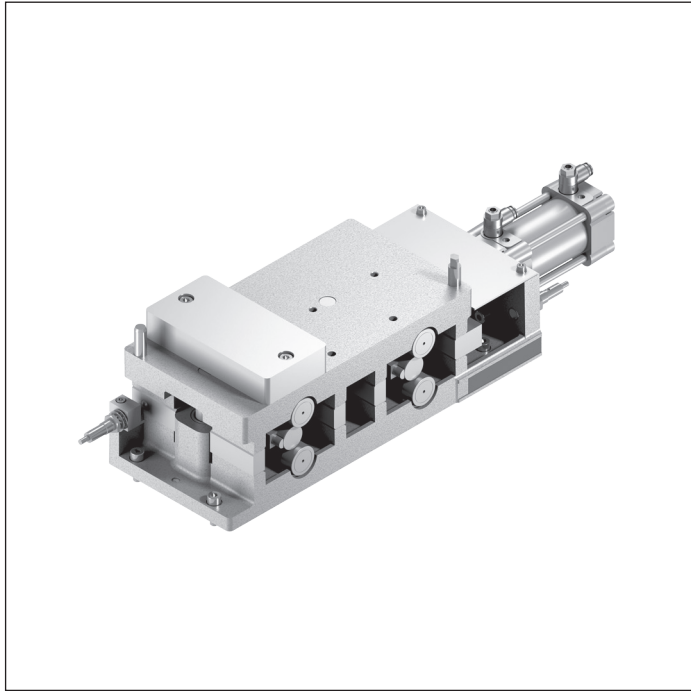
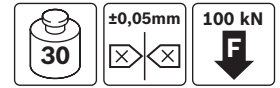


PE 2/XP positioning unit



- ▶ Positions a workpiece pallet in a processing station with especially high vertical process force requirements (100 kN/60 kN), such as those needed for press-fit or riveting work.
- ▶ Mounting in force cells, positive force introduction
- ▶ WT lift above transportation level, approx. 3 mm
- ▶ Can be combined with WT 2 workpiece pallets

Note: Maximum total workpiece pallet weight m_G , incl. anvil plate or positioning plate for BG 1, is: $m_G = 20$ kg and BG 2: $m_G = 30$ kg.

Accessories

Required accessories

- ▶ Anvil plate for standard sizes from 160 x 160 mm to 320 x 240 mm, see p 7-40
- ▶ Anvil plate for 320 x 240 mm workpiece pallets, see p. 7-39
- ▶ Positioning pins, round and flat-sided
h = 30 mm for standard anvil plate
h = 21 mm for special designs
- ▶ VE 2/... stop gate, see p. 8-4
- ▶ 2x M12x70 and M12x67 sensor with rated sensing range $S_N = 4$ mm, can be installed flush, see p. 8-108/8-110

