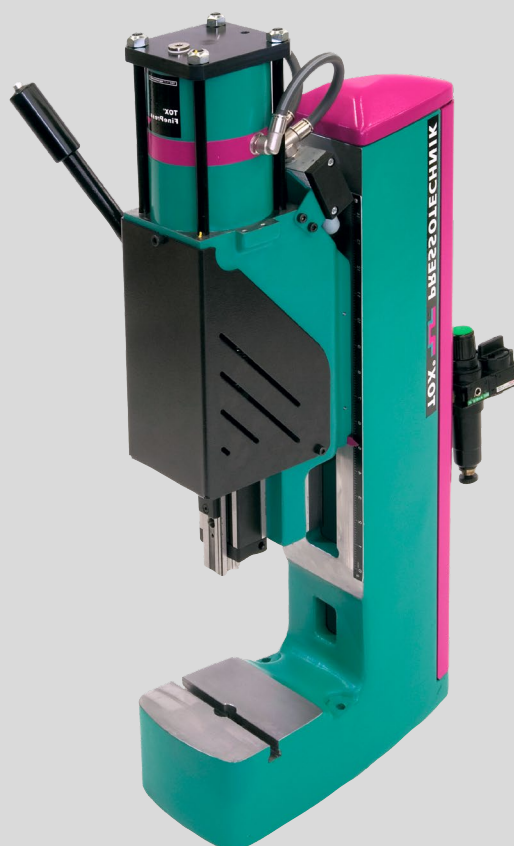


# TOX® FinePress

## Benchtop presses 2 – 57 kN

Data sheet 60.10  
2025/05



TOX® PRESSOTECHNIK SE & Co. KG, Riedstrasse 4, 88250 Weingarten / Germany  
Find your local contact at: [www.tox.com](http://www.tox.com)

# Toggle Presses KF

2.5 – 25 kN

## Changing the force-travel-characteristic

A change in the characteristic of force and travel is possible by simple repositioning of the toggle lever.

**Caution:** Changing the toggle lever position results in a change of the max. press force and the max. stroke (see tables).

## Optional accessories

- Ergonomic side grip ZEH
- Electric counter ZEZ, long life battery operated
- Return stroke lock ZR-L
- Travel sensor ZW-K
- Tool fixture ZA. Also available with 3-in-1 tool clamping concept, with or without force sensor, or as type ZF with fine micrometer adjustment for precise setting of the bottom dead center
- Connection of optional electrical accessories is made easy due to the default interface included in scope of delivery
- More accessories:
  - Pressing monitor
  - Mounting of slide tables according to frame type

## Ordering example:

### KFS 008 + options e. g.

\_\_\_\_\_ max. press force  
 \_\_\_\_\_ Toggle Press

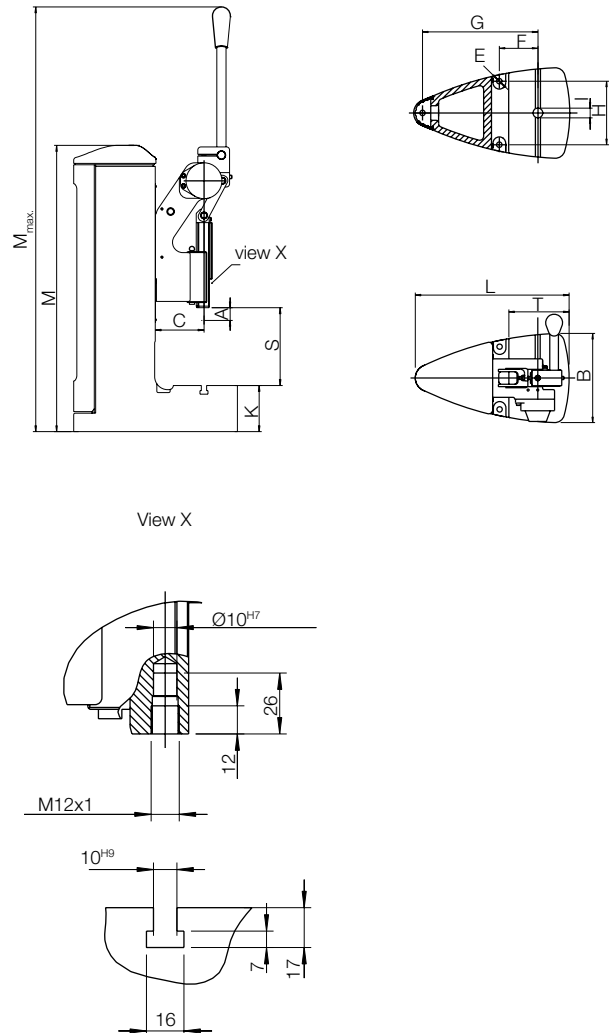
### + ZR-L2.002

\_\_\_\_\_ Return stroke lock

### + ZEZ 001

\_\_\_\_\_ Counter

Please order all other accessories and controls separately.  
 The press heads of this series are available separately.

