

# PW12C...

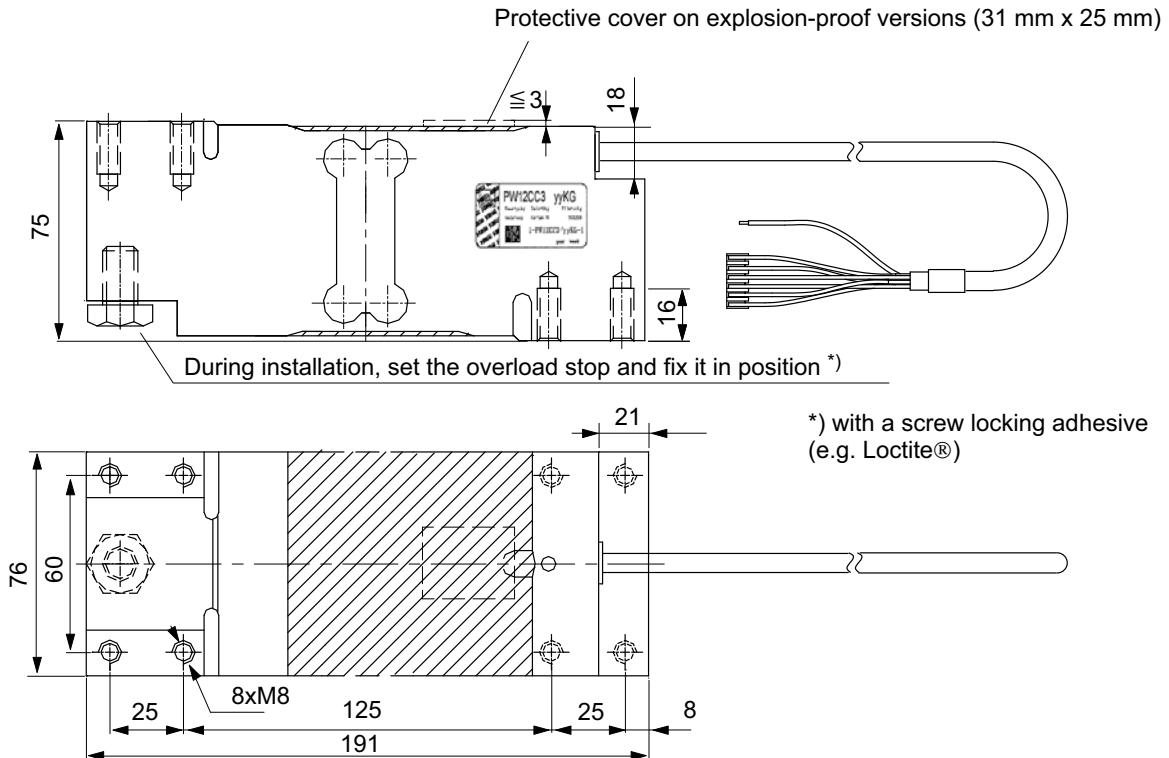
## Single point load cells

### Special features

- Maximum capacities: 50 kg ... 750 kg
- Aluminum
- High ratio of minimum verification interval Y
- Off-center load compensation
- Complies with EMC directives
- Six-wire circuit
- Explosion protection and other options also available



Dimensions in mm (1 mm = 0.03937 inches)



