

PC1 15 kg ...200 kg



PC1 7.5 kg and 10 kg



Product Description

The type PC1 is a stainless steel single point load cell with an improved potting. It is suitable for use in industrial environments.

Application

- Bench and floor scales, conveyor scales

Key Features

- Wide range of capacities from 7.5 kg to 200 kg
- Stainless steel construction
- Environmental Protection IP67 (IP65 for 7.5 kg and 10 kg)
- Maximum platform size up to 600 x 600 mm
- Integral mounting spacer

Approvals

- OIML approval to C3, C3 M16 and C4 (Y = 10 000)
- NTEP approval to 4 500 intervals, Class III (for 7.5 kg to 75 kg)
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

Options

- Y = 15 000 for C3, C3 M16 and C4
- M10 mounting threads available (only for 50 kg, 75 kg and 100 kg)

Packed Weight

■ Capacity (kg)	7.5–100	200
Weight (kg)	1.2	1.6

Available Accessories

- Compatible range of electronics

PC1 Specifications

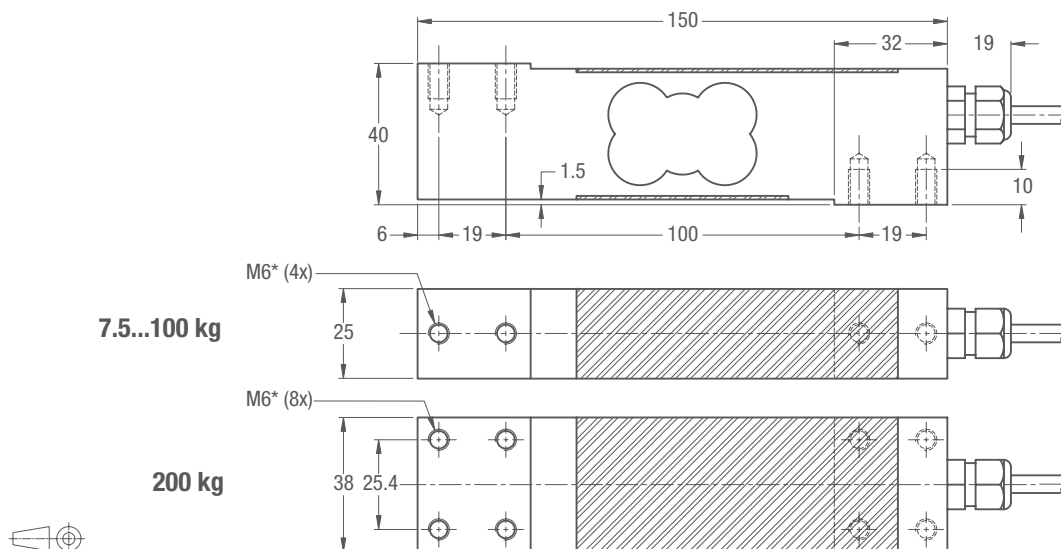
		kg	7.5 / 10 / 15 / 30 / 50 / 75 / 100 / 200			
Maximum capacity	(E _{max})		(GP)	C3	C3 MI 6	C4
Accuracy class according to OIML R60			n.a.	3 000		4 000
Maximum number of verification intervals	(n _{LC})		n.a.	E _{max} /10 000		
Minimum load cell verification interval	(v _{min})		n.a.	E _{max} /15 000		
Temperature effect on minimum dead load output	(TC ₀)	%*RO/10°C	≤ ± 0.0400	≤ ± 0.0140		
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} /15 000		
	Temp. effect on min. dead load output	(TC _{0 opt})	n.a.	≤ ± 0.0093		
Rated Output	(RO)	mV/V	2 ± 0.1			
Zero balance		%*RO	≤ ± 5			
Excitation voltage		V	5...15			
Input resistance	(R _{LC})	Ω	390 ± 20			
Output resistance	(R _{out})	Ω	330 ± 25			
Insulation resistance (100 V DC)		MΩ	≥ 5 000			
Safe load limit	(E _{lim})	%*E _{max}	200			
Ultimate load		%*E _{max}	300			
Safe side load		%*E _{max}	100			
Maximum platform size; loading according to OIML R76		mm	350x350 for 7.5...15 kg / 450x450 for 30...75 kg / 600x600 for 100...200 kg			
Maximum off center distance at maximum capacity		mm	115 for 7.5...15 kg / 150 for 30...75 kg / 200 for 100...200 kg			
Compensated temperature range		°C	-10...+40			
Operating temperature range		°C	-20...+65 (ATEX -20...+60)			
Load cell material			stainless steel 17-4 PH (1.4548)			
Sealing			plastic covered			
Protection according to DIN 40.050			IP67*			

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.

* Attention: IP65 for 7.5 kg and 10 kg

Dimensions (in mm)



PC1: Mounting bolts M6 8.8; torque 10 Nm. Torque value assumes oiled threads.

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

PC1B: Mounting bolts M10 8.8; torque 50 Nm (50/75/100 kg). Torque value assumes oiled threads.

If countersunk mounting screws are used, ask for detailed drawing.

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 connected to the load cell body

