-216
<b>Y38-300</b>	-870835	50 - 900 1 15/16 - 35 7/16	0 - 520 0 - 20 1/2	75 - 230 2 15/16 - 9 1/16	30 - 250 1 3/16 - 9 13/16	180 - 420 7 1/16 - 16 9/16	1.200 47 1/4	700	300	30 33.07	188 414,540	Y-321-E, YHP-325, Y-315-5, YDB- 33E, YRH-302, Y30-180, Y30- 206, Y318-36-P, Y318-33, Y318- 38-P, Y318-41-P, Y305-20, Y318- 10, Y318-11
<b>Y58-500</b>	-870842	460 - 1.200 18 1/8 - 47 1/4	0 - 700 0 - 27 9/16	75 - 230 2 15/16 - 9 1/16	75 - 330 2 15/16 - 12 1	235 - 540 9 1/4 - 21 1/4	1.500 59 1/16	498	500	50 55.12	335 738,675	Y-521-E, YHP-325, Y-515-6, YDB- 55E, YRH-603, Y50-180, Y50- 206, Y518-08-P, Y518-31-P, Y518- 33, Y505-20, Y518-10, Y518- 11, Y50-216

## PRODUCT DETAILS

### SERIES YX8-X56 9-PIECE HYDRAULIC EXTERNAL PULLER SET








The 9- and 15-piece hydraulic puller sets are used for extracting particularly large and stubborn bearings, gears, discs, etc. in industry and commercial vehicles. The set does not require any additional accessories for use. In addition to a hydraulic hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers to provide a solution for various situations during external extraction.

#### Benefits

- Application-oriented assembly for universal use
- Through the storage in the metal box, the completeness of the set can be easily overviewed.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 bar	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
<b>Y28-256</b>	-036811	50 - 500 1 15/16 - 19 11/16	0 - 300 0 - 11 13/16	700	200	20 22.05	68 149,940	YHP-325, YRH-202, Y20-206, Y205-20, Y218-10, Y218-11, Y20-216
<b>Y38-356</b>	-037801	50 - 900 1 15/16 - 35 7/16	0 - 520 0 - 20 1/2	700	300	30 33.07	93,42 205,991	YHP-325, YRH-302, Y30-206, Y305-20, Y318-10, Y318-11
<b>Y58-556</b>	-038631	100 - 1.200 3 15/16 - 47 1/4	0 - 700 0 - 27 9/16	498	500	50 55.12	175 385,875	YHP-325, YRH-603, Y50-206, Y505-20, Y518-10, Y518-11, Y50-216

## PRODUCT DETAILS



### SERIES YSM HUB CYLINDER











The YSM series of hub cylinders are used with the KUKKO hydraulic program in crafts, industry, and workshops when other cylinders are too large. Due to their compact design, they can also be used in tight spaces, allowing for a force-saving and versatile operation even in difficult pulling situations or when a lot of force is required.

#### Benefits

- All models have a CR-400 coupling sleeve with dust cap.
- Mounting holes enable easy installation
- The integrated scraper removes contaminants from the piston, thereby extending the life of the cylinder.

#### Technical attributes

#								Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	bar	cm <sup>3</sup>	kN	t/US t. sh.	kg/lb
<b>YSM-100</b>	-101007	55 2 3/16	82 3 1/4	43 1 11/16	12 1/2	700	0.0000 m <sup>3</sup>	100	10 11.02	1,735 3,826
<b>YSM-200</b>	-102004	76 2 1	101 3 1	51 2 1/64	11 7/16	700	0.0000 m <sup>3</sup>	200	20 22.05	2,795 6,163

### SERIES YRE HYDRAULIC PRESSURE CYLINDERS WITH COLLAR THREAD













The hydraulic pressure cylinders with collar thread of the YRE series are used with the KUKKO hydraulic program for applications in all positions in crafts, industry, and workshops. The model with a large stroke length enables force-saving and versatile work even in difficult pulling situations or when a lot of force is required.

#### Benefits

- All models have a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and fastening threads on the cylinder bottom enable easy assembly.

#### Technical attributes

#										Max. tensile force	Max. Tractive force	
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	nominal dimension	mm/ inch	bar	cm <sup>3</sup>	kN	t/ US t. sh.	kg/lb
<b>YRE-050</b>	-046551	38 1 1/2	98 3 7/8	216 8 1/2	25 1	1 1/2"-16UN	125 4 15/16	700	0.0001 m <sup>3</sup>	50	5 5.51	2,2 4,851
<b>YRE-101</b>	-870927	57 2 1/4	117 4 5/8	350 13 3/4	40 1 9/16	2.1/4"-14 UNS	250 9 13/16	700	0.000406 m <sup>3</sup>	100	10 11.02	6,4 14,112
<b>YRE-106</b>	-879401	57 2 1/4	117 4 5/8	247 9 3/4	40 1 9/16	2.1/4"-14 UNS	155 6 1/8	700	0.000242 m <sup>3</sup>	100	10 11.02	4,375 9,647
<b>YRE-701</b>	-021251	152 5 1	212 8 3/8	285 11 1/4	70 2 3/4	5.3/4"-12 UN	155 6 1/8	700	0.001752 m <sup>3</sup>	750	75 82.67	32 70,560



## PRODUCT DETAILS

### SERIES YRH HOLLOW PISTON CYLINDER














The hydraulic hollow piston cylinders of the YRH series are used for application with the KUKKO hydraulic program in crafts, industry, and workshops. They can be used both as pressure and traction cylinders, enabling a force-saving and versatile operation even in challenging extraction situations or when a lot of force is needed.

#### Benefits

- All models feature a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and mounting threads on the cylinder base allow for easy assembly.

#### Technical attributes

#											Max. tensile force	Max. tractive force	
	EAN	mm/ inch	mm/ inch	mm/ inch	nominal dimension			mm/ inch	bar	cm <sup>3</sup>	kN	t/ US t. sh.	kg/lb
<b>YRH-132</b>	-854460	73 2 7/8	133 5 1/4	60 2 3/8	2 3/4"- 12 UN	3/4"- 16 UN	-	8 5/16	700	0.00001 m <sup>3</sup>	130	13 14.33	2,04 4,498
<b>YRH-202</b>	-046711	99 3 7/8	160 6 5/16	162 6 3/8	3 7/8"- 12 UN	1 9/16"- 16 UN	1"-8 UNC	50 1 15/16	700	0.000173 m <sup>3</sup>	200	20 22.05	7,575 16,703
<b>YRH-206</b>	-870934	99 3 7/8	160 6 5/16	306 12 1/16	3 7/8"- 12 UN	1 9/16"- 16 UN	1"-8 UNC	150 5 7/8	700	0.000527 m <sup>3</sup>	200	20 22.05	14,185 31,278
<b>YRH-302</b>	-046896	117 4 5/8	177 6 15/16	178,5 7 1/32	4 1/2"- 12 UN	1 7/8"- 16 UN	1 1/4"- 7 UNC	63 2 1/2	700	0.00031 m <sup>3</sup>	300	30 33.07	10,7 23,594
<b>YRH-603</b>	-046971	159 6 1/4	219 8 5/8	247,5 9 3/4	6 1/4"- 12 UN	2 3/4"- 16 UN	1 5/8"- 5 1/2 UNS	75 2 15/16	700	0.00068 m <sup>3</sup>	600	60 66.14	30 66,150

## PRODUCT DETAILS



### SERIES YHP ACCESSORIES FOR HYDRAULIC PULLING



The hydraulic hand pump, pressure gauge, and hose are used in conjunction with the pullers from the KUKKO hydraulic program in trade, industry, and workshops. The range includes high-pressure hydraulic hand pumps, pressure gauges, and hoses, as well as various connections and adapters designed for durability and user-friendliness. Depending on the requirements, different combinations of the components are available.

#### Benefits

- The entire series is equipped with numerous safety features to provide reliable performance while ensuring safety in the workplace.

#### Technical attributes

#	EAN	cm <sup>3</sup>	bar	Max. tractive force t/US t. sh.	kg/lb	Components
YHP-320	-045721	0.0006 m <sup>3</sup>	700	50 55.12	7,28 16,052	YHP-320
YHP-321	-111198	0.0006 m <sup>3</sup>	700	50 55.12	8,375 18,467	YHP-320, YF-200
YHP-324	-045806	0.0006 m <sup>3</sup>	700	50 55.12	9,605 21,179	YHP-320, YM-235, YGA-2
YHP-325	-045981	0.0006 m <sup>3</sup>	700	50 55.12	1,5 3,308	YHP-320, YF-200, YM-235, YGA-2
YHP-326	-046483	0.0006 m <sup>3</sup>	700	50 55.12	16,13 35,567	YHP-320, YF-200, YM-235, YGA-2
YHP-420	-609688	0.002 m <sup>3</sup>	700	75 82.67	13,6 29,988	YHP-420
YHP-421	-022968	0.002 m <sup>3</sup>	700	75 82.67	0 0,000	YHP-420, YF-200
YHP-424	-103988	0.002 m <sup>3</sup>	700	75 82.67	13,6 29,988	YHP-420, YM-235, YGA-2
YHP-425	-103995	0.002 m <sup>3</sup>	700	75 82.67	9,605 21,179	YHP-420, YF-200, YM-235, YGA-2
YF-200	-045646	-	700	75 82.67	1,6 3,528	YF-200
YM-235	-157769	-	700	75 82.67	1,65 3,638	YM-235
YGA-2	-458644	-	-	75 82.67	0,21 0,463	YGA-2

### SERIES YPP PNEUMATIC, HYDRAULIC PUMP



The pneumatic and hydraulic pumps are used for application with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The compressed air-operated hydraulic pump can be used via foot or hand operation and is optionally available individually or together with hose and pressure gauge.

#### Benefits

- Safety valve as overload protection ensures safe working.
- With 2-stage drain valve for easier application

#### Technical attributes

#	EAN	bar	cm <sup>3</sup>	Max. tractive force t/US t. sh.	kg/lb
YPP-520	-141577	700	0.003 m <sup>3</sup>	75 82.67	0 0,000
YPP-525	-469732	700	0.003 m <sup>3</sup>	75 82.67	12,93 28,511






## PRODUCT DETAILS

### SERIES Y-10-11 ACCESSORIES FOR HYDRAULIC PULLING

The accessories for hollow piston cylinders are used for compatibility with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The hand cranks and center spindle are designed for the hollow piston cylinders of the YRH series.



#### Technical attributes





#	 EAN	 mm/inch	 mm/inch	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	
<b>Y218-10</b>	-040368	120 4 3/4	17,5 11/16	20 22.05	1,865 4,112	YRH-202, YRH-206
<b>Y218-11</b>	-040443	514 20 1/4	17,5 11/16	20 22.05	1,69 3,726	YRH-206, YRH-202
<b>Y318-10</b>	-041761	150 5 7/8	20,5 13/16	30 33.07	0,88 1,940	YRH-302
<b>Y318-11</b>	-041846	610 24 1/64	20,5 13/16	30 33.07	3,205 7,067	YRH-302
<b>Y318-12</b>	-749865	400 15 3/4	20,5 13/16	30 33.07	8 17,640	YRH-302
<b>Y518-10</b>	-044243	240 9 7/16	25,4 1	50 55.12	2,01 4,432	YRH-603
<b>Y518-11</b>	-044328	750 29 1/2	25,4 1	50 55.12	6,745 14,873	YRH-603

### SERIES YC QUICK COUPLING

The quick coupling of the YC series is used together with the hydraulic cylinders of the YRH and YRE series. The complete coupling consists of the coupling connector (YCH-604) and the coupling sleeve (YCR-400) with a protective cap.



#### Technical attributes

#	 EAN	 mm/inch	 bar	 kg/lb
<b>YCR-400</b>	-201318	3/8" NPT	700	0,225 0,496
<b>YCH-604</b>	-440731	3/8" NPT	700	0,225 0,496



## PRODUCT DETAILS



### SERIES Y-17 PRESSURE PIECE FOR AXLE BORES






The pressure pieces for axle bores are used for pulling bearings and gears in craft, industry, and workshops that are mounted on hollow shafts or in housings. The spindle pressure piece serves as a counter-axis to the puller, transferring the force onto the pressure piece through the spindle.

#### Benefits

- Broader application possibilities for various extraction situations
- The set is available in both 12-piece and 6-piece versions, and if needed, the pressure pieces are also available individually.

#### Technical attributes




#	 EAN	 mm/inch	 kg/lb
Y-01-17	-233173	20 - 23   13/16-7/8	0,006   0,013
Y-02-17	-233258	23 - 26   7/8-1 1/32	0,04   0,088
Y-03-17	-233333	26 - 30   1 1/32-1 3/16	0,05   0,110
Y-04-17	-233418	29 - 33   1 1/8-1 5/16	0,06   0,132
Y-05-17	-233586	33 - 39   1 5/16-1 9/16	0,165   0,364
Y-06-17	-233661	36 - 42   1 7/16-1 5/8	0,2   0,441
Y-07-17	-233746	39 - 46   1 9/16-1 13/16	0,22   0,485
Y-08-17	-233821	42 - 48   1 5/8-1 7/8	0,288   0,635
Y-09-17	-233906	45 - 52   1 3/4-2 1/16	0,26   0,573
Y-10-17	-234163	49 - 58   1 15/16-2 5/16	0,26   0,573
Y-11-17	-234248	51 - 62   2 1/64-2 7/16	0,52   1,147
Y-12-17	-234408	55 - 65   2 3/16-2 9/16	0,26   0,573
Y-13-17	-234576	58 - 68   2 5/16-2 11/16	0,65   1,433
Y-14-17	-234651	61 - 71   2 3/8-2 13/16	0,26   0,573
Y-15-17	-234736	65 - 74   2 9/16-2 15/16	0   0,000
Y-16-17	-234811	71 - 81   2 13/16-3 3/16	0   0,000
Y-17-17	-234996	77 - 88   3 1/32-3 7/16	0   0,000
Y-18-17	-235078	20 - 62   13/16-2 7/16	2,235   4,928
Y-19-17	-235153	33 - 81   1 5/16-3 3/16	5,7   12,569
Y-20-17	-235238	55 - 88   2 3/16-3 7/16	4,9   10,805
Y-60-100-17	-120466		4,455   9,823

### SERIES Y205/206 2-JAW TRAVERSE



The accessories for hydraulic pullers are used for the pullers from the KUKKO hydraulic program in craft, industry, and workshop. The puller jaws with tabs, screws, and nuts, as well as 2-jaw or 3-jaw crossbars, are designed for the series Y20, Y28, Y30, Y38, Y50, and Y58.

#### Technical attributes

#	 EAN	Max. tractive force t/US t. sh.	 kg/lb	
Y205-20	-038976	20 22.05	2,27 5,005	Y28-205, Y28-206, Y20-205, Y20-206, YRH-202, YRH-206
Y206-30	-039478	20 22.05	5 11,025	Y28-205, Y28-206, Y20-205, Y20-206, YRH-202, YRH-206
Y305-20	-040931	30 33.07	3,786 8,348	Y38-205, Y38-206, Y30-205, Y30-206, YRH-302
Y306-30	-041433	30 33.07	4,97 10,959	Y38-205, Y38-206, Y30-205, Y30-206, YRH-302
Y505-20	-042911	50 55.12	7,85 17,309	Y58-205, Y58-206, Y50-205, Y50-206, YRH-603
Y506-30	-043413	50 55.12	1,55 3,418	Y58-205, Y58-206, Y50-205, Y50-206, YRH-603

## PRODUCT DETAILS

### SERIES YD PRESSURE PIECE FOR HOLLOW PISTON CYLINDER









The pressure pieces for hollow piston cylinders are screwed into the internal thread of the piston rod of the hollow piston cylinder. The center spindle can be inserted directly into the threaded piece or secured and adjusted using a quick adjustment nut when using a pressure piece with a smooth bore. When using the closed pressure piece, the cylinders can be used as lifting jacks.

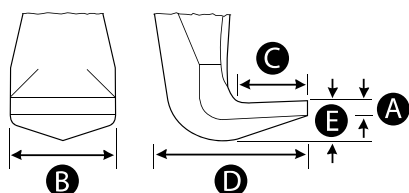
#### Benefits

- Pressure pieces enable the versatile application of the hollow piston cylinder from KUKKO as a pressure or pull cylinder.

#### Technical attributes

#	 EAN	 mm/inch			Max. tractive force t/US t. sh.		 kg/lb
YDB-33E	-400308	58 2 5/16	-	1 7/8"-16 UN	30 33.07	YRH-302	0,21 0,463
YDB-55E	-400483	85 3 3/8	-	2 3/4"-16 UN	50 55.12	YRH-603	0,5 1,103
YDG-20E	-399091	50 1 15/16	1"-8 UNC	1 9/16"-16 UN	20 22.05	YRH-202, YRH-206	0,18 0,397
YDG-30E	-399176	60 2 3/8	1 1/4"-7 UNC	1 7/8"-16 UN	30 33.07	YRH-302	0,285 0,628
YDG-50E	-399251	85 3 3/8	1 5/8"-5 1/2 UNS	2 3/4"-16 UN	50 55.12	YRH-603	0,85 1,874
YDM-20E	-414183	50 1 15/16	-	1 9/16"-16 UN	20 22.05	YRH-202, YRH-206	0,28 0,617
YDM-30E	-414268	58 2 5/16	-	1 7/8"-16 UN	30 33.07	YRH-302	0,38 0,838
YDM-50E	-414343	85 3 3/8	-	2 3/4"-16 UN	50 55.12	YRH-603	1,06 2,337
YDB-27E	-400223	50 1 15/16	-	1 9/16"-16 UN	20 22.05	YRH-202, YRH-206	0,17 0,375

### SERIES Y205 HOOK WITH TABS, SCREWS, AND NUTS












The puller with tabs, screws, and nuts is used for pulling especially large and stubborn bearings, gears, and discs. The multiple holes in the jaws allow for individual adjustment to the desired reach.

#### Benefits

- Universally applicable due to adjustable reach.

#### Technical attributes

#	 EAN	 mm/inch	 L mm/inch	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb
Y205-25	-039393	300 11 13/16	548 21 9/16	33 1 5/16	102 4 1/64	30 1 3/16	30 1 3/16	5 3/16	3,4 7,497
Y205-26	-117893	600 23 5/8	850 33 7/16	33 1 5/16	102 4 1/64	30 1 3/16	30 1 3/16	5 3/16	3,2 7,056
Y305-25	-041358	520 20 1/2	805 31 11/16	41 1 5/8	125 4 15/16	39 1 9/16	35 1 3/8	5 3/16	8,6 18,963
Y505-25	-043338	700 27 9/16	1.100 43 5/16	50 1 15/16	150 5 7/8	30 1 3/16	42 1 5/8	10 3/8	15,1 33,296
Y205-00-S	-469176	300 11 13/16	548 21 9/16	33 1 5/16	102 4 1/64	30 1 3/16	30 1 3/16	5 3/16	14,565 32,116

## PRODUCT DETAILS



### SERIES Y0-205 2-JAW PULLER WITH SWIVELING EXTRACTOR JAWS (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER FOR PUMP DRIVE)








The 2-jaw pullers with swiveling jaws of the Y-205 series are used for pulling particularly large and stuck bearings, gears, discs, etc. in crafts, industry, and workshops. Due to their simple adjustability, the puller is also suitable for various pulling situations. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### Benefits

- Universally usable thanks to adjustable reach
- The greater the pulling force, the stronger the grip of the jaws on the workpiece being pulled.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	
<b>Y20-205</b>	-035906	0 - 420 0 - 16 9/16	300 11 13/16	200	20 22.05	11,425 25,192	YRH-202, Y205-20, Y206-30
<b>Y20-215</b>	-833892	0 - 420 0 - 16 9/16	600 23 5/8	200	20 22.05	0 0,000	YRH-202
<b>Y30-205</b>	-036996	0 - 700 0 - 27 9/16	520 20 1/2	300	30 33.07	25 55,125	YRH-302, Y305-20, Y306-30
<b>Y50-205</b>	-037986	0 - 1.000 0 - 39 3/8	700 27 9/16	500	50 55.12	50 110,250	YRH-603, Y505-20, Y506-30
<b>Y50-215</b>	-854651	0 - 1.000 0 - 39 3/8	1.200 47 1/4	500	50 55.12	0 0,000	YRH-603

### SERIES Y0-206 3-JAW PULLER WITH SWIVELING EXTRACTOR JAWS (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER FOR PUMP DRIVE)





The 3-jaw pullers with swiveling puller jaws of the Y-206 series are used for pulling particularly large and stuck bearings, gears, discs, etc., in crafts, industry, and workshops. Due to their easy adjustability, the puller is also suitable for various pulling situations. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### Benefits

- Universally applicable thanks to adjustable reach
- The larger the pulling force, the stronger the grip of the jaws on the workpiece being pulled.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	
<b>Y20-206</b>	-036163	0 - 500 0 - 19 11/16	300 11 13/16	200	20 22.05	16,44 36,250	YRH-202, Y205-20, Y206-30
<b>Y30-206</b>	-037153	0 - 900 0 - 35 7/16	520 20 1/2	300	30 33.07	40 88,200	YRH-302, Y305-20, Y306-30
<b>Y50-206</b>	-038143	0 - 1.200 0 - 47 1/4	700 27 9/16	500	50 55.12	80 176,400	YRH-603, Y505-20, Y506-30
<b>Y20-216</b>	-833908	0 - 500 0 - 19 11/16	600 23 5/8	200	20 22.05	0 0,000	YRH-202
<b>Y50-216</b>	-854668	0 - 1.200 0 - 47 1/4	1.200 47 1/4	500	50 55.12	0 0,000	YRH-603



## PRODUCT DETAILS

### SERIES Y0-208 3-JAW PULLER WITH SWIVELING JAWS (WITHOUT HYDRAULIC PRESSURE CYLINDER FOR PUMP DRIVE)








The 3-jaw combination pullers with swiveling puller jaws from series Y-208 are used for pulling particularly large and tight-fitting bearings, gears, discs, etc. in craft, industry, and workshops. Combination pullers can be used both as 3-jaw and 2-jaw. A hydraulic pressure cylinder with collar thread from series YRE is also required for application.

#### Benefits

- Universally applicable thanks to adjustable reach and number of hooks
- The larger the pull force, the stronger the grip of the jaws on the workpiece being pulled.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	 YRE-050
<b>Y05-208</b>	-172366	0 - 250 0 - 9 13/16	215 8 7/16	45	4.5 4.96	3,29 7,254	YRE-050
<b>Y10-208</b>	-172441	0 - 500 0 - 19 11/16	500 19 11/16	100	10 11.02	1,32 2,911	YRE-101

### SERIES Y20-11 3-JAW PULLER WITH ADJUSTABLE REACH (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER)







The 3-jaw pullers with adjustable reach of the Y20-11 series are used for pulling particularly large and stuck bearings, gears, discs, etc. in crafts, industry, and workshops. The extra-strong design is capable, thanks to parallel jaws, of safely and efficiently pulling components in any position and under full load. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### Benefits

- Three-jaw design ensures an even load distribution and thus a particularly secure grip on the part being pulled.
- The pulling hooks can be moved on the crossbar, adjusted in length, and used as external and internal pullers in various pulling situations by turning them around.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 YRH-202
<b>Y20-11-0</b>	-469718	500 19 11/16	280 - 600 11 1/32 - 23 5/8	200	20 22.05	YRH-202
<b>Y20-11-1</b>	-711626	500 19 11/16	280 - 600 11 1/32 - 23 5/8	200	20 22.05	YRH-202
<b>Y20-11-2</b>	-711633	500 19 11/16	290 - 740 11 7/16 - 29 1/8	200	20 22.05	YRH-202

KUKKO // *Pull forward*



SERIES DAVID | GOLIATH

# MOBILE HYDRAULIC PULLER





# APPLICATION: HYDRAULIC PULLER "DAVID"

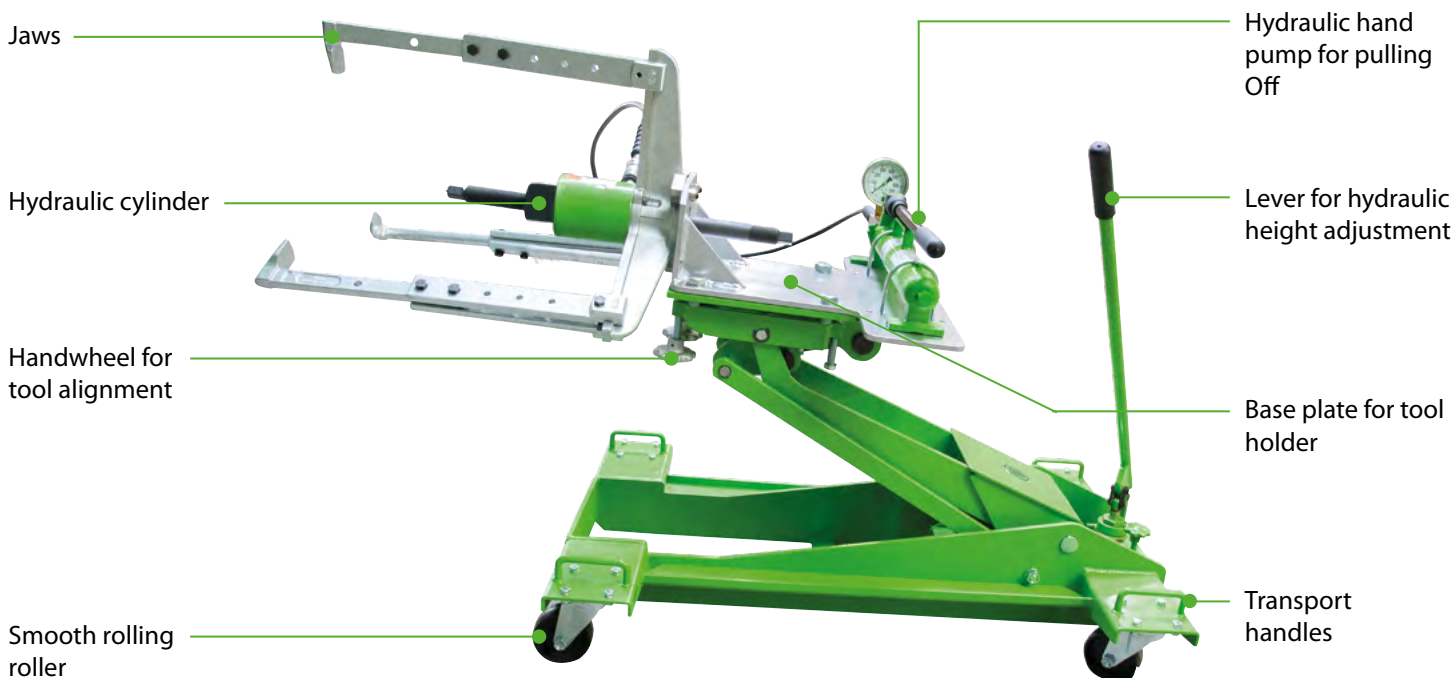
The hydraulic, mobile 3-jaw puller with adjustable reach "DAVID" is used for pulling large bearings, gears, and similar components in heavy industry, crafts, and workshops. With a maximum load of 20 t, the puller provides a strong hydraulic solution for otherwise challenging tasks when pulling large parts.



## Benefits

- Even under full load, the DAVID ensures parallel pulling.
- The lever actuation is swivelable 360° for ergonomic operation from outside the work area.
- The lowering of load with the sink actuator reduces the risk of accidents thanks to the easily accessible valve.
- Operable by means of the four swivel casters at various work locations
- The three-jaw design ensures even load distribution and thus provides a particularly secure grip on the part being pulled off.

## ASSEMBLY



## APPLICATION EXAMPLES



The mobile hydraulic puller "DAVID" in application



# USE: HYDRAULIC PULLER "GOLIATH"



The mobile hydraulic puller "GOLIATH" is used for pulling large bearings, gears, and similar components in the areas of heavy industry, railways, power plants, and other applications. With a pulling force of up to 50 t, the hydraulic puller is the ideal solution for truly large pulling operations. The puller can be used as both a 2-jaw and a 3-jaw puller.

## Benefits

- Hydraulics ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Y-shaped, mobile carrier frame with the 4 smooth rolling rollers (including locking option) allows for easy and comfortable attachment of the puller and guarantees a secure stand.
- The hydraulic puller can be used as both a 2-jaw and a 3-jaw.
- Hydraulic height adjustment ensures comfortable working
- Magnetic closure ensures a quick exchange of the spindle tip (series 140)

## ASSEMBLY



## APPLICATION EXAMPLES



The mobile hydraulic puller "GOLIATH" Goliath-556 when removing a stuck wheel bearing from a harbor crane.

## PRODUCT DETAILS

### SERIES GOLIATH MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH










The mobile hydraulic puller "GOLIATH" is used for pulling off large bearings, gears, and similar components in the heavy industry, railway, power plants, and other applications. With a pulling force of up to 50 tons, the hydraulic puller is the ideal solution for truly large pulling processes. The application of the pulling force on the pressure cylinder equipped with a central pressure spindle is performed by a two-stage electric-hydraulic pump, which is operated via remote control. The puller can be used as both a 2-jaw and a 3-jaw puller.

#### Benefits

- Hydraulics ensure easy and controlled removal of particularly large and seized parts with minimal effort.
- Hydraulic height adjustment guarantees comfortable working
- The Y-shaped, mobile supporting frame with the 4 smooth rolling rollers (including locking capability) allows for easy and comfortable attachment of the puller and guarantees a secure stance.
- The hydraulic puller can be used as both a 2-jaw and a 3-jaw tool.

#### Technical attributes

#							Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	bar	V	kN	t/US t. sh.	kg/lb
<b>Goliath-256</b>	-102714	0 - 500 0 - 19 11/16	300 11 13/16	400 - 1000 15 3/4-39 3/8	700	230 V	200	20 22.05	225 496,125
<b>Goliath-356</b>	-102752	0 - 900 0 - 35 7/16	520 20 1/2	400 - 1000 15 3/4-39 3/8	700	230 V	300	30 33.07	257 566,685
<b>Goliath-556</b>	-102783	0 - 1.200 0 - 47 1/4	700 27 9/16	400 - 1000 15 3/4-39 3/8	700	230 V	500	50 55.12	328 723,240

### SERIES GOLIATH-200 MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH











The mobile hydraulic separator "GOLIATH" is used for disassembling large bearings, gears, and similar components in heavy industry, railways, power plants, and other applications. With a pulling force of up to 50 tons, the "GOLIATH" is the solution for truly large pulling processes. The combination of hydraulic height adjustment and mechanical fine adjustment allows for easy and precise work. Only one person is required for the operation. The application of the pulling force on the pressure cylinder equipped with a central pressure spindle is performed by a two-stage electro-hydraulic pump, which is operated via a motor remote control.

#### Benefits

- Enables tremendous pulling forces of up to 50 t
- Hydraulic height adjustment and mechanical fine adjustment ensure precise work.
- The application of the pulling force is carried out by a two-stage electro-hydraulic pump.
- Simple and comfortable mounting of the puller through Y-shaped, movable support frame with the 4 smooth rolling rollers.

#### Technical attributes

#								Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	bar	V	kN	t/US t. sh.	kg/lb
<b>Goliath-200</b>	-102691	0 - 500 0 - 19 11/16	300 11 13/16	25 - 155 1 - 6 1/8	400 - 1000 15 3/4-39 3/8	700	230 V	200	20 22.05	263 579,915
<b>Goliath-300</b>	-102738	0 - 900 0 - 35 7/16	520 20 1/2	30 - 250 1 3/16 - 9 13/16	400 - 1000 15 3/4-39 3/8	700	230 V	300	30 33.07	335 738,675
<b>Goliath-500</b>	-102769	0 - 1.200 0 - 47 1/4	700 27 9/16	80 - 420 3 1/8 - 16 9/16	400 - 1000 15 3/4-39 3/8	700	230 V	500	50 55.12	489 1,078,245

## PRODUCT DETAILS



### SERIES GOLIATH-218 MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH










The mobile hydraulic separator "GOLIATH" is used for disassembling large bearings, gears, and similar components in heavy industry, railways, power plants, and other applications. With a pulling force of up to 50 tons, the "GOLIATH" is the solution for truly large pulling processes. The combination of hydraulic height adjustment and mechanical fine adjustment allows for easy and precise work. Only one person is required for the operation. The application of the pulling force on the pressure cylinder equipped with a central pressure spindle is performed by a two-stage electro-hydraulic pump, which is operated via a motor remote control.

#### Benefits

- Enables tremendous pulling forces of up to 50 t
- Hydraulic height adjustment and mechanical fine adjustment ensure precise work.
- The application of the pull-off force is achieved through a two-stage electric hydraulic pump.
- Simple and convenient attachment of the puller via Y-shaped, movable frame with 4 smooth rolling rollers.

#### Technical attributes




#	 EAN	 mm/inch	 mm/inch	 mm/inch	 bar	 V	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>Goliath-218</b>	-102707	300 11 13/16	25 - 155 1 - 6 1/8	400 - 1000 15 3/4-39 3/8	700	230 V	200	20 22.05	213 469,665
<b>Goliath-318</b>	-102745	520 20 1/2	30 - 250 1 3/16 - 9 13/16	400 - 1000 15 3/4-39 3/8	700	230 V	300	30 33.07	299 659,295
<b>Goliath-518</b>	-102776	520 20 1/2	80 - 420 3 1/8 - 16 9/16	400 - 1000 15 3/4-39 3/8	700	230 V	500	50 55.12	361 796,005

### SERIES Y-X00 MOUNTING FOR HYDRAULIC CYLINDER



The recordings of hydraulic cylinders from the series Y-X00 are used to secure tools in the hydraulic program of KUKKO in crafts, industry, and workshops. The adapters in various sizes secure heavy equipment to the respective hydraulic device and are suitable for the GOLIATH series, among others.

#### Technical attributes

#	 EAN	 nominal dimension	
<b>Y200-00</b>	-507724	3 7/8"-12 UN	Y28-180, Y28-205, Y28-206, Y28-200, Y28-218, Y28-256, Goliath-200, Goliath-218, Goliath-256, YRH-202, YRH-206
<b>Y300-00</b>	-507748	4 1/2"-12 UN	Y38-180, Y38-205, Y38-206, Y38-300, Y38-318, Y38-356, Goliath-300, Goliath-318, Goliath-356, YRH-302
<b>Y500-00</b>	-507755	6 1/4"-12 UN	Y58-180, Y58-205, Y58-206, Y58-500, Y58-518, Y58-556, Goliath-500, Goliath-518, Goliath-556, YRH-603



## PRODUCT DETAILS

### SERIES DAVID MOBILE 3-JAW HYDRAULIC PULLER "DAVID" WITH ADJUSTABLE REACH









The hydraulic, mobile 3-jaw puller with adjustable reach "DAVID" is used for pulling large bearings, gears, and similar components in heavy industry, trade, and workshops. With a maximum load capacity of 20 tons, the puller provides a strong, hydraulic solution for otherwise difficult tasks in pulling large parts. The jaws are adjustable in length and can be adapted to the required reach.

#### Benefits

- Even under full load, the DAVID ensures parallel pulling.
- The three-jaw design guarantees even load distribution and thereby a particularly secure hold on the part to be pulled off.
- The lever actuation is rotatable by 360° for ergonomic operation from the work area.
- The lowering device for controlled load lowering reduces the risk of accidents thanks to the easily accessible valve.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 bar	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
YHU-S-Y28-11-1	-060144	0 - 520 0 - 20 1/2	500 19 11/16	165 - 890 6 1/2-35 1/32	700	200	20 22.05	204 449,820



KUKKO



22-8



KUKKO





# INTERNAL EXTRACTION

During internal extraction, components that sit in a recess and therefore cannot be gripped from the outside are dismantled without destruction. A sliding hammer or a counter stay is always required to extract internal parts. With a sliding hammer, extraction can be done in a confined space without external support, whereas a counter stay allows for more precise work and greater force.



KUKKO // Pull forward



SERIES 21

# INTERNAL EXTRACTION



# DEPLOYMENT

Internal extractors are used for extracting internal bearings, bearing outer rings, and bushings in craft, workshop, and industry. The internal extractors of series 21 feature extra-large gripping edges, allowing for the secure extraction of internal parts. Depending on the application, there are various sizes of 2-jaw or 3-jaw internal extractors. The segmented design of series 21-E with extra fine gripping edges allows for the secure extraction of flush-mounted parts.



## Benefits

- The robust design as well as the built-in spindle stop guarantee strong and safe operation.
- Due to the extraordinary clamping force and the mechanical spindle, bearings that are closely seated on the back wall are safely and quickly extracted.
- Shaping ensures secure gripping when seating and swiveling for bearings or inner rings that form a blind hole.
- The segment pullers of series 21-E are ideal for precise and gentle work due to their segmentation and fine spindle.

## ASSORTMENT OVERVIEW

### Internal extractor



21-4



21-4-E

In the internal extractors, a distinction can be made between multi-layer models (series 21) with extra-large gripping edges and segmented models (series 21-E) with extra-fine gripping edges.

### Internal extractor suitcase sets



27-A



28-A

The internal extractors are also available in portable, fully equipped case sets. These compact-to-go solutions include everything needed for the non-destructive disassembly of internal components.

### Internal extractor special applications



223-2

Whether for removing cylinder sleeves, pulling off parts with centric threaded holes, or for the disassembly of clamping and notch pins - KUKKO provides the perfect solution for every pulling situation.

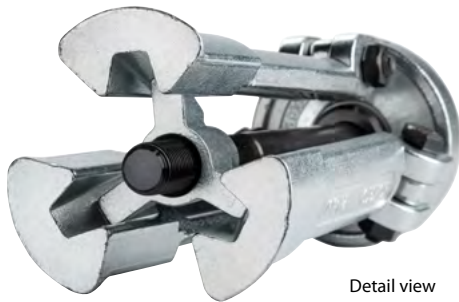
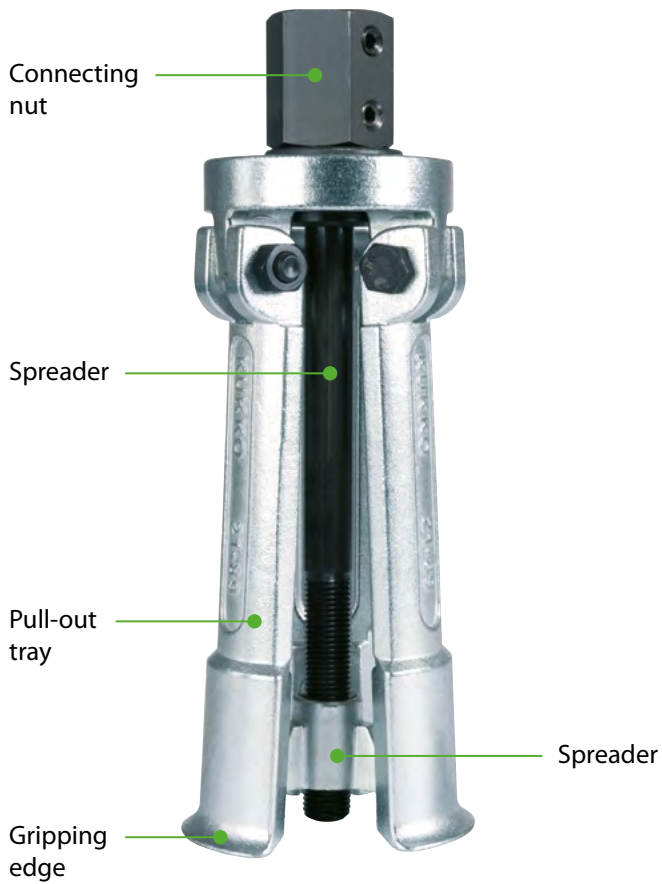


# FEATURES OF THE SERIES



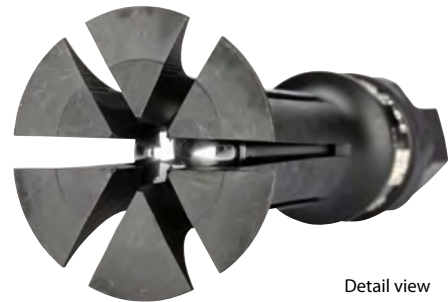
## SERIES 21

### 2- and 3-jaw internal extractors



## SERIES 21-E

### Segment internal extractor

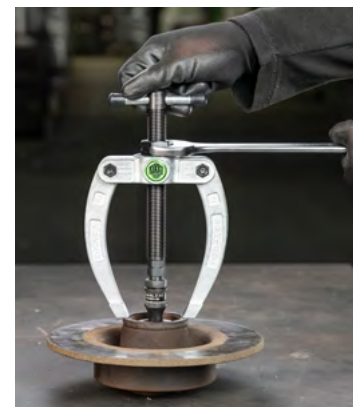


# ADVANTAGES OF COUNTER STAYS AND SLIDING HAMMER

When using an internal extractor, a sliding hammer (series 22-0) or a counter stay (series 22) is always required. The advantage of the sliding hammer is that it can be extracted in a very tight space without a counter stay, whereas with a counter stay, work is done more precisely and with more force.



Internal extractor with sliding hammer

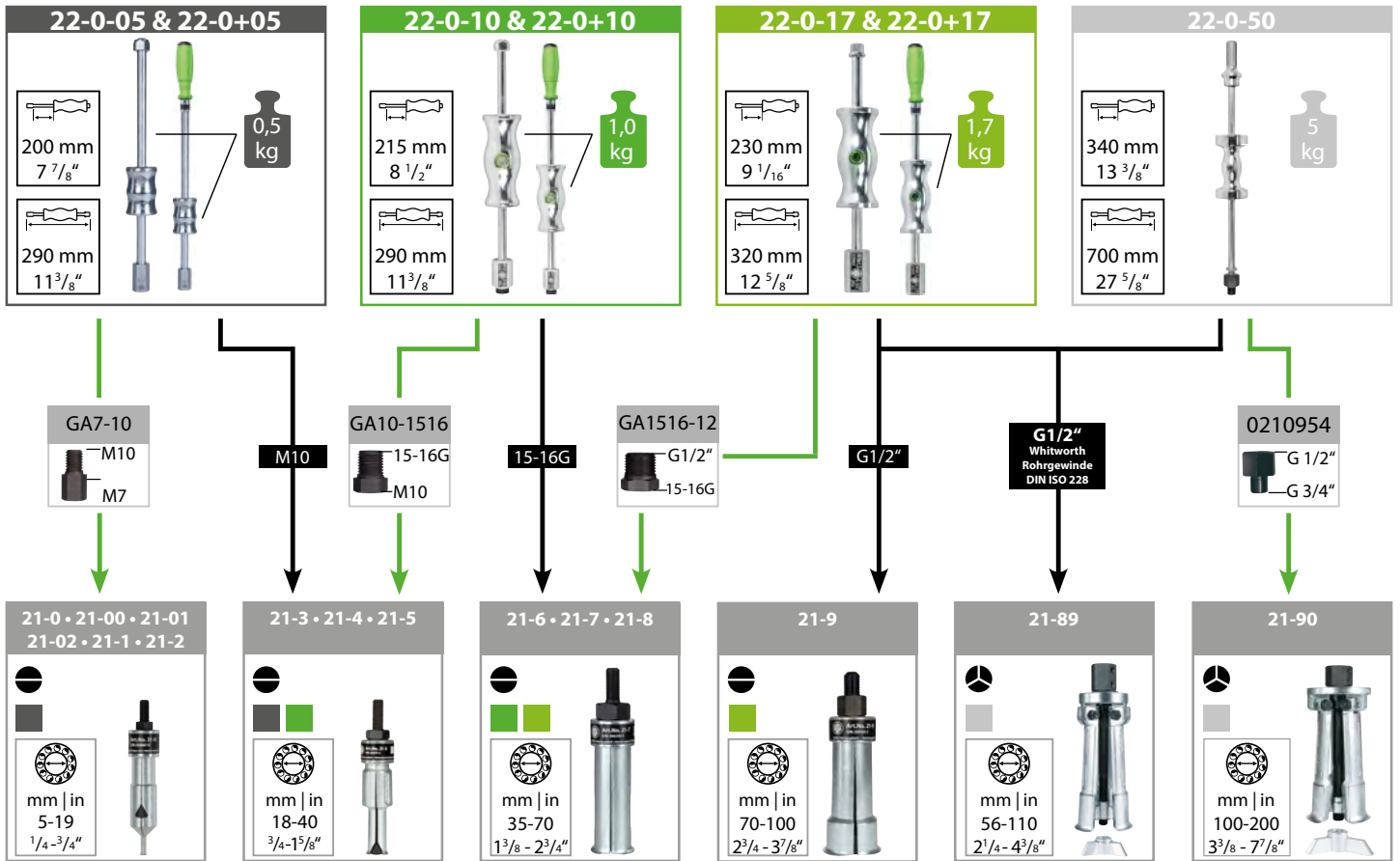


Internal extractor with counter stay

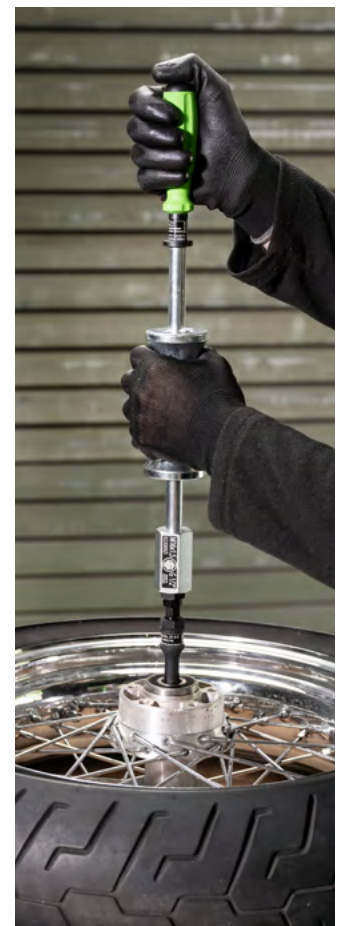
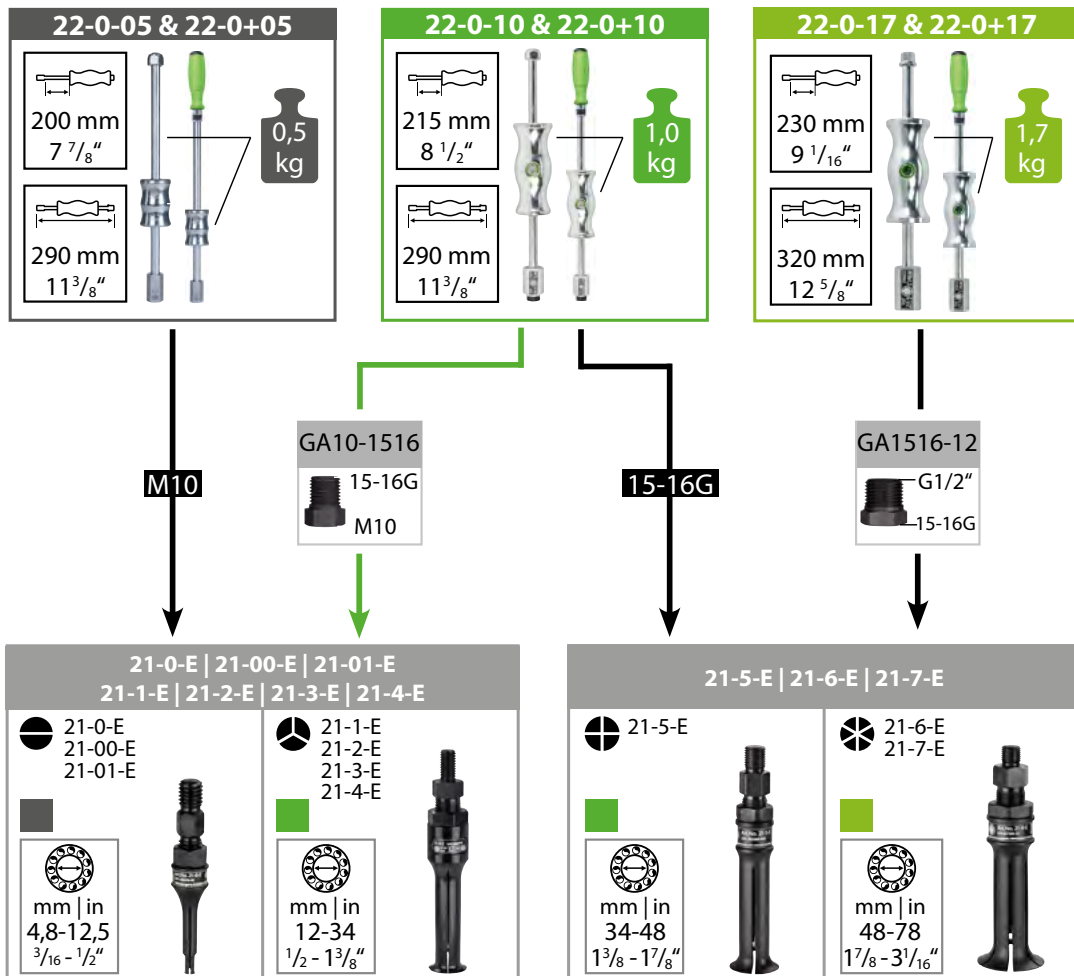


# COMBINATION OPTIONS

Sliding hammers of the series 22-0 in combination with the internal extractors of the series 21



Sliding hammers of series 22-0 in combination with internal extractors of series 21-E

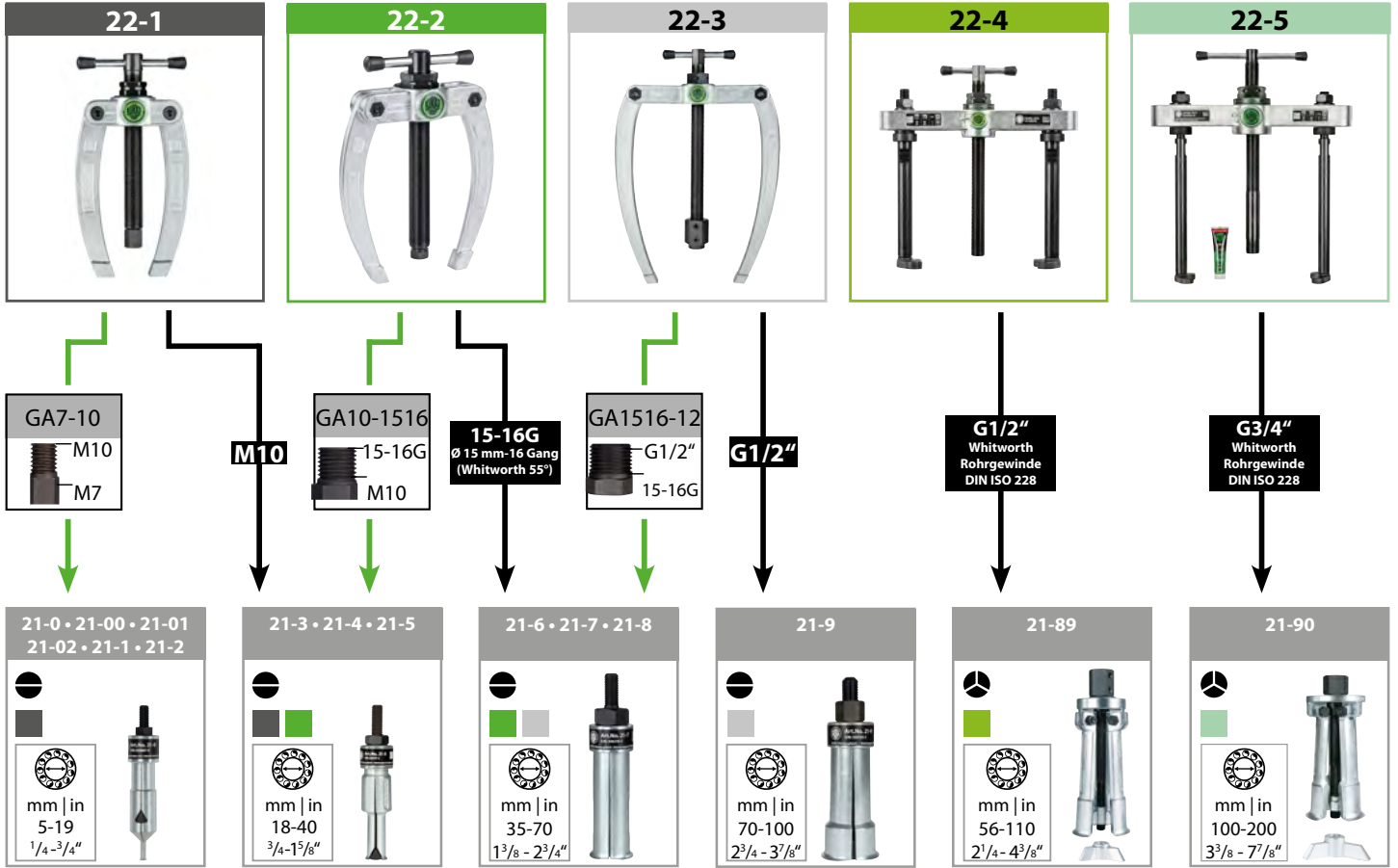


Internal extractor of series 21-E with counter stay

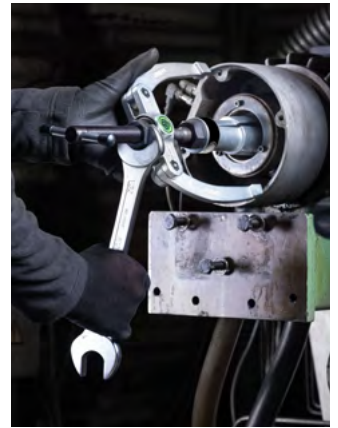
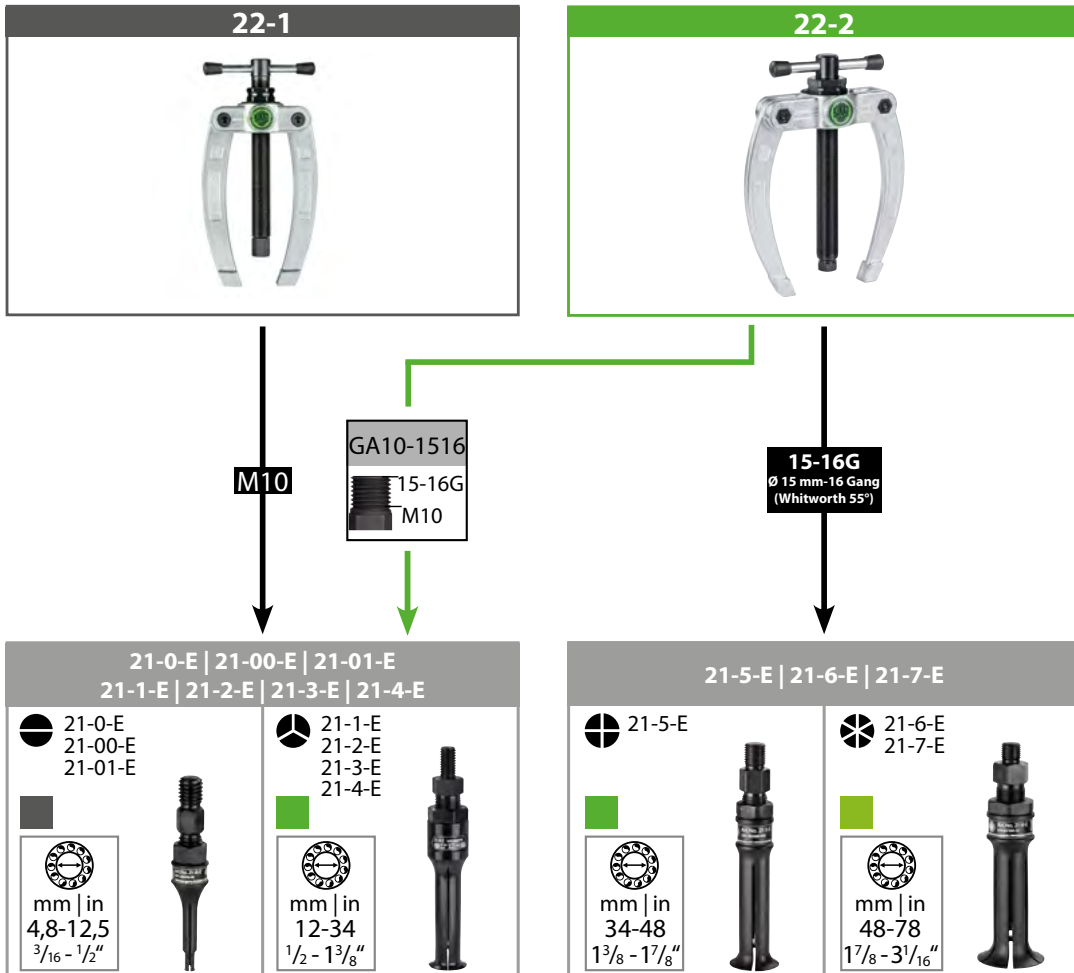
# COMBINATION OPTIONS



Counter stays of series 22 in combination with the internal extractors of series 21



Counter stays of series 22 in combination with the internal extractors of series 21-E



Internal Extractor Series 21 with Counter Stay



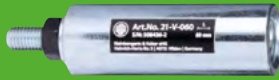
Internal extractor of series 21-E with counter stay

# OPTIONAL EXTENSIONS

Using an extension (series 21-V), the reach can be expanded on the internal extractors of the series 21. This also allows for the access to components seated deeper in the socket.



21-V-040



21-V-060



21-V-080

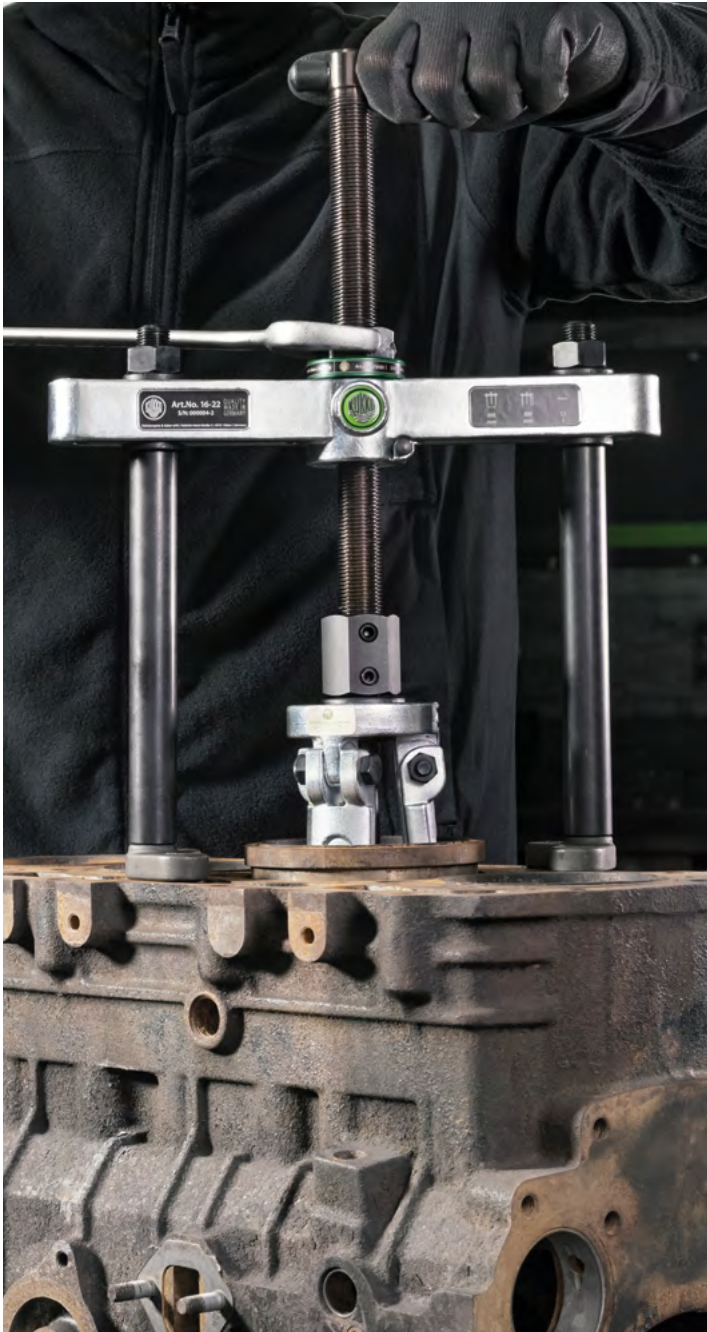


21-V-310



21-V-0

# APPLICATION EXAMPLES



Removing a cylinder sleeve with the 21-90 and the counter stay 22-5



Internal extraction of a ball bearing with the 21-4 and a sliding hammer





## SERIES 21 2-JAW INTERNAL EXTRACTOR










21-0	21-1	21-7	21-89
21-00	21-2	21-8	21-90
21-01	21-3	21-9	
21-02	21-4		
	21-5		
	21-6		

The internal extractors of the series 21 are used for pulling out internal bearings, bearing outer rings, and bushings in craftsmanship, workshops, and industry. The multi-shelled design of the internal extractors with their extra large gripping edges allows for the safe pulling out of internal components. The series 21 impresses with its compatibility and versatility of applications. Depending on the application, there are numerous variants of the optionally 2-jaw or 3-jaw internal extractors. They are used either together with counter stays or with sliding hammers.

### Benefits

- The robust construction and built-in spindle stop not only ensure strong but also safe work.
- Due to the extraordinary clamping force and the mechanical spindle, even bearings that are closely seated on the back wall are securely and quickly removed.
- The design of bearings or inner rings that form a blind hole ensures a secure grip during mounting and turning out.
- The thread adapters for internal extractors are included with the counter stays and sliding hammers.

### Technical attributes

#								Included in the set
	EAN	mm/inch	mm/inch	mm/inch	nominal dimension	mm/inch	kg/lb	
21-0	-010408	5 - 8 3/16 - 5/16	12 1/2	17 11/16	M7	13 1/2	0,115 0,254	-
21-00	-010576	6 - 10 1/4 - 3/8	12 1/2	17 11/16	M7	13 1/2	0,12 0,265	28-A, K-22-A-C
21-01	-010651	8 - 12 5/16 - 1/2	13 1/2	17 11/16	M7	13 1/2	0,115 0,254	28-A, K-22-A-M
21-02	-010736	10 - 14 3/8 - 9/16	15 9/16	17 11/16	M7	13 1/2	0,115 0,254	28-A, K-22-A-C
21-1	-010811	12 - 16 1/2 - 5/8	25 1	17 11/16	M7	13 1/2	0,11 0,243	25-C, 26-B, 28-A, 28-B, 28-C, 28-D, 24-A, 24-B, 24-C, 25-A, 25-B
21-2	-010996	14 - 19 9/16 - 3/4	27 1 1/16	30 1 3/16	M7	13 1/2	0,12 0,265	25-C, 26-B, 28-A, 28-B, 28-C, 28-D, 24-A, 24-B, 24-C, K-22-A-M, K-22-A-C, 25-A, 25-B
21-3	-011153	18 - 23 11/16 - 7/8	35 1 3/8	25 1	M10	17 11/16	0,225 0,496	25-C, 26-B, 28-B, 28-C, 28-D, 24-A, 24-B, 24-C, 25-A, 25-B
21-4	-011238	20 - 30 13/16 - 1 3/16	40 1 9/16	25 1	M10	17 11/16	0,235 0,518	25-C, 26-B, 28-B, 28-C, 28-D, 24-A, 24-B, 24-C, K-22-A-M, K-22-A-C, 25-A, 25-B
21-5	-011498	28 - 40 1 1/8 - 1 9/16	28 1 1/8	31 1 1/4	M10	17 11/16	0,395 0,871	25-C, 26-B, K-26-B, 28-B, 28-C, 28-D, 24-A, 24-B, 24-C, K-22-B, K-22-A-M, K-22-B-C, 25-A, 25-B
21-6	-011566	35 - 46 1 3/8 - 1 13/16	48 1 7/8	37 1 7/16	15-16 G	22 7/8	0,68 1,499	25-B, 25-C, K-26-B, 28-C, 28-D, 24-A, 24-B, 24-C, K-22-B, K-22-B-C, 25-A
21-7	-011641	45 - 58 1 3/4 - 2 5/16	100 3 15/16	45 1 3/4	15-16 G	32 1 1/4	1,23 2,712	25-B, 25-C, K-26-B, 28-D, 24-B, 24-C, K-22-B, K-22-B-C
21-8	-011726	56 - 70 2 3/16 - 2 3/4	100 3 15/16	45 1 3/4	15-16 G	32 1 1/4	1,43 3,153	25-B, K-26-B, 28-D, 24-B, K-22-B, K-22-B-C
21-89	-011801	56 - 110 2 3/16 - 4 5/16	120 4 3/4	70 2 3/4	G 1/2	32 1 1/4	2,4 5,292	25-C, 25-D, 24-C
21-9	-011986	70 - 100 2 3/4 - 3 15/16	130 5 1/8	58 2 5/16	15-16 G	32 1 1/4	2,9 6,395	-
21-90	-012068	100 - 200 3 15/16 - 7 7/8	175 6 7/8	110 4 5/16	G 1/2	32 1 1/4	6,58 14,509	-

## SERIES 21-E SEGMENT INTERNAL EXTRACTOR










The segment internal extractors of series 21-E are used for extracting flush-mounted bearings, bearing outer rings, sleeves, and seals in crafts, workshops, and industry. The segmented design with extra fine gripping edges allows for the safe extraction of flush-mounted parts. The 21 series impresses with its compatibility and application diversity. Depending on the application, there are numerous variants of the segment internal extractors. They are either used together with counter stays or with sliding hammers.

### Benefits

- Due to its segmentation and fine spindle design, the segment puller is ideal for precise and gentle work.
- The mechanical spindle extracts bearings that are tightly seated on the back wall safely and quickly.
- The shaping ensures a secure grip when seating and swiveling for bearings or inner rings that form a blind hole.
- The thread adapters for internal extractors are included in the delivery of the counter stays and sliding hammers.

### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 nominal dimension	 mm/inch	 kg/lb	Included in the set
<b>21-0-E</b>	-909153	4,8 - 6,5 3/16 - 1/4	30 1 3/16	15 9/16	M10	10 3/8	0,5 1,103	27-A, K-22-A-E, K-22-C-E
<b>21-00-E</b>	-909160	6,8 - 9,5 1/4 - 3/8	30 1 3/16	15 9/16	M10	10 3/8	0,5 1,103	27-A, K-22-A-E, K-22-C-E
<b>21-01-E</b>	-909177	9,5 - 12,5 3/8 - 1/2	30 1 3/16	15 9/16	M10	10 3/8	0,5 1,103	K-22-A-E, K-22-C-E
<b>21-1-E</b>	-930003	12 - 16 1/2 - 5/8	35 1 3/8	25 1	M10	14 9/16	0,17 0,375	27-A, K-22-A-E, K-22-B-E, K-22-C-E
<b>21-2-E</b>	-931000	14 - 19 9/16 - 3/4	38 1 1/2	25 1	M10	14 9/16	0,175 0,386	27-A, K-22-B-E, K-22-C-E
<b>21-3-E</b>	-931109	18 - 23 11/16 - 7/8	45 1 3/4	25 1	M10	14 9/16	0,21 0,463	27-A, K-22-B-E, K-22-C-E
<b>21-4-E</b>	-909191	24 - 34 15/16 - 1 5/16	55 2 3/16	25 1	M10	17 11/16	0,25 0,551	27-A, K-22-B-E, K-22-C-E
<b>21-44-E</b>	-039300	15 - 20 9/16 - 13/16	45 1 3/4	25 1	M10	14 9/16	0,2 0,441	-
<b>21-5-E</b>	-924071	34 - 48 1 5/16 - 1 7/8	73 2 7/8	26 1 1/32	15-16 Gang	19 3/4	0,215 0,474	27-A
<b>21-6-E</b>	-924088	48 - 63 1 7/8 - 2 1/2	80 3 1/8	35 1 3/8	15-16 Gang	24 15/16	0,71 1,566	-
<b>21-7-E</b>	-924095	63 - 78 2 1/2 - 3 1/16	82 3 1/4	35 1 3/8	15-16 Gang	24 15/16	0,86 1,896	-

KUKKO // Pull forward



SERIES 22-0

# SLIDING HAMMER





# DEPLOYMENT

The robust sliding hammers of the series 22-0 are the perfect choice for a contactless and material-saving disassembly. No support surface is needed for the pulling process. This allows work in the tightest spaces or under restricted environmental conditions. Thanks to the ergonomically shaped, solid sliding piece, the applied force can be optimally transferred, and a strong shock effect can be achieved. The sliding hammers differ in size and impact weight depending on the required force.
















## Benefits

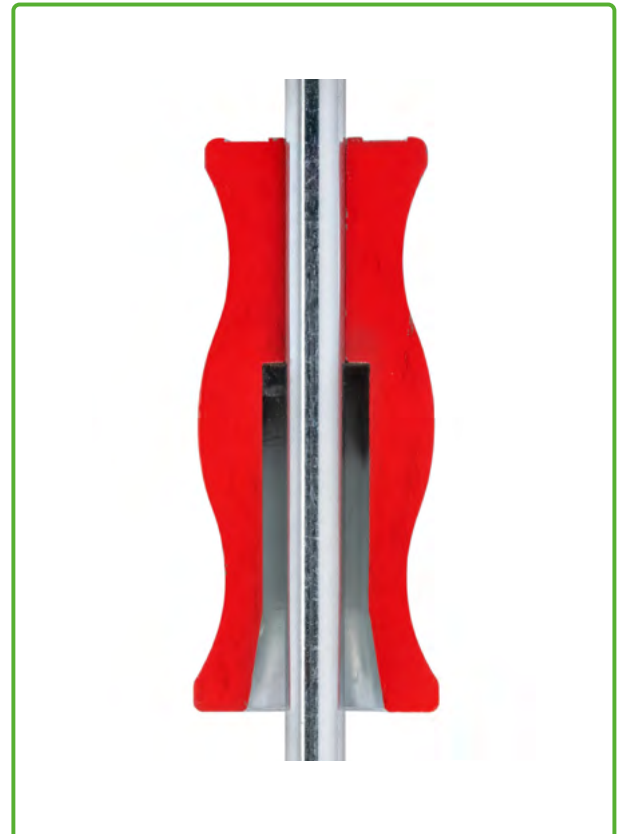
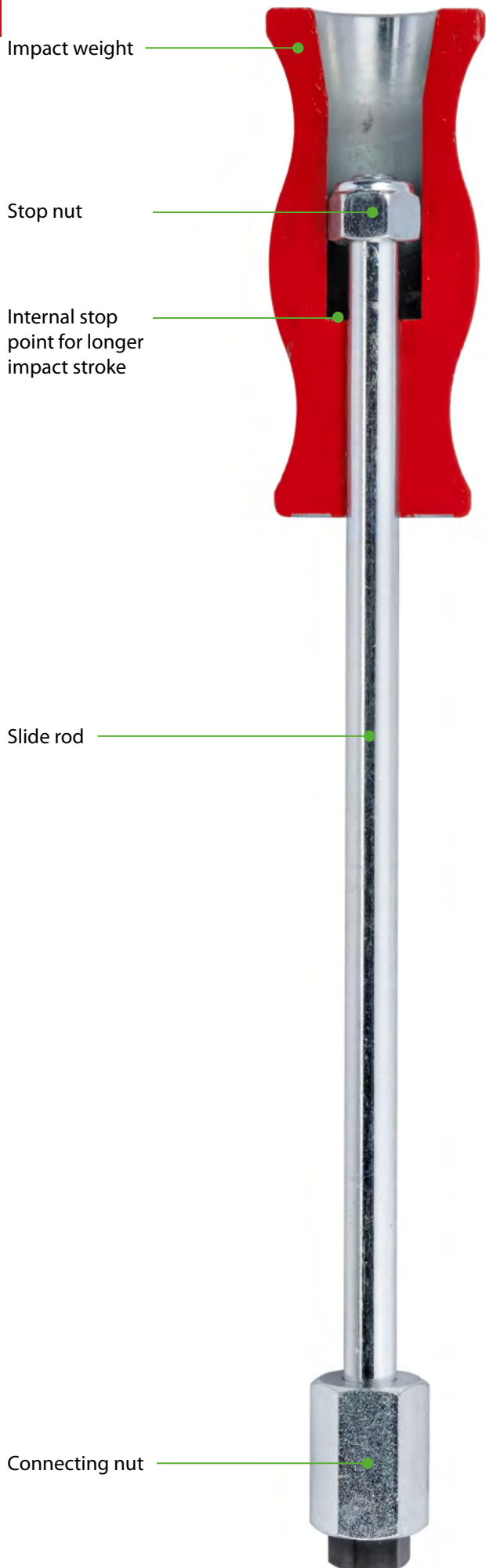
- High quality in processing and design for optimal handling
- Non-destructive and gentle removal of internal bearings, gears, dowel pins, etc.
- Reversible impact weight to extend the impact stroke for even more striking power
- Ergonomically shaped, solid sliding piece for ideal force transmission
- The internal stop point prevents crushing and ensures a safe working process.
- Especially suitable for deeper-seated components

## FEATURES OF THE SERIES

The item numbers of the sliding hammers consist of the series designation and the respective impact weight.

S	M	L	XL
 0,5 kg	 1,0 kg	 1,7 kg	 5,0 kg
Art.Nr. <b>22-0-05</b>	Art.Nr. <b>22-0-10</b>	Art.Nr. <b>22-0-17</b>	Art.Nr. <b>22-0-50</b>
			
Art.Nr. <b>22-0+05</b>	Art.Nr. <b>22-0+10</b>	Art.Nr. <b>22-0+17</b>	 The impact weight of the sliding hammer can be optionally increased by screwing in 3 kg weight extensions.  <b>22-0-2-100</b>
			

# STRUCTURE AND CROSS-SECTION OF A SLIDING HAMMER



In confined spaces, the impact weight can be reversed to shorten the impact stroke.



The internal stop point prevents pinching of the thumb during the trigger operation.

# ASSORTMENT OVERVIEW

## Sliding hammer individually



22-0-10

22-0+10

The sliding hammer can be purchased as a standalone product in four different sizes. It is ideally suited for universal use to extract internal components.

## Sliding hammer in tool case



KS-22-01



K-22-B

The sliding hammer is also available in portable, fully equipped suitcase sets. These compact to-go solutions include internal extractors and thread adapters in various sizes and – depending on the version – a counter stay for even more precise and powerful extraction.

## Sliding hammer special applications



223-2

When changing a hub, removing a seal ring, or pulling out dowel pins - the sliding hammer is the powerful drive for various pulling processes.

## Optional Extensions

### TIP:

For an even better handling, use the 3-component grip G-22, which is compatible with all KUKKO sliding hammers. This way, you always have everything firmly in hand – before, during, and after the pulling process.





# COMBINATIONS



## Sliding hammer

- 22-0-05
- 22-0-10
- 22-0-17
- 22-0-50

## Series 22-0



+

## Connecting Nut

Connecting nuts are the coupling between the sliding hammer and adapters and can be screwed onto any compatible external thread.

## Series VM



+

## Thread adapter

for adjusting the thread diameter

## Series GE



## Series GA



### TIP FOR THREAD ADJUSTMENT:

Thanks to the movable threaded pin, the adapters GA3 to GA12-10 can be used as both internal and external threads by unscrewing.

+

## Internal Extractor

for extracting internally located components

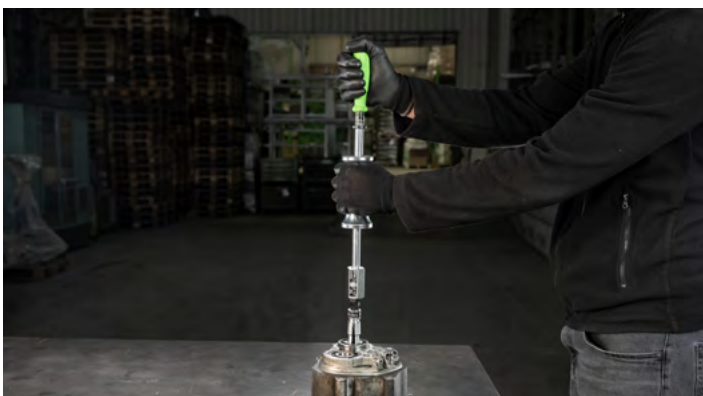
## Series 21



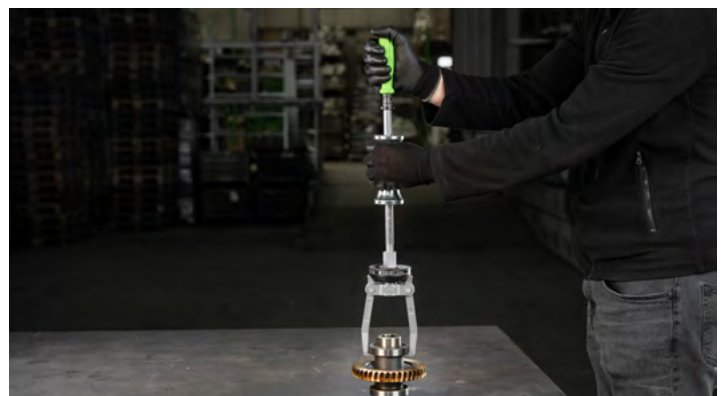
## Series 21-E



# APPLICATION EXAMPLES



Removing a ball bearing with a sliding hammer and an internal extractor from series 21



Removing a ball bearing with a sliding hammer and the puller 220-2

## PRODUCT DETAILS

### SERIES 22-0 SLIDING HAMMER DEVICE










The sliding hammer devices of series 22-0 are used together with internal extractors of series 21 in crafts, industry, and workshops. The use of a sliding hammer is particularly recommended when there is no support surface available or this is too sensitive. The ergonomically shaped, solid sliding piece allows the applied force to be optimally transmitted and a strong shock effect to be achieved. This also ensures contactless and gentle extraction. Various sizes and accessories make sliding hammers with impact weights from 500 g to 8 kg available for every application case.

#### Benefits

- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.
- If there is not enough space, the impact weight can be turned over.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg	 nominal dimension	 nominal dimension	 kg/lb	Included in the set
22-0-05	-283697	325 12 13/16	200 7 7/8	0.5	M7	M10	0,85 1,874	K-22-A-E, K-22-B-E
22-0-10	-385070	300 11 13/16	250 9 13/16	1	-	-	1,44 3,175	-
22-0-17	-385087	370 14 9/16	250 9 13/16	1.7	15-16 G	G 1/2	2,71 5,976	26-B, K-26-B, 28-A, 28-B, K-22-C-E, KS-22-01, KS-22-01-UNC, KS-22-02, 223-G, 223-K
22-0-50	-385094	700 27 9/16	340 13 3/8	5	G 3/4	G 1/2	8,83 19,470	-

### SERIES 22-0+ SLIDING HAMMER DEVICE












The sliding hammer devices of series 22-0+ are used together with internal extractors of series 21 in crafts, industry, and workshops. The use of a sliding hammer is particularly recommended when there is no support surface available or this surface is too sensitive. The massive sliding piece allows for optimal force transfer and achieves a strong shock effect. This also ensures contactless and gentle extraction. The ergonomically shaped 2-component handle (PB Swiss) guarantees maximum power transmission even with wet and oily hands.

#### Benefits

- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 nominal dimension	 nominal dimension	 kg	 mm/inch	 mm/inch	 kg/lb
22-0+05	-060847	325 12 13/16	40 1 9/16	M10	M7	0.5	200 7 7/8	19 3/4	0,85 1,874
22-0+10	-060854	300 11 13/16	50 1 15/16	-	-	0.9	250 9 13/16		1,44 3,175
22-0+17	-060861	370 14 9/16	60 2 3/8	G 1/2	15-16 G	1.7	250 9 13/16	32 1 1/4	2,71 5,976

## PRODUCT DETAILS

### 26-B 10-PIECE INTERNAL EXTRACTOR SET











The 10-piece internal puller set for impact operation 26-B is used for pulling internal bearings, bearing outer rings, and bushings in crafts, workshops, and industry. The two-shell design of the internal pullers with its extra large gripping edges allows for the safe extraction of internal parts. The included sliding hammer is used in conjunction with the internal pullers.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with the sliding hammer, are capable of finding a suitable response in various pulling situations.
- The sliding hammer allows for optimal and safe extraction in varying applications depending on the existing conditions.

#### Technical attributes

#								Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	t/US t. sh.	kg/lb	
26-B	-781704	12 - 38 1/2-1 1/2	370 14 9/16	250 9 13/16	1.7	M7, M10, 15-16G	G1/2	{8328}	4,74 10,452	22-0-17, GA10-1516, GA7-10, 21-1, 21-2, 21-3, 21-4, 21-5, VM1615-12, GA1516-12

### K-26-A 6-PIECE BALL BEARING PULLER SET WITH SLIDING HAMMER











The 6-piece ball bearing puller set K-26-A is used for extracting internal bearings, bearing outer rings, and bushings in crafts, workshops, and industry. The 2-jaw design of the internal extractors with their extra large gripping edges allows for the safe extraction of internal parts. The included sliding hammer is used together with the internal extractors.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with the sliding hammer, are capable of finding a suitable response in various pulling situations.
- The sliding hammer allows for optimal and safe extraction in varying applications depending on the existing conditions.

#### Technical attributes

#										Components
	EAN	mm/inch	mm/inch	mm/inch	kg	nominal dimension	nominal dimension		kg/lb	
K-26-A	-854378	5 - 28 3/16-1 1/8	325 12 13/16	200 7 7/8	0.5	M7	M10		2,83 6,240	22-0-05, G-22, 21-00, 21-02, 21-2, 21-4



## PRODUCT DETAILS

### K-26-B 7-PIECE BALL BEARING PULLER SET WITH SLIDING HAMMER









The 7-piece ball bearing puller set K-26-B is used for extracting internal bearings, bearing outer rings, and bushes in crafts, workshops, and industry. The 2-shell design of the internal extractors with their extra large gripping edges allows for the safe extraction of internal parts. The included sliding hammer is used together with the internal extractors.



#### Benefits

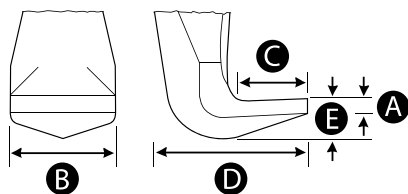
- The internal extractors, along with the sliding hammer, are capable of finding a suitable response in various pulling situations.
- The sliding hammer allows for optimal and safe extraction in varying applications depending on the existing conditions.

#### Technical attributes

#									Components
	EAN	mm/inch	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
K-26-B	-854392	28 - 70 1 1/8-2 3/4	300 11 13/16	250 9 13/16	1	M10	15-16G	8,435 18,599	22-0-10, 21-5, 21-6, 21-7, 21-8, G-22, VM12-1516, GA10-1516

### SERIES 224-0 OIL HOOK

The oil hooks of the series 224-0 are used in conjunction with a sliding hammer for the removal of oil seals, shaft seals, and other seals in the automotive sector and mechanical engineering. The combination of oil hooks and sliding hammer allows for a felt or powerful striking or loosening of difficult-to-remove parts in vehicles and machines.













#### Benefits

- Enables the disassembly of seal rings when other pullers are not applicable.
- Available in different sizes depending on the seal diameter.



#### Technical attributes

#										
	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb	
224-0-05 NEW	-009976	70 2 3/4	M12	12 1/2	3 1/8	8 5/16	4 3/16	1 1/32	0 0,000	22-0-05, 22-0-10
224-0-10 NEW	-009983	100 3 15/16	M16x1,5	46 1 13/16	14 9/16	24 15/16	14 9/16	4 3/16	0,3 0,662	22-0-17

KUKKO // Pull forward



SERIES 22

# COUNTER STAY





# DEPLOYMENT

Series 22 counter stays are used together with series 21 internal extractors in trade, industry and workshops. Thanks to the ribbed shape of the support feet, counter stay are particularly suitable for large cylinder liners and ball bearings etc. and ensure a firm stand when extracting. This improves the gentle extraction of internal parts. In contrast to a slide hammer, a counter stay can be used to work more precisely and with more force.



## Benefits

- Determine the inner diameter of the ball bearing and select a suitable internal extractor
- Insert the internal extractor into the bore and tighten the clamping nut
- Support the counter stay on the housing and screw it onto the wedge spindle of the internal extractor
- Hold the handle of the counter stay and pull out the bearing safely by tightening the hexagon nut
- Retighten the clamping nut when pulling out

# ASSEMBLY OF A COUNTER STAY





## PRODUCT DETAILS



### SERIES 22 COUNTER STAY



22-1  
22-2  
22-3













22-4  
22-5

The counter stays of the series 22 are used together with the internal extractors of the series 21 in crafts, industry, and workshops. Counter stays are particularly well suited for large cylinder bushings and ball bearings, etc., thanks to the ribbed shape of the support feet, and ensure a firm stand during extraction. In this way, the gentle extraction of internal components is improved. Unlike a sliding hammer, a Counter stay allows for more precise work with greater force.

#### Benefits

- Sizes from 21-2 are particularly low-friction due to integrated pressure bearings in the form.
- The friction resistance of the counter nut is minimized by an integrated pressure bearing.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 nominal dimension	 nominal dimension	 Max. tensile force	 Max. tractive force	 kg/lb	 Included in the set
							kN	t/US t. sh.		
22-1	-012228	15 - 60 9/16 - 2 3/8	115 4 1/2	22 7/8	M7, M10	M15x1,5	30	3 3.31	0,69 1,521	25-B, 25-C, 28-C, 28-D, 24-A, 24-B, 24-C, K-22-A-M, K-22-A-C, K-22-A-E, K-22-B-E, K-22-C-E, K-22-A-E-C, K-22-B-E-C, 25-A
22-2	-012303	25 - 100 1 - 3 15/16	165 6 1/2	32 1 1/4	15-16 G, M10	G 1/2	40	4 4.41	1,873 4,130	25-B, 25-C, 28-C, 28-D, 24-A, 24-B, 24-C, K-22-B, K-22-B-C, 25-A
22-3	-012488	0 - 180 0 - 7 1/16	280 11 1/32	32 1 1/4	G 1/2, 15-16 G	G 1/2	50	5 5.51	4 8,820	-
22-4	-112478	70 - 240 2 3/4 - 9 7/16	200 7 7/8	32 1 1/4	-	G 1/2	70	7 7.72	4,1 9,041	25-D, 24-C
22-5	-012556	100 - 310 3 15/16 - 12 3/16	260 10 1/4	46 1 13/16	-	G 3/4	90	9 9.92	7,76 17,111	-

## PRODUCT DETAILS

### 25-K 4-PIECE BALL BEARING PULLER SET WITH COUNTER STAY







The 25-K-piece ball bearing puller set 4 is used for extracting inner bearings, outer rings, and bushings in crafts, industry, and workshops. The set includes internal extractors and counter stays. The multi-layer construction of the internal extractors with their extra large gripping edges allows for the safe removal of internal parts, and together with the counter stays, internal parts can be safely removed.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the counter stays, are able to find a suitable answer in various extraction situations.
- The sets are designed for various application fields and widths, all owing a wide range of options for internal extraction.

#### Technical attributes

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
25-K	-863899	5 - 19 3/16-3/4	0 - 60 0 - 2 3/8	30	3 3.31	2,165 4,774	22-1, 21-00, 21-02, 21-2

### 25-A 8-PIECE BALL BEARING PULLER SET WITH COUNTER STAY







The 8-piece ball bearing puller set 25-A is used for pulling internal bearings, bearing outer rings, and bushings in crafts, industry, and workshops. The set includes internal pullers and counter stays. The multi-layered design of the internal pullers with their extra-large gripping edges allows for the safe extraction of internal parts, and together with the counter stays, internal parts can be safely removed.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the counter stays, are able to find a suitable answer in various extraction situations.
- The sets are designed for various application fields and widths, all owing a wide range of options for internal extraction.

#### Technical attributes

#				max. Zugkraft	max. Zugkraft		Bestandteile
		mm	mm	kN	t	kg	
25-A	4021176013058	12 - 48	0 - 100	40	4	6,5	22-1, 22-2, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6

## PRODUCT DETAILS



### 25-B 10-PIECE BALL BEARING PULLER SET WITH COUNTER STAY







The 10-piece ball bearing puller set 25-B is used for pulling internal bearings, bearing outer rings, and bushings in craft, industry, and workshop. The set includes internal extractors and counter stays. The multi-layered design of the internal extractors with their extra-large gripping edges allows for the safe removal of internal parts, and together with the counter stays, internal parts can be safely removed.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the counter stays, are able to find a suitable answer in various extraction situations.
- The sets are designed for various application fields and widths, allowing a wide range of options for internal extraction.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
25-B	-013133	12 - 70 1/2-2 3/4	0 - 100 0 - 3 15/16	40	4 4.41	9,94 21,918	22-1, 22-2, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7, 21-8

### 25-C 12-PIECE BALL BEARING PULLER SET WITH COUNTER STAY







The 12-piece ball bearing puller set 25-C is used for removing internal bearings, bearing outer rings, and bushings in crafts, industry, and workshops. The set includes internal extractors and counter stays. The multi-layered design of the internal extractors with their extra-large gripping edges allows for the safe removal of internal parts, and together with the counter stays, internal components can be safely removed.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the counter stays, are able to find a suitable answer in various extraction situations.
- The sets are designed for various application fields and widths, allowing a wide range of options for internal extraction.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
25-C	-013218	12 - 110 1/2-4 5/16	0 - 240 0 - 9 7/16	70	7 7.72	17,5 38,588	22-1, 22-2, 22-4, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7, 21-89



## PRODUCT DETAILS

### 25-D 3-PIECE BALL BEARING PULLER SET WITH COUNTER STAY







The 3-piece ball bearing puller set 25-D is used for extracting internal bearings, outer bearing rings, and bushings in craft, industrial, and workshop applications. The set includes internal extractors and counter stays. The multi-layer design of the internal extractors with their extra-large gripping edges allows for the safe extraction of internal parts, and together with the counter stays, internal parts can be securely removed.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the counter stays, are able to find a suitable answer in various extraction situations.
- The sets are designed for various application fields and widths, allowing a wide range of options for internal extraction.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
25-D	-158803	60 - 110 2 3/8-4 5/16	70 - 240 2 3/4 - 9 7/16	70	7 7.72	9,275 20,451	22-4, 21-89

KUKKO // Pull forward



# COMBINED SETS



## PRODUCT DETAILS

### K-22-A 8-PIECE BALL BEARING EXTRACTOR SET WITH COUNTER STAY AND SLIDING HAMMER












The 8-piece ball bearing puller set with counter stay and sliding hammer K-22-A is used for pulling internal bearings, bearing outer rings, and bushings in crafts, workshops, and industry. The multi-section design of the internal extractors with their extra large gripping edges allows for the safe extraction of internal parts. The included counter stay or the sliding hammer is used together with the internal extractors, depending on whether there is sufficient support surface available. Depending on the size of the ball bearing and the extraction situation, the set is available in various designs.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with counter stays and the sliding hammer, are capable of finding an appropriate response in versatile extraction situations.
- Counter stays and sliding hammers enable optimal and safe extraction depending on the existing conditions with varying applications.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg	nominal dimension	nominal dimension	kN	t/ US t. sh.	kg/lb	
K-22-A	-039263	5 - 28 3/16-1 1/8	15 - 60 9/16 - 2 3/8	325 12 13/16	200 7 7/8	0.5	M7	M10	30	3 3.31	4,1 9,041	21-00, 21-02, 21-2, 21-4, 22-0-05, G-22, 22-1

### K-22-B 8-PIECE BALL BEARING PULLER SET WITH COUNTER STAY AND SLIDING HAMMER












The 8-piece ball bearing puller set with counter stay and sliding hammer K-22-B is used for pulling internal bearings, outer bearing rings, and bushings in crafts, workshops, and industry. The multi-shell design of the internal extractors with their extra-large gripping edges allows for the safe extraction of internal parts. The included counter stay or the sliding hammer is used together with the internal extractors, depending on whether a sufficient support area is available. Depending on the size of the ball bearing and the extraction situation, the set is available in various designs.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with counter stays and the sliding hammer, are capable of finding an appropriate response in versatile extraction situations.
- Counter stays and sliding hammers enable optimal and safe extraction depending on the existing conditions with varying applications.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg	nominal dimension	nominal dimension	kN	t/ US t. sh.	kg/lb	
K-22-B	-854385	28 - 70 1 1/8- 2 3/4	25 - 100 1 - 3 15/16	300 11 13/16	250 9 13/16	1	M10	15-16G	40	4 4.41	1,14 2,514	21-5, 21-6, 21-7, 21-8, 22-0-10, 22-2, G-22



## PRODUCT DETAILS

### K-22-A-M 10-PIECE BALL BEARING PULLER SET WITH COUNTER STAY AND SLIDING HAMMER












The 10-piece ball bearing puller set with counter stay and sliding hammer K-22-A-M is used for pulling out internal bearings, outer bearing rings, and bushings in trades, workshops, and industry. With a span of 8 to 40 mm, the five different internal extractors are specifically designed for the disassembly of common bearings, outer bearing rings, and bushings in the automotive sector, making them universally applicable. The multi-layer design of the internal extractors with their extra-large gripping edges allows for secure extraction of internal parts. The included counter stay or sliding hammer is used together with the internal extractors, depending on whether there is a sufficient support surface available.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with counter stays and the sliding hammer, are capable of finding a suitable solution in various extraction situations.
- Counter stays and sliding hammers enable an optimal and safe removal, depending on the existing conditions in varying applications.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg	nominal dimension	nominal dimension	kN	t/ US t. sh.	kg/lb	
K-22-A-M	-910180	8 - 40 5/16 - 1 9/16	15 - 60 9/16 - 2 3/8	300 11 13/16	250 9 13/16	1	M7	M10	30	3 3.31	4,1 9,041	22-0-10, 22-1, 21-01, 21-1, 21-2, 21-4, 21-5, VM12-10, VM12-7

### K-22-A-E 6-PIECE BALL BEARING EXTRACTOR SET WITH COUNTER STAY AND SLIDING HAMMER












The 6-piece ball bearing puller set with counter stay and sliding hammer K-22-A-E is used for extracting flat-mounted bearings, bearing outer rings, and bushings in craftsmanship, workshops, and industry. The segmented design with extra fine gripping edges allows for the secure extraction of flat-mounted parts. The included counter stay or sliding hammer is used in conjunction with the internal extractors depending on whether a sufficient support surface is available.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- Internal extractors, together with counter stays and sliding hammers, are capable of finding a suitable solution in a wide range of extracting situations.
- Counter stays and sliding hammers allow for optimal and safe removal depending on the existing conditions in changing applications.

