

PW29...

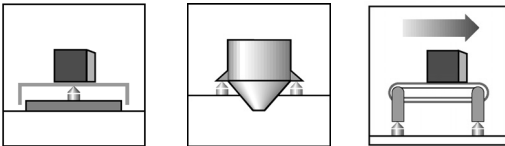
Single point load cell

Special Features

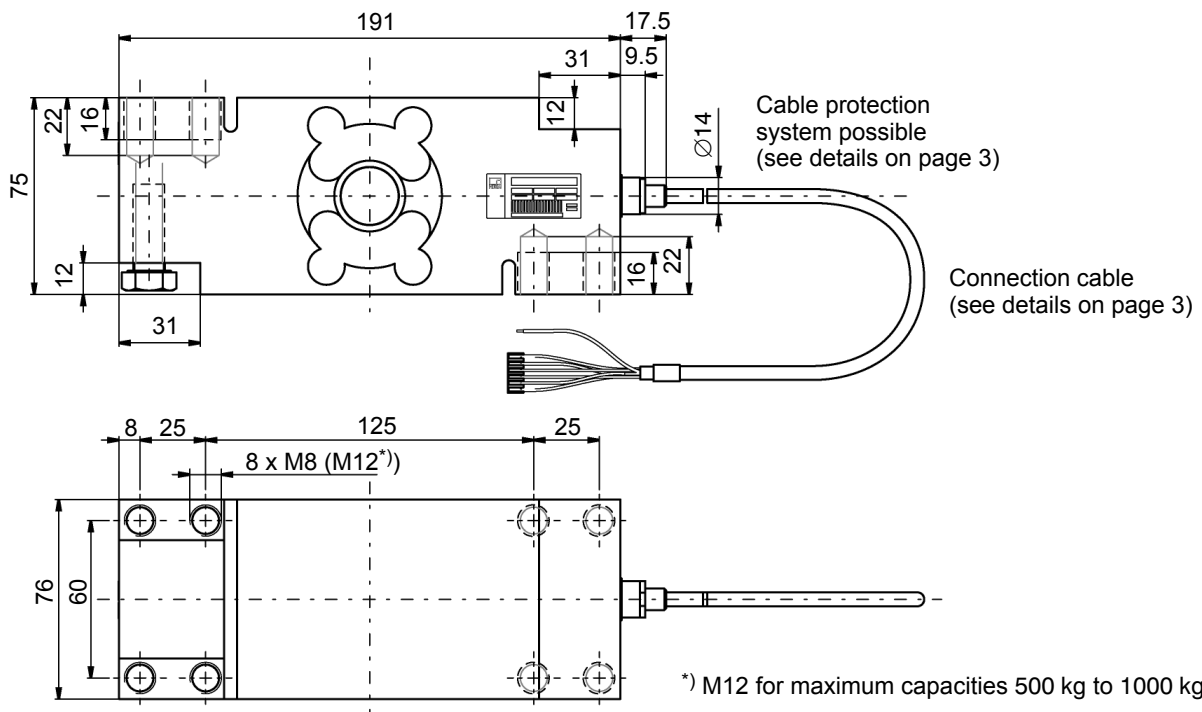
- Hermetically encapsulated (IP68; IP69K)
 - Accuracy class C3MR
 - OIML R60 test report
 - Maximum capacities 100 kg ... 1000 kg
 - Platform sizes 800 x 800mm
 - Off-center load compensated (OIML R76)
 - Installation compatible with products of numerous manufacturers^{*)}
 - Stainless steel 1.4545
 - Complies with EMC guidelines
 - Six-wire circuit
 - Integrated connection for cable protection systems
- ^{*)} Mountings with M8 for maximum capacities up to 250 kg, with M12 above that

Optional:

- Aligned output, suitable for parallel connection
- Different cable lengths



Dimensions (in mm; 1 mm = 0.03937 inches)



