

Type PC1 Load Cell



PC1 6 kg and 10 kg

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 x 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 0, 1, 2 (gas) and 20, 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 (IP 65 for 6 kg and 10 kg).
- Maximum platform size 600 x 600 mm.
- · Integral mounting spacer.
- W&M certified for 5000 intervals (PTB: D09-97.28 Rev. 2).
- Factory Mutual approved.

Option

- Explosion protection zone 0, 1, 2 and 20, 21, 22 ATEX (except 6 kg and 10 kg).
- C3, C3 MI 6 and C4 with Y=15000.

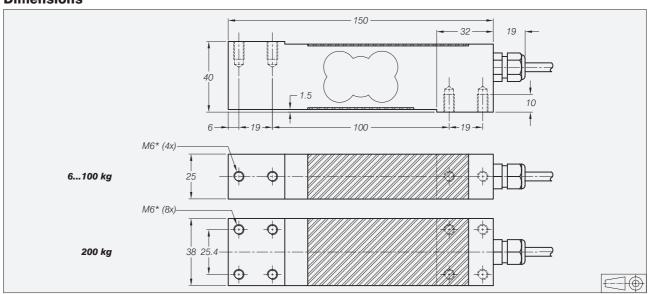


PC1 Specifications

Maximum capacity (E _{max})		kg	6 / 10 / 15 / 30 / 50 / 75 / 100 / 200				
Rated Output (Cn)		mV/V	2 ± 0.1				
Accuracy class according to OIML R 60			(GP)	C3	C3 MI 6	C4	
Maximum number of verification intervals (n _{max})				n.a.	3000	3000	4000
Minimum load cell verification interval (v _{min})				n.a.	E _{max} /10000		
Temperature effect on minimum dead load output			%Cn/°C	≤ ± 0.0040	≤ ± 0.0014		
Option	Min. load cell verification interval	(v _{min})		n.a.	E _{max} /15000		
	Temp. effect on min. dead load output		%Cn/°C	n.a.	≤ ± 0.00093		
Combined error			%Cn	≤ ± 0.040	≤ ± 0.015	≤ ± 0.012	≤ ± 0.012
Creep error (30 minutes) / DR		%Cn	≤ ± 0.060	≤ ± 0.024	≤ ± 0.012	≤ ± 0.018	
Temperature effect on sensitivity		%/°C	≤ ± 0.0020	≤ ± 0.0010	≤ ± 0.0010	≤ ± 0.0008	
Excitation voltage		V	515				
Zero balance		%Cn	≤ ± 5				
Input resistance		Ω	390 ± 20				
Output resistance		Ω	330 ± 25				
Insulation resistance (100 DC)			МΩ	≥ 5000			
Compensated temperature range			°C	-10+40			
Operating temperature range		°C	-40+65				
Safe load limit (Elim)		%E _{max}	200				
Ultimate load		%E _{max}	300				
Safe side load		%E _{max}	100				
Maximum platform size; loading according OIML		mm	350x350 for 615 kg / 450x450 for 3075 kg / 600x600 for 100200 kg				
Maximum off center distance at maximum capacity		mm	115 for 615 kg / 150 for 3075 kg / 200 for 100200 kg				
Load cell material				stainless steel 17-4 PH (1.4548)			
Sealing			plastic covered				
Protection according DIN 40.050				IP 67*			

^{*} Attention: Maximum capacity 6 kg and 10 kg only available with protection IP 65

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.

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. PC1B:

Wiring

• The load cell is provided with a shielded, 4 conductor cable (AWG 24). Cable jacket polyurethane.

• Cable length: • Cable diameter: 5 mm.

• The shield is connected to the load cell body.

