



PULLERS



MECHANICAL 3-LEG PULLERS

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- Universal reversible 3-leg pullers **629**
- Slim-profile 3-leg pullers **632**
- High capacity 3-leg pullers **633**



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- Pullers - hg **636**
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- Tip-type pullers, cage grip **647**
- Tip-type pullers, inside grip **648**
- Spreader-type pullers, inside grip **650**

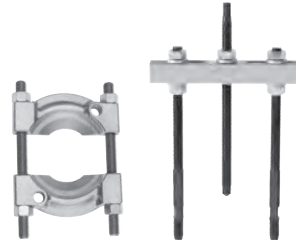


SLIDE HAMMERS

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Slide hammers

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SPARE PARTS

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SELECTION GUIDE

A choice of 90 pullers for all types of components up to 800 mm.

The right questions to ask when choosing a puller

- What type of component is to be removed ? = bearing, pulley, studs or nuts.
- What is the diameter of the component to be removed ? = choice of spread.
- How is the component to be gripped ? = choice of type of grip: outside grip, inside grip, special grip.
- How is the component to be pulled ? = choice of bearing point: on the central axis, on the outside of the component, no available bearing point (= need to use puller accessories).

| | ■ Bearings | ■ Pulleys | ■ Studs | ■ Outside grip | ■ Inside grip | | | | |
|---|-------------|-----------|---------|----------------|---------------|-----|---|---|-------------------------|
| 🔗 | Spread (mm) | | | Reach (mm) | Force T | kN | Characteristics | | Page |
| Outside grip - adjustable 2 or 3 leg pullers | | | | | | | | | |
| U.306A140 | 7 | 140 | | 147 | 3 | 30 | | | 630 |
| U.306-180 | 10 | 180 | | 200 | 4 | 40 | System U.306 - 2 or 3 legs - Inside or outside grip - Self gripping - self centring |  | 630 |
| U.306-260 | 20 | 260 | | 250 | 4 | 40 | | | 630 |
| U.310-170 | 15 | 170 | | 170 | 10 | 100 | | | 630 |
| U.310-250 | 15 | 250 | | 250 | 10 | 100 | | | 631 |
| Outside grip - 3 leg pullers | | | | | | | | | |
| U.302 | 17 | 80 | | 90 | 1,5 | 15 | Compact series slim legs |  | 632 |
| U.302-150 | 25 | 150 | | 150 | 1,5 | 15 | | | 632 |
| U.302-200 | 25 | 200 | | 200 | 2,4 | 24 | | | 632 |
| U.20 | 25 | 170 | | 160 | 7 | 70 | Force |  | 633 |
| U.20B | 25 | 260 | | 220 | 7 | 70 | | | 633 |
| U.27AS3 | 30 | | 800 | 720 | 6 | 60 | |  | 634 |
| U.320 | 100 | 360 | | 400 | 20 | 200 | Heavy duty |  | 635 |
| U.330 | 100 | 530 | | 550 | 30 | 300 | | | 635 |
| U.312H | 45 | 270 | | 260 | 10 | 100 | Heavy duty hydraulic |  | 636 |
| U.320H | 100 | 360 | | 265 | 20 | 200 | | | 638 |
| U.330H | 100 | 530 | | 395 | 30 | 300 | | | 638 |
| Inside or outside grip - 2 leg pullers | | | | | | | | | |
| U.32T2-8 | 20 | 80 | | 105 | 2 | 20 | Lockable reversible 2-leg puller |  | 641 |
| U.32T2-12 | 20 | 120 | | 105 | 2 | 20 | | | 641 |
| U.32T6-16 | 20 | 160 | | 150 | 6 | 60 | | | 641 |
| U.32T6-20 | 20 | 200 | | 150 | 6 | 60 | | | 641 |
| U.32T15-25 | 25 | 250 | | 170 | 15 | 150 | | | 641 |
| U.32T15-35 | 25 | 350 | | 270 | 15 | 150 | | | 641 |
| U.32T15-50 | 25 | 470 | | 270 | 15 | 150 | | | 641 |
| U.232-65 | 30 | 60 | | 65 | 1,5 | 15 | | | Reversible 2-leg puller |
| U.232-90 | 60 | 81 | | 100 | 3 | 30 | 643 | | |
| U.232-130 | 60 | 122 | | 100 | 3 | 30 | 643 | | |
| U.232-160 | 86 | 153 | | 145 | 4 | 40 | 643 | | |
| U.232-210 | 86 | 203 | | 145 | 4 | 40 | 643 | | |
| U.232-270 | 100 | 255 | | 190 | 5 | 50 | 643 | | |
| U.232-340 | 100 | 325 | | 190 | 5 | 50 | 643 | | |

SELECTION GUIDE

| ⇒ | Spread (mm) | Reach (mm) | Force T kN | Characteristics | Page |
|---|-------------|------------|------------|---|------|
| Outside grip - 2 leg pullers | | | | | |
| U.14A | 10 35 | 40 | - | Compact series slim legs | 643 |
| U.14L | 10 45 | 60 | - | | 643 |
| U.301 | 10 80 | 90 | 0,9 9 | | 643 |
| U.301-150 | 15 150 | 150 | 0,9 9 | | 643 |
| U.301-200 | 15 200 | 200 | 1,3 13 | | 643 |
| U.301P | 15 50 | 70 | 0,9 10 | Compact series wide legs | 645 |
| U.301M | 15 100 | 100 | 0,9 11 | | 645 |
| U.301L | 15 110 | 130 | 1,3 17 | | 645 |
| U.35P | 10 55 | 75 | 1 10 | Wide legs | 645 |
| U.35 | 15 75 | 90 | 4 40 | | 645 |
| U.35L | 15 75 | 130 | 3 30 | | 645 |
| U.34 | 40 180 | 245 | 7 70 | Slim legs with yoke | 645 |
| U.42 | 10 85 | 120 | 1,5 15 | | 646 |
| U.42B | 10 85 | 180 | 1,5 15 | | 646 |
| U.52 | 10 150 | 160 | 6 60 | | 646 |
| Pulley pulling | | | | | |
| DM.17A | 40 65 | 30 | - | Special for grooved pulleys: pitch=3.56 mm | 23 |
| DM.50 | 45 175 | 15 | - | | |
| Inside grip - adaptable 2 or 3 leg pullers | | | | | |
| U.306A130N | 23 130 | 140 | 3 30 | System U.306 | 630 |
| U.306-170N | 50 170 | 190 | 4 40 | | 630 |
| U.310-230N | 50 230 | 190 | 4 40 | | 632 |
| Special inside grip | | | | | |
| U.51B | 32 70 | - | - | | 648 |
| U.28 | 70 160 | - | - | | 649 |
| U.49P1 → U.49P9 | 6 60 | - | - | | 650 |
| U.23D5 → U.23D32 | 25 190 | 240 | - | | 647 |
| U.23D32 | 25 190 | 240 | - | | 647 |
| Stud extractors | | | | | |
| 285 | 3 50 | - | - | Flush broken studs, right-hand | 660 |
| 885 | 6 14 | - | - | Flush broken studs, right and left-hand thread | 661 |
| 286A | 5 20 | - | - | Multi-diameter tool for removing/refitting or pulling studs | 661 |
| 286A.PL | 15 27 | - | - | | |
| 287B | 6 16 | - | - | Singe-diameter tool for removing/refitting or pulling studs | 661 |
| Separators - Beams - Threaded adaptors | | | | | |
| U.53T | 5 250 | - | - | Separators | 654 |
| U.23K | 25 95 | 150 | - | Beams | 655 |
| U.53K | 40 400 | 350 | - | Beams | 655 |
| U.53E | ∅ M4-M14 | - | - | Threaded adaptors | 656 |

Slide hammers

| ⇒ | Compatible pullers | | | Page |
|-----------------|---|-------|-------|------|
| U.49L | U.49P1 → U.49P4 | M8 | 0,2 | 652 |
| U.49AM | U.49P5 → U.49P9 | Tr1/2 | 1,0 | 652 |
| U.306M | U.49P5 → U.49P9/U.35/U.35L/U.42/U.42L/U.32T2-8/U.32T2-12 | M16 | 2 | 652 |
| U.2/U.2A | U.20/U.20B/U.310-170/U.310-250/U.310-230N/U.32T6-16/U.32T6-20 | M22 | 7/9,8 | 652 |

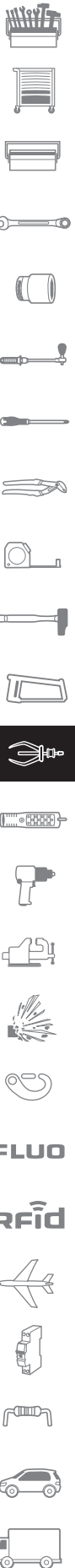
INFORMATION

The quoted pulling powers are the actual powers obtained in the laboratory under normal working conditions. All our pullers are designed to provide maximum safety and reliability.

SAFETY



As soon as access allows, use a 3-leg rather than 2-leg configuration. Check that the puller is properly aligned with the axis before applying the pulling force.



FACOM YOUR PULLER SPECIALIST

Designer and manufacturer.

A comprehensive range



Your safety: our priority.

- The design, choice of materials and optimisation of Facom's pullers ensure guaranteed safety and reliability.
- FACOM has developed a "force limiting" safety system consisting of a shear pin that fails when the maximum allowable torque is reached (series U.306/310 and U.20).



Pullers: it pays to be ready.

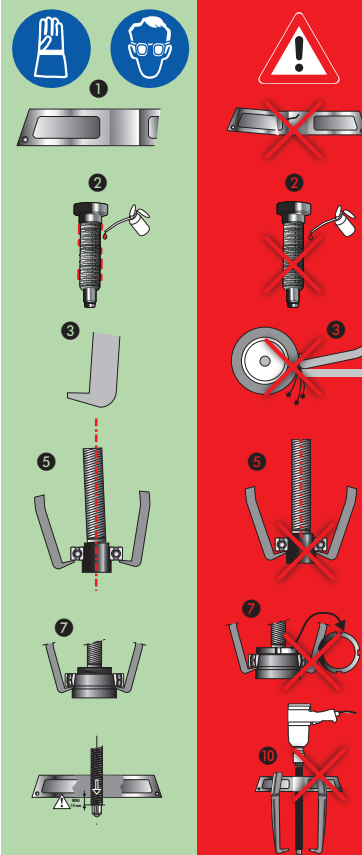
- Saves time: having the right puller readily to hand allows a speedy response in the event of a breakdown, and a quick resumption of production.
- A sound investment: when a machine breaks down, each second of lost production represents a great deal of money. A puller often pays for itself after just one use.

PULLERS: SAFETY FIRST

Facom's 10 tips

Pulling components can involve very high forces. The operation can therefore be very hazardous, which is why pullers require professional handling.

- 1 Wear eye protection and gloves (see section 15, p528).
- 2 Always ensure that a puller is in good condition and that the screw is evenly lubricated.
- 3 Never modify a puller. Do not grind or weld the legs. Modifications can be very dangerous for the user and invalidates the guarantee.
- 4 Wherever possible, select a 3-leg puller for optimum load distribution.
- 5 Position the legs carefully, making sure that the puller is straight in relation to the line of traction.
- 6 Where possible, use a net (or sheet) to cover both the puller and the part being removed, in case the assembly springs apart suddenly.
- 7 Before applying pressure, check that the component is free to move, i.e. that all brackets, pins and nuts have been removed.
- 8 Never stand behind a puller - stay to one side.
- 9 Ask any bystanders to keep their distance.
- 10 Apply pressure to the puller screw progressively. Do not use impact wrenches.

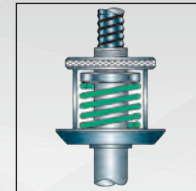


U.306/310 COVERS 80% OF COMMON APPLICATIONS



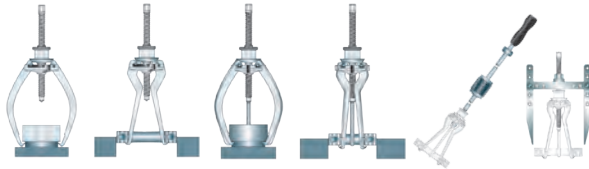
Practical, efficient, versatile

Exclusive Facom body.
Easier, safer.



VERSATILE

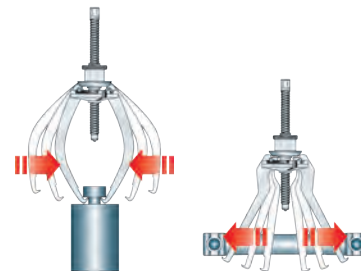
- Based on a single body, the U.306/U.310 system can be configured to perform all routine mechanical engineering pulling operations.
- Puller accessories provide a full range of pulling solutions.



Inside or outside configuration for 2 or 3-leg pullers, with or without accessories.

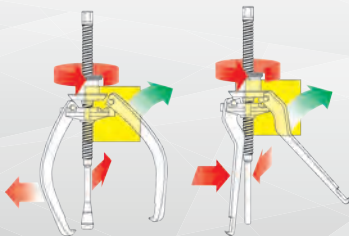
EASY TO USE

- Self-gripping.
- Self-centering.



EASY LEG CHANGE

- Compress the spring.
- Remove the leg in place and place the new desired leg.

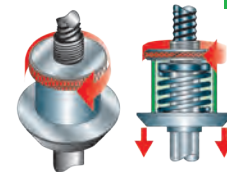


SAFETY



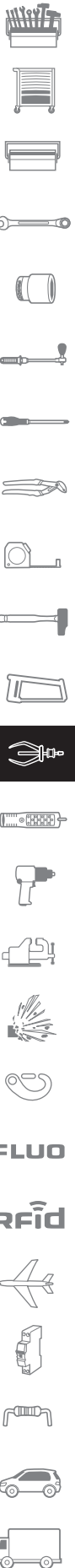
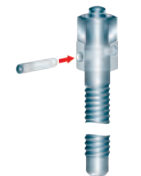
Locknut

- Tightening the locknut securely locks the legs in place.



Shear pin

- The pin shears if torque limit is exceeded.



FLUO

Rfid

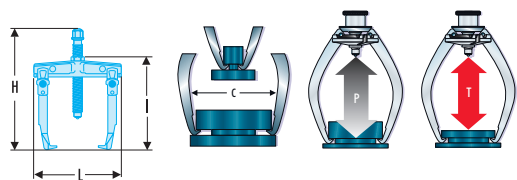


UNIVERSAL REVERSIBLE 3-LEG PULLERS

U.306 - Outside pullers



- Versatile: takes 2 or 3 legs. Converts into inside puller with the legs U.306G2 + screw U.306-4 or legs U.306G20 + screw U.306-2.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. Refer to spares table according to puller power.
- Adaptable puller accessories: slide hammer U.306M (direct attachment) and beam U.40 (attached using ring and nut U.306A1 to be ordered separately).
- The U.306-260 puller is supplied with the U.306-3 screw fitted with its extension.

