

Inductive sensor

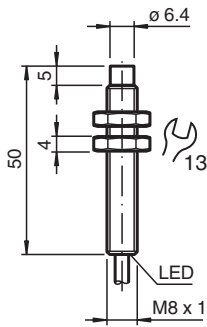
NBN3-8GM50-A0



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



Dimensions



Technical Data

General specifications			
Switching function			complementary
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

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

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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 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
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		3.3 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

