

precix 6

# PW2C...

Single point load cells

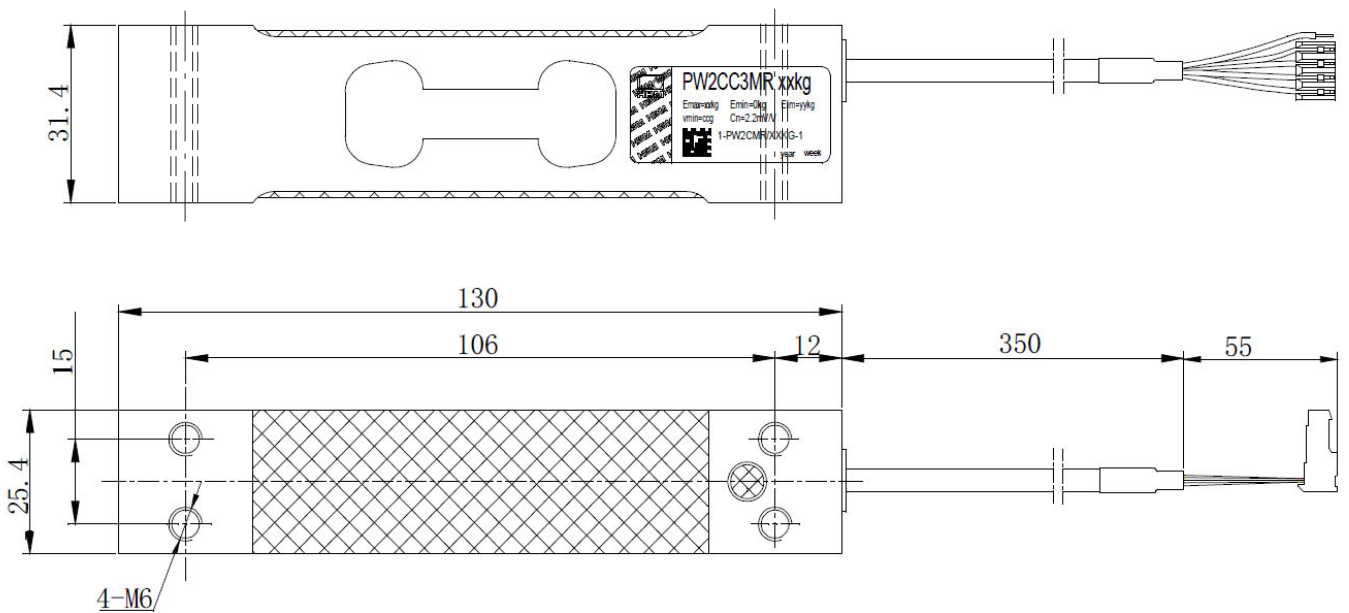
## Special features

- 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 acc. to OIML R60 <sup>1)</sup>			C3 Multi Range (MR)				
Maximum number of load cell intervals	$n_{LC}$		3,000				
Maximum capacity <sup>2)</sup>	$E_{max}$	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	
Accuracy class acc. to NTEP			III S				
Maximum number of load cell intervals	$n_{LC}$		3,000				
Maximum capacity	$E_{max}$	kg	-	-	18	36	-
Minimum LC verification interval	$v_{min}$	g	-	-	2	5	-
Ratio of minimum verification interval	Y		-	-	9,000	7,200	-
General specifications							
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 <sup>3)</sup> 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 <sup>3)</sup>	$d_{hy}$	% of $C_n$	±0.0166				
Linearity deviation <sup>3)</sup>	$d_{lin}$		±0.0166				
Minimum dead load output return	MDLOR		±0.0166				
Off-center load error <sup>4)</sup>			±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		V	15				
Isolation resistance at 100 V <sub>DC</sub>	$R_{is}$	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 <sup>5)</sup>			IP67				
Material Measuring body Application protection Cable sheath			Aluminum Silicone rubber PVC				

