

## Electrical Load Cells – Model 649



- Capacities: 10kg to 1,5t
- Bending beam load cell
- Calibratable acc. to OIML R 60
- Standard, class C3 and C4
- Stainless steel
- Highest accuracy
- Sensitivity: 2mV/V
- TEDS module available <sup>1)</sup>

The bending beam load cells of the model series 649 that are made of stainless steel are for example used for the construction of belt weighers, batching and weighing

systems for industrial products and platform scale, as well as for hybrid scales and testing facilities in laboratories. A TEDS module inside the plug is available on de-

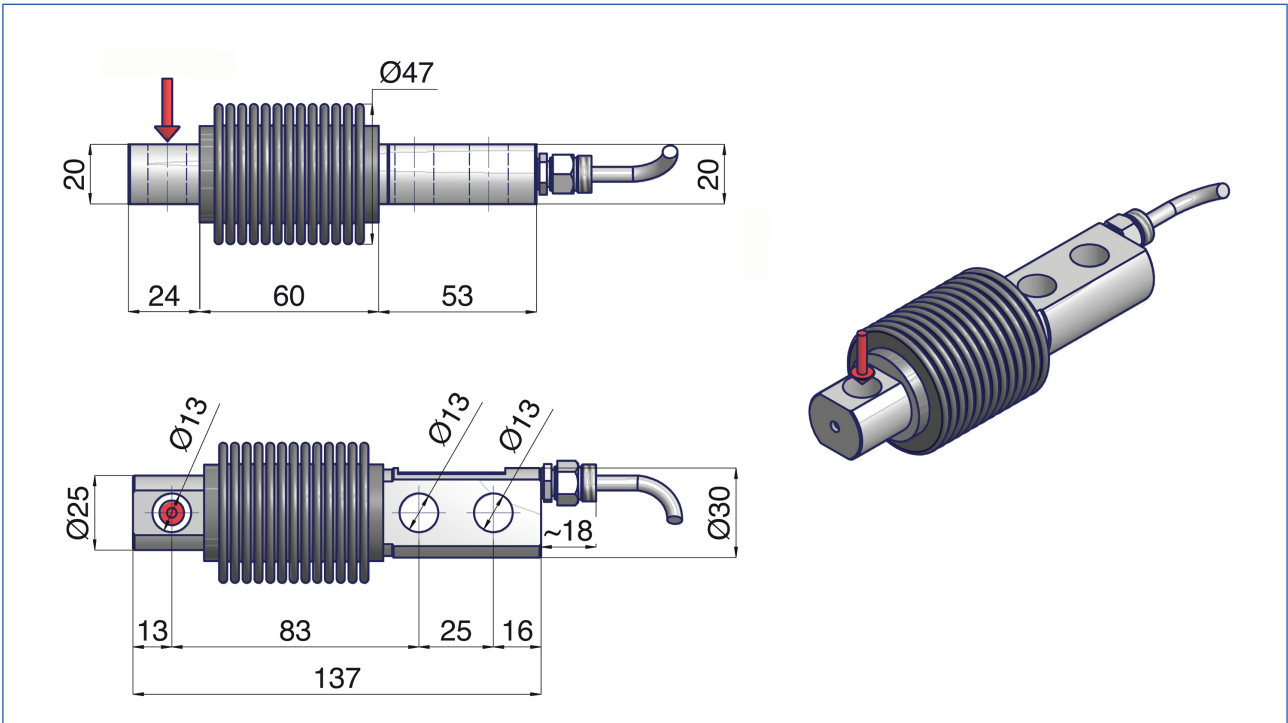
mand. The model 649 is provided in the standard version and in the calibratable versions according to OIML R 60, accuracy classes C3 and C4.

Model 649					
>> Technical data according to OIML R 60	Symbol	Unit	Standard	C3	C4
Number of scale intervals	N <sub>LC</sub>	d	-	3.000	4.000
Minimum scale division	V <sub>min</sub>	%	-	12.000	15.000
Zero signal when removed	S <sub>0</sub>	mV/V		0,01	
Nominal rated sensitivity	C <sub>n</sub>	mV/V		2	
Sensitivity tolerance	T <sub>n</sub>	% (≤ ±)		0,1	
Combined error	F <sub>comb</sub>	% (≤ ±)	0,025	0,022	0,018
Non linearity	d <sub>lin</sub>	% (≤ ±)	0,0175	0,0154	0,0126
Nominal temperature range	B <sub>T, nom</sub>	°C		-10...+40	
Operating temperature range	B <sub>T, G</sub>	°C		-15...+60	
Storage temperature range	B <sub>T, S</sub>	°C		-20...+70	
Creep after 30 min	K <sub>0,5</sub>	% (≤ ±)	0,03	0,024	0,018
Temperature coefficient of sensitivity per 10K	TK <sub>C</sub>	% (≤ ±)	0,008	0,003	0,0025
Temperature coefficient of zero signal per 10K	TK <sub>0</sub>	% (≤ ±)	0,02	0,018	0,01
Input resistance	R <sub>e</sub>	Ω		400 ± 25	
Output resistance	R <sub>a</sub>	Ω		350 ± 2	
Insulation resistance	R <sub>is</sub>	GΩ		> 5	
Maximum excitation voltage	U <sub>max</sub>	V		15	
Reference excitation voltage	U <sub>ref</sub>	V		10	
Nominal range of excitation voltage	B <sub>U, nom</sub>	V		5...10	
Limit load	E <sub>L</sub>	%		≤ 150	
Breaking load	E <sub>d</sub>	%		≥ 300	
Max. permissible side load	L <sub>S</sub>	%		-	
Degree of protection according to DIN 60529				IP 67	

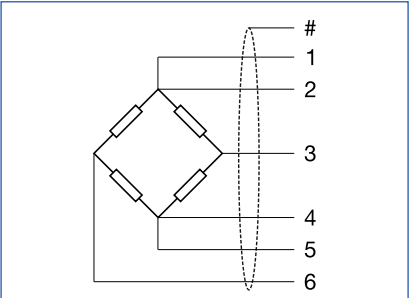
<sup>1)</sup> TEDS = Transducer Electronic Data Sheet acc. to IEEE 1451.4

Centered data is valid for all three device classes

# Electrical Load Cells – Model 649



Capacities					
Model 649					
	10kg	50kg	150kg	300g	750kg
	20kg	75kg	200kg	500kg	1.000kg
		100kg	250kg		1.500kg
Available versions	Standard	Standard	Standard	Standard	Standard
	C3	C3	C3	C3	
		C4	C4	C4	



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