

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

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

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
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

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
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 10T)



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	
820-0	-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		Compo- nents
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
818-215	-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



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

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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
12-1	-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
12-2	-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
12-3	-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

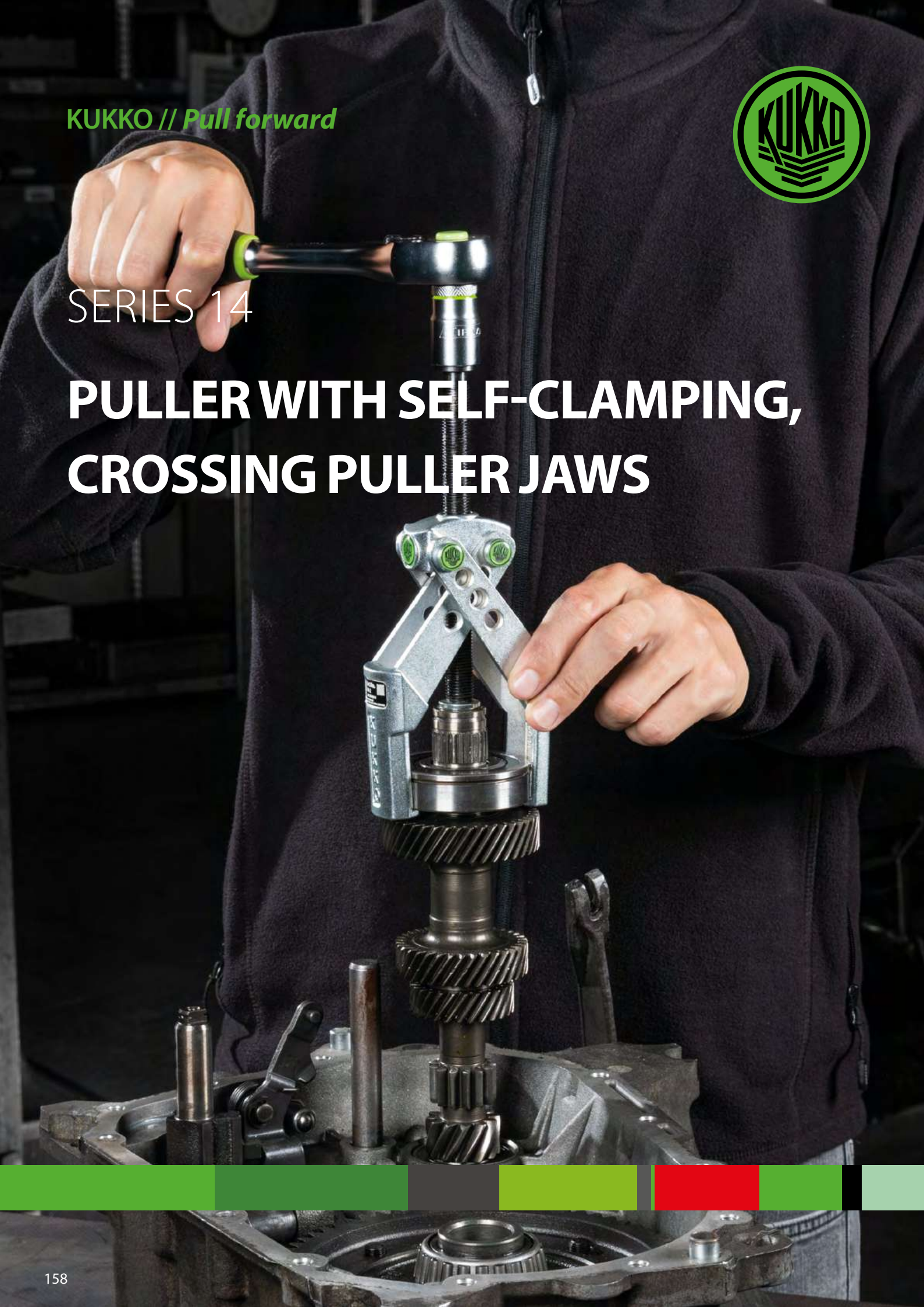
#	 EAN	 mm/inch	 mm/inch	 mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
12-4	-850509	0 - 250 0 - 9 7/8	225 8 7/8	27 1 1/16	300 221.28	100	10 11.02	11,99 26,438
12-5	-850684	0 - 350 0 - 13 3/4	275 10 7/8	27 1 1/16	300 221.28	100	10 11.02	13,485 29,734
12-6	-850769	0 -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

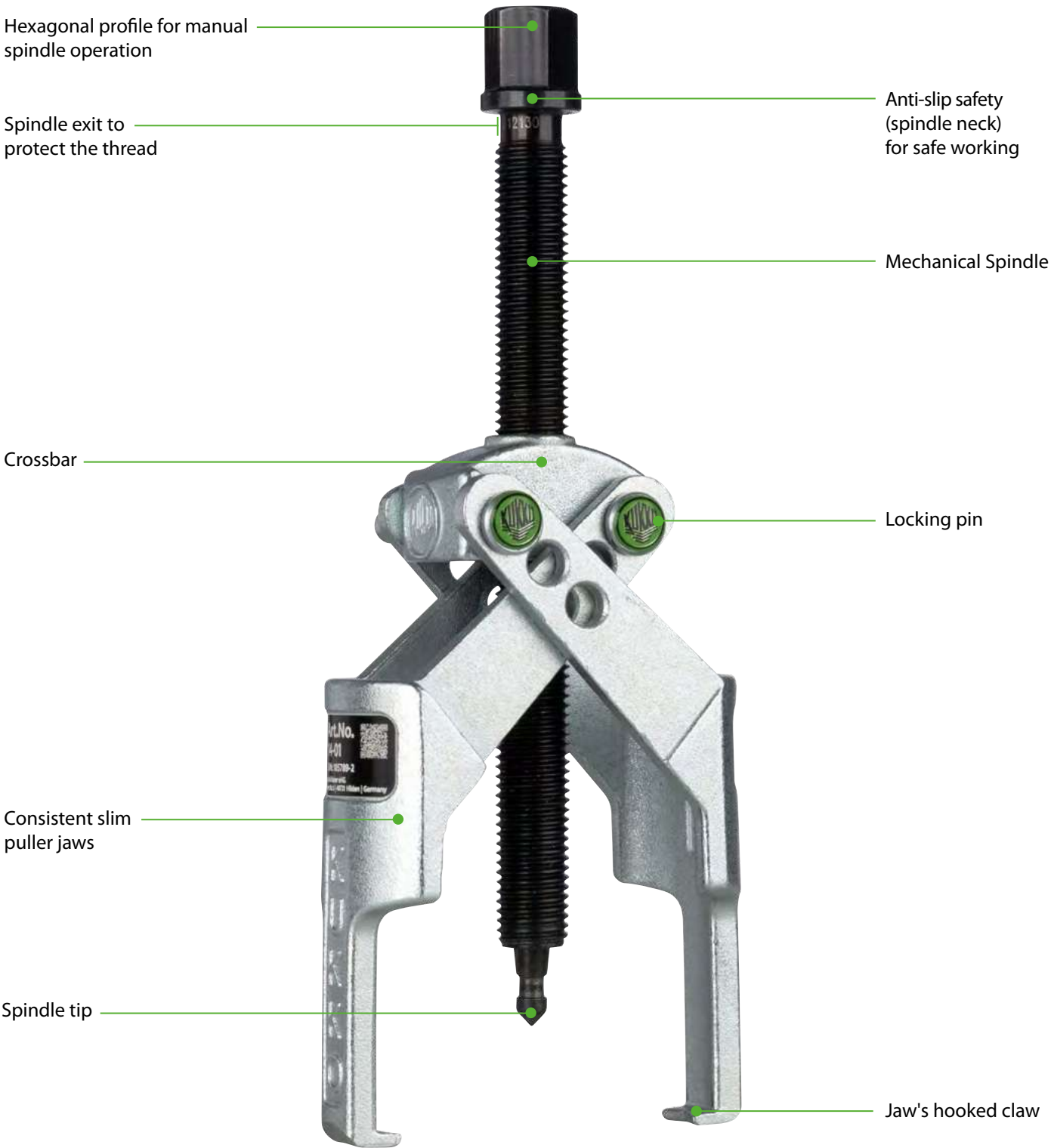
The special feature of the series 14 is the intersecting puller jaws with hooked claws. During the pulling process, the scissor-like hook guidance presses the hooked claws against the part to be pulled off. This allows even the tightest gaps between sprockets, bearings, and similar components to be reached. 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.

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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
14-1	-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
14-2	-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
14-3	-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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
14-01	-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
14-02 NEW	-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
14-03	-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

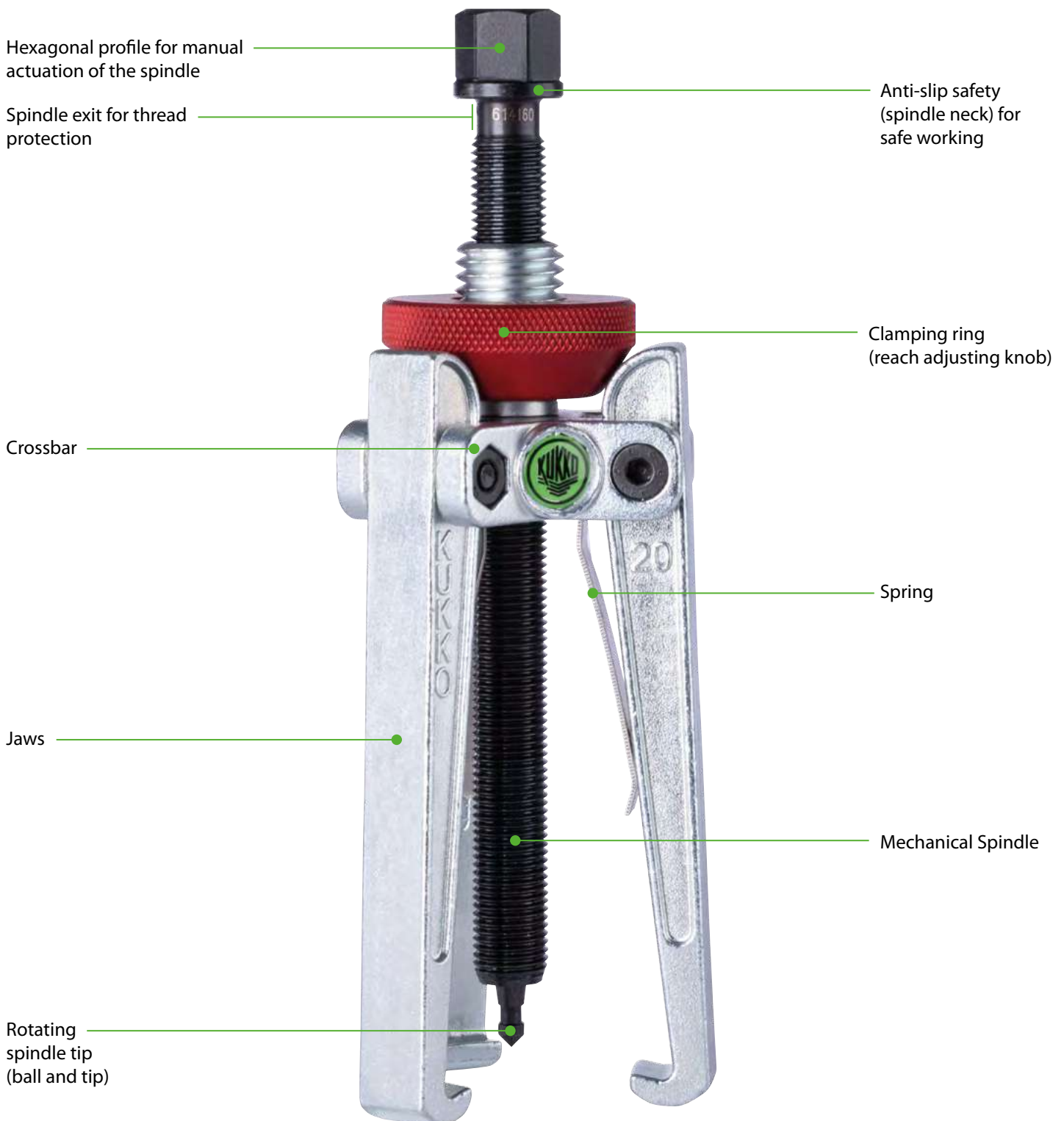
The 2-jaw and 3-jaw pullers with cone knobs have been developed for the proper removal of rolling bearings in collaboration with a Scandinavian ball bearing manufacturer. Both the proportions and the consistently straight puller jaws are specifically tailored to the requirements for concentric pulling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

