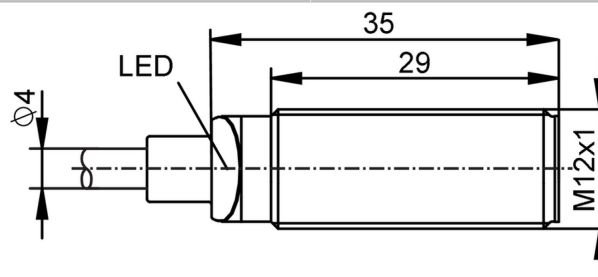


MFS228



Magnetic sensor

MFB3060-BPKG/AM/G/ZH



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	60; (referred to magnet M 4.0)
Housing	Threaded type
Dimensions [mm]	M12 x 1 / L = 35

Application

Special feature	Full-metal housing
Pressure rating [bar]	50

Electrical data

Operating voltage [V]	10...30 DC; (cULus - Class 2 source required)
Rated insulation voltage [V]	60
Current consumption [mA]	< 10
Protection class	III
Reverse polarity protection	yes
Max. power-on delay time [ms]	50

Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	200
Switching frequency DC [Hz]	5000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	60; (referred to magnet M 4.0)
Magnetic sensitivity [mT]	1.2

Accuracy / deviations

Hysteresis [% of Sr]	1...10
Switch-point drift [% of Sr]	< 10
Repeatability [% of Sr]	< 10

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Operating conditions		
Ambient temperature	[°C]	-25...75
Protection		IP 67
Pollution degree		3
Tests / approvals		
EMC	EN 61000-4-2	4 kV CD / 8 kV AD
	EN 61000-4-3	10 V/m
	EN 61000-4-4	2 kV
	EN 61000-4-5	0,5 kV line to line, Ri: 2 Ohm
	EN 61000-4-6	10 V
	EN 55011	class B
	DIN ISO 11452-2	100 V/m
Vibration resistance	EN 60068-2-6 Fc	20 g 50 sweep cycles per frequency; 1 octave per minute in 3 axes / 10...3000 Hz
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)
MTTF	[years]	1445
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	UL approval number	C023
	File number UL	E174191
Mechanical data		
Weight	[g]	69.4
Housing		Threaded type
Dimensions	[mm]	M12 x 1 / L = 35
Thread designation		M12 x 1
Material		housing: stainless steel (316L / 1.4404); cable plug: PEI; lock nuts: brass
Full-metal housing		yes
Displays / operating elements		
Display	Switching status	1 x LED, yellow
Accessories		
Items supplied		lock nuts: 2
Remarks		
Remarks		voltage supply to EN50178, SELV, PELV
Pack quantity		1 pcs.

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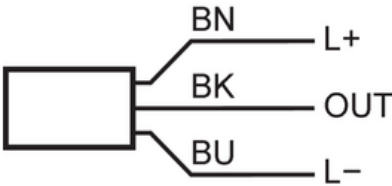
Magnetic sensor

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Electrical connection

Cable: 2 m, PUR; 3 x 0.34 mm²

Connection



BN : brown
BK: black
BU: blue

BN: L+
BK: OUT DO (NO)
BU: L-