

PW15AH...

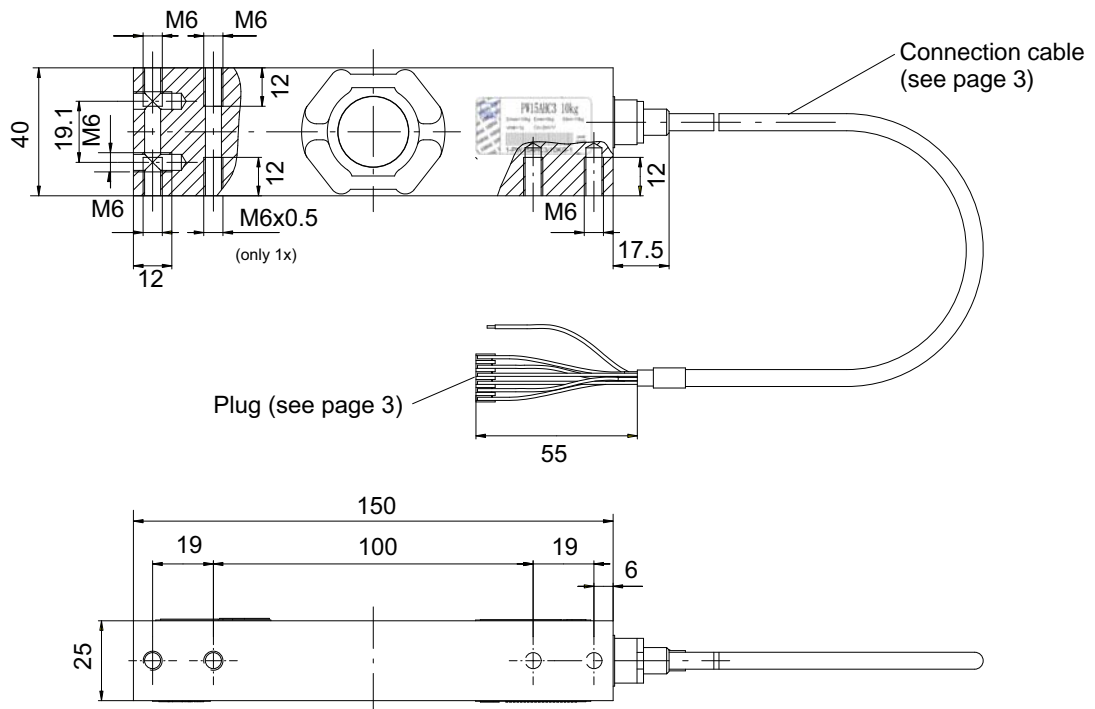
Single point load cell

Special features

- Nominal load 10 kg ... 100 kg
- Stainless steel
- High ratio of minimum verification interval Y
- Industrial Footprint (SP4M)
- Degree of Protection IP68; IP69K
- Different cable lengths and other options available



Dimensions (in mm; 1 mm= 0.03937 inches)



Specifications

Type			PW15AH/PW15AHY (C3 MR)			
Accuracy class ¹⁾			C3 Multi Range (MR)			
Max. number of load cell interval	n_{LC}		3000			
Maximum capacity	E_{max}	kg	10	20	50	100
Min. LC verification interval (PW15AH)	v_{min}	g	1	2	5	10
Ratio of minimum verification interval (PW15AH)	Y		10000			
Temperature effect on zero balance (PW15AH)	TK_0	% of $C_n / 10\text{ K}$	± 0.0140	± 0.0140	± 0.0140	± 0.0140
Min. LC verification interval (PW15AHY)	v_{min}	g	0.5	1	2	5
Ratio of minimum verification interval (PW15AHY)	Y		20000		25000	20000
Temperature effect on zero balance (PW15AHY)	TK_0	% of $C_n / 10\text{ K}$	± 0.0070	± 0.0070	± 0.0056	± 0.0070
Maximum platform size		mm	500 x 400			
Sensitivity	C_n	mV/V	2.0 \pm 0.2			
Zero balance			0 \pm 0.1			
Temperature effect on sensitivity ²⁾ Temperature range: +20 ... +40°C [+68 ... +104°F] -10 ... +20°C [+14 ... +68°F]	TK_C	% of $C_n / 10\text{ K}$	± 0.0175 ± 0.0117			
Hysteresis error ²⁾	d_{hy}	% of C_n	± 0.0166			
Non-linearity ²⁾	d_{lin}		± 0.0166			
Minimum dead load output return	DR		± 0.0166			
Off center load error ³⁾			± 0.0233 ³⁾			
Input resistance	R_{LC}	Ω	300 ... 500			
Output resistance	R_0		300 ... 500			
Reference excitation voltage	U_{ref}	V	5			
Nom. range of excitation voltage	B_U		1 ... 12			
Max. excitation voltage			15			
Insulation resistance with 100 V _{DC}	R_{is}	G Ω	> 1			
Nominal temperature range	B_T	°C [°F]	-10 ... +40 [+14 ... +104°F]			
Service temperature range	B_{tu}		-10 ... +50 [+14 ... +122°F]			
Storage temperature range	B_{tl}		-25 ... +70 [-13 ... +158°F]			
Safe load limit ^{*)}	E_L	% of E_{max}	150			
^{*)} at max. eccentricity		mm	160			
Lateral load limit, static	E_{lq}	% of E_{max}	300			
Breaking load	E_d		300			
Deflect. at E_{max} , approx.	s_{nom}	mm	< 0.5			
Weight, approx.	m	kg	1.0			
Protection class ⁵⁾			IP 68 (test conditions 100 h at 1 m water column); IP69K (water at high pressure, steam jet cleaning) ⁴⁾			
Material	Measuring element Cable sheath		1.4545 ⁶⁾ PVC			