Specifications

Type			PW29...				
Accuracy class ¹⁾			C3MR				
Number of load cell verification intervals	n_{LC}		3000				
Maximum capacity	E_{max}	kg	100	250	500	750	1000
Minimum load cell verification interval	v_{min}	g	10	20	50	50	100
Temperature coefficient of the zero signal per 10 K	TK_0	% of C_n	± 0.0140	± 0.0112	± 0.0140	± 0.0093	± 0.0140
Maximum platform size		mm	800 x 800				
Nominal (rated) sensitivity	C_n	mV/V	2.0 \pm 10% (option 6: \pm 0.1%)				
Zero signal error			± 0.1				
Temperature coefficient of the sensitivity per 10 K ²⁾ in the temperature range +20 to +40 °C -10 to +20 °C	TK_C	% of C_n	± 0.0175				
Non-linearity ²⁾	d_{lin}		± 0.0117				
Relative reversibility error ²⁾	d_{hy}		± 0.0166				
Minimum dead load output return	$MDLOR$		± 0.0166				
Off-center load error ³⁾			≤ 233				
Input resistance	R_{LC}	Ω	380 \pm 15				
Output resistance	R_0		350 \pm 10 (option 6: 359 \pm 0.2)				
Reference excitation voltage	U_{ref}	V	5				
Nominal (rated) range of the excitation voltage	B_U		1 to 12				
Maximum excitation voltage			15				
Insulation resistance at 100 V _{DC}	R_{is}		$G\Omega$				
Nominal (rated) temperature range	B_T	°C	-10 to +40				
Operating temperature range	B_{tu}		-10 to +50				
Storage temperature range	B_{tl}		-25 to +70				
Limit load at max. 100 mm eccentricity	E_L	% of E_{max}	150				
Limit lateral loading, static	E_{lq}		300				
Breaking load	E_d		300				
Nominal (rated) displacement ⁴⁾	s_{nom}	mm	< 0.2	< 0.2	< 0.25	< 0.25	< 0.3
Displacement at 1/3 · E_{max} and 283 mm eccentricity	s_{exz}		< 0.1	< 0.15	< 0.2	< 0.25	< 0.3
Weight, approx.	G	kg	6.3				
Degree of protection per EN 60529 (IEC 529)			IP68 (test conditions 1 m water column / 100 h); IP69K (water at high pressure, steam cleaner) ⁵⁾				
Cable length (standard)		m	3				
Material: measuring body, cable entry cable sheath cover			steel 1.4545 ⁶⁾ PVC steel 1.6908				

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

²⁾ The values for non-linearity (d_{lin}), relative reversibility error (d_{hy}) and temperature coefficient of sensitivity (TK_C) are recommended values. The sum of these values is within the cumulated error limit according to OIML R60.

³⁾ As per OIML R76.

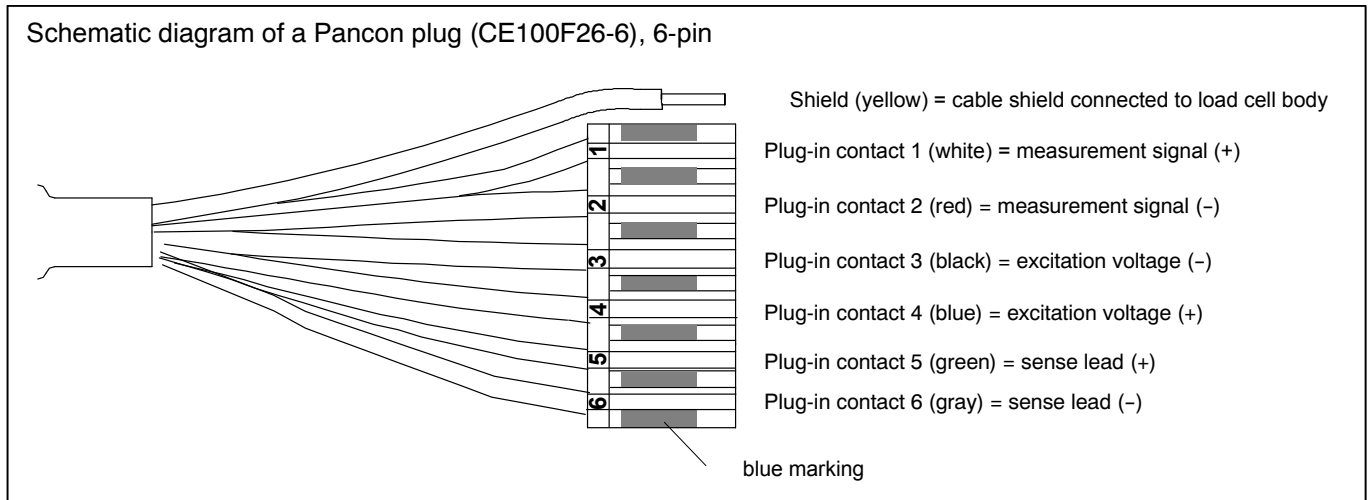
⁴⁾ Loading with E_{max} and center of gravity in center of load cell.

