

Single point load cell

Up to 300 kg

Model F4883

WIKA data sheet FO 53.18

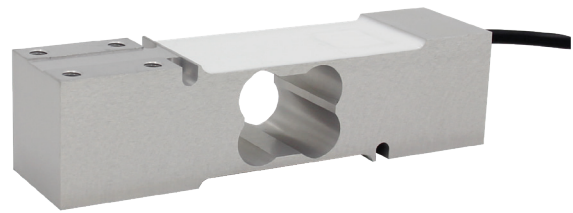
EAC

Applications

- Checkweighers
- Belt weighers, floor and bench scales
- Filling applications
- Dosing systems

Special features

- Measuring ranges 0 ... 8 kg to 0 ... 300 kg
[0 ... 18 lbs to 0 ... 661 lbs]
- Load cell made from aluminium
- High accuracy, react quickly, low settling time
- Insensitive to lateral and corner load
- Simple design, easy installation



Load cell, model F4883

Description

The model F4883 single point load cells are a range of aluminium single point load cells suitable for a wide range of applications. Thanks to their standardised geometry and simple design, they can be easily installed in all types of scales.

The model F4883 load cells are adapted to the special requirements of checkweighers and feature a particularly short settling time, so that the weight of the goods being recorded can be determined as quickly as possible.

The load cells are also suitable for use in sectors such as industry, commerce, medicine and research.

The model F4883 single point load cells also feature high accuracy and react quickly. They are also insensitive to lateral and corner loading.


The load cells are easy to handle due to their simple force introduction. This is made perpendicular to the geometry.

Specifications per VDI/VDE/DKD 2638

Model F4883							
Rated load F_{nom} kg	8	15	20	50	100	200	300
Rated load F_{nom} lbs	18	33	44	110	220	441	661
Relative linearity error $d_{lin}^{1)}$	$\pm 0.02 \% F_{nom}$						
Relative creep, 30 min.	$\pm 0.02 \% F_{nom}$						
Relative reversibility error v	$\pm 0.02 \% F_{nom}$						
Relative deviation of zero signal $d_{s,0}$	$\pm 5 \% F_{nom}$						
Temperature effect on zero signal TK_0	$\leq \pm 0.014 \% / 10 K$						
Temperature effect on characteristic value TK_C	$\leq \pm 0.02 \% / 10 K$						
Force limit F_L	150 % F_{nom}						
Breaking force F_B	200 % F_{nom}						
Material of the measuring body	Aluminium						
Rated temperature range $B_{T, nom}$	-10 ... +40 °C [14 ... 104 °F]						
Operating temperature range $B_{T, G}$	-20 ... +65 °C [-4 ... 149 °F]						
Input resistance R_e	410 \pm 10 Ω						
Output resistance R_a	350 \pm 5 Ω						
Insulation resistance R_{is}	$\geq 5,000 M\Omega / DC 100 V$						
Output signal (rated characteristic value) C_{nom}	2.0 \pm 0.2 mV/V						
Electrical connection	Measuring cable $\varnothing 5 \times 3,000$ mm [$\varnothing 0.2 \times 118$ in]						
Supply voltage $U_{B, nom}$	DC 5 ... 10 V (max. 15 V)						
Ingress protection (per IEC/EN 60529)	IP66						
Platform size	600 x 500 mm [23.62 x 19.69 in]						
Weight	0.6 kg [1.32 lbs]						

1) Relative linearity error is specified in accordance with guideline VDI/VDE/DKD 2638 chap. 3.2.6.

