

PW10A...

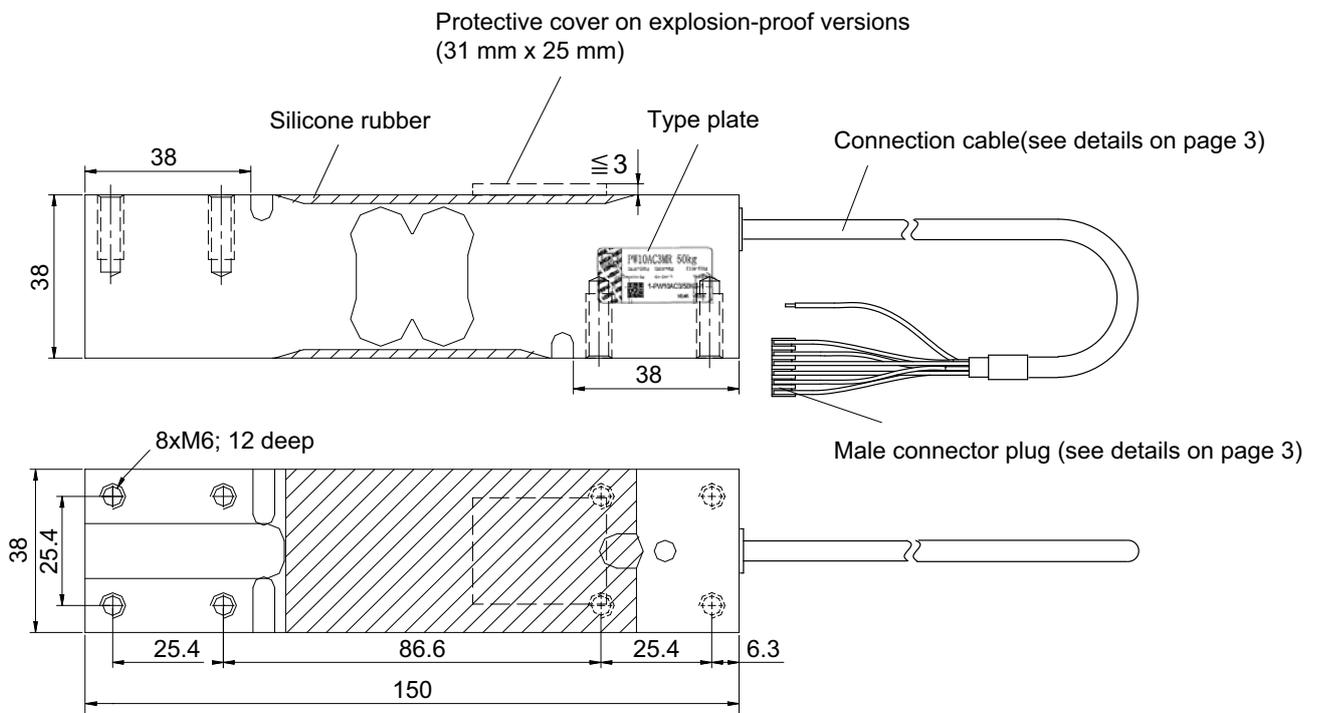
Single-point load cell



Special features

- Maximum capacities: 50 kg ... 300 kg
- Aluminum
- High ratio of minimum verification interval Y
- Compensated off-center load error
- Complies with EMC directives
- Shielded connection cable
- 6-wire configuration
- Explosion protection and other options also available

Dimensions (in mm; 1 mm = 0.03937 inches)



