PC7H single point load cell

product description

The PC7H is a 1,000kg capacity single-point load cell designed for rear-end bin lifting systems on waste collection vehicles. Certified to both OIML and NTEP standards, it's an ideal choice for trade approved applications. It's rugged, stainless steel construction is hermetically sealed to IP69K making it reliable at performing in harsh environments, and avoids issues that can occur with aluminium alternatives.

Alternative load cell size and bolt hole configurations are available in the Flintec bin-lift load cell range – see PC2H, PC3H, PC5H and PC6H single point load cells.

applications

Rear end (REL) bin lifting systems for waste collection vehicles (RCV's).

options + accessories

Variable cable lengths

Can be supplied with connectors

Compatible range of electronics

key features

Capacity of 1,000kg

Stainless steel construction with a bead-blasted surface

Hermetically sealed to IP68/IP69K

Rugged construction

Off-centre load adjusted

High accuracy

approvals

OIML approval to C2 (Y = 7,400)

NTEP approval to 3,000 intervals, Class III, for single cell applications

RoHS compliant

IP69K

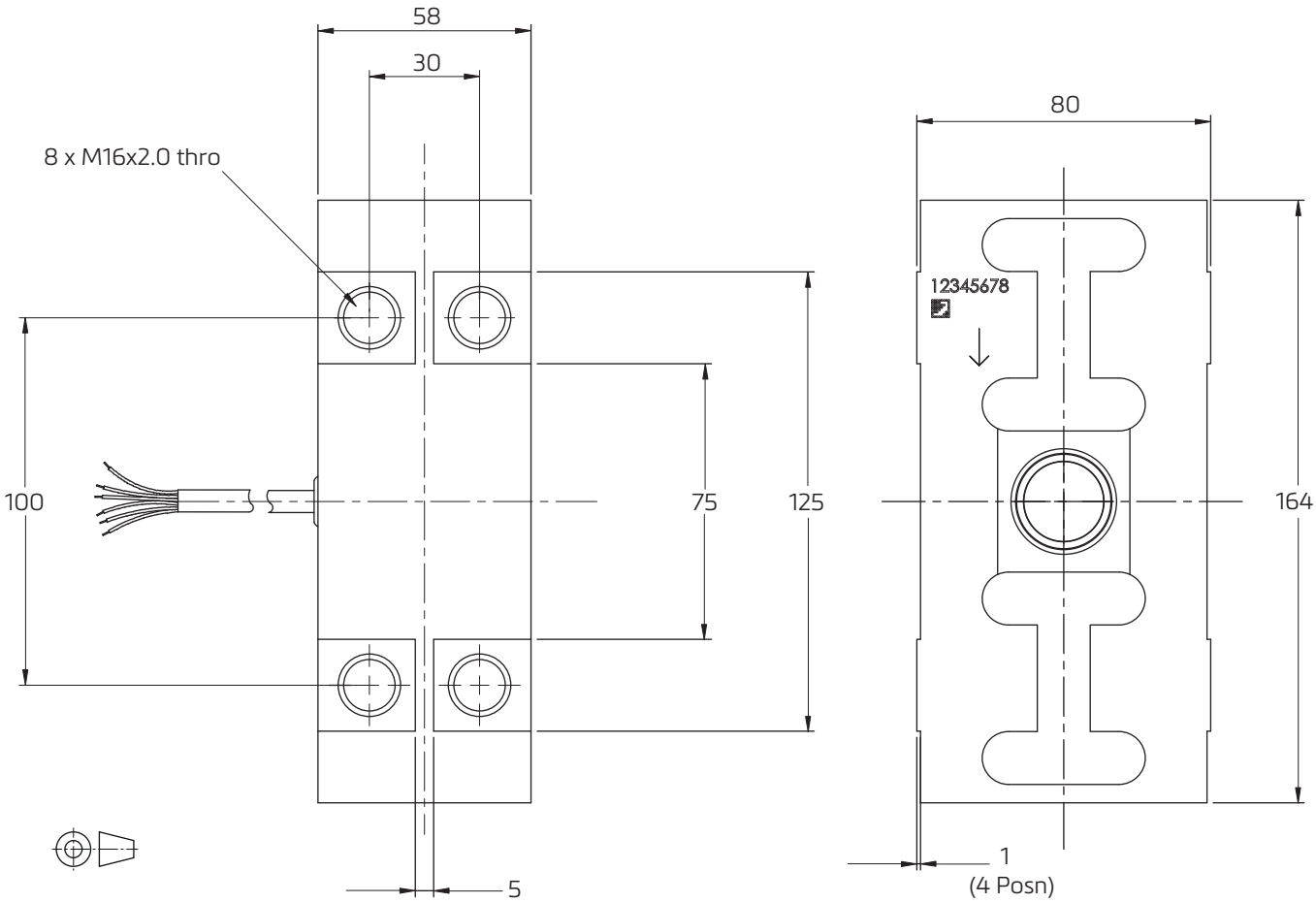
flintec quality + precision

specifications

Maximum capacity (E_{max})	kg	1,000	
Minimum dead load	kg	0	
Accuracy class according to OIML R60	-	GP	C2
Maximum number of verification intervals (n_{LC})	-	n.a	2,000