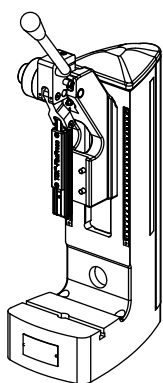


For frame size W > 8 kN,  
 two T-slots, spaced 100 mm

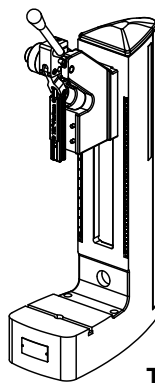
| Type                                                     | Max. press<br>force<br>kN | max. allow.<br>handle pull<br>force N | Max.<br>stroke<br>A*<br>mm | Return<br>force<br>N | BxT     | C   | ØE   | F   | G   | H   | Table<br>bore<br>ØI <sup>H7</sup> | K   | L   | M<br>M <sub>max</sub> | S       | Weight<br>kg | Max.<br>deflec-<br>tion** | M <sub>oy</sub> allow.<br>moment<br>Nm*** |
|----------------------------------------------------------|---------------------------|---------------------------------------|----------------------------|----------------------|---------|-----|------|-----|-----|-----|-----------------------------------|-----|-----|-----------------------|---------|--------------|---------------------------|-------------------------------------------|
| <b>Toggle Presses with standard frame size type S</b>    |                           |                                       |                            |                      |         |     |      |     |     |     |                                   |     |     |                       |         |              |                           |                                           |
| KFS 002                                                  | 2.5                       | 50                                    | 42                         | 30                   | 110x 90 | 90  | 9    | 72  | 203 | 76  | 20                                | 55  | 260 | 465<br>709            | 70-200  | 22.5         | 0.05                      | 25                                        |
| KFSU 008                                                 | (4)<br>8                  | 220                                   | (55.7)<br>23.1             | (26)<br>60           | 130x110 | 95  | 9    | 78  | 214 | 94  | 20                                | 80  | 285 | 535<br>751            | 57-207  | 32           | 0.10                      | 25                                        |
| KFSU 025                                                 | (16)<br>25                | 220                                   | (60)<br>25.3               | (5)<br>35            | 185x120 | 95  | 11   | 79  | 236 | 130 | 20                                | 90  | 319 | 555<br>991            | 54-189  | 45           | 0.25                      | 25                                        |
| <b>Toggle Presses with increased open height type L</b>  |                           |                                       |                            |                      |         |     |      |     |     |     |                                   |     |     |                       |         |              |                           |                                           |
| KFLU 008                                                 | (4)<br>8                  | 220                                   | (55.7)<br>23.1             | (26)<br>60           | 150x125 | 120 | 9    | 94  | 263 | 110 | 20                                | 95  | 339 | 674<br>886            | 57-327  | 45.5         | 0.10                      | 25                                        |
| KFLU 025                                                 | (16)<br>25                | 220                                   | (60)<br>25.3               | (5)<br>35            | 200x180 | 165 | 11   | 120 | 330 | 144 | 20                                | 115 | 439 | 800<br>1231           | 59-404  | 83.5         | 0.45                      | 25                                        |
| <b>Toggle Presses with increased throat depth type W</b> |                           |                                       |                            |                      |         |     |      |     |     |     |                                   |     |     |                       |         |              |                           |                                           |
| KFWU 008                                                 | (4)<br>8                  | 220                                   | (55.7)<br>23.1             | (26)<br>60           | 200x200 | 300 | 13.5 | 145 | 500 | 100 | 20                                | 150 | 624 | 745<br>961            | 197-347 | 103          | 0.20                      | 25                                        |

\*Stroke at lever angle 90° \*\*Press head in uppermost position \*\*\*Ram in bottom dead center ( ) = for alternative toggle lever position Dimensions in mm

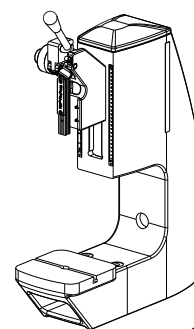
C = Throat depth  
E = Mounting bore  
S = Open height, adjustable



