

DATA SHEET

PW37P... “Hygienic design” single-point load cell

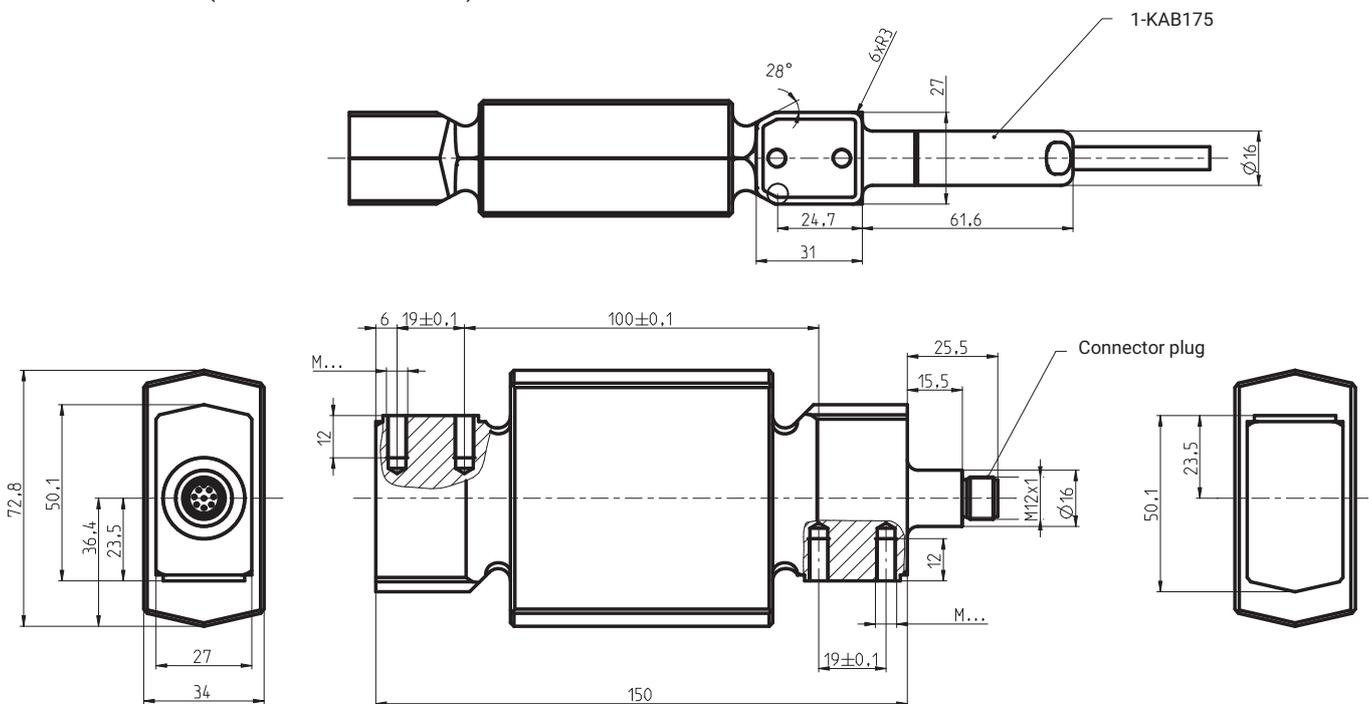
SPECIAL FEATURES

- Maximum capacities 50 kg, 100 kg, 200 kg
- Stainless steel
- High ratio of minimum verification interval Y
- EHEDG-certified
- Easy to clean
- “Hygienic design” M12 connection cable



DIMENSIONS

Dimensions in mm (1 mm = 0.03937 inches)



