



# PULLERS

## 2-/3-ARM UNIVERSAL EXTERNAL+INTERNAL PULLERS

&gt;431



## 2-/3-ARM UNIVERSAL EXTERNAL+INTERNAL PULLER SETS

&gt;435



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&gt;489



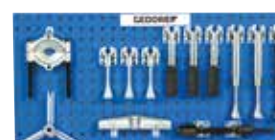
## THREADED INSERTS

&gt;490



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&gt;491



# GEDORE PULLERS

The right tool for every demand placed

## For maximum performance - even under a multi-ton load

- › High-grade industrial quality for the toughest forms of continuous use and safety in everyday work
- › Our innovative force over the past few years, which has given rise to numerous patents and utility models, is very much a reflection of our extensive track record in the development and production of puller tools.
- › Effortless moving of multi-ton loads
- › Ideal for the controlled use of force and a vital requirement for safe working: puller in association with a torque wrench

## Intelligent designs - well thought-out components

- › The refined GEDORE pullers impress as much through their quality as they do through their user-friendliness and superiority in detail:
- › A lasered scale on the 2-arm cross-beam enable the legs to be symmetrically aligned
- › Leg brake and quick-release clamp are those rapid and assured ways of locking and fastening the puller legs
- › Both the nitro-carburised mechanical and hydraulic spindles have properties that make work considerably easier and safer.

## Best-possible quality for your safety

- › Maximum value is attached to the safety of the puller when selecting the material and manufacturing process for each individual component part beforehand.
- › Any overloading of drop-forged components, such as 2-arm cross-beams, legs and clamping parts, is revealed through deformation - on account of the course of their fibres - rather than through fracturing and/or splintering.
- › Thermo-chemical treatment bestows a hardness on the components meeting the demands placed.
- › Strict quality checks ensure a constant high level

## Flexibility and specialization

- › Irrespective as to whether the same pulling operations are repeated or whether you are confronted each time with new pulling challenges, special or flexible all-purpose pullers - saving both on time and force - are there to meet your individual demands
- › The 1.06 and 1.07 series provide that unsurpassed flexibility. 2 and 3-arm cross-beams of various sizes, legs in the most varied of shapes and lengths, various fastening systems and the scope to replace the mechanical spindle by a hydraulic one all give rise to a modular system with which you can extensively retrofit and update your puller - thus making it applicable for all sorts of pulling situations.
- › Appropriate ranges for varied fields of work - including the workshop, industry and agricultural/constructional machinery repairs.
- › From the incidental parts to the heavy-duty puller, GEDORE provides tools for external, internal and ball bearing pullers and special-purpose tools. Should you still not find the right tool, then do contact us as to possible customised manufacturing.

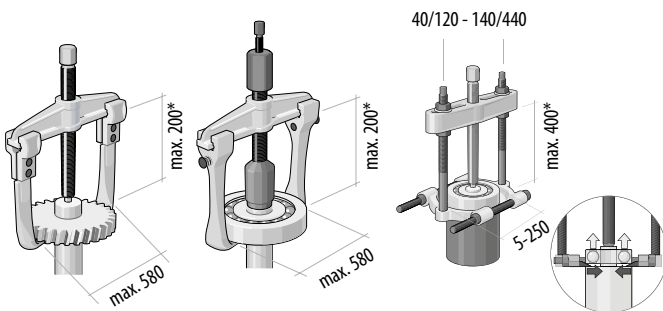


# YOUR PATH TO THE RIGHT PULLER

- A** How can the component to be extracted be gripped?
- B** Is a support possible either externally or internally?
- C** Which clamping spread/reach has to be obtained?

## 1. EXTERNAL PULLING

> 431

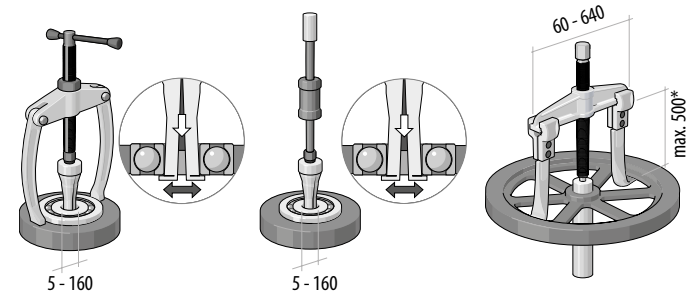


- > The component to be extracted can only be gripped externally
- > The centre axle is for supporting purposes
- > The component to be extracted is well set into, thus ruling out the use of pulling legs
- > The centre axle is for supporting purposes

## 2. INTERNAL PULLING

> 478

- > The component to be extracted can only be gripped internally
- > Centre axle supporting is not possible

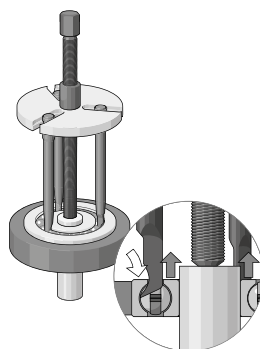


- > Supporting possible outside of the component
- > No support possible - thus the use of extracting aids
- > Centre axle supporting is possible

## 3. BALL BEARING EXTRACTION

> 473

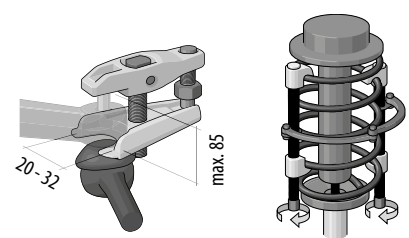
The ball bearing to be pulled is fitted on a shaft and in a housing and, as such, can neither be internally or externally gripped



## 4. EXTRACTION USING A SPECIAL-PURPOSE TOOL

> 484

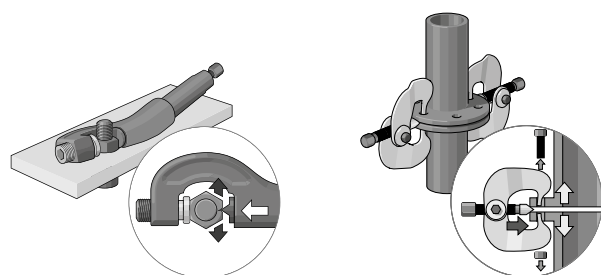
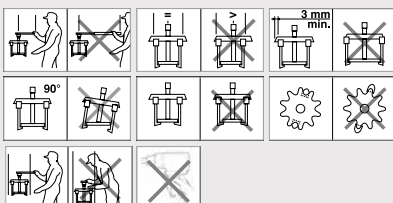
- > Automotive tool for
- > Ball joints
- > Oil filters /cartridges
- > Steering wheel
- > Springs
- > Wheel hubs etc.



- > Supporting possible outside of the component

### SAFETY NOTES FOR PULLERS

> 640

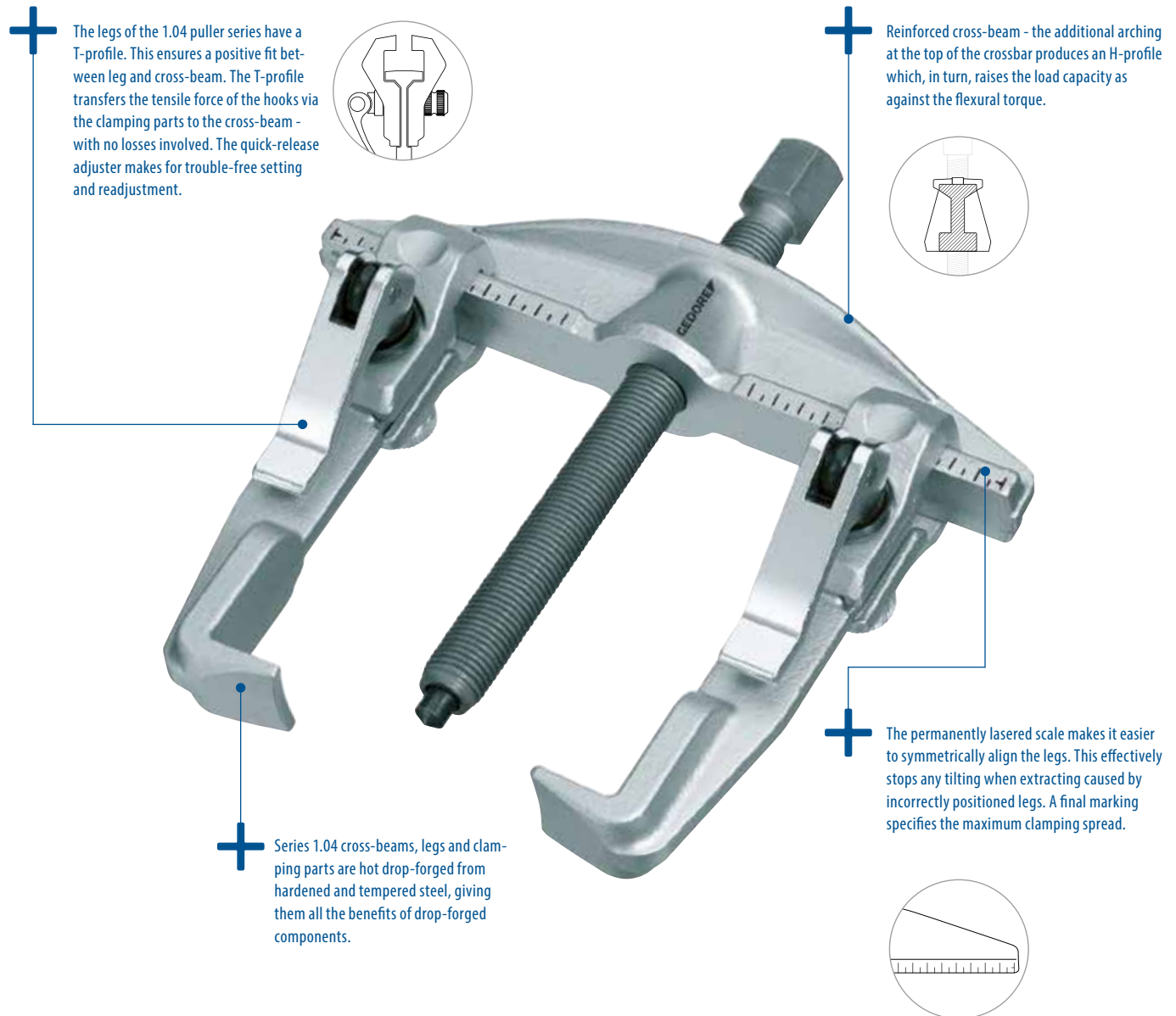


- > Nut splitters
- > Stud extractors
- > Flange separators
- > Threaded inserts





# 1.04 - A THOROUGHLY SUPERIOR TYPE OF PULLER



## GEDORE spindles

- Comprise turned hardened and tempered steel. The fine thread is then rolled - this additional strengthening of the steel gives rolled thread a higher strength than a thread produced by cutting.
- Have a fine thread which stops any unintended slackening from vibrations.
- Are thermo-chemically treated. Nitro-carburating gives the spindle a high degree of wear and corrosion resistance. Oils and greases are not needed and, as such, the thread stays clean and smooth much longer.
- Are fitted out with a replaceable spindle tip which is equally suitable for both centred and non-centred shafts.



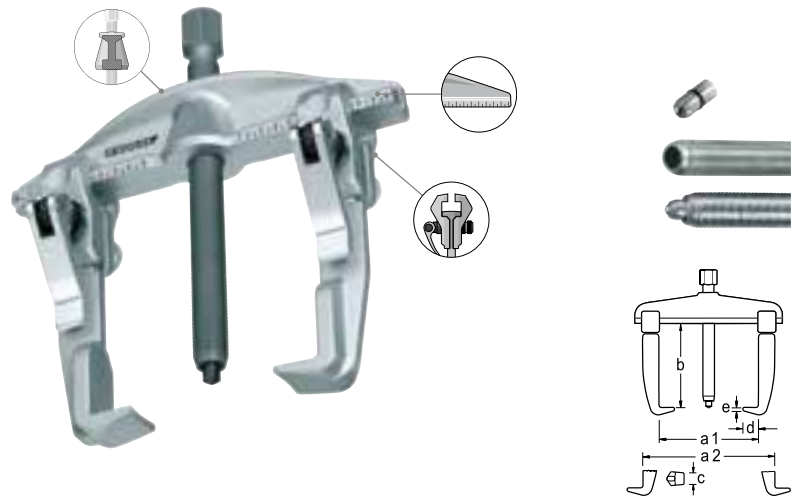
## Safety-relevant




Forces amounting to several tons in weight act on the puller during the extracting operation! Drop-forged components "announce" possible overloading by bending. This is due to the fibre course of the material during forging permitting a certain flexibility of the components ahead of fracturing - an extremely "healthy" property, in fact!

# 1.04 UNIVERSAL PULLER

## 2-arm pattern

- For the safe and quick removal of pulleys, wheels, ball bearings, etc.
- Strong drop forged pattern
- Due to the bending-moment reinforcement on its back face, the energy-saving design of the cross-beam means even stronger and safer pulling work
- Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- The quick-action adjustment feature supports the energy-saving and fast operation
- Spindle with replaceable ball and tip point
- Upgradeable with hydraulic spindle (see table)

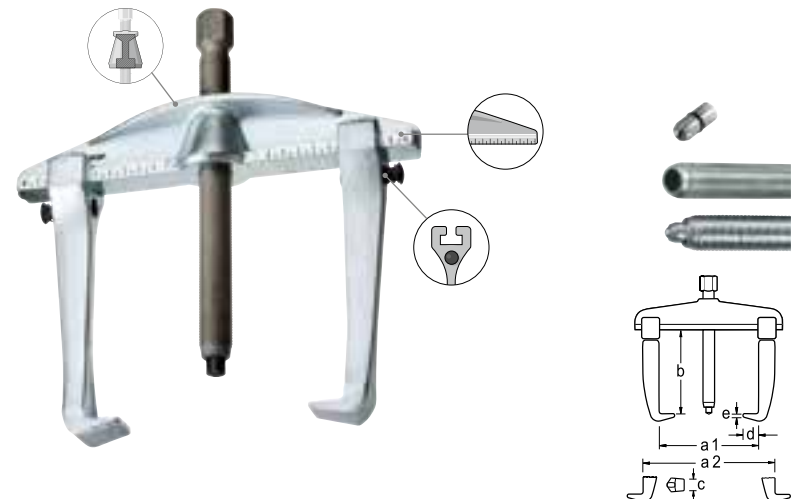







a <sub>1</sub>	a <sub>2 min</sub>	a <sub>2 max</sub>	b	max. t		optional 	c	d	e			Code	No.	
130	70	170	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.2	1307703	1.04/1A
200	110	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.4	1307827	1.04/2A
350	150	420	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	7.7	1307940	1.04/3A

# 1.04/B UNIVERSAL PULLER

## 2-arm pattern, rigid legs with leg brake

- Due to the bending-moment reinforcement on its back face, the energy-saving design of the cross-beam means even stronger and safer pulling work
- Strong drop forged pattern
- Rigid legs forged from one piece
- The legs clamp automatically when under tension
- Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- By reversing the legs, this tool can be used as an internal or external puller
- Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- Spindle with replaceable ball and tip
- Spindle thermo-chemically hardened
- Upgradeable with hydraulic spindle (see table)



$a_1$	$a_{2\min}$	$a_{2\max}$	b	max. t		 optional 	c	d	e			Code	No.	
130	70	170	100	3.0	M 14x1,5 x 140	17	—	22	15	3.0	x	1.2	1981110	1.04/1A-B
200	110	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	x	3.4	1981129	1.04/2A-B
350	150	420	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	33	5.0	x	7.7	1981137	1.04/3A-B

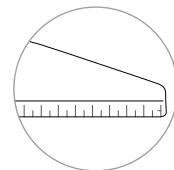
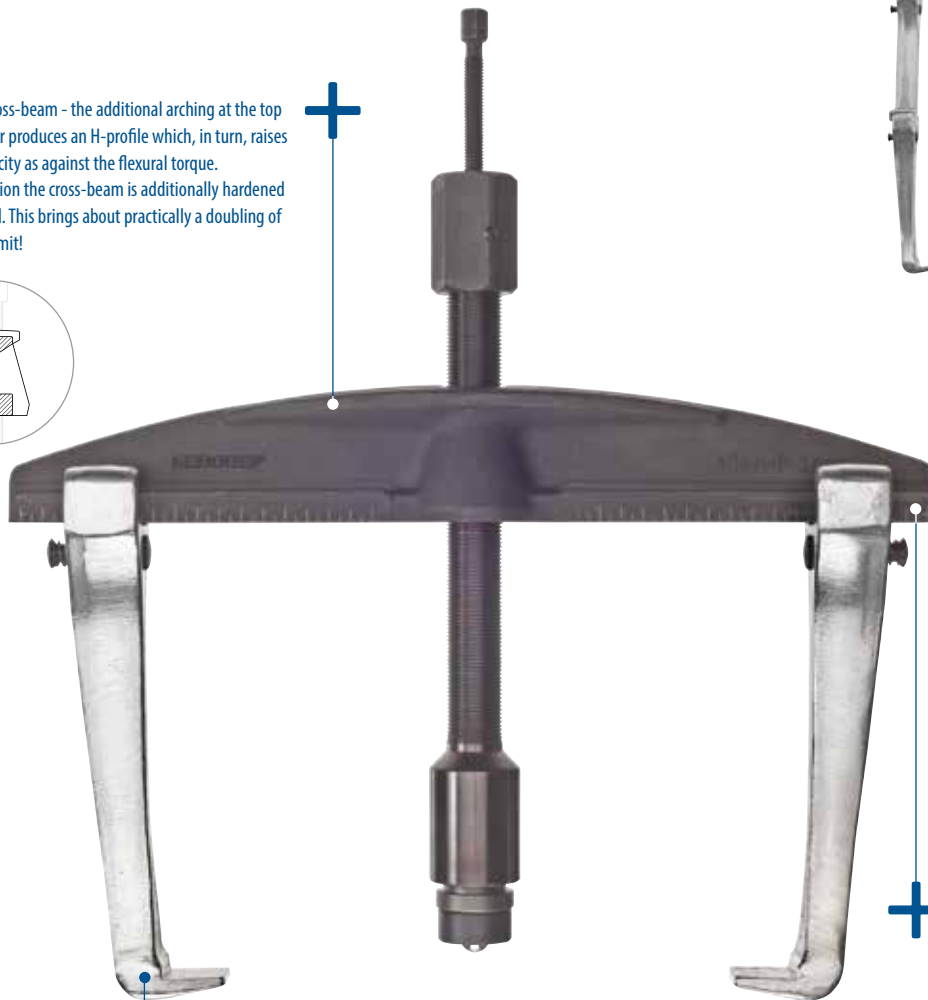
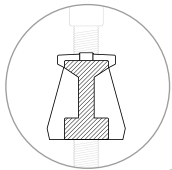
## SUMMARY OF PULLER LEGS



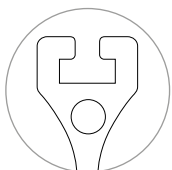
➤448

# 1.04 HIGH POWER - THE POWER PACK

- Reinforced cross-beam - the additional arching at the top of the crossbar produces an H-profile which, in turn, raises the load capacity as against the flexural torque.
- In the HP version the cross-beam is additionally hardened and tempered. This brings about practically a doubling of the loading limit!



The permanently lasered scale makes it easier to symmetrically align the legs. This effectively stops any tilting when extracting caused by incorrectly positioned legs. A final marking specifies the maximum clamping spread.



- The all-in steel legs are hot forged in one piece from 31CrV3 steel and hardened/tempered. They provide a positive-locking connection to the cross-beam.
- The leg brake secures the hooks from unintentional motions.
- Pressing the release button unlatches the locking - the leg can be moved on the cross-beam. Releasing the button causes the leg to jam tight on the cross-beam with slipping ruled out.

## Hydraulic spindles

- Hydraulic spindles simplify the work - less force and time needed for a pulling operation
- The hydraulic spindle principle is both straightforward and ingenious at the same time. The effect of screwing in the clamping bolt is to compress the grease inside the hydraulic piston - the extending piston acts on the part to be extracted with a force many times greater than that manually applied at the top.
- This controlled operation provides for working safely with the hydraulic spindle and is recommended, in particular, for high levels of force.
- In the 1.04 series a hydraulic spindle can be used upwards of puller size 2A. The pressure piece can be replaced by a tip and lengthened by 35, 85 or 135 mm. The small pressure spindle is secured with an unscrewing lock to stop any accidental withdrawal.



## Safety-relevant

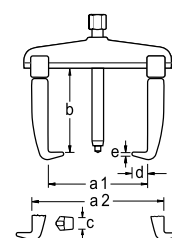
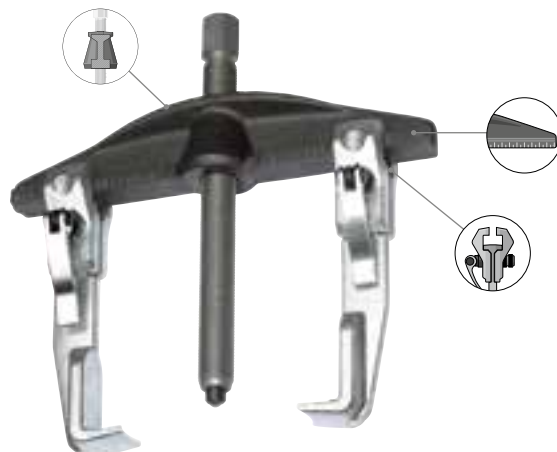
Forces amounting to several tons in weight act on the puller during the extracting operation! Drop-forged components "announce" possible overloading by bending. This is due to the fibre course of the material during forging permitting a certain flexibility of the components ahead of fracturing - an extremely "healthy" property, in fact!






