

precix 6

PW6C

Single point load cells

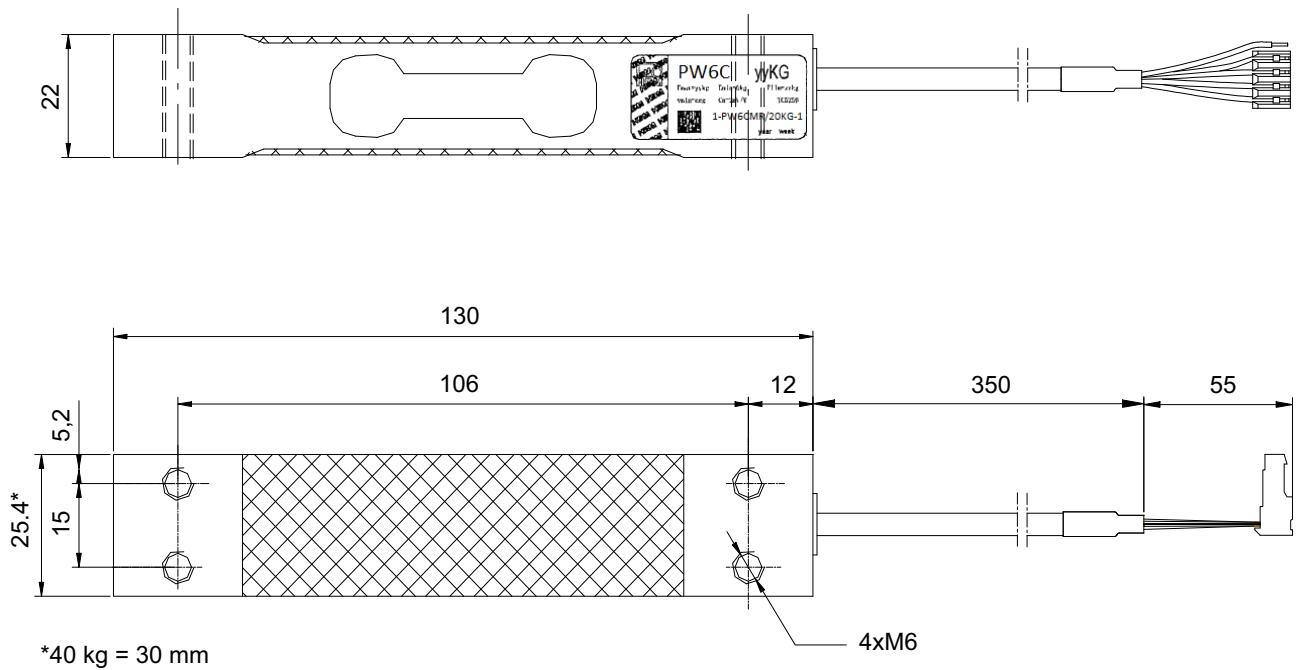
Special features

- Max. capacities: 3 kg ... 40 kg
- Aluminum
- Accuracy class C3MR & C6
- Off center load compensated
- Shielded connection cable
- Different cable lengths and other options deliverable



Data sheet

Dimensions (in mm; 1 mm = 0.03937 inches)



Specifications

Type			PW6C...						
Accuracy class ¹⁾			C3 Multi Range (MR)						
Maximum number of load cell intervals	n_{LC}		3000						
Maximum capacity	E_{mac}	kg	3	5	10	15	20	30	40
Minimum LC verification interval, (Accuracy class C3MR)	v_{min}	g	0.2	0.5	1	1	2	2	5
Minimum LC verification interval (Accuracy class C3MR)	v_{min}	% of C_n / 10 K	± 0.0093	± 0.0140	± 0.0140	± 0.0093	± 0.0140	± 0.0093	± 0.0175
Ratio of minimum verification interval	γ		15.000	10.000	10.000	15.000	10.000	15.000	8.000
Max. platform size		mm	300 x 300						
Sensitivity	C_n	mV/V	2.2 \pm 0.2						
Zero signal			0 \pm 0.12						
Temperature effect on sensitivity ²⁾ in the temperature range +20 ... +40 °C [+68 ... +104 °F] -10 ... +20 °C [+14 ... +68 °F]	TK_C	% of C_n / 10 K	± 0.0175						
			± 0.0117						
Relative reversibility error ²⁾	d_{hy}	% of C_n	± 0.0166						
Non-linearity ²⁾	d_{lin}		± 0.0166						
Ratio of minimum dead load output return	DR		± 0.0245						
Off-center load error ³⁾			± 0.0233						
Input resistance	R_{LC}	Ω	300...500						
Output resistance	R_0		300...500						
Reference excitation voltage	U_{ref}	V	5						
Nom. range of excitation voltage	B_U		1 ... 12						
Max. excitation voltage		V	15						
Isolation resistance at 100 V _{DC}	R_{is}	G Ω	> 2						
Nominal (rated) range of ambient temperature	B_T	°C [°F]	-10 ... +40 [+14 ... +104]						
Operating temperature range	B_{tu}		-10 ... +50 [+14 ... +122]						
Storage temperature range	B_{tl}		-25 ... +70 [-13 ... +158]						
Limit load	E_L	% of E_{max}	150						
at max. eccentricity		mm	100						
Lateral load limit, static	E_{lq}	% of E_{max}	300						
Breaking load	E_d	E_{max}	300						
Nominal (rated) displacement at E_{max} , approx.	s_{nom}	mm	< 0.5						
Weight, approx.	m	kg	0.25						
Degree of protection ⁴⁾			IP67						
Material			Aluminum Silicone rubber PVC						

