

Inductive sensor

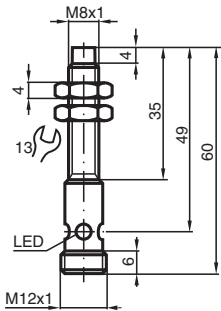
NBN3-8GM30-E2-C-V1



- 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_{Al}		0.3
Reduction factor r_{Cu}		0.25
Reduction factor r_{304}		0.65
Output type		3-wire

Nominal ratings

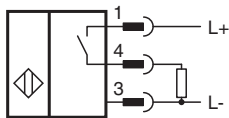
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 50 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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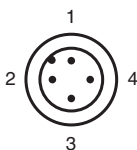
Technical Data

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 μ A 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



Connection Assignment

Wire colors in accordance with EN 60947-5-2

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