

Inductive sensor

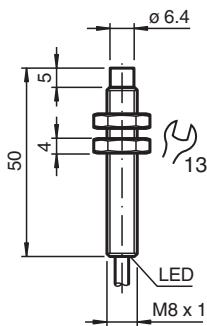
NBN3-8GM50-E0



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



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s _n	3 mm
Installation		non-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) 8 mm x 8 mm x 1 mm
Reduction factor r _{Al}		0.5
Reduction factor r _{Cu}		0.45
Reduction factor r ₃₀₄		0.75
Reduction factor r _{Brass}		0.55
Output type		3-wire
Nominal ratings		
Operating voltage	U _B	5 ... 30 V
Switching frequency	f	0 ... 4500 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

Release date: 2024-05-27 Date of issue: 2024-05-30 Filename: 304615-0129_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

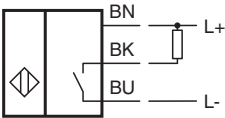
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Off-state current	I_r	0 ... 0.2 mA
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 100 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, General Purpose, Class 2 Power Source
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		cable PVC , 2 m
Core cross section		0.14 mm ²
Housing material		brass, nickel-plated
Sensing face		LCP
Degree of protection		IP65 / IP66 / IP67
Cable		
Cable diameter		3.5 mm ± 0.1 mm
Bending radius		> 10 x cable diameter
Mass		41 g
Dimensions		
Length		50 mm
Diameter		8 mm
General information		
Scope of delivery		2 hex nuts included

Connection



Release date: 2024-05-27 Date of issue: 2024-05-30 Filename: 304615-0129_eng.pdf