

# **PW27**...

# Platform load cell with aseptic design

#### **Special features**

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

Dimensions in mm (1 mm = 0.03937 inch)



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

НВМ

## **Specifications**

Туре			PW27	
Accuracy class <sup>1)</sup>			C3 Multi Range (MR)	
Maximum number of scale intervals	n <sub>LC</sub>		3000	
Nominal load	E <sub>max</sub>	kg	10	20
Minimum scale division	v <sub>min</sub>	g	1	2
Ratio of minimum verification interval	Y		10000	
Maximum platform size		mm	400 x 400	
Nominal (rated) sensitivity	Cn		2.0 ± 0.2 0 ± 0.1	
Zero signal (without initial load)		mv/v		
Temperature coefficient of sensitivity <sup>2)</sup>				
In the range +20 +40°C [+68 +104°F]	ΤK <sub>C</sub>	% of C <sub>n</sub> / 10K	±0.0175	
In the range -10 +20°C [+14 +68°F]			±0.0117	
Temperature coefficient of zero signal	TK <sub>0</sub>		± 0.0140	
Relative reversibility error <sup>2)</sup>	d <sub>hy</sub>		± 0.0166	
Non-linearity <sup>2)</sup>	d <sub>lin</sub>	% of C <sub>n</sub>	± 0.0166	
Return of initial load signal	DR		± 0.0166	
Off-center load error <sup>3)</sup>			±0.0233	
Input resistance	$R_{LC}$	0	300 500	
Output resistance	$R_{LC}$	52	300 500	
Reference excitation voltage	U <sub>ref</sub>		5	
Nominal excitation voltage range	Β <sub>U</sub>	V	1 12	
Maximum excitation voltage			15	
Insulation resistance at 100 V <sub>DC</sub>	R <sub>is</sub>	GΩ	> 1	
Nominal ambient temperature range	B <sub>T</sub>		-10 +40 [+14 +104°F]	
Operating temperature range	B <sub>T</sub>		-20 +70 [-4 +160°F]	
Storage temperature range	B <sub>T</sub>	°C [°F]	-25 +90 [-13 +195°F]	
Cleaning temperature			max. +120 [248°F] for max. 10 minutes	
Operational load at max. 120 mm eccentricity	EU		150	
Limit load at 20 mm eccentricity	EL		1000	
Limit lateral loading, static	Elq	% of F	200	
Breaking load	Ed		> 1500	
Relative perm. vibrational stress at max. 50 mm eccentricity	F <sub>srel</sub>		70	
Nominal (rated) displacement at E <sub>max</sub> , approx.	s <sub>nom</sub>	mm	0.19	0.18
Resonance frequency, approx.		Hz	210	315
Weight, approx.	m	kg	0.8	
Degree of protection <sup>6)</sup>			IP68 (test conditions 1 m water column / 100 hours); IP69K (water at high pressure, steam cleaner) <sup>4)</sup>	
Material: Measuring body Seal Cable sheath			Stainless steel <sup>5)</sup> NBR PUR	

<sup>1)</sup> As per OIML R60, with PLC = 0.7.

<sup>17</sup> As per OIML RoU, with PLC = 0.7.
 <sup>29</sup> The values for non-linearity (d<sub>iin</sub>), relative reversibility error (d<sub>hy</sub>) and temperature coefficient of sensitivity (TK<sub>C</sub>) are recommended values. The sum of these values is within the cumulative error limits according to R60.
 <sup>30</sup> As per OIML R76.
 <sup>31</sup> As per OIML R76.

<sup>4)</sup> Based on DIN 40050 specifications, Part 9, for road vehicles.

<sup>5)</sup> As per EN 10088-1, material list on request.
<sup>6)</sup> As per EN 60 529 (IEC 529)

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

### 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 <sup>*)</sup>
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)



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.

HB

Subject to modifications.

All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability. Hottinger Baldwin Messtechnik GmbH Im Tiefen See 45 · 64293 Darmstadt · Germany Tel. +49 6151 803-0 · Fax +49 6151 803-9100 Email: info@hbm.com · www.hbm.com

