

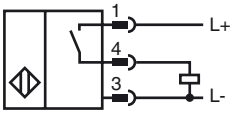
Model Number

NRB12-18GM40-E2-C-V1

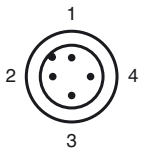
Features

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

Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

Accessories

BF 18
Mounting flange, 18 mm

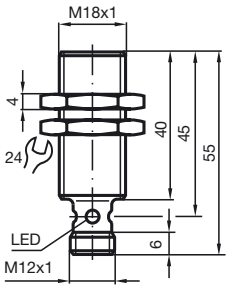
V1-G
4-pin, M12 female field-attachable connector

V1-W
4-pin, M12 female field-attachable connector

V1-G-OR2M-POC
Female cordset, M12, 4-pin, TPE cable, welding-bead resistant

V1-W-OR2M-POC
Female cordset, M12, 4-pin, TPE cable, welding-bead resistant

Dimensions



Technical Data

General specifications		
Switching element function		PNP NO
Rated operating distance	s_n	12 mm
Installation		quasi flush
Output polarity		switched high
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_{St37}		1
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 µA at 25 °C
No-load supply current	I_0	≤ 25 mA
Switching state indication		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 %
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Device connector M12 x 1 , 4-pin
Housing material		Brass, PTFE coated
Sensing face		Ryton R4
Protection degree		IP67
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
Protection class		II
Rated insulation voltage	U_i	60 V
Design-impulse-voltage withstand	U_{imp}	800 V
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

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