

Inductive sensor

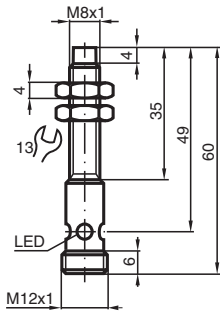
NBN3-8GM30-E2-C-V1



- 3 mm non-flush
- Increased operating distance
- Weld Immune



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	3 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 2.43 mm
Reduction factor r_{AI}		0.3
Reduction factor r_{Cu}		0.25
Reduction factor r_{304}		0.65
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 50 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

Release date: 2025-06-06 Date of issue: 2025-06-06 Filename: 801784_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

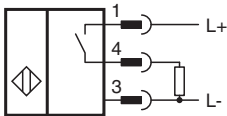
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

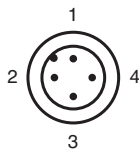
Technical Data

Voltage drop	U _d	≤ 3 V
Operating current	I _L	0 ... 100 mA
Off-state current	I _r	0 ... 0.5 mA typ. 0.1 μA at 25 °C
No-load supply current	I ₀	≤ 20 mA
Constant magnetic field	B	100 mT
Alternating magnetic field	B	100 mT
Switching state indicator	Multihole-LED, yellow	
Functional safety related parameters		
MTTF _d		1640 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 Enclosure Type Rating: Type 1
CCC approval	CCC approval / marking not required for products rated ≤36 V	
Ambient conditions		
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)	
Mechanical specifications		
Connection type		Connector plug
Housing material		Brass, PTFE coated
Sensing face		Ryton R4
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Dimensions		
Length		35 mm
Diameter		8 mm

Connection



Connection Assignment



Release date: 2025-06-06 Date of issue: 2025-06-06 Filename: 801784_eng.pdf

Connection Assignment

Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)