DATA SHEET

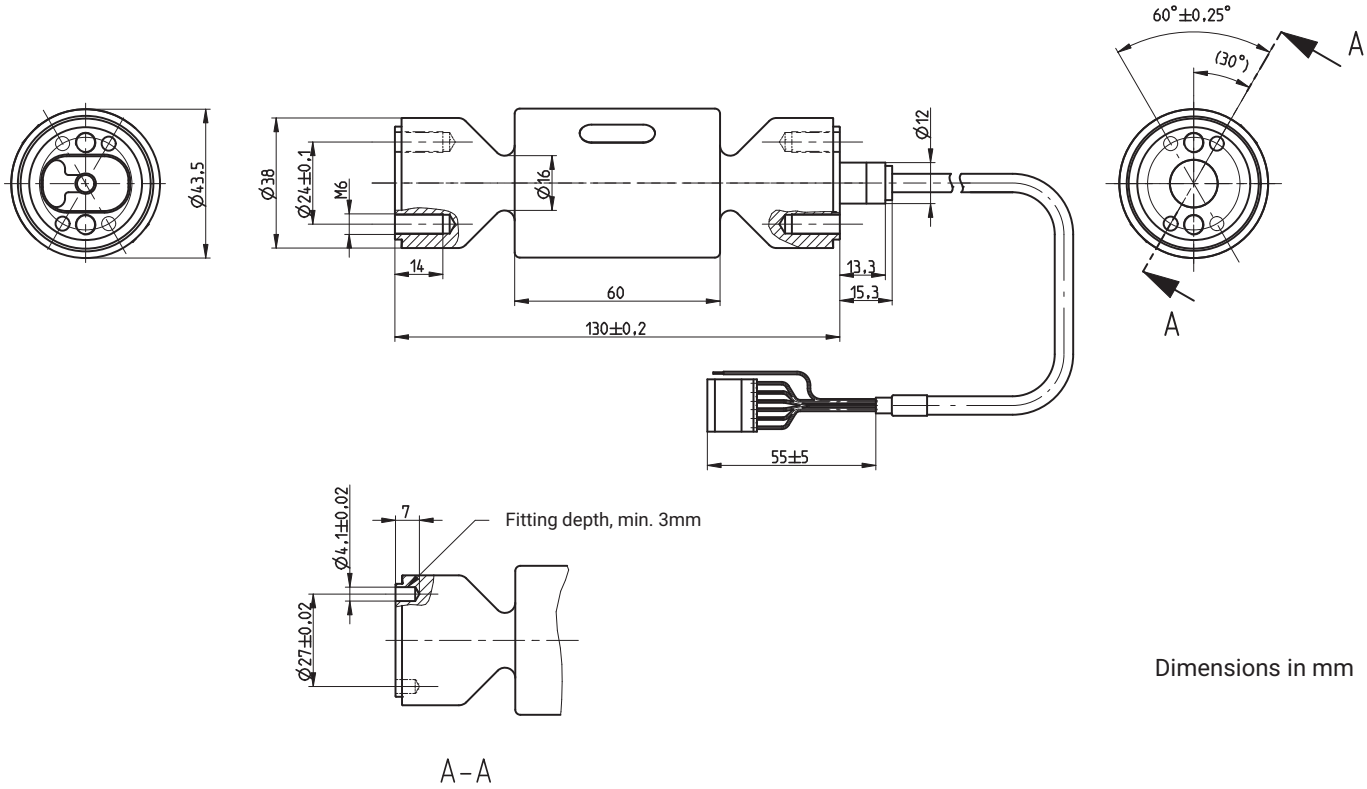
PW27B...
Hygienic design single point load cell

SPECIAL FEATURES

- Maximum capacities 10 kg, 20 kg
- Easy to clean
- Stainless steel
- EHEDG-certified
- Integrated, encapsulated overload protection
- High ratio of minimum verification interval Y
- Additional accessories available



