

# Bending beam up to 500 kg

## Model F3833

WIKA data sheet FO 51.22



### Applications

- Hopper scales, industrial scales
- Price labeling scales
- Gravimetric feeder
- Laboratory technology
- Process industry

### Special features

- Measuring ranges 0 ... 5 kg up to 0 ... 500 kg
- Completely welded bellows
- Ingress protection IP68



**Bending beam, model F3833**

### Description

Bending beams are designed for static and dynamic measurement tasks. They determine the forces in a wide scope of applications.

These load cells are used in industrial weighing and laboratory as well as in the process industry.

The bending beams F3833 are made of stainless steel, which are particularly suitable for the application areas. The output signal is a mV/V signal.

#### Note

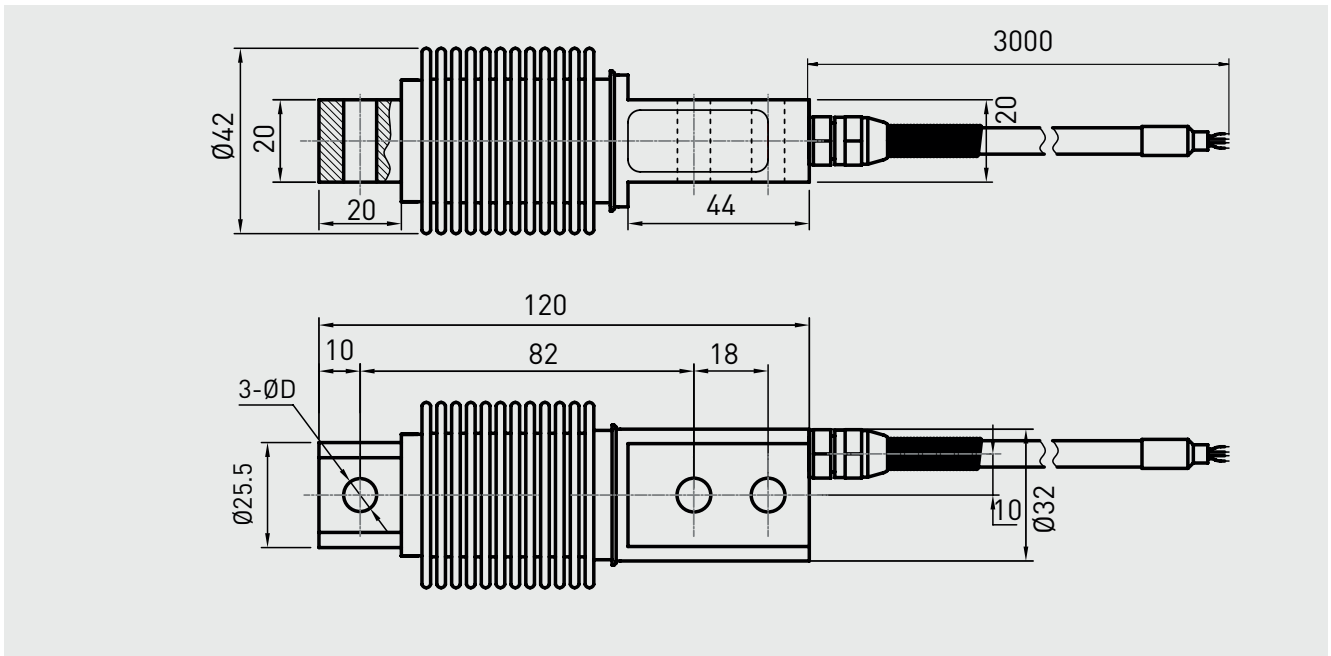
In order to avoid overloading, it is advantageous to connect the load cell electrically during installation and to monitor the measured value. The force to be measured must be applied concentrically and free of transverse force.

The bending beams are to be mounted on a level surface.

## Specifications in accordance with VDI/VDE/DKD 2638

Model F3833	
Nominal load $F_{nom}$ kg	5 / 10 / 20 / 30 / 40 / 50 / 75 / 100 / 150 / 200 / 250 / 300 / 500
Relative linearity error $d_{lin}$	$\pm 0.02 \% F_{nom}$
Relative creep, 30 min.	$\pm 0.03 \% F_{nom}$
Relative reversibility $v$	$\leq \pm 0.02 \% F_{nom}$
Relative deviation of zero signal $d_{S,0}$	$\pm 2 \% F_{nom}$
Temperature effect on zero signal $TK_0$	$\leq \pm 0.03 \% / 10^\circ C$
Temperature effect on characteristic value $TK_C$	$\leq \pm 0.03 \% / 10^\circ C$
Force limit $F_L$	150 % $F_{nom}$
Breaking force $F_B$	200 % $F_{nom}$
Material	Stainless steel
Rated temperature range $B_{T, nom}$	-10 ... +60 °C
Operating temperature range $B_{T, G}$	-20 ... +80 °C
Input resistance $R_e$	385 $\pm$ 10 $\Omega$
Output resistance $R_a$	350 $\pm$ 5 $\Omega$
Insulation resistance $R_{is}$	$\geq 5,000 M\Omega / DC 100 V$
Output signal (rated output) $C_{nom}$	2.0 $\pm$ 1 % mV/V
Electrical connection	Cable $\varnothing 5 \times 3,000$ mm
Rated range of excitation voltage $B_{U, nom}$	10 V (max. 15 V)
Ingress protection (acc. to IEC/EN 60529)	IP68
Weight in kg	0.6
Certificate	Nominal loads from 0...50 kg to 0...250 kg acc. OIML R60 – Edition 2000 (E) with accuracy class C3 certificated

