DATA SHEET

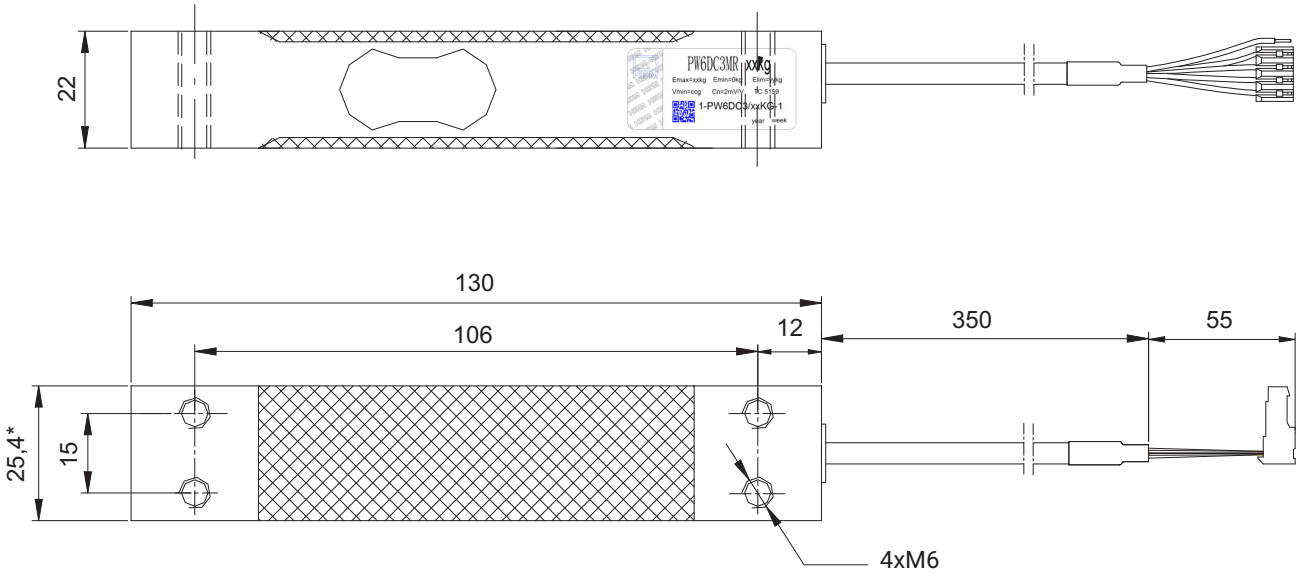
PW6D
Single point load cells

with IO-Link option

SPECIAL FEATURES

- Max. capacities: 3 kg ... 40 kg
- Aluminum
- High ratio of minimum verification interval Y
- Optimized for dynamic weighing applications
- Different cable length and other options deliverable
- Available as LCMC measurement chain with smart option (IO-Link), with digital option (CANopen or RS-485), with analog option (4 … 20 mA or 0 … 10 V)

DIMENSIONS



* PW6DC3MR/40 kg: 30

Dimensions in mm (1 mm = 0.03937 inches)

SPECIFICATIONS

Type			PW6D...						
Accuracy class[1]			**C3 Multi Range (MR)**						
Maximum number of load cell intervals	n_{LC}		3000						
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
Ratio of minimum verification interval	Y		15,000	10,000	10,000	15,000	10,000	15,000	8,000
Accuracy class according to NTEP[2]			**III S**						
Max. number of load cell intervals	n_{LC}		3000						
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
Ratio of minimum verification interval	Y		15,000	10,000	10,000	15,000	10,000	15,000	8,000
General specifications									
Max. platform size		mm	300 x 300						
Sensitivity	C_n	mV/V	2.0 ±0.2						
Zero signal			0 ±0.1						
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						
Non-linearity[3]	d_{lin}		±0.0166						
Ratio of minimum dead load output return	DR		±0.0166						
Off-center load error[4]			±0.0233						
Input resistance	R_{LC}	Ω	380 ±38						
Output resistance	R_0		380 ±38						
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. 100 mm eccentricity	E_L	% of E_{max}	150						
Lateral load limit, static	E_{lq}		300						
Breaking load	E_d		300						
Nominal (rated) displacement at E_{max}, approx.	s_{nom}	mm	< 0.18	< 0.18	< 0.19	< 0.21	< 0.23	< 0.28	< 0.29
Natural frequency, approx.		Hz	270	390	500	600	675	760	790
Weight, approx.	m	kg	0.25						