**Type S**



**Type L**



**Type W**

# Rack and Pinion Presses ZF

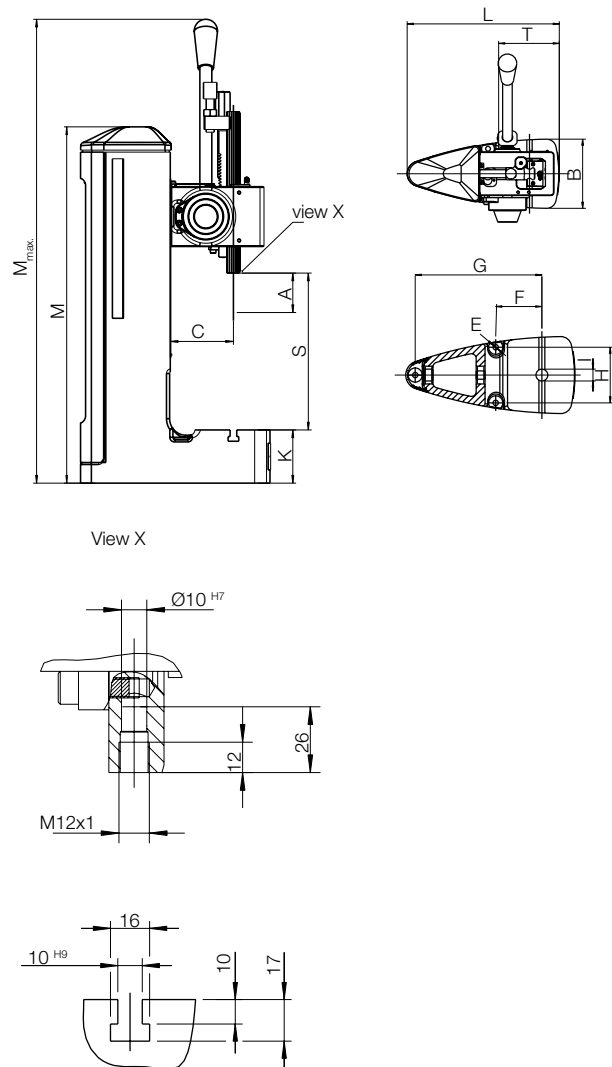
2.5 – 4 kN

The Rack and Pinion Presses transmit the pull force on the lever into a high force at the ram. Constant press force throughout the entire working stroke.

With stop screw for precise end of stroke adjustment.

## Optional accessories

- Ergonomic side grip ZEH
- Electric counter ZEZ, long life battery operated
- Return stroke lock
- Travel sensor ZW-Z
- Tool fixture ZA. Also available with 3-in-1 tool clamping concept, with or without force sensor
- Connection of optional electrical accessories is made easy due to the default interface included in scope of delivery
- More accessories:
  - Pressing monitor
  - Mounting of slide tables according to frame type



## Ordering example:

### ZFS 004 + options e. g.

\_\_\_\_\_ max. press force  
 \_\_\_\_\_ Rack and Pinion Press

### + ZR-L2.002

\_\_\_\_\_ Return stroke lock

### + ZEZ 001

\_\_\_\_\_ Counter

Please order all other accessories and controls separately.  
 The press heads of this series are available separately.

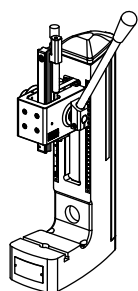
| Type                                                              | Max. press force kN | Max. allowable handle pull force N | Max. stroke over lever rotation A | Return force N | BxT     | C   | ØE   | F   | G   | H   | Table bore Ø <sup>H7</sup> | K   | L   | M <sub>max.</sub> | S       | Weight kg | Max. deflection* | M <sub>0y</sub> allow. moment Nm** |
|-------------------------------------------------------------------|---------------------|------------------------------------|-----------------------------------|----------------|---------|-----|------|-----|-----|-----|----------------------------|-----|-----|-------------------|---------|-----------|------------------|------------------------------------|
| <b>Rack and Pinion Presses with standard frame size type S</b>    |                     |                                    |                                   |                |         |     |      |     |     |     |                            |     |     |                   |         |           |                  |                                    |
| ZFS 002                                                           | 2.5                 | 200                                | 60/228°                           | 60             | 110x90  | 90  | 9    | 72  | 203 | 76  | 20                         | 55  | 260 | 465<br>522        | 55-190  | 22        | 0.05             | 25                                 |
| ZFS 004                                                           | 4                   | 300                                | 80/218°                           | 60             | 130x110 | 95  | 9    | 78  | 214 | 94  | 20                         | 80  | 285 | 535<br>690        | 80-230  | 33        | 0.05             | 25                                 |
| <b>Rack and Pinion Presses with increased open height type L</b>  |                     |                                    |                                   |                |         |     |      |     |     |     |                            |     |     |                   |         |           |                  |                                    |
| ZFL 004                                                           | 4                   | 300                                | 80/218°                           | 60             | 150x125 | 120 | 9    | 94  | 263 | 110 | 20                         | 95  | 339 | 674<br>830        | 85-355  | 47        | 0.05             | 25                                 |
| <b>Rack and Pinion Presses with increased throat depth type W</b> |                     |                                    |                                   |                |         |     |      |     |     |     |                            |     |     |                   |         |           |                  |                                    |
| ZFW 004                                                           | 4                   | 300                                | 80/218°                           | 60             | 200x200 | 300 | 13.5 | 145 | 500 | 100 | 20                         | 150 | 624 | 745<br>900        | 225-370 | 104       | 0.05             | 25                                 |

