



Basic features

Approval/Conformity	CE
	ATEX
Basic standard	FM
	cCSAus
	WEEE
	CCC Ex
	EN IEC 60079-0
Ex marking	EN 60079-11
	EN 60079-26
	IEC 60079-0
	IEC 60529
	IEC 60947-5-6
	CSA Class 258 04
	CSA Class 258 84
	FM Class 3600
	FM Class 3610
	FM Class 3810
	Including Supplement 1
	ANSI/NEMA 250
	ATEX: Ex II 1G Ex ia IIC T6 Ga Ta: -20 ... 55 °C
	Ex II 2G Ex ia IIC T6 Gb Ta: -20 ... 70 °C
	Ex 1D Ex ia IIIC T90°C Ta: -20 ... 70 °C
	NEC: CSA/FM Class I, Division 1, Groups ABCD
	Class II, Division 1, Groups EFG
	Class III

Display/Operation

Function indicator	no
Power indicator	no

Electrical connection

Cable length L	2 m
Conductor cross-section	0.14 mm ²
Connection type	Cable, 2.00 m, PVC
Number of conductors	2
Polarity reversal protected	no

Electrical data

Current consumption max., damped	1 mA
Current consumption min., undamped	2.1 mA
Internal capacitance Ci max.	80 nF
Internal inductance Li max.	0.07 nH
Operating voltage Ub	7.7...9 VDC
Permiss. series resistance Rv	550...1100 Ohm
Rated insulation voltage Ui	75 V DC
Rated operating voltage Ue DC	8.2 V
Rated series resistance Rv	1000 Ohm
Ready delay tv max.	1 ms
Switching frequency	2000 Hz

Environmental conditions

Ambient temperature	-20...70 °C
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	4816 a
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Inductive Sensors
BES M08MD-GNX10B-EV02-EEX
Order Code: BES02ZT



Interface

Interface	NAMUR
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Material

Housing material	Brass, Nickel-free coated
Material jacket	PVC
Material sensing surface	PBT

Mechanical data

Dimension	Ø 8 x 30 mm
Installation	for flush mounting
Mounting length	30.00 mm
Size	M8x1
Tightening torque	2.5 Nm

Range/Distance

Assured operating distance Sa	0.8 mm
Rated operating distance Sn	1 mm
Real switching distance sr	1 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

Operating manual must be followed.
Operate only with suitable approved switching amplifier.
Use only in approved intrinsically safe circuits with max. values $U_i = 15\text{ V}$, $I_i = 50\text{ mA}$, $P_i = 120\text{ mW}$.
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Wiring Diagrams