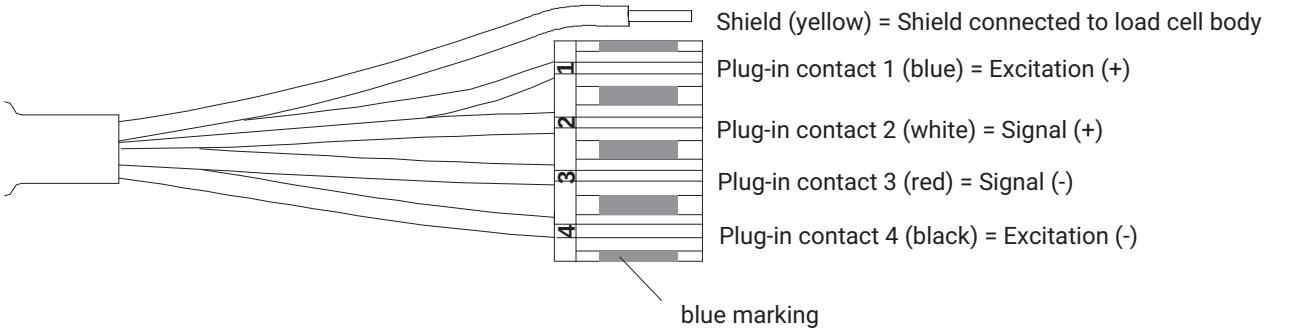
Type			PW6D...
Degree of protection[5]			IP67
Material Measuring body Application protection Cable sheath			 Aluminum Silicone caoutchouc PVC

1) According to OIMLR60 with P_{LC} = 0.7
2) Only applies to 4-wire cable
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)

WIRING CODE

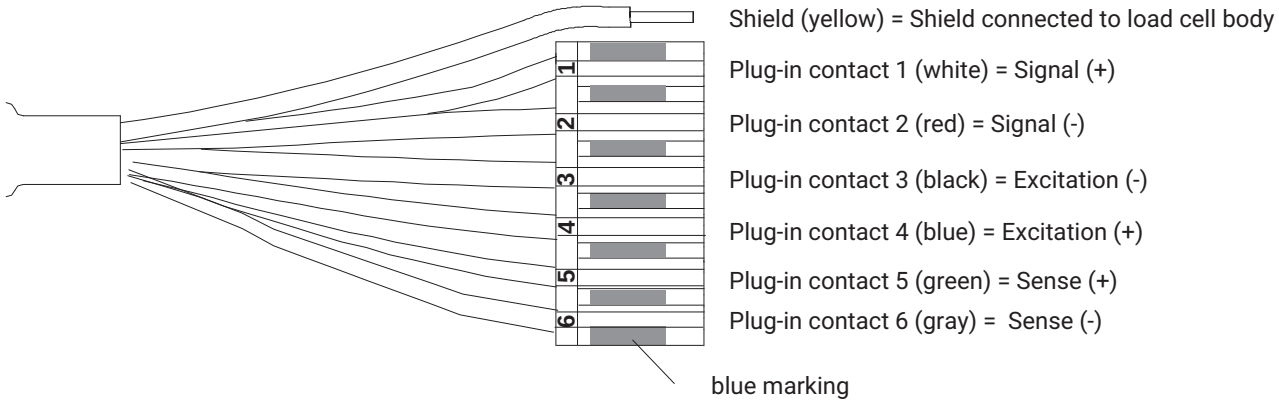
Connection with 4 wire cable (cable length: 0.35 m)