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⁾ Following the definitions of the DIN 40050, part of 9, for road vehicles

⁵⁾ According to EN60529 (IEC529)

⁶⁾ According to EN 10088-1

Type			PW15AH (C6 MR)			
Accuracy class ¹⁾			C6 MR (Multi Range)			
Max. number of load cell interval	n_{LC}		6,000			
Maximum capacity	E_{max}	kg	10	20	50	100
Minimum load cell verification interval	v_{min}	g	0.5	1	2	5
Ratio of minimum verification interval	Y		20,000		25,000	20,000
Temperature coefficient of zero signal	TC_0		± 0.0070	± 0.0070	± 0.0056	± 0.0070
Temperature coefficient of sensitivity ²⁾ Temperature range: +20 ... +40°C [+68 ... +104°F] -10 ... +20°C [+14 ... +68°F]	TC_s	% of C_n / 10 K	± 0.0087 ± 0.0058			
Hysteresis error ²⁾	d_{hy}	% of C_n	± 0.0083			
Non-linearity ²⁾	d_{lin}		± 0.0083			
Minimum dead load output return	MDLOR		± 0.0083			
Off center load error ³⁾			± 0.0116			

Type			PW15AH (C3MI8)			
Accuracy class ¹⁾			C3MI8			
Max. number of load cell interval	n_{LC}		3,000			
Maximum capacity	E_{max}	kg	10	20	50	100
Minimum load cell verification interval	v_{min}	g	1	2	5	10
Ratio of minimum verification interval	Y		10,000			
Temperature coefficient of zero signal	TC_0		± 0.0140			
Temperature coefficient of sensitivity ²⁾ Temperature range: +20 ... +40°C [+68 ... +104°F] -10 ... +20°C [+14 ... +68°F]	TC_s	% of C_n / 10 K	± 0.0175 ± 0.0117			
Hysteresis error ²⁾	d_{hy}	% of C_n	± 0.0062			
Non-linearity ²⁾	d_{lin}		± 0.0062			
Minimum dead load output return	MDLOR		± 0.0062			
Off center load error ³⁾			± 0.0116			