#### Technical attributes

#									Max. tensile force	Max. Tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg	nominal dimension	nominal dimension	kN	t/ US t. sh.	kg/lb	
K-22-A-E	-140471	5 - 15 3/16 - 9/16	15 - 60 9/16 - 2 3/8	325 12 13/16	200 7 7/8	0.5	M10	M12	30	3 {8328}	2,8 6,174	22-0-05, 22-1, 21-0-E, 21-00-E, 21-01-E, 21-1-E

## PRODUCT DETAILS

### K-22-B-E 6-PIECE BALL BEARING EXTRACTOR SET WITH COUNTER STAY AND SLIDING HAMMER












The 6-piece ball bearing puller set with counter stay and sliding hammer K-22-B-E is used to pull out flush-mounted bearings, bearing outer rings, and bushings in craft, workshop, and industry. The segmented design with extra fine gripping edges allows for the safe extraction of flush-mounted parts. The included counter stay or the sliding hammer is used together with the internal extractors, depending on whether a sufficient support surface is available.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- Internal extractors, together with counter stays and sliding hammers, are capable of finding a suitable solution in a wide range of extracting situations.
- Counter stays and sliding hammers allow for optimal and safe removal depending on the existing conditions in changing applications.

#### Technical attributes

#									Max. tensile force	Max. Tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg	nominal dimension	nominal dimension	kN	t/ US t. sh.	kg/lb	
K-22-B-E	-039270	12 - 34 1/2 - 1 5/16	15 - 60 9/16 - 2 3/8	325 12 13/16	200 7 7/8	0.5	M10	M12	30	3	3,255 7,177	22-0-05, 22-1, 21-1-E, 21-2-E, 21-3-E, 21-4-E

### K-22-C-E 9-PIECE BALL BEARING EXTRACTOR SET WITH COUNTER STAY AND SLIDING HAMMER












The 9-piece ball bearing puller set with counter stay and sliding hammer K-22-C-E is used for extracting flush-mounted bearings, outer rings, and bushings in crafts, workshops, and industry. The segmented design with ultra-fine gripping edges allows for the safe extraction of flush-mounted parts. The included counter stay or sliding hammer is used together with the internal extractors, depending on whether sufficient support surface is available.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- Internal extractors, together with counter stays and sliding hammers, are capable of finding a suitable solution in a wide range of extracting situations.
- Counter stays and sliding hammers allow for optimal and safe removal depending on the existing conditions in changing applications.

#### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg	nominal dimension	nominal dimension	kN	t/ US t. sh.	kg/lb	
K-22-C-E	-140402	5 - 34 3/16 - 1 5/16	15 - 60 9/16 - 2 3/8	325 12 13/16	200 7 7/8	0.5	M10	M12	30	3	3,45 7,607	22-0-05, 22-1, 21-0-E, 21-00-E, 21-01-E, 21-1-E, 21-2-E, 21-3-E, 21-4-E

## PRODUCT DETAILS



### 28-A 19-PIECE SLIDING HAMMER SET











The 28-A 19-piece sliding hammer set is used for the contactless extraction of internal bearings, bearing outer rings, and bushings, as well as components with threads (dowel pins, key strips, bolts, etc.) in craft, workshop, and industry. The multi-shell design of the internal extractors, with their extra-large gripping edges, allows for the safe extraction of internal parts. The included sliding hammer is used together with the internal extractors. Additionally, there are thread inserts for extracting parts with concentric threaded holes in the set, which are used together with the sliding hammer.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the sliding hammer and threaded inserts, are capable of finding an appropriate solution in a variety of extraction situations.
- The sliding hammer allows for optimal and safe extraction due to its design.

#### Technical attributes

#									Components
	EAN	mm/inch	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
28-A	-507779	5 - 19 3/16-3/4	300 11 13/16	250 9 13/16	1	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18	M7, M10, 15-16G	3,395 7,486	21-00, 21-01, 21-02, 21-1, 21-2, 22-0-10, GE4-10, GE5-10, GE6-10, GE8-10, GE10-10, GE12-10, VM12-1516, VM12-10, GE3-10, GE14-10, GE16-10, GE18-10, VM12-7

### 28-B 19-PIECE SLIDING HAMMER SET












The 28-piece sliding hammer set 19 is used for contactless extraction of internal bearings, outer bearing rings, and bushings, as well as components with threads (dowel pins, key stock, bolts, etc.) in crafts, workshops, and industry. The multi-shell design of the internal extractors with their extra-large gripping edges allows for the secure removal of internal parts. The included sliding hammer is used together with the internal extractors. Additionally, the set includes thread adapters for extracting parts with concentric threaded holes, which are used in conjunction with the sliding hammer.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the sliding hammer and threaded inserts, are capable of finding an appropriate solution in a variety of extraction situations.
- The sliding hammer allows for optimal and safe extraction due to its design.

#### Technical attributes

#										Components
	EAN	mm/inch	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	nominal dimension	kg/lb	
28-B	-507786	12 - 38 1/2-1 1/2	370 14 9/16	250 9 13/16	1.7	M8, M10, M12, M14, M16, M18, M20, M22, M24	15-16G, M7, M18x1,5, M10	G1/2	6,145 13,550	22-0-17, 21-1, 21-2, 21-3, 21-4, 21-5, GE14-1815, GE16-1815, GE18-1815, GE20-1815, GE22-1815, GE24-1815, GA7-10, GA12-1815, GE8-1815, GE10-1815, GE12-1815



## PRODUCT DETAILS

### 28-C 22-PIECE SLIDING HAMMER AND COUNTER STAY SET












The 28-C 22-piece sliding hammer set is used for non-contact extraction of internal bearings, bearing outer rings, and bushings as well as components with threads (dowel pins, key steel, bolts, etc.) in crafts, workshops, and industry. The multi-shell design of the internal extractors with their extra-large gripping edges allows for secure extraction of internal parts. The included counter stay or sliding hammer will be used together with the internal extractors, depending on whether a sufficient support surface is available. Additionally, the set includes thread inserts for extracting parts with concentric threaded holes, which are used in conjunction with the sliding hammer.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with counter stays, sliding hammers, and thread inserts, are capable of finding a suitable solution in a variety of puller situations.
- Counter stays and sliding hammers allow for optimal and safe removal depending on the existing conditions in changing applications.

#### Technical attributes

#										Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
28-C	-466762	12 - 48 1/2-1 7/8	0 - 100 0 - 3 15/16	300 11 13/16	250 9 13/16	1	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18	M7, M10, 15-16G	11,995 26,449	21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 22-1, 22-2, GE10-10, GE12-10, GE14-10, GE16-10, GE18-10, GE3-10, GE4-10, GE5-10, GE6-10, GE8-10, 22-0-10, VM12-10

### 28-D 24-PIECE SLIDING HAMMER AND COUNTERSTAY SET












The 24-piece sliding hammer set 28-D is used for removing internal bearings, outer bearing rings, and bushings as well as components with threads (dowel pins, feather keys, bolts, etc.) in crafts, workshops, and industry without contact. The multi-shell design of the internal extractors with their extra large gripping edges allows for safe extraction of internal parts. The included counter stay or the sliding hammer are used together with the internal extractors depending on whether there is a sufficient support surface. Additionally, there are thread inserts for extracting parts with concentric threaded holes in the set, which are used together with the sliding hammer.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with counter stays, sliding hammers, and thread inserts, are capable of finding a suitable solution in various extraction situations.
- Counter stays and sliding hammers allow for optimal and safe removal depending on the existing conditions in changing applications.

#### Technical attributes

#										Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
28-D	-466779	12 - 70 1/2-2 3/4	0 - 100 0 - 3 15/16	300 11 13/16	250 9 13/16	1	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18	M7, M10, 15-16G	14,57 32,127	VM12-7, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7, 21-8, 22-1, 22-2, GE10-10, GE12-10, GE14-10, GE16-10, GE18-10, GE3-10, GE4-10, GE5-10, GE6-10

## PRODUCT DETAILS



### SERIES 21-V EXTENSIONS FOR INTERNAL EXTRACTORS








The extensions for the internal extractors of series 21 are used for loosening and pulling out deeply seated bearings, bearing outer rings, and bushes in crafts, workshops, and industry. The extensions available in various lengths from 40 to 280 mm allow for a variable application of the internal extractors even in extreme cases.

#### Benefits

- Various extension sizes for different applications

#### Technical attributes

#				$\emptyset$		
	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	kg/lb
<b>21-V-040</b>	-909214	40 1 9/16	M7	14 9/16	11 7/16	0,08 0,176
<b>21-V-060</b>	-909221	60 2 3/8	M7	14 9/16	11 7/16	0,11 0,243
<b>21-V-080</b>	-909238	80 3 1/8	M7	14 9/16	11 7/16	0,14 0,309
<b>21-V-310</b>	-914386	100 3 15/16	M10	20 13/16	17 11/16	0,295 0,650

### SERIES 21-V-0 INTERNAL EXTRACTOR EXTENSIONS








The set of extensions for internal extractors of series 21 is used for loosening and extracting deeply seated bearings, bearing outer rings, and bushings in craft, workshop, and industry. The extensions, available in various lengths, allow for versatile use of the internal extractors even in extreme cases. The set contains extensions in four different sizes from 40 - 280 mm for compatibility in every case.

#### Benefits

- Different extension sizes for various applications
- Practical assembly for universal use

#### Technical attributes

#				$\emptyset$			Components
	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	kg/lb	
<b>21-V-0</b>	-909207	40; 60; 80; 100 1 9/16; 2 3/8; 3 1/8; 3 15/16	M7, M10	14, 20 9/16, 13/16	11, 17 7/16, 11/16	1,35 2,977	21-V-040, 21-V-060, 21-V-080, 21-V-310

## PRODUCT DETAILS

### SERIES 21-V-E ACCESSORIES FOR INTERNAL EXTRACTION








The extension for internal extractors of series 21-V-E is used for loosening and pulling deep-seated bearings, bearing outer rings, and bushes in craft, workshop, and industry. The extension allows the spreading of the internal extractor in tight or deep-seated installation situations that would otherwise be inaccessible.

#### Benefits

- Extension allows access to deep-seated bearings, bearing outer rings, and sockets.

#### Technical attributes

#				$\emptyset$		
	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	kg/lb
<b>21-4-E-180 NEW</b>	-010866	180 7 1/16	M10	34 1 5/16	11/16	0,25 0,551

### SERIES 818-021 INTERNAL EXTRACTOR








The internal extractors of the series 818-021 are used together with a puller device with hydraulic spindle of the series 818-0 for extracting internal bearings, outer bearing rings, and bushings in crafts, workshops, and industry. The model series is based on a modular system and can therefore be expanded in a variety of ways. The internal extractors with tension spindle, spindle nut, U-washer, and threaded sleeve with smooth bore are fully operational in combination with the puller device and can be used in many ways.

#### Benefits

- Other pullers from the 800 series have the same hydraulic spindle and do not require additional accessories.
- For the 800 series, there are numerous easily exchangeable and combinable individual parts.

#### Technical attributes

#				Max. tensile force	Max. tractive force			Included in the set
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	mm/inch	kg/lb	
<b>818-021</b>	-757969	30 - 180 1 3/16 - 7 1/16	135 5 5/16	100	10 11.02	22 7/8	2,8 6,174	818-215



## PRODUCT DETAILS



### SERIES Y-21-E INTERNAL EXTRACTOR








The internal extractors of the Y-21 series are used for extracting internal bearings, bearing outer rings, and bushings in crafts, workshops, and industry. The series 21 impresses with its compatibility and variety of applications. Depending on the application case, there are several variants of the internal extractors. The internal extractors of the Y-21-E series require the puller devices of the Y-180 series.

#### Benefits

- The hydraulic puller device needed in combination with the internal extractor allows easy and controlled removal of particularly stubborn parts.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 nominal dimension	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
Y-221-E	-040856	30 - 180 1 3/16 - 7 1/16	135 5 5/16	1"-8 UNC	100	10 11.02	2,8 6,174	Y28-200, Y28-218
Y-321-E	-042836	75 - 230 2 15/16 - 9 1/16	140 5 1/2	1 1/4 - 7" UNC	220	22 24.25	6,5 14,333	Y38-300, Y38-318
Y-521-E	-044656	75 - 230 2 15/16 - 9 1/16	140 5 1/2	1 5/8" - 51 2UNS	275	27.5 30.31	7,3 16,097	Y58-518, Y58-500

### SERIES 818-0 HYDRAULIC PULLER








The extractor device with hydraulic spindle is used for universal applications with the pullers of series 818 in crafts, workshops, and industry. The model series is built on a modular system and is therefore versatile and expandable. This extractor device is the fundamental element of a system that allows for universal application possibilities in combination with various accessories, such as internal extractors, puller jaws, or separators.

#### Benefits

- Pullers of series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily interchangeable and frequently combinable individual parts and accessories.
- The hydraulics enable high pull-out performance with low manual effort.
- The axial working piston does not rotate with the hydraulic spindle.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
818-0	-173196	85 - 270 3 3/8 - 10 5/8	280 7 1/16	40 29.50	100	10 11.02	7,8 17,199	818-100, 818-150, 818-215






## PRODUCT DETAILS

### SERIES 818 BOLT EXTENSIONS

The pull bolt extension serves to extend the pull bolts of a puller device during external extraction.



#### Technical attributes






#					
	EAN	mm/inch	nominal dimension	mm/inch	kg/lb
<b>818-250</b>	-173356	250 9 13/16	5/8"-18 UNF	22 7/8	0,79 1,742
<b>818-280</b>	-173431	250 9 13/16	5/8"-18 UNF	22 7/8	1,1 2,426

### SERIES 818-P BOLT EXTENSIONS

The pull rod extensions are used to extend the pull rods of a puller when separating.



#### Technical attributes

#					
	EAN	mm/inch	nominal dimension	mm/inch	kg/lb
<b>818-250-P</b>	-385391	250 9 13/16	5/8"-18 UNF	22 7/8	1,56 3,440
<b>818-280-P</b>	-385544	250 9 13/16	5/8"-18 UNF	22 7/8	2,16 4,763

## PRODUCT DETAILS



### SERIES YX8-X18 13-PIECE HYDRAULIC PULLER SET










The 13-piece hydraulic puller sets are used for separating and internally extracting particularly large and stuck bearings, gears, discs, etc. in industry and commercial vehicles. The set does not require any additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for internal extraction and separation.

#### Benefits

- Application-oriented assembly for universal use
- Through the storage in the metal box, the completeness of the set can be easily overviewed.

#### Technical attributes

#							Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	bar	kN	t/US t. sh.	kg/lb	
<b>Y28-218</b>	-036651	135 - 300 5 5/16 - 11 13/16	1,000 39 3/8	30 - 180 1 3/16 - 7 1/16	25 - 155 1 - 6 1/8	394	150	15 16.53	60 132,300	Y-221-E, YHP-325, Y-215-3, YDB-27E, YRH-202, Y20-180, Y218-06-P, Y218-08-P, Y218-31-P, Y218-33, Y218-10, Y218-11
<b>Y38-318</b>	-037641	180 - 420 7 1/16 - 16 9/16	1,200 47 1/4	75 - 230 2 15/16 - 9 1/16	30 - 250 1 3/16 - 9 13/16	514	250	25 27.56	115 253,575	Y-321-E, YHP-325, Y-315-5, YDB-33E, YRH-302, Y30-180, Y318-36-P, Y318-33, Y318-38-P, Y318-41-P, Y318-10, Y318-11
<b>Y58-518</b>	-038891	235 - 540 9 1/4 - 21 1/4	1,500 59 1/16	75 - 230 2 15/16 - 9 1/16	75 - 330 2 15/16 - 12 1	348	350	35 38.58	220 485,100	Y-521-E, YHP-325, Y-515-6, YDB-55E, YRH-603, Y50-180, Y518-08-P, Y518-31-P, Y518-33, Y518-10, Y518-11

### SERIES Y-180 HYDRAULIC PULL/ PRESS EXTRACTOR WITH HYDRAULIC HOLLOW PISTON CYLINDER








The Y-180 series hydraulic puller is used for removing particularly large and stubborn bearings, gears, disks, etc., by using separating knives and internal extractors in crafts, workshops, and industry. The Y-180 series is used together with the separating device Y-15 or the internal extractor Y-21-E and can be used in two different ways.

#### Benefits

- Low effort for high pulling performance
- The required internal extractor or separator for the application allows, together with the hydraulic puller, the easy and controlled removal of particularly stubborn parts.

#### Technical attributes

#				Max. tensile force	Max. tractive force			Included in the set
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	bar	kg/lb	
<b>Y28-180</b>	-036408	135 - 300 5 5/16 - 11 13/16	470 18 1/2	150	15 16.53	700	20,81 45,886	Y28-200, Y28-218
<b>Y38-180</b>	-037498	180 - 420 7 1/16 - 16 9/16	520 20 1/2	250	25 27.56	700	37,68 83,084	Y38-318, Y38-300
<b>Y58-180</b>	-038488	235 - 540 9 1/4 - 21 1/4	660 25 63/64	350	35 38.58	700	84 185,220	Y58-518, Y58-500



## PRODUCT DETAILS

### SERIES Y-18-E ACCESSORIES FOR HYDRAULIC PULLERS

The accessories for hydraulic pullers are used for the application with the pullers from the KUKKO hydraulic program in craftsmanship, industry, and workshop. The crossbars, fastening materials, tension bolts, support nuts, connectors for tension bolts, and quick adjustment nuts are designed for the pullers of the series Y20, Y28, Y30, Y38, Y50, and Y58.



**Traverse**  
Y218-03  
Y318-03  
Y518-03



**Quick adjusting nut**  
Y218-33  
Y318-33  
Y518-33





**Pair of tension bolts**  
Y218-06-P  
Y218-07-P  
Y218-08-P  
Y218-12-P  
Y318-36-P  
Y318-37-P  
Y318-38-P  
Y518-07-P  
Y518-08-P

**Fastening material  
for 1 pair of tie rods**  
Y218-04  
Y318-04

**Pair of support nuts  
for tension bolts**  
Y218-09-P  
Y318-39-P  
Y518-09-P

**Pair of connectors  
for tension bolts**  
Y218-31-P  
Y318-41-P  
Y518-31-P

### Technical attributes

#	 EAN	Max. tractive force t/US t. sh.	 kg/lb
Y218-03	-039706	15 16.53	4,82 10,628
Y218-04	-529818	15 16.53	1,03 2,271
Y218-06-P	-056420	15 16.53	2,3 5,072
Y218-07-P	-056437	15 16.53	3,685 8,125
Y218-08-P	-056444	15 16.53	3,685 8,125
Y218-09-P	-218095	15 16.53	0,265 0,584
Y218-12-P	-097157	15 16.53	1,34 2,955
Y218-31-P	-218316	15 16.53	0,32 0,706
Y218-33	-040771	15 16.53	1,105 2,437
Y318-03	-041686	25 27.56	11,4 25,137
Y318-04	-318047	25 27.56	6,92 15,259
Y318-33	-042188	25 27.56	1,854 4,088
Y318-36-P	-056338	25 27.56	4,28 9,437
Y318-37-P	-305863	25 27.56	6,93 15,281
Y318-38-P	-056345	25 27.56	11,805 26,030
Y318-39-P	-318399	25 27.56	0,82 1,808
Y318-41-P	-318412	25 27.56	0,6 1,323
Y518-03	-043826	35 38.58	30,91 68,157
Y518-04	-529825	0.00	0 0,000
Y518-07-P	-056468	35 38.58	15,86 34,971
Y518-08-P	-056475	35 38.58	21,28 46,922
Y518-09-P	-518096	35 38.58	1,336 2,946
Y518-31-P	-518317	35 38.58	1,2 2,646
Y518-33	-044571	35 38.58	2,66 5,865

KUKKO // Pull forward



SERIES GA | GE | VM

# THREAD ADAPTERS





# DEPLOYMENT

The thread adapters of the series GA (male/external thread) and GE (female/internal thread) are suitable for extracting components with concentric threaded holes and can be connected to a puller, a counter stay, or a sliding hammer. Depending on the requirements, the adapters can expand or reduce the thread diameter. The connecting nuts of the series VM allow the combination of two external threads.



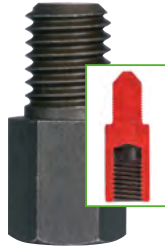
connecting nut  
**VM series**



thread adapter  
**Series GE**



thread adapter  
**GA series**



## Benefits

- The thread adapter allows for both an increase and a decrease in the thread diameter.
- The connecting nut serves as a coupling between the spindle and the sliding hammer rod and adapter.
- Assembling the thread adapter and connecting nut offers numerous combination possibilities.

# COMBINATION POSSIBILITIES

**Series 18**



**VM series**  
+  
**Series GA or GE**



Puller  
+ Connecting nut  
+ Thread adapter

**Series 22**



+

**GA series**



Internal thread of the spindle

Counter stays  
+ Thread adapter

**Series 22-0**



+

**GA series**



Internal thread of the thread adapter

Sliding hammer  
+ Connecting nut  
+ Thread adapter



# THREAD ADJUSTMENT



The items GA-3 to GA12-10 are equipped with a movable threaded pin for unscrewing. The adapters can therefore be used as both external and internal threads. The length of the threaded pins is freely adjustable via an internal hexagon. Due to the modular design of the adapters with a movable pin, they can be cost-effectively replaced with a standard part in case of breakage.



# APPLICATION EXAMPLES



Removing a ball bearing using a sliding hammer, connecting nut and thread adapter



Removing a dowel pin using a sliding hammer and thread adapter

## TIP:

If a component cannot be grabbed with a puller, the thread adapters are useful at this point. Simply drill a hole in the component and cut a thread. Then screw in the adapter and pull it out with a sliding hammer or a counter stay.

## PRODUCT DETAILS

### SERIES GA THREAD ADAPTER

Thread adapters are spare parts that allow flexible connections between different threads, thereby providing more flexible application possibilities.



#### Technical attributes

#	 EAN	 kg/lb	
GA7-10	-221002	0,2 0,441	28-B, 224-676, 26-B
GA10-1516	-225161	0,25 0,551	K-26-B, 22-0-10, 26-B
GA12-1/2	-181771	0,055 0,121	KS-22-01-UNC, K-22-01-UNC
GA12-1/4	-181788	0 0,000	KS-22-01-UNC, K-22-01-UNC
GA12-3/8	-181795	0 0,000	KS-22-01-UNC, K-22-01-UNC
GA12-3	-223112	0,45 0,992	27-A, KS-22-01
GA12-4	-223129	0,45 0,992	27-A, KS-22-01
GA12-5/16	-181801	0 0,000	KS-22-01-UNC, K-22-01-UNC
GA12-5	-223136	0,5 1,103	27-A, KS-22-01
GA12-6	-223143	0,5 1,103	27-A, KS-22-01, KS-22-02
GA12-7/16	-181818	0 0,000	KS-22-01-UNC, K-22-01-UNC
GA12-8	-223150	0,5 1,103	27-A, KS-22-01
GA12-10	-223167	0,55 1,213	27-A, KS-22-01, KS-22-02
GA12-34	-774430	0,42 0,926	21-90
GA12-81	-231056	0,05 0,110	KS-22-02
GA12-101	-221125	0,055 0,121	KS-22-02
GA12-121	-221132	0,06 0,132	KS-22-02
GA12-1515	-221149	0,065 0,143	KS-22-02
GA12-1815	-507588	0,155 0,342	28-B, 223-G
GA1415-12	-220678	0,22 0,485	K-486-1-22
GA1516-12	-300219	0,35 0,772	26-B

## PRODUCT DETAILS






### SERIES GE THREAD ADAPTER



With the threaded inserts, internal threads for screw connections are created. The inserts in various sizes expand the application in craft, industry, and workshop.

#### Technical attributes

#			
	EAN	kg/lb	
GE3-10	-183386	0,2 0,441	28-A, 223, 28-C, 28-D, 223-K, 18-003A
GE4-10	-184383	0,2 0,441	28-A, 22-1-AS, 223, 28-C, 28-D, 223-K, 18-004A, 18-0-AS, 18-003A
GE5-5	-018541	0,02 0,044	K-222-1/7, 222-S
GE5-10	-185380	0,2 0,441	28-A, 22-1-AS, 223, 28-C, 28-D, 223-K, 18-005A, 18-0-AS
GE6-10	-186387	0,25 0,551	28-A, 22-1-AS, 223, 28-C, 28-D, 223-K, 18-006A, 18-0-AS
GE8-10	-188428	0,2 0,441	28-A, 22-1-AS, 223, 28-C, 223-K, 18-008A, 18-0-AS
GE8-1415	-188435	0,04 0,088	18-208A, 18-2-AS
GE8-1815	-188442	0,95 2,095	28-B, 223-G
GE10-10	-180460	0,35 0,772	22-1-AS, 28-A, 223, 28-C, 28-D, 223-K, 18-0-AS, 18-010A
GE10-1415	-101458	0,05 0,110	18-2-AS, 18-210A
GE10-1815	-181443	0,15 0,331	28-B, 223-G
GE12-10	-182488	0,4 0,882	28-A, 22-1-AS, 223, 28-C, 28-D, 223-K, 18-012A, 18-0-AS
GE12-1415	-121456	0,06 0,132	18-212A, 18-2-AS
GE12-1815	-182440	0,12 0,265	28-B, 223-G
GE14-10	-184468	0,06 0,132	28-A, 223, 28-C, 28-D, 223-K
GE14-1415	-184482	0,07 0,154	18-214A, 18-2-AS
GE14-1815	-184444	0,11 0,243	28-B, 223-G, 18-3-AS, 18-314A
GE16-10	-184857	0,25 0,551	28-A, 223, 28-C, 28-D, 223-K, 18-016A
GE16-1415	-186509	0,08 0,176	18-216A, 18-2-AS
GE16-1815	-186462	0,14 0,309	28-B, 223-G, 18-316A, 18-3-AS
GE18-10	-188480	0,07 0,154	28-A, 223, 28-C, 28-D, 223-K
GE18-1415	-180521	0,1 0,221	18-218A, 18-2-AS
GE18-1815	-180637	0,14 0,309	28-B, 223-G, 18-318A, 18-3-AS
GE20-1815	-182068	0,16 0,353	28-B, 223-G, 18-320A, 18-3-AS
GE22-1815	-182655	0,19 0,419	28-B, 223-G, 18-322A, 18-3-AS
GE24-1815	-182419	0,21 0,463	28-B, 223-G, 18-324A, 18-3-AS
GE81-1615	-181559	0,065 0,143	225
GE101-1615	-181597	0,07 0,154	225
GE142-1615	-182631	0,085 0,187	225
GE162-1615	-180675	0,085 0,187	225
GE1415-1615	-185632	0,1 0,221	225
GE1615-1615	-185670	0,1 0,221	225
GE2015-1615	-181573	0,15 0,331	225
GE2215-1815 NEW	-181214	0,28 0,617	WT-031



## SERIES 18-A THREAD ADAPTER (PAIR)










The thread adapters of series 18-A are used together with the pullers of series 18 for removing and pulling components with threads, such as dowel pins, keyways, or bolts, in crafts, industry, and workshops. The separation-puller process is capable of first gently separating those parts before they can be pulled out from the outside.

### Benefits

- The thread adapters allow for the careful and secure removal of parts with threaded holes.

### Technical attributes

#	 EAN	 mm/inch	 nominal dimension	 nominal dimension	 mm/inch	 mm/inch	 kg/lb
<b>18-003A</b>	-788406	52 2 1/16	M10	M3	12 1/2	14 9/16	0,085 0,187
<b>18-004A</b>	-337383	52 2 1/16	M10	M4	12 1/2	14 9/16	0,85 1,874
<b>18-005A</b>	-337468	55 2 3/16	M10	M5	15 9/16	14 9/16	0,4 0,882
<b>18-006A</b>	-337536	58 2 5/16	M10	M6	18 1 1/16	14 9/16	0,9 1,985
<b>18-008A</b>	-337611	60 2 3/8	M10	M8	20 1 3/16	14 9/16	0,095 0,209
<b>18-010A</b>	-337796	65 2 9/16	M10	M10	25 1	14 9/16	0,105 0,232
<b>18-012A</b>	-337871	68 2 11/16	M10	M12	28 1 1/8	14 9/16	0,125 0,276
<b>18-016A</b>	-788574	69 2 11/16	M10	M16	25 1	14 9/16	0,175 0,386
<b>18-208A</b>	-337956	70 2 3/4	M14x1,5	M8	20 13/16	22 7/8	0,255 0,562
<b>18-210A</b>	-338113	75 2 15/16	M14x1,5	M10	25 1	22 7/8	0,27 0,595
<b>18-212A</b>	-338298	78 3 1/16	M14x1,5	M12	28 1 1/8	22 7/8	0,285 0,628
<b>18-214A</b>	-338373	79 3 1/8	M14x1,5	M14	29 1 1/8	22 7/8	0,3 0,662
<b>18-216A</b>	-338458	82 3 1/4	M14x1,5	M16	32 1 1/4	22 7/8	0,33 0,728
<b>18-218A</b>	-338526	84 3 5/16	M14x1,5	M18	34 1 5/16	22 7/8	0,38 0,838
<b>18-314A</b>	-338601	94 3 11/16	M18x1,5	M14	29 1 1/8	27 1 1/16	0,545 1,202
<b>18-316A</b>	-338786	97 3 13/16	M18x1,5	M16	32 1 1/4	27 1 1/16	0,575 1,268
<b>18-318A</b>	-338861	99 3 7/8	M18x1,5	M18x1,5	34 1 5/16	27 1 1/16	0,6 1,323
<b>18-320A</b>	-338946	100 3 15/16	M18x1,5	M20	35 1 3/8	27 1 1/16	0,635 1,400
<b>18-322A</b>	-339028	102 4 1/64	M18x1,5	M22	37 1 7/16	27 1 1/16	0,68 1,499
<b>18-324A</b>	-339103	102 4 1/64	M18x1,5	M24	37 1 7/16	27 1 1/16	0,71 1,566

## PRODUCT DETAILS



### SERIES 18-AS THREAD ADAPTER SETS







The thread adapter set of model series 18-AS is used together with the pullers of model series 18 for removing and pulling components with threads, such as dowel pins, keyways or bolts, in crafts, industry and workshops. The separation-pulling process is capable of gently separating those parts first before they can be externally pulled off.

#### Benefits

- The thread adapters enable the careful and safe removal of parts with threaded holes.
- Universal assembly for optimal practical application

#### Technical attributes

#	 EAN	 nominal dimension	 nominal dimension	 kg/lb	Components
<b>18-0-AS</b>	-337048	M10	M4-M5-M6-M8- M10-M12	0,375 0,827	18-003A, 18-004A, 18-005A, 18-006A, 18-008A, 18-010A, 18-012A, 18-016A
<b>18-2-AS</b>	-337123	M14x1,5	M8-M10-M12- M14-M16-M18	0,98 2,161	18-208A, 18-210A, 18-212A, 18-214A, 18-216A, 18-218A
<b>18-3-AS</b>	-337208	M18x1,5	M14-M16-M18- M20-M22-M24	2,32 5,116	18-314A, 18-316A, 18-318A, 18-320A, 18-322A, 18-324A

## PRODUCT DETAILS




### SERIES VM CONNECTING NUT FOR THREAD ADAPTERS



The connecting nuts can be used as spacers or as a connecting piece for threaded rods. They are available in both connecting and reducing versions.



#### Technical attributes

#	 EAN	 kg/lb	
<b>VM10-10</b>	-529498	0,025 0,055	18-0-AS, 18-003A, 18-004A, 18-005A, 18-006A, 18-008A, 18-010A, 18-012A, 18-016A
<b>VM10-12</b>	-529504	0,235 0,518	-
<b>VM12-7</b>	-529559	0,7 1,544	28-A, 28-D, 223-K, KS-22-01, KS-22-01-UNC, KS-22-02, K-22-A-M
<b>VM12-10</b>	-529528	0,6 1,323	28-A, 28-C, 223, 223-K, KS-22-01, KS-22-01-UNC, KS-22-02, K-22-A-M
<b>VM12-1516</b>	-529542	0,1 0,221	28-A, K-26-B, 22-0-10, 223-K, KS-22-01, KS-22-01-UNC, KS-22-02
<b>VM14-12</b>	-529566	0,25 0,551	-
<b>VM112-12</b>	-529511	0,205 0,452	21-89
<b>VM1415-1415</b>	-529573	0,085 0,187	18-2-AS, 18-208A, 18-210A, 18-212A, 18-214A, 18-216A, 18-218A
<b>VM1615-12</b>	-161513	0,3 0,662	26-B
<b>VM1815-58</b>	-529641	0,6 1,323	K-226-4/12, 226-4/11
<b>VM1815-1815</b>	-529634	0,155 0,342	18-3-AS, 18-314A, 18-316A, 18-318A, 18-320A, 18-322A, 18-324A
<b>VM2015-58</b>	-529665	0,575 1,268	K-226-4/12, 226-4/11
<b>VM2215-58</b>	-529672	0,555 1,224	K-226-4/12, WT-031, 226-4/11



## PRODUCT DETAILS



### SERIES 22-1-AS SPINDLE INSERT SET








The thread insert set for sliding hammer or counter stays of series 22 is used to pull out parts with central threaded holes in crafts, industry, and workshops. The set includes six different threads for various situations and sizes.

#### Benefits

- The standardized size of the spindle inserts allows for flexible use with various sliding hammers and counter stays.

#### Technical attributes

#	 EAN	 mm/inch	 nominal dimension	 nominal dimension	 kg/lb	Components
22-1-AS	-339288	33 - 49 1 5/16-1 15/16	M10	M4, M5, M6, M8, M10, M12	0,18 0,397	18-004A, 18-005A, 18-006A, 18-008A, 18-010A, 18-012A

### K-22-01-UNC 12-PIECE SLIDING HAMMER SET IN CASE









The 12-piece sliding hammer set in the case K-22-01-UNC is used for pulling parts with threaded holes (dowel pins, keys, etc.) with American thread sizes. The threads included in the set can be screwed in using the corresponding hex key also included, to effectively work with American thread dimensions. The accompanying sliding hammer is used together with internal extractors.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The sliding hammer replacement has been specifically developed for American thread standards.
- The sliding hammer can be used not only in conjunction with UNC threads but also generally for the internal extraction of internal bearings.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg	 nominal dimension	 kg/lb	Components
K-22-01-UNC	-039614	300 11 13/16	250 9 13/16	1	1/4"- 20 UNC, 5/16"-18 UNC, 3/8"-16 UNC, 7/16"- 14 UNC, 1/2"-13 UNC	2,98 6,571	22-0-10, G-22, 238-318, 238-397, 238-476, 238- 556, 238-635, GA12-1/4, GA12-5/16, GA12-3/8, GA12-7/16, GA12-1/2

## PRODUCT DETAILS

### KS-22-01 10-PIECE SLIDING HAMMER SET IN CASE










The 10-piece sliding hammer set in the case KS-22-01 is used for pulling bushings as well as components with threads (dowel pins, key profiles, bolts, etc.) in crafts, industry, and workshops. The use of a sliding hammer is particularly recommended when there is no support surface available or when this is too sensitive. The ergonomically shaped, solid sliding piece allows the applied force to be optimally transmitted and a strong shock effect to be achieved. Additionally, it ensures contactless and gentle extraction. The thread adapters included in this set can be used for both internal and external threads.

#### Benefits

- By storing it in the case, the completeness of the set can be easily surveyed
- With the help of the dimensions laser-engraved on the thread adapters, the thread can be uniquely identified.
- The included thread adapters can be used for various thread types and sizes.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg	 nominal dimension	 nominal dimension	 kg/lb	Components
KS-22-01	-924569	300 11 13/16	250 9 13/16	1	M3, M4, M5, M6, M8, M10	M7, M10, 15-16G	2,12 4,675	22-0-10, GA12-3, GA12-4, GA12-5, GA12-6, GA12- 8, GA12-10, VM12-1516, VM12-10, VM12-7

### KS-22-02 10-PIECE SLIDING HAMMER SET IN CASE










The 10-piece sliding hammer set in the case KS-22-02 is used for pulling plugs and components with threads (dowel pins, key stock, bolts, etc.) in crafts, industry, and workshops. The use of a sliding hammer is particularly advisable when no support surface is available or when it is too sensitive. The ergonomically shaped, solid sliding piece allows the applied force to be optimally transmitted, achieving a strong shock effect. It also ensures contact-free and gentle pulling out. The thread adapters contained in this set can be used for both internal and external threads.

#### Benefits

- By storing it in the case, the completeness of the set can be easily surveyed
- With the help of the dimensions laser-engraved on the thread adapters, the thread can be uniquely identified.
- The included thread adapters can be used for various thread types and sizes.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg	 nominal dimension	 nominal dimension	 kg/lb	Components
KS-22-02	-951121	300 11 13/16	250 9 13/16	1	M6, M8x1, M10, M10x1, M12x1, M15x1,5	M7, M10, 15-16G	2 4,410	22-0-10, GA12-6, GA12-10, GA12-81, GA12-101, GA12- 121, GA12-1515, VM12-1516, VM12-10, VM12-7

## PRODUCT DETAILS



### KS-22-01-UNC 9-PIECE SLIDING HAMMER SET IN CASE









The 9-piece sliding hammer set in the case KS-22-01-UNC is used for pulling sockets and components with threads (dowel pins, keyways, bolts, etc.) in crafts, industry, and workshops. The use of a sliding hammer is particularly advisable when there is no support surface available or when it is too delicate. The ergonomically shaped, solid sliding piece allows for optimal force transfer and achieves a strong shock effect. This also ensures a non-contact and gentle extraction. The thread adapters included in this set can be used for both internal and external threads.

#### Benefits

- By storing it in the case, the completeness of the set can be easily surveyed
- With the help of the dimensions laser-engraved on the thread adapters, the thread can be uniquely identified. The included thread adapters can be used for various thread types and sizes.

#### Technical attributes

#							Components
	EAN	mm/inch	mm/inch	kg	nominal dimension	kg/lb	
<b>K-22-01-UNC</b>	-039614	300 11 13/16	250 9 13/16	1	1/4"- 20 UNC, 5/16"-18 UNC, 3/8"-16 UNC, 7/16"-14 UNC, 1/2"-13 UNC	2,98 6,571	22-0-10, G-22, 238-318, 238-397, 238-476, 238-556, 238-635, GA12-1/4, GA12-5/16, GA12-3/8, GA12-7/16, GA12-1/2

### 223-K 14-PIECE PASS PIN AND DRIVE PIN REMOVER SET










The 14-piece puller and extractor set is used for extracting bushings as well as components with threads (dowel pins, keyways, bolts, etc.) in crafts, industry, and workshops. In addition to a sliding hammer device, various thread inserts are included to extract parts in different sizes.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- With the help of the dimensions laser-engraved on the thread adapters, the thread can be uniquely identified.

#### Technical attributes

#							Max. tractive force		Components
	EAN	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	t/US t. sh.	kg/lb	
<b>223-K</b>	-784859	300 11 13/16	250 9 13/16	1	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18	M7, M10, 15-16G	{8328}	2,94 6,483	22-0-10, GE4-10, GE5-10, GE6-10, GE8-10, GE10-10, GE12-10, VM12-1516, VM12-10, GE3-10, GE14-10, GE16-10, GE18-10, VM12-7



## 223-G 14-PIECE PULLER AND EXTRACTOR SET











The 14-piece puller and extractor set is used for extracting bushings as well as components with threads (dowel pins, flat keys, bolts, etc.) in craft, industry, and workshops. In addition to a sliding hammer device, various thread inserts are included to extract parts in different sizes.

### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- With the help of the dimensions laser-engraved on the thread adapters, the thread can be uniquely identified.

### Technical attributes

#								Max. Tractive force		Components
	EAN	mm/ inch	mm/ inch	kg	nominal dimension	nominal dimension	nominal dimension	t/US t. sh.	kg/lb	
223-G	-984181	370 14 9/16	250 9 13/16	1.7	M8, M10, M12, M14, M16, M18, M20, M22, M24	15-16G, M10, M18x1,5	G1/2	{8328}	5,85 12,899	22-0-17, GE14-1815, GE16-1815, GE18-1815, GE20-1815, GE22-1815, GE24-1815, GA12-1815, GE8-1815, GE10-1815, GE12-1815

## PRODUCT DETAILS



### SERIES G-22 3-ARM GRIP FOR SLIDING HAMMER







The 3-component handle as an accessory for sliding hammers of series 22 serves better guidance during the pulling process when using sliding hammers in crafts, industry, and workshops. The ergonomic handle design ensures good haptics and maximum force transmission even with wet and oily hands.

#### Benefits

- The risk of injury is reduced by using a handle.
- Ergonomically shaped grip

#### Technical attributes

#				
	EAN		mm/inch	kg/lb
G-22	-018442	M12	155 6 1/8	0,167 0,368

### SERIES 22-0-2-100 3 KG WEIGHT EXTENSION FOR 22-0-50








The additional weights of the series 22-0-2-100 are used together with sliding hammers of the series 22-0-50 in crafts, industry, and workshops. Each additional weight module increases the impact weight of the sliding hammer by 3 kg, allowing even particularly stuck parts to be safely and gently pulled off.

#### Benefits

- Multiple weight extensions can be used together with a single sliding hammer, allowing the impact weight of the sliding hammer to be individually adjusted upwards.

#### Technical attributes

#					
	EAN	mm/inch	mm/inch		kg/lb
22-0-2-100	-111211	66 2 5/8	95 3 3/4	M10	3,225 7,111

## PRODUCT DETAILS

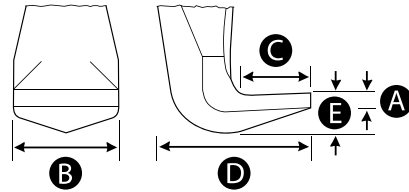
### SERIES 229-01 HOOK WITH TOGGLE JOINT










The specially profiled hook with toggle joint is used together with the sliding hammer 22-0-50 for releasing the control arm from the ball joint clamping and for work on the body in automotive and industrial applications.

#### Benefits

- Specialized tool for safe and gentle disassembly



#### Technical attributes

#							
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
229-01	-117329	138 5 7/16	25 1	40 1 9/16	85 3 3/8	16 5/8	3,21 7,078

### SERIES 221-G INTERNAL EXTRACTOR WITH SLIDING HAMMER











The internal extractors with sliding hammer of the series 221 are used for pulling and internal extraction of ball bearings, roller bearings, inner rings, and other flush-mounted parts in craftsmanship, workshops, and industries when there is not enough space for puller arms. The internal extractor is a purpose-driven model with a large clamping range, which allows for contactless and gentle extraction of, for example, internal bearings due to its design. With the built-in sliding hammer, it not only saves space but also has a strong impact effect, which can securely extract even stuck parts.

#### Benefits

- Especially suitable for tight spaces where counter stays or puller devices cannot be installed due to lack of space.
- The built-in sliding hammer means that no support surface is required for this internal extractor.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents pinching and ensures a safe working process.

#### Technical attributes

#									Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg	mm/inch	kg/lb	
221-G	-175824	30 - 180 1 3/16 - 7 1/16	135 5 5/16	320 12 5/8	250 9 13/16	1.7	17 11/16	4,4 9,702	224-677, 224-678



## PRODUCT DETAILS

### SERIES 224 INTERNAL EXTRACTOR WITH SLIDING HAMMER










The internal extractors with sliding hammer of the series 224 are used for extracting small end and guide bearings, bearing rings, and similar parts in crafts, workshops, and industry. The internal extractor is a purpose-oriented model with a large clamping range that allows for contactless and gentle extraction of, for example, internal bearings due to its design. With the built-in sliding hammer, it is not only space-saving but also provides a strong impact force that can safely extract even stuck parts.

#### Benefits

- Especially suitable for tight spatial conditions and small storage, as the hooks can be precisely pressed behind the part to be pulled out.
- With the built-in sliding hammer, this internal extractor does not require a support surface.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stopping point prevents crushing and ensures a safe working process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
<b>224-1</b>	-325656	12 - 35 1/2 - 1 3/8	38 1 1/2	290 11 7/16	250 9 13/16	1	1,765 3,892
<b>224-2</b>	-325571	15 - 50 9/16 - 1 15/16	50 1 15/16	290 11 7/16	250 9 13/16	1	1,96 4,322

### SERIES 223 PULLER FOR PARTS WITH THREADED HOLES







The pullers of series 223 are used for pulling parts with concentric threaded holes in crafts, industry, and workshops. The sliding hammer is capable of this together with the thread adapters. The ergonomically shaped, solid sliding piece allows the applied force to be optimally transmitted and a strong shock effect to be achieved. This also ensures a contactless and gentle extraction.

#### Benefits

- The thread adapters enable the careful and safe removal of parts with threaded holes.
- Using the dimensions laser-etched on the thread adapters, the thread can be uniquely identified.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg	 nominal dimension	 nominal dimension	 kg/lb	<b>Included in the set</b>
<b>223</b>	-309083	290 11 7/16	250 9 13/16	1	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18	M10	1,635 3,605	28-A, 28-B, 28-C, 28-D

## PRODUCT DETAILS

### SERIES 223-2 DOWEL PIN PULLER WITH SLIDING HAMMER









The pass pin extractor of the series 223-2 is used for disassembling locking and dowel pins in crafts, industry, and workshops. The three arms mounted in the chuck can be adjusted to the respective application in the range of 1-13 mm. The grip force can be further increased through the micro-toothing in the chuck to ensure a secure fit. The ergonomically shaped, solid sliding piece allows for optimal transfer of applied force and achieves a strong shock effect.

#### Benefits

- Universally adjustable spread up to 13 mm
- Increased power development through fine notching of the arms
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents pinching and ensures a safe working process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
223-2	-007088	1 - 13 1/32 - 1/2	290 11 7/16	250 9 13/16	1	0 0,000

### SERIES 220/221 UNIVERSAL PULLER WITH SLIDING HAMMER











The 2-arm and 3-arm pullers with conical self-tensioning are used for concentric pulling of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the removal of any component that sits on a shaft and is freely accessible from the outside. With the tightening of the tension cone, the puller arms are automatically centered. By operating the tension cone, the desired spread can be set. Additionally, the puller arms can be pre-tensioned using the cone to prevent possible slipping. Usable as both external extractors and internal extractors (in combination with a sliding hammer) by simply reversing the puller arms and the tension cone.

#### Benefits

- By modifying the puller arms, various pulling methods are ensured.
- The internal puller can be designed either as a 2-arm or 3-arm tool, providing a flexible grip for the respective part.
- The arms self-center and secure themselves tightly to the part being pulled off.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb	Included in the set
220+ NEW	-009754	0 - 150 0 - 5 7/8	170 6 11/16	60 - 180 2 3/8 - 7 1/16	500 19 11/16	250 9 13/16	1.7	10,855 23,935	K-220





Art. No. 15-2  
S/N: 4300000 000  
Ø 12 - 115 mm

TH  
1000-00  
125-150  
150-200  
200-250  
250-300  
300-350  
350-400  
400-450  
450-500  
500-550  
550-600  
600-650  
650-700  
700-750  
750-800  
800-850  
850-900  
900-950  
950-1000

TH  
1000-00  
125-150  
150-200  
200-250  
250-300  
300-350  
350-400  
400-450  
450-500  
500-550  
550-600  
600-650  
650-700  
700-750  
750-800  
800-850  
850-900  
900-950  
950-1000

AT-NG 78-2  
QUALITY  
RELIABILITY  
SAFETY  
DIN 85000-3  
1000-00  
125-150  
150-200  
200-250  
250-300  
300-350  
350-400  
400-450  
450-500  
500-550  
550-600  
600-650  
650-700  
700-750  
750-800  
800-850  
850-900  
900-950  
950-1000





# SEPERATING

The separation is recommended for components lying flat. During the pull-off separation, the sharp, wedge-shaped cutting edges of the separator are pressed behind the part to be pulled off. The edges slip between the bearing and the seat. With the help of a puller device, which is screwed into the separator, the component can be removed gently and without damage thanks to the large support area of the separator.





KUKKO // Pull forward



SERIES 15 | 17 | 18 | Y-15

# SEPARATOR & PULLING DEVICES



# DEPLOYMENT

The separating devices of series 15 and 17 are used together with the puller devices of series 18 for pulling off flat components when there is not enough space for puller arms. In a first step, the part to be disassembled is carefully separated. Subsequently, it can be pulled off from the outside without damaging it.



## Benefits

- Sharp edges of the separating device grip under flatly resting components.
- To enlarge the clamping surface for an even gentler extraction, simply screw the separation arms into the extractor device in the opposite direction.
- Through the screwing of separating and pulling devices, the highest stability during separation is ensured.
- Multi-Traverse with scale as an adjustment aid for the foot bolts. The foot bolts provide a particularly firm stand (series 68)

## FEATURES OF THE SERIES

### SERIES 15

#### Separator



15-0

The separation devices of series 15 are used together with the pulling devices of series 18 for removing ball bearings, roller bearings, inner rings, and other flat-lying components.

### SERIES 17

#### Separator with quick-action clamping spindle



17-0

Compared to series 15, series 17 is particularly handy because the separating arms can be quickly and concentrically tensioned by a pressure spindle.

### SERIES 18

#### Puller



18-0

The pullers of series 18 are used together with the separating devices of series 15 and 17 for pulling flat-lying or thin-walled parts.

### SERIES Y-15

#### Separator for hydraulic pullers

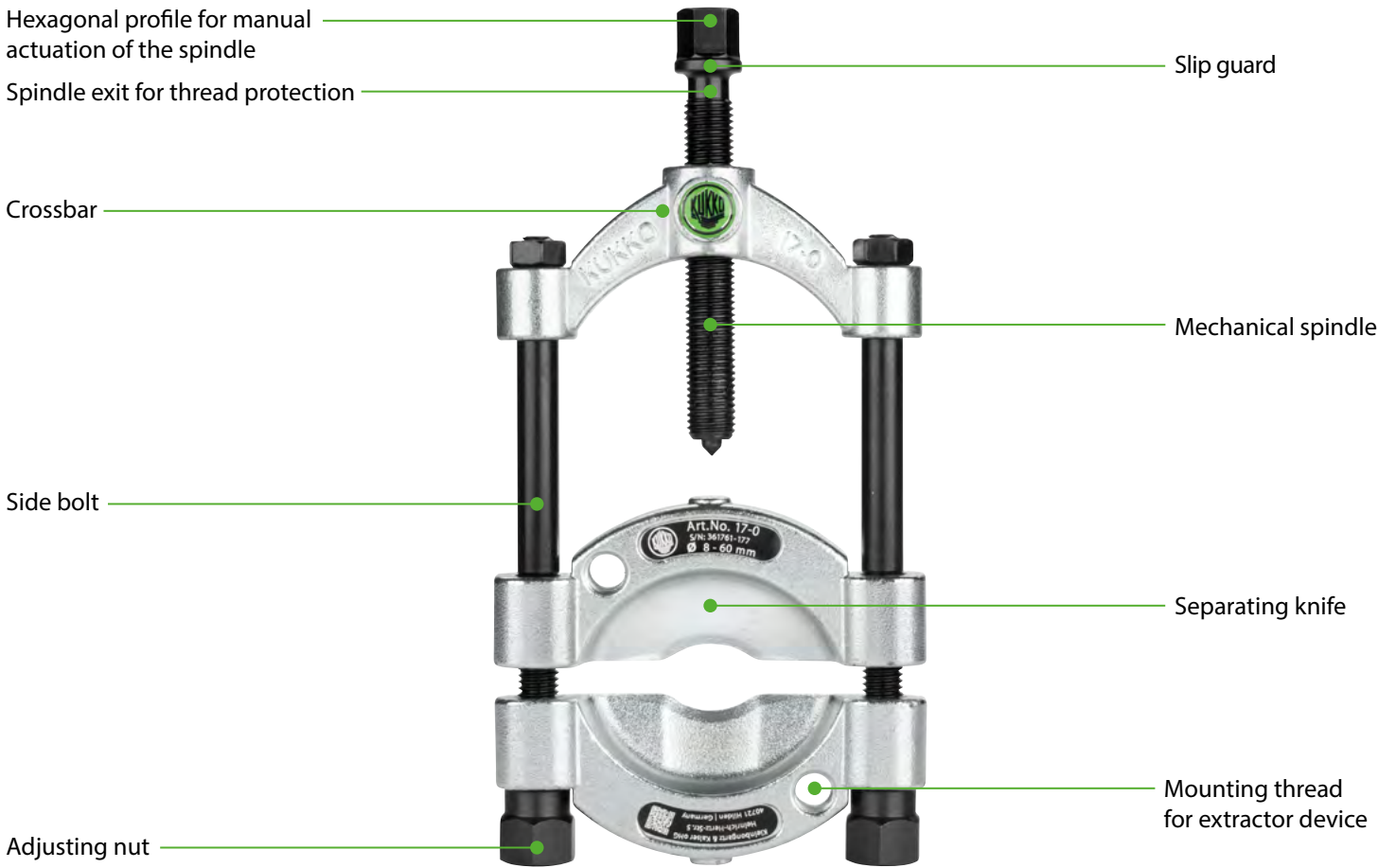


Y-15

Depending on the application, there are several variants of the Y-15 series. The separation devices require the hydraulic PULL/PUSH puller of the Y-180 series.



## ASSEMBLY OF A SEPARATOR DEVICE OF SERIES 17



## ASSEMBLY OF A PULLER DEVICE OF SERIES 18



# SETS

The pullers and separating devices are also available in practical suitcase sets. Specifically assembled for application and industry, the sets impress with their universal use in separating pullers.



15-A



17-A



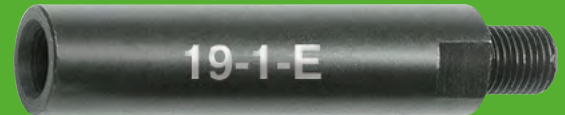
17-B



K-68-B

## OPTIONAL EXTENSION: REACH EXTENSION

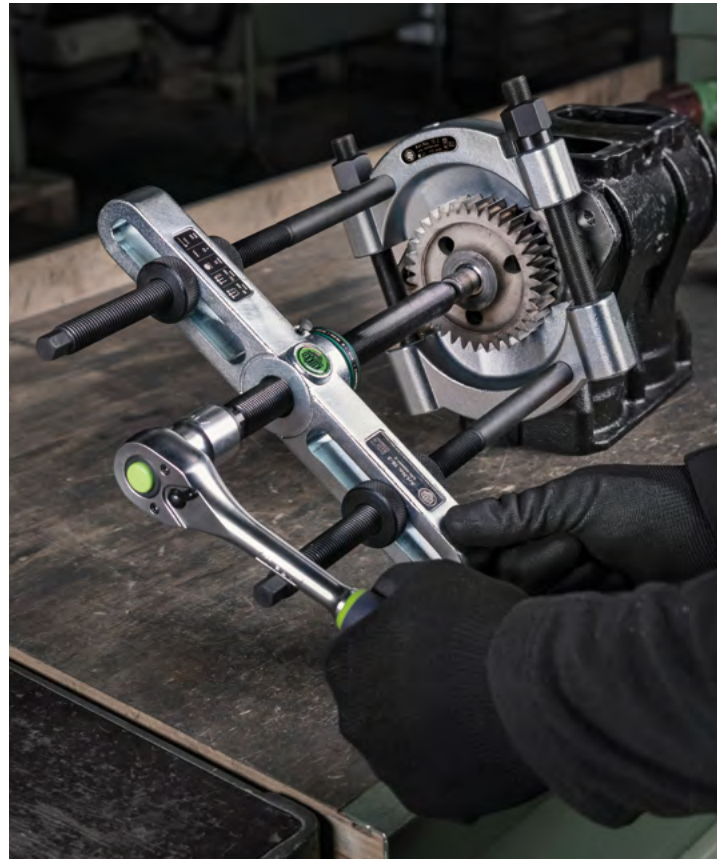
The extensions for puller devices are used together with the pullers of series 18 to increase the reach of the puller device. The extensions are available in pairs in various lengths.



## APPLICATION EXAMPLES



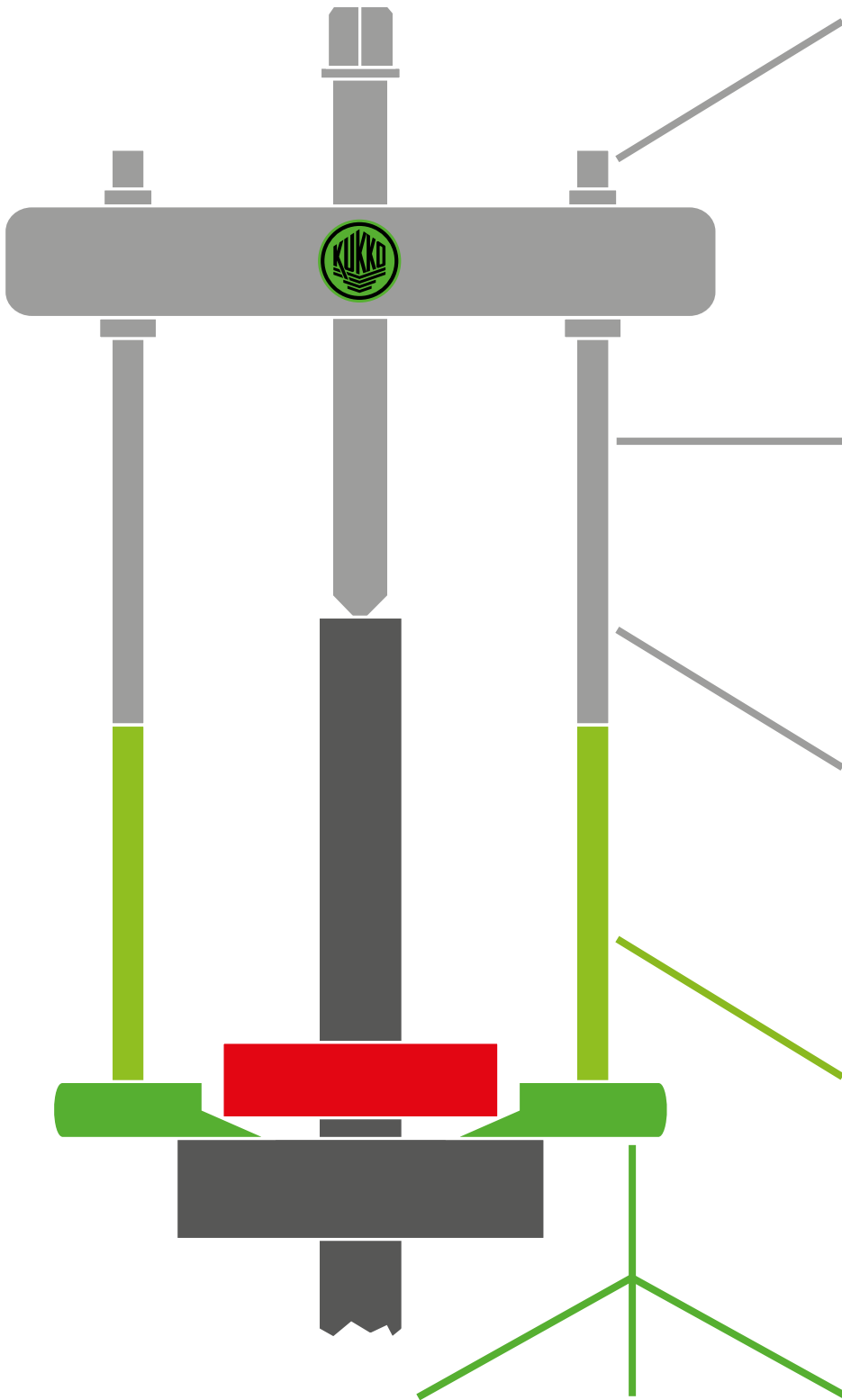
Removing a bearing from a gear shaft



Removing a gearbox gear

### TIP:

For an increase in the support surface, the separating arms of the separating devices (series 15 and 17) can be screwed into the extractor device in reverse. This enlarges the support surface, allowing for a more gentle extraction. This approach is recommended, for example, for rusted and brittle components.



### Separating Device Series 18

Art. No.			
<b>18-00</b>	20-50	61	
<b>18-0</b>	32-114	150	
<b>18-1</b>	58-150	200	
<b>18-2</b>	68-244	260	
<b>18-3</b>	75-310	300	
<b>18-4</b>	116-380	335	
<b>18-5</b>	142-440	380	

### Hydraulic Separating Devices Series 18-B

Art. No.			
	mm	mm	
<b>18-2-B</b>	68-244	260	
<b>18-3-B</b>	75-310	300	
<b>18-4-B</b>	116-380	335	
<b>18-5-B</b>	142-440	380	

### Hydraulic Separating Devices Series Y-180

Art. No.			
	mm	mm	
<b>Y28-180</b>	135-300	470	
<b>Y38-180</b>	180-420	520	
<b>Y58-180</b>	235-540	660	

### Extensions Series 19-P

Art. No.	L mm	für for	
<b>19-00-P</b>	100	18-0; 18-1	
<b>19-1-P</b>	100	18-0; 18-1	
<b>19-2-P</b>	100	18-2	
<b>19-3-P</b>	100	18-3	
<b>19-4-P</b>	200	18-4	
<b>19-5-P</b>	200	18-5	

### Cutting knife Series 15

Art. No.			
	mm	mm	
<b>15-00</b>	5- 60	60	
<b>15-0</b>	5- 60	60	
<b>15-1</b>	12- 75	75	
<b>15-2</b>	22-115	115	
<b>15-3</b>	25-155	155	
<b>15-4</b>	30-200	200	
<b>15-5</b>	30-250	250	

### Cutting knife Series 17

Art. No.			
	mm	mm	
<b>17-0</b>	8- 60	60	
<b>17-1</b>	8- 75	75	
<b>17-2</b>	22-115	115	
<b>17-3</b>	30-155	155	

### Hydraulic cutting knives Series Y-15

Art. No.			
	mm	mm	
<b>Y-215-2</b>	22-115	67	
<b>Y-215-3</b>	25-155	78	
<b>Y-215-4</b>	30-200	103	
<b>Y-315-4</b>	30-200	103	
<b>Y-315-5</b>	30-250	116	
<b>Y-515-5</b>	30-250	116	
<b>Y-515-6</b>	75-330	130	
<b>Y-515-7</b>	80-420	130	



## PRODUCT DETAILS

### SERIES 15 4-PIECE SEPARATION DEVICE SET













The pulling devices of series 15 are used in conjunction with the pulling devices of series 18 for the removal of ball bearings, roller bearings, inner rings, and other flat components in crafts, industry, and workshops, when there is not enough space for puller arms. The separating-pulling process is capable of initially separating those parts gently before they can be pulled off from the outside.

#### Benefits

- The sharp edges allow for extraction where other extraction methods are not applicable.
- By screwing together the separation and pulling device, the highest stability during pulling is ensured.
- If the separating arms are screwed into the pulling device the other way around, the support area is enlarged and removed more gently.

#### Technical attributes

#	 EAN	 mm/inch	 nominal dimension	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb	 Included in the set
15-00	-101854	6 - 46 1/4 - 1 13/16	M6	24,5 15/16	0,2 1/64	3,3 1/8	12,5 1/2	10 3/8	0,23 0,507	18-00 29-A-69
15-0	-006951	8 - 60 5/16 - 2 3/8	M10	39,5 1 9/16	0,3 1/64	5,5 3/16	21 13/16	17 11/16	0,695 1,532	18-0 15-K
15-1	-007033	8 - 75 5/16 - 2 15/16	M10	43 1 11/16	0,5 1/64	6,4 1/4	25 1	19 3/4	1,15 2,536	18-1 15-A, 224-678
15-2	-007118	22 - 115 7/8 - 4 1/2	M14x1,5	67 2 5/8	0,5 1/64	9,1 3/8	41 1 5/8	24 15/16	2,9 6,395	18-2, 18-2-B 15-B, 224-678, K-20-15
15-3	-007293	30 - 150 1 3/16 - 5 7/8	M18x1,5	78 3 1/16	0,5 1/64	11,2 7/16	50 1 15/16	32 1 1/4	5,3 11,687	18-3, 18-3-B 15-C
15-4	-007378	30 - 200 1 3/16 - 7 7/8	G5/8	103 4 1/16	2 1/16	15,6 5/8	65 2 9/16	41 1 5/8	11,8 26,019	18-4, 18-4-B 15-D, 18-4SAF
15-5	-007453	30 - 250 1 3/16 - 9 13/16	G3/4-14	116 4 9/16	2 1/16	14 9/16	70 2 3/4	46 1 13/16	18,5 40,793	18-5, 18-5-B 15-E

### 15-K 4-PIECE SEPARATION DEVICE SET












The 15-K part separator set with 4 pieces is used for extracting ball bearings, roller bearings, inner rings, and other flat-lying components in crafts, industry, and workshops when there is insufficient space for puller arms. The separation-extraction process is capable of initially separating those parts gently before they can be pulled out from the outside. This 4-piece set includes one separator and one extractor device, as well as a pair of extensions, ensuring the full range of application is guaranteed.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 Max. tensile force	 Max. Tractive force	 kg/lb	 Components
15-K	-007941	250 9 13/16	50 - 110 1 15/16 - 4 5/16	8 - 60 5/16 - 2 3/8	13 1/2	30 kN	3 t/US t. sh. 3.31	2,86 6,306	15-0, 18-0, 19-1-P

## PRODUCT DETAILS



### 15-A 4-PIECE SEPARATION DEVICE SET









The 4-piece separator set 15-A is used for pulling ball bearings, roller bearings, inner rings, and other flat-lying parts in crafts, industry, and workshops when there is insufficient space for puller arms. The separating-pulling process is capable of gently separating those parts before they can be pulled from the outside. This 4-piece set includes one separator and one puller as well as a pair of extensions, ensuring the full range of applications is covered.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
15-A	-007521	300 11 13/16	58 - 150 2 5/16 - 5 7/8	8 - 75 5/16 - 2 15/16	19 3/4	50	5 5.51	4,4 9,702	15-1, 18-1, 19-1-P

### 15-B 4-PIECE SEPARATION DEVICE SET









The 4-piece separator set 15-B is used for pulling ball bearings, roller bearings, inner rings, and other flat-lying parts in crafts, industry, and workshops when there is not enough space for puller arms. The separating-pulling process is capable of gently separating those parts initially before they can be pulled off from the outside. This 4-piece set includes one separator and one puller device as well as a pair of extensions, ensuring the full application range.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.

#### Technical attributes

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
15-B	-007606	350 13 3/4	60 - 200 2 3/8 - 7 7/8	22 - 115 7/8 - 4 1/2	22 7/8	70	7 7.72	9,5 20,948	15-2, 18-2, 19-2-P

## PRODUCT DETAILS

### 15-C 4-PIECE SEPARATION DEVICE SET









The 15-C 8883-piece separator set is used for removing ball bearings, roller bearings, inner rings, and other flat-mounted parts in craft, industry, and workshops when there is not enough space for puller arms. The separating and pulling process is capable of initially separating these parts gently before they can be pulled off from the outside. This 4-piece set includes one separator and one puller device, as well as a pair of extensions, thereby ensuring the full range of application.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.

#### Technical attributes

#					SW 	Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
15-C	-007781	400 15 3/4	75 - 310 2 15/16 - 12 3/16	30 - 150 1 3/16 - 5 7/8	27 1 1/16	100	10 11.02	16,99 37,463	15-3, 18-3, 19-3-P

### 15-D 7-PIECE SEPARATOR SET









The 15-piece separator set 7 is used for pulling ball bearings, roller bearings, inner rings, and other flat-lying parts in crafts, industry, and workshops when there is insufficient space for puller arms. The separating and pulling process is capable of initially separating those parts gently before they can be pulled out externally. This 4-piece set includes one separating device and one pulling device, as well as a pair of extensions, ensuring the full range of applications is covered.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.

#### Technical attributes

#					SW 	Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
15-D	-007866	550 21 5/8	120 - 380 4 3/4 - 14 15/16	30 - 200 1 3/16 - 7 7/8	36 1 7/16	150	15 16.53	32,18 70,957	15-4, 18-4, 19-4-P



## PRODUCT DETAILS



### 15-E 7-PIECE SEPARATION DEVICE SET









The 15-piece separator set 7 is used for pulling ball bearings, roller bearings, inner rings, and other flat components in crafts, industry, and workshops when there is insufficient space for puller arms. The separation-pulling process is capable of initially separating these parts gently before they can be pulled off from the outside. This 4-piece set includes one separator and puller device each, as well as a pair of extensions, ensuring the full range of applications.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Components</b>
15-E	-308826	600 23 5/8	150 - 440 5 7/8 - 17 5/16	30 - 250 1 3/16 - 9 13/16	41 1 5/8	200	20 22.05	49 108,045	15-5, 18-5, 19-5-P



The separating device 15-2 during the removal of a fixed gear wheel on a machine component

## PRODUCT DETAILS

### SERIES 17 SEPERATOR WITH QUICK-ACTION PRESSURE SPINDLE













The separating devices of the series 17 are used together with the pullers of the series 18 for pulling ball bearings, roller bearings, inner rings, and other flat-lying parts in crafts, industry, and workshops, where there is not enough space for puller arms. The separating-pulling process is capable of gently separating those parts initially before they can be pulled off from the outside. Compared to the series 15, the series 17 is particularly handy because the separating arms can be quickly and concentrically tightened by a pressure spindle.

#### Benefits

- A simple and safe handling is made possible by the quick-release clamp spindle.
- The sharp blades allow for extraction where other types of pullers are unsuitable.
- By screwing the separating and pulling device together, the highest stability during pulling is ensured.
- If the separation arms are screwed into the tightening device in reverse, the support surface is enlarged and is pulled off more gently.

#### Technical attributes

#	 EAN	 mm/inch	 nominal dimension	 mm	 mm	 mm	 mm	 mm	 kg/lb	
17-0	-008108	8 - 60 5/16 - 2 3/8	M10	39,5 1 9/16	0,3 1/64	5,5 3/16	21 13/16	17 11/16	0,95 2,095	18-0
17-1	-008283	8 - 75 5/16 - 2 15/16	M10	43 1 11/16	0,5 1/64	6,4 1/4	25 1	19 3/4	1,465 3,230	18-1
17-2	-008368	22 - 115 7/8 - 4 1/2	M14x1,5	67 2 5/8	0,5 1/64	9,1 3/8	41 1 5/8	24 15/16	3,72 8,203	18-2, 18- 2-B
17-3	-008443	30 - 150 1 3/16 - 5 7/8	M18x1,5	78 3 1/16	0,5 1/64	11,2 7/16	50 1 15/16	32 1 1/4	7,135 15,733	18-3, 18- 3-B

### 17-K 4-PIECE SEPARATOR SET WITH QUICK-ACTION PRESSURE SPINDLE









The 17-K 8,883-piece separator set is used for pulling ball bearings, roller bearings, inner rings, and other flat-lying parts in crafts, industry, and workshops when there is not enough space for puller arms. The separation-extraction process is capable of initially separating those parts gently before they can be pulled off from the outside. Compared to series 15, series 17 is particularly handy because the separation arms are quickly and concentrically clamped by a pressure spindle. This 4-piece set includes one separator and puller device as well as a pair of extensions, ensuring the full range of applications is guaranteed.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- A simple and safe handling is made possible by the quick clamping pressure spindle.
- The sharp edges allow for extraction where other types of extraction are not applicable.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Components</b>
17-K	-008856	150 5 7/8	50 - 110 1 15/16 - 4 5/16	8 - 60 5/16 - 2 3/8	13 1/2	30	3 3.31	3,11 6,858	17-0, 18-0, 19-1-P

## PRODUCT DETAILS



### 17-A 4-PIECE SEPARATOR SET WITH QUICK-ACTION PRESSURE SPINDLE











The 17-A 4-piece separating device set is used for pulling ball bearings, roller bearings, inner rings, and other flat-lying parts in crafts, industry, and workshops when there is not enough space for puller arms. The separating-puller process is capable of gently separating those parts before they can be pulled out from the outside. Compared to the series 15, the series 17 is particularly handy because the separating arms can be quickly and concentrically tightened using a pressure spindle. This 4-piece set includes one separating and puller device as well as a pair of extensions, ensuring full application versatility.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- A simple and safe handling is made possible by the quick clamping pressure spindle.
- The sharp edges allow for extraction where other types of extraction are not applicable.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 SW mm/inch	 Max. tensile force kN	 Max. tractive force t/US t. sh.	 kg/lb	Components
17-A	-008511	300 11 13/16	60 - 150 2 3/8 - 5 7/8	12 - 75 1/2 - 2 15/16	19 3/4	50	5 5.51	4,83 10,650	17-1, 18-1, 19-1-P

### 17-B 4-PIECE SEPARATOR SET WITH QUICK-ACTION PRESSURE SPINDLE











The 17-piece separator set 4 is used for removing ball bearings, roller bearings, inner rings, and other flat-lying parts in craftsmanship, industry, and workshops when there is not enough space for puller arms. The separator-extraction process is able to gently separate those parts initially before they can be pulled off from the outside. Compared to series 15, series 17 is particularly handy because the separator arms can be quickly and concentrically tightened by a pressure spindle. This 4-piece set includes one separator and puller device as well as a pair of extensions, ensuring the full range of applications.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- A simple and safe handling is made possible by the quick clamping pressure spindle.
- The sharp edges allow for extraction where other types of extraction are not applicable.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 SW mm/inch	 Max. tensile force kN	 Max. tractive force t/US t. sh.	 kg/lb	Components
17-B	-008696	350 13 3/4	60 - 200 2 3/8 - 7 7/8	22 - 115 7/8 - 4 1/2	22 7/8	70	7 7.72	1,395 3,076	17-2, 18-2, 19-2-P



## PRODUCT DETAILS

### 17-C 4-PIECE SEPARATOR SET WITH QUICK-ACTION PRESSURE SPINDLE









The 4-piece separator set 17-C is used for pulling ball bearings, roller bearings, inner rings, and other flat-lying parts in crafts, industry, and workshops when there is insufficient space for puller arms. The separating and pulling process is capable of gently separating those parts before they can be pulled off from the outside. Compared to the series 15, the series 17 is particularly handy because the separating arms can be quickly and concentrically tightened by a pressure spindle. This 4-piece set includes a separating and pulling device, as well as a pair of extensions, ensuring the full range of applications.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- A simple and safe handling is made possible by the quick clamping pressure spindle.
- The sharp edges allow for extraction where other types of extraction are not applicable.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Components</b>
17-C	-008771	400 15 3/4	80 - 130 3 1/8 - 5 1/8	25 - 155 1 - 6 1/8	27 1 1/16	100	10 11.02	19 41,895	17-3, 18-3, 19-3-P

### SERIES Y-15 SEPARATOR FOR HYDRAULIC PULL/ PUSH PULLERS













The Y-15 series separation devices are used for pulling ball bearings, roller bearings, inner rings, and other flush-fitting parts in crafts, workshops, and industries when there is not enough space for pulling hooks. The separation-puller process can initially separate those parts gently before they can be pulled off from the outside. The Y-15 series impresses with its compatibility and variety of applications. Depending on the application case, there are several variants of the separation devices. The Y-15 series separation devices require the hydraulic puller device of the Y-180 series.

#### Benefits

- The required hydraulic pulling device, in combination with the separating device, allows for the easy and controlled removal of particularly stubborn parts.
- The sharp edges allow for a pulling action where other types of pullers are unusable.
- By screwing the separating and pulling device, the highest stability during pulling is ensured.
- If the separator arms are screwed in the opposite direction into the puller device, the supporting surface is enlarged and is removed more gently.

#### Technical attributes

#	 EAN	 mm/inch	 nominal dimension	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb	 Y28-180	<b>Included in the set</b>
Y-215-2	-172106	22 - 115 7/8 - 4 1/2	5/8"-18 UNF	67 2 5/8	0,5 1/64	9,1 3/8	41 1 5/8	24 15/16	2,86 6,306	Y28-180	818-100, 818-215
Y-215-3	-039546	25 - 155 1 - 6 1/8	5/8"-18 UNF	78 3 1/16	0,5 1/64	11,2 7/16	50 1 15/16	32 1 1/4	2,88 6,350	Y28-180	818-150, 818-215, 845-855, 845-858, Y28-200, Y28-218
Y-315-4	-398186	30 - 200 1 3/16 - 7 7/8	1"-14 UNS	103 4 1/16	2 1/16	15,6 5/8	65 2 9/16	41 1 5/8	11,865 26,162	Y38-180	Y38-300
Y-215-4	-385629	30 - 200 1 3/16 - 7 7/8	5/8"-18 UNF	103 4 1/16	2 1/16	15,6 5/8	65 2 9/16	41 1 5/8	11,8 26,019	Y28-180	-
Y-315-5	-041501	30 - 250 1 3/16 - 9 13/16	1"-14 UNS	116 4 9/16	2 1/16	14 9/16	70 2 3/4	46 1 13/16	20,11 44,343	Y38-180	Y38-318
Y-515-5	-400063	30 - 250 1 3/16 - 9 13/16	1 1/4"-12 UNF	116 4 9/16	2 1/16	14 9/16	70 2 3/4	46 1 13/16	19 41,895	Y58-180	-
Y-515-6	-043581	75 - 330 2 15/16 - 12 1	1 1/4"-12 UNF	130 5 1/8	2 1/16	16 5/8	70 2 3/4	55 2 3/16	39 85,995	Y58-180	Y58-518, Y58-500
Y-515-7	-172281	80 - 420 3 1/8 - 16 9/16	1 1/4"-12 UNF	130 5 1/8	2 1/16	16 5/8	70 2 3/4	55 2 3/16	45 99,225	Y58-180	-

## PRODUCT DETAILS



### SERIES 18 2-ARM PULLER DEVICE










The puller devices of series 18 are used in conjunction with the separating devices of series 15 and 17 for pulling flat-lying or thin-walled parts in craft, industry, and workshops when there is not enough space for arms. The separating-pulling process is capable of initially separating those parts gently before they can be externally pulled off.

#### Benefits

- By screwing the separator and puller device, the highest stability when pulling is ensured.
- If the separating arms are screwed into the clamping device the other way around, the support surface is enlarged and pulled off more gently.
- Due to its simple design, special separating devices can also be easily created in-house for the series 18.

#### Technical attributes

#						Max. tensile force	Max. tractive force			Included in the set
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb		
<b>18-00</b>	-101939	20 - 110 13/16 - 4 5/16	61 2 3/8	12 1/2	40 29.50	15	1.5 1.65	0,82 1,808	15-00, 19-00-P	-
<b>18-0</b>	-075599	32 - 114 1 1/4 - 4 1/2	150 5 7/8	13 1/2	40 29.50	30	3 3.31	0,825 1,819	15-0, 17-0, 19-1-P, 18-003A, 18-004A, 18-005A, 18-006A, 18-008A, 18-010A, 18-012A, 18-016A, 18-0-AS	15-K
<b>18-1</b>	-075674	58 - 150 2 5/16 - 5 7/8	200 7 7/8	19 3/4	70 51.63	50	5 5.51	2 4,410	15-1, 17-1, 19-1-P, 18-003A, 18-004A, 18-005A, 18-006A, 18-008A, 18-010A, 18-012A, 18-016A, 18-0-AS	15-A, 224-678
<b>18-2</b>	-075759	68 - 244 2 11/16 - 9 5/8	260 10 1/4	22 7/8	120 88.51	70	7 7.72	3,245 7,155	8-0-621, 15-2, 17-2, 8-01, 19-2-P, 18-208A, 18-210A, 18-212A, 18-214A, 18-216A, 18-218A, 18-2-AS	15-B, 224-678, K-20-15
<b>18-3</b>	-005961	75 - 310 2 15/16 - 12 3/16	300 11 13/16	27 1 1/16	280 206.53	100	10 11.02	6,375 14,057	15-3, 8-02, 17-3, 8-0-626, 19-3-P, 18-314A, 18-316A, 18-318A, 18-320A, 18-322A, 18-324A, 18-3-AS	15-C
<b>18-4</b>	-006043	116 - 380 4 9/16 - 14 15/16	335 13 3/16	36 1 7/16	450 331.92	150	15 16.53	14,3 31,532	15-4, 8-1-B, 19-4-P	15-D, K-226-4/12, 18-4SAF
<b>18-5</b>	-075834	142 - 440 5 9/16 - 17 5/16	380 14 15/16	41 1 5/8	500 368.80	200	20 22.05	24,19 53,339	15-5, 8-2-M, 19-5-P	15-E

## PRODUCT DETAILS

### SERIES 18-B HYDRAULIC PULLER DEVICE WITH MECHANICAL SPINDLE









The puller devices of series 18 are used together with the separating devices of series 15 and 17 for pulling flat-lying or thin-walled parts in craftsmanship, industry, and workshops when there is insufficient space for arms. The separating-pulling process is capable of initially separating those parts gently before they can be pulled from the outside. Series 18-B is additionally equipped with a hydraulic spindle that achieves an average pulling force of up to 20 t, thus allowing a gentle and efficient separating-pulling operation.

#### Benefits

- Through the bolting of the separator and puller, the highest stability during extraction is ensured.
- If the separating arms are screwed into the tensioning device the other way around, the contact surface is increased and is removed more gently.
- Due to its simple design, special separation devices can also be easily created for the series 18 in custom applications.
- Hydraulics ensures a power-saving and fast extraction

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	
<b>18-2-B</b>	-885723	68 - 244 2 11/16 - 9 5/8	260 10 1/4	15 11.06	100	10 11.02	4,745 10,463	17-2, 15-2
<b>18-3-B</b>	-885730	75 - 310 2 15/16 - 12 3/16	300 11 13/16	20 14.75	120	12 13.23	8,405 18,533	17-3, 19-3-P, 15-3
<b>18-4-B</b>	-885747	116 - 380 4 9/16 - 14 15/16	335 13 3/16	45 33.19	150	15 16.53	21,11 46,548	19-4-P, 15-4
<b>18-5-B</b>	-885754	142 - 440 5 9/16 - 17 5/16	380 14 15/16	30 22.13	200	20 22.05	37 81,585	19-5-P, 15-5

### SERIES 19-P 2 EXTENSIONS FOR PULLER DEVICES









The extensions for pullers are used together with the pullers of series 18 in craft, industry, and workshop to increase the reach of the puller. The extensions are available in various lengths in pairs.

#### Benefits

- The extensions are combinable with each other, allowing for optimal adjustment to the required reach.

#### Technical attributes

#	 EAN	 nominal dimension	 mm/inch	 mm/inch	 mm/inch	 kg/lb	Included in the set
<b>19-00-P</b>	-120510	M6	10 3/8	95 3 3/4	8 5/16	0,115 0,254	-
<b>19-1-P</b>	-169984	M10	14 9/16	100 3 15/16	12 1/2	0,23 0,507	-
<b>19-2-P</b>	-170041	M14x1,5	22 7/8	100 3 15/16	19 3/4	0,555 1,224	-
<b>19-3-P</b>	-170126	M18x1,5	24 15/16	100 3 15/16	19 3/4	0,655 1,444	-
<b>19-4-P</b>	-168321	G5/8	23 7/8	200 7 7/8	32 1 1/4	0,23 0,507	18-4SAF
<b>19-5-P</b>	-152306	G3/4	26,3 1 1/32	200 7 7/8	36 1 7/16	2,94 6,483	-
<b>19-7-P</b>	-041181	M10	22 7/8	100 3 15/16	17 11/16	0,596 1,314	-



KUKKO // *Pull forward*



SERIES 670000

# POWER NUT



# DEPLOYMENT

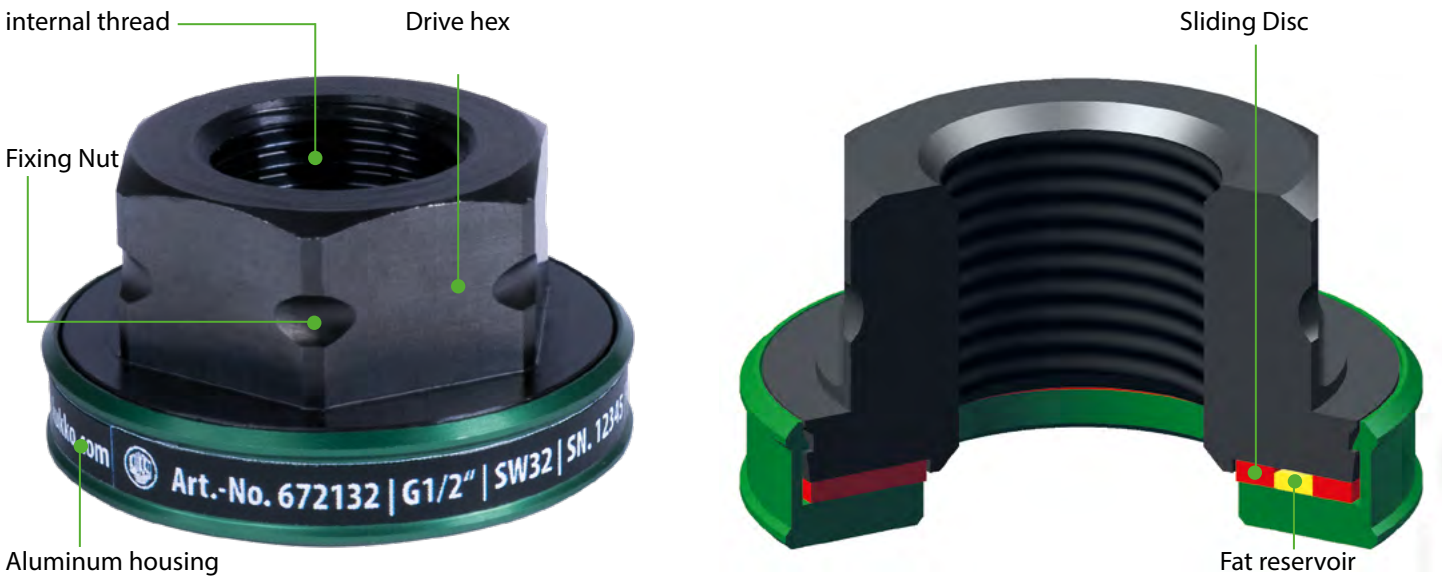
The Power Nut is a true powerhouse! It can generate forces that can otherwise only be achieved with hydraulics. For more energy-efficient clamping of tools and workpieces, as well as driving without significant friction losses, KUKKO has developed the Power Nut. The Power Nut can be used as a movement thread and is employed in fixture construction as well as in assembly and clamping technology. The nut also serves as a tool for pressing in or as a clamping aid to generate higher clamping forces.



**Benefits**

- Low construction height enables use in confined space conditions.
- Increased power generation with minimal friction
- Long service life without maintenance due to stable construction
- Applicable above or below the crossbar to increase tension or compressive force

# ASSEMBLY OF THE POWER NUT



# SYSTEMATIC OF ITEM NUMBERS

All KUKKO pressure spindles and Power Nuts are equipped with a descriptive item number. Both item numbers include the diameter of the thread, thus enabling a quick match of the appropriate Power Nut to the respective spindle.

	Art.No. Spindle	Pressure spindle	Ø a mm	b mm
		6	26	300
	Art.No. Power nut	67	26	46
		Power nut	Ø a mm	SW mm





**ABBREVIATIONS:**

a = thread pitch of the spindle  
 b = thread length of the spindle



# FEATURES OF THE SERIES



Zugkraft	Art. No. Spindel	Art. No. Power Nut
2 t 	608...	670817 Ø30   M8 - SW17
	610...	671017 Ø30   M10 - SW17
4 t 	612...	671217 Ø30   M12 - SW17
	612...	671224 Ø36   M12x1,5 - SW24
6 t 	615...	671519 Ø30   M15x1,5 - SW19
	616...	671624 Ø36   M16 - SW24
	-	671827 Ø46   M18 - SW27
8 t 	620...	672032 Ø46   M20 - SW32
	621...	672132 Ø46   G1/2 - SW32
	-	672432 Ø46   M24 - SW32
	626...	672646 Ø67   G3/4 - SW46
	-	673046 Ø67   M30 - SW46
	-	673655 Ø67   M36 - SW55



Depending on the spindle diameter, the Power Nut - suitable for KUKKO spindles - is available in various sizes.

# FUNCTIONALITY

## INCREASED TENSION FORCE



The Power Nut is located above the crossbar. By turning the Power Nut, the spindle is pulled upwards with increased force until the cylinder socket is drawn out.

## INCREASED PRESSURE FORCE



The Power Nut is located below the crossbar. By operating the hexagon, the spindle is pressed down. In the process, the Power Nut amplifies the applied force multiple times.

# APPLICATION EXAMPLES



The power nut is screwed onto the spindle.



The Power Nut reduces the effort required to actuate the spindle.



## PRODUCT DETAILS







### SERIES 670000 POWER NUT



For more efficient clamping of tools and workpieces, as well as driving without significant friction loss, KUKKO has developed the Power Nut. The Power Nut can be used as a motion thread and is employed in fixture construction as well as in assembly and clamping technology. The nut also serves as a tool for pressing in or clamping aids to generate higher clamping forces.



