



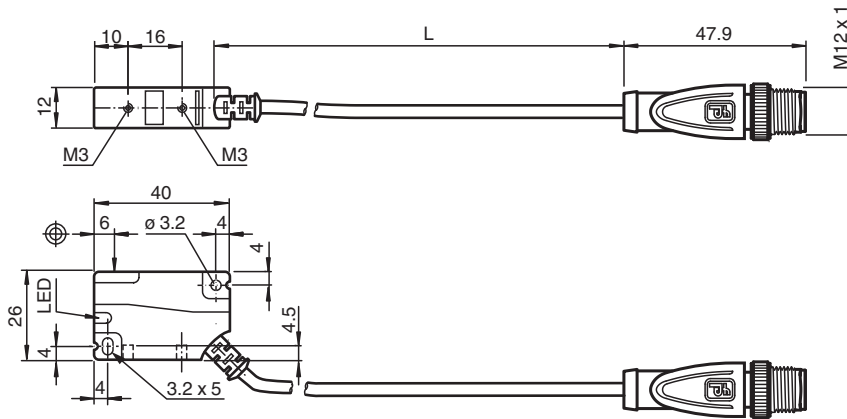
Inductive sensor

NBN8-F1-E2-Y70144594

- 8 mm non-flush
- 3-wire DC



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.45
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.55
Output type		3-wire

Nominal ratings

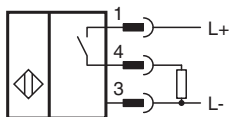
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1400 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2.5 V

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Technical Data

Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	0 ... 250 mA
Off-state current	I_r	0 ... 0.01 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	\leq 15 mA
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1640 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
Protection class		II
Rated insulation voltage	U_i	60 V
Rated impulse withstand voltage	U_{imp}	800 V
CCC approval		CCC approval / marking not required for products rated \leq 36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PA
Sensing face		PA
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Cable		
Cable diameter		5.2 mm \pm 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.5 mm ²
Length	L	395 mm \pm 15
Tightening torque, fastening screws		Threading M3 \leq 1.1 Nm
Dimensions		
Height		40 mm
Width		12 mm
Length		26 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)