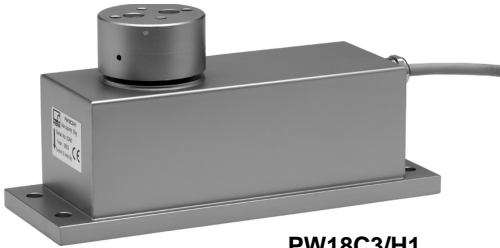


PW18C3 PW18C3/H1

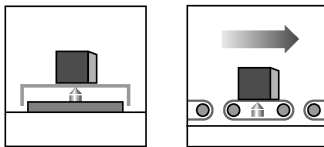
Single point load cells for static and dynamic weighing



PW18C3



PW18C3/H1



Special features

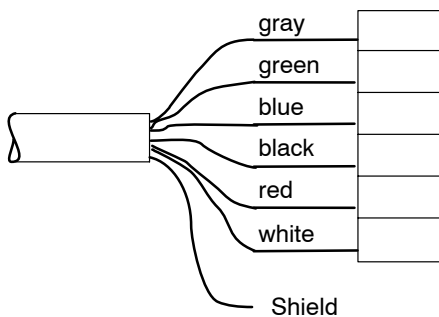
- High accuracy
- High overload limits
- High torsion / bending stiffness
- Protection class IP 67

PW18C3/H1 version:

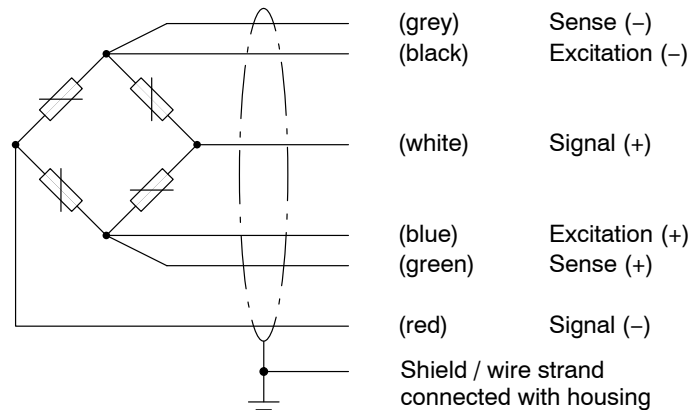
- Integrated vertical overload stops, effective in positive and negative load direction
- Corrosion resistant, laser welded
- Barometric pressure balance
- Protection class IP 66

Abmessungen (in mm)

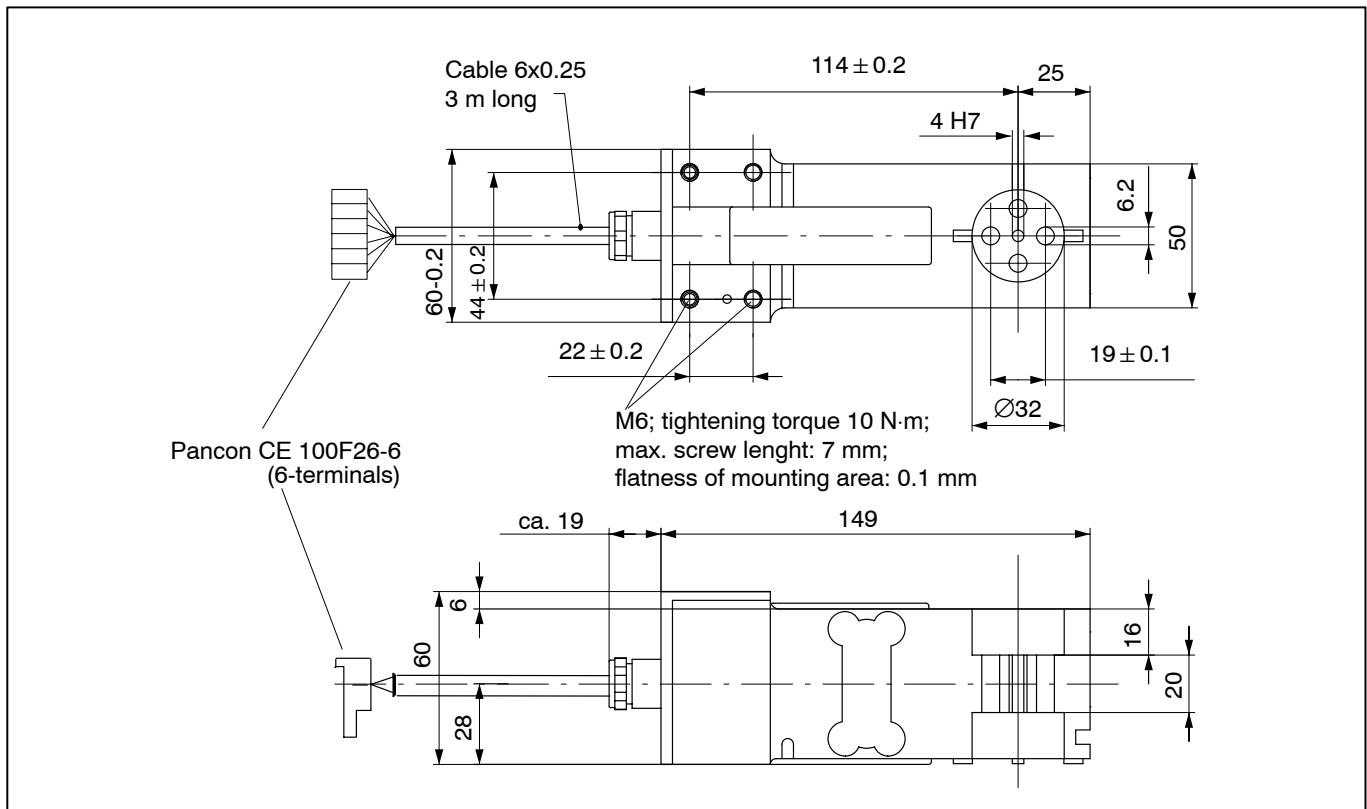
Pancon CE 100F26-6
(6 terminals)



