


## Bending Beam Load Cell PR 6207 and Mounting Kit PR 6007

The tough standard solution for industry



German Quality

 The load cells of the PR 6207 series have been specially designed for weighing process vessels and use in belt and platform scales. When combined with the mounting kit PR 6007, they ensure that movements caused by mechanical or thermal contraction or expansion of the vessel and/or the supporting construction have a negligible effect on the weighing result.

The right solution for all of these applications:



Weighing



Filling and dosing



Fill quantity  
control

## Technical specifications

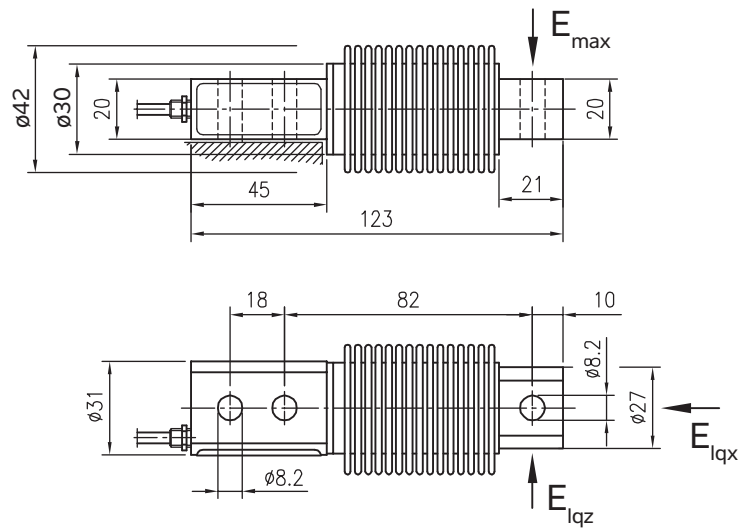
Bending beam load cell PR 6207					
Parameters	Description	Abbr.	D1	C3	Unit
Accuracy class			5.00%	1.00%	%E <sub>max</sub>
Minimal dead load	Lowest limit of specified measuring range	E <sub>min</sub>	0	0	%E <sub>max</sub>
Maximum capacity	Highest limit of specified measuring range	E <sub>max</sub>	See ordering information table		kg
Safe load limit	Maximum load possible without irreversible damage	E <sub>lim</sub>	150	150	%E <sub>max</sub>
Destructive load	Danger of mechanical destruction	E <sub>d</sub>	150	150	%E <sub>max</sub>
Safe load limit Z direction	Highest limit for statistical load in Z direction	E <sub>lqz</sub>	200	200	%E <sub>max</sub>
Minimum LC verification	Minimum load cell verification interval, $V_{min} = E_{max}/Y$	Y	2778	11111	
Rated output	Relative output signal at maximum capacity	C <sub>n</sub>	2	2	mV/V
Tolerance on rated output	Permissible deviation from rated output C <sub>n</sub>	d <sub>c</sub>	< (+1.0-0.1)	< 0.1	%C <sub>n</sub>
Zero output signal	Load cell output signal under unloaded condition	S <sub>min</sub>	< 1.0	< 1.0	%C <sub>n</sub>
Reproducibility	Max. change in load cell output for repeated loading	ε <sub>R</sub>	< 0.03	< 0.01	%C <sub>n</sub>
Creep	Max. change of output signal at E <sub>max</sub> during 30 min.	d <sub>cr</sub>	< 0.05	< 0.017	%C <sub>n</sub>
Non-linearity	Deviation from best straight line through zero	d <sub>lin</sub>	< 0.05	< 0.018	%C <sub>n</sub>
Hysteresis	Max. difference in between loading and unloading	d <sub>hy</sub>	< 0.05	< 0.017	%C <sub>n</sub>
Temperature effect (TK) of S <sub>min</sub>	Max. change of S <sub>min</sub> in B <sub>T</sub>	TK <sub>Smin</sub>	< 0.05	< 0.013	%C <sub>n</sub> /10 K
TK of parameter	Max. change of C in B <sub>T</sub>	TK <sub>C</sub>	< 0.05	< 0.008	%C <sub>n</sub> /10 K
Input impedance	Between supply terminals	R <sub>LC</sub>	350 to 480	350 to 480	Ω
Output impedance	Between measuring terminals	R <sub>O</sub>	365 ± 0.2	365 ± 0.2	Ω
Insulation impedance	Between measuring circuit and housing at 100 V DC	R <sub>IS</sub>	>5000	>5000	MΩ
Nominal supply voltage range	In compliance with the technical data	B <sub>u</sub>	4 to 12	4 to 12	V
Max. supply voltage	Continuous operation without damage	U <sub>max</sub>	18	18	V
Nominal ambient temperature range	In compliance with the technical data	B <sub>T</sub>	-10 to +40	-10 to +40	°C
Service temperature range	Continuous operation without damage	B <sub>TU</sub>	-30 to +70	-30 to +70	°C
Storage temperature range	Without electrical and mechanical stress	B <sub>TI</sub>	-50 to +85	-50 to +85	°C
Vibration resistance	Resistance against oscillations (IEC 68-2-6-Fc)		20 g, 100 h, 10 to 150 Hz		
Nominal deflection	Max. elastic deforming under maximum capacity	S <sub>nom</sub>	0.3 to 0.4	0.3 to 0.4	mm
Material	Load cell: Stainless steel 1.4122 Bellows: Stainless steel 1.4541				
Protection class	IP67				
Cables	Length: 3 m Diameter: 5.4 mm Material of cable sheathing: PVC				
Bending radius	≥ 60 mm in case of fixed installation ≥ 120 mm in case of flexible installation				