Delivery notes

Condition on delivery

- ▶ Fully assembled

Ordering information

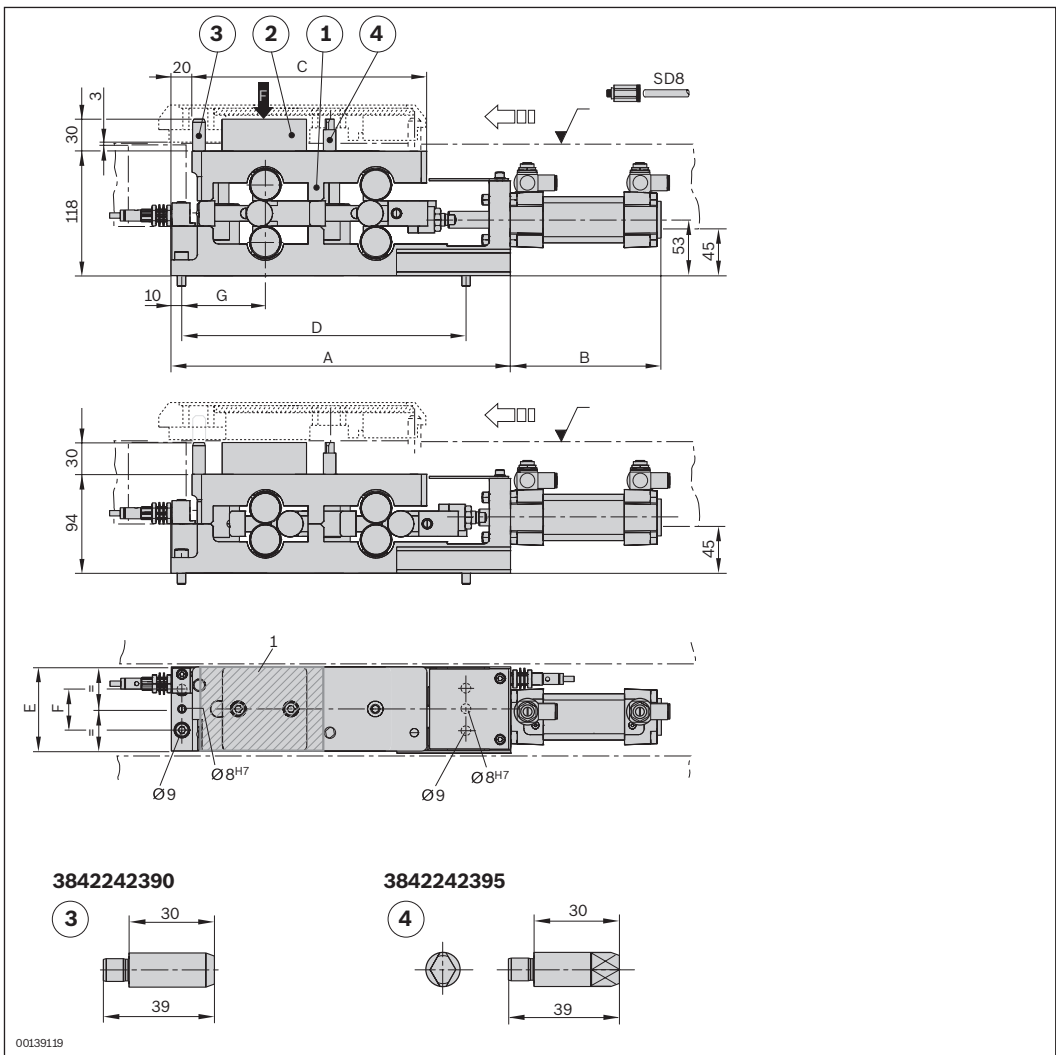
| Product designation | Size | Width of workpiece pallet (mm) | Material number |
|--------------------------|------|--------------------------------|-----------------|
| PE 2/XP positioning unit | BG 1 | 160 | 3842242350 |
| PE 2/XP positioning unit | BG 2 | 240 | 3842242351 |

Technical data

| | | | |
|---|-------|-------------------|-------------------|
| Material number | | 3842242350 | 3842242351 |
| Load | | | |
| Max. total workpiece pallet weight | m_G | kg | 20 |
| | | | 30 |
| Features | | | |
| ESD | | Yes | Yes |
| Design | | | |
| Size | BG | BG 1 | BG 2 |
| Additional information | | | |
| Repeat accuracy | | mm | ± 0.05 |
| Permissible vertical process forces ¹⁾ | | kN | 60 |
| | | | 100 |
| WT lift above conveying level | | mm | 3 |
| | | | 3 |

