

Single point load cell 0...3 kg bis 0...250 kg Model F4801

Applications

- Electronic precision scales
- Industrial weighing systems

Special features

- Measurement ranges 0...3 kg up to 0...250 kg
- Made of aluminum alloy
- High accuracy
- High side load tolerance
- Simple structure
- Easy to install



Description

Single point load cells are especially designed to be used in platform weighing. They can be mounted under the platform without any further construction or calibration processes.

The load cell is easy to operate due to its simple way of the force direction. It applied vertically to the load cell axis.

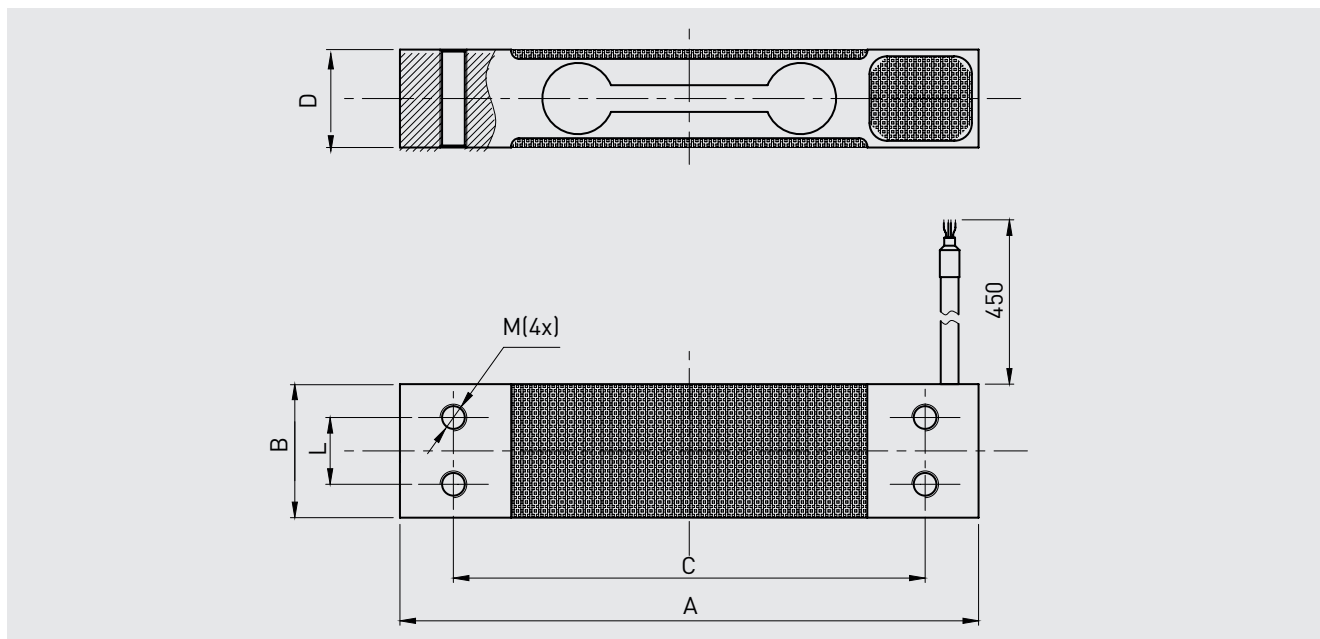
Note

The load cells are to be mounted on an even surface. The permitted load direction is marked with an arrow symbol.

Specifications in accordance with VDI/VDE/DKD 2638

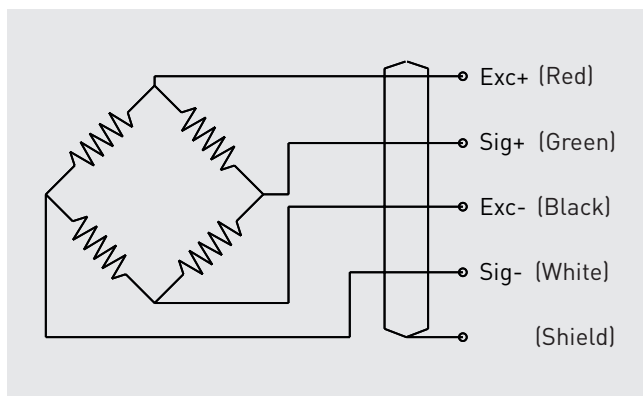
Model series	Symbol	Unit	F4801									
Measurement range												
Nominal load	F_{nom}	kg	3	4	5	6	8	10	15	20	25	
			30	40	45	50	60	100	150	200	250	
Accuracy and stability												
Relative linearity error	d_{lin}	$\times\%F_{nom}$	± 0.02									
Relative reversibility	v	$\times\%F_{nom}$	± 0.02									
Relative repeatability error in unchanged mounting position	b_{rg}	$\times\%F_{nom}$	± 0.02									
Relative deviation of zero signal	$d_{S,0}$	$\times\%F_{nom}$	± 2									
Relative creep, 30 at min.		$\times\%F_{nom}$	± 0.02									
Temperature effect on zero signal	TK_0	$\%/10\text{ }^{\circ}\text{C}$	$\leq \pm 0.02$									
Temperature effect on characteristic value	TK_C	$\%/10\text{ }^{\circ}\text{C}$	$\leq \pm 0.02$									
Mechanical characteristics												
Force limit	F_L	$\times\%F_{nom}$	150									
Breaking force	F_B	$\times\%F_{nom}$	200									
Material			Aluminum									
Temperature ranges												
Rated temperature range	$B_{T,nom}$	$^{\circ}\text{C}$	-10...40									
Operating temperature range	$B_{T,G}$	$^{\circ}\text{C}$	-20...60									
Electrical characteristics												
Output signal (rated output)	C_{nom}	mV/V	$2.0 \pm 10\%$									
Input resistance	R_e	Ω	410 ± 10									
Output resistance	R_a	Ω	350 ± 5									
Insulation resistance	R_{is}	M Ω	$\geq 2,000/\text{DC } 100\text{ V}$									
Recommended excitation voltage		V	10									
Maximum excitation voltage		V	15									
Electrical connection			Cable $\varnothing 3 \times 450\text{ mm}$									
General data												
Protection (acc. to EN/IEC 60529)			IP65									
Platform size		mm	250 x 300									
Weight		kg	0,3 (3 up to 50 kg) 0,4 (60 up to 250 kg)									

Dimensions in mm



Nominal load in kg	Dimensions in mm					
	A	B	C	D	L	M
3, 4, 5, 6, 8, 10, 15, 20, 25, 30, 40, 45, 50	130	30	106	22	15	M6
60, 100, 150, 200, 250	130	50	106	22	25	M8

Pin assignment



Electrical connection	
Excitation voltage (+)	Red
Excitation voltage (-)	Black
Signal (+)	Green
Signal (-)	White
Screen	Screen

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We reserve the right to make modifications to the specifications and materials.