

precix 6

PW2C...

Single point load cells

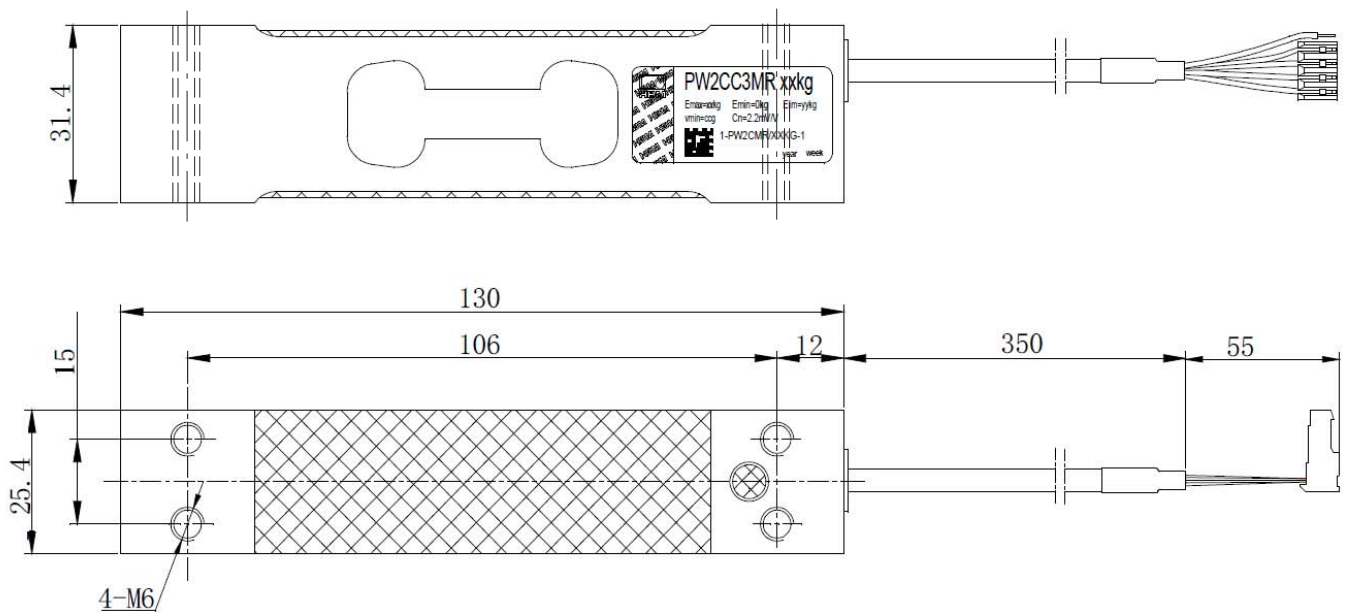
Special features

- Max. capacities: 7.2 kg ... 72 kg
- Aluminum
- High ratio of minimum verification interval Y
- Off-center load compensation
- Shielded connection cable
- Different cable length and other options deliverable



Data sheet

Dimensions (in mm; 1 mm = 0.03937 inches)



Specifications

Type			PW2C...				
Accuracy class ¹⁾			C3 Multi Range (MR)				
Maximum number of load cell intervals	n_{LC}		3000				
Maximum capacity ²⁾	E_{max}	kg	7.2	12	18	36	72
Minimum LC verification interval	v_{min}	g	0.5	1	2	5	10
Temperature effect on zero balance	TK_0	% of C_n / 10 K	±0.0097	±0.0116	±0.0155	±0.0194	±0.0194
Ratio of minimum verification interval	Y		14,400	12,000	9,000	7,200	
Maximum platform size		mm	380 x 380				
Sensitivity	C_n	mV/V	2.2 ±0.2				
Zero signal		mV/V	0 ±0.12				
Temperature effect on sensitivity ³⁾ 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 ³⁾	d_{hy}	% of C_n	±0.0166				
Linearity deviation ³⁾	d_{lin}		±0.0166				
Minimum dead load output return	MDLOR		±0.0166				
Off-center load error ⁴⁾			±0.0233				
Input resistance	R_{LC}	Ω	300...500				
Output resistance	R_0		300...500				
Reference excitation voltage	U_{ref}	V	5				
Nominal range of excitation voltage	B_U		1 ... 12				
Maximum excitation voltage			15				
Isolation resistance at 100 V _{DC}	R_{is}	GΩ	> 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}	150				
Lateral load limit, static	E_{lq}		300				
Service load at max. 100 mm eccentricity	E_u		150				
Breaking load at max. 20 mm eccentricity	E_d		300				
Relative permissible oscillation stress at max. 20 mm eccentricity	F_{srel}		70				
Nominal (rated) displacement at E_{max} , approx.	s_{nom}		mm	< 0.5			
Weight, approx.	m	kg	0.25				
Degree of protection ⁵⁾			IP67				
Material Measuring body Application protection Cable sheath			Aluminum Silicone rubber PVC				

