

Product Description

The type PC6 is a stainless steel single point load cell with complete hermetic sealing. It is a perfect fit for use in harsh industrial environments and wash down applications.

Application

- Bench and floor scales, conveyor scales, check weighers, packaging machines and industrial process control

Key Features

- Wide range of capacities from 10 kg to 200 kg
- Stainless steel construction
- Environmental Protection IP68 with complete hermetic sealing
- Maximum platform size up to 600 x 600 mm
- High input resistance
- Integral mounting spacer

Approvals

- OIML approval to C3 (Y = 12 500), C3 MI6 (Y = 12 500) and C4 (Y = 12 500)
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

Option

- Y = 25 000 for C3, C3 MI6 and C4
- Digital version PC6D-20 kg with CANOpen output available on request

Packed Weight

- 1.32 kg

Available Accessories

- Compatible range of electronics

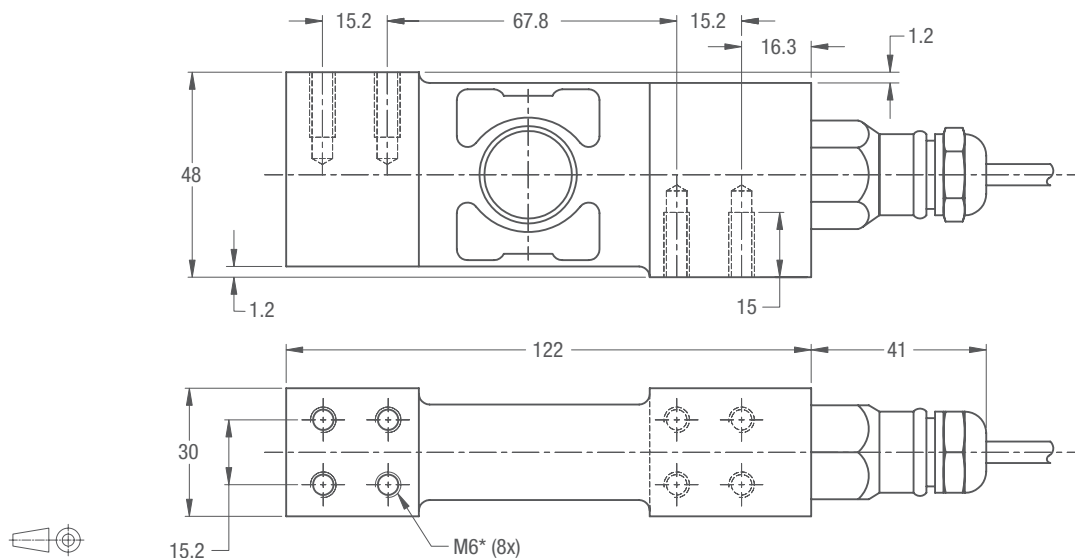
PC6 Specifications

| | | (E _{max}) | kg | 10 / 20 / 50 / 100 / 200 | | | |
|---|---------------------------------------|-------------------------|--------------------|---|-------------------------|------------|------------|
| Accuracy class according to OIML R60 | | | | (GP) | C3 | C3 MI 6 | C4 |
| Maximum number of verification intervals | | (n _{LC}) | | n.a. | 3000 | | 4000 |
| Minimum load cell verification interval | | (v _{min}) | | n.a. | E _{max} /12500 | | |
| Temperature effect on minimum dead load output | | (TC ₀) | %*RO/10°C | ≤ ± 0.0400 | ≤ ± 0.0112 | | |
| Temperature effect on sensitivity | | (TC _{RO}) | %*RO/10°C | ≤ ± 0.0200 | ≤ ± 0.0100 | | ≤ ± 0.0080 |
| Combined error | | | %*RO | ≤ ± 0.0500 | ≤ ± 0.0200 | ≤ ± 0.0180 | ≤ ± 0.0180 |
| Non-linearity | | | %*RO | ≤ ± 0.0400 | ≤ ± 0.0166 | ≤ ± 0.0166 | ≤ ± 0.0125 |
| Hysteresis | | | %*RO | ≤ ± 0.0400 | ≤ ± 0.0166 | ≤ ± 0.0083 | ≤ ± 0.0125 |
| Creep error (30 minutes) / DR | | | %*RO | ≤ ± 0.0600 | ≤ ± 0.0166 | ≤ ± 0.0083 | ≤ ± 0.0125 |
| Option | Min. load cell verification interval | (v _{min opt}) | | n.a. | E _{max} /25000 | | |
| | Temp. effect on min. dead load output | (TC _{0 opt}) | %*RO/10°C | n.a. | ≤ ± 0.0056 | | |
| Temp. effect on min. dead load output | | (RO) | mV/V | | 2 ± 5% | | |
| Zero balance | | | %*RO | | ≤ ± 5 | | |
| Excitation voltage | | | V | | 5...15 | | |
| Input resistance | | (R _{LC}) | Ω | | 1 100 ± 50 | | |
| Output resistance | | (R _{out}) | Ω | | 960 ± 50 | | |
| Insulation resistance (100 V DC) | | | MΩ | | ≥ 5000 | | |
| Safe load limit | | (E _{lim}) | %*E _{max} | | 200 | | |
| Ultimate load | | | %*E _{max} | | 300 | | |
| Safe side load | | | %*E _{max} | | 100 | | |
| Maximum platform size; loading acc. to OIML R76 | | | mm | 350 x 350 for 10...20 kg / 450 x 450 for 50 kg / 600 x 600 for 100...200 kg | | | |
| Maximum off centre distance at maximum capacity | | | mm | 115 for 10...20 kg / 150 for 50 kg / 200 for 100...200 kg | | | |
| Compensated temperature range | | | °C | -10...+40 | | | |
| Operating temperature range | | | °C | -40...+80 (ATEX -40...+60) | | | |
| Load cell material | | | | stainless steel 17-4 PH (1.4548) | | | |
| Sealing | | | | complete hermetic sealing; cable entry sealed by glass to metal header | | | |
| Protection according DIN 40.050 | | | | IP68 | | | |

The limits for Non-Linearity, Hysteresis, and TC_{RO} are typical values.

The sum of Non-linearity, Hysteresis and TC_{RO} meets the requirements according to OIML R60 with p_{LC}=0.7.

Dimensions (in mm)



Mounting bolts M6 8.8; torque 10 Nm. Torque value assumes oiled threads.

* Unified thread 1/4-20 UNC is available.

Wiring

- The load cell is provided with a shielded, 4 conductor cable (AWG 24). Cable jacket polyurethane.
- Cable length: 3 m
- Cable diameter: 5 mm
- The shield is floating

On request 6 conductor cable and the shield connected to the load cell body available.

