

Inductive sensor

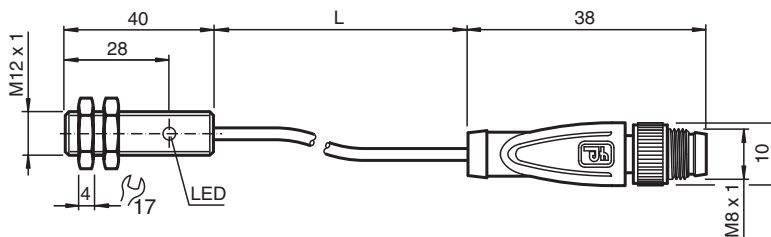
NJ2-12GM40-E2-Y302463



■ 2 mm flush



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Actual operating distance	s_r	1.8 ... 2.2 mm typ.
Reduction factor r_{Al}		0.23
Reduction factor r_{Cu}		0.21
Reduction factor r_{304}		0.7
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 3000 Hz
Hysteresis	H	1 ... 10 % typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Voltage drop at I_L		
Voltage drop $I_L = 100$ mA, switching element on	U_d	1.2 ... 2.5 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 0.5 mA

Release date: 2024-12-10 Date of issue: 2024-12-11 Filename: 302463_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

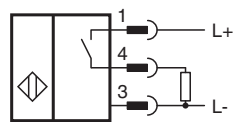
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**

Technical Data

No-load supply current	I_0	$\leq 9\text{ mA}$
Time delay before availability	t_v	$\leq 20\text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		750 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		
UL approval		cULus Listed, General Purpose
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °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		
Threading		M8 x 1
Number of pins		3
Cable		
Cable diameter		3 mm - 0.2 mm
Bending radius		> 12 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm ²
Length	L	0.5 m
Dimensions		
Length		40 mm
Diameter		12 mm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Release date: 2024-12-10 Date of issue: 2024-12-11 Filename: 302463_eng.pdf

Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Release date: 2024-12-10 Date of issue: 2024-12-11 Filename: 302463_eng.pdf