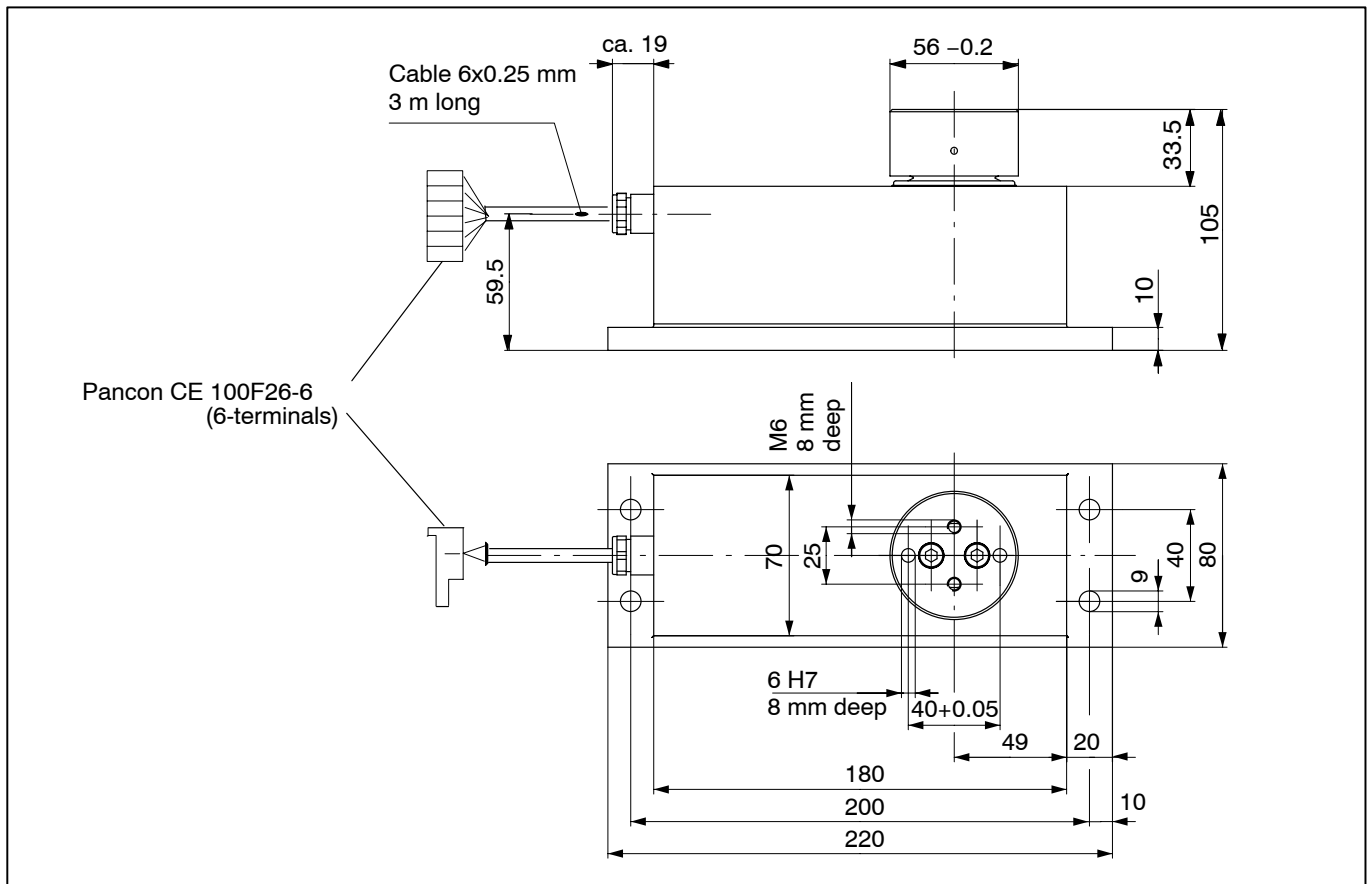
Wiring code (6-wire circuit):