Type			PW12C...									
Accuracy class <sup>1)</sup>			C3 Multi Range (MR)									
Number of load cell verification intervals (n <sub>LC</sub> )	n <sub>LC</sub>		3000									
Maximum capacity <sup>2)</sup>	E <sub>max</sub>	kg	50	75	100	150	200	250	300	500	635	750
Minimum load cell verification interval, accuracy class C3MR	v <sub>min</sub>	g	5	5	10	10	20	20	20	50	50	50
Temperature coefficient of zero signal, accuracy class C3MR	TC <sub>0</sub>	% of C <sub>n</sub> / 10 K	±0.0140	±0.0093	±0.0140	±0.0093	±0.0140	±0.0112	±0.0093	±0.0140	±0.0110	±0.0093
Ratio of minimum verification interval Y		Y	10,000	15,000	10,000	15,000	10,000	12,500	15,000	10,000	12,700	15,000
Maximum platform size		mm	800 x 800									
Nominal sensitivity	C <sub>n</sub>	mV/V	2.0 ±0.2 (Option 6: A = 2mV/V ±0.1%)									
Zero signal			0 ±0.1									
Temperature coefficient of sensitivity <sup>3)</sup> Temperature range: +20 ... +40 °C -10 ... +20 °C	TC <sub>c</sub>	% of C <sub>n</sub> / 10K	±0.0175 ±0.0117									
Relative reversibility error <sup>3)</sup>	d <sub>hy</sub>	% of C <sub>n</sub>	±0.0166									
Non-linearity <sup>3)</sup>	d <sub>lin</sub>		±0.0166									
Minimum dead load output return (DR)			±0.0166									
Off-center load error <sup>4)</sup>			±0.0233									
Input resistance	R <sub>LC</sub>	Ω	300 ... 500									
Output resistance	R <sub>0</sub>		300 ... 500 (Option 6: A = 410 Ω ±0.2 Ω)									
Reference excitation voltage	U <sub>ref</sub>	V	5									
Nominal (rated) range of the excitation voltage	B <sub>U</sub>		1 ... 12									
Maximum excitation voltage	B <sub>U</sub>		15									
Insulation resistance at 100 V <sub>DC</sub>	R <sub>is</sub>	GΩ	> 2									
Nominal (rated) range of the ambient temperature	B <sub>T</sub>	°C	-10 ... +40									
Operating temperature range	B <sub>tu</sub>		-10 ... +50									
Storage temperature range	B <sub>tl</sub>		-25 ... +70									
Limit load at max. 100 mm eccentricity	E <sub>L</sub>	% of E <sub>max</sub>	150									
Limit lateral loading, static	E <sub>lq</sub>		300									
Breaking load	E <sub>d</sub>		300									
Rated displacement at E <sub>max</sub> , approx.	S <sub>nom</sub>	mm	< 0.5									
Weight, approx.	m	kg	2.4									
Degree of protection <sup>5)</sup>			IP67									
Material:	Measuring body		Aluminum									
	Covering agent		Silicone rubber									
	Cable sheath		PVC									

