

precix 6

PW6C

Single point load cells

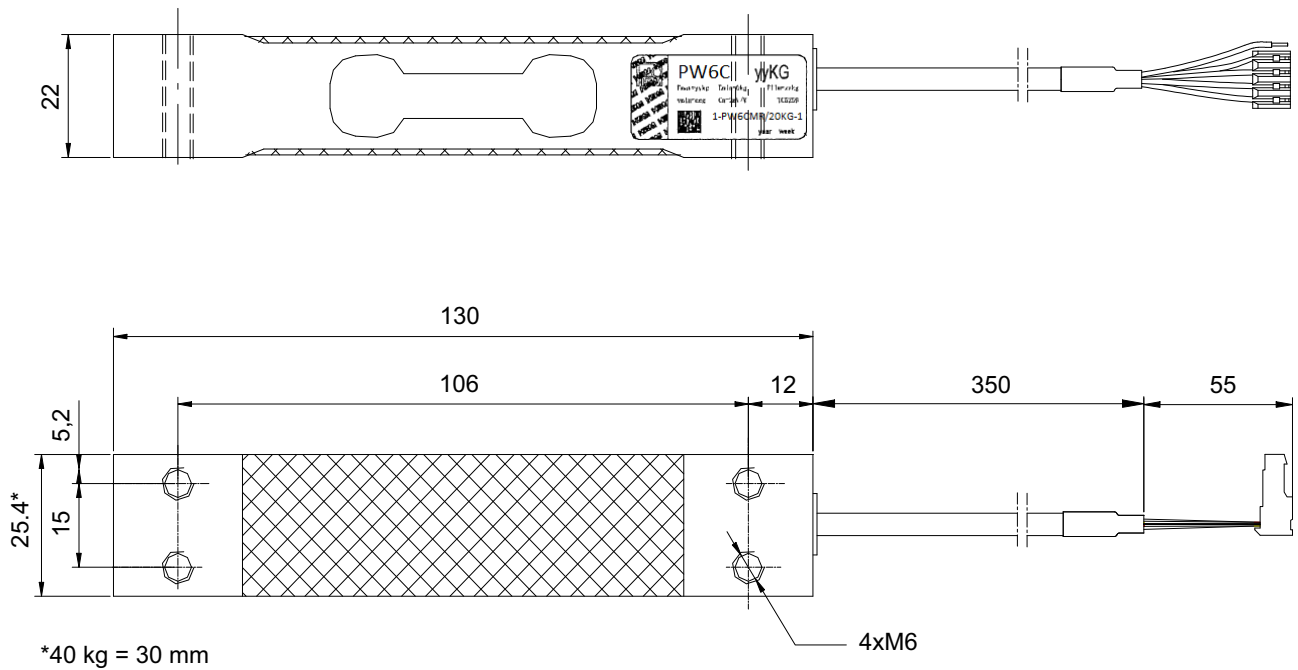
Special features

- 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	1.5	3	5	10	15	20	30	40
Minimum LC verification interval, (Accuracy class C3MR)	v_{min}	g	0.1	0.2	0.5	1		2		5
Minimum LC verification interval (Accuracy class C3MR)	v_{min}	% of C_n / 10 K	± 0.0093		± 0.0140		± 0.0093	± 0.0140	± 0.0093	± 0.0175
Ratio of minimum verification interval	γ		15,000		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}	$G\Omega$	> 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 at max. eccentricity	E_L	% of E_{max} mm	150 100							
Lateral load limit, static	E_{lq}	% of E_{max}	300							
Breaking load	E_d		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 Measuring body Application protection Cable sheath			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						

