precix 6

PW6C

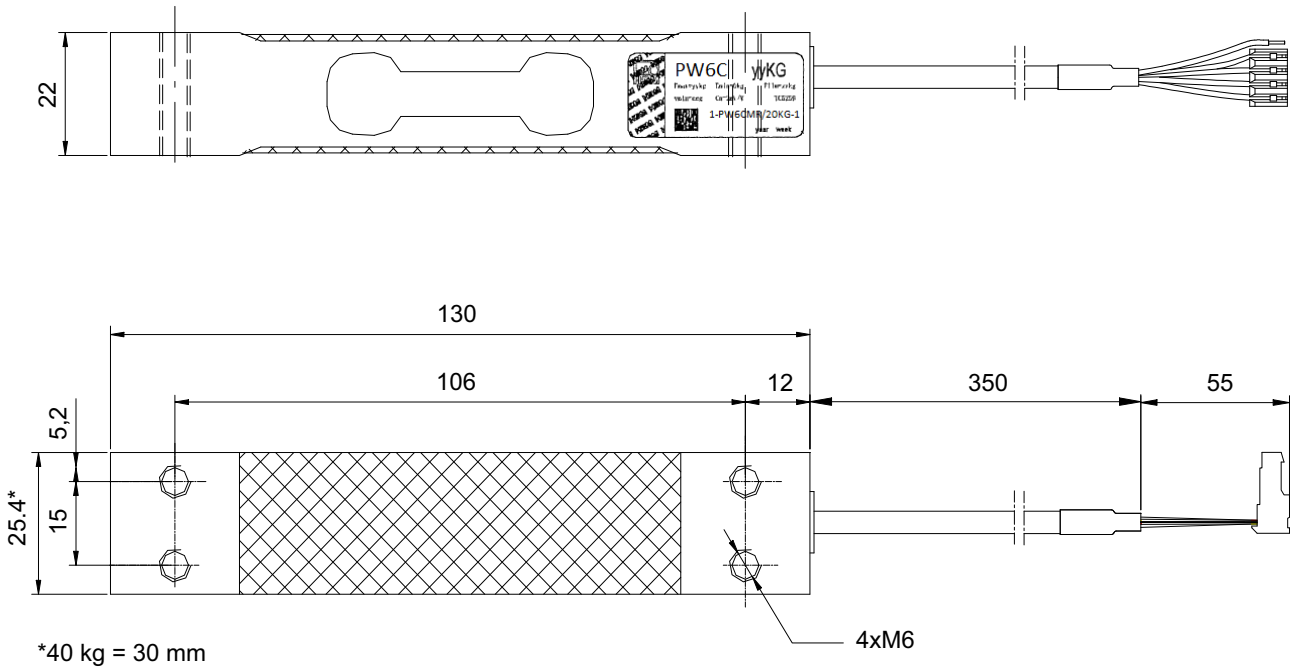
Single point load cells

Special features

- **Max. capacities: 1.5 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)



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Specifications

Type			**PW6C...**							
Accuracy class [1]			C3 Multi Range (MR)							
Number of load cell verification intervals	n_{LC}		3000							
Maximum capacity	E_{max}	kg	1.5	3	5	10	15	20	30	40
Minimum load cell verification interval	v_{min}	g	0.1	0.2	0.5	1		2		5
Temperature coefficient of zero signal	TK_0	% of C_n/10K	±0.0093		±0.0140		±0.0093	±0.0140	±0.0093	±0.0175
Ratio of minimum verification interval	Y		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 ±0.2							
Zero signal			0 ±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	MDLOR		±0.0166							
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}	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} 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)

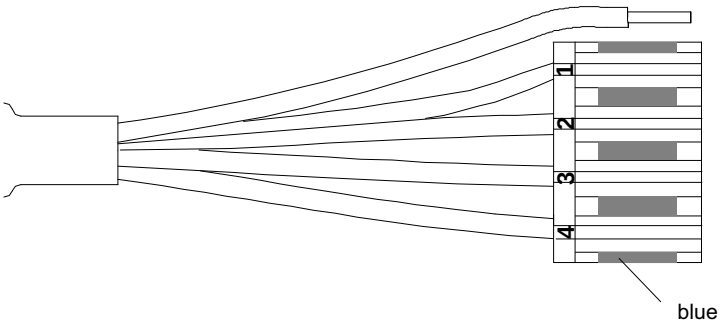
Type			PW6C...						
Accuracy class[1]			C6						
Maximum number of load cell intervals	n_{LC}		6000						
Maximum capacity	E_{max}	kg	3	5	10	15	20	30	40
Minimum LC verification interval	v_{min}	g	0.2	0.5	1	1	2	2	5
Temperature effect on zero balance	TK_0	% of C_n / 10 K	±0.0093	±0.0140	±0.0140	±0.0093	±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)