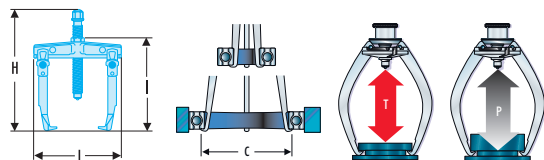


| Model | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size[mm] | $\Delta\Delta$ [kg] |
|-----------|--------------------|--------|--------|--------|-------------|----------|------------|--------|------------|----------------|---------------------|
| U.306A140 | 7 - 140 | 262 | 225 | 130 | 147 | U.306G1 | 3 | 30 | U.306-4 | 18 | 1.6 |
| U.306-180 | 50 - 170 | 320 | 185 | 135 | 200 | U.306G10 | 4 | 40 | U.306-2 | 18 | 2.2 |
| U.306-260 | 20 - 260 | 385 | 350 | 145 | 250 | U.306G15 | 4 | 40 | U.306-3 | 18 | 3.1 |

U.306N - Inside pullers



- Versatile: takes 2 or 3 legs. Converts into outside puller with the legs U.306G1 + screw U.306-4 or legs U.306G10 + screw U.306-2 or legs U.306G15 + screw U.306-3 (supplied fitted with its extension).
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. Refer to spares table according to puller power.
- Adaptable puller accessories: slide hammer U.306M (direct attachment) and beam U.40 (attached using ring and nut U.306A1 to be ordered separately).



| Model | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size[mm] | $\Delta\Delta$ [kg] |
|------------|--------------------|--------|--------|--------|-------------|----------|------------|--------|------------|----------------|---------------------|
| U.306A130N | 23 - 130 | 250 | 225 | 130 | 140 | U.306G2 | 3 | 30 | U.306-4 | 18 | 1.3 |
| U.306-170N | 50 - 170 | 320 | 285 | 135 | 190 | U.306G20 | 4 | 40 | U.306-2 | 18 | 1.8 |

Inside/outside puller kit

- Comprising:
 - 1 puller U.306A140.
 - 3 inside legs U.306G2.
 - 2 puller accessories: slide hammer U.306M and beam U.40 (attached using ring and nut U.306A1, supplied with the kit).
- Spread:
 - Outside: Ø 7 to Ø 140 mm.
 - Inside: Ø 23 to Ø 130 mm.
- Reach: 140 mm.
- Supplied in a steel case BT.102 with tray PL.209.



| | $\Delta\Delta$ [kg] |
|----------------|---------------------|
| U.306J1 | 11.3 |

Inside/outside puller kit

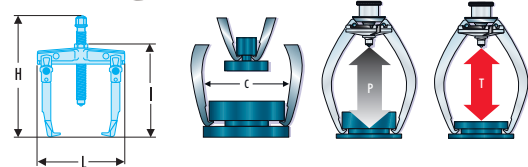
- Comprising:
 - 1 puller U.306A140.
 - 3 inside legs U.306G2.
 - 3 long-reach outside legs U.306G10.
 - Spread: outside Ø 7 to 140 mm or Ø 10 to 180 mm, inside 23 to 130 mm.
- 1 compact puller U.14L.
- Spread Ø 10 to 45 mm.
- Tray PL.354.



| | H [mm] | I [mm] | L [mm] | $\Delta\Delta$ [kg] |
|-----------------|--------|--------|--------|---------------------|
| MOD.U306 | 40 | 350 | 435 | 4.4 |

U.310 - Outside pullers

- Versatile: takes 2 or 3 legs. Converts into inside puller with the legs U.306G3 + screw U.20B1.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Adaptable puller accessories: hydraulic screw U.3 and slide hammer U.2.



| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size[mm] | $\Delta\Delta$ [kg] |
|------------------|--------------------|--------|--------|--------|-------------|---------|------------|--------|--------------|----------------|---------------------|
| U.310-170 | 15 - 170 | 365 | 300 | 143 | 170 | U.310G1 | 10 | 100 | U.20B1 | 24 | 4.6 |
| U.310-250 | 15 - 250 | 420 | 380 | 163 | 250 | U.310G2 | 10 | 100 | U.310-250-10 | 24 | 5.6 |

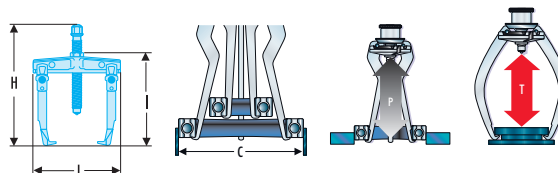


UNIVERSAL REVERSIBLE 3-LEG PULLERS

Inside puller



- Versatile: takes 2 or 3 legs. Converts into outside puller with the legs U.306G1 + screw U.20B1 or legs U.310G2 + screw U.310-250-10.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Adaptable puller accessories: hydraulic screw U.3 and slide hammer U.2.



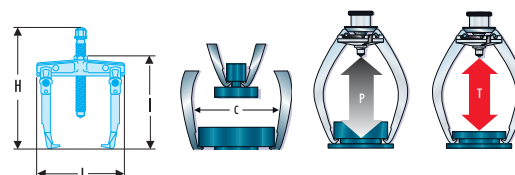
| ED | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size[mm] | ΔΔ [kg] |
|------------|--------------------|--------|--------|--------|-------------|---------|------------|--------|------------|----------------|---------|
| U.310-230N | 50 - 230 | 400 | 360 | 180 | 200 | U.310G3 | 10 | 100 | U.20B1 | 24 | 4.1 |

SLIM-PROFILE 3-LEG PULLERS

U.302 - Self-gripping outside pullers with slim legs



- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Adaptable puller accessories: slide hammer U.49AM.
 - Per tip U.301E1 (U.302 and U.302-150).
 - Per tip U.301E2 (U.302-200).

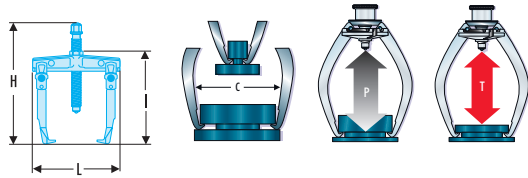


| ED | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size[mm] | ΔΔ [kg] |
|-----------|--------------------|--------|--------|--------|-------------|--------|------------|--------|--------------|----------------|---------|
| U.302 | 17 - 80 | 153 | 130 | 77 | 90 | U.301G | 1,5 | 15 | U.301-04 | 10 | 0.6 |
| U.302-150 | 25 - 150 | 222 | 206 | 90 | 150 | - | 1,5 | 15 | U.301-04-150 | 10 | 0.9 |
| U.302-200 | 25 - 200 | 300 | 270 | 105 | 200 | - | 2,4 | 24 | U.301-04-200 | 13 | 1.6 |

HIGH CAPACITY 3-LEG PULLERS

Reversible universal 2-leg pullers

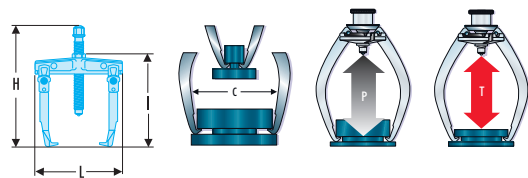
- Safety: legs locked in position on the bearing using the central nut. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. U.306-24J3.
- Fitted with the anti-rotation bush U.20-12.
- The button protects the screw when a bar is used to block puller rotation.
- Adaptable puller accessory: slide hammer U.2.



| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | ΔΔ [kg] |
|-------------|--------------------|--------|--------|--------|-------------|---------|------------|--------|------------|-----------------|---------|
| U.20 | 25 - 170 | 305 | 265 | 120 | 160 | U.20SE4 | 7 | 70 | U.20-1S | 24 | 3.5 |

Long-reach leg outside puller

- Safety: legs locked in position on the bearing using the central nut. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. U.306-24J3.
- Fitted with the anti-rotation bush U.20-12. The button protects the screw when a bar is used to block puller rotation.
- Adaptable puller accessory: slide hammer U.2.



| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | ΔΔ [kg] |
|--------------|--------------------|--------|--------|--------|-------------|----------|------------|--------|------------|-----------------|---------|
| U.20B | 25 - 260 | 370 | 325 | 125 | 220 | U.20BSE4 | 7 | 70 | U.20-B1S | 24 | 4.3 |



HIGH CAPACITY 3-LEG PULLERS

U.27AS3 ATTACHMENT OPTIONS

Long legs and links for increased versatility

U.27AS3

Fitted with standard legs and links.

- Spread: 30 to 460 mm.
- Max. reach: 360 mm.

3 x U.27D:

Fitted with long legs

- Spread: 40 to 460 mm.
- Max reach: 480 mm.

3 x U.27B:

Fitted with long links

- Spread: 50 to 800 mm.
- Max reach: 600 mm

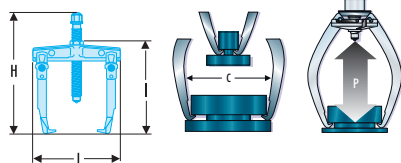
3 x U.27D

+ 3 x U.27B:
Fitted with long legs and links.

- Spread: 50 to 800 mm.
- Max reach: 720 mm.



Wide spread grip puller - 2 or 3 leg pullers

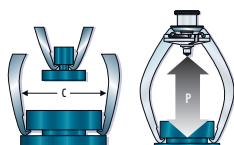


- Versatile: takes 2 or 3 legs.
- Can be fitted with long legs U.27D (order by sets of 3) and linkage system U.27B (order by sets of 3).



| | C mini - maxi [mm] | H [mm] | L [mm] | L [mm] | P [mm] | P maxi [mm] | Spare Links | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | ΔΔ [kg] |
|----------------|--------------------|--------|--------|--------|--------|-------------|-------------|-------|------------|--------|------------|-----------------|---------|
| U.27AS3 | 30 - 460 | 555 | 450 | 280 | 360 | 360 | U.27BS | U.27S | 6 | 60 | U.27-6 | 35 | 16.5 |

1 long leg for U.27AS3



- Long links designed to increase spread of puller U.27AS3 from 360 to 480 mm (order by set of 3).
- Supplied without shaft.
- Set of pins to order separately: U.27SE2.



| | C mini - maxi [mm] | P maxi [mm] | ΔΔ [kg] |
|--------------|--------------------|-------------|---------|
| U.27D | 40 - 460 | 480 | 1.5 |

1 long leg for U.27AS3

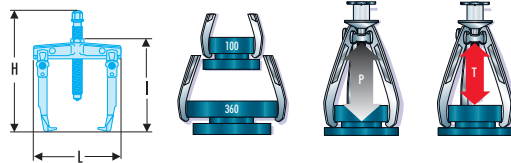
- Long links designed to increase spread of puller U.27AS3 from 460 to 800 mm (order by set of 3).
- Supplied without shaft.
- Set of pins to order separately: U.27SE2.



| | C mini - maxi [mm] | P maxi [mm] | $\Delta\Delta$ [kg] |
|--------------|--------------------|-------------|---------------------|
| U.27B | 50 - 800 | 600 | 3.2 |

High-capacity 20T outside puller

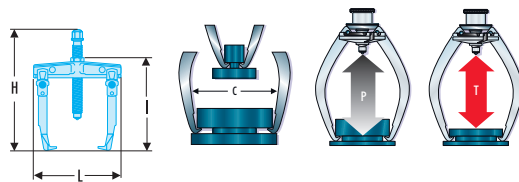
- Versatile: takes 2 or 3 legs.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- The screw is supplied with an extension: U.320-14.
- Adaptable puller accessory: hydraulic jack UWG.320. Using the jack requires the screw UWG.320-H01 and hydraulic pump UWP.10M. Mounting with 3 legs only with the hydraulic jack.



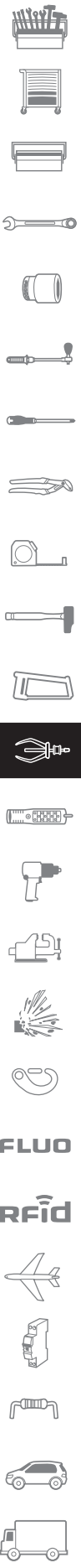
| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|--------------|--------------------|--------|--------|--------|-------------|-----------|------------|--------|------------|-----------------|---------------------|
| U.320 | 100 - 360 | 740 | 700 | 250 | 400 | U.320-13A | 20 | 200 | U.320-01 | 36 | 27.4 |

High-capacity 30T outside puller

- Versatile: takes 2 or 3 legs.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- The screw is supplied with an extension: U.330-14.
- Adaptable puller accessory: hydraulic jack UWG.330. Using the jack requires the screw UWG.330-H01 and hydraulic pump UWP.10M. Mounting with 3 legs only with the hydraulic jack.



| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|--------------|--------------------|--------|--------|--------|-------------|----------|------------|--------|------------|-----------------|---------------------|
| U.330 | 100 - 530 | 950 | 900 | 300 | 550 | U.330-08 | 30 | 300 | U.330-02 | 41 | 32.4 |



PULLERS - HG

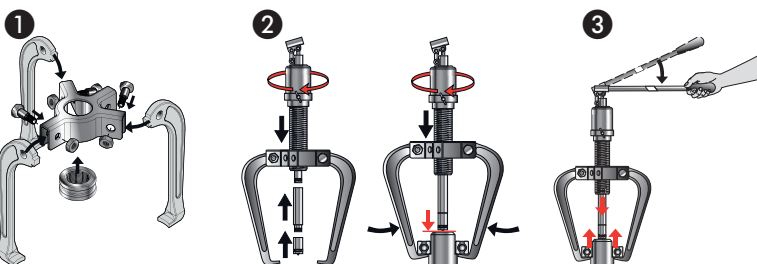
U.312H MEDIUM-DUTY HYDRAULIC PULLER



10 tonnes of effortless pulling force readily to hand

VERSATILE

Based on a single body that can be fitted with 4 different sizes of legs for bearings \varnothing 45 to 270 mm. 2 or 3-leg configurations. For light to heavy engineering applications.



- 1 Assemble the body and the correct legs for the bearing.
- 2 Position the jack and the puller. Pump the jack. The bearing will be removed safely and effortlessly.
- 3



PRACTICAL

The carry case (field servicing) dismantles for easy storage in the drawers of your FACOM JET XL, JET+ roller cabinets (workshop servicing).

SAFETY FIRST



- A safety valve hydraulically limits the jack to 10 tonnes.
- The other mechanical components can withstand much higher forces.



Hydraulic puller 10 T for outside puller - 3 sets of legs

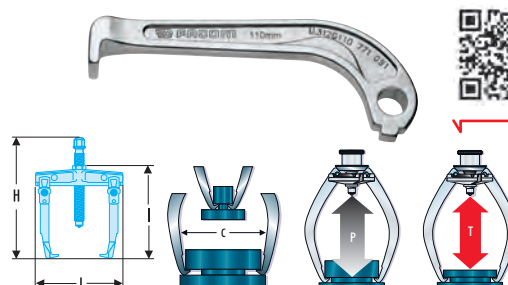
- Versatile: takes 2 or 3 legs.
- Safety: power is limited hydraulically to 10 tonnes. No risk of breakage.
- Comprising:
 - A 10-tonne hydraulic jack (100 kN) U.312-01 + and guide tip U.312-02 + set of 2 extensions U.312-03.
 - A body with 2 or 3 legs U.312-04 + centering screw U.312-04-01 + set of 3 screws/nuts U.312-04-02.
 - 3 sets of legs: U.312G160, U.312G210 and U.312G260.
- Supplied in plastic case U.312VAL.



| | H [mm] | l [mm] | L [mm] | ΔΔ [kg] |
|-----------------|--------|--------|--------|---------|
| U.312HJ3 | 105 | 412 | 565 | 13.2 |

U.312HJ3 - Mounting with legs

| | A [mm] | C mini - maxi [mm] | H [mm] | l [mm] | L [mm] | P maxi [mm] | Tonnes [t] | T [kN] | ΔΔ [kg] |
|------------------|--------|--------------------|--------|--------|--------|-------------|------------|--------|---------|
| U.312G160 | 7 | 80 - 170 | 400 | 220 | 218 | 160 | 10 | 100 | 0.6 |
| U.312G210 | 7 | 90 - 210 | 450 | 270 | 275 | 210 | 10 | 100 | 0.7 |
| U.312G260 | 7 | 110 - 270 | 492 | 312 | 330 | 260 | 10 | 100 | 1.0 |



Hydraulic puller 10 T for outside puller - 4 sets of legs

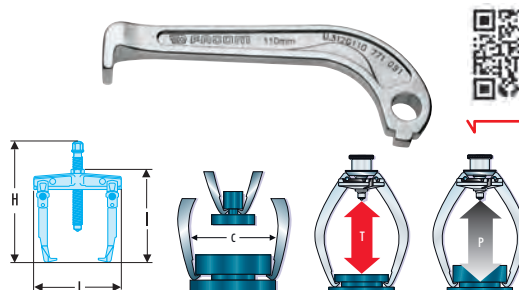
- Versatile: takes 2 or 3 legs.
- Safety: power is limited hydraulically to 10 tonnes. No risk of breakage.
- Comprising:
 - A 10-tonne hydraulic jack (100 kN) U.312-01 + and guide tip U.312-02 + set of 2 extensions U.312-03.
 - A body with 2 or 3 legs U.312-04 + centering screw U.312-04-01 + set of 3 screws/nuts U.312-04-02.
 - 4 sets of legs: U.312G110, U.312G160, U.312G210 and U.312G260.
- Supplied in plastic case U.312VAL.



| | H [mm] | l [mm] | L [mm] | ΔΔ [kg] |
|-----------------|--------|--------|--------|---------|
| U.312HJ4 | 105 | 412 | 565 | 14.4 |

U.312HJ4 - Mounting with legs

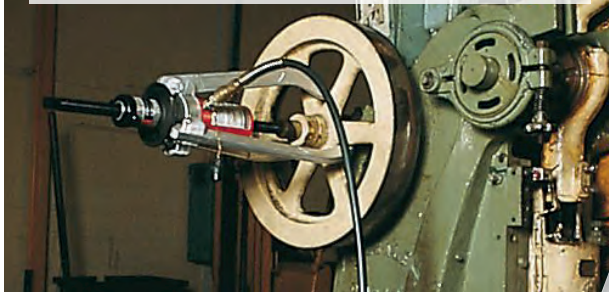
| | A [mm] | C mini - maxi [mm] | H [mm] | l [mm] | L [mm] | P maxi [mm] | Tonnes [t] | T [kN] | ΔΔ [kg] |
|------------------|--------|--------------------|--------|--------|--------|-------------|------------|--------|---------|
| U.312G110 | 7 | 45 - 85 | 355 | 175 | 155 | 110 | 10 | 100 | 0.4 |
| U.312G160 | 7 | 80 - 170 | 400 | 220 | 218 | 160 | 10 | 100 | 0.6 |
| U.312G210 | 7 | 90 - 210 | 450 | 270 | 275 | 210 | 10 | 100 | 0.7 |
| U.312G260 | 7 | 110 - 270 | 492 | 312 | 330 | 260 | 10 | 100 | 1.0 |



HYDRAULIC PULLERS

U.320H/U.330H HIGH CAPACITY HYDRAULIC PULLERS

Up to 30 tonnes in complete safety



Hydraulic models incorporate a hydraulic jack fitted with a standard male coupling. The jack is designed for pressures up to 700 bar and is supplied from a manual or powered pump.