¹⁾ According to OIMLR60 with $P_{LC} = 0.7$

²⁾ The values for linearity deviation (d_{lin}), relative reversibility error (d_{hy}) and temperature effect on sensitivity (TK_C) are recommended values. The sum of these values remain within the cumulated error limit acc. to OIML R60.

³⁾ According to OIML R76.

⁴⁾ According to EN60529 (IEC529)

Specifications (continuation)

Type			PW6C...						
Accuracy class ¹⁾			C6						
Maximum number of load cell intervals	n_{LC}		6000						
Maximum capacity	E_{max}	kg	3	5	10	15	20	30	40
Minimum LC verification interval	v_{min}	g	0.2	0.5	1	1	2	2	5
Temperature effect on zero balance	TK_0	% of C_n / 10 K	± 0.0093	± 0.0140	± 0.0140	± 0.0093	± 0.0140	± 0.0093	± 0.0175
Max. platform size		mm	300 x 300						
Sensitivity	C_n	mV/V	2.2 ± 0.2						
Zero signal			0 ± 0.10						
Temperature effect on sensitivity ²⁾ in the temperature range +20 ... +40 °C [+68 ... +104 °F] -10 ... +20 °C [+14 ... +68 °F]	TK_C	% of C_n / 10 K	± 0.0087 ± 0.0058						
Relative reversibility error ²⁾	d_{hy}	% of C_n	± 0.0083						
Non-linearity ²⁾	d_{lin}		± 0.0083						
Ratio of minimum dead load output return	DR		± 0.0083						
Off-center load error ³⁾			± 0.0116						

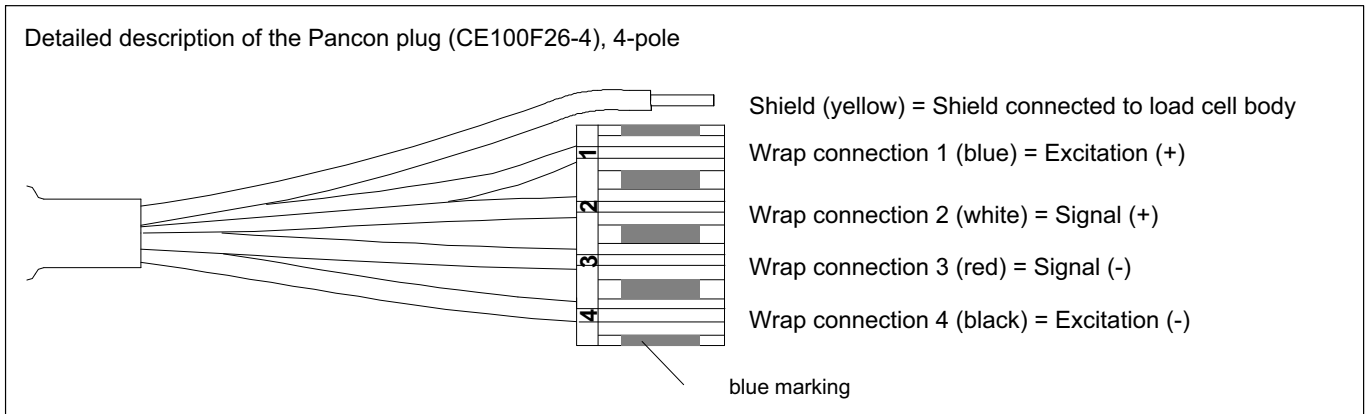
1) According to OIMLR60 with $P_{LC} = 0.7$

2) The values for linearity deviation (d_{lin}), relative reversibility error (d_{hy}) and temperature effect on sensitivity (TK_C) are recommended values. The sum of these values remain within the cumulated error limit acc. to OIML R60.