## Mounting kits PR 6007

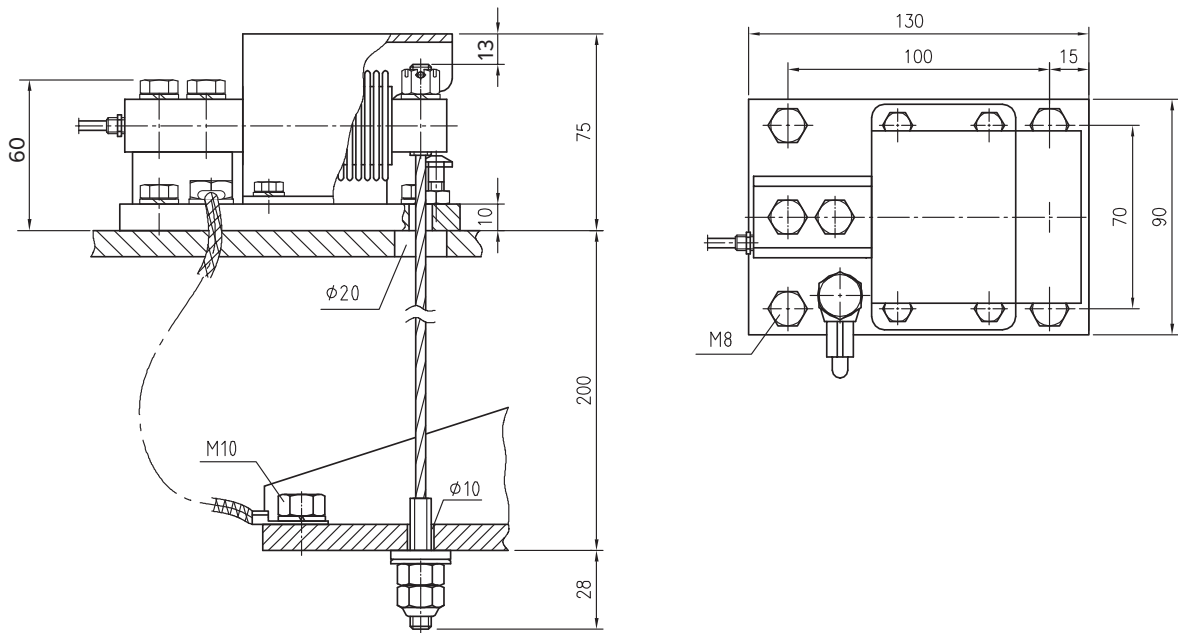
Maximum capacity of the load cell PR 6207	Mounting kit/ accessories	Material	Description/comments	Height (mm)
10 kg – 200 kg	PR 6007/00N	Steel, electrogalvanised surface yellow chromated	Mounting kit	75 (303)
	PR 6007/00S	Stainless steel	Mounting kit	

## Technical diagrams

### Bending beam load cell PR 6207



### Mounting kit PR 6007



## Ex approval

### Scope of validity:

Bending beam load cell PR 6207



Explosion protection

### Bending beam load cell PR 6207 certificates

Zone	Marking	Certificate number	For
2	II 3G Ex nA IIC T6 Gc	Manufacturer's declaration	All PR 6207
22	II 3D Ex tc IIIC T85 °C Dc	Manufacturer's declaration	All PR 6207

## Ordering information

### Bending beam load cells OIML R60, accuracy class D1 = 0.05%

Type	Maximum capacity	Order number
PR 6207/11D1	10 kg	940526207112
PR 6207/21D1	20 kg	940526207212
PR 6207/51D1	50 kg	940526207512
PR 6207/12D1	100 kg	940526207122
PR 6207/22D1	200 kg	940526207222

### Precision bending beam load cell OIML R60, accuracy class C3 = 0.017%

Type	Maximum capacity	Order number
PR 6207/11C3	10 kg	940526207118
PR 6207/21C3	20 kg	940526207218
PR 6207/51C3	50 kg	940526207518
PR 6207/12C3	100 kg	940526207128
PR 6207/22C3	200 kg	940526207228

## Accessories

### Mounting kits PR 6007 load cell accessories

Type	Order number
PR 6007/00N	940536007001
PR 6007/00S	940536007002

The products and solutions presented in this data sheet make major contributions in the following sectors:



Food  
and beverages



Agribusiness



Building materials



Machinery  
(OEM)

The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.

Specifications subject to change without notice.  
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