1) As per OIMLR60, with P<sub>LC</sub> = 0.7

2) Maximum eccentric loading as per OIML R76

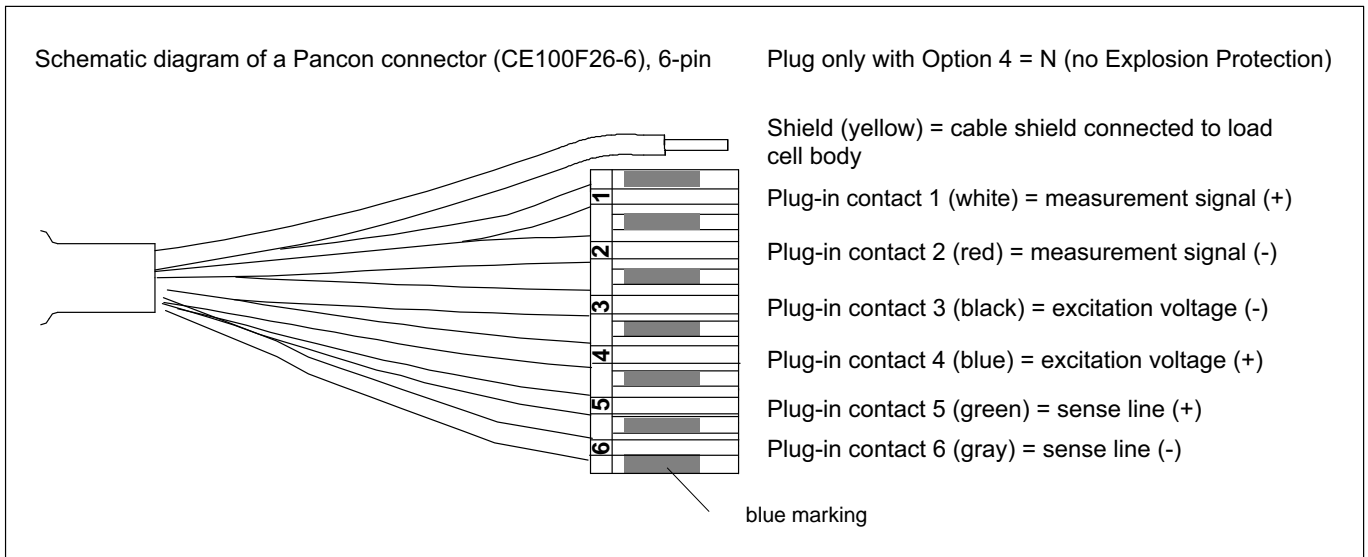
3) If the values for non-linearity (d<sub>lin</sub>), relative reversibility error (d<sub>hy</sub>) and temperature coefficient of sensitivity (TC<sub>c</sub>) are added together, they are within the cumulated error limit specified in OIML R60.

4) Off-center load deviation per OIML R76

5) As per EN 60 529 (IEC 529)

## Cable assignment

6-wire cable connection (available cable lengths: 1.5 m; 3 m; 6 m; 12 m)