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

#				SW 		Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
112-1	-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
112-10	-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
112-2	-419218	0 - 90 5/8 - 4	70 2 3/4	17 11/16	55 40.57	30	3 3.31	0,86 1,896
112-20	-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
112-3	-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

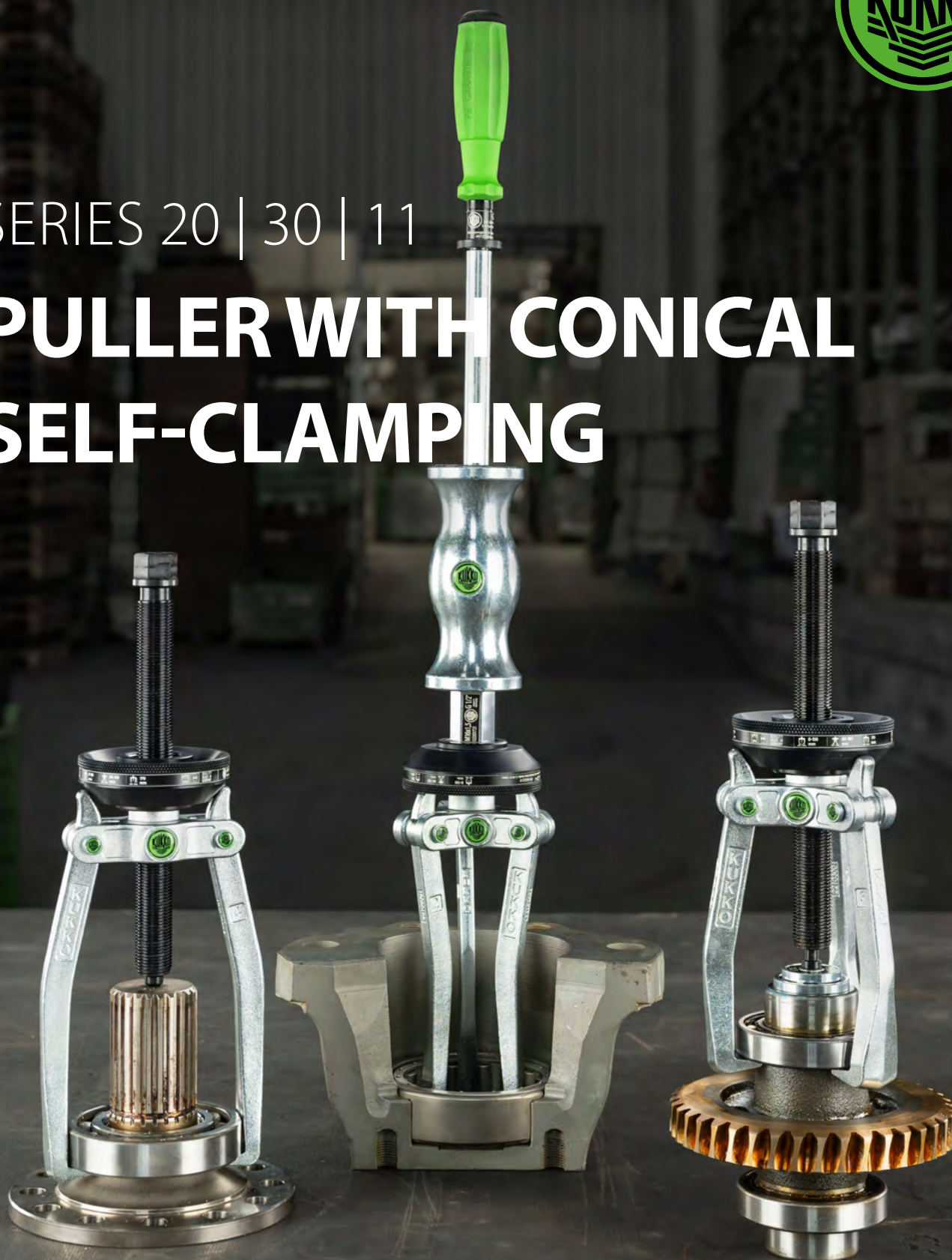
#				SW 		Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb
113-20	-422423	1 - 125 3/4 - 4 7/8	100 3 7/8	17 11/16	45 33.19	30	3 3.31	1,23 2,712
113-3	-422751	3 - 185 1 - 7 1/4	165 6 1/2	17 11/16	60 44.26	40	4 4.41	2,94 6,483

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 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°



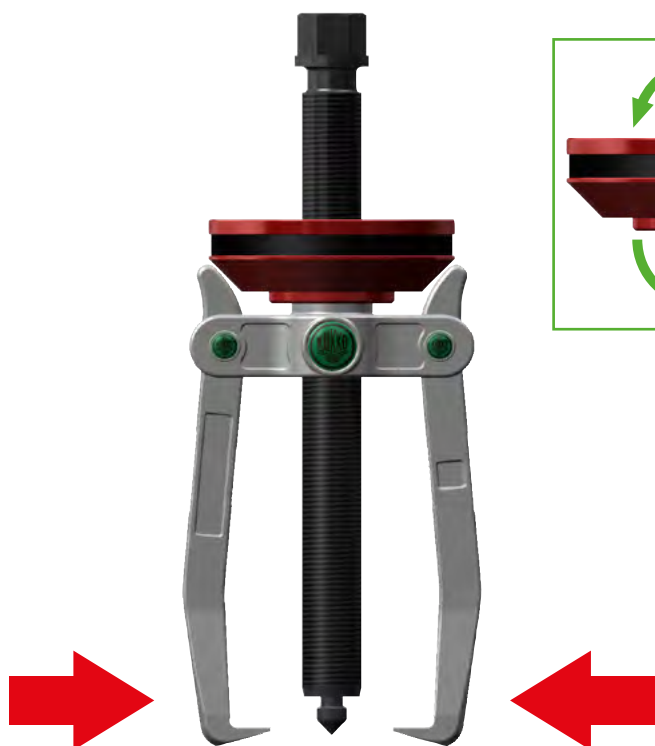
The internal extractor is ready for use

APPLICATION EXAMPLES



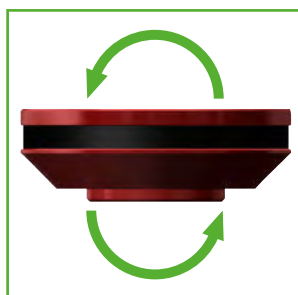
The puller legs are pretensioned exclusively via the clamping cone. The cone sits on an external thread on the cross on the crosshead and has no contact with the spindle. The mechanical spindle is used to generate the pulling force.

External extraction:



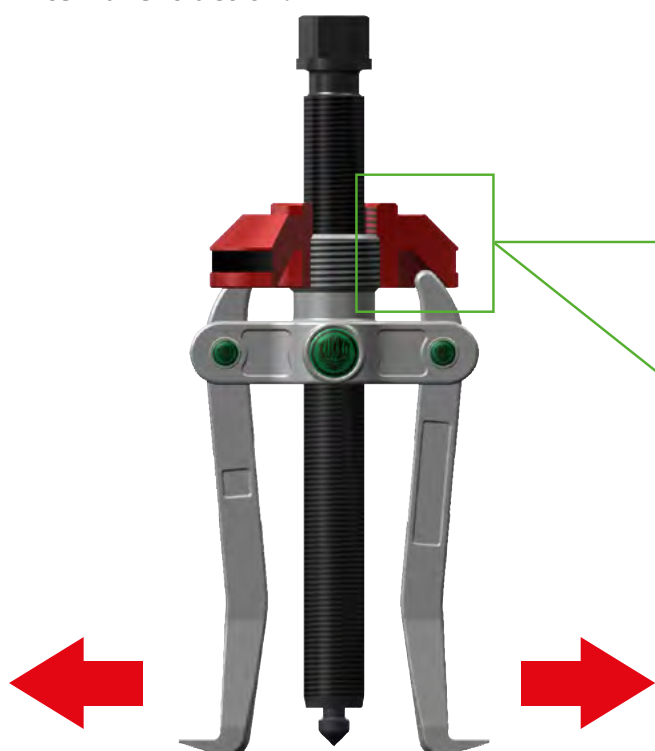
By tightening the clamping cone, the puller legs are guided inwards as the outer cone presses against the legs.

Repositioning:

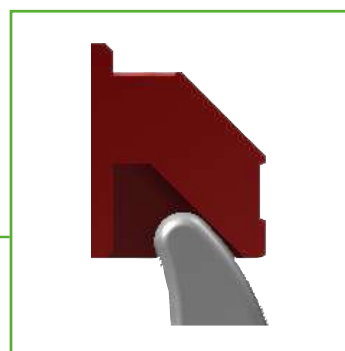


The clamping cone is rotated by 180°. The legs can be removed and reversed by loosening the bolts.

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.



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	
220-1 NEW	-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
220-2 NEW	-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
220-3 NEW	-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
220-4 NEW	-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	
221-1 NEW	-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
221-2 NEW	-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
221-3 NEW	-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
221-4 NEW	-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

#	 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

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

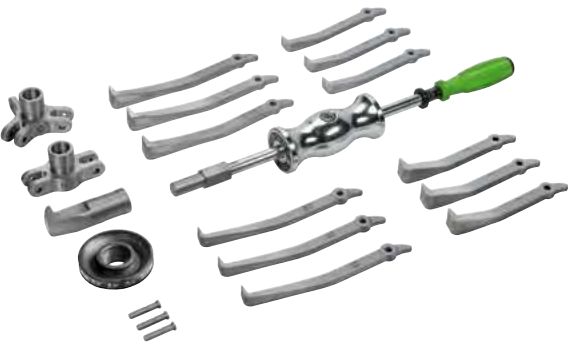
#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg	Number of doors	 kg/lb	Components
224-676 NEW	-042072	750 29 1/2	225 8 7/8	650 25 9/16	50	2	42,8 94,374	022-206, 22-0-17, 15-00, 15-2, 203-1, 203-2, 21-2, 21-4, 21-5, 21-6, 68-0, 68-2, GA7-10, X-SB-65x75

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	
224-178 NEW	-446603	0 - 150 0 - 5 7/8	0 - 170 0 - 6 11/16	60 - 180 2 3/8 - 7 1/16	1.7	250 9 13/16	500 19 11/16	0.00	7,4 16,317	221-3, 22-0+17, 220-1-T, 221-1-T

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.

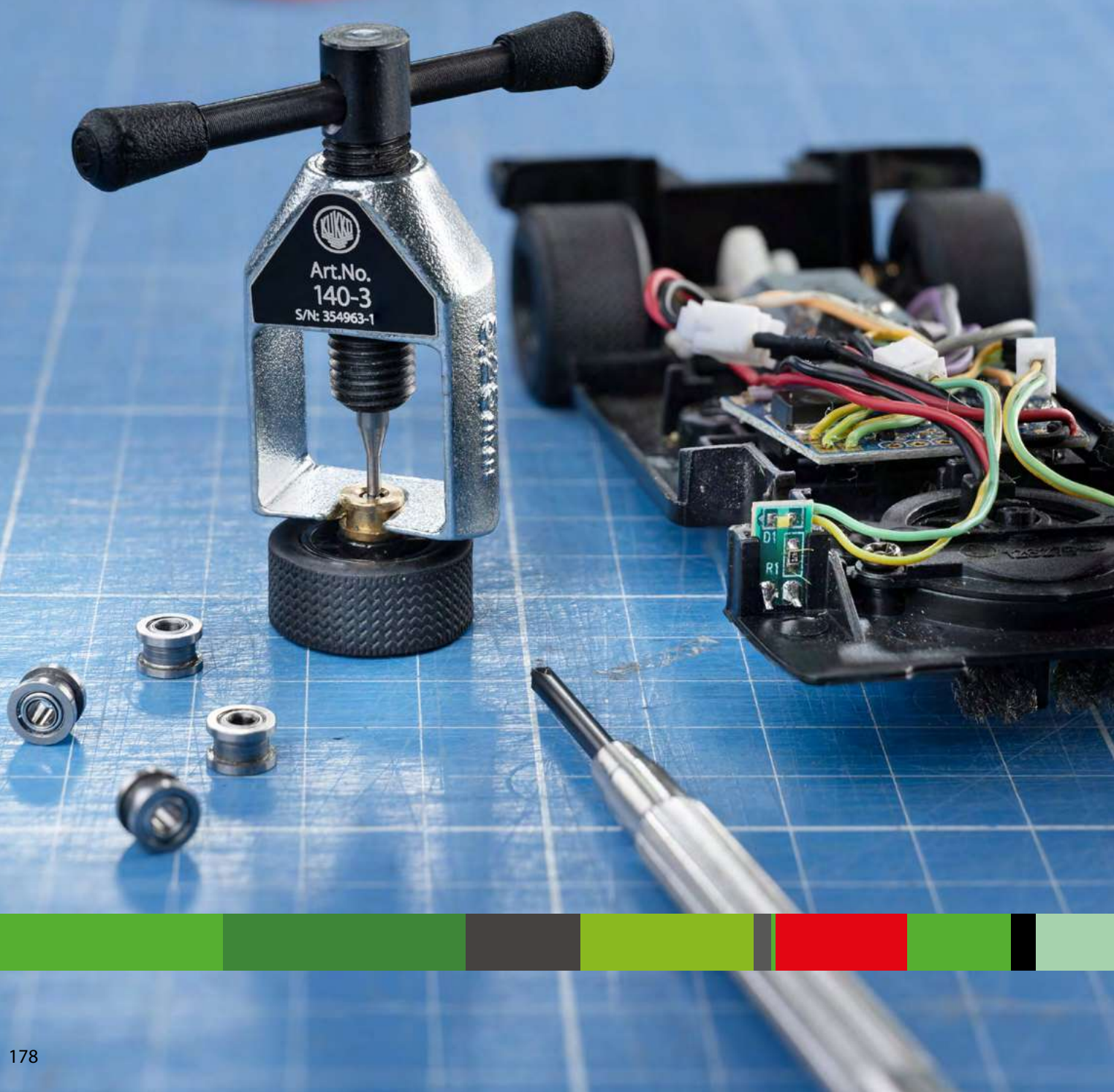
Technical attributes

#										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	
224-675 NEW	-061158	0 - 400 0 - 15 3/4	280 11 1/32	14 - 150 9/16 - 5 7/8	0 - 280 0 - 11 1/32	6 - 115 1/4 - 4 1/2	1.7	250 9 13/16	470 18 1/2	130	13 14.33	28,1 61,961	207-1, 201-1, 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
MICRO	-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	
140-1	-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
140-2	-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
140-3	-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

