

PW25...

Single point load cell for rough environment

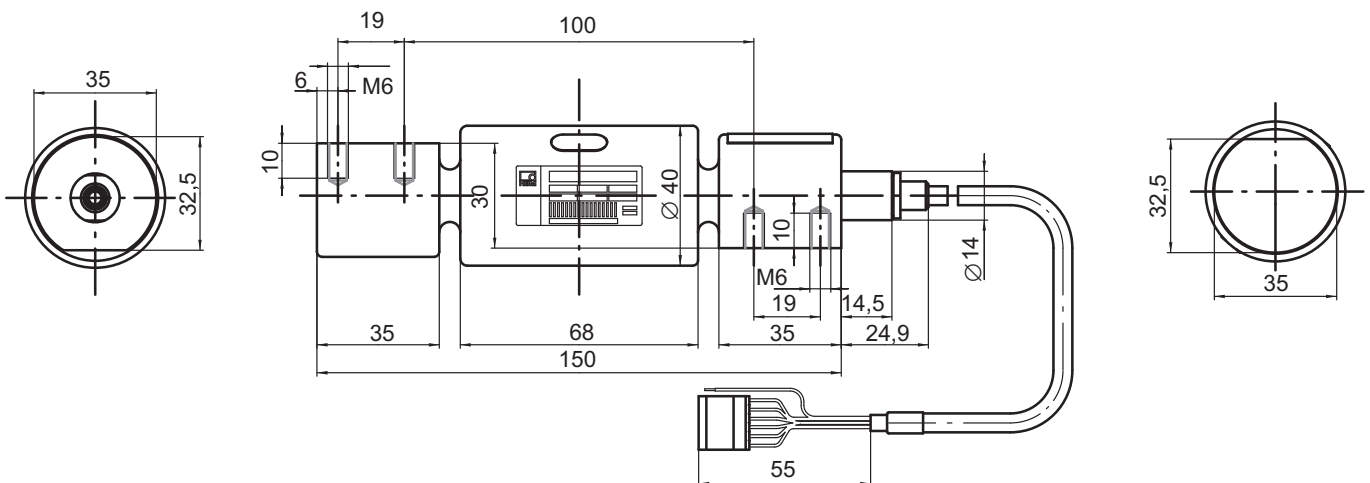
Special features

- Nominal load 10 kg, 20 kg
- Stainless steel
- High ratio of minimum verification interval Y
- Industry Footprint (SP4M)
- Degree of protection IP68, IP69k

Data sheet



Dimensions (in mm; 1 mm = 0.03937 inches)



Specifications

Type			PW25/...	
Accuracy class ¹⁾			C3 Multi Range (MR)	
Maximum number of load cell verification intervals	n_{LC}		3000	
Maximum capacity	E_{max}	kg	10	20
Minimum LC verification interval	v_{min}	g	1	2
Ratio of minimum verification interval	Y		10000	
Maximum platform size		mm	400 x 400	
Nominal (rated) sensitivity	C_n	mV/V	2.0 ± 0.2	
Zero signal (without load)			0 ± 0.1	
Temperature coefficient of sensitivity ²⁾ Temperature range: +20 ... +40°C [+68 ... +104°F] -10 ... +20°C [+14 ... +68°F]	TK_C	% of $C_n/10$ K	± 0.0175 ± 0.0117	
Temperature coefficient of zero signal	TK_0		± 0.0140	
Hysteresis ²⁾	d_{hy}	% of C_n	± 0.0166	
Non-linearity ²⁾	d_{lin}		± 0.0166	
Minimum dead load output return	MDLOR		± 0.0166	
Off-center load error ³⁾			± 0.0233	
Input resistance	R_{LC}	Ω	300 ... 500	
Output resistance	R_0		300 ... 500	
Reference excitation voltage	U_{ref}	V	5	
Nominal (rated) range of the excitation voltage	B_U		1 ... 12	
Maximum excitation voltage			15	
Insulation resistance at 100 V _{DC}	R_{is}		GΩ	> 1
Nominal (rated) ambient temperature range	B_T	°C [°F]	-10 ... +40 [+14 ... +104°F]	
Operating temperature range	B_{tu}		-10 ... +50 [+14 ... +122°F]	
Storage temperature range	B_{tl}		-25 ... +70 [-13 ... +158°F]	
Limit load at 20 mm eccentricity	E_L	% of E_{max}	1000	
Limit lateral loading, static	E_{lq}		200	
Service load at max. 120 mm eccentricity	EU		150	
Breaking load at max. 20 mm eccentricity	E_d		> 1000	
Relative permitted vibrational stress at max. 20 mm eccentricity	F_{srel}		70	
Nominal (rated) displacement at E_{max} , approx.	s_{nom}		mm	0.19
Natural frequency, approx.		Hz	210	
Weight, approx.	m	kg	0.8	
Degree of protection ⁶⁾			IP 68 (test conditions 100 h at 1 m water column); IP69K (water at high pressure, steam jet cleaning) ⁴⁾	
Material:	Measuring body Cable sheath		Stainless steel ⁵⁾ PUR	

