



PW6C

Single point load cells

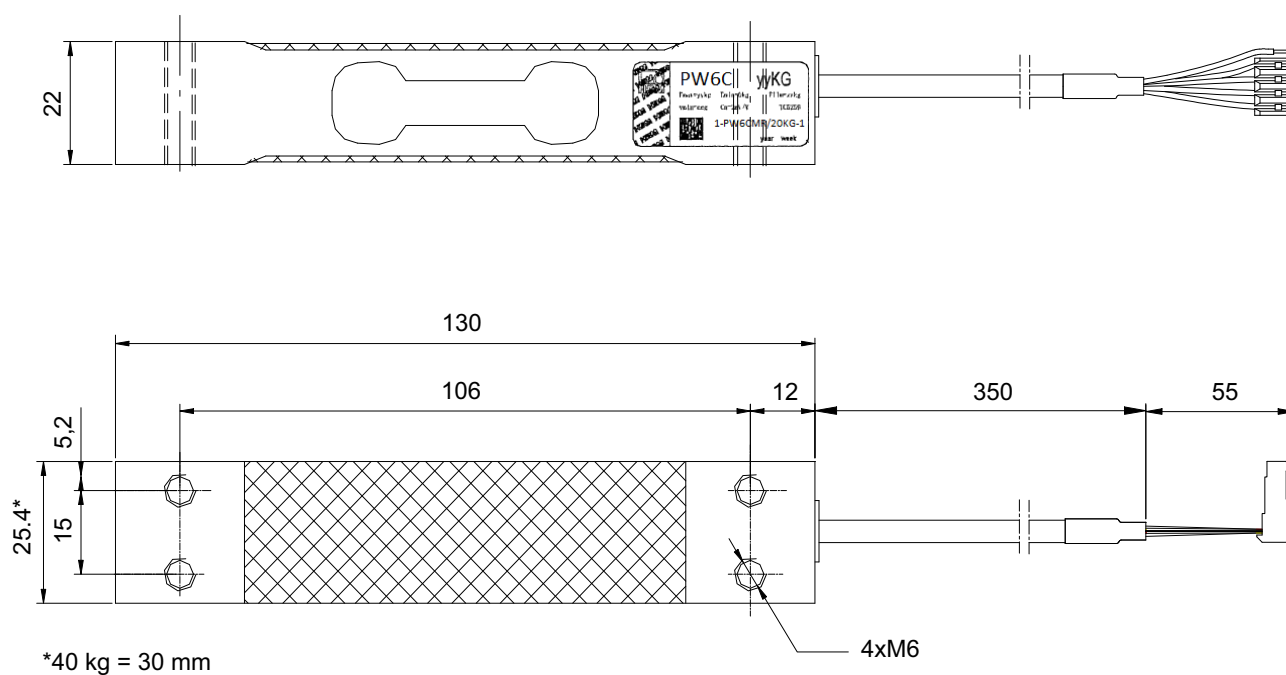
Special features

- 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	Y		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 ± 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	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}	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	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		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			Aluminum						
Application protection			Silicone rubber						
Cable sheath			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						

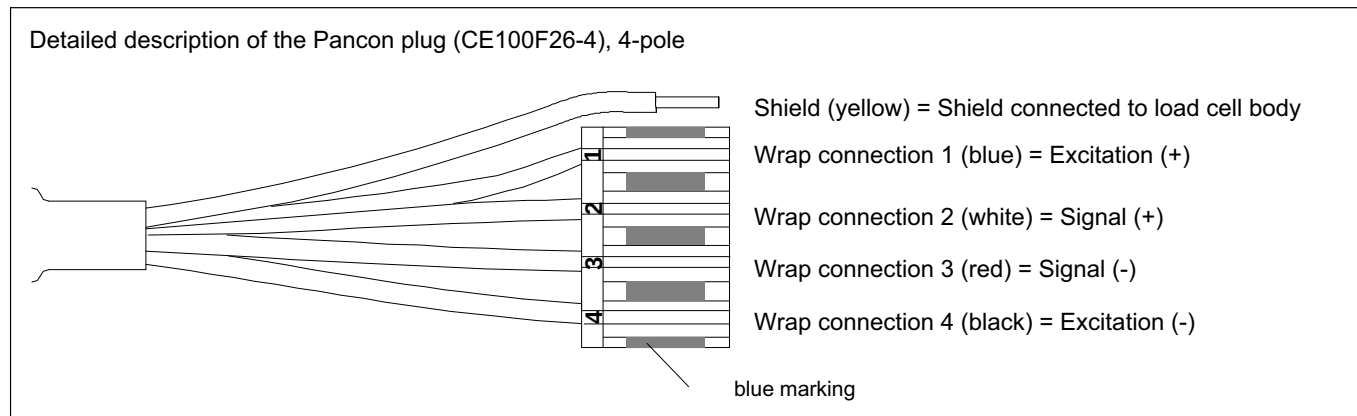
1) According to OIMLR60 with P_{LC} = 0.7

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.

