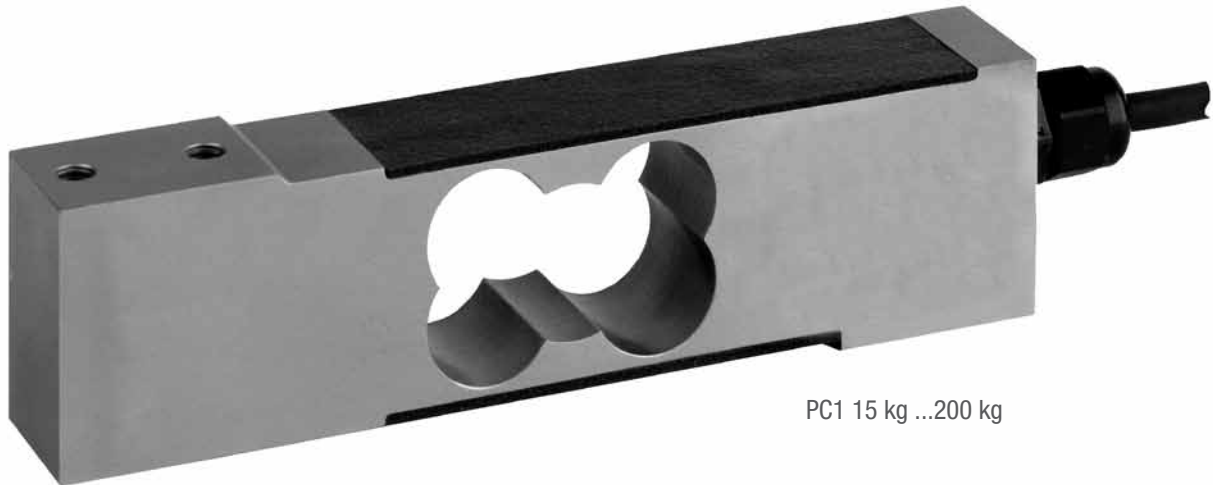


Type PC1 Load Cell



Product Description

The type PC1 is a stainless steel single point load cell with an improved potting. It is suitable for use in industrial environments.

Application

- Bench and floor scales, conveyor scales

Key Features

- Wide range of capacities from 7.5 kg to 200 kg
- Stainless steel construction
- Environmental Protection IP67 (IP65 for 7.5 kg and 10 kg)
- Maximum platform size up to 600 x 600 mm
- Integral mounting spacer

Approvals

- OIML approval to C3, C3 M16 and C4 (Y = 10 000)
- NTEP approval to 4 500 intervals, Class III (for 7.5 kg to 75 kg)
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

Options

- Y = 15 000 for C3, C3 M16 and C4
- M10 mounting threads available (only for 50 kg, 75 kg and 100 kg)

