

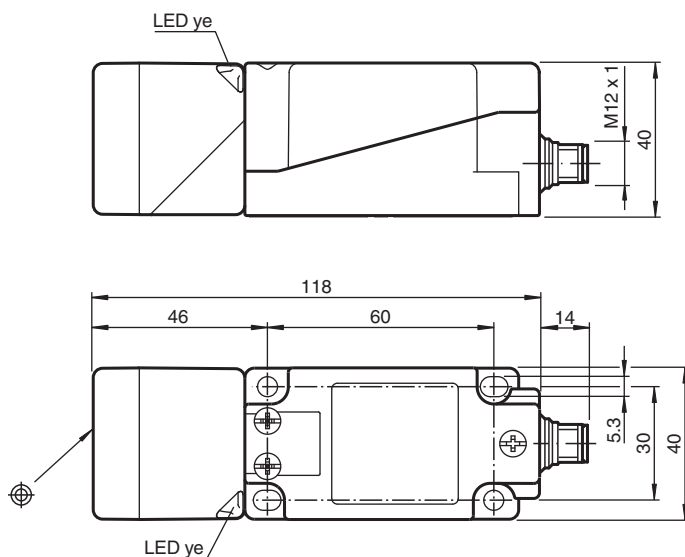


Inductive sensor NBN40-U1K-N0-V1

- 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_{AI}		0.31
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.74
Output type		2-wire

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 150 Hz
Hysteresis	H	typ. 5 %

Release date: 2025-06-12 Date of issue: 2025-06-15 Filename: 70133139_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

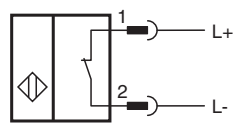
Reverse polarity protection	yes
Short-circuit protection	yes
Current consumption	
Measuring plate not detected	min. 2.2 mA
Measuring plate detected	≤ 1 mA
Switching state indicator	LED, yellow
Functional safety related parameters	
MTTF _d	1415 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Compliance with standards and directives	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility	NE 21:2007
Standards	EN IEC 60947-5-2
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
Equipment protection level Mb	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
ANZEx	19.3001X
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
Sensing face	PA
Degree of protection	IP66 / IP68 / IP69K
Connector	
Threading	M12 x 1
Number of pins	4
Mass	225 g
Dimensions	
Height	40 mm
Width	40 mm
Length	118 mm

Release date: 2025-06-12 Date of issue: 2025-06-15 Filename: 70133139_eng.pdf

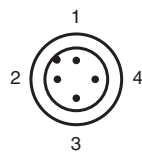
Technical Data

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

Connection Assignment



Connection Assignment



Wire colors in accordance with EN 60947-5-6

1	BN	(brown)
2	BU	(blue)

Release date: 2025-06-12 Date of issue: 2025-06-15 Filename: 70133139_eng.pdf