¹⁾ Incl. WT 2

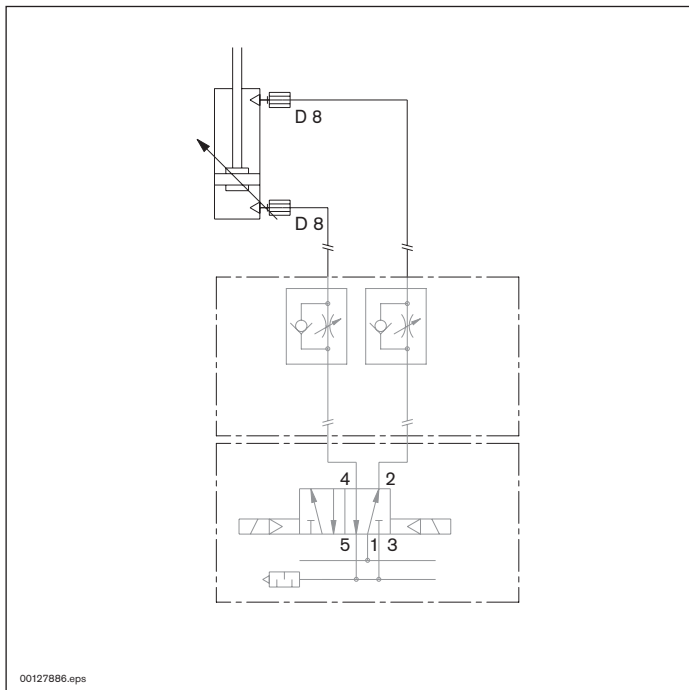
Dimensions



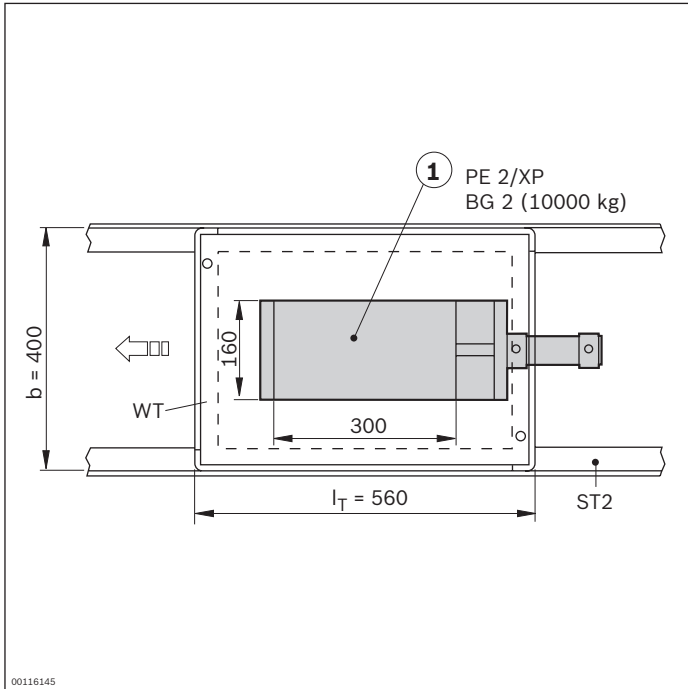
Dimensions

| Size | Workpiece pallet size l_T (mm) | Workpiece pallet size b (mm) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) |
|------|--|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| BG 1 | 160 | 160 | 322 | 142 | 222 | 270 | 80 | 40±0.2 | 78.5 |
| BG 1 | 240 | 160 | 322 | 142 | 222 | 270 | 80 | 40±0.2 | 118.5 |
| BG 2 | 160 | 240 | 405 | 146 | 298 | 350 | 160 | 100±0.3 | 78.5 |
| BG 2 | 240 | 240 | 405 | 146 | 298 | 350 | 160 | 100±0.3 | 118.5 |
| BG 2 | 320 | 240 | 405 | 146 | 298 | 350 | 160 | 100±0.3 | 158.5 |

Circuit diagrams



Not included in delivery



Use of PE 2/XP positioning unit with workpiece pallets larger than $l_T = 320 \text{ mm} \times b = 240 \text{ mm}$

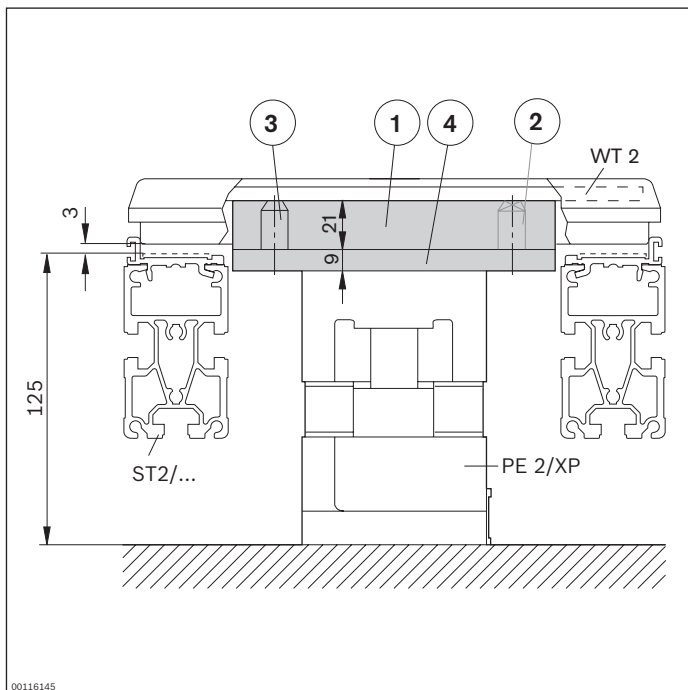
The PE 2/XP positioning unit, designed to absorb forces, can also be used with workpiece pallets with large dimensions if the process forces are applied at certain points.