Details of these accessories can be found under "Pumps and jacks".

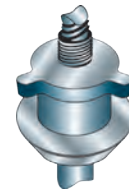


Powerful

Fluid power ensures effortless and fast removal, while the puller remains steady even when applied to rotating components. Hydraulic models are used only with 3 legs.

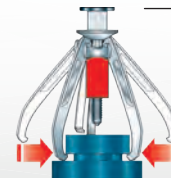
Safe

- Legs are secured with a locknut.



Automatic

- Self-centring.
- Self-gripping.



20 T hydraulic outside puller



- Comfort: self-gripping legs by return spring. The puller stays in position on the bearing even when not in tension.
- Safety: power is limited hydraulically by the pump. No risk of breakage.
- 1 hollow jack UWG.320 fitted with the screw UWG.320H01.
- Use with 700-bar pump UWP.10MA.
- Mounting with 3 legs only with the hydraulic jack.



| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Jack | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|--------|--------------------|--------|--------|--------|-------------|-----------|------------|--------|---------|------------|-----------------|---------------------|
| U.320H | 100 - 360 | 740 | 700 | 250 | 265 | U.320-13A | 20 | 200 | UWG.320 | UWG.320H01 | 21 | 48.5 |

30 T hydraulic outside puller



- Comfort: self-gripping legs by return spring. The puller stays in position on the bearing even when not in tension.
- Safety: power is limited hydraulically by the pump. No risk of breakage.
- 1 hollow jack UWG.320 fitted with the screw UWG.330H01.
- Use with 700-bar pump UWP.10MA.
- Mounting with 3 legs only with the hydraulic jack.



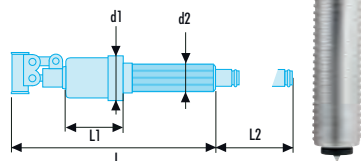
| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Jack | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|--------|--------------------|--------|--------|--------|-------------|-----------|------------|--------|---------|------------|-----------------|---------------------|
| U.330H | 100 - 530 | 950 | 900 | 300 | 395 | U.330-08A | 30 | 300 | UWG.330 | UWG.330H01 | 24 | 55.6 |

HYDRAULIC JACKS AND PUMPS

10T hydraulic jack for U.312H

- Hydraulic jack: power 10 tonnes (100 kN).
- Beam travel: 80 mm.
- Use with hydraulic puller U.312H in kits U.312HJ3 and U.312HJ4.
- Supplied with guide bit U.312-02.

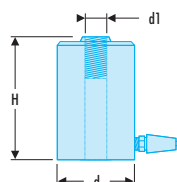
| | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | L2 [mm] | ΔΔ [kg] |
|-----------------|---------|---------|--------|---------|---------|---------|
| U.312-01 | 61 | 42 | 325 | 83 | 80 | 2.3 |



UWG - 20T and 30T hollow jacks for U.320H, U.330H

- These jacks are intended for hydraulic pullers U.320H and U.330H in replacement or option on manual pullers U.320 and U.330 using special screws UWG.320H01 and UWG.330H01.
- They are fitted with through taps receiving a central screw to work in pushing or traction.
- Jacks activated with 700-bar pump UWP.10MA.
- The use in jack function is possible.

| | d [mm] | d1 [mm] | H [mm] | Oil Capacity [cm³] | Travel [N.m] | Rating [kN] | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | ΔΔ [kg] |
|----------------|--------|---------|--------|--------------------|--------------|-------------|------------|--------|------------|-----------------|---------|
| UWG.320 | 100 | 23,8 | 160 | 141,5 | 50 | 200 | 20 | 200 | UWG.320H01 | 21 | 8.0 |
| UWG.330 | 115 | 29,0 | 177 | 257,4 | 60 | 300 | 30 | 300 | UWG.330H01 | 24 | 10.0 |



Screws for UWG jack

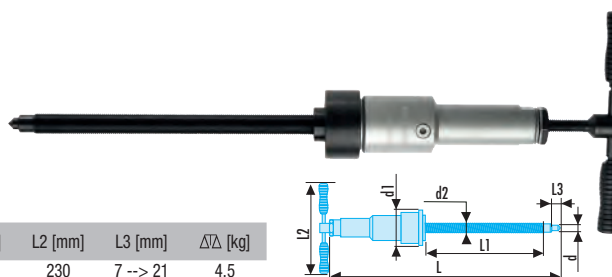
| | d [mm] | L [mm] | Jack | Screw Size [mm] | ΔΔ [kg] |
|-------------------|-----------|--------|---------|-----------------|---------|
| UWG.320H01 | M27 x 3,0 | 590 | UWG.320 | 21 | 2.3 |
| UWG.330H01 | M33 x 3,5 | 780 | UWG.330 | 24 | 4.5 |



10 T hydraulic screw

- Power: 10 tonnes (100 kN).
- Length of the threaded screw: 300 mm.
- Travel of the pusher bit: 14 mm.
- M22 x 2.0 thread compatible with puller U.310.

| | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | ΔΔ [kg] |
|------------|--------|---------|-----------|--------|---------|---------|----------|---------|
| U.3 | 14 | 70 | M22 x 2,0 | 555 | 300 | 230 | 7 --> 21 | 4.5 |



2-speed hydraulic hand pump

- Manual pump with pressure gauge and relief valve, giving 2 flow rates:
 - 1st stage: high flow, max pressure: 50 bar.
 - 2nd stage: low flow, max pressure: 700 bar.
- Use with pullers U.320H, U.330H and hollow cylinders UWG.320, UWG.330.
- Oil capacity: 1500 to 2500 cm³.
- Supplied with a 1.80 m hose with a female quick coupler WA.1166F.
- Size: 450 x 170 x 160 mm.

| | l [mm] | L [mm] | ΔΔ [kg] |
|-----------------|--------|--------|---------|
| UWP.10MA | 170 | 450 | 12.5 |

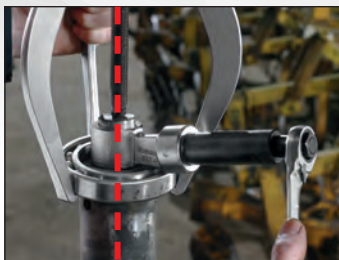


HYDRAULIC JACKS AND PUMPS

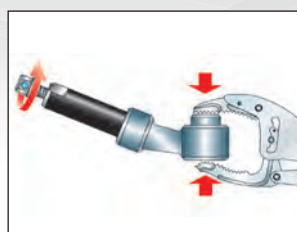
U.33A/U.66A HYDRAULIC JACKS

Hydraulically-assisted pulling action

Used in conjunction with mechanical pullers, hydraulic jacks help separate the fittings to be removed.



- Place the jack between the component and the puller's screw.
- Centre the loads.
- Apply pressure axially.



Plunger retraction

- Back off screw to release pressure.
- Use pliers or clamp to push back plunger.



- Hold the puller while tightening the screw to allow the plunger to extend.
- The bearing is removed

SAFETY FIRST




- During screw tightening, a safety pin will shear if the maximum allowable torque is exceeded.
- When using both puller and jack, make sure generated forces are compatible.
- Never use pneumatic tools.

■ Mechanical screw 30-tonne jack



- Piston travel: 5 mm.
- Pin shearing at 110 N.m.
- Supplied with 3 spare pins, and 2 shims 25 and 50 mm high (Ø 40 mm).
- Set of 3 spare pins: U.33GJ3.
- Set of 2 spare blocks: U.33-EMB.
- Piston Ø: 33 mm.
- Length: 260 mm; head height: 35 mm.
- Power: 30 tonnes; 300 kN.
- 6-point screw size 19 mm.



| Icon | L [mm] | ΔΔ [kg] |
|---|--------|---------|
|  | 260 | 2.0 |

U.33A

■ Mechanical screw 120-tonne jack



- Piston travel: 15 mm.
- Pin shearing at 550 N.m.
- Piston Ø: 80 mm; borehole Ø: 47 mm.
- Length: 500 mm; head height: 105 mm.
- Power: 120 tonnes; 1200 kN.
- 6-point screw size 36 mm.
- Supplied with 3 spare pins.
- Set of 3 spare pins: U.66A03J3.

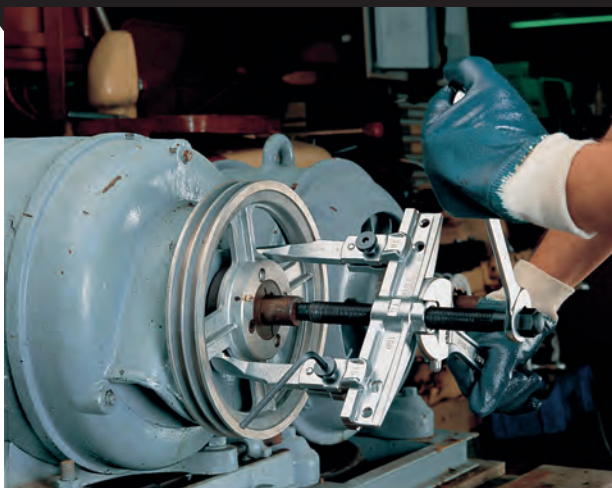


| Icon | L [mm] | ΔΔ [kg] |
|---|--------|---------|
|  | 500 | 9.0 |

U.66A

REVERSIBLE UNIVERSAL 2-LEG PULLERS

U.32T LOCKABLE 2-LEG PULLER



High performance puller

For inside and outside puller applications. Inside and outside puller spread in millimeters.

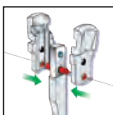


SAFETY FIRST



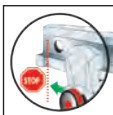
Pins

- Leg-mounting pins ensure easy and safe fixing to beam. Pins are treated to withstand pulling stresses.



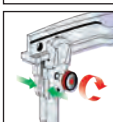
Leg retainer

- Beam end-stop prevents legs sliding off.



Knurled locknut

- Leg assembly locks in any position by hand-tightening the knurled locknut.



Rotation prevention

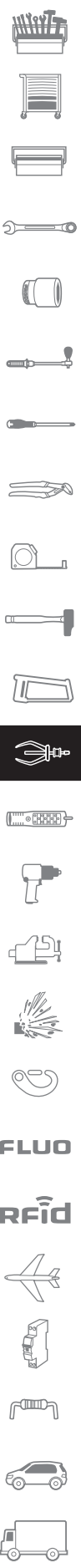


- Tightening the lock-nut with a wrench.
- Passing a rod through holes in the beam.



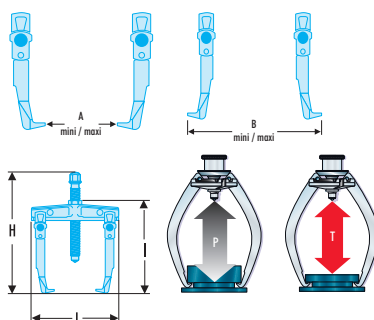
Reach

- Long-leg sets are easily fitted to the beam using a unique system of attachment. They increase the reach up to 470 mm.



U.32T - Lockable 2-leg sliding pullers

- Versatile: conversion possible in inside or outside grip with the same meg.
- Safety: knurled locking button.



| | A mini - maxi [mm] | B mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Puller | Tonnes [t] | T [kN] | Screw Size | Screw Size[mm] | ΔΔ [kg] |
|------------|--------------------|--------------------|--------|--------|--------|-------------|--------|------------|--------|------------|----------------|---------|
| U.32T2-8 | 20 - 80 | 90 - 140 | 170 | 150 | 142 | 105 | 21 | 2 | 20 | U.32T2-1 | 13 | 1.1 |
| U.32T2-12 | 20 - 120 | 90 - 180 | 170 | 150 | 182 | 105 | 21 | 2 | 20 | U.32T2-1 | 13 | 1.2 |
| U.32T6-16 | 20 - 160 | 130 - 250 | 255 | 215 | 230 | 150 | 32 | 6 | 60 | U.32T6-1 | 24 | 2.9 |
| U.32T6-20 | 20 - 200 | 130 - 290 | 255 | 215 | 277 | 150 | 32 | 6 | 60 | U.32T6-1 | 24 | 3.2 |
| U.32T15-25 | 25 - 250 | 180 - 380 | 360 | 305 | 364 | 170 | 41 | 15 | 150 | U.32T15-1 | 35 | 8.6 |
| U.32T15-35 | 25 - 350 | 180 - 480 | 470 | 405 | 464 | 270 | 41 | 15 | 150 | U.32T15-2 | 35 | 10.8 |
| U.32T15-50 | 25 - 470 | 180 - 530 | 470 | 405 | 614 | 270 | 41 | 15 | 150 | U.32T15-2 | 35 | 17.1 |

REVERSIBLE UNIVERSAL 2-LEG PULLERS

U.32TGA - Spare legs for U.32T



- For your safety, we recommend that all the legs are replaced in the event of a problem.
- Leg supplied per unit, without leg holder.
- Leg holder supplied per unit.