Minimum load cell verification interval (v_{min})	-	n.a	E_{max}/7,400
Temperature effect on minimum dead load output (TC_0)	%*RO/10 °C	±0.04	±0.0140
Temperature effect on sensitivity (TC_{RO})	%*RO/10 °C	±0.02	±0.0120
Combined error	%*RO"	±0.05	±0.030
Non-Linearity	%*RO	±0.04	±0.025
Hysteresis	%*RO	±0.04	±0.025
Creep error (30 minutes)/DR	%*RO	±0.06	±0.025
Rated output (RO)	mV/V	1 ± 0.1%	
Calibration in mV/V/Ω	%	±0.05	
Zero balance	%*RO	≤ ±5	
Excitation voltage (AC/DC)	V	5....15	
Input resistance (R_{LC})	Ω	1,100±50	
Output resistance(R_{out})	Ω	1,000±2	
Insulation resistance (100 V DC)	MΩ	≥ 5,000	
Safe load limit (E_{lim})	%* E_{max}	200	
Ultimate load	%* E_{max}	400	
Safe side load	%* E_{max}	100	
Maximum off centre loading effect	%*RO/mm	±0.0005	
Maximum off centre distance at maximum capacity	mm	600	
Compensated temperature range	°C	-10...+40	
Operating temperature range	°C	-40...+80	
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 2m water depth)/IP69K	
Weight	kg	3.61	

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.

product dimensions (mm)



wiring

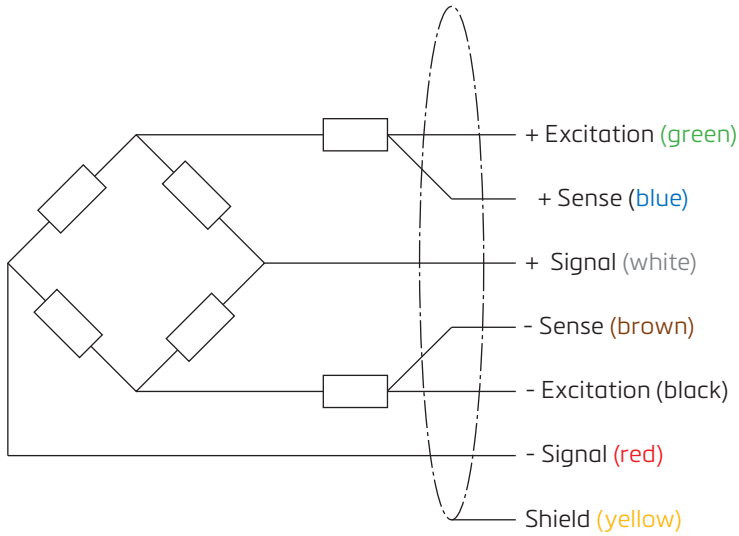
The load cell is provided with a shielded, 6 conductor cable (AWG 26).

Cable jacket: polyurethane

Cable length: 5 m

Cable diameter: 5.8 mm

Shield is not connected. On request, shield can be connected to the element



Specifications and dimensions are subject to change without notice.