DIMENSIONS



Dimensions in mm

SPECIFICATIONS

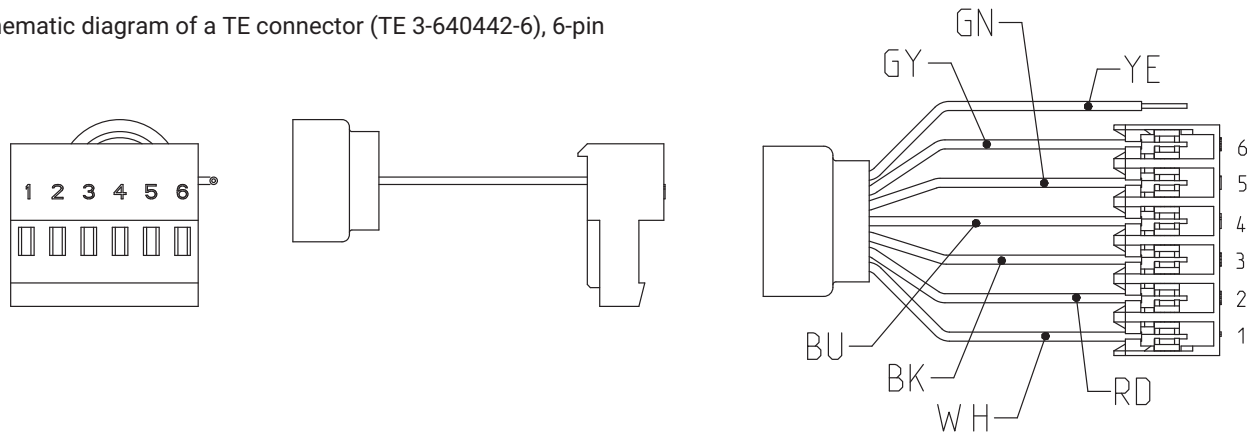
Type			PW27B...	
Accuracy class[1]			**C3 Multi Range (MR)**	
Maximum number of load cell verification intervals	n_{LC}		3,000	
Maximum capacity	E_{max}	kg	10	20
Minimum load cell verification interval	v_{min}	g	1	2
Ratio of minimum verification interval Y	Y		10,000	
Temperature coefficient of zero signal	TC_0	% of C_n/10 K	±0.0140	
Maximum platform size		mm	400 x 400	
Rated output (nominal)	C_n	mV/V	2.0 ±0.2	
Zero signal (without initial load)			0 ±0.1	
Temperature coefficient of sensitivity[2] In the range +20 ... +40°C In the range -10 ... +20°C	TC_S	% of C_n/10 K	 ±0.0175 ±0.0117	
Relative reversibility error[2]	d_{hy}	% of C_n	±0.0166	
Non-linearity[2]	d_{lin}		±0.0166	
Minimum dead load output return	DR		±0.0166	
Off-center load error[3]			±0.0233	
Input resistance	R_{LC}	Ω	300 … 500	
Output resistance	R_{LC}		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) range of the ambient temperature	B_T	°C	-10 ... +40	
Operating temperature range	B_T		-20 ... +70	
Storage temperature range	B_T		-25 ... +90	
Cleaning temperature			max.+120 for max. 10 minutes	
Service load at max. 120 mm eccentricity	EU	% of E_{max}	150	
Limit load at 20 mm eccentricity	E_L		1000	
Limit lateral loading, static	E_{lq}		200	
Breaking load at max. 20 mm eccentricity	E_d		> 1000	
Relative permissible oscillation stress at max. 20 mm eccentricity	F_{srel}		70	
Rated displacement at E_{max}, approx.	s_{nom}	mm	0.19	0.18
Resonance frequency, approx.		Hz	210	315
Weight, approx.	m	kg	0.8	
Equipment protection level[4]			IP68 (test conditions 1m water column/100 hours); IP69K (water at high pressure, steam cleaner)[5]	
Material Measuring body Seal Cable sheath			 Stainless steel 1.4545[6] EPDM PUR	

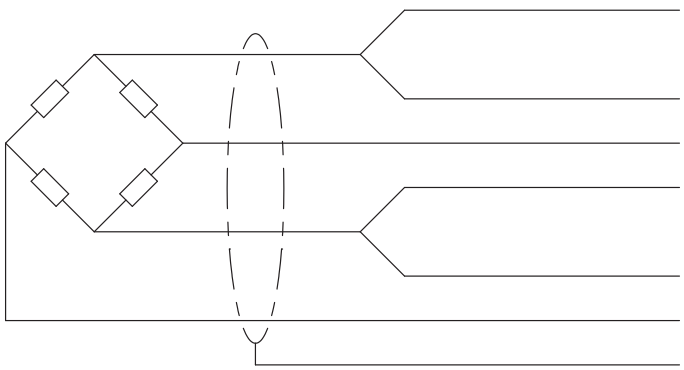
1) As per OIML R60, with PLC = 0.7
2) The values for non-linearity (d_{lin}), relative reversibility error (d_{hy}) and temperature coefficient of sensitivity (TC_S) are recommended values. The sum of these values is within the accumulated error limit specified by R60.
3) As per OIML R76
4) Per EN 60 529 (IEC 529)
5) Based on DIN 40050 specifications, Part 9, for road vehicles
6) As per EN 10088-1, material list on request

CABLE ASSIGNMENT

Connection of 6-wire cable, 6 x 0.14 mm^2/AWG 26 (cable length 3 m)

Schematic diagram of a TE connector (TE 3-640442-6), 6-pin





Plug-in contact 4 (blue [BU]) = excitation voltage (+)

Plug-in contact 5 (green [GN]) = sense line (+)

Plug-in contact 1 (white [WH]) = measurement signal (+)

Plug-in contact 3 (black [BK]) = excitation voltage (-)

Plug-in contact 6 (gray [GY]) = sense line (-)

Plug-in contact 2 (red [RD]) = measurement signal (-)