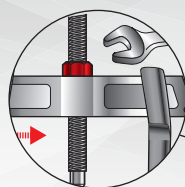
| Ref | A [mm] | E [mm] | H [mm] | H1 [mm] | L [mm] | L1 [mm] | L2 [mm] | P [mm] | Legs | Mounting Pins | For | ΔΔ [kg] |
|-------------|--------|--------|--------|---------|--------|---------|---------|--------|-------------------------|---------------|---------|---------|
| U.32T2GA10 | 8,5 | 2,5 | 130 | 105 | 18 | 10 | 18,0 | 110 | U.32T2-8 - U.32T2-14 | U.32T2DG | U.32T2 | 0.6 |
| U.32T2GA20 | 2,5 | 2,5 | 225 | 185 | 18 | 10 | 18,0 | 185 | Option | U.32T2DG | U.32T2 | 0.8 |
| U.32T2GA25 | 2,5 | 2,5 | 275 | 235 | 18 | 10 | 18,0 | 235 | Option | U.32T2DG | U.32T2 | 0.9 |
| U.32T6GA15 | 4 | 4,0 | 180 | 150 | 24 | 15 | 28,5 | 150 | U.32T6-16 - U.32T6-22 | U.32T6DG | U.32T6 | 1.4 |
| U.32T6GA30 | 4 | 4,0 | 335 | 280 | 24 | 15 | 28,5 | 280 | Option | U.32T6DG | U.32T6 | 2.0 |
| U.32T15GA20 | 5 | 5,0 | 250 | 170 | 34 | 20 | 36,0 | 170 | U.32T15-25 | U.32T15DG | U.32T15 | 3.4 |
| U.32T15GA30 | 4 | 5,0 | 315 | 270 | 34 | 20 | 36,0 | 270 | U.32T15-35 - U.32T15-50 | U.32T15DG | U.32T15 | 4.2 |
| U.32T15GA40 | 5 | 5,0 | 445 | 370 | 34 | 20 | 36,0 | 370 | Option | U.32T15DG | U.32T15 | 5.0 |
| U.32T15GA50 | 5 | 5,0 | 545 | 470 | 34 | 20 | 36,0 | 470 | Option | U.31T15DG | U.32T15 | 5.8 |

U.232 2-LEG PULLER



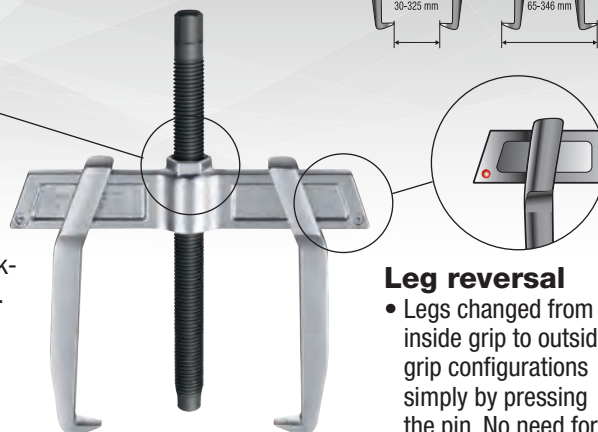
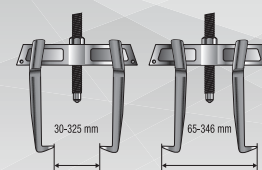
Strength and simplicity!

2-leg puller, inside or outside grip



Anti-rotation system

- Tightening the lock-nut with a wrench.



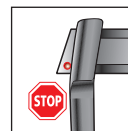
Leg reversal

- Legs changed from inside grip to outside grip configurations simply by pressing the pin. No need for tools.

SAFETY FIRST

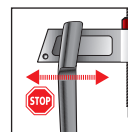
Leg retainer

A spring-loaded pin at the end of the beam prevents the legs from sliding off.



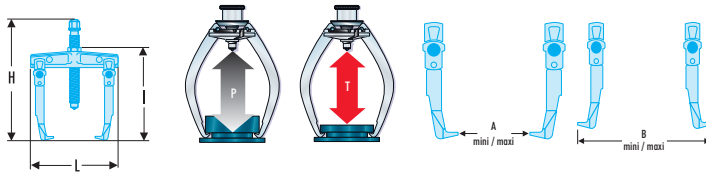
Leg locking

The legs are designed to cantilever during pulling, blocking them in place and preventing them from sliding along the beam.



U.232 - 2-leg sliding-leg pullers

- Versatile: conversion possible in inside or outside grip with the same leg.
- Safety:
 - Stops to prevent legs from falling.
 - Under pressure, the legs are set to overhang to avoid sliding.

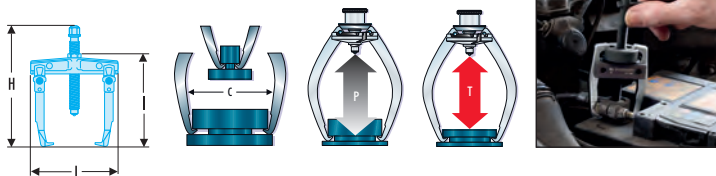


| | A mini - maxi [mm] | B mini - maxi [mm] | H [mm] | l [mm] | L [mm] | P maxi [mm] | Puller | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | ΔΔ [kg] |
|-----------|--------------------|--------------------|--------|--------|--------|-------------|--------|---------|------------|--------|------------|-----------------|---------|
| U.232-65 | 30 - 60 | 65 - 90 | 133 | 105 | 115 | 65 | 16 | U.232G1 | 1,5 | 15 | U.35P01 | 13 | 0.4 |
| U.232-90 | 60 - 81 | 86 - 95 | 182 | 155 | 146 | 100 | 21 | U.232G2 | 3,0 | 30 | U.35SE1 | 17 | 0.9 |
| U.232-130 | 60 - 122 | 86 - 136 | 182 | 155 | 186 | 100 | 21 | U.232G2 | 3,0 | 30 | U.35SE1 | 17 | 1 |
| U.232-160 | 86 - 153 | 127 - 171 | 283 | 233 | 247 | 145 | 27 | U.232G3 | 4,0 | 40 | U.53S2A07 | 17 | 2.8 |
| U.232-210 | 86 - 203 | 127 - 222 | 283 | 233 | 297 | 145 | 27 | U.232G3 | 4,0 | 40 | U.53S2A07 | 17 | 3 |
| U.232-270 | 100 - 255 | 148 - 276 | 345 | 303 | 379 | 190 | 36 | U.232G4 | 5,0 | 50 | U.53S3-07 | 32 | 7.5 |
| U.232-340 | 100 - 325 | 148 - 346 | 345 | 303 | 449 | 190 | 36 | U.232G4 | 5,0 | 50 | U.53S3-07 | 32 | 8.2 |

SLIM-PROFILE 2-LEG PULLERS

U.14 - Self-gripping outside pullers with slim legs

- Access: 2 slim leg puller.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Example of use = battery terminals.

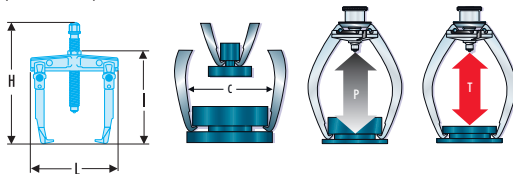


| | C mini - maxi [mm] | H [mm] | l [mm] | L [mm] | P maxi [mm] | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | ΔΔ [kg] |
|-------|--------------------|--------|--------|--------|-------------|------------|--------|------------|-----------------|---------|
| U.14A | 10 - 35 | 125 | 75 | 60 | 40 | 0,5 | 5 | U.14A04 | Spindle | |
| U.14L | 10 - 45 | 150 | 120 | 85 | 60 | 0,5 | 5 | U.14A04 | Spindle | 0.38 |



U.301 - Self-gripping outside pullers with slim legs

- Access: 2 slim leg puller.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Adaptable puller accessory: slide hammer U.49AM.
 - Per tip U.301E1 (U.301 and U.301-150).
 - Per tip U.301E2 (U.301-200).



| | C mini - maxi [mm] | H [mm] | l [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | ΔΔ [kg] |
|-----------|--------------------|--------|--------|--------|-------------|--------|------------|--------|--------------|-----------------|---------|
| U.301 | 10 - 80 | 153 | 130 | 83 | 90 | U.301G | 0,9 | 9 | U.301-04 | 10 | 0.5 |
| U.301-150 | 15 - 150 | 222 | 206 | 90 | 150 | - | 0,9 | 9 | U.301-04-150 | 10 | 0.7 |
| U.301-200 | 15 - 200 | 300 | 268 | 120 | 200 | - | 1,3 | 13 | U.301-04-200 | 13 | 1.1 |



SLIM OR WIDE LEGS?

Slim leg pullers

Slim leg pullers are used for pulling bearings located in confined spaces.



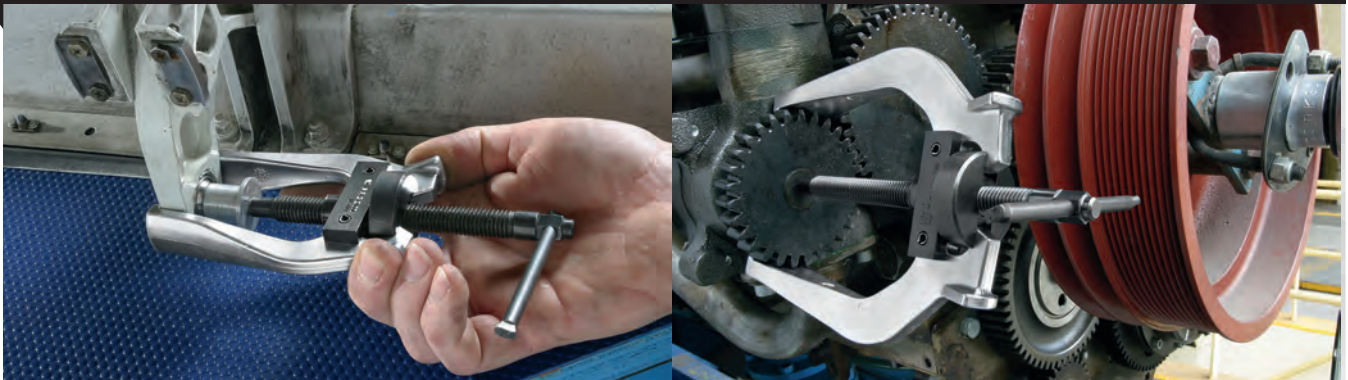
OR

Wide leg pullers

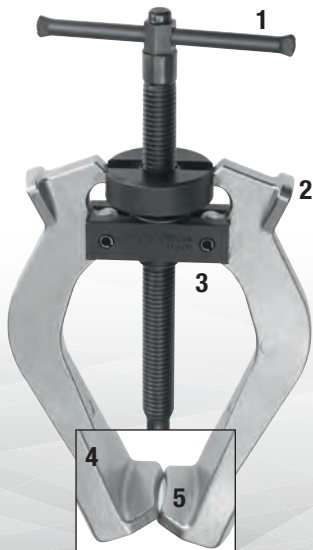
Wide leg pullers offer more limited access but their legs wrap around the bearing, offering maximum grip. The bearing is preserved and more power can be applied.



U.301 L/M/P WIDE 2-LEG PULLER



A compact puller with two "wrap around" legs for a better grip!



Effective and easy to use. Self-gripping, self-centring "body and spring" system.

- 1 - Force-limiting safety rod.
- 2 - Ergonomic finger grips and one-hand installation option.
- 3 - Shear pin.
- 4 - "Wrap-around" legs to grip the part firmly without scratching.
- 5 - "Positive" leg angle for optimum grip even under maximum pulling force. Spread: 50, 100, 110 mm.



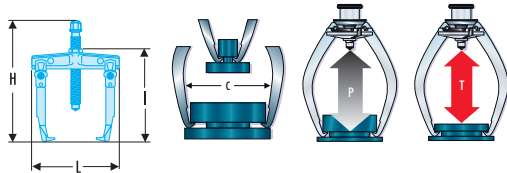
SAFETY FIRST

The rod (1) then the shear pin (3) fail in stages before the yield point of the legs is reached.

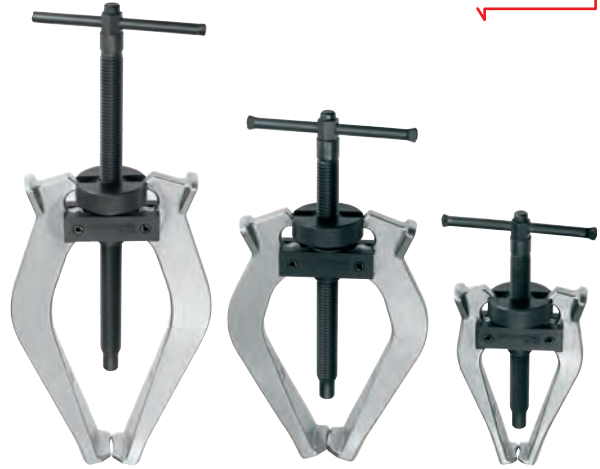
WIDE 2-LEG PULLERS

U.301 - Self-gripping outside pullers with wide legs

- Comfort: self-gripping legs by return spring. The puller stays in position on the bearing even when not in tension.
- Safety: a power restrictor pin is pressed when the force applied is too strong.
- Adaptable puller accessory: slide hammer U.49AM.
 - Per tip U.301E1 (U.301P and U.301M).
 - Per tip U.301E2 (U.301L).

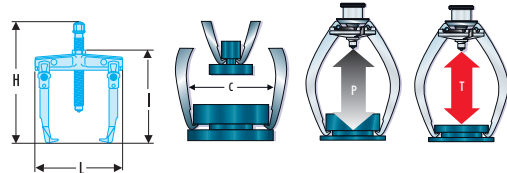


| Model | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Tonnes [t] | T [kN] | Screw Size | $\Delta\Delta$ [kg] |
|--------|--------------------|--------|--------|--------|-------------|------------|--------|------------|---------------------|
| U.301P | 15 - 50 | 147 | 120 | 75 | 70 | 0,9 | 9 | U.301P04 | 0.5 |
| U.301M | 15 - 100 | 222 | 206 | 90 | 100 | 0,9 | 9 | U.301M04 | 0.8 |
| U.301L | 15 - 110 | 300 | 268 | 120 | 130 | 1,3 | 13 | U.301L04 | 0.9 |



U.35 - Pullers with outside wide legs

- Safety: use in "uncrossed legs" configuration doubles capacity, but the "cross-legged" configuration should be used preferably.
- Adaptable puller accessory: slide hammer U.306M for U.35 and U.35L.
- Set of 2 spare pins:
 - U.42-5J2 for U.35P.
 - U.35-5J2 for U.35 and U.35L.

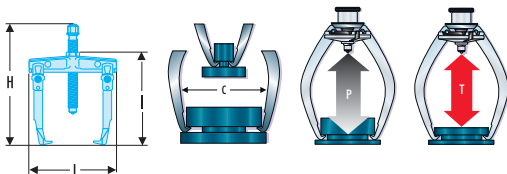


| Model | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|-------|--------------------|--------|--------|--------|-------------|-------------|------------|--------|-------------------|-----------------|---------------------|
| U.35P | 10 - 55 | 140 | 110 | 65 | 75 | U.35D (x 2) | 1 | 10 | U.35P01 | 13 | 0.4 |
| U.35 | 15 - 75 | 183 | 160 | 68 | 90 | U.35C (x 2) | 4 | 40 | U.35SE1 | 17 | 1 |
| U.35L | 15 - 75 | 225 | 188 | 90 | 130 | U.35B (x 2) | 3 | 30 | U.35SE1 + U.35SE3 | 17 | 1.2 |

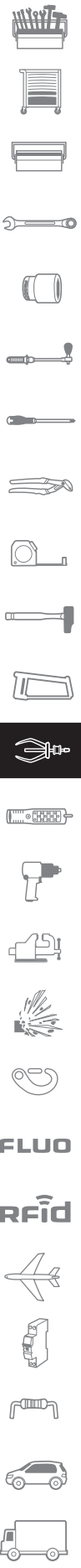


High-capacity wide leg outside puller

- Safety: use in "uncrossed legs" configuration doubles capacity, but the "cross-legged" configuration should be used preferably.
- Adaptable puller accessory: slide hammer U.2.



| Model | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|-------|--------------------|--------|--------|--------|-------------|------------|------------|--------|------------|-----------------|---------------------|
| U.34 | 40 - 180 | 370 | 315 | 215 | 245 | U.34G (x2) | 7 | 70 | U.20B1 | 24 | 4.4 |

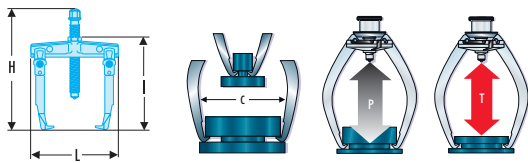
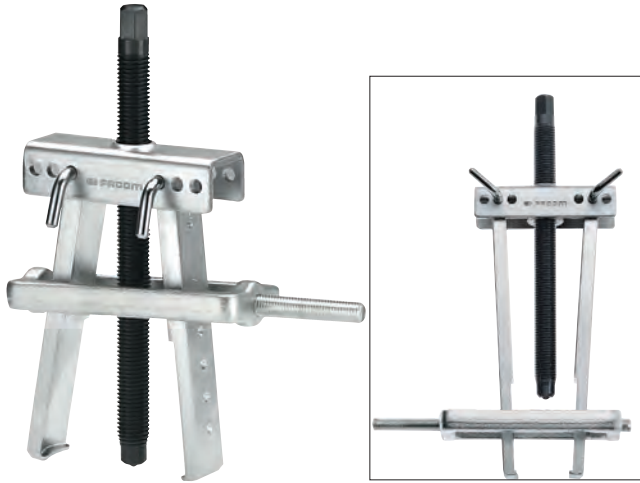


U-BOLT 2-LEG PULLERS

U.42 - Pullers with yoke



- The U.42 and U.42B models have legs designed specifically for gearbox bearings.
- Spare yoke for U.42 and U.42B: U.42SE2.
- Set of 2 spare pins for U.42 and U.42B: U.42-5J2.