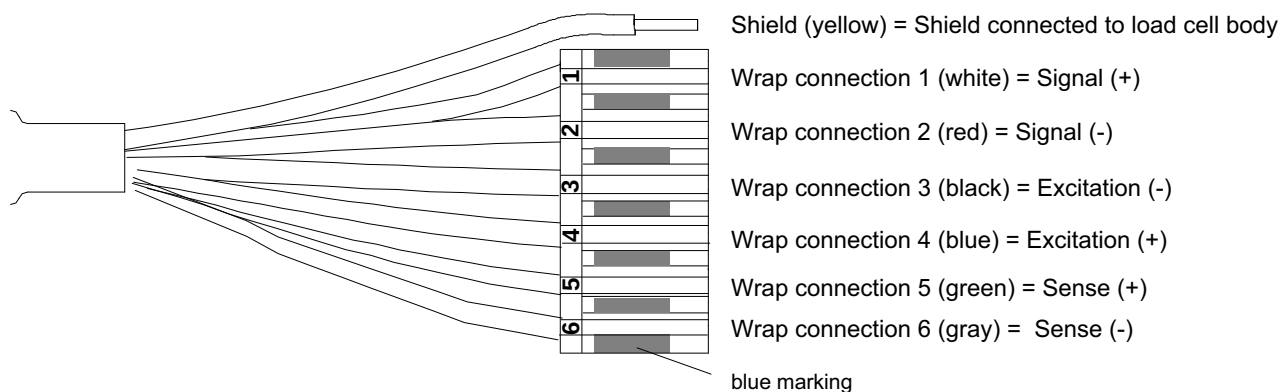
Wiring code

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)

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



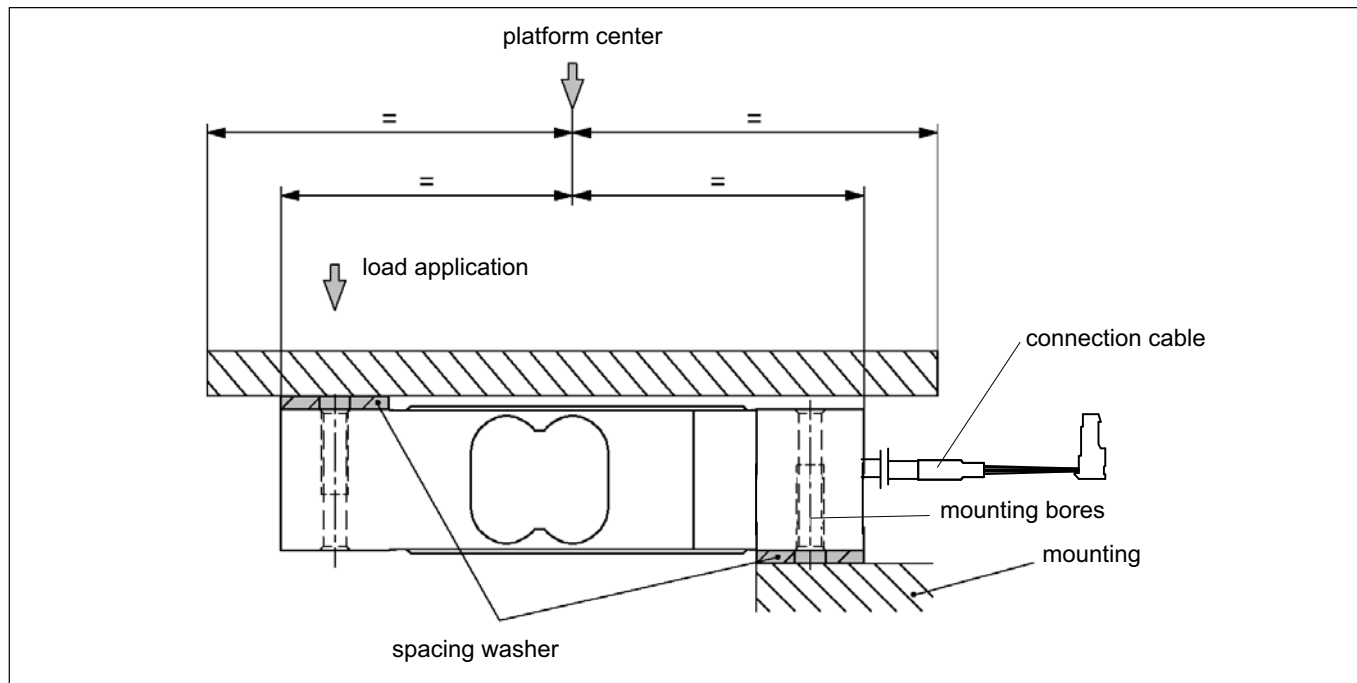
Mounting and Load application

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⁾
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.
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
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 - - - - - - - - - -

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 Baldwin Messtechnik 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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