

Electrical Load Cells – Model 610



- Capacities: 100kg to 750kg
- Shear beam load cell
- Resistant to lateral forces
- Aluminum
- High accuracy
- Sensitivity: 2mV/V
- TEDS module possible ¹⁾

The shear beam load cells of the model series 610 are typically used for the construction of industrial weighing or batching systems, e.g. for container or tanks. The load

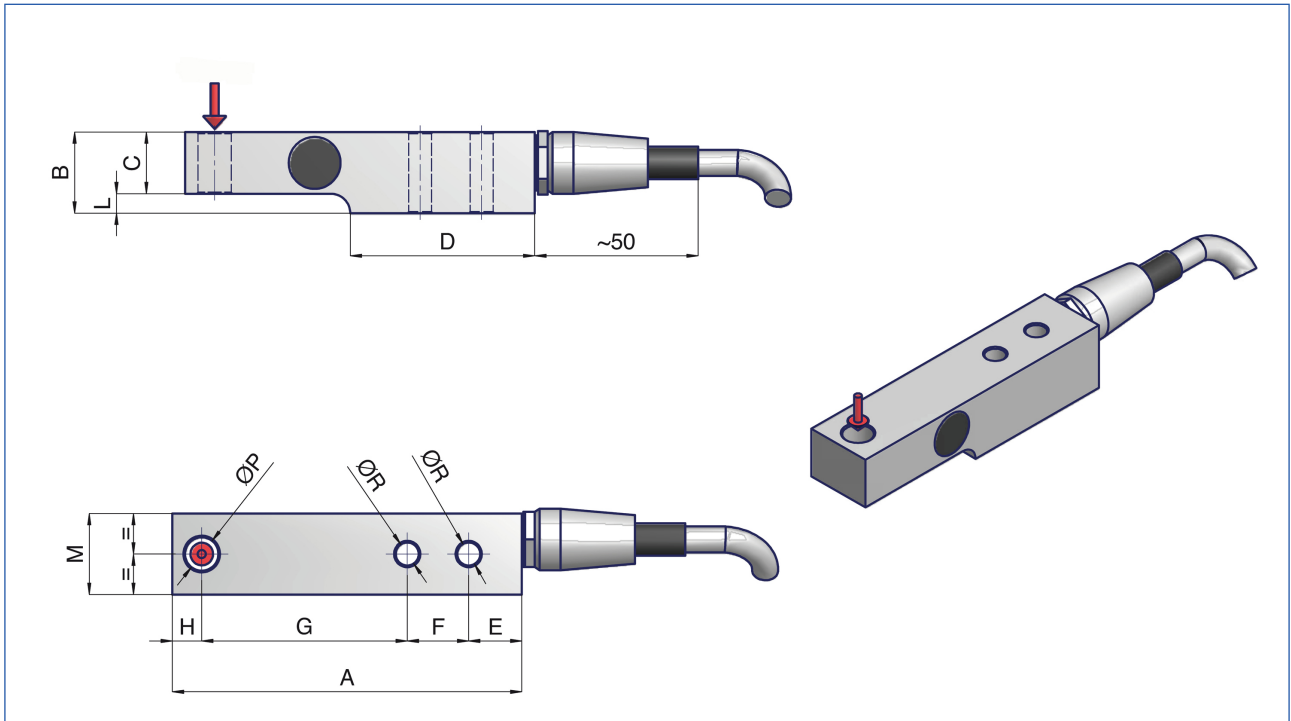
cells that are made of aluminum are excellently suitable for applications under rough, industrial conditions and are inured to lateral forces. On demand a TEDS modu-

le can be installed inside the plug for automatic sensor recognition. The model 610 is only available in the standard version.

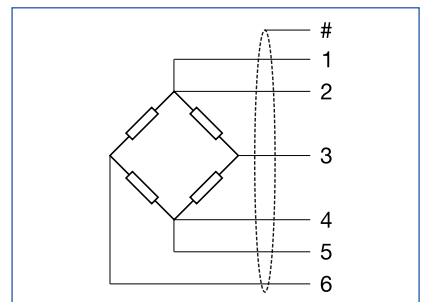
Model 610			
>> Technical data close to OIML R 60	Symbol	Unit	Standard
Zero signal when removed	S ₀	mV/V	0,02
Nominal rated sensitivity	C _n	mV/V	2
Sensitivity tolerance	T _n	% (≤ ±)	0,1
Combined error	F _{comb}	% (≤ ±)	0,03
Non linearity	d _{lin}	% (≤ ±)	0,021
Nominal temperature range	B _{T,nom}	°C	-10...+40
Operating temperature range	B _{T,G}	°C	-15...+60
Storage temperature range	B _{T,S}	°C	-20...+70
Creep after 30 min	K _{0,5}	% (≤ ±)	0,03
Temperature coefficient of sensitivity per 10K	TK _C	% (≤ ±)	0,006
Temperature coefficient of zero signal per 10K	TK ₀	% (≤ ±)	0,02
Input resistance	R _e	Ω	400 ± 20
Output resistance	R _a	Ω	350 ± 2
Insulation resistance	R _{is}	GΩ	> 5
Maximum excitation voltage	U _{max}	V	15
Reference excitation voltage	U _{ref}	V	10
Nominal range of excitation voltage	B _{U,nom}	V	5...10
Limit load	E _L	%	≤ 150
Breaking load	E _d	%	≥ 300
Max. permissible side load	L _s	%	100
Degree of protection according to DIN 60529			IP65

¹⁾ TEDS = Transducer Electronic Data Sheet acc. to IEEE 1451.4

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Dimensions in mm		
Model 610		
Capacities	100kg	350kg
	200kg	500kg
	250kg	750kg
A	108,0	137,0
B	25,0	38,0
C	19,0	26,4
D	57,0	86,0
E	16,4	19,5
F	19,0	25,4
G	63,5	82,6
H	9,1	9,5
L	6,0	11,6
M	25,0	28,0
P	10,3	10,3
R	7,1	10,3



Connection Drawing		
1	white	Sense +
2	red	Excitation +
3	yellow	Output +
4	blue	Excitation -
5	black	Sense -
6	green	Output -
#		Shield

Advice for load in tensile direction:

For load application please pay attention to an installation that is free of lateral forces, if necessary use rotating intermediate parts or joint heads with shackles.

For safety reasons you should use arresting cables, straps or chains when other mechanical protection is not existing.