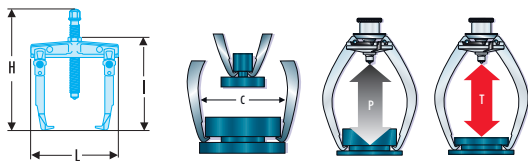


| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|--------------|--------------------|--------|--------|--------|-------------|--------|------------|--------|------------|-----------------|---------------------|
| U.42 | 10 - 85 | 235 | 165 | 160 | 120 | U.42-3 | 1,5 | 15 | U.42-1 | 13 | 1.3 |
| U.42B | 10 - 85 | 240 | 225 | 160 | 180 | U.42B3 | 1,5 | 15 | U.42-1 | 13 | 1.6 |

U.52 - Pullers with yoke



- Spare yoke for U.52 = U.52SE2.
- Set of 2 spare pins for U.52: U.35-5J2.



| | C mini - maxi [mm] | H [mm] | I [mm] | L [mm] | P maxi [mm] | Legs | Tonnes [t] | T [kN] | Screw Size | Screw Size [mm] | $\Delta\Delta$ [kg] |
|-------------|--------------------|--------|--------|--------|-------------|--------|------------|--------|------------|-----------------|---------------------|
| U.52 | 10 - 150 | 250 | 200 | 220 | 160 | U.52-3 | 6 | 60 | U.52-1 | 17 | 1.7 |

TIP-TYPE PULLERS, CAGE GRIP

U.23 TIP TYPE PULLERS, CAGE GRIP

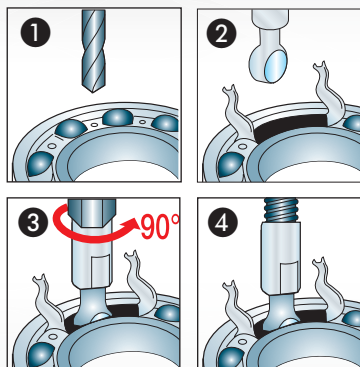
The design of this puller is particularly suited to cage-type ball bearings.

- Pressure is distributed over the two races and the tool can be used for both shaft and housing fits.
- Depending on the ball diameter, different pairs of spherical tips should be selected from of three sets available.



Positioning tips in bearings

- 1 - Drill 2 diametrically opposed holes.
- 2 - Bend back cage ends.
- 3 - Insert appropriately sized tips into race. Turn through 90 degrees to lock.
- 4 - Screw beam rods into tips.



Micro-engineering puller kit

- Comprising:
 - 3 pairs of tips: Ø 5.5 - 6 - 7.5 mm.
 - Beam U.23K1A.
- Spread: Ø 25 to 95 mm.
- For ISO bearings: 6004 to 6010; 6200 to 6205; 6300 to 6302.
- Supplied in plastic case BP.102 with tray PL.392A.

| | |
|---------|---------------------|
| | $\Delta\Delta$ [kg] |
| U.23J1A | 0.8 |



Light engineering puller kit

- Comprising:
 - 3 pairs of tips: Ø 9 - 11 - 12.5 mm.
 - Beam U.53K1.
- Spread: Ø 40 to 110 mm.
- For ISO bearings: 6206 to 6211; 6303 to 6307; 6403 to 6404.
- Supplied in plastic case BP.115 with tray PL.71A.

| | |
|--------|---------------------|
| | $\Delta\Delta$ [kg] |
| U.23J2 | 1.8 |



General engineering puller kit

- Comprising:
 - 6 pairs of tips: Ø 16 - 19 - 22 - 25 - 28 - 32 mm.
 - Beam U.53K2.
- Spread: Ø 70 to 190 mm.
- For ISO bearings: 6212 to 6222; 6308 to 6319; 6405 to 6414.
- Supplied in plastic case BP.109 with tray PL.104A.

| | |
|--------|---------------------|
| | $\Delta\Delta$ [kg] |
| U.23J3 | 7.3 |



TIP-TYPE PULLERS, CAGE GRIP

U.23D - Set of 2 tips



| Part No. | d [mm] | No. | Tapping | T [kN] | $\Delta\Delta$ [g] |
|----------|--------|-----|---------|--------|--------------------|
| U.23D5 | 5,5 | 1 | M6 | 25 | 26 |
| U.23D6 | 6,0 | 2 | M6 | 30 | 27 |
| U.23D8 | 7,5 | 3 | M6 | 30 | 30 |
| U.23D9 | 9,0 | 4 | M10 | 40 | 39 |
| U.23D11 | 11,0 | 5 | M10 | 45 | 44 |
| U.23D12 | 12,5 | 6 | M10 | 45 | 45 |
| U.23D16 | 16,0 | 7 | M16 | 125 | 125 |
| U.23D19 | 19,0 | 8 | M16 | 275 | 275 |
| U.23D22 | 22,0 | 9 | M16 | 315 | 315 |
| U.23D25 | 25,0 | 10 | M16 | 490 | 487 |
| U.23D28 | 28,0 | 11 | M16 | 525 | 525 |
| U.23D32 | 32,0 | 12 | M16 | 670 | 669 |

U.51B TIP TYPE PULLER, INSIDE GRIP

1- Locate the spreader at end of screw.

2- Insert claw ends through bearing.

3- Screw claws tight against bearing.

4- Fit beam and screw down nut to withdraw bearing.

TIP-TYPE PULLERS, INSIDE GRIP

Tip-type pullers, inside grip



- Capacity: \varnothing 32 to 70 mm.
- Adaptable puller accessories: beam U.40 or beam U.30.
- Supplied with 15 tips.
- Set of 15 spare tips: U.51BJ15.
- Spare nut + bush: U.51B-1.
- Supplied in plastic case BP.109 with tray PL.710.

| Part No. | $\Delta\Delta$ [kg] |
|----------|---------------------|
| U.51B | 3.4 |

Tip-type pullers, large spread inside grip

- Capacity: Ø 70 to 160 mm.
- Allocation of "separator" tip discs:
 - Tip disc no.1: capacity 70 - 100 mm.
 - Tip disc no.2: capacity 100 - 136 mm.
 - Tip disc no.3: capacity 130 - 160 mm.
- Adaptable puller accessory: beam U.30.
- Set of 3 spare separator tips: U.28J3
- Spare nut + bush: U.28-1.



| Part Number | Weight $\Delta\Delta$ [kg] |
|-------------|----------------------------|
| U.28 | 3.3 |

Separator and beam for inside grip set

- Comprising:
 - 1 separator U.28.
 - 1 beam U.30.
- Spread: Ø 70 to 160 mm.
- Supplied in a steel case BT.111 (396 x 224 x 82 mm) with tray PL.168.



| Part Number | H [mm] | I [mm] | L [mm] | Weight $\Delta\Delta$ [kg] |
|-------------|--------|--------|--------|----------------------------|
| U.28J1 | 82 | 224 | 396 | 9.5 |

Beam for pullers U.28 and U.51B

- Use with pullers U.28 and U.51B.



| Part Number | Weight $\Delta\Delta$ [kg] |
|-------------|----------------------------|
| U.30 | 4.6 |

Beam for pullers U.51B and U.306

- Use with pullers U.51B and U.306. Using the beam U.40 with the separator U.306 requires using the bush and nut U.306A1 (to be ordered separately).



| Part Number | Weight $\Delta\Delta$ [kg] |
|-------------|----------------------------|
| U.40 | 1.8 |



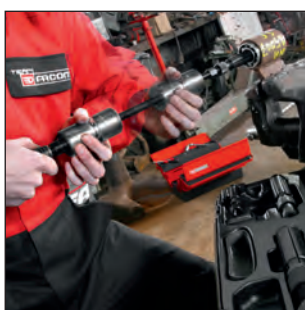
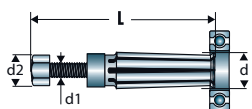
SPREADER-TYPE PULLERS, INSIDE GRIP

U.49P - Clamps for inside grip



U.49P1 U.49P2

U.49P5



- High impact and screwing / unscrewing resistance.
- Multiple flexible blades and hardly sensitive to distortion.
- Easy to use.

| ED | d mini [mm] | d maxi [mm] | d mini - maxi [mm] | d1 [mm] | d2 [mm] | L maxi [mm] | L [mm] | ΔΔ [g] |
|--------|-------------|-------------|--------------------|---------|---------|-------------|--------|--------|
| U.49P1 | 6,5 | 8 | 6,5 - 8,0 | M8 | 12 | 76 | 76 | 25 |
| U.49P2 | 8,5 | 10 | 8,5 - 10,0 | M8 | 12 | 76 | 76 | 30 |
| U.49P3 | 10,5 | 13 | 10,5 - 13,0 | M8 | 12 | 88 | 88 | 45 |
| U.49P4 | 13 | 18 | 13,0 - 18,0 | M8 | 12 | 100 | 100 | 70 |
| U.49P5 | 18 | 22,5 | 18,0 - 22,5 | 1/2" | 17 | 112 | 112 | 140 |
| U.49P6 | 22,5 | 30 | 22,5 - 30,0 | 1/2" | 17 | 139 | 139 | 300 |
| U.49P7 | 30 | 38 | 30,0 - 38,0 | 1/2" | 22 | 158 | 158 | 545 |
| U.49P8 | 38 | 50 | 38,0 - 50,0 | 1/2" | 1-1/4" | 190 | 190 | 1200 |
| U.49P9 | 50 | 60 | 50,0 - 60,0 | 1/2" | 1-1/4" | 190 | 190 | 1400 |

Maintenance kit



- To pull bearings Ø 8.5 to 38 mm.
- Comprising:
 - 6 pliers U.49P2 to U.49P7.
 - 2 beams U.53KL0 and U.53KL2.
 - Adapter bit U.49BR1.
- Supplied in plastic case BP.109 with tray PL.711.

| ED | ΔΔ [kg] |
|----------|---------|
| U.49P J1 | 3.5 |

Light engineering puller kit



- To pull bearings Ø 18 to 50 mm.
- Comprising:
 - 4 pliers U.49P5 to U.49P8.
 - 1 slide hammer U.49AM.
- Supplied in plastic case BP.109 with tray PL.712.

| ED | ΔΔ [kg] |
|----------|---------|
| U.49P J2 | 5 |

General engineering puller kit

- To pull bearings Ø 6.5 to 18 mm.
- Comprising:
 - 4 pliers U.49P1 to U.49P4.
 - 1 slide hammer U.49L.
- Supplied in plastic case BP.115 with tray PL.445.



| FACOM | ΔΔ [kg] |
|---------|---------|
| U.49PJ3 | 1.4 |

Heavy engineering puller kit

- To pull bearings Ø 30 to 60 mm.
- Comprising:
 - 3 pliers U.49P7 to U.49P9.
 - 1 beam U.53KL2.
 - Tip U.49BR1.
- Supplied in plastic case BP.109 with tray PL.713.



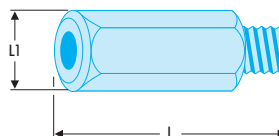
| FACOM | ΔΔ [kg] |
|---------|---------|
| U.49PJ4 | 5.3 |

Adaptor tip for clamps U.49P5 to P9 on slide hammer or beam

- Female thread: M16 x 2.0.
- Male thread: 1/2" - 20 UNF.
- Used to connect the slide hammer U.306M or beam U.53KL2 to the clamps U.49P5 to U.49P9.



| FACOM | L [mm] | L1 [mm] | Screw Size [mm] | ΔΔ [g] |
|---------|--------|---------|-----------------|--------|
| U.49BR1 | 48 | 13 | 23 | 100 |



Adaptor tips for separators U.301 / U.302 on slide hammer U.49AM

- U.301E1 tip for pullers U.301, U.302, U.301-150, U.302-150.
 - Female thread: 1/2" - 20 UNF.
 - Male thread: M12 x 1.75.
- U.301E2 tip for pullers U.301-200 and U.302-200.
 - Female thread: 1/2" - 20 UNF.
 - Male thread: M16 x 2.00.
- Locks the legs in Pullers position.



| FACOM | d [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|---------|--------|--------|---------|--------|
| U.301E1 | 25 | 62 | 22 | 200 |
| U.301E2 | 25 | 62 | 22 | 300 |

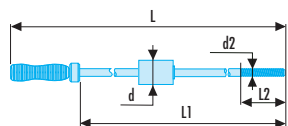


SLIDE HAMMERS

Slide hammer 0.2 kg



- For fitting on low spread clamps U.49P1 to U.49P4.
- Allows to extract bearings with an inner diameter \varnothing 6.5 to 18 mm.

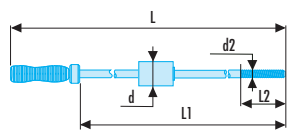


| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | L2 [mm] | $\Delta\Delta$ [g] |
|--------------|--------|---------|--------|---------|---------|--------------------|
| U.49L | 30 | M8x1,25 | 302 | 212 | 14 | 500 |

Slide hammer 1 kg



- For fitting on high spread clamps U.49P5 to U.49P9.
- Allows to extract bearings with an inner diameter \varnothing 18 to 60 mm.
- Use of threaded tips U.53E4 to U.53E14 with the adaptor tip U.53H3.

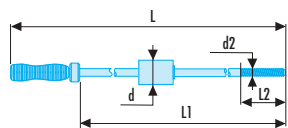


| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | L2 [mm] | $\Delta\Delta$ [kg] |
|---------------|--------|------------|--------|---------|---------|---------------------|
| U.49AM | 45 | 1/2"-200NF | 452 | 325 | 25 | 1.6 |

Slide hammer 2 kg



- Adapts to pullers U.306, U.42, U.42B, U.32T2-8, U.32T2-12, U.35, U.35L.
- Adaptable accessories:
 - Clamps U.49P5 to U.49P9 with adaptor tip U.49BR1.
 - Threaded tips U.53E4 to U.53E14 with the adaptor tip U.53H2.

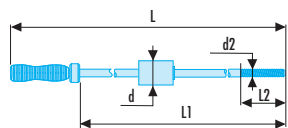


| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | L2 [mm] | $\Delta\Delta$ [kg] |
|---------------|--------|---------|--------|---------|---------|---------------------|
| U.306M | 60 | M16x2,0 | 654 | 537 | 228 | 2.8 |

Slide hammer 7 kg



- Adapts to pullers U.20, U.20B, U.310, U.32T6-16, U.32T6-20 and tray U.9.



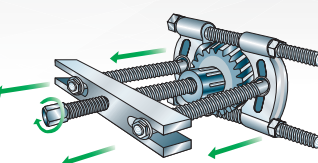
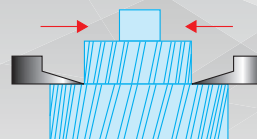
| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | L2 [mm] | $\Delta\Delta$ [kg] |
|-------------|----------|---------|--------|---------|---------|---------------------|
| U.2 | 92 / 171 | M22x2,0 | 761 | 615 | 70 | 8.7 |
| U.2A | 92 / 171 | M22x2,0 | 761 | 615 | 70 | 8.7 |

PULLER KITS

U.53 SEPARATORS, FLUSH GRIP

Bearing separators U.53T fit behind races where ordinary puller claws will not reach.

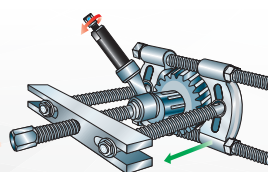
- The wedge-shaped jaws bear against the back of the fitting, pushing it out as they close.
- Separators can be used with beams for mechanical screws or with beams designed specifically for use with hand-operated hydraulically-assisted jacks.



Separator and beam with hand-operated hydraulic system.

