PW22…

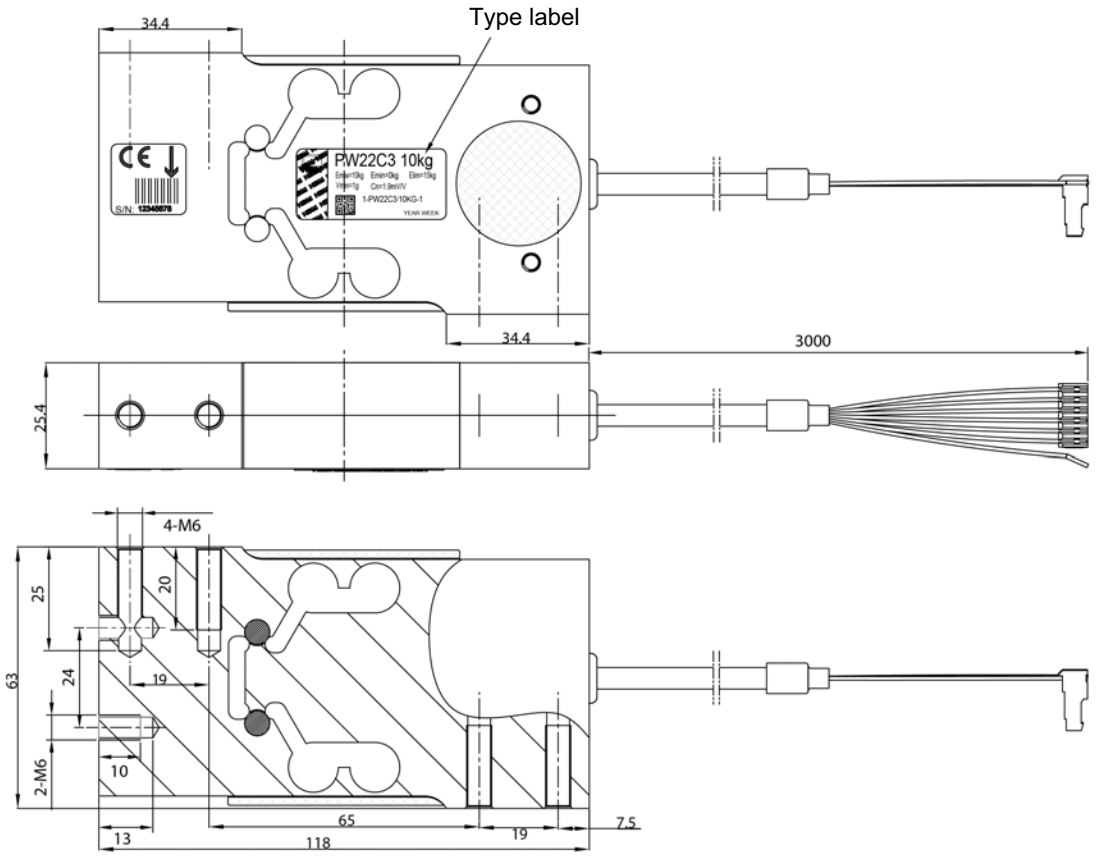
Single point load cells

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**
- **Explosion protection, protection housing and other options deliverable**

Data sheet

Dimensions (in mm; 1 mm = 0.03937 inches)