Packed Weight

■ Capacity (kg)	7.5–100	200
Weight (kg)	1.2	1.6

Available Accessories

- Compatible range of electronics

Specifications

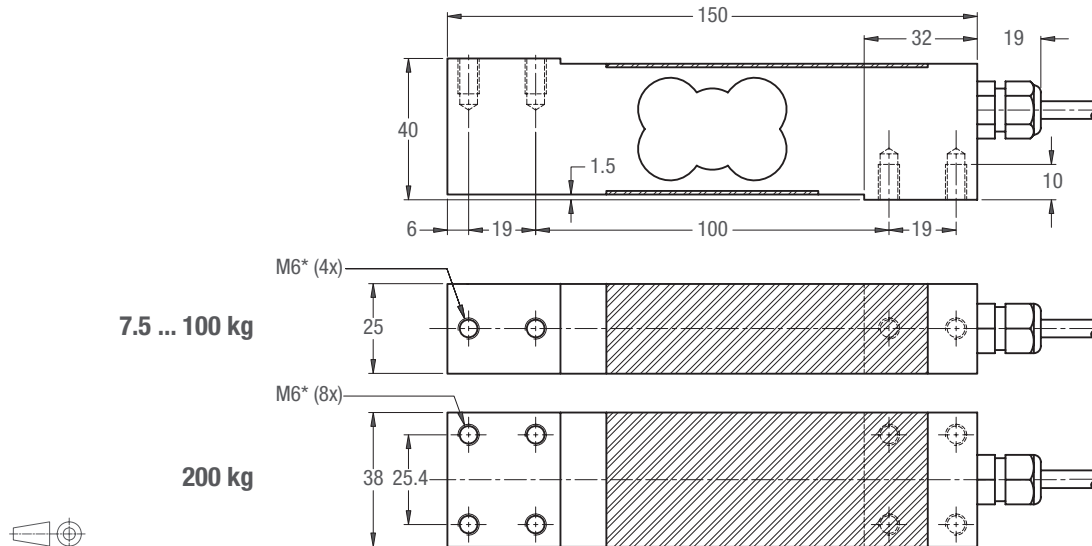
		(E _{max})	kg	7.5 / 10 / 15 / 30 / 50 / 75 / 100 / 200			
Accuracy class according to OIML R60				(GP)	C3	C3 MI 6	C4
Maximum number of verification intervals		(n _{LC})		n.a.	3 000		4 000
Minimum load cell verification interval				n.a.	E _{max} /10 000		
Temperature effect on minimum dead load output		(TC ₀)	%*RO/10°C	± 0.0400	± 0.0140		
Temperature effect on sensitivity		(TC _{RO})	%*RO/10°C	± 0.0200	± 0.0100		± 0.0080
Combined error			%*RO	± 0.0500	± 0.0200	± 0.0180	± 0.0180
Non-linearity			%*RO	± 0.0400	± 0.0166	± 0.0166	± 0.0125
Hysteresis			%*RO	± 0.0400	± 0.0166	± 0.0083	± 0.0125
Creep error (30 minutes) / DR			%*RO	± 0.0600	± 0.0166	± 0.0083	± 0.0125
Option	Min. load cell verification interval	(v _{min opt})		n.a.	E _{max} /15 000		
	Temp. effect on min. dead load output	(TC _{0 opt})	%*RO/10°C	n.a.	± 0.0093		
Rated Output		(RO)	mV/V	2 ± 0.1			
Zero balance			%*RO	± 5			
Excitation voltage			V	5...15			
Input resistance		(R _{LC})	Ω	390 ± 20			
Output resistance		(R _{out})	Ω	330 ± 25			
Insulation resistance (100 V DC)			MΩ	≥ 5 000			
Safe load limit		(E _{lim})	%*E _{max}	200			
Ultimate load			%*E _{max}	300			
Safe side load			%*E _{max}	100			
Maximum platform size; loading according to OIML R76			mm	350x350 for 7.5...15 kg / 450x450 for 30...75 kg / 600x600 for 100...200 kg			
Maximum off center distance at maximum capacity			mm	115 for 7.5...15 kg / 150 for 30...75 kg / 200 for 100...200 kg			
Compensated temperature range			°C	-10...+40			
Operating temperature range			°C	-20...+65 (ATEX -20...+60)			
Load cell material				stainless steel 17-4 PH (1.4548)			
Sealing				plastic covered			
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.

* **Attention:** IP65 for 7.5 kg and 10 kg

Dimensions (in mm)



PC1: Mounting bolts M6 8.8; torque 10 Nm. Torque value assumes oiled threads.

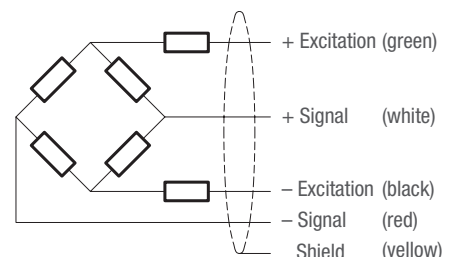
* Unified thread 1/4-20 UNC is available.

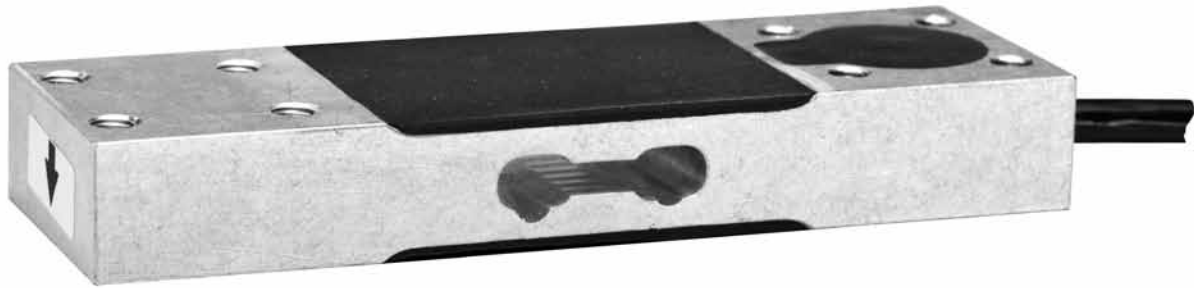
PC1B: Mounting bolts M10 8.8; torque 50 Nm (50/75/100 kg). Torque value assumes oiled threads.

