

Compression load cell, type 0101

For the precise measurement of axial compressive forces

Thanks to high-strength stainless steel and the FEA based design, the BROSA compression load cells can withstand very high loads. Even at maximum load the life of the compact sensors are extremely high due to the overload capacity of up to 3x the measuring range. Thanks to the proven and tested strain-gauge technology and fully developed amplifiers providing reliable and exact measurement results, BROSA compression load cells can be permanently used under the most extreme environmental conditions.

Applications

- Object weighing
- Production lines
- Test rigs
- Torque support

Features

- Customer-specific design
- Integrated amplifier
- High overload capacity
- Durable design (verification on request)
- Temperature compensated
- High EMC resistance



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Technical data

Accuracy	≤ 0.5 % FS
Measurement range	10 kN to 10 000 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 IO-Link optional redundant PL c
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
Climatic tests	DIN EN 60068-2
Vibration resistance	DIN EN 60068-2
Electrical connections	M12 × 1, 5-pins
Electrical protection classes	Reverse polarity protection, overvoltage protection and short-circuit protection
Material	Stainless steel

Options

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



ISO 9001
ISO 14001



94/9/EG