

Type PC1 Load Cell



Flintec load cells are designed to meet the most stringent accuracy requirements. Certifications have been obtained from Weights & Measures Authorities, worldwide.

The PC1 platform load cells are available in the capacities 6 kg to 200 kg and include Accuracy Classifications GP, C3, C3 MI 6 and C4 according to OIML R 60; NTEP $n_{max}=4500$.

They offer stainless steel construction and improved potting, making them suitable for use in tough industrial environments.

Designed to withstand shock and fatigue loading.

The off center load performance according OIML allows a maximum platform size of 600 × 600 mm.

The version PC1B is available with M10 thread in the capacities 50 kg, 75 kg and 100 kg.

The PC1 / PC1B is available for use in hazardous areas zone 1, 2 (gas) and 21, 22 (dust) according to EEx ia IIC T6...T4 T150°C ATEX.

Important Features

- Capacity: 6 kg to 200 kg.
- High accuracy.
- Stainless steel construction.
- Protection IP 67.
- Maximum platform size 600 × 600 mm.
- Integral mounting spacer.
- W&M certified for 4000 intervals.
- Factory mutual approved.

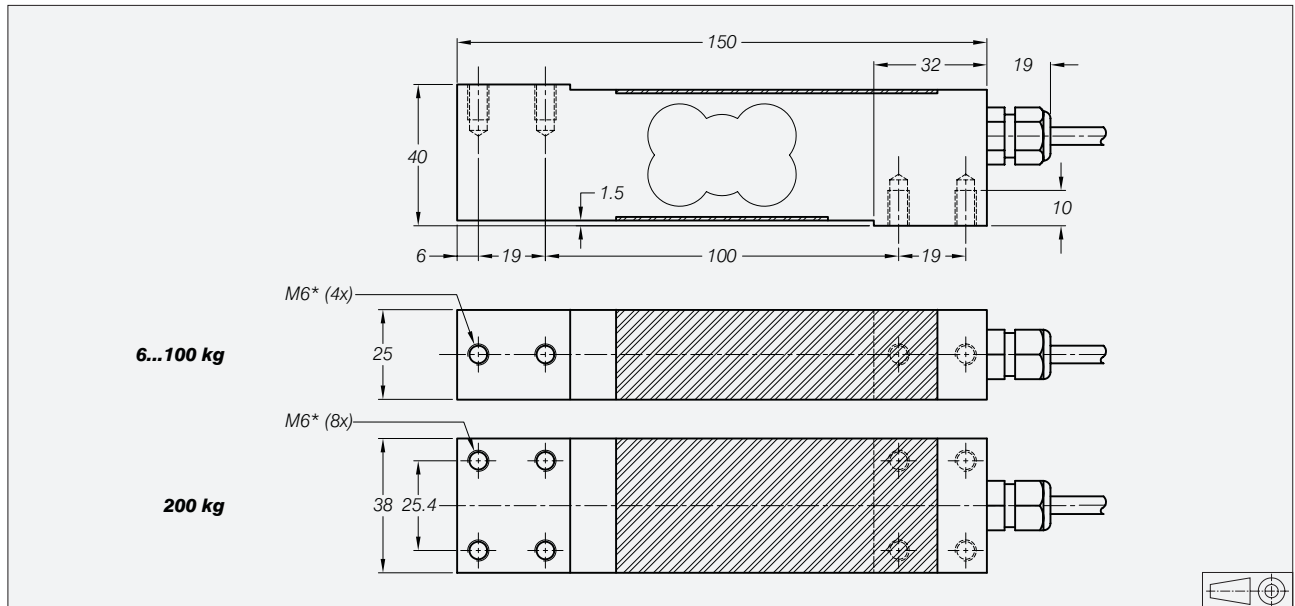
Option

- Explosion protection zone 1, 2, 21 and 22 ATEX.

PC1 Specifications

Maximum capacity (=E _{max})	kg	6 / 10 / 15 / 30 / 50 / 75 / 100 / 200			6 / 10 / 15 / 30	
Rated Output (=RO)	mV/V	2 ± 5%				
Accuracy class according to OIML R 60		(GP)	C3	C3 MI 6	C4	
Maximum number of verification intervals (n)		n.a.	3000	3000	4000	
Minimum load cell verification interval (v _{min})		n.a.	E _{max} /8000	E _{max} /8000	E _{max} /8000	
Combined error	%RO	≤ ± 0.040	≤ ± 0.015	≤ ± 0.012	≤ ± 0.012	
Creep error (30 minutes)	%RO	≤ ± 0.060	≤ ± 0.024	≤ ± 0.012	≤ ± 0.018	
Temperature effect on minimum dead load output	%RO/°C	≤ ± 0.0040	≤ ± 0.00085	≤ ± 0.00085	≤ ± 0.00085	
Temperature effect on sensitivity	%/°C	≤ ± 0.0020	≤ ± 0.0010	≤ ± 0.0010	≤ ± 0.0008	
Excitation voltage	V	5...15				
Zero balance	%RO	≤ ± 1.0				
Input resistance	Ω	390 ± 10				
Output resistance	Ω	330 ± 25				
Insulation resistance	MΩ	≥ 5000				
Compensated temperature range	°C	-10...+40				
Operating temperature range	°C	-20...+65				
Safe load limit	%E _{max}	200				
Ultimate load	%E _{max}	300				
Safe side load	%E _{max}	100				
Maximum platform size; loading according OIML	mm	375×375 for 6...15 kg / 450×450 for 30 kg / 600×600 for other capacities				
Maximum off center distance at maximum capacity	mm	200				
Load cell material		stainless steel 17-4 PH (1.4548)				
Sealing		potted				
Protection according DIN 40.050		IP 67				

Dimensions



All dimensions in mm. Dimensions and specifications are subject to change without notice.

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.

Wiring

- The load cell is provided with a shielded, 4 conductor cable.
- Cable length: 3 m.
- Cable diameter: 5 mm.
- The shield is connected to the load cell body.

