

PW22...

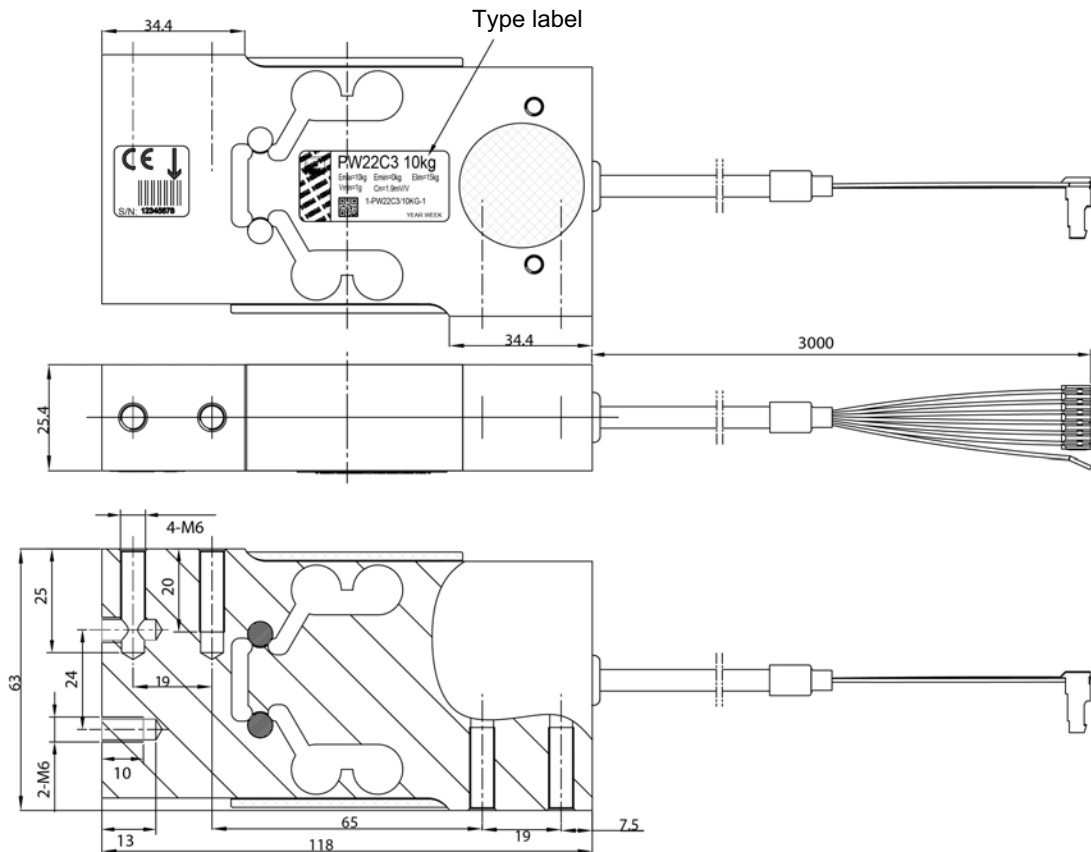
Single point load cells

Special features

- Maximum capacities: 6 kg ... 90 kg
- Aluminum
- High ratio of minimum verification interval Y
- Integrated overload protection (Patent pending)
- Optimized for dynamic weighing applications
- Protection housing and other options deliverable



Dimensions (in mm; 1 mm = 0.03937 inches)



