X-Y load pin, type 0201

For measuring forces with an unknown direction and magnitude

BROSA X-Y load pins represent an enhancement of the tried and tested BROSA load pins. They make it possible to determine the resulting force in relation to forces in the X and Y direction. It is possible to further reduce the complexity of the construction by integrating two measuring systems. Possible parasitic influences are thus reduced to a minimum.

Applications

- Guide rollers
- Cable end
- Chassis
- Mechanical engineering
- Hydraulic/pneumatic cylinders

Properties

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

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Technical specifications

Accuracy	≤ 1 % FS
Measurement range	10 kN to 10 000 kN
Limit 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
Power supply	9 to 36 VDC
Output signal	4 to 20 mA, optionally redundant CANopen, optionally Safety PROFINET, optionally PROFIsafe
Protection type	IP 57, optional 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
Interference emission	DIN EN 55025
Climatic tests	DIN EN 60068-2
Vibration resistance	DIN EN 60068-2
Electrical connections	M12x1, 5-pins
Electrical protection types	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 version	Output ~ 1 mV / V

Deviating requirements can be implemented by agreement.

ISO 9001
ISO 14001

94/9/EC

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