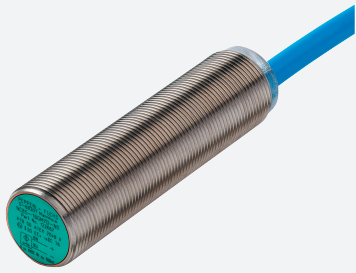


Inductive sensor

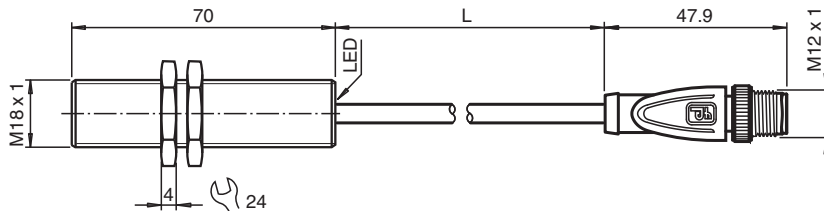
NCB8-18GM70-N0-20M-V1



- 8 mm flush
- Cable with M12 plug



Dimensions



Technical Data

General specifications

Switching function	Normally closed (NC)	
Output type	NAMUR	
Rated operating distance	s_n	8 mm
Installation	flush	
Assured operating distance	s_a	0 ... 6.48 mm
Actual operating distance	s_r	7.2 ... 8.8 mm typ. 8 mm
Reduction factor r_{Al}	0.39	
Reduction factor r_{Cu}	0.36	
Reduction factor r_{304}	0.71	
Output type	2-wire	

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protection	reverse polarity protected	
Short-circuit protection	yes	
Suitable for 2:1 technology	yes , Reverse polarity protection diode not required	
Current consumption		
Measuring plate not detected	min. 2.2 mA	
Measuring plate detected	≤ 1 mA	
Switching state indicator	all direction LED, yellow	

Functional safety related parameters

MTTF _d	2660 a
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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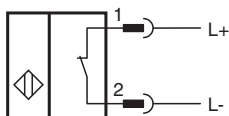
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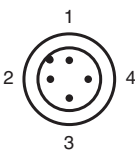
Technical Data

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
Standards		EN IEC 60947-5-2
Approvals and certificates		
IECEX approval		
Equipment protection level Ga		IECEX PTB 11.0037X
Equipment protection level Gb		IECEX PTB 11.0037X
Equipment protection level Da		IECEX PTB 11.0037X
Equipment protection level Mb		IECEX PTB 11.0037X
ATEX approval		
Equipment protection level Ga		PTB 00 ATEX 2048 X
Equipment protection level Gb		PTB 00 ATEX 2048 X
Equipment protection level Da		PTB 00 ATEX 2048 X
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0452
CCC approval		CCC approval / marking not required for products rated ≤36 V
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		fixed cable with plug
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Connector		M12 x 1
Cable		
Cable diameter		4.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Core cross section		0.34 mm ²
Length	L	20 m
Dimensions		
Length		70 mm
Diameter		18 mm
General information		
Use in the hazardous area		see instruction manuals

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

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