

## Product Description

The type PCB is a stainless steel single point load cell with complete hermetic sealing. It is a perfect fit for use in harsh industrial environments.

## Application

- Bench and floor scales, packaging machines and conveyor scales

## Key Features

- Wide range of capacities from 50 kg to 1 000 kg
- Stainless steel construction
- Environmental Protection IP68 with complete hermetic sealing
- Maximum platform size up to 1 000 x 1 000 mm
- High input resistance
- Integral mounting spacer

## Approvals

- OIML approval to C3 and C3 MI6 (Y = 12 500)
- NTEP approval to 5 000 intervals, Class III
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

## Option

- Y = 20 000 for C3 and C3 MI6

## Packed Weight

Capacity (kg)	50	100	250	500	1 000
Weight (kg)	5.4	5.4	5.7	5.7	5.8

## Available Accessories

- Compatible range of electronics

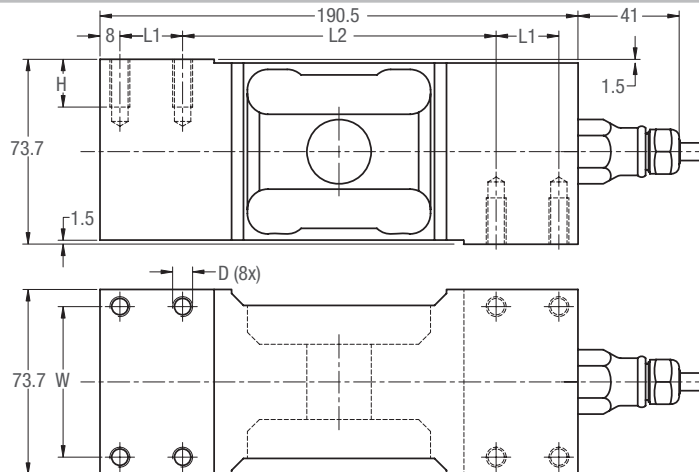
## Specifications

Maximum capacity		(E <sub>max</sub> )	kg	50 / 100 / 250 / 500 / 1 000		
Accuracy class according to OIML R60				(GP)	C3	C3 MI 6
Maximum number of verification intervals		(n <sub>LC</sub> )		n.a.	3 000	
Minimum load cell verification interval		(V <sub>min</sub> )		n.a.	E <sub>max</sub> / 12 500	
Temperature effect on minimum dead load output		(TC <sub>0</sub> )	%*RO/10°C	≤ ± 0.0400	≤ ± 0.0112	≤ ± 0.0011
Temperature effect on sensitivity		(TC <sub>RO</sub> )	%*RO/10°C	≤ ± 0.0200	≤ ± 0.0100	≤ ± 0.0011
Combined error			%*RO	≤ ± 0.0500	≤ ± 0.0200	≤ ± 0.0180
Non-linearity			%*RO	≤ ± 0.0400	≤ ± 0.0166	≤ ± 0.0166
Hysteresis			%*RO	≤ ± 0.0400	≤ ± 0.0166	≤ ± 0.0083
Creep error (30 minutes) / DR			%*RO	≤ ± 0.0600	≤ ± 0.0166	≤ ± 0.0083
Option	Min. load cell verification interval	(V <sub>min opt</sub> )		n.a.	E <sub>max</sub> / 20 000	
	Temp. effect on min. dead load output	(TC <sub>0 opt</sub> )	%*RO/10°C	n.a.	≤ ± 0.0070	
Rated Output		(RO)	mV/V		2 ± 5%	
Zero balance			%*RO		≤ ± 5	
Excitation voltage			V		5...15	
Input resistance		(R <sub>LC</sub> )	Ω		1 100 ± 50	
Output resistance		(R <sub>out</sub> )	Ω		960 ± 50	
Insulation resistance (100 V DC)			MΩ		≥ 5 000	
Safe load limit		(E <sub>lim</sub> )	%*E <sub>max</sub>		200	
Ultimate load			%*E <sub>max</sub>		300	
Safe side load			%*E <sub>max</sub>		100	
Maximum platform size; loading acc. to OIML R76			mm	600 x 600 for 50 kg / 800 x 800 for 100...500 kg / 1 000 x 1 000 for 1 000 kg		
Maximum off centre distance at maximum capacity			mm	200 for 50 kg / 250 for 100...500 kg / 300 for 1 000 kg		
Compensated temperature range			°C	-10...+40		
Operating temperature range			°C	-40...+80 (ATEX -40...+60)		
Load cell material				stainless steel 17-4 PH (1.4548)		
Sealing				complete hermetic sealing; cable entry sealed by glass to metal header		
Protection according EN 60 529				IP68 (up to 2 m water depth) / IP69K		

The limits for Non-Linearity, Hysteresis, and TC<sub>RO</sub> are typical values.

The sum of Non-linearity, Hysteresis and TC<sub>RO</sub> meets the requirements according to OIML R60 with ρ<sub>LC</sub>=0.7.

## Dimensions (in mm)



Type	L1	L2	H	W	D	Mounting bolts	Torque <sup>1)</sup>
PCB-50/100/250/500/1 000 kg	25	125	19	60	M8 2)	M8 8.8 / PCB-1 000 kg: M8 12.9	25 Nm
PCBB-500/1 000 kg	35	104,5	25	57	M12	M12 8.8	90 Nm
PCBC-50/100/250/500/1 000 kg	35	107	19	50	M8 2) 3)	M8 8.8	25 Nm

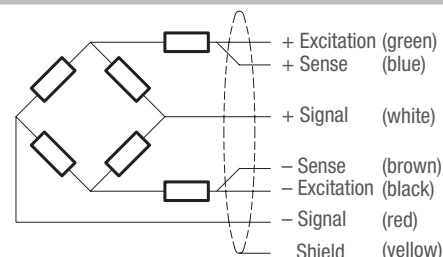
1) Torque values assume oiled thread.

2) Unified thread 5/16-18 is available.

3) OIML approval only valid for M8 threads.

## Wiring

- The load cell is provided with a shielded, 4 conductor cable (AWG 24) or a shielded, 6 conductor cable (AWG 26). Cable jacket polyurethane
- Cable length: 3 m
- Cable diameter: 5 mm
- The shield is floating or connected to the load cell body



Sense wire only present with 6 conductor cable