



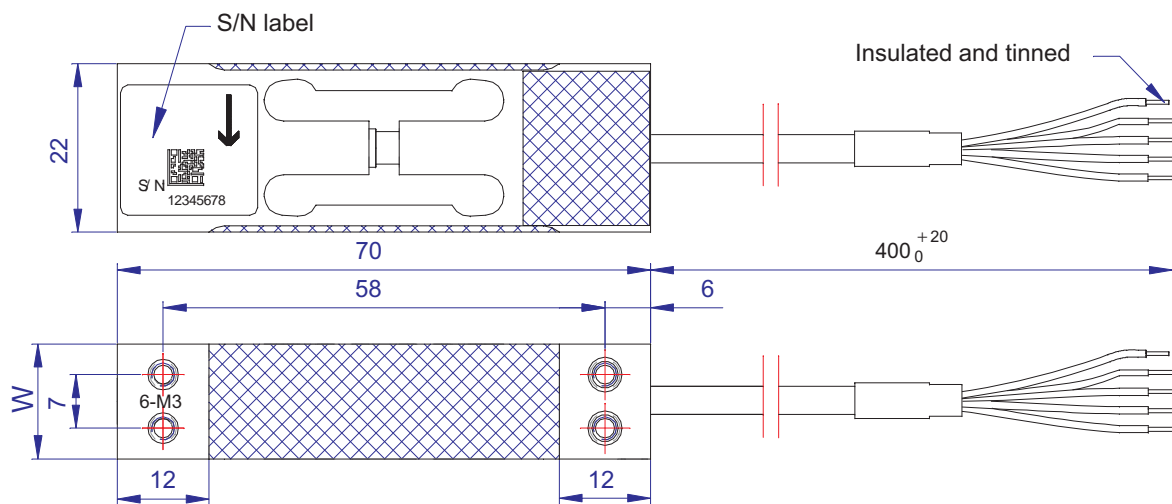
PW4M...OP

Single point load cell

Special features

- For determining small weights (0.3 kg ... 5 kg)
- Aluminum
- Compensated off-center load error
- Shielded connection cable
- Overload protection

Dimensions in mm (1 mm = 0.03937 inches)



Maximum capacity	0.3 kg ... 1 kg	2 kg ... 5 kg
W	12	15

Specifications

Type			PW4M...OP					
Accuracy class ¹⁾			C3					
Number of load cell verification intervals	n _{LC}		3000					
Maximum capacity ²⁾	E _{max}	kg	0.300	0.500	1	2	3	5
Minimum load cell verification interval	V _{min}	g	0.05	0.1	0.2	0.2	0.5	1
Ratio of minimum verification interval Y	Y		6,000	5,000		10,000	6,000	5,000
Temperature coefficient of zero signal	TC ₀	% of C _n /10K	±0.0233	±0.0280		±0.0140	±0.0233	±0.0280
Maximum platform size		mm	200 x 200					
Rated output (nominal)	C _n	mV/V	1.0 ±0.1		2.0 ±0.2			
Zero signal (without initial load)		mV/V	0 ±0.03		0 ±0.06			
Temperature coefficient of sensitivity ³⁾ +20°C ... +40°C -10°C ... +20°C	TC _S	% of C _n /10K	±0.0175 ±0.0117					
Relative reversibility error ³⁾			d _{hy}	% of C _n	±0.015			
Non-linearity ³⁾	d _{lin}		±0.015					
Dead load output return	MDLOR		±0.0166					
Off-center load error ⁴⁾			±0.0233					
Input resistance	R _{LC}	Ω	300 ... 500					
Output resistance	R _O		300 ... 500					
Reference excitation voltage	U _{ref}	V	5					
Nominal (rated) range of the excitation voltage	B _U		1 ... 8					
Maximum excitation voltage			10					
Insulation resistance at 100 V _{DC}	R _{is}	GΩ	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. 50 mm eccentricity	E _L	% of E _{max}	150					
Limit lateral loading, static	E _{lq}		300					
Service load at max. 100 mm eccentricity	E _U		150					
Breaking load at max. 20 mm eccentricity	E _d		1,000					500
Relative permissible oscillation stress at max. 20 mm eccentricity	F _{srel}		70					
Rated displacement at E _{max} , approx.	S _{nom}	mm	< 0.5					
Resonance frequency		Hz	180	251	250	322	404	544
Weight, approx.	m	kg	0.05					
Equipment protection level ⁵⁾			IP65					
Material Measuring body Cover Cable sheath			Aluminum Silicone rubber PVC					