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

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 kg/lb	Components
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

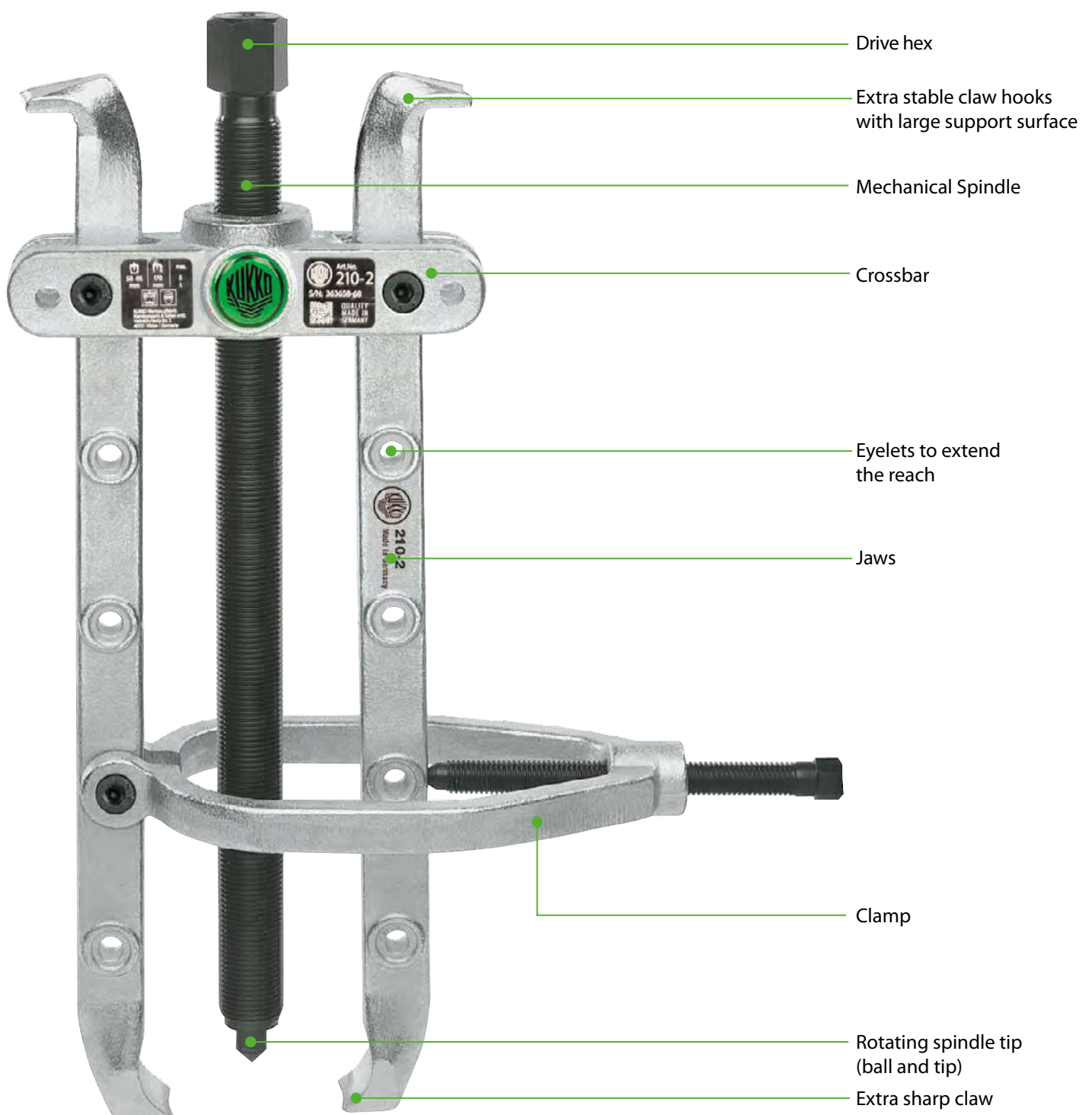
The 2-jaw pullers with lateral clamp of series 204 and 210 are used for pulling particularly stubborn or flat-lying components. A typical application example in the automotive field is the replacement of wheel bearings. In this case, it can happen that the inner ring of the bearing remains on the shaft. 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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
204-0	-028168	12 - 50 1 - 2	70 2 3/4	T-handle	0.00	10	1 1.10	0,69 1,521	27-A
204-02 NEW	-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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
204-1	-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
204-2	-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	-
204-3	-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	-



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	 SW mm/inch	 Nm/ft lb	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Included in the set
210-1	-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
210-2	-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	-
210-3	-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

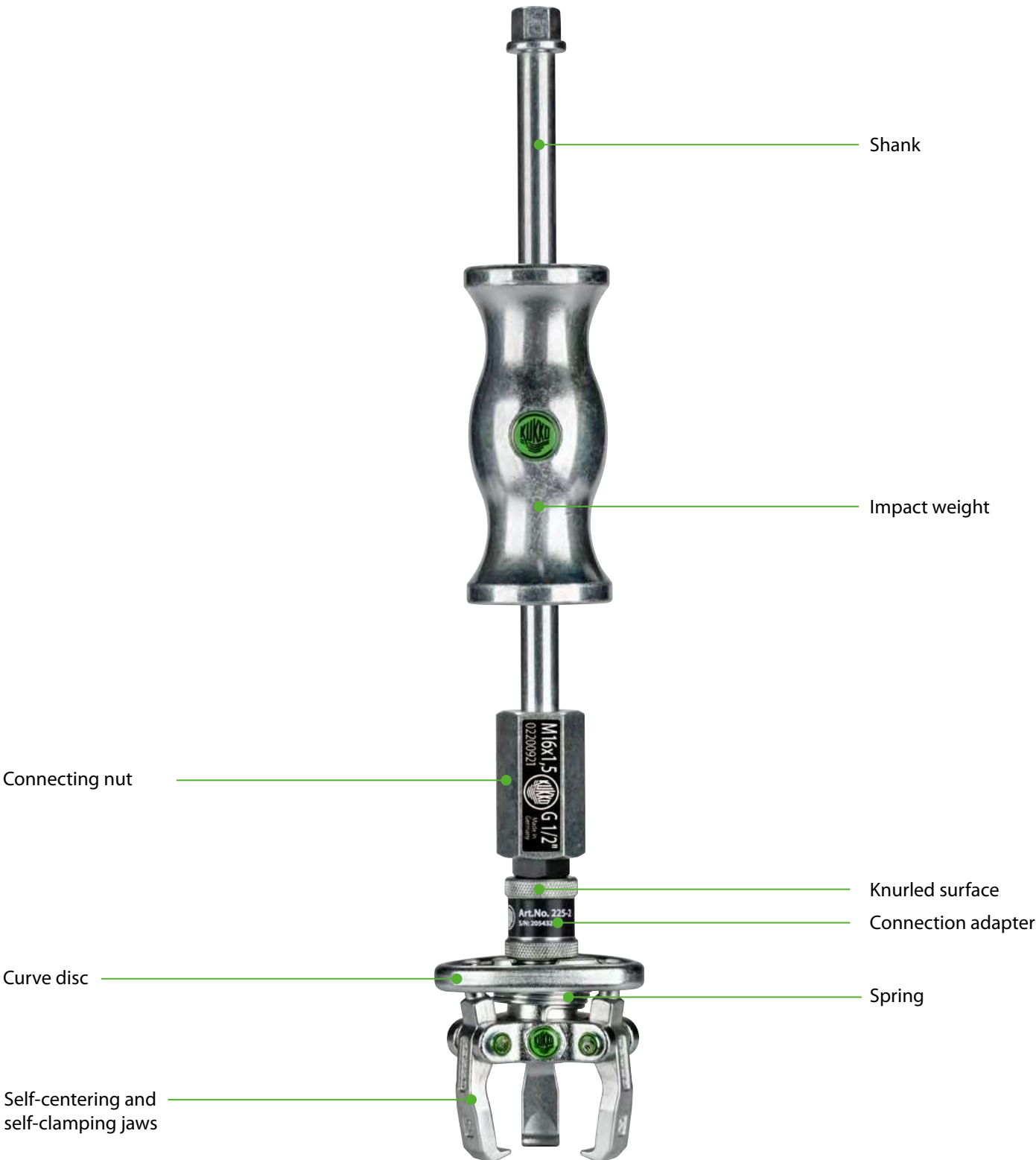
The 3-jaw pullers of series 225 with self-centering puller jaws are used for pulling bearings, gears, and discs. The specially shaped puller jaws are connected by a spring. This ensures a self-tensioning of the puller jaws and prevents possible slipping during the pulling process. Thanks to the quick-release 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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
225-1-G	-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
225-2-G	-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
225-3-G	-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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb
225-1	-123405	18,4 - 50 1 3/16 - 2	35 1 3/8	60	6 6.61	1,12 2,470
225-2	-123412	58 - 90 2 3/4 - 3 1/2	35 2 3/16	60	6 6.61	1,235 2,723
225-3	-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



