CERTIFIED EHEDG — European Hygienic Engineering & Design Group — TYPE EL OCTOBER 2008

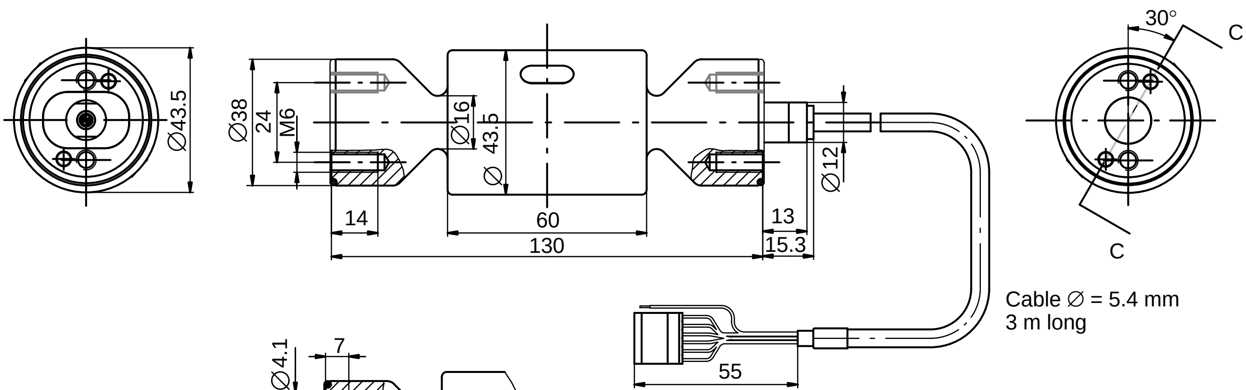
PW27…

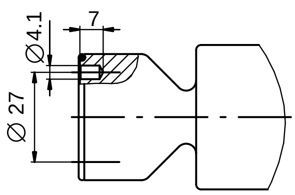
Platform load cell with aseptic design

Special features

- **Nominal load 10 kg, 20 kg**
- **Stainless steel**
- **High ratio of minimum verification interval Y**
- **EHEDG certified**
- **Simple to clean**

Dimensions in mm (1 mm = 0.03937 inch)





C–C

Wire color of cable:

1:	Signal +	: white
2:	Signal -	: red
3:	Excitation -	: black
4:	Excitation +	: blue
5:	Sense +	: green
6:	Sense -	: grey
	Shield	: yellow
	(connected to housing)	

Mounting:
Cylinder head bolts M6-8.8
Tightening torque: 10 N·m

HBM

Specifications

Type			PW27...	
Accuracy class [1]			**C3 Multi Range (MR)**	
Maximum number of scale intervals	n_{LC}		3000	
Nominal load	E_{max}	kg	10	20
Minimum scale division	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 initial load)			0 ±0.1	
Temperature coefficient of sensitivity [2] In the range +20 ... +40°C [+68 ... +104°F] In the range -10 ... +20°C [+14 ... +68°F] **Temperature coefficient of zero signal**	 TK_C TK_0	% of C_n / 10K	 ±0.0175 ±0.0117 ±0.0140	
Relative reversibility error [2]	d_{hy}	% of C_n	±0.0166	
Non-linearity [2]	d_{lin}		±0.0166	
Return of initial load signal	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 excitation voltage range	B_U		1 ... 12	
Maximum excitation voltage			15	
Insulation resistance at 100 V_{DC}	R_{is}	GΩ	> 1	
Nominal ambient temperature range	B_T	°C [°F]	-10 ... +40 [+14 ... +104°F]	
Operating temperature range	B_T		-20 ... +70 [-4 ... +160°F]	
Storage temperature range	B_T		-25 ... +90 [-13 ... +195°F]	
Cleaning temperature			max. +120 [248°F] for max. 10 minutes	
Operational 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	E_d		> 1500	
Relative perm. vibrational stress at max. 50 mm eccentricity	F_{srel}		70	
Nominal (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	
Degree of protection[6]			IP68 (test conditions 1 m water column / 100 hours); IP69K (water at high pressure, steam cleaner) [4]	
Material: **Measuring body** **Seal** **Cable sheath**			Stainless steel [5] NBR 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 (TK_C) are recommended values. The sum of these values is within the cumulative error limits according to R60.
3) As per OIML R76.
4) Based on DIN 40050 specifications, Part 9, for road vehicles.
5) As per EN 10088-1, material list on request.
6) As per EN 60 529 (IEC 529)