1) 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 acc. to OIML R60 <sup>1)</sup>			C6, C6 Multi Range (MR)				
Maximum number of load cell intervals	$n_{LC}$		6,000				
Maximum capacity <sup>2)</sup>	$E_{max}$	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 (Accuracy class C6)	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 (Accuracy class C6MR)	Y		-	-	18,000		
Accuracy class acc. to NTEP <sup>3)</sup>			III S				
Maximum number of load cell intervals	$n_{LC}$		5,000				
Maximum capacity	$E_{max}$	kg	-	-	18	36	-
Minimum LC verification interval	$v_{min}$	g	-	-	1.08	2.16	-
Ratio of minimum verification interval	Y		-	-	16,667	16,667	-
General specifications							
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 <sup>4)</sup> 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 <sup>4)</sup>	$d_{hy}$	% of $C_N$	±0.0083				
Non-linearity <sup>4)</sup>	$d_{lin}$		±0.0083				
Minimum dead load output return	MDLOR		±0.0083				
Off-center load error <sup>5)</sup>			±0.0116				

1) With  $P_{LC} = 0.7$

2) Max. eccentric loading according to OIML R76

3) NTEP III S 5000 only in conjunction with accuracy class OIML C6MR

4) 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.

5) According to OIML R76.

For further specifications, see Table PW2C..., Accuracy class C3 Multi Range (MR) (page 2)

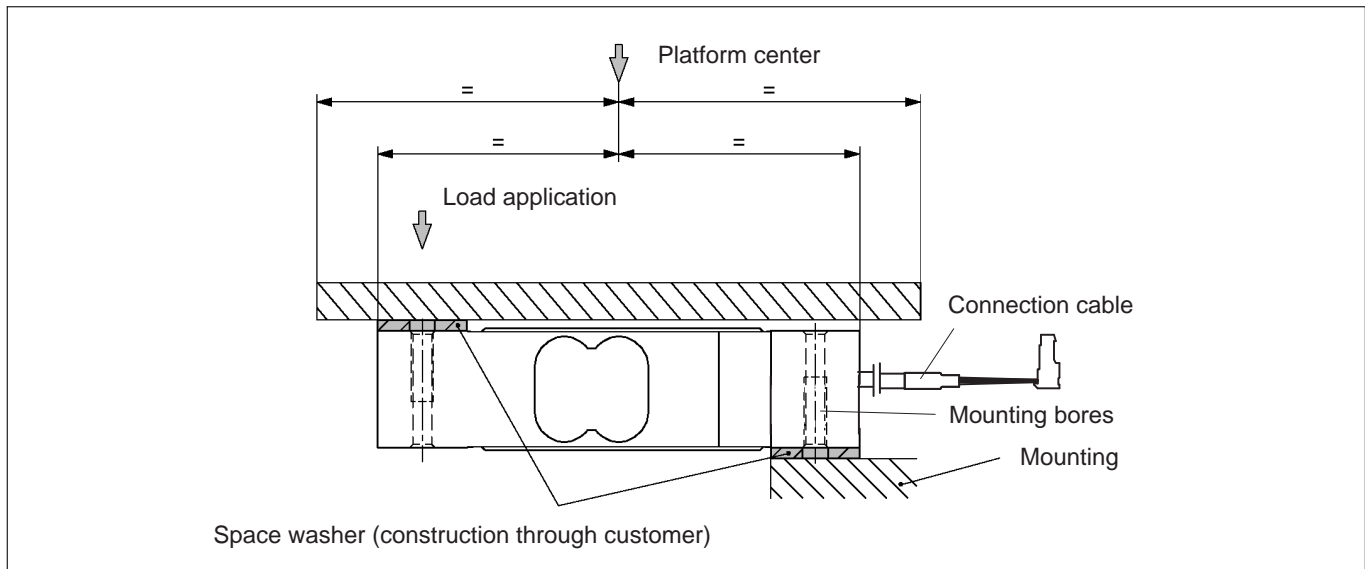
## Mounting and Load application

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 <sup>1)</sup>
7.2...36 kg	M6	8.8	6 N·m
72 kg	M6	10.9	10 N·m