⁵⁾ Based on DIN 40050, Part 9 specifications, for road vehicles.

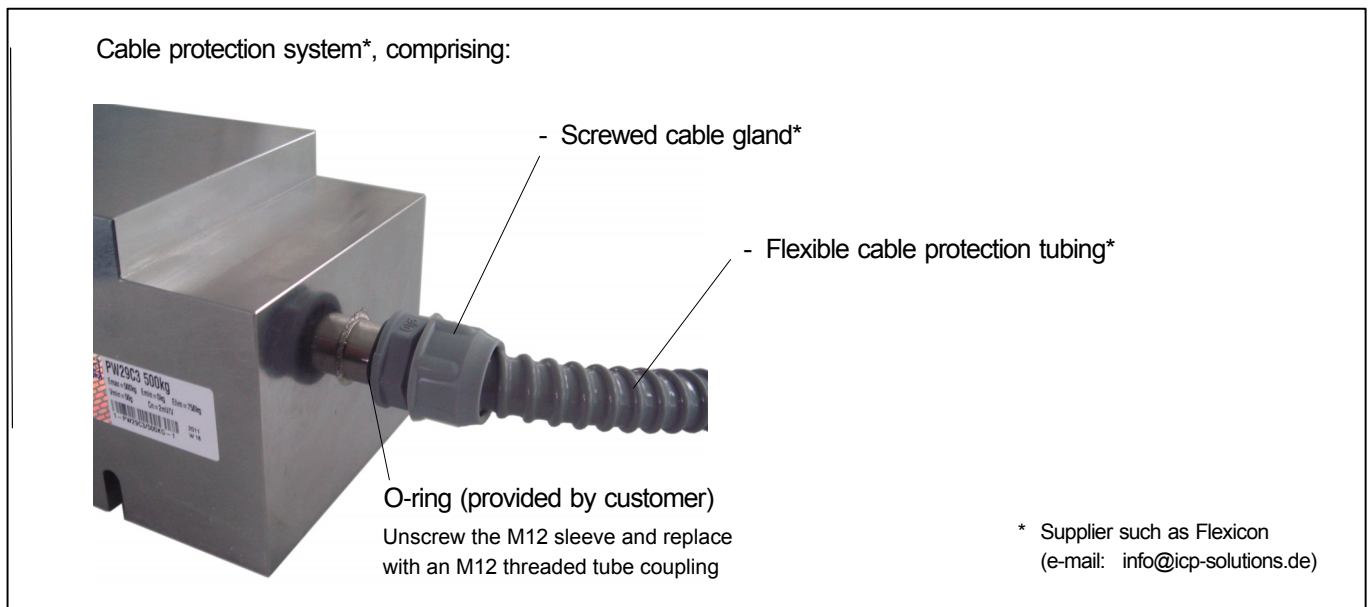
⁶⁾ As per EN 10088-1.