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

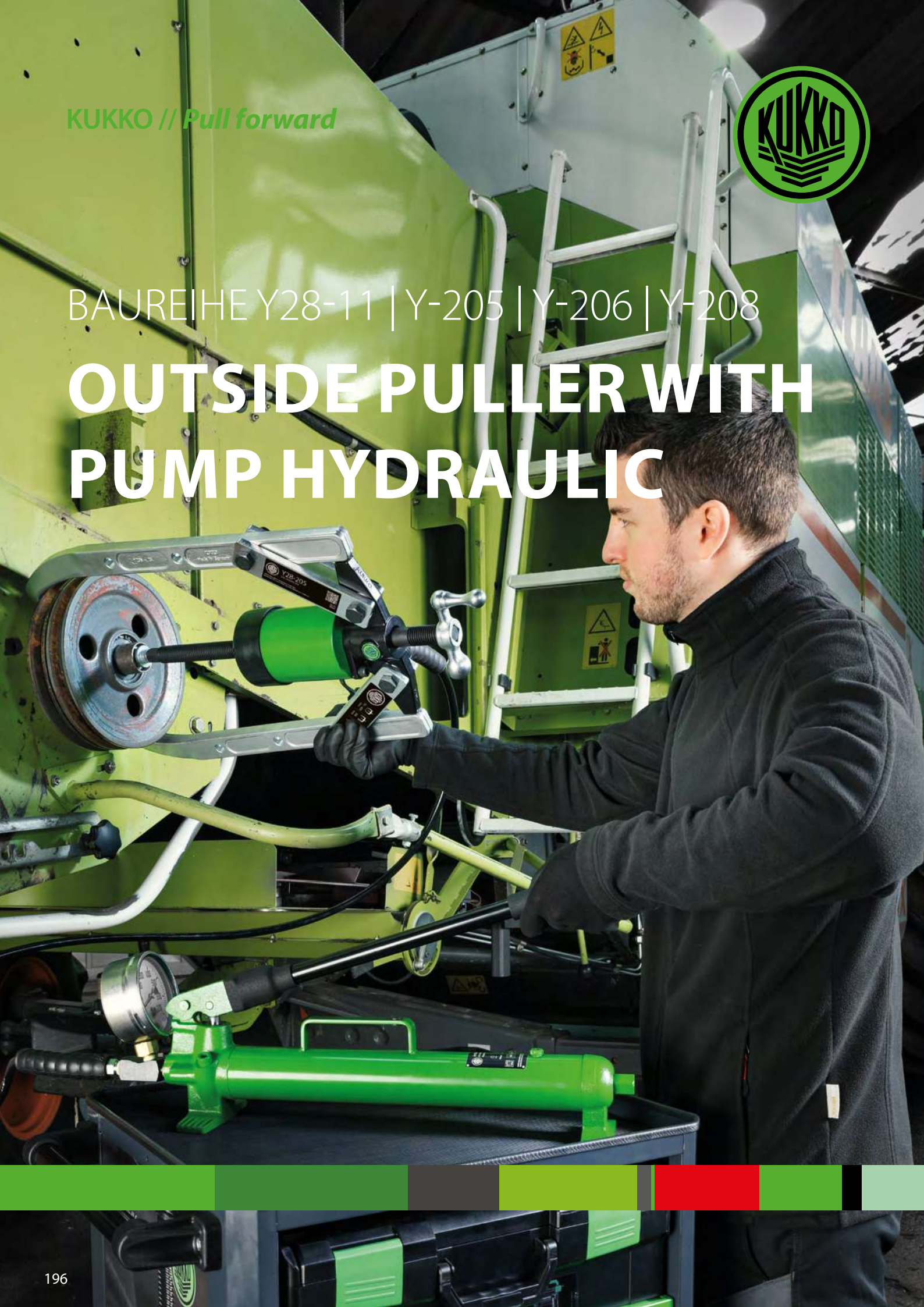


KUKKO // *Pull forward*



BAUREIHE Y28-11 | Y-205 | Y-206 | Y-208

OUTSIDE PULLER WITH PUMP HYDRAULIC



DEPLOYMENT

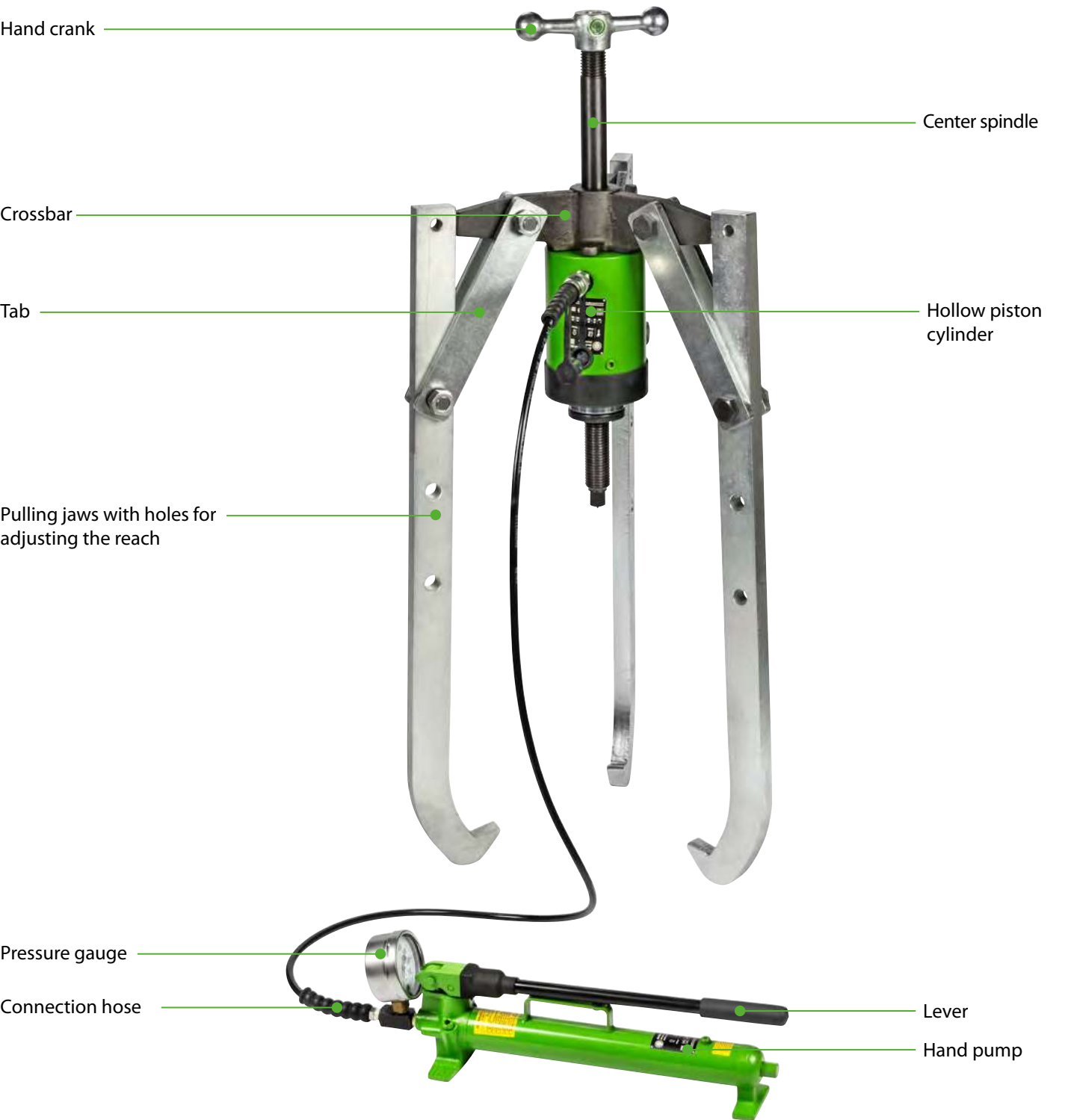
The hydraulic pullers from KUKKO are capable of solving even extreme pulling problems. The continuously adjustable power enables controlled and safe operation while utilizing the full performance potential of the pullers. Whenever manual force reaches its limits, the hydraulic system ensures maximum 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





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

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	bar	kN	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

#				Max. tensile force	Max. tractive force		
	EAN	mm/inch	mm/inch	kN	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	
Y28-206	-036248	0 - 500 0 - 19 11/16	300 11 13/16	700	20	20 22.05	31,48 69,413	Y28-256, Y28-200
Y38-206	-037238	0 - 900 0 - 35 7/16	520 20 1/2	700	30	30 33.07	54 119,070	Y38-356, Y38-300
Y58-206	-038228	0 - 1.200 0 - 47 1/4	700 27 9/16	700	50	50 55.12	125 275,625	Y58-556, Y58-500
Y28-216	-833922	0 - 500 0 - 19 11/16	600 23 5/8	700	20	20 22.05	37 81,585	-
Y58-216	-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
Y08-208	-461774	0 - 250 0 - 9 13/16	215 8 7/16	625	45	4.5 4.96	5,39 11,885
Y18-208	-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	
Y28-200	-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
Y38-300	-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
Y58-500	-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
Y28-256	-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
Y38-356	-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
Y58-556	-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 ³	kN	t/US t. sh.	kg/lb
YSM-100	-101007	55 2 3/16	82 3 1/4	43 1 11/16	12 1/2	700	0.0000 m ³	100	10 11.02	1,735 3,826
YSM-200	-102004	76 2 1	101 3 1	51 2 1/64	11 7/16	700	0.0000 m ³	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 ³	kN	t/ US t. sh.	kg/lb
YRE-050	-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 ³	50	5 5.51	2,2 4,851
YRE-101	-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 ³	100	10 11.02	6,4 14,112
YRE-106	-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 ³	100	10 11.02	4,375 9,647
YRE-701	-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 ³	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 ³	kN	t/ US t. sh.	kg/lb
YRH-132	-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 ³	130	13 14.33	2,04 4,498
YRH-202	-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 ³	200	20 22.05	7,575 16,703
YRH-206	-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 ³	200	20 22.05	14,185 31,278
YRH-302	-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 ³	300	30 33.07	10,7 23,594
YRH-603	-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 ³	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 ³	bar	Max. tractive force t/US t. sh.	kg/lb	Components
YHP-320	-045721	0.0006 m ³	700	50 55.12	7,28 16,052	YHP-320
YHP-321	-111198	0.0006 m ³	700	50 55.12	8,375 18,467	YHP-320, YF-200
YHP-324	-045806	0.0006 m ³	700	50 55.12	9,605 21,179	YHP-320, YM-235, YGA-2
YHP-325	-045981	0.0006 m ³	700	50 55.12	1,5 3,308	YHP-320, YF-200, YM-235, YGA-2
YHP-326	-046483	0.0006 m ³	700	50 55.12	16,13 35,567	YHP-320, YF-200, YM-235, YGA-2
YHP-420	-609688	0.002 m ³	700	75 82.67	13,6 29,988	YHP-420
YHP-421	-022968	0.002 m ³	700	75 82.67	0 0,000	YHP-420, YF-200
YHP-424	-103988	0.002 m ³	700	75 82.67	13,6 29,988	YHP-420, YM-235, YGA-2
YHP-425	-103995	0.002 m ³	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 ³	Max. tractive force t/US t. sh.	kg/lb
YPP-520	-141577	700	0.003 m ³	75 82.67	0 0,000
YPP-525	-469732	700	0.003 m ³	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	Max. tractive force t/US t. sh.	 kg/lb	
Y218-10	-040368	120 4 3/4	17,5 11/16	20 22.05	1,865 4,112	YRH-202, YRH-206
Y218-11	-040443	514 20 1/4	17,5 11/16	20 22.05	1,69 3,726	YRH-206, YRH-202
Y318-10	-041761	150 5 7/8	20,5 13/16	30 33.07	0,88 1,940	YRH-302
Y318-11	-041846	610 24 1/64	20,5 13/16	30 33.07	3,205 7,067	YRH-302
Y318-12	-749865	400 15 3/4	20,5 13/16	30 33.07	8 17,640	YRH-302
Y518-10	-044243	240 9 7/16	25,4 1	50 55.12	2,01 4,432	YRH-603
Y518-11	-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		 bar	 kg/lb
YCR-400	-201318	3/8" NPT	700	0,225 0,496
YCH-604	-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

#		Max. tractive force		
	EAN	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.

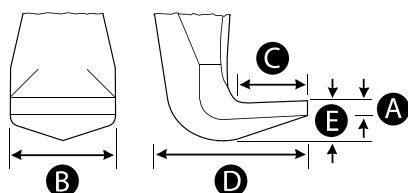
Benefits

- Pressure pieces enable the versatile application of the hollow piston cylinder from KUKKO as a pressure or pull cylinder.

Technical attributes

#	 EAN	 mm/inch	 -	 1 7/8"-16 UN	Max. tractive force t/US t. sh.	 YRH-302	 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	 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 1/4	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 1/4	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 1/4	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	
Y20-205	-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
Y20-215	-833892	0 - 420 0 - 16 9/16	600 23 5/8	200	20 22.05	0 0,000	YRH-202
Y30-205	-036996	0 - 700 0 - 27 9/16	520 20 1/2	300	30 33.07	25 55,125	YRH-302, Y305-20, Y306-30
Y50-205	-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
Y50-215	-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	
Y20-206	-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
Y30-206	-037153	0 - 900 0 - 35 7/16	520 20 1/2	300	30 33.07	40 88,200	YRH-302, Y305-20, Y306-30
Y50-206	-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
Y20-216	-833908	0 - 500 0 - 19 11/16	600 23 5/8	200	20 22.05	0 0,000	YRH-202
Y50-216	-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	
Y05-208	-172366	0 - 250 0 - 9 13/16	215 8 7/16	45	4.5 4.96	3,29 7,254	YRE-050
Y10-208	-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.	
Y20-11-0	-469718	500 19 11/16	280 - 600 11 1/32 - 23 5/8	200	20 22.05	YRH-202
Y20-11-1	-711626	500 19 11/16	280 - 600 11 1/32 - 23 5/8	200	20 22.05	YRH-202
Y20-11-2	-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.



