

Inductive sensor

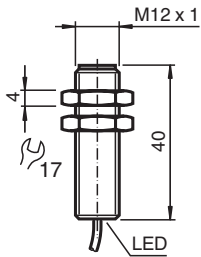
NRB4-12GM40-A2-C



- Reduction factor = 1
- Magnetic field resistant
- Weld Immune



Dimensions



Technical Data

General specifications			
Switching function		complementary	
Output type		PNP	
Rated operating distance	s_n	4 mm	
Installation		flush	
Output polarity		switched high	
Assured operating distance	s_a	0 ... 3.24 mm	
Reduction factor r_{Al}		1	
Reduction factor r_{Cu}		1	
Reduction factor r_{304}		1	
Reduction factor r_{St37}		1	
Output type		4-wire	
Nominal ratings			
Operating voltage	U_B	10 ... 30 V DC	
Switching frequency	f	0 ... 2000 Hz	
Hysteresis	H	typ. 5 %	
Reverse polarity protection		reverse polarity protected	
Short-circuit protection		pulsing	
Voltage drop	U_d	≤ 2 V	
Rated insulation voltage	U_{BIS}	60 V	
Operating current	I_L	0 ... 200 mA	
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C	
No-load supply current	I_0	≤ 14 mA	

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

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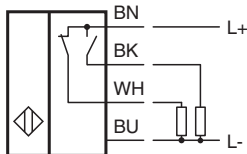
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Technical Data

Time delay before availability	t_v	max. 15 ms
Constant magnetic field	B	200 mT
Alternating magnetic field	B	200 mT
Switching state indicator		all direction LED, yellow
Functional safety related parameters		
MTTF _d		1393 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
Protection class		II
Rated insulation voltage	U _i	60 V
Rated impulse withstand voltage	U _{imp}	800 V
UL approval		cULus Listed, General Purpose Class 2 power source
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cablE PUR , 2 m
Core cross section		0.34 mm ²
Housing material		Brass, PTFE coated
Sensing face		PPS
Degree of protection		IP68 / IP69K
Mass		62 g
Dimensions		
Length		40 mm
Diameter		12 mm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



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