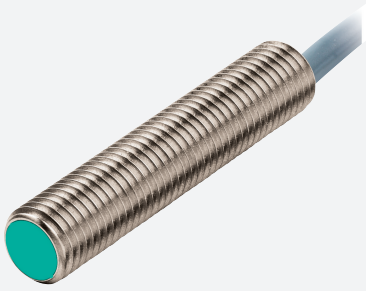


Inductive sensor

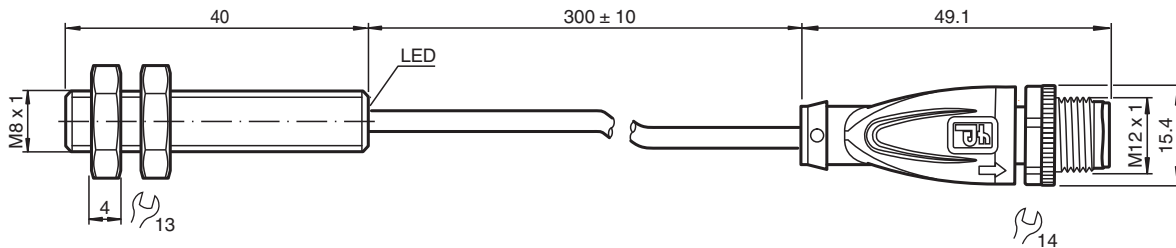
NEB3-8GM40-E2-0,3M-PUR-V1



- 3 mm flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C



Dimensions



Technical Data

General specifications

Switching function	Normally open (NO)	
Output type	PNP	
Rated operating distance	s_n	3 mm
Installation	flush	
Output polarity	DC	
Assured operating distance	s_a	0 ... 2.43 mm
Actuating element	mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 9 mm x 9 mm x 1 mm	
Reduction factor r_{Al}	0.5	
Reduction factor r_{Cu}	0.4	
Reduction factor r_{304}	0.75	
Reduction factor r_{Brass}	0.5	
Output type	3-wire	

Nominal ratings

Operating voltage	U_B	5 ... 30 V
Switching frequency	f	0 ... 3500 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	U_d	≤ 1.5 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.2 mA
No-load supply current	I_0	≤ 10 mA

Release date: 2026-04-02 Date of issue: 2026-04-02 Filename: 304615-0249_eng.pdf

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

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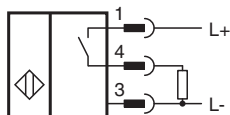
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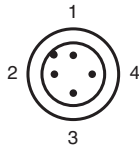
Technical Data

Time delay before availability	t_v	$\leq 100 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		960 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 Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 100 mA
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		brass , white bronze coated
Sensing face		LCP
Degree of protection		IP65 / IP66 / IP67
Connector		
Threading		M12 x 1
Number of pins		3
Cable		
Cable diameter		3.5 mm $\pm$ 0.1 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		grey
Number of cores		3
Core cross section		0.14 mm ²
Length	L	300 mm $\pm$ 10 mm
Mass		32 g
Dimensions		
Length		40 mm
Diameter		8 mm
General information		
Scope of delivery		2 hex nuts included

Connection Assignment



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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