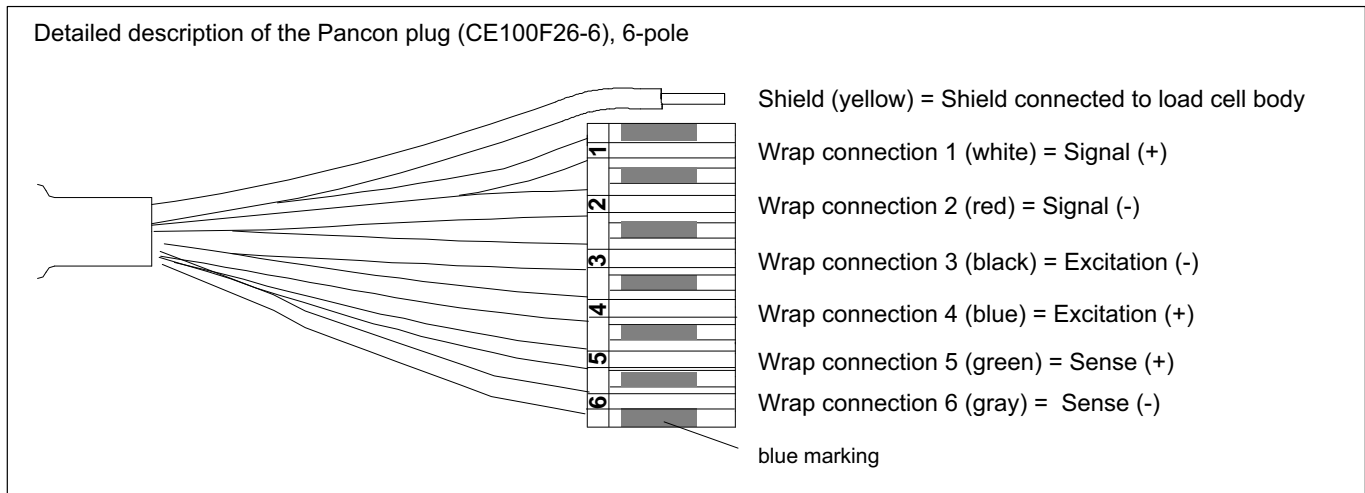
3) According to OIML R76.

Wiring code

Connection with 4 wire cable (cable length: 0.35 m)



Connection with 6 wire cable (cable length, selectable: 0.35 m; 1.5 m; 3 m; 6 m)



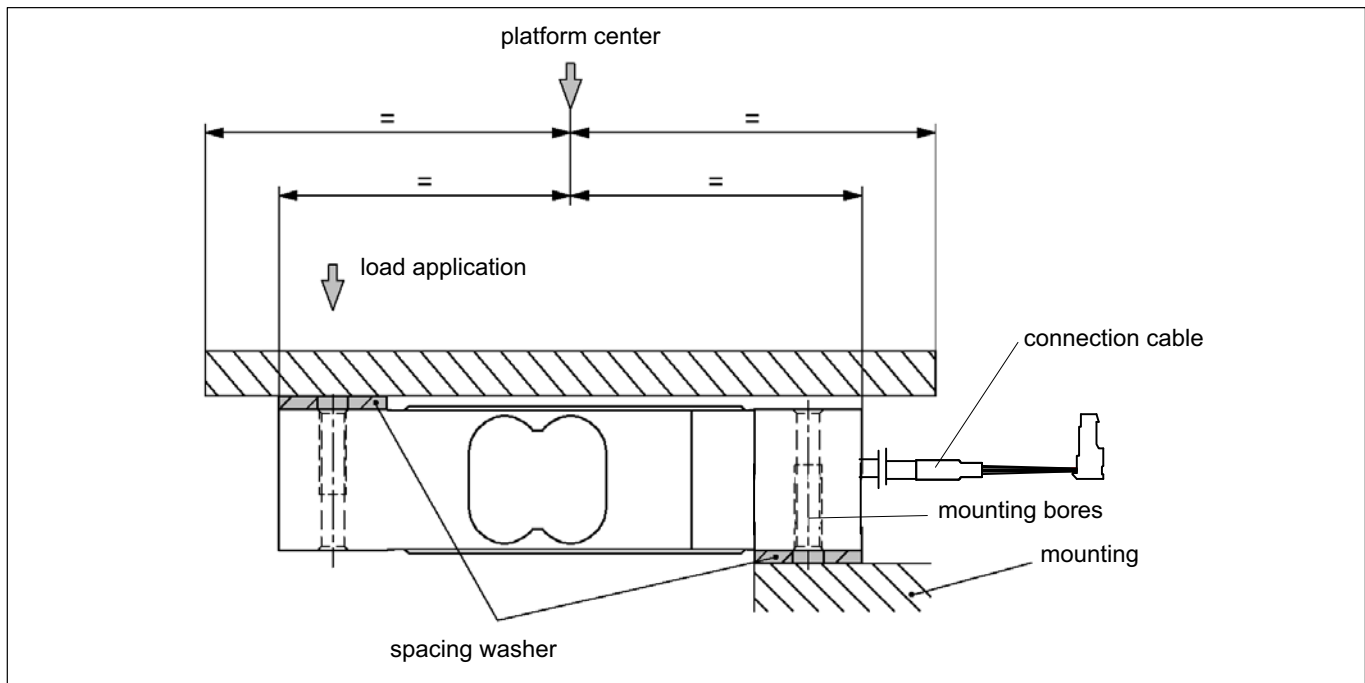
Mounting and Load application

The load cells are fixed at the mounting bores. For the recommended screws and tightening torques refer to the table below:

Max. capacity	Thread	Min. property class	Tightening torque ¹⁾
3...40 kg	M6	8.8	10 N·m

¹⁾ Recommended value for the stated property class. For screw dimensioning please refer to the appropriate information given by the screw manufacturers.

Load must not be applied to the side where the cable connection is located, as this would cause a force shunt.



Subject to modifications.
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