SAFETY FIRST


Only hand-operated hydraulic systems are to be used in conjunction with separator and beam combinations.



Separator and beam with mechanical screw.

- Beam used with hydraulic press U.33A
- Only to be used with beams U.53K4 and U.53S4A.


60 mm separator and beam puller kit

- Comprising:
 - 1 separator U.53T1 = spread: \varnothing 5 to 60 mm.
 - 1 beam U.53K1 = spread: \varnothing 40 to 110 mm.
 - Max reach: 180 mm.
 - 4 pairs of U.53E threaded tips M4 - M5 - M6 - M8.
 - 2 adaptors U.53H1.
- Supplied in plastic case BP.112 with tray PL.296A.



U.53J1

 $\Delta\Delta$ [kg]

3.4



FLUO

RFid



PULLER KITS

110 mm separator and beam puller kit



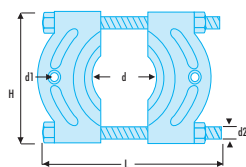
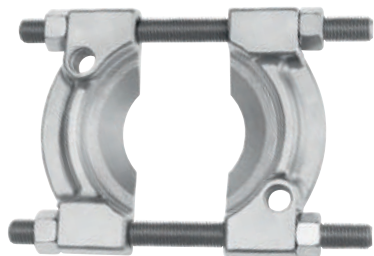
- Comprising:
 - 1 separator U.53T2 = spread: Ø 15 to 110 mm.
 - 1 beam U.53K2 = spread: Ø 70 to 200 mm.
 - Max reach: 240 mm.
 - 4 pairs of U.53E threaded tips M8 - M10 - M12 - M14.
 - 2 adaptors U.53H2.
- Supplied in plastic case BP.109 with tray PL.297A.



| | ΔΔ [kg] |
|--------|---------|
| U.53J2 | 7.3 |

SEPARATORS

U.53T - Separators



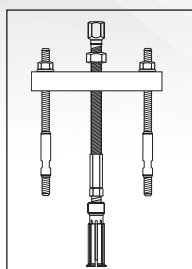
- Separators spread Ø 5 to 250 mm.
- Fit behind races where ordinary puller claws will not reach.
- They can be used with beams assisted by screws or jacks.



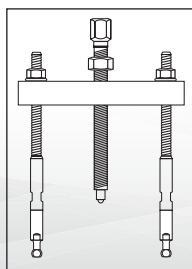
| | d mini - maxi [mm] | d1 [mm] | d2 [mm] | H [mm] | L [mm] | For | For use on | Screw Size | ΔΔ [kg] |
|--------|--------------------|---------|---------|--------|--------|------------------|------------|------------|---------|
| U.53T1 | 5 - 60 | M10 | M12 | 91 | 140 | U.53K1 | - | U.53T1-02 | 0.6 |
| U.53T2 | 15 - 110 | M16 | M16 | 153 | 215 | U.53K2 - U.53S2A | U.53S2A | U.53T2-02 | 2.1 |
| U.53T3 | 15 - 150 | M20 | M20 | 204 | 290 | U.53K3 | - | U.53T3-02 | 4.6 |
| U.53T4 | 20 - 180 | M22 | M22 | 289 | 360 | U.53K4 - U.53S4A | U.53S4A | U.53T4-02 | 8.2 |
| U.53T5 | 25 - 250 | M22 | M22 | 316 | 430 | U.53K4 - U.53S4A | U.53S4A | U.53T5-02 | 11.2 |

U.23/U.53 BEAM PULLERS

Beams can be used with different types of pullers:



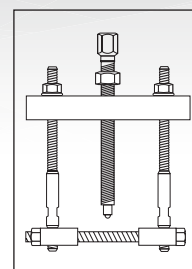
- Expansion bearing puller U.49P.



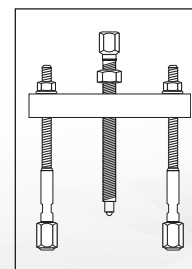
- Spherical or threaded tip pullers U.23.



- Separator U.53.



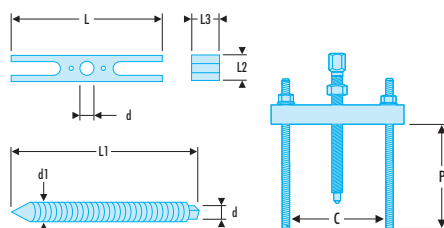
- Extraction via beam alone.



BEAM PULLERS

U.23K-U.53K - Tapped beams

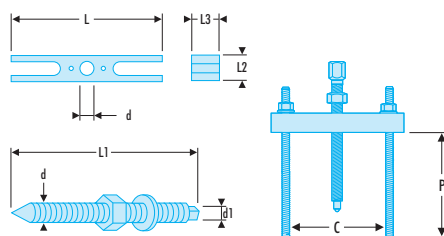
- Tapped beams are used in mechanical pulling with separators, spherical or threaded tips.
- Spread: Ø 25 to 400 mm.



| Model | C mini - maxi [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | P maxi [mm] | Tie-rods | Tonnes [t] | T [kN] | Screw Size | ΔΔ [kg] |
|---------|--------------------|--------|---------|--------|---------|---------|---------|-------------|------------|------------|--------|------------|---------|
| U.23K1A | 25 - 95 | M10 | 8 | 110 | 155 | 20 | 20 | 100 | U.23K1A-03 | 1 | 10 | U.23K1A-02 | 0.4 |
| U.53K1 | 40 - 110 | M16 | 11 | 135 | 215 | 25 | 25 | 180 | U.53R1L | 3 | 30 | U.51K1-07 | 0.9 |
| U.53K2 | 70 - 200 | M16 | 11 | 220 | 280 | 30 | 30 | 240 | U.53R2L | 3 | 30 | U.53K2-07 | 2.3 |
| U.53K3 | 75 - 280 | M27 | 21 | 320 | 340 | 45 | 35 | 300 | U.53R3L | 4 | 40 | U.53S3-07 | 5.3 |
| U.53K4 | 145 - 400 | M33 | 25 | 450 | 420 | 50 | 50 | 350 | U.53R4LA | 5 | 50 | U.53S4-07 | 10.7 |

U.53KL - Non-tapped beams

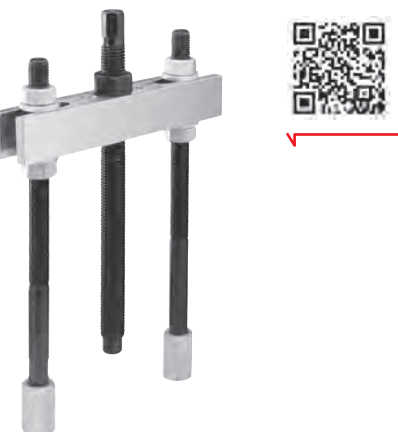
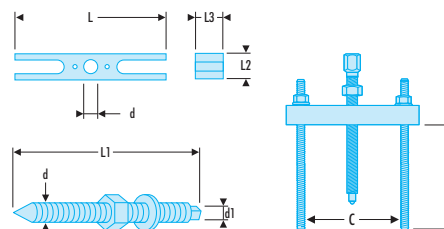
- Non tapped beams allow to use clamps U.49P1 to U.49P9 to extract bearings by inside grip.
- U.53KL0: for clamps U.49P1 to U.49P4.
- U.53KL2: for clamps U.49P5 to U.49P9 with adaptor tip U.49BR1.



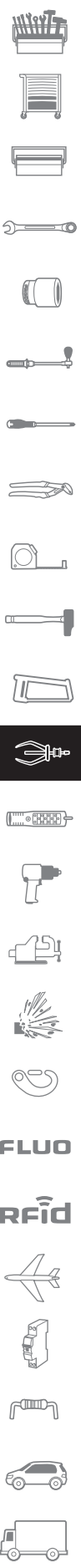
| Model | C [mm] | C mini - maxi [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | P [mm] | P maxi [mm] | Tie-rods | Tonnes [t] | T [kN] | Screw Size | ΔΔ [kg] |
|---------|----------|--------------------|--------|---------|--------|---------|---------|---------|--------|-------------|------------|------------|--------|------------|---------|
| U.53KL0 | 25 - 100 | 25 - 100 | M8 | 6 | 110 | 155 | 20 | 20 | 125 | 125 | U.53KL0-02 | 1 | 10 | U.53KL0-02 | 0.4 |
| U.53KL2 | 70 - 200 | 70 - 200 | M16 | 11 | 220 | 280 | 30 | 30 | 240 | 240 | U.53R2L | 3 | 30 | U.53K2-07 | 2.4 |

U.53S - Jack beams

- These 2 non tapped beams with mechanical specifications exceeding U.53K (dimensions, steel and thermal treatment) are designed to withstand the high loads generated by the power of jacks used.



| Model | C mini - maxi [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | P maxi [mm] | Rating [kN] | Tie-rods | Tonnes [t] | T [kN] | Screw Size | ΔΔ [kg] |
|---------|--------------------|--------|---------|--------|---------|---------|---------|-------------|-------------|----------|------------|--------|------------|---------|
| U.53S2A | 120 - 200 | 280 | M20 | 220 | 280 | 35 | 35 | 235 | 100 | U.53R2L | 10 | 100 | U.53S2A07 | 3.0 |
| U.53S4A | 170 - 400 | 420 | M33 | 450 | 420 | 60 | 60 | 340 | 300 | U.53R4LA | 30 | 300 | U.53S4-07 | 15.5 |

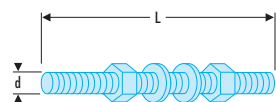


BEAM PULLERS

U.23K-U.53RL - Spare tie rods for beam



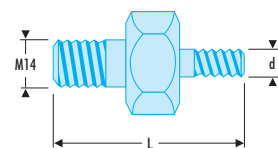
- Tie rods supplied by 2 with chrome-plated tips, nuts and washers.



| Part No. | d [mm] | L [mm] | Beams | For use on | ΔΔ [g] |
|------------|------------|--------|----------------------------|-----------------|--------|
| U.23K1A-03 | M8 x 1,25 | 95 | - | - | 50 |
| U.53KL0-02 | M8 x 1,25 | 155 | - | - | 50 |
| U.53R1L | M10 x 1,50 | 205 | U.53K1 | U.53K1 | 200 |
| U.53R2L | M16 x 2,00 | 275 | U.53K2 - U.53KL2 - U.53S2A | U.53K2, U.53KL2 | 500 |
| U.53R3L | M20 x 2,50 | 350 | U.53K3 | U.53K3 | 1200 |
| U.53R4LA | M22 x 2,50 | 420 | U.53K4 - U.53S4A | U.53K4, U.53S4A | 1700 |

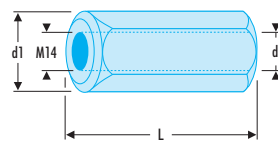
ACCESSORIES FOR BEAM PULLERS

U.53E - Threaded tips



| Part No. | d [mm] | L [mm] | ΔΔ [g] |
|----------|--------|--------|--------|
| U.53E4 | 4 | 33,5 | 50 |
| U.53E5 | 5 | 33,5 | 50 |
| U.53E6 | 6 | 36,5 | 50 |
| U.53E8 | 8 | 39,5 | 50 |
| U.53E10 | 10 | 42,5 | 55 |
| U.53E12 | 12 | 46,6 | 60 |
| U.53E14 | 14 | 48,5 | 70 |

U.53H - Adaptors for threaded tips

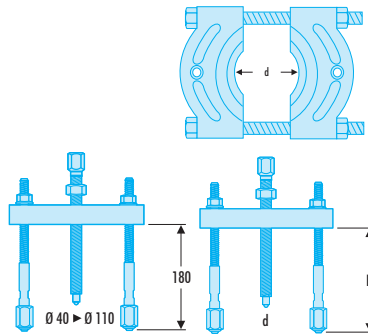


| Part No. | d [mm] | d1 [mm] | L [mm] | ΔΔ [g] |
|----------|---------------|---------|--------|--------|
| U.53H1 | M10 x 1,5 | 23 | 50 | 130 |
| U.53H3 | 1/2" - 20 UNF | 23 | 50 | 120 |
| U.53H2 | M16 x 2,0 | 23 | 50 | 110 |

WORKSHOP BOARDS

Light engineering puller kit

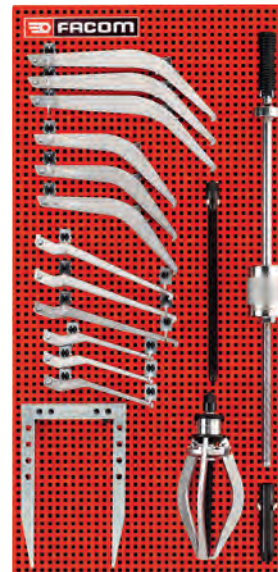
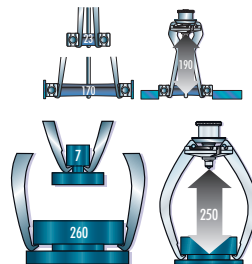
- Comprising:
 - 2 slim leg pullers for outside grip = U.301 and U.302 (spread 10 to 80 mm).
 - 4 clamps for inside grip = U.49P1 to U.49P4 (spread 6.5 to 18 mm).
 - 1 slide hammer U.49L.
 - 1 separator for difficult outside grip = U.53T1 (spread 5 to 60 mm) and its beam U.53K1.
- Presented on the PK.2 panel.



| | l [mm] | L [mm] | $\Delta\Delta$ [kg] |
|--------------|--------|--------|---------------------|
| U.JA1 | 444 | 444 | 4.3 |

4-Tonne kit

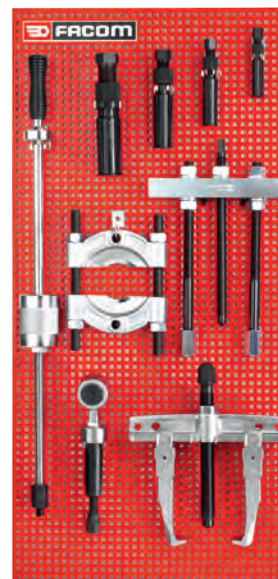
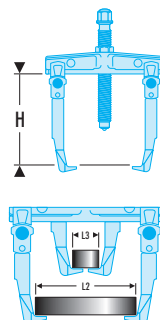
- Comprising:
 - 1 clamp puller for outside grip = U.306A140 (spread 7 to 140 mm).
 - 2 sets of 3 long legs for outside grip = U.306G10 (spread 10 to 180 mm) and U.306G15 (spread 20 to 260 mm).
 - 2 sets of 3 legs for inside grip = U.306G2 (spread 23 to 130 mm) and U.306G20 (spread 60 to 170 mm).
 - 1 long screw with tip U.306-3.
 - 1 beam U.40 (attached using ring and nut U.306A1, supplied with the kit).
 - 1 slide hammer U.306M.
- Presented on the PK.1 panel.



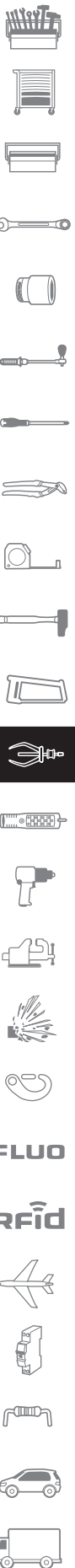
| | l [mm] | L [mm] | $\Delta\Delta$ [kg] |
|-------------|--------|--------|---------------------|
| U.J2 | 888 | 444 | 12.4 |

General engineering puller kit

- Comprising:
 - 1 sliding leg puller = U.32T6-20 outside grip (spread 20 to 200 mm) / inside grip (spread 130 to 290 mm).
 - 1 separator U.53T2 (spread 15 to 110 mm) and the beam U.53K2.
 - 4 clamps U.49P5 to U.49P8 (spread 18 to 50 mm).
 - 1 slide hammer U.306M with adaptor tip U.49BR1.
 - 1 jack U.33A (capacity 30 tonnes).
- Presented on the PK.1 panel.



| | l [mm] | L [mm] | $\Delta\Delta$ [kg] |
|--------------|--------|--------|---------------------|
| U.JA3 | 888 | 444 | 15.5 |



CASE KITS

Light engineering puller kit



- Comprising:
 - 1 leg puller U.301 for outside grip pulling (spread 10 to 80 mm).
 - 4 clamps U.49P1 to U.49P4 (spread 6.5 to 18 mm).
 - 1 beam U.53 KLO.
- Supplied in plastic case BP.112 with tray PL.182B.

