PC1 single point load cell



product description

High accuracy, single point load cell ideal for a wide variety of weighing tasks. The PC1 is constructed out of stainless steel and is environmentally protected with durable potting material. With capacities ranging from 7.5kg through to 200kg and accuracy classes to C4 OIML, the PC1 lends itself to many types of certified weighing equipment.

applications

Bench scales, packaging and grading machines, bag filling equipment, bottle filling machinery.

key features

Stainless steel construction

Environmentally sealed by potting to IP67 (IP65 only for the 7.5 and 10kg models)

Wide range of capacities from 7.5kg to 200kg

High accuracy

For platform sizes of up to 600 x 600mm

Integral mounting spacer













approvals

OIML approval to C3, C3 MI6 and C4 (Y = 10,000)

NTEP approval to 4,500 intervals, Class III (for 7.5kg to 75kg)

ATEX hazardous area approval for zones 0, 1, 2, 20, 21 and 22

FM hazardous area approval

accessories + options

Compatible range of electronics

Y = 15,000 for C3, C3 MI6 and C4

M10 mounting threads available (only for 50kg, 75kg and 100kg)











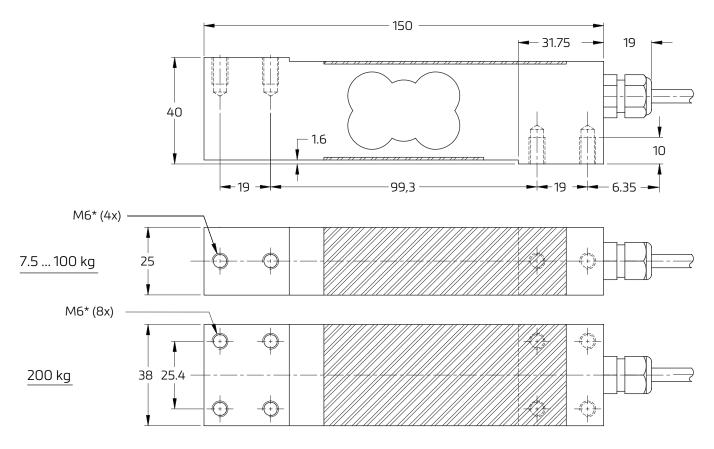


specifications

Maximum capacity (E _{max})	kg	7.5 / 10 / 15 / 30 / 50 / 75 / 100 / 200				
Accuracy class according to OIML R60	-	(GP)	С3	C3 MI 6	C4	
Maximum number of verification intervals (n_{LC})	-	n.a.	3,000 4,000		4,000	
Minimum load cell verification interval (v_{min})	-	n.a.	E _{max} /10,000			
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	
Optional min. load cell verification interval (v _{min} opt)	-	n.a.	E _{max} /15000			
Optional temp. effect on min. dead load output (TC ₀ opt)	%*RO/10°C	n.a.	± 0.0093			
Rated Output (RO)	mV/V		2 ± 5%			
Zero balance	%*RO	± 5				
Excitation voltage	V	515				
Input resistance (R _{LC})	Ω	390 ± 20				
Output resistance (R _{out})	Ω	330 ± 25				
Insulation resistance (100 V DC)	ΜΩ	≥ 5000				
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 7.515 kg / 450x450 for 3075 kg / 600x600 for 100200 kg				
Maximum off centre distance at maximum capacity	mm	115 for 7.515 kg / 150 for 3075 kg / 200 for 100200 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 EN 60 529	-	IP67*				
Packet weight	kg	1.2 (7.5-100kg), 1.6 (200kg)				

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 pLC=0.7. * Attention: IP65 for 7.5 kg and 10 kg

product dimensions (mm)



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

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 a detailed drawing.

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 - Signal (red) Shield (yellow)

Specifications and dimensions are subject to change without notice.

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