Cable assignment

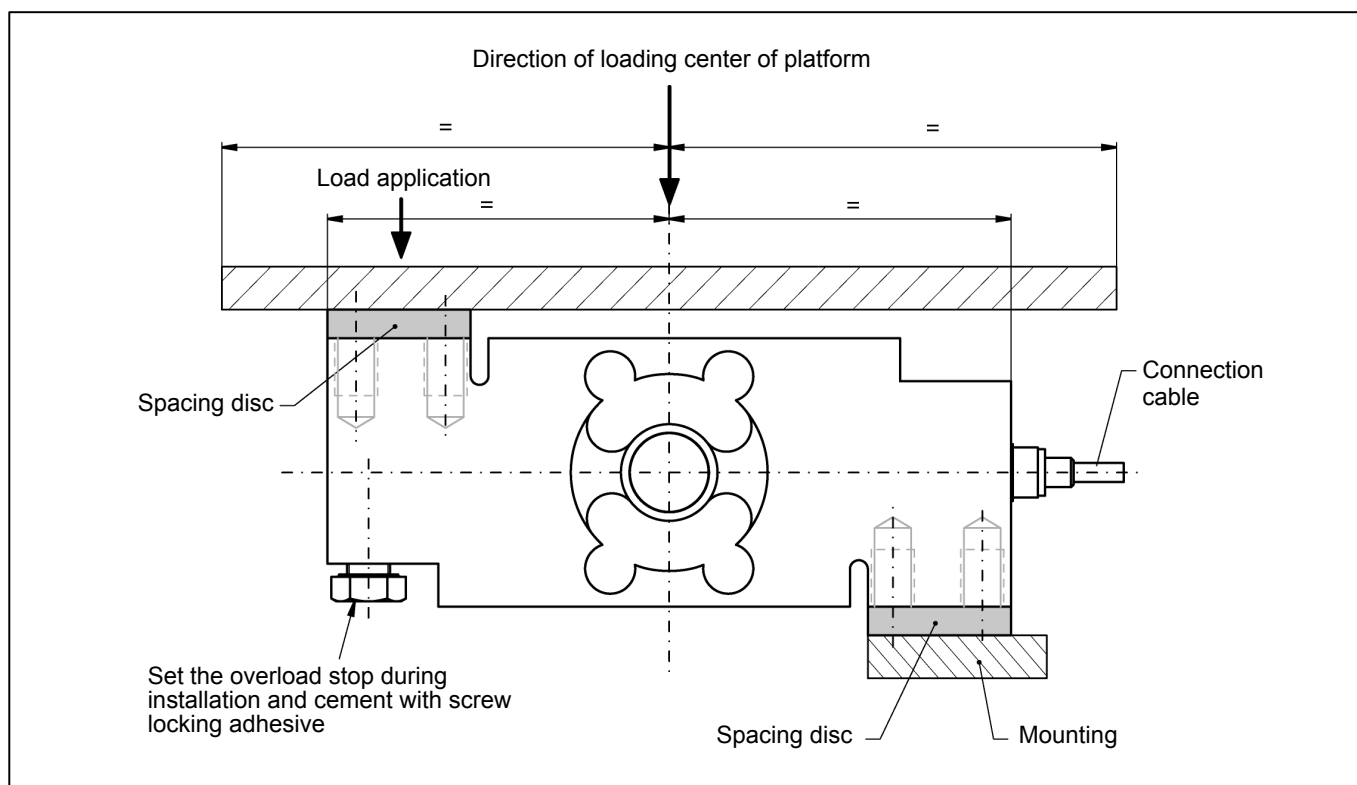
Connection with 6-wire cable (choice of cable lengths: 3 m, 6 m)



Cable protection (provided by customer)



Mounting instructions



Installation notes		
Maximum capacity	Socket head cap screw	Maximum tightening torque
100 kg ... 250 kg	M8 10.9	35 N·m
500 kg ... 1000 kg	M12 10.9	110 N·m

Product numbers (overview)

PW29... (stainless steel, hermetically sealed)

Type	PW29...
Accuracy class	C3-MR (OIML)
Comments	Cable length 3 m (six-wire configuration)
Maximum capacity	Order number
100 kg	1-PW29C3/100KG-1
250 kg	1-PW29C3/250KG-1
500 kg	1-PW29C3/500KG-1
750 kg	1-PW29C3/750KG-1
1000 kg	1-PW29C3/1T-1

K-PW29... (stainless steel, hermetically sealed), version options

Order no.
K-PW29

Code	Option 1: Mechanical design
N	standard

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

Code	Option 3: Maximum capacity
100	100 kg
250	250 kg
500	500 kg
750	750 kg
1000	1000 kg

Code	Option 4: Explosion protection currently not available
N	no ATEX

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

Code	Option 6: Miscellaneous
N	without
A	2 mV/V 0.1% / 359 Ω ± 0.2 Ω (aligned output, suitable for parallel connection)

Product no. K-PW29- - - - - -
 Example K-PW29- - - - - -

Modifications reserved.
All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability and do not constitute any liability whatsoever.

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