Force measuring pin, type 0201

For the precise force measurement at bearing points

BROSA force measuring pins are made of high-strength stainless steel and meet the highest requirements. Depending on the application-specific conditions the BROSA force measuring pins are designed and produced according to different, partly patented design concepts. High measurement accuracies are ensured for a long time by considering the exact installation situation from the construction to the calibration of the sensors.

Applications

- Sheaves
- Rope endpoint
- Carriage forces
- Machine construction

Features

- Customer-specific design
- 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 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
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	M12x1, 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 9001:2008
ISO 14001:2004

94/9/EG

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