

# Load cell PR 6212, converter Connexx®

for maximum corrosion resistance



- (!) Load cell PR 6212 benefits
- Maximum corrosion resistance
- High-temperature version available for up to 180 °C
- Easy and failure-free installation using the mounting kit PR 6012
- (!) Mounting kit PR 6012 benefits
- Integrated jack-up and dummy function
- Low installation height



Digital Assistance Technology



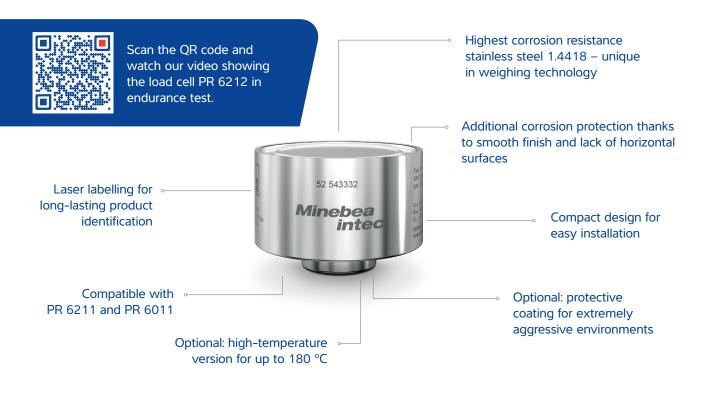
The load cell PR 6212 is a state-of-the-art product. This corrosion-resistant load cell has a compact design and also features high heat resistance. Its long product lifetime minimises downtime and ensures safer and more reliable processes in the chemical and steel industry.

### Corrosion resistance and precision for demanding applications

- ① Stainless steel 1.4418, unique in weighing technology, ensures maximum corrosion resistance. The PR 6212 is also available with protective coating for use in extremely aggressive environments.
- ① The perfectly coordinated combination of the load cell PR 6212 and mounting kit PR 6012 meets all precision and handling requirements. The inverted installation provides additional corrosion protection for the load cell and is simple and failure-free.
- ① The compact design ensures a low system height and allows for easy retrofitting of weighing technology.

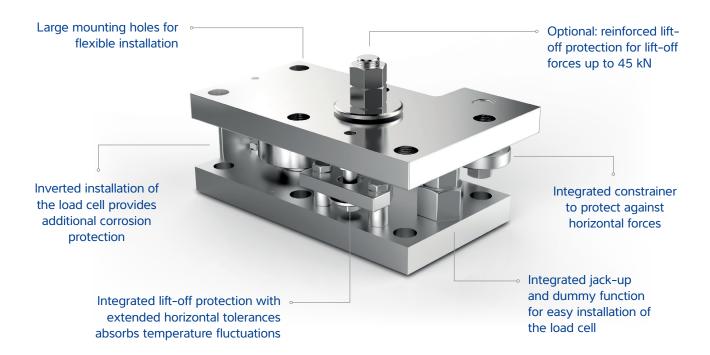
#### Less corrosion, more cost-efficiency

The combination of the load cell PR 6212 and mounting kit PR 6012 makes quick and easy installation possible and facilitates consistently reliable and precise measurement results in the chemical and steel industry.



#### Combined for reliable installation: PR 6212 and PR 6012 as a complete solution

The load cell PR 6212 is not only fully compatible with all mounting kits from the PR 6012 range but also with the previous PR 6011 range. The innovative complete solution ensures failure-free and efficient installation. Thanks to the integrated jack-up function there is no need for external lifting devices and even a load cell dummy is no longer required.



## Load cell technical specifications

Optionally available with protective coating for especially aggressive environments and as a high-temperature version

