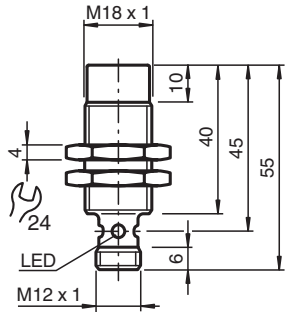


Inductive sensor

NRN15-18GH40-E2-V1

- Reduction factor = 1
- Magnetic field resistant
- Stainless steel housing
- Front face FDA conform

Dimensions



Technical Data

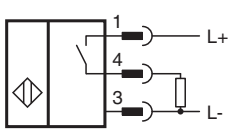
General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	15 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 12.15 mm
Reduction factor r_{Al}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		1
Reduction factor r_{St37}		1
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 800 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2 V
Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 µA at 25 °C
No-load supply current	I_0	≤ 14 mA
Time delay before availability	t_v	max. 15 ms
Constant magnetic field	B	200 mT

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Technical Data

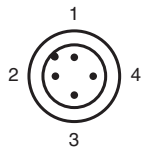
Alternating magnetic field	B	200 mT
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
$MTTF_d$		1393 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
Protection class		II
Rated insulation voltage	U_i	60 V
Rated impulse withstand voltage	U_{imp}	800 V
UL approval		cULus Listed Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 200 mA
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug
Housing material		Stainless steel 1.4404 / AISI 316L
Sensing face		LCP, (conforms with FDA)
Degree of protection		IP68 / IP69K
Connector		
Threading		M12 x 1
Number of pins		3
Mass		36 g
Dimensions		
Length		55 mm
Diameter		18 mm
General information		
Scope of delivery		Supplied with 2 nuts

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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