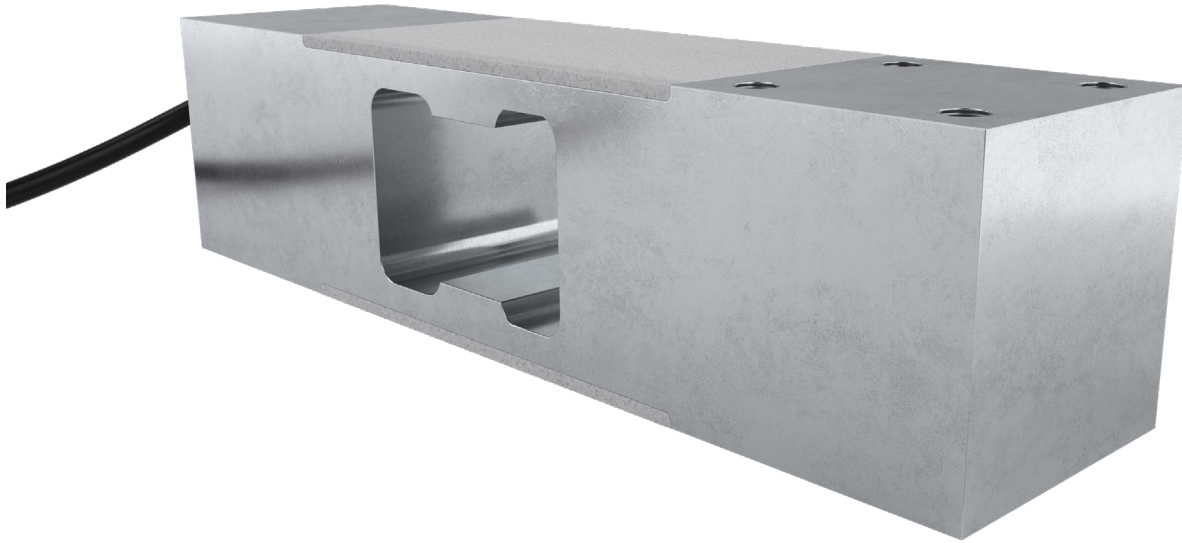


PC46 single point load cell



product description

The PC46 single point is a medium capacity load cell ideal for bench scales and medical scales. Constructed from aluminium and environmentally sealed with potting compound to ensure durability. The PC46 enables scales with 4000d accuracy to be constructed with platform sizes of 400 x 400mm.

applications

Bench scales, small platform scales, medical scales.

key features

Aluminium construction

Environmentally sealed by potting to IP67

Low profile design

For platform sizes of up to 400 x 400mm

Capacities from 50kg to 250kg

approvals

OIML approval to C3 (Y = 7,500)
and C4 (Y = 12,500, 250kg only)

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

FM hazardous area approval

accessories

Compatible range of electronics

options

Y = 15,000 for C3

Y = 25,000 for C4 (250kg only)