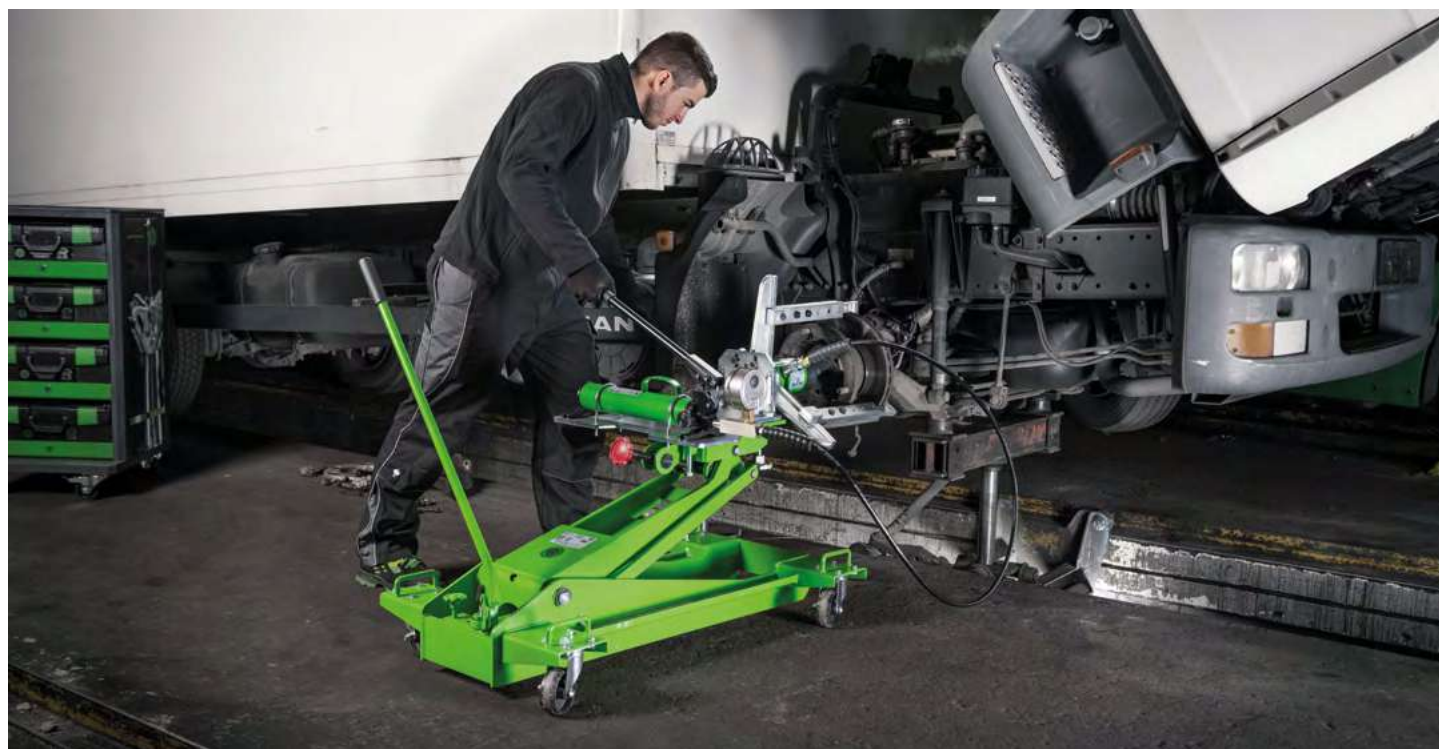
Benefits

- 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
Goliath-256	-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
Goliath-356	-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
Goliath-556	-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
Goliath-200	-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
Goliath-300	-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
Goliath-500	-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

#							Max. tensile force	Max. tractive force	
	EAN	mm/inch	mm/inch	mm/inch	bar	V	kN	t/US t. sh.	kg/lb
Goliath-218	-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
Goliath-318	-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
Goliath-518	-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	
Y200-00	-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
Y300-00	-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
Y500-00	-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

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





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

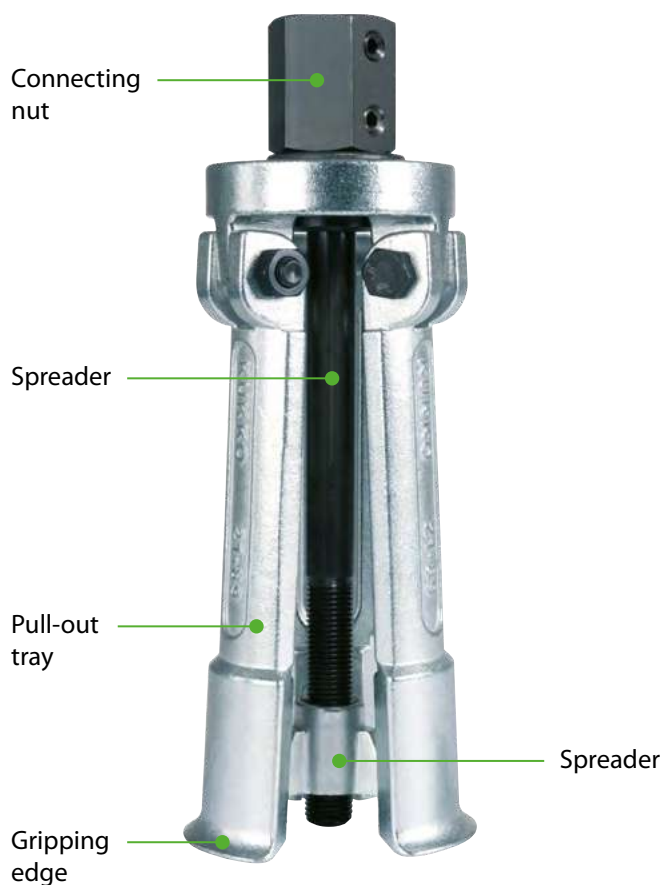
Whether for removing cylinder sleeves, pulling off parts with centric threaded holes, or for the disassembly of clamping and notch pins - KUKKO provides the perfect solution for every pulling situation.

FEATURES OF THE SERIES



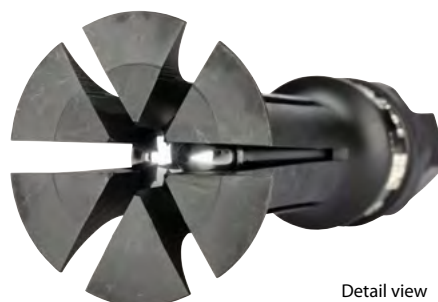
SERIES 21

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.



