

FORCE-SENSING DEVICES of hydraulic type Standard programme



Types picture 500/1 and 500/2

Pressure cells for static and dynamic force sensing with $\pm 1\%$ sensing accuracy of end scale value (for pressure cells with higher sensing accuracy see page D 35). Suitable for environment temperatures ranging from -20°C to $+50^{\circ}\text{C}$.

Types (for details see Page 2):

Compact shape = picture 500/1 **Compact shape with distributor** = picture 504/1
Ring shape*) = picture 500/2 **Ring shape with distributor *)** = picture 504/2

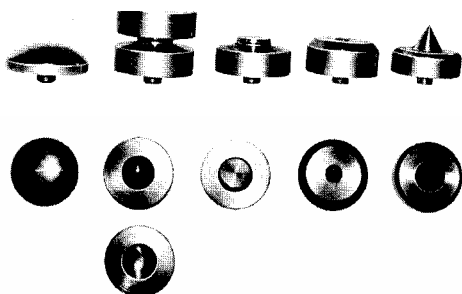
Measuring capacity types (for details see Page 3):

Compact shape:

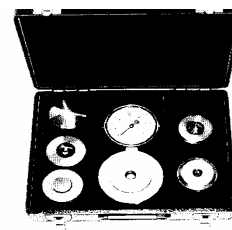
| | | | |
|---------------------|-------------------|---------------|-------------------------|
| 6.1 = display range | 60 N to 160 N, | display piece | 100 mm \varnothing |
| 6.2 = display range | 250 N to 60 kN, | display piece | 63/100 mm \varnothing |
| 6.3 = display range | 100 kN to 250 kN, | display piece | 100 mm \varnothing |
| 6.4 = display range | 400 kN to 600 kN, | display piece | 100 mm \varnothing |

Ringform:*)

I – VI = display range 1 kN to 2,5 MN, display piece 100 mm \varnothing



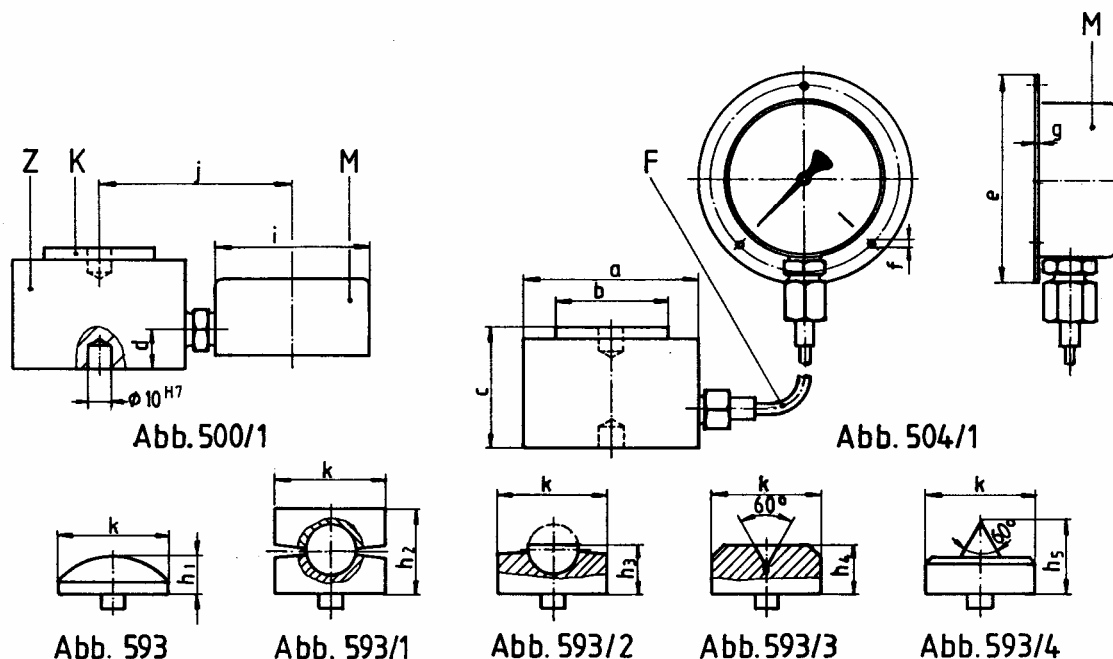
Types picture 593 to 593/4



Case for complete line:
Types picture 500/1 and picture 593 to 593/4

*) Described on Page D 38-01.