#### Technical attributes

#	 EAN	 mm/inch	 M	 mm/inch	 SW mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
670817	-080203	30 1 3/16	M8	19,5 3/4	17 11/16	10	1 1.10	0,04 0,088
671017	-283345	30 1 3/16	M10	19,5 3/4	17 11/16	20	2 2.20	0,04 0,088
671217	-283352	30 1 3/16	M12	19,5 3/4	17 11/16	20	2 2.20	0,35 0,772
671224	-060823	36 1 7/16	M12	21,5 7/8	24 15/16	20	2 2.20	0,12 0,265
671519	-344459	30 1 3/16	M15	19,5 3/4	19 3/4	40	4 4.41	0,1 0,221
671624	-283369	36 1 7/16	M16	21,5 7/8	24 15/16	40	4 4.41	0,12 0,265
671827	-283376	36 1 7/16	M18	23 7/8	24 15/16	40	4 4.41	0,15 0,331
672032	-283383	46 1 13/16	M20	24 15/16	32 1 1/4	60	6 6.61	0,2 0,441
672132	-283390	46 1 13/16	G 1/2"	24 15/16	32 1 1/4	60	6 6.61	0,12 0,265
672432	-283413	46 1 13/16	M24	26 1 1/32	32 1 1/4	60	6 6.61	0,17 0,375
672646	-182105	67 2 5/8	G 3/4"	31,5 1 1/4	46 1 13/16	80	8 8.82	0,17 0,375
673046	-283420	67 2 5/8	M30	31,5 1 1/4	46 1 13/16	80	8 8.82	0,17 0,375
673655	-283437	67 2 5/8	M36	31,5 1 1/4	55 2 3/16	80	8 8.82	0,21 0,463





# REMOVING

When removing ball bearings, it must first be decided whether the bearing may be destroyed or should be retained. The ball bearing can be located on a shaft or in a housing. There are also applications in which both installation situations apply. When dismantling with the series 69 ball bearing extractor sets, the cage of the bearing must be drilled out so that the hemispheres of the bearing adapters can be screwed in. The series 70 ball bearing extractors are used for the non-destructive removal of bearings. The specially developed puller hooks grip precisely into the bearing raceway of the ball bearing.





KUKKO // Pull forward



SERIES 69 | 70 | 71 | 71-17mm

# BALL BEARING - REMOVING AND INSTALLATION



# DEPLOYMENT

Many ball bearings sit on a shaft, in a housing, or even both together. To ensure proper disassembly, a special type of puller is required. First, the ball bearing to be removed should be determined by its dimensions. For the choice of the right puller, it is important whether the bearing is to be destroyed or whether it is to be reused. With series 69 and 70, KUKKO offers various tools for ball bearing disassembly, while the bearing installation tool set from series 71 allows ball bearings to be installed effortlessly.



## Benefits

- Versatile application without damaging the shaft (series 69)
- Quick and secure selection through labeling of the storage adapters (series 69)
- The special crossbar shape allows for a safe, easy hanging and the force-amplifying self-tensioning of the arms (PULLPO Technology)
- Self-damaged bearings can be gripped by the adjustable hooks (series 70).
- By combining the impact ring and impact tube, the installation forces are never transmitted over the rolling bodies of the bearing, thus protecting it (series 71).

## FEATURES OF THE SERIES

### SERIES 69



69-A

The puller sets of series 69 are used for removing ball bearings of all types, which are seated in a housing and/or on a shaft. In this type of disassembly, the ball bearing is destroyed.

### SERIES 70



70-02

The pullers of series 70 are used for non-destructive removal of deep groove ball bearings without disassembling the shaft. With this type of dismantling, the ball bearing remains undamaged and can be reused.

## ASSEMBLY OF THE SERIES 69



Hexagonal profile for manual actuation of the spindle

Anti-slip safety (spindle neck)

Crossbar

Side screw

Mechanical spindle

Bearing adapter



## ASSEMBLY OF THE SERIES 70

Hexagonal profile for manual actuation of the spindle

Anti-slip safety (spindle neck)

Mechanical spindle

Crossbar

Hexagonal key surface for use with sliding hammer

Arms



### TIP:

For the non-destructive extraction of roller bearings seated in a housing but without a shaft for support, the PULLPO can be connected to a sliding hammer. For this pulling process, the spindle is reversed and screwed in from below into the PULLPO, so that the sliding hammer can be used.





# BALL BEARING INSTALLATION AND REMOVAL

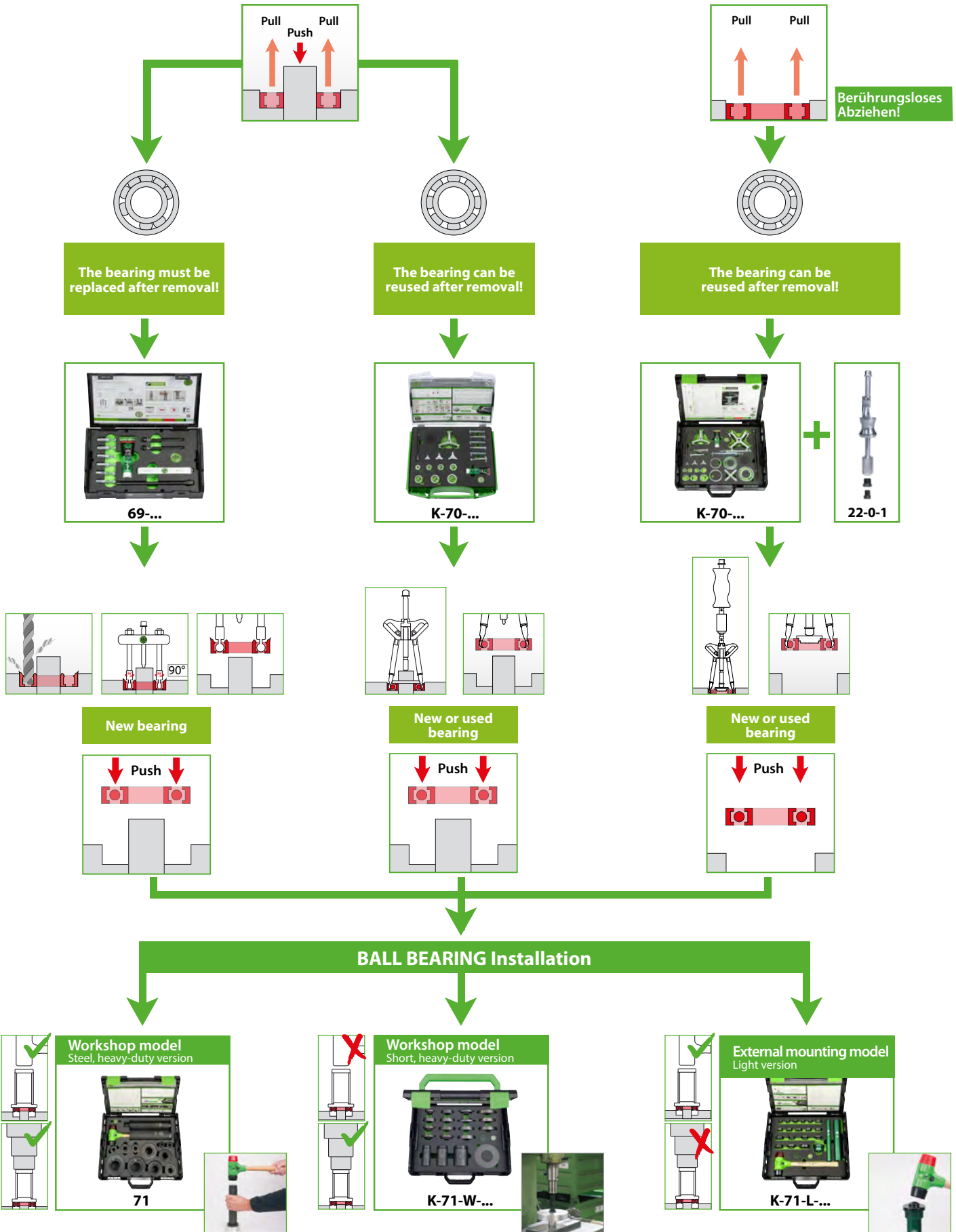


**A**

Ball bearings that sit in a housing and on a shaft at the same time.







































**B**

The ball bearing is located in a housing, but does not have a shaft for support.




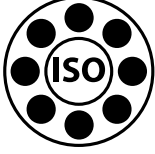



# PULLPO BALL BEARING PULLER SETS K-70-A, K-70-B AND K-70-C

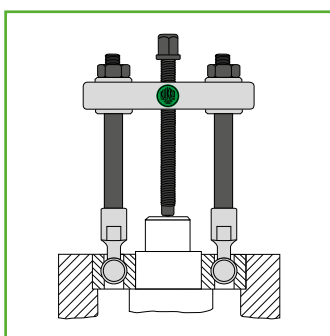


	Cross-beam and spindle						
	Art.No.	70-011 (3 pcs.) 70-012 (3 pcs.)	70-021 (4 pcs.) 70-022 (4 pcs.)	70-01-R AA - GG	70-02-R B - G	700117 S M L	700217 S M L XL
6000	 70-01	70-011 small			-	 S	K-70-A
6001							
6002							
6003							
6004		70-012 wide			DD	 M	
6005							
6006							
6200							
6201		70-011 small			-	 S	
6202							
6203							
6204							
6205		70-012 wide			EE	 L	
6300							
6301							
6302							
6303	70-011 small			GG	 M		
6304							
6403							
6404							
6405	 70-02	70-011 small		AA	 S	K-70-B	
6406							
6007							
6207							
6307		70-012 wide			CC		 M
6407							
6008							
6208							
6308		70-011 small			DD		 L
6009							
6209							
6309							
6010		70-012 wide			DD		 M
6011							
6211							
6311							
6012	70-011 small			DD	 L	K-70-C	
6013							
6014							
6015							
6016	70-012 wide			FF	 M		
6017							
6018							
6019							
6020	70-011 small			GG	 S		
6403							
6404							
6405							
6206	70-021 small			GG	 S		
6306							
6406							
6007							
6207	70-022 wide			GG	 M		
6307							
6407							
6008							
6208	70-022 wide			GG	 S		
6308							
6408							
6009							
6209	70-021 small			GG	 M		
6309							
6010							
6210							
6310	70-022 wide			GG	 L		
6011							
6211							
6311							
6012	70-021 small			GG	 XL		
6013							
6014							
6015							
6016	70-022 wide			GG	 L		
6017							
6018							
6019							
6020	70-021 small			GG	 XL		
6403							
6404							
6405							
6206	70-022 wide			GG	 XL		
6306							
6406							
6007							
6207	70-022 wide			GG	 XL		
6307							
6407							
6008							
6208	70-022 wide			GG	 XL		
6308							
6408							
6009							
6209	70-022 wide			GG	 XL		
6309							
6010							
6210							
6310	70-022 wide			GG	 XL		
6011							
6211							
6311							
6012	70-022 wide			GG	 XL		
6013							
6014							
6015							
6016	70-022 wide			GG	 XL		
6017							
6018							
6019							
6020	70-022 wide			GG	 XL		
6403							
6404							
6405							
6206	70-022 wide			GG	 XL		
6306							
6406							
6007							
6207	70-022 wide			GG	 XL		
6307							
6407							
6008							
6208	70-022 wide			GG	XL		
6308							
6408							
6009							
6209	70-022 wide			GG	XL		
6309							
6010							
6210							
6310	70-022 wide			GG	XL		
6011							
6211							
6311							
6012	70-022 wide			GG	XL		
6013							
6014							
6015							
6016	70-022 wide			GG	XL		
6017							
6018							
6019							
6020	70-022 wide			GG	XL		
6403							
6404							
6405							
6206	70-022 wide			GG	XL		
6306							
6406							
6007							
6207	70-022 wide			GG	XL		
6307							
6407							
6008							
6208	70-022 wide			GG	XL		
6308							
6408							
6009							
6209	70-022 wide			GG	XL		
6309							
6010							
6210							
6310	70-022 wide			GG	XL		
6011							
6211							
6311							
6012	70-022 wide			GG	XL		
6013							
6014							
6015							
6016	70-022 wide			GG	XL		
6017							
6018							
6019							
6020	70-022 wide			GG	XL		
6403							
6404							
6405							
6206	70-022 wide			GG	XL		
6306							
6406							
6007							
6207	70-022 wide			GG	XL		
6307							
6407							
6008							
6208	70-022 wide			GG	XL		
6308							
6408							
6009							
6209	70-022 wide			GG	XL		
6309							
6010							
6210							
6310	70-022 wide			GG	XL		
6011							
6211							
6311							
6012	70-022 wide			GG	XL		
6013							
6014							
6015							
6016	70-022 wide			GG	XL		
6017							
6018							
6019							
6020	70-022 wide			GG	XL		
6403							
6404							
6405							
6206	70-022 wide			GG	XL		
6306							
6406							
6007							
6207	70-022 wide			GG	XL		
6307							
6407							
6008							
6208	70-022 wide			GG	XL		
6308							
6408							
6009							
6209	70-022 wide			GG	XL		
6309							
6010							
6210							
6310	70-022 wide			GG	XL		
6011							
6211							
6311							
6012	70-022 wide			GG	XL		
6013							
6014							
6015							
6016	70-022 wide			GG	XL		
6017							
6018							
6019							
6020	70-022 wide			GG	XL		
6403							
6404							
6405							
6206	70-022 wide			GG	XL		
6306							
6406							
6007							
6207	70-022 wide			GG	XL		
6307							
6407							
6008							
6208	70-022 wide			GG	XL		
6308							
6408							
6009							
6209	70-022 wide			GG	XL		
6309							
6010							
6210							
6310	70-022 wide			GG	XL		
6011							
6211							
6311							
6012	70-022 wide			GG	XL		
6013							
6014							
6015							
6016	70-022 wide			GG	XL		
6017							
6018							
6019							
6020	70-022 wide			GG	XL		
6403							
6404							
6405							
6206	70-022 wide			GG	XL		
6306							
6406							
6007							
6207	70-022 wide			GG	XL		
6307							
6407							
6008							
6208	70-022 wide			GG	XL		
6308							
6408							
6009							
6209	70-022 wide			GG	XL		
6309							
6010							
6210							
6310	70-022 wide			GG	XL		
6011							
6211							
6311							
6012	70-022 wide			GG	XL		
6013							
6014							
6015							
6016	70-022 wide			GG	XL		
6017							
6018							
6019							
6020	70-022 wide			GG	XL		
6403							
6404							
6405							
6206	70-022 wide			GG	XL		
6306							
6406							
6007							
6207	70-022 wide			GG	XL		

# UNIVERSAL BALL BEARING PULLER SETS 69-A, 69-B AND 69-C



Art.No. Set	Art.No. Adapter 	Ball bearing size ISO 					
 <b>69-A</b>	69-A1	6004 - 6008	6201 - 6203	-	-	<b>69-A</b>	
	69-A2	6005 - 6010	6202 - 6205	6300 - 6302	6300 - 6302		
	69-A3	6009 - 6013	6206	6303 - 6305	-		
 <b>69-B</b>	69-B4	6011-6015	6206-6210	6305-6306	-	<b>69-B</b>	
	69-B5	6016 - 6020	6207 - 6211	6307	6403		
	69-B6	6016-6020	6212	6308-6309	6404-6407		
 <b>69-C</b>	69-C7	6021-6024	6213-6216	6310-6311	6406-6408	<b>69-C</b>	
	69-C8	6026 - 6030	6217 - 6218	6310-6312	6407-6409		
	69-C9	6032	6219-6220	6313-6314	6410		
	69-C10	-	6221	6315	6411		
	69-C11	-	6222-6230	6316-6318	6412-6413		
	69-C12	-	-	6319-6321	6414-6417		




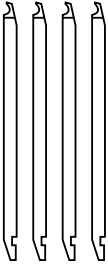
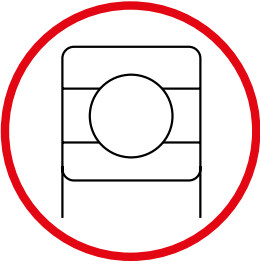






# BALL BEARING PULLER SETS 70-A, 70-B AND 70-C



The crossbars and hooks in sets **70-A**, **70-B** and **70-K** can be easily assigned using the following labelling:



 Traverse Art.No.	 Hook Art.No.	 Bearing Size (* = Spacer Ring needed)			
<b>70-1</b> 	70-711	6000; 6001; 6002; 6003	6200		
	70-712**	*6004; *6005; *6006	6201; *6202; *6203	*6300	
	70-713**		*6204; *6205	*6301; *6302; *6303	
<b>70-2</b> 	70-721**	6007; 6008; 6009; 6010; *6013			
	70-722**	6011 6012	*6206 *6207	*6304; *6305; *6306	
<b>70-3</b> 	70-731**		*6208; *6209; *6210	*6307	*6403 *6407
	70-732**		6211 *6212	*6308; *6309; *6310; *6311	*6404; *6405; *6406; *6408
<b>70-4</b> 	70-4730**	*6014 *6015 *6016 *6017			
	70-4731**	*6018 6019 *6020	*6213 *6214 *6215		
	70-4733**		*6216 *6217 *6218 *6219 *6220 *6221 *6222	*6312 *6313 *6314 *6315 *6316 *6317	*6410 *6411 *6412 *6413 *6414 *6415
	70-4734	6021			6409

70-A

70-B

70-K

\*\*Additional support rings are supplied with these sets. These bridge different distances between the bearing rings and thus increase the possible uses of the individual sets.

For bearings marked with an \*, the support ring provided with the relevant bearing nut is placed on the inner ring of the bearing beforehand.

# BALL BEARING INSTALLATION WITH SERIES 71

The bearing installation tool set made of steel as a lightweight external mounting model of series 71 is used for the quick, precise, and safe installation of bearings and seals in craft, industry, and workshops. The tool set allows for a damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

## Benefits

- The required combination of impact ring and impact sleeve can be found in the table in the lid of the case.
- The impact ring and impact tube gently transmit the installation forces through the frame of the bearing.
- The included SELECTHOR hammer can be flexibly used by swapping the included striking heads.



Impact Sleeve

Impact rings

Soft-face hammer Selecthor

The bearing installation tool set made of steel as a lightweight external mounting model of series 71 is used for the quick, precise, and safe installation of bearings and seals in craft, industry, and workshops. The tool set allows for a damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

## SETS

The puller and separator devices are also available in practical case sets. Application-specific and industry-oriented, the sets impress with their universal use.



69-A

K-70-B

70-K

71-L

## APPLICATION EXAMPLES



Ball bearing disassembly with the 69-A



Ball bearing disassembly with the 70-0



Bearing installation with the 71-L

## PRODUCT DETAILS



### 69-A 10-PIECE BALL BEARING PULLER SET "UNIVERSAL"










The 10-piece ball bearing puller set 69-A is used for pulling ball bearings of all types that are seated in a housing and/or on a shaft, in craft, industry, and workshops. Although the affected ball bearing cannot be reused in this process, the application ensures safety and the integrity of the corresponding housing or shaft while also requiring minimal effort. The series 69 impresses with its versatility; depending on the required bearing ball diameter, three different sets are available that allow for ideal and tailored use.

#### Benefits

- Versatile application without damaging the spindle
- Application-oriented compilation for universal use

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
<b>69-A</b>	-781391	20 - 110 13/16 - 4 5/16	100 3 15/16	12 1/2	5,3, 5,8, 8 3/16;3/16;5/16	6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6201, 6202, 6203, 6204, 6205, 6206, 6300, 6301, 6302, 6303, 6304, 6305	1,85 4,079

### 69-B 12-PIECE BALL BEARING PULLER SET "UNIVERSAL"










The 12-piece ball bearing puller set 69-B is used for removing ball bearings of all types that sit in a housing and/or on a shaft, in craftsmanship, industry, and workshops. Although the affected ball bearing cannot be reused in this process, the application ensures safety and integrity of the corresponding housing or shaft, with minimal effort. The series 69 impresses with its versatility; depending on the required ball diameter, three different sets are available, allowing for ideal and tailored usage.

#### Benefits

- Versatile application without damaging the spindle
- Application-oriented compilation for universal use

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
<b>69-B</b>	-781476	40 - 140 1 9/16 - 5 1/2	200 7 7/8	17 11/16	8, 9, 11, 12,5 5/16;3/8;7/16;1/2	6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018, 6019, 6020, 6206, 6207, 6208, 6209, 6210, 6211, 6212, 6305, 6306, 6307, 6308, 6309, 6403, 6404, 6405, 6406, 6407	1,755 3,870



## PRODUCT DETAILS

### 69-C 16-PIECE BALL BEARING PULLER SET "UNIVERSAL"










The 16-piece ball bearing puller set 69-C is used for extracting ball bearings of all types that are mounted in a casing and/or on a shaft, in crafts, industry, and workshops. Although the affected ball bearing cannot be reused during this process, the application ensures safety and the integrity of the associated casing or shaft while requiring minimal work effort. The 69 series impresses with its variability; depending on the required ball bearing diameter, three different sets are available, allowing for ideal and customized use.

#### Benefits

- Versatile application without damaging the spindle
- Application-oriented compilation for universal use

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch		 kg/lb
69-C	-781544	60 - 240 2 3/8 - 9 7/16	500 19 11/16	22 7/8	16, 19, 22, 25, 28, 32 5/8; 3/4; 7/8; 1; 1/8; 1 1/4	6021, 6022, 6024, 6026, 6028, 6030, 6032, 6213, 6214, 6215, 6216, 6217, 6218, 6219, 6220, 6221, 6222, 6224, 6226, 6228, 6230, 6310, 6311, 6312, 6313, 6314, 6315, 6316, 6317, 6318, 6319, 6320, 6321, 6406, 6407, 6408, 6409, 6410, 6411, 6412	11 24,255

### SERIES 70 BALL BEARING PULLER, WITHOUT HOOKS







The ball bearing pullers of series 70 are used for non-destructive removal of deep groove ball bearings without disassembling the shaft in crafts, industry, and workshops. With these pullers, bearings that are seated simultaneously in a housing and on a shaft can be removed easily and quickly, and can be reused if they are not already damaged. The series 70 impresses with its specifically developed arms for precise installation in the bearing raceways. Various arm sets are available for each puller size.

#### Benefits

- Suitable for a variety of groove diameters through infinitely adjustable hooks and internationally applicable.
- Self-damaged bearings can be grasped by the adjustable hooks.
- The claw shape ensures a secure grip, allowing for high pulling forces to be developed.
- The puller is also suitable for removing sealed bearings from housing bores.

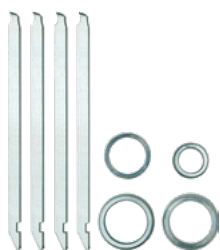
#### Technical attributes

#	 EAN	 mm/inch	 kg/lb		Included in the set
70-1	-021138	17 11/16	0,38 0,838	70-711, 70-712, 70-713	KS-70-A-K
70-2	-021213	17 11/16	0,67 1,477	70-721, 70-722	KS-70-A-K
70-3	-021398	24 15/16	1,38 3,043	70-731, 70-732	-
70-4	-316418	22 7/8	2,315 5,105	70-4730, 70-4731, 70-4733, 70-4734	-

## PRODUCT DETAILS








### SERIES 70-4S PULLING ARM SET



The pulling arm sets of series 70-S are suitable for bearing pullers of series 70 and are used for non-destructive removal of deep groove ball bearings without dismantling the shaft. In addition to the arms, the sets also include anti-slip safety rings as spare parts.

#### Technical attributes

#	 EAN	 mm/inch			
70-711	-021473	150 5 7/8	6000, 6001, 6002, 6003, 6200	0,3 0,662	70-1
70-712	-021541	150 5 7/8	6004, 6005, 6006, 6201, 6202, 6203, 6300	0,29 0,639	70-1
70-713	-021626	170 6 11/16	6204, 6205, 6301, 6302, 6303	0,32 0,706	70-1
70-721	-021701	180 7 1/16	6007, 6008, 6009, 6010, 6011, 6012, 6013	1,75 3,859	70-2
70-722	-021886	180 7 1/16	6011, 6012, 6206, 6207, 6304, 6005, 6306	0,58 1,279	70-2
70-731	-021961	217 8 9/16	6208, 6209, 6210, 6307, 6403, 6407	1,16 2,558	70-3
70-732	-022043	217 8 9/16	6211, 6212, 6308, 6309, 6310, 6311, 6404, 6405, 6406, 6407, 6408	1,915 4,223	70-3
70-4730	-320453	217 8 9/16	6014, 6015, 6016, 6017	1,265 2,789	70-4
70-4731	-320521	217 8 9/16	6018, 6019, 6020, 6213	2,22 4,895	70-4
70-4733	-320781	290 11 7/16	6216, 6217, 6218, 6219, 6220, 6221, 6222, 6312, 6313, 6314, 6315, 6316, 6317, 6410, 6411, 6412	8,78 19,360	70-4
70-4734	-320606	290 11 7/16	6021, 6409	1,36 2,999	70-4

### 70-K 37-PIECE BALL BEARING PULLER SET FOR DEEP GROOVE BALL BEARINGS









The 37-piece ball bearing puller set 70-K is used for non-destructive extraction of deep groove ball bearings without disassembling the shaft in crafts, industry, and workshop. With these pullers, bearings that are simultaneously mounted in a housing and on a shaft can be easily and quickly removed and can be reused, provided they are not already damaged. The series 70 impresses with its specially developed extraction arms designed for precise installation into the bearing tracks, enabling the secure removal of small to large bearings.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed
- Quick and secure selection by labeling the storage adapters
- In the sentence, in addition to the pullers, there are also the corresponding puller sets and extractor rings, ensuring optimal application at all times

#### Technical attributes

#	 EAN	 mm/inch					Components
70-K	-786754	150 - 180 5 7/8 - 7 1/16	6000-6013, 6200-6207, 6300-6306	10 - 65 3/8-2 9/16	26 - 100 1 1/32-3 15/16	6,165 13,594	70-1, 70-711, 70-712, 70-713, 70-2, 70-721, 70-722

## PRODUCT DETAILS

### 70-A 59-PIECE BALL BEARING PULLER SET FOR DEEP GROOVE BALL BEARINGS









The 70-A 8883-piece ball bearing puller set is used for non-destructive removal of deep groove ball bearings without disassembly of the shaft in crafts, industry, and workshop. With these pullers, bearings that are simultaneously seated in a housing and on a shaft can be easily and quickly removed and, if not already damaged beforehand, can be reused. The series 70 impresses with its specially developed arms for precise installation in the bearing raceways, enabling safe removal of small to large bearings.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- Quick and secure selection by labeling the storage adapters
- In the sentence, in addition to the pullers, there are also the corresponding puller sets and extractor rings, ensuring optimal application at all times.

#### Technical attributes

#							Components
	EAN	mm/inch		mm/inch	mm/inch	kg/lb	
<b>70-A</b>	-022128	150 - 217 5 7/8 - 8 9/16	6000-6013, 6200-6212, 6300-6311, 6403-6408	10 - 60 3/8-2 3/8	26 - 120 1 1/32-4 3/4	10,025 22,105	70-1, 70-711, 70-712, 70-713, 70-2, 70-721, 70-722, 70-3, 70-731, 70-732

### 70-B 47-PIECE BALL BEARING PULLER SET FOR DEEP GROOVE BALL BEARINGS









The 47-piece ball bearing puller set 70-B is used for non-destructive removal of deep groove ball bearings without dismantling the shaft in craft, industry, and workshop. With these pullers, bearings that are simultaneously seated in a housing and on a shaft can be removed easily and quickly, and can be reused if they are not already damaged. The series 70 impresses with its specially designed arms for precise installation into the bearing raceways, which enable the safe removal of small to large bearings.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- Quick and secure selection by labeling the storage adapters
- In the sentence, in addition to the pullers, there are also the corresponding puller sets and extractor rings, ensuring optimal application at all times

#### Technical attributes

#							Components
	EAN	mm/inch		mm/inch	mm/inch	kg/lb	
<b>70-B</b>	-320866	217 - 290 8 9/16 - 11 7/16	6014-6021, 6213-6222, 6312-6317, 6409-6415	45 - 110 1 3/4-4 5/16	110 - 200 4 5/16-7 7/8	19,44 42,865	70-4, 70-4730, 70-4731, 70-4733, 70-4734



## PRODUCT DETAILS



### SERIES 70-0 BALL BEARING PULLER "PULLPO"







The „PULLPO“ ball bearing puller from the series 70 is used for completely non-destructive extraction of deep groove ball bearings without removing the shaft in crafts, industry, and workshops. Even without the possibility of support, the PULLPO can safely extract otherwise inaccessible bearings and thus ensure the reuse of the affected parts. The PULLPO impresses not only with its innovative design but also with its simple application, and the specially developed extractor arms enable a reliable grip during the extraction process and greater removal forces.

#### Benefits

- The special crossbar design allows for safe, easy hanging and the lever-amplified self-tensioning of the arms (PULLPO Technology)
- Through the collar on the spindle neck, the torque wrench cannot slip during application, allowing for a mark-free removal.
- Four magnets for easy holding of the counter pressure ring

#### Technical attributes






#	 EAN	 mm/inch	 kg/lb	Included in the set	
70-01	-908972	13 1/2	0,4 0,882	K-70-A, K-70-C, K-70-A-C	70-011, 70-012, 70-011-S, 70-012-S
70-02	-909580	17 11/16	1,3 2,867	K-70-B, K-70-C, K-70-B-C	70-021, 70-022, 70-021-S, 70-022-S

### SERIES 70-0-S PULLING ARM SET



The pulling arm sets of the 70-0-S series are suitable for ball bearing pullers of the 70-0 series and are used for non-destructive removal of deep groove ball bearings without disassembling the shaft. In addition to the arms, the sets also include stop rings as spare parts.

#### Technical attributes

#	 EAN	 mm/inch		 kg/lb	
70-011-S	-181306	70 2 3/4	6000, 6001, 6002, 6003, 6004, 6200, 6201, 6202, 6301	0,125 0,276	70-01
70-012-S	-181313	70 2 3/4	6005, 6006, 6203, 6204, 6205, 6300, 6302, 6303, 6304	0,175 0,386	70-01
70-021-S	-181344	156 6 1/8	6007, 6008, 6009, 6010, 6011, 6012, 6013, 6206, 6210, 6211, 6306, 6307	0,935 2,062	70-02
70-022-S	-181368	156 6 1/8	6014, 6015, 6016, 6017, 6018, 6019, 6020, 6207, 6208, 6209, 6212, 6305, 6308, 6309, 6310, 6311, 6403, 6404, 6405, 6406, 6407, 6408	1,16 2,558	70-02

## PRODUCT DETAILS

### K-70-A 18-PIECE BALL BEARING PULLER SET "PULLPO"









The 18-piece ball bearing puller set "PULLPO" K-70-A is used for completely non-destructive pulling of deep groove ball bearings without removing the shaft in trades, industry, and workshops. Even without the possibility of support, the PULLPO can securely pull otherwise unreachable bearings, thereby ensuring the reuse of the affected parts. The PULLPO not only impresses with its innovative design but also with its easy application, and the specially developed puller arms allow for reliable grip during the pulling process and higher extraction forces. The set includes not only the PULLPO but also matching hooks and rings for appropriate application.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The special crossbar design enables secure and easy suspension and the lever-amplifying self-tensioning of the arms (PULLPO Technology)
- Through the collar at the spindle neck, the torque wrench cannot slip during use, allowing for a seamless removal.

#### Technical attributes

#	 EAN	 mm/inch					Components
	EAN	mm/inch		mm/inch	mm/inch	kg/lb	
K-70-A	-058851	70 2 3/4	6000-6006, 6200-6205, 6300-6304	10 - 30 3/8-1 3/16	26 - 52 1 1/32-2 1/16	1,91 4,212	70-01-T, 70-01-T, 70-011, 70-012, 610120, 70-01-R, 700117

### K-70-B 21-PIECE BALL BEARING PULLER SET "PULLPO"









The 21-piece ball bearing puller set "PULLPO" K-70-B is used for completely non-destructive removal of deep groove ball bearings without disassembly of the shaft in crafts, industry, and workshop. Even without the possibility of support, the PULLPO can securely pull otherwise inaccessible bearings and thus ensure the reuse of the affected parts. The PULLPO convinces not only through its innovative design but also through its easy application, and the specially developed puller arms enable a reliable grip during the pulling process and higher extraction forces. The set includes suitable arms and rings for appropriate application, alongside the PULLPO.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The special crossbar design enables secure and easy suspension and the lever-amplifying self-tensioning of the arms (PULLPO Technology)
- Through the collar at the spindle neck, the torque wrench cannot slip during use, allowing for a seamless removal.

#### Technical attributes

#	 EAN	 mm/inch					Components
	EAN	mm/inch		mm/inch	mm/inch	kg/lb	
K-70-B	-058868	156 6 1/8	6007-6020, 6206-6212, 6305-6311, 6403-6408	17 - 100 11/16-3 15/16	62 - 150 2 7/16-5 7/8	4,365 9,625	70-02-T, 70-021, 70-022, 614242, 70-02-R, 700217, 70-021-S

## PRODUCT DETAILS



### K-70-C 38-PIECE BALL BEARING PULLER SET "PULLPO"









The 38-piece ball bearing puller set "PULLPO" K-70-C is used for completely non-destructive removal of deep groove ball bearings without disassembly of the shaft in crafts, industry, and workshops. Even without the possibility of support, the PULLPO can safely remove otherwise inaccessible bearings and thus ensure the reuse of the affected parts. The PULLPO convinces not only with its innovative design but also with its ease of use, and the specially developed puller arms enable a reliable hold during the removal process and higher removal forces. The set includes not only the PULLPO but also suitable arms and rings for appropriate application.

#### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- The special crossbar design enables secure and easy suspension and the lever-amplifying self-tensioning of the arms (PULLPO Technology).
- Through the collar at the spindle neck, the torque wrench cannot slip during use, allowing for a seamless removal.

#### Technical attributes

#							Components
	EAN	mm/inch		mm/inch	mm/inch	kg/lb	
K-70-C	-019999	70 - 156 2 3/4 - 6 1/8	6000-6020, 6200-6212, 6300-6311, 6403-6408	10 - 100 3/8-3 15/16	26 - 150 1 1/32-5 7/8	7,125 15,711	70-01-T, 70-02-T, 70-011, 70-012, 70-021, 70-022, 610120, 614242, 70-01-R, 70-02-R, 700117, 700217, 70-021-S

### KS-70-A-K 60-PIECE BEARING PULLER SET









The 60-piece ball bearing puller set KS-70-A-K is used for non-destructive removal of deep groove ball bearings without disassembly of the shaft in craft, industry, and workshops. With these pullers, bearings that are simultaneously seated in a housing and on a shaft can be easily and quickly removed and may be reused if they are not already damaged. The series 70 impresses with its specially designed puller arms for precise installation into the bearing raceways, which, depending on the selected set, enable secure removal of small to large bearings. The sets thus allow for a wide range of applications across various groove diameters.

#### Benefits

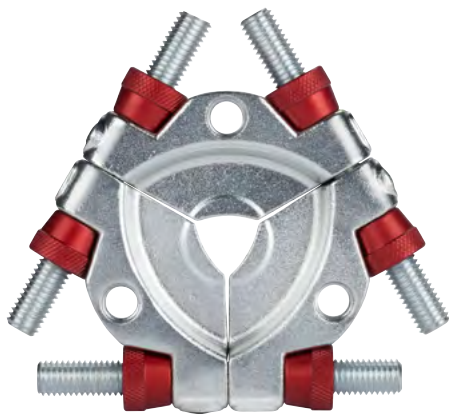
- By storing it in the box, the completeness of the set can be easily overviewed.
- Quick and secure selection by labeling the storage adapters
- In the sentence, in addition to the pullers, there are also the corresponding puller sets and extractor rings, ensuring optimal application at all times.

#### Technical attributes

#							Components
	EAN	mm/inch		mm/inch	mm/inch	kg/lb	
KS-70-A-K	-956362	156 - 233 6 1/8 - 9 3/16	6000-6013, 6200-6212, 6300-6311, 6403-6408	10 - 100 3/8-3 15/16	26 - 150 1 1/32-5 7/8	9,875 21,774	70-A-K-36, 70-1, 70-2



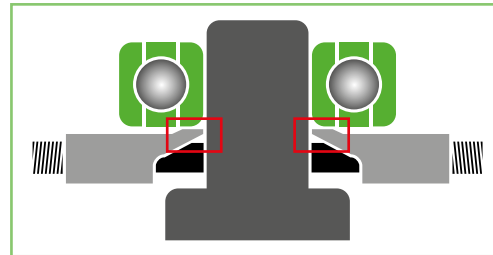
## SERIES 13 TRI-PULL WITH 3 SEGMENTS



The three-part puller TRI-PULL of series 13 is used for gentle pulling of pendulum and angular roller bearings in drive engineering. The segments are applied behind the bearing on the inner ring, thereby ensuring an even force transmission across the entire bearing.

### Benefits

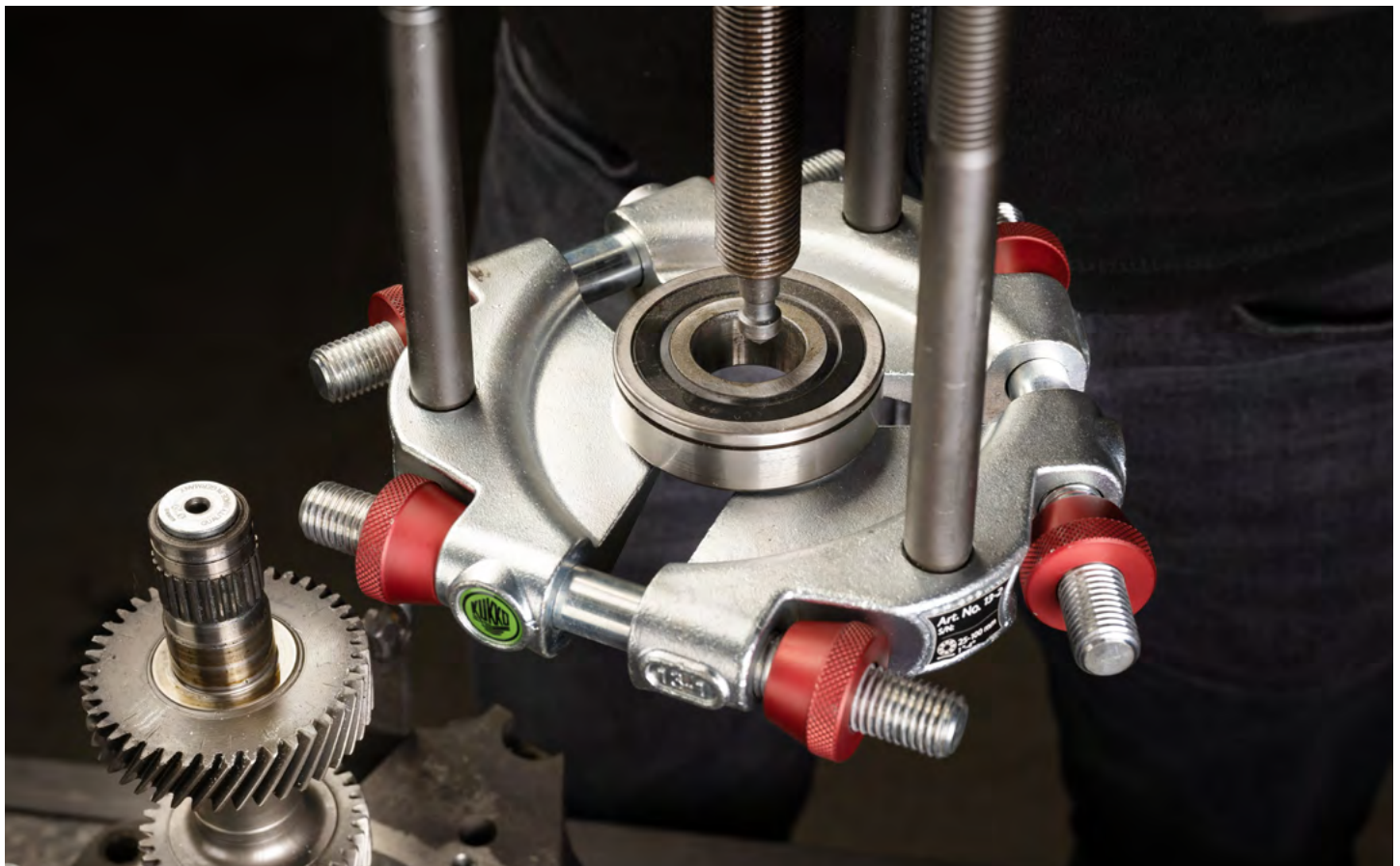
- The force-amplifying design of the separator sections on the inner ring protects the bearing from damage during extraction.
- The even distribution of force around the inner ring circumference prevents tilting or misalignment of the bearing ring during removal.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.



The lip of the puller device TRI-PULL (series 13) only rests on the bearing inner ring in order to minimise stress on the bearing the bearing as little as possible

### Technical attributes

#	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb	
<b>13-1</b>	-041228	12 - 50 1/2 - 1 15/16	M10	34 1 5/16	4 3/16	9 3/8	13,5 9/16	0,6 1,323	68-1
<b>13-2</b>	-169724	25 - 100 1 - 3 15/16	M14x1,5	63 2 1/2	5,7 1/4	16 5/8	28 1 1/8	3,61 7,960	68-2
<b>13-3</b>	-041235	50 - 160 1 15/16 - 6 5/16	M18x1,5	87 3 7/16	7 1/4	18 11/16	35 1 3/8	7,325 16,152	68-3



The three-part TRI-PULL 13-2 separating device when removing a seized ball bearing

## PRODUCT DETAILS

### SERIES 222 SEAL RING DISASSEMBLY TOOLS







The seal ring removal tools of series 222 are used for extracting radial shaft seals, axial shaft seals, sealing sleeves, and other bearing seals in crafts, industry, and workshops. Depending on the available space, the pulling process can be carried out either with the extractor lever 222-U or the sliding hammer device with handle 222-S.



#### Benefits

- The Slide hammers with 2-component Powergrip ensure safe and comfortable working
- The ejector lever can be used universally in situations where the necessary space is available

#### Technical attributes

#							Included in the set
	EAN	mm/inch	mm/inch	mm/inch	kg	kg/lb	
222-U	-777790	300 11 13/16			-	0,565 1,246	-
222-S	-018497	650 25 9/16	400 15 3/4	240 9 7/16	0.5	1,265 2,789	K-222-1/7
222-1	-035722	430 16 15/16	400 15 3/4	240 9 7/16	0.5	0,82 1,808	-



Removing a seal ring with the 222-U



## PRODUCT DETAILS

### K-222-1/7 7-PIECE SEAL RING PULLER SET (SIMMERRINGE®) IN CASE









The 7-piece seal ring removal set of the series K-222 is used for removing Simmerringe®, radial shaft seals, sealing sleeves, gaskets, bearing seals, and shaft seals in crafts, industry, and workshops. This set includes not only disassembly tools, a pick, and a special screw set but also various extensions and handles, ensuring optimal removal work. The K-222 series impresses with its variety of applications and universality for use in different sectors and problem situations.

#### Benefits

- Depending on the available space, suitable tools with sliding hammer are also available in the set.
- The two-component handle allows for safe and careful work.

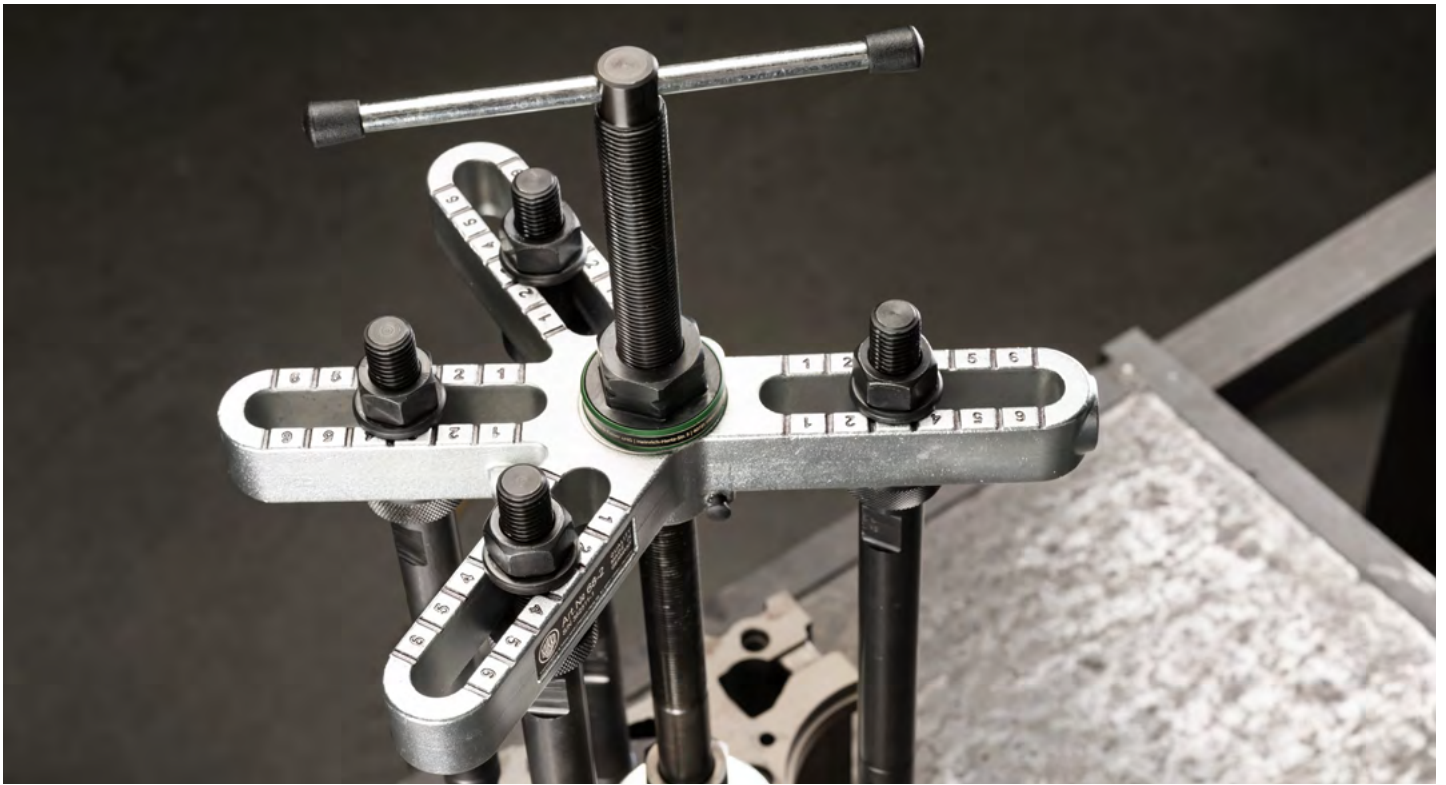
#### Technical attributes

#							Components
	EAN	mm/inch	mm/inch	mm/inch	kg	kg/lb	
K-222-1/7	-222757	300 11 13/16	400 15 3/4	240 9 7/16	0.5	2,895 6,383	222-1, 222-U, 222-S, 222-1-100, 222-1-250, 222-1-50S, 222-E, 222-P



Removing a radial shaft seal with the 222-1





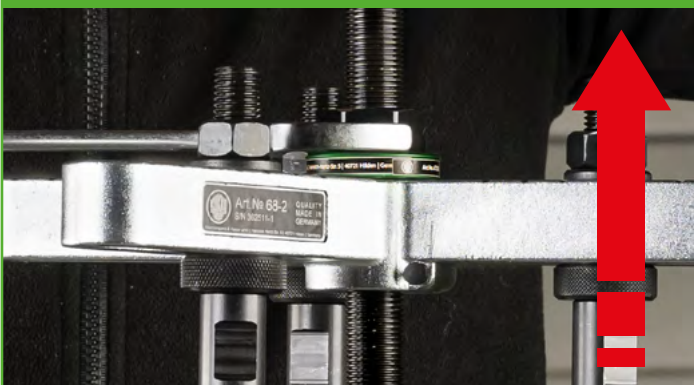
## MULTI-TRAVERSE WITH POWER NUT

The new Multi-Traverse of the series 68 offers space for up to four foot bolts. This guarantees a larger contact area and consequently a more uniform distribution of forces.

Three small magnets are attached underneath the traverse, which are used to align and fix the power groove.

The Power Nut by KUKKO guarantees a more energy-saving clamping of tools and workpieces as well as drive without significant friction loss.

## INCREASED TENSION FORCE



The Power Nut is located above the crossbar. By turning the Power Nut, the spindle is pulled upwards with increased force until the cylinder socket is drawn out.

## INCREASED PRESSURE FORCE



The Power Nut is located below the crossbar. By operating the hexagon, the spindle is pressed down. In the process, the Power Nut amplifies the applied force multiple times.

## SERIES 68 2-ARM PULLER DEVICE










The combination puller devices of series 68 with Power Nut are combinable with separation devices of series 13, internal extractors of series 21, ball bearing puller sets of series 69, and other parts (e.g. hooks or oil hooks). Due to the different positioning options of the Power Nut, the devices are suitable for both pushing and pulling of components in craft, industry, and workshop. The multi-crossbar offers space for two, three, or four foot bolts depending on the application. This ensures a larger support area and thus a more uniform distribution of force. Below the crossbar, three small magnets are attached, which are used to align and fix the Power Nut. The puller devices 18-00 and 18-0 do not include a Power Nut.

### Benefits

- By screwing the separator and puller device, the highest stability when pulling is ensured.
- The foot bolts ensure a particularly firm standing when pulling off.
- Multi-Traversal with scale as adjustment aid for the foot bolts
- Due to its simple design, special separating devices can also be easily created in-house for series 68.

### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	
<b>68-0 NEW</b>	-446641	20 - 110 13/16 - 4 5/16	75 2 15/16	13 1/2	40 29.50	15	1.5 1.65	0 0,000	-
<b>68-10 NEW</b>	-009440	55 - 150 2 3/16 - 5 7/8	230 9 1/16	19 3/4	100 73.76	50	5 5.51	0 0,000	-
<b>68-1</b>	-007385	58 - 150 2 5/16 - 5 7/8	160 6 5/16	13 1/2	70 51.63	50	5 5.51	1,555 3,429	19-1-S, 13-1
<b>68-2</b>	-007392	68 - 244 2 11/16 - 9 5/8	280 11 1/32	22 7/8	120 88.51	70	7 7.72	5,25 11,576	19-2-S, 13-2
<b>68-3</b>	-007408	75 - 310 2 15/16 - 12 3/16	330 12 1	27 1 1/16	280 206.53	100	10 11.02	0 0,000	19-3-S, 13-3

## SERIES 19-S PULLER DEVICE EXTENSION SET









The extensions for puller devices are used together with the combination puller devices of series 68 in craft, industry, and workshops to increase the reach of the puller device. The extensions are available in various lengths in the set (3 pieces).

### Benefits

- The extensions are combinable with each other, allowing for optimal adjustment to the required reach.

### Technical attributes

#	 EAN	 nominal dimension	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>19-1-S</b>	-060816	M10	14 9/16	100 3 15/16	12 1/2	0,345 0,761
<b>19-2-S NEW</b>	-042096	M14x1,5	22 7/8	100 3 15/16	19 3/4	0,8325 1,836
<b>19-3-S NEW</b>	-042102	M18x1,5	22 7/8	100 3 15/16	19 3/4	0,9825 2,166

## PRODUCT DETAILS



### K-68-A MULTI-ARM BOLT PULLER SET



The multi-side bolt puller set K-68-A is used for pulling components with threaded holes. The multi-crossbar allows for the attachment of up to three foot bolts for even more uniform force distribution. For precise adjustment assistance, a scale with numerical values is located above the crossbar. For individual adaptation to the shaft, different pressure pieces can be used.

#### Benefits

- The set includes a large number of common standard threads for customising the extractor
- The multi-traverse of series 68 allows for the removal over two or three threads in the component to be disassembled.
- The sentence is equipped with side bolts and can thus be combined with separating knives and Tri-Pull tools.

#### Technical attributes

#					<b>Max. tensile force</b>	<b>Max. tractive force</b>			<b>Components</b>
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.		kg/lb	
<b>K-68-A NEW</b>	-009136	100 3 15/16	20 - 110 13/16 - 4 5/16	13 1/2	15	1.5 1.65	M4, M5, M6, 1/4"-28 UNF	0 0,000	68-0

### K-68-B MULTI-SIDE BOLT PULLER SET









The multi-way puller set K-68-B is used for removing components with threaded holes. A power nut integrated into the crossbar allows for the application of force that would otherwise only be achievable with hydraulic systems. The multi-crossbar enables the attachment of up to three side bolts for even more uniform force distribution. Above the crossbar, there is a scale with numerical values for precise adjustment. For individual adaptation to the shaft, various pressure pieces can be used.

#### Benefits

- The set includes a wide range of common standard threads for adapting the puller
- The multi-traverse of the 68 series enables extraction via two or three threads in the component to be removed
- The set is equipped with side bolts and can therefore be combined with cut-off knives and Tri-Pull tools

#### Technical attributes

#					<b>Max. tensile force</b>	<b>Max. tractive force</b>			<b>Components</b>
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.		kg/lb	
<b>K-68-B NEW</b>	-009143	205 8 1/16	58 - 150 2 5/16 - 5 7/8	13 1/2	50	5 5.51	M8, M10, 1/4"-28 UNF, 5/16"-24 UNF, 5/16"-18 UNC, 3/8"-16 UNC, 3/8"- 24 UNF	6,9 15,215	68-1



# PRODUCT DETAILS

## K-68-C MULTI-SIDE BOLT PULLER SET









The Multi-Sided Bolt Puller Set K-68-C is used to pull components with threaded holes. A power nut integrated into the crossbar allows for applied force that would otherwise only be achievable with hydraulic systems. The multi-crossbar allows for the attachment of up to three side bolts for an even more uniform distribution of force. For precise adjustment assistance, there is a scale with numerical values above the crossbar. Various pressure pieces can be used for individual adaptation to the shaft.

### Benefits

- The set includes a wide range of common standard threads for adapting the puller
- The multi-traverse of series 68 allows for the removal over two or three threads in the component to be disassembled.
- The sentence is equipped with side bolts and can thus be combined with separating knives and Tri-Pull tools.
- The set includes outer and inner arms, which can be combined with side bolts

### Technical attributes

#					Max. tensile force	Max. tractive force			Components
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.		kg/lb	
K-68-C NEW	-009150	270 10 5/8	55 - 150 2 3/16 - 5 7/8	19 3/4	50	5 5.51	M10, M12, M14, 3/8"-16 UNC, 3/8"-24 UNF, 7/16"-14 UNC, 1/2"-13 UNC	0 0,000	68-10

## 29-A-69 12-PIECE UNIVERSAL PULLER, EXTRACTOR, AND BALL BEARING PULLER SET












The 8883-piece universal puller, separator, and ball bearing puller set from series 29-A-69 is used for the easy and trouble-free removal of bearings, drums, discs, pole wheels, and similar parts on motorcycles and other small engines in craft, industry, and workshops. For separation and pulling, the separator device from series 15 is suitable, whose sharp edges allow for pulling where other pulling methods are inapplicable. While the affected ball bearing cannot be reused during ball bearing extraction with the included series 69, the application ensures the safety and integrity of the associated housing or shaft.

### Benefits

- By storing it in the box, the completeness of the set can be easily overviewed.
- Quick and secure selection by labeling the storage adapters
- The screw connection of the separator and puller device ensures the highest stability during extraction.

### Technical attributes

#									Max. tensile force	Max. tractive force		Components
	EAN		mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
29-A-69	-101878	6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6201, 6202, 6203, 6204, 6205, 6206, 6300, 6301, 6302, 6303, 6304, 6305	200 7 7/8	20 - 110 13/16 - 4 5/16	6 - 46 1/4 - 1 13/16	20 - 100 13/16 - 3 15/16	200 7 7/8	12 1/2	15	1.5 1.65	2,2 4,851	69-A, 225-150, 15-00

KUKKO // Pull forward



# DISMANTLING TOOLS



**KUKKO** Art.No. 139-1  
S/N: 363388-4

122 - 144 mm	110 mm
0 - 35 mm	4 mm

QUALITY  
MADE IN  
GERMANY

KUKKO Werkzeugfabrik  
Kleinbongartz & Kaiser oHG  
Heinrich-Hertz-Str. 5  
40721 Hilden | Germany  
kukko.com



## DEPLOYMENT

KUKKO offers a wide range of dismantling tools for various applications, whether it's for extracting a stud bolt, removing a seal ring, or driving out pins. Various models of wiper pullers, wedge pullers, oil filter wrenches, and brake tools are also provided as essential tools for the automotive industry.



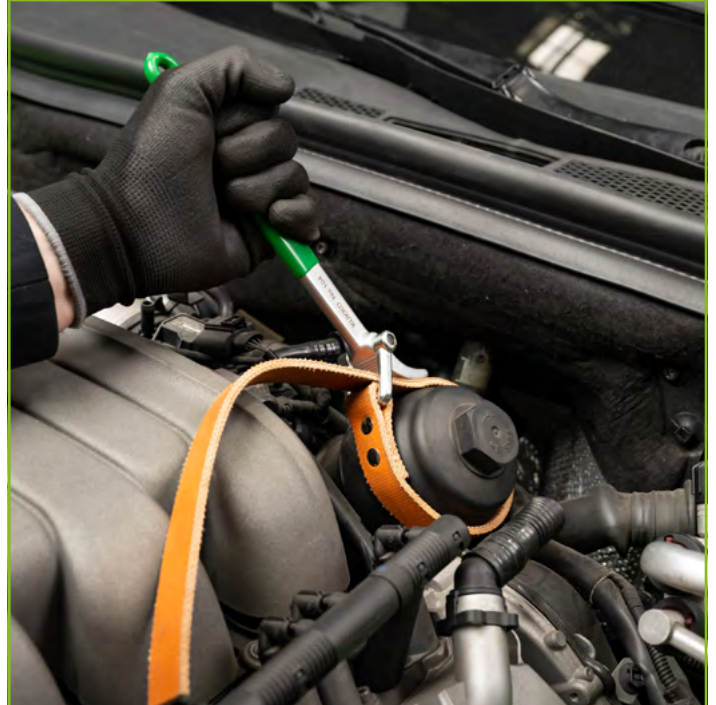
## APPLICATION EXAMPLES

### SERIES 720 - PIN PUNCH



Driving out a retaining pin with a pin punch

### SERIES 104 - OIL FILTER WRENCH



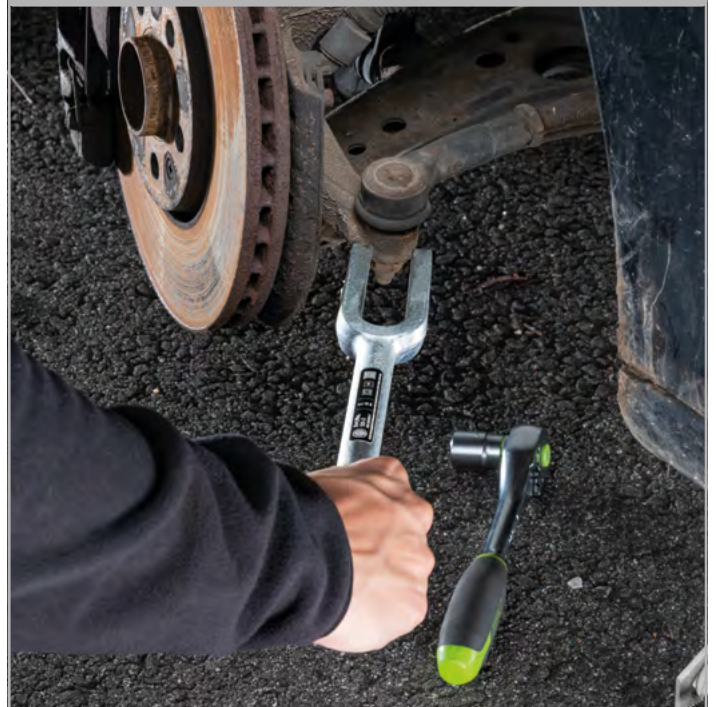
Attaching a strap wrench to the oil filter

### SERIES 728 - RETAINING RING PLIERS



Removing a circlip

### SERIES 135 - SEPERATOR



Separating a control arm from the suspension



## PRODUCT DETAILS



### SERIES 23 PULLER FOR GROOVE BALL BEARING INNER RINGS







The puller of the series 23 is used for pulling off shoulder bearing inner rings on alternators and electric motors in craftsmanship, workshops, and industry. This pulling device allows parts to be pulled off in a way that they can be grasped due to its design. The series 23 convinces with its stability and ease of use, and thus ensures safe pulling.

#### Benefits

- Crisis-proof tool perfect for the repair of various electric motors
- Ideal for removing deep bearings and shoulder bearing rings



#### Technical attributes

#					Included in the set
	EAN	mm/inch	mm/inch	kg/lb	
23	-012631	5 - 32 3/16 - 1 1/4	17 11/16	1,42 3,131	24-B, 24-C

### SERIES 139 PULLING PLIERS FOR WEDGES IN GROOVES







The wedge extracting pliers in grooves is used for the easy and damage-free removal of stuck wedges from the key grooves of shafts in crafts, industry, and workshops. With the pliers, it is possible to loosen even strongly secured wedges from the key grooves of drive shafts. The series 139 impresses with its compactness and simple application method. Its construction is ideal for use on electric motors.

#### Benefits

- The adjustable span of the clamping arms allows for variable application depending on the size of the stuck wedge.
- The handwheels for adjustment make the addition of external tools unnecessary.

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
139-1	-779176	0 - 35 0 - 1 3/8	122 4 13/16	4 3/16	2,5 5,513

## PRODUCT DETAILS

### SERIES 135 SEPARATOR







The fork separators of series 135 are used for loosening ball pivot joints that are wedged in the cone seat, for loosening steering levers, for disassembling shock absorbers, and for other separation work of all kinds in automotive and industry. Their universal applicability makes the fork separators an important companion for disassembly and separation tasks.

#### Benefits

- The set includes sizes with various arm openings for use in every case.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
135-1	-024856	310 12 3/16	18 11/16	0,74 1,632
135-2	-024931	316 12 7/16	23 7/8	0,8 1,764
135-3	-025013	319 12 9/16	29 1 1/8	0,815 1,797
135-4	-025198	335 13 3/16	39 1 9/16	1,465 3,230
135-5	-220531	340 13 3/8	45 1 3/4	1,28 2,822

### SERIES 177-HP PICKS & HOOKS WITH 2K COMFORT GRIP IN SET








The Picks & Hooks with 2K comfort grip in the set are used for loosening stuck seal rings, separating cables in a wiring harness, and other tasks in sanitation and automotive. The Picks & Hooks of series 177 allow for sensitive and powerful working due to their two-component grip and high-quality processing.

#### Benefits

- Application-oriented assembly for universal use
- Through storage in the set, the completeness of the set can be easily overviewed.
- Thanks to the rotary cap and fast rotation zone, the two-component handle allows for safe and comfortable one-handed operation.
- The narrow handle also allows working in tight and hard-to-reach places.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
177-HP04	-158132	155 6 1/8	3,5 1/8	70 2 3/4	0,1 0,221

## PRODUCT DETAILS



### SERIES 177-P PICKS WITH 2K COMFORT GRIP








The picks and hooks with 2K comfort grip are used for releasing stuck sealing washers, separating wires in a cable harness, and for other tasks in sanitation and automotive. The picks & hooks of the series 177 enable sensitive and powerful work due to their two-component handle and high-quality craftsmanship.

#### Benefits

- Thanks to the rotating cap and quick-turn zone, the two-component handle allows for safe and comfortable one-handed operation.
- The narrow grip also allows work in tight and hard-to-reach places

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>177-P000</b>	-017538	155 6 1/8	3,5 1/8	70 2 3/4	0,15 0,331
<b>177-P045</b>	-017545	155 6 1/8	3,5 1/8	70 2 3/4	0,2 0,441
<b>177-P090</b>	-017552	155 6 1/8	3,5 1/8	70 2 3/4	0,015 0,033

### SERIES 177-H HOOK








The hooks with 2K comfort grip are used for loosening stuck sealing washers, separating cables in a wiring harness, and other tasks in sanitary and automotive applications. The picks & hooks of series 177 enable a sensitive as well as powerful operation due to their two-component handle and high-quality workmanship.

#### Benefits

- Thanks to the rotary cap and quick rotation zone, the two-component handle allows for safe and comfortable work even with one hand.
- The narrow handle also allows for working in tight and hard-to-reach places

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>177-H000</b>	-017521	155 6 1/8	3,5 1/8	70 2 3/4	0,015 0,033



## PRODUCT DETAILS

### SERIES 728-A RETAINING RING PLIERS FOR EXTERNAL RINGS, STRAIGHT







The retaining ring pliers for external rings are used for the assembly and disassembly of retaining rings on shafts in crafts, industry, and workshops. The simple yet powerfully forged design allows for safe and quick operation in any application case. The series 728 impresses with its versatility. Depending on the diameter of the external ring, the retaining ring pliers are available in various sizes, allowing for a case-oriented approach.

#### Benefits

- The tips are stable and slip-resistant; even in hard-to-reach places, you can work comfortably with the pliers.
- The plier body and the tips are oil-hardened and made of chrome-vanadium steel, offering high durability and resilience.
- The shape provides an unobstructed view of the work peaks.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Included in the set
728K-A0	-004346	135 5 5/16	3-10 1/8-3/8	0,1 0,221	-
728K-A1	-004384	135 5 5/16	10-25 3/8-1	0,95 2,095	728K-729
728K-A2	-004421	180 7 1/16	19 - 60 3/4-2 3/8	0,18 0,397	728K-729
728K-A3	-004469	225 8 7/8	40 - 100 1 9/16-3 15/16	0,315 0,695	-

### SERIES 728-A-1 RETAINING RING PLIERS FOR EXTERNAL RINGS, BENT







The circlip pliers for external rings are used for the assembly and disassembly of circlips on shafts in crafts, industry, and workshops. The simple yet powerfully forged design allows for safe and quick work in any application. The series 728 impresses with its variability. Depending on the diameter of the external ring, the circlip pliers are available in various sizes, allowing for a situation-oriented approach.

#### Benefits

- The tips are stable and slip-resistant; even in hard-to-reach places, you can work comfortably with the pliers.
- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The form provides an unobstructed view of the work peaks.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Included in the set
728K-A01	-004360	135 5 5/16	3-10 1/8-3/8	0,095 0,209	-
728K-A11	-004407	135 5 5/16	10-25 3/8-1	0,1 0,221	728K-729
728K-A21	-004445	180 7 1/16	19 - 60 3/4-2 3/8	0,19 0,419	-
728K-A31	-004490	225 8 7/8	40 - 100 1 9/16-3 15/16	0,31 0,684	-

## PRODUCT DETAILS



### SERIES 729-J RETAINING RING PLIERS FOR INTERNAL RINGS, STRAIGHT







The retaining ring pliers for internal rings are used for the assembly and disassembly of retaining rings in holes in crafts, industry, and workshops. The simple yet powerfully forged design allows for safe and fast work in every application. The 729 series impresses with its variability. Depending on the diameter of the internal ring, the retaining ring pliers are available in different sizes, allowing for a task-oriented approach.

#### Benefits

- The tips are stable and anti-slip; even in hard-to-reach places, you can work comfortably with the pliers.
- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The form provides an unobstructed view of the work peaks.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Included in the set
729K-J0	-004513	135 5 5/16	8-13 5/16-1/2	0,085 0,187	-
729K-J1	-004568	135 5 5/16	10-25 3/8-1	0,085 0,187	728K-729
729K-J2	-004605	180 7 1/16	19 - 60 3/4-2 3/8	0,155 0,342	728K-729
729K-J3	-004650	225 8 7/8	40 - 100 1 9/16-3 15/16	0,3 0,662	-

### SERIES 729-J-1 RETAINING RING PLIERS FOR INTERNAL RINGS, BENT







The retaining ring pliers for internal rings are used for the assembly and disassembly of retaining rings in bores in crafts, industry, and workshops. The simple yet robustly forged design allows for safe and quick work in any application. The series 729 impresses with its versatility. Depending on the diameter of the internal ring, the retaining ring pliers are available in various sizes, allowing for an application-oriented approach.

#### Benefits

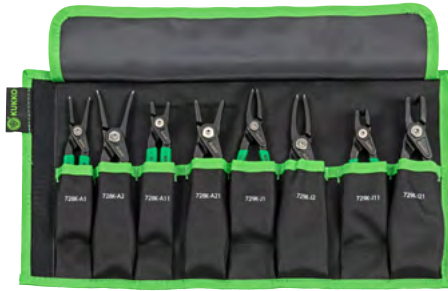
- The tips are stable and slip-resistant; even in hard-to-reach places, you can work comfortably with the pliers.
- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The form provides an unobstructed view of the work peaks.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Included in the set
729K-J01	-004537	135 5 5/16	8-13 5/16-1/2	0,9 1,985	-
729K-J11	-004582	135 5 5/16	10-25 3/8-1	0,085 0,187	728K-729
729K-J21	-004629	180 7 1/16	19 - 60 3/4-2 3/8	0,16 0,353	728K-729
729K-J31	-004674	225 8 7/8	40 - 100 1 9/16-3 15/16	0,31 0,684	-

## PRODUCT DETAILS

### 728K-729 8-PIECE RETAINING RING PLIERS SET







The 8-piece retaining ring pliers set is used for the assembly and disassembly of retaining rings on shafts and in bores in craft, industry, and workshop. The simple yet powerfully forged shape of the various retaining ring pliers allows for safe and quick work in any application case. Depending on the diameter and location of the retaining ring, the set includes various sizes and shapes, enabling the user to work in a case-oriented manner.

#### Benefits

- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The shape provides an unobstructed view of the work peaks.
- Application-oriented compilation for universal use

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
<b>728K-729</b>	040211761 -004322	135 - 180 5 5/16-7 1/16	10 - 60 3/8-2 3/8	1,17 2,580	728K-A1, 728K-A2, 728K-A11, 729K-J1, 729K-J2, 729K-J11, 729K-J21, 728K-A21



A pair of pliers from the circlip pliers set 728K-729 is used to remove a stuck circlip



## PRODUCT DETAILS



### SERIES 720 PIN PUNCH









The pin punch of the series 720 is used for driving out pins and similar parts in crafts, industry, and workshops. The pin punch is available in various tip diameters and shank lengths, thereby allowing the choice of the optimal tool depending on the application case.

#### Benefits

- The specially tempered extra chrome-vanadium steel and the chrome-plated surface ensure a long service life and reduced arm formation.
- The curved shape of the handle ensures an optimal grip and prevents slipping, providing particularly safe work conditions.
- The various sizes have a color coding and can be easily distinguished.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>720-002</b>	-103216	150 5 7/8	2 1/16	42 1 5/8	11 7/16	0,065 0,143
<b>720-003</b>	-103230	150 5 7/8	3 1/8	44 1 3/4	11 7/16	0,065 0,143
<b>720-004</b>	-103247	150 5 7/8	4 3/16	45 1 3/4	11 7/16	0,07 0,154
<b>720-005</b>	-103254	150 5 7/8	5 3/16	48 1 7/8	11 7/16	0,067 0,148
<b>720-006</b>	-103261	150 5 7/8	6 1/4	48 1 7/8	11 7/16	0,07 0,154
<b>720-008</b>	-103278	150 5 7/8	8 5/16	49 1 15/16	11 7/16	0,078 0,172

### SERIES 720-S PIN PUNCH SET









The pin punch set of series 720 is used for driving out pins and similar parts in crafts, industry, and workshops. The set includes pin punches in six different diameters, allowing for the selection of the optimal tool depending on the application.

#### Benefits

- Application-oriented assembly for universal use
- Thanks to color coding, the pin punches can be easily distinguished.
- The specially coated extra chrome-vanadium steel and the chrome-plated surface ensure a long service life and reduced arm formation.
- The curved shape of the handle ensures optimal grip and prevents slipping, thus guaranteeing particularly safe operation.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>720-028</b>	-058714	150 5 7/8	2, 3, 4, 5, 6, 8 1/16, 1/8, 3/16, 3/16, 1/4, 5/16	42, 44, 45, 48, 48, 49 1 5/8, 1 3/4, 1 3/4, 1 7/8, 1 7/8, 1 15/16	11 7/16	0,75 1,654

## SERIES 50 STUD EXTRACTOR WITH INTERNAL TOOTHING







The stud extractor with internal teeth from series 50 is used for extracting stud bolts or broken parts in automotive and industrial applications. Kukko stud extractors are available in various diameters and designs. The series 50 impresses with its particularly proven and robust design, especially under high stress.

### Benefits

- The knurled wheel with a groove presses the stud bolt securely against the internal gearing.
- The stud bolt is in the area of the key during the extraction and cannot break off.
- The extra profiled knurled wheel has a surface for a secure grip.



### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
50-1	-019258	17 11/16	5 - 10 3/16-3/8	0,115 0,254
50-2	-019333	27 1 1/16	8 - 19 5/16-3/4	0,43 0,948
50-3	-019418	36 1 7/16	18 - 25 11/16-1	0,585 1,290

## SERIES 51 STUD EXTRACTOR WITH INTERNAL PROFILE







The stud extractor with internal tothing of series 51 is used for extracting studs or broken components in the automotive and industrial sectors. Kukko stud extractors are available in various diameters and designs. The series 51 impresses with its handy and cost-effective design.

### Benefits

- The knurled wheel with a groove securely presses the stud bolt against the internal teeth.
- The stud bolt is in the area of the key during the extraction and cannot break off.
- The extra profiled knurled wheel has a surface for a firm grip.



### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
51-1	-019586	19 3/4	5 - 10 3/16-3/8	0,355 0,783
51-2	-019661	19 3/4	8 - 19 5/16-3/4	0,37 0,816
51-3	-019746	19 3/4	18 - 25 11/16-1	0,52 1,147

## PRODUCT DETAILS



### SERIES 52 STUD EXTRACTOR WITH LARGE CLAMPING RANGE




The stud extractor with internal gearing from series 52 is used for extracting stud bolts or broken components in automotive and industrial applications. Kukko stud extractors are available in various diameters and designs. The series 52 has an especially large clamping range and allows for the grasping of short stud bolt ends due to the deep arrangement of the knurled wheel.

#### Benefits

- The knurled wheel with a groove securely presses the stud bolt against the internal teeth.
- The stud bolt is in the area of the key during the extraction and cannot break off.
- The extra profiled knurled wheel has a surface for a firm grip.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
52	-019821	19 3/4	5 - 19 3/16-3/4	0,525 1,158



Removing a gear with the 47-1-A



## PRODUCT DETAILS

### SERIES 53 STUD EXTRACTOR FOR TIGHT SPACES










The stud extractor with internal toothing of series 53 is used for extracting stud bolts or broken components in automotive and industry. Kukko stud extractors are available in different diameters and designs. The series 53 can also be used in very confined spaces due to its design and is operated using a ring or socket wrench.

#### Benefits

- The knurled wheel with a groove securely presses the stud bolt against the internal teeth.
- During the extraction, the stud bolt is located in the area of the key and cannot break off.
- The extra profiled knurled wheel has a surface for a firm grip.

#### Technical attributes

#								Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb	
53-5	-137860	65 2 9/16	24 15/16	5 3/16	21 13/16	12,7 1/2	0,15 0,331	-
53-6	-342318	60 2 3/8	25 1	6 1/4	21 13/16	12,7 1/2	0,12 0,265	53-A
53-7	-866234	65 2 9/16	24 15/16	7 1/4	21 13/16	12,7 1/2	0,155 0,342	-
53-8	-342493	60 2 3/8	25 1	8 5/16	21 13/16	12,7 1/2	0,155 0,342	53-A
53-10	-342561	71 2 13/16	28 1 1/8	10 3/8	21 13/16	12,7 1/2	0,22 0,485	53-A
53-12	-342646	71 2 13/16	28 1 1/8	12 1/2	21 13/16	12,7 1/2	0,83 1,830	53-A
53-14	-984563	72 2 13/16	36 1 7/16	14 9/16	24 15/16	0,34 0,750	-	-
53-16	-388774	72 2 13/16	36 1 7/16	16 5/8	24 15/16	0,31 0,684	-	-
53-18	-137846	100 3 15/16	48 1 7/8	18 11/16	36 1 7/16	0,835 1,841	-	-
53-20	-745591	100 3 15/16	48 1 7/8	20 13/16	36 1 7/16	0,82 1,808	-	-
53-22	-971082	100 3 15/16	48 1 7/8	22 7/8	36 1 7/16	0,73 1,610	-	-
53-24	-966774	100 3 15/16	48 1 7/8	24 15/16	36 1 7/16	0,795 1,753	-	-
53-30	-966781	125 4 15/16	63 2 1/2	30 1 3/16	46 1 13/16	1,66 3,660	-	-

### SERIES 53-A STUD EXTRACTOR SET FOR TIGHT SPACES










The stud extractor set of series 53 is used for extracting stud bolts or broken components in automotive and industry applications. Kukko stud extractors are available in various diameters and designs. The series 53 can also be used in the tightest spaces due to its design and is operated with a ring or socket wrench. The set includes 4 different extractors with various diameters from 6 – 12 mm.

#### Benefits

- Application-oriented assembly for universal use
- The knurled wheel with a groove securely presses the stud bolt against the internal toothing.
- During extraction, the stud bolt is located in the area of the key and cannot break.

#### Technical attributes

#								Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb	
53-A	-222801	24-28 15/16-1 1/8	65-75 2 9/16-2 15/16	6, 8, 10, 12 1/4, 5/16, 3/8, 1/2	21 13/16	12,7 1/2	0,715 1,577	53-6, 53-8, 53-10, 53-12

O // Pull forward



TI 8351  
Centri Porsche Ticino





# AUTOMOTIVE

Whether for removing wet cylinder liners, pressing ball joints, pulling wheel hubs, steering wheels, wiper arms, camshafts or steering column levers, spreading piston rings, during the disassembly of oil filters, and for the removal and tensioning of coil springs – KUKKO offers the perfect solution for every application.

## The automotive range includes among others:

- Cylinder liner pullers
- Ball joint presses
- Hub pullers
- Steering wheel pullers
- Wiper arm pullers
- Camshaft pullers
- Steering column lever pullers
- Piston ring pliers
- Oil filter wrenches
- Coil spring compressors



KUKKO // Pull forward



SERIES 127 | 128 | 129

# BALL JOINT PULLER AND PRESS





# DEPLOYMENT

Ball joints are found in vehicles both in the axle suspension and in the steering. Ball joints are subjected to heavy loads, which causes the ball heads to wear over time. This leads to play in the joints, which can affect steering and driving safety. At the latest, a replacement of the ball joints is urgently necessary. To disassemble ball joints without damage, KUKKO offers the optimal tools with series 128 and 129.



## FEATURES OF THE SERIES

### SERIES 127



127-0

#### Universal Joint Puller

The bell-shaped direct press ball joint puller of series 127 is used for pushing out the ball pins when removing ball joints as well as tie rod ends on tie rods in automotive and industry applications. The puller allows for damage-free working and is optimal when space is limited.

#### Benefits

Due to its simple yet effective design, the Direct Pull Ball Joint Puller is especially suitable for quick and uncomplicated applications.

### SERIES 128



128-50

#### Puller with direct pressure

The bell-shaped ball joint puller of series 128 is used to press out the ball pins when removing ball joints and tie rod ends from tie rods for all vehicle types. The puller allows for damage-free working and is optimal when there is plenty of space available.

#### Benefits

Due to its simple yet effective design, the direct pull spherical joint puller is particularly suitable for quick and uncomplicated applications.

### SERIES 129



129-3

#### Ball Joint Separator for Passenger Cars

The ball joint puller with lever transmission of the series 129 is used to press out the ball pins when removing ball joints as well as tie rod ends on tie rods for cars and light commercial vehicles. Due to its lever transmission, the ball joint puller can apply a lot of force even where there is barely any access space.

#### Benefits

- The bolt can be adjusted to flexibly adapt the clamping range.
- The spread can be increased by simple conversion.

### SERIES 135



135-1

#### Separator

The separating forks of the series 135 are used for loosening ball joint fittings jammed in the cone seat, for loosening steering rods, for disassembling shock absorbers, and for other separation tasks of all kinds in automotive and industry.

#### Benefits

- The assortment includes sizes with different fork holes for use in every case.

## ASSEMBLY OF SERIES 128



Anti-slip safety (spindle neck) for safe working

Hexagonal profile on the crossbar for counter-holding

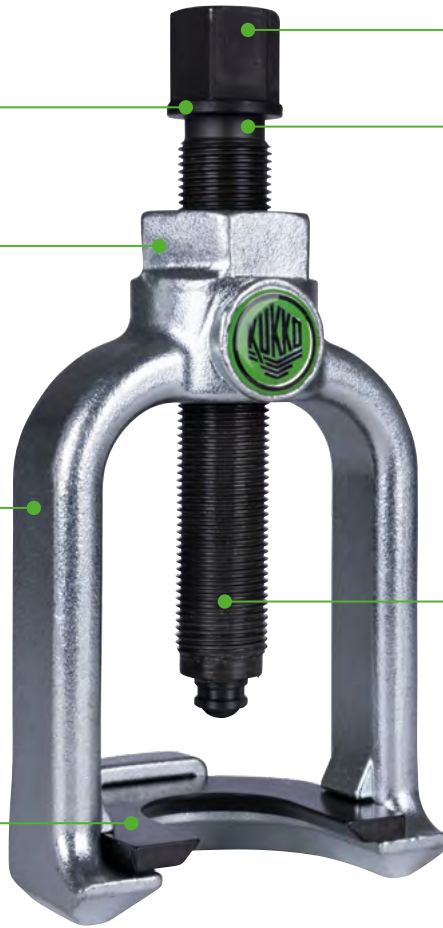
Puller

Pulling surface for gentle detachment

Hexagonal profile for manual operation of the spindle

Spindle exit to protect the thread

Precise, mechanical spindle for extra high tension force



## ASSEMBLY OF THE SERIES 129

Lever

Spring mechanism for adjusting the reach

Body

Anti-slip safety (spindle neck) for safe working

Precise, mechanical spindle for extra high tension force

Reducing socket for switching the mechanical and hydraulic spindle

Spindle exit to protect the thread

Hexagonal profile for manual actuation of the spindle





# OPTIONAL EXTENSIONS

In case of particularly stubborn components, the mechanical spindle can easily be replaced with a hydraulic spindle, achieving a medium tension force of up to 20 t.

## Hydraulic spindle 800



### Benefits:

- The hydraulic spindle guarantees easy and controlled removal of particularly stuck parts with low effort.
- Hydraulic spindle doubles the manual extraction force by 100%
- Handy format for quick, portable use
- Thanks to integrated fat-hydraulic, no external pump is required.

## Fall protection 660



# APPLICATION EXAMPLES



Separation of a tie rod from the suspension



The ball joint puller 128-60 when pressing a steering track end on a tie rod in a workshop



The spherical joint puller 129-3 when pressing out a tie rod end in a workshop



## PRODUCT DETAILS

### SERIES 127-0 DIRECT PRESS BALL JOINT PULLER








The bell-shaped direct press ball joint puller of series 127 is used to press out the ball pins when removing ball joints as well as tie rod ends on tie rods in automotive and industry. The puller allows for damage-free work and is optimal when there is little space available.

#### Benefits

- Due to its simple yet effective design, the direct puller ball joint remover is particularly suitable for quick and uncomplicated application.

#### Technical attributes

#	 EAN	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb
127-2	-123290	33,5 1 5/16	120 88.51	70	7 7.72	17 11/16	1,38 3,043
127-3	-981784	34 1 5/16	140 103.26	100	10 11.02	19 3/4	0,965 2,128
127-4	-123306	37 1 7/16	120 88.51	70	7 7.72	17 11/16	1,33 2,933
127-55	-007156	32 1 1/4	120 88.51	70	7 7.72	17 11/16	2,45 5,402

### SERIES 128 BELL-SHAPED BALL JOINT PULLER








The bell-shaped ball joint puller of series 128 is used for pressing out the ball studs when disassembling ball joints and tie rod ends on tie rods for all vehicle types. The puller allows for damage-free work and is optimal when there is plenty of space available. The series 128 impresses with its fast and easy operating method and is available in various sizes.

#### Benefits

- Due to its simple yet effective design, the direct puller ball joint remover is particularly suitable for quick and uncomplicated application.

#### Technical attributes

#	 EAN	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb	Included in the set
128-1	-024108	18 11/16	80 59.01	70	7 7.72	17 11/16	0,34 0,750	K-127-A/6
128-2	-024283	23 7/8	120 88.51	70	7 7.72	17 11/16	0,52 1,147	-
128-3	-024368	29 1 1/8	140 103.26	100	10 11.02	19 3/4	0,94 2,073	-
128-4	-024443	40 1 9/16	250 184.40	100	10 11.02	24 15/16	1,715 3,782	-
128-5	-024511	46 1 13/16	250 184.40	100	10 11.02	24 15/16	1,84 4,057	-
128-6	-007002	55 2 3/16	0.00	-	0.00	-	0 0,000	-

## PRODUCT DETAILS

### SERIES 128-0 BELL-SHAPED BALL JOINT PULLER








The bell-shaped ball joint puller of series 128 is used to press out the ball studs when removing ball joints and tie rod ends on tie rods in automotive and industry applications. The puller allows for damage-free working and is optimal when there is plenty of space available. The series 128 impresses with its quick and easy operation and is available in various sizes.



#### Benefits

- Due to its simple yet effective design, the direct print ball joint puller is particularly suitable for quick and uncomplicated application.
- The ball joint pullers can be used hydraulically together with the YSM series lift cylinder.

#### Technical attributes

#	 EAN	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb
<b>128-30</b>	-006937	30 1 3/16	150 110.64	100	10 11.02	22 7/8	1,5 3,308
<b>128-40</b>	-006968	39 1 9/16	150 110.64	100	10 11.02	22 7/8	4,225 9,316
<b>128-50</b>	-006982	46 1 13/16	150 110.64	100	10 11.02	22 7/8	0 0,000
<b>128-60</b>	-007019	55 2 3/16	150 110.64	100	10 11.02	22 7/8	0 0,000



The ball joint puller 128-60 when pressing out a tie rod end on a track rod



## PRODUCT DETAILS

### SERIES 128-H HYDRAULIC BALL JOINT PULLER








The bell-shaped hydraulic ball joint puller from series 128-H is used for pressing out ball pins when removing ball joints and tie rod ends on tie rods in automotive and industry applications. The puller allows for non-damaging work and is optimal when there is plenty of space available. The 128 series impresses with its fast and easy operation and is available in various sizes. The grease hydraulic spindle achieves an average pulling force of up to 15 t.

#### Benefits

- Due to its simple yet effective design, the direct-print ball joint puller is particularly suitable for quick and uncomplicated application.
- The hydraulics ensure a force-saving and safe operation.

#### Technical attributes

#	 EAN	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 mm/inch	 kg/lb
<b>128-30-H</b>	-006944	30 1 3/16	70 51.63	150	15 16.53	19 3/4	2,1 4,631
<b>128-40-H</b>	-006975	39 1 9/16	70 51.63	150	15 16.53	19 3/4	2,1 4,631
<b>128-50-H</b>	-006999	46 1 13/16	70 51.63	150	15 16.53	19 3/4	4,9 10,805
<b>128-60-H</b>	-007026	55 2 3/16	70 51.63	150	15 16.53	19 3/4	5 11,025

### SERIES 128-T-4 KUKKO SYSTEM FOR REPAIR WORK ON VW T4 TRAILING JOINTS








The KUKKO system for repair work on the ball joint of series 128 is used for the installation and removal of the ball joints on the T4 in automotive and industry. The system allows for damage-free operation and is optimal when there is plenty of space available. The series 128 impresses with its fast and simple working method and is available in various sizes. This version was specifically developed for applications on the VW T4.

#### Benefits

- Two additional spacer plates of 40 mm and 46 mm are included.
- Due to its simple yet effective design, the system is particularly suitable for quick and uncomplicated application.

#### Technical attributes

#	 EAN	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 mm/inch	 kg/lb
<b>128-T-4</b>	-018022	40, 46, 51, 55 1 9/16, 1 13/16, 2 1/64, 2 3/16	250 184.40	100	10 11.02	24 15/16	2,81 6,196

## PRODUCT DETAILS

### SERIES 129 BALL JOINT EXTRACTOR WITH LEVER TRANSLATION FOR PASSENGER CARS









The ball joint extractor with lever translation from the series 129 is used for pressing out ball pins when removing ball joints as well as tie rod ends on tie rods for passenger cars and light commercial vehicles. Due to its lever translation, the ball joint extractor can also apply a lot of force in areas where there is little access space. The series 129 impresses with its versatility of applications. In addition to a universal model, there are also versions that have been specifically manufactured for certain automobile categories and models, thus enabling ideal use. The lever clamping range can be adjusted via the thread of the center spindle.

#### Benefits

- The bolt can be adjusted to flexibly adapt the clamping range.
- The spread can be increased by simple conversion.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 mm/inch	 kg/lb	Included in the set
129-0	-410536	20 13/16	50 1 15/16	45 33.19	65	6.5 7.17	24 15/16	1,225 2,701	K-127-A/6
129-0-25	-989667	25 1	50 1 15/16	45 33.19	65	6.5 7.17	24 15/16	1,26 2,778	-
129-0-29	-989674	29,5 1 3/16	50 1 15/16	45 33.19	65	6.5 7.17	24 15/16	1,245 2,745	-
129-0-DC-1	-923920	20 13/16	50 1 15/16	45 33.19	65	6.5 7.17	24 15/16	1,23 2,712	-
129-0-DC-2	-923647	20 13/16	50 1 15/16	45 33.19	65	6.5 7.17	24 15/16	1,225 2,701	-

### SERIES 129-1 BALL JOINT PULLER WITH LEVER TRANSLATION, FOR CARS AND LIGHT VANS









The ball joint puller with lever translation of series 129 is used to press out the ball pins when removing ball joints and tie rod ends on steering rods for cars and light commercial vehicles. Due to its lever translation, the ball joint puller can also apply a lot of force where there is little access space. Series 129 impresses with its application variety. Within the series, there are various sizes of ball joint pullers with different arm openings. The lever clamping range is adjustable via the thread of the center spindle.

#### Benefits

- The bolt can be adjusted to flexibly adapt the clamping range.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 mm/inch	 kg/lb
129-1	-024696	22 7/8	50 1 15/16	30 22.13	30	3 3.31	17 11/16	0,72 1,588
129-1-B-1	-923654	31 1 1/4	50 1 15/16	30 22.13	30	3 3.31	17 11/16	0,725 1,599

## PRODUCT DETAILS

### SERIES 129-2 UNIVERSAL PRESS WITH LEVER TRANSLATION, SUITABLE FOR PASSENGER CARS, VANS, AND MEDIUM TRUCKS









The ball joint extractor with lever translation of series 129 is used for pressing out the ball pins when removing ball joints as well as tie rod ends on tie rods, universally for passenger cars, vans, and medium trucks. Due to its lever translation, the ball joint extractor can also apply much force where there is little access space available. Series 129 impresses with its variety of applications. The lever clamping range is adjustable via the thread of the center spindle.

#### Benefits

- The ball joint puller is universally applicable through three arm widths.
- The bolt can be adjusted to flexibly adapt the clamping range.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb
129-2	-024771	16, 22, 32 5/8, 7/8, 1 1/4	70 2 3/4	35 25.82	30	3 3.31	17 11/16	1,13 2,492

### SERIES 129-25 UNIVERSAL BALL JOINT PULLER









The universal ball joint puller of the series 129 is used for pressing out the ball pins when removing ball joints on tie rods and track rods in passenger cars. Thanks to its leverage, the ball joint puller can also apply a lot of force where there is hardly any access space. The series 129 impresses with its wide range of applications. The lever clamping range can be adjusted via the thread of the center spindle.