If countersunk mounting screws are used, ask for detailed drawing.

Wiring

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





Product Description

The type PC52 is an aluminium single point load cell with an improved potting.

Application

- Retail scales, bench scales and process scales (e.g. gas bottle scale)

Key Features

- Capacity of 200 kg
- Aluminium construction
- Environmental Protection IP67
- Very low profile design
- Maximum platform size up to 250 x 250 mm

Packed Weight

- 0.4 kg

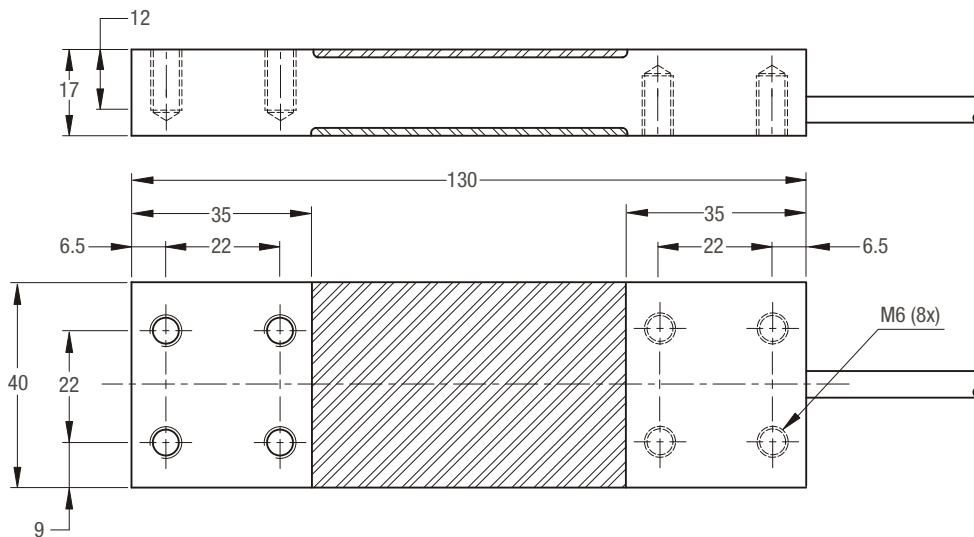
Available Accessories

- Compatible range of electronics

Specifications

Maximum capacity	(E_{max})	kg	200
Accuracy class			(GP)
Temperature effect on minimum dead load output	(TC_0)	$\% \cdot RO / 10^\circ C$	± 0.2500
Temperature effect on sensitivity	(TC_{RO})	$\% \cdot RO / 10^\circ C$	± 0.0700
Combined error		$\% \cdot RO$	± 0.0400
Creep error (30 minutes) / DR		$\% \cdot RO$	± 0.0400
Rated output	(RO)	mV/V	$2 \pm 5\%$
Zero balance		$\% \cdot RO$	± 5
Excitation voltage		V	5...15
Input resistance	(R_{LC})	Ω	1150 ± 50
Output resistance	(R_{out})	Ω	1000 ± 100
Insulation resistance (100 V DC)		M Ω	≥ 10000
Safe load limit	(E_{lim})	$\% \cdot E_{max}$	200
Ultimate load		$\% \cdot E_{max}$	300
Safe side load		$\% \cdot E_{max}$	100
Maximum platform size; loading acc. OIML R76		mm	250 x 250
Maximum off centre distance at maximum capacity		mm	95
Compensated temperature range		$^\circ C$	-10...+40
Operating temperature range		$^\circ C$	-20...+65
Load cell material			aluminium
Sealing			potted
Protection according EN 60 529			IP67

