

Inductive sensor

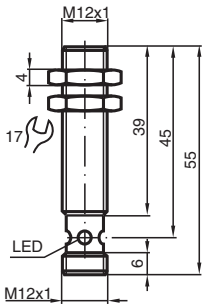
NBB2-12GM40-Z0-V1



- 2 mm flush
- Extended temperature range
- 2-wire DC



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 1.52 mm (-40 ... -25 °C (-40 ... -13 °F))
Actual operating distance	s_r	1.8 ... 2.2 mm typ.
Reduction factor r_{Al}		0.18
Reduction factor r_{Cu}		0.12
Reduction factor r_{304}		0.67
Output type		2-wire
Nominal ratings		
Operating voltage	U_B	5 ... 60 V
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	1 ... 10 % typ. 5 %

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

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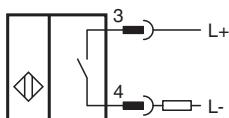
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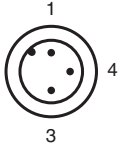
Technical Data

Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Operating current	I_L	2 ... 100 mA
Lowest operating current	I_m	2 mA
Off-state current	I_r	0 ... 0.5 mA typ.
Time delay before availability	t_v	\leq
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		2250 a
Safety-relevant product characteristics		
MTTF _d		2250 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 Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 60 V DC Output Switching Current: 100 mA
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Connection type		Connector plug
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Mass		28 g
Dimensions		
Length		40 mm
Diameter		12 mm

Connection Assignment



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1		BN	(brown)
3		BU	(blue)
4		BK	(black)