

PW29 - 100...750kg

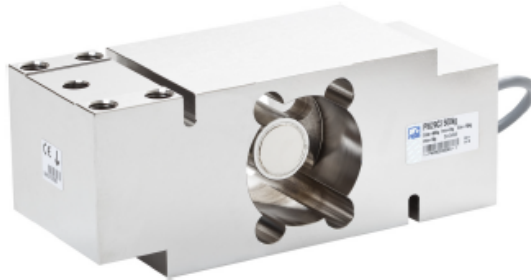
Célula de carga Single Point



**Libracom**  
Inteligência em Processos Industriais

## PW29...

Single point load cell



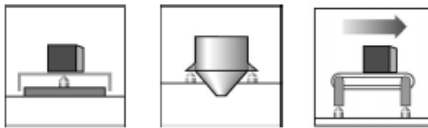
### Special Features

- 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 <sup>\*)</sup>
- Stainless steel 1.4545
- Complies with EMC guidelines
- Six-wire circuit
- Integrated connection for cable protection systems

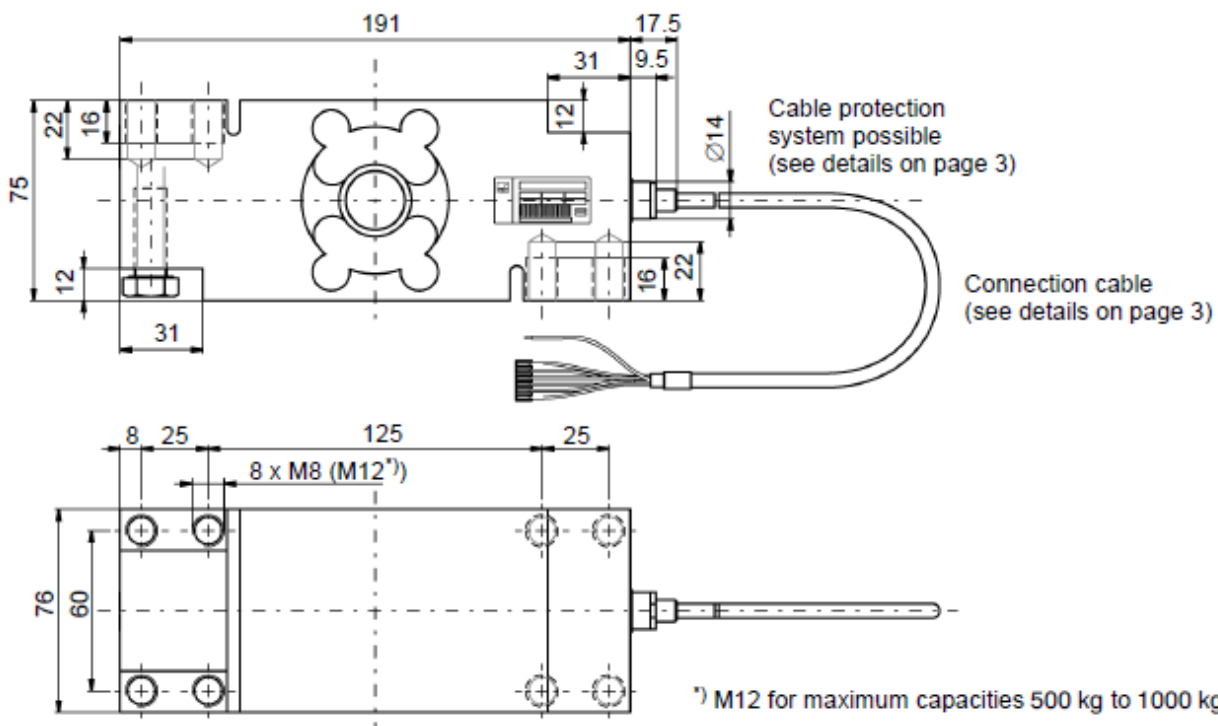
<sup>\*)</sup> Mountings with M8 for maximum capacities up to 250 kg, with M12 above that

### Optional:

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



Dimensions (in mm; 1 mm = 0.03937 inches)