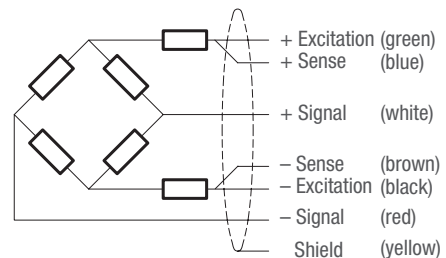
Dimensions (in mm)

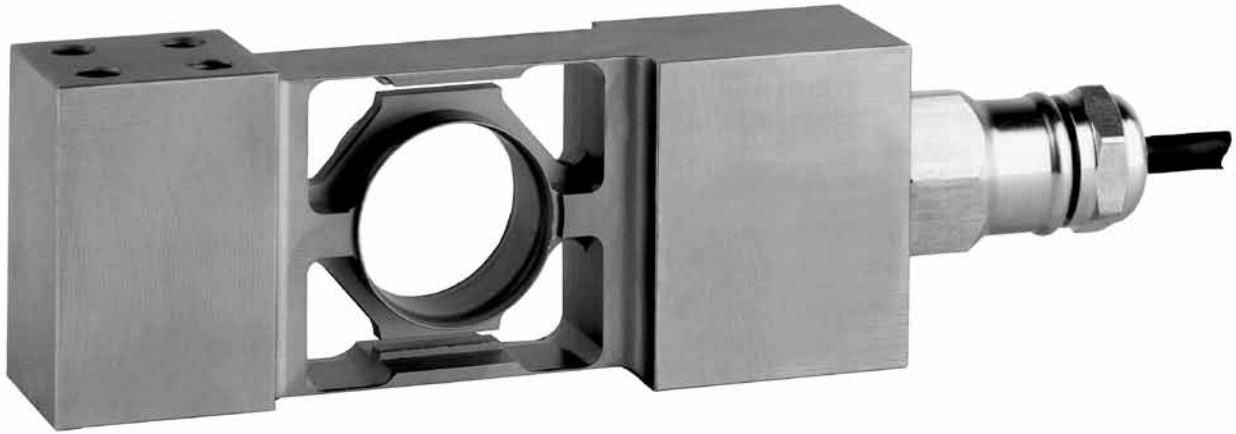


Mounting bolts M6 8.8; torque 10 Nm. Torque value assumes oiled threads.

Wiring

- The load cell is provided with a shielded, 6 conductor cable (AWG 26).
Cable jacket polyurethane
- Cable length: 0.315 m
- Cable diameter: 5.8 mm
- The shield is connected to the load cell body





Product Description

The type PC6 is a stainless steel single point load cell with complete hermetic sealing. It is a perfect fit for use in harsh industrial environments and wash down applications.

Application

- Bench and floor scales, conveyor scales, check weighers, packaging machines and industrial process control

Key Features

- Wide range of capacities from 10 kg to 200 kg
- Stainless steel construction
- Environmental Protection IP68 with complete hermetic sealing
- Maximum platform size up to 600 x 600 mm
- High input resistance
- Integral mounting spacer

Approvals

- OIML approval to C3 (Y = 12 500), C3 MI6 (Y = 12 500) and C4 (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