#### Benefits

- With the center spindle, the press can be adjusted and pre-tensioned.
- The bolt can be adjusted to flexibly adapt the clamping range.
- The spread can be adjusted threefold by a simple modification.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb
129-25	-967924	19 3/4	45 1 3/4	140 103.26	170	17 18.74	19 3/4	1,62 3,572



## PRODUCT DETAILS

### SERIES 129-3-4 BALL JOINT PRESS WITH LEVER TRANSLATION, FOR MEDIUM AND HEAVY TRUCKS, BUSES, AND CONSTRUCTION VEHICLES









The ball joint puller with lever translation of the series 129 is used for pressing out the ball pins when removing ball joints as well as tie rod ends on tie rods, for medium and heavy trucks, buses, and construction vehicles. Due to its lever translation, the ball joint puller can also apply a lot of force where there is little access space available. The series 129 impresses with its versatility of applications. Within the series, there are various sizes of ball joint pullers with different arm openings. The lever clamping range is adjustable via the thread of the center spindle.



#### Benefits

- Better haptics through modern and ergonomic design
- Low effort for high extraction performance
- The reach can be easily adjusted using a spring mechanism
- The bolt can be adjusted to flexibly adapt the clamping range.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb
<b>129-3</b>	-270949	31 1 1/4	70 2 3/4	85 62.70	100	10 11.02	19 3/4	3,316 7,312
<b>129-4</b>	-271021	40 1 9/16	85 3 3/8	125 92.20	150	15 16.53	19 3/4	3,26 7,188



The ball joint extractor 129-3 when pressing out a track rod knob

## PRODUCT DETAILS

### SERIES 129-3-A JOINT EXTRACTOR WITH LEVERAGE TRANSLATION, SPECIALLY DESIGNED FOR CARS WITH ALUMINUM CHASSIS









The ball joint puller with lever transmission from the series 129 is used for pressing out the ball pins when removing ball joints as well as tie rod ends on tie rods, specifically for cars with aluminum chassis. Due to its lever transmission, the ball joint puller can also apply a lot of force in places with limited access. The series 129 impresses with its variety of applications. Within the series, there are different sizes of ball joint pullers with varying arm openings. The lever clamping range can be adjusted via the thread of the center spindle.

#### Benefits

- The reach can be easily adjusted with a spring mechanism.
- The bolt can be adjusted to flexibly adapt the clamping range.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb
129-3-A	-803178	30 1 3/16	65 2 9/16	35 25.82	65	6.5 7.17	19 3/4	1,96 4,322
129-3-A-32	-989681	32 1 1/4	65 2 9/16	35 25.82	65	6.5 7.17	19 3/4	1,925 4,245
129-3-A-34	-989698	34 1 5/16	65 2 9/16	35 25.82	65	6.5 7.17	19 3/4	1,96 4,322

### SERIES 129-4-30 BALL JOINT EXTRACTOR WITH LEVER TRANSLATION FOR PASSENGER CARS









The ball joint extractor with lever translation of series 129 is used to press out the ball pins when removing ball joints and tie rod ends on steering rods in passenger cars. Tight space conditions allow little room for the gentle positioning of the press. Due to its special design, the disassembly of the support joint occurs without contact with other axle components, thus protecting the sensitive surfaces. Series 129 impresses with its versatility in application. The version 129-4-30 has been specifically developed for applications on the Audi R8. The lever clamping range can be adjusted via the thread of the center spindle.

#### Benefits

- Better haptics through modern and ergonomic design
- Low effort for high pulling performance
- The reach can be easily adjusted using a spring mechanism.
- The bolt can be adjusted to flexibly adapt the clamping range.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	SW  mm/inch	 kg/lb
129-4-30	-102653	30 1 3/16	70 2 3/4	85 62.70	100	10 11.02	19 3/4	2,8 6,174

## PRODUCT DETAILS

### SERIES 129-5 PULLER FOR HEAVY TRUCKS









The ball joint puller for heavy trucks of series 129 is used for the hydraulic extraction of ball pins when removing ball joints on tie rods and steering rods specifically for medium and heavy trucks, buses, and construction vehicles. The series 129 impresses with its versatility in application. The lever clamping range is adjustable via the thread of the center spindle.



#### Benefits

- The bolt can be adjusted to flexibly adapt the clamping range.

#### Technical attributes

#					Max. tensile force	Max. tractive force	SW 	
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	mm/inch	kg/lb
129-5	-865084	36 1 7/16	70 2 3/4	200 147.52	150	15 16.53	19 3/4	4,24 9,349

### SERIES 129-5-H HYDRAULIC SPINDLE PULLER FOR HEAVY TRUCKS









The ball joint puller with hydraulic spindle for heavy trucks of series 129 is used for the hydraulic extraction of the ball pins when removing ball joints on tie rods and steering rods specifically designed for medium and heavy trucks, buses, and construction vehicles. The series 129 impresses with its versatility. The hydraulic spindle guarantees an easy and controlled removal of particularly seized parts with minimal effort.

#### Benefits

- Low effort for high pulling performance
- The spindle neck prevents the key from slipping off.

#### Technical attributes

#					Max. tensile force	Max. tractive force	SW 	
	EAN	mm/inch	mm/inch	Nm	kN	t/US t. sh.	mm/inch	kg/lb
129-5-H	-865091	36 1 7/16	70 2 3/4	70	150	15 16.53	19 3/4	5,34 11,775



## PRODUCT DETAILS

### SERIES 129-5-0 2-ARM AND PUSHROD PULLER FOR HEAVY TRUCKS









The 2-arm puller for heavy trucks of the series 129 is used for mechanically pressing out the ball studs when removing ball joints on thrust and steering rods. The series 129 impresses with its versatility of applications. Within the series, there are different sizes of ball joint presses with varying arm openings. The lever clamping range can be adjusted via the thread of the center spindle.

#### Benefits

- The extra strong version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- With the center spindle, the press can be adjusted and pre-tensioned.
- Suitable for the following vehicle types:
  - o Mercedes Benz: ACTROS, ATEGO from 18 tons, SKO 405, -N, -GN (low-floor buses)
  - o MAN: F2000, TG, A 23 (low-floor articulated buses)
  - o Scania: series 3 and 4, Icarus
- Depending on the space requirement, the mechanical drive spindle can be actuated by modification from above or below.

#### Technical attributes

#					<b>Max. tensile force</b>	<b>Max. tractive force</b>		
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	mm/inch	kg/lb
<b>129-5-45</b>	-333316	45 1 3/4	120 4 3/4	210 154.90	100	10 11.02	27 1 1/16	7,96 17,552
<b>129-5-50</b>	-123313	55 2 3/16	120 4 3/4	420 309.79	200	20 22.05	27 1 1/16	6,84 15,082

### SERIES 129-5-H-0 2-ARM AND 3-ARM PULLER WITH HYDRAULIC LIFTING CYLINDER










The 2-arm and steering arm puller with hydraulic lift cylinder from series 129 is used for the hydraulic extraction of ball pins when removing ball joints on steering and tie rods specifically for trucks and low-floor buses. The lift cylinder ensures easy and controlled removal of particularly stuck parts with minimal effort. Series 129 impresses with its versatility of applications. Within the series, there are various sizes of ball joint extractors with different arm openings. A hydraulic pump (YHP-320) with hose (YF-200), which is not included in the delivery, is required for driving the tool.

#### Benefits

- The hydraulic presses are powered by a hydraulic cylinder, allowing for controlled and safe operation.
- The extra powerful version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- With the center spindle, the press can be adjusted and pre-tensioned.
- Suitable for the following vehicle types:
  - o Mercedes Benz: ACTROS, ATEGO from 18 tons, SKO 405, -N, -GN (low-floor buses)
  - o MAN: F2000, TG, A 23 (low-floor articulated buses)
  - o Scania: series 3 and 4, Icarus

#### Technical attributes

#						<b>Max. tensile force</b>	<b>Max. tractive force</b>		
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	bar	kg/lb
<b>129-5-45-H10</b>	-333361	28,5 1 1/8	45 1 3/4	6 1/4	120 4 3/4	100	10 11.02	700	8,28 18,257
<b>129-5-45-H20</b>	-333422	28,5 1 1/8	45 1 3/4	6 1/4	120 4 3/4	200	20 22.05	700	9,57 21,102
<b>129-5-50-H10</b>	-000317	28,5 1 1/8	55 2 3/16	6 1/4	120 4 3/4	100	10 11.02	700	7,65 16,868
<b>129-5-50-H20</b>	-000324	28,5 1 1/8	55 2 3/16	6 1/4	120 4 3/4	200	20 22.05	700	9,2 20,286

## PRODUCT DETAILS

### SERIES 129-6 TRUCK BALL JOINT PRESS "UNIVERSAL"








The truck ball joint press "Universal" of series 129 is used for pressing out particularly firmly seated ball pins when removing ball joints on push and steering rods for trucks, buses, and construction vehicles. The series 129 impresses with its versatility.



#### Benefits

- Versatile due to the three different separator arms included in the scope of delivery.
- Especially suitable for solving ball joint connections that are stuck in the cone seat.

#### Technical attributes

#	 EAN	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 SW mm/inch	 kg/lb
129-6	-971662	25, 32, 47 1, 1 1/4, 1 7/8	300 221.28	100	10 11.02	27 1 1/16	9,24 20,374

### SERIES 129-36 PULLER FOR TIE RODS







The puller for tie rods and push rods of the series 129 is used for the hydraulic pressing out of the ball pins when removing ball joints on push and tie rods specifically designed for trucks and low-floor buses.

#### Benefits

- The extra sturdy design of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- The low design is ideal for low-floor buses of the types MAN, Mercedes-Benz, CITARO, etc. Suitable

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
129-36	-865077	36 1 7/16	60 2 3/8	100	10 11.02	5,395 11,896

## PRODUCT DETAILS

### SERIES 129-36-H 2-ARM AND PUSH ROD JOINT PULLER WITH HYDRAULIC LIFT CYLINDER










The rod end and tie rod puller with hydraulic lifting cylinder of series 129 is used for hydraulic pressing out of ball pins when removing ball joints from push and tie rods specifically for trucks and low-floor buses. This extra heavy-duty version is particularly suitable for hydraulic pressing out or separating the ball joints on the tie and push rods.

#### Benefits

- The hydraulic press with its hydraulic cylinder enables controlled and safe pulling off.
- The extra-strong version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- The low building form is ideal for low-floor buses of the types MAN, Mercedes-Benz, CITARO, etc. Suitable

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	bar	kg/lb
129-36-H	-222894	36 1 7/16	60 2 3/8	100	10 11.02	700	7,055 15,556

### SERIES 129-H BALL JOINT PRESS WITH SHORT HYDRAULIC SPINDLE











The spherical joint extractor with a short hydraulic spindle of series 129 is used to press out particularly stubborn ball pins during the dismantling of ball joints and tie rod ends on medium trucks, buses, and construction vehicles. Series 129 impresses with its versatility of applications. Within the series, there are different sizes of spherical joint extractors with varying arm openings. The clamping range can be adjusted via the thread of the center spindle. The grease hydraulic spindle achieves an average pulling force of up to 15 tons, thus guaranteeing an easy and controlled pulling off of particularly stubborn parts with minimal effort. For extraction processes with a pulling force of up to 10 tons and/or in tight space conditions, the mechanical spindle can be used.

#### Benefits

- Low effort for high pulling performance
- The reach can be easily adjusted using a spring mechanism.
- The bund of the spindle neck prevents the slipping of the key.

#### Technical attributes

#								
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	mm/inch	kg/lb
129-3-H	-803253	31 1 1/4	70 2 3/4	40 29.50	100	10 11.02		4,16 9,173
129-4-H	-803666	40 1 9/16	85 3 3/8	70 51.63	150	15 16.53	19 3/4	4,175 9,206



## PRODUCT DETAILS

### SERIES 135 SEPARATOR







The fork separators of series 135 are used for loosening ball pivot joints that are wedged in the cone seat, for loosening steering levers, for disassembling shock absorbers, and for other separation work of all kinds in automotive and industry. Their universal applicability makes the fork separators an important companion for disassembly and separation tasks.



#### Benefits

- The set includes sizes with various arm openings for use in every case.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
135-1	-024856	310 12 3/16	18 11/16	0,74 1,632
135-2	-024931	316 12 7/16	23 7/8	0,8 1,764
135-3	-025013	319 12 9/16	29 1 1/8	0,815 1,797
135-4	-025198	335 13 3/16	39 1 9/16	1,465 3,230
135-5	-220531	340 13 3/8	45 1 3/4	1,28 2,822



The separating fork 135-2 when releasing a ball joint wedged into the cone seat of a car

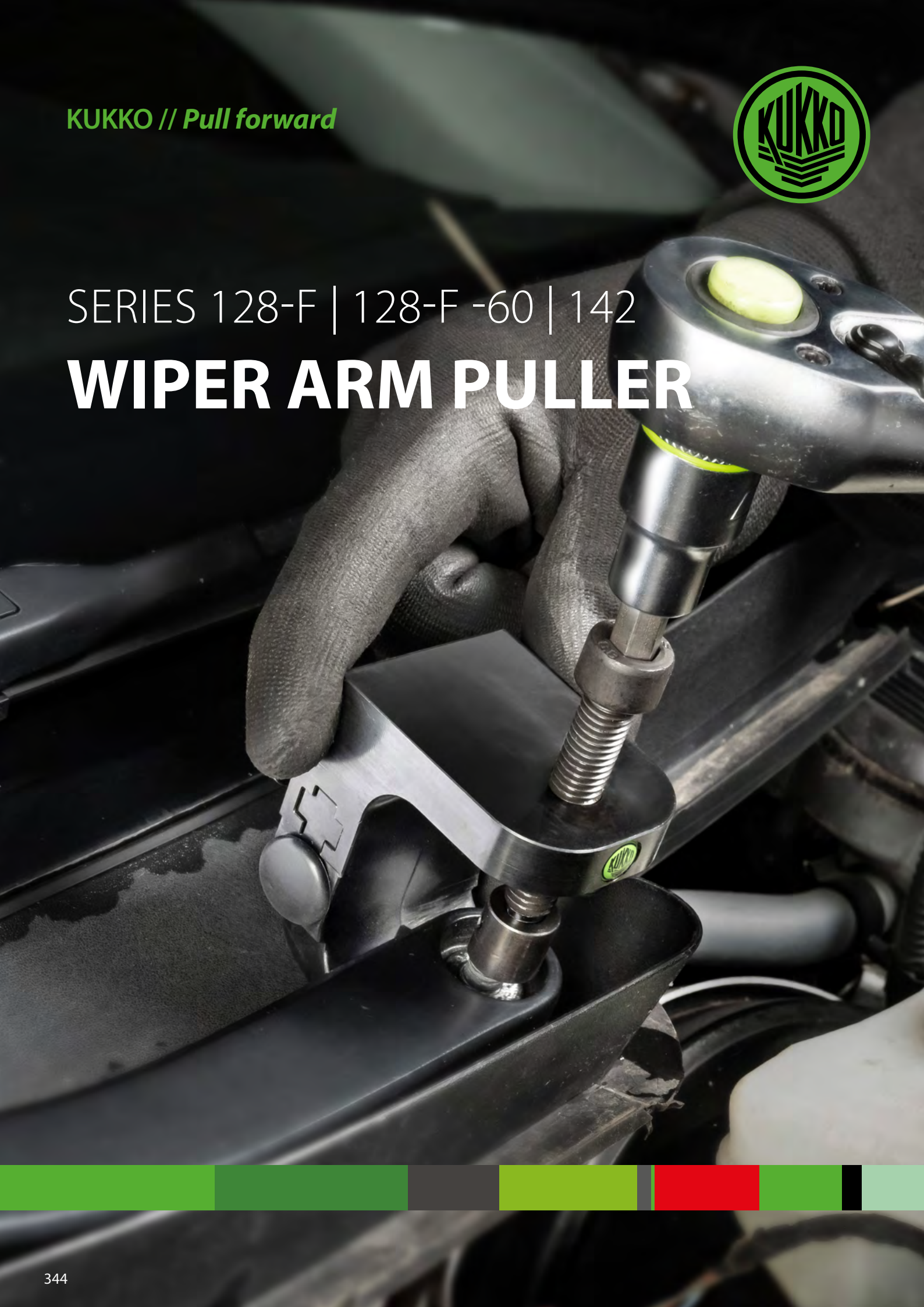


KUKKO // *Pull forward*



SERIES 128-F | 128-F -60 | 142

# WIPER ARM PULLER



# DEPLOYMENT

Bent or broken wiper arms must be replaced quickly in order to free the windshield and rear window from rain, snow, and dirt. In general, the wiper arms are very tight and cannot be loosened without special tools. KUKKO pullers are the ideal choice for dismantling particularly seized or rusted windshield wiper arms.



## Benefits

- Gentle removal thanks to special pressure piece on the spindle
- Adjustable spread using a spring mechanism (series 128-F-60)
- Suitable for windshields and rear windows where the water hose goes through the hub (series 128-F-60)

# ASSEMBLY

## ART. NO. 128-F-SW



## ART. NO. 128-F-60





## FEATURES OF THE SERIES

### SERIES 128-F-SW



128-F-SW

The universal wiper puller can be used on 80% of all vehicle models. The specially designed pressure piece protects the wiper fluid hose during the extraction process.

### SERIES 142



142-2

The models of series 142 are adapted to the aerodynamic and safety-related developments of the automotive industry. Due to the increasingly tight spatial conditions, the spindle can be adjusted in angle and length.

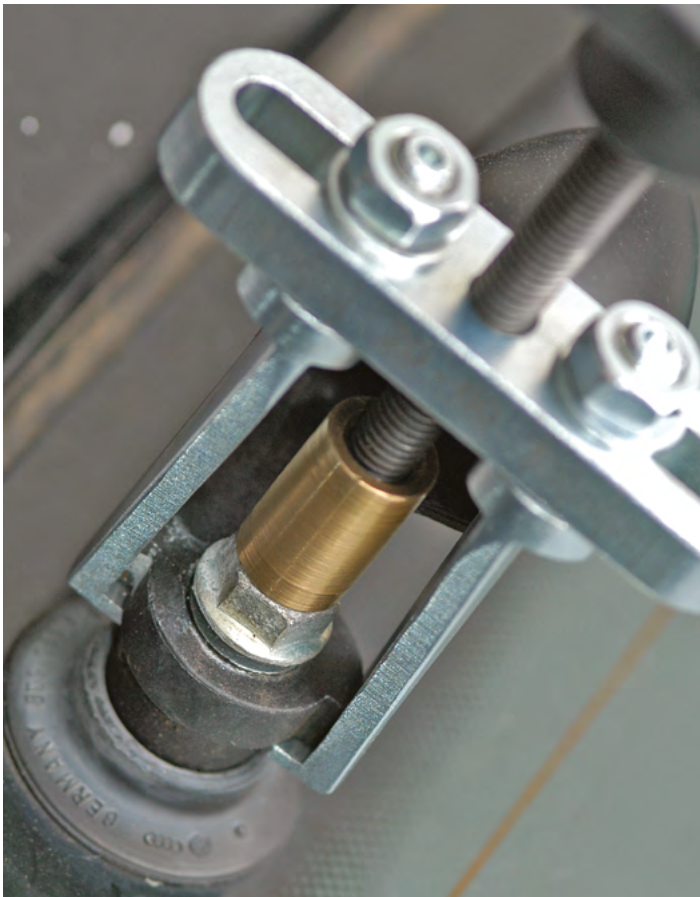
### SERIES 128-F-60



128-F-60

The puller arm extractor with adjustable spread (16-38 mm) can be used universally. Thanks to the spring mechanism, the hooks are optimally positioned. A special benefit is the interchangeable hooks.

## APPLICATION EXAMPLES



Removing a wiper arm with the 128-F-SW



Removing a wiper arm with the 128-F-60

## PRODUCT DETAILS

### SERIES 128-F 2-ARM UNIVERSAL WIPER PULLER








The 2-arm universal wiper puller is used for removing stuck, rusted, and deeply set wiper arms on windshields and rear windows. The pressure piece on the spindle ensures the perfect contact surface and guarantees a gentle removal.



#### Benefits

- Gentle removal thanks to special pressure piece on the spindle
- Anti-slip safety (spindle neck) at the spindle head for safe work with the wrench.
- Spindle outlet to protect the thread

#### Technical attributes

#						Included in the set
	EAN	mm/inch	mm/inch	mm/inch	kg/lb	
128-F-SW	-971242	25 - 60 1 - 2 3/8	50 1 15/16	13 1/2	0,245 0,540	K-142/4, K-142/6

### SERIES 128-F-60 2-ARM UNIVERSAL WIPER PULLER







The universal wiper pullers with adjustable spread of series 128-F-60 are used for removing stuck, rusted, and deeply mounted wiper arms in the automotive industry. The returning spring mechanism keeps the arms under tension. Thanks to interchangeable arms, the puller can also be used on low-mounted wiper arms.

#### Benefits

- Suitable for windshields and rear windows where the wiper water hose passes through the hub.
- The choice of special threads allows for particularly high pulling forces.
- Particularly gentle removal thanks to a special pressure piece on the spindle
- Adjustable span using spring mechanism

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
128-F-60	-007071	16 - 38 5/8   1 1/2	13 1/2	0 0,000

## PRODUCT DETAILS

### SERIES 142 UNIVERSAL WIPER PULLER







The universal pullers of series 142 are used for removing stuck, rusted, and recessed windshield wiper arms in the automotive sector. The optimal bell shape and easy adjustability make the puller applicable for most models of common windshield wiper arms.

#### Benefits

- Suitable for windshields and rear windows where the wiper water hose passes through the hub.
- The choice of special threads allows for particularly high pulling forces.
- Particularly gentle removal thanks to a special pressure piece on the spindle
- Anti-slip safety (spindle neck) for safe working with wrench

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Included in the set
142-1	-555572	15 9/16	8 5/16	0,245 0,540	K-142/4, K-142/6, K-22-A
142-2	-555602	23,5 15/16	8 5/16	0,26 0,573	K-142/6, K-22-A
142-3	-555619	15 9/16	8 5/16	0,225 0,496	K-142/6, K-22-A
142-4	-555626	26,5 1 1/32	16 5/8	0,215 0,474	K-142/4, K-142/6, K-22-A

### SERIES K-142 5-PIECE UNIVERSAL WIPER PULLER SET








The 5-piece Universal Wiper Puller Set K-142/4 is used to pull off stuck, rusted, and deeply installed wiper arms on all vehicle models. Included are the wiper pullers from series 142, as well as a wiper arm puller from series 128-F-SW and a 2-arm universal puller with self-centering puller arms from series 43. This set, due to its composition, is capable of gently and safely pulling even in tricky extraction situations without having to disassemble any additional parts.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Particularly gentle removal thanks to a special pressure piece on the spindle

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb	Components
K-142/4	-039232	0 - 60 0 - 2 3/8	0 - 50 0 - 1 15/16	15, 26,5 9/16, 1 1/16	1,35 2,977	128-F-SW, 142-1, 142-4, 43-1



## PRODUCT DETAILS

### SERIES K-142 8-PIECE UNIVERSAL WIPER PULLER SET








The 8-piece universal wiper puller set K-142/6 is used to remove firmly seated, rusted, and deeply mounted wiper arms on all vehicle models. Included are the wiper pullers from series 142, as well as a wiper arm puller from series 128-F-SW and a 2-arm universal puller with self-centering puller arms from series 43. Due to this combination, the set is capable of gently and safely pulling even in tricky extraction situations without the need to disassemble additional parts.



#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Particularly gentle removal thanks to a special pressure piece on the spindle

#### Technical attributes

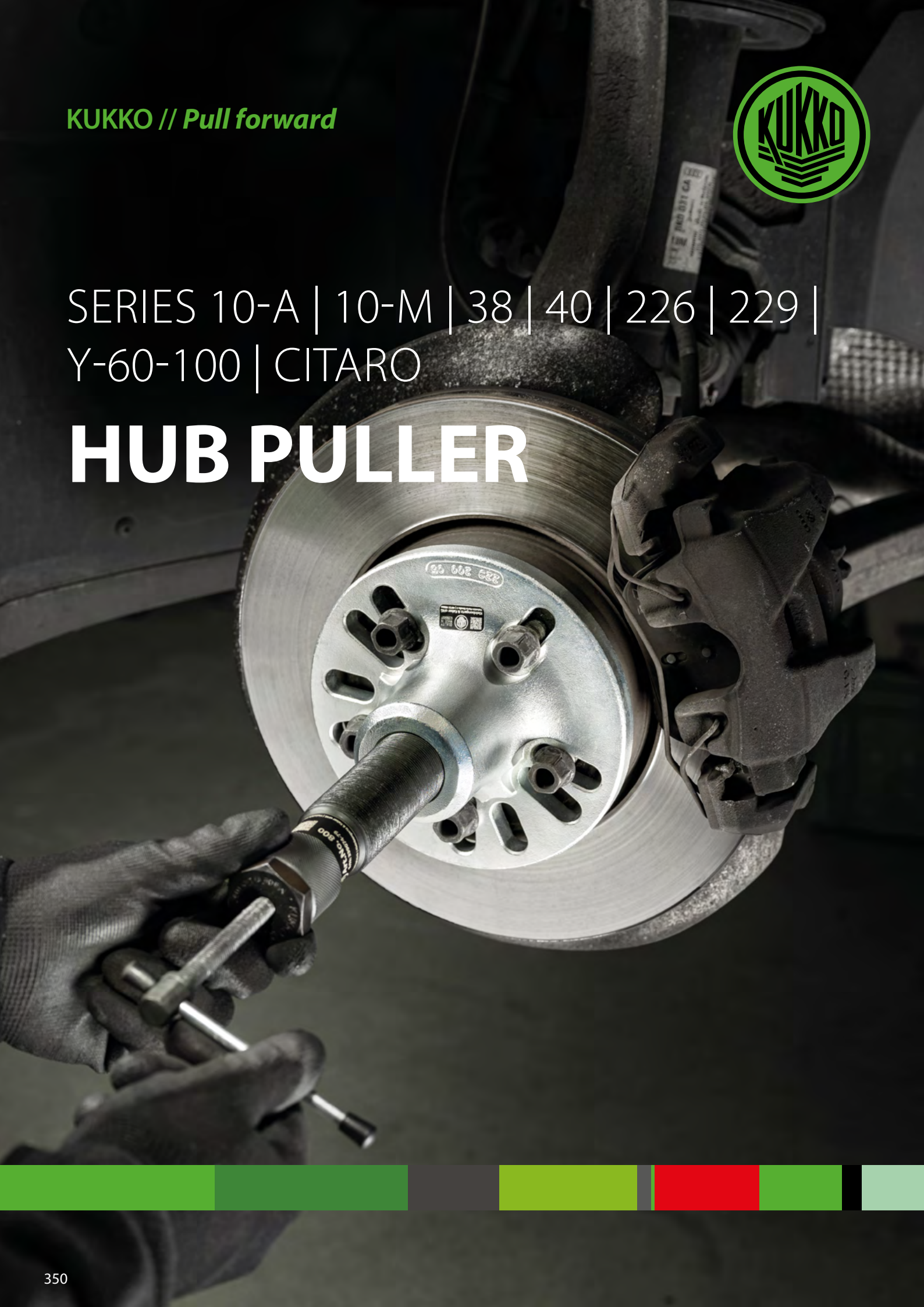
#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb	Components
K-142/6	-039249	0 - 60 0 - 2 3/8	0 - 50 0 - 1 15/16	15, 15, 23,5, 56,5 9/16, 9/16, 15/16, 2 1/4	2,61 5,755	43-1, 128-F-SW, 142-1, 142-2, 142-3, 142-4

KUKKO // Pull forward



SERIES 10-A | 10-M | 38 | 40 | 226 | 229 |  
Y-60-100 | CITARO

# HUB PULLER

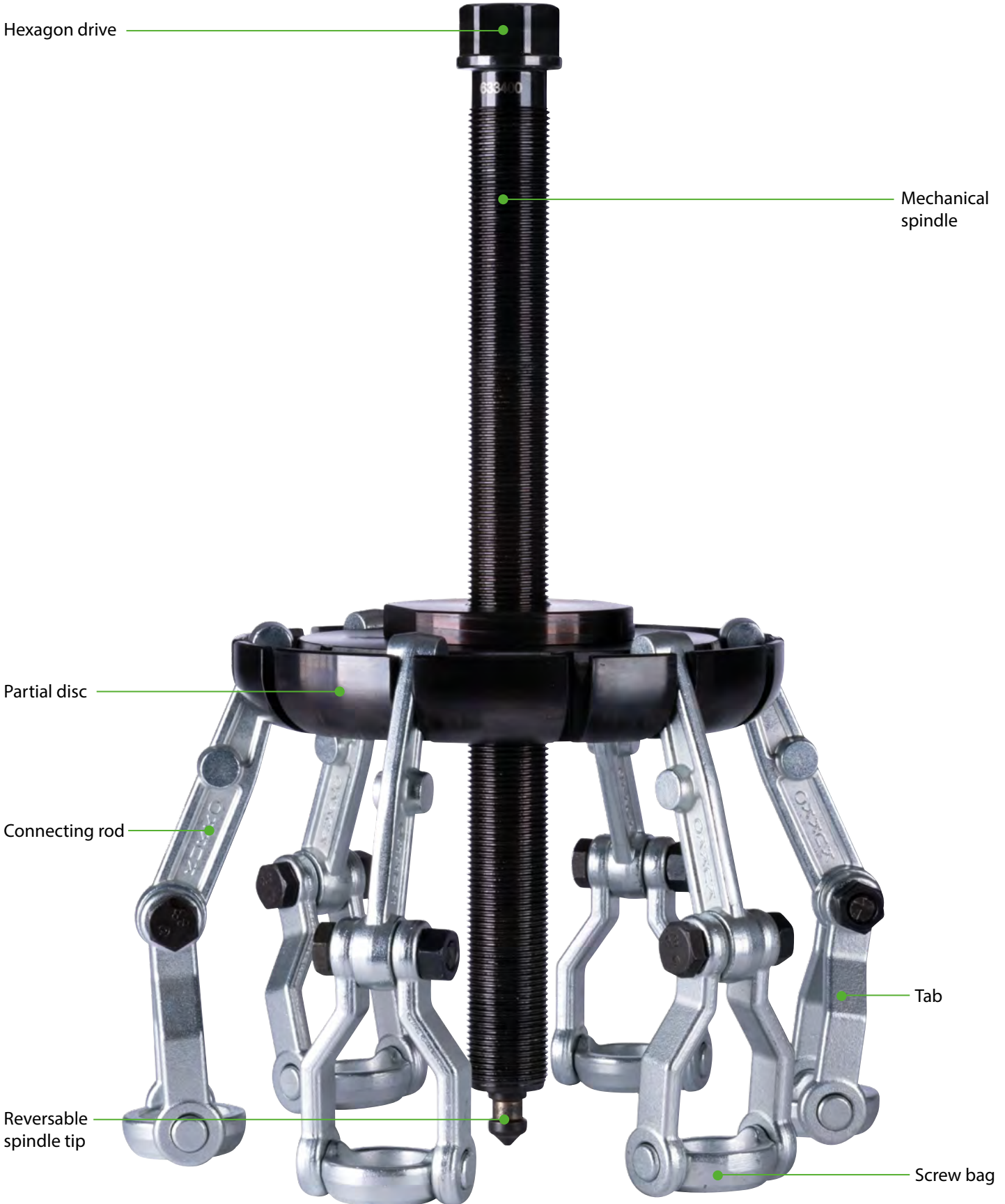


# DEPLOYMENT

Wheel hubs are subjected to significant stresses. In motor vehicles, the wheel hub is mounted on the drive shaft in the center of the wheel. Special tools are required for the disassembly of the wheel hub. KUKKO offers various disassembly tools depending on the installation situation.



## ASSEMBLY OF A HUB PULLER OF THE SERIES 10-M





# ASSEMBLY OF A HUB PULLER OF SERIES 229



Impact stop

Sliding rod

Impact weight

Connecting piece

Flange

Washers

# FEATURES OF THE SERIES

## SERIES 10-A



The hydraulic hub puller is used for pulling hub assemblies on cars and trucks. The grease hydraulic spindle achieves a pulling force of 20 t. Up to six puller arms can be used on the partial disc, making the puller universally applicable. In addition, the puller arms can be adjusted to two different lengths.

## SERIES 10-M



The hub puller with crossbar is used for pulling wheel hubs on trucks. Up to six puller arms can be hung in different positions on the crossbar. The arms can also be adjusted to two different lengths. This makes the puller universally usable even for variable bolt circle diameters.

## SERIES 38



The hub puller with crossbar is used for removing wheel hubs on trucks. Up to five pulling arms can be hung on the crossbar, which are freely movable on the bar. This makes the puller universally applicable for different vehicle models. The freely movable T-handle on the spindle head guarantees manual tightening of the spindle in tight spaces.

## SERIES 40



The hub puller with crossbar is used for pulling hubs on trucks. The spindle runs in a thread bush that is axially movable, in case impacts on the spindle head are required to loosen the hub. The freely movable T-handle on the spindle head ensures manual tightening of the spindle in confined spaces.

## SERIES 226



The pulling device for truck axles of the series 226 is used for pulling wheel hubs on SAF and BPW axles for trucks and commercial vehicles in the automotive sector. In addition to the pulling device, several adapters are also included, allowing application on most common models.

## SERIES 229



The hub puller with sliding hammer of series 229 is used for removing all 4- and 5-hole wheel hubs of almost all car types in automotive. The flange is designed with grooves of different spacing to accommodate standard screws. Also available with hydraulic spindle.



# FEATURES OF THE SERIES

## SERIES Y-60-000



The hydraulic wheel hub puller for commercial vehicles and low-floor buses is used for the safe and quick disassembly of the wheel hub on commercial vehicles and buses in the automotive sector. The bolt circle disc and the 30 t pressure cylinder are capable of loosening very tightly seated and difficult-to-remove wheel hubs.

## SERIES CITARO



The hydraulic hub puller "Citaro" is used for pulling wheel hubs in the automotive industry. It perfectly loosens very tight, difficult-to-remove wheel hubs. The 30 t pressure cylinder allows for a time-saving and universal application, even with stubborn parts.

# APPLICATION EXAMPLES



Attaching the puller to the wheel hub



The hub puller 229-1-1 with sliding hammer for extracting stuck wheel hubs on a passenger car.



## PRODUCT DETAILS

### SERIES 10-M HUB PULLER









The hub puller with crossbar is used for pulling wheel hubs on trucks. Up to six puller arms can be hung in different positions on the crossbar. The arms can also be adjusted to two different lengths. This makes the puller universally applicable even with variable bolt circle diameters.



#### Benefits

- Preservation of wheel bolt threads by consistently flat-lying nut pockets
- Length-adjustable and individually positionable pulling arms as well as variously sized part discs ensure universal application on trucks.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>10-M</b>	-862311	350 13 3/4	150 5 7/8	36 1 7/16	450 331.92	150	15 16.53	16 35,280

### SERIES 10-A HYDRAULIC HUB PULLER SET








The hydraulic hub puller is used for pulling hub assemblies on passenger cars and trucks. The grease-hydraulic spindle achieves a pulling force of 20 t. Up to six pulling arms can be used on the partial disc, making the puller universally applicable. Additionally, the pulling arms can be adjusted to two different lengths. The 22-piece set includes: one partial disc, six pulling arms, twelve insert rings in different sizes, one hydraulic spindle, and two pressure pieces.

#### Benefits

- Adjustable and individually positionable arms guarantee universal application on cars and trucks.
- Thanks to the partial disc, different hole circles can be covered.
- Preservation of wheel bolt integrity through consistently flat-lying nut pockets.
- Fat hydraulic spindle guarantees easy and controlled removal of particularly stubborn parts with minimal effort.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>10-A</b>	-005626	250 9 13/16	150 5 7/8	17 11/16	200	20 22.05	17,34 38,235
<b>10-G</b>	-005701	350 13 3/4	150 5 7/8		200	20 22.05	24,88 54,860

## PRODUCT DETAILS

### SERIES 38 HUB PULLER








The hub puller with crossbar is used for pulling hub assemblies on trucks. Up to five puller arms can be hung on the crossbar, which are freely movable on it. This makes the puller universally applicable for various vehicle models. The freely movable T-handle at the spindle head guarantees manual tightening of the spindle in tight spaces.

#### Benefits

- Preservation of wheel bolt threads by consistently flat-lying nut pockets
- Integrated, free-moving T-handle ensures manual spindle drive in tight spaces

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
38	-014383	250 9 13/16	105 4 1/8	27 1 1/16	5,68 12,524

### SERIES 40 HUB PULLER








The hub puller with the crossbar is used for pulling hubs from trucks. The spindle runs in a threaded bushing that is axially movable, in case impacts on the spindle head are necessary to loosen the hub. The freely movable T-handle on the spindle head ensures manual tightening of the spindle in tight spaces.

#### Benefits

- Preservation of wheel bolt threads by consistently flat-lying nut pockets
- Integrated, free-moving T-handle ensures manual spindle drive in tight spaces

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
40-3	-014611	225 8 7/8	150 5 7/8	27 1 1/16	4,51 9,945
40-5	-014956	225 8 7/8	150 5 7/8	27 1 1/16	5,44 11,995

## PRODUCT DETAILS

### SERIES 229-1-1 HUB PULLER WITH SLIDING HAMMER









The hub puller with sliding hammer of series 229 is used to extract all 4- and 5-hole hubs of almost all types of passenger cars in automotive applications. The flange is designed with slots of varying spacing to accommodate standard screws.

#### Benefits

- Also suitable for pressing drive shafts in vehicles with front-wheel drive.
- The hub puller is suitable for removing all 4- and 5-hole hubs on VW, Audi, Seat, Skoda, Opel, Volvo, Fiat, Renault, etc.
- The reducer can be screwed in to work with a mechanical spindle.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	kg	kg/lb
229-1-1	-283703	97 - 145 3 13/16-5 11/16	370 14 9/16	250 9 13/16	1.7	12,02 26,504

### SERIES 229-1-2 HUB PULLER WITH SLIDING HAMMER









The hub puller with sliding hammer of series 229 is used to extract all 4- and 5-hole hubs of almost all types of passenger cars in automotive applications. The flange is designed with slots of varying spacing to accommodate standard screws.

#### Benefits

- Also suitable for pressing drive shafts in vehicles with front-wheel drive.
- The hub puller is suitable for removing all 4- and 5-hole hubs on VW, Audi, Seat, Skoda, Opel, Volvo, Fiat, Renault, etc.
- The reducer can be screwed in to work with a mechanical spindle.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	kg	kg/lb
229-1-2	-545733	97 - 145 3 13/16-5 11/16	700 27 9/16	340 13 3/8	5	11,29 24,894



## PRODUCT DETAILS

### SERIES 229 HYDRAULIC HUB PULLER







The hydraulic hub puller of the series 229 is used for removing all 4- and 5-hole hubs of almost all car types in automotive and industry. The flange is designed with slots of different spacings to accommodate commercially available screws.

#### Benefits

- Also suitable for pressing drive shafts in vehicles with front-wheel drive.
- The hub puller is suitable for pulling all 4- and 5-hole wheel hubs on VW, Audi, Seat, Skoda, Opel, Volvo, Fiat, Renault etc.
- The reducer can be screwed in to work with a mechanical spindle.

#### Technical attributes

#	 EAN	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>229-2</b>	-995026	97 - 145 3 13/16-5 11/16	40 29.50	100	10 11.02	4,665 10,286
<b>229-3</b>	-995033	97 - 145 3 13/16-5 11/16	70 51.63	150	15 16.53	4,735 10,441

### SERIES 226 PULLER DEVICE FOR TRUCK AXLES











The pulling device for truck axles of the series 226 is used for pulling wheel hubs on SAF and BPW axles for trucks and commercial vehicles in the automotive industry. In addition to the pulling device, several adapters are included, which allow application on most common models.

#### Benefits

- Printing pieces and extensions are already included in the set and expand the application.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 nominal dimension	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb	<b>Included in the set</b>
<b>226-4/11</b>	-831362	115 - 380 4 1/2 - 14 15/16	370 14 9/16	90x30, 110x30mm 3 9/16x1 3/16, 4 5/16x1 3/16	M18x1,5, M20x1,5, M22x1,5	36 1 7/16	450 331.92	150	15 16.53	22,09 48,708	K-226-4/12

## PRODUCT DETAILS

### SERIES Y-60-000 HYDRAULIC HUB PULLER FOR COMMERCIAL VEHICLES AND LOW-FLOOR BUSES








The hydraulic hub puller for commercial vehicles and low-floor buses is used for the safe and quick disassembly of the wheel hub in commercial vehicles and buses in the automotive industry. The bolt circle plate and the 30 t pressure cylinder are capable of loosening very tight and difficult-to-remove wheel hubs.



#### Benefits

- The hole circle disc with various radii and drill diameters allows for use with a variety of models.
- By storing it in the box, the completeness of the set can be easily overviewed.
- The pulling process protects the hub bearings and removes them quickly and without damage.

#### Technical attributes

#	 EAN	 mm/inch	 bar	 M16x1,5, M18x1,5, M20x1,5	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
Y-60-100	-356780	168,184,190 6 5/8, 7 1/4, 7 1/2	700	M16x1,5, M18x1,5, M20x1,5	300	30 33.07	37 81,585
Y-60-200 NEW	-104060	225, 275, 335 8 7/8, 10 13/16, 13 3/16	700	M22 x 1,5	300	30 33.07	37 81,585

### SERIES CITARO HYDRAULIC WHEEL HUB PULLER "CITARO"







The hydraulic hub puller "Citaro" is used for pulling wheel hubs in the automotive industry. It allows for the perfect loosening of very stuck, difficult-to-remove wheel hubs. The 30 t pressure cylinder enables a time-saving and versatile application, even with stubborn parts.

#### Benefits

- For quick and easy positioning on the vehicle, the work unit is pivotable and pre-adjustable.
- The lever actuation allows ergonomic operation from the work area thanks to 360° swivel capability.
- The overload protection and the lowering device with easily accessible rotary valve reduces the risk of injury.
- Thanks to the 4 swivel casters and easy adjustability, it can be used mobility at any time.

#### Technical attributes

#	 EAN	 bar	 M16x1,5, M18x1,5, M20x1,5	Max. tensile force kN	Max. tractive force t/US t. sh.	Usage	 kg/lb
YHU-S-Citaro	-060137	700	M16x1,5, M18x1,5, M20x1,5	300	30 33.07	Achse ZF A, B und C (Typ AV132) RL 75 E, RL 75 EC	200 441,000



KUKKO // Pull forward



SERIES 31 | 32 | 33 | 34

# STEERING WHEEL PULLERS





# DEPLOYMENT

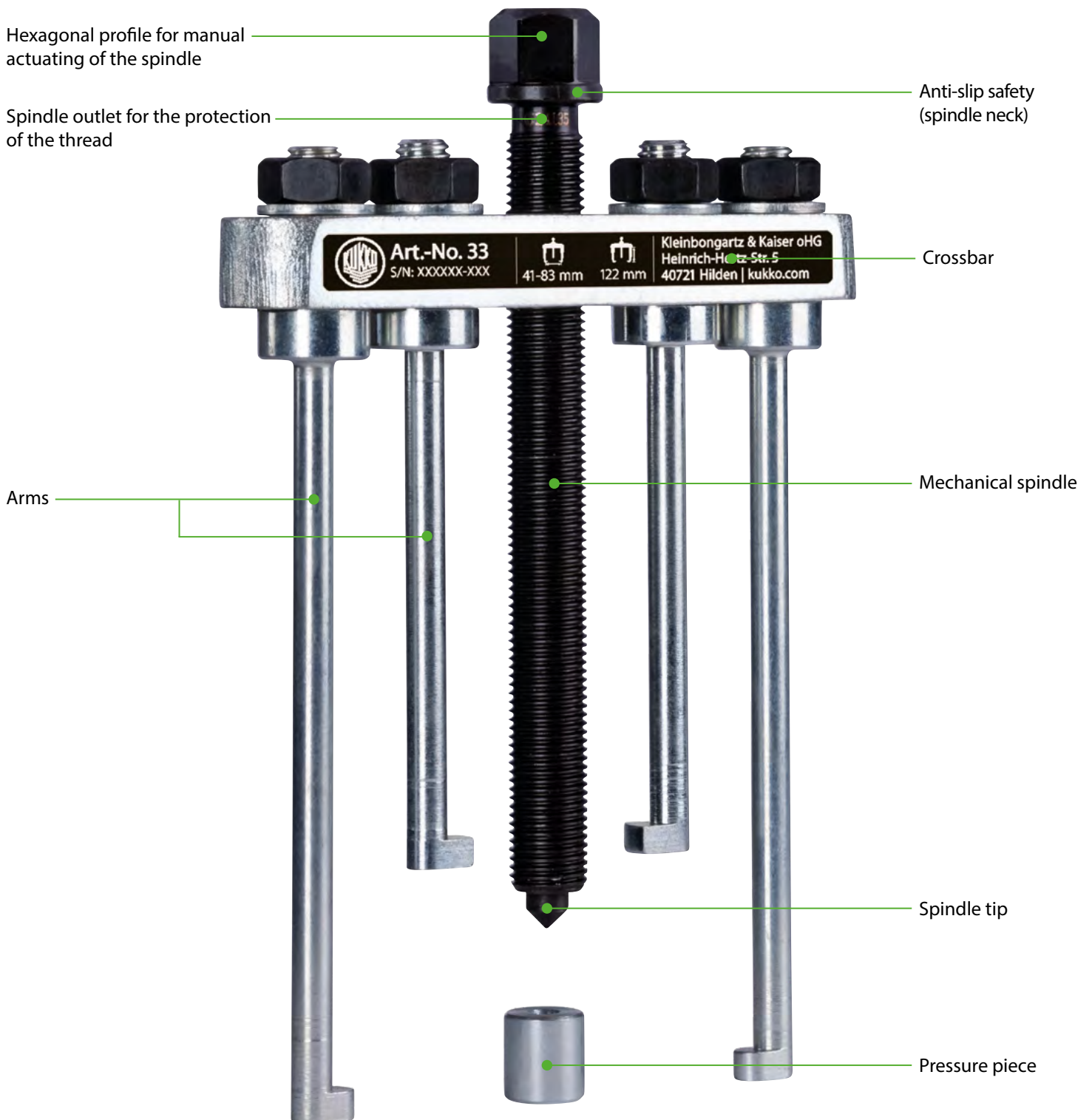
With the steering wheel pullers from KUKKO, steering wheels are professionally and material-friendly removed. The special hook shape is also suitable for pulling difficult-to-reach components. Depending on the vehicle model and installation situation, KUKKO offers various steering wheel pullers in its range. The selection ranges from pullers for steering wheels with three or four spokes to pullers for sport steering wheels.



## Benefits

- Universally applicable thanks to various sizes of insert rings (series 31)
- Universally applicable thanks to various sizes of pull rings (series 32)
- Universally applicable for a variety of steering wheel types thanks to different lengths of arms (series 33)
- Separate protective cap for the steering spindle thread is included (series 33 and 34)

## ASSEMBLY OF A STEERING WHEEL PULLER





## SERIES 31

### Steering wheel puller



31-1

The universal steering wheel puller is used for gently removing steering wheels in various designs. The particularly powerful design of the puller withstands even the strongest loads.

## SERIES 32

### Steering wheel puller



32-1

The steering wheel puller is used for gentle removal of steering wheels with three or four spokes. The particularly powerful design of the puller withstands even the greatest loads.

## SERIES 33

### 2-arm steering wheel puller



33

The 2-arm puller is used for pulling steering wheels with narrow pull slots. The two short arms are ideally suited for sport steering wheels. The long arms come into play with standard steering wheels. Due to their construction, the arms are adjustable in every direction.

## SERIES 34

### 2-arm steering wheel puller



34-1





The 2-arm puller is used for removing steering wheels with large pull slots. The variant 34-0 is equipped with a pair of short arms. The model 34-1 has an additional pair of long arms. Due to their construction, the arms are adjustable in every direction.

## PRODUCT DETAILS

### SERIES 31 STEERING WHEEL PULLER



#### Technical attributes

#			SW 	
	EAN	mm/inch	mm/inch	kg/lb
31-1	-013881	30 - 60 1 3/16   2 3/8	22 7/8	5,9 13,010
31-2	-013966	80 - 90 3 1/8   3 9/16	22 7/8	4,86 10,716

The universally applicable steering wheel puller is used for gentle removal of steering wheels in various designs. The particularly powerful design of the puller withstands even the strongest loads.

#### Benefits






- Universally applicable thanks to various sizes of insert rings
- Safe setup of the spindle through a swiveling spindle tip on both smooth surfaces and during centering (Switch Technology)



### SERIES 32 STEERING WHEEL PULLER



#### Technical attributes

#				SW 	
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
32-1	-014048	53 - 92 2 1/16 - 3 5/8	100 3 7/8	17 11/16	1,56 3,440
32-2	-014123	53 - 92 2 1/16 - 3 5/8	120 4 3/4	19 3/4	2,325 5,127

The steering wheel puller is used for gentle removal of steering wheels with three or four spokes. The particularly strong design of the puller withstands even the highest loads.






#### Benefits

- The rubber coating on the pulling ring provides protection for the steering wheel and spokes during the extraction process.
- Universally applicable thanks to variously sized pull rings
- Secure mounting of the spindle with a swivel spindle tip on both smooth surfaces and during centering (Switch Technology)

### SERIES 33 STEERING WHEEL PULLER



#### Technical attributes

#				SW 	
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
33	-014208	41 - 83 1 5/8 - 3 1/4	122 3 1/2   5 1/8	17 11/16	0,745 1,643

The 2-arms steering wheel puller is used to pull off steering wheels with narrow puller slots. The two short puller legs are ideal for sports steering wheels. The long puller legs are used for standard steering wheels. Due to their design, the legs can be adjusted in any direction. Thanks to the slim design of the puller, it is possible to reach into narrow puller slots to remove the steering wheel or other hard-to-reach components.






#### Benefits

- Anti-slip safety at the spindle head for safe working with wrench.
- Spindle outlet to protect the thread
- Universally applicable for a variety of steering wheel types thanks to different lengths of arms.
- A separate protective cap for the steering column thread is included.

### SERIES 34 STEERING WHEEL PULLER



#### Technical attributes

#				SW 	
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
34-0	-865879	28 - 90 1 1/8 - 3 9/16	85 3 3/8	17 11/16	0,68 1,499
34-1	-865886	28 - 90 1 1/8 - 3 9/16	85 3 3/8	17 11/16	0,96 2,117

The 2-arm steering wheel puller is used to pull off steering wheels with large puller slots and hard-to-reach components. The 34-0 model is equipped with a pair of short puller legs. The 34-1 model has an additional pair of long puller legs. Due to their design, the legs can be adjusted in any direction. Thanks to the sturdy design of the puller, it is possible to reach into large puller slots to reach the steering wheel.

#### Benefits

- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench
- Spindle outlet to protect the thread
- Separate protective cap for the steering shaft thread is attached



KUKKO // *Pull forward*



SERIES 118

# PULLER FOR CAMSHAFT GEARS



# DEPLOYMENT

The pullers for camshaft wheels of series 118 are equipped with sliding, always parallel puller arms and are used for pulling spoke camshaft wheels in automotive workshops. Thanks to the four special puller arms, particularly safe, non-destructive disassembly is guaranteed. Usable up to a maximum span of 115 mm and a maximum reach of 43 mm.



## Benefits

- Special puller arms for ideal adaptation to camshaft gears
- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.
- Spindle exit to protect the thread

# ASSEMBLY OF A PULLER FOR CAMSHAFT GEARS



# APPLICATION EXAMPLES



Both photos show the extraction process of a camshaft gear with the 118-0 using the single-finger claws.



## PRODUCT DETAILS

### SERIES 118 PULLER FOR CAMSHAFT GEARS







The camshaft puller with sliding, always parallel puller arms is used for pulling spoke camshaft wheels in the automotive workshop. Equipped with four special puller arms, the external puller guarantees particularly safe, non-destructive disassembly.

#### Benefits

- Special puller arms for ideal fitting on camshaft gears
- Anti-slip safety (spindle neck) at the spindle head for safe work with wrench.
- Spindle outlet to protect the thread



#### Technical Attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>118-0</b>	-860904	28 - 115 1 1/8 - 4 1/2	43 1 11/16	17 11/16	35 25.82	20	2 2.20	1,26 2,778
<b>118-1</b>	-989636	42 - 115 1 5/8 - 4 1/2	43 1 11/16	17 11/16	35 25.82	20	2 2.20	1,28 2,822







KUKKO // Pull forward



BAUREIHE 16

# CYLINDER BUSH EXTRACTOR



# DEPLOYMENT

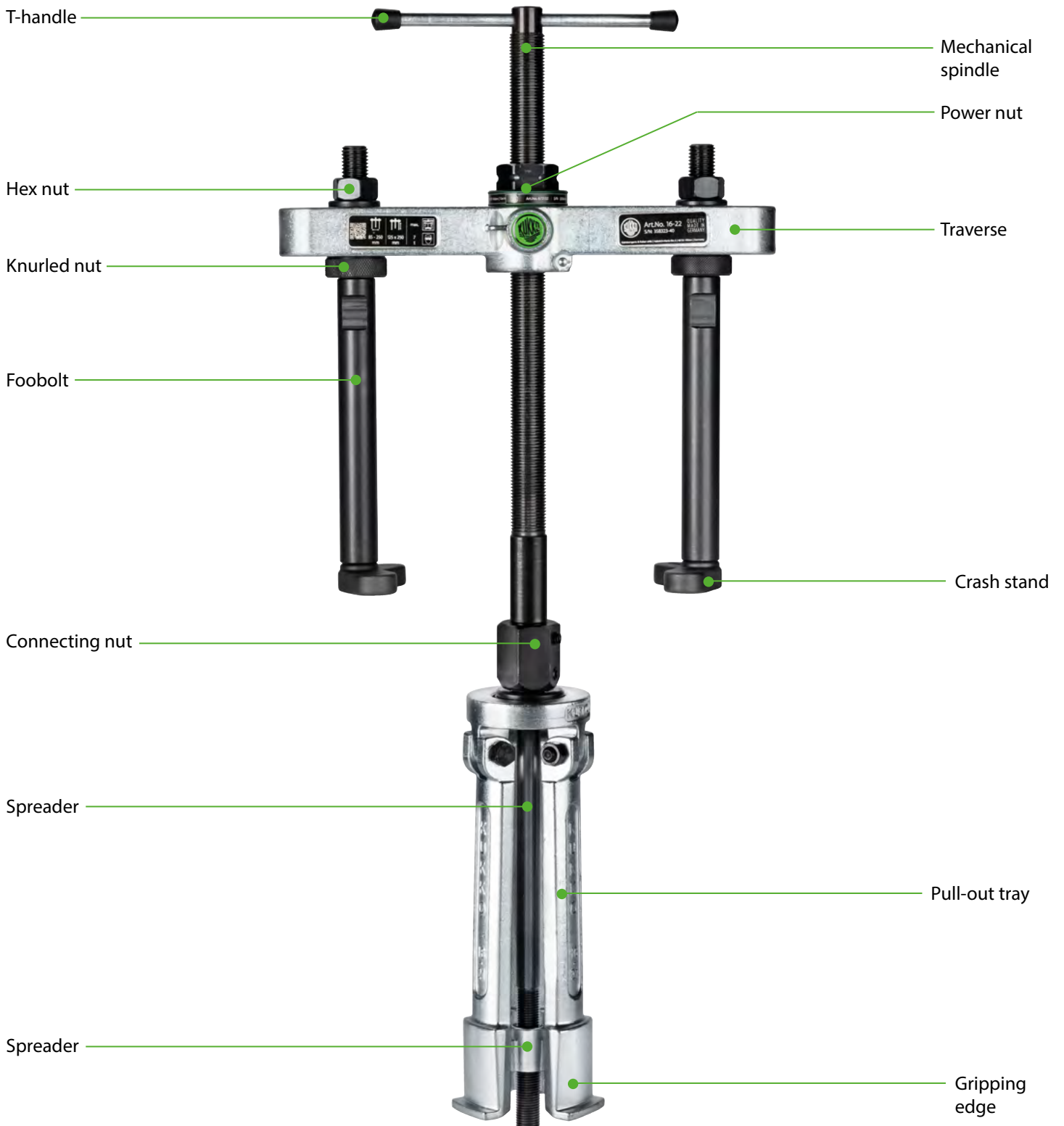
Cylinder sleeves protect the engine block from wear. As wear parts, the sleeves must be replaced over time. For removing wet cylinder liners as well as similar components in trucks, cars, and stationary engines, KUKKO recommends the series 16. The combination of internal puller and counter stay guarantees a powerful and gentle extraction. Furthermore, the integrated Power Nut enables energy-saving work without significant friction loss.



## Benefits

- The mechanical spindle allows for safe and fast extraction of bearings even when they are tightly seated on the back wall.
- The friction resistance of the counter stay nut is minimized by a built-in pressure bearing.
- The pullers are suitable for large cylinder sleeves and bearings.
- The foot bolts provide a particularly firm grip when pulling off.

## ASSEMBLY OF A CYLINDER PULLER





# ASSORTMENT OVERVIEW



## Internal extractor



Spreading range of 60 - 155 mm



(View from below)

**16-21**

## Counter supports



**16-22**



**16-23**

## Cylinder liner extractor



**16**



**16-2**

## SETS



**K-16-A**



**K-16-B**

The suitcase sets of the K-16-A series with 2-arm crossbar and K-16-B with multi-crossbar include an application-oriented assembly for immediate and universal use in cylinder bush extraction.

# FEATURES OF THE COUNTER STAYS 16-23

## MULTI-TRAVERSE



The new Multi-Traverse of the series 68 offers space for up to four foot bolts. This guarantees a larger contact area and consequently a more uniform distribution of forces.

## FINE ADJUSTMENT SCALE



Above the crossbar, there is a scale with various numerical values. This adjustment aid ensures that the foot bolts can be adjusted at equal intervals to pull out with the same load.

## SCREW CONNECTION



The knob impresses with its particularly stable construction and large contact area. The knurling ensures easy and powerful operation of the knob.

## POWER NUT



The Power Nut by KUKKO guarantees a more energy-saving clamping of tools and workpieces as well as drive without significant friction loss.



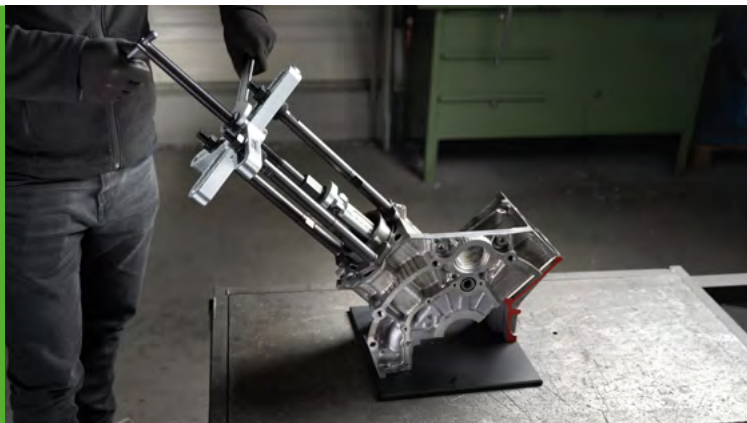


## TIPS



### EXTENSION OF THE FOOT BOLTS:

The suitcase sets K-16-A and K-16-B contain 2 or 3 extensions for the foot bolts. To increase the reach, simply screw the extensions onto the foot bolts.



### EXTENSION OF THE SPINDLE:

The translation is: "When disassembling particularly deeply seated components, the spindle can be extended with a spindle extension."



## APPLICATION EXAMPLES



A look inside when removing a cylinder sleeve



With three foot bolts on the multi traverse, you have an optimal stand during the extraction process with the cylinder bush puller 16-2.



## SERIES 16 CYLINDER SLEEVES PULLER










The cylinder sleeves pullers of series 16 are used for pulling out wet cylinder liners in trucks, cars, as well as stationary engines and similar parts. Three spreading bodies guarantee optimal adjustment of the internal extractor to the respective application. Series 16 impresses with the integrated POWER NUT Technology in the crossbar, which allows for exerting force that would otherwise only be possible with hydraulic systems. The counter stay, with its support feet, is particularly well suited for large cylinder sleeves and ball bearings, etc., and ensures a firm stand during extraction. The knurled nut provides the crossbar with a large contact surface for uniform and powerful extraction.



### Benefits

- Pullers are suitable for large cylinder sleeves and bearings and guarantee a firm stand when pulling out.
- Knurled nut provides a large contact area for even and powerful extraction.
- The Power Nut minimizes friction resistance while simultaneously allowing forces that can otherwise only be achieved with hydraulic spindles.
- The mechanical spindle allows bearings that are tightly seated on the rear wall to be safely and quickly extracted.

### Technical attributes

#						Max. tensile force	Max. Tractive force		SW		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	nominal dimension	mm/inch	kg/lb	
<b>16-21</b>	-251559		60 - 155 2 3/8 - 6 1/8	190 7 1/2	70 2 3/4	70	7 7.72	G 1/2	32 1 1/4	3,47 7,651	K-16-A, K-16-B
<b>16-22</b>	-251634	85 - 250 3 3/8 - 9 13/16				70	7 7.72	G 1/2	32 1 1/4	4,325 9,537	K-16-A
<b>16-23</b>	-060731	85 - 250 3 3/8 - 9 13/16				70	7 7.72	G 1/2	32 1 1/4	5,96 13,142	K-16-B
<b>16</b>	-008023	85 - 250 3 3/8 - 9 13/16	60 - 155 2 3/8 - 6 1/8	120 4 3/4	70 2 3/4	70	7 7.72	G 1/2	32 1 1/4	7,6 16,758	K-16-A
<b>16-2</b>	-060717	85 - 250 3 3/8 - 9 13/16	60 - 155 2 3/8 - 6 1/8	120 4 3/4	70 2 3/4	70	7 7.72	G 1/2	32 1 1/4	0 0,000	K-16-B

## PRODUCT DETAILS

### K-16-A 10-PART CYLINDER SLEEVE PULLER SET







The 10-piece Cylinder Sleeve Puller Set K-16-A is used to extract wet cylinder sleeves from trucks, cars, as well as stationary engines and similar parts. Three spreading bodies ensure an optimal fit of the internal extractor for the respective application. The K-16 series impresses with its integrated POWER NUT Technology in the crossbar, which allows for a force that would otherwise only be achieved with hydraulic systems. The counter stay is particularly well suited for large cylinder sleeves and ball bearings, etc., ensuring a firm stand during extraction. The knurled nut provides the crossbar with a large surface area for uniform and powerful extraction.

#### Benefits

- Knurled nut provides a large contact area for even and powerful extraction
- The Power Nut minimizes friction resistance while simultaneously allowing forces that can otherwise only be achieved with hydraulic spindles.
- The mechanical spindle allows bearings that are tightly seated on the rear wall to be safely and quickly extracted.

#### Technical attributes

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-16-A	-711664	60 - 155 2 3/8 - 6 1/8	85 - 250 3 3/8 - 9 13/16	70	7 7.72	11,76 25,931	16-21, 16-22, 16-22-V, 19-7-P

### K-16-B 12-PIECE CYLINDER BUSHING EXTRACTOR SET







The 12-piece cylinder bushing puller set K-16-B is used for extracting wet cylinder liners in trucks, cars, as well as stationary engines and similar parts. Three spread bodies ensure an optimal fitting of the internal extractor to the respective application. The K-16 series convinces with the POWER NUT Technology integrated into the crossbar, which allows exerting effort that would otherwise only be possible with hydraulic systems. The counter stay, with its stopping feet, is particularly suitable for large cylinder bushings and ball bearings, ensuring a particularly firm position during extraction. The knurled nut provides a large support surface for the crossbar for a uniform and powerful extraction. The multi-crossbar allows for the attachment of up to four foot bolts for an even more uniform force distribution. For precise adjustment assistance, there is a scale with numerical values above the crossbar.

#### Benefits

- Knurled nut provides a large contact area for even and powerful extraction
- The Power Nut minimizes friction resistance while simultaneously allowing forces that can otherwise only be achieved with hydraulic spindles.
- The mechanical spindle allows bearings that are tightly seated on the rear wall to be safely and quickly extracted.

#### Technical attributes

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
K-16-B	-711671	60 - 155 2 3/8 - 6 1/8	85 - 250 3 3/8 - 9 13/16	70	7 7.72	13,82 30,473	16-21, 19-7-P, 16-23, 16-22-V



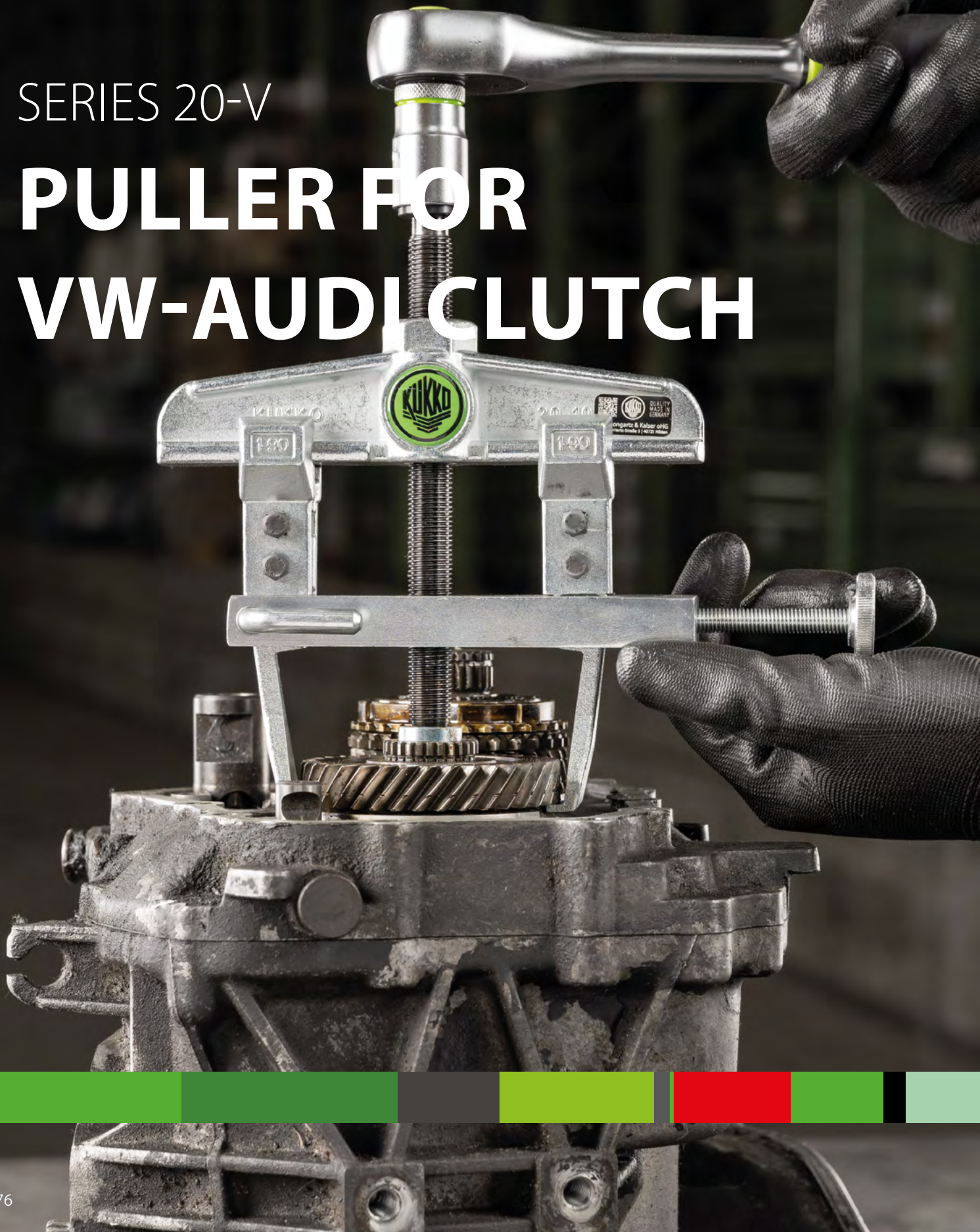


KUKKO // Pull forward



SERIES 20-V

# PULLER FOR VW-AUDI CLUTCH



# DEPLOYMENT

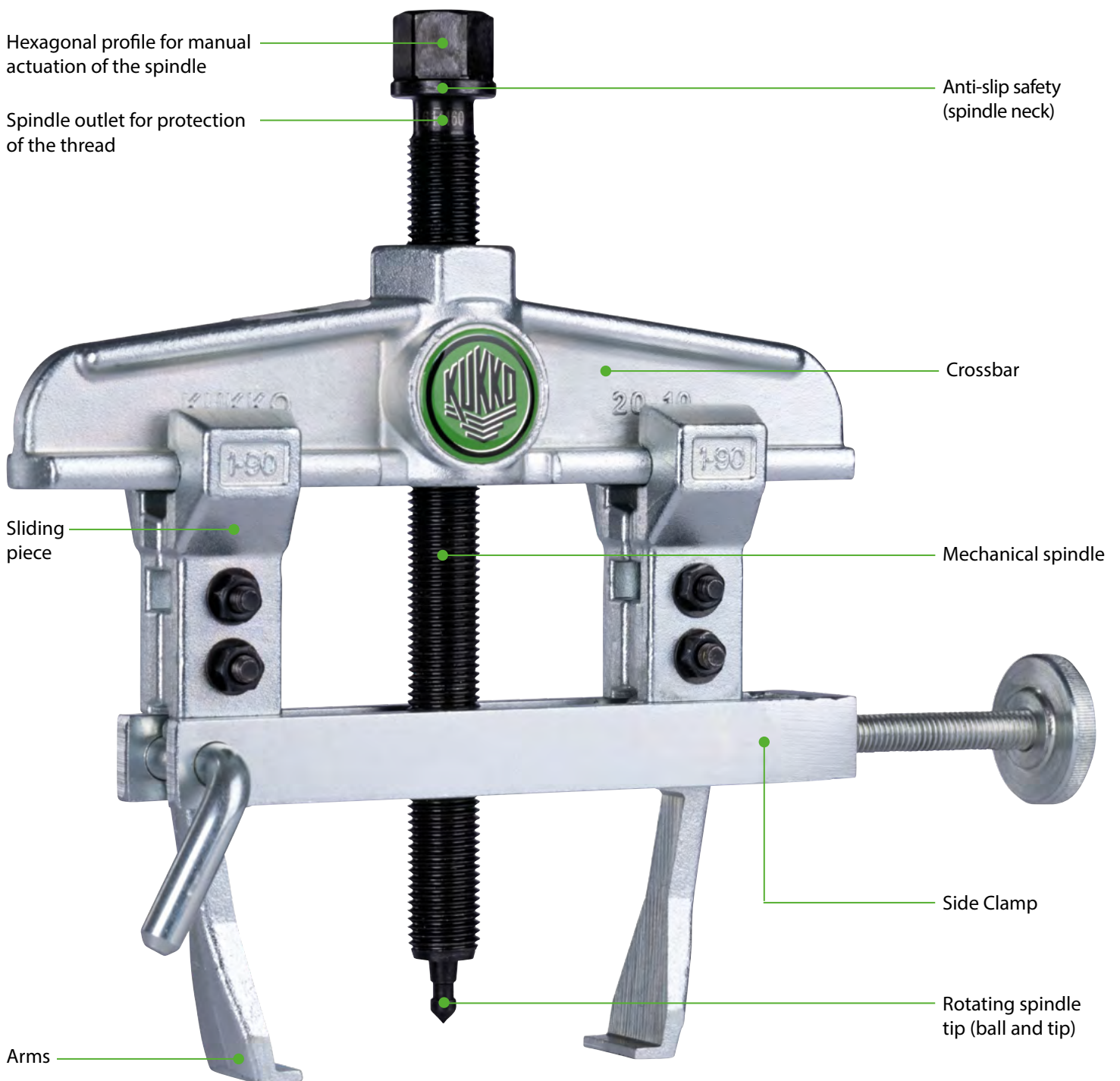
The 2-arm puller of series 20-V is used for extracting gearbox gears for the VW/Audi clutch-gear combination from model year 2007 onwards. With powerful, slender special hooks and a later fixable lateral clamping device, series 20-V is an ideal problem solver. Aside from models from VW and Audi, it is also suitable for many other gears and ball bearings where working with standard pullers is impossible.



## Benefits

- Screw connection allows easy loosening and particularly tight fastening of the arms with an allen key
- Application also for eccentric components using freely movable puller arms sliding on the crossbar.
- Optimal adjustment of the spindle to the shaft through a 2-sided spindle tip (ball and tip)
- Hexagonal profile on the crossbar for safe counter-holding
- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.

# ASSEMBLY







Removing a gear wheel with the 20-10-V



The clamp presses the arms against the part to be removed.



Detail view of the special hook shape



## PRODUCT DETAILS

### SERIES 20-V 2-ARM PULLER FOR GEAR WHEELS FOR VW/AUDI CLUTCH- TRANSMISSION COMBINATION









The 2-arm puller for gear wheels is used for removing gear wheels for the VW/Audi clutch-transmission combination from the year 2007 onwards in craft, workshop, and industry. With powerful, slim special hooks and a subsequently fixable lateral clamping device, the series 20-V is an ideal problem solver. Apart from models from VW and Audi, it is also usable for many other gears and ball bearings where work with standard pullers is impossible.



#### Benefits

- The screw connection allows for easy loosening and particularly tight fastening of the arms with an allen key
- Application also for eccentric components through freely movable, sliding puller arms on the crossbar.

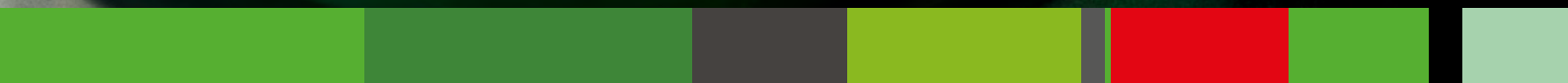
#### Technical attributes

#				SW 		Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
<b>20-10-V</b>	-907944	0 - 120 0 - 4 3/4	100 3 15/16	17 11/16	80 59.01	45	4.5 4.96	1,59 3,506

**KUKKO // *Pull forward***



# OTHER AUTOMOTIVE TOOLS



## PRODUCT DETAILS

### SERIES K-226 15-PIECE PULLER DEVICE FOR TRUCK AXLES IN CASE








The 15-piece puller for truck axles in the K-226 series case is used for pulling wheel hubs on SAF and BPW axles for trucks and commercial vehicles in the automotive industry. In addition to pullers, it also includes a hydraulic additional press and several adapters that allow application on most common models.



#### Benefits

- Printing pieces and extensions are already included in the set and expand the application.

#### Technical attributes







#	 EAN	 mm/inch	 mm/inch	 nominal dimension	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
K-226-4/12	-035753	336 13 1/4	116 - 380 4 9/16 - 14 15/16	M18x1,5, M20x1,5, M22x1,5	150	15 16.53	25,14 55,434	9-2, 18-4

### SERIES 18-4SAF 7-PIECE PULLER SET IN METAL CASE FOR SAF AXLES



The 7-piece puller set in the metal case for SAF axles of the series 18 is used for pulling axles on trucks in the automotive industry. The set is particularly suitable for SAF axles of the types SK9030 / 9037 / 9042 / 11030 / 11242 due to its composition of puller, extension, and adapter.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 nominal dimension	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
18-4SAF	-465246	535 21 1/16	116 - 380 4 9/16 - 14 15/16	36 1 7/16	M18 x 1,5	150	15 16.53	24,43 53,868	18-4, 15-4, 19-4-P



## PRODUCT DETAILS

### SERIES 102 PISTON PIN PRESS FOR ASSEMBLY AND DISASSEMBLY



The piston pin presses of the series 102 are used for the gentle insertion and extraction of piston pins in the automotive industry. The tool enables safe assembly and disassembly of piston pins via pressure pieces without damaging the piston in the process. Item 102-0 contains two additional pressure pieces, while 102-1 is designed for large piston ring diameters and includes three additional pressure pieces.

#### Benefits

- Damage-free work on the piston
- Customizable versatile application

#### Technical attributes

#	 EAN	Ø mm/inch	 kg/lb
102-0	-170874	38 1 1/2	0,17 0,375
102-1	-022791	100 3 15/16	1,335 2,944

### SERIES 126 MONTAGE AND DISASSEMBLY TOOL FOR BRAKE CALIPERS, BRAKE PADS, BRAKE PISTONS, AND PULLEYS





The brake caliper tool assortment of series 126 is used for a quick and time-saving repair on brake calipers in the automotive sector. The assortment includes a piston retraction device, brake pad puller, brake piston retaining clip, brake piston pliers, brake caliper brush, and brake caliper file for general use in vehicle maintenance.

#### Benefits

- Different tools for different applications
- The set offers a complete compilation for universal repair.

#### Technical attributes

#	 EAN	 kg/lb
126-10	-534966	2,46 5,424
126-01	-496271	0,15 0,331
126-02	-496356	0,06 0,132
126-03	-496431	0,28 0,617
126-04	-534881	0,096 0,212
127	-492051	0,1 0,221

## PRODUCT DETAILS

### SERIES 126-15 BRAKE CALIPER TOOL



Art.No. 126-00



Art.No. 126-15

The brake piston resetter from the 126-15 series is used to reset pistons on 6-piston brake callipers in the automotive industry. The heavy-duty design of the resetter also enables the resetting of high-performance brake callipers from heavy or very powerful brake callipers. The brake piston resetter 126-15 is suitable for brakes with more than one brake cylinder (e.g. VW Touareg, Crafter, Ford Transit etc.).









#### Benefits

- Compatible with all common vehicle types without an integrated handbrake locking device.
- The puller is suitable for the following vehicles: Touareg, Phaeton, Porsche Cayenne, Audi A8, Q7, BMW M3, etc.



#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>126-00</b>	-487774	20 - 85 13/16 - 3 3/8	185 7 5/16		66 2 5/8	1,845 4,068
<b>126-15</b>	-018954	20 - 90 13/16 - 3 9/16	174 6 7/8	115 4 1/2	290 11 7/16	0 0,000

### SERIES 123 EXTRACTOR LEVER FOR DISC BRAKE PADS



Art.No. 123



Art.No. 123-2

The extractor levers for brake pads of series 123 are used in the automotive industry to remove stuck brake shoes from the fixed caliper of disc brakes.

#### Benefits

- Simple application with high efficiency
- Article 123 is specifically designed for Mercedes models.

#### Technical attributes

#			
	EAN	mm/inch	kg/lb
<b>123</b>	-270789	400 15 3/4	0,595 1,312
<b>123-2</b>	-431586	400 15 3/4	0,505 1,114

## PRODUCT DETAILS

### 124-K 2-ARM PULLEY PULLER SET FOR ALL VEHICLE TYPES



The car pulley puller set for all vehicle types is used for removing multi-ribbed pulleys with a diameter of up to 195 mm in automotive applications. The 2-arm design allows for space-saving work, which functions in any position and even under full load, thanks to the parallel puller arms.

#### Benefits

- Universally applicable for most vehicle types
- The flange of the spindle neck prevents the slipping of the key.
- The included hook extensions allow adjustment to all given installation conditions.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 M10	 kg/lb
124-K	-736841	17 11/16	195 7 11/16		2,52 5,557

### SERIES 104 STRAP WRENCH FOR OIL FILTER REMOVAL



The strap wrench of series 104 is a spare part used for oil filter removal in crafts, industry, and workshops. The strap can be tightened around the filter to disassemble it without causing damage using the handle.

#### Benefits

- The sturdy, non-slip fabric tape with rubberized grip ensures smooth disassembly.

#### Technical attributes

#	 EAN	 mm/inch	 kg/lb
104	-023606	180 7 1/16	0,26 0,573



## PRODUCT DETAILS




### SERIES 104-32 OIL FILTER WRENCH WITH 32-LINK CHAIN



The oil filter wrench with a 32-link chain from the 104 series is a spare part used for the oil filter removal in crafts, industry, and workshops. The chain can be reliably tensioned to dismantle the oil filter without causing damage.



#### Technical attributes

#		Ø		
	EAN	mm/inch	mm/inch	kg/lb
104-32	-790751	0-110 0-4 5/16	32 1 1/4	0,36 0,794

### SERIES 105 OIL FILTER WRENCH



The oil filter wrenches of series 105 are spare parts used for loosening oil filters and other round screw connections in crafts, industry, and workshops. The variant 105-0 features a robust handle for quick use, while the variant 105-1 has a space-saving square drive for work even in the tightest of spaces.

#### Benefits

- The steel band is adjustable and universally applicable.

#### Technical attributes

#		Ø	
	EAN	mm/inch	kg/lb
105-0	-023866	70-110 2 3/4-4 5/16	0,33 0,728
105-1	-175749	70-110 2 3/4-4 5/16	0,22 0,485

## PRODUCT DETAILS

### SERIES 108 OIL FILTER CLAW KEY



The Oil Filter Claw Wrenches are spare parts used for loosening oil filters and other round fasteners in crafts, industry, and workshop. The extremely strong and durable oil filter claws are capable of safely and non-destructively removing even tightly stuck oil filters.

#### Benefits

- Universal use even in hard-to-reach places



108-1

108-2

108-3

#### Technical attributes

#		∅				
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
108-1	-760426	60-100 2 3/8-3 15/16	10 3/8	12,5 1/2	21 13/16	0,38 0,838
108-2	-965487	65-120 2 9/16-4 3/4	10 3/8	12,5 1/2	22 7/8	0,595 1,312
108-3	-967900	90-140 3 9/16-5 1/2	12,5 1/2	12,5 1/2		1 2,205

### SERIES 204-44 UNIVERSAL STEERING ARM PULLER FOR MEDIUM AND HEAVY COMMERCIAL VEHICLES

The mechanical universal steering arm puller of series 204-44 is used for pulling steering arms on medium and heavy commercial vehicles. Its solid and stable design provides a variable solution for the robust yet safe removal of steering arms.

#### Benefits

- With increasing spindle pressure, the arms grip the part to be removed with an automatically increasing force.
- The special robustness makes the steering arm puller the ideal tool for working on trucks.



#### Technical attributes

#				SW	Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb
204-44	-969539	60 - 90 2 3/8 - 3 9/16	70 2 3/4	24 15/16	10	1 1.10	1,725 3,804

## PRODUCT DETAILS

### SERIES 101-1 PISTON RING PLIERS







The piston ring pliers of the series 101 are used for spreading piston rings in crafts, industry, and workshops. The piston ring pliers are capable of spreading piston rings without damaging the original shape of the rings.

#### Benefits

- The design allows for the gentle and uniform pulling apart of piston rings.
- Through the pliers shape, the piston rings can be securely inserted.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
101-1	-022531	200 7 7/8	50 - 100 1 15/16 - 3 15/16	0,25 0,551
101-2	-022616	240 9 7/16	90 - 150 3 9/16 - 5 7/8	0,4 0,882

### SERIES W-133-M BRAKE CALIPER REMOVAL PLIERS






The W-133-M series brake caliper removal tool is used for the easy and damage-free removal of brake calipers in automotive applications. For professional brake maintenance, the removal tool is indispensable.

#### Benefits

- Flat and stable design
- Brake pistons can be removed without damaging parts.

#### Technical attributes

#	 EAN	 mm/inch	 kg/lb
W-133-M	-895447	19 - 46 3/4-1 13/16	0,22 0,485

### SERIES 101-3 UNIVERSAL PISTON RING PLIERS







The universal piston ring placement pliers are used for the efficient installation of piston rings in the automotive industry. The placement pliers are capable of gently and problem-free mounting of piston rings without overstretching or causing any other damage. The pliers are handy and due to their lightweight adjustability, they are flexible for use with various piston rings.

#### Benefits

- The precise adjustment of the spread prevents the piston rings from overstretching or breaking
- Wear, oil loss or other damage to piston rings or cylinders are effectively prevented

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
101-3	-974489	220 8 11/16	60 - 140 2 3/8 - 5 1/2	0,31 0,684



## PRODUCT DETAILS

### SERIES URANOS MOBILE ENGINE CONDUCTOR "URANOS"









The motor conductor "URANOS" is used for directing the angle during the installation and removal of engines, transmissions, and batteries of all kinds in industry and workshop. By operating the hand chain, the motor conductor can be universally and easily adjusted to ensure smooth operation on the engine. The self-locking worm gear and the 3-point suspension provide the necessary stability and safety.

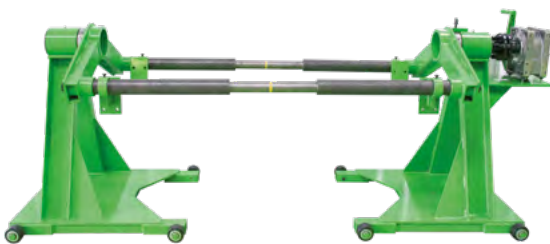
#### Benefits

- The actuation of the hand chain can occur in all angular positions without impairment.
- The necessary tilt is securely held by the built-in, self-locking worm gear as soon as the operation of the hand chain ceases.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
<b>W-3180</b>	-318007	1.900 74 13/16	700 27 9/16	500 19 11/16	2.000	32 70,560
<b>W-3188</b>	-318809	1.245 49 1/64	500 19 11/16	345 13 9/16	500	11,85 26,129

### SERIES W-6066 MOTOR MOUNTING BRACKETS










The motor mounting bracket of the W-6066 series is used for double-sided support of various engines in industry and workshop. It consists of 1 driven bearing mount, 1 counter bearing mount, 2 beams, 4 support arms, 4 clamping arms, and 2 connecting pipes, and is suitable for various engines thanks to interchangeable clamping arms.

#### Benefits

- Adaptation to many engines possible
- Highest productivity through simple and fast handling
- Continuous rotation of the motor by 360° is possible in both directions.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
<b>W-6066</b>	-120785	1.950 76 3/4	900 35 7/16	1.070 42 1/8	667 26 1/4	1.200	450 992,250

## PRODUCT DETAILS

### SERIES W-6067 MOTOR MOUNTING BRACKETS











The motor assembly stand of the W-6067 series is used for one-sided support of various engines in industrial and workshop environments. It consists of 1 driven bearing block, 1 clamping rail with a disc, tabs, and screws, as well as 1 support arm and is suitable for different engines thanks to replaceable clamping arms.



#### Benefits

- Adaptation to many engines possible
- Highest productivity through simple and fast handling
- Continuous rotation of the motor by 360° is possible in both directions.

#### Technical attributes

#								
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg	kg/lb
<b>W-6067</b>	-120853	1.120 44 1/8	950 37 3/8	1.070 42 1/8	930 36 5/8	130 5 1/8	600	204 449,820

### SERIES YHU MOBILE HYDRAULIC TRANSMISSION JACK "RHINO"










The hydraulic transmission jack RHINO is used for work on car and truck transmissions, clutches, and differentials. The two-axis swivel base plate with adjustable mounts and chains serves to align the pickups and tool universal mount up to 1.5 tons.

#### Benefits

- The lever actuation is swiveling 360° and removable, allowing for ergonomic operation from the work area.
- The overload protection and the lowering mechanism for controlled load lowering reduce the risk of injuries or damages.

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg	kg/lb
<b>YHU-S</b>	-060113	652 25 11/16	890 35 1/32	1.105 43 1/2	725 28 9/16	1.500	146 321,930

## PRODUCT DETAILS

### SERIES 65 SPRING COMPRESSORS









The universal spring compressors of series 65 are used for the removal and tensioning of coil springs in the automotive sector. Spring compressors are simple yet essential tools that allow for the safe removal and installation of springs and shock absorbers. The universal design makes it applicable for use on most vehicles.

#### Benefits

- The adjustable connecting bracket makes it easier to apply and tension even in hard-to-reach places.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>65-0</b>	-020636	260 10 1/4	110 - 180 4 5/16 - 7 1/16	100 - 200 3 15/16 - 7 7/8	27 1 1/16	20	2 2.20	3,02 6,659
<b>65-1</b>	-020711	360 14 3/16	110 - 180 4 5/16 - 7 1/16	100 - 300 3 15/16 - 11 13/16	27 1 1/16	20	2 2.20	3,295 7,265
<b>65-2</b>	-020896	460 18 1/8	110 - 180 4 5/16 - 7 1/16	100 - 400 3 15/16 - 15 3/4	27 1 1/16	20	2 2.20	3,615 7,971

### SERIES 66 MACPHERSON SPRING COMPRESSOR









The "MacPherson" spring compressors of series 66 are used for removing and tensioning coil springs in automotive applications. Spring compressors are simple but essential tools that enable the safe removal and installation of springs and shock absorbers. The design "MacPherson" is also suitable for the heaviest springs.

#### Benefits

- The adjustable connecting bracket makes it easier to put on and tighten even in hard-to-reach places.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
<b>66-1</b>	-020971	300 11 13/16	110 - 180 4 5/16 - 7 1/16	100 - 250 3 15/16 - 9 13/16	24 15/16	25	2.5 2.76	2,99 6,593
<b>66-2</b>	-170201	450 17 11/16	110 - 180 4 5/16 - 7 1/16	100 - 400 3 15/16 - 15 3/4	24 15/16	25	2.5 2.76	3,54 7,806
<b>66-3</b>	-170386	450 17 11/16	110 - 180 4 5/16 - 7 1/16	100 - 400 3 15/16 - 15 3/4	24 15/16	25	2.5 2.76	4,29 9,459



## PRODUCT DETAILS

### SERIES 100 PISTON RING CLAMPS







The piston ring tension bands of the series 100 are used to tension the piston rings during the installation of the pistons in the cylinders in automotive applications. The tension bands in various sizes are ideally suited for wide application in the automotive industry.



#### Benefits

- Simple application for the safe installation of pistons
- Easy operation with hex key

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
100-1	-022203	57 - 125 2 1/4 - 4 15/16	80 3 1/8	0,285 0,628
100-2	-022388	90 - 175 3 9/16 - 6 7/8	80 3 1/8	0,32 0,706
100-3	-022463	90 - 175 3 9/16 - 6 7/8	165 6 1/2	0,595 1,312

### SERIES 103-1 VALVE SPRING COMPRESSOR







The valve spring compressors of series 103 are used for the damage-free installation and removal of valves for overhead cam engines in the automotive industry. The compressors allow for a safe removal of valves by tensioning the valve spring.

#### Benefits

- Suitable for both installation and removal.
- Safe and gentle work on the engine

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
103-1	-022876	290 11 7/16	60 - 230 2 3/8 - 9 1/16	1,21 2,668

## PRODUCT DETAILS

### SERIES 145 SPREADER FOR SUSPENSION AND STEERING PARTS








The spreaders for strut and steering components of series 145 are used for the safe and completely damage-free widening of the mountings of struts or steering parts from threads in the automotive and workshop industries. They are specifically designed for the gentle spreading of clamping fits on aluminum chassis. Especially in very tight and unclear spatial conditions, series 145 becomes an ideal problem solver due to its compact and handy design.

#### Benefits

- The installation and removal of the shock absorber is achieved in a single step and without additional effort.
- An accidental slipping of the tool is impossible due to the fastening on the cross or support arm.

#### Technical attributes

#	 EAN	 mm/inch	 M10	 mm/inch	 kg/lb
145-2	-123337	40 1 9/16	M10	13 1/2	0,245 0,540
145-3	-001420	50 1 15/16	M12	13 1/2	0,31 0,684

### SERIES 48 ONE-HAND TENSIONING TERMINAL PULLER







The handy 2-arm puller with self-centering arms is used to remove battery terminals. It can loosen any component that sits on a shaft and is freely accessible from the outside. The narrow arms are suitable for tight, hard-to-reach spots. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in confined spaces. The pulling process occurs in direct contact with the part to be tightened, thereby ensuring a controlled application of force.

