

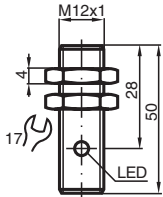
Inductive sensor NJ2-12GM40-E-V1



■ 2 mm flush



Dimensions



Technical Data

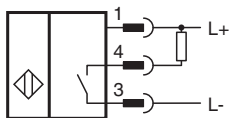
General specifications		
Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Actual operating distance	s_r	1.8 ... 2.2 mm typ.
Reduction factor r_{Al}		0.23
Reduction factor r_{Cu}		0.21
Reduction factor r_{304}		0.7
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 3000 Hz
Hysteresis	H	1 ... 10 % typ. 3 %
Reverse polarity protection		reverse polarity protected

Release date: 2025-06-04 Date of issue: 2025-06-04 Filename: 013949_eng.pdf

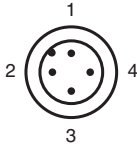
Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3 \text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 100 \text{ mA}$, switching element on	U_d	1.2 ... 2.5 V
Operating current	I_L	0 ... 200 mA
No-load supply current	I_o	$\leq 11 \text{ mA}$
Time delay before availability	t_v	$\leq 20 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1200 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, 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 plug
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		4
Dimensions		
Length		50 mm
Diameter		12 mm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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