

# PW12BC3 / PW12BC3-MR

Single point load cells

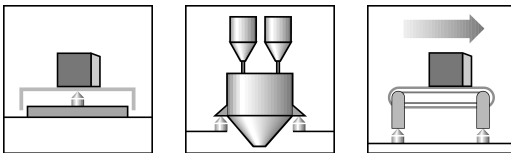
## Special features



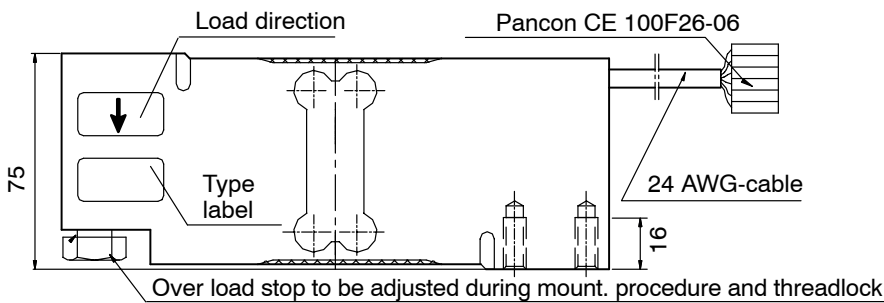
- OIML-R60 approval
- Max. Capacities: 50 kg...1000 kg
- Off center load compensated (OIML R76)
- Meets EMC standards (EN 45 501)
- 6-wire circuit

### PW10C3-MR version:

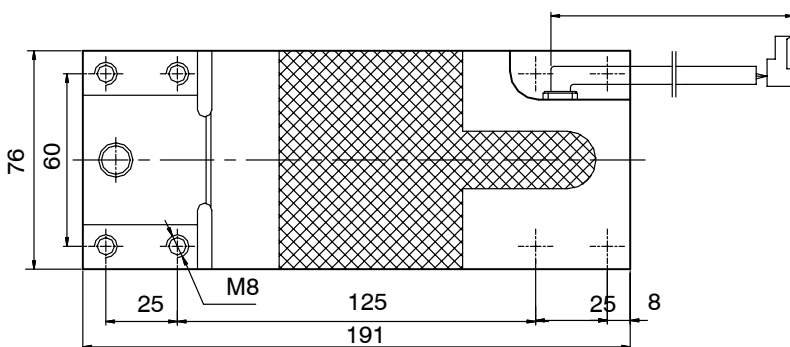
- Reduced minimum LC verification interval ( $v_{min}$ ) for multi range applications
- Parallel connection of equal LC possible
- Cable length: 6 m



## Dimensions (in mm; 1 mm = 0.03937 inches)



PW12C3: 3000 ± 50  
PW12C3-MR: 6000 ± 50



### Wiring code (6-core):

1. Sense (-) ..... grey
  2. Sense (+) ..... green
  3. Excitation (+) ..... blue
  4. Excitation (-) ..... black
  5. Signal (-) ..... red
  6. Signal (+) ..... white
- Shield ..... yellow  
(connected to load cell body)

### Mounting:

- Cylindrical head screw M8-10.9  
(600 kg: M8-12.9)  
Tightening torque: 35 N·m  
(600 kg: 42 N·m)

# Specifications

Type	PW12BC3											PW12BC3MR										
Accuracy class	C3 <sup>1)</sup>											C3MR <sup>1)</sup>										
Number of load cell intervals (n <sub>LC</sub> )	3000											3000										
Maximum capacity (E <sub>max</sub> )*	kg	50	75	100	150	200	250	300	500	635	1000	50	75	100	150	200	250	300	500	635	1000	
Minimum LC verification interval (v <sub>min</sub> )	g	10	10	20	20	50	50	50	100	100	200	5	5	10	10	20	20	20	50	50	100	
Temperature effect on zero balance (TK <sub>0</sub> )	% of C <sub>n</sub> / 10 K	± 0.0280	± 0.0186	± 0.0280	± 0.0186	± 0.0350	± 0.0280	± 0.0233	± 0.0280	± 0.0221	± 0.0280	± 0.0140	± 0.0093	± 0.0140	± 0.0093	± 0.0140	± 0.0112	± 0.0093	± 0.140	± 0.0110	± 0.0140	
Max. platform size	mm	800 x 800**											800 x 800**									
Sensitivity (C <sub>n</sub> )	mV/V	2.0 ± 0.2											2.0 ± 0.002									
Zero balance		0 ± 0.1											0 ± 0.1									
Temperature effect on sensitivity (TK <sub>C</sub> ) <sup>2)</sup>	% of C <sub>n</sub> / 10 K																					
Temperature range																						
+20 ... +40 °C [+68 ... +104 °F]		± 0.017											± 0.017									
-10 ... +20 °C [+14 ... +68 °F]		± 0.011											± 0.011									
Hysteresis error (d <sub>hy</sub> ) <sup>2)</sup>		± 0.0166											± 0.0166									
Non-linearity (d <sub>lin</sub> ) <sup>2)</sup>		± 0.0166											± 0.0166									
Minimum dead load output return (DR)	% of C <sub>n</sub>	± 0.0166											± 0.0166									
Off center load error <sup>3)</sup>		± 0.0233											± 0.0233									
Input resistance (R <sub>LC</sub> )	Ω	420 ± 15											420 ± 15									
Output resistance (R <sub>0</sub> )		350 ± 5											350 ± 0,3									
Reference excitation voltage (U <sub>ref</sub> )	V	5											5									
Nominal range of excitation voltage (B <sub>U</sub> )		15											15									
Max. excitation voltage		15											15									
Insulation resistance (R <sub>is</sub> ) at 100 V <sub>DC</sub>	GΩ	> 2											> 2									
Nominal temp. range (B <sub>T</sub> )	°C	-10 ... +40 [+14 ... +104]											-10 ... +40 [+14 ... +104]									
Service temp. range (B <sub>TU</sub> )	[°F]	-10 ... +50 [+14 ... +122]											-10 ... +50 [+14 ... +122]									
Storage temp. range (B <sub>TI</sub> )		-25 ... +70 [-13 ... +158]											-25 ... +70 [-13 ... +158]									
Safe load limit (E <sub>L</sub> ), at max. 100mm eccentricity	% of E <sub>max</sub>	150											150									
Lateral load limit (E <sub>Lq</sub> ), static	% of E <sub>max</sub>	300											300									
Breaking load (E <sub>d</sub> )		300											300									
Deflection at E <sub>max</sub> (s <sub>nom</sub> ), approx.		< 0.6											< 0.6									
Weight (G), approx.		2.0											2.0									
Protection class according to EN 60 529 (IEC 529)		IP67											IP67									
Material: Measuring element		Aluminium											Aluminium									
Coating		Silicone rubber											Silicone rubber									
Cable sheath		PVC											PVC									

\* For max. capacities 50 kg, 75 kg, 635 kg, 1000 kg: OIML certificate in preparation

\*\* At max. capacity 1000 kg: 600 mmx600 mm, to be checked by the customer

1) In accordance to OIML-R60 with P<sub>LC</sub> = 0.7

2) The sum of data for Non-linearity, Hysteresis error and TC Span meets the requirements of OIML R60.

3) Eccentric error according to OIML R76 class. For more than 635 kg, recommended platform size 600x600 mm. Safe load limit at max. 100 mm eccentricity. Customers should select the size according to the application.

Modifications reserved.

All details describe our products in general form only. They are not to be understood as express warranty and do not constitute any liability whatsoever.

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