

Product Description

The type PC46 is an aluminium single point load cell with an improved potting.

Application

- Bench and floor scales, conveyor scales and medical scales

Key Features

- Capacities from 50 kg to 250 kg
- Aluminium construction
- Environmental Protection IP67
- Maximum platform size up to 400 x 400 mm

Approvals

- OIML approval to C3 (Y = 7 500) and C4 (Y = 12 500, 250 kg only)
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

Options

- Y = 15 000 for C3
- Y = 25 000 for C4 (250 kg only)

Packed Weight

- 0.8 kg

Available Accessories

- Compatible range of electronics

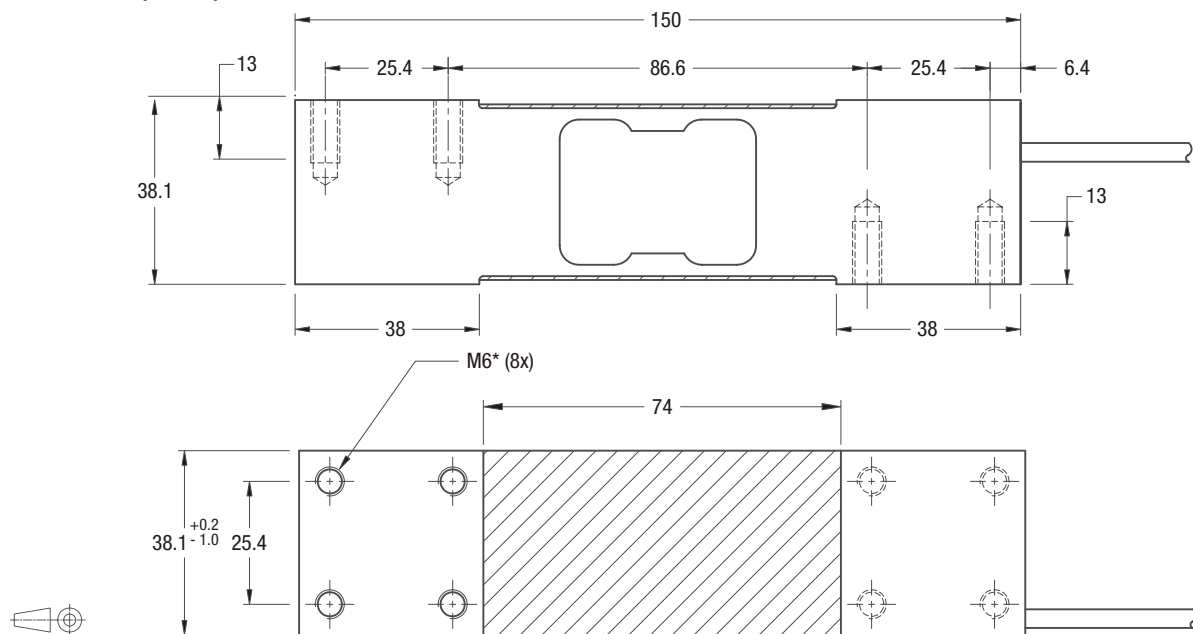
Specifications

		(E _{max})	kg	50 / 100 / 150 / 200 / 250		250
Maximum capacity				(GP)	C3	C4
Accuracy class according to OIML R60				n.a.	3000	4000
Minimum number of verification intervals		(n _{LC})		n.a.	E _{max} /7 500	E _{max} /12 500
Minimum load cell verification interval		(v _{min})		n.a.	E _{max} /15 000	E _{max} /25 000
Temperature effect on minimum dead load output		(TC ₀)	%*RO/10°C	≤ ± 0.0400	≤ ± 0.0187	≤ ± 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
Non-linearity			%*RO	≤ ± 0.0400	≤ ± 0.0166	≤ ± 0.0125
Hysteresis			%*RO	≤ ± 0.0400	≤ ± 0.0166	≤ ± 0.0125
Creep error (30 minutes) / DR			%*RO	≤ ± 0.0600	≤ ± 0.0166	≤ ± 0.0125
Option	Min. load cell verification interval	(v _{min opt})		n.a.	E _{max} /15 000	E _{max} /25 000
	Temp. effect on min. dead load output	(TC _{0 opt})	%*RO/10°C	n.a.	≤ ± 0.0093	≤ ± 0.0056
Rated Output		(RO)	mV/V	2 ± 10%		
Zero balance			%*RO	≤ ± 5		
Excitation voltage			V	5...15		
Input resistance		(R _{LC})	Ω	413 ± 20		
Output resistance		(R _{out})	Ω	350 ± 25		
Insulation resistance (100 V DC)			MΩ	≥ 5000		
Safe load limit		(E _{lim})	%*E _{max}	150		
Ultimate load			%*E _{max}	300		
Safe side load			%*E _{max}	100		
Maximum platform size; loading acc. to OIML R76			mm	400 x 400		
Maximum off centre distance at maximum capacity			mm	150		
Compensated temperature range			°C	-10...+40		
Operating temperature range			°C	-20...+65 (ATEX -20...+60)		
Load cell material				aluminium		
Sealing				potted		
Protection according EN 60 529				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.

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, 6 conductor cable (AWG 26). Cable jacket polyurethane
- Cable length: 3 m
- Cable diameter: 5.8 mm
- The shield is connected to the load cell body

