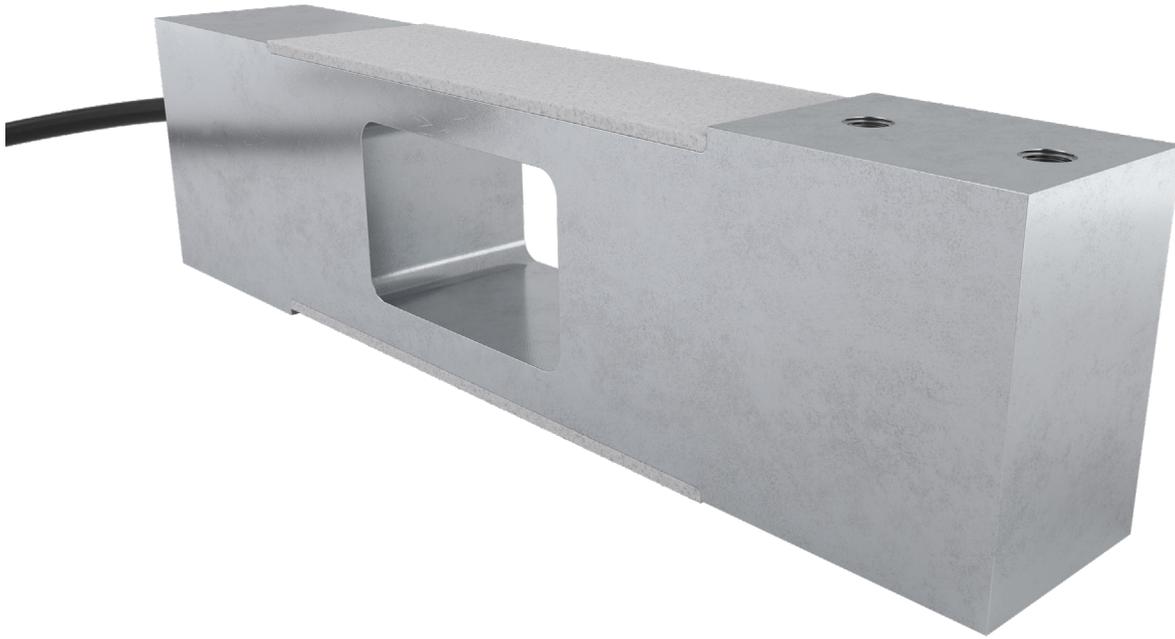


PC42 single point load cell



product description

The PC42 is a compact, low to medium capacity aluminium single point load cell ideal for a wide range of weighing applications. Environmentally sealed with potting compound to ensure durability. The industry standard size and mounting hole configuration makes the PC42 ideal for new equipment manufacturer or as a replacement fitting.

applications

Retail scales, bench scales, small platform scales, multi-head weighers, medical scales.

key features

Aluminium construction

Environmentally sealed by potting to IP67

Low profile design

For platform sizes of 400 x 400mm

Wide range of capacities from 5kg to 200kg

Integral mounting spacer

approvals

OIML approval to C3 (Y = 10,000)