\*Press head in uppermost position

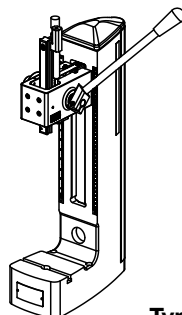
\*\*Ram in bottom dead center

Dimensions in mm

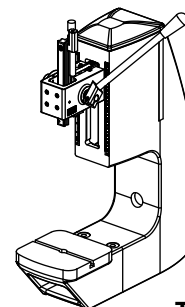
C = Throat depth  
E = Mounting bore  
S = Open height, adjustable



**Type S**



**Type L**



**Type W**

# Pneumatic Presses PF

2 – 57.5kN

The TOX® Pneumatic Cylinder features the latest seal technology for smooth, trouble-free operation. These seals provide a more reliable operation than pneumatic cylinders with flat seals.

- Adjustable end position damping
- Clean plumbing. Air connections integrated on frame
- Stroke adjustment over entire travel

## Optional accessories

- Electric counter ZPZ, long life battery operated incl. pressure switch
- Travel sensor ZW-P
- Home position sensor ZOT mounted on tie rods
- End position sensor ZUT with stroke adjustment. No sensor adjustment required if stroke is adjusted
- Tool fixture ZA. Also available with 3-in-1 tool clamping concept, with or without force sensor
- Connection of optional electrical accessories is made easy due to the default interface included in scope of delivery
- More accessories:
  - Pressing monitor
  - Mounting of slide tables according to frame type

## Ordering example:

### PFL 004 + options e.g.

Max. press force  
Pneumatic Press

### + ZUT 000

End position sensor

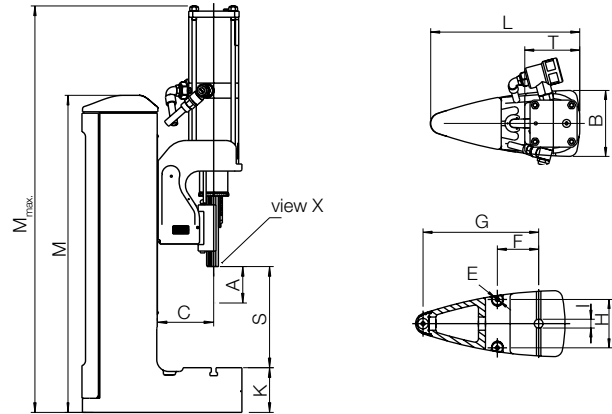
### + ZPZ 001

Counter

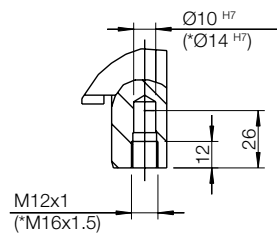
### + STP 03-10

2-hand safety controls

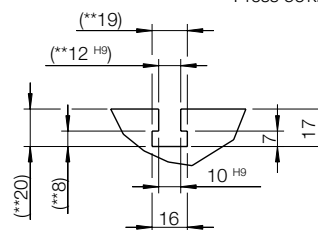
Please order all other accessories and controls separately.  
The press heads of this series are available separately.