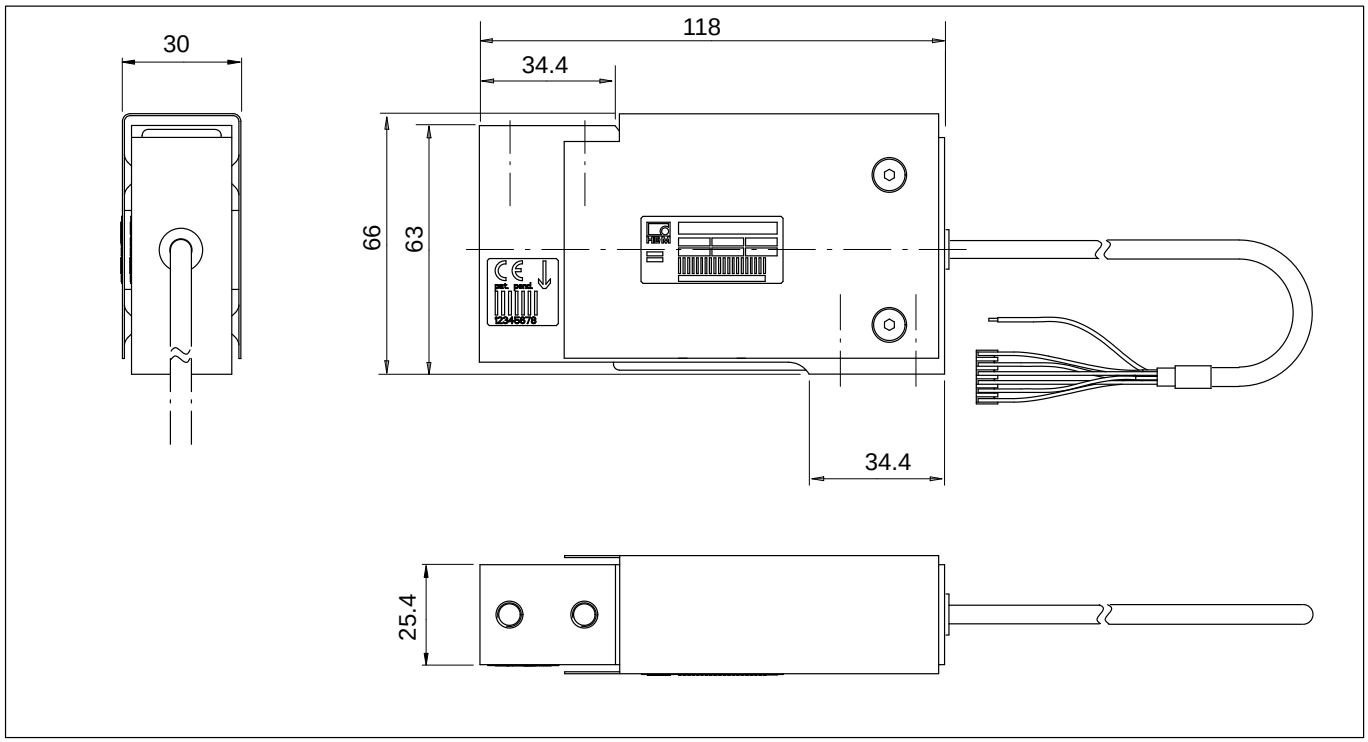


Specifications

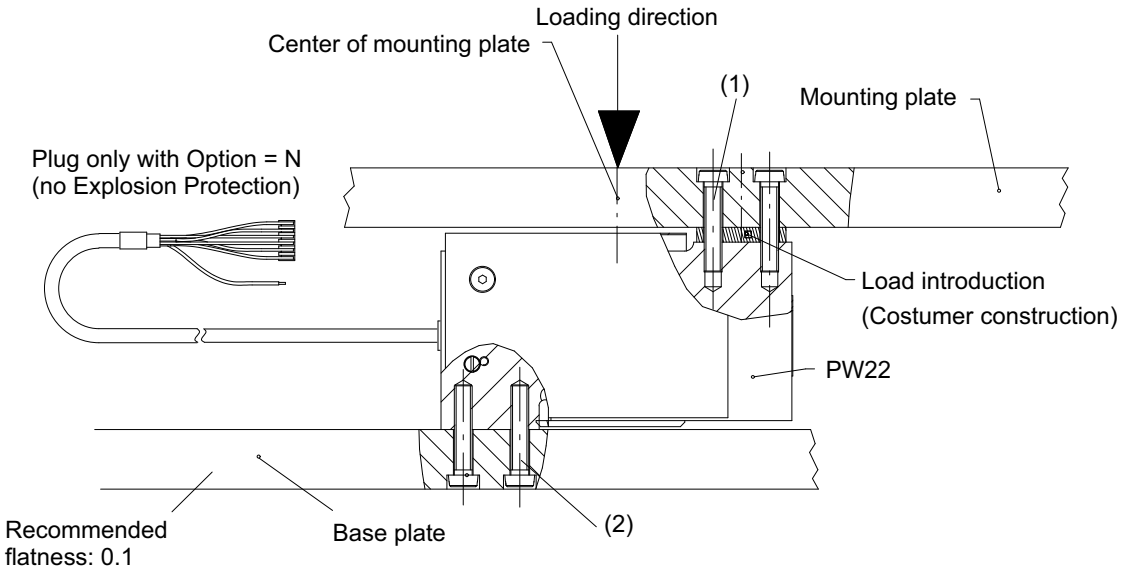
Type			**PW22...**					
Accuracy class [1]			C3 Multi Range (MR)					
Maximum number of load cell intervals	n_{LC}		3000					
Maximum capacity	E_{max}	kg	6	10	20	30	50	90
Minimum LC verification interval	v_{min}	g	0.5	1	2	2	5	10
Max. platform size		mm	400 x 400					
Sensitivity	C_n	mV/V	1.9 ±0.1					
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)