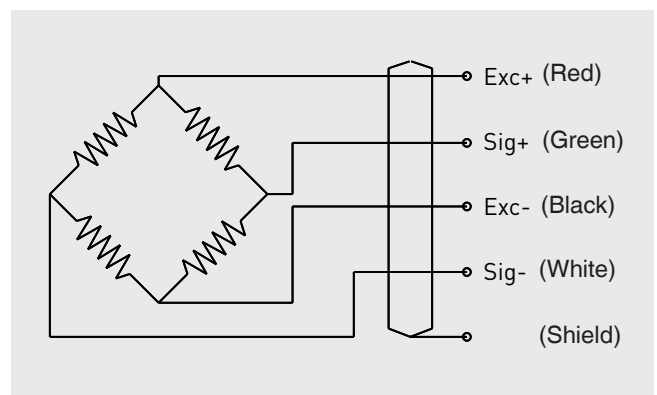
## Dimensions in mm



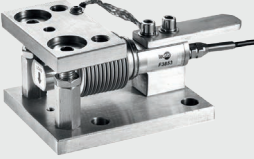
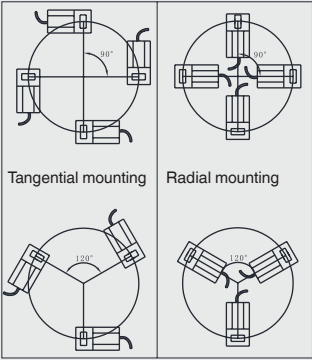
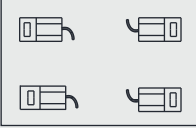
Nominal load in kg	Dimensions in mm
	D
5 / 10 / 20 / 30 / 40 / 50 / 75 / 100 / 150 / 200 / 250	8.2
300 / 500	10.2

## Pin assignment

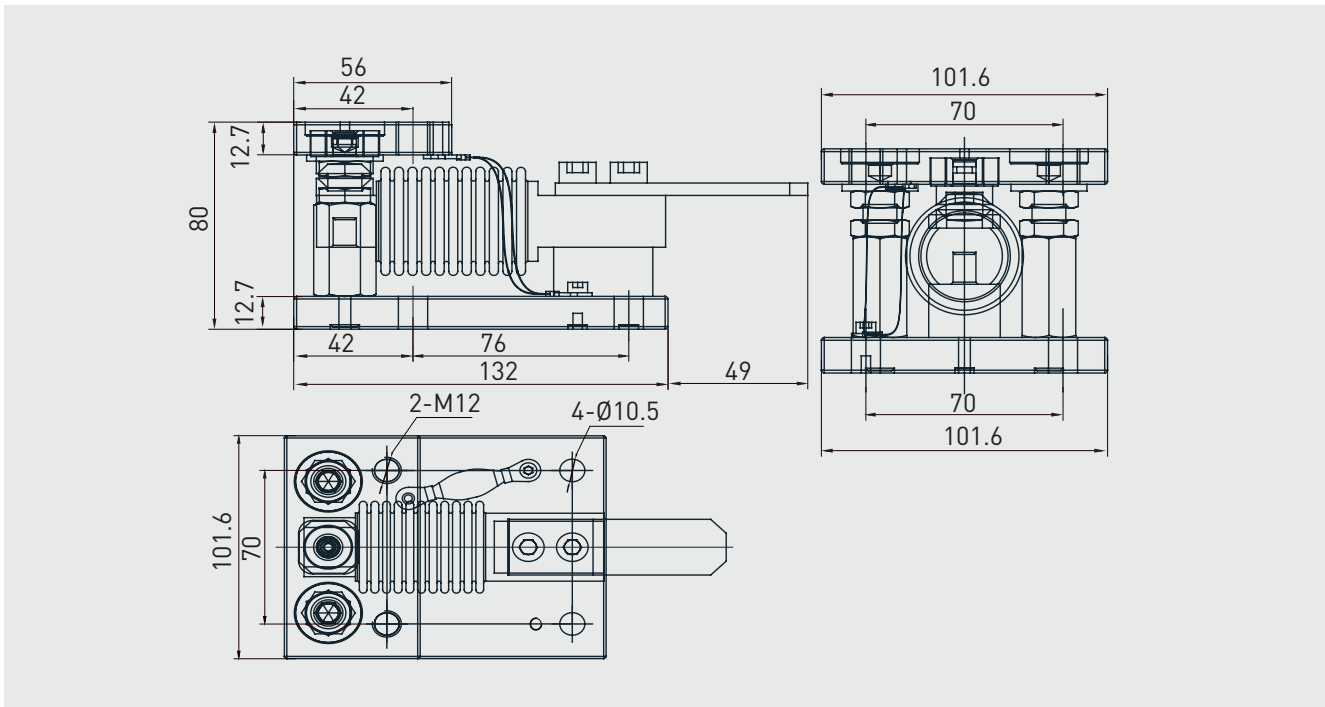
Electrical connection	
Excitation voltage (+)	Red
Excitation voltage (-)	Black
Signal (+)	Green
Signal (-)	White
Screen $\oplus$	Screen



# Accessory

	Description	Order no.
	<p><b>Installation kit</b></p> <ul style="list-style-type: none"> <li>■ Material stainless steel</li> <li>■ Weight 2,4 kg</li> </ul> <p><b>Mounting options</b></p>  <p>Tangential mounting      Radial mounting</p>  <p>Note: Junction box is required for trimming of a signal.</p>	AZK03

## Dimensions in mm



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