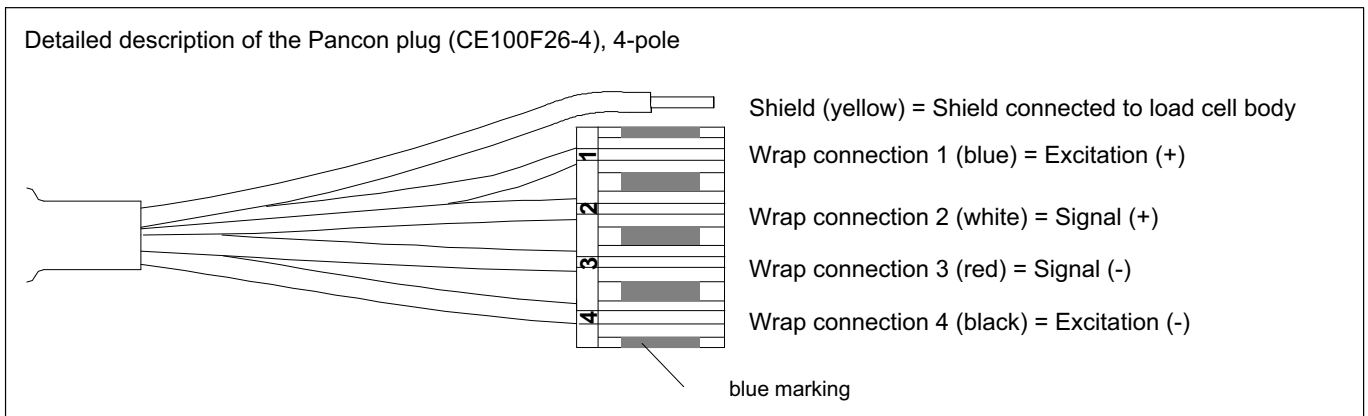
1) According to OIMLR60 with $P_{LC} = 0.7$

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.

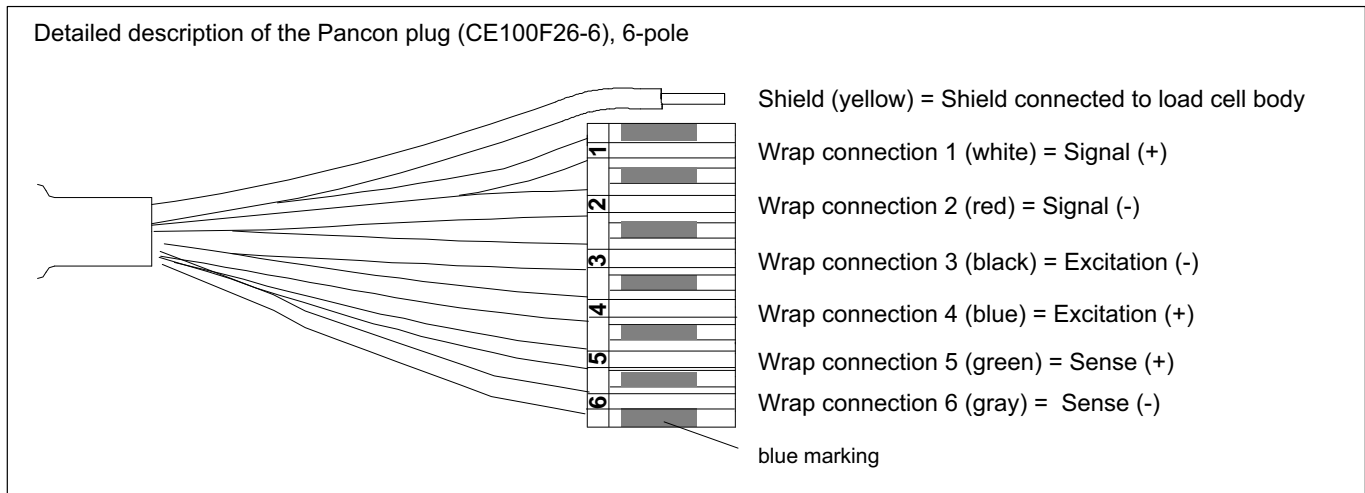
3) According to OIML R76.