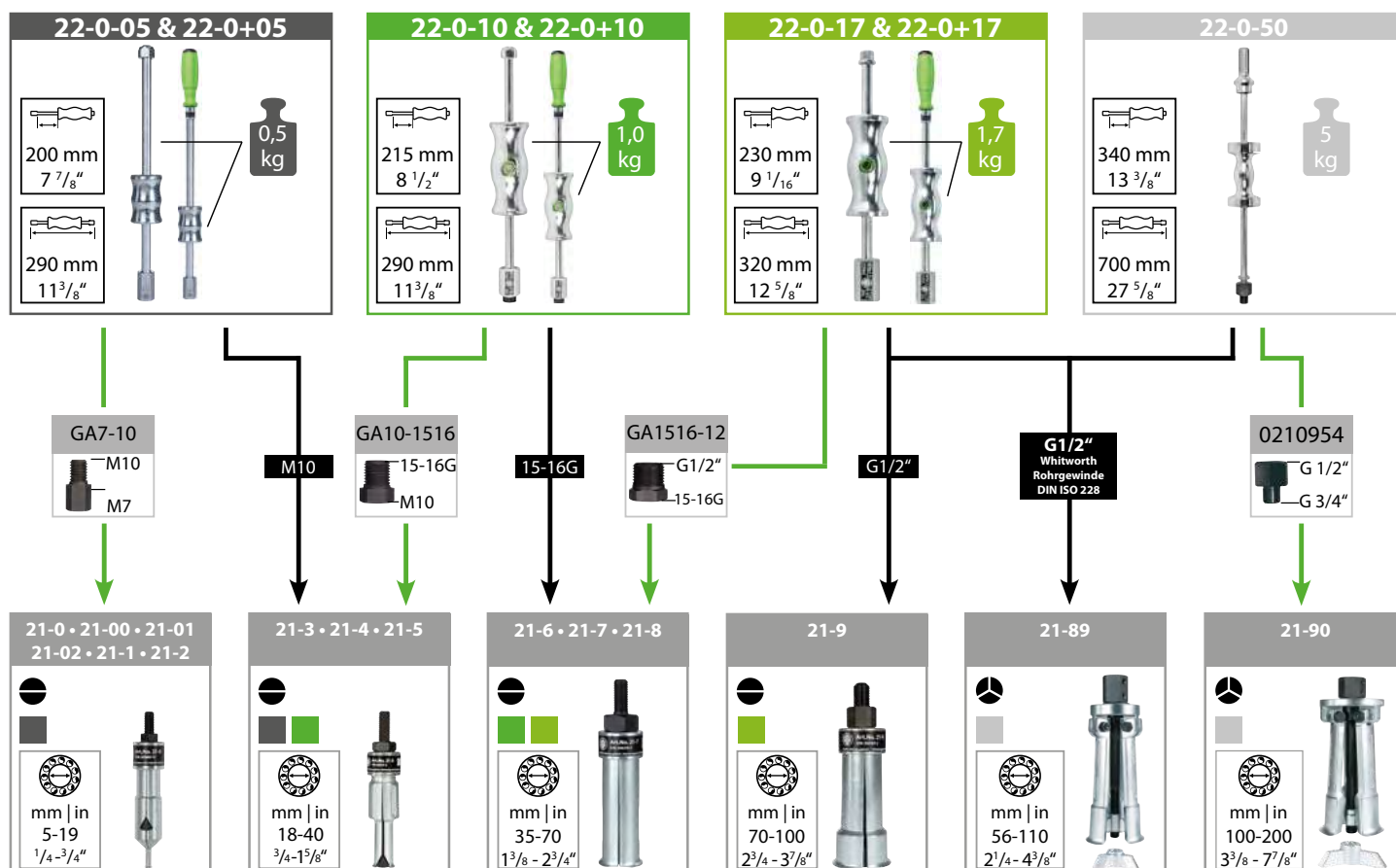
Internal extractor with sliding hammer



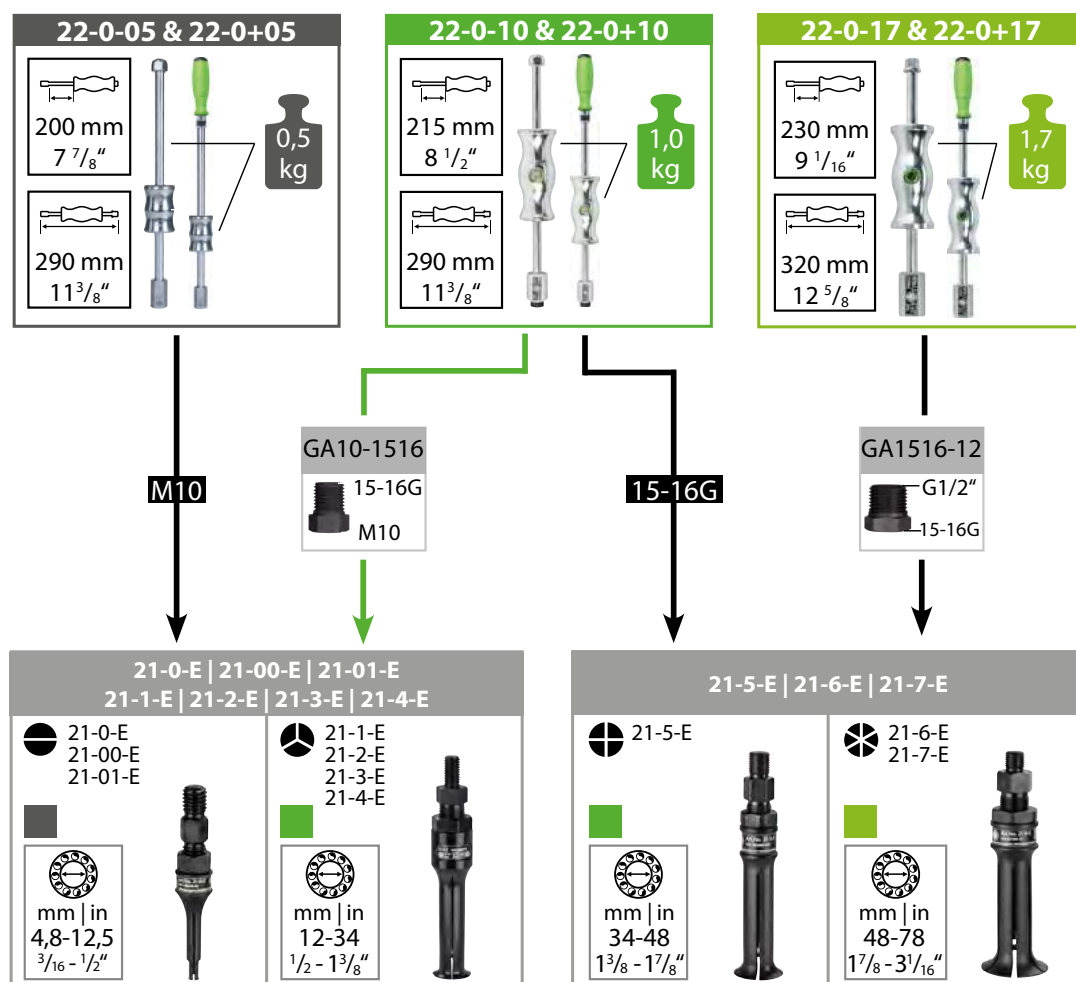
Internal extractor with counter stay

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

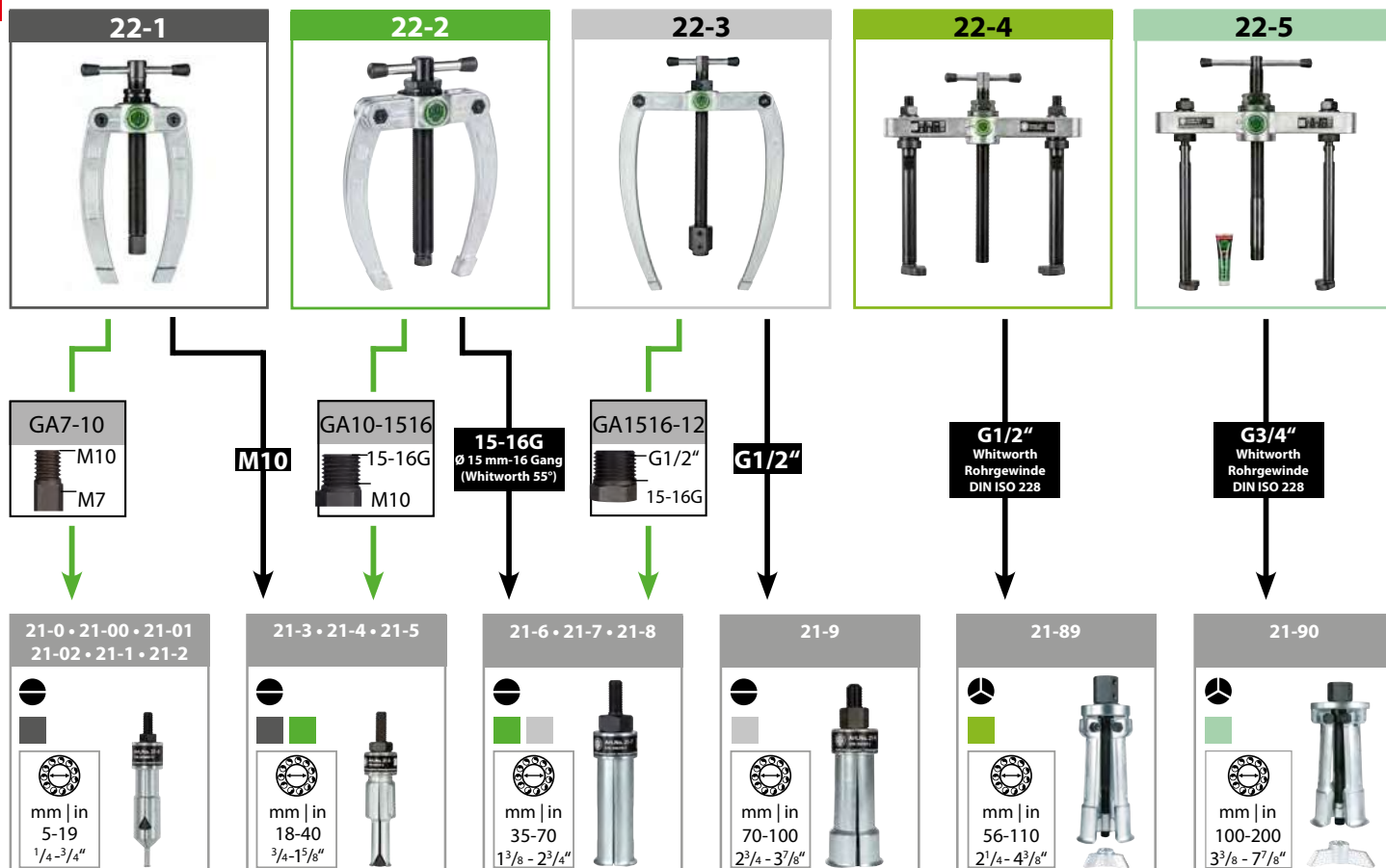


Internal extractor of series 21\ with counter stay

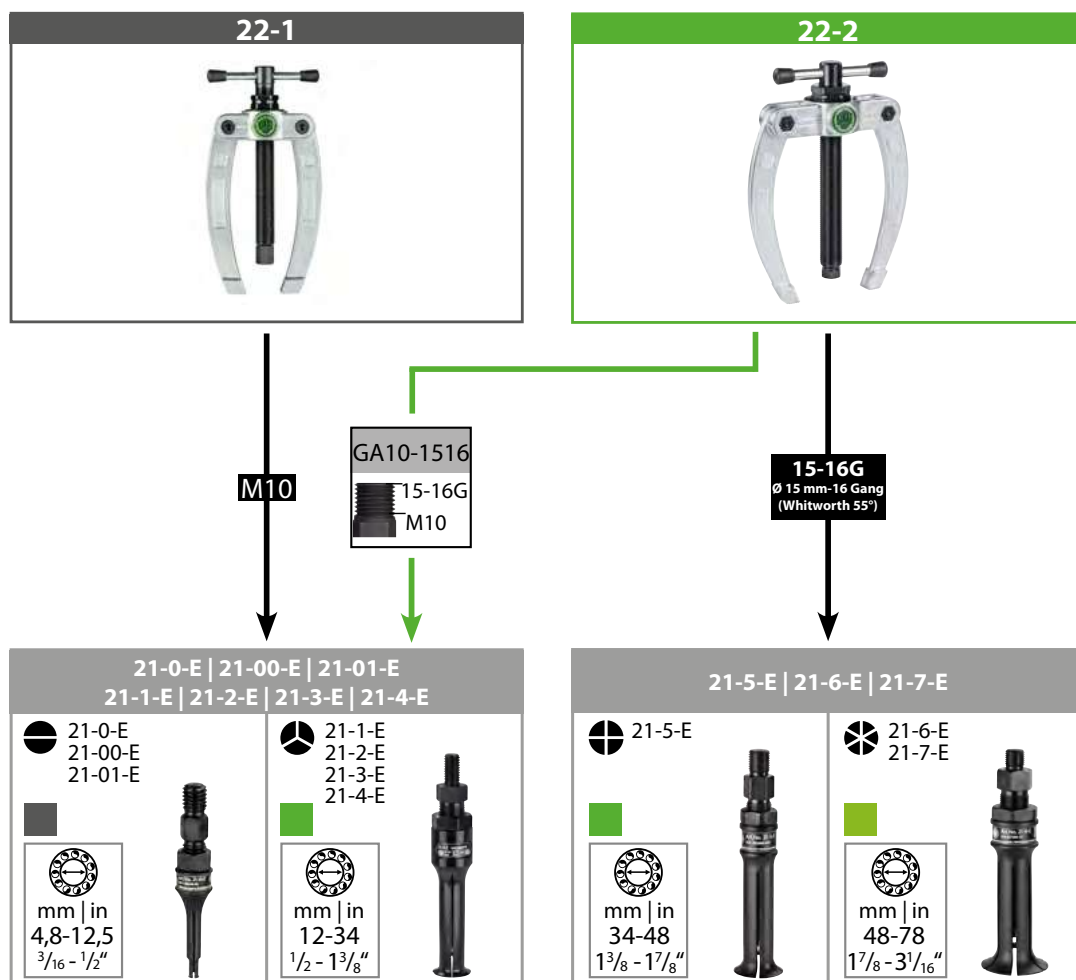
COMBINATION OPTIONS



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

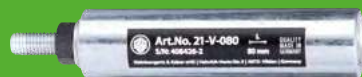
Using an extension (series 21-V), the reach can be expanded on the internal extractors of the series 21. This also allows for the access to components seated deeper in the socket.



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



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

#								Included in the set
	EAN	mm/inch	mm/inch	mm/inch	nominal dimension	mm/inch	kg/lb	
21-0-E	-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
21-00-E	-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
21-01-E	-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
21-1-E	-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
21-2-E	-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
21-3-E	-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
21-4-E	-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
21-44-E	-039300	15 - 20 9/16 - 13/16	45 1 3/4	25 1	M10	14 9/16	0,2 0,441	-
21-5-E	-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
21-6-E	-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	-
21-7-E	-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

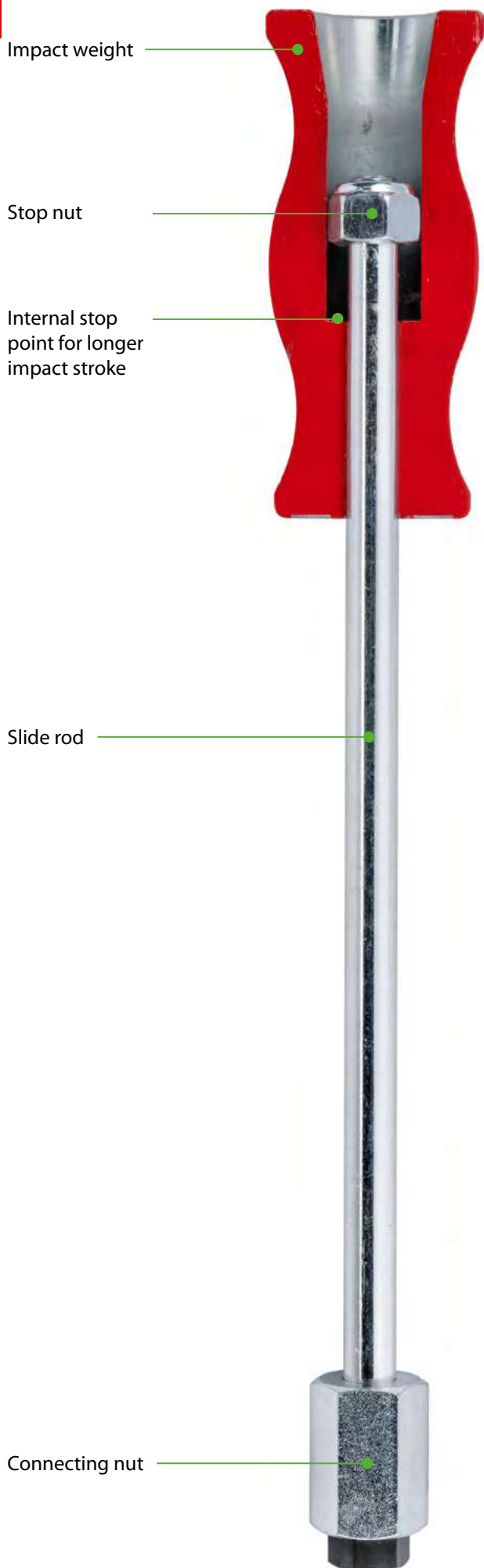
The item numbers of the sliding hammers consist of the series designation and the respective impact weight.

S	M	L	XL
 0,5 kg	 1,0 kg	 1,7 kg	 5,0 kg
Art.Nr. 22-0-05	Art.Nr. 22-0-10	Art.Nr. 22-0-17	Art.Nr. 22-0-50
			
Art.Nr. 22-0+05	Art.Nr. 22-0+10	Art.Nr. 22-0+17	 22-0-2-100

60% MORE POWER

The impact weight of the sliding hammer can be optionally increased by screwing in 3 kg weight extensions.

