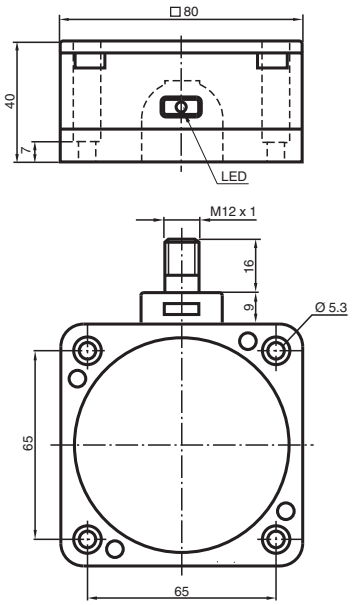
Inductive sensor

NCN50-FP-N0-P4-V1

- 50 mm non-flush
- NAMUR output
- Polarity reversal protected

Dimensions



Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	50 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 40.5 mm
Actual operating distance	s_r	45 ... 55 mm typ.
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.8
Output type		2-wire
Nominal ratings		
Installation conditions		
A		40 mm
B		150 mm
F		240 mm
Nominal voltage	U_o	8.2 V (R_i approx. 1 kΩ)
Switching frequency	f	0 ... 80 Hz

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Technical Data

Hysteresis	H	0 ... 5 % typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA
Time delay before availability	t_v	≤ 20 ms
Switching state indicator		LED, yellow
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
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		2020322315002304
NEPSI approval		
NEPSI certificate		GYJ16.1394X
CML approval		on request
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		PBT/metal
Sensing face		PBT
Housing base		aluminum painted
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		4
Mass		538 g
Tightening torque, housing screws		1 Nm
Dimensions		
Height		40 mm
Width		80 mm
Length		80 mm
General information		
Use in the hazardous area		see instruction manuals

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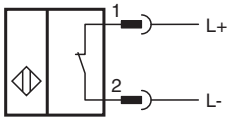
Connection



Wire colors in accordance with EN 60947-5-6

1	|	BN	(brown)
2	|	BU	(blue)

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