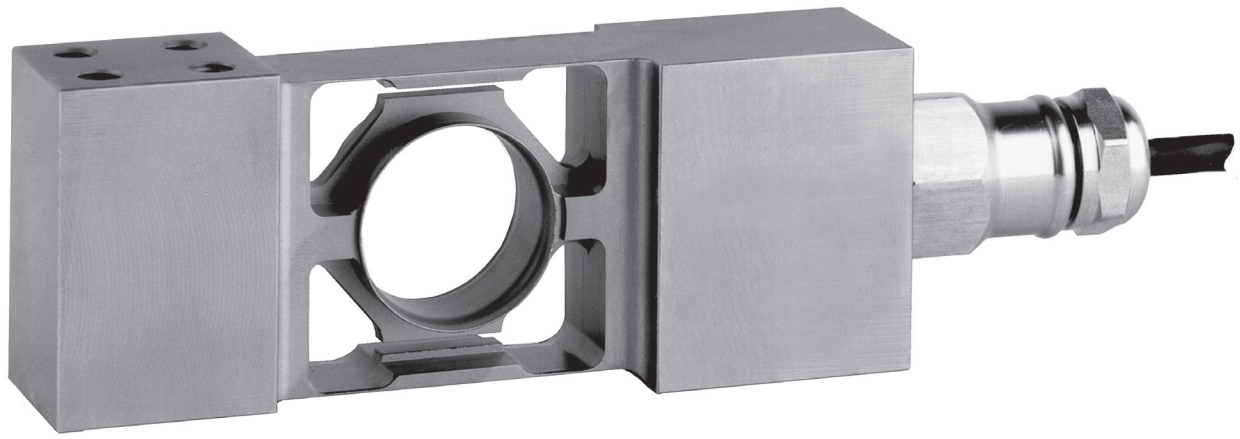
Type PC6 Load Cell



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

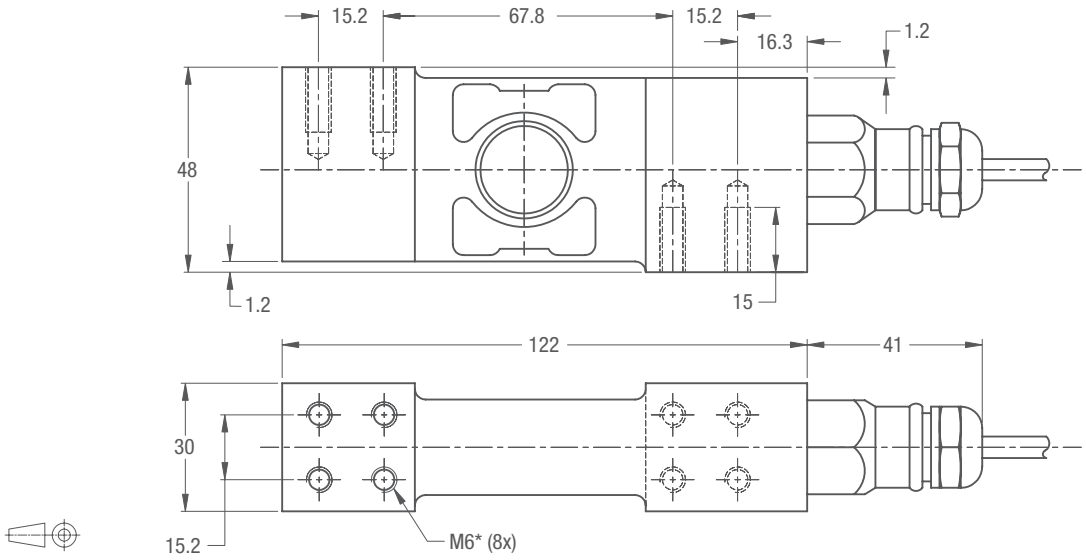
- Compatible range of electronics

PC6 Specifications

Maximum capacity (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	1100 ± 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.