View X  
\*Presses > 13.5 kN



\*\*Press 56 kN



For frame size W > 8 kN two T-slots,  
spaced 100 mm

| Type                                                        | Max. press<br>force**<br>kN | Max.<br>stroke<br>A | Max. return<br>force kN at<br>6 bar | BxT     | C   | ØE   | F   | G   | H   | Table<br>bore<br>Ø <sup>H7</sup> | J   | K   | L   | M<br>M <sub>max</sub> | S       | Weight<br>kg | Max.<br>deflec-<br>tion* | M <sub>oy</sub> allow.<br>moment<br>Nm*** |
|-------------------------------------------------------------|-----------------------------|---------------------|-------------------------------------|---------|-----|------|-----|-----|-----|----------------------------------|-----|-----|-----|-----------------------|---------|--------------|--------------------------|-------------------------------------------|
| <b>Pneumatic Presses with standard frame size type S</b>    |                             |                     |                                     |         |     |      |     |     |     |                                  |     |     |     |                       |         |              |                          |                                           |
| PFS 002                                                     | 2                           | 80                  | 1                                   | 110x90  | 90  | 9    | 72  | 203 | 76  | 20                               | 1/4 | 55  | 260 | 465<br>673            | 70-125  | 25           | 0.05                     | 25                                        |
| <b>Pneumatic Presses with increased open height type L</b>  |                             |                     |                                     |         |     |      |     |     |     |                                  |     |     |     |                       |         |              |                          |                                           |
| PFL 004                                                     | 4.0                         | 80                  | 1                                   | 150x125 | 120 | 9    | 94  | 263 | 110 | 20                               | 1/4 | 95  | 339 | 674<br>1167           | 100-295 | 51           | 0.15                     | 25                                        |
| PFL 008                                                     | 8.5                         | 80                  | 4                                   | 150x125 | 120 | 9    | 94  | 263 | 110 | 20                               | 1/2 | 95  | 339 | 674<br>919            | 70-270  | 57           | 0.20                     | 25                                        |
| PFL 013                                                     | 13.5                        | 80                  | 4                                   | 200x180 | 165 | 11   | 120 | 330 | 144 | 20                               | 1/2 | 115 | 439 | 800<br>1189           | 75-370  | 96           | 0.50                     | 25                                        |
| PFL 022                                                     | 22.5                        | 80                  | 11                                  | 200x180 | 165 | 11   | 120 | 330 | 144 | 20                               | 1/2 | 115 | 439 | 800<br>1048           | 90-370  | 116          | 0.45                     | 70                                        |
| PFL 056                                                     | 57.5                        | 80                  | 11                                  | 260x220 | 240 | 13.5 | 178 | 487 | 190 | 30                               | 1/2 | 160 | 614 | 860<br>1549           | 95-385  | 227          | 0.85                     | 70                                        |
| <b>Pneumatic Presses with increased throat depth type W</b> |                             |                     |                                     |         |     |      |     |     |     |                                  |     |     |     |                       |         |              |                          |                                           |
| PFW 004                                                     | 4.0                         | 80                  | 1                                   | 200x200 | 300 | 13.5 | 145 | 500 | 100 | 20                               | 1/4 | 150 | 624 | 745<br>1237           | 240-310 | 107          | 0.20                     | 25                                        |
| PFW 008                                                     | 8.5                         | 80                  | 4                                   | 200x200 | 300 | 13.5 | 145 | 500 | 100 | 20                               | 1/2 | 150 | 624 | 745<br>989            | 210-285 | 114          | 0.25                     | 25                                        |

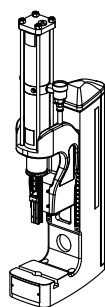
\*Press head in uppermost position

\*\*at 6 bar air pressure (max. operating pressure 6 bar, min. 3.0 bar)

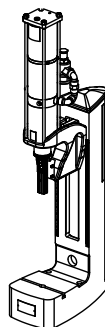
\*\*\*Ram in bottom dead center

Dimensions in mm

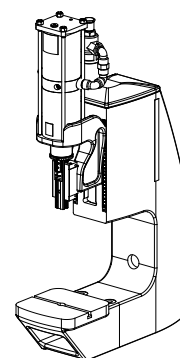
C = Throat depth  
E = Mounting bore  
J = Connection [inch]  
S = Open height, adjustable



**Type S**



**Type L**



**Type W**

# Pneumatic Presses with manual approach PFH

## 8.5 – 57.5 kN

Pneumatic Presses with hand lever toggle mechanism for 54 mm approach stroke and max. 6 mm power stroke. From 8.5 – 57.5 kN, high precision, no guide adjustment required, non-rotating ram.

- In compliance with the EC type examination certificate
- Clean plumbing. Air connections integrated on frame
- Fine stroke adjustment during power stroke (6 mm)
- Return force/tool weight is infinitely adjustable
- Default interface for easy connection of electrical components
- Controls completely integrated on frame, including air servicing unit
- The hand lever can be mounted on left side too for all models

### Function:

The press ram is moved forward over a toggle mechanism by pulling on the hand lever. Pressing the start button on the lever, after a limit switch is tripped, results in a 6 mm long pneumatic power stroke. Releasing the lever or the start button ends the power stroke.

