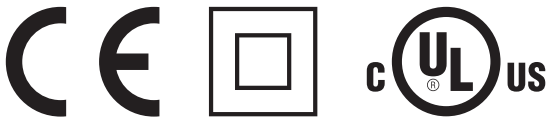


Inductive sensor

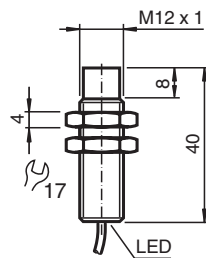
NRN10-12GM40-A2-C



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



Dimensions



Technical Data

General specifications		
Switching function		complementary
Output type		PNP
Rated operating distance	s_n	10 mm
Installation		non-flush
Output polarity		switched high
Assured operating distance	s_a	0 ... 8.1 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 ... 1000 Hz
Hysteresis	H	typ. 5 %

Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 292519_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

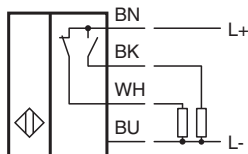
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 2 \text{ V}$
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 μA at 25 °C
No-load supply current	I_0	$\leq 14 \text{ mA}$
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 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		
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 $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °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
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Accessories

	BF 12	Mounting flange, 12 mm
---	--------------	------------------------

Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 292519_eng.pdf