#### Benefits

- Self-centering of the arms by manually tightening the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle ensures manual spindle drive in the tightest spaces
- Easy one-handed operation for flexible working
- The slim design of the arms allows access to hard-to-reach places. No additional tool is required for the pulling process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
48	-170539	0 - 60 0 - 2 3/8	40 1 5/8	15	1.5 1.65	0,225 0,496

## PRODUCT DETAILS

### SERIES 204-V 2-ARM BEARING PULLER WITH SIDE CLAMP AND ADAPTER









The 2-arm bearing puller with lateral clamp is used for removing particularly stuck ball bearings, bearing rings, and workpieces. It can loosen any component that sits on a shaft and is freely accessible from the outside. The additionally included adapter fits all common axle holes. Thanks to the clamp, the pressing force of the puller arms is increased many times over. This prevents the puller from slipping. When the clamp is tightened, the sharp claws of the puller arms grip under the part to be removed and loosen it even before the actual removal process begins.

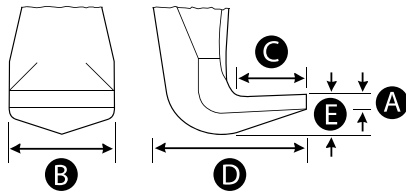
#### Benefits

- The lateral clamp ensures that the puller arms are pressed particularly firmly against the part to be pulled off.
- 2-fold exertion of force from above and the side ensures 100% secure grip
- The adapter fits all common axle holes such as VAG and other models.
- The slim design of the arms allows access to hard-to-reach areas.

#### Technical attributes

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
204-V	-974533	26 - 90 1 5/8 - 3 5/8	100 3 7/8	22 7/8	75 55.32	40	4 4.41	2,75 6,064

### SERIES 229-1 HOOK CLAW WITH SLIDING HAMMER











The sliding hammer with specially profiled hook of series 229 is used for loosening the control arm from the ball joint clamp and for bodywork in automotive and industry.

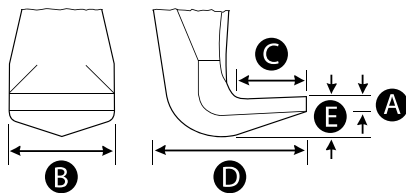
#### Benefits

- Specialized tool for safe and gentle disassembly

#### Technical attributes

#								
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg	kg/lb
229-1	-995002	25 1	40 1 9/16	85 3 3/8	700 27 9/16	340 13 3/8	5	12,095 26,669

### SERIES 230-I PULLING TOOL FOR INJECTORS



The extraction tool for injectors of series 230-I is used for removing fuel injectors from diesel engines in cars during service and automotive applications. The ergonomically shaped, massive sliding piece of the sliding hammer allows optimal force transfer and achieves a strong shock effect. It also ensures contactless and gentle extraction.

#### Benefits

- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.

#### Technical attributes

#								
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg	kg/lb
230-I	-977626	15 9/16	20 13/16	27 1 1/16	370 14 9/16	250 9 13/16	1.7	2,71 5,976









# CUTTING & LOOSING

KUKKO offers the perfect solution for every application, whether for blasting stuck nuts, restoring screw connections, cutting discs, removing adhesive weights, producing seals, punching and stamping a wide variety of materials, removing broken parts or cleaning nozzles.

The cutting & loosening activity includes:

- Nut splitter
- Thread repair
- Thread files
- Disc cutters
- Soft scraper
- Iron handle hole
- Shears
- Screw punch
- Screw extractors
- Nozzle reamer sets



KUKKO // Pull forward



SERIES 54 | 55 | 56 | Y-57

# NUT SPLITTERS



S/N: 365211-008  
800-115396 - NLS  
Art.No. 55-2  
19 - 27 mm  
Kleinbongartz & Kalser oHG  
Heinrich-Hertz-Str. 5 | 40721 Hilden | Germany



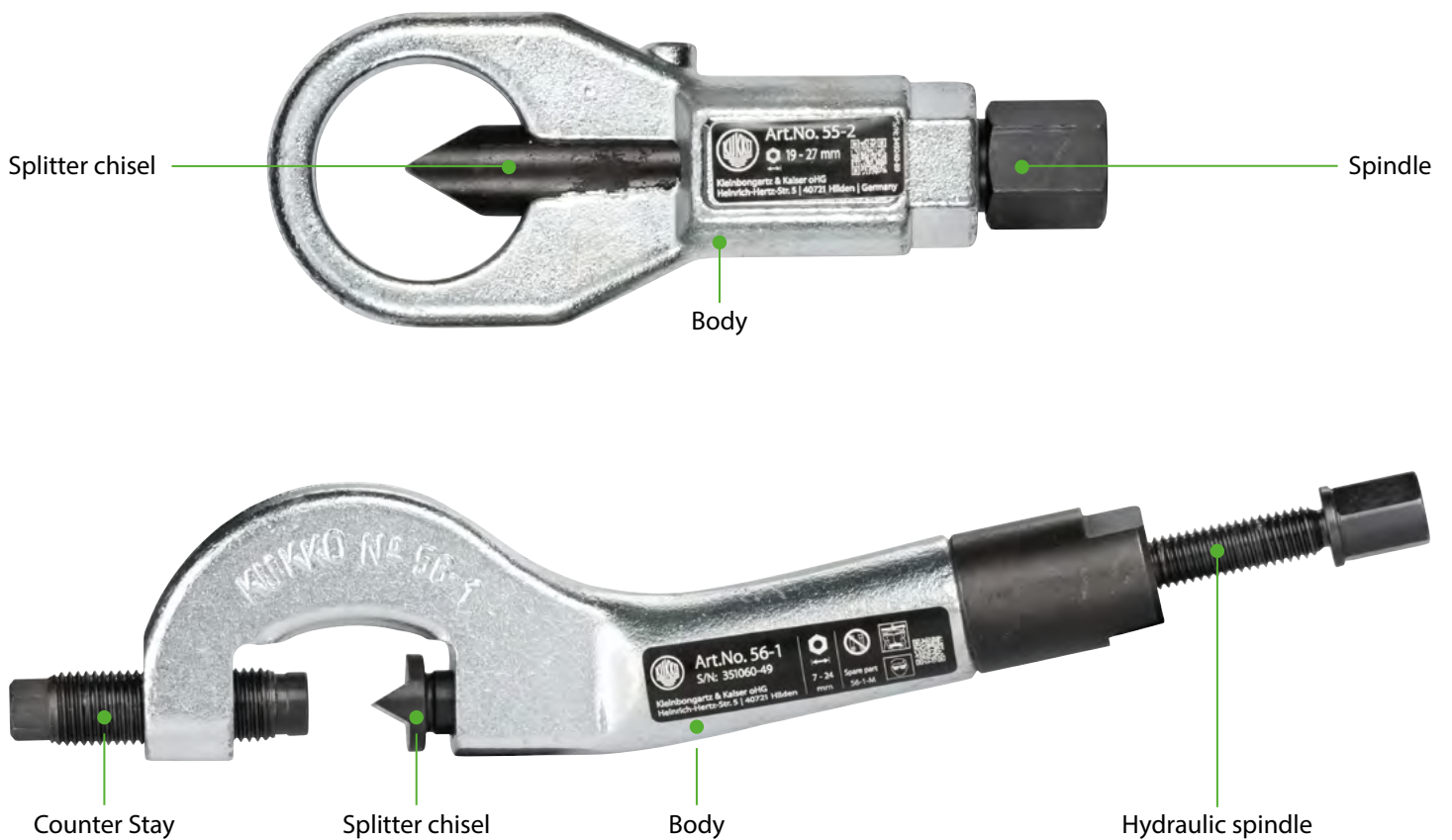
# DEPLOYMENT

If nuts come into contact with moisture over an extended period, they start to rust. Rusted components of screw connections can lead to impairments in structures of any kind. Depending on the degree of corrosion, the nut can no longer be unscrewed without damaging the threaded bolt. Additionally, nuts lose their shape during use, making them ungrippable with a wrench. The solution to these problems is provided by the nut splitters from KUKKO.

## Benefits

- Detaching the mother can be done without damaging the threaded bolt.
- Pullback Technology guarantees a smooth retraction of the chisel from the blasted nut.
- Very sharp edges due to facet grinding
- Measuring tools are available as spare parts and can be quickly replaced in case of damage.

# ASSEMBLY



## TIP:

### Spare Parts

All splitter chisels of series 54, 55, and 56 are available as replacement parts and are very easy to replace.



54-2-M-C



# FEATURES OF THE SERIES

## SERIES 54

**Two-sided,  
mechanical nut splitter**



54-2

The two-sided nut splitter breaks the nut apart due to double explosive action in just one step.

## SERIES 55

**One-sided,  
mechanical nut splitter**



55-0

The single-edged, mechanical nut splitter is used in confined spaces where there is little room around the nut.

## SERIES 56

**Single-sided,  
fat-hydraulic nut splitter**



56-1

Thanks to the fat hydraulic system, only a small amount of force is required for the single-sided fat hydraulic nut splitter.

## SERIES Y-57 - THE HYDRAULIC NUT SPLITTER



Y-57



For maximum work convenience, the nut splitter is also available with a pump hydraulic drive. The hydraulics guarantee an enormous cutting force of up to 90 t.

**The set of the Y-57 series includes:** A pump hydraulic nut splitter, a replacement chisel, and two internal hexagonal wrenches for changing the chisel.

## APPLICATION EXAMPLES



By pulling the spindle, the chisel is pressed into the nut to be split.



After the explosive release, the mother can be easily removed from the thread.

## PRODUCT DETAILS

### SERIES 54 TWO-EDGED, MECHANICAL NUT SPLITTER









The two-edged mechanical nut splitters are used for splitting irreversibly jammed, rusty, or over-tightened nuts with a tensile strength of up to 800 N/mm<sup>2</sup>. In this splitting process, the threaded pin remains undamaged. The two sharp edges of the chisel, which are ground with a facet, penetrate deeply into the nut when the spindle is tightened until it is split. Thanks to the double splitting effect, only one working step is necessary.

#### Benefits

- Removing the mother is possible without damaging the threaded bolt.
- Pullback Technology guarantees an easy retraction of the chisel from the blasted nut.

#### Technical attributes

#	 EAN	 mm/inch	 8	 mm/inch	 mm/inch	 kg/lb
54-2	-170614	10 - 27 3/8 - 1 1/16	8	17 11/16	14 9/16	0,55 1,213
54-3	-170799	17 - 36 11/16 - 1 7/16	8	19 3/4	16 5/8	0,72 1,588

### K-54-B 8-PIECE MECHANICAL NUT SPLITTER SET








The 8-part mechanical nut splitter set of the K-54-B series is used for splitting unloosable, rusted, or overtightened nuts with a tensile strength of up to 800 N/mm<sup>2</sup>. During this splitting process, the threaded pin remains undamaged. The two sharply cut edges of the splitter chisel penetrate deeply into the nut when the spindle is tightened until it is split. Thanks to the double splitting effect, only one working step is necessary. The practical ready-to-use set contains: two double-edged mechanical nut splitters for sizes 10-36 mm, two new splitter chisels, and two box wrenches. The set includes everything needed for nut splitting. No additional accessories are required.

#### Benefits

- Application-oriented compilation for immediate, universal use
- By storing it in the L-Boxx, the completeness of the set can be easily monitored.
- Double explosive effect saves time

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 8	 kg/lb	Components
K-54-B	-019531	16 5/8	10 - 36 3/8 - 1 7/16	8	2,15 4,741	54-2, 54-3, 54-2-M, 54-3-M



## SERIES 55

### SERIES 55 SINGLE-EDGED, MECHANICAL NUT SPLITTER









The single-blade mechanical nut splitter is used for splitting stuck, rusted, or over-tightened nuts with a tensile strength of up to 800 N/mm<sup>2</sup>. During this splitting process, the threaded pin remains undamaged. The sharp edge of the chisel, which has a faceted grinding, penetrates deeply into the nut when the spindle is tightened, until the nut is split. In confined environmental conditions where there is only limited space around the nut, the single-blade nut splitter is exactly the right choice.

#### Benefits

- Removing the mother is possible without damaging the thread bolt.
- Pullback Technology guarantees easy retraction of the chisel from the exploded nut.

#### Technical attributes

#	 EAN	 mm/inch	 8	 mm/inch	 mm/inch	 kg/lb	Included in the set
55-0	-019906	4 - 10 3/16 - 3/8	8	14 9/16	8 5/16	0,1 0,221	-
55-1	-020063	10 - 18 3/8 - 11/16	8	17 11/16	12 1/2	0,22 0,485	K-55-B
55-2	-020148	19 - 27 3/4 - 1 1/16	8	17 11/16	14 9/16	0,435 0,959	K-55-B
55-3	-020223	27 - 36 1 1/16 - 1 7/16	8	19 3/4	16 5/8	0,66 1,455	K-55-B
55-4	-020308	32 - 50 1 1/4 - 1 15/16	8	32 1 1/4	26 1 1/32	2,55 5,623	-

### K-55-B 4-PIECE MECHANICAL NUT SPLITTER SET








The 7-piece mechanical nut splitter set of series K-55-B is used for splitting stubborn, rusted, or overtightened nuts with a tensile strength of up to 800 N/mm<sup>2</sup>. During this splitting process, the threaded pin remains undamaged. The two sharp edges of the splitter chisel, which are angled, penetrate deeply into the nut when the spindle is tightened until it is split. In restricted environmental conditions, where there is little space available around the nut, the single-blade nut splitter is exactly the right choice. The practical ready-to-use set includes: three single-blade mechanical nut splitters for sizes 10-36 mm, three new splitting chisels, and a thread file for reworking and cleaning damaged internal and external threads. The set contains everything needed for nut splitting. No additional accessories are required.

#### Benefits

- Application-oriented assembly for immediate, universal use
- By storing it in the L-Boxx, the completeness of the set can be easily overviewed.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 8	 kg/lb	Components
K-55-B	-405877	16 5/8	10 - 36 3/8 - 1 7/16	8	2,15 4,741	55-1, 55-2, 55-3, 97-1, 55-1-M, 55-2-M, 55-3-M

## PRODUCT DETAILS

### SERIES 56 SINGLE-EDGE, HYDRAULIC NUT SPLITTER










The single-sided, fat-hydraulic nut splitters are used for splitting particularly large, stuck, rusted, or overtightened nuts of quality classes 5, 6, 8, and 10. During this splitting process, the threaded pin remains undamaged. Thanks to the fat hydraulics, only a small amount of force is required. For better ease of use, the nut splitter is slightly angled.

#### Benefits

- Removing the mother is possible without damaging the thread bolt.
- Fat hydraulic ensures a significant reduction in workload.
- Also suitable for use in pipeline construction and other industries.

#### Technical attributes

#							
	EAN	mm/inch		mm/inch	mm/inch	Nm/ft lb	kg/lb
56-1	-020483	7 - 24 1/4 - 15/16	10	13 1/2	18 11/16	60 44.26	0,86 1,896
56-2	-020551	22 - 36 7/8 - 1 7/16	10	17 11/16	30 1 3/16	70 51.63	2,865 6,317
56-3	-111501	27 - 46 1 1/16 - 1 13/16	10	24 15/16	37 1 7/16	50 36.88	6,6 14,553

### SERIES Y-57 4-PIECE, PUMP-HYDRAULIC NUT SPLITTER SET









The 4-piece hydraulic nut splitter sets are used for splitting stubbornly stuck, rusted, or overtightened nuts of all quality classes. During this splitting process, the threaded pin remains undamaged. The special TiN coating of the chisel has particularly good friction properties, allowing for high cutting performance with minimal effort. The nut splitter set is applied in the fields of commercial vehicles, pipe industry, tank cleaning, petrochemical industry, as well as steel and mining. The hydraulic pump guarantees an enormous cutting force of up to 90 tons. The set includes: a hydraulic nut splitter, a replacement chisel, and two internal hexagonal keys for chisel replacement.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the L-Boxx, the completeness of the set can be easily overviewed.
- The TiN coating of the measuring tool guarantees higher cutting performance.

#### Technical attributes

#						
	EAN	mm/inch		mm/inch	bar	kg/lb
Y-57-10	-123559	10 - 19 3/8 - 3/4	12	17 11/16	700	2,26 4,983
Y-57-19	-123566	19 - 24 3/4 - 15/16	12	25 1	700	3,24 7,144
Y-57-24	-870675	24 - 32 15/16 - 1 1/4	12	30 1 3/16	700	5,4 11,907
Y-57-32	-870682	32 - 41 1 1/4 - 1 5/8	12	32 1 1/4	700	8,53 18,809
Y-57-41	-870699	41 - 50 1 5/8 - 1 15/16	12	45 1 3/4	700	13,44 29,635
Y-57-50	-870705	50 - 60 1 15/16 - 2 3/8	12	48 1 7/8	700	25,08 55,301
Y-57-60	-870712	60 - 75 2 3/8 - 2 15/16	12	70 2 3/4	700	34,1 75,191

KUKKO // Pull forward



# DRIVE TECHNOLOGY





## PRODUCT DETAILS

### SERIES 58-1 MOUNTING CLAMP








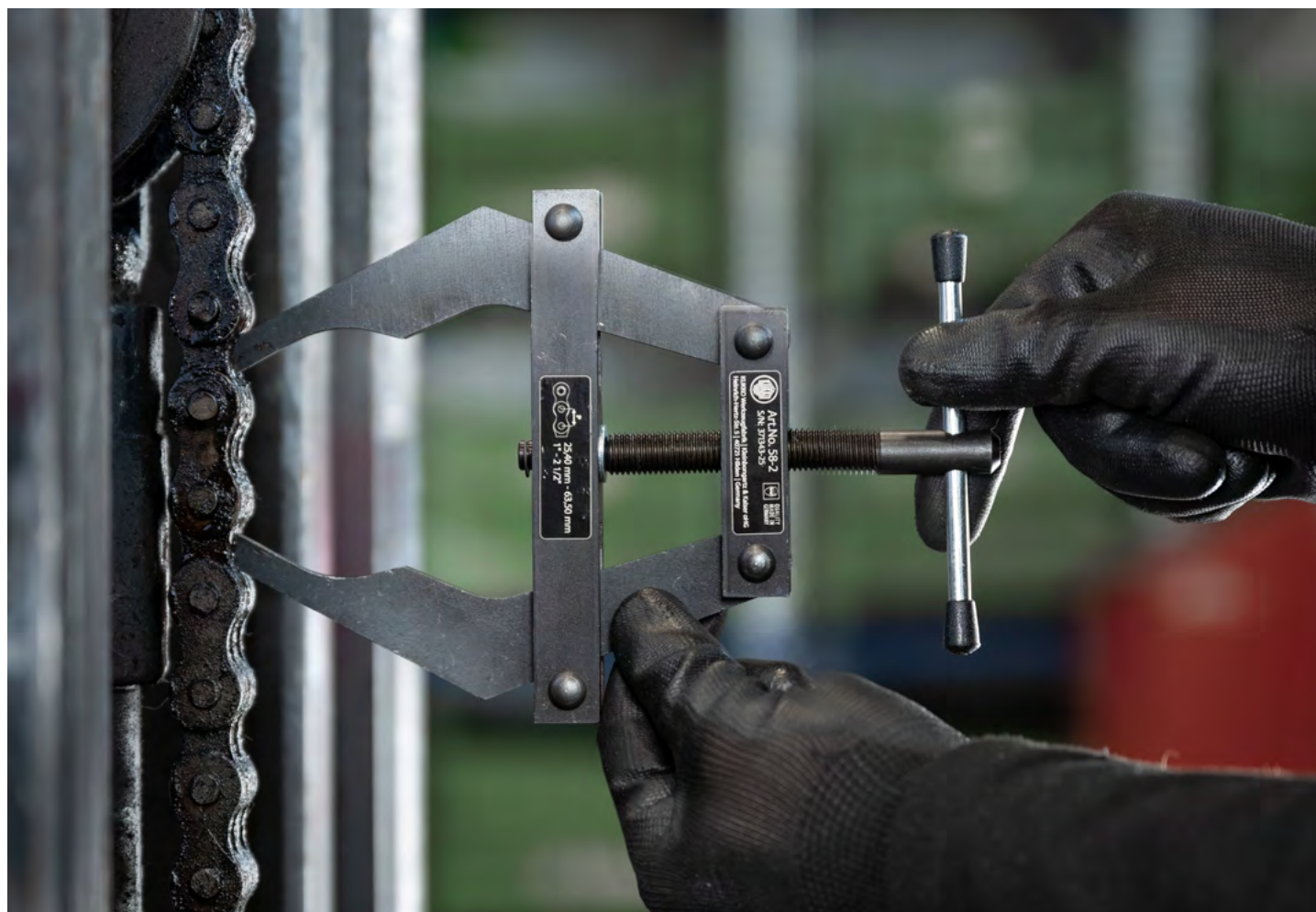
The assembly clamp from series 58-1 is used for tensioning chains and similar parts in crafts, industry, and workshops. It is particularly suitable for tensioning chains and can be complemented by other tools from KUKKO in application.

#### Benefits

- Guaranteed fast and straightforward installation of connecting left
- Easy assembly of the respective chain ends

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
<b>58-1</b>	-800245	9 - 46 3/8 - 1 13/16	5 3/16	3 1/8	0,17 0,375
<b>58-2 NEW</b>	-774454	25,4 - 63,5 1 - 2 1/2	8,5 5/16	6 1/4	0 0,000



The 58-2 assembly tensiometer is used to tension the lift chain of a forklift truck to make it easier to dismantle

## PRODUCT DETAILS

### SERIES 59-1 CHAIN BREAKER BASIC DEVICE







The chain breaker device of series 59 is used for breaking various chains in industry and workshop. It serves as the basis for chain breaking, which can be supplemented by other KUKKO tools.

#### Benefits

- Guaranteed a quick and uncomplicated separation of chains
- Easy handling and flexible to use



#### Technical attributes

#	 EAN	 mm	 mm/inch	 kg/lb
59-1	-800214	48 1 7/8	3,28 - 5,72 1/8-3/16	0,924 2,037

### SERIES 59-1-1 SMALL REPLACEMENT PART SET FOR THE CHAIN TENSIONER BASIC DEVICE








The small set for the chain tensioner of the series 59 is a spare parts kit that provides essential elements for the use of the basic device.

#### Benefits

- Used together with the chain breaker basic device 59-1 or the KUKKO chain breaker set KS-59-1/14.

#### Technical attributes

#	 EAN	 mm	 mm/inch	 mm	 kg/lb
59-1-1	-800221	3,0; 3,9 1/8; 1/8	3,28 - 4,45 1/8-3/16	3 1/8	0,13 0,287
59-1-2	-800238	4,2; 5,0 3/16; 3/16	5,08 - 5,72 3/16-3/16	4 3/16	0,19 0,419

## PRODUCT DETAILS

### K-59-1/14 CHAIN TENSIONER SET







The 15-piece chain tensioner set from the 59 series is used for separating, tensioning and riveting chains. With this set, chains can not only be safely cut, but also accurately riveted thanks to a crimping aid. This set prevents injuries caused by improper tools.



#### Benefits

- Thanks to the pressing aid, the spacings of the rivet bolts can always be correctly adjusted, preventing the chain from being overly compressed
- The set contains all the important tools for processing chains
- Application-orientated compilation for universal use
- Storage in the box makes it easy to keep track of the completeness of the set

#### Technical attributes

#	Barcode						
		mm	mm	mm	mm	mm	kg
K-59-1/14	4021176000461	6,3 - 19	48	3,0; 3,9; 4,2; 5,0	3,28 - 5,72	3,0; 4,0	2,47



The bolt of a chain was pressed out with the chain breaker 59-1



KUKKO // Pull forward



# CUTTING & LOOSENING



# DEPLOYMENT

Whether for cutting and punching various materials, for producing seals, for removing adhesive weights and residues, or for thread renewal - KUKKO offers the perfect solution for every application.

## FEATURES OF THE SERIES

### SERIES 321



The disc cutter is used for cutting discs, leather, paper, particle board, and plastic, as well as for making seal rings. The sharp cutting knife is guided on a rail and can be aligned to a millimeter precision.

### SERIES 2200



The soft scraper is used for gently removing adhesive weights and sealant residues, glued protective strips, plaques, and stickers. The ergonomic handle sits particularly well in the hand. Thanks to the polished scraper blade, even hard-to-remove adhesive residues disappear.

### SERIES 326



The perforating iron are used for punching or manufacturing seals and sealing rings from rubber, leather, felt, plastic, cork, as well as various fabrics.

### SERIES 121



The screw punch is used for evenly punching holes in plastic spacer rods for distance sensors as well as for punching holes in thin-walled materials. In this process, the workpiece is not deformed.

### SERIES 49



The screw extractor with finely grooved design is used for extracting broken bolts and screws with right-hand threads.

### SERIES 245



The 13-piece nozzle reamer set is used for cleaning nozzles. The set consists of two tool holders and eleven reamers with varying diameters ranging from 0.6 to 1.9 mm.



# THREAD REPAIR WITH THE CASE SET K-58

The thread repair set of the K-58 series is suitable for restoring highly stressed screw connections with torn internal threads and for repairing defective or over-torqued threads in all oil pans or oil drain screws. Worn and damaged threads can be professionally and cost-effectively renewed in just a few steps.

**The 60-piece set includes:** 40 thread inserts in various sizes, 4 drills, 4 seating cutters, 4 thread cutters, 4 insertion tools, a 2-piece tool holder with ratchet function, a can of bio multi-oil, and a KUKKO chip with an individual serial number for warranty extension. For metric threads M5, M6, M8, and M10.



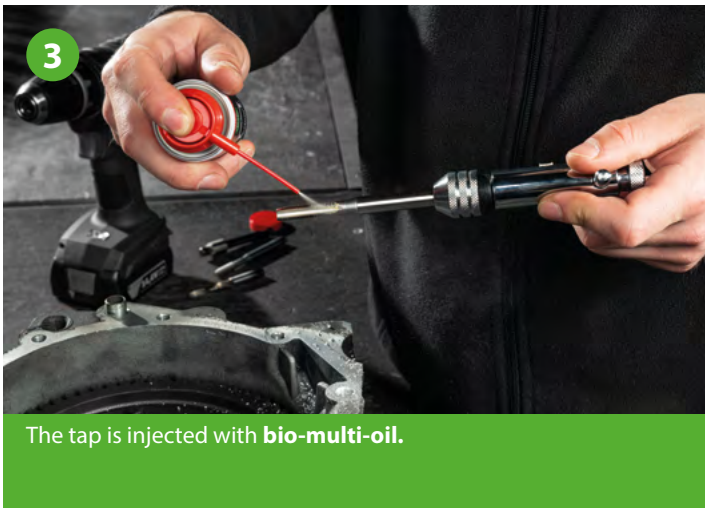
1

The defective thread will be reamed **with** a drill.



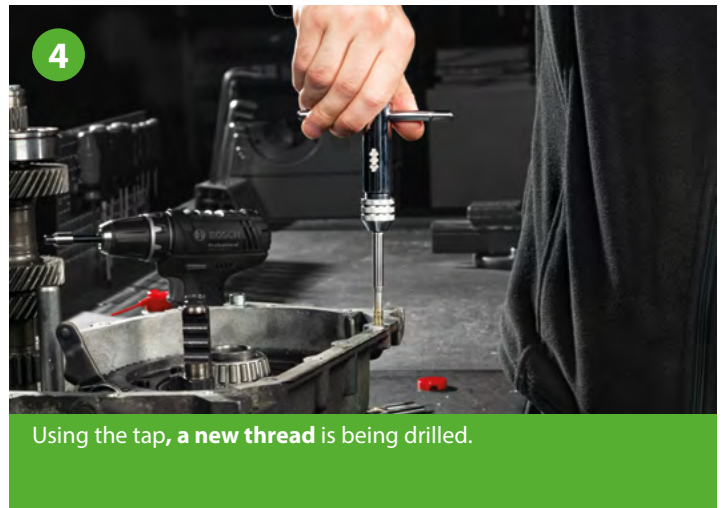
2

The **seat milling** machine ensures that the bore is countersunk.



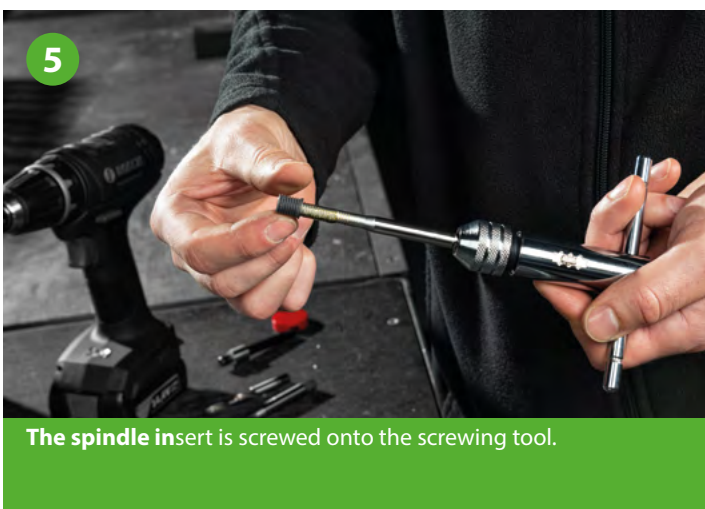
3

The tap is injected with **bio-multi-oil**.



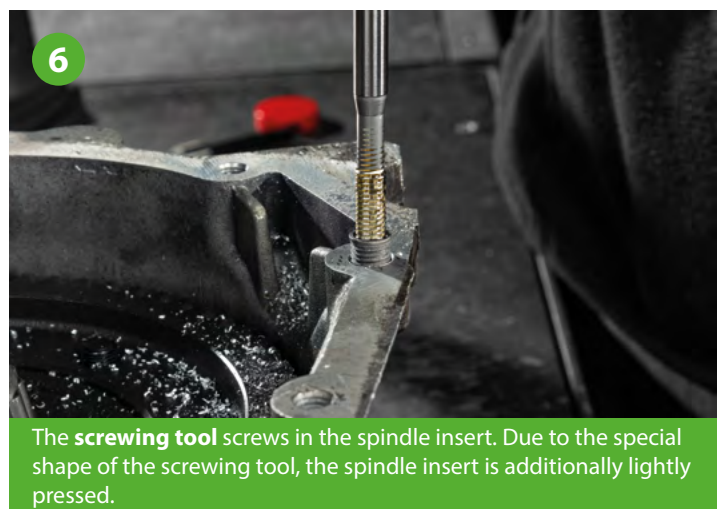
4

Using the tap, a **new thread** is being drilled.



5

The **spindle insert** is screwed onto the screwing tool.



6

The **screwing tool** screws in the spindle insert. Due to the special shape of the screwing tool, the spindle insert is additionally lightly pressed.



# UNSCREW WITH SET 49-U-B

The screw extractor set with drills and drill sockets is used for the universal removal of broken bolts and screws. The screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without. The set includes screw extractors for screw threads from M5 to M16.

## BENEFITS

- Application-oriented assembly for universal use
- Due to the joint storage, the completeness of the set can be easily overviewed
- The fine toothing of the turning pins prevents the widening and jamming of the screw



## APPLICATION

**1**  
Drill out broken screw.

**2**  
Turning pin drive in and unscrew nut to the bottom push on.

**3**  
Evenly unscrew. Do not jam!

## TECHNICAL ATTRIBUTES

Bolt	Guide bush	Pre-drilling mm	Follow up drilling mm	Twist pin mm	Unscrewing nut SW mm
M 5	3/16"	-	3,2	-	10
M 6	1/4"	A-B	3,2	-	10
M 7	1/4"	A-B	3,2	4,8	11
M 8	5/15"	C-D	3,2	4,8	11
M 9	3/8"	C-D	4,8	6,4	13
M 10	7/16"	E-F	4,8	6,4	13
M 12	1/2"	G-H	4,8	8,0	14
M 14	9/16"	I-K	6,4	8,7	17
M 16	5/8"	I-K	6,4	8,7	17

# APPLICATION EXAMPLES



A perforating iron from the 326 series is used together with a soft-face mallet from KUKKO



A soft scraper from the series 2200 for gently removing a product label.



The screw punch 121-182 is inserted through the previously drilled hole.



A screwdriver from the screwdriver set 49-A has safely removed a screw.

## PRODUCT DETAILS

### SERIES K-58 KUKKO-THREAD-REPAIR-SET







The thread repair set is used for restoring high-load screw connections in torn internal threads, as well as for repairing defective and stripped threads in all oil pans and drain plugs. Worn and damaged threads can be properly and cost-effectively renewed in just a few steps. The 58-piece set includes: 40 thread inserts in various sizes, 4 drill bits, 4 seating mills, 4 thread cutters, 4 insertion tools, a 2-piece tool holder with ratchet function, and a can of bio multi-oil.

#### Benefits

- The collar makes additional fixation in the workpiece unnecessary and ensures stability without additional space requirement.
- The synchronous threaded design also allows for repairs on thin-walled components.
- Application-oriented assembly for universal use

#### Technical attributes

#	 EAN	 nominal dimension	 mm/inch	 kg/lb
K-58-M05-M10	-038853	M5x7,6, M5x10, M6x9,4, M6x12, M8x11,7, M8x16,2, M10x14, M10x20	5,1, 6,2, 8,6, 10,3 3/16, 1/4, 5/16, 3/8	2,07 4,564

### SERIES W-714 THREAD RENEWER







The thread renewers of the series W-714 are used for the repair of damaged threads and similar parts in crafts, industry, and workshops. The thread renewers are capable of reliably restoring threads even for special parts that would otherwise be significantly more expensive in their new acquisition.

#### Benefits

- Suitable for right and left-hand threads

#### Technical attributes

#	 EAN	 L	 Ø	 kg/lb
W-714-1	-131248	160 6 5/16	12 - 25 1/2-1	0 0,000
W-714-2	-131255	260 10 1/4	25 - 65 1-2 9/16	0 0,000
W-714-3	-131286	355 13 1	44 - 100 1 3/4-3 15/16	1,8 3,969
W-714-4	-131316	406 15 1	100 - 150 3 15/16-5 7/8	1,515 3,341



## PRODUCT DETAILS

### SERIES 97 HANDY THREAD FILE FOR REWORKING THREADS








The handy thread file is used for manual reworking and cleaning of damaged internal and external threads on technical components such as screws, bolts, axles, or shafts. Additionally, the file is used for repairing external threads where die heads cannot be used or are not available. Overall, the thread file has eight different pitches, which allows for the processing of different thread diameters. In the KUKKO range, there is a suitable thread file for the four common thread types DIN-ISO, Whitworth + BSF, SAE/UNF, and Whitworth/pipe threads.

#### Benefits

- Thread files are used where cutter dies cannot be applied.
- Various slopes allow processing of different thread sizes.

#### Technical attributes

#	 EAN	 mm/inch	 Degree	Suitable for thread type		 kg/lb
97-1	-490231	230 9 1/16	60	DIN ISO Metric	0,8, 1, 1,25, 1,5, 1,75, 2, 2,5, 3	0,125 0,276
97-2	-490316	230 9 1/16	55	Whitworth + BSF	10, 11, 12, 14: 16, 18, 20, 24	0,14 0,309
97-3	-490491	230 9 1/16	60	SAE UNF, UNC	11, 12, 13, 14, 16, 18, 20, 24	0,13 0,287
97-4	-720253	230 9 1/16	55	Whitworth Pipe thread GAZ, BSPP	11, 14, 19, 28	0,13 0,287

### SERIES 321 SLICE CUTTER FOR CUTTING DISCS AND SEAL RINGS





The circular cutter is used for cutting discs, leather, paper, particle board, and plastic, as well as for making seal rings. The sharp cutting blade is guided on a rail and can be aligned with millimeter precision. With the circular cutter, precise round cutouts can be made in the range of 40 to 200 mm in diameter.

#### Benefits

- Millimeter scale on prism rail enables precise work
- The plastic handle sits particularly well and securely in the hand.

#### Technical attributes

#	 EAN	$\emptyset$ mm/inch	 kg/lb
321-200	-616144	40 - 200 1 9/16 - 7 7/8	0,495 1,091
321-400	-616229	40 - 400 1 9/16 - 15 3/4	0,61 1,345
321-600	-616304	40 - 600 1 9/16 - 23 5/8	0,75 1,654
321-800	-616489	40 - 800 1 9/16 - 31 1/2	0,88 1,940

## PRODUCT DETAILS

### SERIES 322 SLICE CUTTER WITH 2 BLADES FOR CUTTING DISCS AND SEAL RINGS





The disc cutter with two blades is used for cutting discs and sealing rings made of rubber, leather, paper, particle board, and plastic. The two sharp cutting blades are guided on a rail that can be aligned with millimeter precision. With the disc cutter, precise circular cutouts can be made with diameters ranging from 40 to 200 mm.

#### Benefits

- The millimeter scale on the prism rail enables precise work.
- The plastic handle lies particularly well and securely in the hand.



#### Technical attributes

#	 EAN	Ø	 kg/lb
		mm/inch	
322-200	-616632	40 - 200 1 9/16 - 7 7/8	0,56 1,235
322-400	-616717	40 - 400 1 9/16 - 15 3/4	0,68 1,499
322-600	-616892	40 - 600 1 9/16 - 23 5/8	0,825 1,819
322-800	-616977	40 - 800 1 9/16 - 31 1/2	0,95 2,095

### SERIES 55-C SINGLE-EDGED, MECHANICAL GASKET CUTTER







The single-edged mechanical gasket cutter of the series 55-C is used for removing gaskets on pipelines for craft, workshop, and industry. Due to its open design, the gasket cutter can be slid over pipelines, even if they are installed in a closed system. The sharp edge of the chisel, created by a facet grind, penetrates deeply into the gasket when the spindle is tightened, until it is cut through.

#### Benefits

- The open construction guarantees access to hard-to-reach seals.
- Pullback Technology guarantees an easy retraction of the pusher from the cut seal.



#### Technical attributes

#	 EAN	Ø	 SW		 kg/lb
		mm/inch	mm/inch	mm/inch	
55-2-C NEW	-021350	30 1 3/16	17 11/16	14 9/16	0,445 0,981

## PRODUCT DETAILS

### SERIES 2200 GENTLE SOFT SCRAPER








Soft scrapers are used for gently removing adhesive weights and sealant remnants, bonded protective strips, badges, and stickers. The ergonomic handle fits particularly well in the hand. Thanks to the polished scraper blade, even difficult-to-remove adhesive residues disappear. At the same time, the manufacturing from polyoxymethylene ensures that the surface to be treated is not damaged. Especially suitable for applications on sensitive surfaces such as adhesive weights on aluminum rims.

#### Benefits

- Sharp scraping blade removes stuck residue completely
- Good haptics due to ergonomic grip
- The scraper blade is resharpenable.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
2200-1	-324284	190 7 1/2	22 7/8	60 2 3/8	0,7 1,544
2200-2	-324291	210 8 1/4	22 7/8	80 3 1/8	0,72 1,588
2200-3	-324307	280 11 1/32	22 7/8	150 5 7/8	0,083 0,183
2200-4	-324314	280 11 1/32	28 1 1/8	150 5 7/8	0,089 0,196

### SERIES 2200-ST GENTLE SOFT SCRAPER SET








The soft scraper set is used for gently removing adhesive weights and sealant residues, bonded protective strips, plaques, and stickers. The ergonomic handle fits particularly well in the hand. Thanks to the polished scraping blade, even difficult-to-remove adhesive residues disappear. At the same time, the manufacturing from polyoxymethylene ensures that the surface being worked on is not damaged. Particularly suitable for applications on sensitive surfaces such as adhesive weights on aluminum rims. The set contains a total of four soft scrapers in different sizes.

#### Benefits

- The sharp scraper blade removes stubborn residues without a trace.
- Universal use thanks to soft scrapers in various sizes
- Grip sizes for hanging or securing the scraper

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
2200	-001611	190, 210, 280, 280 7 1/2; 8 1/4; 11 1/32; 11 1/32	22, 22, 22, 28 7/8; 7/8; 7/8; 1 1/8	60, 80, 150, 150 2 3/8; 3 1/8; 5 7/8; 5 7/8	0,325 0,717



# PRODUCT DETAILS

## SERIES 326 PERFORATING IRON











The perforating iron are used for punching or creating seals and sealing rings from rubber, leather, felt, plastic, cork, as well as various fabrics. The short hollow cylinder is sharply cut at the lower edge. The conical punch head is attached to two carriers. This creates a double-sided recess. Thanks to the particularly powerful design of the perforating iron, a wide variety of materials can be processed.

### Benefits

- Extra sharp blades for the individual processing of various materials
- Uniform force distribution on the hollow cylinder due to impact action

### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
326-002	-620837	100 3 15/16	2 1/16	0,45 0,992
326-003	-620912	100 3 15/16	3 1/8	0,45 0,992
326-004	-621094	100 3 15/16	4 3/16	0,45 0,992
326-005	-621179	110 4 5/16	5 3/16	0,56 1,235
326-006	-621254	110 4 5/16	6 1/4	0,058 0,128
326-007	-621339	110 4 5/16	7 1/4	0,59 1,301
326-008	-621414	110 4 5/16	8 5/16	0,795 1,753
326-009	-621582	110 4 5/16	9 3/8	0,8 1,764
326-010	-621667	110 4 5/16	10 3/8	0,75 1,654
326-011	-621742	125 4 15/16	11 7/16	0,12 0,265
326-012	-621827	125 4 15/16	12 1/2	0,12 0,265
326-013	-621902	125 4 15/16	13 1/2	0,1 0,221
326-014	-622084	137 5 3/8	14 9/16	0,155 0,342
326-015	-622169	137 5 3/8	15 9/16	0,15 0,331
326-016	-622244	137 5 3/8	16 5/8	0,155 0,342
326-017	-622329	137 5 3/8	17 11/16	0,16 0,353
326-018	-622404	141 5 9/16	18 11/16	0,195 0,430
326-019	-622572	141 5 9/16	19 3/4	0,185 0,408
326-020	-622657	141 5 9/16	20 13/16	0,185 0,408
326-021	-622732	153 6 1/32	21 13/16	0,27 0,595
326-022	-622817	153 6 1/32	22 7/8	0,28 0,617
326-023	-622992	153 6 1/32	23 7/8	0,265 0,584
326-024	-623074	153 6 1/32	24 15/16	0,275 0,606
326-025	-623159	162 6 3/8	25 1	0,37 0,816
326-026	-623234	162 6 3/8	26 1 1/32	0,375 0,827
326-027	-623319	162 6 3/8	27 1 1/16	0,36 0,794
326-028	-623494	175 6 7/8	28 1 1/8	0,45 0,992
326-029	-623562	175 6 7/8	29 1 1/8	0,45 0,992
326-030	-623647	175 6 7/8	30 1 3/16	0,435 0,959
326-031	-623722	175 6 7/8	31 1 1/4	0,5 1,103

#				
	EAN	mm/inch	mm/inch	kg/lb
326-032	-623807	175 6 7/8	32 1 1/4	0,49 1,080
326-033	-623982	175 6 7/8	33 1 5/16	0,495 1,091
326-034	-624064	180 7 1/16	34 1 5/16	0,59 1,301
326-035	-624149	180 7 1/16	35 1 3/8	0,585 1,290
326-036	-624224	180 7 1/16	36 1 7/16	0,57 1,257
326-037	-624309	180 7 1/16	37 1 7/16	0,575 1,268
326-038	-624484	190 7 1/2	38 1 1/2	0,75 1,654
326-039	-624552	190 7 1/2	39 1 9/16	0,0023 0,005
326-040	-624637	190 7 1/2	40 1 9/16	0,63 1,389
326-041	-911003	205 8 1/16	41 1 5/8	1,02 2,249
326-042	-624897	205 8 1/16	42 1 5/8	1,8 3,969
326-043	-624972	205 8 1/16	43 1 11/16	2,13 4,697
326-044	-625054	205 8 1/16	44 1 3/4	1,015 2,238
326-045	-625139	205 8 1/16	45 1 3/4	0,98 2,161
326-046	-625214	205 8 1/16	46 1 13/16	0,87 1,918
326-047	-625399	215 8 7/16	47 1 7/8	2,06 4,542
326-048	-625474	215 8 7/16	48 1 7/8	0,93 2,051
326-049	-625542	215 8 7/16	49 1 15/16	0,99 2,183
326-050	-625627	215 8 7/16	50 1 15/16	1,02 2,249
326-055	-625702	220 8 11/16	55 2 3/16	1,165 2,569
326-060	-625887	240 9 7/16	60 2 3/8	1,775 3,914
326-065	-625962	240 9 7/16	65 2 9/16	1,685 3,715
326-070	-626044	250 9 13/16	70 2 3/4	2,225 4,906
326-075	-626129	255 10 1/32	75 2 15/16	2,23 4,917
326-080	-626204	340 13 3/8	80 3 1/8	3,89 8,577
326-085	-922320	340 13 3/8	85 3 3/8	4,565 10,066
326-090	-626389	365 14 3/8	90 3 9/16	4,3 9,482
326-095	-917128	365 14 3/8	95 3 3/4	6,29 13,869
326-100	-626464	380 14 15/16	100 3 15/16	6 13,230

## PRODUCT DETAILS

### SERIES 326-TS PERFORATING IRON SET



The 24-piece set of hand punches with different diameters is used for punching or creating seals and sealing rings made of rubber, leather, felt, plastic, cork, as well as various fabrics. The short hollow cylinder is sharply cut at the lower edge. The conical punch head is mounted on two carriers, creating a dual-sided recess. Thanks to the particularly robust design of the hand punches, a wide variety of materials can be processed. The practical plastic case offers maximum organization and is also ideal for transport. A plastic plate also contained in the case can be used as a support for the workpiece to be processed.

#### Benefits

- Extra sharp blades for the individual processing of various materials
- Uniform distribution of force on the hollow cylinder due to impact effect

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>326-230</b>	-687991	100 - 175 3 15/16-6 7/8	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 25, 28, 30 1/16, 1/8, 3/16, 3/16, 1/4, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 1/8, 1 3/16	4,68 10,319

### SERIES 326-KS PERFORATING IRON SET IN A PLASTIC ROLL BAG







The 9-piece set of hole punches with different diameters is used for punching holes or creating seals and sealing rings from rubber, leather, felt, plastic, cork, as well as various fabrics. The short hollow cylinder is sharply cut at the bottom edge. The conical punch head is attached to two supports, resulting in a dual recess. Thanks to the particularly sturdy design of the hole punches, a wide variety of materials can be processed. The practical roll-up bag made of plastic provides maximum organization and is also ideal for transport.

#### Benefits

- Extra sharp blades for the individual processing of various materials
- Uniform distribution of force on the hollow cylinder due to impact action

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>326-109</b>	-916695	100 - 141 3 15/16-5 9/16	3, 5, 7, 9, 11, 13, 15, 17, 19 1/8, 3/16, 1/4, 3/8, 7/16, 1/2, 9/16, 11/16, 3/4	1,025 2,260
<b>326-119</b>	-916701	100 - 141 3 15/16-5 9/16	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 1/16	1,94 4,278
<b>326-120</b>	-626532	100 - 162 3 15/16-6 3/8	3, 5, 6, 8, 10, 12, 13, 14, 16, 19, 22, 25 1/8	1,82 4,013
<b>326-130</b>	-997700	100 - 175 3 15/16-6 7/8	2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 1/16	3,01 6,637

## PRODUCT DETAILS

### 326-320 RING PUNCH TOOL SET RING PUNCH TOOL SET




The 11-piece ring hole punch set is used for punching or creating seals and seal rings made of rubber, leather, felt, plastic, cork as well as fabrics. Thanks to the dual mounting, seal rings can be produced in just one operation by simultaneously attaching two punches with different diameters to the punch holder. The punches are particularly sharp-edged. This allows for the processing of a variety of materials.

#### Benefits

- Extra sharp stamping knives for the individual processing of various materials
- A variety of ring diameters enables numerous combination options

#### Technical attributes

#		Ø	
	EAN	mm/inch	kg/lb
326-320	-915605	3, 4, 6, 8, 10, 12, 14, 16, 18, 20 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, 11/16, 13/16	0,66 1,455

### 326-330 RING PUNCH TOOL SET



The ring punch tool set is used for punching or creating seals and seal rings from rubber, leather, felt, plastic, cork, as well as fabrics. Thanks to the double attachment, seal rings can be produced in just one operation by simultaneously attaching two punch blades of different diameters to the punch holder. The punch blades are particularly sharp. This allows for the processing of a wide variety of materials.

#### Benefits

- Extra sharp stamping knives for the individual processing of various materials
- A variety of ring diameters enables numerous combination options

#### Technical attributes

#		Ø	
	EAN	mm/inch	kg/lb
326-330	-745004	3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8, 15/16, 1 1/32, 1 1/8, 1 3/16	1,405 3,098



## PRODUCT DETAILS

### 326-350 RING PUNCH TOOL SET





The 33-piece ring punch tool set is used for punching or creating seals and seal rings from rubber, leather, felt, plastic, cork, as well as fabrics. Thanks to the double holder, sealing rings can be produced in just one working step by attaching two punch blades with different diameters to the punch holder simultaneously. The punch blades are particularly sharply cut. This allows for the processing of a wide variety of materials.

#### Benefits

- Extra sharp stamping knives for the individual processing of various materials
- A variety of ring diameters enables numerous combination options

#### Technical attributes

#	 EAN	∅ mm/inch	 kg/lb
326-360	-745264	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60 1/16, 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8, 15/16, 1 1/32, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2 1/16, 2 1/8, 2 3/16, 2 5/16, 2 3/8	5,655 12,469

### 326-360 RING PUNCH TOOL SET





The 38-piece ring punch tool set is used for punching or creating seals and seal rings from rubber, leather, felt, plastic, cork, and fabrics. Thanks to the double holder, seal rings can be produced in just one operation by simultaneously mounting two punch blades of different diameters on the punch holder. The punch blades are particularly sharp. This allows for the processing of a wide variety of materials.

#### Benefits

- Extra sharp stamping knives for the individual processing of various materials
- A variety of ring diameters enables numerous combination options

#### Technical attributes

#	 EAN	∅ mm/inch	 kg/lb
326-360	-745264	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60 1/16, 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8, 15/16, 1 1/32, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2 1/16, 2 1/8, 2 3/16, 2 5/16, 2 3/8	5,655 12,469

## PRODUCT DETAILS

### SERIES 334-820 CONTROL HOLE PUNCH





The control hole punches of series 334-820 are used for marking test labels and for the cancellation of receipts, tickets, train passes, etc.

#### Benefits

- Stable construction and easy application



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
334-820	-929558	120 4 3/4	3 1/8	0,18 0,397

### SERIES 750 REVOLVING HOLE PUNCH





The revolving hole punches of the series 750 are used for punching with low force in crafts and workshops. The hole punches facilitate punching through the adjustable sizes and the pliers design and enable a smooth workflow.

#### Benefits

- Anti-slip safety (spindle neck) Thighs made of red PVC
- Hole punch diameter 2 – 2.5 – 3 – 3.5 – 4 and 4.5 mm



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
750-220	-611927	220 8 11/16	2,0; 2,5; 3,0; 3,5; 4,0; 4,5 1/16, 1/8, 1/8, 1/8, 3/16, 3/16	0,27 0,595
750-250	-650520	250 9 13/16	2,0; 2,5; 3,0; 3,5; 4,0; 4,5 1/16, 1/8, 1/8, 1/8, 3/16, 3/16	0,45 0,992

## PRODUCT DETAILS

### SERIES 970 IDEAL SCISSORS









The Ideal scissors in the heavy-duty version are used for straight and continuous cuts as well as figure cuts on hard-to-separate sheets. The arms of the scissors are made of sturdy steel sheet and equipped with an anti-slip safety 2-component cover. The built-in opening spring ensures easy handling and operation. The maximum cutting capacity ranges from 1.2 mm for sheets up to 1.8 mm for V2A sheets. Thanks to the optimized design and geometry of the scissors, hard-to-reach places can also be accessed.

#### Benefits

- High force through lever amplification
- Ergonomic handle for fatigue-free working

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 right/left	 kg/lb
<b>970-260</b>	-687427	260 10 1/4	32 1 1/4	1,8 1/32	right	0,525 1,158
<b>970-261</b>	-687595	260 10 1/4	32 1 1/4	1,8 1/32	left	0,54 1,191

### SERIES 971 CIRCULAR PATTERN SNIPS









The circular pattern snips in the lightweight version are used for curved cuts as well as short and straight cuts. The arms of the snips are made of sturdy sheet steel and equipped with an anti-slip safety 2-component cover. The built-in opening spring guarantees easy handling and operation. The maximum cutting capacity ranges from 1.0 mm for V2A sheets to 1.2 mm for sheets. Thanks to the optimized design and geometry of the snips, even hard-to-reach spots can be accessed.

#### Benefits

- High force through lever amplification
- Ergonomic handle for fatigue-free working

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 right/left	 kg/lb
<b>971-240</b>	-557157	243 9 9/16	30 1 3/16	1,2 1/32	right	0,4 0,882
<b>971-241</b>	-557232	243 9 9/16	30 1 3/16	1,2 1/32	left	0,38 0,838
<b>971-242</b>	-558222	250 9 13/16	30 1 3/16	1,2 1/32	left	0,4 0,882



## PRODUCT DETAILS

### SERIES 972 SHEET METAL SHEARS









The heavy-duty figurine sheet metal shear is used for curve cuts as well as short and straight cuts. The arms of the shear are made of sturdy sheet steel and are equipped with an anti-slip safety 2-component cover. The built-in opening spring ensures easy handling and operation. The maximum cutting capacity ranges from 1.2 mm for V2A sheets up to 1.8 mm for sheets. Thanks to the optimized design and geometry of the shear, even hard-to-reach areas can be accessed.

#### Benefits

- High force through lever amplification
- Ergonomic handle for fatigue-free working

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 right left	 kg/lb
972-260	-558307	260 10 1/4	40 1 9/16	1,8 1/32	right	0,465 1,025
972-261	-558482	260 10 1/4	40 1 9/16	1,8 1/32	left	0,475 1,047

### SERIES 973 IDEAL SHEARS









The Ideal shear in the lightweight version is used for straight and continuous cuts as well as figure cuts on hard-to-separate sheets. The arms of the shear are made of sturdy sheet steel and are equipped with an anti-slip safety 2-component coating. The built-in opening spring ensures easy handling and operation. The maximum cutting capacity ranges from 1.0 mm for V2A sheets to 1.2 mm for sheets. Thanks to the optimized design and geometry of the shear, hard-to-reach areas can also be accessed.

#### Benefits

- High force through lever amplification
- Ergonomic handle for fatigue-free working

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 left	 kg/lb
973-241	-558635	235 9 1/4	30 1 3/16	1,2 1/32	left	0,415 0,915

## PRODUCT DETAILS

### SERIES 974 IDEAL SHEARS









The Ideal shear in the heavy version is used for straight and continuous cuts as well as figure cuts on hard-to-separate sheets. The arms of the shear are made of sturdy sheet steel and equipped with an anti-slip safety 2-component coating. The built-in opening spring guarantees easy handling and operation. The maximum cutting capacity ranges from 1.2 mm for V2A sheets to 1.8 mm for sheets. Thanks to the optimized design and geometry of the shear, even hard-to-reach areas can be accessed.

#### Benefits

- High force through lever amplification
- Ergonomic handle for fatigue-free working

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 right/left	 kg/lb
<b>974-260</b>	-558710	260 10 1/4	32 1 1/4	1,8 1/32	right	0,535 1,180
<b>974-261</b>	-558895	260 10 1/4	32 1 1/4	1,8 1/32	left	0,53 1,169

### SERIES 974-HS IDEAL SHEARS









The Ideal shear is used for straight and continuous cuts as well as figure cuts on difficult-to-separate sheets. The arms of the shears are made of sturdy steel sheet and are equipped with an anti-slip safety 2-component coating. The shear head is coated with TiN, which ensures an even longer service life. The employed blades are made of high-speed steel, which significantly increases cutting speed. The built-in opening spring guarantees easy handling and operation. Thanks to the optimized design and geometry of the shears, even hard-to-reach areas can be accessed.

#### Benefits

- High force through lever amplification
- Ergonomic handle for fatigue-free working
- Available for left or right cutting

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 right/left	 kg/lb
<b>974-HSL</b>	-710279	260 10 1/4	37 1 7/16	1,8 1/32	right	0,55 1,213
<b>974-HSR</b>	-710354	260 10 1/4	37 1 7/16	1,8 1/32	left	0,55 1,213

## PRODUCT DETAILS

### SERIES 980 BERLIN SHEARS







The Berlin sheet metal shear is used for long and straight cuts for non-deforming cutting of sheets. Thanks to the blue protective coating, the arms have a particularly good grip. The firm stop protects the blades and prevents possible injury from crushing. Additionally, the sheet metal shear is characterized by easy handling and smooth cutting.

#### Benefits

- High force through lever amplification
- Fixed stop offers protection for the blades.

#### Technical attributes

#	 EAN	 mm/inch	 right	 kg/lb
980-250	-560775	250 9 13/16	right	0,465 1,025
980-275	-560850	275 10 13/16	right	0,645 1,422
980-300	-645922	300 11 13/16	right	0,685 1,510

### SERIES 981 PELIKAN CONTINUOUS CUTTING SCISSORS







The Pelikan guillotine shear is used for long, straight as well as continuous cuts for non-chip cutting of sheets. Due to its special design, the shear is particularly suitable for cutting sheet metal panels. Thanks to the blue protective coating, the arms have a particularly good grip. The fixed stop protects the blades and prevents possible injury from crushing. Additionally, the sheet metal shear is characterized by its easy handling and smooth cutting.

#### Benefits

- High force through lever amplification
- Fixed stop offers protection for the blades.

#### Technical attributes

#	 EAN	 mm/inch	 right	 kg/lb
981-300	-560935	300 11 13/16	right	0,68 1,499





## PRODUCT DETAILS

### SERIES 982 SHEET METAL SHEARS







The sheet metal shears are used for short and straight cuts as well as contour cuts for non-deforming cutting of sheets. Thanks to the blue protective coating, the arms have particularly good grip. The solid stop protects the blades and prevents possible injury from crushing. In addition, the shears stand out for their easy handling and smooth cutting.

#### Benefits

- High force through lever amplification
- Fixed stop offers protection for the blades.

#### Technical attributes

#	 EAN	 mm/inch		 kg/lb
982-250	-561017	250 9 13/16	right	0,465 1,025
982-251	-561192	250 9 13/16	left	0,52 1,147
982-275	-561277	275 10 13/16	right	0,55 1,213
982-276	-561352	275 10 13/16	left	0,47 1,036
982-300	-646004	300 11 13/16	right	0,57 1,257
982-301	-646189	300 11 13/16	left	0,7 1,544

### SERIES 983 IDEAL SHEARS







The Ideal scissors are used for straight and tapered cuts as well as figure cuts for cutting sheets without deformation. Thanks to the blue protective coating, the arms have a particularly good grip. The solid stop protects the blades and prevents possible injury from crushing. In addition, the sheet metal scissors stand out for their easy handling and smooth cutting.

#### Benefits

- High force through lever amplification
- Fixed stop offers protection for the blades.

#### Technical attributes

#	 EAN	 mm/inch		 kg/lb
983-260	-561437	260 10 1/4	right	0,615 1,356
983-261	-561505	260 10 1/4	left	0,59 1,301
983-280	-561680	280 11 1/32	right	0,605 1,334
983-281	-561765	280 11 1/32	left	0,605 1,334

## PRODUCT DETAILS

### SERIES 986 GOLDSMITH / FINE SHEET METAL SHEARS







The goldsmith / sheet metal shears are used for cutting thin sheets. Thanks to the protective coating, the arms have a particularly good grip. The firm stop protects the blades and prevents possible injury from crushing. The slim design of the arms allows processing even in hard-to-reach places.

#### Benefits

- High force through lever amplification
- Fixed stop offers protection for the blades.
- Available with straight or curved cutting edges

#### Technical attributes

#				
	EAN	mm/inch		kg/lb
<b>986-180</b>	-562182	180 7 1/16	right	0,105 0,232
<b>986-181</b>	-562267	180 7 1/16	left	0,12 0,265

### SERIES 987 GOLDSMITH / FINE SHEET METAL SHEARS







The goldsmith's fine sheet metal shear is used for cutting thin sheets. Thanks to the protective coating, the arms have a particularly good grip. The slim design of the arms allows processing even in hard-to-reach places.

#### Benefits

- High force through lever amplification
- Fixed stop offers protection for the blades.
- Available with straight or curved cutting edges

#### Technical attributes

#				
	EAN	mm/inch		kg/lb
<b>987-180</b>	-562342	180 7 1/16	right	0,105 0,232
<b>987-181</b>	-562427	180 7 1/16	left	0,13 0,287

## PRODUCT DETAILS

### SERIES 988 GOLDSMITH / FINE SHEET METAL SHEARS







The goldsmith / sheet metal shears are used for cutting thin sheets. Thanks to the protective coating, the arms have a particularly good grip. The firm stop protects the blades and prevents possible injury from crushing. The slim design of the arms allows processing even in hard-to-reach places.

#### Benefits

- High force through lever amplification
- Fixed stop offers protection for the blades.
- Available with straight or curved cutting edges

#### Technical attributes

#	 EAN	 mm/inch	 right	 kg/lb
<b>988-180</b>	-562595	180 7 1/16	right	0,105 0,232
<b>988-181</b>	-562670	180 7 1/16	left	0,09 0,198

### SERIES 993 UNIVERSAL COMBINATION SCISSORS








The universal combination scissors are used for cutting various materials for industry and crafts. The scissors cut, for example, sheet metal, wire, plastic, rubber, leather, cardboard, and paper. This makes them a true all-rounder among cutting tools. Equipped with a practical one-handed metal lock, the scissors can be easily opened or closed.

#### Benefits

- High force through lever amplification
- Practical One-Handed Closure

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 right	 kg/lb
<b>993-140</b>	-563585	140 5 1/2	33 1 5/16	right	0,08 0,176
<b>993-190</b>	-563660	190 7 1/2	42 1 5/8	right	0,125 0,276



## PRODUCT DETAILS

### SERIES 995 WORK SCISSORS








The work scissors are used for cutting thick paper, cardboard, thin rubber, leather, and textiles, making them versatile. They feature one long and one round grip eye, which guarantees optimal guidance.

#### Benefits

- High force through lever amplification
- Universally applicable for processing various materials



#### Technical attributes

#					
	EAN	mm/inch	mm/inch		kg/lb
995-175	-166441	250 9 13/16	83 3 1/4	right	0,215 0,474
995-200	-563905	175 6 7/8	94 3 11/16	right	0,22 0,485
995-225	-166465	225 8 7/8	110 4 5/16	right	0,285 0,628
995-250	-564087	200 7 7/8	120 4 3/4	right	0,4 0,882

### SERIES 996 MULTIPURPOSE SCISSORS








The multipurpose scissors can be used individually and are used for cutting paper and fabric. It features one long and one round handle eye, which ensures optimal guidance. The handles made of impact-resistant plastic are adjustable and screwed together.

#### Benefits

- High force through lever amplification
- Universally applicable for processing a variety of materials

#### Technical attributes

#					
	EAN	mm/inch	mm/inch		kg/lb
996-210	-564247	210 8 1/4	75 2 15/16	right	0,12 0,265

## PRODUCT DETAILS

### SERIES 997 WICK SCISSORS








The wick scissors are used to cut burnt-down wicks to the desired length. The glowing wick stays on the cutting edge without contaminating the candle. The wick scissors feature two round finger holes that ensure optimal handling.

#### Benefits

- High force through lever amplification
- Cut the glowing wick.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 right	 kg/lb
997-150	-140311	150 5 7/8	43 1 11/16		0,215 0,474

### SERIES 121 SCREW HOLE PUNCH













The screw punches of series 121 are used for uniformly punching plastic support rods for distance sensors as well as for stamping holes in thin-walled materials. During the working process, the workpiece is not deformed. Each screw punch consists of a punch, a die, and a pressure screw in a particularly stable design.

#### Benefits

- Special cutting geometry prevents the detachment of the carriage point
- Can be used without any problems on already painted bumpers.

#### Technical attributes

#	 EAN	 M10x1	 mm/inch	 mm/inch	 kg/lb	#	 EAN	 M10x1	 mm/inch	 mm/inch	 kg/lb
121-182	-831379	M10x1	18,2 11/16	17 11/16	0,105 0,232	121-266	-403187	M10x1	26,6 1 11/32	17 11/16	0,195 0,430
121-184	-403163	M10x1	18,4 11/16	17 11/16	0,09 0,198	121-282	-079757	M10x1	28,2 1 1/8	17 11/16	0,18 0,397
121-186	-058745	M10x1	18,6 11/16	17 11/16	0,095 0,209	121-293	-058776	M10x1	29,3 1 1/8	17 11/16	0,195 0,430
121-190	-079092	M10x1	19 3/4	17 11/16	0,105 0,232	121-310	-009716	M10x1	31 1 1/4	17 11/16	0 0,000
121-200	-202544	M10x1	20 13/16	17 11/16	0,1 0,221	121-319	-403194	M10x1	31,9 1 1/4	17 11/16	0,255 0,562
121-225	-202575	M10x1	22,5 7/8	17 11/16	0,125 0,276	121-326	-403200	M10x1	32,6 1 1/4	17 11/16	0,265 0,584
121-260	-831386	M10x1	26 1 1/32	17 11/16	0,16 0,353	121-389	-403224	M10x1	38,9 1 1/2	17 11/16	0,34 0,750
121-265	-058752	M10x1	26,5 1 1/32	17 11/16	14 30,870						

## PRODUCT DETAILS

### SERIES 49 SCREW EXTRACTOR



Application video:








The screw extractors of series 49 with finely grooved shape are used for removing broken bolts and screws with right-hand threads. Thus, the screw extractor is an indispensable tool that neither hobbyists nor professional craftsmen can do without.






#### Benefits

- Fine grooves ensure better traction and thus a comfortable working method.
- Optimized thread lengths ensure a shallow drilling depth.



#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
<b>49-1</b>	-018008	50 1 15/16	3 - 6 1/8 - 1/4	2,7 1/8	0,5 1,103
<b>49-2</b>	-018183	57 2 1/4	6 - 8 1/4 - 5/16	3,8 1/8	0,1 0,221
<b>49-3</b>	-018268	64 2 1/2	8 - 11 5/16 - 7/16	4,9 3/16	0,15 0,331
<b>49-4</b>	-018343	71 2 13/16	11 - 14 7/16 - 9/16	7 1/4	0,03 0,066
<b>49-5</b>	-018428	78 3 1/16	14 - 18 9/16 - 11/16	9 3/8	0,05 0,110
<b>49-6</b>	-018596	85 3 3/8	18 - 24 11/16 - 15/16	12 1/2	0,1 0,221

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
<b>49-7</b>	-018671	92 3 5/8	24 - 33 15/16 - 1 5/16	14,5 9/16	0,165 0,364
<b>49-8</b>	-018756	100 3 15/16	33 - 45 1 5/16 - 1 3/4	18 11/16	0,29 0,639
<b>49-9</b>	-018831	112 4 7/16	45 - 52 1 3/4 - 2 1/16	24 15/16	0,555 1,224
<b>49-10</b> <b>NEW</b>	-239809	141,5 5 9/16	52 - 64 2 1/16 - 2 1/2	31,2 1 1/4	0,99 2,183

### 49-A SCREW EXTRACTOR SET

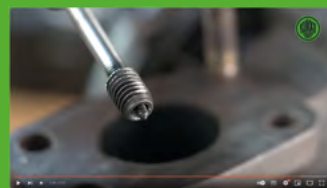


The 5-piece screw extractor set 49-A with finely grooved shape is used for extracting broken bolts and screws with right-hand threads. The screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without. The set includes screw extractors for thread diameters starting from M3 and depending on the version, up to a diameter of M18 (49-A), M24 (49-B), or M45 (49-C).






#### Benefits

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.

Application video:



#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
<b>49-A</b>	-018916	50, 57, 64, 71, 78 1 15/16; 2 1/4; 2 1/2; 2 13/16; 3 1/16	M3 - M18 -	2,7; 3,8; 4,9; 7; 9 1/16; 1/8; 3/16; 1/4; 3/8	0,53 1,169



## PRODUCT DETAILS

### 49-B SCREW EXTRACTOR SET



The 5-piece screw extractor set 49-B with finely grooved shape is used for extracting broken bolts and screws with right-hand threads. The screw extractors are an indispensable tool that neither hobbyist nor professional tradesperson can do without. The set includes screw extractors for thread diameters starting from M3 and depending on the design, up to diameters of M18 (49-A), M24 (49-B), or M45 (49-C).






#### Benefits

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.

#### Application video:



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
49-B	-019098	50, 57, 64, 71, 78, 85 1 15/16; 2 1/4; 2 1/2; 2 13/16; 3 1/16; 3 3/8	M3 - M24 -	2,7; 3,8; 4,9; 7; 9; 12 1/16; 1/8; 3/16; 1/4; 3/8; 1/2	0,636 1,402

### 49-C SCREW EXTRACTOR SET

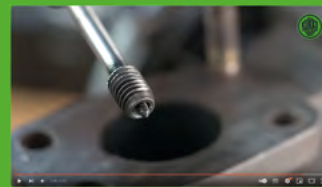


The 8-piece screw extractor set 49-C with finely serrated shape is used to extract broken bolts and screws with right-hand threads. The screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without. The set includes screw extractors for thread diameters from M3 and, depending on the design, up to a diameter of M18 (49-A), M24 (49-B), or M45 (49-C).






#### Benefits

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.

#### Application video:



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
49-C	-019173	50, 57, 64, 71, 78, 85, 92, 100 1 15/16; 2 1/4; 2 1/2; 2 13/16; 3 1/16; 3 3/8; 3 5/8; 3 15/16	M3 - M45 -	2,7; 3,8; 4,9; 7; 9; 12; 14,5; 18 1/16; 1/8; 3/16; 1/4; 3/8; 1/2; 2,9/16; 11/16	0,75 1,654

## PRODUCT DETAILS

### SERIES K-49 READY-TO-USE SCREW EXTRACTOR SET IN CASE








The 10-piece, ready-to-use screw extractor set from the K-49 series with fine ribbed shape is used for extracting broken bolts and screws with right-hand thread. Ideal for screws with a thread diameter of 4 to 20 mm. The set contains six screw extractors, a ratchet, two chucks, and an adapter, making it ready for immediate use. The screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without.

#### Benefits

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb	Components
<b>K-49-B NEW</b>	-041938	50, 55, 61, 65, 69 1 15/16, 2 3/16, 2 3/8, 2 9/16, 2 11/16	4 - 20 3/16 - 13/16	2,6, 3,8, 4,8, 7, 9 1/16, 1/8, 1/8, 3/16, 5/16	0,22 0,485	49-T-1, 49-T-2, 49-T-3, 49-T-4, 49-T-5

### SERIES 49-0 SCREW EXTRACTOR








The screw extractors of series 49-0 with broad ribbed shape are used for removing broken bolts and screws with right-hand threads. Thus, the screw extractor is an indispensable tool that neither hobbyist nor professional tradesman can do without.

#### Benefits

- Wide grooves are particularly suitable for soft materials, such as brass and aluminum.
- Optimized thread lengths ensure a shallow drilling depth.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>49-01</b>	-490569	48 1 7/8	3 - 6 1/8 - 1/4	3,2 1/8	0,05 0,110
<b>49-02</b>	-490644	54 2 1/8	6 - 8 1/4 - 5/16	4,2 3/16	0,005 0,011
<b>49-03</b>	-490729	60 2 3/8	8 - 11 5/16 - 7/16	5 3/16	0,01 0,022
<b>49-04</b>	-490804	67 2 5/8	11 - 14 7/16 - 9/16	6,4 1/4	0,02 0,044
<b>49-05</b>	-490989	86,5 3 3/8	14 - 18 9/16 - 11/16	9 3/8	0,04 0,088
<b>49-06</b>	-491061	95 3 3/4	18 - 24 11/16 - 15/16	12 1/2	0,12 0,265

## PRODUCT DETAILS

### SERIES 49-0-S SCREW EXTRACTOR SET WITH WIDE-GROOVED, AMERICAN SHAPE








The screw extractor set with wide, grooved shape is used for extracting broken bolts and screws with right-hand threads. The screw extractors are an indispensable tool that neither hobbyist nor professional craftsmen can do without. The set includes screw extractors for thread diameters from 3 to 24 mm.

#### Benefits

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
49-0-S	-491146	48, 54, 60, 67, 86, 5, 95 1 7/8; 2 1/8; 2 3/8; 2 5/8; 3 3/8; 3 3/4	3 - 24 1/8 - 15/16	3,2; 4,2; 5; 6,4; 9; 12 1/8; 3/16; 3/16; 1/4; 3/8; 1/2	0,195 0,430

### SERIES 49-T "SUPER TRACTION" SCREW EXTRACTOR








The screw extractor "Super Traction" is used to extract broken bolts and screws with right-hand threads. Thus, the screw extractor is an indispensable tool that neither hobbyist screwdrivers nor professional craftsmen can do without.

#### Benefits

- Narrow grooves ensure better traction and thus a comfortable operation.
- Optimized thread lengths ensure a shallow drilling depth.

#### Technical attributes

#						Included in the set
	EAN	mm/inch	mm/inch	mm/inch	kg/lb	
49-T-1	-758461	50 1 15/16	4 - 5 3/16 - 3/16	2,6 1/8	0,1 0,221	K-49-B
49-T-2	-758539	55 2 3/16	5 - 7 3/16 - 1/4	3,8 1/8	0,1 0,221	K-49-B
49-T-3	-758614	61 2 3/8	8 - 12 5/16 - 1/2	4,8 3/16	0,15 0,331	K-49-B
49-T-4	-758799	65 2 9/16	12 - 14 1/2 - 9/16	7 1/4	0,2 0,441	K-49-B
49-T-5	-758874	69 2 11/16	16 - 20 5/8 - 13/16	9 3/8	0,44 0,970	K-49-B



## PRODUCT DETAILS

### SERIES 49-T-A SCREW EXTRACTOR SET "SUPER TRACTION"








The screw extractor set "Super Traction" is used to extract broken bolts and screws with right-handed threads. The screw extractors are an indispensable tool that neither DIY enthusiasts nor professional craftsmen can do without. The set includes screw extractors for thread diameters from 4 to 20 mm.

#### Benefits

- Application-oriented assembly for universal use
- Through the shared storage, the completeness of the set can be easily overseen.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
49-T-A	-758959	50, 55, 61, 65, 69 1 15/16; 2 3/16; 2 3/8; 2 9/16; 2 11/16	4 - 20 3/16 - 13/16	2,6; 3,8; 4,8; 7; 9 1/16; 1/8; 3/16; 1/4; 3/8	0,11 0,243

### SERIES 49-U SCREW EXTRACTOR WITH DRILLS AND DRILL SOCKET







The screw extractors with drills and drill sockets are used for extracting broken bolts and screws. Thus, screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without.

#### Benefits

- Optimized thread lengths ensure a low drilling depth

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
49-U-11	-799549	M5 - M7 -	3,2 1/8	0,3 0,662
49-U-12	-799624	M8 - M9 -	4,8 3/16	0,55 1,213
49-U-13	-799709	M10 - -	6,4 1/4	0,85 1,874
49-U-14	-799884	M12 - -	8 5/16	0,125 0,276
49-U-15	-799969	M14 - M16 -	8,7 5/16	0,16 0,353

## PRODUCT DETAILS

### SERIES 49-U-B SCREW EXTRACTOR SET





The 25-piece screw extractor set with drills and drill sockets is used for universal extraction of broken bolts and screws. The screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without. The set includes screw extractors for screw threads from M5 to M16.

#### Benefits

- Application-oriented assembly for universal use
- Through the shared storage, the completeness of the set can be easily overseen.



#### Technical attributes

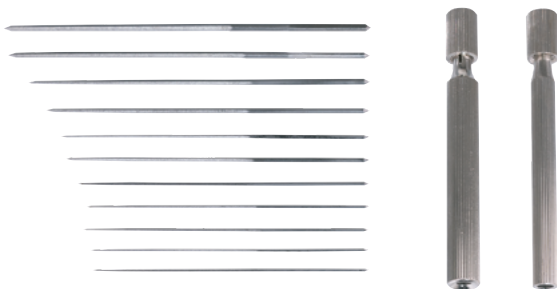
#	 EAN	 mm/inch	 mm/inch	 kg/lb
49-U-B	-799136	M5 - M16 -	3,2-8,7 1/8-5/16	0,85 1,874

### SERIES 245 NOZZLE REAMER SET






The 12-piece nozzle reamer set is used for cleaning nozzles. The set consists of two tool holders and eleven reamers with various diameters ranging from 0.6 to 1.9 mm.

#### Benefits

- Compact and handy range that can be used for all nozzle sizes.



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
245-004	-597412	150 5 7/8	0,6; 0,65; 0,7; 0,75; 0,8; 0,9; 1,0; 1,1; 1,3; 1,5; 1,7; 1,9 1/32 - 1/16	20 - 50 13/16-1 15/16	0,25 0,551









# PRESSING & INSERTING

For the professional and precise installation of bearings, the replacement of silent bushings on axles in the automotive sector, as well as for the hydraulic pressing in and out of axle knuckle bolts – KUK-KO offers the perfect solution for every application.

The activities related to pressing & inserting include:

- Bearing installation tool sets
- Universal press frames
- Workshop press AXLE





# APPLICATION OF BEARING INSTALLATION TOOL OF SERIES 71

The heavy-duty bearing installation tool set made of steel from series 71 is used for the installation of bearings using a hydraulic press or hammer in craftsmanship, industry, and workshops. The set includes 33 impact rings and 5 impact tubes made of extra strong steel, as well as 1 SELCTHOR with two different impact inserts (PU/CA). The tool set allows for a damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

## Benefits

- Application-oriented assembly for universal use
- The combination of impact ring and impact sleeve required for the installation of the ball bearing can be taken from the table in the suitcase lid
- By combining the impact ring and impact tube, the installation forces are never transmitted through the rolling elements of the bearing, thus preserving them

## BUILD-UP



## SET

The storage inserts are available in various suitcase sets. Depending on the application, different assortments can be chosen.



K-71-L-F



K-71-W-B



K-71-W-B



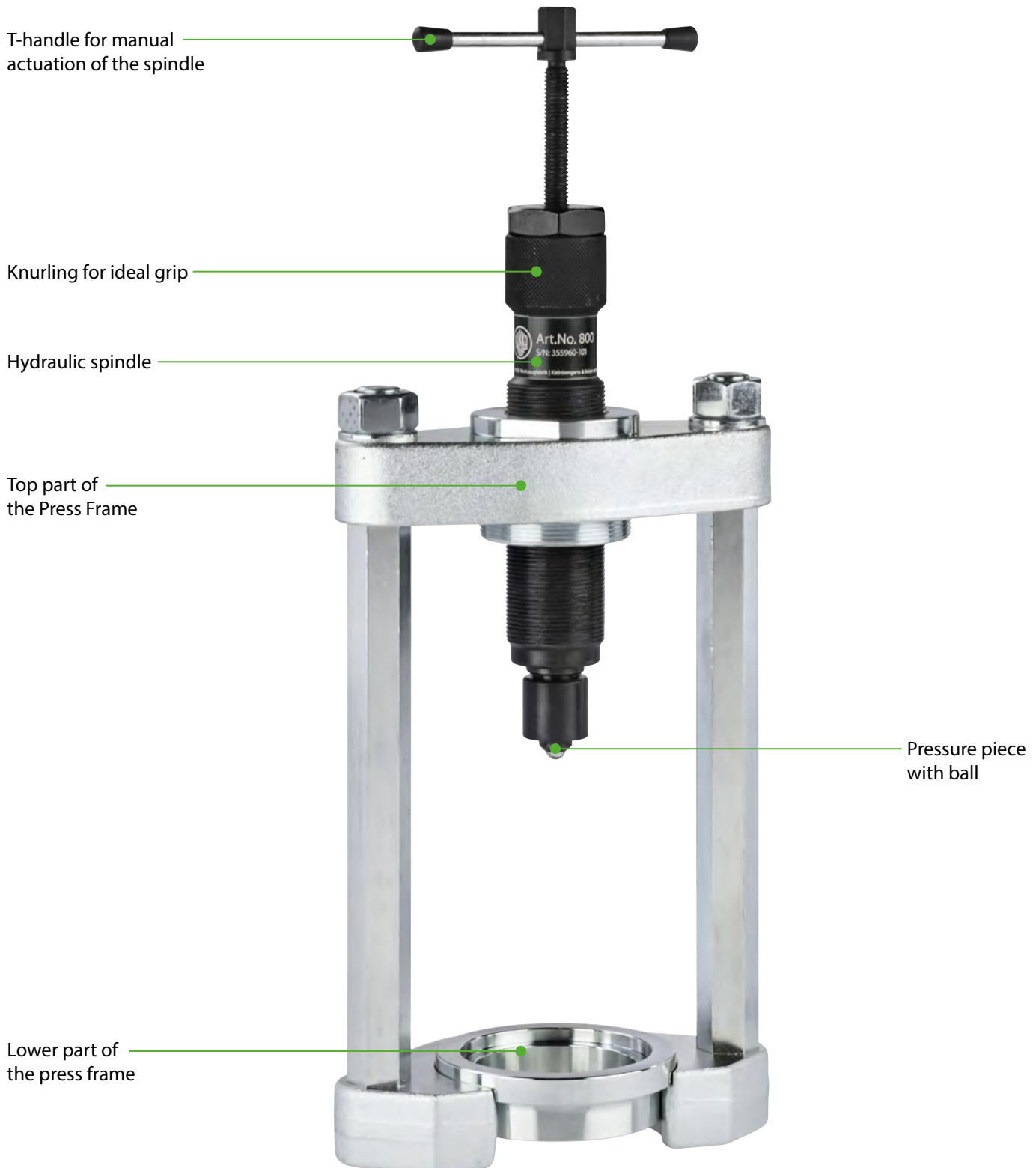
# USE OF UNIVERSAL PRESS FRAME OF SERIES 880 & 890

The universal press frames for silent bushes are used for axle replacement at the front and rear axle without disassembling the axle in the automotive industry, e.g. for silent bearings, hydraulic bearings, plastic bearings, ball joints, or shock absorber rubber. The press frames of series 880 are available in various designs for varying load requirements and are universally applicable.

## Benefits

- The compact and robust design makes the press frame versatile in its application.
- The hydraulic system enables high pulling performance with low effort.
- The axially operating piston does not rotate with the hydraulic spindle.

## ASSEMBLY



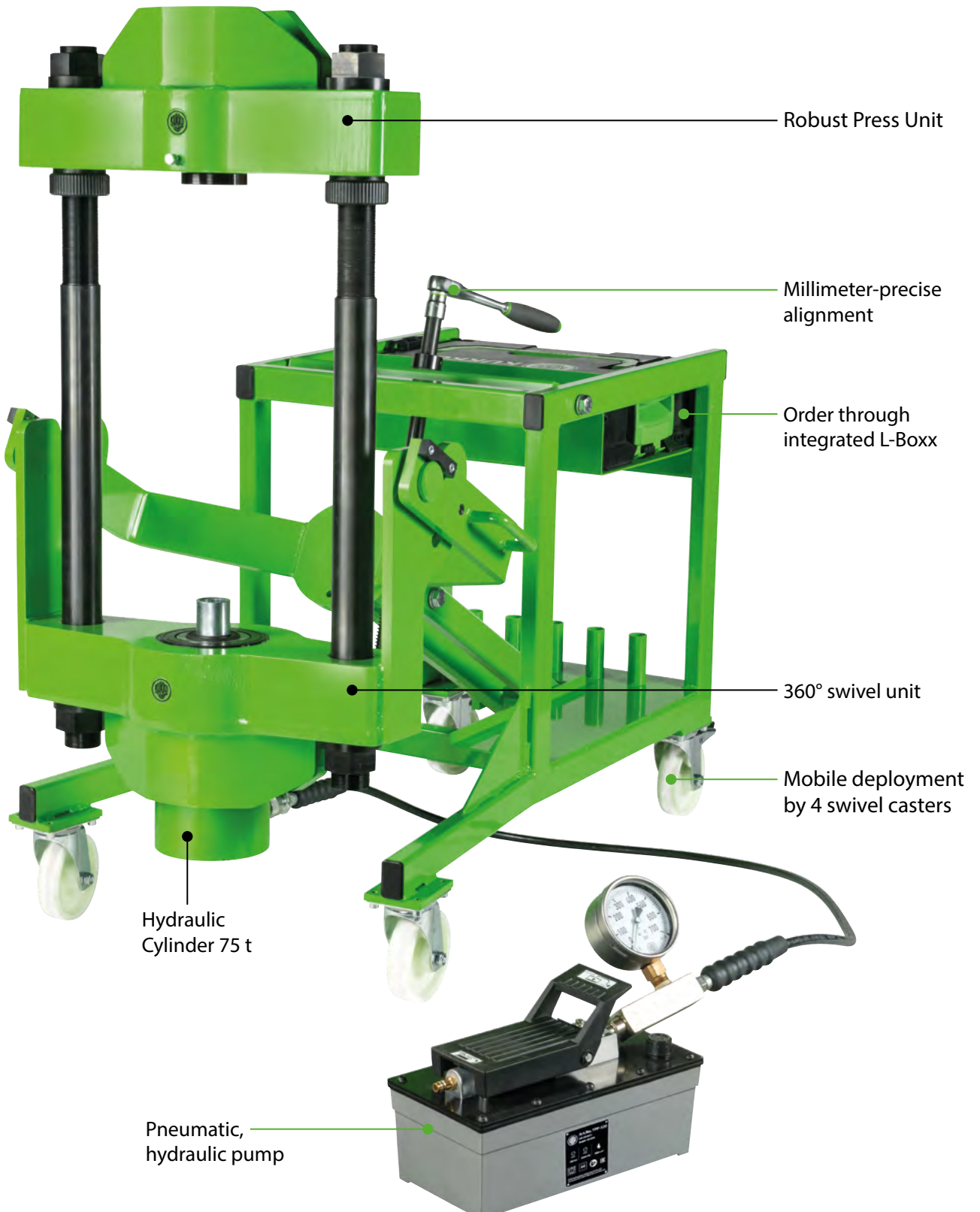
# USE OF THE AXLE BALL JOINT PRESS AXLE

The hydraulic axle pin press is used for the quick pressing in and out of all common axle pins on commercial vehicle front axles. For positioning, the working unit is swiveling and adjustable, and the flat design allows work even on low-lying vehicles.

## Benefits

- The press can be used in both the assembled and disassembled state of the axle
- The 360° swiveling lever actuation enables ergonomic operation from the working area
- Flexible to position in the workshop due to mobile deployment

## ASSEMBLY





# APPLICATION EXAMPLES



Inserting the appropriate impact ring into the impact tube when using a K-71 set



Pressing a bearing using a K-71



The hydraulic axle joint bolt press "AXLE" Y-AP-75 is adjusted with a ratchet.



The hydraulic axle tie rod press "AXLE" Y-AP-75 is ready for use on a truck.



## PRODUCT DETAILS

### SERIES 71 BEARING INSTALLATION TOOL SET MADE OF STEEL, HEAVY-DUTY









The heavy-duty bearing installation tool set made of steel from series 71 is used for the installation of bearings using a hydraulic press or hammer in crafts, industry, and workshops. The set includes 33 impact rings and 5 impact tubes made of extra strong steel, as well as 1 SELECTHOR with two different impact inserts (PU/CA). The tool set allows for damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The included SELECTHOR hammer can be used flexibly by swapping the provided striking heads.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb
71	-314841	15, 20, 30, 40, 55 9/16;13/16;1 3/16;1 9/16;2 3/16	25, 30, 40, 50, 65 1	225 8 7/8	26 - 110 1 1/32-4 5/16	17,75 39,139

### SERIES 71-L BEARING INSTALLATION TOOL SET MADE OF STEEL, HEAVY-DUTY






The 37-piece bearing installation tool set, as a lightweight external mounting model of series 71-L, is used for the quick, precise, and safe installation of bearings and seals in craft, industry, and workshops. The set includes 33 impact rings made of impact-resistant polyethylene terephthalate and 3 impact tubes made of aluminum, as well as 1 SELECTHOR with two different impact inserts (PU/CA). The tool set enables damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The included SELECTHOR hammer can be used flexibly by swapping the provided striking heads.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
71-L	-782121	19, 32, 50 3/4, 1 1/4, 1 15/16	220 8 11/16	26 - 110 1 1/32-4 5/16	6,34 13,980

## PRODUCT DETAILS

### SERIES 71-L-F BEARING INSTALLATION TOOL SET MADE OF STEEL, HEAVY-DUTY








The 37-piece bearing installation tool set made of steel from the series 71-L-F is used for the quick, precise, and safe installation of bearings and seals in crafts, industry, and workshops. The set includes 33 impact rings made of impact-resistant polyethylene terephthalate, 3 impact tubes made of aluminum, and a soft-face hammer. The tool set guarantees damage-free installation of bearings, axles, bearing housings, or seal rings and is used, among others, in the food industry.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Usable for mounting in the housing, on the shaft, or both simultaneously



#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
71-L-F	-007613	19, 32, 50 3/4, 1 1/4, 1 15/16	220 8 11/16	26 - 110 1 1/32-4 5/16	6,34 13,980

### SERIES K-71-L-A BALL BEARING INSTALLATION SET








The 22-piece ball bearing installation kit K-71-L-A is used for the fast, precise, and secure installation of bearings and seals in craft, industry, and workshop. The set includes 18 impact rings made of impact-resistant polyethylene terephthalate, 2 impact tubes made of aluminum, an impact head, and a soft-face hammer. The tool set ensures a damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- By combining the impact ring and impact tube, the installation forces are never transmitted through the roller bodies of the bearing, thus protecting it.

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
K-71-L-A	-909818	19, 32 3/4; 1 1/4	220 8 11/16	26 - 55 1 1/32-2 3/16	5,155 11,367

## PRODUCT DETAILS

### SERIES K-71-L-B BALL BEARING INSTALLATION SETBALL BEARING INSTALLATION KIT








The 20-piece K-71-L-B ball bearing installation set is used for the quick, precise, and safe installation of bearings and seals in crafts, industry, and workshops. The set includes 16 impact rings made of impact-resistant polyethylene terephthalate, 2 impact tubes made of aluminum, an impact head, and a soft-face hammer. The tool set ensures a damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- By combining the impact ring and impact tube, the installation forces are never transmitted through the roller bodies of the bearing, thus protecting it.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
K-71-L-B	-909825	32, 50 1 1/4, 1 15/16	220 8 11/16	52 - 110 2 1/16-4 5/16	6,15 13,561

### SERIES K-71-L-C BALL BEARING INSTALLATION SETBALL BEARING INSTALLATION SET








The 38-piece ball bearing installation set K-71-L-C is used for the quick, precise, and safe installation of bearings and seals in crafts, industry, and workshops. The set includes 33 impact rings made of impact-resistant polyethylene terephthalate, 3 impact tubes made of aluminum, an impact head, and a soft-face hammer. The tool set ensures a damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- By combining the impact ring and impact tube, the installation forces are never transmitted through the roller bodies of the bearing, thus protecting it.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
K-71-L-C	-909832	19, 32, 50 1 1/4, 1 15/16	220 8 11/16	26 - 110 1 1/32-4 5/16	6,555 14,454



## PRODUCT DETAILS

### SERIES 880 UNIVERSAL PRESS FRAME FOR SILENT BUSHINGS








The universal press frames for silent bushings are used for axle changes on the front and rear axles in automotive applications without removing the axle, for example, for silent bearings, hydraulic bearings, plastic bearings, control arms or shock absorber rubber. The press frames of the series 880 are available in various designs for varying load requirements and can be used universally.

#### Benefits

- For the series 800, there are numerous easily interchangeable and combinable individual parts and extensions.
- The compact and sturdy design makes the press frames versatile in their application.



