

Single point load cell

Up to 10 kg

Model F4802

WIKA data sheet FO 53.13

Applications

- Precision scales
- Industrial scales, medical engineering
- Belt weighers
- Bench scales
- Dosing systems

Special features

- Measuring ranges 0 ... 0.3 kg to 0 ... 10 kg
[0 ... 0.7 lbs to 0 ... 22 lbs]
- Load cell made from aluminium
- High accuracy and quick reponse
- Insensitive to lateral and corner load
- Simple design, easy installation



Single point load cell, model F4802

Description

The model F4802 single point load cells are a series 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 F4802 load cells are used in various areas such as industry, commerce, medicine and research.

The most common application area is in precision, industry and bench scales as well as belt weighers, to measure the weight of products (e.g., food, bulk material, feed). Load cells are also used in the packaging industry, manufacturing as well as material testing.

The single point load cells feature high accuracy and a quick reponse. Moreover, they are insensitive to lateral and corner loads.

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

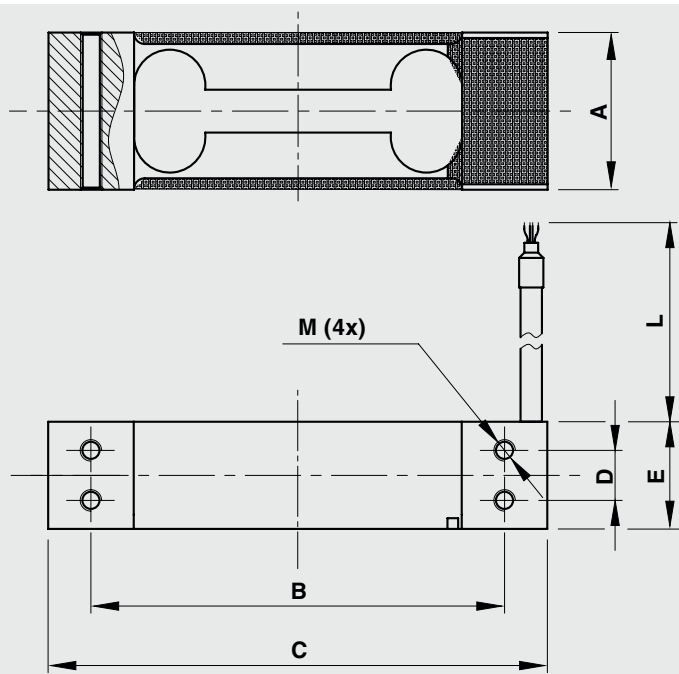
Model F4802									
Rated load F_{nom} kg	0.3	0.5	1	1.5	2	3	4	5	10
Rated load F_{nom} lbs	0.7	1.1	2.2	3.3	4.4	7	9	11	22
Relative linearity error d_{lin} ¹⁾	$\pm 0.02\% F_{nom}$								
Relative creep, 30 min.	$\pm 0.02\% F_{nom}$								
Relative reversibility error v	$\pm 0.02\% F_{nom}$								
Relative deviation of zero signal $d_{s,0}$	$\pm 2\% F_{nom}$								
Temperature effect on zero signal TK_0	$\leq \pm 0.02\%/10\text{ K}$								
Temperature effect on characteristic value TK_C	$\leq \pm 0.02\%/10\text{ K}$								
Force limit F_L	$150\% F_{nom}$								
Breaking force F_B	$200\% F_{nom}$								
Material of the measuring body	Aluminium								
Rated temperature range $B_{T,nom}$	$-10 \dots +40\text{ °C}$ [$+14 \dots +104\text{ °F}$]								
Operating temperature range $B_{T,G}$	$-20 \dots +60\text{ °C}$ [$-4 \dots +140\text{ °F}$]								
Input resistance R_e	$410 \pm 10\ \Omega$								
Output resistance R_a	$350 \pm 5\ \Omega$								
Insulation resistance R_{is}	$\geq 2,000\text{ M}\Omega/\text{DC } 100\text{ V}$								
Output signal (rated characteristic value) C_{nom}	$2.0 \pm 0.2\text{ mV/V}$								
Electrical connection	Measuring cable $\varnothing 3 \times 450\text{ mm}$ [$\varnothing 0.12 \times 17.72\text{ in}$]								
Supply voltage $U_{B,nom}$	DC 10 V (max. 15 V)								
Ingress protection (per IEC/EN 60529)	IP65								
Platform size	$200 \times 200\text{ mm}$ [$7.87 \times 7.87\text{ in}$]								
Weight	0.1 kg [0.22 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

Dimensions in mm [in]

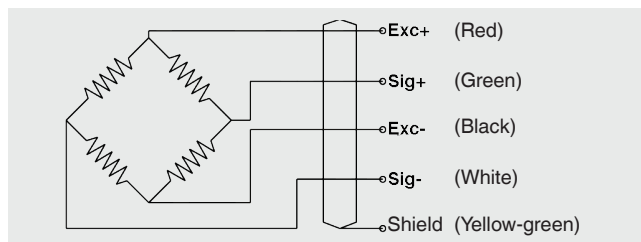


Dimensions in mm						
A	B	C	D	E	L	M
20	58	70	7	15	450	M3

Dimensions in inch						
A	B	C	D	E	L	M
0.79	2.28	2.75	0.27	0.6	17.72	M3

Pin assignment

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



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