

Inductive sensor

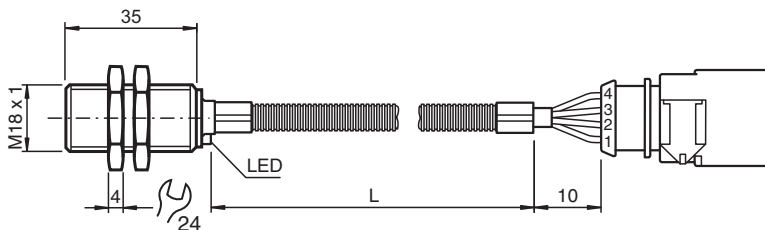
NBB8-18GM35-A0-M1-Y0104



- 8 mm flush
- Extended temperature range
-40 ... +85 °C
- E1-Type approval
- With increased sealing, protection class
IP68 / IP69K
- Raised EMC resistance 36 V/m



Dimensions



Technical Data

General specifications

Switching function		complementary
Output type		NPN
Rated operating distance	s_n	8 mm
Installation		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}		0.3
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.45
Output type		4-wire

Nominal ratings

Operating voltage	U_B	7 ... 30 V
Switching frequency	f	0 ... 1600 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 4 μ A at 25 °C
No-load supply current	I_0	≤ 10 mA

Release date: 2026-09-18 Date of issue: 2026-09-18 Filename: 293454-0104_eng.pdf

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

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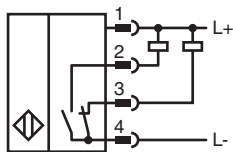
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Technical Data

Time delay before availability	t_v	$\leq 100 \text{ ms}$
Switching state indicator		LED, yellow
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cURus Recognized Load Type: General Purpose Circuitry: Class 2 Power Source Supply/Switching Voltage: 30 V DC Output Switching Current: 200 mA Further UL information see section "Additional Information"
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
E1 Type approval		10R-06
Ambient conditions		
Ambient temperature		$-40 \dots 85 \text{ }^\circ\text{C}$ ($-40 \dots 185 \text{ }^\circ\text{F}$)
Storage temperature		$-40 \dots 85 \text{ }^\circ\text{C}$ ($-40 \dots 185 \text{ }^\circ\text{F}$)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP68 / IP69K
Connector		
Number of pins		4
Connection assembly		Connector housing: FEP 1K0973804 AMP crimp 969028-2 AMP sealing 964971-1 cable clamp DN 4.5 protection tube DN 4.5
Cable		
Cable diameter		$4.3 \text{ mm} \pm 0.15 \text{ mm}$
Bending radius		$> 10 \times \text{cable diameter}$
Material		PUR
Color		black
Number of cores		4
Core cross section		0.34 mm^2
Length	L	1050 mm
Dimensions		
Length		35 mm
Diameter		18 mm

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.

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Additional Information

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

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