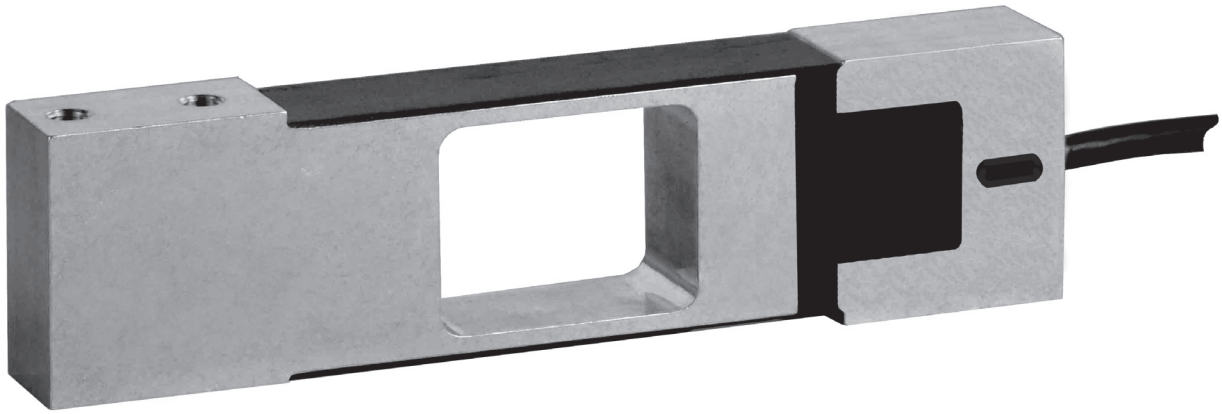
Type PC42 Load Cell



Product Description

The type PC42 is an aluminium single point load cell with an improved potting.

Application

- Retail scales, bench scales and conveyor scales

Key Features

- Wide range of capacities from 5 kg to 200 kg
- Aluminium construction
- Environmental Protection IP67
- Maximum platform size up to 400 x 400 mm
- Integral mounting spacer

Approvals

- OIML approval to C3 (Y = 10 000)
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

Option

- Y = 15 000 for C3

Packed Weight

- 1.0 kg

Available Accessories

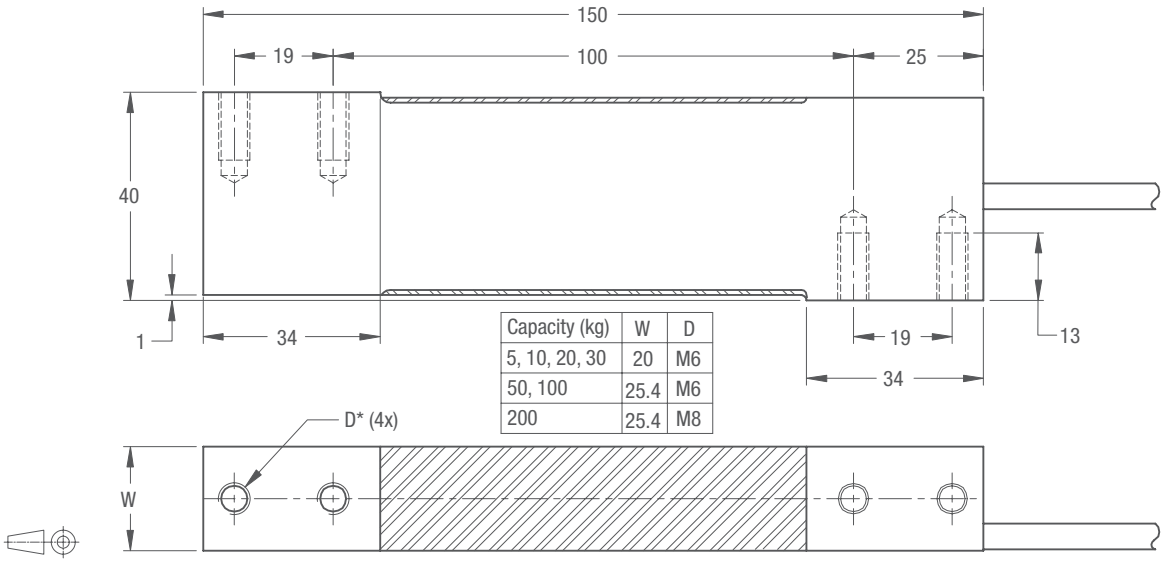
- Compatible range of electronics

PC42 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	
Option: Min. load cell verification interval	($v_{min\ opt}$)		n.a.	E_{max} /15 000	
Option: 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 DIN 40.050			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)



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

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: 1 m
- Cable diameter: 5.8 mm
- The shield is connected to the load cell body