## Specifications

Type			PW29...				
Accuracy class <sup>1)</sup>			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 $C_n$	$\pm 0.0140$	$\pm 0.0112$	$\pm 0.0140$	$\pm 0.0093$	$\pm 0.0140$
Maximum platform size		mm	800 x 800				
Nominal (rated) sensitivity	$C_n$	mVV	$2.0 \pm 10\%$ (option 6: $\pm 0.1\%$ )				
Zero signal error			$\pm 0.1$				
Temperature coefficient of the sensitivity per 10 K <sup>2)</sup> in the temperature range +20 to +40 °C -10 to +20 °C	$TK_C$	% of $C_n$	$\pm 0.0175$ $\pm 0.0117$				
Non-linearity <sup>2)</sup>	$d_{ln}$		$\pm 0.0166$				
Relative reversibility error <sup>2)</sup>	$d_{ry}$		$\pm 0.0166$				
Minimum dead load output return	MDLOR		$\pm 0.0166$				
Off-center load error <sup>3)</sup>		ppm	$\leq 233$				
Input resistance	$R_{LC}$	$\Omega$	$380 \pm 15$				
Output resistance	$R_D$	$\Omega$	$350 \pm 10$ (option 6: $359 \pm 0.2$ )				
Reference excitation voltage	$U_{ref}$	V	5				
Nominal (rated) range of the excitation voltage	$B_U$	V	1 to 12				
Maximum excitation voltage			15				
Insulation resistance at 100 V <sub>DC</sub>	$R_{i2}$	G $\Omega$	$> 2$				
Nominal (rated) temperature range	$B_T$	°C	-10 to +40				
Operating temperature range	$B_{tu}$	°C	-10 to +50				
Storage temperature range	$B_{st}$		-25 to +70				
Limit load at max. 100 mm eccentricity	$E_L$		150				
Limit lateral loading, static	$E_{lq}$	% of $E_{max}$	300				
Breaking load	$E_D$		300				
Nominal (rated) displacement <sup>4)</sup>	$s_{nom}$	mm	$< 0.2$	$< 0.2$	$< 0.25$	$< 0.25$	$< 0.3$
Displacement at 1/3 $E_{max}$ and 283 mm eccentricity	$s_{exz}$	mm	$< 0.1$	$< 0.15$	$< 0.2$	$< 0.25$	$< 0.3$
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) <sup>5)</sup>				
Cable length (standard)		m	3				
Material: measuring body, cable entry cable sheath cover			steel 1.4545 <sup>6)</sup> PVC steel 1.6908				

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

<sup>2)</sup> The values for non-linearity ( $d_{ln}$ ), relative reversibility error ( $d_{ry}$ ) 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.

<sup>3)</sup> As per OIML R76.

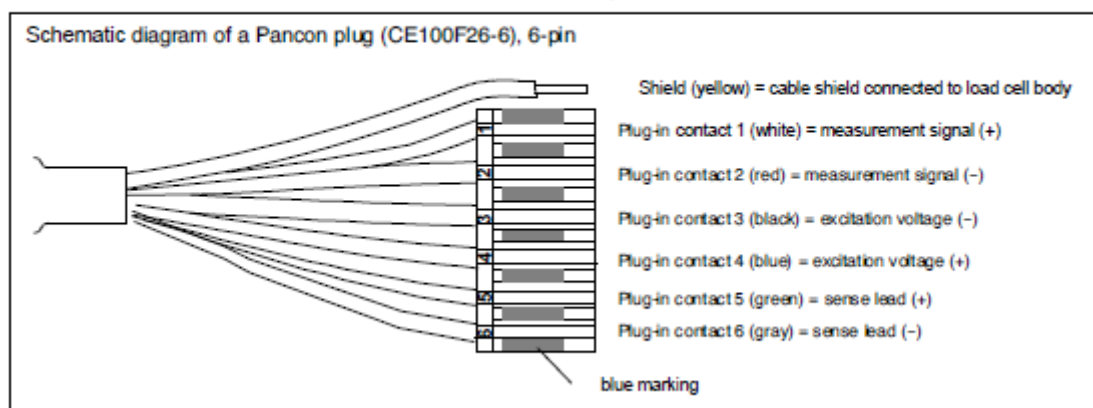
<sup>4)</sup> Loading with  $E_{max}$  and center of gravity in center of load cell.

<sup>5)</sup> Based on DIN 40050, Part 9 specifications, for road vehicles.

