

Inductive sensor

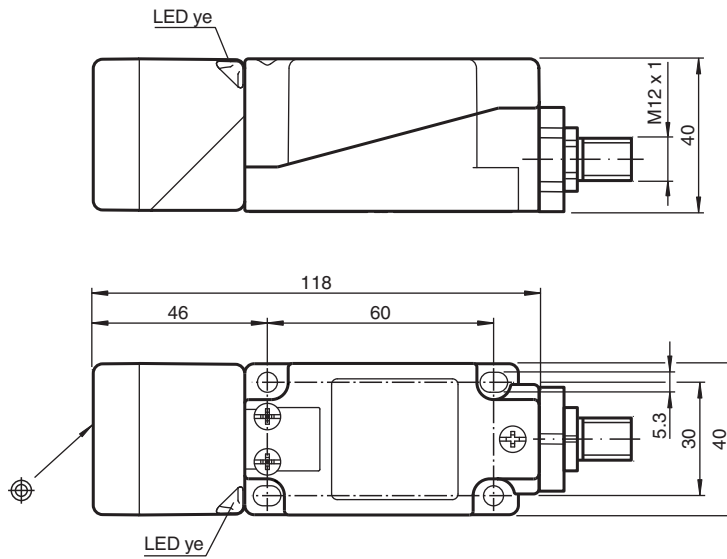
NBN40-U4K-N0-V1



- Sensor head bidirectional and rotatable
- 40 mm non-flush



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	40 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 32.4 mm
Actual operating distance	s_r	36 ... 44 mm
Reduction factor r_{Al}		0.31
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.74

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

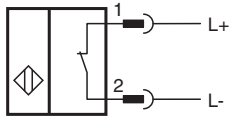
Output type		2-wire
Nominal ratings		
Nominal voltage	U _o	8.2 V (R _i approx. 1 kΩ)
Switching frequency	f	0 ... 150 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Current consumption		
Measuring plate not detected		min. 2.2 mA
Measuring plate detected		≤ 1 mA
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1415 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility		NE 21:2007
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
Approvals and certificates		
IECEX approval		
Equipment protection level Ga		IECEX PTB 11.0021X
Equipment protection level Gb		IECEX PTB 11.0021X
Equipment protection level Da		IECEX PTB 11.0021X
ATEX approval		
Equipment protection level Ga		PTB 00 ATEX 2032 X
Equipment protection level Gb		PTB 00 ATEX 2032 X
Equipment protection level Da		PTB 00 ATEX 2032 X
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0451
CCC approval		
Hazardous Location		2020322315002303
NEPSI approval		
NEPSI certificate		GYJ16.1394X
CML approval		on request
Marine approval		DNVGL TAA00001A5
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		Connector plug
Housing material		PA/metal
Sensing face		PA
Degree of protection		IP68 / IP69K
Connector		
Threading		M12 x 1
Number of pins		4

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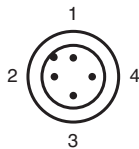
Technical Data

Mass	225 g
Note	Tightening torque: 1.8 Nm (housing)
General information	
Use in the hazardous area	see instruction manuals

Connection






Connection Assignment



Wire colors in accordance with EN 60947-5-6

1	BN	(brown)
2	BU	(blue)

Accessories

	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	MHW 01	Modular mounting bracket

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