Type PC30 Load Cell

Product Description

The type PC30 is a stainless steel single point load cell with a high performance potting for superior environmental protection.

Application

- Retail scales and bench scales

Key Features

- Capacities from 7 kg to 100 kg
- Stainless steel construction
- Environmental Protection IP67
- Low profile design
- Maximum platform size up to 400 x 400 mm

Approvals

- OIML approval to C3 (Y = 10 000)

Option

- Y = 15 000 for C3

Packed Weight

- 1.0 kg

Available Accessories

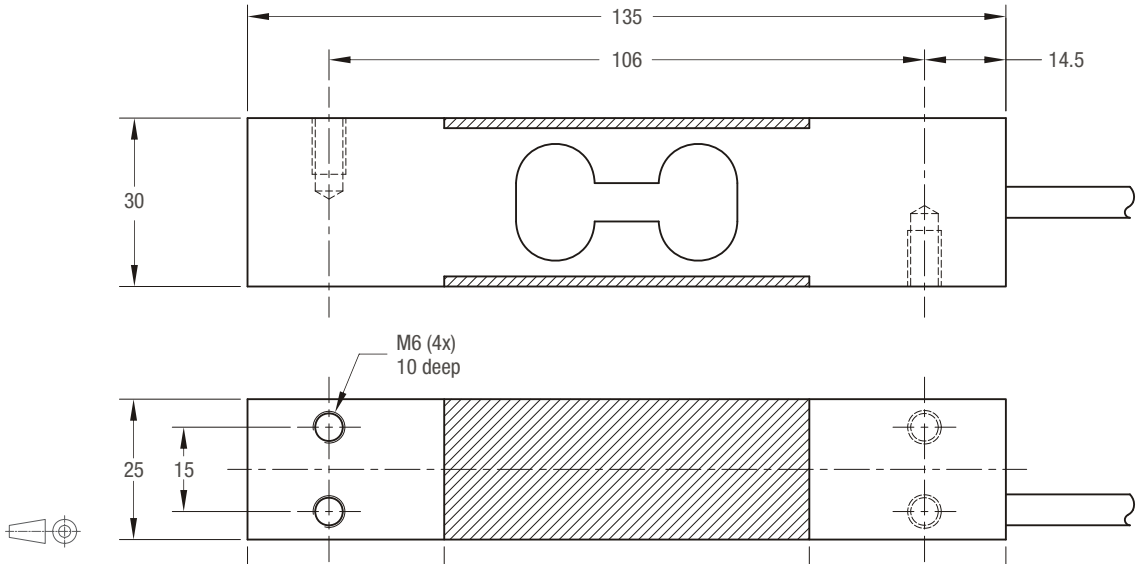
- Compatible range of electronics

Specifications

Maximum capacity		(E_{max})	kg	7 / 10 / 15 / 20 / 30 / 50 / 100	10 / 15 / 20 / 30 / 50 / 100
Accuracy class according to OIML R60				(GP)	C3
Maximum number of verification intervals		(n_{LC})		n.a.	3000
Minimum load cell verification interval		(v_{min})		n.a.	E_{max} /10000
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} /15000
	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	385 ± 10	
Output resistance		(R_{out})	Ω	350 ± 10	
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	135	
Compensated temperature range			°C	–10...+40	
Operating temperature range			°C	–20...+65	
Load cell material				stainless steel 17-4 PH (1.4548)	
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.

Wiring

- The load cell is provided with a shielded, 6 conductor cable (AWG 26).
  Cable jacket polyurethane
- Cable length: 1.5 m
- Cable diameter: 5.8 mm
- The shield is connected to the load cell body