Specifications

Type			PW22...					
Accuracy class ¹⁾			C3 Multi Range (MR)					
Maximum number of load cell intervals	n_{LC}		3000					
Maximum capacity	E_{max}	kg	6	10	20	30	50	90
Minimum LC verification interval	v_{min}	g	0.5	1	2	2	5	10
Max. platform size		mm	400 x 400					
Sensitivity	C_n	mV/V	1.9 ±0.1					
Zero signal (without pre load)			0 ±0.1					
Temperature effect on zero balance	TK_0	% of $C_n/10$ K	±0.0117	±0.0140	±0.0140	±0.0093	±0.0140	±0.0155
Ratio of minimum verification interval	Y		12,000	10,000	10,000	15,000	10,000	9,000
Temperature effect on sensitivity ²⁾ in the temperature range +20 ... +40 °C -10 ... +20 °C	TK_c	% of $C_n/10$ K	±0.0175 ±0.0117					
Relative reversibility error ²⁾	d_{hy}	% of C_n	±0.0166					
Linearity deviation ²⁾	d_{lin}		±0.0166					
Ratio of minimum dead load output return	DR		±0.0166					
Off-center load error ³⁾			±0.0233					
Input resistance	R_{LC}	Ω	300...500					
Output resistance	R_0		300...500					
Reference excitation voltage	U_{ref}	V	5					
Nominal range of excitation voltage	B_U	V	1...12					
Max. excitation voltage		V	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 120 mm eccentricity	E_L	% of E_{max}	150					
Lateral load limit, static	E_{lq}		> 300					
Permissible dyn. load; with max. 50 mm eccentricity	F_{srel}		70					
Breaking load at 20 mm eccentricity	E_d		500					
Nominal (rated) displacement at E_{max} , approx.	s_{nom}	mm	< 0.2					
Resonance frequency, without load, approx.		Hz	280	380	540	660	866	1015
Weight, approx.	G	kg	0.5					
Degree of protection ⁴⁾			IP67					
Material: Measuring body Application protection Cable sheath			Aluminum Silicone rubber PVC					

¹⁾ According to OIMLR60 with $P_{LC} = 0.7$

²⁾ 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 acc. to OIML R60.

³⁾ Loaded with 30 % of the max. capacity at 142 mm eccentricity (acc. to OIML R76).

⁴⁾ According to EN 60 529 (IEC 529)

Options

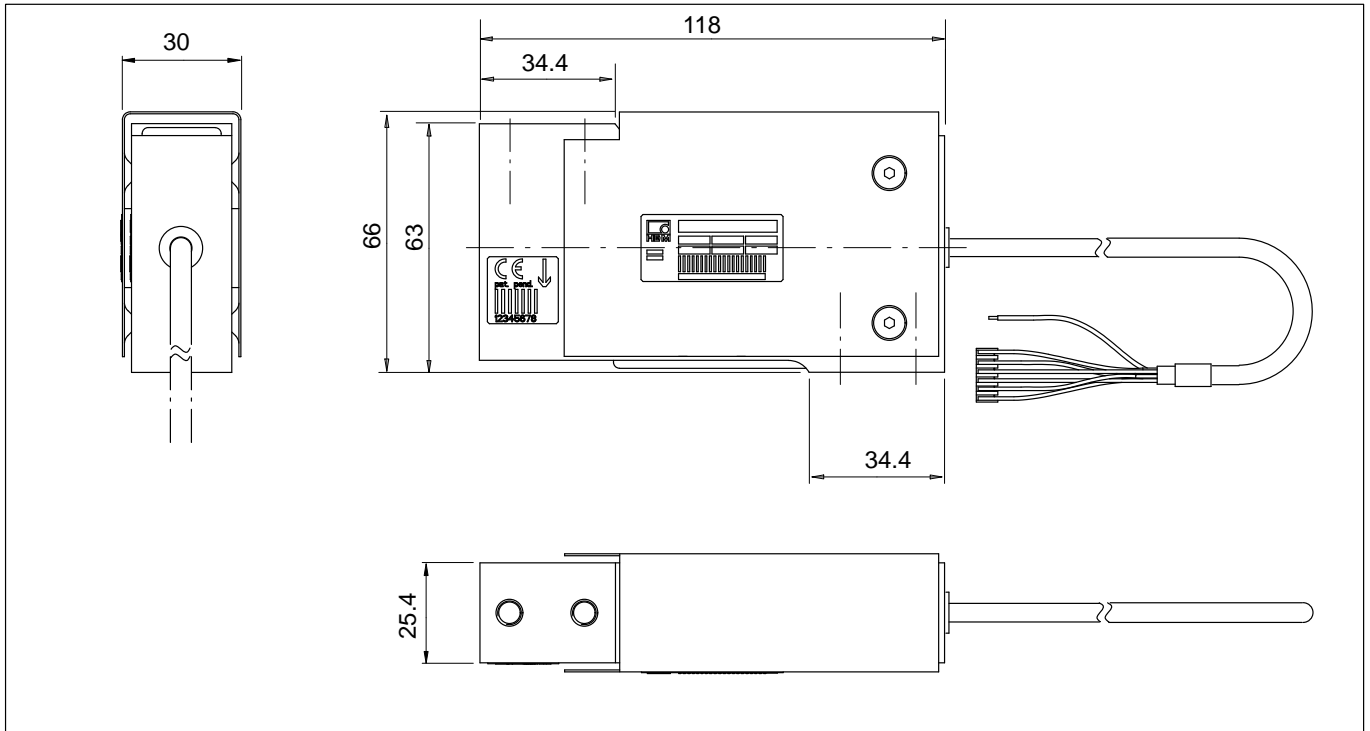
Ex protection versions per IECEx and ATEX