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



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

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



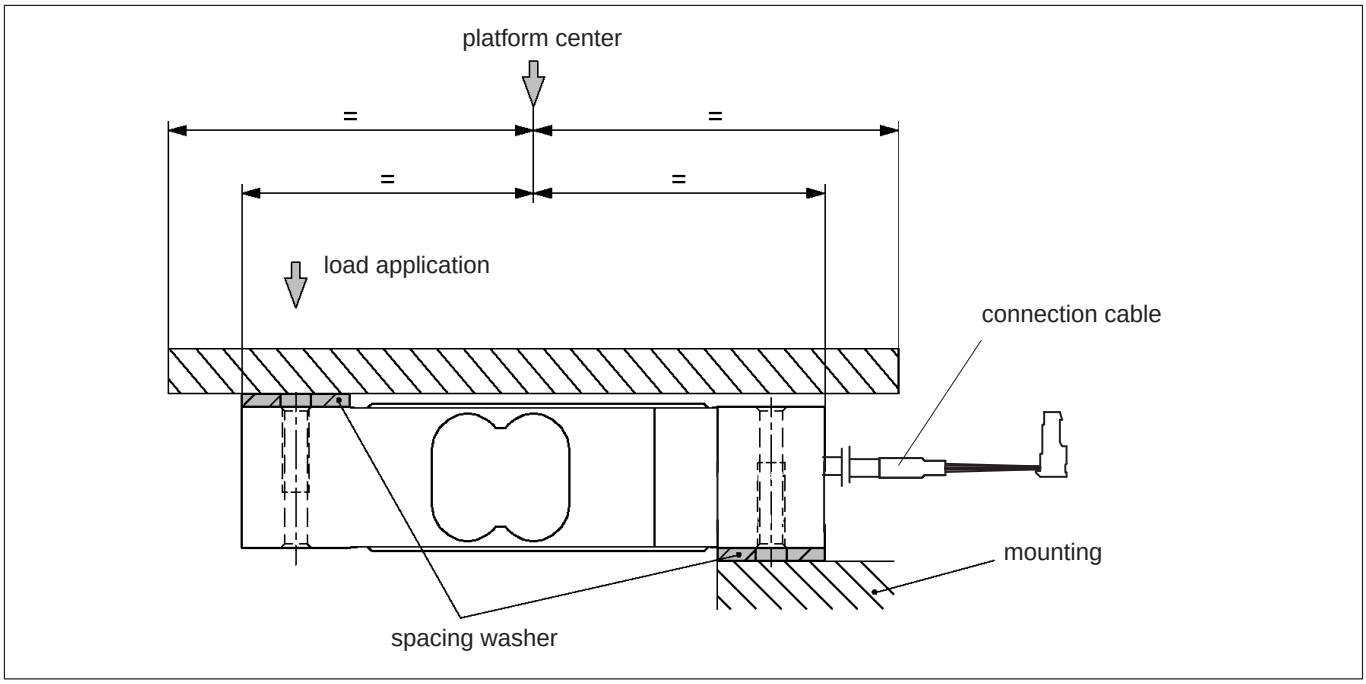
MOUNTING AND LOAD APPLICATION

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 DESIGNATIONS (OVERVIEW)

PW6D... (Aluminum)

Type	PW6D
Accuracy	OIML R60 C3MR / NTEP III S 3000
Note	Cable length 0.35 m (4 wire)

Capacity [kg]	Order no.
3	1-PW6DC3/3KG-1
5	1-PW6DC3/5KG-1
10	1-PW6DC3/10KG-1
15	1-PW6DC3/15KG-1
20	1-PW6DC3/20KG-1
30	1-PW6DC3/30KG-1
40	1-PW6DC3/40KG-1