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. Pressing force</b> t/US t. sh.	 kg/lb
<b>880-800</b>	-433689	200 7 7/8	80 3 1/8	40 29.50	10 11.02 tn sh	7,1 15,656
<b>880-801</b>	-433696	200 7 7/8	80 3 1/8	70 51.63	15 16.53 tn sh	6,7 14,774
<b>880-802</b>	-433702	200 7 7/8	80 3 1/8	100 73.76	20 22.05 tn sh	7,16 15,788

### SERIES 890 PULLER SET FOR EVOBUS SUSPENSION JOINTS









The puller set for suspension joints EVOBUS is used for the installation and removal of the control arm on ZF axles. The tools can be applied on axles RL 75 E, which serve as the front axle for all high-floor buses (buses with trunk, coaches from Euro II and combi buses from Euro IV) from Setra and Mercedes-Benz. Furthermore, they are applicable to the axles RL 75 EC, which are used as front axles for low-floor buses (Citaro, Setra low-floor series 400 or S 415 NF), and in coaches and combi buses as auxiliary axles.

#### Benefits

- The smooth-running spindle with trapezoidal thread allows for precise force transmission.
- Special tool for optimal application on ZF axles

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	<b>Max. Pressing force</b> t/US t. sh.	 kg/lb
<b>890-EVO1</b>	-020834	320 12 5/8	58 - 79 2 5/16-3 1/8	36 1 7/16	400 295.04	12 13.23 tn sh	12,69 27,981

## PRODUCT DETAILS

### SERIES AXLE MOBILE HYDRAULIC AXLE PIN PRESS "AXLE"











The hydraulic axle joint press of the Axle series is used for the quick pressing in and out of all common axle joints on commercial vehicle front axles in workshops, industry, and automotive applications. The Axle series impresses with its time-saving and universal application. For quick and easy positioning, the working unit is pivotable and pre-adjustable, and the flat design allows work even on low-lying vehicles.

#### Benefits

- The press can be used both in the assembled and disassembled state of the axle.
- The 360° swivel lever actuation enables ergonomic operation from the work area.

#### Technical attributes




#								Max. pressing force	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	bar	°	t/US t. sh.	kg/lb
Y-AP-75	-691157	370 14 9/16	615 24 3/16	1.100 43 5/16	155 6 1/8	700	360	75 82.67 tn sh	286 630,630

### SERIES Y-AP-3XX ACCESSORIES FOR HYDRAULIC PULLING



The accessories for "AXLE" Y-AP-75 are used together with it for the quick and problem-free pressing out and in of truck axle eye bolts in craftsmanship, industry, and workshops.

#### Technical attributes

#		$\varnothing$	$\overline{L}$		
	EAN	mm/inch	mm/inch	kg/lb	
Y-AP-371	-060076	21,5 - 39 13/16-1 9/16	120 - 220 4 3/4-8 11/16	10,7 23,594	Y-AP-75
Y-AP-372	-060083	50 - 66 1 15/16-2 5/8	35 - 100 1 3/8-3 15/16	0 0,000	Y-AP-75
Y-AP-373	-060090	22 - 37 7/8-1 7/16	70 - 220 2 3/4-8 11/16	19,1 42,116	Y-AP-75











# GRIPPING & HOLDING

Holding, gripping, expanding, and compressing multiple workpieces, separating flange connections, widening the receptacle of struts, tensioning and riveting chains, removing and tensioning coil springs, or guiding the tilt during engine removal – KUKKO offers the perfect solution for every application.

The activity of Gripping & Holding includes, among others:

- Clamps
- Clamping jaws
- Vises
- Flange spreaders
- Pliers
- Spreaders
- Chain tensioners
- Spring tensioners
- Tool holders
- URANOS



# DEPLOYMENT

The clamping tools from KUKKO are the ideal choice when it comes to securing or holding workpieces together. Depending on the area of application or required clamping force, KUKKO offers various tools for individual processing with the file clamps, screw clamps, locking pliers, and screw blocks.

## ASSEMBLY CLAMP USING EXAMPLE 490P



### Benefits

- The 2K comfort grip provides an optimal grip when hands are wet or oily
- Maximum power transmission thanks to the contoured grip with haptic surface
- Anti-slip safety enables a simple locking of the sliding piece
- Secure positioning of the sliding block
- Preset of the reach
- One-handed locking of the sliding jaw
- Tension force up to 7,000 N (depending on model)
- KTL coating provides significantly increased corrosion protection



# FEATURES OF THE SERIES

## CLAMPS



**SERIES 490P**

The VIRIDIS ductile iron clamps with 2K comfort grip are used for compressing and holding multiple workpieces. Thanks to the steel sliding rail, high clamping force can be achieved. The series 490P is equipped with a 2-component handle that allows for safe and stable work.

## CLAMP JAW



**SERIES 101**

The hand vises with a wide jaw and hexagon nut are used for flat clamping of smaller workpieces. The inner side of the jaws is ribbed with a prismatic notch, allowing round and angular parts to be clamped. Ideal for finer machining as well as forging work.

## LOCKING PLIERS



**SERIES 690**

The universal locking pliers are used for securely holding and compressing round, Profilee, and flat materials. The locking pliers are very handy and can be operated with one hand. The knee lever mechanism also allows for the application of very high forces.

## FLANGE SPREADER



**SERIES 160**

The flange spreaders are used in pairs for safely and accident-free separating flange connections of piping in power plants, petrochemicals, or off-shore. They enable the separation of large and high-performance flanges, facilitating maintenance work.

## VICES



**SERIES 525**

The parallel vises with extremely high clamping force are used for clamping and securing workpieces. Due to the induction-hardened parts, the vise is ideally suited for fixing medium-sized workpieces. In addition, this ensures the necessary durability and stability of the vise.

## MOTOR DIRECTOR



**SERIES URANOS**

The engine conductor "URANOS" is used for controlling the angle when installing and removing engines, transmissions, and batteries of all types in industry and workshop. By operating the hand chain, the engine conductor can be universally and easily adjusted to ensure smooth operation on the engine.

## APPLICATION EXAMPLES



In welding applications, the all-steel clamping tool acts as a "third hand." The image shows a model from the series 469P.



Clamping a workpiece with a vise from the 525 series.



Cutting a wire with a universal locking pliers from the series 690.



Two hand vises 101-100 for clamping several workpieces for drilling operations.

## PRODUCT DETAILS

### SERIES 101 HAND VISE WITH WIDE JAW








The hand vises with a wide jaw and hex nut of the series 101 are used for flat clamping of workpieces in workshops, industry, and crafts. The inner side of the jaws is grooved with a prismatic cut, allowing round and angular parts to be clamped. The series 101 impresses with its convenience, enabling rotation and flipping of the workpiece during operation.

#### Benefits

- Universal usability in various work situations
- Robust design with flexible hinge guidance

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
101-100	-535049	100 3 15/16	40 1 9/16	18 11/16	0,365 0,805
101-120	-535124	120 4 3/4	45 1 3/4	22 7/8	0,5 1,103
101-130	-042225	130 5 1/8	48 1 7/8	25 1	0,545 1,202
101-145	-535384	145 5 11/16	52 2 1/16	28 1 1/8	0,85 1,874
101-160	-535469	160 6 5/16	58 2 5/16	35 1 3/8	1,04 2,293
101-180	-535537	180 7 1/16	60 2 3/8	40 1 9/16	1,56 3,440
101-200	-535612	200 7 7/8	65 2 9/16	45 1 3/4	2 4,410

### SERIES 102-120 POINTED JAW VISE WITH POINTED MOUTH AND WING NUT HAND VISE WITH WIDE JAW








The pointed jaw vise with pointed mouth and wing nut of the series 102 is used for particularly firm gripping of workpieces on a small surface in workshops, industry, and crafts. The inner side of the jaws is ribbed with a prismatic cut, so that round and angular parts can be clamped. The series 102 impresses with its handy design, which allows for rotating and turning the workpiece during operation.

#### Benefits

- Universal usability in various work situations
- Robust design with flexible joint guidance

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
102-120	-527617	120 4 3/4	13 1/2	20 13/16	0,355 0,783



## PRODUCT DETAILS

### SERIES 103 HAND VISE WITH WIDE JAWS AND KEYHAND VISE WITH WIDE JAW








The hand vises with wide jaws and key of series 103 are used for flat clamping of workpieces in workshops, industry, and crafts. The inner side of the jaws is grooved with a prismatic cut, allowing both round and angular parts to be clamped securely. The series 103 impresses with its convenience, enabling rotation and turning of the workpiece while working.

#### Benefits

- Universal Applicability in Various Work Situations
- The key enables a quick and secure grip on the workpiece
- Different designs allow for application depending on the size of the workpiece.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
103-160	-909833	160 6 5/16	58 2 5/16	35 1 3/8	1,075 2,370
103-180	-527952	180 7 1/16	60 2 3/8	40 1 9/16	1,635 3,605
103-200	-528034	200 7 7/8	65 2 9/16	45 1 3/4	2,365 5,215

### SERIES 106 DOUBLE STRONG HAND VISE WITH WIDE JAWHAND VISE WITH WIDE JAW








The double-strong hand vises with wide jaw, hex nut, and key from series 106 are used for clamping workpieces in medium-heavy tasks in steel construction. The inner side of the jaws is grooved with a prismatic cut, allowing for the clamping of round and angular parts. Series 106 impresses with its ease of handling, enabling rotation and flipping of the workpiece during operation.

#### Benefits

- Universal usability in various work situations
- The key enables a quick and secure grip on the workpiece

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
106-180	-528782	180 7 1/16	68 2 11/16	40 1 9/16	2,335 5,149
106-200	-528867	200 7 7/8	70 2 3/4	45 1 3/4	2,935 6,472

## PRODUCT DETAILS

### SERIES 107 HAND VISES FOR INSTALLERS WITH WIDE JAWSHAND VISE WITH WIDE JAW








The hand vises for installers with wide jaws, hex nut, and wrench from the series 107 are used to clamp workpieces during the work of installers and plumbers. The inner side of the jaws is ribbed with a prismatic cut, allowing for the clamping of round and angular parts. The series 107 impresses with its handling, which allows for rotating and turning the workpiece during work.

#### Benefits

- Universal Applicability in Various Work Situations
- The key enables a quick and secure grip on the workpiece.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
107-200	-528942	200 7 7/8	85 3 3/8	50 1 15/16	2,995 6,604

### SERIES 109 WIDE MOUTH MACHINE CLAMP








The machine vises with wide jaws, hexagon nut and key of series 109 are used for clamping workpieces under the highest stress in workshops, industry, and craftsmanship. The inside of the jaws is grooved with a prismatic cut, allowing both round and angular parts to be clamped. The series 109 convinces with its handling, enabling rotation and repositioning of the workpiece while working.

#### Benefits

- Universal usability in various work situations
- The key enables a quick and secure grip on the workpiece.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
109-160	-529024	160 6 5/16	65 2 9/16	40 1 9/16	2,27 5,005
109-180	-529109	180 7 1/16	70 2 3/4	40 1 9/16	3,3 7,277
109-200	-529284	200 7 7/8	80 3 1/8	50 1 15/16	3,52 7,762
109-250	-529369	250 9 13/16	90 3 9/16	60 2 3/8	5,465 12,050

## PRODUCT DETAILS

### SERIES 112-100 NARROW JAW PULLER WITH A 45-DEGREE ANGLED MOUTH








The screw clamps with narrow, angled jaws of the series 112-100 are used for clamping tires from barrels, saw blades during sharpening, etc. in workshops, industry, and trade. The series 112-100 impresses with its application-oriented specialization, ensuring optimal clamping.

#### Benefits

- Universal usability in various work situations
- Very robust design with flexible joint guidance

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
112-125	-529444	125 4 15/16	28 1 1/8	32 1 1/4	0,595 1,312
112-150	-529512	150 5 7/8	40 1 9/16	35 1 3/8	1 2,205

### SERIES 113-1 FLAT FILE CLAMP WITH FINE JAWHAND VISE WITH WIDE JAW








The 113 series stem clamping vises with fine jaws are used for clamping particularly fine workpieces in workshops, industry, and craftsmanship. The inside of the jaws is ribbed with a prismatic cut, allowing round and angular parts to be clamped. The 113 series is particularly suitable for fine work, for example on watches, and enables a delicate and precise working method.

#### Benefits

- Universal usability in various work situations
- Robust design with flexible hinge guidance

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
113-115	-599232	115 4 9/16	16 5/8	6 1/4	0,06 0,132
113-116	-589745	115 4 9/16	16 5/8	6 1/4	0,01 0,022
113-130	-599317	130 5 3/16	20 13/16	7 1/4	0,085 0,187
113-131	-589820	130 5 3/16	20 13/16	7 1/4	0,08 0,176



## PRODUCT DETAILS

### SERIES 469 ALL-STEEL SCREW CLAMPS VIRIDIS WITH WOODEN HANDLE









The all-steel clamping tools VIRIDIS with wooden handle from series 469 are used for compressing and holding multiple workpieces in crafts, industry, and workshops. With the built-in spring suspension, the clamps absorb the vibrations of the workpiece. Series 469, with its round wooden handle, is the classic of the clamping tool range.

#### Benefits

- Tensile force up to 10,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Numerous variations of the spread and extension of clamps allow for holding parts of various sizes.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	N	mm/inch	kg/lb
469-0100-050	-140304	151 5 15/16	100 / 50 3 15/16   1 15/16	2.200	11,5 x 5,7 7/16 x 1/4	0,203 0,448
469-0120-060	-022686	181 7 1/8	120 / 60 4 3/4   2 3/8	2.700	13,5 x 6,5 9/16 x 1/4	0,28 0,617
469-0160-080	-010798	225 8 7/8	160 / 80 6 5/16   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,52 1,147
469-0200-050	-022822	251 9 7/8	200 / 50 7 7/8   1 15/16	2.200	11,5 x 5,7 7/16 x 1/4	0,245 0,540
469-0200-060	-022990	261 10 1/4	200 / 60 7 7/8   2 3/8	2.700	13,5 x 6,5 9/16 x 1/4	0,3 0,662
469-0200-080	-023058	265 10 7/16	200 / 80 7 7/8   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,55 1,213
469-0200-100	-023126	280 11 1/32	200 / 100 7 7/8   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	0,945 2,084
469-0250-100	-023232	330 12 1	250 / 100 9 13/16   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	1 2,205
469-0250-120	-023294	337 13 1/4	250 / 120 9 13/16   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,265 2,789
469-0300-050	-023676	351 13 13/16	300 / 50 11 13/16   1 15/16	2.200	11,5 x 5,7 7/16 x 1/4	0,285 0,628
469-0300-060	-023744	361 14 3/16	300 / 60 11 13/16   2 3/8	2.700	13,5 x 6,5 9/16 x 1/4	0,5 1,103
469-0300-080	-023812	365 14 3/8	300 / 80 11 13/16   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,66 1,455
469-0300-100	-023980	380 14 15/16	300 / 100 11 13/16   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	1,065 2,348
469-0300-120	-024116	387 15 1/4	300 / 120 11 13/16   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,345 2,966
469-0300-140	-024284	396 15 9/16	300 / 140 11 13/16   5 1/2	6.700	25 x 12 1 x 1/2	1,85 4,079
469-0400-100	-010927	480 18 7/8	400 / 100 15 3/4   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	0,9 1,985
469-0400-120	-024734	496 19 1/2	400 / 120 15 3/4   4 3/4	7.500	25 x 12 1 x 1/2	1,97 4,344
469-0400-120-S	-548520	487 19 3/16	400 / 120 15 3/4   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,49 3,285
469-0500-120	-024802	596 23 7/16	500 / 120 19 11/16   4 3/4	7.500	25 x 12 1 x 1/2	2,175 4,796
469-0600-120	-010965	696 27 3/8	600 / 120 23 5/8   4 3/4	7.500	25 x 12 1 x 1/2	0,9 1,985
469-0600-120-S	-548537	687 27 1/16	600 / 120 23 5/8   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,6 3,528
469-0800-120	-025038	900 35 7/16	800 / 120 31 1/2   4 3/4	10.000	27 x 13 1 1/16 x 1/2	3,19 7,034
469-1000-120	-025106	1.100 43 5/16	1.000 / 120 39 3/8   4 3/4	10.000	27 x 13 1 1/16 x 1/2	4,85 10,694
469-1250-120	-025274	1.350 53 1/8	1.250 / 120 49 3/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	4,295 9,470
469-1500-120	-025342	1.600 62 1	1.500 / 120 59 1/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	5,245 11,565

## PRODUCT DETAILS

### SERIES 469P ALL-STEEL CLAMPS VIRIDIS WITH 2K COMFORT GRIP









The all-steel screw clamps VIRIDIS with 2K comfort grip of the series 469P are used for compressing and holding multiple workpieces in craft, industry, and workshop. With the built-in spring mechanism, the screw clamps absorb the vibrations of the workpiece. The series 469P features a 2-component grip that enables safe and stable work.

#### Benefits

- Tension force up to 10,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Numerous variations of the spread and extension of clamps allow for holding parts of various sizes.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	N	mm/inch	kg/lb
<b>469P0100-050 NEW</b>	-780172	151 5 15/16	100 / 50 3 15/16   1 15/16	2.200	11,5 x 5,7 7/16 x 1/4	0,235 0,518
<b>469P0200-050</b>	-779589	251 9 7/8	200 / 50 7 7/8   1 15/16	2.200	11,5 x 5,7 7/16 x 1/4	0,57 1,257
<b>469P0250-120 NEW</b>	-780219	337 13 1/4	250 / 120 9 13/16   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,255 2,767
<b>469P0300-120</b>	-779688	387 15 1/4	300 / 120 11 13/16   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,065 2,348
<b>469P0400-120-S</b>	-009105	487 19 3/16	400 / 120 15 3/4   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,97 4,344
<b>469P0600-120-S</b>	-009099	687 27 1/16	600 / 120 23 5/8   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,6 3,528
<b>469P0300-140 NEW</b>	-780264	396 15 9/16	300 / 140 11 13/16   5 1/2	6.700	25 x 12 1 x 1/2	1,78 3,925
<b>469P0400-120 NEW</b>	-780226	496 19 1/2	400 / 120 15 3/4   4 3/4	7.500	25 x 12 1 x 1/2	1,97 4,344
<b>469P0500-120 NEW</b>	-779695	596 23 7/16	500 / 120 19 11/16   4 3/4	7.500	25 x 12 1 x 1/2	2,17 4,785
<b>469P0600-120 NEW</b>	-780233	696 27 3/8	600 / 120 23 5/8   4 3/4	7.500	25 x 12 1 x 1/2	2,375 5,237
<b>469P0800-120 NEW</b>	-779701	900 35 7/16	800 / 120 31 1/2   4 3/4	10.000	27 x 13 1 1/16 x 1/2	3,19 7,034
<b>469P1000-120 NEW</b>	-780240	1.100 43 5/16	1.000 / 120 39 3/8   4 3/4	10.000	27 x 13 1 1/16 x 1/2	3,66 8,070
<b>469P1250-120 NEW</b>	-780257	1.350 53 1/8	1.250 / 120 49 3/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	4,3 9,482
<b>469P0400-100</b>	-779671	480 18 7/8	400 / 100 15 3/4   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	0,235 0,518
<b>469P0300-100</b>	-779664	380 14 15/16	300 / 100 11 13/16   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	0,235 0,518
<b>469P0300-050</b>	-779596	351 13 13/16	300 / 50 11 13/16   1 15/16	2.200	11,5 x 5,7 7/16 x 1/4	0,235 0,518
<b>469P0120-060 NEW</b>	-780189	181 7 1/8	120 / 60 4 3/4   2 3/8	2.700	13,5 x 6,5 9/16 x 1/4	0,335 0,739
<b>469P0200-060</b>	-779602	261 10 1/4	200 / 60 7 7/8   2 3/8	2.700	13,5 x 6,5 9/16 x 1/4	0,235 0,518
<b>469P0300-060</b>	-779619	361 14 3/16	300 / 60 11 13/16   2 3/8	2.700	13,5 x 6,5 9/16 x 1/4	0,235 0,518
<b>469P0160-080 NEW</b>	-780196	225 8 7/8	160 / 80 6 5/16   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,52 1,147
<b>469P0200-080</b>	-779626	265 10 7/16	200 / 80 7 7/8   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,235 0,518
<b>469P0300-080</b>	-779633	365 14 3/8	300 / 80 11 13/16   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,235 0,518
<b>469P0400-080</b>	-779640	465 18 5/16	400 / 80 15 3/4   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,235 0,518
<b>469P0200-100 NEW</b>	-780202	280 11 1/32	200 / 100 7 7/8   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	0,96 2,117
<b>469P0250-100</b>	-779657	330 12 1	250 / 100 9 13/16   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	0,235 0,518
<b>469P1500-120</b>	-779718	1.600 62 1	1.500 / 120 59 1/16   4 3/4	-	27 x 13 1 1/16 x 1/2	0,235 0,518

## PRODUCT DETAILS

### SERIES 469K ALL-STEEL SCREW CLAMPS VIRIDIS WITH KNURLED GRIP









The all-steel clamps VIRIDIS with knob handle of the series 469K are used to compress and hold multiple workpieces in crafts, industry, and workshops. With the built-in suspension, the clamps absorb the vibrations of the workpiece. The series 469K features a knob handle that allows for particularly tight fastening.

#### Benefits

- Tension force up to 10,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	N	mm/inch	kg/lb
<b>469K0160-080</b>	-025410	225 8 7/8	160 / 80 6 5/16   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,925 2,040
<b>469K0200-100</b>	-025519	280 11 1/32	200 / 100 7 7/8   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	0,915 2,018
<b>469K0250-120</b>	-025588	337 13 1/4	250 / 120 9 13/16   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,245 2,745
<b>469K0300-140</b>	-025656	396 15 9/16	300 / 140 11 13/16   5 1/2	6.700	25 x 12 1 x 1/2	1,84 4,057
<b>469K0400-120</b>	-026264	496 19 1/2	400 / 120 15 3/4   4 3/4	7.500	25 x 12 1 x 1/2	0,8 1,764
<b>469K0500-120</b>	-026646	596 23 7/16	500 / 120 19 11/16   4 3/4	7.500	25 x 12 1 x 1/2	2,175 4,796
<b>469K0600-120</b>	-027636	696 27 3/8	600 / 120 23 5/8   4 3/4	7.500	25 x 12 1 x 1/2	2,375 5,237
<b>469K0800-120</b>	-027872	900 35 7/16	800 / 120 31 1/2   4 3/4	10.000	27 x 13 1 1/16 x 1/2	3,215 7,089
<b>469K1000-120</b>	-027940	1.100 43 5/16	1.000 / 120 39 3/8   4 3/4	10.000	27 x 13 1 1/16 x 1/2	3,66 8,070
<b>469K1250-120</b>	-028008	1.350 53 1/8	1.250 / 120 49 3/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	4,275 9,426
<b>469K1500-120</b>	-028480	1.600 62 1	1.500 / 120 59 1/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	4,875 10,749

### SERIES 469PU ALL-STEEL CLAMPS VIRIDIS WITH 2K COMFORT FOLDING HANDLE









The all-steel VIRIDIS clamps with 2K comfort folding handle from the 469PU series are used for compressing and holding multiple workpieces in crafts, industry, and workshops. With the built-in suspension, the clamps absorb the vibrations of the workpiece. The 469PU series is equipped with a 3-component folding handle that allows for safe and stable work.

#### Benefits

- Tensile force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Numerous variations of the spread and extension of clamps allow for holding parts of various sizes.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	N	mm/inch	kg/lb
<b>469PU0200-100 NEW</b>	-780271	280 11 1/32	200 / 100 7 7/8   3 15/16	4.500	19,5 x 9,5 3/4 x 3/8	1,8 3,969
<b>469PU0250-120 NEW</b>	-780288	337 13 1/4	250 / 120 9 13/16   4 3/4	5.500	22 x 10,5 7/8 x 7/16	1,31 2,889
<b>469PU0300-140 NEW</b>	-780295	396 15 9/16	300 / 140 11 13/16   5 1/2	6.700	25 x 12 1 x 1/2	1,96 4,322
<b>469PU0400-120 NEW</b>	-780301	496 19 1/2	400 / 120 15 3/4   4 3/4	7.500	25 x 12 1 x 1/2	0,89 1,962
<b>469PU0600-120 NEW</b>	-780318	696 27 3/8	600 / 120 23 5/8   4 3/4	7.500	25 x 12 1 x 1/2	2,525 5,568



## PRODUCT DETAILS

### SERIES 473K ALL-STEEL LOCKSMITH CLAMPS WITH KNOB HANDLE









The all-steel locksmith clamps with knob grip of the 473K series are used for clamping under heavy loads in crafts, industry, and workshops. The heavy locksmith clamp withstands the required increased performance and thus enables application in extreme cases.

#### Benefits

- Tension force up to 10,000 N
- Hexagon allows the use of a key, ratchet, or impact wrench.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 mm/inch	 kg/lb
<b>473K0200-120</b>	-031596	320 12 5/8	200 / 120 7 7/8   4 3/4	10.000	27 x 13 1 1/16 x 1/2	1,935 4,267
<b>473K0250-120</b>	-031664	370 14 9/16	250 / 120 9 13/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	2,04 4,498
<b>473K0300-120</b>	-031732	420 16 9/16	300 / 120 11 13/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	2,38 5,248
<b>473K0400-120</b>	-031800	520 20 1/2	400 / 120 15 3/4   4 3/4	10.000	27 x 13 1 1/16 x 1/2	2,39 5,270
<b>473K0500-120</b>	-031978	620 24 7/16	500 / 120 19 11/16   4 3/4	10.000	27 x 13 1 1/16 x 1/2	2,7 5,954
<b>473K0600-120</b>	-032036	720 28 3/8	600 / 120 23 5/8   4 3/4	10.000	27 x 13 1 1/16 x 1/2	2,8 6,174

### SERIES 475K HEAVY ALL-STEEL LOCKSMITH CLAMPS WITH SCREW HANDLES









The heavy all-steel locksmith clamps with knurled grip of series 475K are used for heavy and strong applications when clamping workpieces in steel construction, locksmithing, commercial vehicle construction, mechanical engineering, etc. The heavy locksmith clamp also withstands the required increased loads and thus allows application in critical cases.

#### Benefits

- Tensile strength up to 12,000 N
- The movable special clamping cap allows for the clamping of oblique workpieces up to 35°.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 mm/inch	 kg/lb
<b>475K0250-120</b>	-032104	388 15 1/4	250 / 120 9 13/16   4 3/4	12.000	30 x 15 1 3/16 x 9/16	2,695 5,942
<b>475K0300-140</b>	-032272	438 17 1/4	300 / 140 11 13/16   5 1/2	12.000	30 x 15 1 3/16 x 9/16	3 6,615
<b>475K0500-140</b>	-032418	638 25 1/8	500 / 140 19 11/16   5 1/2	12.000	30 x 15 1 3/16 x 9/16	3,57 7,872
<b>475K0800-140</b>	-032586	938 36 15/16	800 / 140 31 1/2   5 1/2	12.000	30 x 15 1 3/16 x 9/16	4,5 9,923
<b>475K1000-120</b>	-032654	1.138 44 13/16	1.000 / 120 39 3/8   4 3/4	12.000	30 x 15 1 3/16 x 9/16	5,5 12,128
<b>475K1250-120</b>	-032722	1.388 54 5/8	1.250 / 120 49 3/16   4 3/4	12.000	30 x 15 1 3/16 x 9/16	6 13,230
<b>475K1500-120</b>	-032890	1.638 64 1/2	1.500 / 120 59 1/16   4 3/4	12.000	30 x 15 1 3/16 x 9/16	6,5555 14,455

## PRODUCT DETAILS

### SERIES 476K HEAVY U-CLAMPS WITH KNOB GRIP









The heavy U-clamps with toggle grip from the 476K series are used for clamping on T and double-T steel beam Profiles in the industry. The heavy U-clamp also withstands the required increased performance, thus enabling application in critical cases.

#### Benefits

- Tensile strength up to 11,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 kg/lb
<b>476K0300-140</b>	-032968	535 21 1/16	300 / 140 11 13/16   5 1/2	11.000	30 x 15 1 3/16 x 9/16	3,665 8,081

### SERIES 480K ALL-STEEL CONSTRUCTION CLAMPS WITH TOGGLE HANDLE









The all-steel clamps with screw handle of the 480K series are used for extra heavy and strong loads when clamping workpieces in steel construction, locksmiths, commercial vehicle construction, mechanical engineering, etc. The steel clamps also withstand the required increased loads, enabling their application in critical situations.

#### Benefits

- Tensile force up to 22,000 N
- The movable special clamp allows for clamping oblique workpieces up to 35°.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 kg/lb
<b>480K0300-175</b>	-033026	460 18 1/8	300 / 175 11 13/16   6 7/8	22.000	40 x 20 1 9/16 x 13/16	5,385 11,874
<b>480K0400-175</b>	-033262	560 22 1/16	400 / 175 15 3/4   6 7/8	22.000	40 x 20 1 9/16 x 13/16	5,955 13,131
<b>480K0500-175</b>	-033330	660 25 1	500 / 175 19 11/16   6 7/8	22.000	40 x 20 1 9/16 x 13/16	5,13 11,312
<b>480K0600-175</b>	-033408	760 29 15/16	600 / 175 23 5/8   6 7/8	22.000	40 x 20 1 9/16 x 13/16	8,2 18,081
<b>480K0800-175</b>	-033880	960 37 13/16	800 / 175 31 1/2   6 7/8	22.000	40 x 20 1 9/16 x 13/16	8,15 17,971
<b>480K1000-175</b>	-033958	1.160 45 11/16	1.000 / 175 39 3/8   6 7/8	22.000	40 x 20 1 9/16 x 13/16	9,245 20,385
<b>480K1250-175</b>	-034184	1.410 55 1/2	1.250 / 175 49 3/16   6 7/8	22.000	40 x 20 1 9/16 x 13/16	10,7 23,594
<b>480K1500-175</b>	-034252	1.660 65 3/8	1.500 / 175 59 1/16   6 7/8	22.000	40 x 20 1 9/16 x 13/16	11,775 25,964

## PRODUCT DETAILS

### SERIES 472 ALL-STEEL LEVER CLAMPS VIRIDIS









The all-steel lever clamps VIRIDIS of the series 472 are used for quickly and effortlessly clamping multiple workpieces with high clamping pressure in crafts, industry, and workshops. The optimized rail Profilee ensures uniform buildup of clamping force and greater power reserves, especially when fully utilizing the clamping spread. As a result, the series 472 is up to 5x faster than conventional clamps.

#### Benefits

- Tensile strength up to 6,000 N
- Through self-locking, insensitive to vibrations of the workpiece

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 mm/inch	 kg/lb
<b>472H0120-060</b>	-029302	181 7 1/8	120 / 60 4 3/4   2 3/8	1.600	13,5 x 6,5 9/16 x 1/4	0,4 0,882
<b>472H0160-080</b>	-030292	225 8 7/8	160 / 80 6 5/16   3 1/8	3.000	16 x 7,5 5/8 x 5/16	0,555 1,224
<b>472H0200-100</b>	-030360	280 11 1/32	200 / 100 7 7/8   3 15/16	3.500	19,5 x 9,5 3/4 x 3/8	0,985 2,172
<b>472H0250-120</b>	-030438	337 13 1/4	250 / 120 9 13/16   4 3/4	4.000	22 x 10,5 7/8 x 7/16	1,32 2,911
<b>472H0300-140</b>	-030506	396 15 9/16	300 / 140 11 13/16   5 1/2	5.000	25 x 12 1 x 1/2	2,1 4,631
<b>472H0400-120</b>	-030674	496 19 1/2	400 / 120 15 3/4   4 3/4	5.500	25 x 12 1 x 1/2	2,14 4,719
<b>472H0500-120</b>	-030742	596 23 7/16	500 / 120 19 11/16   4 3/4	5.500	25 x 12 1 x 1/2	2,36 5,204
<b>472H0600-120</b>	-030810	696 27 3/8	600 / 120 23 5/8   4 3/4	5.500	25 x 12 1 x 1/2	2,565 5,656
<b>472H0800-120</b>	-030988	900 35 7/16	800 / 120 31 1/2   4 3/4	6.000	27 x 13 1 1/16 x 1/2	3,37 7,431
<b>472H1000-120</b>	-031046	1.100 43 5/16	1.000 / 120 39 3/8   4 3/4	6.000	27 x 13 1 1/16 x 1/2	3,83 8,445



# PRODUCT DETAILS

## SERIES 490 VIRIDIS CAST IRON SCREW CLAMPS WITH WOODEN HANDLE















The VIRIDIS cast iron clamps with a wooden handle from the series 490 are used for compressing and holding multiple workpieces in crafts, industry, and workshops. The steel sliding rail allows for high clamping force to be achieved. The vibration-dampened fixed and sliding arms made of cast iron guarantee efficient and precise work. The series 490, with its round wooden handle, is a classic in the clamp range.

### Benefits

- Tensioning force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Soft plastic protective caps protect sensitive workpiece surfaces

### Technical attributes

#						
	EAN	mm/inch	mm/inch	Power N	mm/inch	kg/lb
490-0100-050	-034320	150 5 7/8	100 / 50 3 15/16   1 15/16	1.700	15 x 5 9/16 x 3/16	0,275 0,606
490-0120-065	-037918	190 7 1/2	120 / 65 4 3/4   2 9/16	1.700	22 x 6 7/8 x 1/4	0,54 1,191
490-0120-080	-038076	190 7 1/2	120 / 80 4 3/4   3 1/8	2.700	22 x 6 7/8 x 1/4	0,65 1,433
490-0150-050	-038144	160 6 5/16	150 / 50 5 7/8   1 15/16	1.700	15 x 5 9/16 x 3/16	0,315 0,695
490-0160-080	-038175	230 9 1/16	160 / 80 6 5/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,68 1,499
490-0200-050	-038212	250 9 13/16	200 / 50 7 7/8   1 15/16	1.700	15 x 5 9/16 x 3/16	0,34 0,750
490-0200-065	-000608	285 11 1/4	200 / 65 7 7/8   2 9/16	1.700	22 x 6 7/8 x 1/4	0 0,000
490-0200-080	-000615	265 10 7/16	200 / 80 7 7/8   3 1/8	2.700	22 x 6 7/8 x 1/4	0,72 1,588
490-0200-100	-000622	290 11 7/16	200 / 100 7 7/8   3 15/16	4.000	30 x 8 13/16 x 5/16	1,34 2,955
490-0200-120	-000738	290 11 7/16	200 / 120 7 7/8   4 3/4	4.500	30 x 8 13/16 x 5/16	1,515 3,341
490-0250-080	-000776	315 12 3/8	250 / 80 9 13/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,77 1,698
490-0250-100	-001155	360 14 3/16	250 / 100 9 13/16   3 15/16	4.000	30 x 8 13/16 x 5/16	1,475 3,252
490-0250-120	-001162	360 14 3/16	250 / 120 9 13/16   4 3/4	4.500	30 x 8 13/16 x 5/16	1,625 3,583
490-0300-065	-001186	385 15 3/16	300 / 65 11 13/16   2 9/16	1.700	22 x 6 7/8 x 1/4	0,715 1,577
490-0300-080	-001193	365 14 3/8	300 / 80 11 13/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,81 1,786
490-0300-100	-001209	410 16 1/8	300 / 100 11 13/16   3 15/16	4.000	30 x 8 13/16 x 5/16	1,55 3,418
490-0300-120	-001216	410 16 1/8	300 / 120 11 13/16   4 3/4	4.500	30 x 8 13/16 x 5/16	1,8 3,969
490-0300-140	-001223	400 15 3/4	300 / 140 11 13/16   5 1/2	5.000	35 x 9 1 3/8 x 3/8	2,22 4,895
490-0400-080	-001230	465 18 5/16	400 / 80 15 3/4   3 1/8	2.700	22 x 6 7/8 x 1/4	0,9 1,985
490-0400-100	-001247	510 20 1/16	400 / 100 15 3/4   3 15/16	4.000	30 x 8 13/16 x 5/16	1,8 3,969
490-0400-120	-001254	510 20 1/16	400 / 120 15 3/4   4 3/4	4.500	30 x 8 13/16 x 5/16	1,845 4,068
490-0400-140	-001261	500 19 11/16	400 / 140 15 3/4   5 1/2	5.000	35 x 9 1 3/8 x 3/8	2,48 5,468

#						
	EAN	mm/inch	mm/inch	Power N	mm/inch	kg/lb
490-0400-175	-001278	500 19 11/16	400 / 175 15 3/4   6 7/8	5.500	35 x 9 1 3/8 x 3/8	2,74 6,042
490-0500-080	-001339	565 22 1/4	500 / 80 19 11/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,995 2,194
490-0500-100	-001438	610 24 1/64	500 / 100 19 11/16   3 15/16	4.000	30 x 8 13/16 x 5/16	1,885 4,156
490-0500-120	-001445	610 24 1/64	500 / 120 19 11/16   4 3/4	6.000	30 x 8 13/16 x 5/16	2,5 5,513
490-0500-140	-001452	600 23 5/8	500 / 140 19 11/16   5 1/2	5.000	35 x 9 1 3/8 x 3/8	2,5 5,513
490-0500-175	-001605	600 23 5/8	500 / 175 19 11/16   6 7/8	5.500	35 x 9 1 3/8 x 3/8	2,945 6,494
490-0600-080	-001827	685 26 15/16	600 / 80 23 5/8   3 1/8	2.700	22 x 6 7/8 x 1/4	0 0,000
490-0600-120	-001957	710 27 15/16	600 / 120 23 5/8   4 3/4	6.000	30 x 8 13/16 x 5/16	2,175 4,796
490-0600-140	-002169	700 27 9/16	600 / 140 23 5/8   5 1/2	5.000	35 x 9 1 3/8 x 3/8	0 0,000
490-0600-175	-002244	700 27 9/16	600 / 175 23 5/8   6 7/8	5.500	35 x 9 1 3/8 x 3/8	3,15 6,946
490-0800-120	-002251	910 35 13/16	800 / 120 31 1/2   4 3/4	6.500	30 x 8 13/16 x 5/16	2,5 5,513
490-0800-140	-002268	900 35 7/16	800 / 140 31 1/2   5 1/2	5.000	35 x 9 1 3/8 x 3/8	0 0,000
490-0800-175	-002275	900 35 7/16	800 / 175 31 1/2   6 7/8	5.500	35 x 9 1 3/8 x 3/8	0 0,000
490-1000-120	-002282	1.110 43 11/16	1.000 / 120 39 3/8   4 3/4	7.000	30 x 8 1 3/16 x 5/16	2,83 6,240
490-1000-140	-002299	1.100 43 5/16	1.000 / 140 39 3/8   5 1/2	5.000	35 x 9 1 3/8 x 3/8	0 0,000
490-1000-175	-002305	1.100 43 5/16	1.000 / 175 39 3/8   6 7/8	5.500	35 x 9 1 3/8 x 3/8	4,09 9,018
490-1250-120	-002404	1.340 52 3/4	1.250 / 120 49 3/16   4 3/4	7.500	30 x 8 13/16 x 5/16	3,25 7,166
490-1500-120	-002572	1.590 62 5/8	1.500 / 120 59 1/16   4 3/4	7.500	30 x 8 13/16 x 5/16	3,5 7,718

# PRODUCT DETAILS

## SERIES 490P VIRIDIS CAST IRON CLAMPS WITH 2K COMFORT GRIP















The VIRIDIS ductile iron clamps with 2K comfort grip from the 490P series are used for compressing and holding multiple workpieces in craft, industry, and workshop. The steel sliding rail allows for a high clamping force to be achieved. The vibration-dampening fixed and sliding arms made of ductile iron guarantee efficient and precise work. The 490P series is equipped with an ergonomically contoured 2-component grip that provides ideal grip and ensures high torque transmission.

### Benefits

- Tensile strength up to 7,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Soft plastic protective caps protect sensitive workpiece surfaces

### Technical attributes

#						
	EAN	mm/inch	mm/inch	N	mm/inch	kg/lb
<b>490P0100-050</b>	-777783	150 5 7/8	100 / 50 3 15/16   1 15/16	1.700	15 x 5 9/16 x 3/16	0,57 1,257
<b>490P0150-050</b>	-777806	160 6 5/16	150 / 50 5 7/8   1 15/16	1.700	15 x 5 9/16 x 3/16	0,57 1,257
<b>490P0200-050</b>	-777813	250 9 13/16	200 / 50 7 7/8   1 15/16	1.700	15 x 5 9/16 x 3/16	0,57 1,257
<b>490P0120-065 NEW</b>	-779015	190 7 1/2	120 / 65 4 3/4   2 9/16	1.700	22 x 6 7/8 x 1/4	0,57 1,257
<b>490P0200-065</b>	-777820	285 11 1/4	200 / 65 7 7/8   2 9/16	1.700	22 x 6 7/8 x 1/4	0,615 1,356
<b>490P0300-065</b>	-777837	385 15 3/16	300 / 65 11 13/16   2 9/16	1.700	22 x 6 7/8 x 1/4	0,57 1,257
<b>490P0160-080 NEW</b>	-779022	230 9 1/16	160 / 80 6 5/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,7 1,544
<b>490P0200-080</b>	-777851	265 10 7/16	200 / 80 7 7/8   3 1/8	2.700	22 x 6 7/8 x 1/4	0,57 1,257
<b>490P0250-080</b>	-777868	315 12 3/8	250 / 80 9 13/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,57 1,257
<b>490P0300-080</b>	-777875	365 14 3/8	300 / 80 11 13/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,57 1,257
<b>490P0400-080</b>	-777882	465 18 5/16	400 / 80 15 3/4   3 1/8	2.700	22 x 6 7/8 x 1/4	0,57 1,257
<b>490P0200-100 NEW</b>	-779893	290 11 7/16	200 / 100 7 7/8   3 15/16	4.000	30 x 8 1 3/16 x 5/16	1,36 2,999
<b>490P0250-100</b>	-777899	360 14 3/16	250 / 100 9 13/16   3 15/16	4.000	30 x 8 1 3/16 x 5/16	0,57 1,257
<b>490P0300-100</b>	-777905	410 16 1/8	300 / 100 11 13/16   3 15/16	4.000	30 x 8 1 3/16 x 5/16	0,57 1,257
<b>490P0400-100</b>	-777912	510 20 1/16	400 / 100 15 3/4   3 15/16	4.000	30 x 8 1 3/16 x 5/16	0,57 1,257
<b>490P0500-100</b>	-777936	610 24 1/64	500 / 100 19 11/16   3 15/16	4.000	30 x 8 1 3/16 x 5/16	0,57 1,257
<b>490P0250-120 NEW</b>	-780004	360 14 3/16	250 / 120 9 13/16   4 3/4	4.500	30 x 8 1 3/16 x 5/16	1,615 3,561
<b>490P0300-120 NEW</b>	-780011	410 16 1/8	300 / 120 11 13/16   4 3/4	4.500	30 x 8 1 3/16 x 5/16	1,7 3,749

#						
	EAN	mm/inch	mm/inch	N	mm/inch	kg/lb
<b>490P0400-120 NEW</b>	-780028	510 20 1/16	400 / 120 15 3/4   4 3/4	4.500	30 x 8 1 3/16 x 5/16	1,87 4,123
<b>490P0500-120</b>	-777943	610 24 1/64	500 / 120 19 11/16   4 3/4	6.000	30 x 8 1 3/16 x 5/16	0,57 1,257
<b>490P0600-120 NEW</b>	-780035	710 27 15/16	600 / 120 23 5/8   4 3/4	6.000	30 x 8 1 3/16 x 5/16	2,19 4,829
<b>490P0800-120 NEW</b>	-780059	910 35 13/16	800 / 120 31 1/2   4 3/4	6.500	30 x 8 1 3/16 x 5/16	2,525 5,568
<b>490P1000-120</b>	-779473	1.110 43 11/16	1.000 / 120 39 3/8   4 3/4	7.000	30 x 8 1 3/16 x 5/16	2,875 6,339
<b>490P0300-140 NEW</b>	-780073	400 15 3/4	300 / 140 11 13/16   5 1/2	5.000	35 x 9 1 3/8 x 3/8	2,24 4,939
<b>490P0400-140</b>	-779503	500 19 11/16	400 / 140 15 3/4   5 1/2	5.000	35 x 9 1 3/8 x 3/8	0,57 1,257
<b>490P0500-140</b>	-779459	600 23 5/8	500 / 140 19 11/16   5 1/2	5.000	35 x 9 1 3/8 x 3/8	0,57 1,257
<b>490P0600-140</b>	-779510	700 27 9/16	600 / 140 23 5/8   5 1/2	5.000	35 x 9 1 3/8 x 3/8	0,57 1,257
<b>490P0800-140</b>	-790003	900 35 7/16	800 / 140 31 1/2   5 1/2	5.000	35 x 9 1 3/8 x 3/8	3,56 7,850
<b>490P1000-140</b>	-790010	1.100 43 5/16	1.000 / 140 39 3/8   5 1/2	5.000	35 x 9 1 3/8 x 3/8	3,56 7,850
<b>490P0400-175 NEW</b>	-780080	500 19 11/16	400 / 175 15 3/4   6 7/8	5.500	35 x 9 1 3/8 x 3/8	2,725 6,009
<b>490P0500-175</b>	-790027	600 23 5/8	500 / 175 19 11/16   6 7/8	5.500	35 x 9 1 3/8 x 3/8	3,56 7,850
<b>490P0600-175 NEW</b>	-780097	700 27 9/16	600 / 175 23 5/8   6 7/8	5.500	35 x 9 1 3/8 x 3/8	3,155 6,957
<b>490P0800-175 NEW</b>	-780066	900 35 7/16	800 / 175 31 1/2   6 7/8	5.500	35 x 9 1 3/8 x 3/8	3,375 7,442
<b>490P1000-175</b>	-790034	1.100 43 5/16	1.000 / 175 39 3/8   6 7/8	5.500	35 x 9 1 3/8 x 3/8	3,56 7,850

## PRODUCT DETAILS

### SERIES 490K VIRIDIS TEMPERED CAST IRON SCREW CLAMPS WITH STEEL KNOB HANDLE









The VIRIDIS ductile iron clamps with steel T-handle of the 490K series are used for compressing and holding multiple workpieces in craft, industry, and workshops. A high clamping force can be achieved through the steel sliding rail. The vibration-dampened fixed and sliding arms made of ductile iron ensure efficient and precise working. The 490K series features a T-handle that allows particularly tight tightening.

#### Benefits

- Tensile strength up to 7,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Through the labeling on the jaws, one can quickly keep an eye on the dimensions.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 kg/lb
<b>490K0160-080</b>	-002657	230 9 1/16	160 / 80 6 5/16   3 1/8	2.700	22 x 6 7/8 x 1/4	0,67 1,477
<b>490K0200-100</b>	-002671	290 11 7/16	200 / 100 7 7/8   3 15/16	4.000	30 x 8 1 3/16 x 5/16	0,8 1,764
<b>490K0250-120</b>	-002688	360 14 3/16	250 / 120 9 13/16   4 3/4	4.500	30 x 8 1 3/16 x 5/16	1,61 3,550
<b>490K0300-120</b>	-002695	410 16 1/8	300 / 120 11 13/16   4 3/4	4.500	30 x 8 1 3/16 x 5/16	1,7 3,749
<b>490K0400-120</b>	-002718	510 20 1/16	400 / 120 15 3/4   4 3/4	4.500	30 x 8 1 3/16 x 5/16	1,82 4,013
<b>490K0500-120</b>	-002732	610 24 1/64	500 / 120 19 11/16   4 3/4	6.000	30 x 8 1 3/16 x 5/16	3 6,615
<b>490K0600-120</b>	-002749	710 27 15/16	600 / 120 23 5/8   4 3/4	6.000	30 x 8 1 3/16 x 5/16	2,175 4,796
<b>490K0800-120</b>	-002756	910 35 13/16	800 / 120 31 1/2   4 3/4	6.500	30 x 8 1 3/16 x 5/16	3 6,615
<b>490K1000-120</b>	-002770	1.110 43 11/16	1.000 / 120 39 3/8   4 3/4	7.000	30 x 8 1 3/16 x 5/16	0 0,000
<b>490K0300-140</b>	-002701	400 15 3/4	300 / 140 11 13/16   5 1/2	5.000	35 x 9 1 3/8 x 3/8	2,235 4,928
<b>490K0400-175</b>	-002725	500 19 11/16	400 / 175 15 3/4   6 7/8	5.500	35 x 9 1 3/8 x 3/8	0 0,000





## PRODUCT DETAILS

### SERIES 493 VIRIDIS HEAVY DUTY CAST IRON SCREW CLAMPS WITH WOODEN HANDLE









The Tempered Cast Iron Clamp VIRIDIS with Wooden Handle of Series 493 is used for compressing and holding multiple workpieces in crafts, industry, and workshops. The steel sliding rail allows for high clamping force to be achieved. The low-vibration fixed and sliding arms made of tempered cast iron guarantee efficient and precise work. Series 493, with its round wooden handle, is a classic in the clamp assortment.

#### Benefits

- Tensioning force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Soft plastic protective caps protect sensitive workpiece surfaces

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 mm/inch	 kg/lb
<b>493-0400-120</b>	-003562	500 19 11/16	400 / 120 15 3/4   4 3/4	7.500	35 x 11 1 3/8 x 7/16	2,62 5,777
<b>493-0500-120</b>	-004262	600 23 5/8	500 / 120 19 11/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0 0,000
<b>493-0600-120</b>	-004279	700 27 9/16	600 / 120 23 5/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	3,145 6,935
<b>493-0800-120</b>	-004286	900 35 7/16	800 / 120 31 1/2   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0 0,000
<b>493-1000-120</b>	-004293	1.100 43 5/16	1.000 / 120 39 3/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	4,18 9,217
<b>493-1250-120</b>	-004309	1.350 53 1/8	1.250 / 120 49 3/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	4,82 10,628
<b>493-1500-120</b>	-004316	1.600 62 1	1.500 / 120 59 1/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	6 13,230
<b>493-1800-120</b>	-004323	1.900 74 13/16	1.800 / 120 70 7/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	5 11,025
<b>493-2000-120</b>	-004330	2.100 82 11/16	2.000 / 120 78 3/4   4 3/4	7.500	35 x 11 1 3/8 x 7/16	6,8 14,994
<b>493-2200-120</b>	-004347	2.300 90 9/16	2.200 / 120 86 5/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0 0,000
<b>493-2500-120</b>	-004354	2.600 102 3/8	2.500 / 120 98 7/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	8,15 17,971
<b>493-3000-120</b>	-004361	3.100 122 1/16	3.000 / 120 118 1/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	5 11,025

## PRODUCT DETAILS

### SERIES 493P HEAVY DUCTILE IRON SCREW CLAMPS VIRIDIS WITH 2K COMFORT GRIP









The VIRIDIS ductile iron screw clamps with a 2K comfort grip from series 493P are used to compress and hold multiple workpieces in craftsmanship, industry, and workshops. The steel sliding rail allows for achieving high clamping force. The vibration-reducing fixed and sliding arms made of ductile iron ensure efficient and precise work. The 493P series is equipped with an ergonomically arched 2-component grip that provides ideal grip and ensures high torque transmission.

#### Benefits

- Tensioning force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Soft plastic protective caps protect sensitive workpiece surfaces

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 kg/lb
<b>493P0400-120 NEW</b>	-790041	500 19 11/16	400 / 120 15 3/4   4 3/4	7.500	35 x 11 1 3/8 x 7/16	2,6 5,733
<b>493P0500-120 NEW</b>	-780103	600 23 5/8	500 / 120 19 11/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	2,86 6,306
<b>493P0600-120 NEW</b>	-780110	700 27 9/16	600 / 120 23 5/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	3,115 6,869
<b>493P0800-120</b>	-779527	900 35 7/16	800 / 120 31 1/2   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0,57 1,257
<b>493P1000-120</b>	-779534	1.100 43 5/16	1.000 / 120 39 3/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0,57 1,257
<b>493P1250-120 NEW</b>	-780127	1.350 53 1/8	1.250 / 120 49 3/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	4,85 10,694
<b>493P1500-120 NEW</b>	-780134	1.600 62 1	1.500 / 120 59 1/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	5,5 12,128
<b>493P1800-120</b>	-779541	1.900 74 13/16	1.800 / 120 70 7/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0,57 1,257
<b>493P2000-120</b>	-779558	2.100 82 11/16	2.000 / 120 78 3/4   4 3/4	7.500	35 x 11 1 3/8 x 7/16	7 15,435
<b>493P2200-120</b>	-779565	2.300 90 9/16	2.200 / 120 86 5/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0,57 1,257
<b>493P2500-120</b>	-779480	2.600 102 3/8	2.500 / 120 98 7/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0,57 1,257
<b>493P3000-120</b>	-779572	3.100 122 1/16	3.000 / 120 118 1/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0,57 1,257



## PRODUCT DETAILS

### SERIES 493K HEAVY DUCTILE IRON SCREW CLAMPS VIRIDIS WITH STEEL TOGGLE HANDLE









The ductile cast iron screw clamps VIRIDIS with a steel knob handle from series 493K are used for compressing and holding multiple workpieces in crafts, industry, and workshops. The steel sliding rail allows for achieving high clamping force. The low-vibration fixed and sliding arms made of ductile cast iron ensure efficient and precise work. The series 493K features a knob handle that allows for particularly tight fastening.

#### Benefits

- Tensioning force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- By labeling the brackets, dimensions can be quickly in view.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 kg/lb
<b>493K0400-120</b>	-004378	500 19 11/16	400 / 120 15 3/4   4 3/4	7.500	35 x 11 1 3/8 x 7/16	2,605 5,744
<b>493K0500-120</b>	-004385	600 23 5/8	500 / 120 19 11/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0 0,000
<b>493K0600-120</b>	-004392	700 27 9/16	600 / 120 23 5/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	3,18 7,012
<b>493K0800-120</b>	-004408	900 35 7/16	800 / 120 31 1/2   4 3/4	7.500	35 x 11 1 3/8 x 7/16	3,745 8,258
<b>493K1000-120</b>	-004415	1.100 43 5/16	1.000 / 120 39 3/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	4,316 9,517
<b>493K1250-120</b>	-004460	1.350 53 1/8	1.250 / 120 49 3/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	4,88 10,760
<b>493K1500-120</b>	-004477	1.600 62 1	1.500 / 120 59 1/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	5,5 12,128
<b>493K2000-120</b>	-004484	2.100 82 11/16	2.000 / 120 78 3/4   4 3/4	7.500	35 x 11 1 3/8 x 7/16	6,82 15,038
<b>493K2500-120</b>	-004491	2.600 102 3/8	2.500 / 120 98 7/16   4 3/4	7.500	35 x 11 1 3/8 x 7/16	0 0,000
<b>493K3000-120</b>	-004507	3.100 122 1/16	3.000 / 120 118 1/8   4 3/4	7.500	35 x 11 1 3/8 x 7/16	9,225 20,341



## PRODUCT DETAILS

### SERIES 505/509 DEEP-THROAT DUCTILE IRON CLAMPS WITH WOODEN HANDLE









The deep-throat cast-iron clamps with wooden handles from series 505 to 509 are used to compress and hold large workpieces in construction and industry. The steel gliding rail allows for a high clamping force to be achieved. Series 505 to 509, with their round wooden handle, are classics of the clamp assortment.

#### Benefits

- Tensile strength up to 7,000 N
- Smooth-running trapezoidal spindles ensure an even higher power transmission.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 mm/inch	 kg/lb
<b>505-040</b>	-564995	530 20 7/8	400 / 200 15 3/4   7 7/8	5.000	35 x 11 1 3/8 x 7/16	3,256 7,179
<b>507-100</b>	-566067	1.170 46 1/16	1.000 / 300 39 3/8   11 13/16	6.000	45 x 12 1 3/4 x 1/2	9,57 21,102
<b>507-080</b>	-565985	970 38 3/16	800 / 300 31 1/2   11 13/16	6.000	45 x 12 1 3/4 x 1/2	8,5 18,743
<b>507-060</b>	-565800	770 30 5/16	600 / 300 23 5/8   11 13/16	6.000	45 x 12 1 3/4 x 1/2	7,94 17,508
<b>507-040</b>	-565725	570 22 7/16	400 / 300 15 3/4   11 13/16	6.000	45 x 12 1 3/4 x 1/2	7 15,435
<b>506-100</b>	-565640	1.170 46 1/16	1.000 / 250 39 3/8   9 13/16	7.000	45 x 12 1 3/4 x 1/2	6,5 14,333
<b>506-080</b>	-565565	970 38 3/16	800 / 250 31 1/2   9 13/16	7.000	45 x 12 1 3/4 x 1/2	4,2 9,261
<b>506-060</b>	-565497	770 30 5/16	600 / 250 23 5/8   9 13/16	7.000	45 x 12 1 3/4 x 1/2	7,4 16,317
<b>506-040</b>	-565312	570 22 7/16	400 / 250 15 3/4   9 13/16	7.000	45 x 12 1 3/4 x 1/2	5 11,025
<b>505-100</b>	-565237	1.130 44 1/2	1.000 / 200 39 3/8   7 7/8	5.000	35 x 11 1 3/8 x 7/16	4,86 10,716
<b>505-080</b>	-565152	930 36 5/8	800 / 200 31 1/2   7 7/8	5.000	35 x 11 1 3/8 x 7/16	4,35 9,592
<b>505-060</b>	-142506	730 28 3/4	600 / 200 23 5/8   7 7/8	5.000	35 x 11 1 3/8 x 7/16	3,855 8,500



## PRODUCT DETAILS

### SERIES 505P/507P LOW-PRESSURE DIE-CAST CLAMPS WITH 2K COMFORT GRIP







The deep-throat cast iron clamps with 2K comfort grip from series 505P to 509P are used for compressing and holding large workpieces in construction and industry. The steel sliding rail allows for a high clamping force to be achieved. Series 505P to 509P are equipped with a 2-component grip that enables safe and stable work.

#### Benefits

- Tensile strength up to 7,000 N
- Smooth-running trapezoidal spindles ensure an even higher power transmission.



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 kg/lb
<b>505P040</b>	-779725	530 20 7/8	400 / 200 15 3/4   7 7/8	5.000	35 x 11 1 3/8 x 7/16	0,235 0,518
<b>507P100</b>	-779947	1.170 46 1/16	1.000 / 300 39 3/8   11 13/16	6.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>507P080</b>	-779930	970 38 3/16	800 / 300 31 1/2   11 13/16	6.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>507P060</b>	-779923	770 30 5/16	600 / 300 23 5/8   11 13/16	6.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>507P040</b>	-779916	570 22 7/16	400 / 300 15 3/4   11 13/16	6.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>506P100</b>	-779909	1.170 46 1/16	1.000 / 250 39 3/8   9 13/16	7.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>506P080</b>	-779770	970 38 3/16	800 / 250 31 1/2   9 13/16	7.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>506P060</b>	-779763	770 30 5/16	600 / 250 23 5/8   9 13/16	7.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>506P040</b>	-779787	570 22 7/16	400 / 250 15 3/4   9 13/16	7.000	45 x 12 1 3/4 x 1/2	0,235 0,518
<b>505P100</b>	-779756	1.130 44 1/2	1.000 / 200 39 3/8   7 7/8	5.000	35 x 11 1 3/8 x 7/16	0,235 0,518
<b>505P080</b>	-779749	930 36 5/8	800 / 200 31 1/2   7 7/8	5.000	35 x 11 1 3/8 x 7/16	0,235 0,518
<b>505P060</b>	-779732	730 28 3/4	600 / 200 23 5/8   7 7/8	5.000	35 x 11 1 3/8 x 7/16	3,715 8,192

## PRODUCT DETAILS

### SERIES 505K/509K DEEP CLAMP CAST IRON SCREW CLAMPS WITH STEEL KNURLED HANDLE









The deep clamping cast iron screw clamps with steel toggle grips from series 505K to 509K are used for compressing and holding large workpieces in construction and industry. The steel glide rail allows for high clamping force to be achieved. The series 505K to 509K features a toggle grip that enables particularly tight fastening.

#### Benefits

- Tensile strength up to 7,000 N
- Smooth-running trapezoidal spindles ensure an even higher power transmission.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 mm/inch	 kg/lb
<b>505K040</b>	-772482	530 20 7/8	400 / 200 15 3/4   7 7/8	5.000	35 x 11 1 3/8 x 7/16	3,85 8,489
<b>507K100</b>	-773540	1.170 46 1/16	1.000 / 300 39 3/8   11 13/16	6.000	45 x 12 1 3/4 x 1/2	3,58 7,894
<b>507K080</b>	-773472	970 38 3/16	800 / 300 31 1/2   11 13/16	6.000	45 x 12 1 3/4 x 1/2	8,765 19,327
<b>507K060</b>	-773397	770 30 5/16	600 / 300 23 5/8   11 13/16	6.000	45 x 12 1 3/4 x 1/2	7,91 17,442
<b>507K040</b>	-773212	570 22 7/16	400 / 300 15 3/4   11 13/16	6.000	45 x 12 1 3/4 x 1/2	7 15,435
<b>506K100</b>	-773137	1.170 46 1/16	1.000 / 250 39 3/8   9 13/16	7.000	45 x 12 1 3/4 x 1/2	9,3 20,507
<b>506K080</b>	-773052	970 38 3/16	800 / 250 31 1/2   9 13/16	7.000	45 x 12 1 3/4 x 1/2	8,085 17,827
<b>506K060</b>	-772970	770 30 5/16	600 / 250 23 5/8   9 13/16	7.000	45 x 12 1 3/4 x 1/2	7,45 16,427
<b>506K040</b>	-772895	570 22 7/16	400 / 250 15 3/4   9 13/16	7.000	45 x 12 1 3/4 x 1/2	6,4 14,112
<b>505K100</b>	-772710	1.130 44 1/2	1.000 / 200 39 3/8   7 7/8	5.000	35 x 11 1 3/8 x 7/16	5,515 12,161
<b>505K080</b>	-772635	930 36 5/8	800 / 200 31 1/2   7 7/8	5.000	35 x 11 1 3/8 x 7/16	0 0,000
<b>505K060</b>	-772550	730 28 3/4	600 / 200 23 5/8   7 7/8	5.000	35 x 11 1 3/8 x 7/16	3,815 8,412





## PRODUCT DETAILS

### SERIES 440 POLE SCREW CLAMP FOR GROUNDING WITH GUIDE RING










The pole screw clamps of series 440 are used for grounding during welding work. The solid and application-oriented design allows for safe clamping. The series 440 has a guide ring for ground cables.

#### Benefits

- Tensile strength up to 5,000 N
- Through the labeling on the frames, you can quickly keep track of dimensions.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 A	 kg/lb
<b>440-150</b>	-607647	235 9 1/4	150 / 60 5 7/8   2 3/8	5.000	30 x 8 1 3/16 x 5/16	400 A	0,95 2,095
<b>440-156</b>	-032289	235 9 1/4	150 / 60 5 7/8   2 3/8	5.000	30 x 8 1 3/16 x 5/16	600 A	0,9595 2,116
<b>440-158</b>	-803339	235 9 1/4	150 / 80 5 7/8   3 1/8	5.000	30 x 8 1 3/16 x 5/16	400 A	0,97 2,139

### SERIES 441 POLE SCREW CLAMP FOR GROUNDING WITH MOUNTING HOLE










The pole screw clamps of series 441 are used for grounding during welding work. The solid and application-oriented design allows for secure clamping. Series 441 features a mounting hole for ground cables.

#### Benefits

- Tensile strength up to 5,000 N
- Through the labeling on the frames, you can quickly keep track of dimensions.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 N	 mm/inch	 A	 kg/lb
<b>441-580</b>	-558062	230 9 1/16	150 / 80 5 7/8   3 1/8	2.700	22 x 6 7/8 x 1/4	250 A	0,705 1,555
<b>441-600</b>	-776367	290 11 7/16	200 / 100 7 7/8   3 15/16	5.000	30 x 8 1 3/16 x 5/16	600 A	1,4 3,087

## PRODUCT DETAILS

### SERIES 365 C-CLAMPS MADE OF SOLID STEEL WITH KNOB HANDLE








The C-clamps made of solid steel from series 365 are used for spring elastic clamping of multiple workpieces in craft, industry, and workshop. The clamp provides an exceptionally high clamping force through its trapezoidal spindle. Series 365 features a star grip that allows for particularly tight tightening.

#### Benefits

- Tensile strength up to 40,000 N
- Smooth-running trapezoidal spindles provide an even higher force transmission.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 kg/lb
<b>365-050</b>	-915742	120 4 3/4	50 / 50 1 15/16   1 15/16	10.000	0,425 0,937
<b>365-075</b>	-915759	150 5 7/8	75 / 50 2 15/16   1 15/16	13.000	0,625 1,378
<b>365-100</b>	-915766	186 7 5/16	100 / 60 3 15/16   2 3/8	15.000	0,965 2,128
<b>365-150</b>	-915773	247 9 3/4	150 / 75 5 7/8   2 15/16	18.000	1,445 3,186
<b>365-200</b>	-915780	308 12 1/8	200 / 90 7 7/8   3 9/16	22.000	2,265 4,994
<b>365-250</b>	-915797	384 15 1/8	250 / 100 9 13/16   3 15/16	40.000	4,38 9,658

### SERIES 420 C-CLAMPS WITH METRIC FINE THREAD








The C-clamps with metric fine thread of the series 420 are used for compressing and holding multiple workpieces in crafts, industry, and workshops. The clamp provides precise and controlled force application through the spindle with metric thread. The series 420 features a knurled handle that allows for particularly tight tightening.

#### Benefits

- Tensile strength up to 4,000 N
- Smooth-running spindles ensure even higher torque transmission.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 kg/lb
<b>420-028</b>	-604677	85 3 3/8	28 / 25 1 1/8   1	1.000	0,18 0,397
<b>420-053</b>	-604752	125 4 15/16	53 / 38 2 1/16   1 1/2	1.500	0,345 0,761
<b>420-078</b>	-604837	155 6 1/8	78 / 50 3 1/16   1 15/16	1.500	0,565 1,246
<b>420-130</b>	-605094	230 9 1/16	130 / 70 5 1/8   2 3/4	2.500	1,405 3,098
<b>420-155</b>	-667122	260 10 1/4	155 / 76 6 1/8   2 1	4.000	2,075 4,575
<b>420-206</b>	-605179	330 12 1	206 / 86 8 1/8   3 3/8	4.000	3,13 6,902

## PRODUCT DETAILS

### SERIES 430 PARALLEL CLAMPS







The parallel clamps of the series 430 are used in crafts, industry, and workshops for the precise, parallel adjustment of the clamping surfaces thanks to their double spindle guidance.

#### Benefits

- Tensile force up to 4,000 N
- Smooth-running spindles ensure an even higher power transmission.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
<b>430-028</b>	-606084	50 1 15/16	28 / 16 1 1/8   5/8	0,14 0,309
<b>430-040</b>	-606169	60 2 3/8	40 / 25 1 9/16   1	0,185 0,408
<b>430-055</b>	-606244	75 2 15/16	55 / 35 2 3/16   1 3/8	0,23 0,507
<b>430-070</b>	-606329	100 3 15/16	70 / 50 2 3/4   1 15/16	0,48 1,058
<b>430-105</b>	-606404	150 5 7/8	105 / 70 4 1/8   2 3/4	0,94 2,073

### SERIES 431 QUICK-CHANGE COLLETS KANT-TWIST









The KANT-TWIST quick-release clamps from series 431 are used for internal and external clamping of various Profilees in crafts, industry, and workshops. Series 431 impresses with its multifunctionality. It combines the features of clamps, pliers, and vices in a single tool.

#### Benefits

- Tensile force up to 9700 N
- Movable Jaws with Prism Cut

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	N	kg/lb
<b>431-001</b>	-606572	25 1	15 - 17 9/16-11/16	8 5/16	1.700	0,4 0,882
<b>431-002</b>	-606657	50 1 15/16	35 - 40 1 3/8-1 9/16	12 1/2	3.900	0,18 0,397
<b>431-003</b>	-606732	75 2 15/16	35 - 50 1 3/8-1 15/16	16 5/8	7.300	0,525 1,158
<b>431-004</b>	-606817	110 4 5/16	60 - 75 2 3/8-2 15/16	22 7/8	8.300	0,77 1,698
<b>431-006</b>	-606992	150 5 7/8	60 - 85 2 3/8-3 3/8	22 7/8	9.700	1,375 3,032
<b>431-009</b>	-607074	240 9 7/16	80 - 135 3 1/8-5 5/16	32 1 1/4	9.700	3,28 7,232
<b>431-010</b>	-607159	255 10 1/32	150 - 190 5 7/8-7 1/2	32 1 1/4	9.700	4,85 10,694
<b>431-012</b>	-607234	300 11 13/16	120 - 170 4 3/4-6 11/16	32 1 1/4	9.700	6,49 14,310



## PRODUCT DETAILS

### SERIES 432 PARALLEL CLAMPS








The parallel clamps of series 432 are used for universal internal and external clamping of various workpiece forms in craft, industry, and workshops. The series 432 features four different surfaces for use with different workpiece forms, ensuring universal application.

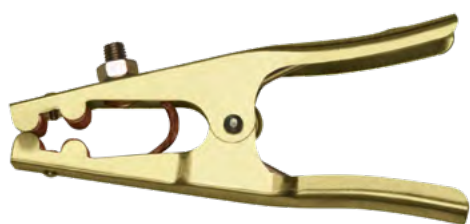
#### Benefits

- Tensile force up to 8,500 N
- Smooth-running trapezoidal spindles ensure an even higher power transmission.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 Power N	 kg/lb
432-001	-795252	25 1	15 - 20 9/16-13/16	1.300	0,6 1,323
432-002	-795337	50 1 15/16	33 - 42 1 5/16-1 5/8	3.100	0,26 0,573
432-003	-795412	75 2 15/16	35 - 49 1 3/8-1 15/16	5.000	0,56 1,235
432-004	-795580	110 4 5/16	58 - 78 2 5/16-3 1/16	6.800	0,565 1,246
432-006	-795665	150 5 7/8	110 - 128 4 5/16-5 1/32	8.500	2,08 4,586

### SERIES 442 EARTH CLAMPS






The grounding clamps of series 442 guarantee a secure connection to metallic components such as housings, pipes, and mounting systems and serve for the termination of protective conductors. The clamps are mounted in no time and can be used flexibly. A typical application example is their use in welding work.

#### Benefits

- Versatile use
- Quality steel sheet

#### Technical attributes

#	 EAN	 A	 kg/lb
442-400	-607807	400 A	0,265 0,584
442-600	-607982	500 A	0,415 0,915



## PRODUCT DETAILS

### SERIES 450 MITER WELDING PLIERS







The miter welding pliers of the series 450 are used for accurately clamping workpieces during welding or for assembly work in trades, industry, and workshops. The ductile iron base body has firm, well-machined support surfaces at a clamping angle of 90°.

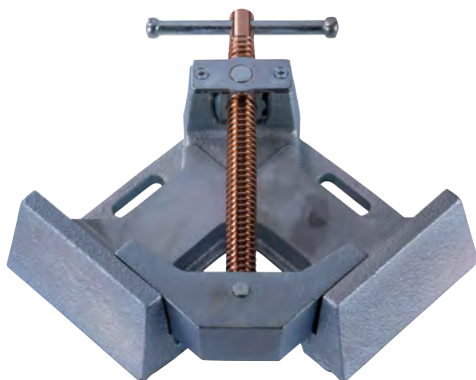
#### Benefits

- Prisms allow clamping for various workpiece shapes.
- The movable clamp jaw makes the miter welding pliers suitable for different material cross-sections.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
450-050	-564735	230 9 1/16	50 1 15/16	1,24 2,734
450-100	-564810	320 12 5/8	100 3 15/16	2,78 6,130

### SERIES 450-260 METAL ANGLE CLAMP







The metal angle clamp of the series 450 is used for precise angle clamping of workpieces during welding or for assembly work in crafts, industry, and workshops. The ductile cast iron base body features solid, cleanly machined support surfaces at a clamping angle of 90°.

#### Benefits

- The movable clamp jaw makes the miter welding pliers suitable for different material cross-sections.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
450-260	-564650	250 9 13/16	90 3 9/16	4,16 9,173

## PRODUCT DETAILS

### SERIES 516 GLUE PLIER CLAMP







The clamps of the 516 series are used to hold multiple workpieces in craft, industry, and workshop. The clamps are equipped with a strong spring and a vulcanized fiber plate coating to ensure powerful and handy holding.

#### Benefits

- High quality through stamping from sheet steel
- Coating made of vulcanized fiber protects and insulates the workpiece

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
516-110	-634612	110 4 5/16	40 / 37 1 9/16   1 7/16	0,06 0,132
516-155	-634797	155 6 1/8	50 / 56 1 15/16   2 3/16	0,16 0,353

### SERIES 516-200 GLUE PLIER CLAMP







The glue plier clamps of series 516 are used to hold multiple workpieces in craft, industry, and workshop. The glue plier clamps are equipped with a strong spring and high-quality plastic to ensure powerful and handy holding.

#### Benefits

- By adjusting the grid settings, parts of different sizes can be held precisely.
- Suitable for universal use in holding workpieces.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
516-200	-002077	180 7 1/16	50 / 46 1 15/16   1 13/16	0,155 0,342
516-300	-002084	240 9 7/16	75 / 85 2 15/16   3 3/8	0,26 0,573



## PRODUCT DETAILS

### SERIES 511 WOOD CLAMPING VICES








The wooden clamps of the series 511 are used for pressing and clamping multiple workpieces. The clamps are specially designed for wooden parts and consist of a solid upper part, lower part, and eccentric made of beech wood, as well as a steel rail. This guarantees ideal handling thanks to the infinitely variable adjustment of the clamping pressure through the eccentric lever. The non-slip cork pad prevents pressure points or other damage.

#### Benefits

- Infinitely adjustable pressure adjustment via eccentric lever
- Non-slip design, also on curves and edges
- Lightweight

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
511-200	-917685	200 7 7/8	200 / 110 7 7/8   4 5/16	20 x 5 13/16 x 3/16	0,485 1,069
511-300	-917692	300 11 13/16	300 / 110 11 13/16   4 5/16	20 x 5 13/16 x 3/16	0,505 1,114
511-400	-013288	400 15 3/4	400 / 110 15 3/4   4 5/16	20 x 5 13/16 x 3/16	0,635 1,400
511-600	-013295	600 23 5/8	600 / 110 23 5/8   4 5/16	20 x 5 13/16 x 3/16	0,815 1,797
511-800	-013301	800 31 1/2	800 / 110 31 1/2   4 5/16	20 x 5 13/16 x 3/16	0,905 1,996

### SERIES 517 ONE-HAND CLAMPS







The one-handed clamp of series 517 is used for compressing and holding multiple workpieces. The one-handed clamp is primarily used in the wood sector. The one-handed operation ensures maximum flexibility. The protective caps guarantee a gentle handling of the workpiece. Thanks to the 2-component plastic handle, ergonomic working is enabled.

#### Benefits

- One-handed operation for tightening and loosening using two separate controls.
- Ergonomically shaped 2-component plastic handle

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
517-150K	-039905	150 / 85 5 7/8   3 3/8	19 x 6 3/4 x 1/4	0,655 1,444
517-300K	-039929	300 / 85 11 13/16   3 3/8	19 x 6 3/4 x 1/4	0,78 1,720
517-450K	-039943	450 / 85 17 11/16   3 3/8	19 x 6 3/4 x 1/4	0,89 1,962
517-600K	-039967	600 / 85 23 5/8   3 3/8	19 x 6 3/4 x 1/4	1,025 2,260

## PRODUCT DETAILS

### SERIES 520 ALL-STEEL SCREW CLAMPS












The all-steel vises of series 520 are used for clamping workpieces in crafts, industry, and workshops. The lightweight design of series 520 is ideal for universally clamping simple workpieces, and the material provides the necessary durability and stability of the vise.

#### Benefits

- High-quality material and simple actuation
- Easy execution for flexible work in workshops and crafts

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>520-080</b>	-609474	95 3 3/4	250 9 13/16	93 3 11/16	100 3 15/16	80 3 1/8	20 13/16	50 1 15/16	3,965 8,743
<b>520-100</b>	-609542	100 3 15/16	310 12 3/16	112 4 7/16	120 4 3/4	100 3 15/16	22 7/8	64 2 1/2	7,24 15,964
<b>520-125</b>	-609627	130 5 1/8	377 14 13/16	137 5 3/8	140 5 1/2	125 4 15/16	25 1	75 2 15/16	10,265 22,634
<b>520-150</b>	-609702	160 6 5/16	435 17 1/8	165 6 1/2	155 6 1/8	150 5 7/8	30 1 3/16	95 3 3/4	16,9 37,265
<b>520-175</b>	-609887	175 6 7/8	435 17 1/8	165 6 1/2	155 6 1/8	175 6 7/8	30 1 3/16	95 3 3/4	17 37,485
<b>520-100-R</b>	-997090	100 3 15/16	310 12 3/16	112 4 7/16	120 4 3/4	100 3 15/16	22 7/8	64 2 1/2	7 15,435
<b>520-125-R</b>	-455668	130 5 1/8	377 14 13/16	137 5 3/8	140 5 1/2	125 4 15/16	25 1	75 2 15/16	7 15,435
<b>520-150-R</b>	-455880	160 6 5/16	435 17 1/8	165 6 1/2	155 6 1/8	150 5 7/8	30 1 3/16	95 3 3/4	7 15,435
<b>520-175-R</b>	-035808	175 6 7/8	435 17 1/8	165 6 1/2	155 6 1/8	175 6 7/8	30 1 3/16	95 3 3/4	7 15,435
<b>520-100-G</b>	-997083	100 3 15/16	310 12 3/16	112 4 7/16	120 4 3/4	100 3 15/16	22 7/8	64 2 1/2	6,9 15,215
<b>520-125-G</b>	-759865	130 5 1/8	377 14 13/16	137 5 3/8	140 5 1/2	125 4 15/16	25 1	75 2 15/16	7 15,435
<b>520-150-G</b>	-056179	160 6 5/16	435 17 1/8	165 6 1/2	155 6 1/8	150 5 7/8	30 1 3/16	95 3 3/4	15 33,075
<b>520-175-G</b>	-759872	175 6 7/8	435 17 1/8	165 6 1/2	155 6 1/8	175 6 7/8	30 1 3/16	95 3 3/4	17,18 37,882

### SERIES 525 PARALLEL VISES










The parallel vises of series 525 are used for clamping workpieces in crafts, industry, and workshops. The induction-hardened parts of series 525 make it ideal for the universal clamping of medium-sized workpieces, and the material ensures the necessary durability and stability of the vise.

#### Benefits

- High-quality material and easy operation
- Medium execution for flexible work as a Parallel Vise

#### Technical attributes

#									
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>525-100</b>	-925185	125 4 15/16	292 11 1/2	125 4 15/16	125 4 15/16	100 3 15/16	17 11/16	69 2 11/16	6,89 15,192
<b>525-125</b>	-925192	145 5 11/16	350 13 3/4	148 5 13/16	150 5 7/8	125 4 15/16	20 13/16	82 3 1/4	10,32 22,756
<b>525-150</b>	-925208	165 6 1/2	452 17 13/16	178 7 1/64	200 7 7/8	150 5 7/8	24 15/16	99 3 7/8	11,5 25,358
<b>525-175</b>	-925215	190 7 1/2	510 20 1/16	208 8 3/16	220 8 11/16	175 6 7/8	27 1 1/16	122 4 13/16	26,46 58,344
<b>525-100-R</b>	-455675	125 4 15/16	292 11 1/2	125 4 15/16	125 4 15/16	100 3 15/16	17 11/16	69 2 11/16	11 24,255
<b>525-125-R</b>	-178796	145 5 11/16	350 13 3/4	148 5 13/16	150 5 7/8	125 4 15/16	20 13/16	82 3 1/4	11,5 25,358
<b>525-150-R</b>	-813468	165 6 1/2	452 17 13/16	178 7 1/64	200 7 7/8	150 5 7/8	24 15/16	99 3 7/8	16,67 36,757
<b>525-175-R</b>	-831332	190 7 1/2	510 20 1/16	208 8 3/16	220 8 11/16	175 6 7/8	27 1 1/16	122 4 13/16	26 57,330
<b>525-100-G</b>	-035815	125 4 15/16	292 11 1/2	125 4 15/16	125 4 15/16	100 3 15/16	17 11/16	69 2 11/16	6,775 14,939
<b>525-125-G</b>	-096991	145 5 11/16	350 13 3/4	148 5 13/16	150 5 7/8	125 4 15/16	20 13/16	82 3 1/4	10,27 22,645
<b>525-150-G</b>	-097028	165 6 1/2	452 17 13/16	178 7 1/64	200 7 7/8	150 5 7/8	24 15/16	99 3 7/8	17 37,485
<b>525-175-G</b>	-097042	190 7 1/2	510 20 1/16	208 8 3/16	220 8 11/16	175 6 7/8	27 1 1/16	122 4 13/16	6,55 14,443

## PRODUCT DETAILS

### SERIES 160-1 FLANGE SPREADER








The flange spreaders of series 160 are used in pairs for the safe and accident-free separation of flange connections of pipelines in power plants, petrochemistry, or offshore. They enable the separation of large and high-performance flanges, allowing for easy maintenance work, even when a large access gap is present between the flanges.

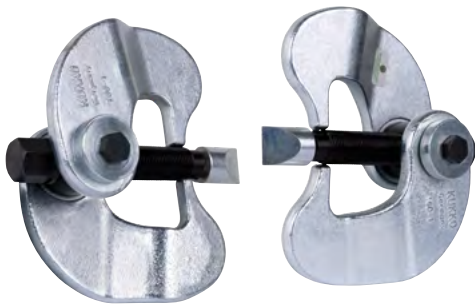
#### Benefits

- After completing the work, the flanges will be returned precisely to their original position.
- Flange spreaders are the perfect solution for the repair of pipes and flanges.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>160-1-E</b>	-245701	80 - 250 3 1/8-9 13/16	14,5 9/16	24 15/16	2,905 6,406
<b>160-1-P</b>	-041167	80 - 250 3 1/8-9 13/16	14,5 9/16	24 15/16	5,87 12,943

### SERIES 160-2 FLANGE SPREADER








The flange spreaders of series 160 are used in pairs for the safe and accident-free separation of flange connections of pipelines in power plants, petrochemistry, or offshore. They enable the separation of large and high-performance flanges, allowing for easy maintenance work, even when a large access gap is present between the flanges.

#### Benefits

- After completing the work, the flanges will be returned precisely to their original position.
- Flange spreaders are the perfect solution for the repair of pipes and flanges.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>160-2-E</b>	-245886	250 - 1200 9 13/16-47 1/4	24 15/16	27 1 1/16	8,95 19,735
<b>160-2-P</b>	-041174	250 - 1200 9 13/16-47 1/4	24 15/16	27 1 1/16	7,39 16,295



## PRODUCT DETAILS

### SERIES 165 UNIVERSAL SPREADER







The universal spreader of the series 165 is used for the quick and safe spreading of flanges and similar parts of all kinds and sizes in the industry. It is a universal tool designed for many applications, intended for paired use.

#### Benefits

- The smooth operation of the spreader is performed via a built-in ratchet.
- The tool allows for easy execution of maintenance tasks such as a seal ring replacement.



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	<b>Max. tensile force</b> kN	<b>Max. tractive force</b> t/US t. sh.	 kg/lb
165-E	-491979	10 - 75 3/8 - 2 15/16	30 1 3/16	20	2 2.20	6,5 14,333

### SERIES 689 LANGBECK LOCKING PLIERS







The Langbeck locking pliers of series 689 are used for clamping and gripping in narrow, tapering areas in workshops, industry, and trade. The locking pliers are not only handy and can be operated with one hand, but the toggle lever mechanism also allows for the application of very high forces. The series 689 is an ideal choice, especially in cases of reduced accessibility.

#### Benefits

- The knurled screw with fine thread allows for precise setting of spread and clamping pressure.
- The single-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
689-150	-005664	150 5 7/8	40 1 9/16	0 0,000
689-230	-005688	230 9 1/16	55 2 3/16	0,395 0,871

## PRODUCT DETAILS

### SERIES 690 UNIVERSAL LOCKING PLIERS







The Universal locking pliers of series 690 are used for securely holding round, Profilee, and flat materials in workshops, industry, and crafts. The locking pliers are not only handy and can be operated with one hand, but the toggle mechanism also allows for very high forces to be applied. The series 690 is a universal model suitable for a variety of workpieces.

#### Benefits

- The semicircular jaws are particularly suitable for round and flat material.
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>690-180</b>	-651367	180 7 1/16	35 1 3/8	0,37 0,816
<b>690-250</b>	-651442	250 9 13/16	50 1 15/16	0,605 1,334
<b>690-300</b>	-651510	300 11 13/16	65 2 9/16	0,95 2,095

### SERIES 690+ UNIVERSAL LOCKING PLIERS







The universal locking pliers of the 690+ series are used for securely holding round, Profilee, and flat materials in the workshop, industrial settings, and crafts. The locking pliers are not only handy and can be operated with one hand, but the lever mechanism also allows for very high forces to be applied. The 690+ series is a universal model suitable for a wide range of workpieces.

#### Benefits

- Tensioning regulator and release lever make working with locking pliers easier.
- Jaw body and gripping jaws are made of highly durable material.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>690+004</b>	-909604	220 8 11/16	30 1 3/16	0,505 1,114

## PRODUCT DETAILS

### SERIES 691 PRISMA LOCKING PLIERS







The Prisma grip pliers of series 691 are used for securely holding round, Profilee, and flat materials in workshops, industry, and crafts. The grip pliers are not only handy and can be operated with one hand, but thanks to the lever mechanism, very high forces can also be applied. The 691 series features a wire groove in the upper jaw, allowing nails and wires to be accessible and manageable from the front.

#### Benefits

- Particularly suitable for round and flat materials
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
691-180	-651695	180 7 1/16	30 1 3/16	0,28 0,617
691-250	-651770	250 9 13/16	35 1 3/8	0,595 1,312

### SERIES 691+ UNIVERSAL OPTI GRIP PLIERS







The Universal Opti-Grip Pliers of series 691+ are used for securely holding round, Profilee, and flat materials in workshops, industry, and crafts. The grip pliers are not only handy and can be operated with one hand, but the toggle lever mechanism also enables the application of very high forces.

#### Benefits

- Tensioning regulator and release lever make working with locking pliers easier.
- Jaw body and gripping jaws are made of highly durable material.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
691+005	-909611	220 8 11/16	30 1 3/16	0,495 1,091



## PRODUCT DETAILS

### SERIES 692 IDEAL LOCKING PLIERS







The Ideal locking pliers of series 692 are used for securely holding round, Profilee, and flat materials in workshops, industry, and crafts. The locking pliers are not only handy and can be operated with one hand, but also allow for very high forces to be applied thanks to the lever mechanism. Series 692 features a combined jaw design with four-point contact.

#### Benefits

- The knurled screw with fine thread allows for precise setting of spread and clamping pressure.
- The one-hand quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
692-250	-651930	250 9 13/16	50 1 15/16	0,57 1,257

### SERIES 693 PARALLEL-PLUS-LOCKING PLIERS







The Parallel-Plus locking pliers of series 693 are used for securely holding round, Profilee, and flat materials in workshops, industry, and crafts. The locking pliers are not only handy and can be operated with one hand, but thanks to the toggle lever mechanism, very high forces can also be applied. Series 693 has a combined jaw shape with a swiveling jaw, making parallel and prismatic clamping possible.

#### Benefits

- Suitable for symmetrical materials as well
- The knurled screw with fine thread allows for precise adjustment of spread and clamping pressure.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
693-250	-650117	250 9 13/16	45 1 3/4	0,62 1,367

## PRODUCT DETAILS

### SERIES 694 BROAD-JAW LOCKING PLIERS







The wide-jaw locking pliers of the 694 series are used for clamping edges and surfaces in workshops, industries, and crafts. The locking pliers are not only handy and can be operated with one hand, but the toggle lever mechanism also allows for very high forces to be applied. The 694 series can be utilized for clamping, bending, and flanging thinner, softer sheets due to its jaw shape.

#### Benefits

- The knurled screw with fine thread allows for precise adjustment of spread and clamping pressure.
- The one-hand quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
694-275	-652012	180 7 1/16	45 1 3/4	0,53 1,169

### SERIES 695 SCHWEISSER-LOCKING PLIERS







The welding grip pliers of series 695 are used for centric clamping when welding Profilee or flat material by impact in workshop, industry, and trades. The grip pliers are not only handy and can be operated with one hand, but thanks to the lever mechanism, very high forces can also be applied. The series 695, with its U-shaped jaws, facilitates easier and more flexible clamping due to its good vibration absorption.

#### Benefits

- Also ideal for more delicate surfaces
- The knurled screw with fine thread allows for precise adjustment of spread and clamping pressure.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
695-280	-652197	280 11 1/32	60 2 3/8	0,85 1,874

## PRODUCT DETAILS

### SERIES 696 PIPE WELDER LOCKING PLIERS







The 696 series of pipe welding locking pliers are used for centric clamping when welding round or pipe materials in the workshop, industry, and crafts. The locking pliers are not only handy and can be operated with one hand, but the knee lever mechanism also allows for the application of very high forces. The 696 series enables easier and more flexible clamping even with round materials due to its good vibration absorption.

#### Benefits

- Also ideal for more sensitive surfaces
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
696-280	-652272	280 11 1/32	90 3 9/16	0,85 1,874

### SERIES 697 CLAMPING-LOCKING PLIERS








The clamping locking pliers of series 697 are used for clamping, holding and gripping Profilee and flat material in workshops, industry and craftsmanship. The locking pliers are not only handy and can be operated with one hand, but the lever mechanism also allows very high forces to be applied. The series 697 with its special shape can also clamp asymmetrical and bulky workpieces and Profilees with high webs.

#### Benefits

- Optimal suited for tensioning behind cross beams with asymmetrical materials
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
697-280	-652357	280 11 1/32	90 3 9/16	A:55   B:85   C:95   D:77	0,75 1,654



## PRODUCT DETAILS

### SERIES 698 PARALLEL JAW LOCKING PLIERS








The parallel clamping pliers of series 698 are used for clamping and gripping round, Profilee, and flat materials in workshops, industry, and crafts. The grip pliers are not only handy and can be operated one-handed, but the lever mechanics also allow for the application of very high forces. Series 698, with its movable jaws with large support discs, provides excellent clamping effect even with asymmetric materials.

#### Benefits

- Optimal suited for tensioning behind bridges with asymmetric materials
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.

#### Technical attributes

#					
	EAN	mm/inch	mm/inch max.	mm/inch	kg/lb
698-280	-652432	280 11 1/32	90 3 9/16	A:55   B:85   C:95   D:77	0,785 1,731

### SERIES 280 TOOL AND DRILL HOLDER WITH RATCHET









The tool and drill holders with ratchet of the series 280 are tool holders for threading and reaming. Due to their short design, they are particularly suitable for hard-to-reach places.

#### Benefits

- Switchable for left and right operation as well as rigid locking
- Two-jaw chuck for securely clamping square shafts



#### Technical attributes

#						
	EAN	mm/inch	DIN 352	DIN 206	mm/inch	kg/lb
280-085	-910938	85 3 3/8	M2 - M8	2,5 - 6,5	2 - 5,5 1/16-3/16	0,175 0,386
280-100	-910945	110 4 5/16	M5 - M12	4-8	4,5 - 8 3/16-5/16	0,28 0,617
280-250	-910952	250 9 13/16	M1 - M10	2,5 - 6,5	2 - 5,5 1/16-3/16	0,26 0,573
280-300	-910969	300 11 13/16	M5 - M12	5,5 - 10	4,5 - 8 3/16-5/16	0,415 0,915

## PRODUCT DETAILS

### SERIES 315 TOOL HOLDER







The tool holders of series 315 are used for holding various tools for universal use in craft, industry, and workshop. Series 315 is drilled.