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Parameter	Description	Abbr.	PR 6212/ LT <sup>4)</sup> (high-temperature load cell)	PR 6212/ C1 <sup>1)</sup> PR 6212/ C1E <sup>2)</sup> PR 6212/ C1-L <sup>3)</sup> (load cell with protective coating)	Unit
Accuracy class			0,25	0,04	% E <sub>max</sub>
Minimum 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>	0,5; 1; 2; 3; 5	0,5; 1; 2; 3; 5; 10	t
Safe load limit	upper limit of measurements	E <sub>lim</sub>	150	150	% E <sub>max</sub>
Destructive load	danger of mechanical destruction	E <sub>d</sub>	>300	>300	% E <sub>max</sub>
Minimum LC verification		Υ	-	5000	
Rated output	relative output at maximum capacity	C <sub>n</sub>	2	2	mV/V
Tolerance on rated output	permissible deviation from rated output $C_n$	d <sub>c</sub>	<1,5	<0,25	% C <sub>n</sub>
Zero output signal	load cell output signal under unloaded condition	S <sub>min</sub>	0±2	0±2	% C <sub>n</sub>
Reproducibility	max. change in load cell output for repeated loading	ε <sub>R</sub>	<0,1	<0,01	% C <sub>n</sub>
Creep	max. change of output signal at E <sub>max</sub> during 30 minutes	d <sub>cr</sub>	<0,1	<0,035	% C <sub>n</sub>
Linearity deviation <sup>5)</sup>	deviation from best straight line through zero	d <sub>Lin</sub>	<0,25	<0,03	% C <sub>n</sub>
Hysteresis <sup>5)</sup>	max. difference in LC output between loading and unloading	d <sub>hy</sub>	<0,25	<0,035	% C <sub>n</sub>
Temperature effect on S <sub>min</sub>	max. change of $S_{\text{min}}$ per 10 K over BT referred to $C_{\text{n}}$	$TK_{Smin}$	<0,1	<0,028	% C <sub>n</sub> /10 K
Temperature effect on C <sup>5)</sup>	max. change of C per 10 K over $B_T$ referred to $C_n$	TK <sub>C</sub>	<0,07	<0,02	% C <sub>n</sub> /10 K
Input impedance	between supply terminals	R <sub>LC</sub>	1200 ±200	650 ±6	Ω
Output impedance	between measuring terminals	$R_0$	1200 ±6	610 ±1	Ω
Insulation impedance	between measuring circuit and housing at 100 V <sub>DC</sub>	R <sub>IS</sub>	>5000	>5000	ΜΩ
Insulation voltage	between circuit and housing (PR 6212/E only)		-	500	V
Recommended supply voltage	to hold the specified performance	Bu	424	424	V
Max. supply voltage	permissible for continuous operation without damage	U <sub>max</sub>	32	32	V
	PR 6212/E	U <sub>max</sub>	-	25	V
Nominal ambient temp. range	to hold the specified performance	B <sub>T</sub>	-10+155	-10+40	°C
Service temperature range	permissible for continuous operation without damage	B <sub>Tu</sub>	-30+180	-30+95	°C
Storage temperature range	without electrical and mechanical stress	B <sub>Ti</sub>	-40+180	-40+95	°C
Permissible inclination	permissible inclination whilst maintaining the specified measurement accuracy		1	1	angle in °
Vibration resistance	resistance against oscillations (IEC 60068-2-6-Fc)		20 g, 100 h, 10150 Hz	20 g, 100 h, 10150 Hz	
Ambient pressure impact	influence of ambient air pressure on $\boldsymbol{S}_{\scriptscriptstyle{\min}}$	$PK_{Smin}$	≤70	≤60	g/kPa
Nominal deflection	elastic deformation under maximum capacity	S <sub>nom</sub>	<0,2	<0,2	mm
Material (sensor)			1.4542 (DIN EN 10088-3)	1.4418 (DIN EN 10088-3)	
Protection class			according to IEC 529 - PR 6212: IP68*/IP69 - Connexx®: IP65 / IP 68*	*	
Cables			robust, flexible, shielded, length: 5 m		
			PR 6212/ LT PFA, colour: red, Ø 5 mm, 4 x 0,382 mm <sup>2</sup>	PR 6212/C1 TPE, colour: grey, Ø 5 mm, 4 x 0,355 mm <sup>2</sup> PR 6212/C1E TPE, colour: blue,	
Ponding radius			fixed installation >50 mm	Ø 5 mm, 4 x 0,382 mm flexible installation ≥150 mm	1
Bending radius			ii∧eu ii istaliatititi ≥50 MM,	HEVING HISTORIGION 5120 WILL	

<sup>1)</sup> C1 = load cell with C1 measurement accuracy | 2) C1-L = load cell with C1 measurement accuracy and special protective coating | 3) C1E = load cell with C1 accuracy for Ex applications | 4) LT = high-temperature version 5) The data for Non-linearity, hysteresis and TKC are typical values. For OIML R60 or NTEP approved load cells the sum of these values is within the permissible cumulative error limits.

Connexx®									
Nominal ambient temp. range	To hold the specified performance	B <sub>T</sub>	-10 +40	°C					
Usable temperature range	Permissible for continuous operation without damage	B <sub>Tu</sub>	-30 +60	°C					
Storage temperature range	Without electrical and mechanical stress	B <sub>Ti</sub>	-30 +70	°C					

<sup>\*</sup> The load cell can be submerged in water at a depth of 1.5 m for 10,000 hours. | \*\* The module can be submerged in water at a depth of 1.5 m for 100 hours.