### Optional accessories

- Electric counter ZPZ, long life battery operated incl. pressure switch
- Travel sensor ZW-PH
- Tool fixture ZA. Also available with 3-in-1 tool clamping concept, with or without force sensor
- More accessories:
  - Pressing monitor
  - Mounting of slide tables according to frame type

### Ordering example:

#### PFHL 008 + options e.g.

\_\_\_\_\_ Max. press force  
 \_\_\_\_\_ Pneumatic Press with manual approach frame

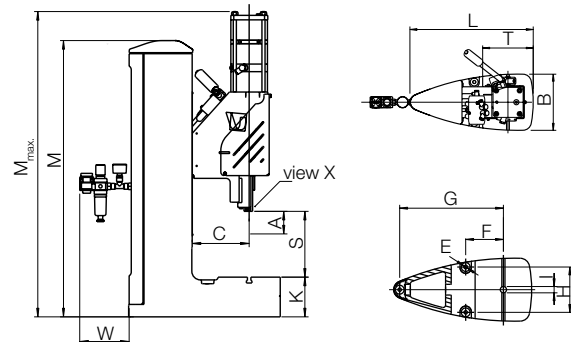
#### + ZAK-K08

\_\_\_\_\_ Tool fixture with force sensor

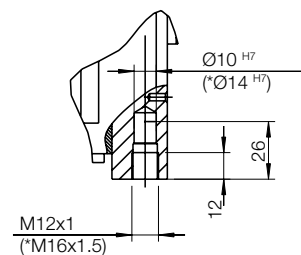
#### + ZPZ 001

\_\_\_\_\_ Counter

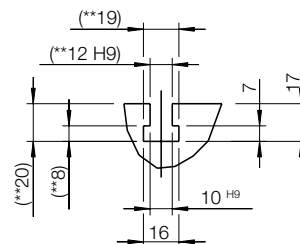
Please order all other accessories and controls separately.  
The press heads of this series are available separately.



\*Presses > 13.5 kN



\*\*Press 56 kN



For frame size W > 8 kN two T-slots, spaced 100 mm

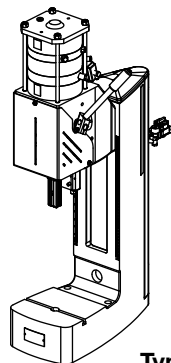
| Type                                                       | Max. press<br>force**<br>kN | Max.<br>stroke<br>A | Max. re-<br>turn force<br>N** | BxT     | C   | ØE   | F   | G   | H   | Table<br>bore<br>Ø I <sup>H7</sup> | J   | K   | L   | M<br>M <sub>max.</sub> | S      | W   | Weight<br>kg | Max.<br>deflec-<br>tion* | M <sub>oy</sub> allow.<br>moment<br>Nm*** |
|------------------------------------------------------------|-----------------------------|---------------------|-------------------------------|---------|-----|------|-----|-----|-----|------------------------------------|-----|-----|-----|------------------------|--------|-----|--------------|--------------------------|-------------------------------------------|
| <b>Pneumatic Presses with increased open height type L</b> |                             |                     |                               |         |     |      |     |     |     |                                    |     |     |     |                        |        |     |              |                          |                                           |
| PFHL 008                                                   | 8.5                         | 60                  | 85                            | 150x125 | 120 | 9    | 94  | 263 | 110 | 20                                 | 1/4 | 95  | 339 | 674<br>860             | 30-265 | 144 | 61           | 0.10                     | 25                                        |
| PFHL 013                                                   | 13.5                        | 60                  | 85                            | 200x180 | 165 | 11   | 120 | 330 | 144 | 20                                 | 1/4 | 115 | 439 | 800<br>999             | 35-375 | 105 | 95           | 0.20                     | 25                                        |
| PFHL 022                                                   | 22.5                        | 60                  | 73                            | 200x180 | 165 | 11   | 120 | 330 | 144 | 20                                 | 1/4 | 115 | 439 | 800<br>999             | 25-330 | 105 | 120          | 0.35                     | 70                                        |
| PFHL 056                                                   | 57.5                        | 60                  | 73                            | 260x220 | 240 | 13.5 | 178 | 487 | 190 | 30                                 | 1/4 | 160 | 614 | 860<br>1273            | 55-340 | 101 | 232          | 0.70                     | 70                                        |

