

Angle sensor Ex d, type 0813

Explosion-proof technology for your angle measurement

BROSA angle sensors Ex d are suitable for use in potentially explosive environments and are characterized by high long-term stability and accuracy. The high-quality workmanship and the flameproof enclosure enable use in gas group II B or II C, depending on the cable gland used. The MEMS technology used can withstand shocks of up to 3500g during operation. Other impressive features are its high measuring accuracy, extreme vibration resistance and low height for a wide range of applications.

Applications

- Explosive environments
- Cranes
- Construction machines
- Mechanical engineering

Features

- Customer-specific design
- Integrated amplifier
- Temperature compensated
- High EMC resistance



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Technical data

Resolution	0.01°
Accuracy	≤ ±0.3°
Measurement range	0 to 360°, 0 to 90°, 0 to 180° optional other measurement ranges
Linearity error	≤ ±0.1°
Hysteresis	≤ ±0.1°
Reproducibility	≤ ±0.1°
Temperature range	-40 to +80 °C
Temperature coefficient	≤ 0,0046 % / °K
Supply voltage	9 to 36 VDC
Output signal	4 to 20 mA, optional redundant
Degree of protection	IP 66 according to DIN EN 60529
Interference immunity	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	Cable gland with compound
Electrical protection	Reverse polarity protection, overvoltage protection and short-circuit protection
Material	Aluminium, saltwater-proof

Options

Safety classification according to DIN EN ISO 13849-1	PL c, PL d (PL e*)
Explosion protection	ATEX Ex d
Ex classification	II 2G Ex d IIC T4 Gb / IECEx Ex d IIC T4 Gb

Other requirements can be implemented by agreement.

* When used in higher-level systems according to DIN EN ISO 13849-1



ISO 9001
ISO 14001



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