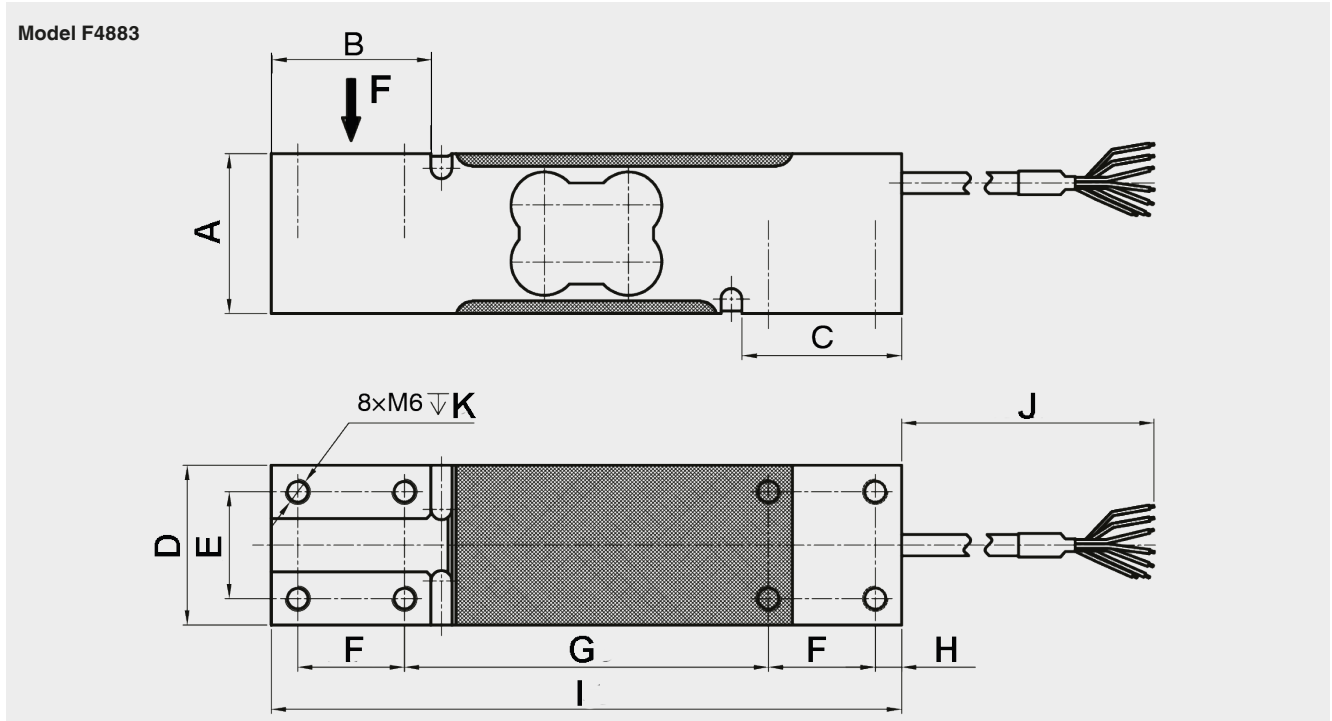
Approvals

Logo	Description	Region
	EU declaration of conformity RoHS directive	European Union
	UKCA RoHS directive	United Kingdom

Optional approvals

Logo	Description	Region
	EAC	Eurasian Economic Community

Dimensions in mm [in]

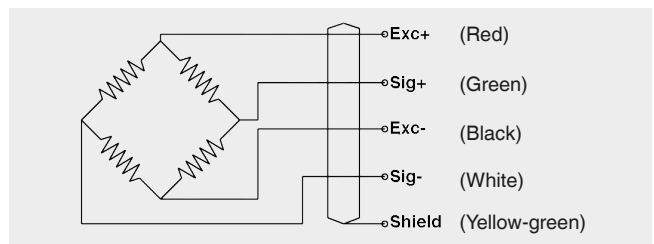


Dimensions in mm										
A	B	C	D	E	F	G	H	I	J	K
38	38	38	38	25.4	25.4	86.6	6.3	150	3,000 ±100	12

Dimensions in inch										
A	B	C	D	E	F	G	H	I	J	K
1.5	1.5	1.5	1.5	1	1	3.41	0.25	5.91	118 ±3.94	0.47

Pin assignment

Electrical connection		
Supply voltage+	Exc+	Red
Supply voltage-	Exc-	Green
Signal+	Sig+	Black
Signal-	Sig-	White
Shield ⊕	Shield	Yellow-green



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