## 1.04/HP

### UNIVERSAL PULLER HIGH POWER

#### 2-arm pattern

- › Cross-beam especially hardened and tempered allows safe application of extremely high pulling forces and doubles the tensile force capability
- › Strong drop forged pattern
- › By reversing the legs, this tool can be used as an internal or external puller
- › Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- › Integral legs, with quick-release
- › Spindle with replaceable ball and tip
- › Spindle thermo-chemically hardened
- › Upgradeable with hydraulic spindle (see table)



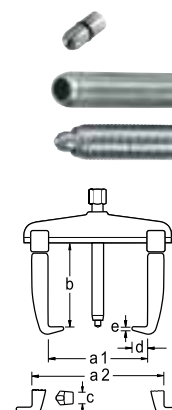
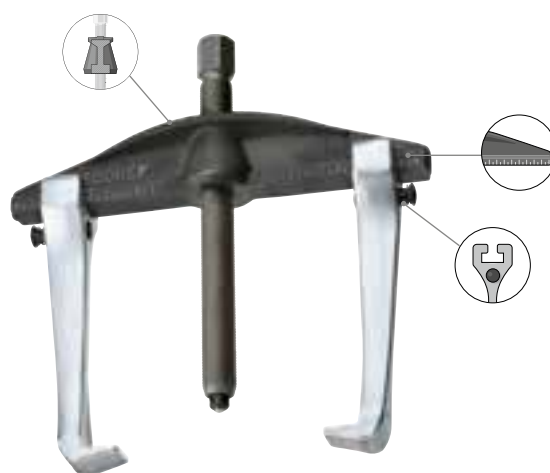
$a_1$	$a_{2 \min}$	$a_{2 \max}$	b	max. t		 mm	optional 	c	d	e			Code	No.
130	70	170	100	5.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.2	1868152	1.04/HP1A
200	110	260	150	10.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.4	1868160	1.04/HP2A
350	150	420	200	15.0	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	7.7	1868179	1.04/HP3A






## 1.04/HP-B

### UNIVERSAL PULLER HIGH POWER

#### 2-arm pattern, rigid legs with leg brake

- › Cross-beam especially hardened and tempered allows safe application of extremely high pulling forces and doubles the tensile force capability
- › Strong drop forged pattern
- › Rigid legs forged from one piece
- › Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- › By reversing the legs, this tool can be used as an internal or external puller
- › Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- › Upgradeable with hydraulic spindle (see table)



$a_1$	$a_{2 \min}$	$a_{2 \max}$	b	max. t		 mm	optional 	c	d	e			Code	No.
130	70	170	100	5.0	M 14x1,5 x 140	17	—	22	15	3.0	x	1.2	1981145	1.04/HP1A-B
200	110	260	150	10.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	x	3.4	1981153	1.04/HP2A-B
350	150	420	200	15.0	G 3/4 x 280	27	1.06/HSP2	36	32	5.0	x	7.7	1981161	1.04/HP3A-B



## 1.04/HP-B-HSP

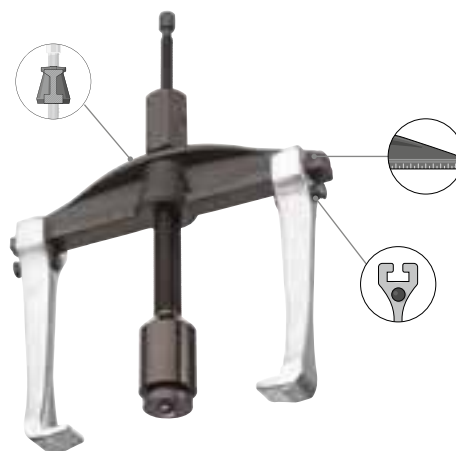
### UNIVERSAL PULLER HIGH POWER

hydraulic, 2-arm pattern, solid steel legs with leg brake

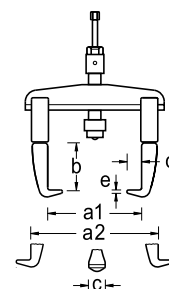
- Cross-beam especially hardened and tempered allows safe application of extremely high pulling forces and doubles the tensile force capability
- Strong drop forged pattern
- Rigid legs forged from one piece
- Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- By reversing the legs, this tool can be used as an internal or external puller
- Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- With the hydraulic spindle, a controlled and safe pulling action is possible at all times
- Also available with standard spindle - Model 1.04/HP-B



1.04/HP3A-B-HSP2



1.04/HP2A-B-HSP1



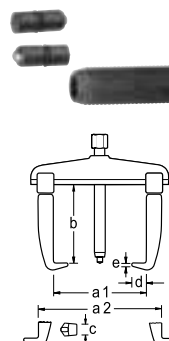
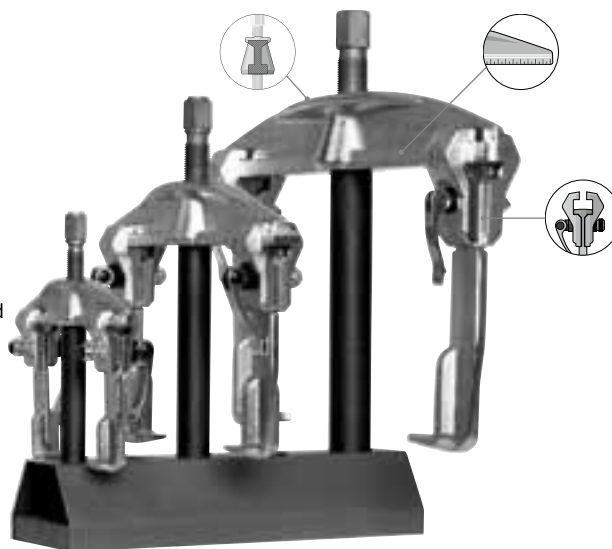
$a_1$	$a_{2min}$	$a_{2max}$	b	max. t	max. N·m		c	d	e			Code	No.
200	110	260	70	10.0	17	1.06/HSP1	30	24	3.5	x	3.8	2016206	1.04/HP2A-B-HSP1
350	150	420	120	12.0	19	1.06/HSP2	36	32	5.0	x	7.8	2300036	1.04/HP3A-B-HSP2

## 1.04/ST

### PULLER SET

with stand

- Consisting of 3 pullers each in different sizes
- Strong drop forged pattern
- Due to the bending-moment reinforcement on its back face, the energy-saving design of the cross-beam means even stronger and safer pulling work
- Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- The quick-action adjustment feature supports the energy-saving and fast operation
- Spindle with replaceable ball and tip point
- Upgradeable with hydraulic spindle (see table)



#### CONTENTS

		Code	No.
1.04/1A	15.2	1675982	1.04/ST
1.04/2A			
1.04/3A			

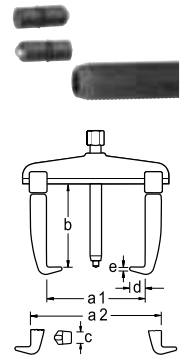
#### SPECIFICATIONS

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1.04/1A	1307703	130	70	170	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.2
1.04/2A	1307827	200	110	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.4
1.04/3A	1307940	350	150	420	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	7.7


## 1.04/ST-HP-B PULLER SET

with stand






- › Consisting of 3 pullers in different sizes and stand
- › Cross-beam especially hardened and tempered allows safe application of extremely high pulling forces and doubles the tensile force capability
- › Strong drop forged pattern
- › Rigid legs forged from one piece
- › Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- › By reversing the legs, this tool can be used as an internal or external puller
- › Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- › Upgradeable with hydraulic spindle (see table)



### CONTENTS

		Code	No.
1.04/HP1A-B	15.2	2300044	1.04/ST-HP-B
1.04/HP2A-B			
1.04/HP3A-B			

### SPECIFICATIONS

No.	Code	a <sub>1</sub>	a <sub>2 min</sub>	a <sub>2 max</sub>	b	max. t		 mm	optional 	c	d	e		
1.04/HP1A-B	1981145	130	70	170	100	5.0	M 14x1,5 x 140	17	–	22	15	3.0	x	1.2
1.04/HP2A-B	1981153	200	110	260	150	10.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	x	3.4
1.04/HP3A-B	1981161	350	150	420	200	15.0	G 3/4 x 280	27	1.06/HSP2	36	32	5.0	x	7.7

## 1100-1.04 UNIVERSAL PULLER SET

in L-BOXX® 136


- › Max. capacity up to 5 t
- › 2- and 3-arm cross-beam
- › With rigid and slim legs and extensions
- › Extra-slim pulling legs for cramped spaces are attached for self-mounting
- › The forged leg feet are very slim particularly suitable for barely accessible places
- › 12 different pullers can be combined
- › External Ø up to 130 mm, internal Ø up to 170 mm with a 200 mm clamping reach
- › 1100 CT2-1.04 to retrofit existing L-BOXX®es 136
- › With Check-Tool insert for quick check of completeness
- › As tools are fully sunk in the foam, the equipped insert can be stacked
- › Insert for use in drawers with min. dimensions 400 x 310 x 60 mm




1100-1.04



1100 CT2-1.04

	Code	No.
6.3	2838362	1100-1.04
4.1	2836068	1100 CT2-1.04

Description		Code	No.
Foam insert 2/2 L-BOXX 136, empty	0.200	2836076	EI-1100 CT2-1.04





# 1100-1.04/12A

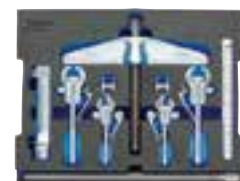
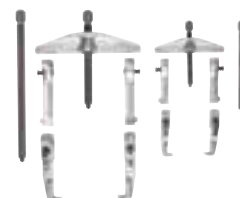
## PULLER SET INTERNAL/EXTERNAL

in L-BOXX® 136


- Max. capacity 3 and 5 t
- For clamping depths up to Ø 200 mm external, Ø 70-260 mm internal, and clamping reach up to 300 mm
- In 3 of 4 spindles the spindle tip (ball/tip) can be rotated
- Quick-release pulling legs with integral T-profile for a better transmission of force
- The forged leg feet are very slim particularly suitable for barely accessible places
- 2 rigid extensions each 100 and 150 mm with leg brake for quick adjustment of the legs
- 1100 CT2-1.04/12A to retrofit existing L-BOXX®es 136
- With Check-Tool insert for quick check of completeness
- As tools are fully sunk in the foam, the equipped insert can be stacked
- Insert for use in drawers with min. dimensions 400 x 310 x 90 mm




1100-1.04/12A



1100 CT2-1.04/12A

	Code	No.
9.6	2927241	1100-1.04/12A
7.4	2927268	1100 CT2-1.04/12A

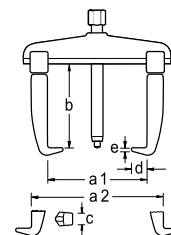
Description	W	D	H		Code	No.
Foam insert 2/2 L-BOXX 136, empty	400	310	90	0.200	2927276	EI-1100 CT2-1.04/12A






## 1.06

### UNIVERSAL PULLER

2-arm pattern

- The tried and tested model for the safe and quick removal of pulleys, wheels, ball bearings, etc.
- Strong drop forged design
- Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- By reversing the legs, this tool can be used as an internal or external puller
- Extra or replacement legs increase versatility
- Upgradeable with hydraulic spindle (see table)

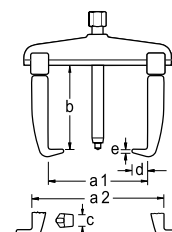







$a_1$	$a_{2\min}$	$a_{2\max}$	b	max. t		 mm	optional 	c	d	e			Code	No.
90	60	140	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.1	8000230	1.06/1
130	70	180	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.3	8000310	1.06/1A
160	80	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.0	8000580	1.06/2
200	90	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.5	8000660	1.06/2A
250	125	330	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	7.2	8000740	1.06/3
350	125	420	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	8.2	8000820	1.06/3A
520	185	600	200	10.0	G 1 x 310	36	1.06/HSP3	36	28	6.5	—	13.7	8000900	1.06/4

## 1.06 UNIVERSAL PULLER

### 2-arm pattern, with extended legs

- › Strong drop forged design
- › Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- › Extended legs
- › By reversing the legs, this tool can be used as an internal or external puller
- › Extra or replacement legs increase versatility
- › Upgradeable with hydraulic spindle (see table)

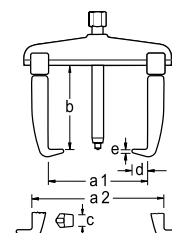







$a_1$	$a_{2\min}$	$a_{2\max}$	b	max. t		 mm	optional 	c	d	e		 kg	Code	No.
90	60	140	200	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.5	8108350	1.06/1-2
130	70	180	200	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.6	8108430	1.06/1A-2
160	80	220	300	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	4.1	8108510	1.06/2-3
200	90	260	300	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	4.5	8108780	1.06/2A-3
250	125	330	300	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	9.1	8001200	1.06/3-3
350	125	420	300	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	9.8	8108860	1.06/3A-3
520	185	600	300	10.0	G 1 x 310	36	1.06/HSP3	36	28	6.5	x	15.2	8108940	1.06/4-3
250	125	330	400	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	10.0	8109080	1.06/3-4
350	125	420	400	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	11.1	8109160	1.06/3A-4
520	185	600	400	10.0	G 1 x 310	36	1.06/HSP3	36	28	6.5	-	16.4	8109240	1.06/4-4
250	125	330	500	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	11.3	8109320	1.06/3-5
350	125	420	500	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	12.2	8112380	1.06/3A-5
520	185	600	500	10.0	G 1 x 310	36	1.06/HSP3	36	28	6.5	-	19.0	8112460	1.06/4-5

## 1.06/B UNIVERSAL PULLER

### 2-arm pattern, rigid legs with leg brake

- › Strong drop forged design
- › Rigid legs forged from one piece
- › Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- › Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- › By reversing the legs, this tool can be used as an internal or external puller
- › Extra or replacement legs increase versatility
- › Upgradeable with hydraulic spindle (see table)



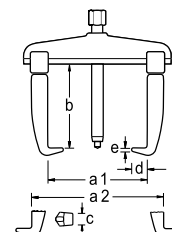
$a_1$	$a_{2\min}$	$a_{2\max}$	b	max. t		 mm	optional 	c	d	e		 kg	Code	No.
100	50	140	100	3.0	M 14x1,5 x 140	17	—	22	15	3.0	x	0.9	1956337	1.06/11-B
140	60	180	100	3.0	M 14x1,5 x 140	17	—	22	15	3.0	x	1.3	1956345	1.06/1A1-B
170	80	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	x	2.8	1956353	1.06/21-B
210	90	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	x	3.3	1956361	1.06/2A1-B
250	125	340	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	32	5.0	x	6.7	1956388	1.06/31-B
340	125	430	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	32	5.0	x	7.5	1956396	1.06/3A1-B
520	185	610	200	10.0	G 1 x 310	36	1.06/HSP3	36	32	5.0	-	14.0	1958399	1.06/41-B




# 1.06/E

## QUICK-RELEASE PULLER

### 2-arm pattern

- › The tried and tested model for the safe and quick removal of pulleys, wheels, ball bearings, etc.
- › Strong drop forged pattern
- › Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- › By reversing the legs, this tool can be used as an internal or external puller
- › Exchangeable legs for several clamping reaches available as accessories
- › Quick release legs for fast, easy set-up and adjustment
- › Upgradeable with hydraulic spindle (see table)



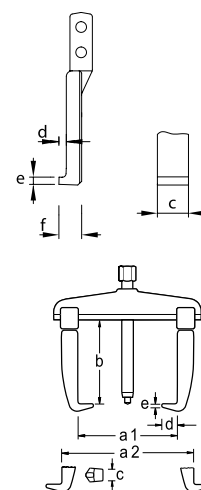
a <sub>1</sub>	a <sub>2 min</sub>	a <sub>2 max</sub>	b	max. t		mm	optional 	c	d	e		kg	Code	No.
90	60	140	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.1	1213830	1.06/1-E
130	70	180	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.3	1215140	1.06/1A-E
160	80	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.0	1216570	1.06/2-E
200	90	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.5	1217720	1.06/2A-E
250	125	330	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	7.1	1218980	1.06/3-E
350	125	420	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	8.2	1220160	1.06/3A-E




# 1.06/S-E

## QUICK-RELEASE PULLER

### 2-arm pattern, with slim legs

- › The forged leg feet are very slim
- › Particularly suitable for barely accessible places
- › Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- › Quick release legs for fast, easy set-up and adjustment



a	b	max. t		mm	optional 	c	d	e	f		kg	Code	No.
100	100	2.0	M 14x1,5 x 140	17	—	29.8	7.5	3.7	13.5	x	1.0	2015706	1.06/S1-E
140	100	2.5	M 14x1,5 x 140	17	—	29.8	7.5	3.7	13.5	x	1.1	2015714	1.06/S1A-E
160	150	5.0	G 1/2 x 210	22	1.06/HSP1	40.0	7.0	5.0	15.0	x	2.9	2015722	1.06/S2-E
200	150	5.0	G 1/2 x 210	22	1.06/HSP1	40.0	7.0	5.0	15.0	x	3.2	2015730	1.06/S2A-E

5.10

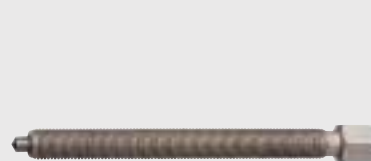
&gt;453



Remember the safety cover!

SPINDLE / LEGS

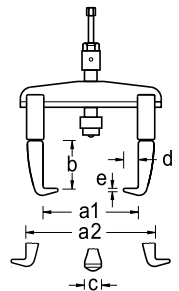
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## 1.06/HSP-B UNIVERSAL PULLER

hydraulic, 2-arm pattern, rigid legs with leg brake

- Strong drop forged pattern
- Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- Rigid legs forged from one piece
- Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- By reversing the legs, this tool can be used as an internal or external puller
- With the hydraulic spindle, a controlled and safe pulling action is possible at all times
- The pressure piece can be replaced by a tip and lengthened, as required.
- The small pressure spindle is secured with an unscrewing lock to stop any accidental withdrawal.
- Also available with standard spindle - Model 1.06/B

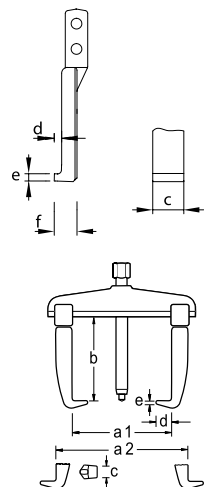







a <sub>1</sub>	a <sub>2</sub>	b	max. t	max. N-m		c	d	e			Code	No.
170	220	70	5.0	9	1.06/HSP1	30	24	3.5	x	3.3	1957899	1.06/21-B-HSP1
210	260	70	5.0	9	1.06/HSP1	30	24	3.5	x	3.4	1957902	1.06/2A1-B-HSP1
250	340	120	7.5	13	1.06/HSP2	36	32	5.0	x	7.2	1957910	1.06/31-B-HSP2
340	430	120	7.5	13	1.06/HSP2	36	32	5.0	x	8.3	1957929	1.06/3A1-B-HSP2
520	610	75	10.0	25	1.06/HSP3	36	32	5.0	-	14.0	1957937	1.06/41-B-HSP3

## 1.06/AS PULLER SET

with 6 legs

- 2-arm puller, with 6 slim legs in 3 lengths
- Particularly suitable for barely accessible places



a	b	max. t			optional 	c	d	e	f			Code	No.
130	100 / 200 / 250	2.5	M 14x1,5 x 140	17	-	29.5	7.5	3.7	13.5	x	3.4	8001710	1.06/AS
260	150 / 220 / 300	5.0	G 1/2 x 210	22	1.06/HSP1	40.0	7.0	5.0	15.0	x	8.1	1675974	1.06/AS-2

# 1.06/ST PULLER SET

with stand

- Consisting of 5 pullers each in different sizes with standard or quick-release pulling legs
- Scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- For clamping depths up to Ø 250 mm external, Ø 330 mm internal, and clamping reach up to 200 mm



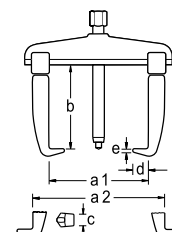
1.06/ST



1.06/ST-E



1.06/ST1-B



## CONTENTS

		Code	No.
1.06/1 1.06/1A 1.06/2 1.06/2A 1.06/3	19.0	8111570	1.06/ST
1.06/1-E 1.06/1A-E 1.06/2-E 1.06/2A-E 1.06/3-E	19.2	1322745	1.06/ST-E
1.06/11-B 1.06/1A1-B 1.06/21-B 1.06/2A1-B 1.06/31-B	17.2	2004569	1.06/ST1-B

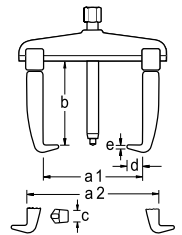
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
No.	Code	a <sub>1</sub>	a <sub>2 min</sub>	a <sub>2 max</sub>	b	max. t		mm	optional	c	d	e		
1.06/1	8000230	90	60	140	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.1
1.06/1A	8000310	130	70	180	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.3
1.06/2	8000580	160	80	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.0
1.06/2A	8000660	200	90	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.5
1.06/3	8000740	250	125	330	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	7.2
1.06/1-E	1213830	90	60	140	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.1
1.06/1A-E	1215140	130	70	180	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	x	1.3
1.06/2-E	1216570	160	80	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.0
1.06/2A-E	1217720	200	90	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	x	3.5
1.06/3-E	1218980	250	125	330	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	x	7.1
1.06/11-B	1956337	100	50	140	100	3.0	M 14x1,5 x 140	17	—	22	15	3.0	x	0.9
1.06/1A1-B	1956345	140	60	180	100	3.0	M 14x1,5 x 140	17	—	22	15	3.0	x	1.3
1.06/21-B	1956353	170	80	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	x	2.8
1.06/2A1-B	1956361	210	90	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	x	3.3
1.06/31-B	1956388	250	125	340	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	32	5.0	x	6.7

## 1.07 UNIVERSAL PULLER

### 3-arm pattern

- › Even load distribution over 3 legs ensures secure grip and balanced pull
- › By reversing the legs, this tool can be used as an internal or external puller
- › Extra or replacement legs increase versatility
- › Upgradeable with hydraulic spindle (see table)

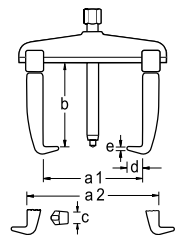






$a_1$	$a_{2\min}$	$a_{2\max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
90	70	140	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	1.4	8113940	1.07/1
130	80	180	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	1.6	8114080	1.07/1A
160	100	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	3.6	8114160	1.07/2
200	100	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	4.2	8114240	1.07/2A
250	100	400	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	9.3	1541757	1.07/3

## 1.07/B UNIVERSAL PULLER

### 3-arm pattern, rigid legs with leg brake

- › Even load distribution over 3 legs ensures secure grip and balanced pull
- › Rigid legs forged from one piece
- › Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- › By reversing the legs, this tool can be used as an internal or external puller
- › Extra or replacement legs increase versatility
- › Upgradeable with hydraulic spindle (see table)



$a_1$	$a_{2\min}$	$a_{2\max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
90	70	140	100	3.0	M 14x1,5 x 140	17	—	22	15	3.0	1.2	1957945	1.07/11-B
130	80	180	100	3.0	M 14x1,5 x 140	17	—	22	15	3.0	1.4	1957953	1.07/1A1-B
160	100	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	3.5	1957961	1.07/21-B
200	100	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	24	3.5	3.7	1957988	1.07/2A1-B
250	100	400	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	8.0	1957996	1.07/31-B



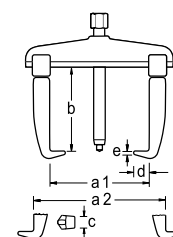






## 1.07/E

### QUICK-RELEASE PULLER

#### 3-arm pattern

- Quick release legs for fast, easy set-up and adjustment
- By reversing the legs, this tool can be used as an internal or external puller
- Upgradeable with hydraulic spindle (see table)



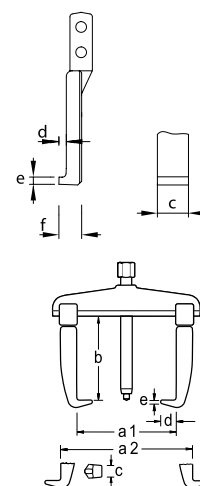
$a_1$	$a_{2 \min}$	$a_{2 \max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>90</b>	70	140	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	1.4	1222902	1.07/1-E
<b>130</b>	80	180	100	3.0	M 14x1,5 x 140	17	—	22	12	3.0	1.6	1225901	1.07/1A-E
<b>160</b>	100	220	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	3.8	1227335	1.07/2-E
<b>200</b>	100	260	150	5.0	G 1/2 x 210	22	1.06/HSP1	30	18	3.5	4.0	1227459	1.07/2A-E
<b>250</b>	100	400	200	7.5	G 3/4 x 280	27	1.06/HSP2	36	28	6.5	9.2	1554751	1.07/3-E