Options

- Y = 25 000 for C3, C3 MI6 and C4

Packed Weight

- 1.32 kg

Available Accessories

- Compatible range of electronics

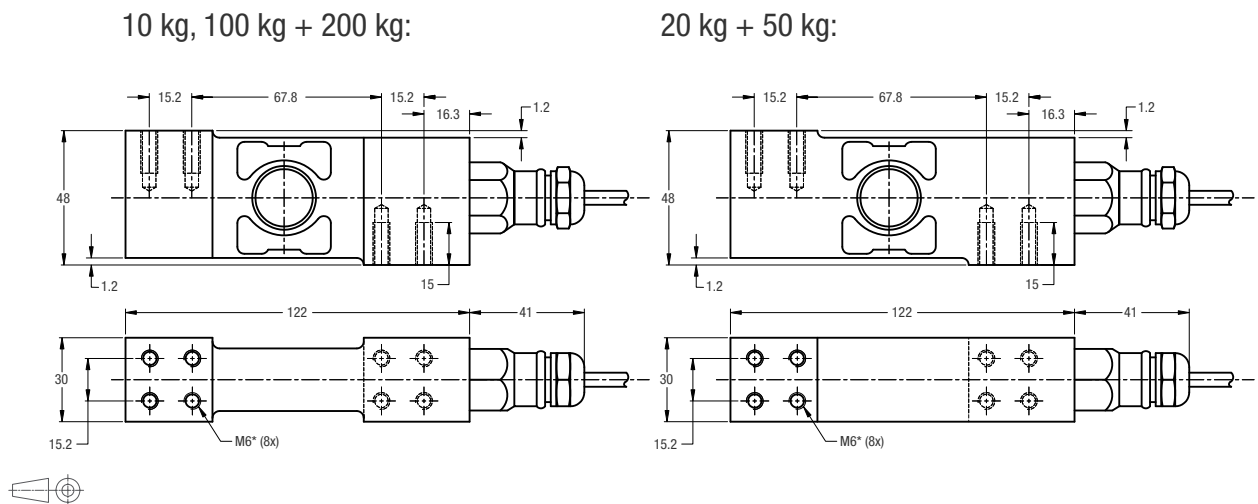
Specifications

		(E _{max})	kg	10 / 20 / 50 / 100 / 200			
Accuracy class according to OIML R60				(GP)	C3	C3 MI 6	C4
Maximum number of verification intervals		(n _{LC})		n.a.	3000		4000
Minimum load cell verification interval		(v _{min})		n.a.	E _{max} /12500		
Temperature effect on minimum dead load output		(TC ₀)	%*RO/10°C	± 0.0400	± 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	± 0.0180
Non-linearity			%*RO	± 0.0400	± 0.0166	± 0.0166	± 0.0125
Hysteresis			%*RO	± 0.0400	± 0.0166	± 0.0083	± 0.0125
Creep error (30 minutes) / DR			%*RO	± 0.0600	± 0.0166	± 0.0083	± 0.0125
Option	Min. load cell verification interval	(v _{min opt})		n.a.	E _{max} /25000		
	Temp. effect on min. dead load output	(TC _{0 opt})	%*RO/10°C	n.a.	± 0.0056		
Rated Output		(RO)	mV/V		2 ± 5%		
Zero balance			%*RO		± 5		
Excitation voltage			V		5...15		
Input resistance		(R _{LC})	Ω		1 100 ± 50		
Output resistance		(R _{out})	Ω		960 ± 50		
Insulation resistance (100 V DC)			MΩ		≥ 5000		
Safe load limit		(E _{lim})	%*E _{max}		200		
Ultimate load			%*E _{max}		300		
Safe side load			%*E _{max}		100		
Maximum platform size; loading acc. to OIML R76			mm	350 x 350 for 10...20 kg / 500 x 500 for 50 kg / 600 x 600 for 100...200 kg			
Maximum off centre distance at maximum capacity			mm	115 for 10...20 kg / 166 for 50 kg / 200 for 100...200 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_{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.

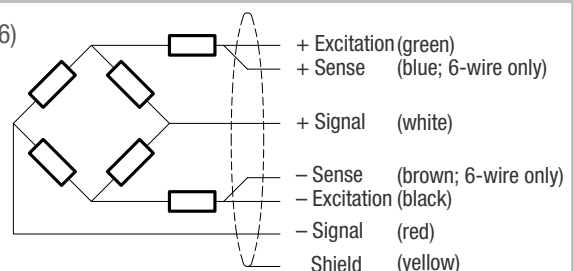
* Unified thread 1/4-20 UNC is available.

