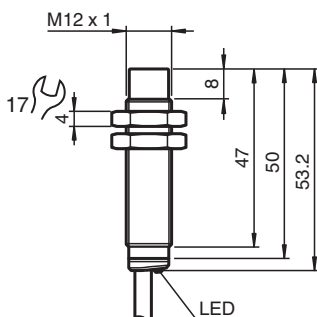


Inductive sensor NBN8-12GM50-E0-Y

- 8 mm non-flush
- Increased operating distance
- Overmolded AMP connector
- Extended temperature range
-40 ... +85 °C
- Extended operating voltage range
- Flexible use with versatile mounting opportunities



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s_n	8 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 24 mm x 24 mm x 1 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.79
Reduction factor r_{Brass}		0.49
Output type		3-wire

Nominal ratings

Operating voltage	U_B	6 ... 36 V
Switching frequency	f	0 ... 1650 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 1 V
Operating current	I_L	0 ... 200 mA

Release date: 2026-03-19 Date of issue: 2026-03-19 Filename: 326163-0277_eng.pdf

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

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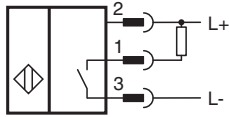
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PEPPERL+FUCHS

Technical Data

Off-state current	I_r	max. 150 μ A
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 10 ms
Switching state indicator		LED, yellow
Safety-relevant product characteristics		
MTTF _d		1607 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	36 V
Rated impulse withstand voltage	U_{imp}	500 V
UL approval		cURus Recognized Load Type: General Purpose Circuitry: Class 2 Power Source Supply/Switching Voltage: 36 V DC Output Switching Current: 200 mA Further UL information see section "Additional Information"
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		fixed cable with plug
Housing material		brass , white bronze coated
Sensing face		PBT , green
Degree of protection		IP65 / IP66 / IP67 / IP68
Connector		
Number of pins		3
Connection assembly		AMP housing 282105-1 AMP crimp 282404-1 AMP sealing 281934-4
Cable		
Cable diameter		4.3 mm $\pm$ 0.15 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		black
Number of cores		3
Core cross section		0.34 mm ²
Length	L	0.5 m
Mass		58 g
Dimensions		
Length		53 mm
Diameter		12 mm
Mounting		with nuts, M12
Tightening torque		≤ 10 Nm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection Assignment



Additional Information

Additional UL Information

Conditions of Acceptability:

Suitability of the mounting means shall be determined in the end use application. The suitability of connection between supply connection and the end connector shall be determined in the end-use application.

The supply connections for these devices are intended for factory wiring only.

These devices shall be used within their recognized electrical ratings.

These proximity switches are intended to be powered by Listed Class 2 power supply or are located in a limited voltage / limited current circuit.