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



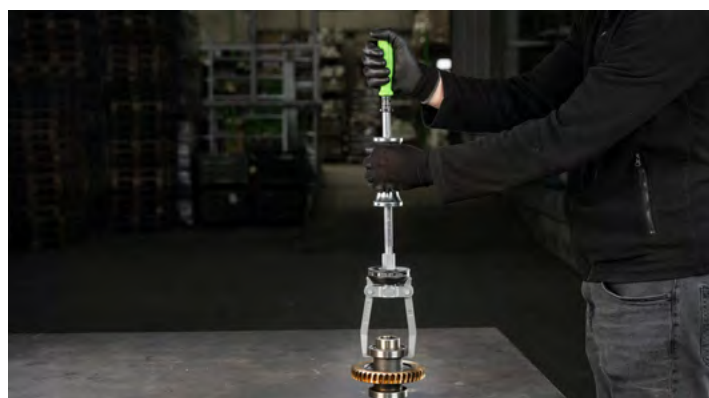
Series 21-E



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

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

#								Included in the set
	EAN	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
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	

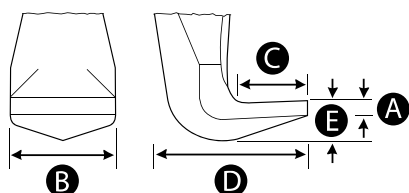
SERIES 224-0 OIL HOOK



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

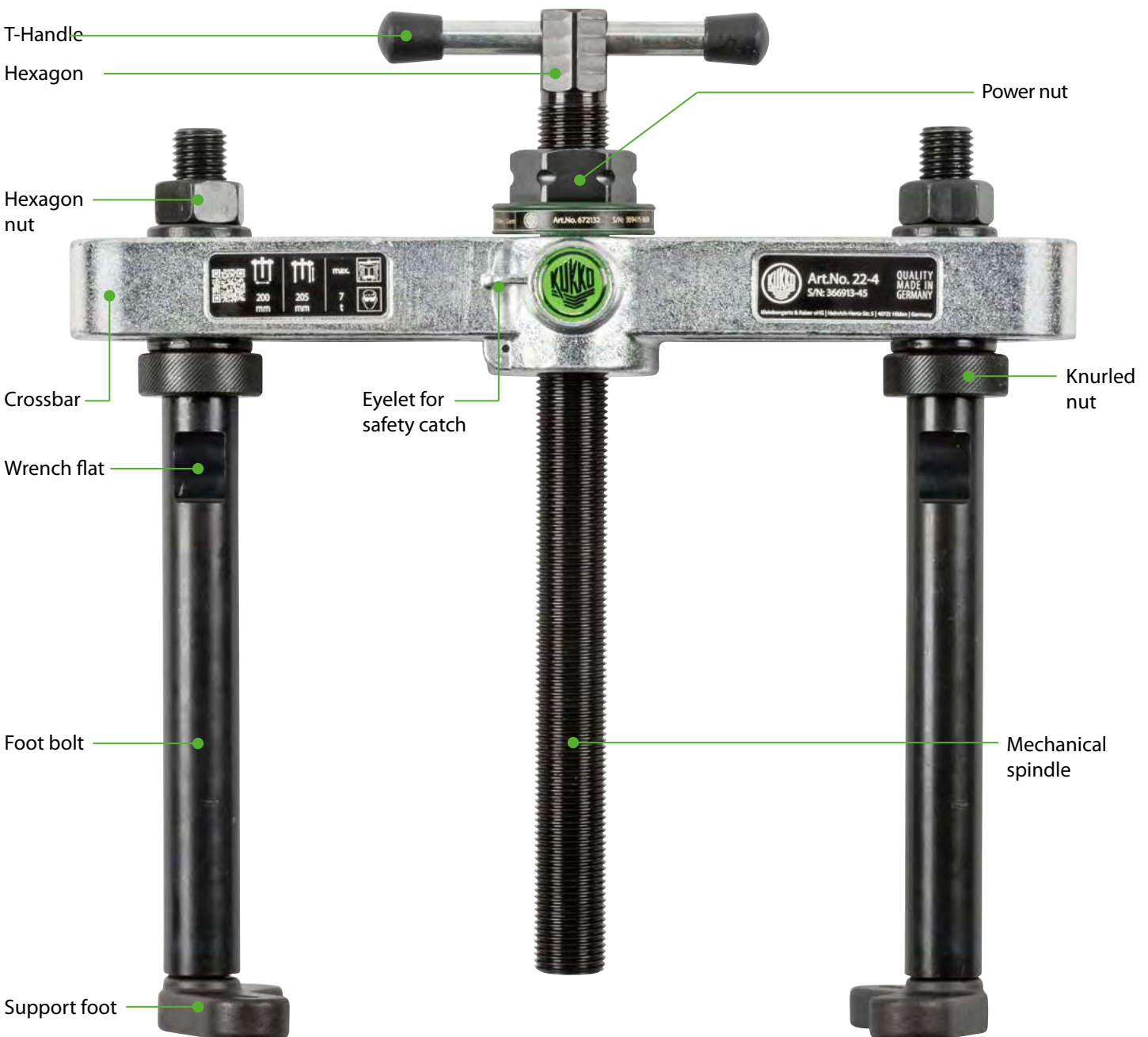
Series 22 counter stays are used together with series 21 internal extractors in trade, industry and workshops. Thanks to the ribbed shape of the support feet, counter stay are particularly suitable for large cylinder liners and ball bearings etc. and ensure a firm stand when extracting. This improves 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

#							Max. tensile force	Max. tractive force		Included in the set
	EAN	mm/inch	mm/inch	mm/inch	nominal dimension	nominal dimension	kN	t/US t. sh.	kg/lb	
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

#	 EAN	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
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

#	 4021176013058	 mm	 mm	max. Zugkraft kN	max. Zugkraft t	 kg	Bestandteile
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

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
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

#				Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
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

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

#				Ø		
	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	kg/lb
21-V-040	-909214	40 1 9/16	M7	14 9/16	11 7/16	0,08 0,176
21-V-060	-909221	60 2 3/8	M7	14 9/16	11 7/16	0,11 0,243
21-V-080	-909238	80 3 1/8	M7	14 9/16	11 7/16	0,14 0,309
21-V-310	-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

#				Ø			Components
	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	kg/lb	
21-V-0	-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

#						
	EAN	mm/inch	nominal dimension	mm/inch	mm/inch	kg/lb
21-4-E-180 NEW	-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	
818-021	-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
818-250	-173356	250 9 13/16	5/8"-18 UNF	22 7/8	0,79 1,742
818-280	-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
818-250-P	-385391	250 9 13/16	5/8"-18 UNF	22 7/8	1,56 3,440
818-280-P	-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	
Y28-218	-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
Y38-318	-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
Y58-518	-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	
Y28-180	-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
Y38-180	-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
Y58-180	-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

#		Max. tractive force	
	EAN	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



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



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
18-003A	-788406	52 2 1/16	M10	M3	12 1/2	14 9/16	0,085 0,187
18-004A	-337383	52 2 1/16	M10	M4	12 1/2	14 9/16	0,85 1,874
18-005A	-337468	55 2 3/16	M10	M5	15 9/16	14 9/16	0,4 0,882
18-006A	-337536	58 2 5/16	M10	M6	18 11/16	14 9/16	0,9 1,985
18-008A	-337611	60 2 3/8	M10	M8	20 13/16	14 9/16	0,095 0,209
18-010A	-337796	65 2 9/16	M10	M10	25 1	14 9/16	0,105 0,232
18-012A	-337871	68 2 11/16	M10	M12	28 1 1/8	14 9/16	0,125 0,276
18-016A	-788574	69 2 11/16	M10	M16	25 1	14 9/16	0,175 0,386
18-208A	-337956	70 2 3/4	M14x1,5	M8	20 13/16	22 7/8	0,255 0,562
18-210A	-338113	75 2 15/16	M14x1,5	M10	25 1	22 7/8	0,27 0,595
18-212A	-338298	78 3 1/16	M14x1,5	M12	28 1 1/8	22 7/8	0,285 0,628
18-214A	-338373	79 3 1/8	M14x1,5	M14	29 1 1/8	22 7/8	0,3 0,662
18-216A	-338458	82 3 1/4	M14x1,5	M16	32 1 1/4	22 7/8	0,33 0,728
18-218A	-338526	84 3 5/16	M14x1,5	M18	34 1 5/16	22 7/8	0,38 0,838
18-314A	-338601	94 3 11/16	M18x1,5	M14	29 1 1/8	27 1 1/16	0,545 1,202
18-316A	-338786	97 3 13/16	M18x1,5	M16	32 1 1/4	27 1 1/16	0,575 1,268
18-318A	-338861	99 3 7/8	M18x1,5	M18x1,5	34 1 5/16	27 1 1/16	0,6 1,323
18-320A	-338946	100 3 15/16	M18x1,5	M20	35 1 3/8	27 1 1/16	0,635 1,400
18-322A	-339028	102 4 1/64	M18x1,5	M22	37 1 7/16	27 1 1/16	0,68 1,499
18-324A	-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
18-0-AS	-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
18-2-AS	-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
18-3-AS	-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	
VM10-10	-529498	0,025 0,055	18-0-AS, 18-003A, 18-004A, 18-005A, 18-006A, 18-008A, 18-010A, 18-012A, 18-016A
VM10-12	-529504	0,235 0,518	-
VM12-7	-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
VM12-10	-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
VM12-1516	-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
VM14-12	-529566	0,25 0,551	-
VM112-12	-529511	0,205 0,452	21-89
VM1415-1415	-529573	0,085 0,187	18-2-AS, 18-208A, 18-210A, 18-212A, 18-214A, 18-216A, 18-218A
VM1615-12	-161513	0,3 0,662	26-B
VM1815-58	-529641	0,6 1,323	K-226-4/12, 226-4/11
VM1815-1815	-529634	0,155 0,342	18-3-AS, 18-314A, 18-316A, 18-318A, 18-320A, 18-322A, 18-324A
VM2015-58	-529665	0,575 1,268	K-226-4/12, 226-4/11
VM2215-58	-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

#								Components
	EAN	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
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

#								Components
	EAN	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
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	
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

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	
223-K	-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	 M10	 kg/lb
22-0-2-100	-111211	66 2 5/8	95 3 3/4	M10	3,225 7,111



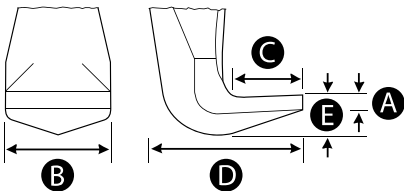
SERIES 229-01
HOOK WITH TOGGLE JOINT

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
224-1	-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
224-2	-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

#								Included in the set
	EAN	mm/inch	mm/inch	kg	nominal dimension	nominal dimension	kg/lb	
223	-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