K-PW6D-... (Aluminum), optional versions

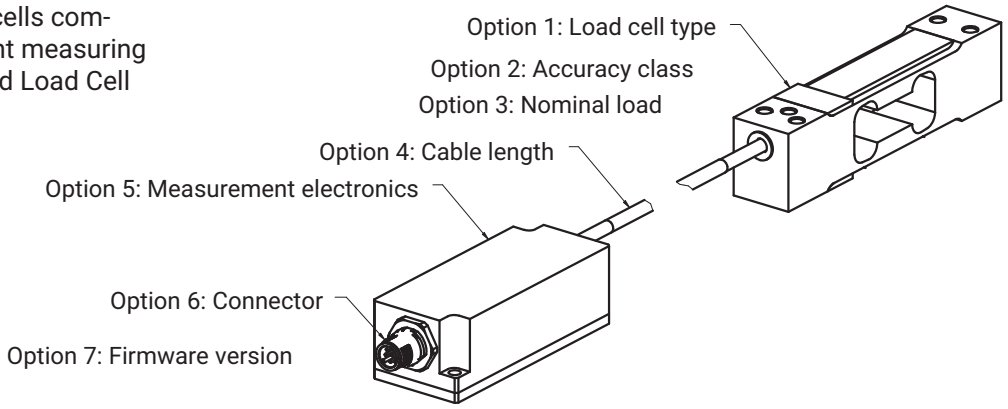
K-PW6D		
1	**Code**	**Option 1: Mechanical design**
	N	-
2	**Code**	**Option 2: Accuracy class**
	MR	C3-MR (OIML) (Multi Range)
3	**Code**	**Option 3: Capacity**
	3	3 kg
	5	5 kg
	10	10 kg
	15	15 kg
	20	20 kg
	30	30 kg
	40	40 kg
4	**Code**	**Option 4: NN**
	N	-
5	**Code**	**Option 5: Cable length**
	4_0.35	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)
6	**Code**	**Option 6: Other**
	N	Without
	A	2 mV/V ±0.1% / 410 Ω ± 0.3 Ω (adjusted output, suitable for parallel connection)

K-PW6D - [N] - [M][R] - [ ][ ] - [N] - [ ][ ][ ][ ][ ][ ] - [ ]

1 **2** **3** **4** **5** **6**

LCMC - LOAD CELL MEASURING CHAIN

A wide range of famous load cells combined with a choice of excellent measuring electronics makes your tailored Load Cell Measuring Chain.



K-LCMC-PW6D ordering options

K-LCMC		
1	**Code**	**Option 1: Load cell type**
	PW6D	PW6D
2	**Code**	**Option 2: Accuracy class**
	MR	C3 MR (OIML)
3	**Code**	**Option 3: Nominal load**
	3K00	3 kg
	5K00	5 kg
	10K0	10 kg
	15K0	15 kg
	20K0	20 kg
	30K0	30 kg
	40K0	40 kg
4	**Code**	**Option 4: Cable length**
	0M3	0.3 m
	0M5	0.5 m
	1M0	1.0 m
	3M0	3.0 m
5	**Code**	**Option 5: Measurement electronics**
	105C	CAN (200 S/s)
	105R	RS485 (200 S/s) 2-wire
	112C	CAN (1,200 S/s)
	112R	RS485 (1,200 S/s) 4-wire
	RM42	Analog 4 … 20 mA
	RM43	Analog 0 .. 10 V
	RMIO	IO-link
6	**Code**	**Option 6: Connector**
	M12A8	M12 A-coded, male, 8-pin [only with option 5 = 105C, 105R, 112C, 112R, RM42, RM43]
	M12A4	M12 A-coded, male, 4-pin [only with option 5 = RMIO]
7	**Code**	**Option 7: FW version**
	N	NA [only with option 5 = 105C, 105R, 112C, 112R, RM42, RM43]
	01	WTIO 1.07 [only with option 5 = RMIO]

K-LCMC - P W 6 D - M R - [ ] [ ] [ ] [ ] - [ ] [ ] [ ] - [ ] [ ] [ ] [ ] - [ ] [ ] [ ] [ ] [ ] - [ ] [ ]

1 **2** **3** **4** **5** **6** **7**

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