Types



Description:

The hydraulic pressure cells are built of steel capsule-shaped pressure hulls: cylinder (Z) and piston (K).

The piston receives the weight and conducts it to the manometer (M) via a special membrane, which ensures a tight seal, and a special conveyance liquid.

As a result of filling of the entire system under highest vacuum, the stroke distance of the piston does not exceed 1 mm.

With types 6.1, 6.2 (only with display piece 100 mm \varnothing) 6.3 and 6.4 auf request with maximum indicator adjustable from outside by means of a socket spanner, as well as with simple and collateral contacts in crawling oder magnet jump feed.

picture 500/1 = pressure cell with rigidly mounted manometer

picture 504/1 = pressure cell with flexible copper pipe distributor (F) to the manometer, with posterior fixing edge for wall mounting (auf request with front ring for table mounting), distributor normal length 2 m, $\varnothing = 4/2$ mm.

Accessories:

picture 593 = spherical cap (hardened)

picture 593/1 = ball hinge plate

picture 593/2 = the same without top device with complete or half ball

picture 593/3 = hollow punch thrust piece 60° (hardened)

picture 593/4 = hollow punch thrust piece 60° (hardened)

Measuring capacity and scaling:

| | | | | |
|-------------------------------|-------------|-----------------------------------|-------------------------------------|-------------------------------------|
| Measuring capacity Scaling | Type 6.1 | 60 N = 6 daN 1 N = 0,1 daN | 100 N = 10 daN 2 N = 0,2 daN | 160 N = 16 daN 5 N = 0,5 daN |
| Measuring capacity Scaling | Type 6.2 | 250 N = 25 daN 10 N = 1 daN | 400 N = 40 daN 20 N = 2 daN | 600 N = 60 daN 20 N = 2 daN |
| Measuring capacity Scaling | | 1 kN = 100 daN 0,05 kN = 5 daN | 1,6 kN = 160 daN 0,05 kN = 5 daN | 2,5 kN = 250 daN 0,1 kN = 10 daN |
| Measuring capacity Scaling | | 4 kN = 400 daN 0,2 kN = 20 daN | 6 kN = 600 daN 0,2 kN = 20 daN | |
| Measuring capacity Scaling | | 10 kN 0,5 kN | 16 kN 0,5 kN | 25 kN 1 kN |
| Measuring capacity Scaling | Type 6.3 | 100 kN 2 kN | 160 kN 5 kN | 250 kN 10 kN |
| Measuring capacity Scaling | Type 6.4 | 400 kN 20 kN | 600 kN 20 kN | |

Sizes and weights:

| Type | Letter size in mm | | | | | | | | | | | | | | | Weight in kg |
|----------|-------------------|-----|----|----|-----|-----|-----|----|-----|----|----|----|-----|-----|-----|-----------------|
| | a | b | c | d | e | f | g | h1 | h2 | h3 | h4 | h5 | i | j | k | |
| 6.1 | 60 | 20 | 65 | 21 | 132 | 4,8 | 6,0 | 15 | 35 | 20 | 20 | 31 | 100 | 100 | 44 | 1,6 |
| 6.2 | 70 | 45 | 50 | 16 | 85 | 3,6 | 5,5 | 15 | 35 | 20 | 20 | 31 | 63 | 75 | 44 | 1,4 |
| 6.2 *) | 70 | 45 | 60 | 23 | 132 | 4,8 | 6,0 | 15 | 35 | 20 | 20 | 31 | 100 | 105 | 44 | 2,1 |
| 6.3, 6.4 | 145 | 115 | 65 | 22 | 132 | 4,8 | 6,0 | 50 | 100 | 60 | 60 | 95 | 100 | 140 | 105 | 7,8 |

Boxes:

Cases and housings are available for types:

- 6.2 with picture 500/1 **and** 593 ff (accessories),
- 6.3 and 6.4 **only** with picture 500/1 (without accessories)

Note:

Measuring capacity and scaling in kp/Mp can only be made available for deliveries abroad or on the internal orderer's special request.

(For details see MMB 01).

*)Type 6.2 with NG 100 manometer