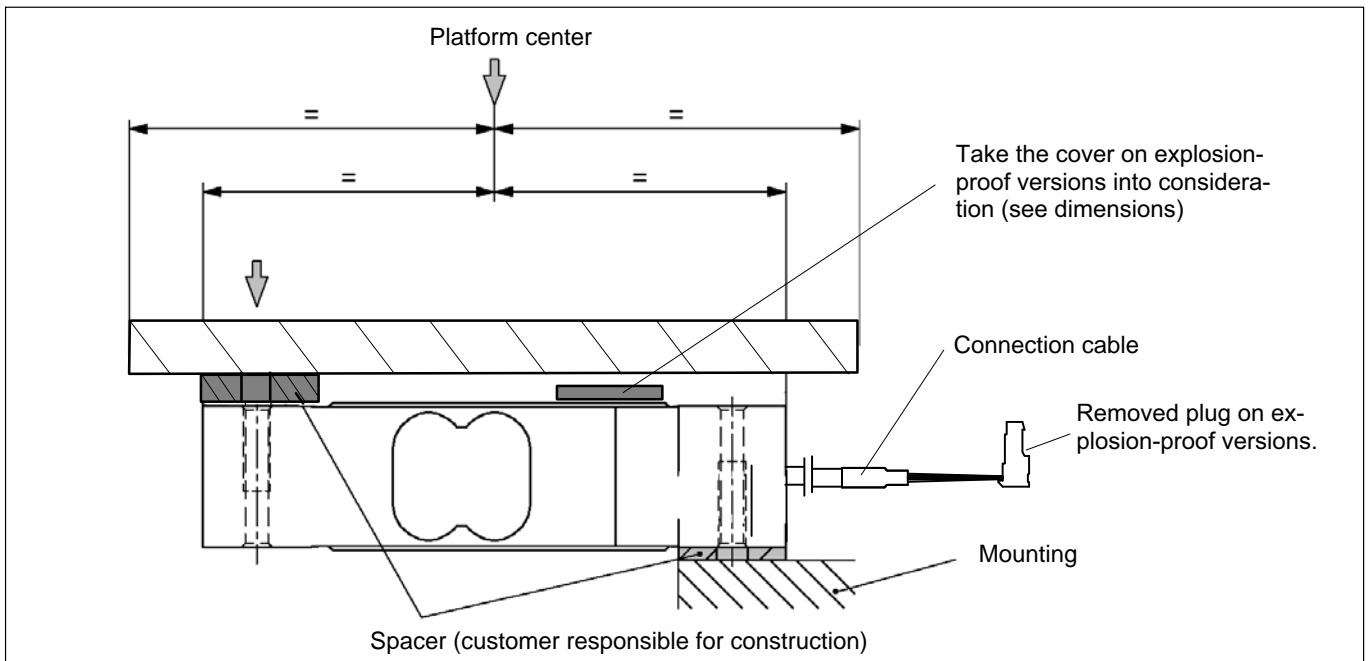
## Mounting and load application

The load cells are attached at the mounting holes, the load is applied at the other end. The recommended screws and tightening torques can be found in the table below:

Maximum capacities	Thread	Min. property class	Tightening torque <sup>1)</sup>
50...500 kg	M8	10.9	35 N·m
635 kg, 750 kg	M8	12.9	42 N·m

<sup>1)</sup> Recommended value for the specified property class. Please comply with the screw manufacturer's instructions with regard to screw dimensions

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



## Product numbers

### PW12C... (aluminum)

Type	PW12C
Accuracy class	C3-MR (OIML) (Multi Range)
Comments	Cable length 3 m (6-wire)

Maximum capacity [kg]	Ordering number
50	1-PW12CC3/50KG-1
75	1-PW12CC3/75KG-1
100	1-PW12CC3/100KG-1
150	1-PW12CC3/150KG-1
200	1-PW12CC3/200KG-1
250	1-PW12CC3/250KG-1
300	1-PW12CC3/300KG-1
500	1-PW12CC3/500KG-1
635	1-PW12CC3/635KG-1
750	1-PW12CC3/750KG-1

### K-PW12C-... (aluminum), optional versions

Ordering number	
<b>K-PW12C</b>	

Code	Option 1: Mechanical design
<b>N</b>	-

Code	Option 2: Accuracy class
<b>MR</b>	C3-MR (OIML) (Multi Range)

Code	Option 3: Nominal (rated) load
<b>50</b>	50 kg
<b>75</b>	75 kg
<b>100</b>	100 kg
<b>150</b>	150 kg
<b>200</b>	200 kg
<b>250</b>	250 kg
<b>300</b>	300 kg
<b>500</b>	500 kg
<b>635</b>	635 kg
<b>750</b>	750 kg

Code	Option 4: Explosion protection
<b>N</b>	No explosion protection
<b>A11/21</b>	IECEx+ATEX Zone 1/21+FM, intrinsically safe II 2G Ex ia IIC T6/T4 Gb/II 2D Ex ia IIIC T125°C Db*
<b>A12/22</b>	IECEx+ATEX Zone 2/22, not intrinsically safe II 3G Ex ec IIC T6/T4 Gc/II 3D Ex tc IIIC T125°C Dc*

Code	Option 5: Cable length
<b>1.5</b>	1.5 m
<b>3</b>	3 m (standard)
<b>6</b>	6 m
<b>12</b>	12 m

Code	Option 6: Other
<b>N</b>	without
<b>A</b>	2mV/V $\pm 0.1\%$ / 410 $\Omega \pm 0.2 \Omega$ (adjusted output, suitable for parallel connection)

<b>K-PW12C</b>	-	N	-	-	-	-	-	-	-	-	-	-	-	-	-
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\* Including EC-Type Examination Certificate/Certificate of Conformity BVS 13 ATEX X 108 X/IECEx BVS 13.0109 X

Subject to modifications.  
All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability.

托驰（上海）工业传感器有限公司  
上海市嘉定区华江路348号1号楼707室  
电话：+86 021 51069888  
传真：+86 021 51069009  
邮箱：zhang@yanatoo.com  
网址：www.sensor-hbm.com

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