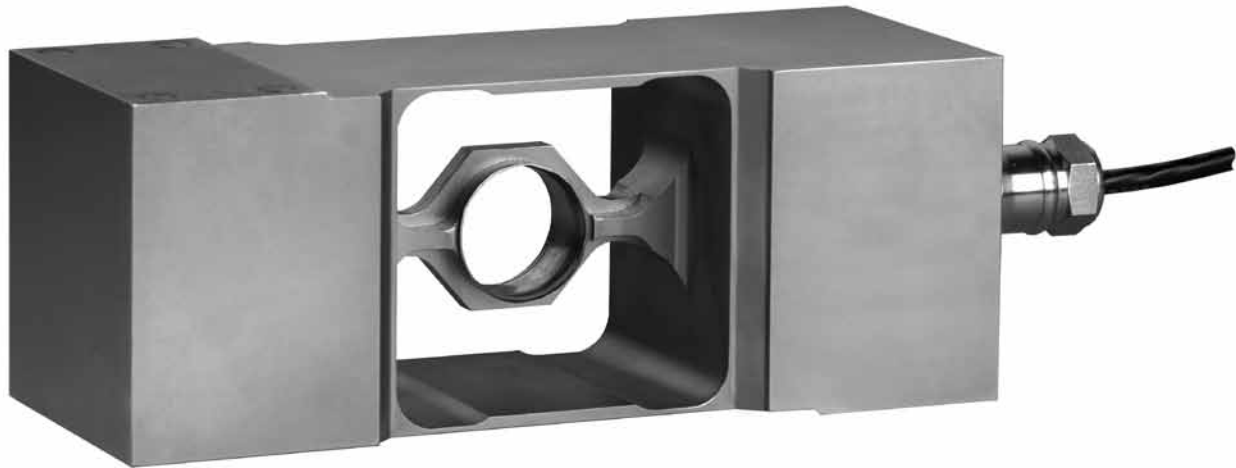
Wiring

- The load cell is provided with a shielded, 6 conductor cable (AWG 26) or with a shielded, 4 conductor cable (AWG 24).

Cable jacket polyurethane.

- Cable length: 3 m
- Cable diameter: 5 mm
- The shield is floating or connected to the load cell body





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

Options

- Y = 20 000 for C3 and C3 MI6
- Y = 25 000 for C3 and C3 MI6 (for 250 kg or higher capacities)

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

Packed Weight

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

Available Accessories

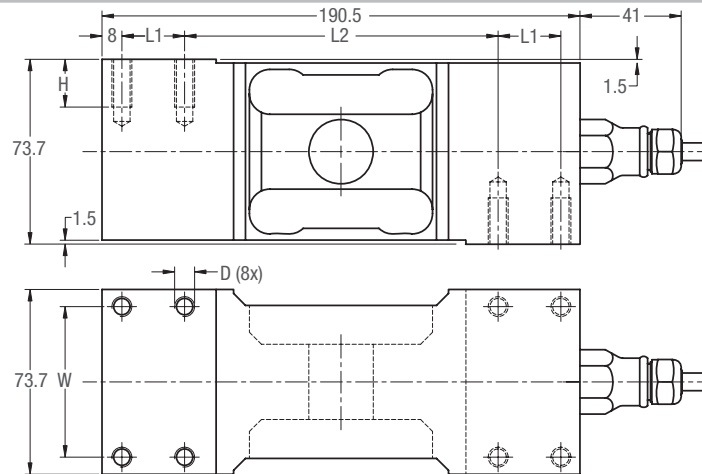
- Compatible range of electronics

Specifications

Maximum capacity		(E _{max})	kg	50 / 100 / 250 / 500 / 1 000		
Accuracy class according to OIML R60				(GP)	C3	C3 MI 6
Maximum number of verification intervals		(n _{LC})		n.a.	3 000	
Minimum load cell verification interval		(V _{min})		n.a.	E _{max} /12 500	
Temperature effect on minimum dead load output		(TC ₀)	%*RO/10°C	± 0.0400	± 0.0112	
Temperature effect on sensitivity		(TC _{RO})	%*RO/10°C	± 0.0200	± 0.0100	
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 _{min opt})		n.a.	E _{max} /20 000; 250 kg or higher: E _{max} /25 000	
	Temp. effect on min. dead load output	(TC _{0 opt})	%*RO/10°C	n.a.	± 0.0070; 250 kg or higher: ± 0.0056	
Rated Output		(RO)	mV/V	2 ± 5%		
Zero balance			%*RO	± 5		
Excitation voltage			V	5...15		
Input resistance		(R _{LC})	Ω	1 100 ± 50		
Output resistance		(R _{out})	Ω	960 ± 50		
Insulation resistance (100 V DC)			MΩ	≥ 5 000		
Safe load limit		(E _{lim})	%*E _{max}	200		
Ultimate load			%*E _{max}	300		
Safe side load			%*E _{max}	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_{RO} are typical values.
The sum of Non-linearity, Hysteresis and TC_{RO} meets the requirements according to OIML R60 with $\rho_{LC}=0.7$.

Dimensions (in mm)



Type	L1	L2	H	W	D	Mounting bolts	Torque ¹⁾
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, 6 conductor cable (AWG 26) or with a shielded, 4 conductor cable (AWG 24). Cable jacket polyurethane.
- Cable length: 3 m
- Cable diameter: 5 mm
- The shield is floating or connected to the load cell body