## 1.07/S-E

### QUICK-RELEASE PULLER

#### 3-arm pattern, with slim legs

- The forged leg feet are very slim
- Particularly suitable for barely accessible places
- Quick release legs for fast, easy set-up and adjustment

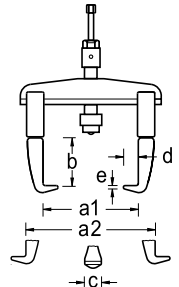




a	b	max. t		 mm	optional 	c	d	e	f		Code	No.
<b>90</b>	100	2.5	M 14x1,5 x 140	17	—	29.5	7.5	3.7	13.5	1.3	2016036	1.07/S1-E
<b>130</b>	100	2.5	M 14x1,5 x 140	17	—	29.5	7.5	3.7	13.5	1.4	2016044	1.07/S1A-E
<b>160</b>	150	5.0	G 1/2 x 210	22	1.06/HSP1	40.0	7.0	5.0	15.0	3.6	2016052	1.07/S2-E
<b>200</b>	150	5.0	G 1/2 x 210	22	1.06/HSP1	40.0	7.0	5.0	15.0	3.9	2016060	1.07/S2A-E

## 1.07/HSP-B UNIVERSAL PULLER

hydraulic, 3-arm pattern, rigid legs with leg brake

- Even load distribution over 3 legs ensures secure grip and balanced pull
- Rigid legs forged from one piece
- Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- By reversing the legs, this tool can be used as an internal or external puller
- Extra or replacement legs increase versatility
- The pressure piece can be replaced by a tip and lengthened, as required.
- The small pressure spindle is secured with an unscrewing lock to stop any accidental withdrawal.
- Also available with standard spindle - Model 1.07/B

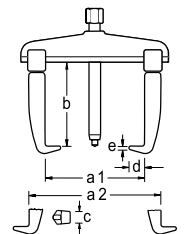






$a_{1 \max}$	$a_{1 \min}$	$a_{2 \max}$	$a_{2 \min}$	b	max. t	max. N·m		c	d	e		Code	No.
160	20	220	140	70	5.0	9	1.06/HSP1	30	24	3.5	4.1	2546566	1.07/21-B-HSP1
200	20	260	140	70	5.0	9	1.06/HSP1	30	24	3.5	4.2	2079984	1.07/2A1-B-HSP1
250	25	340	220	120	7.5	13	1.06/HSP2	36	28	6.5	8.6	2545128	1.07/31-B-HSP2

## 1.07/4 UNIVERSAL PULLER

2-/3-arm pattern

- Just like our standard model no. 1.06, this puller is designed for all branches of industry, but particularly for the construction of electric motors
- It is also suitable for removing heavy, multistage V-belt pulley wheels, flywheels, gear wheels, etc.
- Pins are used to lock the arms at 120 degrees to each other on the hub
- Upgradeable with hydraulic spindle (see table)
- This puller may also be used with the hydraulic aid no. 1.50 without requiring any reduction bushing
- On request, this puller is also available with further legs and extendable up to 6 arms



$a_{1 \max}$	$a_{1 \min}$	$a_{2 \max}$	$a_{2 \min}$	b	max. t		 mm	optional 	c	d	e		Code	No.
450	150	530	270	200	10	G 1 x 360	36	1.06/HSP3	36	28	6.5	18.8	8002440	1.07/4
580	150	640	270	200	10	G 1 x 360	36	1.06/HSP3	36	28	6.5	22.0	1958003	1.07/4A
450	150	530	270	300	10	G 1 x 360	36	1.06/HSP3	36	28	6.5	21.0	1305085	1.07/4-3
450	150	530	270	500	10	G 1 x 360	36	1.06/HSP3	36	28	6.5	25.2	1305425	1.07/4-5
580	150	640	270	400	10	G 1 x 360	36	1.06/HSP3	36	28	6.5	25.8	2302802	1.07/4A-4
580	150	640	270	500	10	G 1 x 360	36	1.06/HSP3	36	28	6.5	28.4	2302810	1.07/4A-5

1.50

➤457

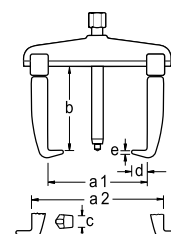






## 1.07/4-B

### UNIVERSAL PULLER

2-/3-arm pattern, rigid legs with leg brake

- Just like our standard model no. 1.06, this puller is designed for all branches of industry, but particularly for the construction of electric motors
- It is also suitable for removing heavy, multistage V-belt pulley wheels, flywheels, gear wheels, etc.
- Pins are used to lock the arms at 120 degrees to each other on the hub
- Rigid legs forged from one piece
- Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- By reversing the legs, this tool can be used as an internal or external puller
- Upgradeable with hydraulic spindle (see table)
- This puller may also be used with the hydraulic aid no. 1.50 without requiring any reduction bushing
- On request, this puller is also available with further legs and extendable up to 6 arms



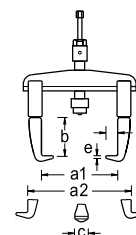
$a_{1\max}$	$a_{1\min}$	$a_{2\max}$	$a_{2\min}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>450</b>	150	530	270	200	10	G 1" x 360	36	1.06/HSP3	36	28	6.5	18.8	2546531	1.07/41-B
<b>580</b>	150	640	270	200	10	G 1" x 360	36	1.06/HSP3	36	28	6.5	22.0	2546558	1.07/4A1-B



## 1.07/4-HSP-B

### UNIVERSAL PULLER

hydraulic, 2-/3-arm pattern, rigid legs with leg brake

- Just like our standard model no. 1.06, this puller is designed for all branches of industry, but particularly for the construction of electric motors
- It is also suitable for removing heavy, multistage V-belt pulley wheels, flywheels, gear wheels, etc.
- Pins are used to lock the arms at 120 degrees to each other on the hub
- Rigid legs forged from one piece
- Leg brake - prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- By reversing the legs, this tool can be used as an internal or external puller
- This puller may also be used with the hydraulic aid no. 1.50 without requiring any reduction bushing
- On request, this puller is also available with further legs and extendable up to 6 arms
- The pressure piece can be replaced by a tip and lengthened, as required.
- The small pressure spindle is secured with an unscrewing lock to stop any accidental withdrawal.
- Also available with standard spindle - Model 1.07/4-B

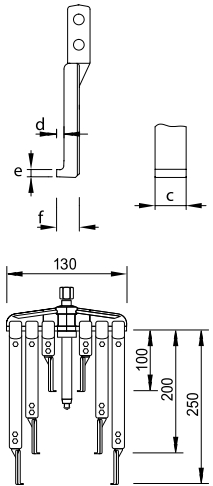






$a_{1\max}$	$a_{1\min}$	$a_{2\max}$	$a_{2\min}$	b	max. t	max. N·m		c	d	e		Code	No.
450	150	530	270	140	10	25	1.06/HSP3	36	28	6.5	19.9	2546574	1.07/41-B-HSP3
580	150	640	270	140	10	25	1.06/HSP3	36	28	6.5	23.1	2546582	1.07/4A1-B-HSP3

## 1.07/AS PULLER SET

with 9 legs

- › 3-arm puller, with 9 slim legs in 3 lengths
- › Particularly suitable for barely accessible places



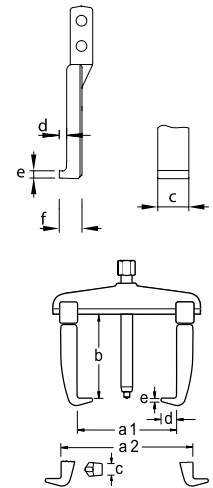
a	b	max. t		 mm	optional 	c	d	e	f		Code	No.
130	100 / 200 / 250	2.5	M 14x1,5 x 140	17	—	29.5	7.5	3.7	13.5	4.8	8117260	1.07/AS
200	150 / 220 / 300	5.0	G 1/2 x 210	22	1.06/HSP1	40.0	7.0	5.0	15.0	11.5	1675990	1.07/AS-2





## 1.07/K PULLER SET

with 9 legs

- › In plastic case
- › Contents: 1 spindle, 1 cross-beam each 2- and 3-arm pattern and 9 slim pulling legs in 3 lengths
- › Second spindle in the set 1.07/K saves working time
- › 1.07/K-2 insert with nubs on both sides

1.07/K



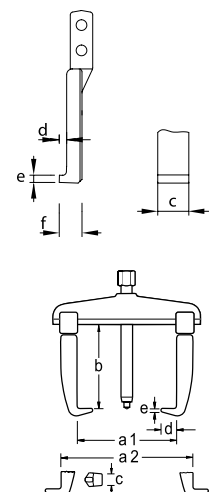
a	b	max. t		 mm	optional 	c	d	e		Code	No.
130	100 / 200 / 250	2.5	M 14x1,5 x 140	17	—	27	7.5	3.7	5.8	8117340	1.07/K
200	150 / 220 / 300	5.0	G 1/2 x 210	22	1.06/HSP1	40	7.0	5.0	13.5	1676008	1.07/K-2







## 1.07/K-SE PULLER SET

with 3 legs

- › In plastic case
- › Contents: 1 spindle, 1 cross-beam each 2- and 3-arm pattern and 3 quick-release pulling legs
- › Second spindle in the set 1.07/K-1-SE saves working time

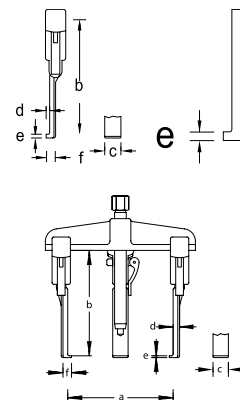





a <sub>1</sub>	b	max. t		 mm	optional 	c	d	e		Code	No.
90	100	2.5	M 14x1,5 x 140	17	—	27	7.5	3.7	2.2	1438484	1.07/K-1-SE
160	150	5.0	G 1/2 x 210	22	1.06/HSP1	40	7.0	5.0	5.5	1645455	1.07/K-2-SE

## 1.07/K-SE 5 PULLER SET

with 6 legs

- › In plastic case
- › The forged leg feet are very slim particularly suitable for barely accessible places
- › Quick release legs for fast, easy set-up and adjustment
- › Contents: 2 spindles, 1 cross-beam each 2- and 3-arm pattern, and 6 slim quick-release pulling legs in 2 lengths
- › Clamping reach 100 mm = thickness of hooked foot at tip (e) 3.7 mm, max. 2.5 t
- › Clamping reach 200 mm = thickness of hooked foot at tip (e) 2.0 mm, max. 2.0 t

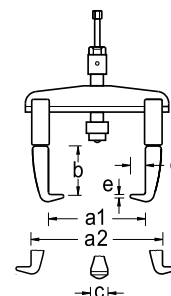





a	b		 mm	c	d		Code	No.
90	100 / 200	M 14x1,5 x 140	17	27	7.5	4.2	1745158	1.07/K-1-SE 200 S

## 1.07/K-HSP PULLER SET

with 3 legs

- › For internal and external use, for hard, everyday use, for industrial use, or on cars and trucks
- › In plastic case
- › Contents: 1 hydraulic spindle, 1 cross-beam each 2- and 3-arm pattern and 3 quick-release pulling legs
- › The pressure piece can be replaced by a tip and lengthened, as required.
- › The small pressure spindle is secured with an unscrewing lock to stop any accidental withdrawal.

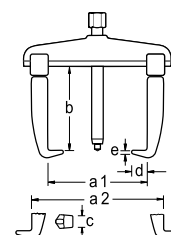





a <sub>1</sub>	a <sub>2</sub>	b	max. t	max. N-m		 mm	c	d	e		Code	No.
160	220	70	5.0	9	1.06/HSP1	32	30	18	3.5	7.2	1438492	1.07/K-2-E-HSP1

## 1.07/K-B PULLER SET

with 3 legs, with leg brake

- › In plastic case
- › Contents: 2 spindles, 1 cross-beam each 2- and 3-arm pattern and 3 rigid legs with leg brake
- › Prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- › By reversing the legs, this tool can be used as an internal or external puller
- › Extra spindle supplied for convenience



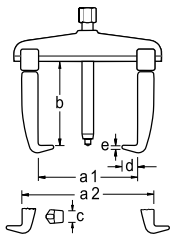
a	b	max. t		 mm	c	d	e		Code	No.
140	100	3.0	M 14x1,5 x 140	17	22	15	3.0	2.9	2224097	1.07/K-1A-B




# 1.08

## UNIVERSAL PULLER

2-arm pattern, with fast spindle adjustment

- Twice as fast and twice as simple
- With the fast spindle adjustment feature, the spindle can be set the desired range in a moment. When the clamping yoke is released, the 4-part internal thread closes, and takes the full working pressure



$a_1$	$a_{2\min}$	$a_{2\max}$	b	max. t			c	d	e		Code	No.
200	110	260	150	5.0	G 1/2 x 210	22	30	18	3.5	4.1	8000070	1.08/2A

1500 ES-1.07

➤103



1100-1.04

➤56



1100-1.30

➤57





## SUMMARY OF PULLER LEGS

106/XX-YY-ZZ xx = Leg size (A-C) yy = Leg length (in mm) zz = Leg type

for 2-arm puller

1.04/1A...

1.04/HP1A...

for 3-arm puller

1.06/1...

1.06/1A...

Mechanical replacement spindle

1.07/1...

1.07/1A...

Hydraulic replacement spindle

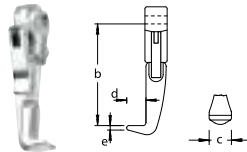
M14x1,5

A

## TE = THE PROVEN LEG

## 104/TE

- Quick-release pulling leg for 1.04

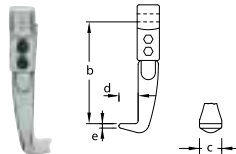


b	c	d	e		Code	No.
100	22	12	3.0	0.3	1499351	104/A-100-TE

## N = THE PROVEN LEG

## 106/N

- 1 leg incl. clamping parts with the reliable screw connection in various lengths

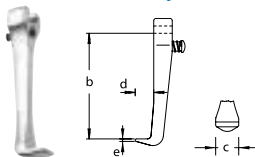


b	c	d	e		Code	No.
100	22	12	3.0	0.260	1120514	106/A-100-N
200	22	12	3.0	0.440	1120522	106/A-200-N

## B = THE STURDY LEG

## 106/B

- 1 leg with leg brake, secured against unintentional slipping, movement of the leg on the cross-beam at the touch of a button, forged from one piece

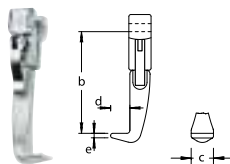


b	c	d	e		Code	No.
100	22	15	3.0	0.240	1970534	106/A-100-B

## E = THE QUICK USE LEG

## 106/E

- leg incl. clamping parts with quick-release adjustment, for fast and uncomplicated setting and adjustment

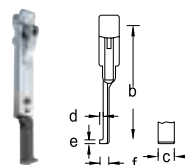


b	c	d	e		Code	No.
100	22	12	3.0	0.280	1178199	106/A-100-E

## SE = THE SLENDER LEG

## 106/SE

- 1 slim leg incl. clamping parts with quick-release adjustment, for fast and uncomplicated setting and adjustment

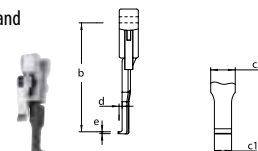


b	c	d	e	f		Code	No.
100	27	7.5	3.7	13.5	0.280	1438514	106/A-100-SE
200	27	7.5	3.7	13.5	0.440	2015757	106/A-200-SE
250	27	7.5	3.7	13.5	0.580	2015773	106/A-250-SE
100	27	7.5	2.0	13.5	0.280	2015781	106/A-100-SSE
200	27	7.5	2.0	13.5	0.460	2015811	106/A-200-SSE
250	27	7.5	2.0	13.5	0.580	2015846	106/A-250-SSE

## XSE = THE SOPHISTICATED LEG

## 106/XSE

- 1 extra slim leg incl. clamping parts with quick-release adjustment, for fast and uncomplicated setting and adjustment
- Particularly suitable for barely accessible places, e.g. gear maintenance



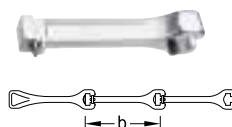
b	c <sub>1</sub>	c <sub>2</sub>	d	e	f		Code	No.
100	16.0	25	5.0	3.7	9.6	0.240	2018748	106/A-100-XSE

## VB = THE FLEXI LEG

## 106/VB

with leg brake

- Using the extension between cross-beam and leg the clamping reach can be extended indefinitely
- Forged from one piece
- Leg brake for more safety

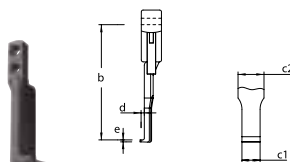


b		Code	No.
100	0.236	2329034	106/A-100-VB

## THE SLIM FIT LEG

## 106/S - 108/XS


- The small black
- 1 slim leg foot for use in confined spaces
- \*S = Spare foot for THE SLIM
- \*\*XS = Spare foot for THE FILIGREE





c	d	e	f		Code	No.
27	7.5	3.7	14.5	0.100	1076957	106/S101
27	7.5	2.0	14.5	0.110	1495607	106/S101-S


c <sub>1</sub>	c <sub>2</sub>	d	e	f		Code	No.
16.0	25	5.0	3.7	9.6	0.102	2013681	106/XS101


1.04/2A...	1.04/HP2A...	<b>B</b>	1.04/3A...	1.04/HP3A...	<b>C</b>
1.06/2...	1.06/2A...		1.06/3...	1.06/3A...	
1.07/2...	1.07/2A...		1.07/3...	1.07/4...	
G1/2"			G3/4"	G1" & M55x2	
1.06/HSP1			1.06/HSP2	1.06/HSP3	


b	c	d	e		Code	No.
150	30	18	3.5	0.7	1499378	104/B-150-TE


b	c	d	e		Code	No.
200	36	28	6.5	2.9	1499386	104/C-200-TE


b	c	d	e		Code	No.
150	30	18	3.5	0.700	1120530	106/B-150-N
300	30	18	3.5	1.250	1123947	106/B-300-N


b	c	d	e		Code	No.
200	36	28	6.5	1.560	1120549	106/C-200-N
300	36	28	6.5	2.360	1120557	106/C-300-N
400	36	28	6.5	2.940	1120565	106/C-400-N
500	36	28	6.5	3.500	1120573	106/C-500-N


b	c	d	e		Code	No.
150	30	24	3.5	0.580	1970542	106/B-150-B

b	c	d	e		Code	No.
200	36	32	5.0	1.160	1970550	106/C-200-B

b	c	d	e		Code	No.
150	30	18	3.5	0.720	1178253	106/B-150-E


b	c	d	e		Code	No.
200	36	28	6.5	1.520	1178350	106/C-200-E


b	c	d	e	f		Code	No.
150	40	7.0	5.0	15.0	0.700	1671499	106/B-150-SE
220	40	7.0	5.0	15.0	0.980	2015862	106/B-220-SE
300	40	7.0	5.0	15.0	1.230	2015870	106/B-300-SE

b	c <sub>1</sub>	c <sub>2</sub>	d	e	f		Code	No.
150	17.5	32	5.5	3.5	11.0	0.620	2018756	106/B-150-XSE

b		Code	No.
150	0.560	2329042	106/B-150-VB

b		Code	No.
200	1.320	2329050	106/C-200-VB

c	d	e	f		Code	No.
40	7.0	5.0	15.5	0.330	1671898	108/S201

c <sub>1</sub>	c <sub>2</sub>	d	e	f		Code	No.
17.5	32	5.5	3.5	11.0	0.230	2013711	108/XS201

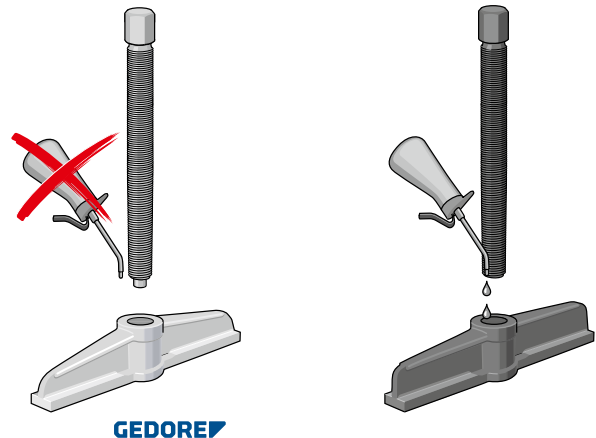


## Spindle summary

### GEDORE SPINDLES ...

- ... **require no maintenance!**
- ... comprise turned hardened and tempered steel. The fine thread is then rolled - this additional strengthening of the steel gives rolled thread a higher strength than a thread produced by cutting.
- ... have a fine thread which stops any unintended slackening from vibrations.
- ... are thermo-chemically treated. Nitro-carburating makes the spindle extremely wear-resistant and corrosion-proof. Nitro-carburated surfaces have excellent sliding properties.
- ... **Oiling and greasing is not needed and**, as such, the thread stays clean and smooth much longer. (Resinated, used oil attracts dirt and chips like magic. The thread pitches clog and turning the thread is not easy - in the final resort, this results in ruination of the thread. Not to speak of that irksome task of regularly filling up with oil.)
- ... are fitted out with a replaceable spindle tip which is equally suitable for both centred and non-centred shafts\*.