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

2) Max. eccentric loading according to OIML R76

3) 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 according to OIML R60.

4) According to OIML R76.

5) According to EN 60 529 (IEC 529)

Specifications (continuation)

Type			PW2C...				
Accuracy class ¹⁾			C6, C6 Multi Range (MR)				
Maximum number of load cell intervals	n _{LC}		6000				
Maximum capacity ²⁾	E _{max}	kg	7.2	12	18	36	72
Minimum LC verification interval, (Accuracy class C6)	v _{min}	g	0.5	1	2	5	10
Temperature effect on zero balance (Accuracy class C6)	TK ₀	% of C _n /10 K	±0.0097	±0.0116	±0.0155	±0.0194	
Ratio of minimum verification interval	Y		14,400	12,000	9,000	7,200	
Minimum LC verification interval (Accuracy class C6MR)	v _{min}	g	-	-	1	2	-
Temperature effect on zero balance (Accuracy class C6MR)	TK ₀	% of C _n /10 K	-	-	±0.0077		-
Ratio of minimum verification interval	Y		-	-	18,000		
Max. platform size		mm	380 x 380				
Sensitivity	C _n	mV/V	2.2 ±0.2				
Zero signal			0 ±0.11				
Temperature effect on sensitivity ³⁾ 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 ³⁾	d _{hy}	% of C _n	±0.0083				
Non-linearity ³⁾	d _{lin}		±0.0083				
Minimum dead load output return	MDLOR		±0.0083				
Off-center load error ⁴⁾			±0.0116				

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

2) Max. eccentric loading according to OIML R76

3) 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.

4) According to OIML R76.