Spare parts: 1 set replacement seals, consisting of 2 round gaskets (NBR), size 34x2, Order No. E-9278.0012
Accessories: 1 set seals, consisting of 2 round gaskets (70EPDM291), Order No. E-9278.0011

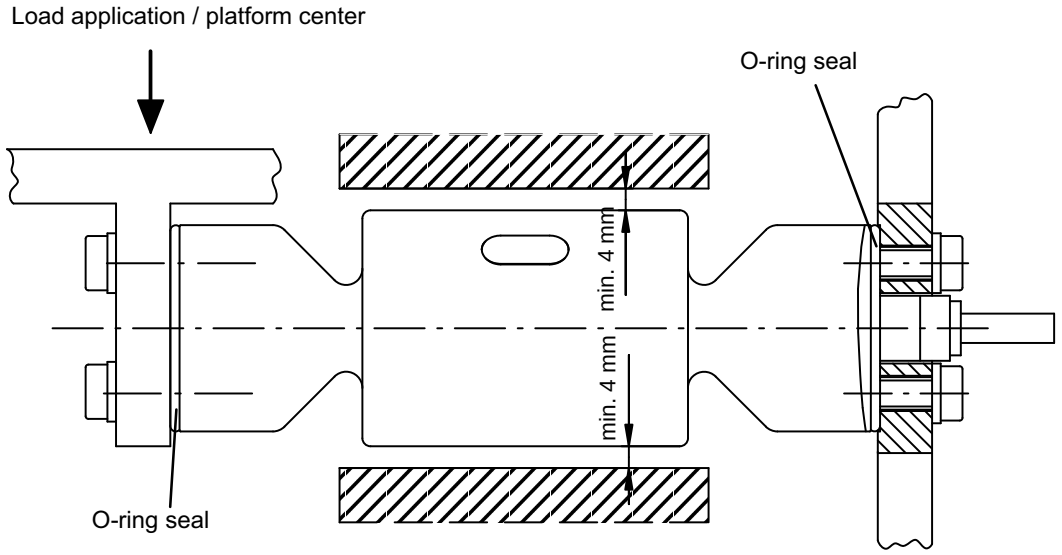
Mounting and load application

The load cells are firmly clamped at the mounting holes, the load is applied at the other end. The scope of supply includes 2 gaskets for sealing the mounting surfaces 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	14 mm	8.8	10 N·m
Rustless	M6	14 mm	A2-70 or A4-70	10 N·m

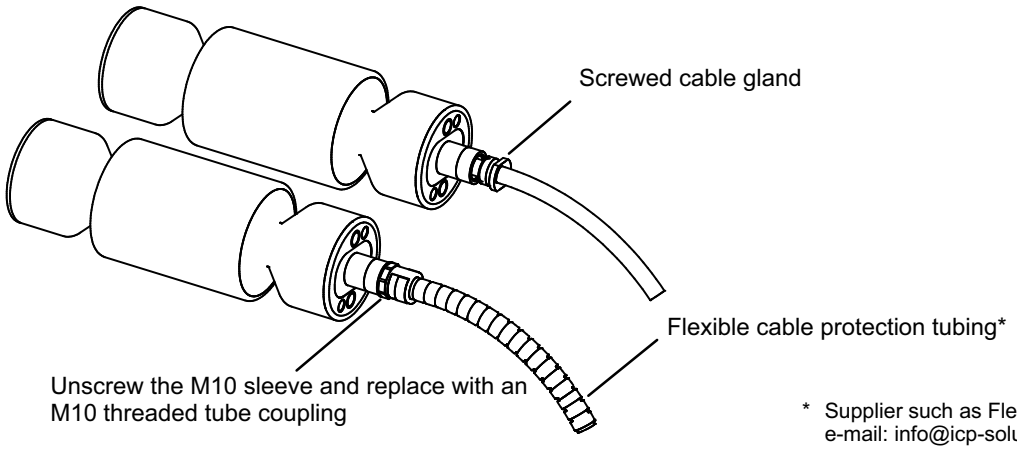
*) Recommended value for the specified property class. Please comply with the screw manufacturer's instructions with regard to screw dimensions.

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



Cable protection (provided by customer)

Cable protection system*, comprising:



* Supplier such as Flexicon, e-mail: info@icp-solutions.de

Even without a cable protection system, standard load cells can achieve IP68/IP69K degree of protection. In applications where the PUR cable of the load cell can be chemically or mechanically attacked or destroyed, extra cable protection can be provided by means of standard cable protection systems.

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