#### Pneumatic Presses with increased throat depth type W

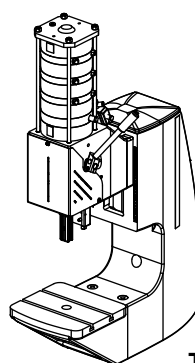
|          |     |    |    |         |     |      |     |     |     |    |     |     |     |            |         |   |     |      |    |
|----------|-----|----|----|---------|-----|------|-----|-----|-----|----|-----|-----|-----|------------|---------|---|-----|------|----|
| PFHW 008 | 8.5 | 60 | 85 | 200x200 | 300 | 13.5 | 145 | 500 | 100 | 20 | 1/4 | 150 | 624 | 745<br>945 | 205-285 | — | 115 | 0.20 | 25 |
|----------|-----|----|----|---------|-----|------|-----|-----|-----|----|-----|-----|-----|------------|---------|---|-----|------|----|

\*Press head in uppermost position \*\*at 6 bar air pressure (max. operating pressure 6 bar, min. 3.0 bar) \*\*\*Ram in bottom dead center Dimensions in mm

C = Throat depth  
E = Mounting bore  
J = Connection [inch]  
S = Open height, adjustable



**Type L**

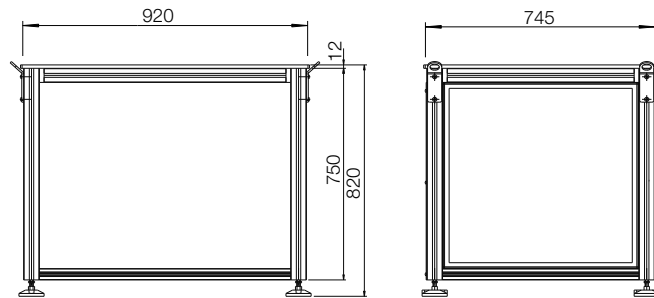
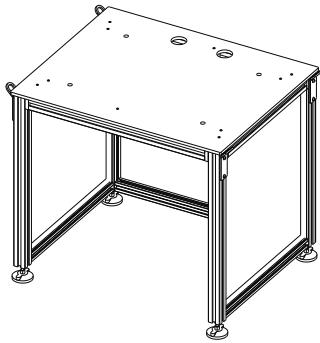


**Type W**

# Accessories

## Universal base FinePress UUF 1-045.100

Base as frame construction made of aluminium profiles with housing. Table board made of steel (RAL 7035 light grey).  
Max. load 900kg, with swivel casters mounted 500kg.



### Order no.

- UUF 1-45 Standard base with steel top and leveling feet

### Option Swivel casters

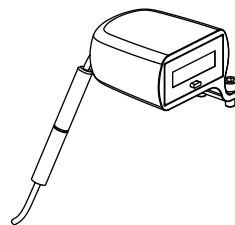


### Order no. option

- ZUUF 1-45 R Swivel casters

## Counter

With the help of the electric counter type ZEZ and the pneumatic counter type ZPZ, the production quantities can be displayed on the eight digit display. The counters can be easily mounted on any press. The electrical counter is powered by a long life battery. **No external power supply required!**

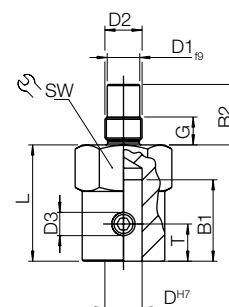
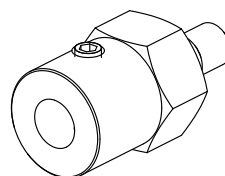


### Order no.

- ZEZ 001 Electric counter for manual presses
- ZPZ 001 Pneumatic counter for pneumatic presses

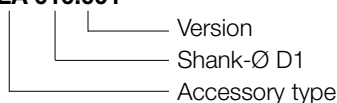
## Tool fixture ZA

This simple tool fixture is screwed into the ram thread. It centers the tool via the precision bore D and provides fixation of the tool using a set screw. Other tool fixtures with different bore sizes D are available on request.



