

Single point load cell

For Heavy Duty platforms 0...100 kg up to 0...2,000 kg

Model F4817

Applications

- Platform scales
- Filling scales
- Belt scales
- Packaging scales
- Dynamic testing system

Special features

- Measurement ranges 0...100 kg up to 0...2,000 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.

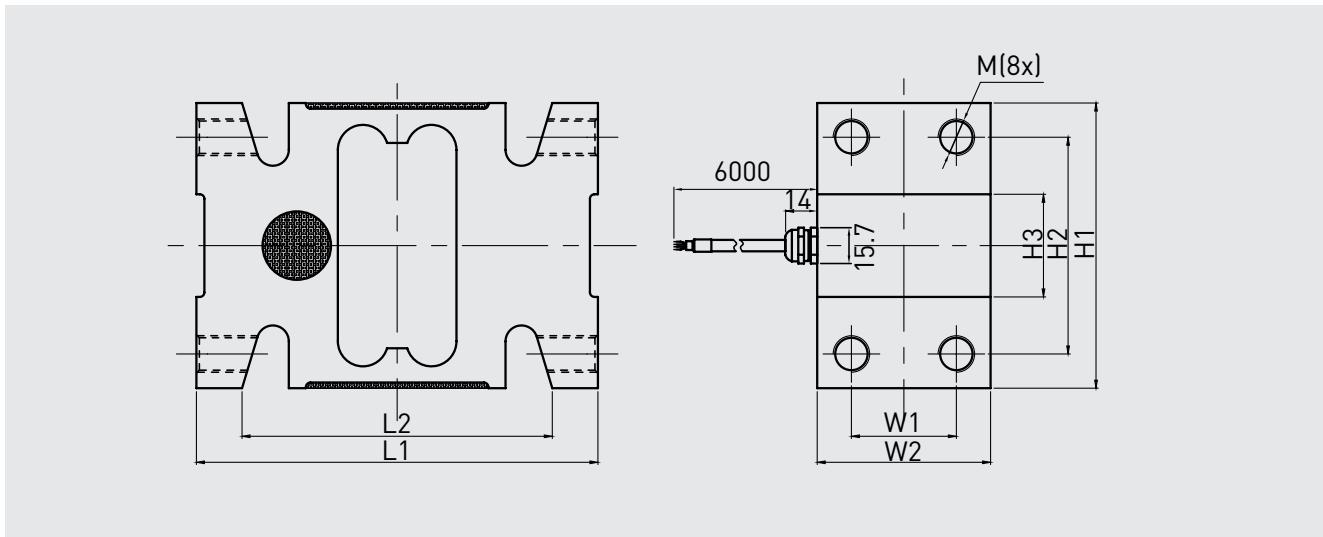
Note

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

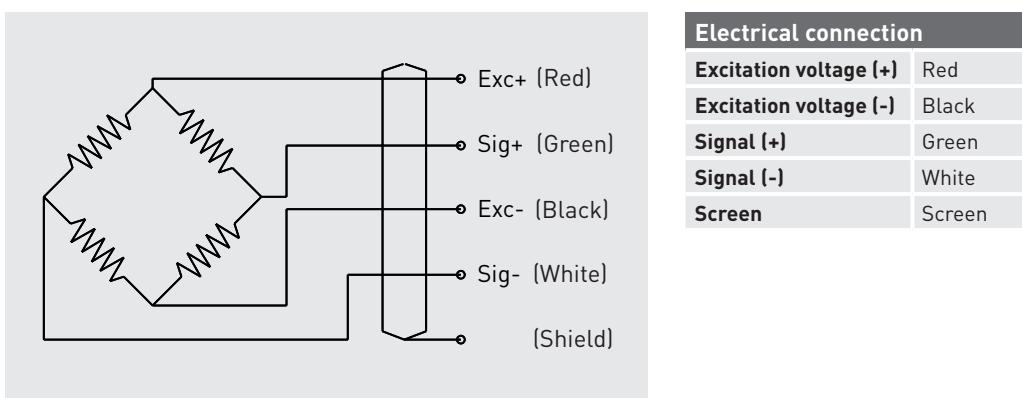
Model series	Symbol	Unit	F4812					
Measurement range								
Nominal load	F_{nom}	kg	100	150	200	300	500	600
			750	800	1,000	1,500	2,000	
Accuracy and stability								
Relative linearity error	d_{lin}	$\text{x\%} F_{\text{nom}}$	± 0.02					
Relative reversibility	v	$\text{x\%} F_{\text{nom}}$	± 0.02					
Relative repeatability error in unchanged mounting position	b_{rg}	$\text{x\%} F_{\text{nom}}$	± 0.02					
Relative deviation of zero signal	$d_{s,0}$	$\text{x\%} F_{\text{nom}}$	± 2					
Relative repeatability error in unchanged mounting position	b_{rg}	$\text{x\%} F_{\text{nom}}$	0.02					
Relative creep, 30 at min.		$\text{x\%} F_{\text{nom}}$	± 0.02					
Temperature effect on zero signal	TK_0	$\text{\%}/10 \text{ }^{\circ}\text{C}$	$\leq \pm 0.025$					
Temperature effect on characteristic value	TK_c	$\text{\%}/10 \text{ }^{\circ}\text{C}$	$\leq \pm 0.025$					
Mechanical characteristics								
Force limit	F_L	$\text{x\%} F_{\text{nom}}$	150					
Breaking force	F_B	$\text{x\%} F_{\text{nom}}$	200					
Material			Aluminum					
Temperature ranges								
Rated temperature range	$B_{T, \text{nom}}$	$^{\circ}\text{C}$	-10...40					
Operating temperature range	$B_{T, G}$	$^{\circ}\text{C}$	-20...60					
Electrical characteristics								
Output signal (rated output)	C_{nom}	mV/V	$2.0 \pm 10 \text{ \%}$					
Input resistance	R_e	Ω	410 ± 10					
Output resistance	R_a	Ω	350 ± 5					
Insulation resistance	R_{is}	$\text{M}\Omega$	$\geq 2,000/\text{DC } 100 \text{ V}$					
Recommended excitation voltage		V	10					
Maximum excitation voltage		V	15					
Electrical connection			Cable Ø 5 x 6,000 mm					
General data								
Protection (acc. to EN/IEC 60529)			IP65					
Platform size		mm	800 x 1,000 (up to 600 kg) 1,200 x 1,200 (up to 750 kg)					
Weight		kg	1.4 (up to 600 kg) 4.7 (from 750 kg)					

Dimensions in mm



Nominal load in kg	Dimensions in mm							
	L1	L2	H1	H2	H3	W2	W1	M
100, 150, 200, 300, 500, 600	140	-	75	50	30	46	25	M10
750, 800, 1,000, 1,500, 2,000	176	134	125	95	45	76	46	M16

Pin assignment



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