

DATA SHEET

# PW25P...

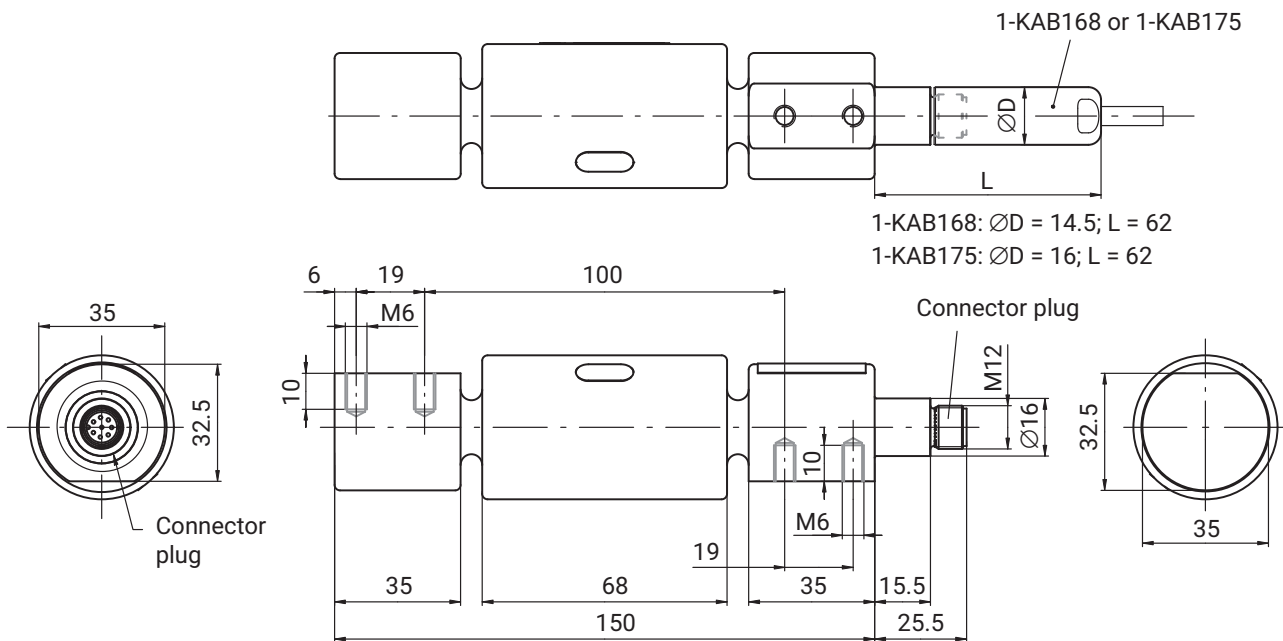
## Single point load cell for harsh environments

SPECIAL FEATURES

- Nominal load 10 kg, 20 kg
- Stainless steel
- High ration of minimum verification interval Y
- Industry Footprint (SP4M)
- Degree of protection IP68; IP69k
- Connection cable and other accessories deliverable



DIMENSIONS



## SPECIFICATIONS

Type			PW25P...	
Accuracy class <sup>1)</sup>			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	
Temperature coefficient of the zero signal per 10 K	$TK_0$	% of $C_n$	$\pm 0.0140$	
Maximum platform size		mm	400 x 400	
Nominal (rated) sensitivity	$C_n$	mV/V	2.0 $\pm$ 0.2	
Zero signal error			0 $\pm$ 0.1	
Temperature coefficient of the sensitivity per 10 K <sup>2)</sup> in the temperature range +20 ... +40°C -10 ... +20°C	$TK_C$	% of $C_n$	$\pm 0.0175$	
Non-linearity <sup>2)</sup>	$d_{lin}$		$\pm 0.0117$	
Relative reversibility error <sup>2)</sup>	$d_{hy}$		$\pm 0.0166$	
Minimum dead load output return	MDLOR		$\pm 0.0166$	
Off-center load error <sup>3)</sup>			ppm	$\leq 233$
Input resistance	$R_{LC}$	$\Omega$	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 <sub>DC</sub>	$R_{is}$	G $\Omega$	>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	210	315
Nominal (rated) displacement <sup>4)</sup>	$s_{nom}$	mm	0.19	0.18
Weight, approx.	m	kg	0.8	
Degree of protection <sup>7)</sup>			IP68 (test conditions: 1 m water column / 100 h); IP69K (water at high pressure, steam cleaner) <sup>5)</sup>	
Material: measuring body			steel 1.4545 <sup>6)</sup>	

<sup>1)</sup> As per OIML R60, with  $P_{LC} = 0.7$ .

