

PW27P...

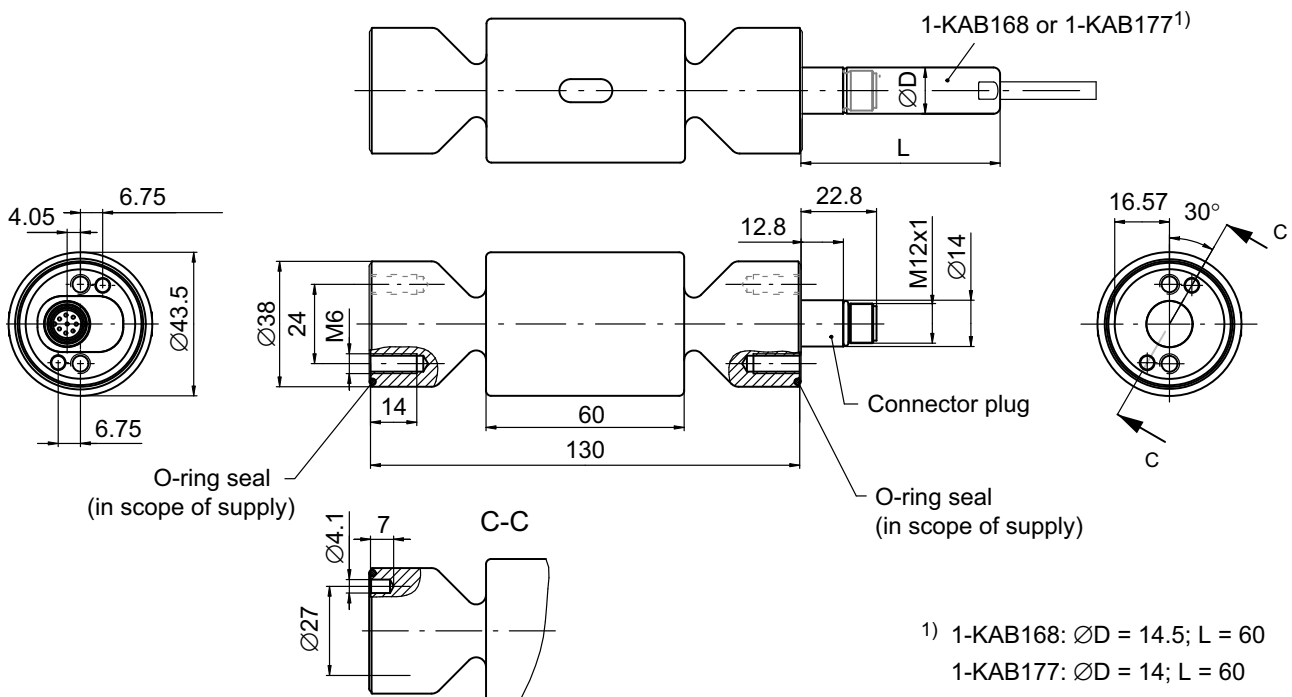
Single point load cell aseptic design

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**
- **Connecting cable and additional accessories deliverable**



Dimensions in mm (1 mm = 0.03937 inches)



Specifications

Type			PW27P...	
Accuracy class ¹⁾			C3 Multi Range (MR)	
Number of load cell verification intervals	n_{LC}		3000	
Maximum capacity	E_{max}	kg	10	20
Minimum load cell 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 error			0 ± 0.1	
Temperature coefficient of the sensitivity per 10 K ²⁾ in the temperature range +20 ... +40°C -10 ... +20°C	TK_C	% of C_n	± 0.0175 ± 0.0117	
Temperature coefficient of the zero signal per 10 K	TK_0		± 0.0140	
Non-linearity ²⁾	d_{lin}		± 0.0166	
Relative reversibility error ²⁾	d_{hy}		± 0.0166	
Minimum dead load output return	MDLOR		± 0.0166	
Off-center load error ³⁾		ppm	≤ 233	
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}	G Ω	>1	
Nominal (rated) ambient temperature range	B_T	°C	-10 ... +40	
Operating temperature range	B_{tu}		-10 ... +50	
Storage temperature range	B_{tl}		-25 ... +85	
Cleaning temperature			max. +120 for max. 10 minutes	
Limit load at 20 mm eccentricity	E_L	% of E_{max}	1000	
Service load at max. 120 mm eccentricity			150	
Limit lateral loading, static	E_{lq}		200	
Breaking load	E_d		>1500	
Permissible vibrational stress at max. 50 mm eccentricity	F_{rb}		70	
Resonance frequency, approx.	f_G	Hz	330	
Nominal (rated) displacement ⁴⁾	s_{nom}	mm	<0.18	
Weight, approx.	m	kg	0.8	
Degree of protection ⁷⁾			IP68 (test conditions 1 m water column / 100 h); IP69K (water at high pressure, steam cleaner) ⁵⁾	
Material: measuring body seal			Steel 1.4545 ⁶⁾ NBR	

