

Tubular load cell, type 0206

For the flexible measurement of radial forces

BROSA tubular load cells measure radial forces acting on an axis with a constant or variable direction of the force transfer. BROSA tubular load cells can be used even in case of axes that had not been suitable for force measurements due to their dimensions or deflection. The combination of several tubular load cells on one axis is possible. Optionally, it is possible to equip BROSA tubular load cells with an integrated angle sensor that measures the inclination of the sensor. The output signal can be the resulting force or even the rope load in case of sheaves.

Applications

- Pulley head
- Tip of the boom
- Bearing loads

Features

- Customer-specific design
- Optional integrated angle measurement
- Integrated amplifier
- High overload capacity
- Designed for endurance strength
- Temperature compensated
- High EMC resistance



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Technical data

Accuracy	≤ 0.5 % FS
Measurement range	10 kN to 5000 kN
Maximum load	≥ 150 %, optional 300 %
Breaking load	≥ 300 %, optional 500 %
Linearity error	≤ 0.5 % FS
Hysteresis	≤ 0.5 % FS
Reproducibility	≤ 0.1 % FS
Temperature range	-40 to +80 °C
Temperature coefficient	≤ 0.0035 % / K
Supply voltage	9 to 36 VDC
Output signal	4 to 20 mA, optional redundant CANopen, optional safety PROFINET, optional PROFIsafe
Protection class	IP 67, optional IP 69K, according to DIN EN 60529
Interference immunity	Up to 200 V/m HF, 100 mA BCI according to ISO 11452, DIN EN 61000-4, ISO 7637
Emission	DIN EN 55025
Climate tests	DIN EN 60068-2
Vibration resistance	DIN EN 60068-2
Electrical connections	M12x1, 4-pins
Electrical protection classes	Reverse polarity protection, overvoltage protection and short-circuit protection
Material	Stainless steel

Options

Safety classification acc. to DIN EN ISO 13849-1	PL c, PL d (PL e)
Explosion protection	ATEX Ex i
Passive design	Output ~ 1 mV / V



ISO 9001:2008
ISO 14001:2004



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