

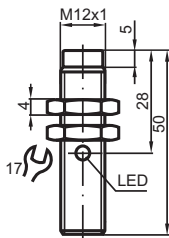
Inductive sensor NJ4-12GM40-E3-V1



■ 4 mm non-flush



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		PNP
Rated operating distance	s_n	4 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Actual operating distance	s_r	3.6 ... 4.4 mm typ.
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.75

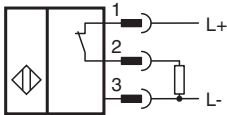
Nominal ratings

Operating voltage	U_B	10 ... 60 V
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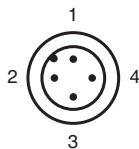
Technical Data

Switching frequency	f	0 ... 2000 Hz
Hysteresis	H	1 ... 10 typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U _d	≤ 3 V
Voltage drop at I _L		
Voltage drop I _L = 100 mA, switching element on	U _d	1.2 ... 2.5 V
Operating current	I _L	0 ... 200 mA
No-load supply current	I ₀	≤ 9 mA
Time delay before availability	t _v	≤ 20 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		750 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector M12 x 1 , 4-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Connection Assignment



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Wire colors in accordance with EN 60947-5-2

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

Accessories

	BF 12	Mounting flange, 12 mm
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable

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