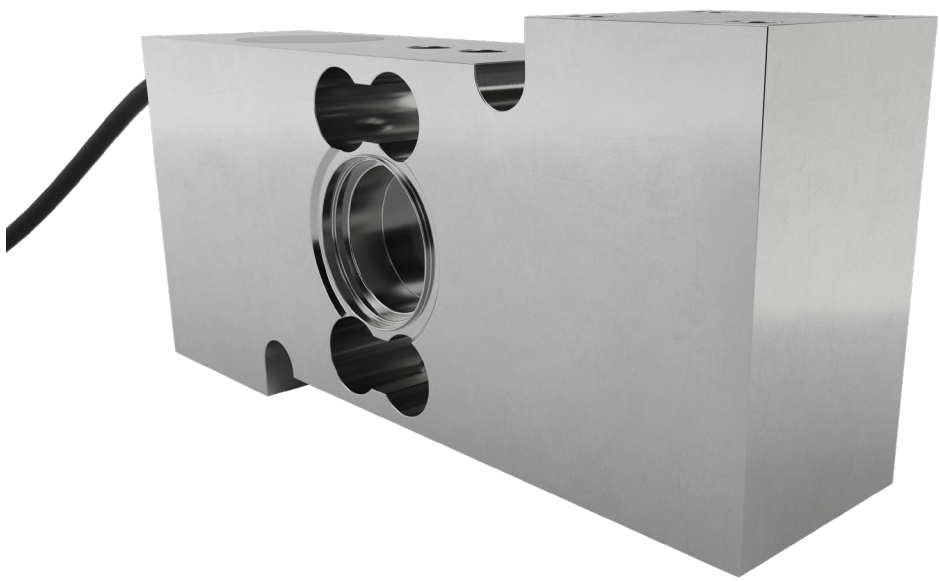
PC7 single point load cell



product description

The PC7 has been designed to complement the range of fully welded, single point load cells offered by Flintec. With an alternative mounting hole configuration and capacity range to the PC6 and PCB load cells, the PC7 extends the design opportunities to the weighing machine manufacturer. Built from electro-polished stainless steel with laser welded covers the robust construction is ideal for marine, food and pharma industries.

applications

Bench scales, high speed checkweighers, marine scales, multi-head weighers.

key features

- Stainless steel construction
- Hermetically sealed to IP68/IP69K
- Electro-polished finish
- For platform sizes of up to 600 x 600mm
- High accuracy
- Capacities of 100 kg, 250kg and 500kg

approvals

- OIML approval to C3 (Y = 12,500), C3 MI6 (Y = 12,500) and C4 (Y = 12,500)
- NTEP approval
- ATEX hazardous area approval for zones 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