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)



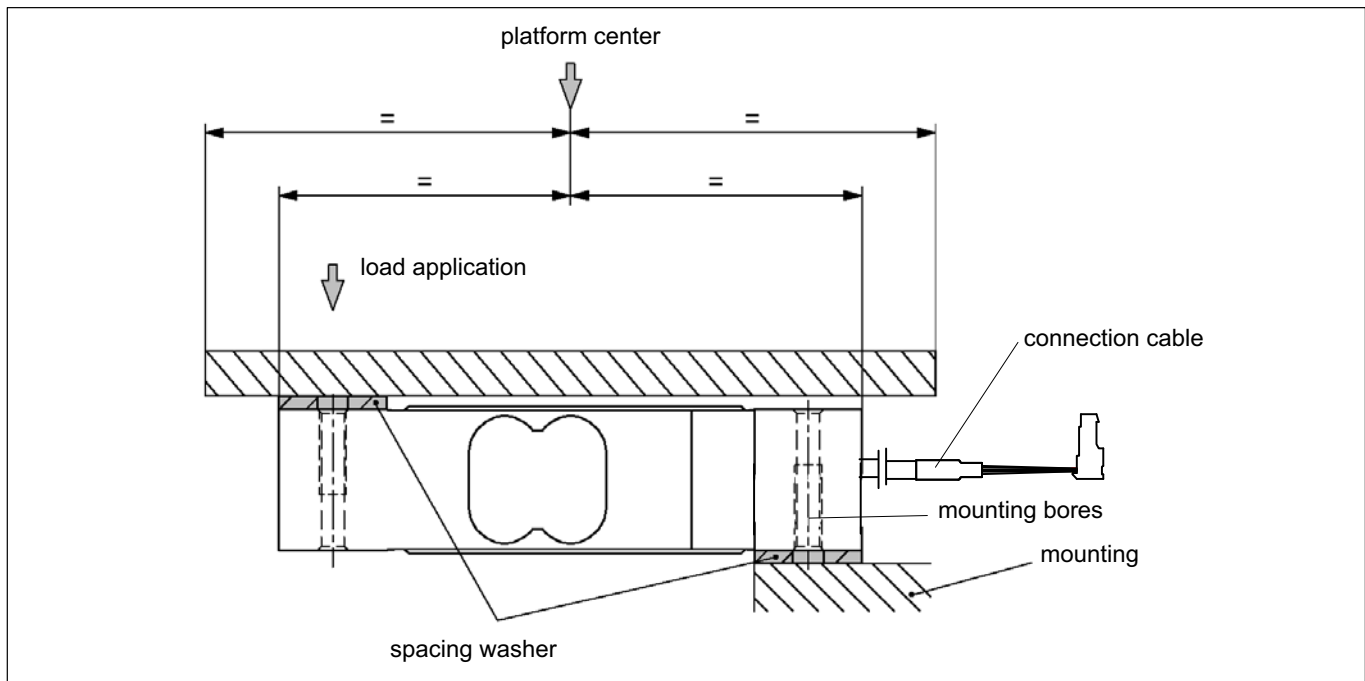
Mounting and Load application

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.



Ordering codes

PW6C... (Aluminum)

Type	PW6C
Accuracy	C3-MR (OIML) (Multi Range)
Note	Cable length 0.35 m (4 wire)

Capacity [kg]	Order no.
1.5	1-PW6CMR/1.5KG-1
3	1-PW6CMR/3KG-1
5	1-PW6CMR/5KG-1
10	1-PW6CMR/10KG-1
15	1-PW6CMR/15KG-1
20	1-PW6CMR/20KG-1
30	1-PW6CMR/30KG-1
40	1-PW6CMR/40KG-1

K-PW6C-... (Aluminum), optional versions

Order no.
K-PW6C

Code	Option 1: Mechanical version
N	-

Code	Option 2: Accuracy
MR	C3-MR (OIML) (Multi Range)
C6	C6 (OIML)

Code	Option 3: Capacity
1.5	1.5 kg
3	3 kg
5	5 kg
10	10 kg
15	15 kg
20	20 kg
30	30 kg
40	40 kg

Code	Option 4: NN
N	-

Code	Option 5: cable length
4_0.35	0,35 m (4 wire), (Standard)
6_0.35	0,35 m (6 wire)
6_1.5	1,5 m (6 wire)
6_3	3 m (6 wire)
6_6	6 m (6 wire)

Code	Option 6: Miscellaneous
N	without
A	2mV/V $\pm 0,1\%$ / 410 $\Omega \pm 0,2 \Omega$ (aligned output, suitable for connection in parallel)

K-PW6C	-	N	-	-	-	-	-	N	-	-	-	-	-	-	-
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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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