Shield (yellow [YN]) = Cable shield

Notice: The plug is not required for variants with explosion protection

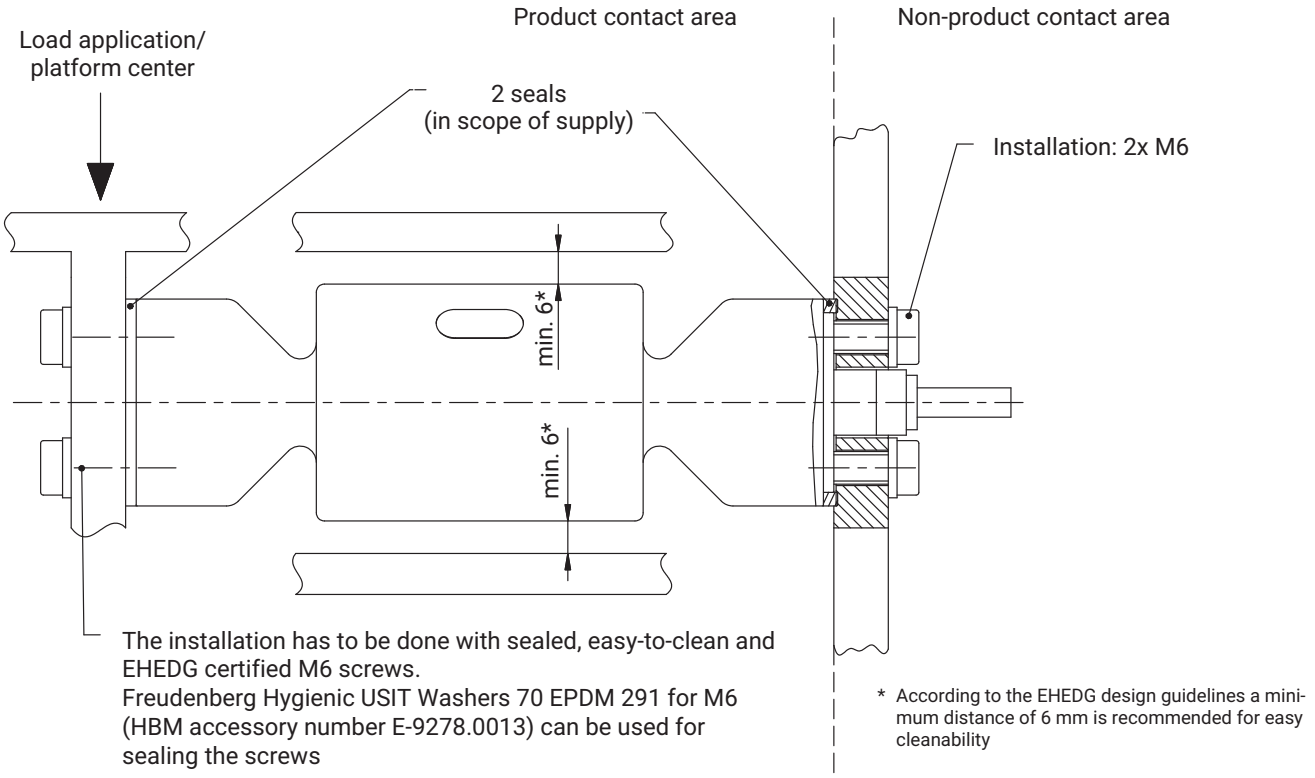
MOUNTING AND LOAD APPLICATION

The load cells are firmly clamped at the mounting holes, the load is applied at the other end. The scope of supply includes two seals for sealing the gap surfaces on the face against microbiological contamination. The recommended screws and tightening torques can be found in the table below:

Version	Thread	Max. thread reach	Min. property class	Tightening torque*)
Standard	M6	14mm	8.8	10 Nm
Rustless	M6	14mm	A2-70 or A4-70	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)

Type	PW27B
Accuracy class	C3-MR (OIML) (Multi Range)
Maximum capacity	**Ordering number**
10 kg	1-PW27BC3/10kg-1
20kg	1-PW27BC3/20kg-1

SPARE PART

One set of replacement seals, consisting of two seals (EPDM), order no. E-9278.0015-1

PRODUCT DESIGNATION (OVERVIEW)

K-PW27B		
1	**Code**	**Option 1: Mechanical design**
	N	Standard
2	**Code**	**Option 2: Accuracy class**
	C3	C3 MR (OIML)
3	**Code**	**Option 3: Maximum capacity**
	10	10 kg
	20	20 kg
4	**Code**	**Option 4: Explosion protection**
	N	No explosion protection
	AI1/21	IECEx + ATEX zone 1/21 + FM [only with option 3 = 20]
5	**Code**	**Option 5: Cable length**
	3	3 m
	6	6 m
6	**Code**	**Option 6: Other**
	N	Without
	A	2 mV/V ±0.1 %/359 ohms ± 0.2 ohms (adjusted output, suitable for parallel connection)

K-PW27B - [N] - [C][3] - [ ][ ] - [ ][ ][ ][ ][ ][ ] - [ ] - [ ]

1 2 3 4 5 6

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