#### Benefits

- Brass
- Nickel-plated

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>315-801</b>	-701284	80 3 1/8	0 - 1 0 - 1/32	0,3 0,662
<b>315-802</b>	-701369	80 3 1/8	1 - 2 1/32 - 1/16	0,6 1,323

### SERIES W-3132/K2 RIVET MACHINES






The W-3132 series riveter is suitable for all riveting work, especially for brake and clutch linings, etc., and even with complicated jaws featuring longitudinal and height ribs. It is a manual tool for riveting and unriveting with a long lever for energy-saving operation. The riveting is done from below, and the unriveting from above.

#### Benefits

- Simple and practical to handle
- The riveting machine can be clamped in the vise as well as attached to the wall with screws.
- The rivet inserts are replaceable by loosening two knob screws.

#### Technical attributes

#	 EAN	 mm/inch	 kg/lb
<b>W-3132/K2</b>	-555662	10 3/8	9,395 20,716

## PRODUCT DETAILS

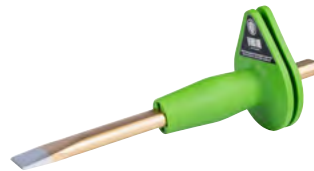
### SERIES 721 CHISEL HOLDERS



The chisel holders made of PVC from the series 721 are used for protection during chisel work and similar activities in crafts, industry, and workshops. The shape and construction of the green holder protect the user and prevent hand injuries in everyday work. Ideal for oval chisels from 20x12 mm to 26x13 mm as well as 8-sided chisels 16-20 mm.





#### Benefits

- The grippy and secure shape reduces fatigue and increases safety.
- Elliptical shape prevents rolling away

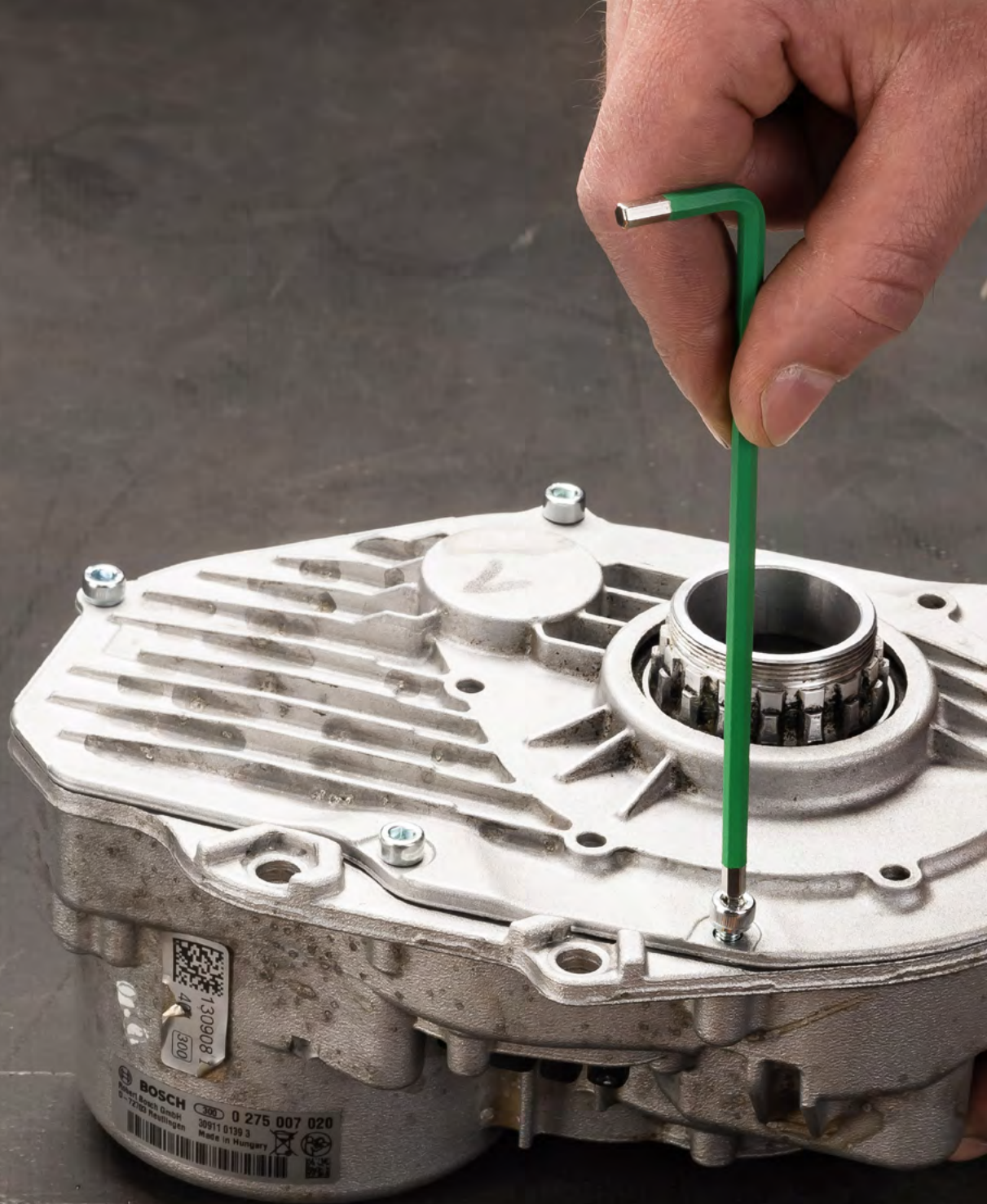


(Application example)

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	Chisel pick-up mm
721-1	-344367	120 4 3/4	40 1 9/16	103 4 1/16	20x12 - 26x13, 26x7, 16 - 20









# SCREW & DRIVE

For fine work in watchmaking, for compressing and holding multiple components, or for operating hard-to-reach screw heads – KUKKO offers the perfect solution for every application.

The activities of Screw & Drive include:

- Watchmaker screwdriver
- European wrench
- Impact wrench

# DEPLOYMENT

For the activity "Screwing & Drive," KUKKO offers various tools in its range. This extends from angle screwdrivers (internal hexagon or Torxx) to impact wrenches and watchmakers' screwdrivers. The perfect solution is found for every application case.

## FEATURES OF THE SERIES

### SERIES 204



The angle screwdrivers ISO 2936 of series 201 are used for operating hard-to-reach screw heads. Hardness and torque meet the ISO standard. The sales and workshop stands are used for proper storage.

### SERIES 211



The Tamper TX angle screwdrivers of series 211 are used for operating hard-to-reach screw heads. Unlike hex keys, the Torx Profilee grips in the center and thus enables easier working and less wear.

### SERIES 212BT



The color-coded TX angle screwdrivers with ball head from the 212 series simplify the selection of the required size and are used for operating hard-to-reach screw heads.

### SERIES 1900



The European from the 1900 series is used to compress and hold multiple workpieces. The adjustable double-ended wrench allows for easy fixation of both metallic and round or polygonal bodies.

### SERIES 250



The slotted watchmaker screwdrivers of series 250 are used for precise work for the highest demands in craftsmanship and watchmaking. The screwdrivers with a revolving hexagon head and knurled fine screwdriver handle allow for the dosed transfer of high torque.

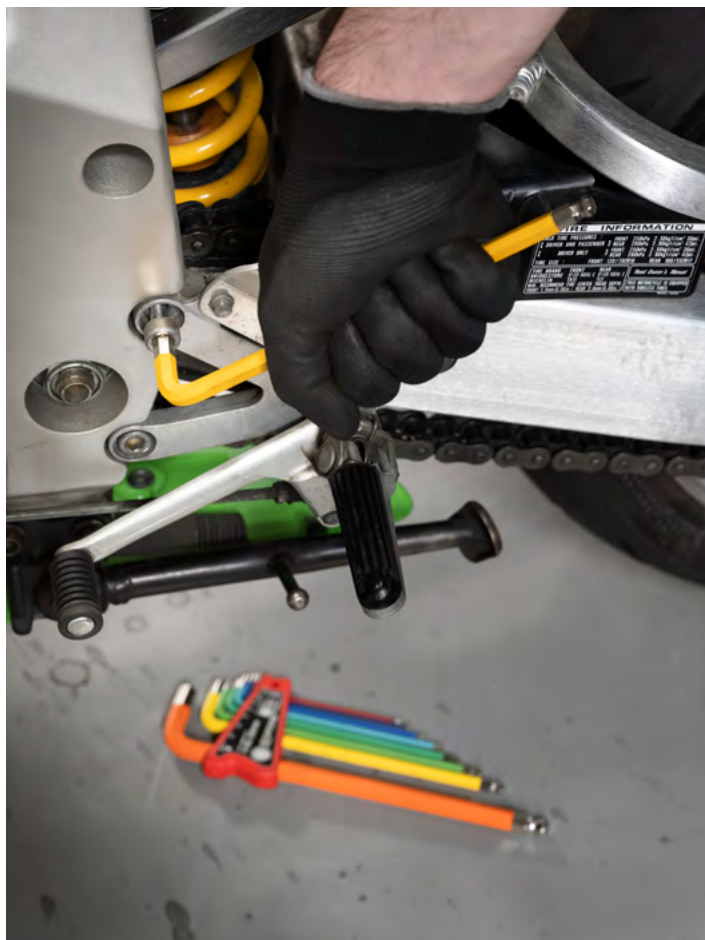
### SERIES 133 | 406



The impact wrenches (DIN 133) of series 133 are used for applications in commercial vehicles, pipe industry, tank cleaning, petrochemical industry, steel and mining, etc. With them, hexagonal or square screw heads and nuts can be operated effortlessly.



# APPLICATION EXAMPLES



Loosening a Torx screw on an electric motor with an allen key from the series 212.



The angle screwdrivers from the sales and workshop stand ISO 2936 during the disassembly of a stamping tool.



A screwdriver from the watchmaker screwdriver set 250-600 for screwing work on a mobile phone.



The European 1900-30 when tightening or loosening a nut on a machine.



## PRODUCT DETAILS

### SERIES 250-550 WATCHMAKER SCREWDRIVER SET IN WOODEN BOX









The nickel-free watchmaker screwdriver sets in the wooden box of series 250 are used for precision work for the highest demands in craftsmanship and watchmaking. The screwdrivers with rotatable hexagon heads and knurled fine screw grips allow for the controlled transmission of strong torque. Made from corrosion-resistant aluminum, the handle ensures exceptionally high strength. Thanks to the rejuvenated handle shape, quick screwing is enabled. Depending on requirements, the set contains screwdrivers for various Profilee sizes and types. The information in the wooden box helps know exactly which screwdriver is needed.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the wooden box, the completeness of the set can be easily overviewed.
- Different designs allow for use with various Profilees

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch		 kg/lb
<b>250-550</b>	-713652	84-112 3 5/16-4 7/16	5-8 3/16 - 5/16		PH0000; PH000; PH00; PH0	0,26 0,573
<b>250-560</b>	-599072	80-112 3 1/8-4 7/16	5-8 3/16 - 5/16	1,0, 1,5, 2,0, 2,5, 3,0, 3,5 1/32, 1/32, 1/16, 1/16, 1/8, 1/8	-	0,345 0,761
<b>250-570</b>	-713737	80-112 3 1/8-4 7/16	5-8 3/16 - 5/16	1,0; 1,5; 2,0; 3,0 1/32;1/32;1/16;1/8	PH0; PH00	0,36 0,794

### SERIES 250-600 WATCHMAKER SCREWDRIVER SET IN WOODEN STAND









The nickel-free watchmaker screwdriver sets in the wooden stand of series 250 are used for delicate work to meet the highest demands in crafts and watchmaking. The screwdrivers with rotating hexagonal head and knurled fine grip allow for controlled transmission of high torque. Made from corrosion-resistant aluminum, the handle guarantees particularly high strength. Thanks to the rejuvenated grip shape, rapid screwing is enabled. Depending on the needs, the set includes screwdrivers for various Profilee sizes and types. The markings in the wooden stand help to know exactly which screwdriver is needed.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the wooden stand, the completeness of the set can be easily overviewed.
- Different designs allow for use with various Profilees

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch		 kg/lb
<b>250-600</b>	-529894	80-112 3 1/8-4 7/16	5-8 3/16 - 5/16	1,0; 1,5; 2,0; 3,0 1/32;1/32;1/16;1/8	PH0; PH00	0,36 0,794

## PRODUCT DETAILS

### SERIES 250-500 WATCHMAKER SCREWDRIVER SETS







The clockmaker's screwdriver sets of series 250 are used for precise work with the highest demands in craftsmanship and watchmaking. The screwdrivers with a rotating hexagon head and knurled fine screw grip allow for the controlled transmission of strong torques. Depending on the needs, the set contains screwdrivers for various Profilee sizes and types.

#### Benefits

- Application-oriented assembly for universal use
- Also suitable for other areas of technology

#### Technical attributes

#	 EAN	 mm/inch		 kg/lb
250-500	-598730		PH000; PH00; PH0	1,265 2,789
250-520	-713409	1,0; 1,5; 2,0; 3,0 1/32; 1/32; 1/16; 1/8	PH00; PH0	0,135 0,298
250-540	-701444	1,0; 1,5; 2,0; 2,5; 3,0; 3,5 1/32; 1/32; 1/16; 1/16; 1/8; 1/8	-	0,125 0,276
250-545	-713577	1,0; 1,5; 1,8; 2,3; 2,9 1/32; 1/32; 1/32; 1/16; 1/16	-	0,07 0,154

### SERIES 250-PH PHILLIPS WATCHMAKER SCREWDRIVER








The Phillips screwdrivers of series 250 are used for delicate work for the highest demands in craftsmanship and watchmaking. The screwdrivers with a rotating hexagonal head and knurled fine screw grip allow for the precise transmission of strong torque. The screwdrivers of series 250-PH are designed for various Phillips cross-Profilees. The colored ring below the head of the screwdrivers simplifies selection.

#### Benefits

- Also suitable for other areas of technology
- High-quality material and hardened execution

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch		 kg/lb
250-042	-711672	84 3 5/16	5 3/16	PH0000	0,01 0,022
250-043	-711757	100 3 15/16	6 1/4	PH000	0,015 0,033
250-044	-711832	100 3 15/16	6 1/4	PH00	0,02 0,044
250-045	-711917	112 4 7/16	8 5/16	PH0	0,035 0,077
250-046	-925734	112 4 7/16	8 5/16	PH1	0,0001 0,000



## PRODUCT DETAILS

### SERIES 250-000 SLOT WATCHMAKER SCREWDRIVER









The slot screwdrivers of series 250 are used for precise work meeting the highest standards in craftsmanship and watchmaking. The screwdrivers with a rotatable hexagonal head and knurled fine grip allow for the measured transfer of high torque. The screwdrivers of series 250-0 are designed for slotted Profilees.

#### Benefits

- Also suitable for other areas of technology
- High-quality material and hardened execution

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	 kg/lb
250-010	-597580	80 3 1/8	5 3/16	1 1/32	0,20 1/64	0,5 1,103
250-012	-529863	84 3 5/16	5 3/16	1,2 1/32	0,25 1/64	0 0,000
250-014	-529870	84 3 5/16	5 3/16	1,4 1/32	0,25 1/64	0 0,000
250-015	-597665	84 3 5/16	5 3/16	1,5 1/32	0,23 1/64	0,0009 0,002
250-020	-597740	100 3 15/16	6 1/4	2 1/16	0,40 1/64	0,02 0,044
250-025	-597825	100 3 15/16	6 1/4	2,5 1/16	0,40 1/64	0,02 0,044
250-029	-529887	112 4 7/16	8 5/16	2,9 1/16	0,50 1/64	0,2 0,441
250-030	-597900	112 4 7/16	8 5/16	3 1/8	0,50 1/64	0,03 0,066
250-035	-598082	112 4 7/16	8 5/16	3,5 1/8	0,60 1/32	0,036 0,079

### SERIES 250-100 SCREWDRIVER WITH INTERCHANGEABLE BLADES IN THE MAGAZINE








The precision screwdrivers with interchangeable blades in the magazine of the series 250 are used for delicate work for the highest demands in craftsmanship and watchmaking. The screwdrivers with a rotating hexagonal head and knurled fine grip allow the controlled transmission of high torque. The screwdrivers of series 250-1 are suitable for various Profilee types thanks to their interchangeable blades.

#### Benefits

- Replacement blades allow the use with slotted and cross Profilees.
- Also suitable for other areas of technology

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
250-120	-598815	115 4 1/2	8,5 5/16	1,5; 2; 2,5; 3 1/32; 1/16; 1/16; 1/8	0,3 0,662
250-130	-712099	115 4 1/2	8,5 5/16	PH0; PH00; PH000; PH0000	0,15 0,331
250-140	-712174	115 4 1/2	8,5 5/16	1,5; 2,0; 2,5; 3,0; PH00	0,035 0,077

## PRODUCT DETAILS

### SERIES 1900 EUROPEAN








The European of the series 1900 is used for compressing and holding multiple workpieces in crafts, industry, and workshop. With the adjustable wrench featuring a double-sided jaw, both metallic and round or polygonal bodies can be easily fixed. It is an advancement of the "Frenchman" and "Englishman." Beyond its holding capability, it can also be utilized for clamping, fixing, turning screws, or loosening.

#### Benefits

- No uncontrolled adjustment due to locking mechanism
- Single-sided diamond mouth for improved application possibilities



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb
<b>1900-30</b>	-000355	150 5 7/8	30 1 3/16	14 9/16	0,455 1,003
<b>1900-50</b>	-000362	175 6 7/8	50 1 15/16	15 9/16	0,48 1,058
<b>1900-75</b>	-000416	260 10 1/4	88 3 7/16	20 13/16	1,74 3,837



Loosening a nut with the European 1900-30.

## PRODUCT DETAILS

### SERIES 205-100 ALLEN KEY






The hand lever clamps of series 205 are used to operate hard-to-reach screw heads in workshops, industry, and craftsmanship. Hardness and torque meet ISO standards. The series 205 is cost-effective and compact and available in numerous sizes suitable for various hexagons.

#### Benefits

- Chamfered forehead edges
- Various designs allow use with different hex sizes

#### Technical attributes

#	 EAN	 mm/inch	Profile	 kg/lb
205-101	-584870	1,5, 2,0, 2,5, 3,0, 4,0, 5,0, 6,0 1/32;1/16;1/16;1/8;3/16;3/16;1/4	Hexagon	0,145 0,320
205-102	-584955	2,5, 3,0, 4,0, 5,0, 6,0, 8,0 1/16;1/8;3/16;3/16;1/4;5/16	Hexagon	0,25 0,551
205-103	-585037	3,0, 4,0, 5,0, 6,0, 8,0, 10,0 1/8;3/16;3/16;1/4;5/16;3/8	Hexagon	0,325 0,717
205-104	-585112	2,5, 3,0, 4,0, 5,0, 6,0, 8,0, 10,0 1/16;1/8;3/16;3/16;1/4;5/16;3/8	Hexagon	0,335 0,739
205-202	-798789	2,5, 3,0, 4,0, 5,0, 6,0, 8,0 1/16;1/8;3/16;3/16;1/4;5/16	Hexagon	0,2 0,441
205-204	-798796	2,5, 3,0, 4,0, 5,0, 6,0, 8,0, 10,0 1/16;1/8;3/16;3/16;1/4;5/16;3/8	Hexagon	0,2865 0,632

### SERIES 205-109 ALLEN KEY






The manual lever clamps of the series 205 are used to operate hard-to-reach screw heads in workshops, industry, and crafts. Hardness and torque comply with ISO standards. The series 205 is cost-effective and compact, and suitable for various hexagons in numerous sizes.

#### Benefits

- Chamfered forehead edges
- Various designs allow use with different hex sizes

#### Technical attributes

#	 EAN	 mm/inch	Profile	 kg/lb
205-109	-585600	2,5, 3, 4, 5, 6, 8, 10 1/16;1/8;3/16;3/16;1/4;5/16;3/8	Hexagon	0,335 0,739



## PRODUCT DETAILS

### SERIES 201/202 SALES AND WORKSHOP STAND ISO 2936






The sales and workshop stands ISO 2936 of the series 201/202 serve for the proper storage of hex keys used in workshops, industry, and crafts. Hardness and torque conform to ISO standards. The series 201/202 is cost-effective and compact, and suitable in numerous sizes for various hexagonal drives.

#### Benefits

- Chamfered forehead edges
- Various designs allow use with different hex sizes

#### Technical attributes

#			
	EAN	mm/inch	kg/lb
201-909	-594022	2,5, 3,0, 4,0, 5,0, 6,0, 8,0, 10,0, 12,0, 14,0 1/16;1/8;3/16;3/16;1/4;5/16;3/8;1/2;9/16	1,11 2,448

### SERIES 204-900 SALES AND WORKSHOP STAND ISO 2936 LONG







The sales and workshop stands ISO 2936 of the series 204 serve for the proper storage of Allen keys used in workshops, industry, and crafts. Hardness and torque comply with ISO standards. The series 204 is affordable and compact.

#### Benefits

- Chamfered forehead edges
- Various designs allow use with different hex sizes

#### Technical attributes

#				
	EAN	mm	inch	kg/lb
204-909	-594107	2,5, 3,0, 4,0, 5,0, 6,0, 8,0, 10,0, 12,0, 14,0	1/16;1/8;3/16;3/16;1/4;5/16 ;3/8;1/2;9/16	1,59 3,506
204-990	-695347	-	3/32; 1/8; 5/32; 3/16; 1/4; 5/16; 3/8; 1/2; 9/16 inch	1,19 2,624

## PRODUCT DETAILS

### SERIES 212BT TX-ANGLE SCREWDRIVER WITH BALL HEAD AND COLOR CODING








The color-coded TX hex screwdrivers with ball head of the series 212BT are used for operating hard-to-reach screw heads in workshops, industry, and crafts. Unlike hex keys, the Torx Profilee engages centrally, making it easier to work and reducing wear. The color coding of the hex screwdrivers simplifies the search for the correct size.

#### Benefits

- The color coding of the allen keys simplifies the selection
- Various designs allow use with different hex sizes
- Different versions allow Usage with different hexagon sizes

#### Technical attributes

#	 EAN	 SW mm/inch	 mm/inch	 mm/inch	Profile	 kg/lb
212BT309	-997106	TX 9	19 3/4	67 2 5/8	TORX®	0,33 0,728
212BT310	-997113	TX 10	20 13/16	76 2 1	TORX®	0,33 0,728
212BT315	-997120	TX 15	20,5 13/16	86,5 3 3/8	TORX®	0,33 0,728
212BT320	-997137	TX 20	22 7/8	98 3 7/8	TORX®	0,33 0,728
212BT325	-997144	TX 25	22,5 7/8	100,5 3 15/16	TORX®	0,33 0,728
212BT327	-997151	TX 27	25,5 1	111,5 4 3/8	TORX®	0,33 0,728
212BT330	-997168	TX 30	30 1 3/16	125 4 15/16	TORX®	0,33 0,728
212BT340	-997175	TX 40	33 1 5/16	139 5 1/2	TORX®	0,33 0,728

### SERIES 213BT "BALL-END L-SHAPED SCREWDRIVER, LONG AND COLOR-CODED"








The long, color-coded angle screwdrivers with ball head of series 213 are used for operating hard-to-reach screw heads in workshops, industry, and trades. Hardness and torque meet the ISO standard. Series 213 is cost-effective and compact, and is housed in a lockable, impact-resistant plastic case.

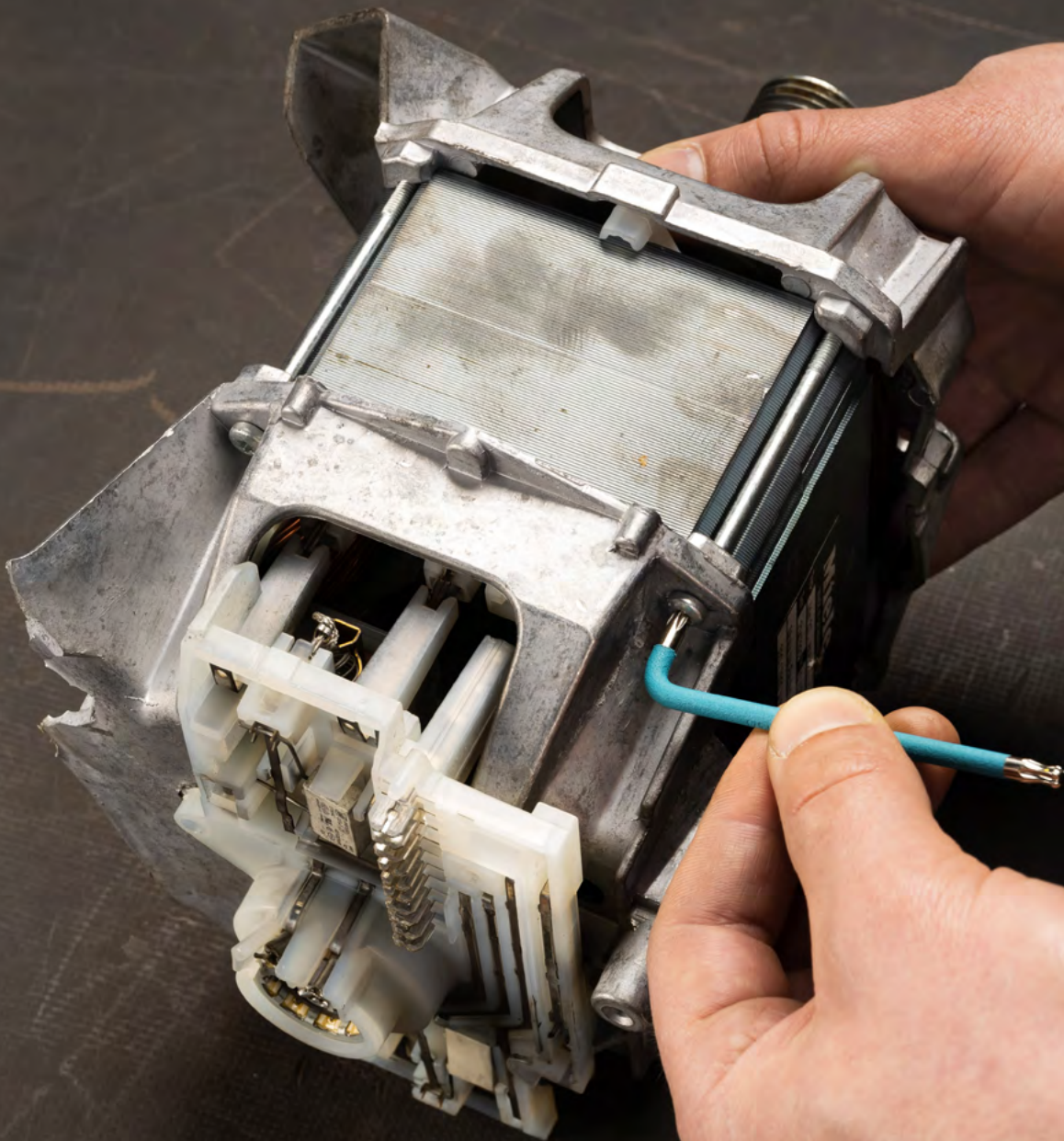
#### Benefits

- The ball head allows for problem-free screwing up to an angle of 30°.
- The color coding of the allen keys simplifies the selection.

#### Technical attributes

#	 EAN	 SW mm/inch	 mm/inch	 mm/inch	Profile	 kg/lb
213BT015	-997243	1,5 1/32	15,5 5/8	91,5 3 5/8	Hexagon	0,002 0,004
213BT002	-178550	2 1/16	18 11/16	102 4 1/64	Hexagon	0,004 0,009
213BT025	-997267	2,5 1/16	20,5 13/16	114,5 4 1/2	Hexagon	0,01 0,022
213BT003	-997182	3 1/8	23 7/8	129 5 1/16	Hexagon	0,009 0,020
213BT004	-997199	4 3/16	29 1 1/8	144 5 11/16	Hexagon	0,015 0,033
213BT005	-997205	5 3/16	33 1 5/16	165 6 1/2	Hexagon	0,035 0,077
213BT006	-997212	6 1/4	38 1 1/2	186 7 5/16	Hexagon	0,05 0,110
213BT008	-997229	8 5/16	44 1 3/4	208 8 3/16	Hexagon	0,105 0,232
213BT010	-997236	10 3/8	50 1 15/16	234 9 3/16	Hexagon	0,185 0,408







## PRODUCT DETAILS

### SERIES 212-260 ALLEN KEY SET








212BT260

The TX angle screwdrivers in the set of series 212 are used for operating hard-to-reach screw heads in workshops, industry, and crafts. Unlike hex keys, the Torx Profilee engages from the center, providing easier working and less wear.

#### Benefits

- Due to the wave-like course, a larger contact surface is created between the tool and the screw.
- Strength according to the specifications of the licensor Camcar, Textron, USA

#### Technical attributes

#					Profile	
	EAN	mm/inch	mm/inch	mm/inch		kg/lb
<b>212-260</b>	-695675	9, 10, 15, 20, 25, 27, 30, 40 3/8;3/8;9/16;13/16;1;1 1/16;1 3/16;1 9/16	19-33 3/4-1 5/16	67-139 2 5/8-5 1/2	TORX®	0,16 0,353
<b>212-265</b>	-927608	9, 10, 15, 20, 25, 27, 30, 40 3/8;3/8;9/16;13/16;1;1 1/16;1 3/16;1 9/16	19-33 3/4-1 5/16	59-119 2 5/16-4 11/16	TORX®	0,16 0,353

### SERIES 215 ALLEN KEY WITH BALL HEAD IN KUKKO CLIP








215BT004

The angle screwdrivers with ball head in the KUKKO clip of series 215 are used for operating hard-to-reach screw heads in workshops, industry, and crafts. Hardness and torque comply with ISO standards.

#### Benefits

- The ball head allows for problem-free screwing up to an angle of 30°
- Cleanly beveled edges

#### Technical attributes

#					Profile	
	EAN	mm/inch	mm/inch	mm/inch		kg/lb
<b>215-000</b>	-588427	1,5, 2,0, 2,5, 3,0, 4,0, 5,0, 6,0, 8,0, 10,0 1/32;1/16;1/16;1/8;3/16;3/16;1/4;5/16;3/8	15,5 - 500 9/16-19 11/16	91,5 - 234 3 9/16-9 3/16	Hexagon	0,439 0,968
<b>215-001</b>	-746414	0,05; 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16 0,05; 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16	16 - 44 5/8-1 3/4	92 - 208 3 5/8-8 3/16	Hexagon	0,3 0,662
<b>215-002</b>	-700607	1,5, 2,0, 2,5, 3,0, 4,0, 5,0, 6,0, 8,0, 10,0 1/32;1/16;1/16;1/8;3/16;3/16;1/4;5/16;3/8	15,5 - 50 9/16-1 15/16	91,5 - 234 3 9/16-9 3/16	Hexagon	0,4 0,882
<b>215-003</b>	-676032	1,5, 2,0, 2,5, 3,0, 4,0, 5,0, 6,0, 8,0, 10,0 1/32;1/16;1/16;1/8;3/16;3/16;1/4;5/16;3/8	15,5 - 50 9/16-1 15/16	91,5 - 234 3 9/16-9 3/16	Hexagon	0,336 0,741

## PRODUCT DETAILS

### SERIES 235 HEXAGON CROSS HANDLE SCREW- DRIVER WITH DOUBLE-SIDED DRIVE









The hexagonal cross-grip screwdrivers with double-sided drive from series 235 are used to operate screw heads under high torques in workshops, industry, and crafts. Hardness and torque comply with ISO standards. Series 235 is ideal for use in demanding situations.

#### Benefits

- The soft finger guard prevents disturbing contact with the blade.
- When using the short jaw arm, the already high torque performance of the cross grip system is additionally enhanced by using the longer arm as a lever.

#### Technical attributes

#						Profile	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
235-0210	-314255	151 5 15/16	2 1/16	60 2 3/8	125 4 15/16	Hexagon	0,15 0,331
235-0251	-314262	151 5 15/16	2,5 1/16	60 2 3/8	100 3 15/16	Hexagon	0,25 0,551
235-0310	-314279	151 5 15/16	3 1/8	60 2 3/8	125 4 15/16	Hexagon	0,0002 0,000
235-0415	-314286	151 5 15/16	4 3/16	60 2 3/8	125 4 15/16	Hexagon	0,035 0,077
235-0515	-314293	184 7 1/4	5 3/16	80 3 1/8	150 5 7/8	Hexagon	0,065 0,143
235-0620	-314309	184 7 1/4	6 1/4	80 3 1/8	150 5 7/8	Hexagon	0,085 0,187
235-0820	-314316	218 8 9/16	8 5/16	100 3 15/16	175 6 7/8	Hexagon	0,175 0,386
235-1020	-314323	218 8 9/16	10 3/8	100 3 15/16	175 6 7/8	Hexagon	0,245 0,540

### SERIES 212-TX TX SCREWDRIVER WITH T-HANDLE









The TX screwdrivers with T-handle from series 212 are used for operating screw heads in workshops, industry, and craftsmanship. Unlike hex keys, the Torx Profilee engages centrally, allowing for easier work and less wear. Series 212 is affordable and compact.

#### Benefits

- Due to the wave-like course, a larger contact surface is created between the tool and the screw
- The handle made of impact-resistant polypropylene (PPN) enables easy and safe working.

#### Technical attributes

#						Profile	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
212-108	-696177	125 4 15/16	TX 8	70 2 3/4	100 3 15/16	TORX®	0,4 0,882
212-109	-696252	125 4 15/16	TX 9	70 2 3/4	100 3 15/16	TORX®	0,25 0,551
212-110	-696337	125 4 15/16	TX 10	70 2 3/4	100 3 15/16	TORX®	0,25 0,551
212-115	-696412	125 4 15/16	TX 15	70 2 3/4	100 3 15/16	TORX®	0,2 0,441
212-120	-696580	125 4 15/16	TX 20	90 3 9/16	100 3 15/16	TORX®	0,4 0,882
212-125	-696665	125 4 15/16	TX 25	90 3 9/16	100 3 15/16	TORX®	0,4 0,882
212-127	-696740	125 4 15/16	TX 27	90 3 9/16	100 3 15/16	TORX®	0,55 1,213
212-130	-696825	125 4 15/16	TX 30	90 3 9/16	100 3 15/16	TORX®	0,55 1,213
212-140	-696900	125 4 15/16	TX 40	90 3 9/16	100 3 15/16	TORX®	0,7 1,544
212-145	-697082	175 6 7/8	TX 45	90 3 9/16	150 5 7/8	TORX®	0,14 0,309
212-150	-697167	175 6 7/8	TX 50	90 3 9/16	150 5 7/8	TORX®	0,16 0,353
212-215	-697242	225 8 7/8	TX 15	90 3 9/16	200 7 7/8	TORX®	0,35 0,772
212-220	-590550	225 8 7/8	TX 20	90 3 9/16	200 7 7/8	TORX®	0,06 0,132
212-225	-697327	225 8 7/8	TX 25	90 3 9/16	200 7 7/8	TORX®	0,55 1,213
212-227	-697402	225 8 7/8	TX 27	90 3 9/16	200 7 7/8	TORX®	0,8 1,764
212-230	-697570	225 8 7/8	TX 30	90 3 9/16	200 7 7/8	TORX®	0,075 0,165
212-240	-697655	225 8 7/8	TX 40	90 3 9/16	200 7 7/8	TORX®	0,1 0,221
212-245	-697730	280 11 1/32	TX 45	110 4 5/16	250 9 13/16	TORX®	0,175 0,386
212-250	-596750	280 11 1/32	TX 50	110 4 5/16	250 9 13/16	TORX®	0,21 0,463

## PRODUCT DETAILS

### SERIES 214-T SCREWDRIVER WITH BALL HEAD AND T-HANDLE









The screwdrivers with ball head and T-handle from series 214 are used for operating screws in workshops, industry, and crafts. Hardness and torque conform to ISO standards. Series 214 is affordable and compact.

#### Benefits

- The ball head allows for problem-free screwing up to an angle of 30°.
- The handle made of impact-resistant polypropylene (PPN) enables easy and safe working.

#### Technical attributes

#						Profile	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
214-310	-699710	125 4 15/16	3 1/8	70 2 3/4	100 3 15/16	Hexagon	0,2 0,441
214-410	-699895	125 4 15/16	4 3/16	70 2 3/4	100 3 15/16	Hexagon	0,2 0,441
214-415	-699970	175 6 7/8	4 3/16	70 2 3/4	150 5 7/8	Hexagon	0,3 0,662
214-510	-700034	125 4 15/16	5 3/16	90 3 9/16	100 3 15/16	Hexagon	0,5 1,103
214-515	-700119	175 6 7/8	5 3/16	90 3 9/16	150 5 7/8	Hexagon	0,6 1,323
214-615	-700294	175 6 7/8	6 1/4	90 3 9/16	150 5 7/8	Hexagon	0,7 1,544
214-620	-700379	225 8 7/8	6 1/4	90 3 9/16	200 7 7/8	Hexagon	0,075 0,165
214-815	-700454	175 6 7/8	8 5/16	90 3 9/16	150 5 7/8	Hexagon	0,1 0,221
214-820	-700522	225 8 7/8	8 5/16	90 3 9/16	200 7 7/8	Hexagon	0,125 0,276
214-910	-699550	225 8 7/8	10 3/8	110 4 5/16	200 7 7/8	Hexagon	0,21 0,463

### SERIES 222-230 HEXAGON SCREWDRIVER WITH T-HANDLE









The hexagon screwdrivers with T-handle from series 222-230 are used for operating screw heads in workshops, industry, and craftsmanship. Hardness and torque meet the ISO standard. Series 222-230 is affordable and compact.







#### Benefits

- The handle made of impact-resistant polypropylene (PPN) allows for easy and safe working.
- Various designs allow use with different hex sizes

#### Technical attributes

#						Profile	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
222-090	-594695	125 4 15/16	2 1/16	70 2 3/4	100 3 15/16	Hexagon	0,0014 0,003
222-100	-700782	125 4 15/16	2,5 1/16	70 2 3/4	100 3 15/16	Hexagon	0,0018 0,004
223-121	-594855	125 4 15/16	3 1/8	70 2 3/4	100 3 15/16	Hexagon	0,02 0,044
223-150	-594930	175 6 7/8	3 1/8	70 2 3/4	150 5 7/8	Hexagon	0,2 0,441
223-200	-595012	225 8 7/8	3 1/8	70 2 3/4	200 7 7/8	Hexagon	0,03 0,066
224-100	-700867	125 4 15/16	4 3/16	70 2 3/4	100 3 15/16	Hexagon	0,025 0,055
224-150	-595272	175 6 7/8	4 3/16	70 2 3/4	150 5 7/8	Hexagon	0,03 0,066
224-200	-595357	225 8 7/8	4 3/16	70 2 3/4	200 7 7/8	Hexagon	0,035 0,077
225-101	-595432	132 5 3/16	5 3/16	90 3 9/16	100 3 15/16	Hexagon	0,05 0,110
225-150	-595500	182 7 3/16	5 3/16	90 3 9/16	150 5 7/8	Hexagon	0,9 1,985
225-200	-595685	232 9 1/8	5 3/16	90 3 9/16	200 7 7/8	Hexagon	0,06 0,132
226-100	-595760	132 5 3/16	6 1/4	90 3 9/16	100 3 15/16	Hexagon	0,055 0,121
226-150	-595845	182 7 3/16	6 1/4	90 3 9/16	150 5 7/8	Hexagon	0,07 0,154
226-200	-595920	232 9 1/8	6 1/4	90 3 9/16	200 7 7/8	Hexagon	0,082 0,181



#						Profile	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
<b>228-100</b>	-596002	132 5 3/16	8 5/16	90 3 9/16	100 3 15/16	Hexagon	0,09 0,198
<b>228-150</b>	-596187	182 7 3/16	8 5/16	90 3 9/16	150 5 7/8	Hexagon	0,12 0,265
<b>228-200</b>	-596262	232 9 1/8	8 5/16	90 3 9/16	200 7 7/8	Hexagon	0,125 0,276
<b>230-100</b>	-596347	139 5 1/2	10 3/8	110 4 5/16	100 3 15/16	Hexagon	0,145 0,320
<b>230-200</b>	-596422	239 9 7/16	10 3/8	110 4 5/16	200 7 7/8	Hexagon	0,2 0,441

**SERIES 236  
HEXAGONAL SOCKET WRENCH  
WITH T-HANDLE**









The hexagonal socket wrenches with T-handle of series 236 are used for operating screw heads in workshops, industry, and crafts. Hardness and torque comply with ISO standards. Series 236 is affordable and compact.



**Benefits**

- The handle made of impact-resistant polypropylene (PPN) allows for easy and safe working.
- Various designs allow use with different hex sizes

**Technical attributes**

#						Profile	
	EAN	mm/inch	mm/inch	mm/inch	mm/inch		kg/lb
<b>236-050</b>	-000974	5 3/16	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,14 0,309
<b>236-055</b>	-000981	5,5 3/16	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,11 0,243
<b>236-060</b>	-000998	6 1/4	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,115 0,254
<b>236-070</b>	-001063	7 1/4	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,15 0,331
<b>236-080</b>	-001070	8 5/16	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,14 0,309
<b>236-090</b>	-001087	9 3/8	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,155 0,342
<b>236-100</b>	-001094	10 3/8	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,145 0,320
<b>236-110</b>	-001100	11 7/16	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,19 0,419
<b>236-120</b>	-001117	12 1/2	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,215 0,474
<b>236-130</b>	-001124	13 1/2	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,19 0,419
<b>236-140</b>	-000530	14 9/16	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,18 0,397
<b>236-150</b>	-117399	15 9/16	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,19 0,419
<b>236-160</b>	-117405	16 5/8	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,21 0,463
<b>236-170</b>	-001131	17 11/16	270 10 5/8	110 4 5/16	230 9 1/16	Hexagon	0,215 0,474

## PRODUCT DETAILS

### SERIES 133 STRIKE-WRENCH (DIN 133)







The impact wrenches (DIN 133) of series 133 are used in application areas such as commercial vehicles, pipe industry, tank cleaning, petrochemical industry, steel and mining, etc. They can easily operate hexagon or square screw heads or nuts. The series 133 is characterized by its variety of designs. Numerous sizes allow use with different screw sizes.

#### Benefits

- Up to a length of 525 mm made of forged carbon steel
- Until key width 120

#### Technical attributes

#	 EAN	 L	 SW	
		mm/inch	mm/inch	kg/lb
133-24	-865213	160 6 5/16	24 1 5/16	0,35 0,772
133-27	-854804	180 7 1/16	27 1 1/16	0,411 0,906
133-30	-854989	190 7 1/2	30 1 3/16	0,55 1,213
133-32	-855061	195 7 11/16	32 1 1/4	0,6333 1,396
133-34	-904394	195 7 11/16	34 1 5/16	0,76 1,676
133-36	-855146	210 8 1/4	36 1 7/16	0,625 1,378
133-41	-855221	225 8 7/8	41 1 5/8	1,125 2,481
133-46	-855306	255 10 1/32	46 1 13/16	1,405 3,098
133-50	-855481	280 11 1/32	50 1 15/16	1,8 3,969
133-55	-855559	310 12 3/16	55 2 3/16	2,425 5,347
133-60	-855634	320 12 5/8	60 2 3/8	2,6 5,733
133-65	-855719	350 13 3/4	65 2 9/16	3,32 7,321
133-70	-855894	370 14 9/16	70 2 3/4	4,6667 10,290
133-75	-855979	400 15 3/4	75 2 15/16	6,25 13,781
133-80	-856051	405 15 15/16	80 3 1/8	5 11,025
133-85	-856136	405 15 15/16	85 3 3/8	6,16 13,583
133-90	-856211	455 17 15/16	90 3 9/16	8,26 18,213
133-95	-856396	455 17 15/16	95 3 3/4	8,19 18,059
133-100	-856471	500 19 11/16	100 3 15/16	11,185 24,663
133-105	-865176	500 19 11/16	105 4 1/8	11,335 24,994
133-110	-865183	500 19 11/16	110 4 5/16	15,64 34,486
133-115	-865190	525 20 11/16	115 4 1/2	15,45 34,067
133-120	-865206	525 20 11/16	120 4 3/4	17,54 38,676

## PRODUCT DETAILS

### SERIES 406 IMPACT RING WRENCH (DIN 7444)







The impact rings (DIN 7444) of series 406 are used in applications such as commercial vehicles, pipe industry, tank cleaning, petrochemical industry, steel and mining, etc. They do not slip off as easily as open-end wrenches and allow for a greater force transmission; however, an open access to the screw is required. The series 406 stands out for its variety of designs. Numerous sizes enable use with different screw sizes.

#### Benefits

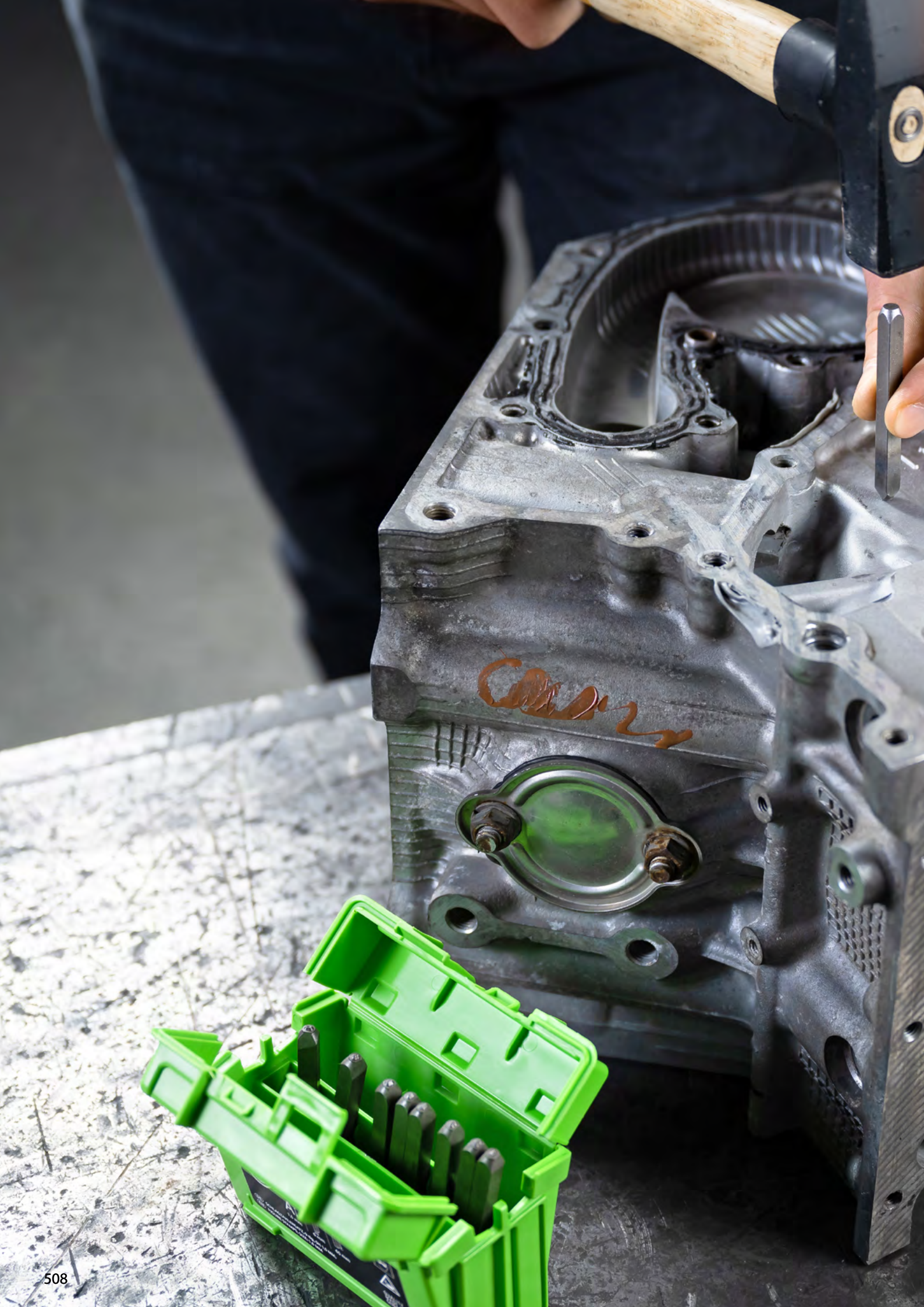
- Up to a length of 480 mm made of forged carbon steel
- Until key width 120

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
406-24	-856549	160 6 5/16	24 1 5/16	0,23 0,507
406-27	-856624	180 7 1/16	27 1 1/16	0,3333 0,735
406-30	-856709	190 7 1/2	30 1 3/16	0,395 0,871
406-32	-856884	195 7 11/16	32 1 1/4	0,45 0,992
406-34	-904431	195 7 11/16	34 1 5/16	0,44 0,970
406-36	-856969	205 8 1/16	36 1 7/16	0,585 1,290
406-38	-865961	205 8 1/16	38 1 1/2	0,715 1,577
406-41	-857041	225 8 7/8	41 1 5/8	0,795 1,753
406-46	-857126	240 9 7/16	46 1 13/16	1,75 3,859
406-50	-857201	250 9 13/16	50 1 15/16	1,2143 2,678
406-55	-857386	270 10 5/8	55 2 3/16	1,5833 3,491
406-60	-857461	270 10 5/8	60 2 3/8	1,9 4,190
406-65	-857539	290 11 7/16	65 2 9/16	1,83 4,035
406-70	-857614	320 12 5/8	70 2 3/4	3 6,615
406-75	-857799	325 12 13/16	75 2 15/16	3,8333 8,452
406-80	-857874	345 13 9/16	80 3 1/8	3,75 8,269
406-85	-857959	360 14 3/16	85 3 3/8	3 6,615
406-90	-858031	400 15 3/4	90 3 9/16	4,78 10,540
406-95	-858116	400 15 3/4	95 3 3/4	5,115 11,279
406-100	-858291	400 15 3/4	100 3 15/16	6,58 14,509
406-105	-858376	435 17 1/8	105 4 1/8	6,595 14,542
406-110	-858451	435 17 1/8	110 4 5/16	8,985 19,812
406-115	-858529	435 17 1/8	115 4 1/2	7,655 16,879
406-120	-858604	480 18 7/8	120 4 3/4	11,04 24,343











# SIGN AND LABEL

Whether for marking workpieces, labeling boxes or parking spaces, for multi-digit engraving, or for sealing – KUKKO offers the perfect solution for every application.

The activity of Signing & Labeling includes:

- Impact numbers
- Impact letters
- Stencils
- Type holder sets
- Hand punch stamps
- Radial punch stamps
- Seal tools

# DEPLOYMENT

For the task "Signing & labelling" KUKKO offers various tools in its range. This includes punch numbers and letters, impact stamps, and signing templates. The perfect solution is found for every application case.

## ASSORTMENT OVERVIEW

### LETTER PUNCHES SERIES 329 | 331



The 27-piece letter punch set is used for the problem-free marking of workpieces. The set has a standardized font according to DIN 1451 and a hardness of the engraving between 58 and 61 HRC.

### IMPACT NUMBERS SERIES 328 | 330



The 9-piece standard punch set is used for easy marking of workpieces. The set features a standardized typeface according to DIN 1451 and a hardness of the engraving between 58 and 61 HRC.

### HAND PUNCH STAMP SERIES 300



The hand punch stamps of the 300 series are used for the trouble-free marking of workpieces. Each hand punch stamp is manufactured individually according to your wishes.

### WHEEL PUNCH STAMP SERIES 332 | 333



The die-punch stamps of series 332 and 333 are particularly suitable for marking stainless steel due to their nickel-plated surface.

### SEAL TOOLS SERIES 334



The side cutter seal pliers of the series 334 are used for cutting seal wire and sealing with just one tool in crafts, industry, and workshops.

### SIGNING TEMPLATES SERIES 327



The professional letter stamping template set with plug-in mechanism of series 327 is used for marking shipping boxes, wooden boxes, parking spaces, etc. using marking paint and a marking roller.



# SETS

The sets of letter punches and stamps consist of many small individual parts that must be securely stored. For ideal storage and the best possible overview, the signing tools are available in practical plastic boxes or cases.



331-012



333-015



# APPLICATION EXAMPLES



Marking a steel plate with a punch stamp from series 333



Marking a punching tool with impact numbers of series 328



Sign templates of the series 327 in use

## PRODUCT DETAILS

### SERIES 328 STANDARD PUNCH SET, 9-PIECE








The 9-piece standard punch set of the 328 series is used for the trouble-free marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in crafts, industry, and workshops. The set has a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The standard set of the 328 series is a classic, ideal for universal applications.

#### Benefits

- Special durability through production in the cold forming process, where the fiber structure of the material is not interrupted.
- To get a better overview, packed in our tried and tested, shatterproof plastic container.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
328-101	-266141	65 2 9/16	58 - 61	6 1/4	1 1/32	0,17 0,375
328-1015	-926274	65 2 9/16	58 - 61	6 1/4	1,5 1/16	0,17 0,375
328-102	-688257	65 2 9/16	58 - 61	6 1/4	2 1/16	0,17 0,375
328-1025	-919320	65 2 9/16	58 - 61	6 1/4	2,5 1/8	0,17 0,375
328-103	-688332	65 2 9/16	58 - 61	6 1/4	3 1/8	0,17 0,375
328-104	-688417	65 2 9/16	58 - 61	7 1/4	4 3/16	0,245 0,540
328-105	-688585	65 2 9/16	58 - 61	8 5/16	5 3/16	0,295 0,650
328-106	-692520	70 2 3/4	58 - 61	9 3/8	6 1/4	0,41 0,904
328-107	-804565	75 2 15/16	58 - 61	10 3/8	7 1/4	0,535 1,180
328-108	-688660	75 2 15/16	58 - 61	11 7/16	8 5/16	0,64 1,411
328-110	-688745	80 3 1/8	58 - 61	12 1/2	10 3/8	0,835 1,841
328-112	-688820	80 3 1/8	58 - 61	14 9/16	12 1/2	1,135 2,503
328-115	-010072	90 3 9/16	58 - 61	16 5/8	15 9/16	1,6 3,528
328-120	-010096	100 3 15/16	58 - 61	20 13/16	20 13/16	2,755 6,075

## PRODUCT DETAILS

### SERIES 330-000 STAMP SET, EXTRA HEAVY QUALITY, SHINY NICKEL PLATED, 9-PIECE








The chrome-plated 9-piece impact number set with extra heavy quality of the series 330 is used for the problem-free marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshops. The set has a standardized letter design according to DIN 1451 and a hardness of the engraving between 58 and 61 HRC. The extra heavy impact numbers of the series 330 have a larger shaft, which increases the weight and significantly facilitates the striking into the workpiece. The nickel-plated surface does not leave any foreign rust and is particularly suitable for marking stainless steel.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.



#### Technical attributes

#			Hardness			
	EAN	mm/inch	HRC	mm/inch	mm/inch	kg/lb
<b>330-001</b>	-224868	65 2 9/16	58 - 61	6 1/4	1 1/32	0,245 0,540
<b>330-0015</b>	-031718	65 2 9/16	58 - 61	6 1/4	1,5 1/16	0,245 0,540
<b>330-002</b>	-626617	70 2 3/4	58 - 61	7 1/4	2 1/16	0,24 0,529
<b>330-0025</b>	-224875	70 2 3/4	58 - 61	7 1/4	2,5 1/8	0,245 0,540
<b>330-003</b>	-626792	70 2 3/4	58 - 61	7 1/4	3 1/8	0,26 0,573
<b>330-004</b>	-626877	70 2 3/4	58 - 61	8 5/16	4 3/16	0,3 0,662
<b>330-005</b>	-626952	70 2 3/4	58 - 61	9 3/8	5 3/16	0,42 0,926
<b>330-006</b>	-627034	75 2 15/16	58 - 61	10 3/8	6 1/4	0,54 1,191
<b>330-007</b>	-799106	75 2 15/16	58 - 61	10 3/8	7 1/4	0,54 1,191
<b>330-008</b>	-627119	80 3 1/8	58 - 61	12 1/2	8 5/16	0,84 1,852
<b>330-010</b>	-627294	80 3 1/8	58 - 61	14 9/16	10 3/8	1,1135 2,455
<b>330-012</b>	-627379	90 3 9/16	58 - 61	16 5/8	12 1/2	1,665 3,671
<b>330-015</b>	-627454	90 3 9/16	58 - 61	16 5/8	15 9/16	1,645 3,627
<b>330-020</b>	-627522	100 3 15/16	58 - 61	20 13/16	20 13/16	2,745 6,053



## PRODUCT DETAILS

### SERIES 330-500 LETTER PUNCH SET, EXTRA HEAVY QUALITY, 9-PIECE








The 9-part impact number set with extra heavy quality of series 330 is used for easy marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshops. The set has a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy impact numbers of series 330 feature a larger shaft, which increases the weight and significantly facilitates the striking into the workpiece.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#			Hardness			
	EAN	mm/inch	HRC	mm/inch	mm/inch	kg/lb
330-501	-158200	70 2 3/4	58 - 61	7 1/4	1 1/32	0,245 0,540
330-5015	-158217	70 2 3/4	58 - 61	7 1/4	1,5 1/16	0,245 0,540
330-502	-928315	70 2 3/4	58 - 61	7 1/4	2 1/16	0,245 0,540
330-5025	-224899	75 2 15/16	58 - 61	8 5/16	2,5 1/8	0,295 0,650
330-503	-224905	75 2 15/16	58 - 61	8 5/16	3 1/8	0,3 0,662
330-504	-928346	75 2 15/16	58 - 61	9 3/8	4 3/16	0,41 0,904
330-505	-928353	75 2 15/16	58 - 61	10 3/8	5 3/16	0,535 1,180
330-506	-928360	80 3 1/8	58 - 61	12 1/2	6 1/4	0,835 1,841
330-508	-011314	80 3 1/8	58 - 61	14 9/16	8 5/16	1,13 2,492
330-510	-928384	90 3 9/16	58 - 61	16 5/8	10 3/8	1,5 3,308
330-512	-928391	95 3 3/4	58 - 61	18 11/16	12 1/2	2,2 4,851
330-515	-928407	95 3 3/4	58 - 61	18 11/16	15 9/16	2,195 4,840
330-520	-928414	100 3 15/16	58 - 61	20 13/16	20 13/16	2,755 6,075

### SERIES 330-P LETTER PUNCH SET, EXTRA HEAVY QUALITY, DOTTED, 9-PIECE








The dotted 9-piece impact number set with extra heavy quality from series 330 is used for problem-free marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshops. The set features a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy impact numbers from series 330 have a larger shank, increasing the weight and significantly facilitating the striking into the workpiece. The dotted font reduces the notch effect of the struck symbol.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#			Hardness			
	EAN	mm/inch	HRC	mm/inch	mm/inch	kg/lb
330-003P	-928155	70 2 3/4	58 - 61	8 5/16	3 1/8	0,3 0,662
330-004P	-928179	70 2 3/4	58 - 61	9 3/8	4 3/16	0,405 0,893
330-005P	-928193	75 2 15/16	58 - 61	10 3/8	5 3/16	0,54 1,191
330-006P	-928216	80 3 1/8	58 - 61	12 1/2	6 1/4	0,835 1,841
330-008P	-010102	80 3 1/8	58 - 61	14 9/16	8 5/16	1,14 2,514
330-010P	-928254	90 3 9/16	58 - 61	16 5/8	10 3/8	1,67 3,682

## PRODUCT DETAILS

### SERIES 330-R LETTER PUNCH SET, EXTRA HEAVY QUALITY, RIGHT-ENGRAVED, 9-PIECE








The right-engraved 9-piece impact number set of extra heavy quality from the 330 series is used for easy marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshops. The set features a standardized letter design according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy impact numbers of the 330 series have a larger shaft, which increases the weight and significantly facilitates the driving into the workpiece. The impact numbers leave a mirror-image print, making it particularly easy to read in hard-to-reach places using a mirror.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- To get a better overview, packed in our tried and tested, shatterproof plastic container.

#### Technical attributes

#			Hardness			
	EAN	mm/inch	HRC	mm/inch	mm/inch	kg/lb
330-001R	-928124	70 2 3/4	58 - 61	7 1/4	1 1/32	0,245 0,540
330-002R	-801700	70 2 3/4	58 - 61	7 1/4	2 1/16	0,245 0,540
330-003R	-801717	75 2 15/16	58 - 61	8 5/16	3 1/8	0,295 0,650
330-004R	-801335	75 2 15/16	58 - 61	9 3/8	4 3/16	0,405 0,893
330-005R	-801724	75 2 15/16	58 - 61	10 3/8	5 3/16	0,53 1,169
330-006R	-802097	80 3 1/8	58 - 61	12 1/2	6 1/4	0,835 1,841
330-008R	-802110	80 3 1/8	58 - 61	14 9/16	8 5/16	1,13 2,492
330-010R	-011352	90 3 9/16	58 - 61	16 5/8	10 3/8	1,67 3,682

### SERIES 330-V LETTER PUNCH SET, EXTRA HEAVY QUALITY, IMPACT HEAD-COATED, 9-PIECE








The impact-rated 9-piece impact number set with extra heavy quality from series 330 is used for easy marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshops. The set features a standardized typeface according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy impact numbers from series 330 have a larger shaft that increases the weight and significantly facilitates driving into the workpiece. The tempering of the impact head reduces wear.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#			Hardness			
	EAN	mm/inch	HRC	mm/inch	mm/inch	kg/lb
330-001V	-928131	70 2 3/4	58 - 61	7 1/4	1 1/32	0,26 0,573
330-002V	-928148	70 2 3/4	58 - 61	7 1/4	2 1/16	0,24 0,529
330-003V	-928162	70 2 3/4	58 - 61	8 5/16	3 1/8	0,3 0,662
330-004V	-928186	75 2 15/16	58 - 61	9 3/8	4 3/16	0,405 0,893
330-005V	-928209	75 2 15/16	58 - 61	10 3/8	5 3/16	0,535 1,180
330-006V	-928223	80 3 1/8	58 - 61	12 1/2	6 1/4	0,835 1,841
330-008V	-158194	80 3 1/8	58 - 61	14 9/16	8 5/16	1,13 2,492
330-010V	-928261	90 3 9/16	58 - 61	16 5/8	10 3/8	1,5 3,308
330-012V	-928285	95 3 3/4	58 - 61	18 11/16	12 1/2	2,2 4,851

## PRODUCT DETAILS

### SERIES 329 LETTER PUNCH SET, STANDARD, 27-PIECE








The 27-piece standard letter punch set of the 329 series is used for easy marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in crafts, industry, and workshops. The set has a standardized font according to DIN 1451 and a hardness on the engraving between 58 and 61 HRC. The standard set of the 329 series is a classic, ideal for universal applications.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
329-201	-266493	65 2 9/16	58 - 61	6 1/4	1 1/32	0,72 1,588
329-2015	-027605	65 2 9/16	58 - 61	6 1/4	1,5 1/16	0,51 1,125
329-202	-688905	65 2 9/16	58 - 61	6 1/4	2 1/16	0,505 1,114
329-2025	-919337	65 2 9/16	58 - 61	6 1/4	2,5 1/8	0,51 1,125
329-203	-692605	65 2 9/16	58 - 61	6 1/4	3 1/8	0,5 1,103
329-204	-689087	65 2 9/16	58 - 61	7 1/4	4 3/16	0,715 1,577
329-205	-689162	65 2 9/16	58 - 61	8 5/16	5 3/16	0,87 1,918
329-206	-689247	70 2 3/4	58 - 61	9 3/8	6 1/4	1,25 2,756
329-207	-804572	70 2 3/4	58 - 61	10 3/8	7 1/4	1,575 3,473
329-208	-689322	75 2 15/16	58 - 61	11 7/16	8 5/16	1,95 4,300
329-210	-689407	80 3 1/8	58 - 61	12 1/2	10 3/8	2,45 5,402
329-212	-689575	80 3 1/8	58 - 61	14 9/16	12 1/2	3,355 7,398
329-215	-002220	90 3 9/16	58 - 61	16 5/8	15 9/16	4,96 10,937
329-216	-039707	90 3 9/16	58 - 61	16 5/8	16 5/8	6,7 14,774
329-220	-002237	100 3 15/16	58 - 61	20 13/16	20 13/16	8,21 18,103



## PRODUCT DETAILS

### SERIES 331-000 LETTER PUNCH SET, EXTRA HEAVY QUALITY, GLOSS NICKEL-PLATED, 27-PIECE








The bright nickel-plated 27-piece letter punch set of extra heavy quality from series 331 is used for the problem-free marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshops. The set features a standardized typeface according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy letter punches of series 331 have a larger shaft, which increases the weight and significantly facilitates the striking into the workpiece. The nickel-plated surface leaves no foreign rust and is particularly suitable for marking stainless steel.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.



#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
331-001	-917012	65 2 9/16	58 - 61	6 1/4	1 1/32	0,72 1,588
331-002	-627607	70 2 3/4	58 - 61	7 1/4	2 1/16	0,72 1,588
331-003	-627782	70 2 3/4	58 - 61	7 1/4	3 1/8	0,72 1,588
331-004	-627867	70 2 3/4	58 - 61	8 5/16	4 3/16	0,875 1,929
331-005	-627942	70 2 3/4	58 - 61	9 3/8	5 3/16	1,2 2,646
331-006	-628024	75 2 15/16	58 - 61	10 3/8	6 1/4	1,58 3,484
331-007	-911065	75 2 15/16	58 - 61	10 3/8	7 1/4	1,6 3,528
331-008	-628109	80 3 1/8	58 - 61	12 1/2	8 5/16	2,48 5,468
331-010	-628284	80 3 1/8	58 - 61	14 9/16	10 3/8	3,375 7,442
331-012	-628369	90 3 9/16	58 - 61	16 5/8	12 1/2	4,92 10,849
331-015	-628444	90 3 9/16	58 - 61	16 5/8	15 9/16	4,95 10,915
331-020	-628512	100 3 15/16	58 - 61	20 13/16	20 13/16	8,2 18,081

## PRODUCT DETAILS

### SERIES 331-500 LETTER PUNCH SET, EXTRA HEAVY QUALITY, 27 PIECES








The 27-piece letter punch set with extra heavy quality from series 331 is used for easy marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in craftsmanship, industry, and workshops. The set features a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy letter punches from series 331 have a larger shaft, which increases the weight and significantly facilitates driving into the workpiece.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
<b>331-501</b>	-928643	70 2 3/4	58 - 61	7 1/4	1 1/32	0,24 0,529
<b>331-5015</b>	-928650	70 2 3/4	58 - 61	7 1/4	1,5 1/16	0,715 1,577
<b>331-502</b>	-928667	70 2 3/4	58 - 61	7 1/4	2 1/16	0,72 1,588
<b>331-5025</b>	-928674	70 2 3/4	58 - 61	8 5/16	2,5 1/8	0,87 1,918
<b>331-503</b>	-928681	70 2 3/4	58 - 61	8 5/16	3 1/8	0,93 2,051
<b>331-504</b>	-928698	70 2 3/4	58 - 61	9 3/8	4 3/16	1,205 2,657
<b>331-505</b>	-928704	75 2 15/16	58 - 61	10 3/8	5 3/16	0,59 1,301
<b>331-506</b>	-928711	80 3 1/8	58 - 61	12 1/2	6 1/4	2,445 5,391
<b>331-508</b>	-928728	80 3 1/8	58 - 61	14 9/16	8 5/16	3,38 7,453
<b>331-510</b>	-928735	90 3 9/16	58 - 61	16 5/8	10 3/8	4,5 9,923
<b>331-512</b>	-928742	95 3 3/4	58 - 61	18 11/16	12 1/2	6,3 13,892
<b>331-515</b>	-928759	95 3 3/4	58 - 61	18 11/16	15 9/16	6,485 14,299
<b>331-520</b>	-928766	100 3 15/16	58 - 61	20 13/16	20 13/16	8,15 17,971

## PRODUCT DETAILS

### SERIES 331-K LETTER PUNCH SET, EXTRA HEAVY QUALITY, LOWERCASE, 27-PIECE








The 27-piece impact letter punch set with extra heavy quality and lowercase letters from series 331 is used for easy marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in craftsmanship, industry, and workshop. The set has a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy impact letters of series 331 have a larger shaft, which increases the weight and significantly facilitates striking into the workpiece.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
<b>331-001K</b>	-918439	70 2 3/4	58 - 61	7 1/4	1 1/32	0,78 1,720
<b>331-002K</b>	-915735	70 2 3/4	58 - 61	7 1/4	2 1/16	0,715 1,577
<b>331-003K</b>	-909284	75 2 15/16	58 - 61	8 5/16	3 1/8	0,885 1,951
<b>331-004K</b>	-916718	75 2 15/16	58 - 61	9 3/8	4 3/16	1,205 2,657
<b>331-005K</b>	-909291	75 2 15/16	58 - 61	10 3/8	5 3/16	1,57 3,462
<b>331-006K</b>	-918040	80 3 1/8	58 - 61	12 1/2	6 1/4	2,47 5,446
<b>331-008K</b>	-928551	80 3 1/8	58 - 61	14 9/16	8 5/16	3,365 7,420
<b>331-010K</b>	-928582	90 3 9/16	58 - 61	16 5/8	10 3/8	4,945 10,904
<b>331-012K</b>	-928612	95 3 3/4	58 - 61	18 11/16	12 1/2	6,3 13,892





## PRODUCT DETAILS

### SERIES 331-P LETTER PUNCH SET, EXTRA HEAVY QUALITY, DOTTED, 27-PIECE








The dotted, 27-piece letter punch set with extra heavy quality from series 331 is used for problem-free marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshops. The set features a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy letter punches from series 331 have a larger shaft, which increases the weight and significantly facilitates driving them into the workpiece. The dotted font reduces the notching effect of the struck character.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.



#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
<b>331-003P</b>	-006297	70 2 3/4	58 - 61	8 5/16	3 1/8	0,88 1,940
<b>331-004P</b>	-928490	70 2 3/4	58 - 61	9 3/8	4 3/16	1,2 2,646
<b>331-005P</b>	-928513	75 2 15/16	58 - 61	10 3/8	5 3/16	1,58 3,484
<b>331-006P</b>	-928537	80 3 1/8	58 - 61	12 1/2	6 1/4	2,48 5,468
<b>331-008P</b>	-928568	80 3 1/8	58 - 61	14 9/16	8 5/16	3,37 7,431
<b>331-010P</b>	-928599	90 3 9/16	58 - 61	16 5/8	10 3/8	4,94 10,893

## PRODUCT DETAILS

### SERIES 331-R LETTER PUNCH SET, HEAVY QUALITY, RIGHT-ENGRAVED, 27-PIECE








The right-engraved, 27-piece letter punch set of extra heavy quality from the series 331 is used for easy marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in craft, industry, and workshop. The set has a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy letter punches of series 331 feature a larger shank that increases the weight and significantly facilitates striking into the workpiece. The letter punches leave a mirror-image imprint, making them particularly easy to read at hard-to-reach locations using a mirror.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
<b>331-001R</b>	-928445	70 2 3/4	58 - 61	7 1/4	1 1/32	0,71 1,566
<b>331-002R</b>	-918446	70 2 3/4	58 - 61	7 1/4	2 1/16	0,71 1,566
<b>331-003R</b>	-802127	75 2 15/16	58 - 61	8 5/16	3 1/8	0,87 1,918
<b>331-004R</b>	-802134	75 2 15/16	58 - 61	9 3/8	4 3/16	1,195 2,635
<b>331-005R</b>	-802141	75 2 15/16	58 - 61	10 3/8	5 3/16	1,57 3,462
<b>331-006R</b>	-811785	80 3 1/8	58 - 61	12 1/2	6 1/4	2,47 5,446
<b>331-008R</b>	-802158	80 3 1/8	58 - 61	14 9/16	8 5/16	3,365 7,420
<b>331-010R</b>	-918453	90 3 9/16	58 - 61	16 5/8	10 3/8	4,93 10,871



## PRODUCT DETAILS

### SERIES 331-V LETTER PUNCH SET, EXTRA HEAVY QUALITY, STRIKING HEAD COATED, 27-PIECE








The striking head tempered, 27-piece letter punch set of the series 331 is used for the trouble-free marking of workpieces with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC) in crafts, industry, and workshop. The set has a standardized font according to DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The extra heavy impact letters of the series 331 have a larger shaft, which increases the weight and significantly facilitates striking them into the workpiece. The tempering of the striking head reduces wear.

#### Benefits

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
<b>331-001V</b>	-006273	70 2 3/4	58 - 61	7 1/4	1 1/32	0,78 1,720
<b>331-002V</b>	-006280	70 2 3/4	58 - 61	7 1/4	2 1/16	0,24 0,529
<b>331-003V</b>	-006303	75 2 15/16	58 - 61	8 5/16	3 1/8	0,885 1,951
<b>331-004V</b>	-928506	75 2 15/16	58 - 61	9 3/8	4 3/16	1,205 2,657
<b>331-005V</b>	-928520	75 2 15/16	58 - 61	10 3/8	5 3/16	1,58 3,484
<b>331-006V</b>	-928544	85 3 3/8	58 - 61	12 1/2	6 1/4	2,244 4,948
<b>331-008V</b>	-928575	80 3 1/8	58 - 61	14 9/16	8 5/16	3,385 7,464
<b>331-010V</b>	-928605	90 3 9/16	58 - 61	16 5/8	10 3/8	4,5 9,923
<b>331-012V</b>	-928636	95 3 3/4	58 - 61	18 11/16	12 1/2	6,3 13,892



## PRODUCT DETAILS

### SERIES 300H HAND PUNCH STAMP







The hand punch stamps of series 300 are used for easy marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in crafts, industry, and workshops. The stamps have a hardness of the engraving between 58 and 61 HRC. Each hand punch stamp is manufactured individually according to your wishes. Special characters, numbers, and letters can also be combined as needed and are available framed upon request.

#### Benefits

- Custom fabrication for personal use
- To enable a precise strike, the stamp is ground down on all sides up to the engraving.



#### Technical attributes

#		Hardness	A <sub>I</sub>	
	EAN	HRC	mm/inch	kg/lb
<b>300H1010</b>	-010065	58 - 61	10 3/8	0,33 0,728
<b>300H0802</b>	-039769	58 - 61	8 5/16	0,168 0,370
<b>300H0801</b>	-039752	58 - 61	8 5/16	0,175 0,386
<b>300H0610</b>	-039745	58 - 61	6 1/4	0,33 0,728
<b>300H0609</b>	-039738	58 - 61	6 1/4	0,33 0,728
<b>300H0608</b>	-039721	58 - 61	6 1/4	0,625 1,378
<b>300H0607</b>	-039714	58 - 61	6 1/4	0,33 0,728
<b>300H0606</b>	-039691	58 - 61	6 1/4	0,16 0,353
<b>300H0605</b>	-039684	58 - 61	6 1/4	0,33 0,728
<b>300H0604</b>	-039677	58 - 61	6 1/4	0,145 0,320
<b>300H0603</b>	-039660	58 - 61	6 1/4	0,23 0,507
<b>300H0602</b>	-039653	58 - 61	6 1/4	1,7 3,749
<b>300H0601</b>	-039646	58 - 61	6 1/4	0,33 0,728
<b>300H0510</b>	-039639	58 - 61	5 3/16	0,33 0,728
<b>300H0508</b>	-039608	58 - 61	5 3/16	0,33 0,728
<b>300H0507</b>	-039592	58 - 61	5 3/16	0,33 0,728
<b>300H0803</b>	-039776	58 - 61	8 5/16	0,12 0,265
<b>300H0804</b>	-039783	58 - 61	8 5/16	0,33 0,728
<b>300H1009</b>	-010058	58 - 61	10 3/8	0,33 0,728
<b>300H1008</b>	-010041	58 - 61	10 3/8	0,33 0,728
<b>300H1007</b>	-010034	58 - 61	10 3/8	0,33 0,728
<b>300H1006</b>	-010027	58 - 61	10 3/8	0,33 0,728

#		Hardness	A <sub>I</sub>	
	EAN	HRC	mm/inch	kg/lb
<b>300H1005</b>	-010010	58 - 61	10 3/8	0,76 1,676
<b>300H1004</b>	-010003	58 - 61	10 3/8	0,33 0,728
<b>300H1003</b>	-009991	58 - 61	10 3/8	0,33 0,728
<b>300H1002</b>	-009984	58 - 61	10 3/8	0,29 0,639
<b>300H1001</b>	-009977	58 - 61	10 3/8	0,17 0,375
<b>300H0810</b>	-009960	58 - 61	8 5/16	0,33 0,728
<b>300H0809</b>	-009953	58 - 61	8 5/16	0,33 0,728
<b>300H0808</b>	-009946	58 - 61	8 5/16	0,33 0,728
<b>300H0807</b>	-039813	58 - 61	8 5/16	0,33 0,728
<b>300H0806</b>	-039806	58 - 61	8 5/16	0,16 0,353
<b>300H0805</b>	-039790	58 - 61	8 5/16	0,33 0,728
<b>300H0506</b>	-039585	58 - 61	5 3/16	0,31 0,684
<b>300H0505</b>	-039578	58 - 61	5 3/16	0,15 0,331
<b>300H0307</b>	-057312	58 - 61	3 1/8	0,25 0,551
<b>300H0305</b>	-057299	58 - 61	3 1/8	0,09 0,198
<b>300H0306</b>	-057305	58 - 61	3 1/8	0,23 0,507
<b>300H0304</b>	-057275	58 - 61	3 1/8	0,085 0,187
<b>300H0303</b>	-057268	58 - 61	3 1/8	1,115 2,459
<b>300H0302</b>	-057251	58 - 61	3 1/8	0,03 0,066
<b>300H0301</b>	-057244	58 - 61	3 1/8	0,33 0,728
<b>300H0210</b>	-057237	58 - 61	2 1/16	0,33 0,728
<b>300H0209</b>	-057220	58 - 61	2 1/16	0,115 0,254



#	 EAN	Hardness HRC	A <sub>I</sub> mm/inch	 kg/lb
<b>300H0208</b>	-057213	58 - 61	2 1/16	0,175 0,386
<b>300H0207</b>	-057206	58 - 61	2 1/16	0,33 0,728
<b>300H0206</b>	-057190	58 - 61	2 1/16	0,33 0,728
<b>300H0205</b>	-057183	58 - 61	2 1/16	0,055 0,121
<b>300H0204</b>	-057176	58 - 61	2 1/16	0,33 0,728
<b>300H0203</b>	-057169	58 - 61	2 1/16	0,33 0,728
<b>300H0202</b>	-057152	58 - 61	2 1/16	0,03 0,066
<b>300H0308</b>	-057329	58 - 61	3 1/8	0,33 0,728
<b>300H0309</b>	-057336	58 - 61	3 1/8	0,15 0,331
<b>300H0504</b>	-039561	58 - 61	5 3/16	0,185 0,408
<b>300H0503</b>	-039554	58 - 61	5 3/16	0,18 0,397
<b>300H0502</b>	-039530	58 - 61	5 3/16	0,07 0,154
<b>300H0501</b>	-039523	58 - 61	5 3/16	0,055 0,121
<b>300H0410</b>	-039516	58 - 61	4 3/16	0,33 0,728

#	 EAN	Hardness HRC	A <sub>I</sub> mm/inch	 kg/lb
<b>300H0409</b>	-039509	58 - 61	4 3/16	0,16 0,353
<b>300H0408</b>	-057435	58 - 61	4 3/16	0,33 0,728
<b>300H0407</b>	-057428	58 - 61	4 3/16	0,12 0,265
<b>300H0406</b>	-057411	58 - 61	4 3/16	0,11 0,243
<b>300H0405</b>	-057404	58 - 61	4 3/16	0,225 0,496
<b>300H0404</b>	-057398	58 - 61	4 3/16	0,105 0,232
<b>300H0403</b>	-057381	58 - 61	4 3/16	0,105 0,232
<b>300H0402</b>	-057374	58 - 61	4 3/16	0,09 0,198
<b>300H0401</b>	-057350	58 - 61	4 3/16	0,025 0,055
<b>300H0310</b>	-057343	58 - 61	3 1/8	0,225 0,496
<b>300H0201</b>	-057145	58 - 61	2 1/16	0,33 0,728



## PRODUCT DETAILS

### SERIES 333-ST TYPES HOLDER SET









The 115-piece type holder set of series 333-ST is used for multi-digit engraving in the industry. The set has a hardness at the engraving between 58 and 60 HRC. The highly flexible engraving system with free combination of the various type stamps is capable of being universally ready for every application. The nickel-plated surface leaves no foreign rust and is particularly suitable for marking stainless steel. The type holder set includes 112 type stamps, one type holder, one hex key, and one pair of tweezers.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.

#### Technical attributes

#					Hardness		
	EAN	mm/inch	mm/inch	mm/inch	HRC	mm/inch	kg/lb
<b>333-015</b>	-158255	100 3 15/16	45 1 3/4	18 11/16	58 - 60	1,5 1/32	0,97 2,139
<b>333-020</b>	-158262	100 3 15/16	45 1 3/4	18 11/16	58 - 60	2,0 1/16	0,985 2,172
<b>333-025</b>	-158279	100 3 15/16	45 1 3/4	18 11/16	58 - 60	2,5 1/16	1,115 2,459
<b>333-030</b>	-158286	100 3 15/16	45 1 3/4	18 11/16	58 - 60	3,0 1/8	1,125 2,481
<b>333-040</b>	-158293	125 4 15/16	56 2 3/16	23 7/8	58 - 60	4,0 3/16	1,89 4,167
<b>333-050</b>	-158309	125 4 15/16	56 2 3/16	23 7/8	58 - 60	5,0 3/16	1,925 4,245



### SERIES 333 TYPES HOLDER









The type holder of series 333 is used together with types for multi-digit engraving in the industry. The types of series 333 have a hardness at the engraving between 58 and 60 HRC. The highly flexible engraving system with free combination of various type stamps is capable of being universally applicable for every application. The nickel-plated surface leaves no foreign rust and is particularly suitable for marking stainless steel.

#### Benefits

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kg/lb
<b>333-000</b>	-158224	98 3 7/8	45 1 3/4	18 11/16	1,5 - 2,0 1/32-1/16	0,335 0,739
<b>333-001</b>	-158231	98 3 7/8	45 1 3/4	18 11/16	2,5 - 3,0 1/16-1/8	0,33 0,728
<b>333-002</b>	-158248	122 4 13/16	56 2 3/16	23 7/8	4,0 - 5,0 3/16-3/16	0,63 1,389



## PRODUCT DETAILS

### SERIES 300H-S5 HAND PUNCH STAMP, STAR








The hand punch stamps with star of series 300 are used for the problem-free marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in crafts, industry, and workshops. The stamps have a hardness at the engraving between 58 and 61 HRC. The stamps are particularly suitable for limiting texts and serial numbers on nameplates.

#### Benefits

- Text height adapted to the font image
- To enable a precisely accurate strike, the stamp is ground on all sides up to the engraving.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
300H02S5	-222321	70 2 3/4	58 - 61	7 1/4	2 1/16	0,025 0,055
300H03S5	-222338	75 2 15/16	58 - 61	8 5/16	3 1/8	0,035 0,077
300H04S5	-222369	75 2 15/16	58 - 61	9 3/8	4 3/16	0,045 0,099
300H05S5	-222383	75 2 15/16	58 - 61	10 3/8	5 3/16	0,055 0,121
300H06S5	-023454	80 3 1/8	58 - 61	12 1/2	6 1/4	0,09 0,198
300H07S5	-222413	80 3 1/8	58 - 61	14 9/16	7 1/4	0,102 0,225
300H08S5	-222444	80 3 1/8	58 - 61	14 9/16	8 5/16	0,09 0,198
300H10S5	-023522	90 3 9/16	58 - 61	16 5/8	10 3/8	0,18 0,397

### SERIES 300H-S6 HAND PUNCH STAMP, 6-STRIPE STAR








The hand punch stamps with 6-stripe star of the series 300 are used for easy marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in craftsmanship, industry, and workshop. The stamps have a hardness at the engraving between 58 and 61 HRC. The stamps are particularly suitable for the delimitation of texts and serial numbers on nameplates.

#### Benefits

- Text height adjusted to the letter design
- To enable a precisely accurate strike, the stamp is ground on all sides up to the engraving.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
300H02S6	-023379	70 2 3/4	58 - 61	7 1/4	2 1/16	0,025 0,055
300H03S6	-222345	75 2 15/16	58 - 61	8 5/16	3 1/8	0,025 0,055
300H04S6	-222376	75 2 15/16	58 - 61	9 3/8	4 3/16	0,045 0,099
300H05S6	-222390	75 2 15/16	58 - 61	10 3/8	5 3/16	0,06 0,132
300H06S6	-222406	80 3 1/8	58 - 61	12 1/2	6 1/4	0,09 0,198
300H07S6	-222437	80 3 1/8	58 - 61	14 9/16	7 1/4	0,12 0,265
300H08S6	-222451	80 3 1/8	58 - 61	14 9/16	8 5/16	0,12 0,265
300H10S6	-222468	90 3 9/16	58 - 61	16 5/8	10 3/8	0,18 0,397

## PRODUCT DETAILS

### SERIES 300SZ HAND PUNCH STAMP, SPECIAL CHARACTERS








The hand punch stamps with special characters from the 300 series are used for easy marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in trades, industry, and workshops. The stamps have a hardness at the engraving between 58 and 61 HRC. Special characters such as grounding symbols, diameter symbols, etc. can be easily ordered with a fixed item number.






#### Benefits

- Text height adjusted to the letter design
- To enable a precisely accurate strike, the stamp is ground on all sides up to the engraving.

#### Technical attributes

#			Hardness			
	EAN	mm/inch	HRC	mm/inch	mm/inch	kg/lb
300SZ0201	-464202	70 2 3/4	58 - 61	7 1/4	2 1/16	0,025 0,055
300SZ0202	-464219	70 2 3/4	58 - 61	7 1/4	2 1/16	0,33 0,728
300SZ0203	-464226	70 2 3/4	58 - 61	7 1/4	2 1/16	0,03 0,066
300SZ0204	-464233	70 2 3/4	58 - 61	7 1/4	2 1/16	0,33 0,728
300SZ0205	-464240	70 2 3/4	58 - 61	7 1/4	2 1/16	0,33 0,728
300SZ0206	-464257	70 2 3/4	58 - 61	7 1/4	2 1/16	0,33 0,728
300SZ0207	-464264	70 2 3/4	58 - 61	7 1/4	2 1/16	0,33 0,728
300SZ0208	-464271	70 2 3/4	58 - 61	7 1/4	2 1/16	0,33 0,728
300SZ0209	-464288	70 2 3/4	58 - 61	7 1/4	2 1/16	0,33 0,728
300SZ0210	-464295	70 2 3/4	58 - 61	7 1/4	2 1/16	0,02 0,044
300SZ0301	-464301	75 2 15/16	58 - 61	8 5/16	3 1/8	0,33 0,728
300SZ0302	-464318	75 2 15/16	58 - 61	8 5/16	3 1/8	0,03 0,066
300SZ0303	-464325	75 2 15/16	58 - 61	8 5/16	3 1/8	0,03 0,066
300SZ0304	-464332	75 2 15/16	58 - 61	8 5/16	3 1/8	0,03 0,066
300SZ0305	-464349	75 2 15/16	58 - 61	8 5/16	3 1/8	0,04 0,088
300SZ0306	-464356	75 2 15/16	58 - 61	8 5/16	3 1/8	0,03 0,066
300SZ0307	-464363	75 2 15/16	58 - 61	8 5/16	3 1/8	0,33 0,728
300SZ0308	-464370	75 2 15/16	58 - 61	8 5/16	3 1/8	0,03 0,066
300SZ0309	-464387	75 2 15/16	58 - 61	8 5/16	3 1/8	0,03 0,066
300SZ0310	-464394	75 2 15/16	58 - 61	8 5/16	3 1/8	0,33 0,728
300SZ0311	-568672	75 2 15/16	58 - 61	8 5/16	3 1/8	0,03 0,066
300SZ0401	-464400	75 2 15/16	58 - 61	9 3/8	4 3/16	0,33 0,728
300SZ0402	-464417	75 2 15/16	58 - 61	9 3/8	4 3/16	0,33 0,728
300SZ0403	-464424	75 2 15/16	58 - 61	9 3/8	4 3/16	0,045 0,099
300SZ0404	-464431	75 2 15/16	58 - 61	9 3/8	4 3/16	0,045 0,099
300SZ0405	-464448	75 2 15/16	58 - 61	9 3/8	4 3/16	0,045 0,099
300SZ0406	-464455	75 2 15/16	58 - 61	9 3/8	4 3/16	0,33 0,728
300SZ0407	-464462	75 2 15/16	58 - 61	9 3/8	4 3/16	0,33 0,728
300SZ0408	-464479	75 2 15/16	58 - 61	9 3/8	4 3/16	0,33 0,728



#			Hardness			
	EAN	mm/inch	HRC	mm/inch	mm/inch	kg/lb
300SZ0409	-464486	75 2 15/16	58 - 61	9 3/8	4 3/16	0,045 0,099
300SZ0410	-464493	75 2 15/16	58 - 61	9 3/8	4 3/16	0,045 0,099
300SZ0411	-568689	75 2 15/16	58 - 61	9 3/8	4 3/16	0,04 0,088
300SZ0501	-464509	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0502	-464516	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0503	-464523	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0504	-464530	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0505	-464547	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0506	-464554	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0507	-464561	70 2 3/4	58 - 61	10 3/8	5 3/16	0,045 0,099
300SZ0508	-464578	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0509	-464585	70 2 3/4	58 - 61	10 3/8	5 3/16	0,045 0,099
300SZ0510	-464592	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0511	-568696	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0512	-005931	70 2 3/4	58 - 61	10 3/8	5 3/16	0,055 0,121
300SZ0601	-464608	80 3 1/8	58 - 61	12 1/2	6 1/4	0,04 0,088
300SZ0602	-464615	80 3 1/8	58 - 61	12 1/2	6 1/4	0,33 0,728
300SZ0603	-464622	80 3 1/8	58 - 61	12 1/2	6 1/4	0,04 0,088
300SZ0604	-464639	80 3 1/8	58 - 61	12 1/2	6 1/4	0,04 0,088
300SZ0605	-464646	80 3 1/8	58 - 61	12 1/2	6 1/4	0,04 0,088
300SZ0606	-464653	80 3 1/8	58 - 61	12 1/2	6 1/4	0,33 0,728
300SZ0607	-464660	80 3 1/8	58 - 61	12 1/2	6 1/4	0,33 0,728
300SZ0608	-464677	80 3 1/8	58 - 61	12 1/2	6 1/4	0,04 0,088
300SZ0609	-464684	80 3 1/8	58 - 61	12 1/2	6 1/4	0,33 0,728
300SZ0610	-464691	80 3 1/8	58 - 61	12 1/2	6 1/4	0,04 0,088
300SZ0611	-568702	80 3 1/8	58 - 61	12 1/2	6 1/4	0,09 0,198
300SZ0612	-005948	80 3 1/8	58 - 61	12 1/2	6 1/4	0,085 0,187
300SZ0801	-464707	80 3 1/8	58 - 61	14 9/16	8 5/16	0,115 0,254
300SZ0802	-464714	80 3 1/8	58 - 61	14 9/16	8 5/16	0,115 0,254
300SZ0803	-464721	80 3 1/8	58 - 61	14 9/16	8 5/16	0,12 0,265
300SZ0804	-464738	80 3 1/8	58 - 61	14 9/16	8 5/16	0,1154 0,254
300SZ0805	-464745	80 3 1/8	58 - 61	14 9/16	8 5/16	0,18 0,397
300SZ0806	-464752	80 3 1/8	58 - 61	14 9/16	8 5/16	0,11 0,243
300SZ0807	-464769	80 3 1/8	58 - 61	14 9/16	8 5/16	0,115 0,254
300SZ0808	-464776	80 3 1/8	58 - 61	14 9/16	8 5/16	0,11 0,243
300SZ0809	-464783	80 3 1/8	58 - 61	14 9/16	8 5/16	0,33 0,728
300SZ0810	-464790	80 3 1/8	58 - 61	14 9/16	8 5/16	0,33 0,728
300SZ0811	-568719	80 3 1/8	58 - 61	14 9/16	8 5/16	0,11 0,243
300SZ0812	-005955	90 3 9/16	58 - 61	16 5/8	8 5/16	0,18 0,397



## PRODUCT DETAILS

### SERIES 332 WHEEL SLIP STAMP UNIT NUMBERS 0-9







The impact marking stamp device of series 332 is used for problem-free marking of number sequences in workpieces with a strength of up to 1300 N/mm<sup>2</sup> in crafts, industry, and workshops. The set has a hardness at the engraving between 58 and 61 HRC. The impact marking stamps of series 332 are particularly suitable for marking stainless steel due to their nickel-plated surface.