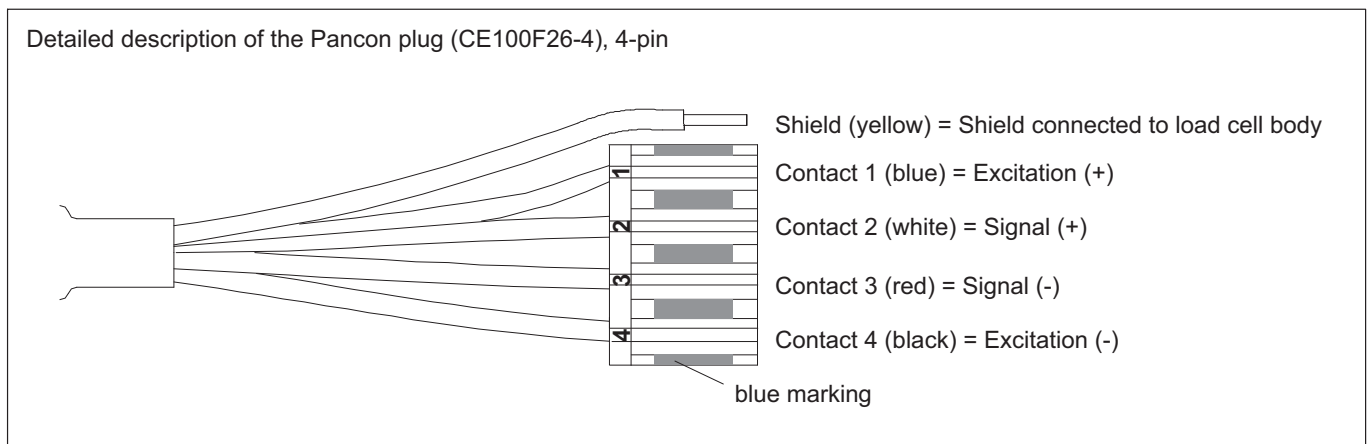
<sup>1)</sup> Recommended value for the stated property class. For screw dimensioning please refer to the appropriate information given by the screw manufacturers.