1) According to OIML R60 with $P_{LC} = 0.7$.

2) The values for non-linearity (d_{lin}), hysteresis (d_{hy}) and temperature coefficient of sensitivity (TK_C) are typical values. The sum of these values is within the cumulative error limits according to OIML R60.

3) According to OIML R76.

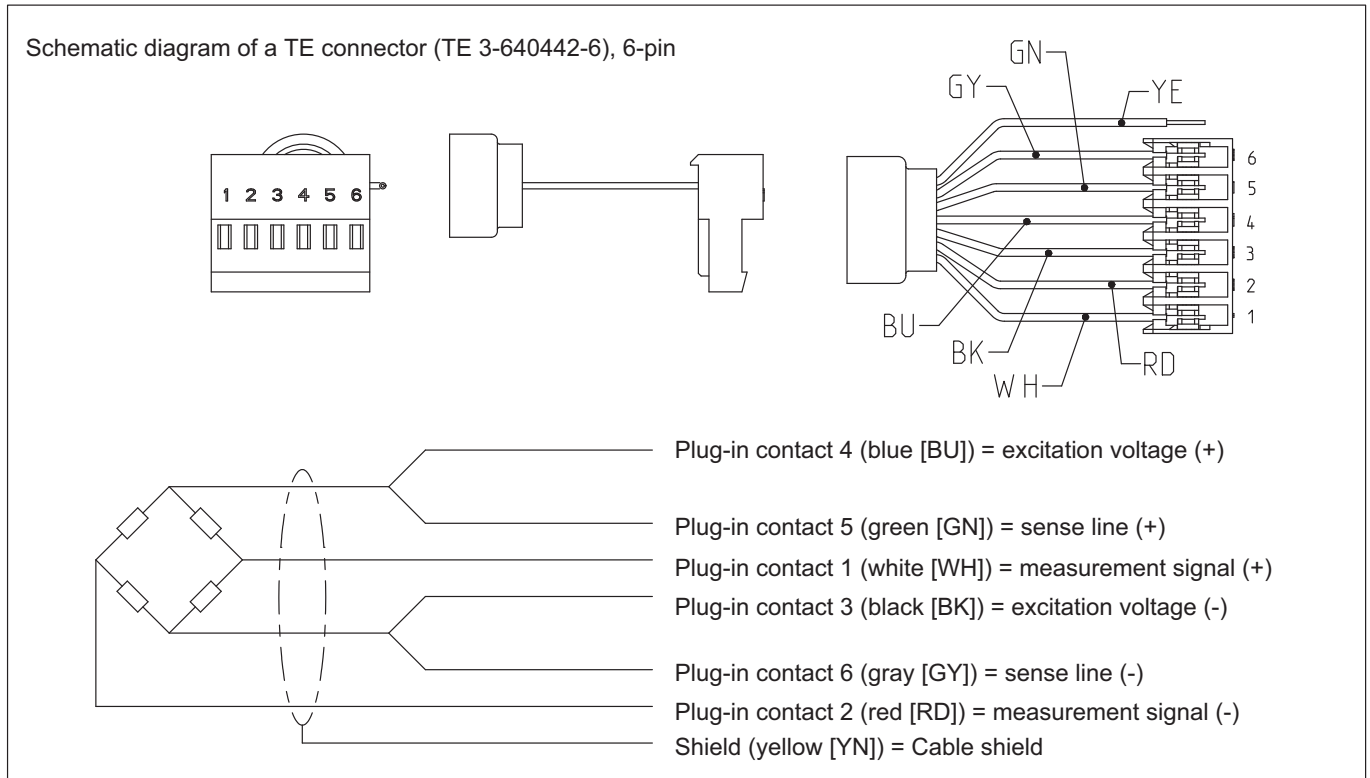
4) Based on DIN 40050, Part 9 specifications, for road vehicles.