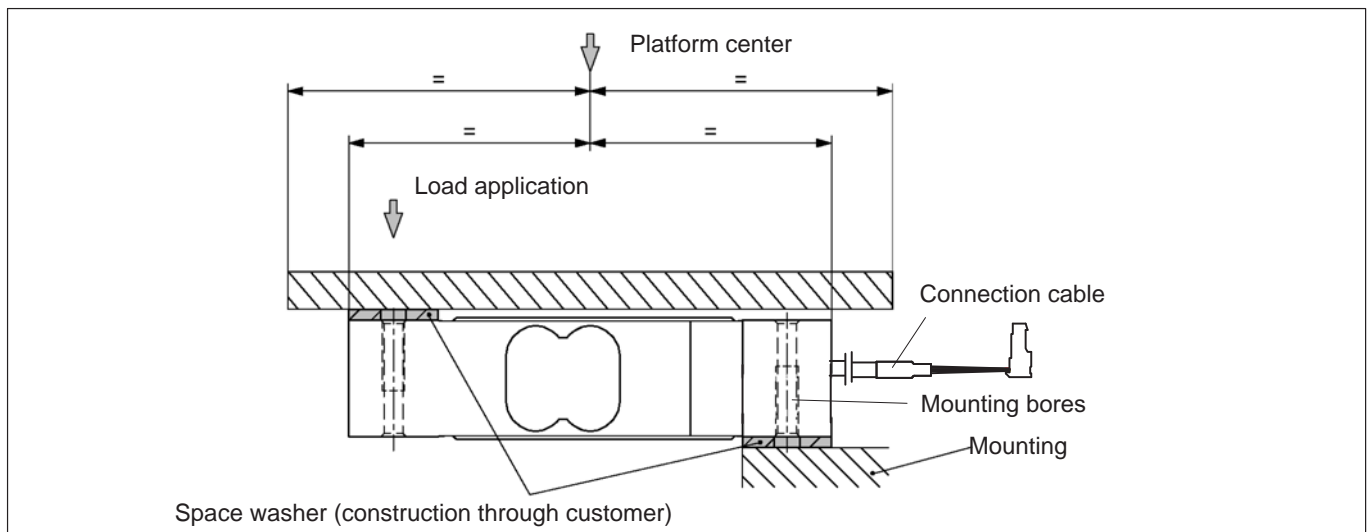
Mounting and Load application

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

Mac. capacity	Thread	Min. property class	Tightening torque ¹⁾
7.2...36 kg	M6	8.8	6 N·m
72 kg	M6	10.9	10 N·m

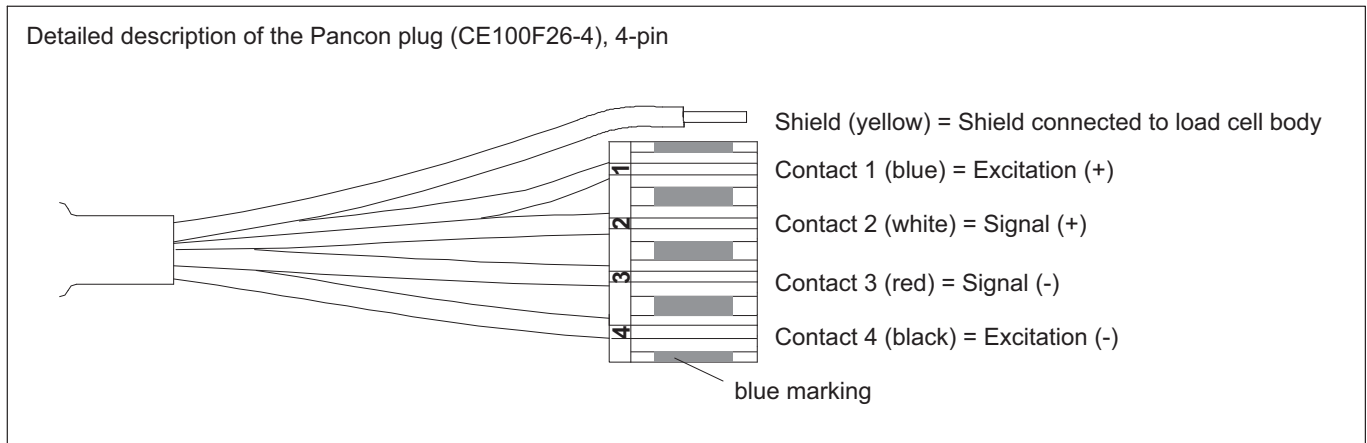
1) Recommended value for the stated property class. For screw dimensioning please refer to the appropriate information given by the screw manufacturers.