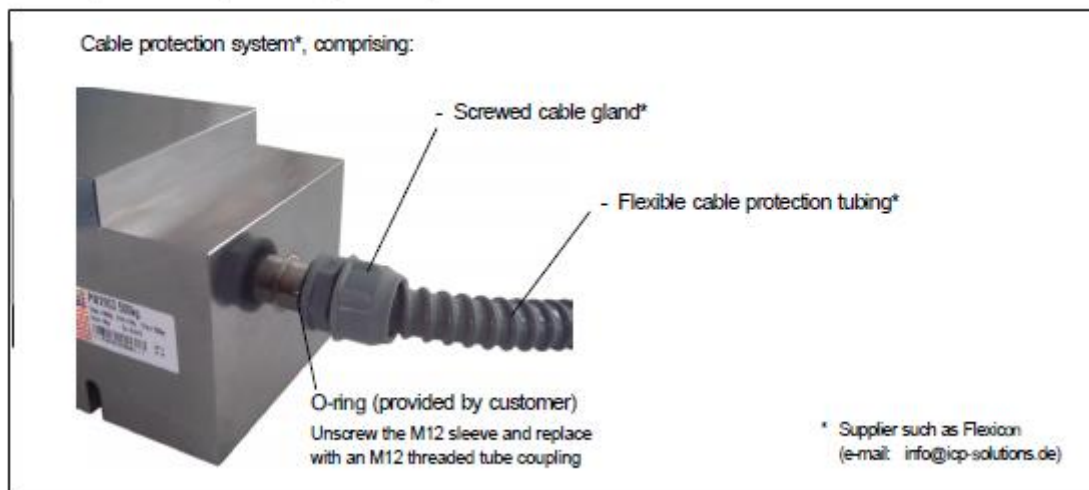
<sup>6)</sup> As per EN 10088-1.

## Cable assignment

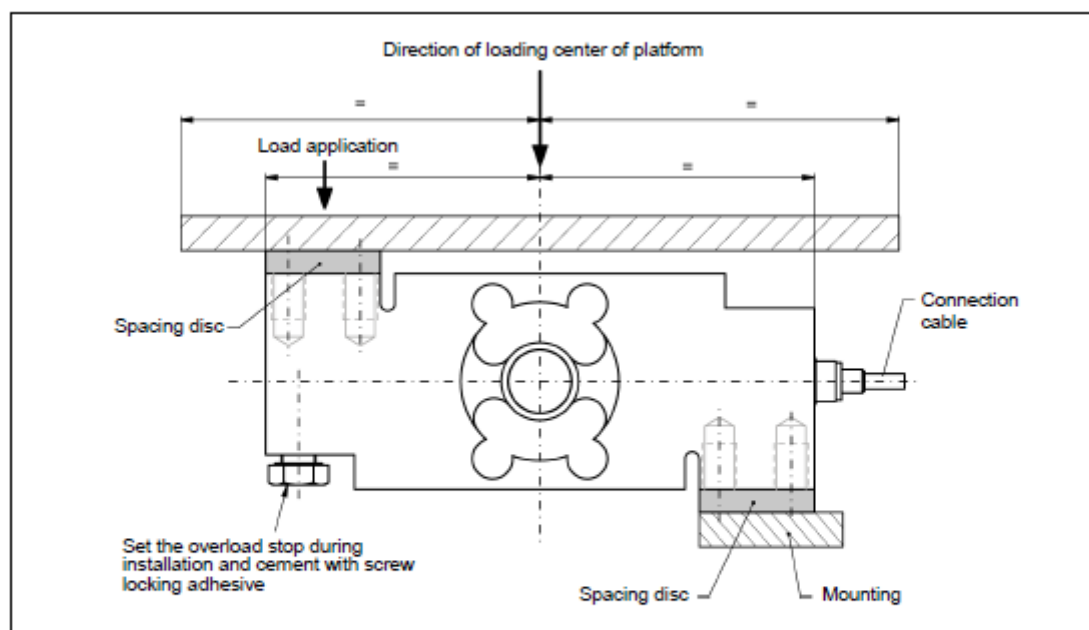
Connection with 6-wire cable (choice of cable lengths: 3 m, 6 m)



## 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 - N - C3 - 100 - N - 6 - N