Maximum capacity 50 kg, 100 kg M6
Maximum capacity 200 kg M8

SPECIFICATIONS

Type			PW37P...		
Accuracy class ¹⁾			C3 Multi Range (MR)		
Number of load cell verification intervals	n_{LC}		3000		
Maximum capacity	E_{max}	kg	50	100	200
Minimum load cell verification interval for PW37P	v_{min}	g	5	10	20
Maximum load cell verification interval for PW37P	Y		10,000		
Temperature coefficient of the zero signal per 10 K for PW37P	TC_0	% of C_n	± 0.0140		
Minimum load cell verification interval for PW37PY	v_{min}	g	2	5	10
Maximum load cell verification interval for PW37PY	Y		25,000	20,000	
Temperature coefficient of the zero signal per 10 K for PW37PY	TC_0	% of C_n	± 0.0056	± 0.0070	± 0.0070
Maximum platform size		mm	600 x 600		
Rated output (nominal)	C_n	mV/V	2.0 ± 0.2		
Zero signal (without initial load)			0 ± 0.2		
Temperature coefficient of sensitivity per 10 K ²⁾ in the temperature range +20 ... +40°C -10 ... +20°C	TC_S	% of C_n	± 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	MDLOR		± 0.0166		
Off-center load error ³⁾	d_{cr}		± 0.0233		
Input resistance	R_{LC}	Ω	380 ± 15		
Output resistance	R_0		360 ± 10		
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	>2		
Nominal (rated) range of the ambient temperature	B_T	°C	-10 ... +40		
Operating temperature range	B_{tu}		-20 ... +70		
Storage temperature range	B_{tl}		-25 ... +90		
Limit load at 20 mm eccentricity	E_L	% of E_{max}	150		
Service load at centric loading			150		
Limit lateral loading, static	E_{lq}		150		
Breaking load at max. 20 mm eccentricity	E_d		>300		
Permissible oscillation stress at max. 20 mm eccentricity	F_{srel}		70		
Resonance frequency, approx.	f_G	Hz	540	630	790
Rated displacement at E_{max} ⁴⁾	s_{nom}	mm	0.09	0.13	0.17
Weight, approx.	m	kg	1.2		
Material: measuring body seal			steel 1.4545 ⁶⁾ EPDM		
Equipment protection level ⁷⁾			IP68 (test conditions 1 m water column / 100 h); IP69K (water at high pressure, steam cleaner) ⁵⁾		

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 (TCS) are recommended values. If these values are added together, the total is within the accumulated error limit laid down by OIML R60.

3) As per OIML R76

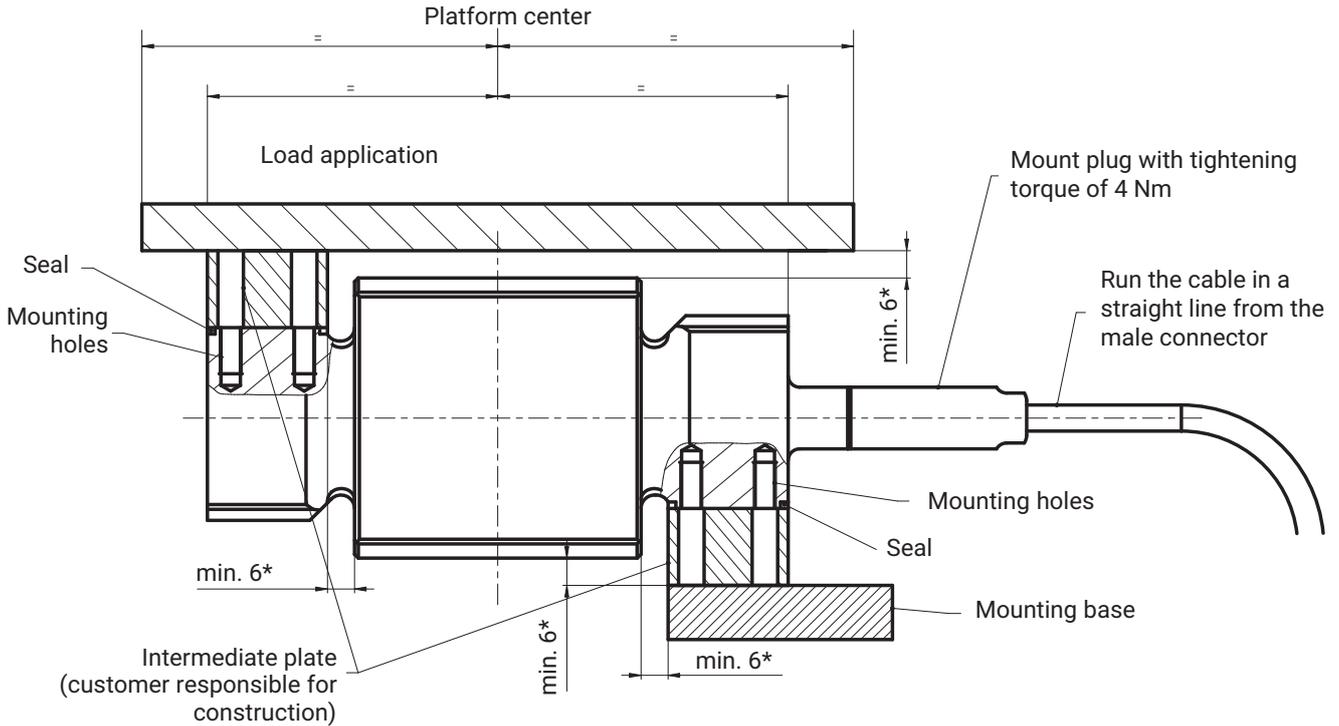
4) Loading with E_{max} and center of gravity in center of load cell.