Dimensions for version with protection housing



Mounting hints



1: Attachment PW22 at load introduction: 2 x M6; property class 10.9; tightening torque 10 N·m; max. thread reach 20 mm. Recommended flatness 0.1 mm on connection surface

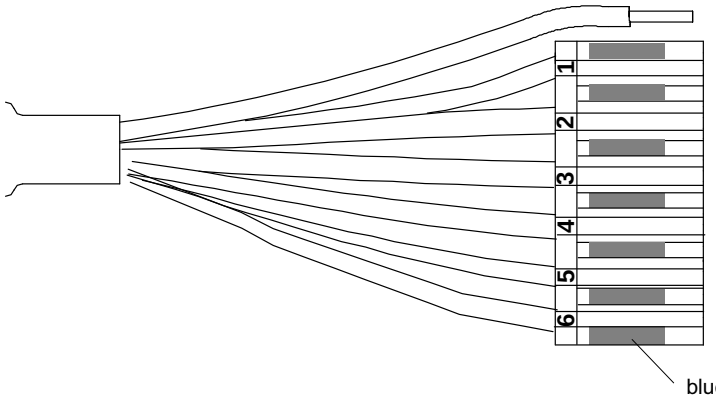
2: Attachment PW22 with base plate: 2 x M6; property class 10.9: tightening torque 10 N·m; max. thread reach 20 mm

Wiring code

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

Detailed description of the Pancon plug (CE100F26-6), 6-pole

Plug only with Option 4 = N (no Explosion Protection)



Shield (yellow) = Shield connected to load cell body

Plug-in contact 1 (white) = Measurement signal (+)

Plug-in contact 2 (red) = Measurement signal (-)

Plug-in contact 3 (black) = Excitation voltage (-)

Plug-in contact 4 (blue) = Excitation voltage (+)

Plug-in contact 5 (green) = Sense lead (+)

Plug-in contact 6 (grey) = Sense lead (-)

Ordering codes

PW22C… (aluminum)

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

Maximum capacity [kg]	Ordering number
6 10	1-PW22C3/6KG-1 1-PW22C3/10KG-1
20 30	1-PW22C3/20KG-1 1-PW22C3/30KG-1
50 90	1-PW22C3/50KG-1 1-PW22C3/90KG-1

K-PW22-… (aluminum), optional versions

Ordering number
K-PW22

Code	*Option 1: Mechanical version*
0	Without protection housing
1	With protection housing

Code	*Option 2: Accuracy class*
MR	C3-MR (OIML) (Multi Range)

Code	*Option 3: Nominal (rated) load*
6	6 kg
10	10 kg
20	20 kg
30	30 kg

Code	*Option 4: Explosion protection*
N	No explosion protection
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 ec IIC T6/T4 Gc, II 3D Ex tc IIIC T125°C Dc*

Code	*Option 5: Cable length*
1.5	1.5 m
3	3 m (standard)
6	6 m
12	12 m

Code	*Option 6: Other*
N	Without

K-PW22	-		-	**M**	**R**	-			-								-				-	**N**

* Including EC-Type Examination Certificate/Certificate of Conformity BVS 13 ATEX X 108 X/IECEx BVS 13.0109 X

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