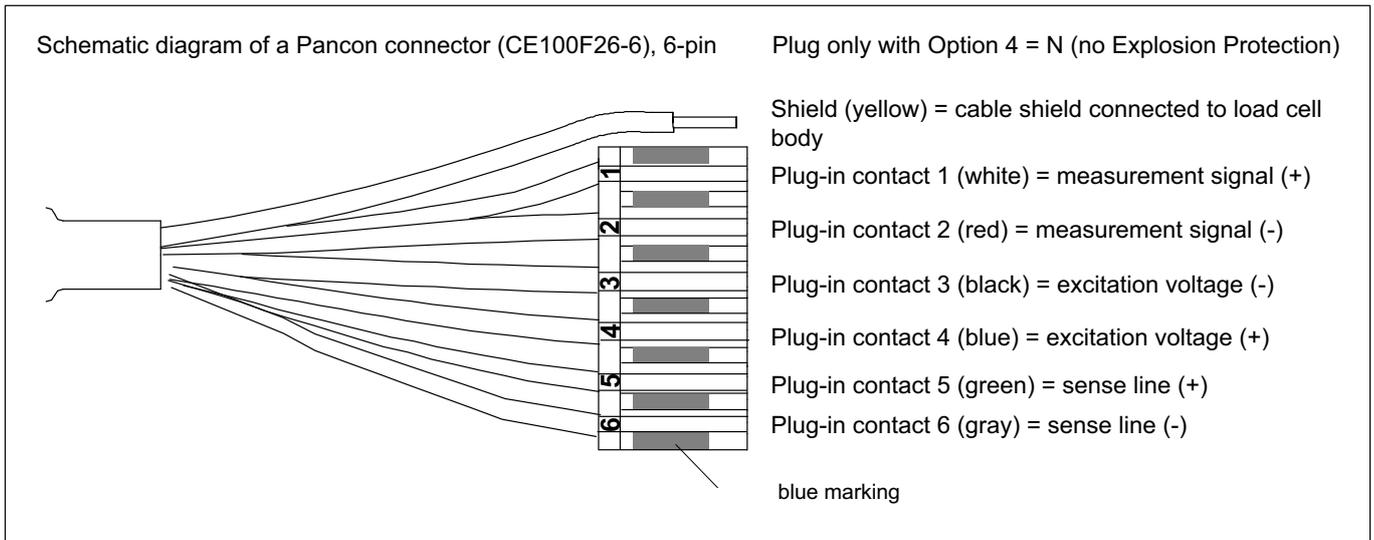
Specifications

Type			PW10A...					
Accuracy class ¹⁾			C3 Multi Range (MR)					
Number of load cell verification intervals (n_{LC})			3000					
Maximum capacity ²⁾	E_{max}	kg	50	100	150	200	250	300
Minimum load cell verification interval Accuracy class C3MR	v_{min}	g	5	10	10	20	20	20
Temperature coefficient of zero signal Accuracy class C3MR	TC_0	% of $C_n/10$ K	± 0.0140	± 0.0140	± 0.0093	± 0.0140	± 0.0112	± 0.0093
Ratio of minimum verification interval Y	Y		10,000		15,000	10,000	12,500	15,000
Maximum platform size		mm	600 x 500					
Rated output (nominal)	C_n	mV/V	2.0 \pm 0.2 (Option 6: A = 2 mV/V \pm 0.1 %)					
Zero signal			0 \pm 0.1					
Temperature coefficient of sensitivity ³⁾ Temperature range +20 ... +40 °C -10 ... +20 °C	TC_S	% of $C_n/10$ K	± 0.0175 ± 0.0117					
Relative reversibility error ³⁾	d_{hy}	% of C_n	± 0.0166					
Non-linearity ³⁾	d_{lin}		± 0.0166					
Minimum dead load output return	DR		± 0.0166					
Off-center load error ⁴⁾			± 0.0233					
Input resistance	R_{LC}	Ω	300 ... 500					
Output resistance	R_0		300 ... 500 (Option 6: A = 359 Ω \pm 0.2 Ω)					
Reference excitation voltage	U_{ref}	V	5					
Nominal (rated) range of the excitation voltage	B_U		1 ... 12					
Maximum excitation voltage			15					
Insulation resistance	R_{is} at 100 V _{DC}	G Ω	> 2					
Nominal (rated) range of the ambient temperature	B_T	°C	-10 ... +40					
Operating temperature range	B_{tu}		-10 ... +50					
Storage temperature range	B_{tl}		-25 ... +70					
Limit load at max. eccentricity	E_L	% of E_{max} mm	150 150					
Limit lateral loading, static	E_{lq}	%	300					
Breaking load	E_d	of E_{max}	300					
Rated displacement at E_{max} , approx.	s_{nom}	mm	< 0.5					
Weight, approx.	m	kg	0.6					
Degree of protection ⁵⁾			IP67					
Material: Measuring body Application protection Cable sheath			Aluminum Silicone rubber PVC					

1) As per OIMLR60, with $P_{LC} = 0.7$
2) Maximum eccentric loading as per OIML R76
3) If the values for non-linearity (d_{lin}), relative reversibility error (d_{hy}) and temperature coefficient of sensitivity (TC_S) are added together, they are within the cumulated error limit specified in OIML R60.
4) Off-center load deviation per OIML R76.
5) As per EN 60 529 (IEC 529)

Cable assignment

6-wire cable connection (available cable lengths: 1.5 m; 3 m; 6 m; 12 m)



