## **BOSCHE** WÄGETECHNIK

# **Tension and compression Load cell** F10N



### **Features**

- Material: stainless steel
- Nominal load: 500 1,000 kg
- Construction: The measuring element is laser-welded, protection class: IP66
- > Particularly robust for tough continuous use in industrial applications
- Force application: External thread / contact surface with threaded holes
- Calibration in N or kg possible
- Compatible with other manufacturers
- Centre of gravity application: Tensile load

### Scope of application:

- Hopper scales
- Belt and dosing scales
- Hybrid scales
- Monitoring of joining forces
- Tensile force measurements

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#### Tension and compression force sensors for industrial applications

The compact F10N force transducer has been specially designed for measuring static and dynamic tensile and compressive loads. The centric thread in the upper part and the hole in the lower part of the load cell ensure optimum force transmission in the direction of tension or compression. The load cells are made of high-quality stainless steel and deliver extremely precise and reproducible measurement results even in longterm use in harsh industrial environments. The load cell is laser-welded and meets the requirements of protection class IP66. For measuring forces, these load cells are also very often calibrated in the physical unit Newton and used as force transducers.

#### TECHNICAL DETAILS

Accuracy class according to OIML R 60		0,03
Nominal load (E <sub>max</sub> )	kg	500, 1.000
Number of division values (n <sub>LC</sub> )		3000
Nominal value ( $C_n$ ) / Characteristic tolerance	mV/V	2,0
Characteristic tolerance:	mV/V	± 0,01
Minimum preload (E <sub>min</sub> )		0
Limit load (E <sub>L</sub> ) Breaking load (E <sub>d</sub> )	% from Emax	150 200
Recommended supply voltage (U <sub>ret</sub> ) Maximum permissible supply voltage (B <sub>u</sub> )	V	5 - 12 15
Zero adjustment	% v. C <sub>n</sub>	≤ ± 1 %
Input resistance ( $R_{Lc}$ ) at reference temperature Output resistance ( $R_{o}$ ) at reference temperature	Ω	400 ± 10 352 ± 3
Insulation resistance	MΩ	> 5 000
Nominal temperature range ( $B_{T}$ )	°C	- 10 + 40
Protection class according to (DIN 40.050 / EN 60529)		IP66
Cable length		5 m
Material		Stainless steel

### TECHNICAL DRAWINGS







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