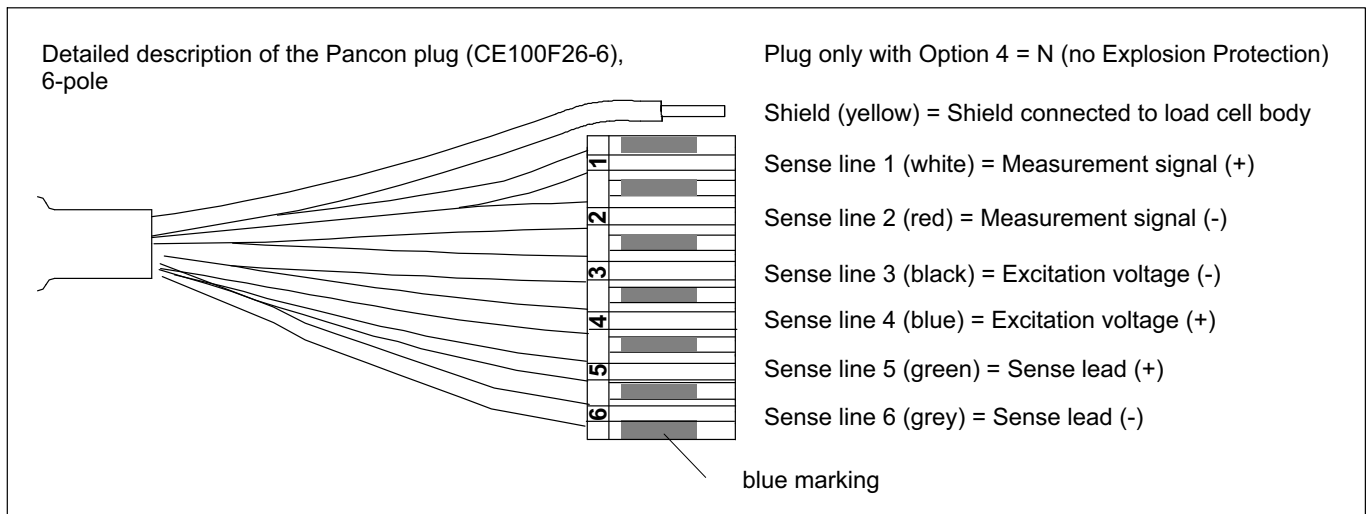
¹⁾ As per OIML R60, with $P_{LC} = 0.7$

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

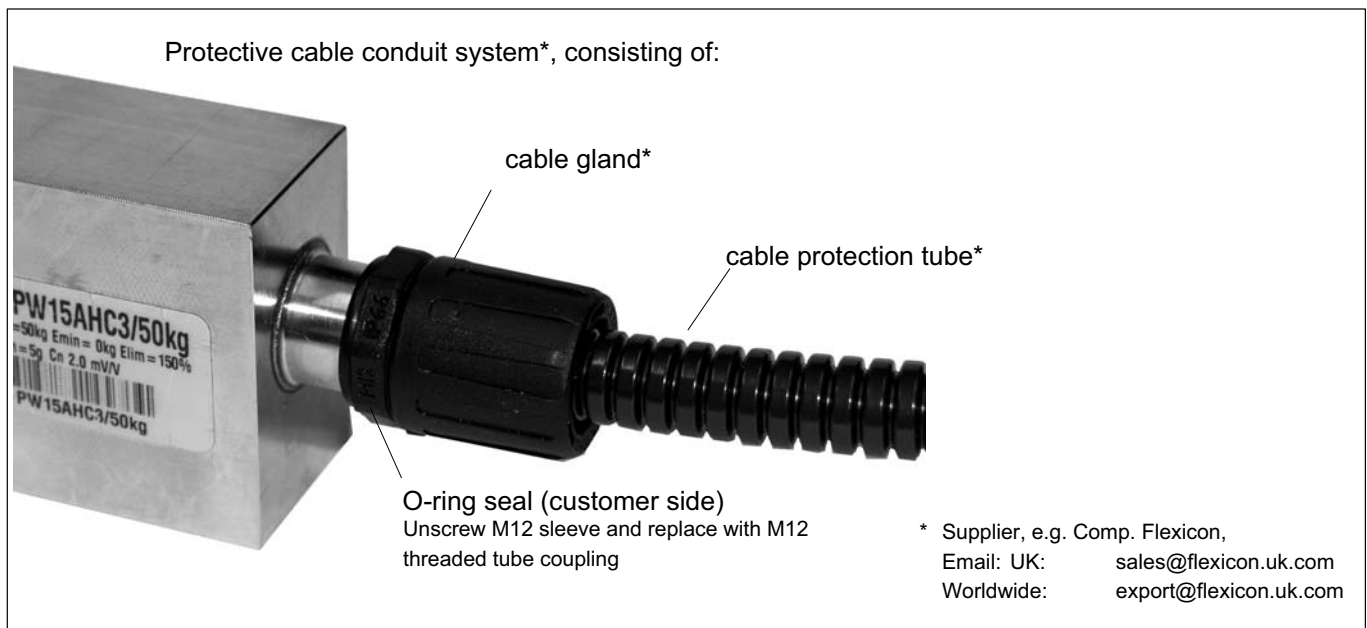
³⁾ As per OIML R76

Wiring code

Connection with 6 wire cable, 24 AWG, 6 x 0.14 mm², Ø5.4 (selectable cable length: 3 m; 6 m)