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



RoHS
compliant



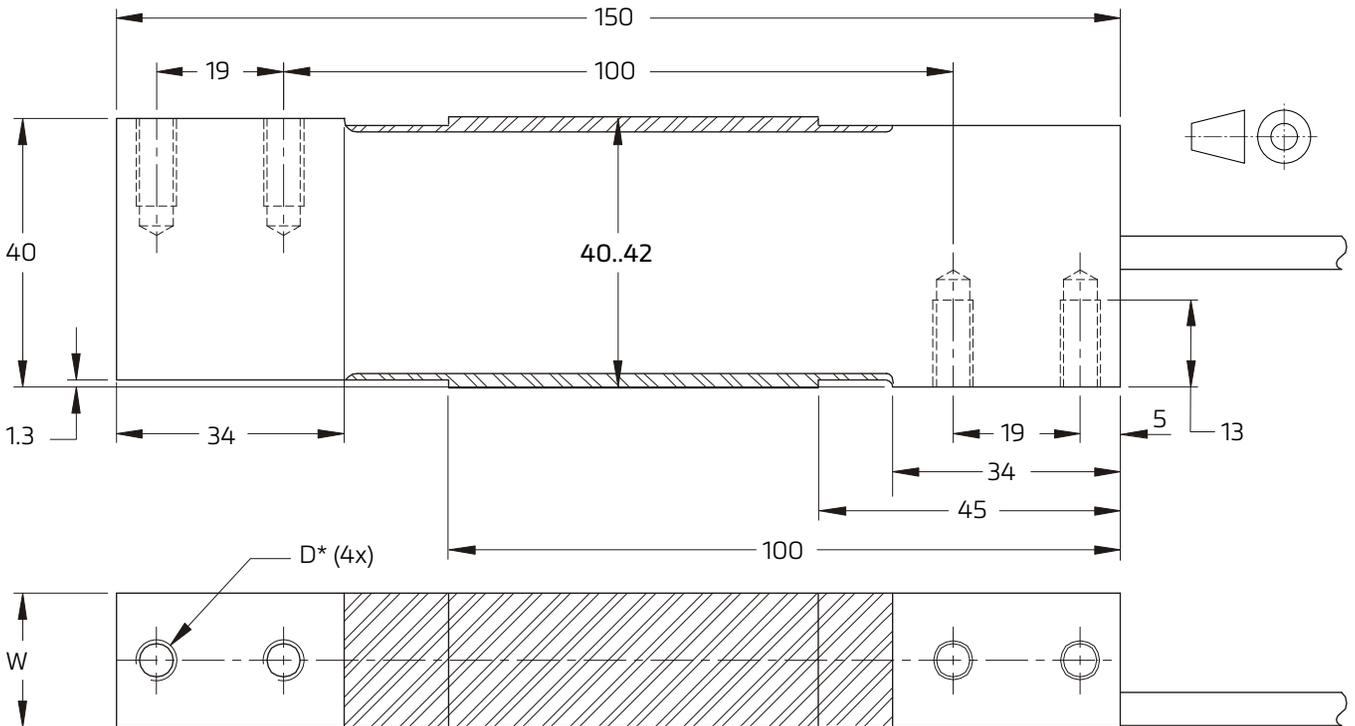
specifications

Maximum capacity (E_{max})	kg	5 / 10 / 20 / 30 / 50 / 100 / 200	
Accuracy class according to OIML R60		(GP)	C3
Maximum number of verification intervals (n_{LC})		n.a.	3,000
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
Combined error	%*RO	± 0.0500	± 0.0200
Non-linearity	%*RO	± 0.0400	± 0.0166
Hysteresis	%*RO	± 0.0400	± 0.0166
Creep error (30 minutes) / DR	%*RO	± 0.0600	± 0.0166
Optional: Min. load cell verification interval ($v_{min opt}$)		n.a.	$E_{max} / 15,000$
Optional: Temp. effect on min. dead load output ($TC_0 opt$)	%*RO/10°C	n.a.	± 0.0093
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	≥ 5,000	
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	135	
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	0.5	

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)



Capacity (kg)	W		D
5, 10, 20, 30	20	+0.2	M6
		-1.0	
50, 100	25.4	+0.2	M6
		-1.0	
200	25.4	+0.2	M8
		-1.0	

Mounting bolts up to 100 kg: M6 8.8 / torque 10 Nm; for 200 kg: M8 8.8 / torque 25 Nm.

Torque values assume oiled threads.

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

wiring

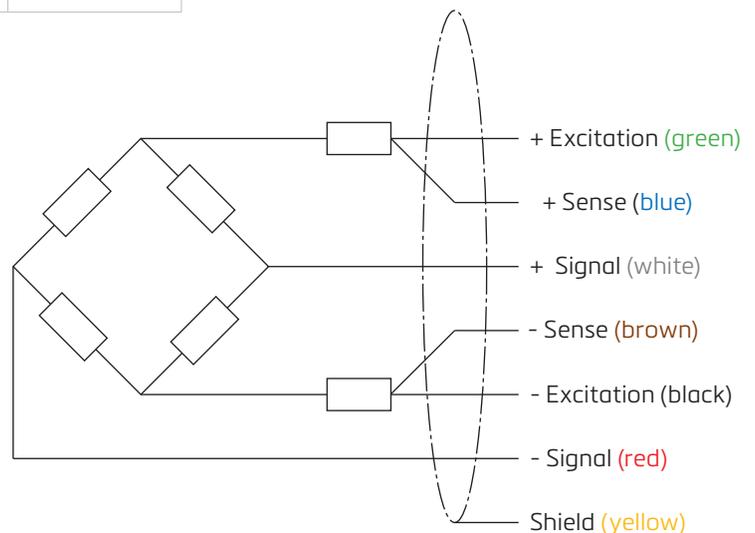
The load cell is provided with a shielded, 6 conductor cable (AWG 26).

Cable jacket: polyurethane

Cable length: 2 m

Cable diameter: 5.8 mm

The shield is connected to the load cell body



Specifications and dimensions are subject to change without notice.