5) According to EN 10088-1, list of materials on request.

6) Per EN 60 529 (IEC 529)

Cable assignment

Connection of 6-wire cable, 6 x 0.14 mm²/AWG 26 (cable length 3 m)



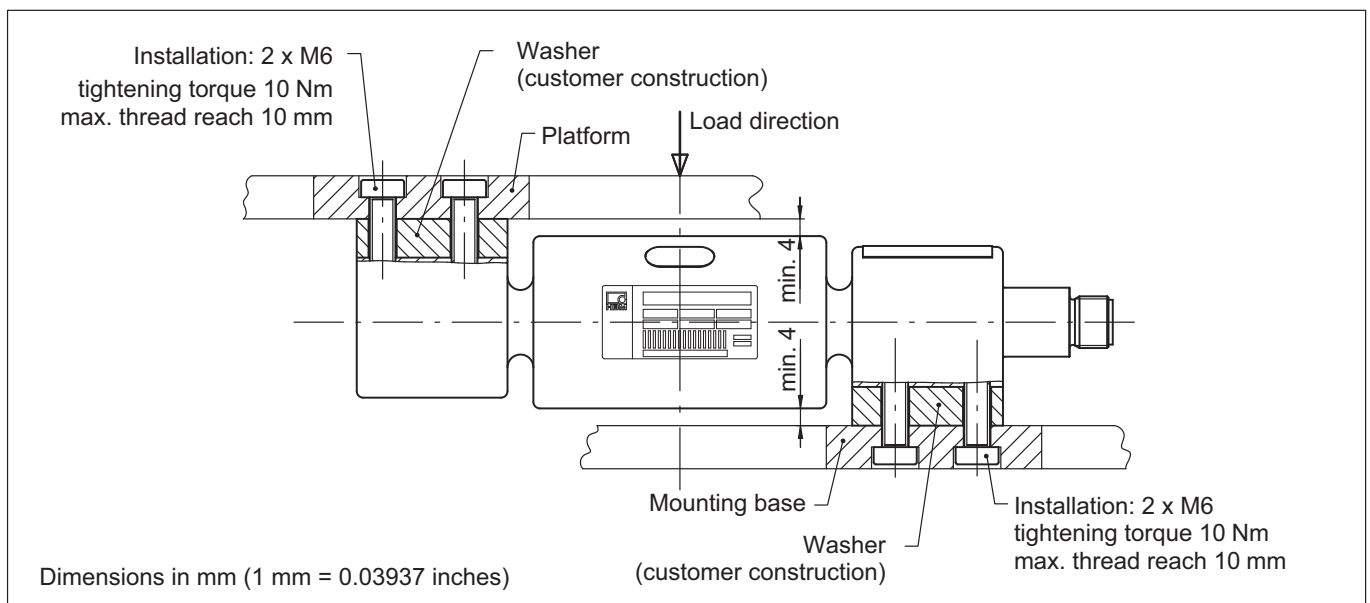
Mounting and load application

The load cells are firmly clamped at the mounting holes, the load is applied at the other end. The recommended screws and tightening torques can be found in the table below:

Thread	Max. thread reach	Min. property class	Tightening torque ^{*)}
M6	14mm	8.8	10 Nm

^{*)} Recommended value for the specified property class. Please comply with the screw manufacturer's instructions with regard to screw dimensions.

Load must not be applied to the side where the cable connection is located, as this would cause a force shunt.



Product numbers (overview)

PW25... (Stainless steel)

Type	PW25
Accuracy class	C3-MR (OIML) (Multi Range)
Comment	Cable length 3 m (6-wire)
Maximum capacity [kg]	Ordering number
10	1-PW25C3/10KG-1
20	1-PW25C3/20KG-1

Subject to modifications.
All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability.

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