Detailed description of the Pancon plug (CE100F26-4), 4-pole



Shield (yellow) = Shield connected to load cell body

Plug-in contact1 (blue) = Excitation (+)

Plug-in contact 2 (white) = Signal (+)

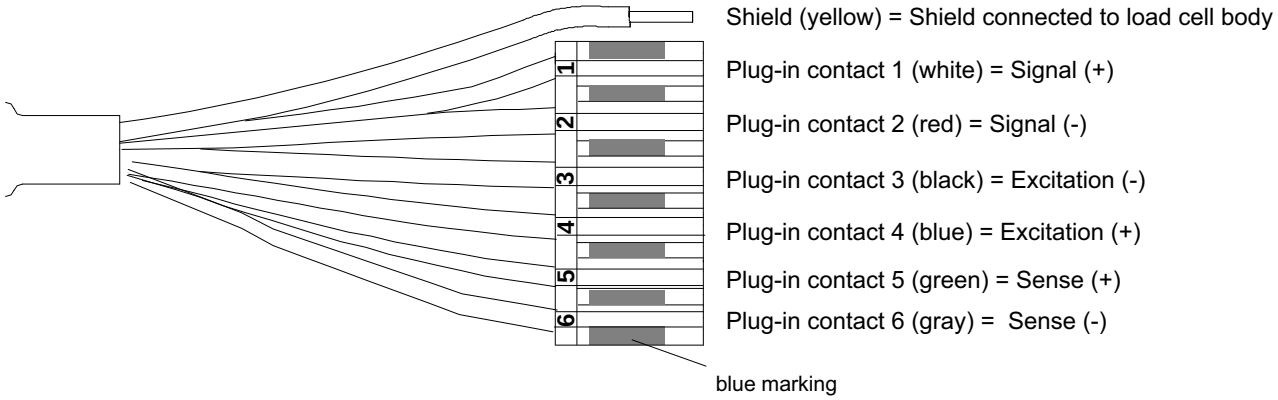
Plug-in contact 3 (red) = Signal (-)

Plug-in contact 4 (black) = Excitation (-)

blue marking

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

Detailed description of the Pancon plug (CE100F26-6), 6-pole



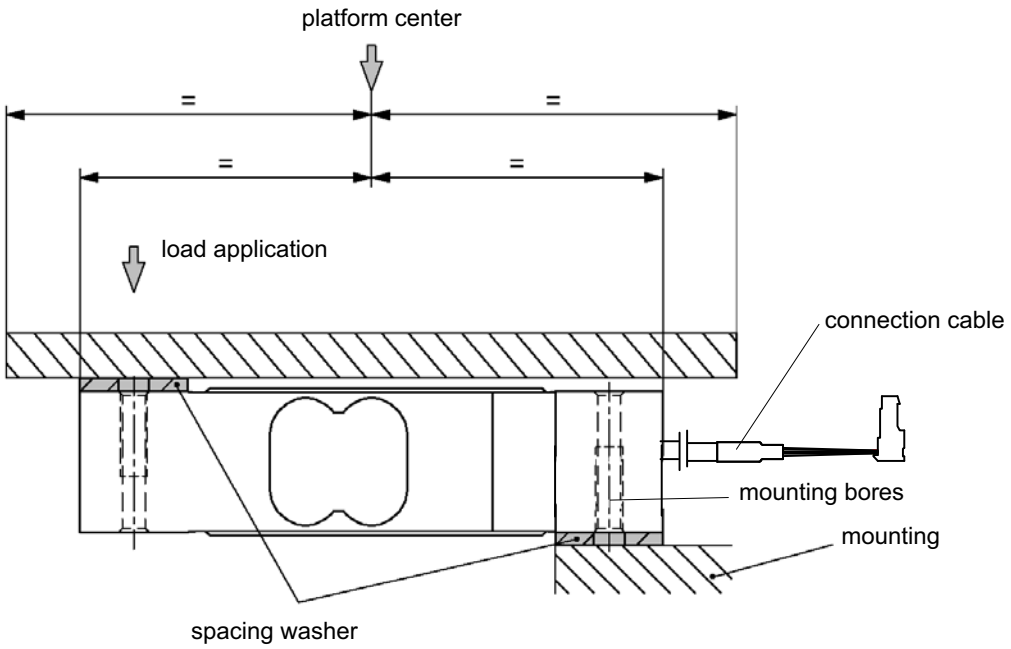
Mounting and Load application

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)]
1.5...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	[only with option 2 = MR]
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 ±0,1% / 410 Ω ±0,2 Ω (aligned output, suitable for connection in parallel)

K-PW6C	-	N	-			-				-	N	-							-	

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