

Single point load cell

Up to 200 kg

Model F4221

WIKA data sheet FO 53.15

Applications

- Apparatus construction
- Laboratory-, letter- and analytic scales
- Measuring and testing devices
- Controlling devices

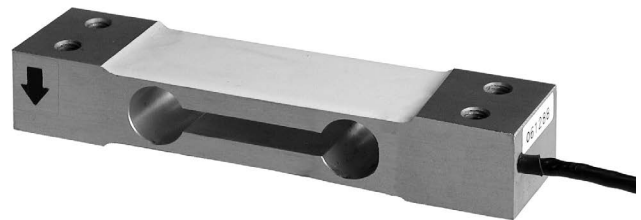
Special features

- Measuring ranges 0 ... 0.6 kg up to 0 ... 200 kg
- Made of aluminum alloy
- High accuracy
- Insensitive to side and corner loads
- Simple structure, easy to install

Description

Single point load cells are especially designed to be used in platform trucks. 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.



Single point load cell, model F4221

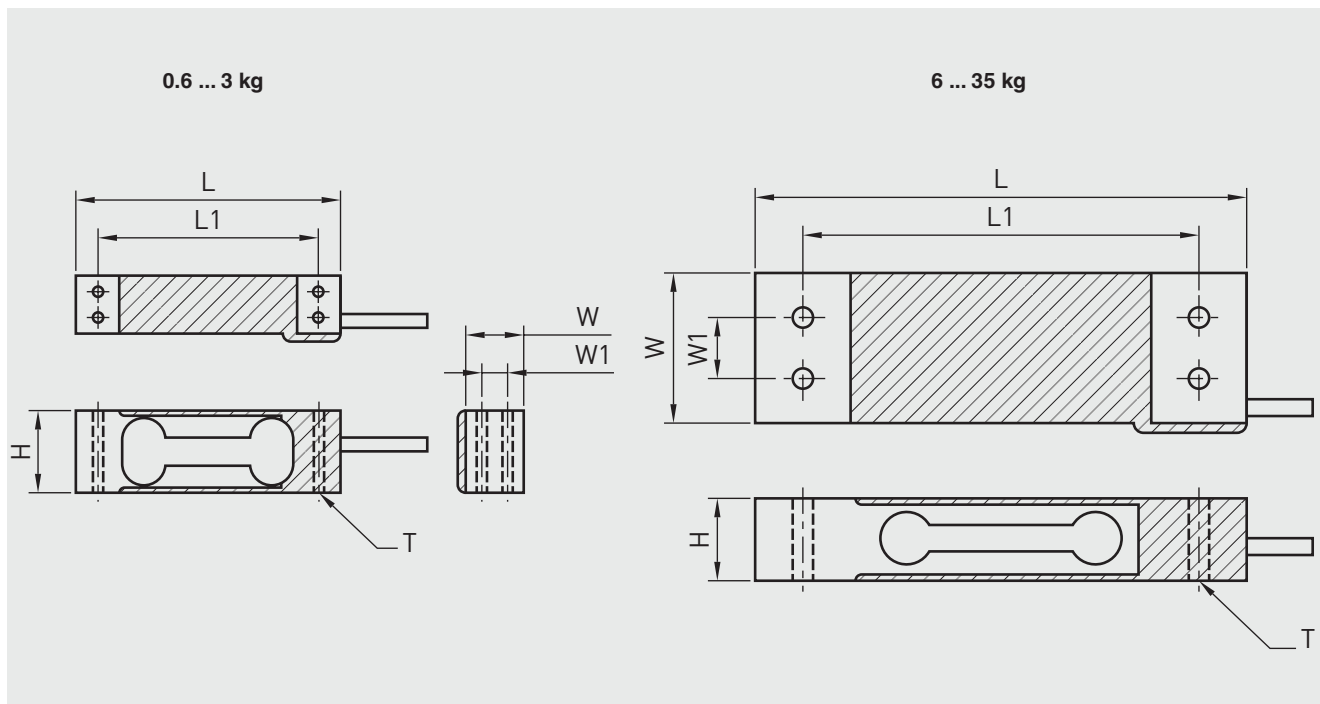
Note

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

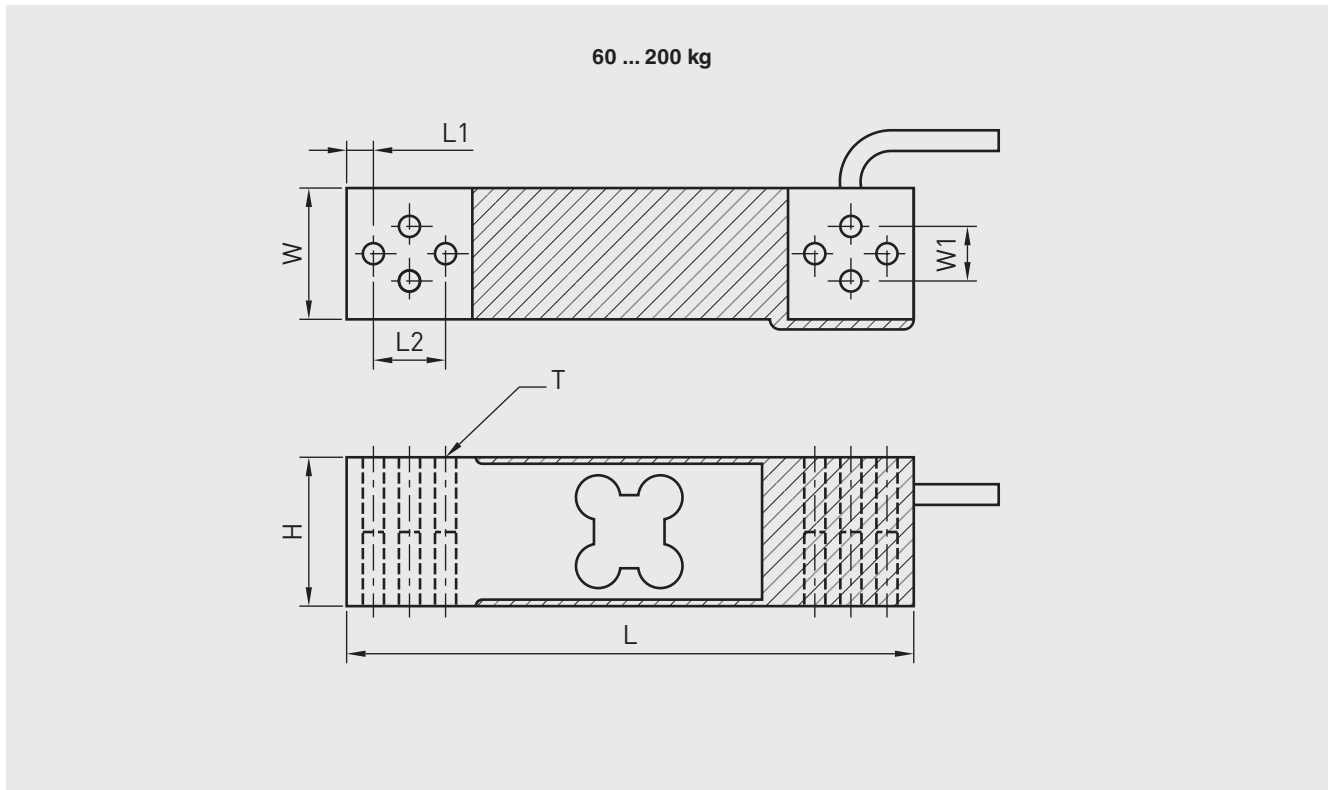
Specifications in accordance with VDI/VDE/DKD 2638

Model F4221			
Nominal load F_{nom} kg	0.6, 1, 2, 3	5, 6, 10, 15, 20, 30, 35, 50	60, 100, 200
Platform size in mm	200 x 200	300 x 300	400 x 400
Cable length in cm	30	40	200
Relative linearity error d_{lin}	$\pm 0.025 \% F_{nom}$		
Relative reversibility v	$\pm 0.02 \% F_{nom}$		
Relative creep, 30 min. with F_{nom}	$\leq \pm 0.03 \% F_{nom}$		
Relative deviation of zero signal $d_{S,0}$	$\pm 3 \% F_{nom}$		
Temperature effect on zero signal TK_0	$\leq \pm 0.015 \%/10 K$		
Temperature effect on characteristic value TK_C	$\leq \pm 0.3 \%/10 K$		