accessories

- Compatible range of electronics

options

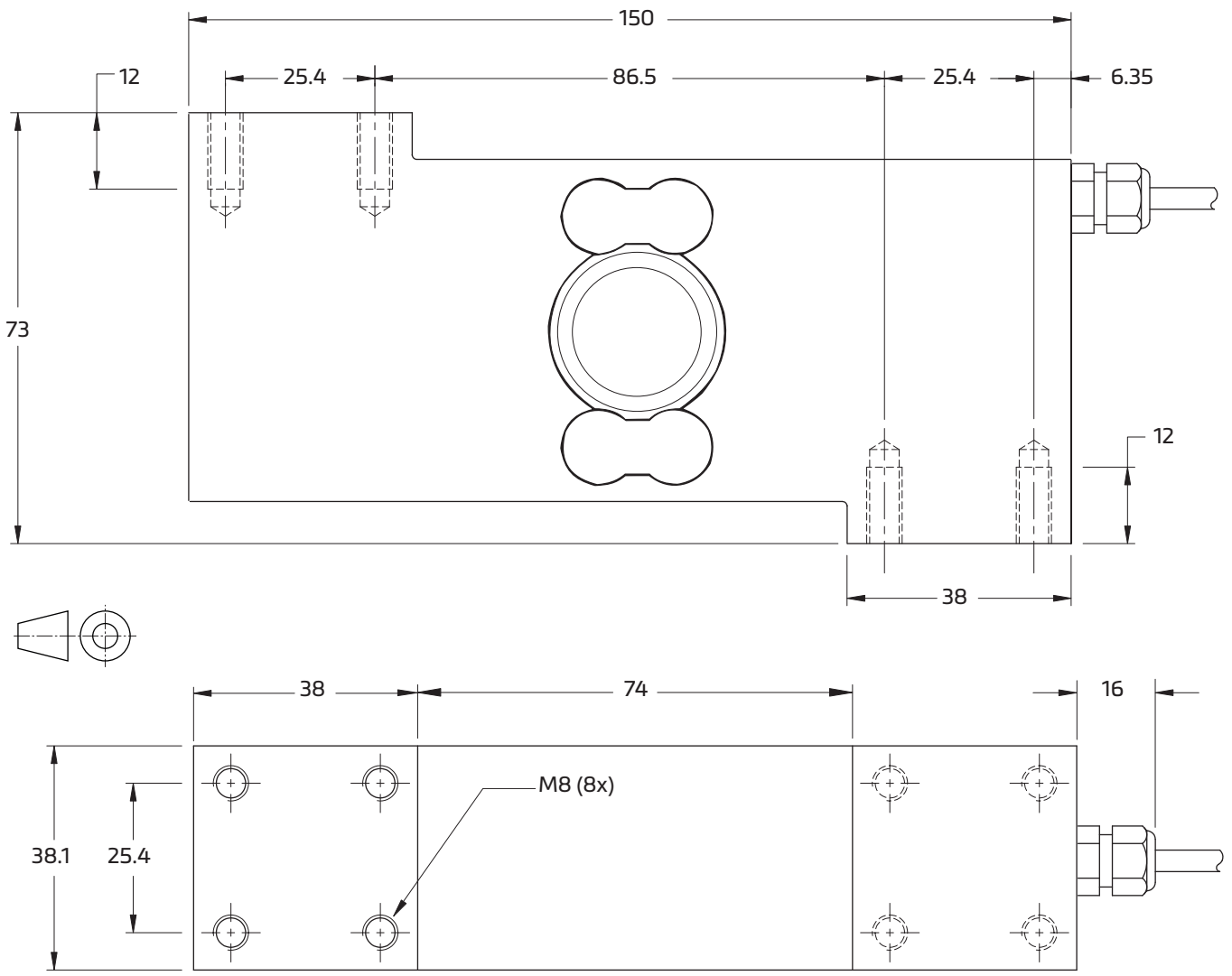
- Y = 15,000 for C3, C3 MI6 and C4

specifications

Maximum capacity (E_{max})	kg	100 / 250 / 500			
Accuracy class according to OIML R60		(GP)	C3	C3 MI6	C4
Maximum number of verification intervals (n_{LC})		n.a.	3,000		4,000
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		± 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
Maximum off centre loading effect	%*RO/mm	± 0.00035	± 0.00011		± 0.00008
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 ± 5%			
Zero balance	%*RO	± 5			
Excitation voltage	V	5...15			
Input resistance (R_{LC})	Ω	380 ± 20			
Output resistance (R_{out})	Ω	350 ± 10			
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			
Maximum off centre distance at maximum capacity	mm	200			
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			
Protection according EN 60 529		IP68 (up to 2 m water depth) / IP69K			
Packet weight	kg	2.5			

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 pLC=0.7.

product dimensions (mm)



Mounting bolts M8 8.8; torque 25 Nm. Torque value assumes oiled threads.

wiring

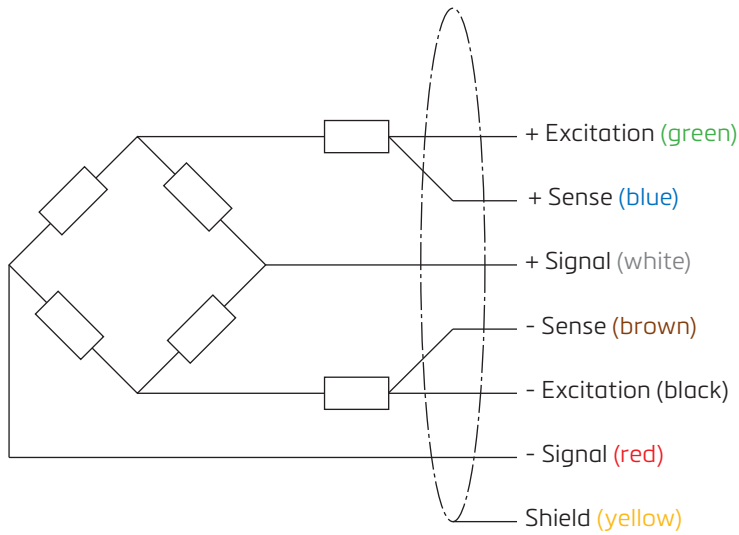
The load cell is provided with a shielded, 6 conductor cable (AWG 26).

Cable jacket: polyurethane

Cable length: 3 m

Cable diameter: 5.8 mm

The shield is floating or connected to the load cell body



Specifications and dimensions are subject to change without notice.