\* As standard with extractors Nos. 1.04 and No.1.09



### SPINDLE SUMMARY

- KS = ball tip, exchangeable
- \* Pull spindle



Threads	usable length	Size/Drive	Ball	Tip	kg	Code	No.
<b>M 10x1,5</b>	160	14	x		0.100	1084739	129.106
<b>M 12x1,5</b>	110	14		x	0.100	1084445	1.1206110
<b>M 14x1,5</b>	50	17		x	0.009	1084453	1.1406050
<b>M 14x1,5</b>	125	17		x	0.170	1084461	1.1406125
<b>M 14x1,5</b>	140	17		x	0.180	1084488	1.1406140
<b>M 14x1,5</b>	140	17	x	x	0.180	1546821	1.1406140KS
<b>M 14x1,5</b>	150	17		x	0.009	1084798	144.15006
<b>M 14x1,5</b>	155	17		x	0.009	1084518	1.1406155
<b>M 14x1,5</b>	200	17	x		0.220	1576224	1.1406200
<b>M 14x2,0</b>	210	17	x		0.250	1084755	129.306
<b>M 18x1,5</b>	80	19		x	0.185	1084526	1.1806080
<b>M 18x1,5</b>	130	19		x	0.280	1084542	1.1806130
<b>M 18x1,5</b>	170	19		x	0.345	1084550	1.1806170
<b>M 18x1,5</b>	200	19		x	0.009	1084569	1.1806200
<b>M 18x2,5</b>	230	19	x		0.500	1084763	129.406
<b>G 1/2"</b>	110	22	x		0.340	1084577	1.2106110
<b>G 1/2"</b>	160	22		x	0.455	1084585	1.2106160

Threads	usable length	Size/Drive	Ball	Tip	kg	Code	No.
<b>G 1/2"</b>	175	22		x	0.009	1084623	1.2106175
<b>G 1/2"</b>	210	22		x	0.590	1084593	1.2106210
<b>G 1/2"</b>	210	22	x	x	0.180	1546872	1.2106210KS
<b>G 1/2"</b>	250	22		x	0.680	1084631	1.2106250
<b>G 1/2"</b>	250	22	x	x	0.680	1795112	1.2106250KS
<b>G 1/2"</b>	350	22			0.009	1084658	1.2106350
<b>G 1/2"</b>	350	22	x	x	0.010	1806564	1.2106350KS
<b>G 1/2"</b>	400	16		*	1.100	1076132	1/2106400
<b>M 20x2,5</b>	235	22	x		0.500	1084771	129.506
<b>G 3/4"</b>	200	27		x	0.980	1084666	1.2606180
<b>G 3/4"</b>	280	27		x	1.200	1084674	1.2606280
<b>G 3/4"</b>	280	27	x	x	1.300	1546910	1.2606280KS
<b>G 1"</b>	310	36		x	2.238	1084690	1.3306310
<b>G 1"</b>	360	36		x	2.540	1084704	1.3306360
<b>G 1"</b>	500	36	x		3.600	1084712	1.3306500
<b>G 1.1/4"</b>	270	41		x	3.160	1084720	1.4206270

### Spindles - Mechanical spindle, hydraulic spindle or hydraulic press?



- The GEDORE puller mechanical spindles provide plenty of benefits: made of hardened and tempered steel, rolled fine thread and thermo-chemically treated - hence they are especially both wear and corrosion resistant.
- Particularly with high forces, using a hydraulic spindle can be both time and effort-saving. The hydraulic spindle principle is both straightforward and ingenious at the same time. The effect of screwing in the clamping bolt is to compress the grease inside the hydraulic piston - the extending piston acts on the part to be extracted with a force many times greater than that

manually applied at the top. This controlled operation provides for working safely with the hydraulic spindle and is recommended, in particular, for high levels of force.

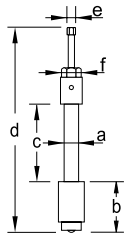
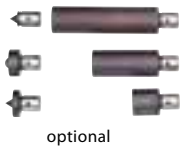
- The hydraulic press represents an alternative to the hydraulic spindle. It is attached between the mechanical spindle and shaft and through hydraulic force supports the spindle.
- As the puller cannot be rotated during extraction, pulling with the assistance of hydraulic aids saves both on time and the effort needed.


## 1.06/HSP HYDRAULIC PRESSURE SPINDLE

- For controlled and safe pulling work
- Set up for a pressure of 10 t, 12 t or 15 t
- The pressure piece can be replaced by a tip and lengthened, as required.
- The small pressure spindle is secured with an unscrewing lock to stop any accidental withdrawal.

### Preparation for use:

1. Before using, check whether the pressure spindle is screwed far enough out of the cap, so that the pressure pad is in the initial position in the hydraulic cylinder.
2. Unscrew the cap from the spindle body. For this purpose, first slacken off the grub screw.
3. Screw the spindle body from beneath into the cross piece of the puller until the body protrudes approx. 60 mm from the cross piece.
4. Screw the cap onto the spindle body until the stop, and then fix it in position by turning in the grub screw.




a	max. t	max. N-m	b	c	d	e	f	Stroke		Code	No.
1/2"	10	17	80	135	350	12	32	12	1.1	8116100	1.06/HSP1
3/4"	12	19	80	205	420	12	36	12	1.8	8116290	1.06/HSP2
1"	15	33	125	165	465	17	41	12	3.3	8116370	1.06/HSP3

## 1.06/HSP-V EXTENSION FOR HYDRAULIC SPINDLE




1.06/HSP-35V / -85V / -135V

usable length	↳ mm ↲		Code	No.
35	60	0.250	2824787	1.06/HSP-35V
85	110	0.600	2824841	1.06/HSP-85V
135	160	0.950	2824868	1.06/HSP-135V

## 1.06/HSP-D THRUST-CARRYING MEMBER FOR HYDRAULIC SPINDLE




DSK / DK / DS

Execution		Code	No.
<b>with ball</b>	0.170	2824876	1.06/HSP12-DK
<b>with tip</b>	0.130	2824884	1.06/HSP12-DS
<b>with tip, short</b>	0.070	2824892	1.06/HSP12-DSK
<b>with tip</b>	0.200	2824906	1.06/HSP3-DS

## 1.55 HYDRAULIC PRESS

- This piece of auxiliary equipment considerably increases the capability of the standard pressure spindle
- Operation: With pressure released, the press is placed between the pressure spindle and the end of the shaft. The pressure spindle is then tightened firmly. Care must be taken that the centreline of the shaft, the hydraulic press, and the pressure spindle are exactly in alignment. Then the hydraulic spindle is screwed inwards.
- **Important note:** Release the hydraulic press after use



max. t	Stroke height	Installation height		Code	No.
8	10	75	1.0	8024090	1.55/1
15	15	90	1.8	8024170	1.55/2

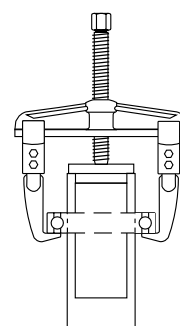
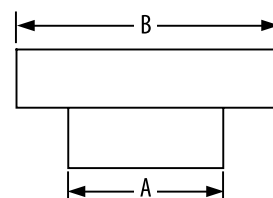
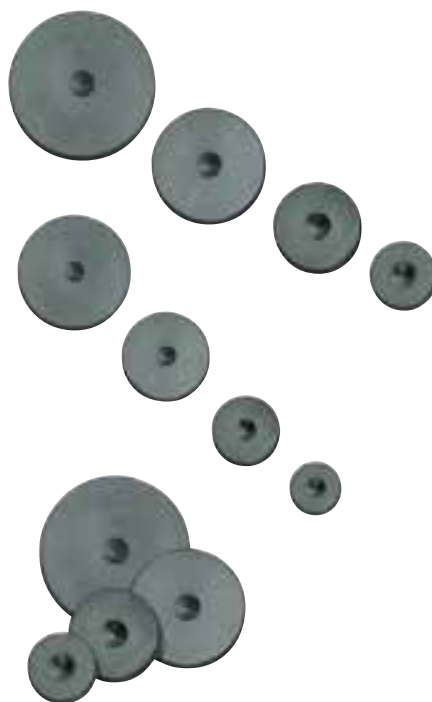
## Spindle pressure pads


# 1.80

## SPINDLE PRESSURE PADS

for axle bores (hollow shafts)

- › For the removal of bearings and gear wheels that are mounted on hollow shafts or in housings
- › The spindle pressure pad serves as a counter-axis to the puller, where the spindle now transfers the force to the pressure pad



A Holder Ø	B Plate Ø		Code	No.
19	25	2.3	1120697	1.80/1
22	28			
25	32			
28	35			
32	41			
35	44			
38	48			
41	50			
44	54			
48	60			
50	64	2.4	1120700	1.80/2
54	67			
57	70			
60	73			
64	78			
70	83			
76	90	4.3	1120719	1.80/3
32	41			
35	44			
38	48			
41	50			
44	54			
48	60			
50	64			
54	67			
57	70			
60	73			
64	78			
70	83			
76	90			

Bearing assembly

1.85/1  
PROFESSIONAL PLASTIC  
BEARING INSTALLATION SET

- › The impact-resistant plastic is handily light, but just as robust as the metal variants
- › The impact rings are now secured on the pipe
- › Using this bearing installation set more than 200 types of bearings may be re-installed effortlessly and without damage
- › In a strong plastic case, dimensions 450 x 360 x 140 mm




Contents		Code	No.
33 impact rings, 10-50 mm for external Ø 26-110 mm	5.2	1120778	1.85/1
3 aluminium impact sleeves			
1 recoil-free bodywork hammer with nylon heads (1.2 kg)			

Safety cover

5.10  
SAFETY COVER SIZE 1

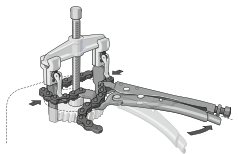
- › At pulling forces of 18 t, these PVC safety covers provide maximum active-safety protection from suddenly detaching ball bearings, driving pinions or small parts. The safety covers are extremely flexible, making them suitable for all situations.
- › Dimensions 510 x 915 mm
- › Double-ply welded = double safety (total thickness at 0.5 mm = 1.0 mm)
- › Tear strength: longitudinal 23 N/mm<sup>2</sup> - lateral 21 N/mm<sup>2</sup>
- › Two straps for variable adjustment
- › Press stud fasteners for added safety - no flapping ends
- › UV resistant
- › Temperature resistant at -25 °C to +50 °C
- › Storage in the supplied carry bag guarantees long service life




	Code	No.
1.5	1868195	5.10

136 K  
CHAIN GRIP WRENCH

- › Particularly suited for clamping geometrically problematical cross-sections
- › With No. 136 K-105 the legs of various pullers - following locking - can be spanned with the chain at the component to be extracted and tightened. This stops the legs bending outwards and slipping. Pulling is still possible even if the legs have a very restricted contact surface



max. Ø	l= mm		Code	No.
330	1050	1.5	2307227	136 K-105





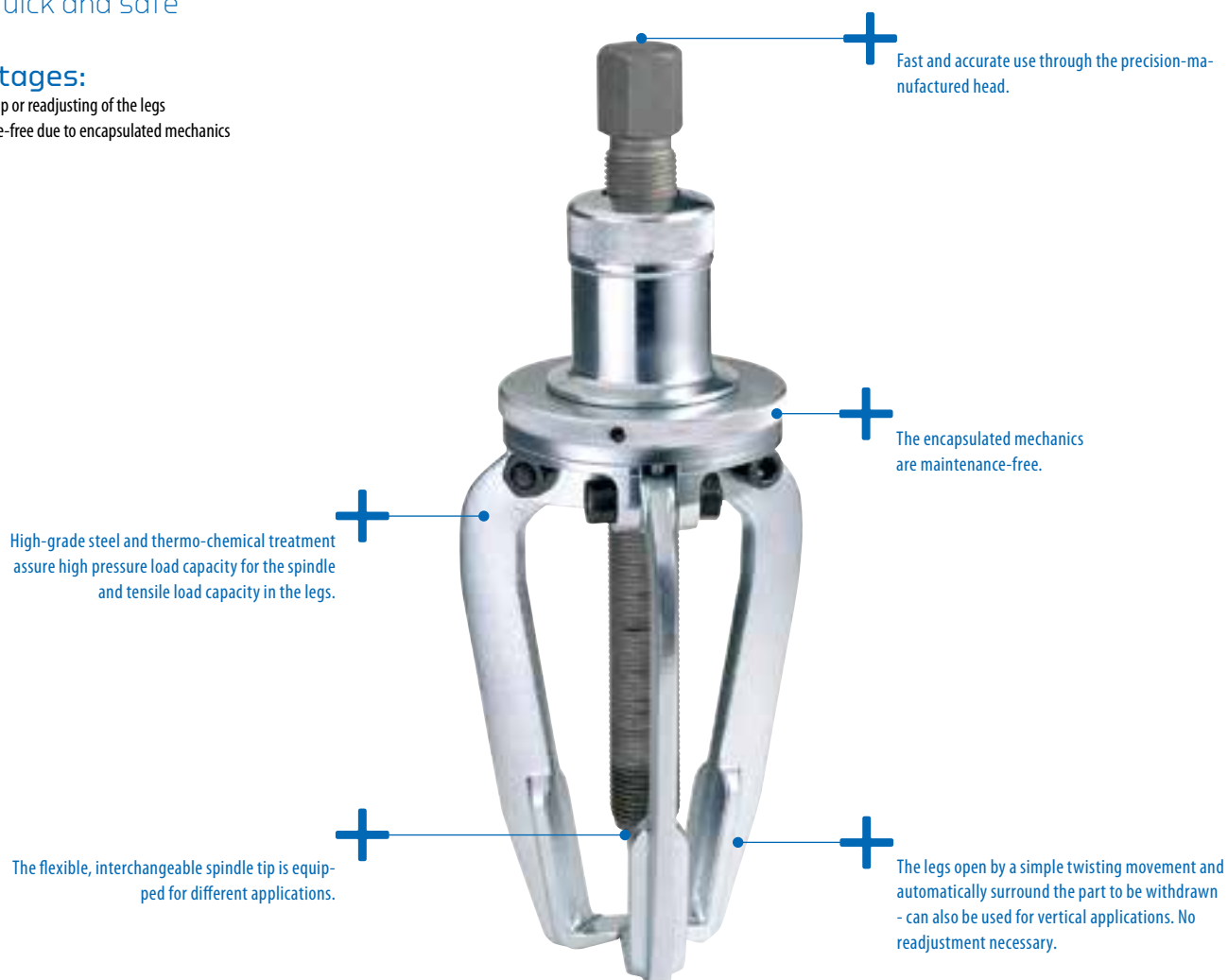
## 3-arm External Puller Twist + Pull

### 1.09 PULLER TWIST & PULL

Easy, quick and safe

#### Advantages:

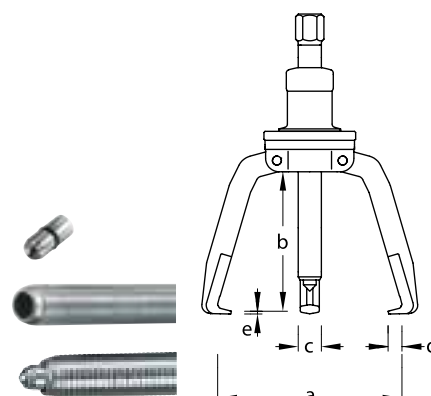
- No setting-up or readjusting of the legs
- Maintenance-free due to encapsulated mechanics






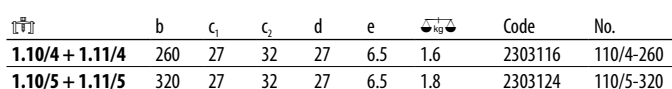
### 1.09 PULLER TWIST + PULL

3-arm pattern, with rotating adjustment

- The precise manufactured head allows fast and exact use
- The legs open by simple rotation and enclose automatically the part to be removed
- No more time-consuming set-up and readjusting of the legs
- High-quality steel and thermo-chemical treatment guarantee highest toughness of the spindle and the legs
- Ball or tip can easily be exchanged



a <sub>min</sub>	a <sub>max</sub>	b		 mm	c	d	e	max. t	 kg	Code	No.
30	150	130	G 1/2 x 250	22	17	12	3.0	6.5	2.5	1748173	1.09/1
80	250	250	G 1/2 x 350	22	24	12	3.0	6.5	4.2	1748181	1.09/2

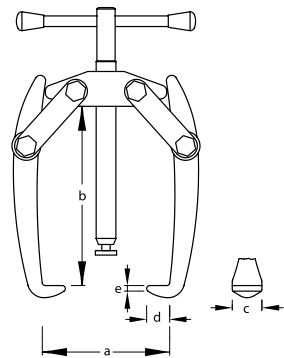




# 1.12

## BATTERY-TERMINAL PULLER

### 2-arm pattern

- Ideal for removing small parts such as battery terminals, pulleys, wheels, ball bearings, etc.
- The legs grip automatically



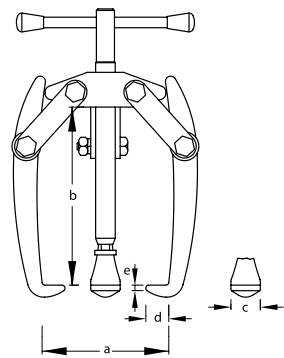
a <sub>max</sub>	b	max. t		c	d	e		Code	No.
60	40	0.5	M 10x1,5 x 60	10	5	2	0.160	8003840	1.12/02
60	60	0.5	M 10x1,5 x 80	10	5	2	0.180	8003760	1.12/01
70	80	0.5	M 10x1,5 x 100	14	8	2	0.300	1628402	1.12/00



# 1.13

## BATTERY-TERMINAL PULLER

### 3-arm pattern

- Ideal for removing small parts such as battery terminals, pulleys, wheels, ball bearings, etc.
- The legs grip automatically





a <sub>max</sub>	b	max. t		c	d	e		Code	No.
60	40	0.75	M 10x1,5 x 60	10	5	2	0.200	8004650	1.13/02
60	60	0.75	M 10x1,5 x 80	10	5	2	0.200	8004570	1.13/01
70	80	1.0	M 10x1,5 x 100	14	8	2	0.400	1628410	1.13/00

# 112

## PULLING LEG

- Complete with clips and screws

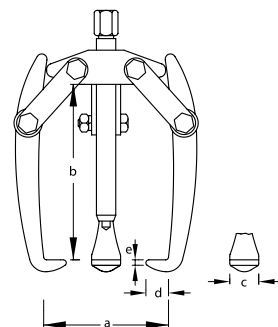






	b	c	d	e		Code	No.
1.12/02 + 1.13/02	40	10	5	2	0.050	2303132	112/02-040
1.12/01 + 1.13/01	60	10	5	2	0.050	2303140	112/01-060
1.12/00 + 1.13/00	80	14	8	2	0.100	2303159	112/00-080

## 1.12 PULLER

### 2-arm pattern

- › Handy robust model for the removal of pulleys, wheels, ball bearings, etc.
- › Inexpensive economy model
- › The legs grip automatically

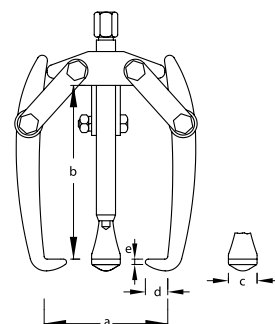






$a_{max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>70</b>	80	1.0	M 12x1,5 x 110	14	—	14	8	2	0.4	8003250	1.12/0
<b>90</b>	120	2.0	M 14x1,5 x 155	17	—	18	11	2	0.8	8003330	1.12/1
<b>130</b>	160	5.0	M 18x1,5 x 200	19	—	25	14	3	1.9	8003410	1.12/2
<b>180</b>	200	8.0	G 1/2 x 250	22	1.06/HSP1	32	20	4	3.7	8003680	1.12/3

## 1.13 PULLER

### 3-arm pattern

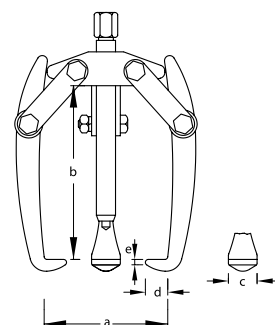
- › Handy robust model for the removal of pulleys, wheels, ball bearings, etc.
- › Inexpensive economy model
- › The legs grip automatically





$a_{max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>70</b>	80	2.0	M 12x1,5 x 110	14	—	14	8	2	0.5	8004140	1.13/0
<b>90</b>	120	3.0	M 14x1,5 x 155	17	—	18	11	2	1.5	8004220	1.13/1
<b>130</b>	160	7.5	M 18x1,5 x 200	19	—	25	14	3	2.5	8004300	1.13/2
<b>180</b>	200	12.0	G 1/2 x 250	22	1.06/HSP1	32	20	4	5.3	8004490	1.13/3

## 112 PULLING LEG

- › Complete with clips and screws



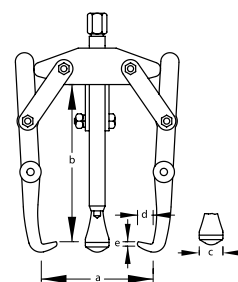
	b	c	d	e		Code	No.
<b>1.12/0 + 1.13/0</b>	80	14	8	2	0.095	2303167	112/0-080
<b>1.12/1 + 1.13/1</b>	120	18	11	2	0.205	2303175	112/1-120
<b>1.12/2 + 1.13/2</b>	160	25	14	3	0.550	2303183	112/2-160
<b>1.12/3 + 1.13/3</b>	200	32	20	4	1.070	2303191	112/3-200







## 1.14 PULLER

### 2-arm pattern

- The reliable, extra-strong model for the removal of pulleys, wheels, ball bearings, etc.
- With technical and economical benefits due to the variable clamping reach and automatic grip of the legs
- Especially suited to removing V-belt pulley wheels and flywheels mounted on longer shafts
- Upgradeable with hydraulic spindle (see table)

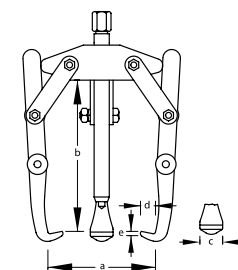






$a_{max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>90</b>	100	1.0	M 12x1,5 x 110	14	—	14	9	2.0	0.4	8004810	1.14/0
<b>130</b>	140	2.0	M 14x1,5 x 140	17	—	18	11	2.0	0.9	8005030	1.14/1
<b>200</b>	210	5.0	M 18x1,5 x 200	19	—	25	16	3.0	2.2	8005380	1.14/2
<b>250</b>	260	8.0	G 1/2 x 250	22	1.06/HSP1	32	18	3.5	4.4	8005460	1.14/3
<b>280</b>	390	8.0	G 1/2 x 250	22	1.06/HSP1	32	20	3.5	5.1	8005540	1.14/4
<b>420</b>	480	8.0	G 1/2 x 350	22	1.06/HSP1	32	20	3.5	6.0	8005620	1.14/5

## 1.15 PULLER

### 3-arm pattern

- The reliable, extra-strong model for the removal of pulleys, wheels, ball bearings, etc.
- With technical and economical benefits due to the variable clamping reach and automatic grip of the legs
- Especially suited to removing V-belt pulley wheels and flywheels mounted on longer shafts
- Upgradeable with hydraulic spindle (see table)

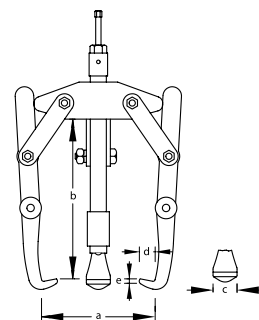





$a_{max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>90</b>	100	2.0	M 12x1,5 x 110	14	—	14	9	2.0	0.5	8006000	1.15/0
<b>130</b>	140	3.0	M 14x1,5 x 140	17	—	18	11	2.0	1.2	8006190	1.15/1
<b>200</b>	210	7.5	M 18x1,5 x 200	19	—	25	16	3.0	3.3	8006350	1.15/2
<b>250</b>	260	12.0	G 1/2 x 250	22	1.06/HSP1	32	18	3.5	6.3	8006430	1.15/3
<b>280</b>	390	12.0	G 1/2 x 250	22	1.06/HSP1	32	20	3.5	7.7	8006510	1.15/4
<b>420</b>	480	12.0	G 1/2 x 350	22	1.06/HSP1	32	20	3.5	8.9	8006780	1.15/5

## 1.15/HSP PULLER

### hydraulic, 3-arm pattern

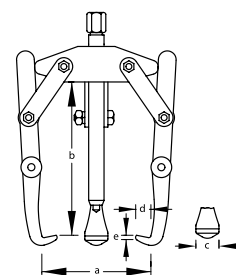
- The reliable, extra-strong model for the removal of pulleys, wheels, ball bearings, etc.
- With technical and economical benefits due to the variable clamping reach and automatic grip of the legs
- Especially suited to removing V-belt pulley wheels and flywheels mounted on longer shafts
- With the hydraulic spindle, a controlled and safe pulling action is possible at all times
- Also available with standard spindle - Model 1.15