AI1/21 IECEx+ATEX zone 1/21 + FM intrinsically safe
II 2G Ex ia IIC T6/T4 Gb, II 2D Ex ia IIIC T125°C Db*

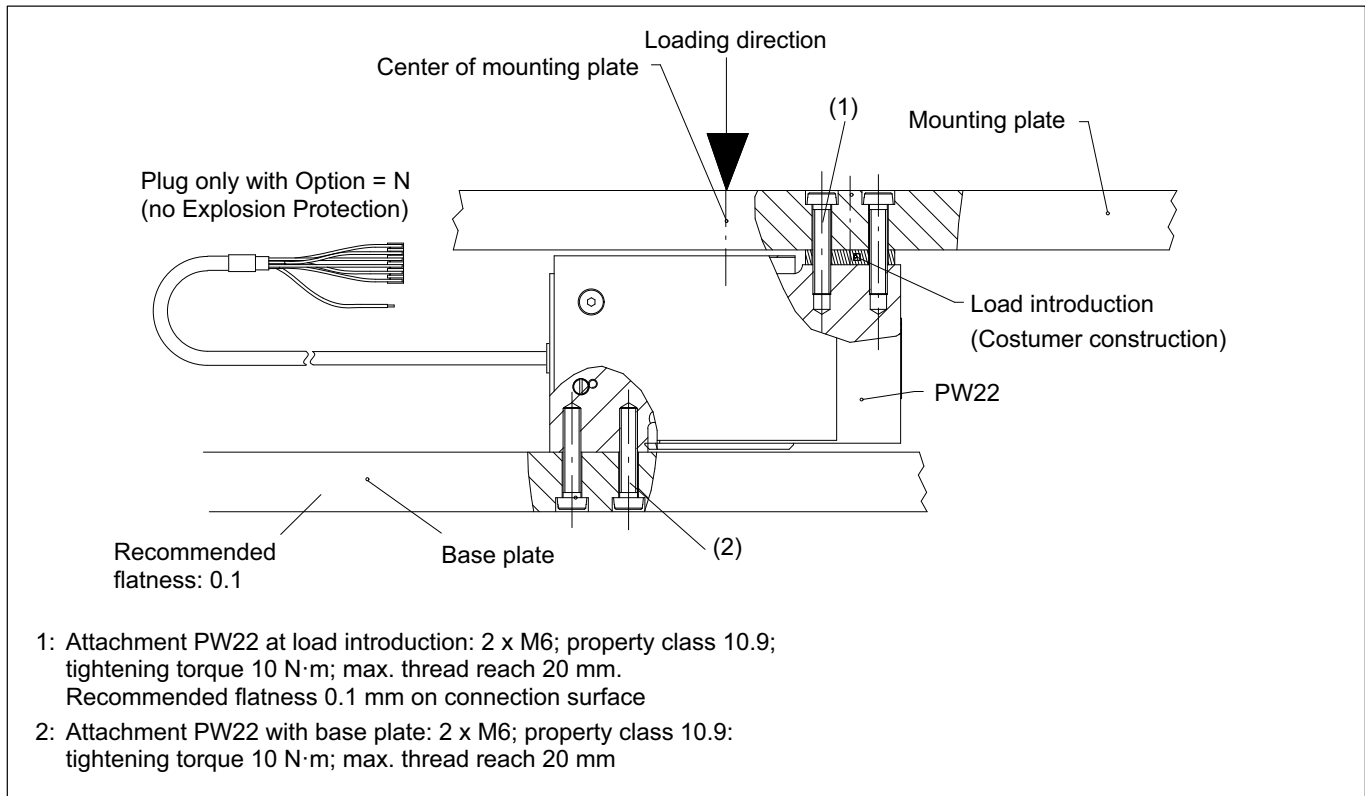
AI2/22 IECEx+ATEX zone 2/22 not intrinsically safe
II 3G Ex nA IIC T6/T4 Gc, II 2D Ex tc IIIC T125°C Dc*