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

6) Per EN 10088-1

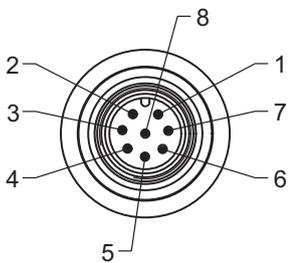
7) Per DIN EN 60529 (IEC 529)

INSTALLATION ADVICE



* For easy cleaning in accordance with the EHEDG design criteria, a minimum distance of 6 mm is recommended.

CONNECTOR PIN ASSIGNMENT



- Plug-in contact 1 = measurement signal (+)
- Plug-in contact 2 = not in use
- Plug-in contact 3 = sense lead (+)
- Plug-in contact 4 = not in use
- Plug-in contact 5 = sense lead (-)
- Plug-in contact 6 = excitation voltage (-)
- Plug-in contact 7 = excitation voltage (+)
- Plug-in contact 8 = measurement signal (-)

PIN ASSIGNMENT 1-KAB175

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

ACCESSORIES

Connection cable	
Connection cable with M12 F male connector, 8-pin, stainless steel IP68/IP69K, hygiene design, 3 m long	1-KAB175-3-1
Connection cable with M12 F male connector, 8-pin, stainless steel IP68/IP69K, hygiene design, 6 m long	1-KAB175-6-1
Connection cable with M12 F male connector, 8-pin, stainless steel IP68/IP69K, hygiene design, 12 m long	1-KAB175-12-1

SPARE PART

1 set of replacement seals, consisting of 2 seals (EPDM), ordering no. E-9278.0014

PRODUCT NUMBERS (OVERVIEW)

Type	PW37P
Accuracy class	C3-MR (OIML)
Maximum capacity	Ordering number
50 kg	1-PW37PC3/50KG-1
100 kg	1-PW37PC3/100KG-1
200 kg	1-PW37PC3/200KG-1
Type	PW37PY
50 kg	1-PW37PY/50KG-1
100 kg	1-PW37PY/100KG-1
200 kg	1-PW37PY/200KG-1

Hottinger Brüel & Kjaer GmbH

Im Tiefen See 45 · 64293 Darmstadt · Germany
Tel. +49 6151 803-0 · Fax +49 6151 803-9100
www.hbkworld.com · info@hbkworl.com

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