$a_{max}$	b	max. t	max. N-m		 mm	c	d	e	 kg	Code	No.
<b>250</b>	180	10	17	1.06/HSP1	32	32	18	3.5	6.6	1392956	1.15/3-HSP1
<b>280</b>	310	10	17	1.06/HSP1	32	32	20	3.5	8.1	1392980	1.15/4-HSP1

## 114 PULLING LEG

- With variable clamping reach
- Complete with clips and screws

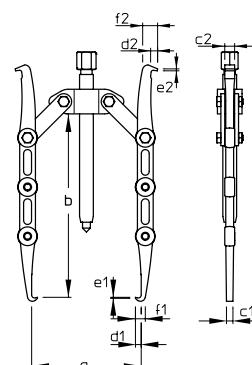
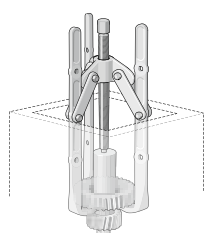





	b	c	d	e	 kg	Code	No.
<b>1.14/0 + 1.15/0</b>	100	14	9	2.0	0.100	2303213	114/0-100
<b>1.14/1 + 1.15/1</b>	140	18	11	2.0	0.250	2303221	114/1-140
<b>1.14/2 + 1.15/2</b>	210	25	16	3.0	0.750	2303248	114/2-210
<b>1.14/3 + 1.15/3</b>	260	32	18	3.5	1.470	2303256	114/3-260
<b>1.15/3-HSP1</b>							
<b>1.14/4 + 1.15/4</b>	390	32	20	3.5	1.750	2303264	114/4-390
<b>1.15/4-HSP1</b>							
<b>1.14/5 + 1.15/5</b>	480	32	20	3.5	2.150	2303272	114/5-480

## 1.14/L FAN PULLER

### 2-arm pattern

- Especially slender legs will each adjust to 3 clamping positions
- The double leg ends, wide or narrow, clamp automatically when under tension
- For use on fans with 2-holes up from Ø 10 mm

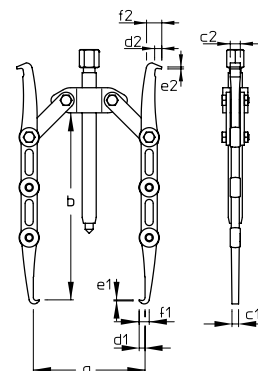
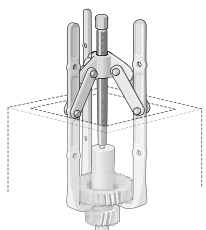





$a_{max}$	b	max. t		 mm	$c_1$	$c_2$	d	$e_1$	$e_2$	$f_1$	$f_2$	 kg	Code	No.
<b>150</b>	100-200	1.0	M 14x1,5 x 155	17	6.6	10	6	1	2	10	16.5	0.9	8005110	1.14/1L

## 1.15/L FAN PULLER

### 3-arm pattern

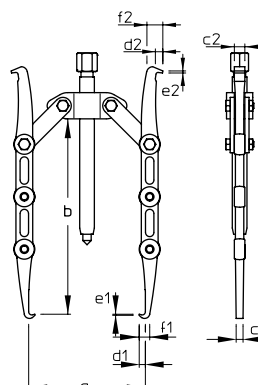
- Especially slender legs will each adjust to 3 clamping positions
- The double leg ends, wide or narrow, clamp automatically when under tension
- For use on fans with 3-holes up from Ø 10 mm





$a_{max}$	b	max. t		 mm	$c_1$	$c_2$	d	$e_1$	$e_2$	$f_1$	$f_2$		Code	No.
150	100-200	1.5	M 14x1,5 x 155	17	6.6	10	6	1	2	10	16.5	1.3	8006270	1.15/1L

## 114/L PULLING LEG

- Especially slender leg will adjust to 3 clamping positions
- Complete with 2 clips and 2 screws

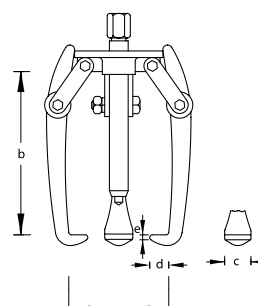






	b	$c_1$	$c_2$	d	$e_1$	$e_2$	$f_1$	$f_2$		Code	No.
1.14/1L + 1.15/1L	100 / 150 / 200	6.6	10	6	1	2	10	16.5	0.3	2303310	114/1-200-L

## 1.16 PULLER

### 2-arm pattern

- Very strong
- Made for industrial applications and for use on heavy agricultural and construction machines
- The legs grip automatically
- Upgradeable with hydraulic spindle (see table)
- Can be extended to 3 arms by additionally buying a large hook no. 116



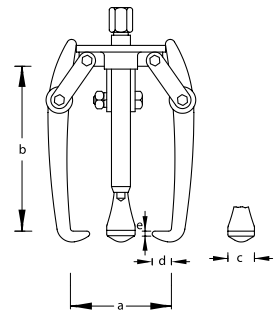
$a_{max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
300	300	8.0	G 1 x 360	36	1.06/HSP3	32	19	3.0	8.4	8007080	1.16/1
450	420	8.0	G 1 x 500	36	1.06/HSP3	32	22	3.0	10.0	8007160	1.16/2







## 1.17 PULLER

### 3-arm pattern

- > Very strong
- > Made for industrial applications and for use on heavy agricultural and construction machines
- > The legs grip automatically
- > Upgradeable with hydraulic spindle (see table)
- > For the assembly of a 2- or 3-arm puller

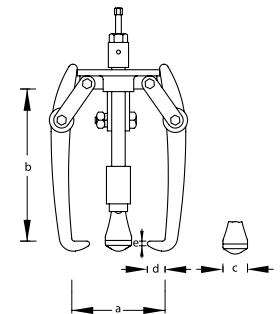





$a_{max}$	b	max. t		 mm	optional 	c	d	e	 kg	Code	No.
300	300	12.0	G 1 x 360	36	1.06/HSP3	32	19	3.0	10.5	8007320	1.17/1
450	420	12.0	G 1 x 500	36	1.06/HSP3	32	22	3.0	12.7	8007400	1.17/2

## 1.17/HSP PULLER

### hydraulic, 3-arm pattern

- > Very strong
- > Made for industrial applications and for use on heavy agricultural and construction machines
- > The legs grip automatically
- > With the hydraulic spindle, a controlled and safe pulling action is possible at all times
- > Also available with standard spindle - Model 1.17

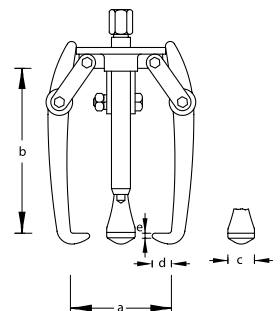




$a_{max}$	b	max. t	max. N-m		 mm	c	d	e	 kg	Code	No.
300	190	12.0	29	1.06/HSP3	41	32	19	3.0	11.4	8014290	1.17/1-HSP3
450	295	12.0	29	1.06/HSP3	41	32	22	3.0	12.6	8014370	1.17/2-HSP3



## 116 PULLING LEG

- > Very strong
- > Complete with clips and screws



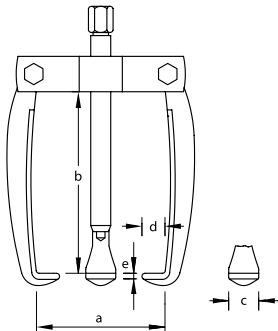
	b	c	d	e	 kg	Code	No.
1.16/1 + 1.17/1	300	32	19	3	1.8	2303280	116/1-300
1.16/1-HSP3 + 1.17/1-HSP3							
1.16/2 + 1.17/2	420	32	22	3	2.2	2303299	116/2-420
1.16/2-HSP3 + 1.17/2-HSP3							





2-/3-arm External Pullers

1.18  
PULLER

2-arm pattern

> The tried and tested range for economical bearing removal

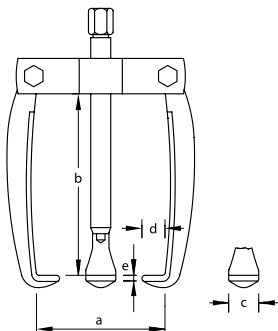






a <sub>max</sub>	b	max. t			optional 	c	d	e		Code	No.
110	110	2.0	M 14x1,5 x 163	17	—	17	18	5.0	1.0	1464965	1.18/1
160	140	3.0	M 18x1,5 x 215	19	—	21	20	6.5	2.1	1464973	1.18/2
200	200	5.0	G 1/2 x 282	22	1.06/HSP1	22	22	7.5	3.4	1464981	1.18/3

1.19  
PULLER

3-arm pattern

> The tried and tested range for economical bearing removal



a <sub>max</sub>	b	max. t			optional 	c	d	e		Code	No.
110	110	2.0	M 14x1,5 x 163	17	—	17	18	5.0	1.4	1465007	1.19/1
160	140	3.0	M 18x1,5 x 215	19	—	21	20	6.5	2.7	1465015	1.19/2
200	200	5.0	G 1/2 x 282	22	1.06/HSP1	22	22	7.5	4.5	1465023	1.19/3

1.35/1A

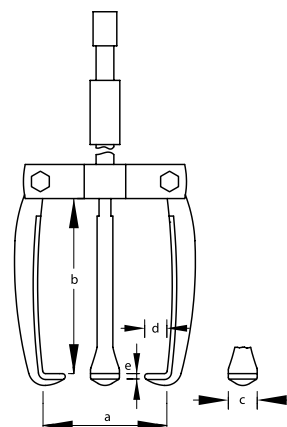



>481

## 1.19/SH

### PULLER WITH SLIDING HAMMER

- The tried and tested range for economical bearing removal, spindle not supplied
- Impact weight: 700 g



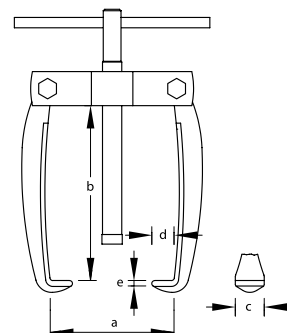
$a_{max}$	b	max. t	c	d	e		Code	No.
70	70	1.0	12	10	3.0	1.2	2178001	1.19/01-SH1A



## 1.18

### FAN PULLER

#### 2-arm pattern

- Removes bearings swiftly and cleanly
- Can also be used with sliding hammer no. 1.35/1A



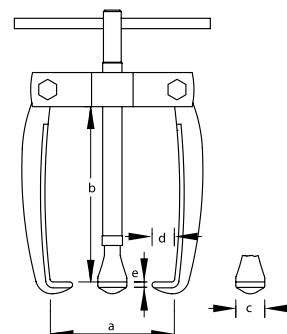
$a_{max}$	b	max. t		c	d	e		Code	No.
65	50	1.0	M 10 x 115	12	10	3.0	0.230	1656996	1.18/02
70	70	1.0	M 10 x 115	12	10	3.0	0.240	1657089	1.18/01
80	80	1.0	M 10 x 115	12	10	3.0	0.240	1656937	1.18/0



## 1.19

### FAN PULLER

#### 3-arm pattern

- Removes bearings swiftly and cleanly
- Can also be used with sliding hammer no. 1.35/1A

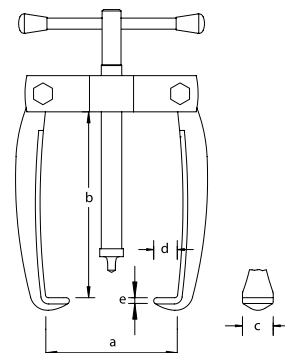


$a_{max}$	b	max. t		c	d	e		Code	No.
65	50	1.0	M 10 x 115	12	10	3.0	0.280	1657054	1.19/02
70	70	1.0	M 10 x 115	12	10	3.0	0.300	1657046	1.19/01
80	80	1.0	M 10 x 115	12	10	3.0	0.300	1657011	1.19/0

## 1.18/XS PULLER

with extra slim legs

- › Very slim forged legs
- › Ideal for use in hard-to-reach places, e.g. work on electric motors

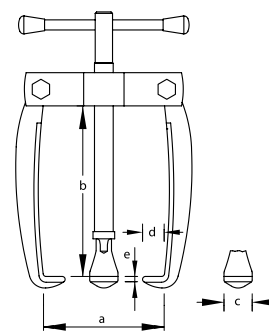


a <sub>max</sub>	b	max. t		c	d	e	s	kg	Code	No.
50	70	0.5	M 10x1,5 x 100	8	3	2	2,9	0.240	2018594	1.18/OXS

## 1.19/XS PULLER

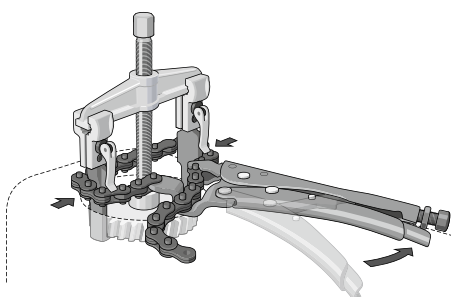
with extra slim legs

- › Very slim forged legs
- › Ideal for use in hard-to-reach places, e.g. work on electric motors



a <sub>max</sub>	b	max. t		c	d	e	s	kg	Code	No.
50	70	0.8	M 10x1,5 x 100	8	3	2	2,9	0.300	2018608	1.19/OXS

## CLAMPING YOKE



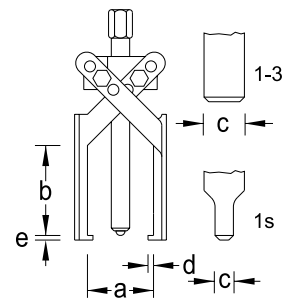
- › The clamping yokes stop the legs bending outwards under load and thus possibly slipping.
- › This can also be attained using the new GEDORE 136 K clamping chain - even with a very restricted contact surface of the legs extracting can still be done.




## Pullers with clamping yoke

### 1.23 PULLER

with slim legs

- For removing bearings in confined spaces
- The legs grip automatically
- No. 1.23/S: particularly slim legs

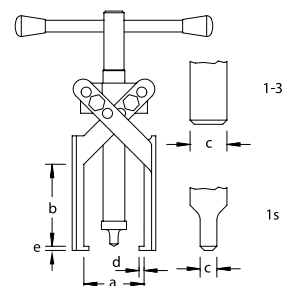


$a_{max}$	b	max. t		 mm	c	d	e		Code	No.
80	85	1.5	M 10 x 105	12	11	4	2.5	0.4	8084580	1.23/1S
80	85	2.0	M 10 x 105	12	23	4	2.5	0.4	8084310	1.23/1
120	120	3.5	M 14x1,5 x 130	17	31	5	3.5	0.8	8084660	1.23/2
120	150	3.5	M 14x1,5 x 205	17	31	5	3.5	1.1	8084740	1.23/3

### 1.23/XS PULLER

with extra slim legs

- Very slim forged legs
- Ideal for use in hard-to-reach places, e.g. work on electric motors
- The legs grip automatically



$a_{max}$	b	max. t		c	d	e	s		Code	No.
80	85	0.7	M 10x1,5 x 100	9	3.5	2	2,9	0.330	2018578	1.23/1XS

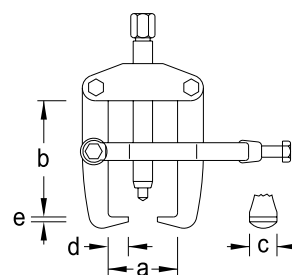






## 1.20

## PULLER

with clamping yoke

- › These pullers are mainly employed for removing car and truck steering arms
- › The clamping yoke applies firm pressure behind the part to be moved and keeps the puller firmly in the correct position



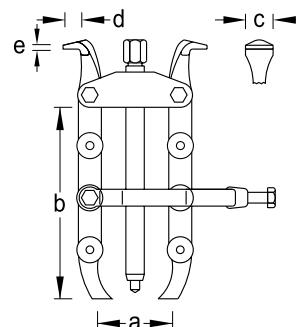
$a_{max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>90</b>	85	5.0	M 18x1,5 x 130	19	—	22	12	3.0	1.6	8008050	1.20/1
<b>90</b>	100	5.0	M 18x1,5 x 130	19	—	24	15	3.0	1.7	8008130	1.20/2
<b>150</b>	140	7.5	G 1/2 x 175	22	1.06/HSP1	30	18	3.5	3.4	8008210	1.20/3





## 1.22

## PULLER

with clamping yoke

- › Double-ended hooks
- › Particularly suitable for separating and removing flush-seated parts
- › Especially economical as it covers a range of different sizes




$a_{max}$	b	max. t		 mm	optional 	c	d	e		Code	No.
<b>110</b>	170	5.0	M 18x1,5 x 200	19	—	25	14	3.5	2.2	8009020	1.22/1
<b>160</b>	260	7.5	G 1/2 x 350	22	1.06/HSP1	25	14	3.5	4.4	8009100	1.22/2
<b>160</b>	325	7.5	G 1/2 x 350	22	1.06/HSP1	25	14	3.5	4.6	8009290	1.22/3

# Hydraulic implements

## 1.50 HYDRAULIC IMPLEMENTS

- > Suitable for pressing, straightening, lifting, bending, and pulling
- > Consisting of hydraulic hand pump no. 1.50/1 and hydraulic cylinder no. 1.51
- > Simple oil filler - can be directly used




consisting of:	max. bar		Code	No.
Hydraulic hand pump 1.50/1	700	14.0	8110410	1.50/10
Hydraulic cylinder 1.51/10				
Hydraulic hand pump 1.50/1	700	15.0	8110680	1.50/11
Hydraulic cylinder 1.51/11				

## 1.50/1 HYDRAULIC HAND PUMP

- > Complete with 1.50 m high-pressure hose
- > To fit hydraulic cylinder 1.51
- > Incl. fitting and dust cover
- > Simple oil filler - can be directly used



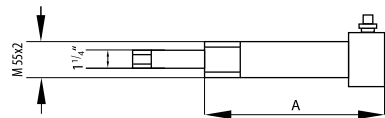
for hydraulic cylinder	max. bar		Code	No.
1.51/10 1.51/11	700	8.3	8022710	1.50/1




# 1.51

## HYDRAULIC CYLINDER

- > Connection of the coupling 3/8"
- > Incl. fitting and dust cover
- > Simple oil filler - can be directly used




Stroke height	max. t	max. bar	A		Code	No.
150	10	700	275	5.0	8023440	1.51/10
230	10	700	355	6.0	8110760	1.51/11

# 1.51/V

## EXTENSION FOR 1.51/10 + 11

- > 1.51/V015 are used to protect the cylinder/piston
- > The 1.51/V045, 1.51/V125 and 1.51/V205 extensions are attached to the hydraulic cylinder using adapter 1.51/A-2



Description		Code	No.
Extension and cylinder protection, 15 mm	0.4	2065045	1.51/V015
Extension for hydraulic cylinder, 45 mm	0.5	2065053	1.51/V045
Extension for hydraulic cylinder, 125 mm	0.9	2065061	1.51/V125
Extension for hydraulic cylinder, 205 mm	1.3	2065088	1.51/V205
Adaptor for 1.51/V045 - V205	0.5	2065096	1.51/A-2

# HYDRAULIC IMPLEMENTS

- > As the puller cannot be rotated during extraction, pulling with the assistance of hydraulic aids - hydraulic implements, hydraulic spindle or hydraulic press - saves both on time and the effort needed.
- > The hydraulic implements can also be used with the 1.07/4 and 1.07/4A pullers.

5.10

>453

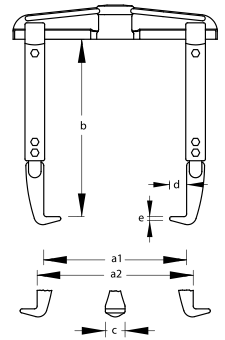



Remember the safety cover!

## 1.06/H PULLER

for hydraulic implement 1.50

- › For the fast and damage-free removal of pulleys, wheels, ball bearings, etc.
- › Robust pattern, designed for rigidity and heavy duty use
- › By reversing the legs, this tool can be used as an internal or external puller
- › The reach may be increased both by using pulling legs in special lengths, and by using extensions

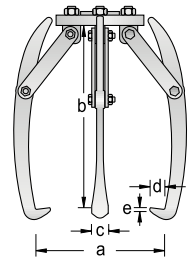



$a_1$	$a_{2 \min}$	$a_{2 \max}$	b	max. t	c	d	e		Code	No.
520	185	600	200	10.0	36	28	6.5	11.0	8112620	1.06/40

## 1.17/H PULLER

for hydraulic implement 1.50

- › Heavy-duty pattern for the removal of gear wheels, spoked wheels, pulleys, etc
- › The legs grip automatically
- › For the assembly of a 2- or 3-arm puller



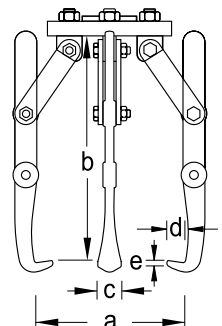
$a_{\max}$	b	max. t	c	d	e		Code	No.
300	300	12	36	19	3.5	9.1	8007590	1.17/10
425	425	12	36	22	3.5	12.4	8109670	1.17/20




## 1.15/H PULLER

for hydraulic implement 1.50

- › Heavy-duty pattern for the removal of gear wheels, spoked wheels, pulleys, etc.
- › The legs grip automatically
- › The adjustable reach means that this puller is very versatile
- › For the assembly of a 2- or 3-arm puller

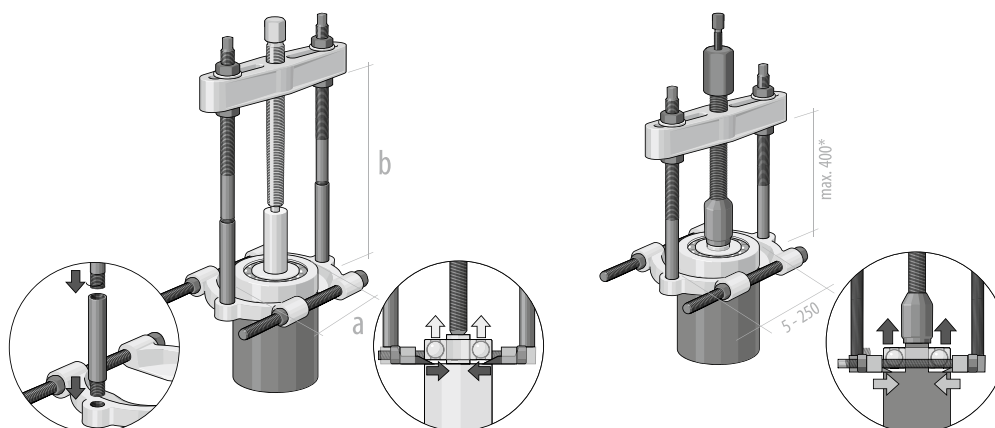


$a_{\max}$	b	max. t	c	d	e		Code	No.
250	260	12	32	18	3.5	9.0	8006860	1.15/30
280	390	12	32	20	3.5	9.2	8109590	1.15/40

## Separators

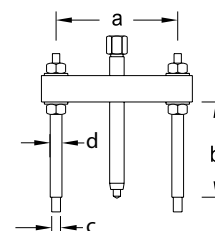
### SEPARATOR PULLERS 1.38 AND 1.40





- › GEDORE separating blades are particularly suited for removing taper roller and ball bearings, inner bearing races and other tightly-seated or thin-walled parts.
- › To remove tightly-seated parts, the sharp edges of the separator blades are pressed behind the part to be removed which is then withdrawn using the correct 1.38 separator puller.
- › To avoid damage to delicate parts, the flat surfaces of the separator blades are used. This produces a large contact surface that prevents tilting.
- › The clamping reach can be enlarged with the aid of the 1.38/AV - FV tension bolt extensions.