The PE 2/XP must then be arranged in such a manner that it can absorb the forces directly.

The forces may be applied off-center.

However, where process forces are applied must be within the area of the upper part of the PE 2/XP.

1 Anvil plate, example:
Process forces applied at center of workpiece pallet



Design notes

When the unit is used with workpiece pallets larger than $l_T \times b = 320 \times 240 \text{ mm}$, a special anvil plate with a thickness of 21 mm and a positioning plate with a thickness of 9 mm must be designed.

The positioning plate must also receive the positioning pins. The anvil plate should support the WT carrying plate.

The anvil plate can also be replaced with several domes for workpiece pallet support and power transmission. Benefits: Weight reduction.

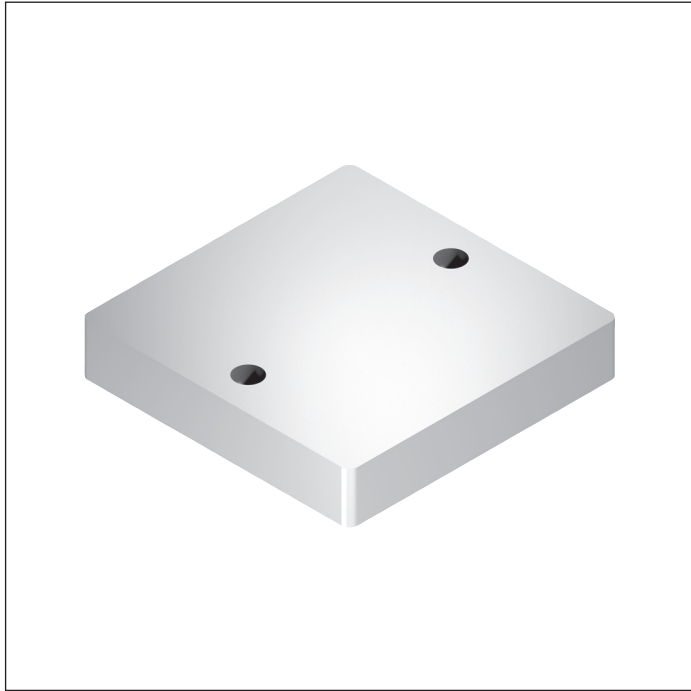
The maximum total workpiece pallet weight m_G , incl. anvil plate or positioning plate, is as follows for the following sizes:

