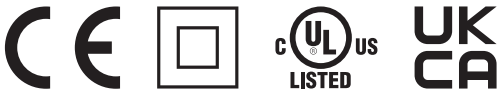


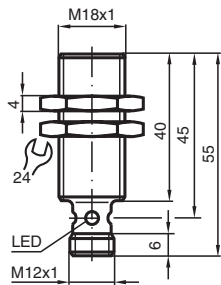


Inductive sensor NRB12-18GM40-E2-C-V1

- 12 mm quasi flush
- Reduction factor = 1
- Weld Immune
- Magnetic field resistant



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	12 mm
Installation		quasi flush
Output polarity		DC
Assured operating distance	s_a	0 ... 9.72 mm
Reduction factor r_{Al}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		1
Reduction factor r_{S137}		1
Output type		3-wire

Nominal ratings

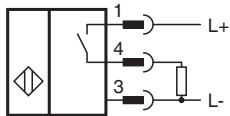
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 600 Hz
Hysteresis	H	typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_o	≤ 25 mA

Release date: 2025-06-10 Date of issue: 2025-06-10 Filename: 201474_eng.pdf

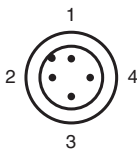
Technical Data

Switching state indicator		Multihole-LED, yellow
Mag. Field strength, AC fields		200 mT
Mag. Field strength, DC fields		200 mT
Functional safety related parameters		
MTTF _d		1074 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 Load Type: General Purpose Enclosure Type Rating: Type 1
CCC approval		CCC approval / marking not required for products rated ≤36 V
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		Brass, PTFE coated
Sensing face		Ryton R4
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Dimensions		
Length		40 mm
Diameter		18 mm

Connection



Connection Assignment



Connection Assignment

Wire colors in accordance with EN 60947-5-2

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