### 1.38 SEPARATOR PULLER

- › These separator pullers are used together with the bearing separators 1.40
- › The tension bolts are screwed into the threaded holes in the bearing separators



a	b	for separator		 mm	optional 	C / D		Code	No.
<b>40-120</b>	125	1.40/0	M 14 x 120	17	—	M10 / M12x1,5	1.0	8017550	1.38/0
<b>60-165</b>	180	1.40/1	M 18 x 170	19	—	M10 / M14x1,5	1.1	8017630	1.38/1
<b>70-215</b>	195	1.40/2	G 1/2 x 210	22	1.06/HSP1	M14x1,5 / M16x1,5	3.4	8017710	1.38/2
<b>90-300</b>	205	1.40/3	G 3/4 x 280	27	1.06/HSP2	M18x1,5 / M20x1,5	6.5	8017980	1.38/3
<b>125-380</b>	275	1.40/4	G 1 x 310	36	1.06/HSP3	M22x1,5 / M24x1,5	11.6	8018010	1.38/4
<b>140-440</b>	320	1.40/5	G 1 x 360	36	1.06/HSP3	M24x1,5 / M26x1,5	16.6	8018280	1.38/5

## 1.38/V EXTENSION ROD

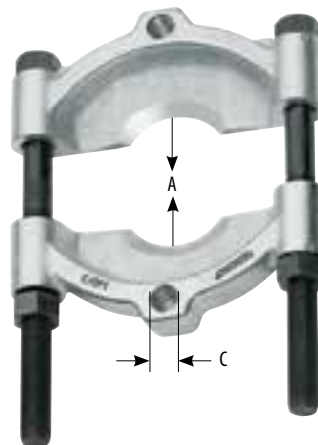
› Extension rods for separator pullers 1.38



for separator	C	l mm	kg	Code	No.
<b>1.38/0 1.38/1</b>	M10	100	0.3	8018440	1.38/AV
<b>1.38/2</b>	M14x1,5	100	0.3	8018520	1.38/CV
<b>1.38/3</b>	M18x1,5	100	0.6	8018600	1.38/DV
<b>1.38/4</b>	M22x1,5	200	2.1	8018790	1.38/EV
<b>1.38/5</b>	M24x1,5	200	2.7	8018870	1.38/FV

## 1.40 SEPARATOR

- › For removing taper roller and ball bearings, inner bearing races, and other tightly-seated or thin-walled parts
- › Operation: To remove tightly-seated parts, the sharp edges of the separator blades are pressed behind the part and it is then withdrawn using the correct puller no. 1.38. To avoid damage to delicate parts, the flat surfaces of the separator blades are used. This produces a large support surface that prevents deformation.



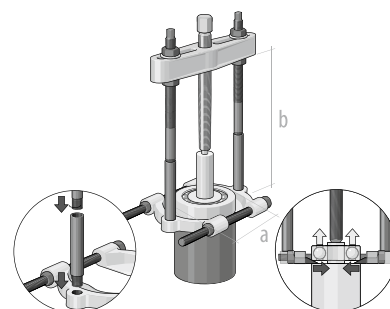
A mm	for puller	C	kg	Code	No.
<b>5-60</b>	1.38/0	M10	0.5	8019680	1.40/0
<b>12-75</b>	1.38/1	M10	0.9	8019760	1.40/1
<b>22-115</b>	1.38/2	M14x1,5	2.4	8019840	1.40/2
<b>30-155</b>	1.38/3	M18x1,5	4.7	8019920	1.40/3
<b>30-200</b>	1.38/4	M22x1,5	8.9	8020180	1.40/4
<b>30-250</b>	1.38/5	M24x1,5	15.3	8020260	1.40/5




## 1.41

### SEPARATOR AND PULLER SET

- › Set comprising separator, puller, and extension rods
- › In sheet metal case



a	b	Contents		Code	No.
<b>5-60</b>	225	1.38/0 1.38/AV 1.40/0	2.8	8109750	1.41/0
<b>12-75</b>	280	1.38/1 1.38/AV 1.40/1	5.2	8109830	1.41/1
<b>22-115</b>	295	1.38/2 1.38/CV 1.40/2	9.0	8109910	1.41/2
<b>30-155</b>	305	1.38/3 1.38/DV 1.40/3	16.0	8110090	1.41/3
<b>30-200</b>	475	1.38/4 1.38/EV 1.40/4	28.6	8110170	1.41/4

## 1100-1.41/2A

### SEPARATOR AND PULLER SET



in L-BOXX® 136


- › For clamping depths from Ø 22 to 115 mm and clamping reach up to 295 mm
- › Incl. threaded inserts for internal threads M8-M18
- › For loosening and pulling tightly-seated parts e.g. taper roller bearings and inner bearing races
- › The clamping reach can be extended with extension rods 1.38/AV-FV from 195 to 295 mm
- › 1100 CT2-1.41/2A to retrofit existing L-BOXX®es 136
- › With Check-Tool insert for quick check of completeness
- › As tools are fully sunk in the foam, the equipped insert can be stacked
- › Insert for use in drawers with min. dimensions 400 x 310 x 60 mm




1100-1.41/2A



1100 CT2-1.41/2A

	Code	No.
11.5	2927284	1100-1.41/2A
7.9	2927292	1100 CT2-1.41/2A

Description		Code	No.
Foam insert 2/2 L-BOXX 136, empty	0.200	2927306	EI-1100 CT2-1.41/2A

## Ball bearing extractors

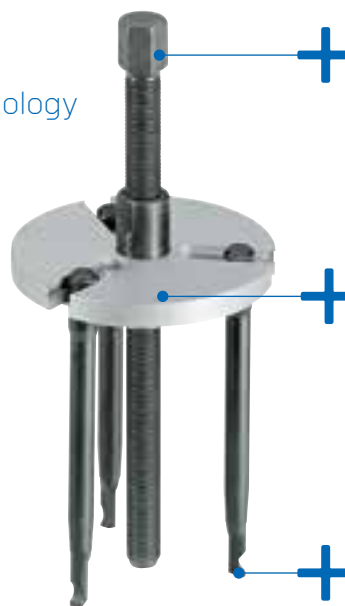
### 1.92 EXTRACTOR

Better solutions through innovative and precise technology

- > The solution for ball bearings, which are mounted on a shaft or in a housing, and thus cannot be extracted neither from the inside nor from the outside.
- > Extracting without drilling open the ball bearing! Therefore no risk of any chippings in machines.
- > In view of the different ball bearing constructions dependent on manufacturer, the table presented can only serve as an orientation guide in selecting the legs and heads.
- > The puller legs suggested in the tables are not mandatory. They only represent a recommendation based on the specifications of reputable ball bearing manufacturers.
- > **The "inner functioning" (cage, diameters of the rolling elements and their number) of a bearing is not standardized.**
- > If a hook does not fit, then choose the next larger / smaller hook.
- > Head sectioning is based on the number of rolling elements.
- > In practise this means that whilst a puller leg fits into bearing 6403 of manufacturer X, it does not with the same 6403 bearing of manufacturer Y. This is because manufacturer Y installs one ball more than manufacturer X.



left 7 balls / right 6 balls



The innovative design with its maximum level of functionality in connection with simple handling provides a PLUS in effectivity and productivity.

The top plate is easy to use. The legs are fixed in the slot.

The self-locking system guarantees 100% force transmission and the maximum safety during withdrawal

#### FIELDS OF APPLICATION

Suitable for more than 40 standard ball bearings up to 6311



### 1.92 BALL BEARING EXTRACTOR PLUS

- > Using the ball bearing extractor, the removal of shaft-mounted ball bearings in a housing is now possible without any problems
- > Due to its great degree of functionality combined with the simplified handling, this design makes a PLUS in effectiveness and productivity possible
- > This tool is easy to use: The legs are fixed in the slot
- > The self-locking arrangement means that the force applied is 100 % utilised
- > Secure at all times against slipping off - and a straight pulling force for precise working
- > Suitable for more than 40 standard ball bearings up to 6311
- > 1.92/1 for bearings: 6000-6010, 6200-6205, 6300-6304
- > 1.92/2 for bearings: 6011-6012, 6206-6212, 6305-6311, 6403-6407
- > 1.92/12 for bearings: 6000-6012, 6200-6212, 6300-6311, 6403-6407



Bearing	Leg	Head size		Code	No.
6000	1.92/10	192/1-7	2.3	1553534	1.92/1
6001	1.92/10	192/1-4			
6002	1.92/10	192/1-3			
6003	1.92/10	192/1-4			
6004	1.92/30	192/1-3			
6005	1.92/30	192/1-3			
6006	1.92/30	192/1-3			
6007	1.92/40	192/1-3			
6008	1.92/40	192/1-3			
6009	1.92/40	192/1-3			
6010	1.92/40	192/1-3			
6200	1.92/10	192/1-4			
6201	1.92/20	192/1-7			
6202	1.92/20	192/1-4			
6203	1.92/30	192/1-4			
6204	1.92/40	192/1-4			
6205	1.92/40	192/1-3			
6300	1.92/30	192/1-3			
6301	1.92/40	192/1-3			
6302	1.92/40	192/1-7			
6303	1.92/40	192/1-7			
6304	1.92/40	192/1-7			


Bearing	Leg	Head size		Code	No.
6011	1.92/50	192/2-3	5.2	1553542	1.92/2
6012	1.92/50	192/2-3			
6206	1.92/50	192/2-3			
6207	1.92/50	192/2-3			
6208	1.92/60	192/2-3			
6209	1.92/60	192/2-3			
6210	1.92/60	192/2-3			
6211	1.92/60	192/2-3			
6212	1.92/70	192/2-3			
6305	1.92/60	192/2-7			
6306	1.92/60	192/2-4			
6307	1.92/60	192/2-4			
6308	1.92/70	192/2-4			
6309	1.92/70	192/2-4			
6310**	1.92/70	192/2-4			
6311***	1.92/70	192/2-4			
6403	1.92/60	192/2-3			
6404	1.92/70	192/2-3			
6405	1.92/70	192/2-7			
6406	1.92/70	192/2-7			
6407*	1.92/60	192/2-7			
Contents of set 1.92/1 and 1.92/2			7.6	1553550	1.92/12




## 1.92

### PARTS

- Pulling legs No. 1.92/10 to 1.92/70 = set of 4 pieces
- For spindle 1.1406200: please also order adaptor 192/A-2

Description		Code	No.
<b>Leg 120 mm</b>	0.170	1583263	1.92/10
<b>Leg 125 mm</b>	0.180	1583271	1.92/20
<b>Leg 130 mm</b>	0.190	1583298	1.92/30
<b>Leg 135 mm</b>	0.200	1583301	1.92/40
<b>Leg 140 mm</b>	0.310	1583328	1.92/50
<b>Leg 145 mm</b>	0.340	1583336	1.92/60
<b>Leg 150 mm</b>	0.470	1583344	1.92/70
<b>Head small 3 slots</b>	0.170	1574485	192/1-3

Description		Code	No.
<b>Head small 4 slots</b>	0.170	1574493	192/1-4
<b>Head small 3/7 slots</b>	0.170	1574507	192/1-7
<b>Head big 3 slots</b>	0.830	1574515	192/2-3
<b>Head big 4 slots</b>	0.800	1574523	192/2-4
<b>Head big 3/7 slots</b>	0.830	1574531	192/2-7
<b>Adaptor for head big 1.92/2</b>	0.048	1574566	192/A-2
<b>Spindle small for 1.92/1</b>	0.090	1576208	1.1006170
<b>Spindle big for 1.92/2</b>	0.220	1576224	1.1406200

## 1101-1.29/1K

### BALL BEARING EXTRACTOR SET

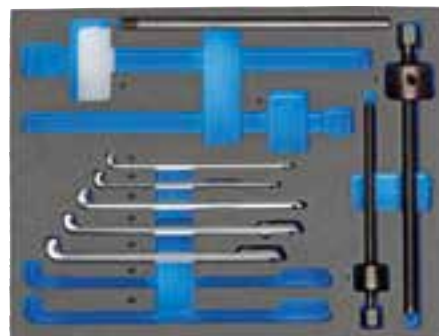


in i-BOXX® 72


- Ball bearing extractor set for more than 30 ball bearings
- For removing ball bearings that are both on a shaft and in a housing
- Non-destructive removal of deep-groove ball bearings without dismantling the shaft; no necessity to drill open the bearing cage (no chippings)
- With Check-Tool insert for quick check of completeness
- Insert for use in drawers with min. dimensions 340 x 260 x 60 mm
- In GEDORE i-BOXX® 72 No. 1101 L
- Dimensions: W 367 x D 316 x H 72 mm



1101-1.29/1K



1101 CT-1.29/1K

for ball bearing No.	Contents		Code	No.
<b>6000 6001 6002 6003 6004 6005 6006 6007 6008 6009 6010 6011 6012 6200 6201 6202 6203 6204 6205 6206 6207 6300 6301 6302 6303 6304 6305 6306 6307 6403 6404</b>	2 Heads with spindle no. 1.29/1 + 1.29/3 5 Heads with spindle no. 1.29/10 - 1.29/35 1 Handle no. 1.29/0	2.610	2963485	1101-1.29/1K
	2 Heads with spindle no. 1.29/1 + 1.29/3 5 Heads with spindle no. 1.29/10 - 1.29/35 1 Handle no. 1.29/0	1.750	2964414	1101 CT-1.29/1K

Description		Code	No.
<b>Foam insert i-BOXX 72, empty</b>	0.110	2964449	EI-1101 CT-1.29/3K



# 1101-1.29/3K

## BALL BEARING EXTRACTOR SET



in i-BOXX® 72

- > Ball bearing extractor set for more than 40 ball bearings
- > For removing ball bearings that are both on a shaft and in a housing
- > Non-destructive removal of deep-groove ball bearings without dismantling the shaft; no necessity to drill open the bearing cage (no chippings)
- > With Check-Tool insert for quick check of completeness
- > Insert for use in drawers with min. dimensions 340 x 260 x 60 mm
- > In GEDORE i-BOXX® 72 No. 1101 L
- > Dimensions: W 367 x D 316 x H 72 mm



1101-1.29/3K



1101 CT-1.29/3K

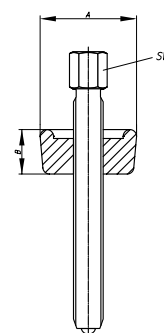
for ball bearing No.	Contents		Code	No.
6000 6001 6002 6003 6004 6005 6006 6007 6008 6009 6010 6011 6012 6200 6201 6202 6203 6204 6205 6206 6207 6208 6209 6210 6211 6212 6213 6300 6301 6302 6303 6304 6305 6306 6307 6308 6309 6310 6311 6403 6404 6405 6406 6407	4 Heads with spindle no. 1.29/1 - 1.29/5 7 Heads with spindle no. 1.29/10 - 1.29/45 1 Handle no. 1.29/0	5.780	2964392	1101-1.29/3K
	4 Heads with spindle no. 1.29/1 - 1.29/5 7 Heads with spindle no. 1.29/10 - 1.29/45 1 Handle no. 1.29/0	4.920	2964430	1101 CT-1.29/3K

Description		Code	No.
Foam insert i-BOXX 72, empty	0.110	2964449	EI-1101 CT-1.29/3K

## 1.29

### BALL BEARING EXTRACTOR

- > For removing ball bearings that are both on a shaft and in a housing
- > The legs selected using the table are inserted into the ball race, evenly distributed in the outer ring according to the number of balls
- > The support rings supplied for the ball bearings to be removed are placed on the bearings' inner races
- > The head with spindle is then placed on the centering depression of the shaft and the spindle put under tension with the legs
- > Delivery contains head and spindle. Please order suitable legs separately!



for leg	A	B		mm		Code	No.
1.29/10-35	28	20	M 10 x 160	14	0.2	8011000	1.29/1
1.29/25-40	40	28	M 14 x 210	17	0.6	8011270	1.29/3
1.29/35-45	50	30	M 18 x 230	19	0.9	8011350	1.29/4
1.29/45	65	30	M 20 x 235	22	1.9	8011430	1.29/5

# 1.29

## SET OF PULLING LEGS

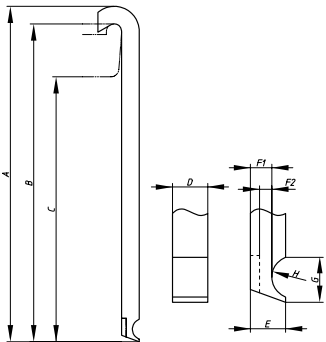
4 pieces




1.29/10 - 1.29/25



1.29/30 - 1.29/45



No.	Code	for ball bearing No.	for extractor	A	B	C	D	E	F1	F2	G	H	
1.29/10	8011510	6000 6001 6002 6003 6200	1.29/1	145	141	121	4.5	4	2,5	2,5	7.7	R4	0.062
1.29/15	8011780	6004 6005 6006 6201 6202 6300	1.29/1	145	140	120	5.7	5	3,0	3,0	8.8	R4	0.098
1.29/25	8011940	6204 6205 6301 6302	1.29/1	176	170	150	6.7	6	3,7	3,7	9.8	R4	0.172
		6007 6008 6300 6301 6302	1.29/3			142							
1.29/30	8012080	6303 6304	1.29/1	186	179	159	7.9	7	4,4-6,1	4,4	10.3	R5	0.256
		6009 6010 6011 6012 6204 6205	1.29/3			151							
		6206 6303 6304	1.29/4			149							
		6009 6010											
1.29/35	8012160	6305	1.29/1	186	178	158	9.0	8	4,8-7,3	4,8	11.8	R5	0.342
		6207 6305 6403	1.29/3			150							
		6011	1.29/4			148							
		6012	1.29/5			148							
1.29/40	8012240	6306 6307 6404	1.29/3	237	227	199	11.3	10	6,4-8,9	6,4	13.1	R6	0.646
		6208 6209 6210 6307	1.29/4			197							
1.29/45	8110250	6211 6308 6309 6405 6406 6407	1.29/4	237	227	197	11.3	10	6,1-11,6	6,1	14.7	R6	0.682
		6211 6212 6213 6309 6310 6311	1.29/5			197							

5.10

>453



Remember the safety cover!


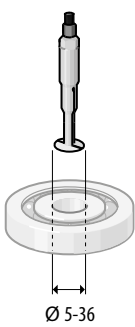
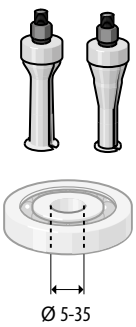
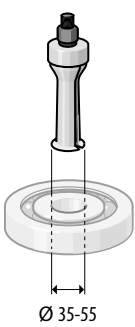
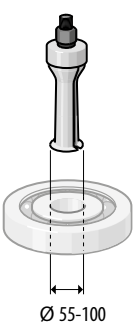
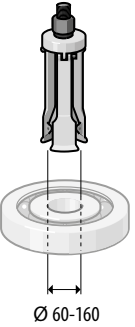

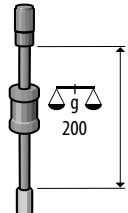




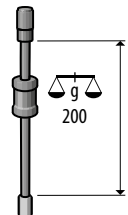




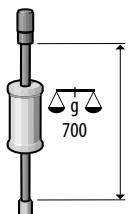




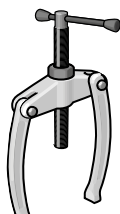
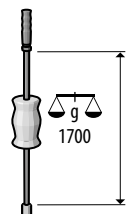






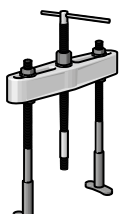
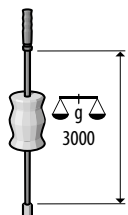



1101-1.29/3K

>60



# INTERNAL EXTRACTOR OVERVIEW

with matching counter-stays and sliding hammers

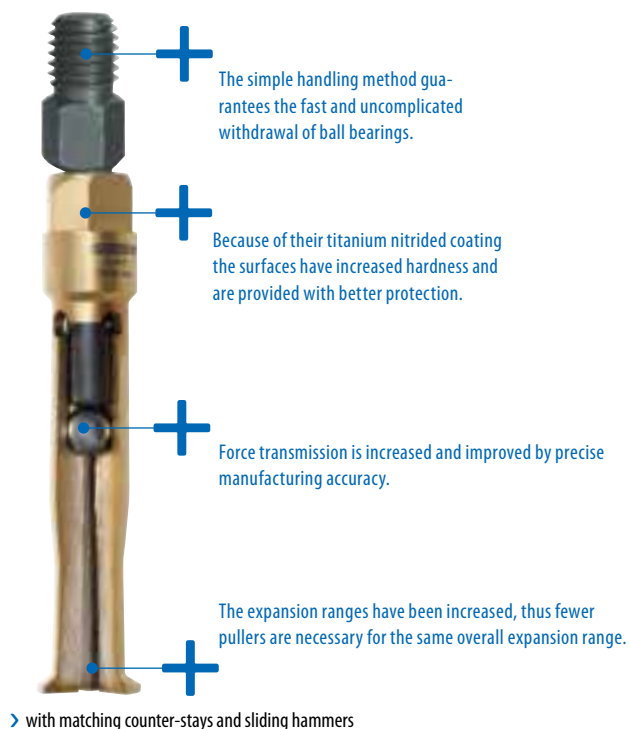
	No. 1.34/1-4	No. 1.30/0-5 No. 1.30/2N-3N	No. 1.30/6-7	No. 1.30/8-9	No. 1.30/10 No. 1.30/10N	
 ↓	 Ø 5-36	 Ø 5-35	 Ø 35-55	 Ø 55-100	 Ø 60-160	 ↓
No. 1.35/0  180	 					 No. 1.36/1
No. 1.35/1  230						 No. 1.36/2
No. 1.35/1A  230			 			 No. 1.36/3
No. 1.35/2  400			 	 		 No. 1.36/4
No. 1.35/3  500					 + Adaptor 135/325-I (Code: 1123750)	



## Internal extractors

## INTERNAL EXTRACTOR OVERVIEW

In a class of its own due to the precision manufacturing technology



## Contents:

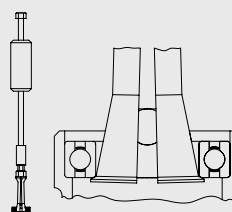
- > 1.34/10 - 5-piece internal extractor set for closely-fitting ball bearings
- > Attractive set arrangement
- > Can be used with sliding hammer or counter-support brace



## FEATURES MATERIAL

## Titanium nitrided surface

- > Harder
- > More wear-resistant
- > Better surface protection
- > More heat-resistant
- > Fine design
- > Fast compensation of temperature differences