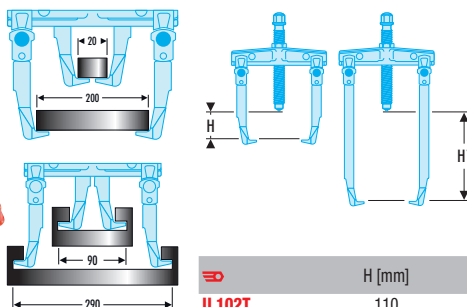


| | H [mm] | l [mm] | L [mm] | ΔΔ [kg] |
|-----------------|--------|--------|--------|---------|
| U.301BJ1 | 66 | 164 | 389 | 2.1 |

General engineering puller kit

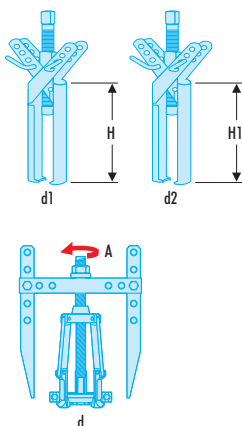


- Comprising:
 - U.32T2-8: 2-tonne sliding-leg puller and set of long legs; reach P1: 105 mm, P2: 185 mm.
 - U.32T6-20: 6-tonne sliding-leg puller and set of long legs; reach P1: 150 mm, P2: 280 mm.
 - U.53T2: separator (spread 15 to 110 mm).
 - U.33A: 30 tonne jack.
- Supplied in metal case. BT.108 with tray PL.287 (removable tray) and PL.288 (box bottom tray).



| | H [mm] | l [mm] | L [mm] | ΔΔ [kg] |
|---------------|--------|--------|--------|---------|
| U.102T | 110 | 270 | 450 | 14.5 |

Medium power engineering puller kit



- This complete set offering normal pulling power for all general engineering applications.
- Comprising:
 - U.35L (spread 15 to 75 mm) and U.34 (spread 40 to 180 mm): wide leg pullers for outside grip pulling.
 - U.51B: bearing inside puller (spread: 32 to 70 mm).
 - U.40: beam.
 - U.33A: 30 tonne jack.
- Supplied in a steel case BT.108 with tray PL.195A.



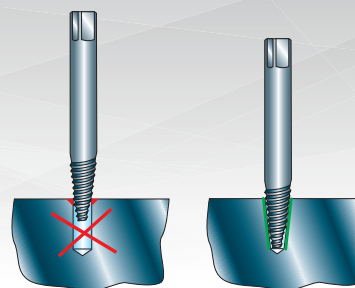
| | H [mm] | l [mm] | L [mm] | ΔΔ [kg] |
|---------------|--------|--------|--------|---------|
| U.103A | 111 | 286 | 452 | 13.3 |

STUD PULLERS

285 STUD EXTRACTORS

For removing sheared right-hand thread studs

- 285 stud extractors are designed exclusively for use on right-hand thread struts (99% of cases).
- The extractors' tapered shape requires the use of cone bits. Using traditional cylindrical bits reduces the contact surface between the extractor and the stud, greatly increasing the risk of extractor breaking in the stud.



- Choose the extractor and corresponding drill bit according to the diameter of the stud to be removed.



- Drill with a 285.F cone bit.



- Push in then unscrew using the corresponding stud extractor.



- The stud is removed.

285.J - Set of stud pullers, right-hand pitch

- 285.J10: Set of 5 stud pullers + 5 appropriate tapered and tap wrench 831.1 (use with the 4 small pullers only).
- 285.JS10: Set of 5 stud pullers and 5 adapted tapered drill-bits, supplied on stand.
- 285.JS5: Set of 5 stud pullers, supplied on stand.
- Supplied in plastic case BP.104 and Tray PL.464.

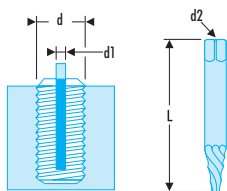


| Icon | d mini - maxi [mm] | H [mm] | l [mm] | L [mm] | Conditioning | Drill Bits | No. | ΔΔ [kg] |
|------|--------------------|--------|--------|--------|-----------------|-------------------------------------|---------------|---------|
| | 3 - 18 | 52 | 122 | 204 | BP.102 + PL.464 | 285.4-5-6-8-11 - 285.F1-F2-F3-F4-F5 | 1, 2, 3, 4, 5 | 0.47 |
| | 3 - 18 | 52 | 122 | 204 | CKS.25A x 2 | 285.4-5-6-8-11 - 285.F1-F2-F3-F4-F5 | 1, 2, 3, 4, 5 | 0.29 |
| | 3 - 18 | 52 | 122 | 204 | CKS.25A | 285.4-5-6-8-11 | - | 0.15 |



STUD PULLERS

285 - Unit stud pullers, right-hand pitch



- These helical pullers allow pulling after drilling a pre-hole using specific tapered drill-bits 285.F.



| ➤ | d [mm] | d1 [mm] | d2 [mm] | L [mm] | Drill Bits | ΔΔ [g] |
|--------|---------|-------------|---------|--------|------------|--------|
| 285.4 | 3 - 6 | 2,2 - 3,4 | 3,0 | 55 | 285.F1 | 5 |
| 285.5 | 6 - 8 | 3,7 - 4,3 | 4,0 | 60 | 285.F2 | 10 |
| 285.6 | 8 - 11 | 4,5 - 5,3 | 4,5 | 65 | 285.F3 | 15 |
| 285.8 | 11 - 14 | 6,2 - 7,1 | 6,0 | 75 | 285.F4 | 25 |
| 285.11 | 14 - 18 | 8,6 - 9,8 | 8,5 | 85 | 285.F5 | 50 |
| 285.14 | 18 - 24 | 11,0 - 12,5 | 10,0 | 90 | - | 85 |
| 285.18 | 24 - 33 | 14,5 - 16,0 | 14,0 | 105 | - | 165 |
| 285.25 | 33 - 50 | 20,0 - 22,5 | 18,0 | 120 | - | 350 |

285.F - Single tapered drill bits for pullers 285



- These tapered drill-bits allow for drilling suited to tapered stud pullers 285.

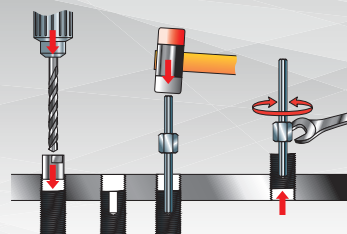


| ➤ | d [mm] | L [mm] | Puller | For use on | ΔΔ [g] |
|--------|--------|--------|--------|------------|--------|
| 285.F1 | 3,5 | 57 | 285.4 | 285.4 | 5 |
| 285.F2 | 4,0 | 63 | 285.5 | 285.5 | 10 |
| 285.F3 | 5,5 | 67 | 285.6 | 285.6 | 10 |
| 285.F4 | 7,5 | 80 | 285.8 | 285.8 | 25 |
| 285.F5 | 10,0 | 86 | 285.11 | 285.11 | 45 |

885 STUD EXTRACTORS

For removing sheared right-hand, or left-hand thread studs

- 885 stud extractors are designed exclusively for use on right-hand thread.
- The splined rod has a cylindrical shape and can be drilled using standard (cylindrical) drill bits.



- Choose the extractor and corresponding drill bit according to the diameter of the stud to be removed.



- Drill with a standard 222A.T bit. Insert the splined bit using a mallet 216.40.



- Install the hexagonal shoulder. Loosen with a wrench.



- The stud is removed

Set of stud pullers, right or left-hand pitch



- Pulling by drilling and inserting a fluted rod driven by a 6-point.
- Spread: studs Ø 6 to 14 mm.
- Right or left-hand pitch.



| ➤ | H [mm] | l [mm] | L [mm] | ΔΔ [g] |
|-----|--------|--------|--------|--------|
| 885 | 25 | 130 | 165 | 540 |

885 - Drill bits and pullers for stud pulling

885.F: Drill bits.
885.EH: Pullers.



| 🔪 | d ["] | d [mm] | L [mm] | ΔΔ [g] |
|--------|-------|--------|--------|--------|
| 885.F1 | 1/8 | 3,2 | 65 | 5 |
| 885.F2 | 3/16 | 4,8 | 85 | 10 |
| 885.F3 | 1/4 | 6,3 | 100 | 20 |
| 885.F4 | 5/16 | 7,9 | 115 | 30 |
| 885.F5 | 11/32 | 8,7 | 120 | 40 |

| 🔪 | d ["] | d [mm] | L [mm] | ΔΔ [g] |
|---------|-------|--------|--------|--------|
| 885.EH1 | 1/4 | 6,3 | - | 15 |
| 885.EH2 | 5/16 | 7,9 | - | 20 |
| 885.EH3 | 3/8 | 9,5 | - | 35 |
| 885.EH4 | 7/16 | 11,1 | - | 45 |
| 885.EH5 | 1/2 | 12,7 | - | 60 |

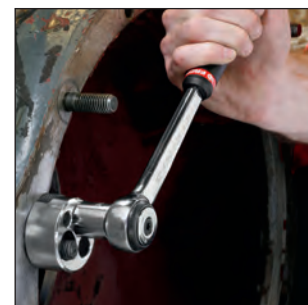
STUD PULLERS

286A - Roller-type stud drivers - Multi-diameter

- Choose the hole suited to the stud diameter.
- Tighten or untighten: thanks to its eccentric shaft, the knob grips the stud, for tightening or untightening.



| 🔪 | C mini - maxi [mm] | Capacity Mini-Maxi [mm] | Square ["] | Dimension [mm] | ΔΔ [g] |
|---------|--------------------|-------------------------|------------|----------------|--------|
| 286A | 5 - 20 | 5 - 20 | 1/2 | 52 x 54 | 400 |
| 286A.PL | 15 - 27 | 15 - 27 | 3/4 | 72 x 66 | 950 |

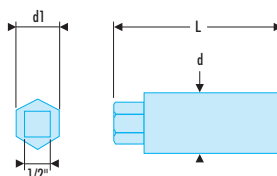


287B - Roller-type stud drivers - Single-diameter

- Capacity: Ø 6 to 16 mm.
- Turned by means of the hexagonal drive or a 1/2" - 12.7 mm ratchet. Except model 287B.16, which has a through-hole for a bar.
- Allows to tighten or untighten the studs.



| 🔪 | A maxi [mm] | d [mm] | d1 [mm] | L [mm] | Capacity [mm] | ΔΔ [g] |
|---------|-------------|--------|---------|--------|---------------|--------|
| 287B.6 | 6 | 25 | 22 | 65 | 6 | 165 |
| 287B.7 | 7 | 25 | 22 | 65 | 7 | 170 |
| 287B.8 | 8 | 25 | 22 | 65 | 8 | 170 |
| 287B.9 | 9 | 29 | 22 | 75 | 9 | 245 |
| 287B.10 | 10 | 29 | 22 | 75 | 10 | 240 |
| 287B.12 | 12 | 29 | 22 | 75 | 12 | 240 |
| 287B.14 | 14 | 34 | 27 | 75 | 14 | 310 |
| 287B.16 | 16 | 34 | 27 | 75 | 16 | 340 |



STUD PULLERS

Set of roller-type stud drivers



- Set of 5 stud drivers to screw and unscrew the M6, M7, M8, M9 and M10 studs (287B.6 to 287B.10).
- Presentation on stand (CKS.73A).



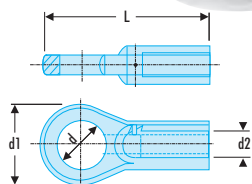
| | H [mm] | l [mm] | L [mm] | $\Delta\Delta$ [kg] |
|-----------------|--------|--------|--------|---------------------|
| 287B.JS5 | 35 | 175 | 155 | 1.1 |

NUT SPLITTER

289.M - Nut splitter



- For splitting a worn or jammed nut without damaging the screw thread.



| | d [mm] | d mini - maxi [mm] | d1 [mm] | d2 [mm] | L [mm] | $\Delta\Delta$ [g] |
|----------------|--------|--------------------|---------|---------|--------|--------------------|
| 289.M8 | 19 | 12 - 16 | 29 | 9,5 | 100 | 170 |
| 289.M18 | 32 | 16 - 22 | 45 | 13 | 128 | 350 |
| 289.M22 | 39 | 22 - 27 | 56,5 | 16 | 148 | 600 |
| 289.M24 | 46 | 27 - 36 | 67 | 17 | 170 | 950 |

Set of 2 nut splitters

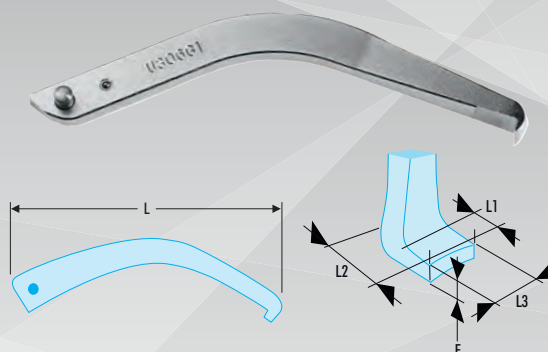


- Comprising:
 - 289.M8.
 - 289.M18.
- Supplied in plastic box BP.102 with plastic tray PL.489.