¹⁾ As per OIML R60 with P_{LC}=0.7

²⁾ Maximum eccentric loading as per OIML R76

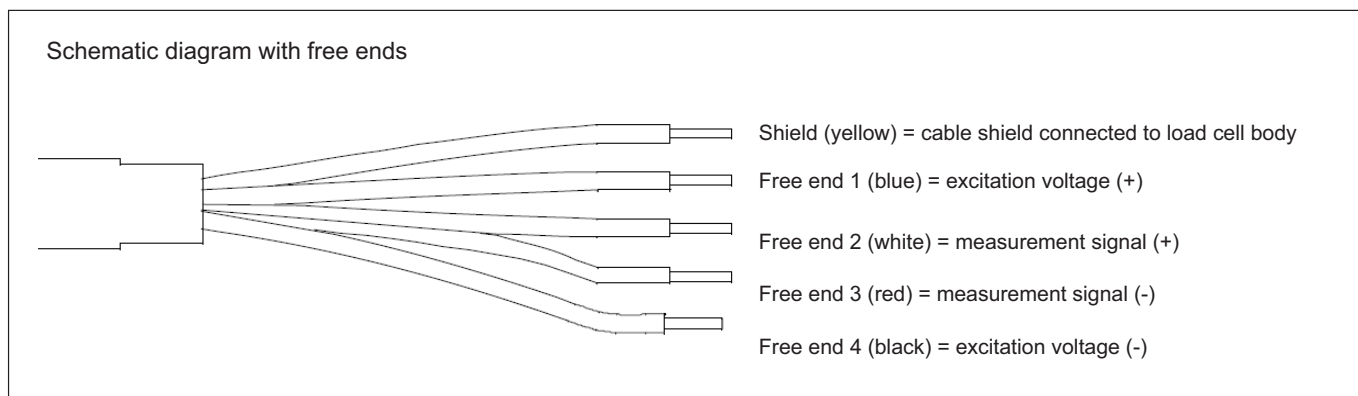
³⁾ The values for non-linearity (d_{lin}), relative reversibility error (d_{hy}) and temperature coefficient of sensitivity (TC_S) are recommended values. If these values are added together, the total is within the accumulated error limit laid down by OIML R60.

⁴⁾ As per OIML R76

⁵⁾ As per EN 60529 (IEC 529)

Cable assignment

Connection with 4-wire cable with PVC cable sheath (cable length: 0.4 m)



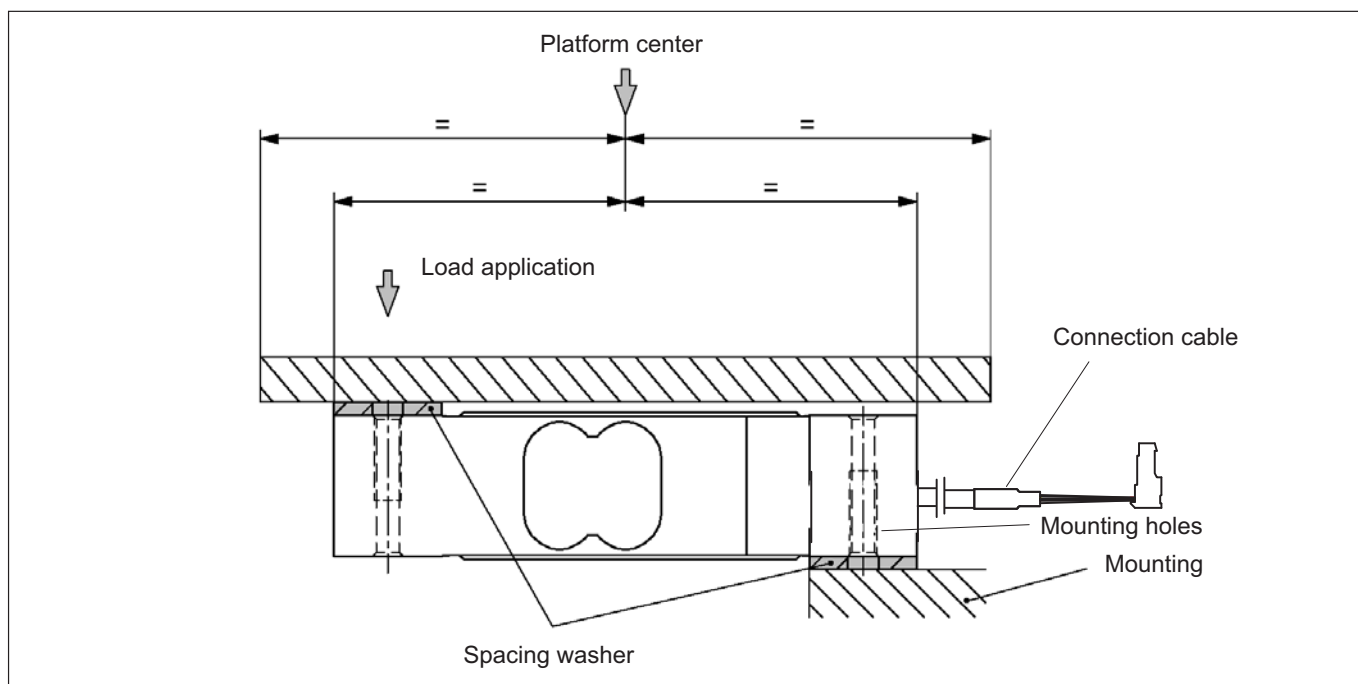
Mounting and load application

The load cells are attached at 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⁾
0.3 ... 5 kg	M3	8.8	1.30 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 number

Type	PW4M...OP
Accuracy class	C3
Comment	Cable length 0.40 m (4-wire)

Maximum capacity	Ordering number
0.3 kg	1-PW4MC3/300GOP-1
0.5 kg	1-PW4MC3/500GOP-1
1 kg	1-PW4MC3/1KGOP-1
2 kg	1-PW4MC3/2KGOP-1
3 kg	1-PW4MC3/3KGOP-1
5 kg	1-PW4MC3/5KGOP-1

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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