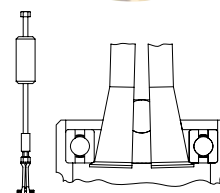
1.34/1 - 1.34/4  
INTERNAL EXTRACTOR

- > For use with sliding hammer no. 1.35/0 or counter-support brace no. 1.36/1
- > Multiple wrench size (11 + 13 mm)

1.34/10  
INTERNAL EXTRACTOR SET

## 5 pieces

- > For tightly-fitting ball bearings, bearing races, bushings and shaft seals
- > Titanium-nitrided surface
- > Multiple wrench size (11 + 13 mm)
- > M10 connecting thread
- > Operation: The internal extractor is inserted into the bearing and the spindle screwed in. The sharp turned-out shoulders of the pulling shell jaws will press outwards behind the part to be extracted. The counter-support brace or the sliding hammer is then added.
- > In plastic case



mm	M	kg	Code	No.
5,0-8,5	M10	0.040	1638556	1.34/1
8,0-15,0	M10	0.060	1638564	1.34/2
15,0-25,0	M10	0.080	1638572	1.34/3
25,0-36,0	M10	0.100	1638580	1.34/4

Contents	kg	Code	No.
1 internal extractor 5-8.5 mm, No. 1.34/1	1.3	1638629	1.34/10
1 internal extractor 8-15 mm, No. 1.34/2			
1 internal extractor 15-24 mm, No. 1.34/3			
1 internal extractor 25-36 mm, No. 1.34/4			
1 sliding hammer, No. 1.35/0			

## 1.30/O-9

### INTERNAL EXTRACTOR

- For extremely-tightly-packed ball bearings, bearing races, bushings, and shaft seals Simmering®
- Operation: The internal extractor is inserted into the bearing and the spindle screwed in. The sharp turned-out shoulders of the pulling shell jaws will press outwards behind the part to be extracted. The counter-support brace is then added. Both feet must be aligned parallel to the spindle to ensure rigidity.
- The design can vary from the image
- Can be used with either sliding hammer or counter-support brace



⌀ mm min - max	M	mm	mm	Sliding hammer	kg	Code	No.
5-8	M10	10	1.36/1	1.35/1A	0.120	8012750	1.30/0
8-12	M10	10	1.36/1	1.35/1A	0.120	8012830	1.30/1
12-15	M10	10	1.36/1	1.35/1A	0.130	8012910	1.30/2
15-19	M10	13	1.36/1	1.35/1A	0.170	8013130	1.30/3
19-25	M10	13	1.36/1	1.35/2	0.200	8013480	1.30/4
25-30	M10	13	1.36/1	1.35/2	0.300	8013560	1.30/4A
30-35	M10	13	1.36/1	1.35/2	0.400	8013640	1.30/5
35-45	M14x1,5	17	1.36/2	1.35/2	0.650	8013720	1.30/6
45-55	M14x1,5	17	1.36/2	1.35/3	0.800	8013800	1.30/7
55-70	M14x1,5	19	1.36/3	1.35/3	1.800	8013990	1.30/8
70-100	M14x1,5	27	1.36/3	1.35/3	3.050	8014020	1.30/9

## 1.30/N

### INTERNAL EXTRACTOR

with reinforced shoulder

- Especially suitable for the safe and trouble-free extraction of needle roller bearings, ball bearings and brass sleeves from crankshafts
- Note: The shoulder of the shell jaw must be applied behind the bearing



⌀ mm	M	mm	kg	Code	No.
12-14	M10	10	0.170	8013050	1.30/2N
14-19	M10	13	0.170	8013210	1.30/3N

1.35

&gt;481



1.36

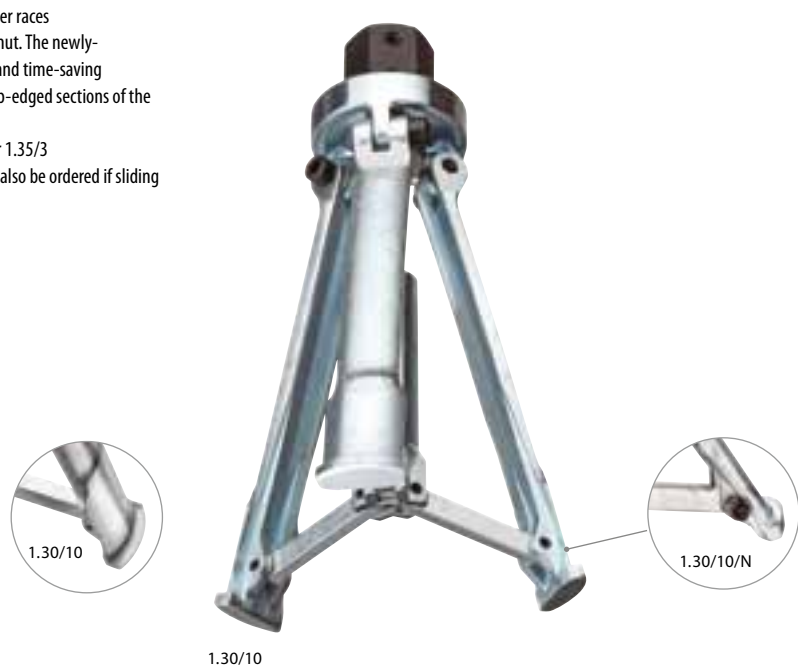
&gt;481



# 1.30/10

## INTERNAL EXTRACTOR

- › Suitable for removing large ball bearings and bearing outer races
- › Operation: The extraction jaws are spread by turning the nut. The newly-developed spreading system enables a simple, step-free and time-saving adjustment to the desired diameter to be made. The sharp-edged sections of the extraction jaws seat flush beneath when spread
- › Both internal extractors can be used with sliding hammer 1.35/3
- › Adapter 135/325-I M16x1,5 G 1/2" (Code 1123750) must also be ordered if sliding hammer 1.35/3 is used.

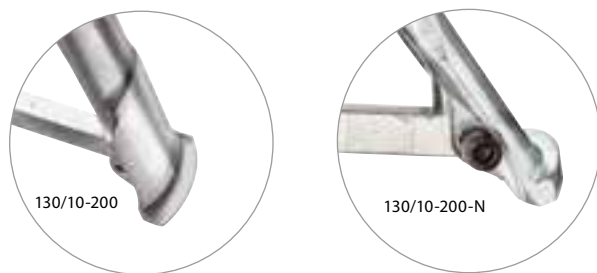


⌀ mm	M	1.36/4	1.35/3	mm	a	b	c	d	e	h1	h2	kg	Code	No.
60-160	G 1/2"	1.36/4	1.35/3	36	70	192	33	5	1	213	269	2.312	8014100	1.30/10
60-160	G 1/2"	1.36/4	1.35/3	36	70	187	33	5	6	213	269	2.312	2724804	1.30/10N

# 130/10

## SPARE LEG FOR 1.30/10

- › One spare hook including screws
- › Suitable for 1.30/10 and 1.30/10N
- › Recommendation: In case of a broken hook, all three hooks should be replaced



1.36/4	b	c	d	e	h1	kg	Code	No.
1.30/10 1.30/10N	192	33	5	1	213	0.360	2827565	130/10-200
1.30/10N 1.30/10	187	33	5	6	213	0.360	2827573	130/10-200-N




1.81

›490

## 1.35 SLIDING HAMMER

- Suited for the removal of small ball bearings since there is often not enough room for counter-support braces
- Can also be used with threaded inserts no. 1.81






for internal extractors	 M	with adaptor	 mm	mm	Sliding surface	Impact weight in g		Code	No.
1.34/1 - 1.34/4	M10	-	13	230	160	200	0.400	1958062	1.35/0
1.30/0 - 1.30/5	M10	-	13	270	200	200	0.450	8016070	1.35/1
1.34/1 - 1.34/4									
1.30/0 - 1.30/7	M10	M 14x1,5	13	270	200	700	0.950	1958070	1.35/1A
1.30/0 - 1.30/9	M 14x1,5	M10	24	520	340	1700	3.030	8039010	1.35/2
1.30/6 - 1.30/10	M 14x1,5	-	24	620	440	3000	4.200	1958089	1.35/3

## 1.36 COUNTER-SUPPORT BRACE

- Operation: The counter-support brace is placed on the housing and the spindle screwed onto the spindle of the internal extractor. The toggle is held firmly, and the bearing extracted by tightening the nut.



for internal extractors	 M	 mm		Code	No.
1.30/0 - 1.30/5	M10	27	0.750	8016580	1.36/1
1.34/1 - 1.34/4					
1.30/6 - 1.30/7	M14x1,5	32	1.650	8016660	1.36/2
1.30/8 - 1.30/9	M14x1,5	32	3.000	8016740	1.36/3
1.30/10	G 1/2"	36	7.600	8016820	1.36/4



## 1.37/2 CYLINDER LINER PULLER

complete with support brace

- Wet heavy-vehicle (e.g. Mercedes Benz, MAN) cylinder liners, automobile and stationary-engine liners, and other parts may be extracted using this puller
- Operation: The spindle of the counter-support brace is screwed into the clamping nut of the puller, and the puller inserted into the liner. The counter-support brace is placed on to the cylinder block. Due to the newly-developed spreading system, when the spindle is turned, all three jaws spread quickly and without difficulty, until they are firmly seated beneath the edge of the liner. Then the nut of the counter-support brace is tightened.



mm	M	mm	kg	Code	No.
60-160	G 1/2"	36	6.8	8017200	1.37/2

## 1100-1.30 INTERNAL EXTRACTOR SET

in L-BOXX® 136, 7 pieces

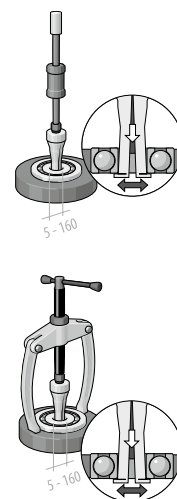
- For Ø 12 - 35 mm
- For extremely-tightly-packed ball bearings, bearing races, bushings, and shaft seals Simmering®
- Sliding hammer 1.7 kg and counter-support brace
- 1100 CT2-1.30 to retrofit existing L-BOXX®es 136
- With Check-Tool insert for quick check of completeness
- As tools are fully sunk in the foam, the equipped insert can be stacked
- Insert for use in drawers with min. dimensions 400 x 310 x 60 mm



1100 CT2-1.30



1100-1.30



Contents	kg	Code	No.	Contents	kg	Code	No.
1.30/2	7.2	2836041	1100-1.30	1.30/2	5.0	2836025	1100 CT2-1.30
1.30/3				1.30/3			
1.30/4				1.30/4			
1.30/4A				1.30/4A			
1.30/5				1.30/5			
1.36/1				1.36/1			
1.35/2				1.35/2			
+ 1100 L							

Description	kg	Code	No.
Foam insert 2/2 L-BOXX 136, empty	0.200	2836033	EI-1100 CT2-1.30

## 1.31 INTERNAL EXTRACTOR SET


- › Sets comprise the most used extractor sizes for the removal of ball bearings, bearing races, bushings, shaft seals, etc.
- › In handy sheet metal case



1.31/0



1.31/2

Contents		Code	No.
<b>4 internal extractors 12-30 mm, No. 1.30/2 /3 /4 /4A</b>	2.6	8014530	1.31/0
<b>1 counter-support brace No. 1.36/1</b>			
<b>6 internal extractors 12-46 mm, No. 1.30/2 - /6</b>	6.4	8014610	1.31/1
<b>2 counter-support braces No. 1.36/1 - /2</b>			
<b>8 internal extractors 12-70 mm, No. 1.30/2 - /8</b>	9.2	8014880	1.31/2
<b>2 counter-support braces No. 1.36/1 - /2</b>			

## 1.32 SET OF INTERNAL AND EXTERNAL EXTRACTORS

- › The handy sheet metal case comprises internal extractors, support braces, pulling chucks, external extractors and stud extractors




1.32/1




1.32/2



1.32/2

Contents		Code	No.
<b>6 internal extractors 12-46 mm No. 1.30/2 - /6</b>	10.4	8015260	1.32/1
<b>2 counter-support braces No. 1.36/1 - /2</b>			
<b>1 puller with extra slim legs No. 1.19/OXS</b>			
<b>1 battery-terminal puller No. 1.12/02</b>			
<b>1 puller, 2-arm pattern, No. 1.06/1</b>			

Contents		Code	No.
<b>8 internal extractors 12-70 mm No. 1.30/2 - /8</b>	19.0	8015340	1.32/2
<b>2 counter-support braces No. 1.36/1 - /2</b>			
<b>1 puller with extra slim legs No. 1.19/OXS</b>			
<b>1 battery-terminal puller No. 1.12/02</b>			
<b>2 pullers, 2-arm pattern, No. 1.06/1 1.06/2</b>			
<b>1 stud extractor No. 1.28/1</b>			






## Wheel-hub Pullers


### 1.60 WHEEL-HUB PULLER

for cars and trucks

- › For wheel stud circles from 80 up to 225 mm
- › Easy to use
- › Upgradeable with hydraulic spindle no. 1.06/HSP2
- › No. 1.60/H = Spare leg



No. of legs		optional 		Code	No.
3	G 3/4 x 200	1.06/HSP2	4.3	8024840	1.60/3
4	G 3/4 x 200	1.06/HSP2	4.8	8110840	1.60/4
5	G 3/4 x 200	1.06/HSP2	5.3	8024920	1.60/5




Description		Code	No.
<b>Spare leg</b>	0.5	8110920	1.60/H


### 1.61 WHEEL-HUB PULLER

for cars and trucks

- › For wheel stud circles up to 250 mm
- › With wheel stud protection using rotating nut apertures that always lie flat to the hub for Ø 22 mm and suitable reduction bushing Ø 14 and 18 mm
- › Easy to use
- › Upgradeable with hydraulic spindle no. 1.06/HSP2
- › No. 1.61/H = Spare leg



No. of legs		optional 		Code	No.
3	G 3/4 x 200	1.06/HSP2	4.6	8111060	1.61/3
4	G 3/4 x 200	1.06/HSP2	5.2	8111140	1.61/4
5	G 3/4 x 200	1.06/HSP2	5.8	8025300	1.61/5





Description		Code	No.
<b>Spare leg</b>	0.6	8111220	1.61/H


### 1.62 WHEEL-HUB PULLER

for trucks

- › For wheel stud circles from 150 up to 350 mm
- › With wheel stud protection using rotating nut apertures that always lie flat to the hub for Ø 22 mm and suitable reduction bushing Ø 14 and 18 mm
- › This tool may also be used with the hydraulic aid without requiring a reduction bushing
- › Upgradeable with hydraulic spindle no. 1.06/HSP3
- › No. 1.61/H = Spare leg



No. of legs			optional 		Code	No.
8	G 1 x 310	36	1.06/HSP3	12.6	8026030	1.62/8

Description		Code	No.
<b>Spare leg</b>	0.6	8111220	1.61/H

1.50

›467



1.06/HSP

›451



## Ball joint pullers

# BALL JOINT PULLER 1.73

Partner to rely on for your vehicle

- Using the spindle, the ball joint puller is brought up to the required clamping height.
- The set bolt applies that force needed to press out the ball joint. To withstand a load like this, the thread is rolled followed by hardening and tempering the spindle.
- Body and lever of the 1.73 ball joint puller are drop-forged from 31CrV3 tempering steel and then hardened and tempered. In this way, the two major parts acquire the needed hardness and stability.
- Article 1.73 comes in two sizes which together with their dimensions cover the most common pressure/force situations.
- Other dimensions are covered by articles 1.72 and 1.74 - the compact 1.72 can be made use of, for instance, in extremely tight spots.

## SAFETY-RELEVANT




➤ Forces amounting to several tons in weight act on the puller during the extracting operation! Drop-forged components "announce" possible overloading by bending. This is due to the fibre

course of the material during forging permitting a certain flexibility of the components ahead of fracturing - an extremely "healthy" property, in fact !

## 1.72 BALL JOINT PULLER

- For the simple and damage-free removal of ball pins on track rods and push rods





a	b	c		 mm	 kg	Code	No.
18	35	40	M 14x1,5 x 50	17	0.300	8030300	1.72/1
23	45	50	M 14x1,5 x 50	17	0.400	8030490	1.72/2
27	56	60	M 18x1,5 x 80	19	0.700	8030570	1.72/3
37	78	75	G 1/2 x 110	22	1.650	8030650	1.72/4
40	80	80	G 1/2 x 140	22	2.160	2183323	1.72/4A
46	100	90	G 3/4 x 160	27	2.780	2183331	1.72/5A

## 1.73 UNIVERSAL BALL JOINT PULLER

- For removing ball joints on cars and trucks



mm 	Clamping height	Fork depth	 kg	Code	No.
23	65	24	0.730	8030810	1.73/1
32	85	28	2.520	8033240	1.73/3


## 1.74 UNIVERSAL BALL JOINT PULLER

- For removing the ball joint journals on track rods, stabilizers, etc.
- Simple operation due to slender lower part and 2-stage lever position



1.74/1

1.74/2

mm 	Clamping height	Fork depth	 kg	Code	No.
20	12-50	35	1.370	8085200	1.74/1
20	50-80	35	1.740	8085390	1.74/2

## Oil filter hook


## 1.75/1

### OIL FILTER HOOK

3-arm pattern

- › For removing firmly seated oil filters and granulate cartridges of compressed air dryers with right-handed thread, e.g. Mercedes Benz, MAN
- › With 3/8" female square drive and adaptor 17 mm external



mm 		Code	No.
60-120	0.650	8117420	1.75/1





## 1.76/1

### CARTRIDGE SPANNER

3-arm pattern

- › Especially suitable for removing firmly seated granulate cartridges of compressed air dryers on HGV, with right-handed or left-handed thread
- › Great clamping reach (from 95 to 165 mm)
- › The GEDORE cartridge spanner is also usable as oil filter key
- › Zinc-plated
- › Drive 1/2"



mm 	" 			Code	No.
95-165	1/2	12.5	1.420	1523651	1.76/1


## Special Automotive Tools

## 1.64

### DRIVE SHAFT PULLER

- › Suitable for drive shafts with 4 or 5 apertures
- › For wheel stud circles 100-155 mm with 6 mm screws
- › For tapped holes up to max. M14
- › **Operation:** The puller is attached to the drive shaft flange using the nuts of the wheel bolts. By striking the spindle head with the sliding hammer, the shaft may be removed easily and without damage.



Ø		Code	No.
100-155	4.5	8026700	1.64/1

## 1.65

### PULLING FLANGE

heavy-duty pattern

- › For wheels and discs with tapped holes up to M16
- › The flange is fitted with slots for hole pitches of 180, 120, and 90 degrees
- › Additional holes may be drilled to render the flange suitable for other pitches and aperture diameters
- › A very sturdy model for heavy parts and the highest requirements






		Code	No.
G 1.1/4 x 270	16.0	8027000	1.65/1

## 1.66 PULLING FLANGE

- For wheels and discs with tapped holes up to M10
- The flange is fitted with slots for hole pitches of 180 and 120 degrees
- No. 1.66/1 plate and spindle without hooks
- No. 1.66/11 with one pair each of long (135 mm) and short (85 mm) hooks and a protective cap for the thread of the steering column






Clamping reach		 mm	 kg	Code	No.
35-80	M 12 x 110	14	0.7	8027510	1.66/1
35-80	M 12 x 110	14	1.1	8027780	1.66/11

## 1.67 STEERING-WHEEL PULLER for cars

- Contains 1 pair of short legs, 1 pair of long legs, and a protective cap for the thread of the steering column






Clamping reach	Leg length up to		 mm	 kg	Code	No.
35-90	135	M 14x1,5 x 150	17	0.9	8028240	1.67/1

## 1.68 STEERING-WHEEL PULLER

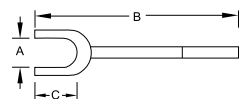
- Featuring 1 pulling ring each with 100 mm and 150 mm diameter for 3-spoke and 4-spoke steering wheels
- To protect the steering-wheels, the pulling rings are fitted with sliding rubber sleeves




Leg length		 mm	 kg	Code	No.
120	M 18 x 170	19	2.0	8028750	1.68/1

## 1.70 DISMANTLING AND ASSEMBLY FORK

- For fast removal of track rod and push rod ends, steering arms, and other steering parts
- Also suitable for removing shock absorbers and other separating and dismantling work
- The forks are suitable for use in the most confined spaces
- Hammer blows on the handle ends are used to separate the parts



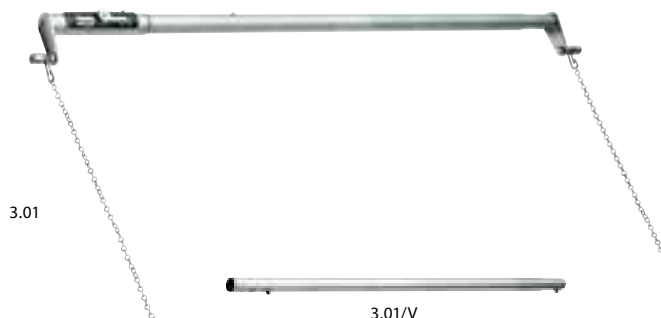
A	B	C	 kg	Code	No.
18	340	80	0.8	8029210	1.70/1
23	340	80	0.9	8029480	1.70/2
29	350	90	1.1	8029560	1.70/3
40	350	90	1.2	8029640	1.70/4
45	355	95	1.2	8085040	1.70/5




## Track alignment gauge

### 3.01 TRACK ALIGNMENT GAUGE

- For inside measurement
- With simple, telescopic length adjustment
- Immediate track-difference readings may be taken from the millimetre scale
- Extensive measurement range from 835 to 1500 mm, and with extensions up to 2100 mm
- Track difference measurable from 0-35 mm
- Notes on Use: The vehicle to be tested must be standing on level ground. The front wheels must be set for running straight ahead and have the same tyre pressure. The play in the steering linkage must be removed by pressing the front wheels apart. The track alignment gauge must be set roughly at the axle centre-line between the front tyres in such a manner that the two chain ends contact the ground. The scale is set a "0". The car is allowed to roll forward approx. one half turn of the wheel, until the chain ends again contact the ground. The track difference may then be read off on the scale.