RoHS
compliant



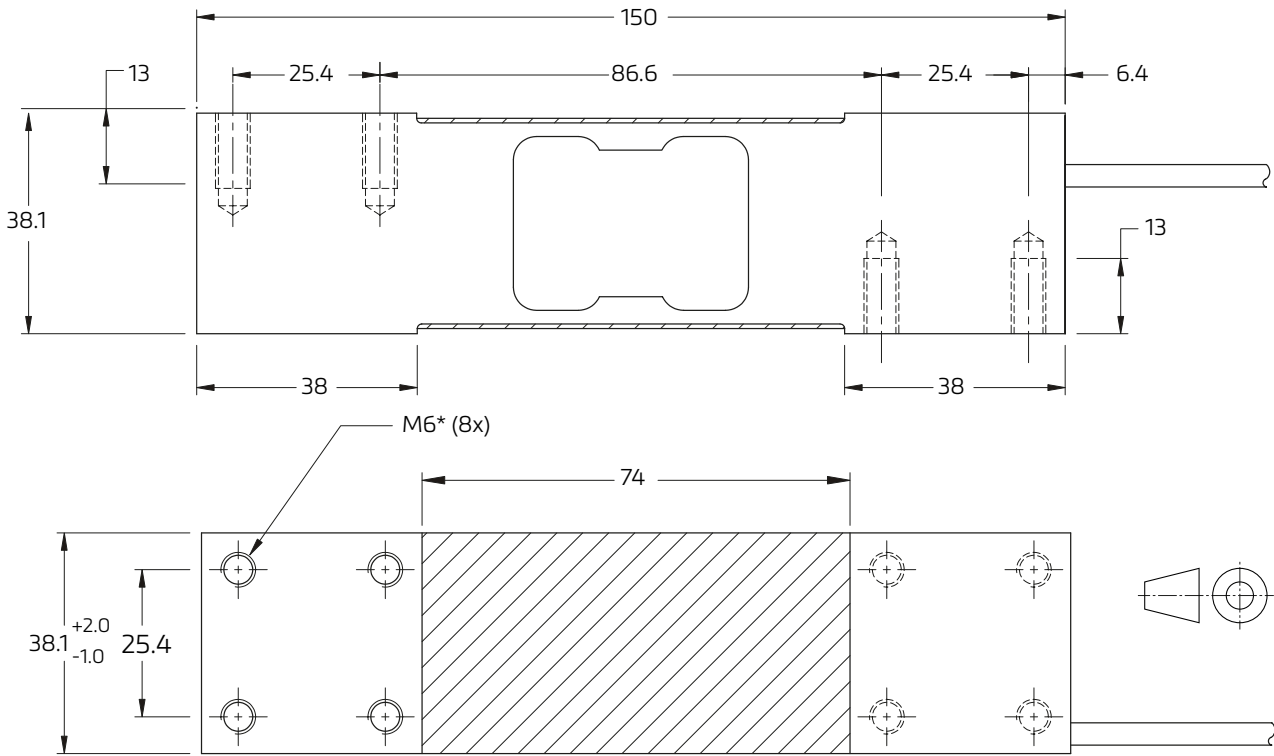
specifications

Maximum capacity (E_{max})	kg	50 / 100 / 150 / 200 / 250		250
Accuracy class according to OIML R60		(GP)	C3	C4
Maximum number of verification intervals (n_{LC})		n.a.	3,000	4,000
Minimum load cell verification interval (v_{min})		n.a.	$E_{max} / 7,500$	$E_{max} / 12,500$
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
Optional: Min. load cell verification interval ($v_{min opt}$)		n.a.	$E_{max} / 15,000$	$E_{max} / 25,000$
Optional: 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 x400		
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		
Packet weight	kg	0.8		

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 $p_{LC}=0.7$.

product dimensions (mm)



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

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

wiring

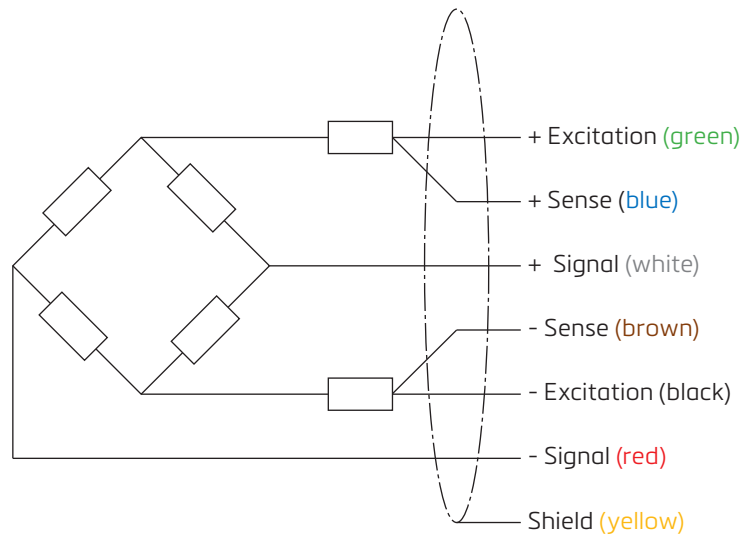
The load cell is provided with a shielded, 6 conductor cable (AWG 26).

Cable jacket: polyurethane

Cable length: 3 m

Cable diameter: 5.8 mm

The shield is connected to the load cell body



Specifications and dimensions are subject to change without notice.