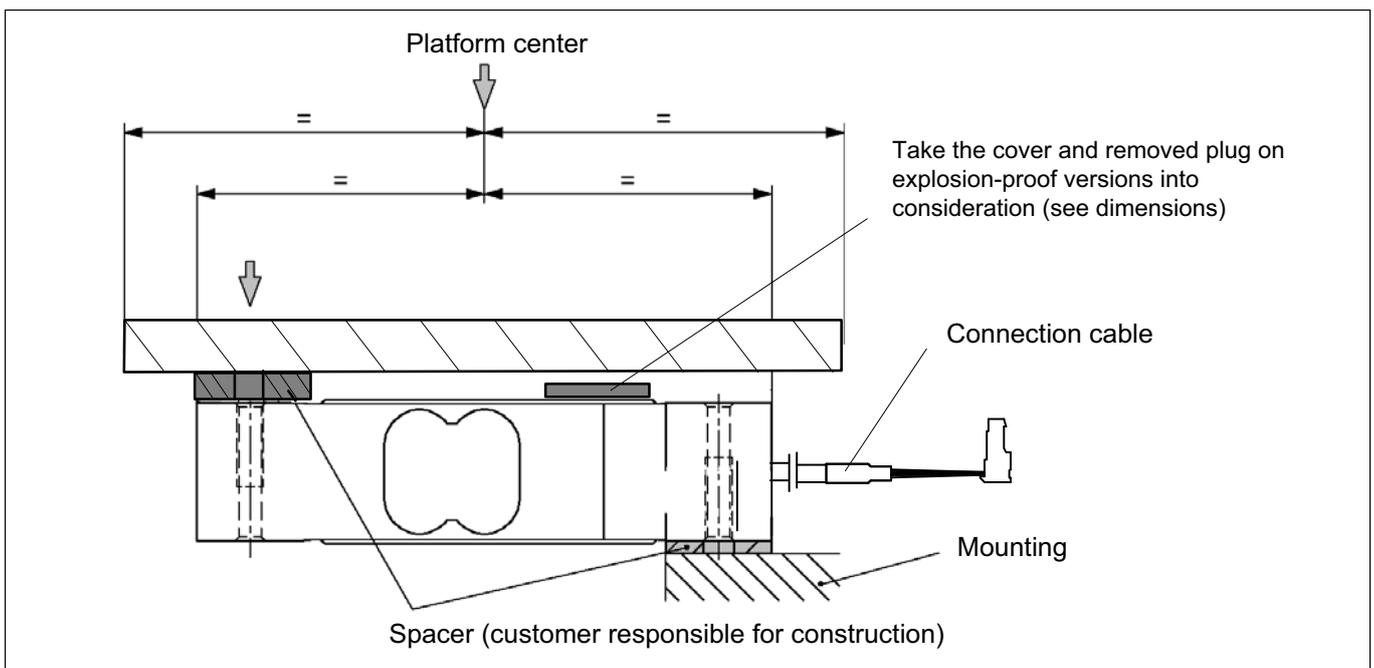
Mounting and load application

The load cells are firmly screwed in to the mounting holes, the load is applied at the other end. The recommended screws and tightening torques can be found in the table below:

Maximum capacities	Thread	Min. property class	Tightening torque ¹⁾
50...300 kg	M6	10.9	14 N·m

¹⁾ 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.



Product numbers

PW10A... (aluminum)

Type	PW10A
Accuracy class	C3-MR (OIML) (Multi Range)
Comment	Cable length 3 m (6-wire)

Maximum capacity	Ordering number
50 kg	1-PW10AC3/50KG-1
100 kg	1-PW10AC3/100KG-1
150 kg	1-PW10AC3/150KG-1
200 kg	1-PW10AC3/200KG-1
250 kg	1-PW10AC3/250KG-1
300 kg	1-PW10AC3/300KG-1

K-PW10A... (aluminum), optional version

Ordering number	K-PW10A
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Code	Option 1: Mechanical design
N	-

Code	Option 2: Accuracy class
MR	C3-MR (OIML) (Multi Range)

Code	Option 3: Maximum capacity
50	50 kg
100	100 kg
150	150 kg
200	200 kg
250	250 kg
300	300 kg

Code	Option 4: Explosion protection
N	No explosion protection
A1/21	IECEX+ATEX Zone 1/21+FM, intrinsically safe II 2G Ex ia IIC T6/T4 Gb/II 2D Ex ia IIIC T125°C Db*
A12/22	IECEX+ATEX Zone 2/22, not intrinsically safe II 3G Ex ec IIC T6/T4 Gc/II 3D Ex tc IIIC T125°C Dc*

Code	Option 5: Cable length
1.5	1.5 m
3	3 m (standard)
6	6 m
12	12 m

Code	Option 6: Other
N	Without
A	2mV/V ±0.1% / 359 Ω ±0.3 Ω [only with option 4 = N] (adjusted output, suitable for parallel connection)

K-PW10A	-	N	-	-	-	-	-	-	-	-	-
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* Including EC-Type Examination Certificate/Certificate of Conformity BVS 13 ATEX X 108 X/IECEX BVS 13.0109 X

Not all codes can be combined with one another. Take note of the conditions in square brackets!

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

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