<sup>2)</sup> 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.

<sup>3)</sup> As per OIML R76.

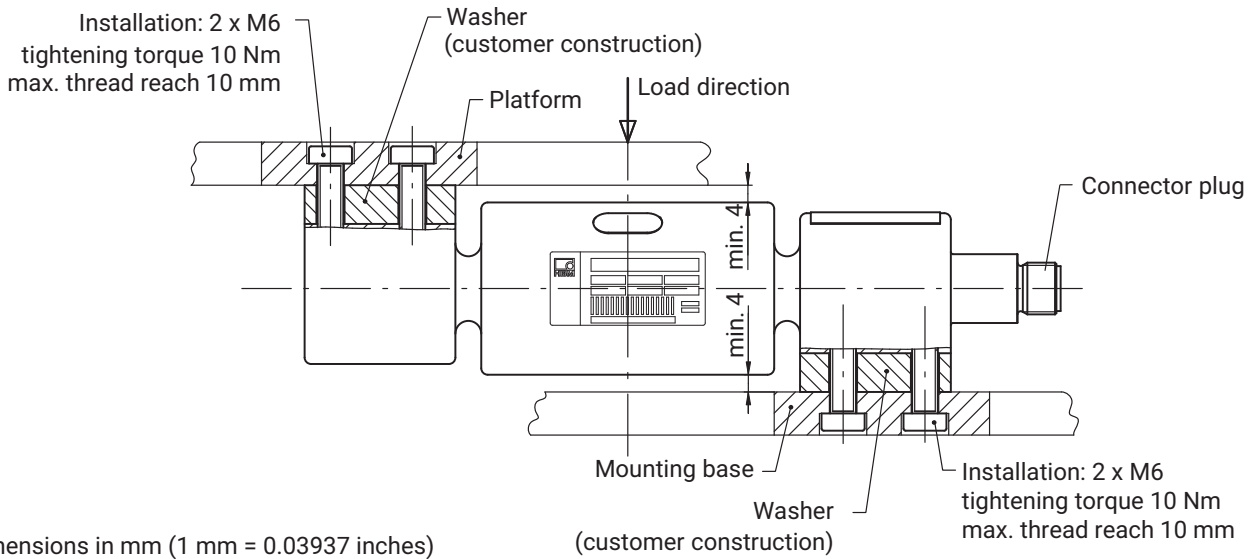
<sup>4)</sup> Loading with  $E_{max}$  and center of gravity in center of load cell.

<sup>5)</sup> Based on DIN 40050, Part 9 specifications, for road vehicles.

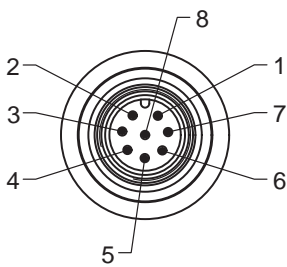
<sup>6)</sup> As per EN 10088-1

<sup>7)</sup> As per DIN EN 60529 (IEC 529)

## MOUNTING INSTRUCTIONS



## 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)

PW25P0 (stainless steel, hermetically sealed)

Type	PW25P
Accuracy class	C3-MR (OIML) (Multi Range)
Maximum capacity	Ordering number
10 kg	1-PW25PC3/10KG-1
20 kg	1-PW25PC3/20KG-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-KAB175-3-1
Connection cable with M12 F connector, 8-pin, stainless steel IP68/IP69K, hygiene design, 6 m long	1-KAB175-6-1
Connection cable with M12 F connector, 8-pin, stainless steel IP68/IP69K, hygiene design, 12 m long	1-KAB175-12-1

### 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-KAB175

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

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