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

| Type | PW18C3 | | | | | | PW18C3/H1 | | | | | |
|---|---------------------|-------------------------------------|----|----|-----------|----|------------------|--|----|----|-----------|--|
| Accuracy class | C3 ¹⁾ | | | | | | C3 ¹⁾ | | | | | |
| Max. number of load cell intervals (n_{LC}) | 3000 | | | | | | 3000 | | | | | |
| Nominal (rated) Load (E_{max}) | kg | 5 | 10 | 20 | 50 | 75 | 5 | 10 | 20 | 50 | 75 | |
| Min. LC verification interval (v_{min}) | g | 0.5 | 1 | 2 | 5 | 10 | 0.5 | 1 | 2 | 5 | 10 | |
| Temperature effect on zero balance (TK_0) | mV/V | ± 0.0140 | | | | | | ± 0.0140 | | | | |
| Max. Platform size | mm | 400 x 400 | | | 600 x 500 | | | 400 x 400 | | | 600 x 500 | |
| Sensitivity (C_n) | mV/V | 1.0 ± 0.1 | | | | | | 1.0 ± 0.1 | | | | |
| Zero signal | | 0 ± 0.1 | | | | | | 0 ± 0.1 | | | | |
| Temperature effect on sensitivity (TK_C) ²⁾ Temperature range: +20 ... +40 °C [+68 ... 104 °F] -10 ... +20 °C [+14 ... 68 °F] | % from $C_n / 10$ K | ± 0.0175 ± 0.0117 | | | | | | ± 0.0175 ± 0.0117 | | | | |
| Hysteresis error (d_{hy}) ²⁾ | % from C_n | ± 0.0166 | | | | | | ± 0.0166 | | | | |
| Non-Linearity (d_{lin}) ²⁾ | | ± 0.0166 | | | | | | ± 0.0166 | | | | |
| Minimum dead load output return (DR) | | ± 0.0166 | | | | | | ± 0.0166 | | | | |
| Off center load error ³⁾ | | ± 0.0233 | | | | | | ± 0.0233 | | | | |
| Input resistance (R_{LC}) | Ω | 380 ... 500 | | | | | | 380 ... 500 | | | | |
| Output resistance (R_0) | | 350 ... 500 | | | | | | 350 ... 500 | | | | |
| Reference excitation voltage (U_{ref}) | V | 5 | | | | | | 5 | | | | |
| Nominal range of excitation voltage (B_U) | | 1 ... 12 | | | | | | 1 ... 12 | | | | |
| Max. excitation voltage | | 15 | | | | | | 15 | | | | |
| Insulation resistance (R_{is}) at 100 V _{DC} | | > 1 | | | | | | > 1 | | | | |
| Nominal temperature range (B_T) | °C [°F] | -10 ... +40 [14 °F ... 104 °F] | | | | | | -10 ... +40 [14 °F ... 104 °F] | | | | |
| Service temperature range (B_{tu}) | | -10 ... +50 [14 °F ... 122 °F] | | | | | | -10 ... +50 [14 °F ... 122 °F] | | | | |
| Storage temperature range (B_{tl}) | | -25 ... +75 [-13 °F ... 167 °F] | | | | | | -25 ... +75 [-13 °F ... 167 °F] | | | | |
| Limit load (E_L) *) *) at max. 20mm Eccentricity | % from E_{max} | 300 ⁴⁾ | | | | | | 1000 | | | | |
| Lateral load limit (E_{lq}), static | | 800 | | | | | | 800 | | | | |
| Breaking load (E_d) | | 400 | | | | | | > 1000 | | | | |
| Nominal displacement at E_{max} (s_{nom}), 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 Cover Cable sheath | | Aluminium Silicone rubber TPE | | | | | | | | | | |
| Material of the PW18C3/H1: Housing Membrane Cable sheath | | | | | | | | Stainless steel Silicone caoutchouc R830 TPE | | | | |