Force limit F_L	150 % F_{nom}		
Breaking force F_B	$> 200 \% F_{nom}$		
Permissible vibration loading F_{rb}	$\pm 70 \% F_{nom}$ (acc. to DIN 50100)		
Rated displacement (typical) s_{nom}	< 1 mm		
Material of measuring body	Aluminium		
Rated temperature range $B_{T,nom}$	$-10 \dots +40$ °C		
Operating temperature range $B_{T,G}$	$-20 \dots +60$ °C		
Storage temperature range $B_{T,S}$	$-40 \dots +70$ °C		
Input resistance R_e	$410 \pm 10 \Omega$		
Output resistance R_a	$350 \pm 3 \Omega$		
Insulation resistance R_{is}	$\geq 5,000 M\Omega/DC 50 V$		
Output signal (rated output) C_{nom}	2.0 mV/V (optional 0(4) ... 20 mA, DC 0 ... 10 V)		
Electrical connection	Cable 4-wire		
Rated range of excitation voltage $B_{U,nom}$	10 V (max. 15 V)		
Protection (acc. to IEC/EN 60529)	IP65		
Options	Silicone-free version, other cable length		

Dimensions in mm



Dimensions in mm



Nominal load in kg	L	L1	L2	W	W1	H	T	Connection cable
0,6, 1, 2, 3	70	58	-	15	7	22	M3 x 0,5	0,3 m
5, 6, 10, 15, 20	130	106	-	30	15	22	M6 x 1	0,45 m
30, 35, 50	130	106	-	30	15	22	M6 x 1	0,45 m
60, 100, 200	150	7	19	35	15	40	M6 x 1	2 m

Pin assignment

Electrical connection		
	up to 50 kg	from 60 kg
Excitation voltage (+)	Red	Red
Excitation voltage (-)	Blue or black	Black
Signal (+)	Green	Green
Signal (-)	White	White
Screen ⊕	Screen	Screen

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