* with EU type examination certificate (BVS13ATEX E 108 X) and IECEx Certificate of Conformity (IECEx BVS 13.0109 X)

Dimensions for version with protection housing

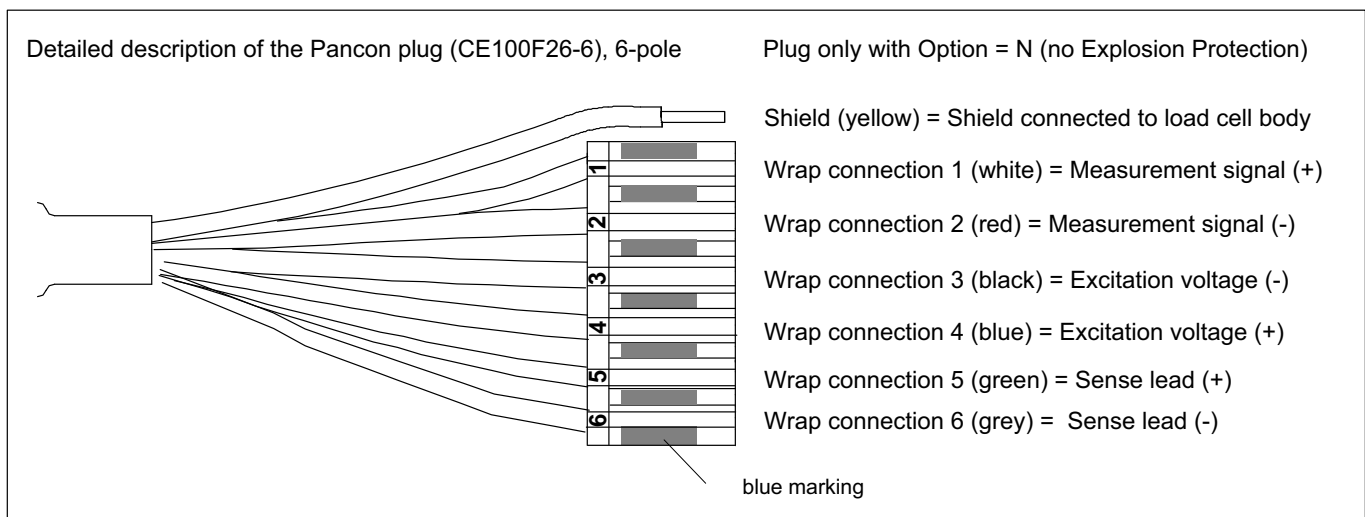


Mounting hints



Wiring code

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



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

Hottinger Baldwin Messtechnik GmbH
Im Tiefen See 45 · 64293 Darmstadt · Germany
Tel. +49 6151 803-0 · Fax +49 6151 803-9100
Email: info@hbm.com · www.hbm.com

measure and predict with confidence

