

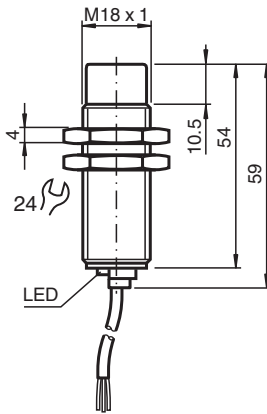
Inductive sensor NBN8-18GM50-E2-T



- Extended temperature range
- 8 mm non-flush



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
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}		0.3
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.4
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 300 Hz
Hysteresis	H	0.04 ... 1.76 mm
Reverse polarity protection		yes

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

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Technical Data

Short-circuit protection		yes
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Ripple		10 %
Voltage drop	U_d	$\leq 2.5 \text{ V}$
Repeat accuracy	R	0.2 mm
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	$\leq 7 \text{ mA}$
Time delay before availability	t_v	$\leq 40 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1935 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		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		cable
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		4.5 mm $\pm$ 0.15 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.25 mm ²
Length	L	2 m
Mass		90 g
Dimensions		
Length		59 mm
Diameter		18 mm

Connection