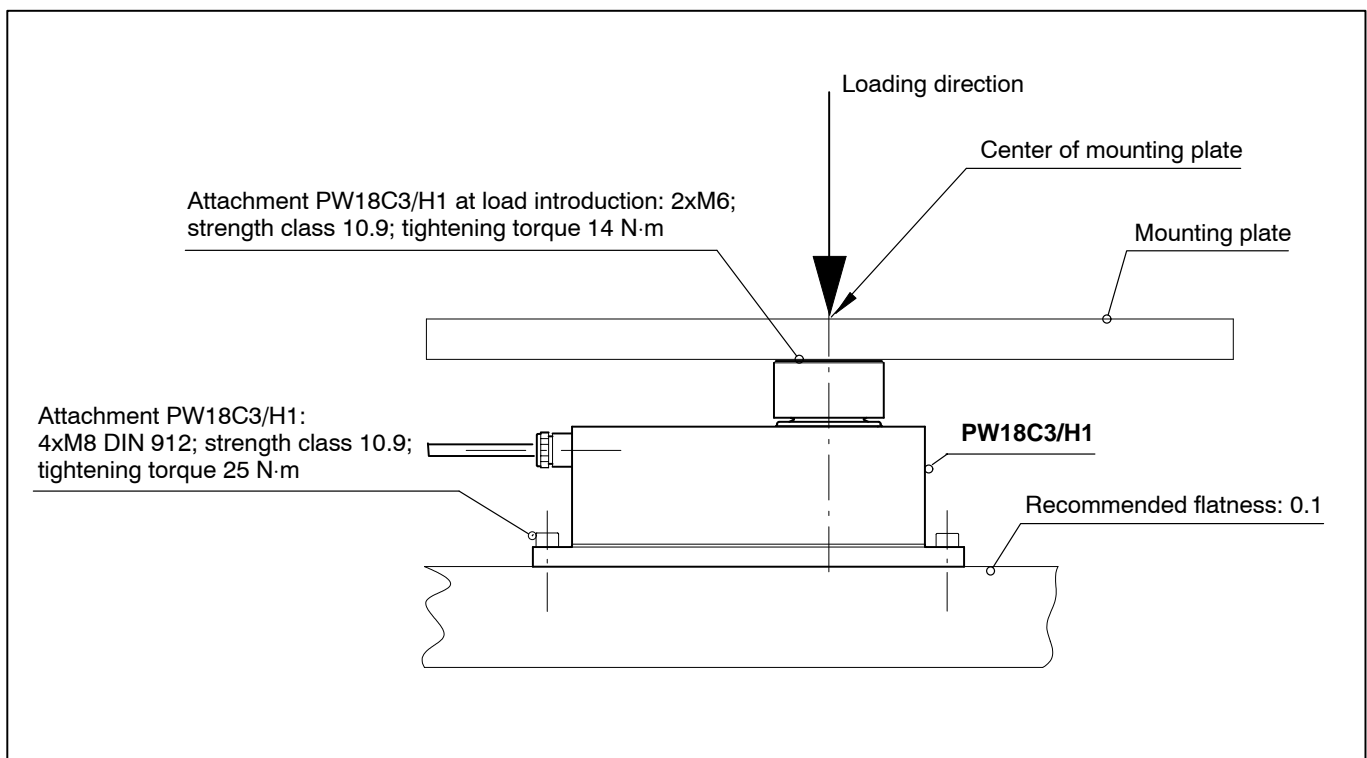
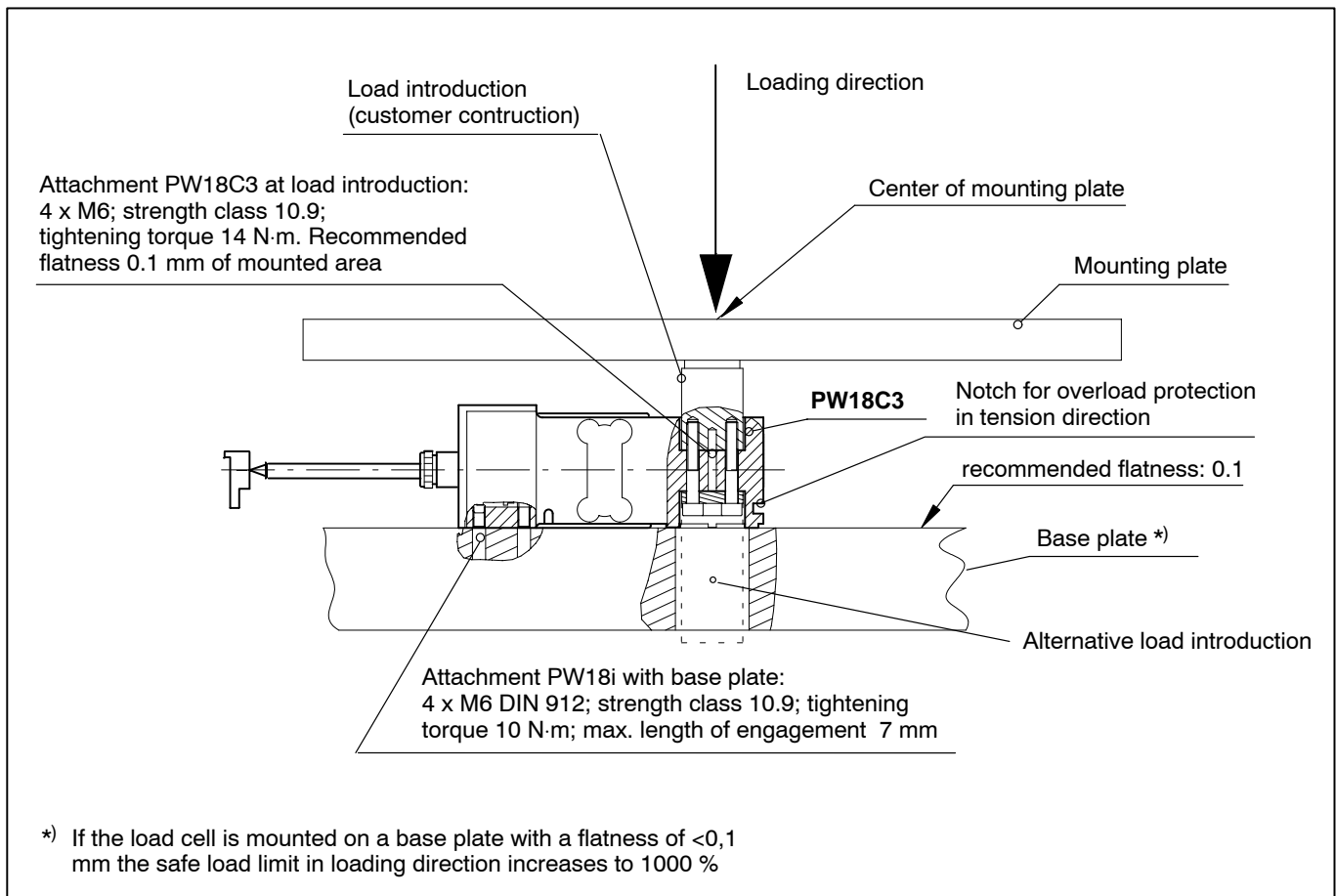
1) According to OIML R60 with $P_{LC} = 0.7$

2) The data for Non-Linearity (d_{lin}), Hysteresis error (d_{hy}) and temperature effect on sensitivity (TK_C) are typical values. The sum of these data meets the requirements according to OIML R60.

3) According to OIML R76.

4) 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



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