BG 1: $m_G = 20 \text{ kg}$

BG 2: $m_G = 30 \text{ kg}$

1 Anvil plate
2 Positioning pin, round
3 Positioning pin, flat-sided
4 Positioning plate

Anvil plate



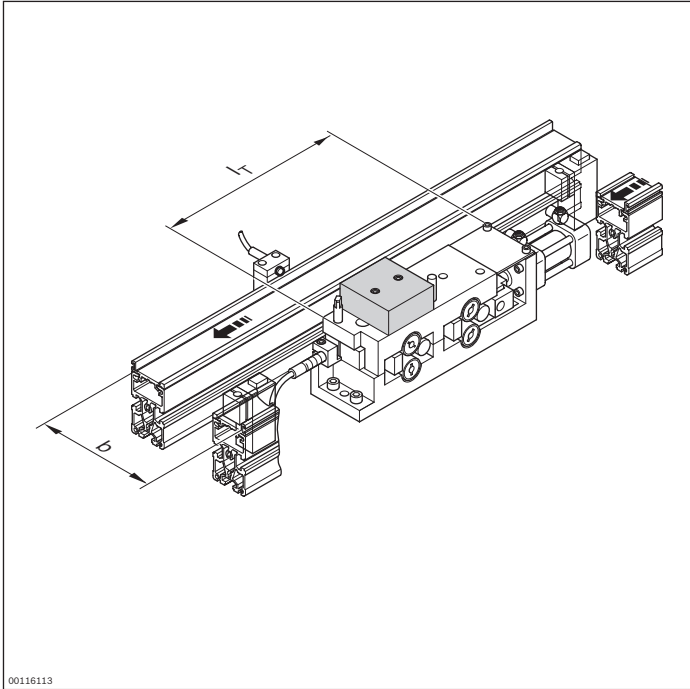
► For PE 2/XP positioning unit

Ordering information

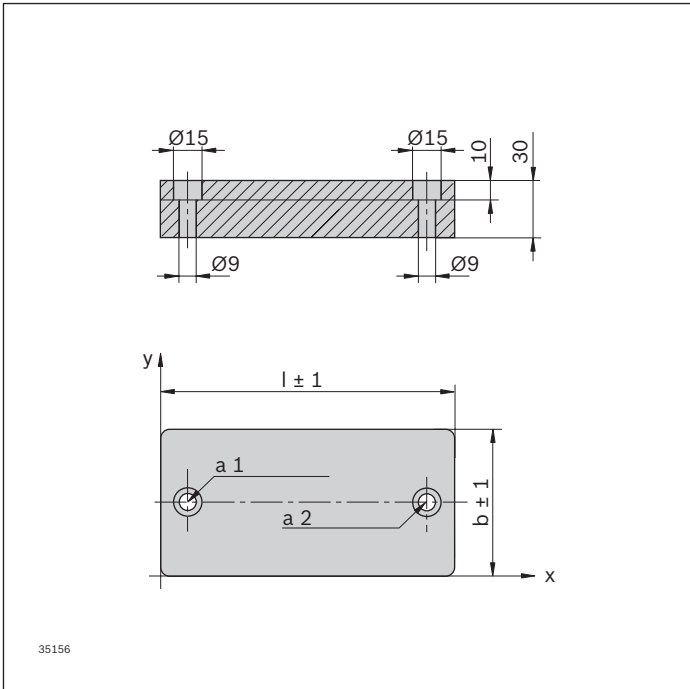
| Product designation | BG | Track width in direction of transport b (mm) | Length in direction of transport l _T (mm) | Material number |
|---------------------|------|---|---|-----------------|
| Anvil plate | BG 1 | 160 | 160 | 3842242375 |
| Anvil plate | BG 2 | 240 | 160 | 3842242376 |
| Anvil plate | BG 1 | 160 | 240 | 3842242376 |
| Anvil plate | BG 2 | 240 | 240 | 3842242377 |
| Anvil plate | BG 2 | 240 | 320 | 3842242378 |

Technical data

| Material number | 3842242375 | 3842242376 | 3842242377 | 3842242378 |
|---------------------------------------|-------------------|-------------|--------------------|-------------|
| Load | | | | |
| Max. total workpiece pallet weight | m _G kg | BG 1: 20 | BG 1; 2: 20; 30 | BG 2: 30 |