¹⁾ As per OIML R60, with $P_{LC} = 0.7$

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 cumulated error limit laid down by OIML R60

³⁾ As per OIML R76

⁴⁾ Loading with E_{max} and center of gravity in center of platform

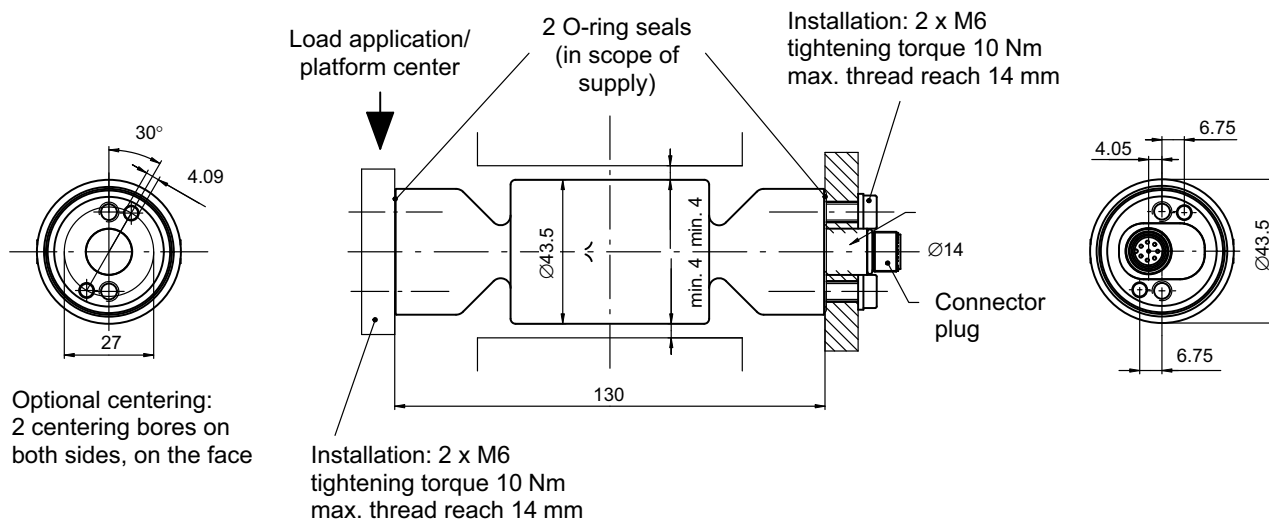
⁵⁾ Based on DIN 40050, Part 9 specifications, for road vehicles

⁶⁾ As per EN 10088-1

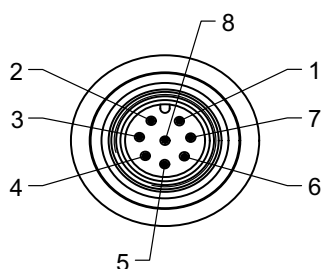
⁷⁾ As per DIN EN 60529 (IEC 529)

Mounting instructions

Dimensions in mm (1 mm = 0.03937 inches)



Connector pin assignment



- Plug-in contact 1 = measurement signal (+)
- Plug-in contact 2 = vacant
- Plug-in contact 3 = sense lead (+)
- Plug-in contact 4 = vacant
- Plug-in contact 5 = sense lead (-)
- Plug-in contact 6 = excitation voltage (-)
- Plug-in contact 7 = excitation voltage (+)
- Plug-in contact 8 = measurement signal (-)

Product numbers (overview)

PW27P... (stainless steel, hermetically sealed)

Type	PW27P
Accuracy class	C3-MR (OIML) (Multi Range)
Maximum capacity	Ordering number
10 kg	1-PW27PC3/10KG-1
20 kg	1-PW27PC3/20KG-1

Accessories



Connection cable	
Connection cable with M12 F connector, 8-pin, TPU IP67, PUR cable sheath, 5 m long	1-KAB168-5
Connection cable with M12 F connector, 8-pin, TPU IP67, PUR cable sheath, 20 m long	1-KAB168-20
Connection cable with M12 F connector, 8-pin, stainless steel IP68/IP69K, hygiene design, 3 m long	1-KAB177-3-1
Connection cable with M12 F connector, 8-pin, stainless steel IP68/IP69K, hygiene design, 6 m long	1-KAB177-6-1

Pin assignment 1-KAB168

Color code	Connection
White	Measurement signal (+)
Red	Measurement signal (-)
Blue	Excitation voltage (+)
Pink	Excitation voltage (-)
Green	Sense lead (+)
Gray	Sense lead (-)
Yellow	Not in use
Brown	Not in use

Pin assignment 1-KAB177

Color code	Connection
White	Measurement signal (+)
Red	Measurement signal (-)
Blue	Excitation voltage (+)
Black	Excitation voltage (-)
Green	Sense lead (+)
Gray	Sense lead (-)

1 set of seals, consisting of 2 round gaskets (70EPDM291), order no. E-9278.0011

Spare part

1 set of replacement seals, consisting of 2 round gaskets (NBR), size 34x2, order no. E-9278.0012

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