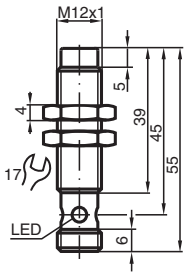
Inductive sensor

NCN4-12GM40-Z0-V1



- 4 mm non-flush
- 2-wire DC

Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
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}		0.42
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.75
Output type		2-wire
Nominal ratings		
Operating voltage	U_B	5 ... 60 V
Switching frequency	f	0 ... 800 Hz
Hysteresis	H	1 ... 10 typ. 5 %
Reverse polarity protection		reverse polarity tolerant

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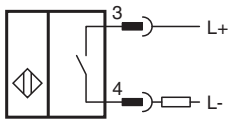
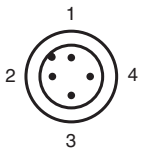
Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Voltage drop at I_L		
Voltage drop I_L = 10 mA, switching element on	U_d	3.5 ... 4.7 V typ. 4.3 V
Operating current	I_L	2 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ.
Time delay before availability	t_v	≤ 15 ms
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
$MTTF_d$		2020 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)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Dimensions		
Length		40 mm
Diameter		12 mm

Connection



Connection Assignment



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Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

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