

# Single point load cell Up to 300 kg Model F4883

WIKA data sheet FO 53.18



### **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

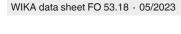
The model F4883 single point load cells are a range of aluminium single point load cells suitable for a wide range of applications. Thanks to their standardised geometry and simple design, they can be easily installed in all types of scales.

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 <sub>nom</sub> kg                              | 8   | 15        | 20 | 50  | 100 | 200 | 300 |  |
| Rated load F <sub>nom</sub> lbs                             | 18  | 33        | 44 | 110 | 220 | 441 | 661 |  |
| Relative linearity error din <sub>lin</sub> 1)              | ±0.02 % F                                       | nom       |    |     |     |     |     |  |
| Relative creep, 30 min.                                     | ±0.02 % F                                       | nom       |    |     |     |     |     |  |
| Relative reversibility error v                              | ±0.02 % F                                       | nom       |    |     |     |     |     |  |
| Relative deviation of zero signal d <sub>S,0</sub>          | ±5 % F <sub>nor</sub>                           | m         |    |     |     |     |     |  |
| Temperature effect on zero signal TK <sub>0</sub>           | ≤±0.014 °                                       | %/10 K    |    |     |     |     |     |  |
| Temperature effect on characteristic value TK <sub>C</sub>  | ≤±0.02 %  | 6/10 K    |    |     |     |     |     |  |
| Force limit F <sub>L</sub>                                  | 150 % F <sub>no</sub>                           | om        |    |     |     |     |     |  |
| Breaking force F <sub>B</sub>                               | 200 % F <sub>no</sub>                           | om        |    |     |     |     |     |  |
| Material of the measuring body                              | Aluminiun                                       | Aluminium |    |     |     |     |     |  |
| Rated temperature range B <sub>T; nom</sub>                 | -10 +40 °C [14 104 °F]                          |           |    |     |     |     |     |  |
| Operating temperature range B <sub>T, G</sub>               | -20 +65 °C [-4 149 °F]                          |           |    |     |     |     |     |  |
| Input resistance R <sub>e</sub>                             | $410\pm10~\Omega$                               |           |    |     |     |     |     |  |
| Output resistance R <sub>a</sub>                            | 350 ±5 Ω  | 350 ±5 Ω  |    |     |     |     |     |  |
| Insulation resistance R <sub>is</sub>                       | ≥ 5,000 MΩ/DC 100 V                             |           |    |     |     |     |     |  |
| Output signal (rated characteristic value) C <sub>nom</sub> | 2.0 ±0.2 mV/V                                   |           |    |     |     |     |     |  |
| Electrical connection                                       | Measuring cable Ø 5 x 3,000 mm [Ø 0.2 x 118 in] |           |    |     |     |     |     |  |
| Supply voltage U <sub>B, nom</sub>                          | 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 [1.3                                     | 32 lbs]   |    |     |     |     |     |  |

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

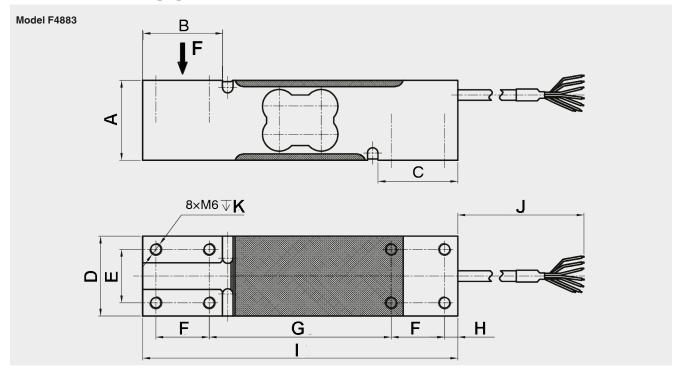
## **Approvals**

| Logo | Description                                 | Region         |
|------|---|----------------|
| CE   | EU declaration of conformity RoHS directive | European Union |
| UK   | UKCA RoHS directive                         | United Kingdom |

### **Optional approvals**

| Logo | Description | Region                      |
|------|-------------|-----------------------------|
| EAC  | EAC         | Eurasian Economic Community |

### Dimensions in mm [in]

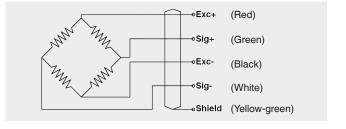


| Dimensions in mm |    |    |    |      |      |      |     |     |            |    |
|------------------|----|----|----|------|------|------|-----|-----|------------|----|
| Α                | В  | С  | D  | E    | F    | G    | Н   | I   | J          | K  |
| 38               | 38 | 38 | 38 | 25.4 | 25.4 | 86.6 | 6.3 | 150 | 3,000 ±100 | 12 |

| Dimensions in inch |     |     |     |   |   |      |      |      |           |      |
|--------------------|-----|-----|-----|---|---|------|------|------|-----------|------|
| Α                  | В   | С   | D   | E | F | G    | Н    | ı    | 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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