# **PW18C3**

# PW18C3/H1



Single point load cells for static and dynamic weighing





### Special features

- High accuracy
- High overload limits
- High torsion / bending stiffness
- Protection class IP 67

# PW18C3/H1 version:

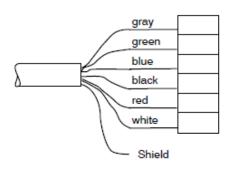
- Integrated vertical overload stops, effective in positive and negative load direction
- Corrosion resistant, laser welded
- Barometric pressure balance
- Protection class IP 66



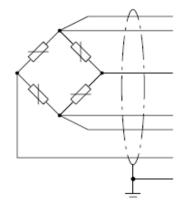


# Abmessungen (in mm)

# Pancon CE 100F26-6 (6 terminals)



#### Wiring code (6-wire circuit):



Sense (-) (grey) (black) Excitation (-)

(white) Signal (+)

Excitation (+) (blue) (green) Sense (+)

Signal (-)

Shield / wire strand connected with housing

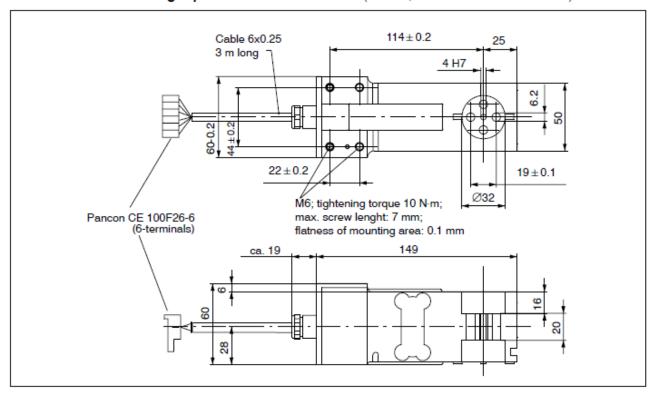




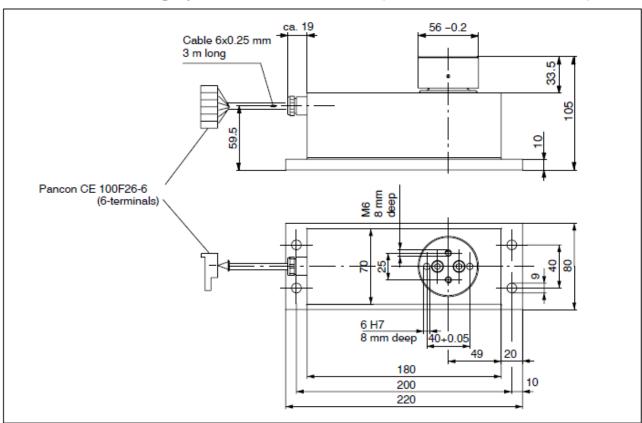




# Dimensions of the single point load cell PW18C3 (in mm; 1 mm= 0.03937 inches)



# Dimensions of the single point load cell PW18C3/H1 (in mm; 1 mm= 0.03937 inches)









# **Specifications**

Туре	PW18C3					PW18C3/H1						
Accuracy class			C3 <sup>1)</sup>					C3 <sup>1)</sup>				
Max. number of load cell intervals (n <sub>LC</sub> )			3000					3000				
Nominal (rated) Load (E <sub>max</sub> )	kg	5	10	20	50	75	5	10	20	50	75	
Min. LC verification interval (v <sub>min</sub> )	g	0.5	1	2	5	10	0.5	1	2	5	10	
Temperature effecton zero balance (TK <sub>0</sub> )	mV/V	± 0.0140					± 0.0140					
Max. Platform size	mm	400 x 400 600 x 500					400 x 400 600 x 500					
Sensitivity (C <sub>n</sub> )		1.0 ± 0.1					1.0 ±0.1					
Zero signal	mV/V	0 ± 0.1					0 ± 0.1					
Temperature effecton sensitivity (TK <sub>C</sub> ) <sup>2)</sup> Temperature range:	% from C <sub>n</sub> /											
+20 +40 °C [+68 104°F]	10 K	± 0.0175					± 0.0175					
-10 +20 °C [+14 68°F]		± 0.0117					±0.0117					
Hysteresis error (d <sub>hv</sub> ) <sup>2)</sup>		±0.0166					± 0.0166					
Non-Linearity (d <sub>lin</sub> ) 2)		±0.0166					± 0.0166					
Minimum dead load output return (DR)	% from C <sub>n</sub>	±0.0166					± 0.0166					
Off center load error <sup>3)</sup>	1			± 0.0233	3				± 0.0233	3		
Input resistance (R <sub>LC</sub> )		380 500				380 500						
Output resistance (R <sub>0</sub> )	Ω	350 500				350 500						
Reference excitation voltage (U <sub>ref</sub> )		5					5					
Nominal range of excitation voltage (B <sub>U</sub> )	v	1 12					1 12					
Max. excitation voltage	1	15					15					
Insulation resistance (Ris) at 100 VDC	GΩ	>1					>1					
Nominal temperature range (B <sub>T</sub> )		–10 +40 [14 °F 104 °F]					–10 +40 [14 °F 104 °F]					
Service temperature range (Btu)	°C [°F]	–10 +50 [14 °F 122 °F]					–10 +50 [14 °F 122 °F]					
Storage temperature range (B <sub>tl</sub> )		–25 +75 [−13 °F 167 °F]				–25 +75 [–13 °F 167 °F]						
Limit load (E <sub>L</sub> ) *)				3004)					1000			
*) at max. 20mm Eccentricity	% from											
Lateral load limit (E <sub>Iq</sub> ), static	E <sub>max</sub>	800					800					
Breaking load (E <sub>d</sub> )			400				>1000					
Nominal displacement at E <sub>max</sub> (s <sub>nom</sub> ),approx.	mm	< 0.15					< 0.15					
Weight (G), approx.	kg	0.8				3						
Protection class to EN60529 (IEC529)		IP67				IP66						
Material of the PW18C3:												
Measuring element			A	Muminiur	n							
Cover		Silicone rubber										
Cable sheath				TPE								
Material of the PW18C3/H1:												
Housing									ainless st			
Membrane								Silicone		ouc R830		
Cable sheath									TPE			

<sup>1)</sup> According to OIML R60 with PLC = 0.7







<sup>2)</sup> The data for Non-Linearity (d<sub>lin</sub>), Hysteresis error (d<sub>hy</sub>) and temperature effect on sensitivity (TK<sub>C</sub>) are typical values. The sum of these data meets the requirements according to OIML R60.

According to OIML R76.

<sup>4)</sup> In combination with a grinded baseplate up to 1000% (details please see operating manual)

## Mounting hints for single point load cells PW18C3 and PW18C3/H1