### Ordering example:

**ZA 010.001**



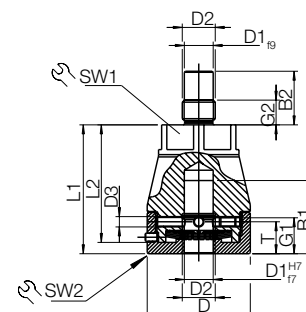
| Type         | B1 | B2 | D  | D1 | D2      | D3  | G  | L  | SW | T  |
|--------------|----|----|----|----|---------|-----|----|----|----|----|
| ZA 10.10.000 | 25 | 26 | 10 | 10 | M12x1   | M8  | 10 | 35 | 30 | 10 |
| ZA 10.12.000 | 30 | 26 | 12 | 10 | M12x1   | M8  | 10 | 45 | 30 | 12 |
| ZA 14.10.000 | 25 | 26 | 10 | 14 | M16x1.5 | M8  | 12 | 35 | 30 | 10 |
| ZA 14.20.000 | 45 | 26 | 20 | 14 | M16x1.5 | M10 | 12 | 60 | 41 | 20 |

Dimensions in mm

## 3 in 1 – the perfect tool fixture concept for long term investment

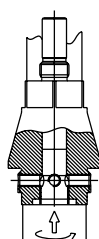
In most conventional small presses, the tool is mounted directly on the press ram and is held in place with a set screw. If the thread in the set screw bore is damaged, the ram has to be replaced, which is expensive. **Therefore, TOX® PRESSOTECHNIK has developed the 3 in 1 solution for:**

- ① Cylindrical threaded centering pilot
- ② Cylindrical clamping shank without threads
- ③ Clamping shank per DIN 9859, with set screw mount



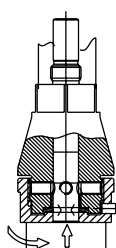
**Caution:** Press force must be carried over the entire surface ØD!

### Choice ①



The tool can be inserted directly into the threaded pilot bore.

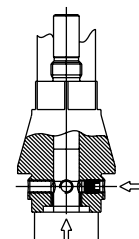
### Choice ②



Clamping disc elements provide high radial clamping forces for a strong connection.

**Advantage:** No damage to tool fixture. Zero clearance and detachable. Tool weight max. 4 kg.

### Choice ③



Conventional set screw clamping is also possible for existing tooling. **Advantage:** Prevents damage to ram.

| Type       | B1 | B2 | D  | D1 | D2      | D3 | G1 | G2 | L1   | L2 | SW1 | SW2 | T    |
|------------|----|----|----|----|---------|----|----|----|------|----|-----|-----|------|
| ZA 010.001 | 32 | 26 | 38 | 10 | M12x1   | M5 | 13 | 10 | 54   | 51 | 24  | 36  | 13   |
| ZA 014.001 | 33 | 26 | 50 | 14 | M16x1.5 | M5 | 17 | 12 | 62.5 | 57 | 32  | 46  | 15.5 |

SW 46 has a height of 11 mm. A suitable open end wrench type CZG (8mm) can be found in TOX® data sheet 80.100.

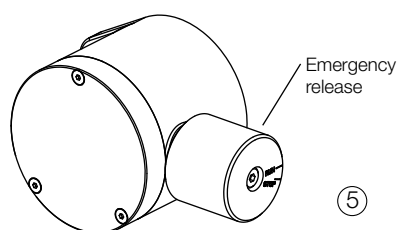
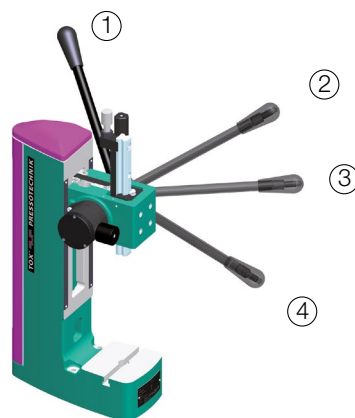
Dimensions in mm



## Return stroke lock ZR-L

- ① Home position of the press.
- ② At this position of the return stroke, the lock is activated again.
- ③ First ratchet position: Loose workpieces can still be aligned.
- ④ Ratchet position in end position: The return stroke lock is released after the ram reaches the selected end position. This guarantees the process repeatability and therefore a constant usage. The locking function can be set to any position within the stroke.
- ⑤ The emergency knob releases the locking function in any position.

**Order no.** ZR-L 2.002

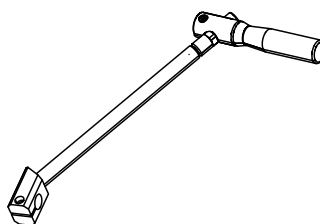


This option can be mounted on any Toggle or Rack and Pinion Press.

## Ergonomic side grip ZEH

Ergonomic grip can be mounted and rotated anywhere along the hand lever.

**Order no.** ZEH 018



## Hand lever extension 150mm

Intended solely to reduce the required manual force, not to increase the press force.

**Order no.** HH 018.150