

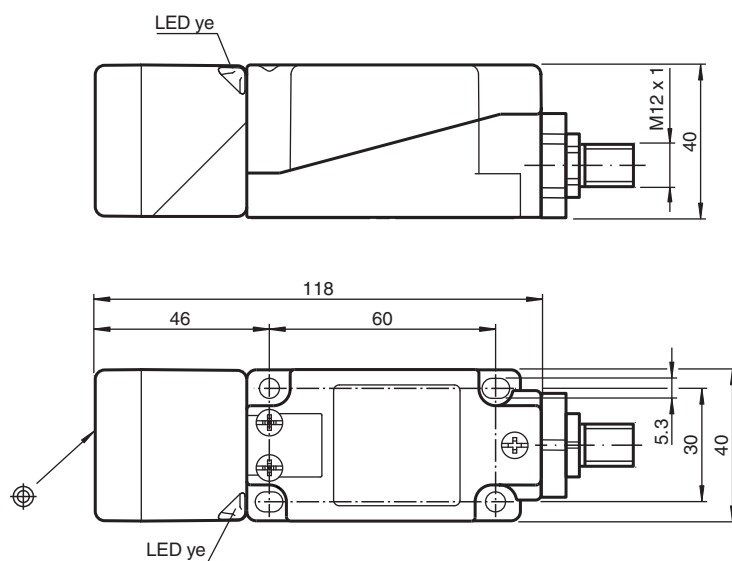


Inductive sensor NBB20-U4K-N0-V1

- Sensor head bidirectional and rotatable
- 20 mm flush
- 2 LEDs indicator for 360° visibility



Dimensions



Technical Data

General specifications

Switching function	Normally closed (NC)	
Output type	NAMUR	
Rated operating distance	s_n	20 mm
Installation	flush	
Assured operating distance	s_a	0 ... 16.2 mm
Actual operating distance	s_r	18 ... 22 mm typ. 20 mm
Reduction factor r_{Al}	0.33	
Reduction factor r_{Cu}	0.31	

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

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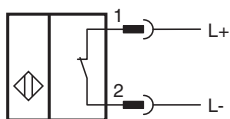
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PEPPERL+FUCHS

Technical Data

Reduction factor r_{304}		0.74
Output type		2-wire
Nominal ratings		
Nominal voltage	U_o	8 V
Switching frequency	f	0 ... 300 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		yes
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		1697 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		
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0451
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1, 4-pin
Housing material		PA/metal
Sensing face		PA
Degree of protection		IP67 / IP69K
Mass		225 g
Note		Tightening torque: 1.8 Nm (housing)
General information		
Use in the hazardous area		see instruction manuals

Connection



Wire colors in accordance with EN 60947-5-6

1		BN	(brown)
2		BU	(blue)

Accessories

	MHW 01	Modular mounting bracket
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable

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