| | $\Delta\Delta$ [g] |
|---------------|--------------------|
| 289.J1 | 750 |

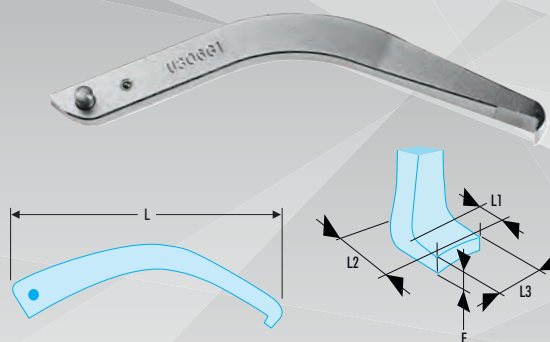
SPARE LEGS SPARE PARTS



| Puller | Leg reference (to be ordered by 2*) | Goupille de griffe | L mm | E mm | L3 mm | L1 mm | L2 mm | kg | For the puller go to page |
|------------|--|---|---------|---------|----------|----------|----------|-------|---------------------------------|
| U.14A | - | - | 74 | 2,5 | 8 | 7 | 16 | 0,040 | 643 |
| U.14L | - | - | 96 | 3,5 | 8 | 7 | 17 | 0,050 | 643 |
| U.20 | U.20SE4 | U.20SE3 (set of 6 pins + 12 shear pins) | 200 | 8,5 | 25 | 6 | 19 | 0,425 | 633 |
| U.20B | U.20BSE4 | U.20SE3 (set of 6 pins + 12 shear pins) | 249 | 6,5 | 25 | 6 | 19 | 0,590 | 633 |
| U.27AS3 | U.27S (standard leg) | U.27SE2 (set of 12 pins + 12 shear pins) | 220 | 12 | 26 | 8 | 29 | 0,850 | 634 |
| U.27AS3 | U.27D (long leg) | U.27SE2 (set of 12 pins + 12 shear pins) | 330 | 10 | 30 | 7 | 16 | 1,520 | 634 |
| U.27AS3 | U.27BS (standard rod + counter-rod) | U.27SE2 (set of 12 pins + 12 shear pins) | 275 | - | - | - | - | 1,800 | 634 |
| U.27AS3 | U.27B (long rod) | U.27SE2 (set of 12 pins + 12 shear pins) | 520 | - | - | - | - | 3,300 | 634 |
| U.32T2-8 | U.32T2GA10 | U.32T2DG (complete flasks + screws) | 130 | 3 | 18 | 10 | 19 | 0,090 | 641 |
| U.32T2-8 | U.32T2GA20 | U.32T2DG (complete flasks + screws) | 225 | 3 | 18 | 10 | 19 | 0,180 | 641 |
| U.32T2-8 | U.32T2GA25 | U.32T2DG (complete flasks + screws) | 275 | 3 | 18 | 10 | 19 | 0,230 | 641 |
| U.32T2-12 | U.32T2GA10 | U.32T2DG (complete flasks + screws) | 130 | 3 | 18 | 10 | 19 | 0,090 | 641 |
| U.32T2-12 | U.32T2GA20 | U.32T2DG (complete flasks + screws) | 225 | 3 | 18 | 10 | 19 | 0,180 | 641 |
| U.32T2-12 | U.32T2GA25 | U.32T2DG (complete flasks + screws) | 275 | 3 | 18 | 10 | 19 | 0,230 | 641 |
| U.32T6-16 | U.32T6GA15 | U.32T6DG (complete flasks + screws) | 180 | 5 | 24,5 | 14 | 31 | 0,280 | 641 |
| U.32T6-16 | U.32T6GA30 | U.32T6DG (complete flasks + screws) | 335 | 5 | 24,5 | 14 | 31 | 0,600 | 641 |
| U.32T6-20 | U.32T6GA15 | U.32T6DG (complete flasks + screws) | 180 | 5 | 24,5 | 14 | 31 | 0,280 | 641 |
| U.32T6-20 | U.32T6GA30 | U.32T6DG (complete flasks + screws) | 335 | 5 | 24,5 | 14 | 31 | 0,600 | 641 |
| U.32T15-25 | U.32T15GA20 | U.32T15DG (complete flasks + screws) | 250 | 10 | 30 | 20 | 38 | 0,660 | 641 |
| U.32T15-25 | U.32T15GA30 | U.32T15DG (complete flasks + screws) | 345 | 10 | 32 | 20 | 43 | 0,990 | 641 |
| U.32T15-25 | U.32T15GA40 | U.32T15DG (complete flasks + screws) | 445 | 10 | 32 | 20 | 43 | 1,590 | 641 |
| U.32T15-25 | U.32T15GA50 | U.32T15DG (complete flasks + screws) | 545 | 10 | 32 | 20 | 43 | 1,800 | 641 |
| U.32T15-35 | U.32T15GA20 | U.32T15DG (complete flasks + screws) | 250 | 10 | 30 | 20 | 38 | 0,660 | 641 |
| U.32T15-35 | U.32T15GA30 | U.32T15DG (complete flasks + screws) | 345 | 10 | 32 | 20 | 43 | 0,990 | 641 |
| U.32T15-35 | U.32T15GA40 | U.32T15DG (complete flasks + screws) | 445 | 10 | 32 | 20 | 43 | 1,590 | 641 |
| U.32T15-35 | U.32T15GA50 | U.32T15DG (complete flasks + screws) | 545 | 10 | 32 | 20 | 43 | 1,800 | 641 |
| U.32T15-50 | U.32T15GA20 | U.32T15DG (complete flasks + screws) | 250 | 10 | 30 | 20 | 38 | 0,660 | 641 |
| U.32T15-50 | U.32T15GA30 | U.32T15DG (complete flasks + screws) | 345 | 10 | 32 | 20 | 43 | 0,990 | 641 |
| U.32T15-50 | U.32T15GA40 | U.32T15DG (complete flasks + screws) | 445 | 10 | 32 | 20 | 43 | 1,590 | 641 |
| U.32T15-50 | U.32T15GA50 | U.32T15DG (complete flasks + screws) | 545 | 10 | 32 | 20 | 43 | 1,800 | 641 |



SPARE LEGS SPARE PARTS



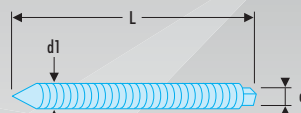
| Puller | Leg reference (to be ordered by 2*) | Leg pin | Lmm | Tmm | L3mm | L1mm | L2mm | kg | For the puller go to page |
|------------|--|--|-----|-----|------|------|------|-------|---------------------------------|
| U.34 | U.34G (set of 2 legs) | M10 screw x 1.5 x 75 mm head H 17 mm, class 8.8 | 300 | 5,5 | 36 | 6 | 15,5 | 1,750 | 645 |
| U.35 | U.35C (set of 2 legs) | U.35-5J2 (set of 2 shear pins) | 155 | 4 | 22 | 3,5 | 14,5 | 0,545 | 645 |
| U.35L | U.35B (set of 2 legs) | U.35-5J2 (set of 2 shear pins) | 188 | 4 | 22 | 3,5 | 14,5 | 0,705 | 645 |
| U.35P | U.35D (set of 2 legs) | U.42-5J2 (set of 2 shear pins) | 110 | 2,5 | 15 | 3 | 8,5 | 0,200 | 645 |
| U.42 | U.42-3 | U.42-5J2 (set of 2 shear pins) | 145 | 3 | 24 | 3 | 8 | 0,220 | 646 |
| U.42B | U.42B3 | U.42-5J2 (set of 2 shear pins) | 194 | 3 | 24 | 3 | 8 | 0,290 | 646 |
| U.52 | U.52-3 | U.35-5J2 (set of 2 shear pins) | 198 | 4,5 | 25 | 4 | 21 | 0,380 | 646 |
| U.232-65 | U.232G1 | - | 100 | 4 | 8,5 | 10 | 16 | 0,080 | 643 |
| U.232-90 | U.232G2 | - | 155 | 5 | 10 | 15 | 24 | 0,190 | 643 |
| U.232-130 | U.232G2 | - | 155 | 5 | 10 | 15 | 24 | 0,190 | 643 |
| U.232-160 | U.232G3 | - | 225 | 8 | 15 | 22 | 33 | 0,580 | 643 |
| U.232-210 | U.232G3 | - | 225 | 8 | 15 | 22 | 33 | 0,580 | 643 |
| U.232-270 | U.232G4 | - | 303 | 11 | 17,5 | 25 | 43 | 1,550 | 643 |
| U.232-340 | U.232G4 | - | 303 | 11 | 17,5 | 25 | 43 | 1,550 | 643 |
| U.301 | U.301G | - | 130 | 5 | 8 | 7 | 16 | 0,100 | 643 |
| U.301-150 | - | - | 205 | 6 | 8 | 7 | 17 | 0,170 | 643 |
| U.301-200 | - | - | 270 | 6 | 8 | 7 | 18 | 0,280 | 643 |
| U.301L | - | - | 180 | 4,5 | 21 | 7 | 18 | 0,220 | 645 |
| U.301M | - | - | 145 | 4 | 21 | 7 | 18,5 | 0,160 | 645 |
| U.301P | - | - | 120 | 4 | 17 | 5 | 12,5 | 0,120 | 645 |
| U.302 | U.301G | - | 130 | 5 | 8 | 7 | 16 | 0,100 | 632 |
| U.302-150 | - | - | 205 | 6 | 8 | 7 | 17 | 0,170 | 632 |
| U.302-200 | - | - | 270 | 6 | 8 | 7 | 18 | 0,280 | 632 |
| U.306-170N | U.306G20 | - | 230 | 6,5 | 8 | 4 | 12 | 0,190 | 630 |
| U.306-180 | U.306G10 | - | 250 | 5 | 14 | 4 | 13 | 0,320 | 630 |
| U.306-260 | U.306G15 | - | 310 | 6,5 | 14 | 4 | 13 | 0,450 | 630 |
| U.306A130N | U.306G2 | - | 170 | 4,5 | 8 | 3,5 | 9,5 | 0,120 | 630 |
| U.306A140 | U.306G1 | - | 185 | 4,5 | 14 | 4 | 13 | 0,210 | 630 |
| U.310-170 | U.310G1 | - | 230 | 6 | 26 | 5 | 19 | 0,560 | 630 |
| U.310-230N | U.310G3 | - | 260 | 10 | 15 | 5,5 | 15 | 0,360 | 630 |
| U.310-250 | U.310G2 | - | 310 | 7 | 26 | 5,5 | 19 | 0,760 | 631 |
| U.312H | U.312G110 | U.312-04-02 (set of 3 screws + nuts) | 150 | 7 | 25 | 15 | 33 | 0,400 | 636 |
| U.312H | U.312G160 | U.312-04-02 (set of 3 screws + nuts) | 190 | 7 | 25 | 15 | 36 | 0,540 | 636 |
| U.312H | U.312G210 | U.312-04-02 (set of 3 screws + nuts) | 240 | 7 | 25 | 12 | 36 | 0,720 | 636 |
| U.312H | U.312G260 | U.312-04-02 (set of 3 screws + nuts) | 285 | 7 | 25 | 12 | 38 | 0,980 | 636 |
| U.320 | U.320-13A | U.320GP1 (set of 3 shear pins) | 505 | 5 | 35,6 | 16 | 45 | 3,100 | 635 |
| U.320H | U.320-13A | U.320GP1 (set of 3 shear pins) | 505 | 5 | 35,6 | 16 | 45 | 3,100 | 638 |
| U.330 | U.330-08 | U.320GP1 (set of 3 shear pins) | 690 | 8,5 | 37,5 | 15,5 | 45 | 6,300 | 635 |
| U.330H | U.330-08 | U.320GP1 (set of 3 shear pins) | 690 | 8,5 | 37,5 | 15,5 | 45 | 6,300 | 638 |

* except U.35B, U.35C, U.35D and U.34: set containing the inside leg and outside leg.



- For your safety, we recommend that all the legs are replaced in the event of a problem.
- Do not modify nor grind the puller legs. Modifications can be very dangerous for the user and invalidates the guarantee.
- Wherever possible, select a 3-leg puller for optimum load distribution.

SPARE SCREWS SPARE PARTS



| Puller | Individual screw reference | Screw extension | L length screw mm | d1 mm | d mm | Shear pin | Shear pin strength | kg | For the puller go to page |
|------------|----------------------------|-----------------|-------------------|------------|---------|--------------------------------------|--------------------|-------|---------------------------|
| U.14A | U.14A04 | - | 105 | M10 x 1,5 | Spindle | - | - | 0,070 | 643 |
| U.14L | U.14A04 | - | 105 | M10 x 1,5 | Spindle | - | - | 0,070 | 643 |
| U.20 | U.20-1S | - | 290 | M22 x 2,5 | 24 | U.306-24J3 | 7T | 0,750 | 633 |
| U.20B | U.20B1S | - | 355 | M22 x 2,5 | 24 | U.306-24J3 | 7T | 0,940 | 633 |
| U.27AS3 | U.27-6 | - | 525 | M32 X 2,5 | 35 | - | - | 2,985 | 634 |
| U.28 | U.28-1* | * | 300 | M22 x 2,0 | 24 | - | - | 0,480 | 649 |
| U.32T2-8 | U.32T2-1 | - | 167 | M16 x 2,0 | 13 | - | - | 0,190 | 641 |
| U.32T2-12 | U.32T2-1 | - | 167 | M16 x 2,0 | 13 | - | - | 0,190 | 641 |
| U.32T6-16 | U.32T6-1 | - | 255 | M22 x 2,0 | 24 | - | - | 0,650 | 641 |
| U.32T6-20 | U.32T6-1 | - | 255 | M22 x 2,0 | 24 | - | - | 0,650 | 641 |
| U.32T15-25 | U.32T15-1 | - | 330 | M32 X 2,5 | 35 | - | - | 1,850 | 641 |
| U.32T15-35 | U.32T15-2 | - | 430 | M32 X 2,5 | 35 | - | - | 2,400 | 641 |
| U.32T15-50 | U.32T15-2 | - | 430 | M32 X 2,5 | 35 | - | - | 2,400 | 641 |
| U.34 | U.20B1 | - | 360 | M22 x 2,0 | 24 | - | - | 0,95 | 645 |
| U.35 | U.35SE1 | - | 183 | M16 x 2,0 | 17 | - | - | 0,200 | 645 |
| U.35L | U.35SE1 | U.35SE3 | 183 | M16 x 2,0 | 17 | - | - | 0,200 | 645 |
| U.35P | U.35P01 | - | 135 | M12 x 1,75 | 13 | - | - | 0,100 | 645 |
| U.42 | U.42-1 | - | 215 | M16 x 2,0 | 13 | - | - | 0,250 | 646 |
| U.42B | U.42-1 | - | 215 | M16 x 2,0 | 13 | - | - | 0,250 | 646 |
| U.51B | U.51B2** | ** | 290 | M18 x 2,5 | 19 | - | - | 0,460 | 648 |
| U.52 | U.52-1 | - | 240 | M18 x 2,5 | 17 | - | - | 0,390 | 646 |
| U.232-65 | U.35P01 | - | 132 | M12 x 1,75 | 13 | - | - | 0,100 | 643 |
| U.232-90 | U.35SE1 | - | 183 | M16 x 2,0 | 17 | - | - | 0,200 | 643 |
| U.232-130 | U.35SE1 | - | 183 | M16 x 2,0 | 17 | - | - | 0,200 | 643 |
| U.232-160 | U.53S2A07 | - | 283 | M20 x 2,5 | 17 | - | - | 0,470 | 643 |
| U.232-210 | U.53S2A07 | - | 283 | M20 x 2,5 | 17 | - | - | 0,470 | 643 |
| U.232-270 | U.53S3-07 | - | 345 | M27 x 3,0 | 21 | - | - | 1,280 | 643 |
| U.232-340 | U.53S3-07 | - | 345 | M27 x 3,0 | 21 | - | - | 1,280 | 643 |
| U.301 | U.301-04 | - | 142 | M12 x 1,75 | 10 | - | - | 0,090 | 643 |
| U.301-150 | U.301-04-150 | - | 212 | M12 x 1,75 | 10 | - | - | 0,150 | 643 |
| U.301-200 | U.301-04-200 | - | 286 | M16 x 2,0 | 13 | - | - | 0,350 | 643 |
| U.301L | U.301L04 | - | 210 | M12 x 1,75 | 10 | - | - | 0,170 | 645 |
| U.301M | U.301M04 | - | 167 | M12 x 1,75 | 10 | - | - | 0,130 | 645 |
| U.301P | U.301P04 | - | 144 | M12 x 1,75 | 10 | - | - | 0,120 | 645 |
| U.302 | U.301-04 | - | 142 | M12 x 1,75 | 10 | - | - | 0,090 | 632 |
| U.302-150 | U.301-04-150 | - | 212 | M12 x 1,75 | 10 | - | - | 0,150 | 632 |
| U.302-200 | U.301-04-200 | - | 286 | M16 x 2,0 | 13 | - | - | 0,350 | 632 |
| U.306-170N | U.306-2 | - | 310 | M16 x 2,0 | 18 | U.306-244J3 (set of 3 shear pins) | 4T | 0,310 | 630 |
| U.306-180 | U.306-2 | - | 310 | M16 x 2,0 | 18 | U.306-244J3 (set of 3 shear pins) | 4T | 0,310 | 630 |
| U.306-260 | U.306-3*** | *** | 370 | M16 x 2,0 | 18 | U.306-24J3 (set of 3 shear pins) | 7T | 0,370 | 630 |
| U.306A130N | U.306-4 | - | 250 | M16 x 2,0 | 18 | U.306-243J3 (set of 3 shear pins) | 3T | 0,250 | 630 |
| U.306A140 | U.306-4 | - | 250 | M16 x 2,0 | 18 | U.306-243J3 (set of 3 shear pins) | 3T | 0,250 | 630 |
| U.310-170 | U.20B1 | - | 360 | M22 x 2,0 | 24 | - | - | 0,95 | 630 |
| U.310-230N | U.20B1 | - | 360 | M22 x 2,0 | 24 | - | - | 0,95 | 632 |
| U.310-250 | U.310-250-10 | - | 400 | M22 x 2,0 | 24 | - | - | 0,950 | 631 |
| U.320 | U.320-01 | U.320-14 | 500 | M30 x 3,0 | 36 | - | - | 2,500 | 635 |
| U.320H | UWG.320H01 | - | 590 | M27 x 3,0 | 21 | - | - | 2,255 | 638 |
| U.330 | U.330-02 | U.330-14 | 650 | M36 x 3,0 | 41 | - | - | 4,700 | 635 |
| U.330H | UWG.330H01 | - | 780 | M33 x 3,5 | 24 | - | - | 4,400 | 638 |

* the U.28-1 screw is supplied with the ring and nut.
 ** the U.51B2 screw is supplied with the ring and nut.
 *** the U.306-3 screw is supplied with its extension.