Description	Measurement range mm		Code	No.
<b>Track alignment gauge 835-1500 mm</b>	835-1.500	1.900	8033080	3.01
<b>Extension for track alignment gauge 1500-2100 mm</b>	1.500-2.100	0.570	8033160	3.01/V

## Spring compressor

### 1.78/S SAFETY COIL SPRING COMPRESSOR

- For the safe installation and removal of coil springs with a diameter of 110-180 mm
- **Safety note:** When the spindles are tightened evenly, the clamping heads grip the coils tightly, rendering sideways slip impossible
- VPA-GS-tested safety



Clamping reach		Code	No.
<b>240</b>	2.2	8031380	1.78/S2
<b>340</b>	2.6	8031460	1.78/S3

### 1.78/P UNIVERSAL COIL SPRING COMPRESSOR

- For MacPherson suspension strut and transverse link axles with spring diameters of 110-180 mm
- The hooks are drop forged
- The wide support rests are matched to the coil spring pitch
- VPA-GS-tested safety
- PK = with plastic cap



1.78/P1



1.78/PK1



Clamping reach	max. t		Code	No.
<b>240</b>	3.5	2.6	8111300	1.78/P1
<b>240</b>	3.5	2.5	8031030	1.78/PK1

### 1.79 SPRING SPREADER

- Especially designed for VAG exhaust installations, where the pipe is not held by bolts to the exhaust manifold, but clamped on using springs





	Code	No.
<b>0.4</b>	8112540	1.79/1

### 1.91 TYRE REMOVING TOOL

- For breaking the adhesion between truck tyres and wheel rims



		Code	No.
<b>300</b>	2.0	8032270	1.91







## Accessories

### 1.26 NUT SPLITTER

- For splitting jammed or stripped nuts without damaging the bolt thread
- Suitable for nuts up to property class 6
- With chisel stopper



for nuts				Code	No.
<b>10-17 mm, M6-M10</b>	M 14x1,5 x 37	17	0.270	8009880	1.26/1
<b>17-24 mm, M10-M16</b>	M 14x1,5 x 37	17	0.300	8009610	1.26/2
<b>24-36 mm, M16-M24</b>	M 22x1,5 x 70	24	1.130	8010030	1.26/3
Description				Code	No.
<b>Spare chisel for 1.26/1 + /2</b>	0.040			2017016	1.26/M1
<b>Spare chisel for 1.26/3</b>	0.050			2017024	1.26/M3

### 1.26/HYD NUT SPLITTER

hydraulic

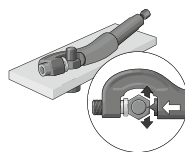
- With strong chisel, additionally induction hardened
- At the cutting edge for breakage resistance
- The chamfer at the chisel's edge improves the splitting effect and prevents breakage
- With smooth chisel function
- Channel walls rolled, thus mirror-smooth and wear resistant
- For nuts up to property class 10
- Chisel replaceable






1.26/1 HYD



1.26/2 HYD




for nuts		max. t		Code	No.
<b>7-22 mm, M4-M14</b>	12	5.0	0.800	8009450	1.26/1 HYD
<b>22-36 mm, M14-M24</b>	12	13.0	3.400	8009530	1.26/2 HYD
Description				Code	No.
<b>Spare chisel for 1.26/1 HYD</b>	0.020			2018586	1.26/M1 HYD
<b>Spare chisel for 1.26/2 HYD</b>	0.112			2043920	1.26/M2 HYD

### 1.26/K NUT SPLITTER SET

- For nuts from size 10 mm (M6) to size 36 mm (M24), including spare chisel
- With chisel stopper
- In plastic case with Check-Tool insert



Contents		Code	No.
<b>1 nut splitter 10-17 mm, M6-M10, No. 1.26/1</b>	2.460	2017008	1.26/K-3
<b>1 nut splitter 17-24 mm, M10-M16, No. 1.26/2</b>			
<b>1 nut splitter 24-36 mm, M16-M24, No. 1.26/3</b>			
<b>1 spare chisel for 1.26/1 + /2, No. 1.26/M1</b>			
<b>1 spare chisel for 1.26/3, No. 1.26/M3</b>			

### 1.28 STUD EXTRACTOR

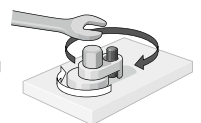
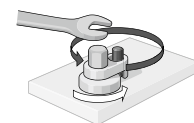
- For removing damaged studs with right-handed or left-handed thread
- Even suitable for extremely short stud ends





1.28/1 - 1.28/3



1.28/4

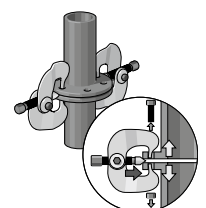



Ø-Stud			Code	No.
<b>6-13</b>	19	0.230	8010620	1.28/1
<b>8-19</b>	19	0.300	8010700	1.28/2
<b>19-25</b>	19	0.400	8010890	1.28/3
<b>5-26</b>	19	0.600	1465031	1.28/4

### 1.90 FLANGE SEPARATORS

(pair)

- For separating DIN standard flanges on pipes when changing seals and doing maintenance work
- For Ø 80-250 mm and screw threads M16-M24
- Use: Always use the separators in pairs and attach them to opposite sides of the flange. When the two spindles are turned alternately, the flanges will be separated from one another evenly. When the spindles are turned back alternately, this guarantees a perfect fitting of the flanges in their original position. Always use in pairs! Press in opposite directions at 180°!



Ø	for screw threads		Code	No.
<b>80-250</b>	M16 - M24	5.5	1596403	1.90/1

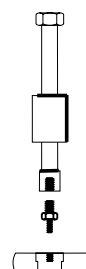




## 1.81/1 + 2



### SET OF THREADED INSERTS

for 1-hole uses

- > The threaded inserts make the removal of threaded caps, for example, possible, when these possess one threaded hole
- > No. 1.81/1: For sliding hammers 1.35/1, 1.35/2, counter-support brace 1.36/1
- > No. 1.81/2: For sliding hammers 1.35/2, 1.36/2, counter-support brace 1.36/3



Connecting thread  M		Code	No.
<b>M10 - M4</b>	0.340	1120727	1.81/1
<b>M10 - M5</b>			
<b>M10 - M6</b>			
<b>M10 - M8</b>			
<b>M10 - M10</b>			
<b>M10 - M12</b>			

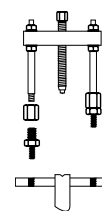
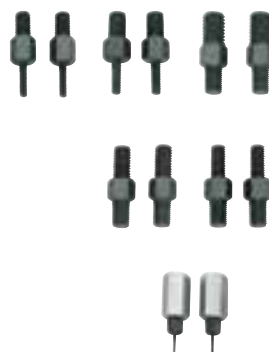
Connecting thread  M		Code	No.
<b>M14x1,5 - M8</b>	0.490	1120743	1.81/2
<b>M14x1,5 - M10</b>			
<b>M14x1,5 - M12</b>			
<b>M14x1,5 - M14</b>			
<b>M14x1,5 - M16</b>			
<b>M14x1,5 - M18</b>			



## 1.81/10 + 20



### SET OF THREADED INSERTS

for 1-hole and 2-hole uses, 2 each

- > The threaded inserts make the removal of threaded caps, for example, possible, when these possess one or two threaded holes
- > No. 1.81/10: For separator puller 1.38/0, 1.38/1
- > No. 1.81/20: For separator puller 1.38/2



Connecting thread  M		Code	No.
<b>M10 - M4</b>	0.670	1120735	1.81/10
<b>M10 - M5</b>			
<b>M10 - M6</b>			
<b>M10 - M8</b>			
<b>M10 - M10</b>			
<b>M10 - M12</b>			

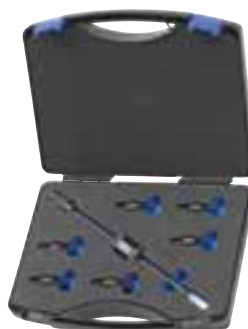
Connecting thread  M		Code	No.
<b>M14x1,5 - M8</b>	1.222	1120751	1.81/20
<b>M14x1,5 - M10</b>			
<b>M14x1,5 - M12</b>			
<b>M14x1,5 - M14</b>			
<b>M14x1,5 - M16</b>			
<b>M14x1,5 - M18</b>			

## 1.81/K

### SET OF THREADED INSERTS

for 1-hole uses

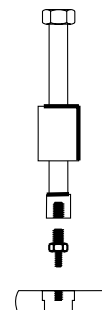
- > The threaded inserts make the removal of threaded caps, for example, possible, when these possess one threaded hole
- > No. 1.81/K-1: With sliding hammer 1.35/1, rod 230 mm and impact weight 200 g
- > No. 1.81/K-12: With sliding hammer 1.35/1A, rod 230 mm and impact weight 700 g, adaptor M14x1,5
- > In robust plastic case, 275 x 229 x 83 mm







1.81/K-1



1.81/K-12



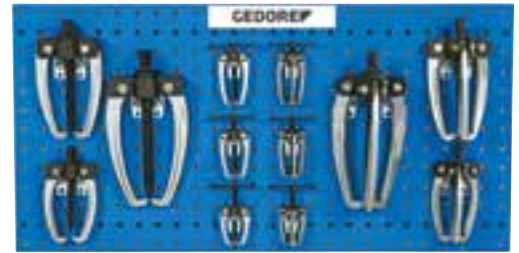
Connecting thread  M		Code	No.
<b>M10 - M4</b>	1.000	1936549	1.81/K-1
<b>M10 - M5</b>			
<b>M10 - M6</b>			
<b>M10 - M8</b>			
<b>M10 - M10</b>			
<b>M10 - M12</b>			

Connecting thread  M		Code	No.
<b>M10 - M4</b>	1.830	1936557	1.81/K-12
<b>M10 - M5</b>			
<b>M10 - M6</b>			
<b>M10 - M8</b>			
<b>M10 - M10</b>			
<b>M10 - M12</b>			
<b>M14x1,5 - M14</b>			
<b>M14x1,5 - M16</b>			
<b>M14x1,5 - M18</b>			

## Add-on systems

### 1.18/1.19 PULLER SET

- This perforated panel offers place for 12 pullers of the series 1.18 and 1.19
- For clamping depths up to Ø 200 mm and clamping reach up to 200 mm
- Delivery includes perforated panel




Contents			Code	No.
<b>2-arm Puller</b>	<b>2-arm-Fan puller</b>	21.0	1824007	1.18/1.19
1.18/1 1.18/2 1.18/3	1.18/0 1.18/01 1.18/02			
<b>3-arm Puller</b>	<b>3-arm Fan puller</b>			
1.19/1 1.19/2 1.19/3	1.19/0 1.19/01 1.19/02			

### 2.10 AUTOMOBILE WORKSHOP SET

#### Add-on system

- 2- and 3-arm puller set
- Clearly arranged module system
- Everything at hand on perforated wall-board

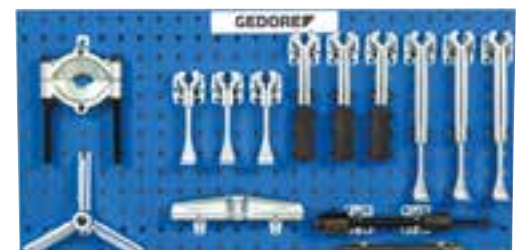



Contents			Code	No.
<b>1 cross-beam, 2-arm pattern 140 mm, No. 106/103</b>	<b>1 battery-terminal puller, 2-arm pattern 60x40 mm, No. 1.12/02</b>	13.3	1088696	2.10
<b>1 cross-beam, 3-arm pattern 140 mm, No. 107/103</b>	<b>1 nut splitter 17-24 mm, M10-M16, No. 1.26/2</b>			
<b>1 spindle 17 mm, M14x1.5, 140 mm, No. 1.1406140</b>	<b>1 stud extractor 8-19 mm, No. 1.28/2</b>			
<b>3 pulling legs 100 mm, No. 106/A-100-N</b>	<b>1 dismantling and assembly fork 23 mm, No. 1.70/2</b>			
<b>3 pulling legs slim pattern 100 mm, No. 106/A-100-S</b>	<b>1 universal ball joint puller 65x23 mm, No. 1.73/1</b>			
	<b>1 oil filter hook 3-arm pattern 60-120 mm, No. 1.75/1</b>			

### 2.20 TRUCK WORKSHOP SET

#### Add-on system

- 2- and 3-arm puller set incl. separator
- Clearly arranged module system
- For clamping depths up to Ø 200 mm external, Ø 260 mm internal, and clamping reach up to 300 mm
- With this set, you will be able to assemble 12 of the usual versions including hydraulic spindle, in seconds
- 2-arm cross-beams with scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- Everything at hand on perforated wall-board



Contents			Code	No.	No.
<b>1 cross-beam, 2-arm pattern 260 mm, No. 106/2A03</b>	<b>3 pulling legs 150 mm, No. 106/B-150-N</b>	23,3	1088718	2.20	
<b>1 cross-beam, 3-arm pattern 260 mm, No. 107/2A03</b>	<b>3 pulling legs slim pattern 220 mm, No. 106/B-220-S</b>				
<b>1 spindle 22 mm, G 1/2", 210 mm, No. 1.2106210</b>	<b>3 pulling legs slim pattern 220 mm, No. 106/B-220-S</b>				
<b>1 hydraulic pressure spindle 10 t, No. 1.06/HSP1</b>	<b>1 bearing separator 22-115 mm, No. 1.40/2</b>				



# MANUFACTURING PROCESS OF A 2-ARM 1.06 PULLER

## CROSS-BEAM

**1**  
**Blank**  
from hard and tempered steel cut from the bar.



**2**  
**"Pre-upsetting"**  
Mighty hammer blows drop-forge the cut-to-length forging into the hot "pre-form".



**3**  
**Rough-forging**  
Powerful drop-hammer blows contour the cross-beam in the first die-sinking.



**4**  
**Final forging**  
The cross-beam obtains its ultimate shape in the second die-sinking.



**5**  
**De-burring**  
Excess burr is removed under an eccentric press.



**6**  
**Forged blank**  
Ready for further processing and finishing.



**7**  
**Calibrating**  
The width of the leg guide is calibrated and sand-blasted. Important for the following operations.



**8**  
**Grinding**  
Grinding the cross-beam on all sides.



**9**  
**Milling the leg guide**  
The height of the leg guide is milled to size.



**10**  
**Drilling**  
Tapped hole is drilled.



**11**  
**Cutting**  
The thread for the spindle is cut.



**12**  
**Zinc-plating**  
Electro-galvanized for corrosion protection.



**13**  
**Stamping**  
Manufacturer and Item No. are stamped on in a permanent fashion.



**14**  
**Lasering**  
The check-tool marking is lasered.



## SPINDLE

**1**  
**Blank**  
from hard and tempered steel cut from the bar.



**2**  
**Turning + drilling**  
Turn the spindle to measure and the drill hole for the spindle tip is inserted.



**3**  
**Rolling**  
The fine thread is rolled.



**4**  
**Nitro-carburating**  
Edge-layer hardening of the thread. The spindle is toughened at the edge and thus resistant to wear. The core remains "soft" and flexible and resiliently absorbs any stresses arising.



**5**  
**Riveting**  
Either the firm spindle tip is permanently riveted or the replaceable spindle tip inserted.



In line with the requirement, we hot-form the ideal steel for each puller sub-assembly.

## CLAMPING PARTS

**1**

### Blank

Made of hard and tempered steel and cut to size from the bar.



**5**

### Hot de-burring

Still hot excess burr is removed under an eccentric press.



**8**

### Perforating

The two holes for connection with the leg are cold-holed.



**2**

### Upsetting

Mighty hammer blows drop-forged the cut-to-length forging into the hot "pre-form".



**6**

### Forged blank

Ready for further processing and finishing.



**9**

### Zinc-plating

Electro-galvanizing protects the clamping part from corrosion.



**3**

### Rough-forging

Powerful drop-hammer blows contour the clamping parts in the first die-sinking.



**7**

### Calibrating

The clamping part is calibrated and sand-blasted.



**10**

### Mounting

A pin and a screw and/or the quick-release clamp are for connecting two clamping parts to the leg.



**4**

### Final forging

The clamping parts obtain their ultimate shape in the second die-sinking.



## LEGS

**1**

### Blank

Made of 31CrV3 and cut to size from the bar.



**5**

### Drilling

The holes for the clamps are drilled.



**8**

### Sand-blasting

Sand-blasting is made use of to clean the surface before processing continues.



**2**

### Forging

Hot, drop-forged.



**6**

### Milling

Milling provides the leg base with its optimum form.



**9**

### Zinc-plating

Electro-galvanizing protects the leg from corrosion.



**3**

### De-burring

Excess burr is removed under an eccentric press.



**7**

### Tempering

A special thermal treatment involving inert gas gives the leg its extreme hardness and toughness. Hardening ensures the required hardness and the annealing which follows imparts that toughness to the legs. Hardening and annealing together are referred to as tempering.



**10**

### Pressing-in

The connecting pin for the two clamping parts is pressed in.



**4**

### Calibrating

The leg is calibrated and sand-blasted.




## 2.30

### INDUSTRIAL PULLING SET

#### Add-on system

- 2- and 3-arm puller set
- For the assembly of the tried and tested 1.06 and 1.07 versions
- For clamping depths up to Ø 200 mm external, Ø 260 mm internal, and clamping reach up to 150 mm
- 2-arm cross-beams with scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- Using this set, you will be able to assemble 12 of the usual versions with high-speed clamping legs, including hydraulic spindle, in seconds
- Everything at hand on perforated wall-board



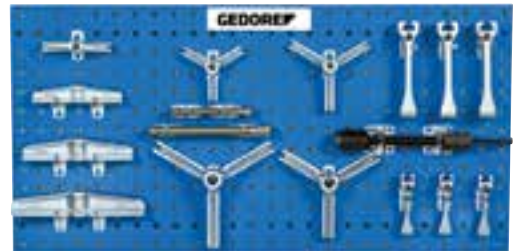
Contents			Code	No.
1 cross-beam, 2-arm pattern 140 mm, No. 106/103	1 spindle 17 mm, M14x1.5, 140 mm, No. 1.1406140	19.4	1393014	2.30
1 cross-beam, 2-arm pattern 180 mm, No. 106/1A03				
1 cross-beam, 2-arm pattern 220 mm, No. 106/203	1 spindle 22 mm, G 1/2", 210 mm, No. 1.2106210			
1 cross-beam, 2-arm pattern 260 mm, No. 106/2A03	1 hydraulic pressure spindle 10 t, No. 1.06/HSP1			
1 cross-beam, 3-arm pattern 140 mm, No. 107/103	3 quick-release pulling legs 100 mm, No. 106/A-100-E			
1 cross-beam, 3-arm pattern 180 mm, No. 107/1A03				
1 cross-beam, 3-arm pattern 220 mm, No. 107/203	3 quick-release pulling legs 150 mm, No. 106/B-150-E			
1 cross-beam, 3-arm pattern 260 mm, No. 107/2A03				


## 2.30-B

### INDUSTRIAL PULLING SET WITH LEG BRAKE

#### Add-on system

- 2- and 3-arm puller set
- For the assembly of the tried and tested 1.06 and 1.07 versions
- For clamping depths up to Ø 210 mm external as well Ø 260 mm internal, and clamping reach up to 150 mm
- With this set, you will be able to assemble 12 of the usual versions with high-speed clamping legs, including hydraulic spindle, in seconds
- 2-arm cross-beams with scale for uniform adjustment of the puller legs. Allows centred pulling, with optimised application of force, even when extremely high pulling forces are required
- Leg brake prevents unintentional leg slipping. The leg can be slid along the cross-beam at the push of a button
- Everything at hand on perforated wall-board



Contents			Code	No.
1 cross-beam, 2-arm pattern 140 mm, No. 106/103	1 spindle 17 mm, M14x1.5, 140 mm, No. 1.1406140	19.4	2017032	2.30-B
1 cross-beam, 2-arm pattern 180 mm, No. 106/1A03	1 spindle 22 mm, G 1/2", 210 mm, No. 1.2106210			
1 cross-beam, 2-arm pattern 220 mm, No. 106/203	1 hydraulic pressure spindle 10 t, No. 1.06/HSP1			
1 cross-beam, 2-arm pattern 260 mm, No. 106/2A03	3 pulling legs, all steel, leg brake 100 mm, No. 106/A-100-B			
1 cross-beam, 3-arm pattern 140 mm, No. 107/103				
1 cross-beam, 3-arm pattern 180 mm, No. 107/1A03	3 pulling legs, all steel, leg brake 150 mm, No. 106/B-150-B			
1 cross-beam, 3-arm pattern 220 mm, No. 107/203				
1 cross-beam, 3-arm pattern 260 mm, No. 107/2A03				


## 2.40

### PULLING SET FOR CONSTRUCTION MACHINES

#### Add-on system

- 2- and 3-arm puller set
- For the assembly of the robust and handy strap-pattern pulling tools 1.14 and 1.15
- For clamping depths up to Ø 280 mm and clamping reach up to 390 mm
- With this set, you will be able to assemble 10 of the usual flexible strap-pattern pulling tools from the range 1.14/1.15, including the new hydraulic spindle
- Everything at hand on perforated wall-board




Inhalt			Code	No.
1 head 2-arm pattern No. 114/204	1 hydraulic pressure spindle 10 t, No. 1.06/HSP1	24,3	1393030	2.40
1 head 2-arm pattern No. 114/304	3 pulling legs 210 mm, No. 114/201			
1 head 3-arm pattern No. 115/204	3 pulling legs 260 mm, No. 114/301			
1 head 3-arm pattern No. 115/304	3 pulling legs 390 mm, No. 114/401			
1 spindle 19 mm, M18x1.5, 200 mm, No. 1.1806200	6 straps No. 114/208			
1 spindle 22 mm, G 1/2", 250 mm, No. 1.2106250	12 straps No. 114/308			

## 2.50

### SET OF INTERNAL AND EXTERNAL EXTRACTORS

- › Suitable for various applications of external or internal extraction
- › Internal extractors for bores with  $\varnothing$  5 - 55 mm. To use in connection with sliding hammer or counter-support braces
- › External extractors with various clamping depths up to 130 mm
- › Separators and pullers incl. extension rods, ideal for removing tightly-seated or thin-walled parts for outer diameter 5 - 115 mm
- › Everything at hand on perforated wall-board



Contents	 kg	Code	No.
1 internal extractor 5-8 mm, No. 1.30/0	29.0	2017040	2.50
1 internal extractor 8-12 mm, No. 1.30/1			
1 internal extractor 12-15 mm, No. 1.30/2			
1 internal extractor 15-19 mm, No. 1.30/3			
1 internal extractor 19-25 mm, No. 1.30/4			
1 internal extractor 25-30 mm, No. 1.30/4A			
1 internal extractor 30-35 mm, No. 1.30/5			
1 internal extractor 35-45 mm, No. 1.30/6			
1 internal extractor 45-55 mm, No. 1.30/7			
1 sliding hammer 230 mm, 700 g, No. 1.35/1A			
1 sliding hammer 500 mm, 1,7 kg, No. 1.35/2			
1 counter-support brace for 1.30/0 - 1.30/5, No. 1.36/1			
1 counter-support brace for 1.30/6 - 1.30/7, No. 1.36/2			
1 universal puller HIGH POWER 2-arm pattern 130x100 mm, No. 1.04/HP1A			
1 battery-terminal puller, 3-arm pattern 70x80 mm, No. 1.13/00			
1 puller 80x85 mm, No. 1.23/15			
1 separator puller 40-120 mm, No. 1.38/0			
1 separator puller 70-215 mm, No. 1.38/2			
1 extension rod M10, No. 1.38/AV			
1 extension rod M14x1.5, No. 1.38/CV			
1 bearing separator 5-60 mm, No. 1.40/0			
1 bearing separator 22-115 mm, No. 1.40/2			

INDIVIDUAL WALL-BOARDS AVAILABLE ON REQUEST!



## SAFETY NOTES

### PULLERS

- › Read the operating instructions!
- › Use only original spare parts and accessories for your GEDORE puller. Never use worn, modified or defective spare parts or accessories.
- › Wear goggles and protective clothing when working. For added safety, use the GEDORE safety cover 5.10!
- › Before pulling, ensure that the legs are in contact with the part to be pulled and are firmly tightened so that the spindle operates centrally along the axis of the puller.
- › Attention! When using a puller, forces of up to several tons are generated! Take care to ensure that the puller is correctly positioned and is vertical to the component being pulled.
- › Do not use electric or pneumatic power or percussion drivers.

