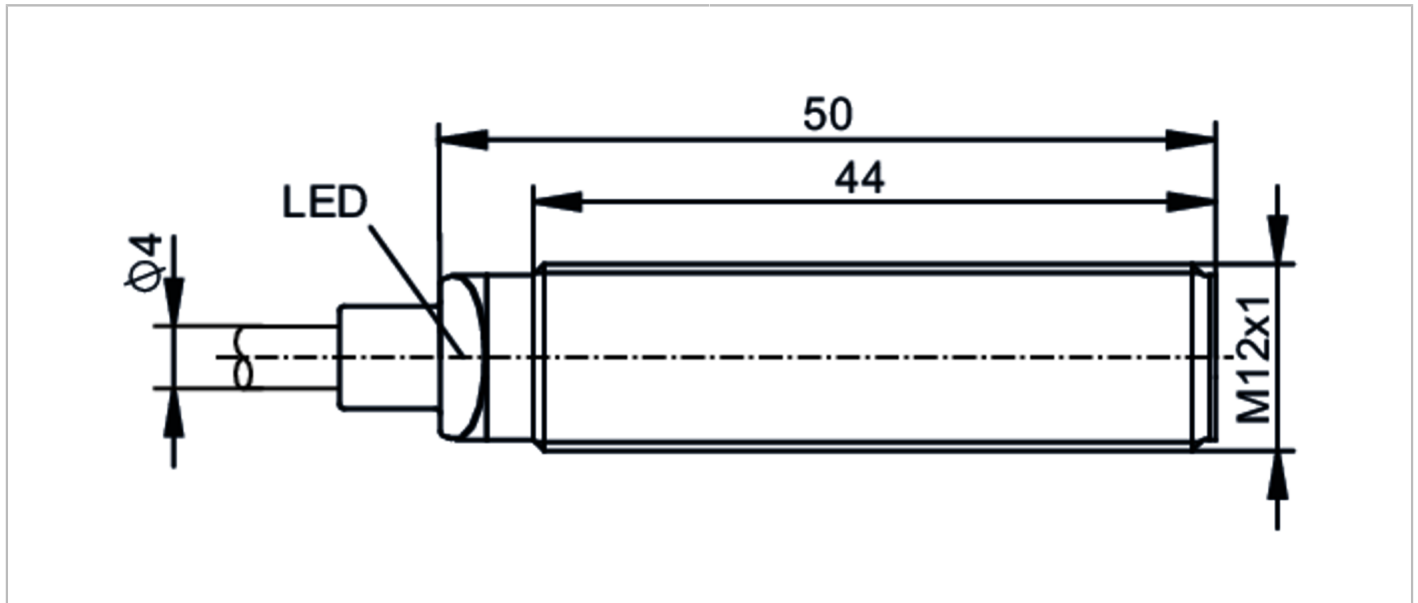


# MFS224



## 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 = 50

### Application

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

### Electrical data

Operating voltage	[V]	10...30 DC; ("supply class 2" to cULus)
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		pulsed
Overload protection		yes

# MFS224



## Magnetic sensor

MFB3060-BPKG/AM/G/ZH

Detection zone		
Sensing range	[mm]	60; (referred to magnet M 4.0)
Response sensitivity	[mT]	1.2
Accuracy / deviations		
Hysteresis	[% of Sr]	1...10
Switch point drift	[% of Sr]	< 10
Repeatability	[% of Sr]	< 10
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, 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 no.	C023
	File number UL	E174191
Mechanical data		
Weight	[g]	73
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 50
Thread designation		M12 x 1
Materials		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.

# MFS224



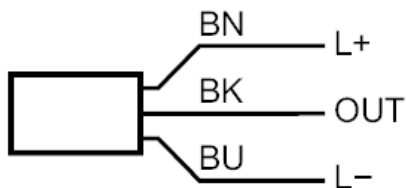
## Magnetic sensor

MFB3060-BPKG/AM/G/ZH

### Electrical connection

Cable: 2 m, PUR; 3 x 0.34 mm<sup>2</sup>

### Connection



BN :	brown
BK:	black
BU:	blue

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