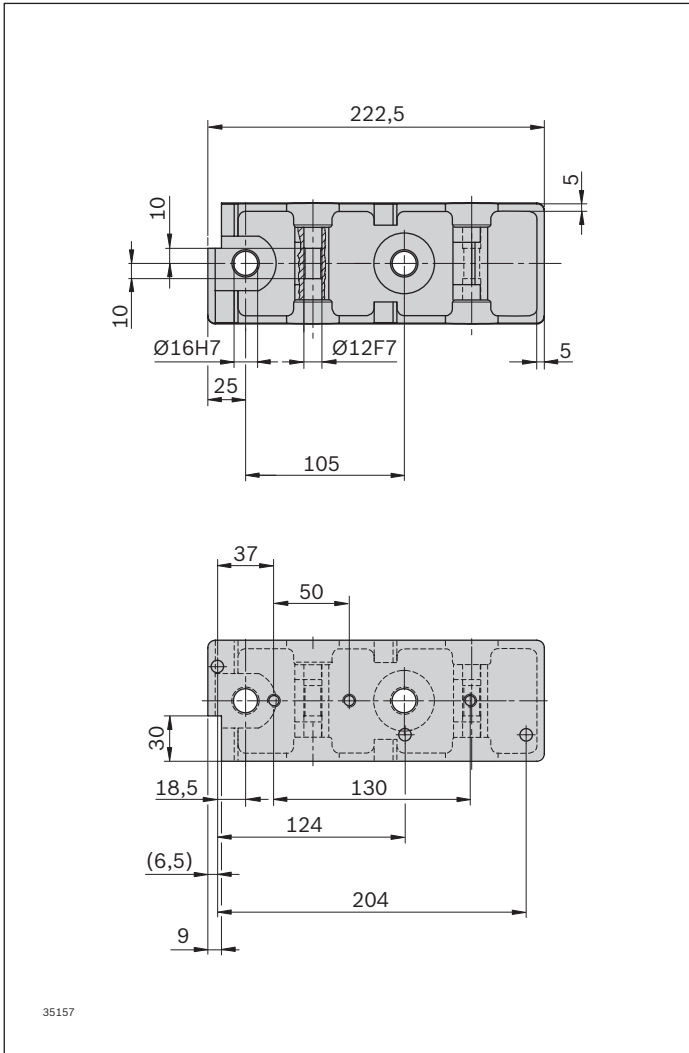


Anvil plate drilling plan

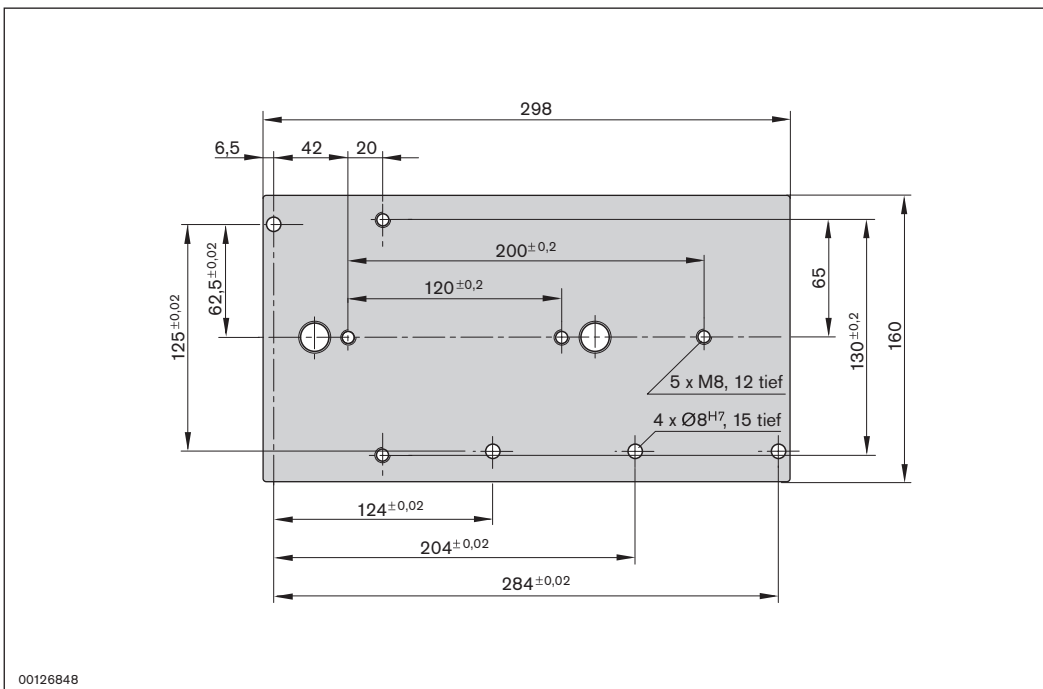


| Workpiece pallet size b_{WT} (mm) | Workpiece pallet size l_{WT} (mm) | Type | b (mm) | l (mm) | x (mm) | y (mm) |
|--|---|------|-----------|-----------|-----------|-----------|
| 160 | 160 | a1 | 80 | 80 | 15 | 40 |
| | | a2 | 80 | 80 | 65 | 40 |
| 160 | 240 | a1 | 80 | 160 | 15 | 40 |
| | | a2 | 80 | 160 | 145 | 40 |
| 240 | 160 | a1 | 80 | 160 | 15 | 40 |
| | | a2 | 80 | 160 | 145 | 40 |
| 240 | 240 | a1 | 160 | 160 | 20 | 80 |
| | | a2 | 160 | 160 | 140 | 80 |
| 240 | 320 | a1 | 160 | 240 | 20 | 80 |
| | | a2 | 160 | 240 | 220 | 80 |

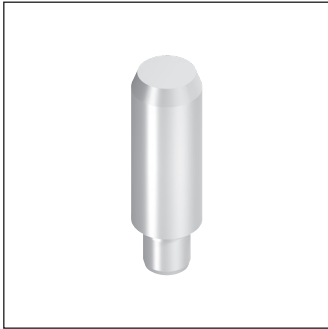
**Drilling plan for upper part
of PE 2/XP (BG 1)**



**Drilling plan for upper part
of PE 2/XP (BG 2)**



Positioning pin, round



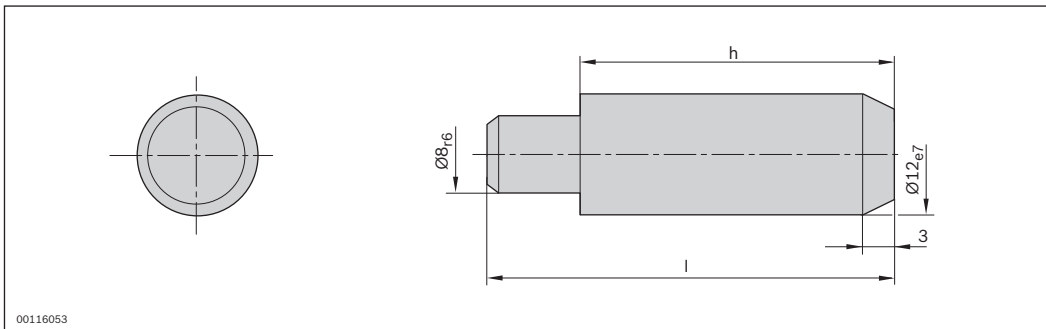