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

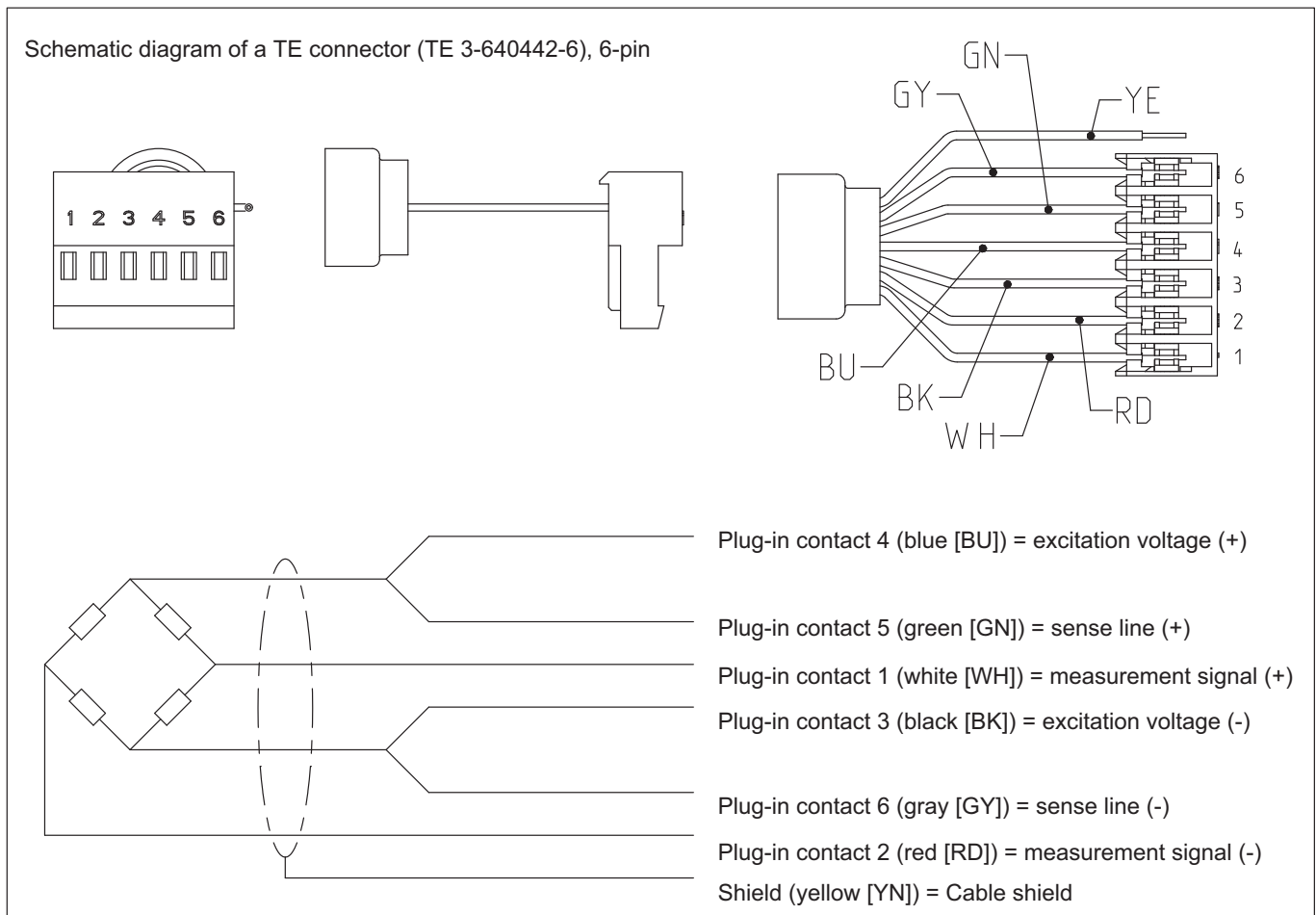


Wiring code

Connection with 4 wire cable, 4 x 0.14 mm²/AWG 26 (cable length: 0.35 m)



Connection with 6 wire cable, 6 x 0.14 mm²/AWG 26 (cable length, selectable: 0.35 m; 1.5 m; 3 m; 6 m)



Ordering codes

PW2C... / K-PW2C-...

Optimized for static applications

PW2C... (Aluminum)

Type	PW2C	
Accuracy	C3-MR (OIML) (Multi Range)	C6 / C6MR (OIML) (Multi Range)
Note	Cable length 0.35 m (4 wire)	Cable length 3 m (6 wire)

Capacity	Order no.	Order no.
7.2 kg	1-PW2CMR/7.2KG-1	-
12 kg	1-PW2CMR/12KG-1	1-PW2CC6/12KG-1
18 kg	1-PW2CMR/18KG-1	1-PW2CC6MR/18KG-1
36 kg	1-PW2CMR/36KG-1	1-PW2CC6MR/36KG-1
72 kg	1-PW2CMR/72KG-1	-

K-PW2C... (Aluminum), optional versions

Order no.
K-PW2C

Code	Option 1: Mechanical version
N	-

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

Code	Option 3: Capacity
7.2	7.2 kg
12	12 kg
18	18 kg
36	36 kg
72	72 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 ±0.1% / 410 Ohm ±0.2 Ohm (aligned output, suitable for connection in parallel)

K-PW2C	-	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.

Hottinger Brüel & Kjaer GmbH
Im Tiefen See 45 · 64293 Darmstadt · Germany
Tel. +49 6151 803-0 · Fax +49 6151 803-9100
Email: info@hbm.com · www.hbm.com

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