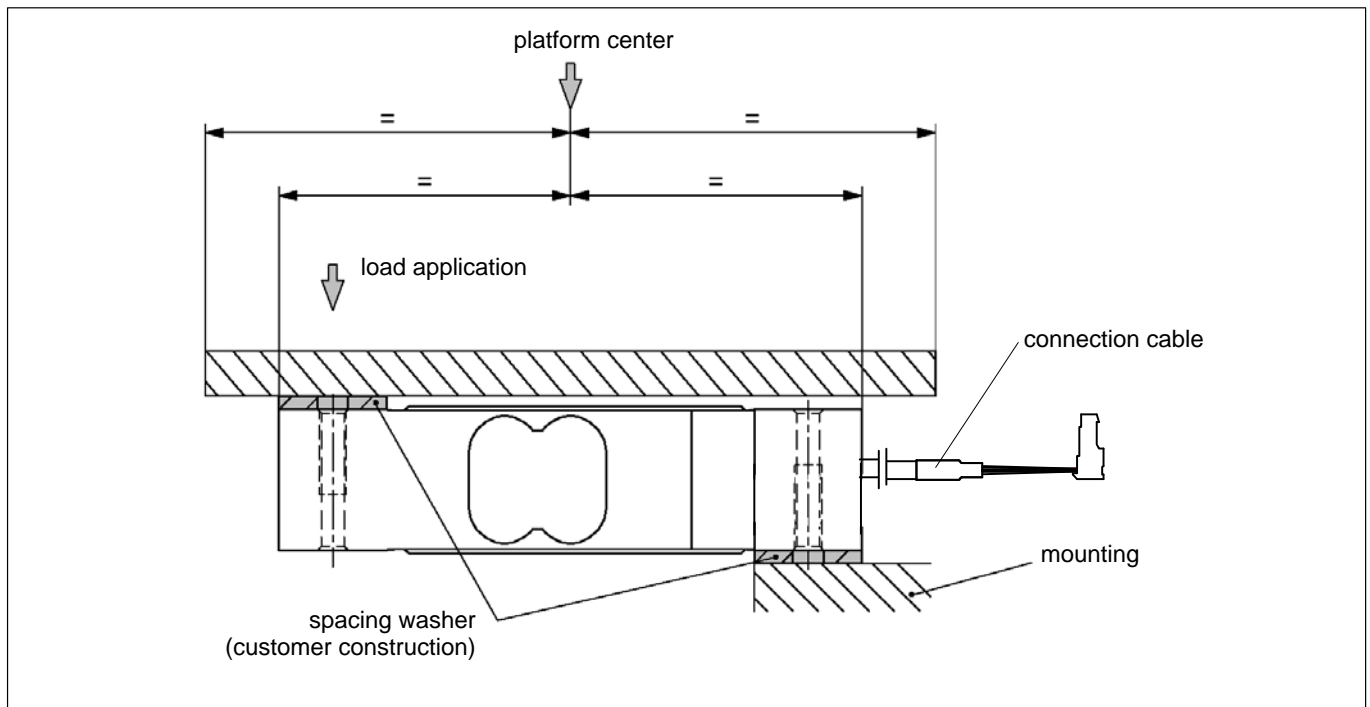


Cable protection (to be implemented by the customer)



Load application

Load must not be applied to the side where the cable connection is located, as this would cause a force shunt.



Ordering codes

PW15AH... (Stainless steel, hermetically sealed)

Type	PW15AH	PW15AHY	PW15AH C3 MI8	PW15AH C6-MR
Accuracy class	C3-MR (OIML) (Multi Range)	C3-MR (OIML) (Multi Range, high Y value)	C3 MI8 (OIML)	C6-MR (OIML) (Multi Range)
Comments	Cable length 3 m (6-wire)-			
Capacity	Order number			
10 kg	1-PW15AHC3/10KG-1	1-PW15AHY/10KG-1		
20 kg	1-PW15AHC3/20KG-1	1-PW15AHY/20KG-1		
50 kg	1-PW15AHC3/50KG-1	1-PW15AHY/50KG-1		
100 kg	1-PW15AHC3/100KG-1	1-PW15AHY/100KG-1		
10 kg	1-PW15AHC6/10KG-1	1-PW15AHMI/10KG-1		
20 kg	1-PW15AHC6/20KG-1	1-PW15AHMI/20KG-1		
50 kg	1-PW15AHC6/50KG-1	1-PW15AHMI/50KG-1		
100 kg	1-PW15AHC6/100KG-1	1-PW15AHMI/100KG-1		

PW15AH... (Stainless steel, hermetically sealed), optional versions

Order no.	
K-PW15AH	
Code	<i>Option 1: Mechanical version</i>
N	Standard
Code	<i>Option 2: Accuracy</i>
MR	C3-MR (OIML)
Code	<i>Option 3: Capacity</i>
10	10 kg
20	20 kg
50	50 kg
100	100 kg
Code	<i>Option 4: Explosion protection</i>
N	No explosion protection
A11/21	IECEX+ATEX Zone 1/21+FM, intrinsically safe II 2G Ex ia IIC T6/T4 Gb/II 2D Ex ia IIIC T125°C Db*
A12/22	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	<i>Option 5: Cable length</i>
3	3 m
6	6 m
Code	<i>Option 6: Miscellaneous</i>
N	without
A	2mV/V ±0.1% / 359 Ohm ±0.3 Ohm (aligned output, suitable for connection in parallel)
Code	<i>Option 7</i>
N	Standard

K-PW15AH - **N** - **M** **R** - [] [] [] - [] [] [] [] [] [] - [] - [] - []

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

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

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