► For PE 2/XP positioning unit

Ordering information

| Product designation | Length l (mm) | Height h (mm) | Material number |
|------------------------|------------------|------------------|-----------------|
| Positioning pin, round | 30 | 21 | 3842242391 |
| Positioning pin, round | 38 | 21 | 3842242392 |
| Positioning pin, round | 39 | 30 | 3842242390 |

7

Dimensions



00116053

Positioning pin, flat-sided

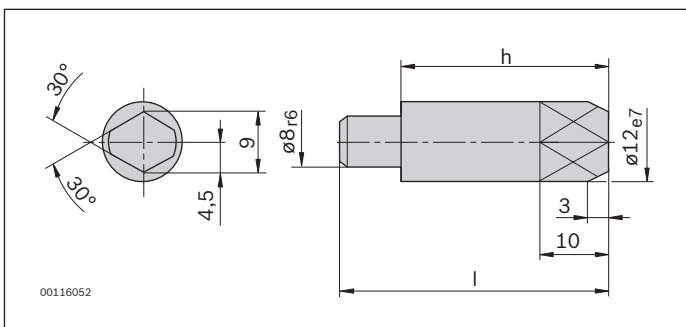


► For PE 2/XP positioning unit

Ordering information

| Product designation | Length l (mm) | Height h (mm) | Material number |
|-----------------------------|------------------|------------------|-----------------|
| Positioning pin, flat-sided | 30 | 21 | 3842242396 |
| Positioning pin, flat-sided | 38 | 21 | 3842242397 |
| Positioning pin, flat-sided | 39 | 30 | 3842242395 |

Dimensions



00116052