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

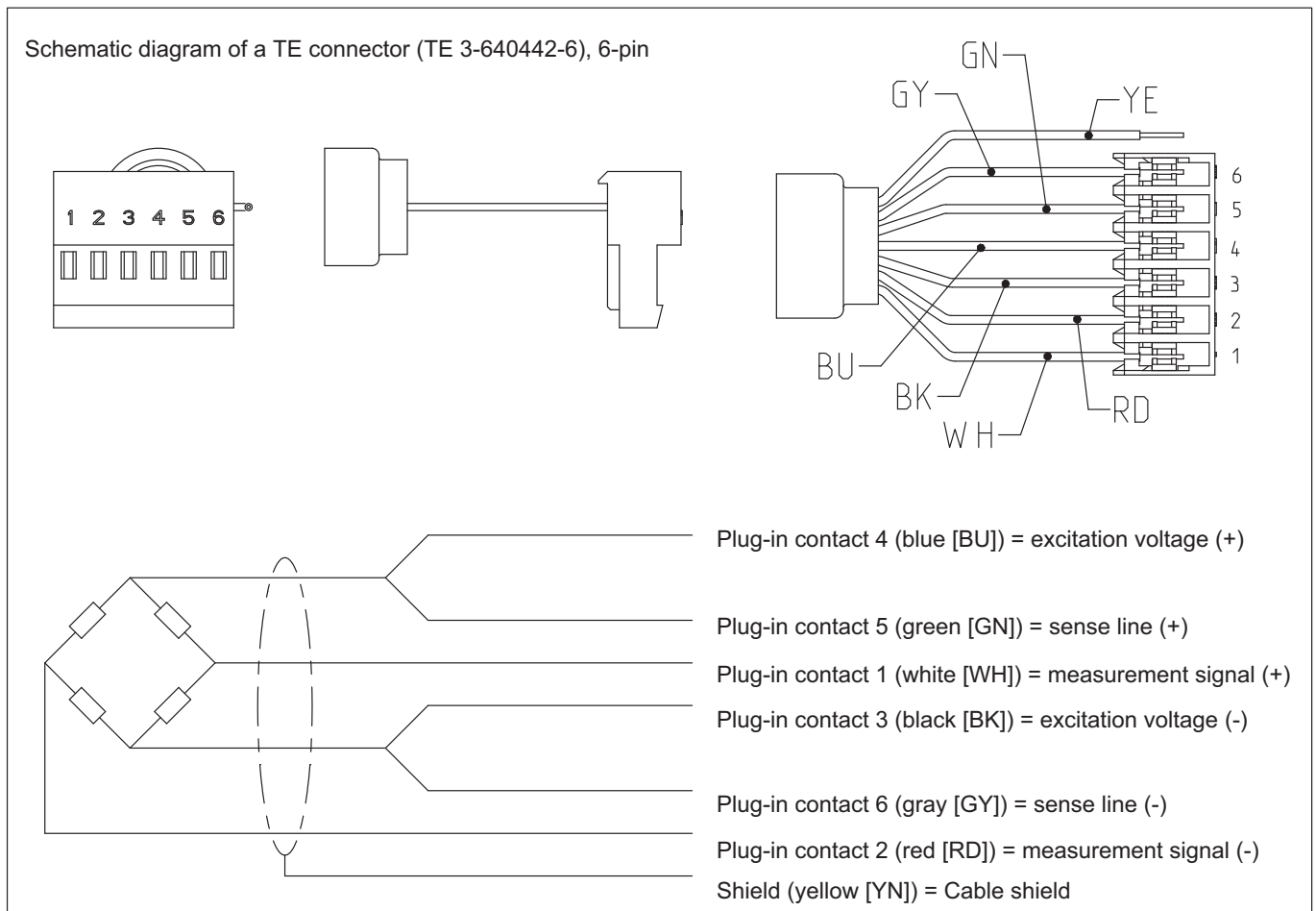


## Wiring code

Connection with 4 wire cable, 4 x 0.14 mm<sup>2</sup>/AWG 26 (cable length: 0.35 m)



Connection with 6 wire cable, 6 x 0.14 mm<sup>2</sup>/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	OIML R60 C3MR	OIML R60 C3MR + NTEP III S 3000	OIML R60 C6	OIML R60 C6MR + NTEP III S 5000
Note	Cable length 0.35 m (4 wire)		Cable length 3 m (6 wire)	
Capacity	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.	
<b>K-PW2C</b>	
Code	Option 1: Mechanical version
<b>N</b>	-
Code	Option 2: Accuracy
<b>MR</b>	C3-MR (OIML) (Multi Range)
<b>C6</b>	C6 (OIML)
Code	Option 3: Capacity
<b>7.2</b>	7.2 kg
<b>12</b>	12 kg
<b>18</b>	18 kg
<b>36</b>	36 kg
<b>72</b>	72 kg
Code	Option 4: NN
<b>N</b>	-
Code	Option 5: Cable length
<b>4_0.35</b>	0.35 m (4 wire) (Standard)
<b>6_0.35</b>	0.35 m (6 wire)
<b>6_1.5</b>	1.5 m (6 wire)
<b>6_3</b>	3 m (6 wire)
<b>6_6</b>	6 m (6 wire)
Code	Option 6: Miscellaneous
<b>N</b>	Without
<b>A</b>	2mV/V ±0.1% / 410 Ohm ±0.2 Ohm (aligned output, suitable for connection in parallel)
<b>K-PW2C</b>	- <b>N</b> - - - - - <b>N</b> - - - - -

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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