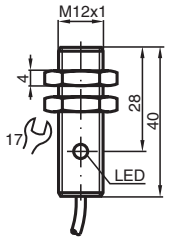


Inductive sensor

NJ2-12GM40-E3-10M

- 2 mm flush

Dimensions



Technical Data

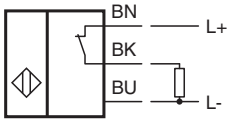
General specifications		
Switching function		Normally closed (NC)
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Actual operating distance	s_r	1.8 ... 2.2 mm typ.
Reduction factor r_{Al}		0.23
Reduction factor r_{Cu}		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

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Technical Data

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 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		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		4.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.34 mm^2
Length	L	10 m
Dimensions		
Length		40 mm
Diameter		12 mm

Connection Assignment



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