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

Seperator



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

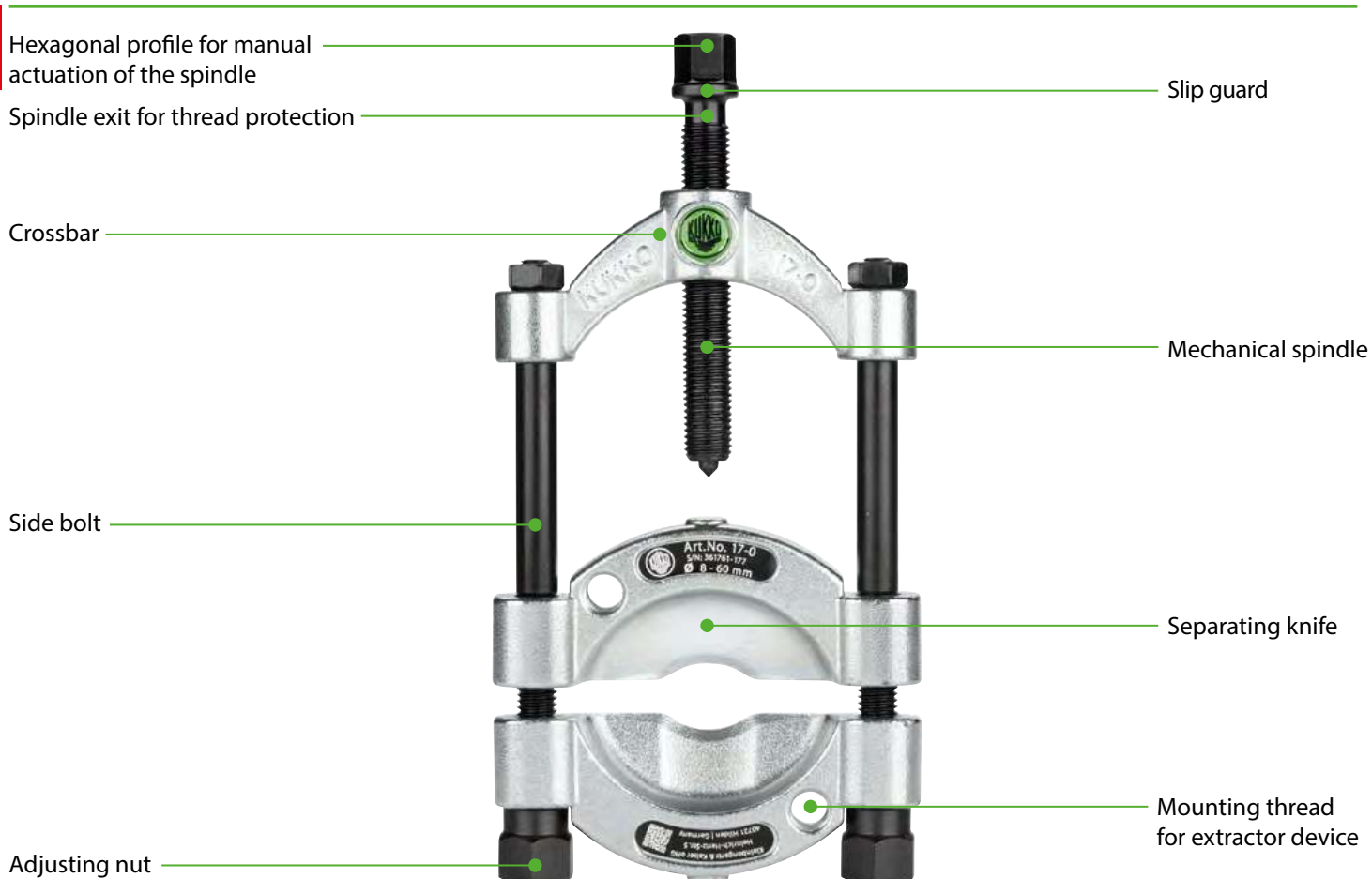
Separator for hydraulic pullers



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



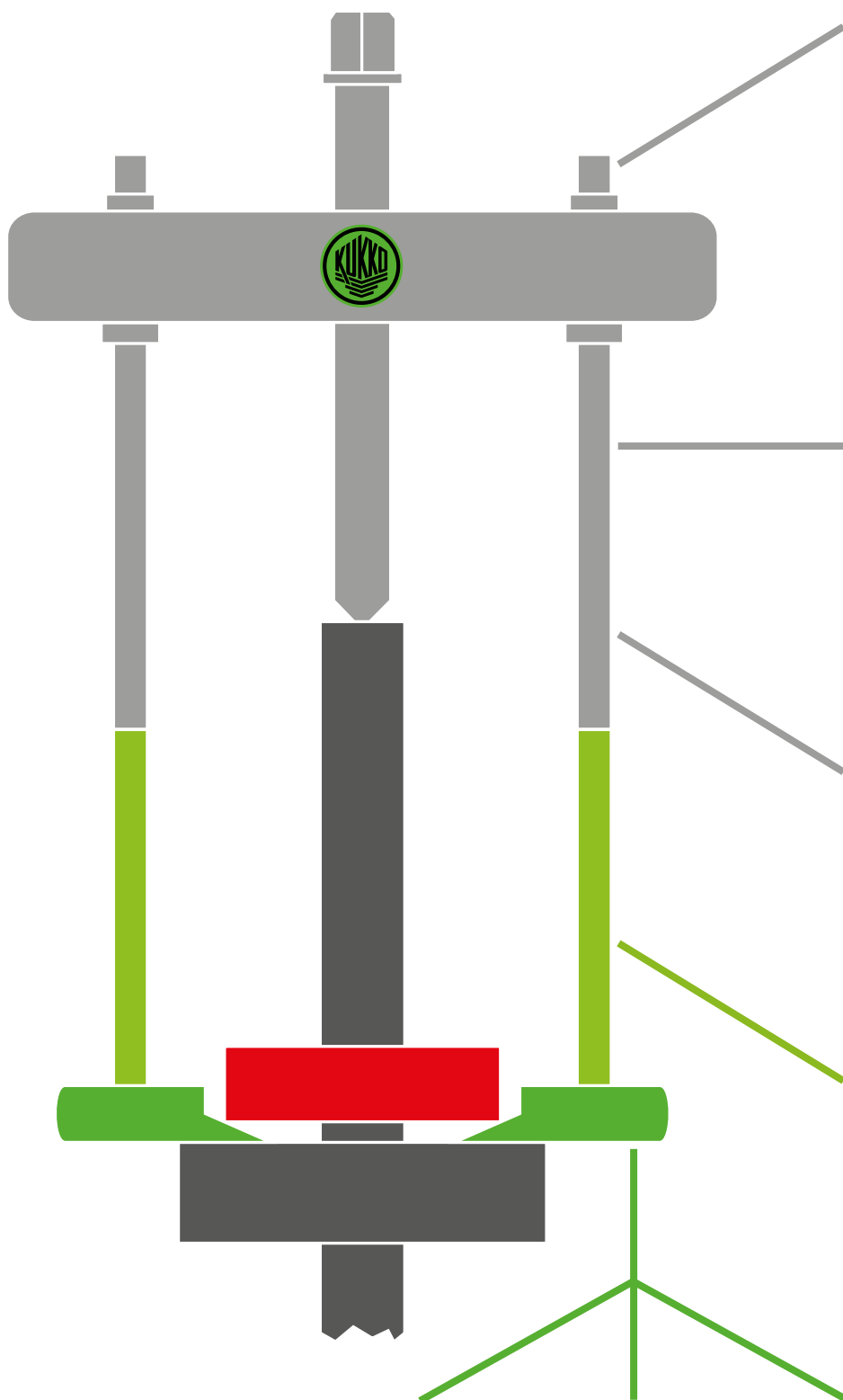
Removing a bearing from a gear shaft



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.			
18-00	20-50	61	
18-0	32-114	150	
18-1	58-150	200	
18-2	68-244	260	
18-3	75-310	300	
18-4	116-380	335	
18-5	142-440	380	

Hydraulic Separating Devices Series 18-B

Art. No.			
	mm	mm	
18-2-B	68-244	260	
18-3-B	75-310	300	
18-4-B	116-380	335	
18-5-B	142-440	380	

Hydraulic Separating Devices Series Y-180

Art. No.			
	mm	mm	
Y28-180	135-300	470	
Y38-180	180-420	520	
Y58-180	235-540	660	

Extensions Series 19-P

Art. No.	L mm	für for	
19-00-P	100	18-0; 18-1	
19-1-P	100	18-0; 18-1	
19-2-P	100	18-2	
19-3-P	100	18-3	
19-4-P	200	18-4	
19-5-P	200	18-5	

Cutting knife Series 15

Art. No.			
	mm	mm	
15-00	5- 60	60	
15-0	5- 60	60	
15-1	12- 75	75	
15-2	22-115	115	
15-3	25-155	155	
15-4	30-200	200	
15-5	30-250	250	

Cutting knife Series 17

Art. No.			
	mm	mm	
17-0	8- 60	60	
17-1	8- 75	75	
17-2	22-115	115	
17-3	30-155	155	

Hydraulic cutting knives Series Y-15

Art. No.			
	mm	mm	
Y-215-2	22-115	67	
Y-215-3	25-155	78	
Y-215-4	30-200	103	
Y-315-4	30-200	103	
Y-315-5	30-250	116	
Y-515-5	30-250	116	
Y-515-6	75-330	130	
Y-515-7	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 kN	 Max. Tractive force t/US t. sh.	 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	3 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



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

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
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

#	 EAN	 mm/inch	 mm/inch	 mm/inch	 mm/inch	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
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/inch	mm/inch	mm/inch	mm/inch	mm/inch	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

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
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

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
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

#						Max. tensile force	Max. tractive force		Components
	EAN	mm/inch	mm/inch	mm/inch	mm/inch	kN	t/US t. sh.	kg/lb	
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	Max. tensile force kN	Max. tractive force t/US t. sh.	 kg/lb	Components
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	 mm	 mm	 mm	 mm	 mm/inch	 kg/lb	 Y28-180	Included in the set
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		
18-00	-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	-
18-0	-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
18-1	-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
18-2	-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
18-3	-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
18-4	-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
18-5	-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

#					Max. tensile force	Max. tractive force		
	EAN	mm/inch	mm/inch	Nm/ft lb	kN	t/US t. sh.	kg/lb	
18-2-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
18-3-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
18-4-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
18-5-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

#							Included in the set
	EAN	nominal dimension	mm/inch	mm/inch	mm/inch	kg/lb	
19-00-P	-120510	M6	10 3/8	95 3 3/4	8 5/16	0,115 0,254	-
19-1-P	-169984	M10	14 9/16	100 3 15/16	12 1/2	0,23 0,507	-
19-2-P	-170041	M14x1,5	22 7/8	100 3 15/16	19 3/4	0,555 1,224	-
19-3-P	-170126	M18x1,5	24 15/16	100 3 15/16	19 3/4	0,655 1,444	-
19-4-P	-168321	G5/8	23 7/8	200 7 7/8	32 1 1/4	0,23 0,507	18-4SAF
19-5-P	-152306	G3/4	26,3 1 1/32	200 7 7/8	36 1 7/16	2,94 6,483	-
19-7-P	-041181	M10	22 7/8	100 3 15/16	17 11/16	0,596 1,314	-

KUKKO // *Pull forward*



SERIES 670000

POWER NUT



DEPLOYMENT

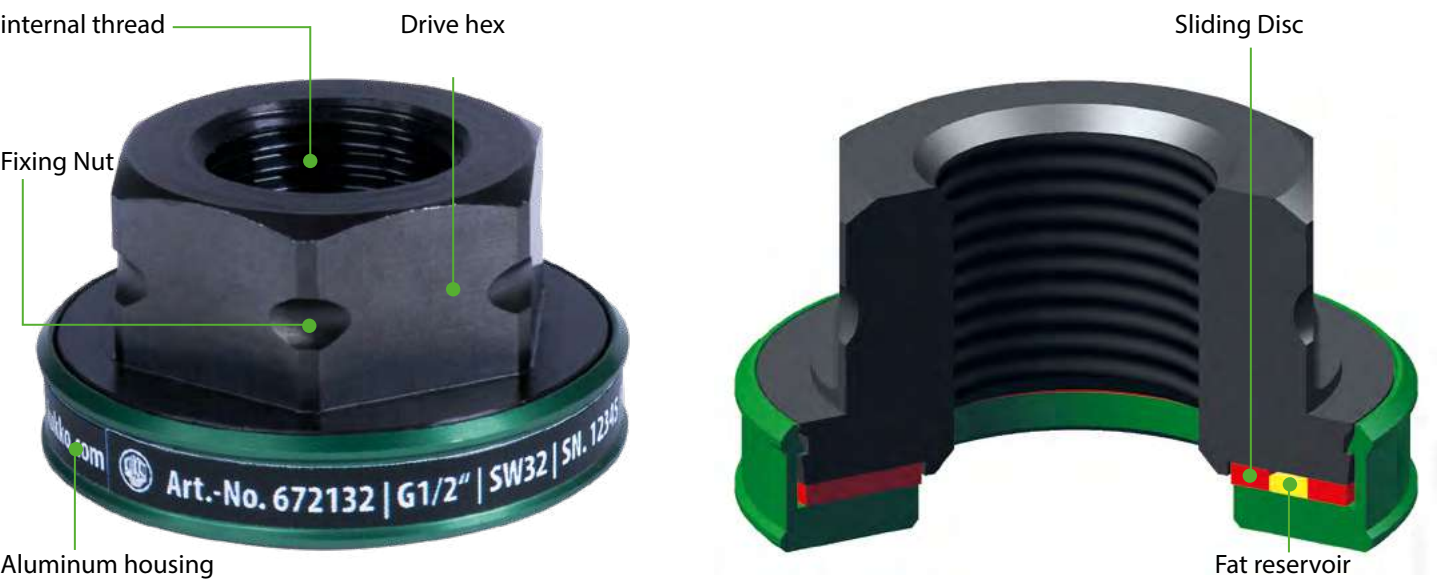
The Power Nut is a true powerhouse! It can generate forces that can otherwise only be achieved with hydraulics. For more energy-efficient clamping of tools and workpieces, as well as driving without significant friction losses, KUKKO has developed the Power Nut. The Power Nut can be used as a movement 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

Power nut	Ø a mm	SW mm
67	26	46

ABBREVIATIONS:

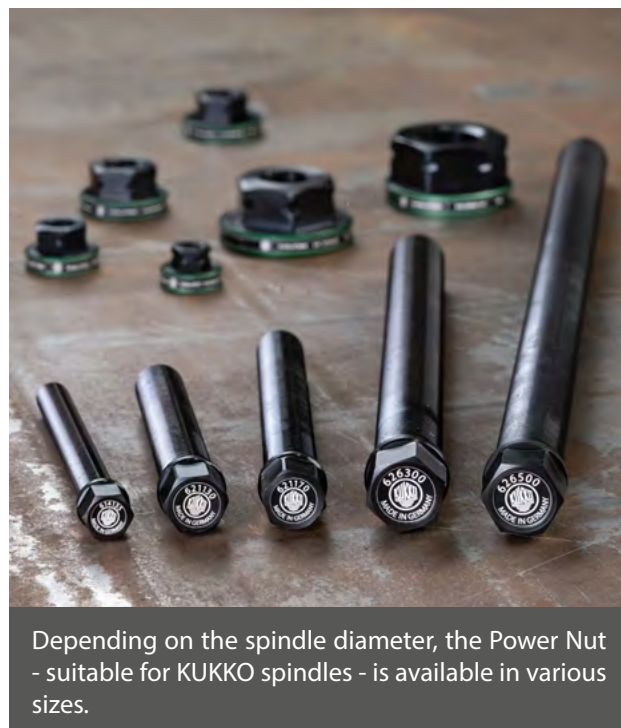
- a = thread pitch of the spindle
- b = thread length of the spindle



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



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.

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

#						Max. tensile force	Max. tractive force	
	EAN	mm/inch		mm/inch	mm/inch	kN	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.