#### Benefits

- The visible edge has been ground, allowing for the reading of the set numbers.
- The space-saving design allows for use in narrow installation situations.

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 kg/lb
332-352	-928803	150 5 7/8	58 - 61	2 1/16	0,53 1,169
332-353	-928810	150 5 7/8	58 - 61	3 1/8	0,645 1,422
332-354	-928827	150 5 7/8	58 - 61	4 3/16	0,53 1,169

### SERIES 332-110 WHEEL STAMPING DIE, NUMBERS








The impact stamp for digits of the series 332 is used together with a stamp holder for easy marking of number sequences on workpieces with a strength of up to 1300 N/mm<sup>2</sup> in crafts, industry, and workshops. The set has a hardness at the engraving between 58 and 61 HRC. The impact stamps of the series 332 are particularly suitable for marking stainless steel due to their nickel-plated surface.

#### Benefits

- The visible edge, after being ground, allows for the readout of the set numbers.
- Durable due to robust and high-quality material

#### Technical attributes

#	 EAN	 mm/inch	Hardness HRC	 mm/inch	 mm/inch	 kg/lb
332-102	-918804	73 2 7/8	58 - 61	10 3/8	2 1/16	0,18 0,397
332-103	-918811	73 2 7/8	58 - 61	10 3/8	3 1/8	0,185 0,408
332-104	-804695	73 2 7/8	58 - 61	10 3/8	4 3/16	0,215 0,474
332-105	-918828	73 2 7/8	58 - 61	10 3/8	5 3/16	0,25 0,551
332-106	-803742	73 2 7/8	58 - 61	10 3/8	6 1/4	0,28 0,617
332-108	-918835	73 2 7/8	58 - 61	10 3/8	8 5/16	0,345 0,761
332-110	-803308	73 2 7/8	58 - 61	10 3/8	10 3/8	0,41 0,904
332-112	-924690	73 2 7/8	58 - 61	10 3/8	12 1/2	0,47 1,036

## PRODUCT DETAILS

### SERIES 332-120 WHEEL PUNCH STAMP, LETTERS








The letter punch for the 332 series is used together with a punch holder for the easy marking of number sequences on workpieces with a strength of up to 1300 N/mm<sup>2</sup> in craft, industry, and workshop. The set has a hardness at the engraving between 58 and 61 HRC. The letter punches of the 332 series are particularly suitable for marking stainless steel due to their nickel-plated surface.

#### Benefits

- The visible edge, after being ground, allows for the readout of the set numbers.
- Durable due to robust and high-quality material

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	Hardness HRC	 mm/inch	 kg/lb
<b>332-122</b>	-918859	73 2 7/8	10 3/8	58 - 61	2 1/16	0 0,000
<b>332-123</b>	-918866	73 2 7/8	10 3/8	58 - 61	3 1/8	0,63 1,389
<b>332-124</b>	-918873	73 2 7/8	10 3/8	58 - 61	4 3/16	0,65 1,433
<b>332-125</b>	-918880	73 2 7/8	10 3/8	58 - 61	5 3/16	0,74 1,632
<b>332-126</b>	-918897	73 2 7/8	10 3/8	58 - 61	6 1/4	0,835 1,841
<b>332-128</b>	-918903	73 2 7/8	10 3/8	58 - 61	8 5/16	0,39 0,860
<b>332-130</b>	-918910	73 2 7/8	10 3/8	58 - 61	10 3/8	1,16 2,558
<b>332-132</b>	-924706	73 2 7/8	10 3/8	58 - 61	12 1/2	1,14 2,514

### SERIES 332-100 HOLDER FOR WHEEL STAMPS







The holder for impact stamps of the series 332 is used as a universal tool holder for impact stamps in crafts, industry, and workshops. Thanks to the supplied distance sleeves, the holder is able to accommodate various sizes of impact stamps. The impact stamps of the series 332 are particularly suitable for marking stainless steel due to their nickel-plated surface.

#### Benefits

- The ergonomic shaft enables particularly safe working.
- Durable due to robust and high-quality material

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>332-100</b>	-997274	183 7 3/16	2-6 1/16-1/4	1,405 3,098

## PRODUCT DETAILS

### SERIES 327-B PROFESSIONAL SIGN TEMPLATE SET LETTERS WITH PLUG MECHANISM







The professional lettering template set with plug-in mechanism of the series 327 is used for marking shipping boxes, wooden crates, parking spaces, etc. with marking paint and marking rollers in crafts, industry, and workshops. The set features a standardized font according to DIN 1451 and is reusable. Thanks to the innovative plug-in system, connecting multiple characters is no problem.

#### Benefits

- Made of very durable and flexible special sheet metal.
- Up to a size of 100 mm, the signing templates are bent up on the bottom side, making it easy to pick them up without smudging the color.

#### Technical attributes

#	 EAN	A    mm/inch	 mm/inch	 kg/lb
327-020-B	-006075	20 13/16	0,15	0,08 0,176
327-040-B	-006099	40 1 9/16	0,15	0,11 0,243
327-050-B	-006129	50 1 15/16	0,15	0,15 0,331
327-070-B	-006204	70 2 3/4	0,15	0,215 0,474
327-100-B	-006419	100 3 15/16	0,15	0,48 1,058
327-150-B	-006594	150 5 7/8	0,3 1/64	0,91 2,007
327-200-B	-006624	200 7 7/8	0,3 1/64	1,415 3,120
327-300-B	-006921	300 11 13/16	0,3 1/64	3,3 7,277

### SERIES 327-Z PROFESSIONAL SIGN TEMPLATES SET NUMBERS WITH PLUG MECHANISM







The professional sign stamping template set numbers with plug-in mechanism of series 327 is used for marking shipping boxes, wooden crates, parking spaces, etc. with marking paint and marking roller in crafts, industry, and workshops. The set has a standardized font according to DIN 1451 and is reusable. Thanks to the innovative plug-in system, chaining multiple characters is no problem.

#### Benefits

- Made of very resilient and flexible special sheet metal
- Up to a size of 100 mm, the marking templates are bent up on the underside, making it easy to lift them without smudging the paint.

#### Technical attributes

#	 EAN	A    mm/inch	 mm/inch	 kg/lb
327-020-Z	-006082	20 13/16	0,15	0,35 0,772
327-040-Z	-006105	40 1 9/16	0,15	0,5 1,103
327-050-Z	-006136	50 1 15/16	0,15	0,65 1,433
327-070-Z	-006389	70 2 3/4	0,15	0,1 0,221
327-100-Z	-006440	100 3 15/16	0,15	0,17 0,375
327-150-Z	-006600	150 5 7/8	0,3 1/64	0,34 0,750
327-200-Z	-006907	200 7 7/8	0,3 1/64	1,8 3,969
327-300-Z	-006945	300 11 13/16	0,3 1/64	1,8 3,969



## PRODUCT DETAILS

### SERIES 334-900 UNIVERSAL SEAL PLIERS



The wire cutting and sealing pliers of series 334 are used for cutting seal wire and sealing with just one tool in crafts, industry, and workshops. The precisely manufactured combination of sealing pliers and wire cutters is capable of combining multiple tasks into a single tool, thereby ensuring a faster workflow.

#### Benefits

- Time savings, as the tool does not need to be switched between work steps
- The interchangeable stamp is available with your desired engraving.

#### Technical attributes

#			
	EAN	mm/inch	kg/lb
334-900	-928926	155 6 1/8	0,165 0,364

### SERIES 334-910 LEAD SEAL PLIERS







The lead seal pliers of the series 334 are used for universal sealing in crafts, industry, and workshops. The lead seal pliers, available in various sizes, can seal workpieces universally and are an all-rounder in their application.

#### Benefits

- Easy operation by translating the lever
- The interchangeable stamp is available from us in your desired engraving

#### Technical attributes

#				
	EAN	mm/inch	mm/inch	kg/lb
334-908	-928933	130 5 1/8	8 5/16	0,245 0,540
334-910	-928940	130 5 1/8	10 3/8	0,49 1,080

## PRODUCT DETAILS



### SERIES 334S STAMP FOR SEAL PLIERS



The stamps for seal pliers of the series 334 are replacement stamps for marking seal pliers of the series 334. Upon request, we can manufacture custom seal stamps with your logo or a unique embossing.



#### Technical attributes

#	 EAN	Ø mm/inch	 kg/lb
334-918	-928957	8 5/16	0,0001 0,000
334S918	-121280	8 5/16	0,001 0,002
334-920	-928964	10 3/8	0,005 0,011

### SERIES 334-928 SEALS





The lead seals of series 334 are used for universal sealing in crafts, industry, and workshops. Thanks to the lead seals available in different sizes, workpieces can be universally sealed.

#### Benefits

- Flexible and mobile usable
- Especially suitable for small products like fuel canisters

#### Technical attributes

#	 EAN	Ø mm/inch	 kg/lb
334-928	-998394	8 5/16	1,5 3,308
334-930	-334932	10 3/8	1,02 2,249

## PRODUCT DETAILS

### SERIES 334-929 GALVANIZED SEAL WIRE, ON SPOOL







The galvanized seal wire, on spool, of the series 334 is used for universal sealing in crafts, industry, and workshops. The seal wire consists of a core and outer cord, and the galvanized iron ensures a good price-performance ratio when sealing.

#### Benefits

- Flexible and mobile use
- Common execution enables universal application

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>334-929</b>	-998400	200.000 7874 1/64	0,5 x 0,3 1/64 x 1/64	0,53 1,169
<b>334-931</b>	-334314	400.000 15748 1/32	0,5 x 0,3 1/64 x 1/64	1,035 2,282

### SERIES 334-933 ZINC-PLATED PLOMBING WIRE IN BUNDLES







The galvanized sealing wire, in bundles, of the series 334 is used for universal sealing in crafts, industry, and workshops. The sealing wire consists of a core and outer cord, and the galvanized iron provides a good price-performance ratio for sealing. The wires are conveniently packaged in bundles of uniform length.

#### Benefits

- Flexible and mobile usable
- The common execution enables universal application.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
<b>334-933</b>	-334338	120 4 3/4	0,5 x 0,3 1/64 x 1/64	0 0,000
<b>334-934</b>	-334345	180 7 1/16	0,5 x 0,3 1/64 x 1/64	0,47 1,036



## PRODUCT DETAILS

### SERIES 334-030 TOOL TAGS



The tool tags of the 334 series are used for marking and labeling tools in trades, industry, and workshops. The tool tags made of brass or aluminum feature an embossed pearl edge and a hole for connection with the workpiece to be marked. Upon request, the tags can also be labeled with your individual symbols.

#### Benefits

- Simple brands for a diverse application
- Labeling helps to organize tools and prevent them from being mixed up



#### Technical attributes

#	 EAN	Ø	 kg/lb
		mm/inch	
<b>334-030</b>	-334307	27 1 1/16	0,0095 0,021
<b>334-031</b>	-143305	27 1 1/16	0,16 0,353







# TESTING & MEASURING

For testing switching pressures, intervals, gradations, control and safety functions, tightness and pressure losses of compressed air brake systems, or for checking the start of delivery in diesel engines – KUKKO offers the perfect solution for every application.

The activity Testing & Measuring includes:

- Pneumatic testing case
- Start of delivery tester



# DEPLOYMENT

The Pneumatic testing case of the series W-6050 is used for testing switching pressures, intervals, gradations, control and safety functions, tightness, and pressure losses of compressed air brake systems up to 4 circuits and others in industry and workshop. In buses, the case is used to test all air suspension systems and door actuation devices, as well as control or servo devices on special vehicles.

# ASSEMBLY OF A PRESS CASE



# APPLICATION EXAMPLES



Connecting a pneumatic hose to the coupling socket



Interior view of the test case

## PRODUCT DETAILS

### SERIES W-6050 PNEUMATIC TEST CASE











The Pneumatic test cases of the series W-6050 are used for testing switching pressures, intervals, gradations, control and safety functions, tightness, and pressure losses of compressed air brake systems with up to 4 circuits, as well as other applications in industry and workshops. For buses, the case is used to test all air suspension systems and door actuation devices, as well as control or servo devices on special vehicles.

#### Benefits

- Swingable instrument panel with built-in pressure gauges, using hinges
- Quick coupling connections on the front of the control panel

#### Technical attributes





#								
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	bar	bar	kg/lb
<b>W-6050/6</b>	-130265	645 25 3/8	355 13 1	250 9 13/16	100 3 15/16	0,1	16	19 41,895
<b>W-6050/8</b>	-605084	645 25 3/8	355 13 1	250 9 13/16	100 3 15/16	0,5	25	23 50,715

### SERIES W-6050/9 SPECIAL MANOMETER 0-16 BAR



The special pressure gauges are accessories for the pneumatic testing case W-6050. They are equipped with a rubber protective cap, connecting nipple, and safety chain for quick coupling and securing with the test hoses.

#### Technical attributes

#					
	EAN	mm/inch	bar	bar	kg/lb
<b>W-6050/9</b>	-605091	100 3 15/16	0,1	16	0,84 1,852

### SERIES W-3209 START-UP TESTER






The start-up tester of the series W-3209 is used for testing the start-up of diesel engines in crafts, industry, and workshops. It has a set of connections for threads M12x1.5 and M14x1.5.

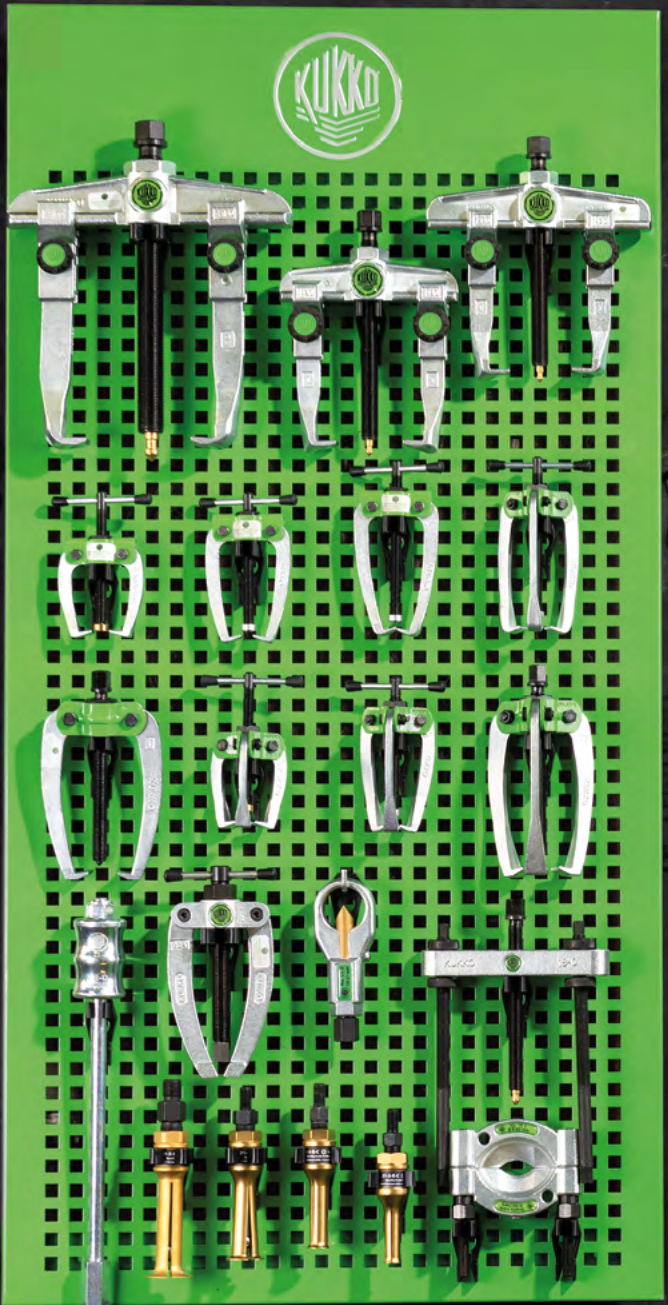
#### Benefits

- Easy setting by adjusting to the zero point of the motor

#### Technical attributes

#			
	EAN		kg/lb
<b>W-3209</b>	-127524	M14x1,5 und M12x1,5	0,28 0,617









# STORAGE & PRESENTATION

For clear storage, safe transport, or sales-boosting presentation of tools – KUKKO offers the perfect solution for every application.

The activities related to storage & presentation include:

- Empty cases
- KUKKO-Cube workshop carts
- Workbenches
- Tool cabinets
- Compartment cabinets with power connection
- Wall boards
- Sales displays



# DEPLOYMENT

The king class of puller tools demands an optimal and unique storage solution. From the compact To-GO solution in the case set to fixed installed walls, KUKKO offers the full range of transport and presentation of pullers and other accessories.

## ASSEMBLY OF A CUBE WORKSHOP TROLLEY

Working and storage area with anti-slip rubber mat

Stable grip for pushing and pulling

Robust insert compartments for multiple KUKKO L-Boxxes (variable)

Swivel casters with locking brakes





# FEATURES OF THE SERIES

## SERIES 20-ST



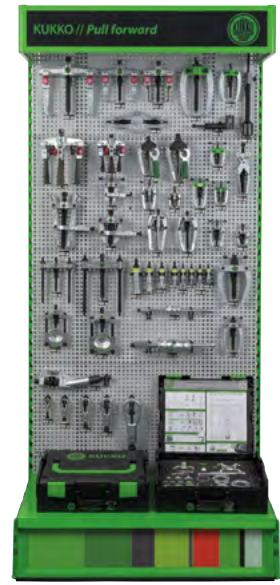
The sales display is indeed the smallest form of sales presentation, but in its compactness, it has been the eye-catcher at every counter for over 100 years. KUKKO is regarded as the first tool manufacturer to present its products for promotional purposes on a sales stand.

## SERIES K-2030



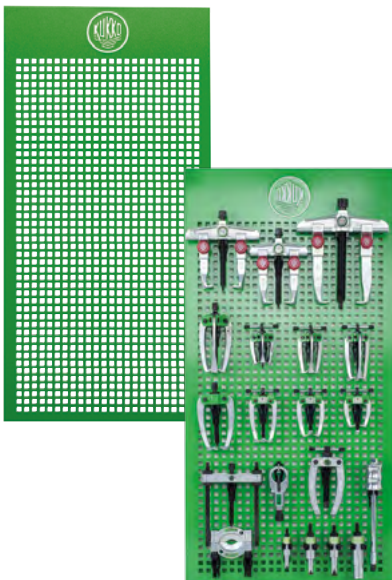
One of KUKKO's bestsellers is the portable, fully equipped case sets in a portable medium size that contain all the necessary tools to solve the desired repair case application or industry-oriented. The cases are equipped with a special foam that completely embeds the tools, ensuring safe storage.

## SERIES EVLW



The massive sales wall presents the KUKKO tools in a maximum range of selection and product variety. The stocking of the wall is done individually based on the application focus or industry orientation. Thanks to generous placement options, the entire tool range can be presented opulently and simultaneously efficiently.

## SERIES WT



The attention-grabbing wall panel in the unmistakable KUKKO green is the eye-catcher in every workshop. Like a modern dashboard, it offers a compactly assembled range of tools and accessories in a manageable space.

## SERIES K-CUBE



The KUKKO-Cube workshop trolley is the smart solution for all tasks that pose special challenges for transport and storage. With its mobility, it provides everything needed for on-site use in the quickest way possible. Extendable drawers offer space for a total of four L-Boxx cases.

## SERIES X-MW



The mobile workbench from KUKKO combines the advantages of a clear and safe storage solution with the provision of a multifunctional workspace for everyday needs. The workbench features five heavy-duty drawers.



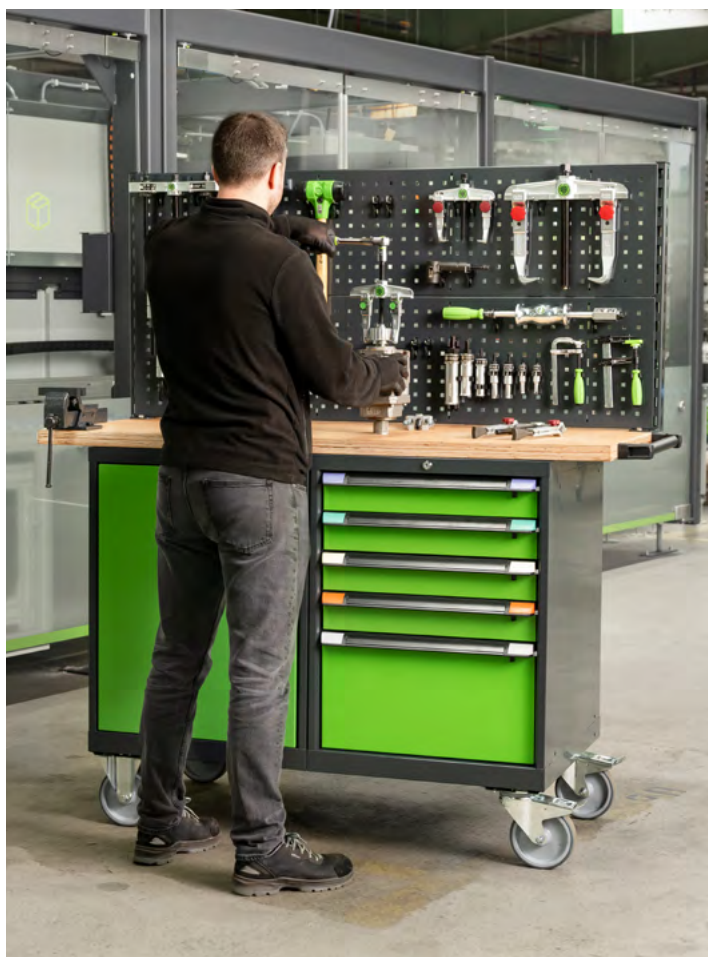
# APPLICATION EXAMPLES



KUKKO Cube with pull-out trays



The practical tool cabinet of the series X-SB for ideal storage



The mobile workbench of the X-MW series



Luggage sets guarantee protection of the tools and ideal storage.

## PRODUCT DETAILS

### SERIES K-L-BOXX K-L-BOXX (EMPTY BOX FROM SORTIMO)









The portable KUKKO empty box of the K-L-BOXX series from Sortimo offers enough space for a range of tools. For ideal handling and transport, the case is equipped with 2 handles. Particularly practical is the click system, which allows any number of L-BOXXes to be stacked and subsequently transported. With just the push of a button, the L-BOXXes can be quickly separated from each other. Thus, the cases are the perfect mobility and storage solution for craftwork, workshops, and industry.

#### Benefits

- Integrable and combinable with all common Sortimo L-Boxxes
- Thanks to a click system, the suitcases can be connected to each other and thus transported more easily.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
K-L-BOXX-L-136	-023132	442 17 3/8	357 14 1/16	151 5 15/16	25	2,66 5,865

### SERIES K-L-BOXX K-L-BOXX (EMPTY BOX FROM SORTIMO)









The portable KUKKO empty box of the K-L-BOXX series from Sortimo offers enough space for a range of tools. For ideal handling and transport, the case is equipped with 2 handles. Particularly practical is the click system, which allows any number of L-BOXXes to be stacked and subsequently transported. With just the push of a button, the L-BOXXes can be quickly separated from each other. Thus, the cases are the perfect mobility and storage solution for craftwork, workshops, and industry.

#### Benefits

- Integrable and combinable with all common Sortimo L-Boxxes
- Thanks to a click system, the suitcases can be connected to each other and thus transported more easily.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
K-L-BOXX-L-238	-023149	442 17 3/8	375 14 3/4	253 9 15/16	25	3,615 7,971

## PRODUCT DETAILS

### SERIES K-L-BOXX K-XL-BOXX (EMPTY BOX FROM SORTIMO)









The portable KUKKO empty box from the K-XL-BOXX series by Sortimo offers ample space for a variety of tools. Particularly practical is the click system, which allows for stacking and transporting any number of XL-BOXXes. With just the press of a button, the XL-BOXXes can be separated in no time. The cases are thus the ideal mobility and storage solution for crafts, workshops, and industry.

#### Benefits

- Integrable and combinable with all common Sortimo L-Boxes
- Thanks to a click system, the suitcases can be connected to each other and thus transported more easily.



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 max. kg	 kg/lb
K-L-BOXX-XL-BOXX	-023187	607 23 7/8	395 15 9/16	179 7 1/16	25	3,2 7,056

### K-L-BOXX K-I-BOXX (EMPTY BOX FROM SORTIMO)









The portable KUKKO empty box from the K-i-BOXX series by Sortimo offers ample space for a selection of tools. The cases are therefore the ideal mobility and storage solution for trades, workshops, and industry.

#### Benefits

- Ideal mobility and storage solution
- Thanks to a click system, the suitcases can be connected to each other and thus transported more easily.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 max. kg	 kg/lb
K-i-BOXX	-002021	367 14 7/16	316 12 7/16	72 2 13/16	3	0,985 2,172



## PRODUCT DETAILS

### SERIES K-L-BOXX K-L-BOXX-MINIK-XL-BOXX (EMPTY BOX FROM SORTIMO)









The portable KUKKO empty box of the L-BOXX Mini series from Sortimo offers sufficient space for a range of tools. For ideal handling and transportation, the case is equipped with 2 handles. Particularly practical is the click system, allowing an arbitrary number of L-BOXXes to be stacked and then transported. With just the push of a button, the L-BOXXes can be quickly separated from one another. The cases are thus the ideal mobility and storage solution for craftsmen, workshops, and industry.

#### Benefits

- Integrable and combinable with all common Sortimo L-Boxxes
- Thanks to a click system, the suitcases can be connected to each other and thus transported more easily.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
K-L-BOXX-MINI	-023156	255 10 1/32	153 6 1/32	63 2 1/2	1,50	0,385 0,849

### SERIES K-A-KT KUKKO SMALL PARTS CASE 440x355x76









The KUKKO small parts case with high-impact polycarbonate lid on a solid base allows safe storage of small parts. The cases can be customized with insert boxes and/or dividers and can be securely connected with a connecting clasp.

#### Benefits

- Transparent lid closes tightly; no mixing of contents
- Impact-resistant lid made of polycarbonate

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	 kg/lb
K-A-KT-440-355-76	-007323	440 17 5/16	355 13 1	76 2 1	36	2,16 4,763



## PRODUCT DETAILS

### SERIES K-A-KT KUKKO TRANSPORT AND STORAGE BOX 600x400x185









The KUKKO small parts case with high-impact polycarbonate lid on a solid base allows safe storage of small parts. The cases can be customized with insert boxes and/or dividers and can be securely connected with a connecting clasp.

#### Benefits

- Transparent lid closes tightly; no mixing of contents
- Impact-resistant lid made of polycarbonate



#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	kg	kg/lb
K-A-KT-440-355-144	-007316	440 17 5/16	355 13 1	144 5 11/16	36	0 0,000

### SERIES K-A-TL KUKKO TRANSPORT AND STORAGE BOX 600X400X185









The KUKKO transport and storage box offers ample storage space for tools, various accessories, and other workshop supplies.

#### Benefits

- The circulating edge acts locking and self-centering.
- Through the Euromass possibility, logistical advantages are optimally utilized.

#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	kg	kg/lb
K-A-TL-600-400-185	-007330	600 23 5/8	400 15 3/4	185 7 5/16	17	0 0,000

## PRODUCT DETAILS

### SERIES K-L-BOXX KUKKO PADLOCK 45/35



The practical KUKKO padlock guarantees a secure closure of all L-Boxes. The KUKKO L-lock is the comprehensive mobility solution for trades, industry, service, and service companies, impressing with high-quality craftsmanship and versatile application possibilities.

#### Benefits

- Integrable and combinable with all common Sortimo L-Boxes
- Thanks to a click system, the suitcases can be connected to each other and thus transported more easily.



#### Technical attributes

#						
	EAN	mm/inch	mm/inch	mm/inch	kg	kg/lb
L-Schloss-45/35	-752261				-	0,08 0,176

### SERIES K-CUBEBOXX EMPTY WORKSHOP TROLLEY KUKKO-CUBE



The KUKKO-Cube workshop cart is the smart solution for all transport and storage problems and is used in the fields of craftsmanship, workshops, and industry. Equipped with four drawers, the workshop cart can be individually stocked with Sortimo® L-Boxes. The L-Boxes are securely stored in the KUKKO-Cube, ensuring ideal storage. The perfect working height of the workshop cart is suitable for assembly work directly on-site. Smooth-rolling and stable load wheels ensure effortless transportation without significant effort.

#### Benefits

- Smooth-rolling extracts as well as self-clamping of the pull-out trays
- Torque-resistant and stable construction of the workshop cart
- Non-slip rubber mat for assembly work

#### Technical attributes

#					
	EAN	mm/inch	mm/inch	mm/inch	kg/lb
K-CubeBoxx	-909986	620 24 7/16	560 22 1/16	1.035 40 3/4	43 94,815



# PRODUCT DETAILS

## SERIES X-MW MOBILE WORKBENCH















The KUKKO mobile workbench combines the advantages of clear and secure storage with the provision of a multifunctional workspace for everyday needs. The workbench features five heavy-duty drawers, an additional storage space with a 9-way adjustable intermediate shelf and permanently mounted door, a replaceable worktop, and a robust back wall. The perforated grid on the back wall provides ample space for tool holders. A centrally located lock secures both the drawers and the door.

### Benefits

- Mobile workbench on wheels for on-site deployment
- Complete extraction of the drawers with ball bearing telescopic rails
- Loch grids provide enough space for attaching tool holders.



### Technical attributes

#												Number of doors	
	EAN	mm/ inch	mm/ inch	mm/ inch	kg	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch		kg/lb
<b>X-MW-179-5</b> <b>NEW</b>	-202803	1.590 62 5/8	700 27 9/16	1.730 68 1/8	600	500 19 11/16	100, 300 3 15/16, 11 13/16	600 23 5/8	600 23 5/8	1590 62 5/8	5	1	160 352,800

## SERIES X-SW STATIONARY WORKBENCH















The stationary workbench from KUKKO combines the advantages of clear and safe storage with the provision of a multifunctional workspace for daily needs. The workbench features seven heavy-duty drawers, additional storage with a 9-fold adjustable intermediate shelf and a fixed-mounted door, a replaceable work surface, and a robust back wall. The perforated grid on the back wall provides ample space for attaching tool holders. A centrally arranged lock simultaneously locks the drawers and the door.

### Benefits

- Mobile workbench on wheels for on-site deployment
- Complete extraction of the drawers with ball bearing telescopic rails
- Loch grids provide enough space for attaching tool holders.

### Technical attributes

#												
	EAN	mm/ inch	mm/ inch	mm/ inch	kg	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	mm/ inch	kg/lb
<b>X-SW-179-6</b> <b>NEW</b>	-202810	1.530 60 1/4	700 27 9/16	1.640 64 9/16	1.500	500 19 11/16	100, 200 3 15/16, 7 7/8	600 23 5/8	600 23 5/8	1500 59 1/16	6	120 264,600



Zerspanung





## PRODUCT DETAILS

### SERIES X-LS BATTERY CHARGING CABINET



The KUKKO locker cabinets with power connection are perfect for the personal and secure storage of battery-operated devices of all kinds. Whether in industry, crafts, offices, schools, universities, or public buildings – thanks to the built-in sockets, batteries can also be charged during storage. This guarantees flexible and immediate usability.

#### Benefits

- Flexible application possibilities with charging options for battery-operated electric machines, BDE devices, laptops, tablets, smartphones, or e-bikes
- Thoughtful ventilation optimal air circulation through front and rear ventilation openings.
- Secure Lockable Devices remain locked at all times and are protected from unauthorized access.



#### Technical attributes







#						
	EAN	mm/inch	mm/inch	mm/inch		kg/lb
<b>X-LS-10 NEW</b>	-080227	410 16 1/8	500 19 11/16	1.790 70 1/2	10	74 163,170

### SERIES X-SB EMPTY TOOL CABINET



The tool cabinet from the X-SB series made of stable sheet metal is used for the safe and organized storage of tools. The perforated grid on the back wall provides enough space for attaching tool holders. The tool cabinet features lockable doors with a cylinder lock as well as a maximum load capacity of 50 kg. The high-quality steel cabinets can be flexibly integrated into various work environments, thus adapting to individual requirements.

#### Technical attributes

#						Number of doors	
	EAN	mm/inch	mm/inch	mm/inch	kg		kg/lb
<b>X-SB-65x75 NEW</b>	-042058	750 29 1/2	225 8 7/8	650 25 9/16	50	2	0 0,000









## PRODUCT DETAILS

### SERIES X-SB-224 10-PIECE TOOL CABINET



The tool cabinets of the X-SB-224 series made of stable sheet metal are used for the safe and organized storage of tools. The hole grid on the back wall provides enough space to attach tool holders. The cabinets feature lockable doors with a cylinder lock and a maximum load capacity of 50 kg. The high-quality steel cabinets can be flexibly integrated into various work environments and thus adapt to individual requirements. Depending on the application, the cabinets are equipped with three different assortments.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	<b>Number of doors</b>	 kg/lb	<b>Components</b>
<b>224-676 NEW</b>	-042072	750 29 1/2	225 8 7/8	650 25 9/16	50	2	42,8 94,374	022-206, 22-0-17, 15-00, 15-2, 203-1, 203-2, 21-2, 21-4, 21-5, 21-6, 68-0, 68-2, GA7-10, X-SB-65x75
<b>224-677 NEW</b>	-141584	750 29 1/2	225 8 7/8	650 25 9/16	50	2	45 99,225	203-2, 221-G, X-SB-65x75
<b>224-678 NEW</b>	-141614	750 29 1/2	225 8 7/8	650 25 9/16	50	2	0 0,000	18-1, 18-2, 15-2, 15-1, 221-G, 203-1, 203-2, 19-2-P, X-SB-65x75

### SERIES 220-T PULLER RANGE – UNIVERSAL



The puller assortment for universal application is a wall panel that is stocked with suitable tools for use and storage in workshops and industry. The assortment includes not only the universal puller with sliding hammer but also larger self-centering and combination pullers. The compilation is ideally made for quick and universal applications in 2-jaw and 3-jaw external extraction, removing parts with threaded holes, as well as internal extraction.

#### Benefits

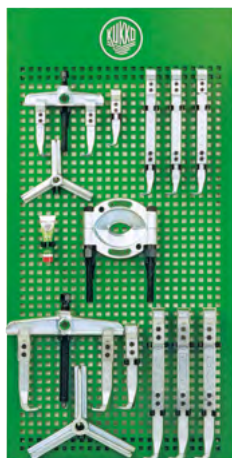
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 kg/lb	
<b>220-1-T NEW</b>	-446382	0,464 1,023	220-1, 220-2, 220-3, 220-4, K-220, K-220-221-A

## PRODUCT DETAILS

### SERIES 30-20-T PULLER SET – INDUSTRY - BASIC







The BASIC puller range for the industry is a wall panel equipped with suitable tools for application and storage in workshops and industry. The range includes not only 2-jaw universal pullers but also 3-jaw traverses and various hooks, which can be combined into different external pullers for various applications thanks to the KUKKO modular system. Together with the included separator device, the range is suitable for external extraction, internal extraction, and bearing separation, making it ideal for versatile use in the industry.

#### Benefits

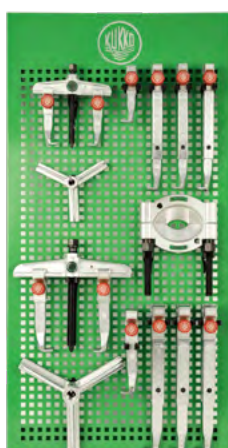
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
30-20-T	-875717	500 19 11/16	1.000 39 3/8	24,2 53,361	20-10, 20-20, 15-2, 1-190-S, 2-300-S, 2-150-E, WT-000

### SERIES 30-20+T PULLER RANGE – INDUSTRY – BASIC+







The BASIC+ puller range for industry is a wall panel stocked with suitable tools for use and storage in workshops and industry. The range includes, in addition to 2-jaw universal pullers with quick-adjustable puller jaws, also 3-jaw crossbars as well as various hooks that can be combined into different external pullers for various applications, thanks to the KUKKO modular system. Together with the included separator device, the range is suitable for external extraction, internal extraction, and bearing separation, making it ideal for versatile applications in industry.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
30-20+T	-141454	500 19 11/16	1.000 39 3/8	25,3 55,787	1-92-E, WT-000, 1-192-S, 15-2, 20-10+, 20-20+, 2-302-S

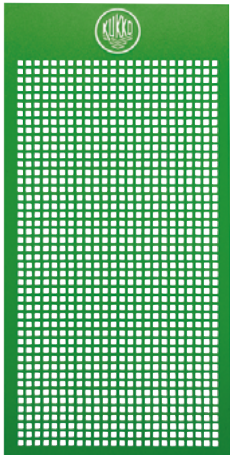
## PRODUCT DETAILS

### SERIES WT-000 WHITEBOARD, UNSTOCKED





The unfurnished wall board of the series WT is used for clean and tidy storage of KUKKO products in industry and workshops. The board can be stocked in various ways and can be ideally used for organization and overview.

#### Benefits

- Central availability of the products for every employee
- Through the storage at the wall panel, the completeness of the range is clearly visible at a glance.



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
WT-000	-890550	500 19 11/16	1.000 39 3/8	4,55 10,033

### SERIES WT-002 PULLER RANGE – HYDRAULIC EXTERNAL EXTRACTION - TOP





The TOP puller selection for hydraulic external extraction is a wall panel stocked with suitable tools for use and storage in workshops and industry. The selection includes various 2-jaw and 3-jaw crossbars and hooks that can be combined into different external pullers for various applications, thanks to the KUKKO modular principle. This allows for the removal of any components that sit on a shaft and are accessible from the outside. The included hydraulic spindle also enables the easy and controlled removal of particularly stubborn parts.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee



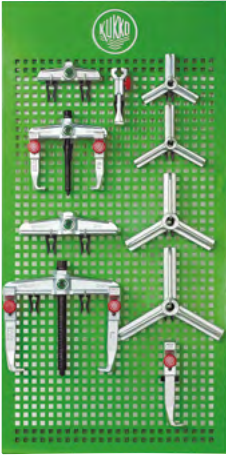
#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-002	-890567	500 19 11/16	1.000 39 3/8	16 35,280	20-10+, 20-20+, 1-92-E, WT-000



## PRODUCT DETAILS

### SERIES WT-003 PULLER RANGE – EXTERNAL EXTRACTION - BASIC







The BASIC puller assortment for external extraction is a wall panel equipped with suitable tools for use and storage in workshops and industry. The assortment includes various 2-jaw and 3-jaw crossbars and hooks that can be combined into different external pullers for various applications, thanks to the KUKKO modular system. This allows for the loosening of any component sitting on a shaft and accessible from the outside.

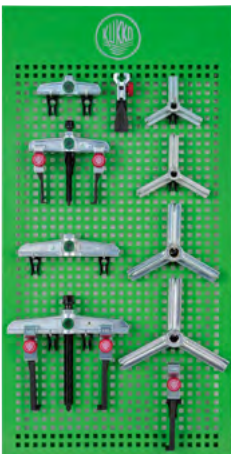
#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-003	-890574	500 19 11/16	1.000 39 3/8	19,65 43,328	20-10+, 20-20+, 1-92-E, WT-000

### SERIES WT-003+S PULLER RANGE – EXTERNAL EXTRACTION – BASIC+







The BASIC+ puller range for external extraction is a wall panel equipped with suitable tools for use and storage in workshops and industry. The range includes various 2-jaw and 3-jaw crossbars and hooks that can be combined into different external pullers for various applications due to the KUKKO modular concept. This allows for the removal of any component that is mounted on a shaft and is freely accessible from the outside. The narrow pulling jaws ensure that tight and hard-to-reach gaps can also be accessed.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-003+S	-141461	500 19 11/16	1.000 39 3/8	19,39 42,755	20-10+S, 20-20+S, WT-000

## PRODUCT DETAILS

### SERIES WT-004 PULLER SET – AUTOMOTIVE - BASIC







The BASIC puller range for the automotive is a wall panel stocked with suitable tools for application and storage in workshops and industry. The range includes 2-jaw universal pullers and 3-jaw crossbars and hooks that can be combined into various external pullers for different applications thanks to the KUKKO modular principle. Additionally, specifically designed for use in the automotive sector are nut splitters, ball joint removers, oil filter wrenches, and separator forks.

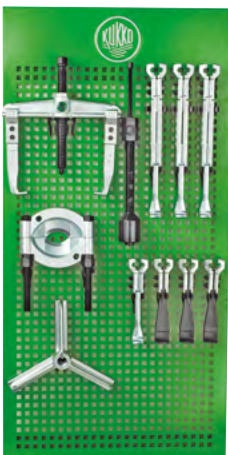
#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-004	-890581	500 19 11/16	1.000 39 3/8	9,4 20,727	30-1-T, 20-1+, 1-92-S, 1-92-E, 108-1, 129-1, 135-2, 43-1, 50-2, 55-1, WT-000

### SERIES WT-008 PULLER SET – NFZ - BASIC







The BASIC puller range for commercial vehicles is a wall-mounted panel stocked with the appropriate tools for application and storage in workshops and industry. The range includes 2-jaw and 3-jaw crossbars and hooks, as well as universal pullers that can be combined into various external pullers for different applications thanks to the KUKKO modular system. Specifically included for commercial vehicles are a separating device and a long hydraulic spindle to effectively remove even particularly stubborn parts.

#### Benefits

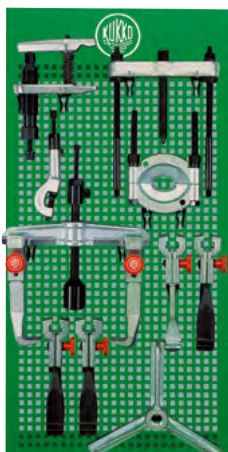
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-008	-890604	500 19 11/16	1.000 39 3/8	18,1 39,911	20-20, 8-0-621, 15-2, 20-20+, 2-300-S, 2-151-S, 2-302-S, 2-153-S, 2-150-E, WT-000

## PRODUCT DETAILS

### SERIES WT-010 PULLER SET – NFZ - TOP







The TOP puller range for commercial vehicles is a wall panel equipped with suitable tools for application and storage in workshops and industry. The range includes universal pullers, as well as hooks and a 3-jaw crossbar, which can be combined into different external pullers for various applications thanks to the KUKKO modular system. Specifically for commercial vehicles, it includes a separating and a pulling device, as well as a short hydraulic spindle, nut splitter, and a heavy ball joint press to effectively remove various particularly stuck parts.

#### Benefits

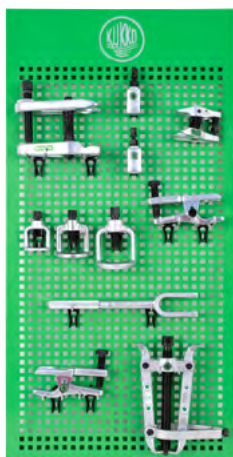
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-010	-890628	500 19 11/16	1.000 39 3/8	39,5 87,098	18-2, 20-3+, 800, 56-1, 129-4, 3-203-S, WT-000, 15-2, 8-02

### SERIES WT-014 PULLER RANGE – AUTOMOTIVE – CHASSIS







The puller range for chassis in the automotive industry is a wall panel equipped with suitable tools for application and storage in workshops and industry. The range includes the 2-jaw separator "Cobra" with adjustable reach. Additionally, the assortment features separating forks, spreaders, ball joint extractors, and ball joint pullers in various sizes, specifically designed for work on the chassis.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-014	-890635	500 19 11/16	1.000 39 3/8	15,3 33,737	210-1, 129-0, 129-0-25, 129-1, 129-4, 128-1, 128-2, 128-3, 135-1, 145-2, 145-3, WT-000



## PRODUCT DETAILS

### SERIES WT-017 PULLER SET – INTERNAL EXTRACTION – BASIC







The BASIC puller range for internal extraction is a wall panel equipped with suitable tools for application and storage in workshops and industries. The range includes numerous 2-jaw internal extractors, as well as internal extractors with segmented gripping edges, sliding hammers, and counter stays in various sizes, along with two retaining ring pliers. Internal parts of various sizes can be safely and versatilely extracted.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-017	-141478	500 19 11/16	1.000 39 3/8	20,93 46,151	22-0-05, 22-0-17, 22-1, 22-2, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7, 21-8, 21-1-E, 21-2-E, 21-3-E, 21-4-E, 21-5-E, 728K-A2, 729K-J2, WT-000

### SERIES WT-018 PULLER RANGE – INTERNAL EXTRACTION – TOP







The TOP puller set for internal extraction is a wall panel equipped with appropriate tools for application and storage in workshops and industry. The set includes numerous 2-jaw internal extractors in 8 different sizes, as well as counter stays and universal pullers in various sizes, puller sleeves for grooved ball bearing inner rings, and an additional hydraulic press. Even particularly stubborn internal parts of various sizes can be extracted safely and versatilely this way.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-018	-141485	500 19 11/16	1.000 39 3/8	22,735 50,131	43-1, 22-1, 22-2, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7, 21-8, 23, WT-000, 20-1+, 20-2+, 9-1

## PRODUCT DETAILS

### SERIES WT-019 PULLER SET – BEARING SEPARATOR







The puller range for separation pulling is a wall panel equipped with suitable tools for application and storage in workshops and industry. The range includes the 2-jaw bearing puller "Cobra" in two different sizes, as well as several separation and pulling devices. This allows parts to be gently separated from the seat before they can then be pulled out from the outside.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee



#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-019	-141492	500 19 11/16	1.000 39 3/8	22,68 50,009	204-0, 17-1, 17-2, 18-1, 18-2, 210-1, WT-000

### SERIES WT-020 CLAMPS RANGE – ALL STEEL – PREMIUM







The premium all-steel clamping range is a wall panel equipped with matching tools for use and storage in workshops and industry. The range includes various VIRIDIS all-steel screw clamps with a 3K comfort grip, as well as VIRIDIS all-steel lever clamps. With these, multiple workpieces can be held and clamped gently, effortlessly, and safely.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-020	-141508	500 19 11/16	1.000 39 3/8	27,7 61,079	469+0160-080, 469+0250-100, 469+0250-120, 469+0300-140, 472H0200-100, WT-000

## PRODUCT DETAILS

### SERIES WT-021 CLAMP RANGE – DUCTILE IRON – PREMIUM







The Premium ductile cast clamp range is a wall panel stocked with suitable tools for use and storage in workshops and industry. The range includes various ductile cast screw clamps VIRIDIS with a 3K comfort grip. These allow for several workpieces to be held and clamped gently and securely.

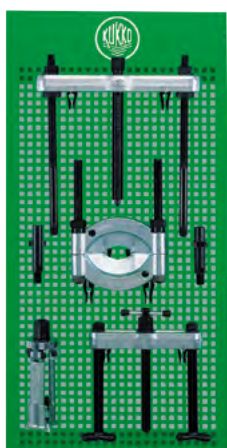
#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-021	-141515	500 19 11/16	1.000 39 3/8	0 0,000	490+0160-080, 490+0250-100, 490+0250-120, 490+0300-140, WT-000

### SERIES WT-030 PULLER RANGE – AUTOMOTIVE – AXLE







The puller assortment for axles in the automotive industry is a wall panel equipped with suitable tools for application and storage in workshops and industry. The assortment includes a puller device with a pair of extensions, as well as a corresponding separator, internal extractor, and counter stays in a large version specifically for work on axles.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

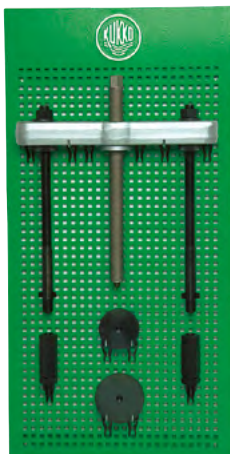
#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-030	-893490	500 19 11/16	1.000 39 3/8	27,91 61,542	15-3, 18-3, 19-3-P, 22-4, 21-89, WT-000





## PRODUCT DETAILS

### SERIES WT-031 PULLER RANGE – COMMERCIAL VEHICLES – AXLE







The puller range for axles at commercial vehicles is a wall panel stocked with suitable tools for application and storage in workshop and industry. The range includes a puller device in extra large version specifically for work on axles of commercial vehicles, as well as corresponding pressure pieces, connection nuts, and thread inserts.

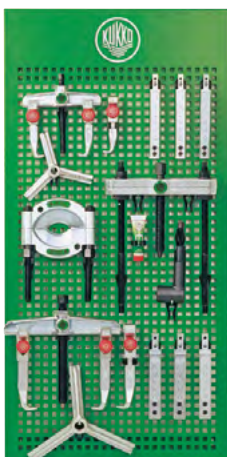
#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#					Components
	EAN	mm/inch	mm/inch	kg/lb	
WT-031	-914584	500 19 11/16	1.000 39 3/8	27,96 61,652	18-4, VM2215-58, 18-4S0117, 18-4S0217, WT-000

### SERIES WT-50 PULLER RANGE – INDUSTRY - TOP







The TOP puller range for the industry is a wall panel that is equipped with matching tools for application and storage in workshops and industry. In addition to 2-jaw universal pullers, the range includes 3-jaw crossbars as well as various hooks that can be combined into different external pullers for different applications thanks to the KUKKO modular system. Together with the included separator and the additional hydraulic press, the range is suitable for external extraction, internal extraction, and separating particularly stubborn parts, making it ideal for versatile applications in the industry.

#### Benefits

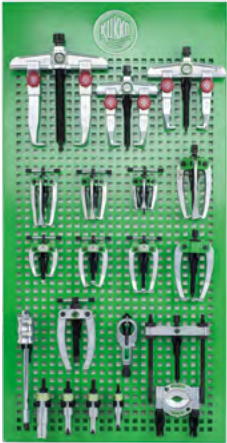
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#					Components
	EAN	mm/inch	mm/inch	kg/lb	
WT-50	-951114	500 19 11/16	1.000 39 3/8	26,44 58,300	1-V-150-S, 2-V-150-S, 1-92-E, WT-000, 15-2, 18-2, 20-10+, 20-20+, 9-1

## PRODUCT DETAILS

### SERIES WT-1-INDUSTRIE PULLER SET – INDUSTRY







The puller range for industry is a wall panel equipped with suitable tools for application and storage in workshops and industry. The range includes various 2-jaw and 3-jaw universal pullers, as well as internal extractors and matching sliding hammer and counter stays. Together with the included separator device and a nut splitter, the range is suitable for external extraction, internal extraction, and bearing separation, making it ideal for versatile applications in the industry.

#### Benefits

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb	Components
WT-1-INDUSTRIE	-003608	500 19 11/16	1.000 39 3/8	21,9 48,290	20-1+, 20-10+, 20-2+, 21-2, 21-3, 21-4, 21-5, 22-0-05, 22-1, 43-1, 43-2, 43-3, 43-11, 43-12, 43-13, 44-1, 45-1, 55-2, WT-000, 15-0, 18-0

### SERIES EVLW-INDUSTRIE-BASIC SALES WALL INDUSTRY BASIC








The sales wall Industry serves the optimal presentation of KUKKO tools in your store. The illuminated sales wall is stocked with an assortment that has been compiled based on years of experience for use in the industry. In addition to pullers, the range also includes internal extractors, sliding hammers, counter stays, separation and puller devices, bearing pullers, and nut splitters. Together with the two case sets, customers in the industry should be able to find the right product for their needs.

#### Benefits

- KUKKO is happy to support you in the setup and training of your employees regarding the respective products and pulling principles. Contact us and get personalized advice.
- Simple reorder of the sold products through clear labeling

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb	Components
EVLW-INDUSTRIE-BASIC	-123689	1.030 40 9/16	550 21 5/8	2.250 88 9/16	123 271,215	8-0-621, 9-1, 12-1, 12-2, 14-3, 17-0, 17-1, 18-0, 18-1, 20-10+, 20-20+, 20-1+S-T, 21-0, 21-01, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 22-0-05, 22-0-17, 22-1, 22-2, 30-1+S, 30-2+S, 41-0, 41-2, 41-3, 42-0, 42-2, 42-3, 43-1, 43-3, 43-11, 44-1, 44-3, 55-0, 55-1, 55-2, 55-3, 55-4, 56-2, 204-0, 204-02, 210-1, 219-1, K-2030-10+S, K-70-C

## PRODUCT DETAILS

### SERIES EVLW-2-INDUSTRIE SALES WALL INDUSTRY








The sales wall Industry serves the optimal presentation of KUKKO tools in your store. The illuminated sales wall is stocked with an assortment that has been compiled based on years of experience for use in the industry. In addition to pullers, the range also includes internal extractors, sliding hammers, counter stays, separation and puller devices, bearing pullers, and nut splitters. Together with the two case sets, customers in the industry should be able to find the right product for their needs.

#### Benefits

- KUKKO is happy to assist you in building and training your employees on the respective products and pulling principles. Contact us and let us provide you with personalized advice.
- Simple reordering of sold products through clear labeling

#### Technical attributes

#						Components
	EAN	mm/inch	mm/inch	mm/inch	kg/lb	
<b>EVLW-2-INDUSTRIE</b>	-141522	1.030 40 9/16	550 21 5/8	2.250 88 9/16	0 0,000	8-0-621, 9-1, 12-1, 12-2, 14-3, 17-0, 17-1, 18-0, 18-1, 20-10+, 20-20+, 20-1+S-T, 21-0, 21-01, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 22-0-05, 22-0-17, 22-1, 22-2, 30-1+S, 30-2+S, 41-0, 41-2, 41-3, 42-0, 42-2, 42-3, 43-1, 43-3, 43-11, 44-1, 44-3, 55-0, 55-1, 55-2, 55-3, 55-4, 56-2, 204-0, 204-02, 210-1, 219-1, K-2030-10+S, K-70-C

### SERIES EVLW-2-KFZ SALES WALL AUTOMOTIVE








The sales wall Automotive serves the optimal presentation of KUKKO tools in your store. The illuminated sales wall is equipped with a compilation that has been assembled based on many years of experience for application in the Automotive sector. In addition to pullers, the range also includes internal extractors, sliding hammers, counter stays, separating and pulling devices, bearing pullers, lock nut splitters, ball joint pullers, and other automotive tools. Together with the two case sets, customers from the industry should be able to find the right product for their needs.

#### Benefits

- KUKKO is happy to support you in the setup and training of your employees regarding the respective products and pulling principles. Contact us and get personalized advice.
- Simple reorder of the sold products through clear labeling

#### Technical attributes

#						Components
	EAN	mm/inch	mm/inch	mm/inch	kg/lb	
<b>EVLW-2-KFZ</b>	-141539	1.030 40 9/16	550 21 5/8	2.250 88 9/16	110 242,550	17-1, 18-1, 20-10+, 20-20+, 20-3+, 20-1+S-T, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7, 22-0-05, 22-0-17, 22-1, 22-2, 43-3, 43-13, 48, 54-2, 54-3, 128-F-SW, 128-2, 128-3, 129-0-25, 129-1, 204-0, 204-V, 210-1, 210-2, K-2030-10+S, K-22-A, 9-1



## PRODUCT DETAILS

### SERIES EVLW-2-NFZ SALES WALL AUTOMOTIVE / COMMERCIAL VEHICLES / AGRICULTURAL MACHINERY








The sales display for Automotive / Commercial Vehicles / Agricultural Machinery serves to optimally present KUKKO tools in your store. The illuminated display is equipped with an assortment that has been compiled based on many years of experience for applications in commercial vehicles. In addition to pullers, the range also includes internal extractors, sliding hammers, counter stays, separating and pulling devices, bearing pullers, nut splitters, ball joint pullers and extractors, as well as other automotive tools. Together with the two tool case sets, customers from the industry should be able to find the suitable product for their needs.

#### Benefits

- KUKKO is happy to support you in the setup and training of your employees regarding the respective products and pulling principles. Contact us and get personalized advice.
- Simple reorder of the sold products through clear labeling

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb	Components
<b>EVLW-2-NFZ</b>	-141546	1.030 40 9/16	550 21 5/8	2.250 88 9/16	0 0,000	9-2, 17-1, 18-1, 20-10+, 20-20+, 20-3+, 20-1+S-T, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7, 22-1, 22-2, 22-0-05, 22-0-17, 43-3, 43-13, 48, 54-2, 54-3, 128-F-SW, 128-3, 128-4, 128-5, 129-0-25, 129-3, 204-V, 204-0, 210-1, 210-2, 129-5, K-2030-20, K-16, 9-1







09

www.kukko.com

SELECTHOR 60



HICKORY  
Wood

9

09





# HAMMERS

For precise aligning, editing, and positioning of impact-sensitive surfaces or various assembly, repair, and maintenance tasks – KUKKO provides the perfect solution for every application.

The activities involving hammers include:

- Soft-face hammer "SELECTHOR"
- Soft-face hammer



## DEPLOYMENT

Soft-face hammers are the ideal choice for precisely processing, aligning, and positioning impact-sensitive surfaces. Depending on the surface, different impact inserts made of rubber, plastic, or nylon can be selected, which exhibit varying degrees of hardness. The anti-rebound inlay ensures optimal impact power with minimal joint stress. Soft-face hammers are multifunctional and can be used across various industries.

## FEATURES OF THE SERIES

### SERIES SELECTHOR



#### Soft-face hammers with interchangeable impact inserts

##### Description

With the Selecthor KU soft-face hammer featuring plastic impact inserts, sensitive surfaces can be processed, positioned, and aligned precisely. The impact inserts are universally applicable and are particularly used in assembly, repair, maintenance work, sheet metal processing, prefabricated house construction, carpentry, scaffolding, and tent construction. For even more versatile applications, the soft-face hammer can be combined with impact inserts made of rubber and/or nylon. The innovative anti-recoil inlay ensures optimal impact force with minimal stress on the joints.

##### Application area

For precise processing, positioning, and aligning of various surfaces.

#### Benefits

- Non-rebound with simultaneous increase in impact energy in sizes D30 - D80
- Joint-saving with anti-recoil inlay
- Stable and precise investment casting housing made of high-quality alloy steel
- Ergonomically designed handles made of durable hickory wood
- Oil and grease resistant inserts
- No chipping at the inserts

### SERIES 343



#### Recoil-free soft-face hammer rubber

##### Description

With the shock-free soft-face hammer, various surfaces can be precisely processed, positioned, and aligned. The soft-face hammer is used for assembly/repair/maintenance work on sensitive materials that must not be damaged, as well as in the food industry. The steel ball filling inside the hammer head ensures optimal striking power with minimal joint stress. Made from durable nitrile rubber. The operating temperature ranges from -20 °C to 90 °C.

##### Application area

For precise processing, positioning, and aligning of different surfaces and in the food industry.

#### Benefits

- Knurling on the handle ensures an ideal grip
- Absolutely rebound-free
- Joint-friendly working

# ASSEMBLY



## SHEET INSERTS

### Gum insert polyurethane (PU)

Hardness Grade ●●○○○○  
Wear Resistance ●●●○○○



#### Areas of application

- Construction/gardening/landscaping
- Setting kerbs
- Paving work
- Dry construction
- Lay floor tiles

### Cellulose acetate (CA) insert

Hardness Grade ●●●○○○  
Wear Resistance ●●●○○○



#### Areas of application

- Tool & machine construction
- Folding & bending
- Car body construction
- Loosening tyres/rims
- Positioning workpieces

### Nylon insert Nylon polyamide 6 (PA 6)

Hardness Grade ●●●●○  
Wear Resistance ●●●●○○



#### Areas of application

- Foundries
- Mould making
- Car repair
- Road construction
- Heavy industry

# ANTI-BACKLASH PRINCIPLE OF THE SOFT-FACE HAMMER

## 1. THE IMPACT STROKE PHASE

The micro-fine metal balls of the anti-backlash inlay are moved backwards by the centrifugal force.



## 2. THE CLAMPING PHASE

The impact insert strikes the material and the metal balls move towards the impact point.



## 3. THE ANTI-ROLLBACK EFFECT

The complete mass of the anti-rebound insert is now thrust forward, generating 1.5 times the impact energy. At the same time, a rebound of the Selector is prevented.



## LUGGAGE SETS



K-Selector



Content of the K-Selector

The set includes various impact inserts made of rubber, plastic, and nylon, which can be combined or exchanged depending on the application. The impact inserts are durable, damping, and last longer than a conventional rubber hammer. They are particularly used in gardening/landscaping, paving work, setting curbstones, masonry and stairs, as well as in fence construction, scaffolding, tent construction, prefabricated house construction, carpentry, and maintenance/repair work.

## APPLICATION EXAMPLES



Use of a Schonhammer Selector when laying paving stones



Installation of a bearing with a soft-face hammer Selector in combination with the 71-L



## PRODUCT DETAILS

### SERIES 3-KU-KU-1 SOFT-FACE HAMMER „SELECTHOR“










With the soft-face hammer Selecthor KU featuring plastic impact inserts, sensitive surfaces can be precisely processed, positioned, and aligned. The impact inserts are universally applicable and are particularly used for assembly, repair, and maintenance work, sheet metal processing, prefabricated house construction, carpentry, scaffolding, and tent construction. For even more versatile applications, the soft-face hammer can be combined with impact inserts made of rubber and/or nylon. The innovative anti-recoil inlay ensures optimal impact force with minimal strain on the joints.

#### Benefits

- Impact-free while simultaneously increasing the impact energy in sizes D30 - D80
- Joint-friendly through anti-kickback inlay
- High-quality screws with spring washer to prevent accidental loosening

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	kg	mm/inch		kg/lb
<b>3-030111-KU-KU-1</b>	-020186	300 11 13/16	92 3 5/8	0,02	30 1 3/16	75	0,785 1,731
<b>3-040111-KU-KU-1</b>	-020230	330 12 63/64	116 4 9/16	0,06	40 1 9/16	75	0,762 1,680
<b>3-050111-KU-KU-1</b>	-020278	380 14 15/16	138 5 7/16	0,14	50 1 15/16	75	1,32 2,911
<b>3-060111-KU-KU-1</b>	-020322	410 16 1/8	149 5 7/8	0,21	60 2 3/8	75	1,758 3,876

### SERIES 3-GU-GU-1 SOFT-FACE HAMMER "SELECTHOR"










With the soft-face hammer Selecthor GU with impact inserts made of rubber, sensitive surfaces can be processed, positioned, and aligned precisely. The impact inserts are low-wear, damping, and last longer than a conventional rubber hammer. They are particularly used in landscaping, paving work, setting curbs, masonry, and stairs, as well as in fence construction, scaffolding, tent construction, prefabricated house construction, carpentry, and maintenance/repair work. For even more versatile application possibilities, the soft-face hammer can be combined with impact inserts made of plastic and/or nylon. The innovative anti-recoil inlay ensures optimal impact force while minimizing joint stress.

#### Benefits

- Free from backlash while simultaneously increasing impact energy in sizes D30 - D80
- Joint-friendly through anti-rebound inlay
- High-quality screws with spring washer to prevent accidental loosening

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	kg	mm/inch		kg/lb
<b>3-030111-GU-GU-1</b>	-020179	300 11 13/16	92 3 5/8	0,02	30 1 3/16	50	0,4 0,882
<b>3-040111-GU-GU-1</b>	-020216	330 12 63/64	116 4 9/16	0,06	40 1 9/16	50	0,76 1,676
<b>3-050111-GU-GU-1</b>	-020261	380 14 15/16	138 5 7/16	0,14	50 1 15/16	50	1,325 2,922
<b>3-060111-GU-GU-1</b>	-020315	410 16 1/8	149 5 7/8	0,21	60 2 3/8	50	1,75 3,859
<b>3-080111-GU-GU-1</b>	-020353	500 19 11/16	175 6 7/8	0,6	80 3 1/8	50	3,768 8,308
<b>3-080112-GU-GU-1</b>	-003325	900 35 7/16	175 6 7/8	0,6	80 3 1/8	50	4,045 8,919

## PRODUCT DETAILS

### SERIES 3-NY-NY-1 SOFT-FACE HAMMER „SELECTHOR“










With the Selecthor NY soft-face hammer featuring impact inserts made of nylon, sensitive surfaces can be processed, positioned, and aligned accurately. The impact inserts are particularly used in tool and machine engineering, during bending and folding work, in body construction, or for loosening tires/wheels. For even more versatile application possibilities, the soft-face hammer can be equipped with impact inserts made of rubber and/or nylon plastic. The innovative anti-kickback inlay provides optimal impact force while minimally stressing the joints.

#### Benefits

- Free from backlash while simultaneously increasing impact energy in sizes D30 - D80
- Joint-friendly through anti-kickback inlay
- High-quality screws with spring washer against accidental loosening

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	kg	mm/inch		kg/lb
<b>3-030111-NY-NY-1</b>	-039492	300 11 13/16	92 3 5/8	0,02	30 1 3/16	85	0,4 0,882
<b>3-040111-NY-NY-1</b>	-039515	330 12 63/64	116 4 9/16	0,06	40 1 9/16	85	0,76 1,676
<b>3-050111-NY-NY-1</b>	-039522	380 14 15/16	138 5 7/16	0,14	50 1 15/16	85	1,32 2,911
<b>3-060111-NY-NY-1</b>	-039553	410 16 1/8	149 5 7/8	0,21	60 2 3/8	85	1,72 3,793
<b>3-080111-NY-NY-1</b>	-039560	500 19 11/16	175 6 7/8	0,6	80 3 1/8	85	3,7 8,159
<b>3-080112-NY-NY-1</b>	-003349	900 35 7/16	175 6 7/8	0,6	80 3 1/8	85	3,94 8,688

### SERIES 3-NY-NY-0 SOFT-FACE HAMMER "SELECTHOR"










The Selecthor NY/NY sledgehammer is equipped on both sides with nylon inserts and offers excellent striking properties. The white nylon striking insert with a hardness of Shore 85D is a very hard, durable insert with very high strength. This sledgehammer is suitable for universal use, for driving in wooden posts, for disassembly, or for demolition work. It is available in sizes D100 and D125. The innovative anti-kickback inlay ensures optimal striking power with minimal joint stress.

#### Benefits

- Impact-free while simultaneously increasing the impact energy in sizes D100 and D125
- Joint-friendly working with many impact repetitions through anti-recoil inlay
- High-quality screws with spring washer against accidental loosening

#### Technical attributes

#							
	EAN	mm/inch	mm/inch	kg	mm/inch		kg/lb
<b>3-100111-NY-NY-0</b>	-003356	1.020 47 1/4	204 8 1/16	0	100 3 15/16	85	6,19 13,649
<b>3-125111-NY-NY-0</b>	-003363	1.020 47 1/4	204 8 1/16	0	125 4 15/16	85	6,37 14,046

## PRODUCT DETAILS

### SERIES K-SELECTHOR SELECTHOR SOFT-FACE HAMMER IN THE CASE SET WITH INTER- CHANGEABLE IMPACT INSERTS










With the soft-face hammer Selecthor in the K-Selecthor case, sensitive surfaces can be precisely processed, positioned, and aligned. The set includes various impact inserts made of rubber, plastic, and nylon, which can be combined or exchanged depending on the application. The impact inserts are low-wear, damping, and last longer than a conventional rubber hammer. They are particularly used in gardening/landscaping, paving work, setting curbs, masonry and stairs, as well as in fence construction, scaffolding, tent construction, prefabricated house building, carpentry, and maintenance/repair work. The innovative anti-rebound inlay ensures optimal impact force with minimal strain on the joints.

#### Benefits

- Impact-free while simultaneously increasing the impact energy in sizes D30 - D80
- Joint-friendly through anti-kickback inlay
- High-quality screws with spring washer to prevent accidental loosening

#### Technical attributes

#								Components
	EAN	mm/inch	mm/inch	kg	mm/inch		kg/lb	
K-SELECTHOR-01	-040320	300 11 13/16	116 4 9/16	0,01	40 1 9/16	45/75/82	4,565 10,066	3-040111-GU-KU-1

### SERIES 343 NON-REBOUND SOFT-FACE HAMMER RUBBER








With the recoil-free soft-face hammer, various surfaces can be processed, positioned, and aligned precisely. The soft-face hammer is used for assembly, repair, and maintenance work on sensitive materials that must not be damaged. The steel ball filling inside the hammer head guarantees optimal impact power with minimal strain on the joints. Made of durable nitrile rubber. The operating temperature ranges from -20 °C to 90 °C.

#### Benefits

- Knurling on the handle guarantees ideal grip
- Absolutely impact-free
- Hammers do not break or split

#### Technical attributes

#					
	EAN	mm/inch	mm/inch		kg/lb
343-050	-911119	320 12 5/8	50 1 15/16	85	0,82 1,808
343-060	-911126	360 14 3/16	60 2 3/8	85	1,265 2,789





**KUKKO**  
Safety-First-Label

**DE** **ACHTUNG!**  
Für sicheren Verwendung des Werkzeuges  
MUSTE die Sicherheits- und Gebrauchshinweise  
beachten.  
Nicht Gebrauch der  
First-Label wieder an die Spritze hängen!

- Tragen Sie stets eine Schutzkleidung  
geeigneter Schutzkleidung
- Umhüllen Sie die abgehängende Teil  
immer mit einer Umhüllung
- Überprüfen Sie die korrekte Anbringung  
des Werkzeuges, falls parallel zusammen  
halten Sie die Gewinde von Spindel und  
Traverse stets sauber und immer gut speist.
- Verwenden Sie keine Verlängerungen

**EN** **ATTENTION!**  
For safe use of the tools, ALWAYS adhere  
to the precautionary notices and health  
limits.  
Recommendations changes to the  
being passed on the product.

2-150

2





# CARE & SAFETY

To ensure the safety of the puller and prevent falls, to secure loads in transport, to protect during pulling operations, or to maintain the spindle under high pulling forces - at KUKKO, safety is a top priority.

The activities related to care & safety include:

- Fall protection
- Tension strap
- Accident protection tarp
- Special grease



# DEPLOYMENT

Even the best tools require proper handling and maintenance to minimize the risk of injury at the workplace. Especially in the field of occupational safety, KUKKO provides essential equipment for daily needs.

## FEATURES OF THE SERIES

### SERIES KFS-69



The green KUKKO special grease for pressure spindles protects and maintains applied spindles, and is especially used under high pulling forces in crafts, industry, and workshops. Each KUKKO puller comes with a tube of special grease.

### SERIES 660



The fall protection of the series 660 is used to secure and prevent the puller from falling during application. The carabiner hook is capable of attaching the puller to a designated attachment point. The fastening ring prevents the tool from falling.

### SERIES UFP



The accident protection tarpaulins for puller operations are necessary for protection and safety when using large forces. During disassembly and pulling operations, it may happen that entire parts are abruptly released or break. The special tarpaulins serve to prevent potential accident hazards.

### SERIES USB



The tension belt is used for securing small to medium loads in transportation. The clamp lock features a serrated clamping jaw with a spring mechanism that ensures a firm hold. If hook eyes are present on the puller, the tension belt can be used to better secure and hold the pull hooks together.



# SAFETY INSTRUCTIONS

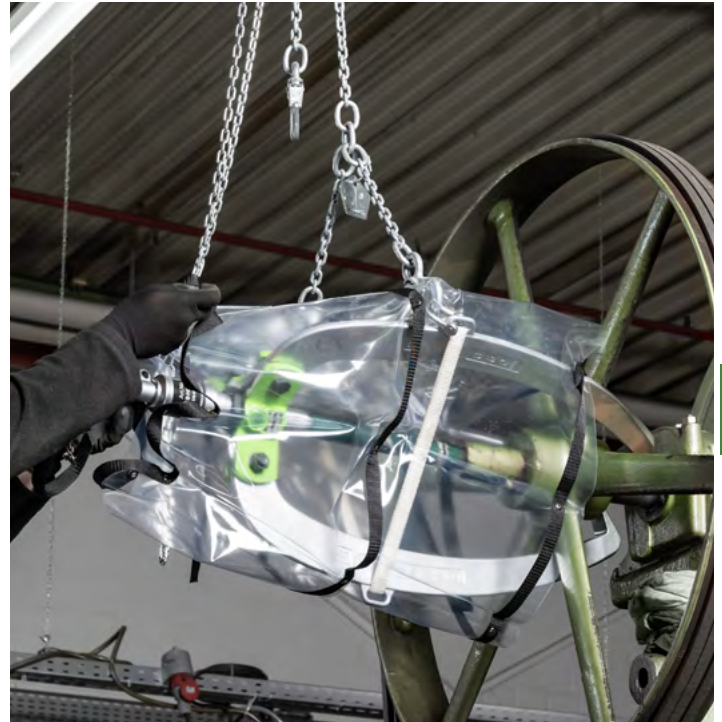
All pullers with spindle are equipped with a KUKKO Safety-First label. This ensures that one always keeps an eye on the safety instructions before each use of the puller. After use, the label must be reattached to the spindle. All KUKKO tools have special labels that contain the most important safety instructions and technical attributes.



# APPLICATION EXAMPLES



Greasing the thread



Safety cover guarantees a secure removal



Load securing with KUKKO strap



Safety puller secures ball joint puller





# PRODUCT DETAILS

## SERIES USB STRAP









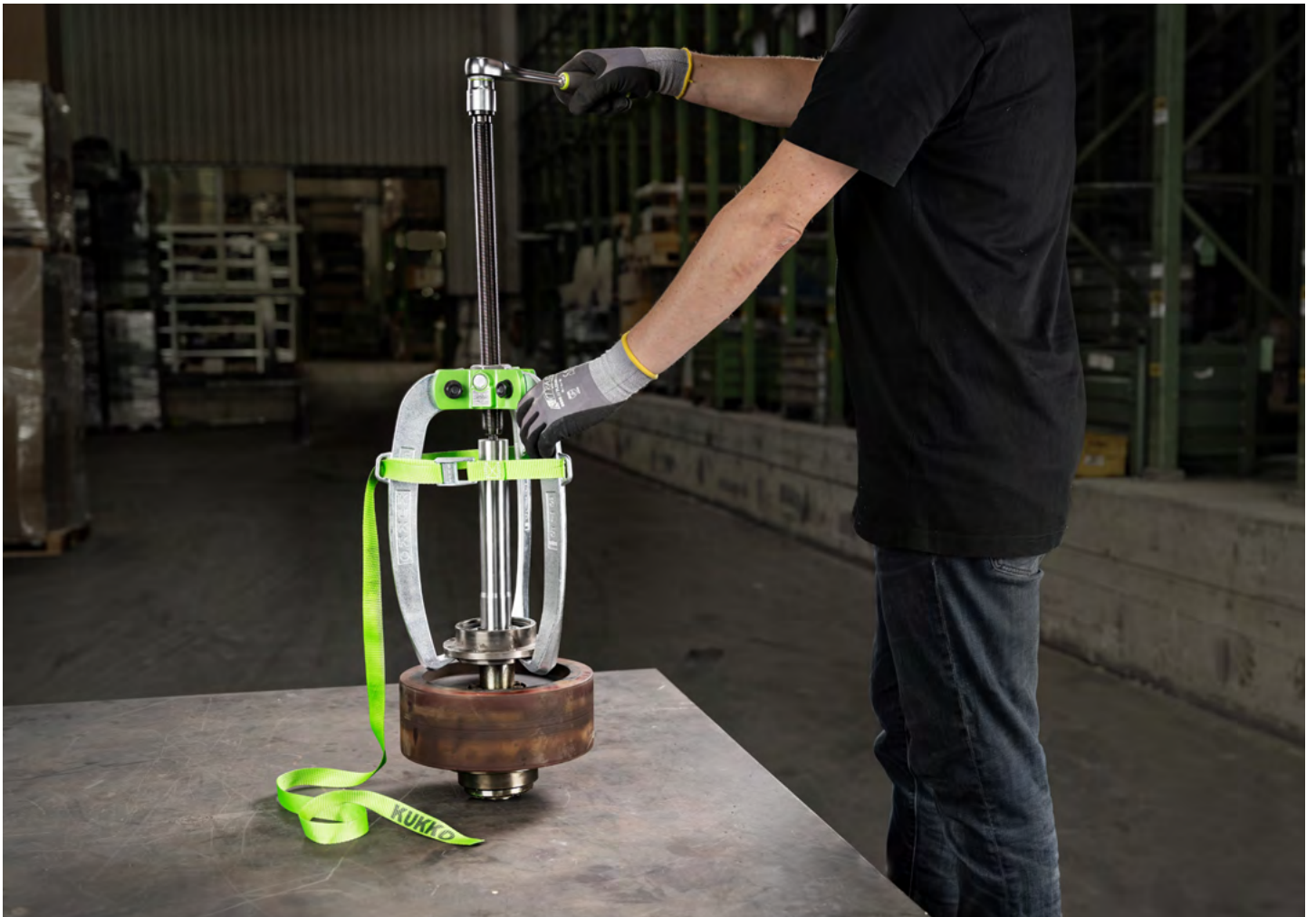
The tension strap is used for securing small to medium loads in transportation. The clamp lock features a serrated clamping jaw with a spring mechanism that guarantees a firm grip. If hook eyes are present on the puller, the tension strap can be used for better fixing and holding of the extraction hooks. This ensures an even safer extraction.

### Benefits

- The grooved clamping jaw ensures ideal grip.
- For tensioning small to medium loads

### Technical attributes

#	 EAN	 mm	 mm	 max. %	 daN	 kg
USB-1	-041952	25	2.000	5 %	450	0,12



The USB-1 tensioning strap secures a 3-armed industrial puller during pulling

## PRODUCT DETAILS

### SERIES UFP PULLING SAFETY COVER FOR PULLER OPERATIONS







The accident protection tarpaulins for disassembly work of the UFP series are necessary for protection and safety when using large forces. During disassembly and pulling operations, it can happen that entire parts are suddenly loosened or break. The tarpaulins serve to prevent potential accident hazards, with which workpieces and tools can be safely enclosed even before the forces are applied.

#### Benefits

- Highly elastic, tear-resistant, and oil-resistant material
- The tarp is delivered in the suitcase for careful storage.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg/lb
UFP-2	-445293	1.500 59 1/16	670 26 3/8	1,75 3,859
UFP-3	-445378	4.000 157 1/2	1.300 51 3/16	7,705 16,990



The UFP accident protection tarpaulin offers safety when removing a pulley from a press



## PRODUCT DETAILS

### SERIES 660 FALL PROTECTIONS FOR EXTRACTORS







The fall protection devices of the series 660 are used to secure the puller and prevent falls during external extraction in crafts, industry, and workshops. The carabiner hook is capable of attaching the puller to a designated fixing point, and the fixing ring prevents falling.

#### Benefits

- The elastic pull line provides enough space to work and stops the puller from falling.
- The tool is continuously secured during the pulling process.

#### Technical attributes

#	 EAN	 mm/inch	 mm/inch	 kg
660-614	-006197	700 27 9/16	19 3/4	20
660-616	-006210	700 27 9/16	21 13/16	20
660-618	-006227	700 27 9/16	23 7/8	20
660-620	-006234	700 27 9/16	25 1	20



The 660 series safety catches offer protection against accidents and damage if the puller falls

## PRODUCT DETAILS

### SERIES KSF-69 KUKKO SPECIAL GREASE FOR SPINDLE PRESSES



The green KUKKO special grease for pressure spindles protects and maintains applied spindles and is particularly used under high pulling forces in crafts, industry, and workshops. The reduced friction increases the efficiency during pulling and minimizes wear.

#### Benefits

- Increases the longevity of the spindle

#### Technical attributes

#	 EAN	 g	 kg/lb
699904	-773518	4	0,5 1,103
699915	-019869	15	0,2 0,441



### SERIES KSF-69-C KUKKO SPECIAL GREASE FOR PRESSURE SPINDLES






The green KUKKO special grease for pressure spindles protects and maintains applied spindles and is particularly used in crafts, industry, and workshops under high pulling forces. By reducing friction, the efficiency during pulling is increased and wear is minimized.

#### Benefits

- Increases the longevity of the spindle

#### Technical attributes

#	 EAN	 g	 kg/lb
699975	-019876	75	0,1 0,221

## PRODUCT DETAILS

### SERIES 699990 BIO-MULTI-OIL



The bio-multi-oil "6 in 1" from KUKKO protects and cares for the spindle under high pulling forces in craftsmanship, industry, and workshops.

#### Benefits

- Increases the longevity of the spindle



#### Technical attributes

#			
	EAN	g	kg/lb
 699990	-333804	100	0,12 0,265



# PRODUCT DETAILS

 #	Article number	 GTIN	 Total width
 Total depth	 Total height	 Spacing of support arms	
 Load capacity	 Gross Weight	 Span (max.)	
 Jaw width vice	 Jaw height	 Clamping height	
 Width of the clamping rail	 Depth of the clamping rail	 Drawer width	
 Drawer height	 Drawer depth	 Worktop depth	
 Worktop width	 Number of drawers	 Valve available	
 Total length	 Diameter	 Hose diameter	
 Hub	 Outer pull-off span (min. - max.)	 Clamping depth (max.)	
 Inner pull-out span (min. - max.)	 Max. Torque	 Ball bearing ISO	
 Insert depth	 Diameter of the puller	 Mounting thread	
 Width across flats hexagon socket	 Width across flats hexagon socket	 Total hook foot depth (total claw depth H)	
 Total claw thickness (L+1 mm) (claw distance to base surface)	 Hook foot width (claw width J)	 Hook foot depth usable (claw depth usable O)	
 Hook foot thickness at the tip (claw thickness K)	 Suitable for (list)	 Outer pull-off span (max.)	
 Tension depth A1-A2	 Thread dimension	 Puller span (min. - max.)	
 Clamping depth of puller	 For ball bearings with inside diameter	 Internal thread of the connecting nut	
 Separation diameter (min. - max.)	 Max. Pressure	 Outer pull-off span (min.)	
 Clamping depth outside draw-off	 Separation diameter (min.)	 Separation diameter (max.)	
 Peel height	 Voltage range	 Max. Pressure of hydraulics	
 Matching (back reference list)	 Length of the slide hammer	 Impact distance	
 Impact mass	 Inner pull-out span (min.)	 Internal pull-out span (max.)	
 Insertion depth (min.)	 Insertion depth (max.)	 Span (min.)	

## PRODUCT DETAILS

	Clamping depth (min.)		Insert thread		Internal thread of the thread adapter
	For bushes with diameter		For bushes with diameter (set)		Counter support span (min. - max.)
	Projection (from to)		Length of jaws		Clamping force Power
	Clamping thread		Jaw width		Diameter of the impact insert
	Shore hardness		Head length		Beater insert filling quantity
	Length of the blade		Width across flats connecting nut		Width across flats SW
	Width of the T-handle		Length of the screwdriver blade mm		Clamping jaw width
	Fork opening (jaw opening)		Diameter of the circlip Ø		Diameter of the tip Ø
	Length of the tip (pin punch)		Shank diameter Ø		Width across flats
	Blade width mm		Blade length mm		Hole diameter Ø
	Length of cutting edge mm		Sheet thickness max. (steel)		Cutting direction
	Length of the handle		Total width (for multi-position holders) mm		Total depth (for multi-position holders) mm
	Font height set		Wire thickness		Handle diameter Ømm
	Blade width screwdriver		Blade thickness mm		Phillips profile
	Diameter (several) Ø		Length of cutting edge set mm		Diameter of tip set Ø
	Max. Jaw opening max.		Clamp grip dimensions		Shank length
	Width of T-handle (set)		Number of pressure pieces		Diameter of punching insert Ø
	Clamping width pliers		Thread diameter screw (min - max)		Mounting square
	Diameter of the piston ring (min - max)		Clamping diameter (min - max) Ø		Spring diameter (min - max) Ø
	Spring clamping range (min - max)		Valve spring insertion depth (min. - max.)		Span width / extension clamp
	Cross-section of the slide rail		Maximum current		Hook sets Suitable for (list)

# PRODUCT DETAILS








































	<b>Spindle thread dimension</b>		<b>Mounting thread for tension bolt</b>		<b>Screw-in length of the thread adapter</b>
	<b>For hand taps according to DIN 352</b>		<b>For hand reamers according to DIN 206</b>		<b>Clamping range for square mounts</b>
	<b>Shank width</b>		<b>Font height</b>		<b>Flankenwinkel</b>
	<b>Thread pitch</b>		<b>Beating insert fits</b>		<b>Total length of the spindle</b>
	<b>Stud bolt diameter</b>		<b>Leg length, short</b>		<b>Leg length, long</b>
	<b>Length to be extended</b>		<b>Spare part from</b>		<b>Separating pull-off span (min. - max.)</b>
	<b>Thread dimension (set)</b>		<b>Outer diameter</b>		<b>Diameter of the fork opening</b>
	<b>Diameter of the bolt circle</b>		<b>Lever clamping range</b>		<b>Max. torque (hydraulic)</b>
	<b>Fork height (jaw height)</b>		<b>Fork thickness at the tip, K</b>		<b>Diameter of the impact sleeves</b>
	<b>Length of the impact sleeves</b>		<b>For ball bearings with outside diameter</b>		<b>Outer diameter of impact sleeves</b>
	<b>Diffuser width</b>		<b>Diffuser height</b>		<b>Total height of press frame</b>
	<b>Stroke of the cylinder</b>		<b>Angle of the swivel unit</b>		<b>Diameter of the flanges</b>
	<b>Minimum screw hole diameter</b> Ø min. mm		<b>Chain length</b>		<b>Chain length balanced</b>
	<b>Chain length Y-strand</b>		<b>Bolt spacing</b>		<b>Width of the chain passage</b> mm
	<b>Diameter of the ejector pins</b> mm		<b>Suitable for chain pin diameter</b>		<b>Radius of the rounding pins</b> mm
	<b>Sheet thickness</b>		<b>Height of the cylinder</b>		<b>Total length of tools (set)</b>
	<b>Diameter of the interchangeable thrust pads</b>		<b>Mounting diameter of thrust piece</b>		<b>Length of concave</b>
	<b>Length of the panel</b>		<b>Length of the tip</b>		<b>Outer diameter</b> Ømm
	<b>Inner diameter</b>		<b>Blade length of the tools (set)</b> mm		<b>Hole diameter set</b>
	<b>Thread diameter screw set (min - max)</b>		<b>Receptacle square set</b>		<b>Extensions set</b>
	<b>Width across flats hexagon socket (set)</b>		<b>Width of the tarpaulin</b>		<b>Height of the tarpaulin</b>
	<b>Diameter of the barometer</b>		<b>Division of the scale of the barometer</b> 0 5 10		<b>Max. Rivet diameter</b>



# PRODUCT DETAILS

	Suitable for fork tubes with diameter		Span of counter support (min. - max.)		Clamping depth (min.)
	Length of the slide hammer		Impact distance		Diameter of fork opening set
	Chisel cutting edge width set		Width across flats of the nut (min - max)		For strength classes of the nut
	Body diameter		Diameter of the oil filter		Square drive
	Adapter square socket		Hexagon drive		Collar diameter of the power groove
	Thread dimension of the power groove		Total height of the power groove		Diameter of the bolt hole circles (set)
	Length of the stud extractor		Diameter of the stud extractor		Total length (set)
	Stroke cylinder width		Stroke-cylinder length		Stroke-cylinder height
	Usable oil volume		Total width of hydraulic cylinder		Total depth of hydraulic cylinder
	Total height of hydraulic cylinder		Outer diameter of hydraulic pressure piece		External thread pressure cylinder
	Internal thread hydraulic cylinder		Internal thread hydraulic pressure piece		Overall length of case
	Total case depth		Total case height		Load capacity
	Chisel cutting edge width		Cutting range (diameter) (min - max)		Piston ring clamping height
	Clamping range (min - max)		Width of the base unit		Drill diameter
	Spread range (min - max)		Suitable hydraulic spindles (list)		Diameter of the center point
	Diameter of the centering tip set		Clamping depth (min. - max.)		Clamping depth of counter support
	Total cutting edge height		Cutting edge thickness at the tip		Rear cutting edge thickness
	Usable snow depth		Span (min. - max.)		Clamping depth
	Internal thread of the spindle		Width of hooks		Hook thickness
	Insertion depth of internal puller		Diameter of the bearing adapter		External thread of the spindle
	Hook length (min. - max.)		Number of hooks		Fork opening
	Sealing diameter (max)		Outer diameter of the extension		Width across flats

## PRODUCT DETAILS

 <b>Width across flats</b>	 <b>Hook length (min.)</b>	 <b>Hook length (max.)</b>
 <b>Number of support rings</b>	 <b>Diameter of the support rings</b>	 <b>Dimensions of the insert sleeves</b>
 <b>Diameter of twist drills</b>	 <b>Filling quantity</b>	 <b>Female thread of the handle</b>
 <b>Projection</b>	 <b>Thread adapter IG+AG</b>	 <b>Maximum weight of the ball bearing</b>
 <b>Temperature</b>	 <b>Pressure range</b>	 <b>Connection of the hose</b>
 <b>Item number NEW</b>	 <b>Total width</b>	 <b>Total depth</b>
 <b>Total height</b>	 <b>Drawer width</b>	 <b>Drawer height</b>
 <b>Drawer depth</b>	 <b>Worktop depth</b>	 <b>Worktop width</b>
 <b>Net weight</b>	 <b>Total length</b>	 <b>Maximum elongation</b>
 <b>Lashing capacity LC</b>	 <b>Length by which is extended</b>	 <b>Span outside pull-off (min. - max.)</b>
 <b>Clamping depth outside pull-off</b>	 <b>Width across flats</b>	 <b>Max. torque</b>
 <b>Span inside pull-out (min. - max.)</b>	 <b>Clamping depth (min. - max.)</b>	 <b>For ball bearings with inner diameter</b>
 <b>Diameter (several)</b>	 <b>Total length of the tools (set)</b>	 <b>Handle length</b>

Issue 09/2024

Imprint:

**K&K Swiss AG**

Via Sant' Abbondio 59 | CH-6577 Ranzo

Represented by: Michael Kleinbongartz

Phone: +49 (0) 2103-9754-300

Fax: +49 (0) 2103-9754-310

E-Mail: [info@kukko.com](mailto:info@kukko.com)

Web: <https://kukag.ch>

**Register entry:**

Commercial register: Tessin

Register number: CH-020.3.044.143-6

Responsible for the content according to § 55 Abs. 2 RStV: Michael Kleinbongartz

© 2024 Kleinbongartz & Kaiser oHG | All rights reserved.

Unauthorized reproduction or distribution without written permission is strictly prohibited.

Technical changes as well as typesetting and printing errors reserved.

**KUKKO // Pull forward**



**KUKKO Werkzeugfabrik**  
**Kleinbongartz & Kaiser oHG**  
Heinrich-Hertz-Straße 5  
40721 Hilden  
Germany

Phone: +49 (0) 2103-9754-300  
Fax: +49 (0) 2103-9754-310

E-Mail: [info@kukko.com](mailto:info@kukko.com)  
Web: <https://www.kukko.com>

Catalog PDF:



CAT-EN-W11-010