Model Number

NBB2-12GM50-E2-V1

Features

- **2 mm flush**
- **Extended temperature range**

Accessories

BF 12
Mounting flange, 12 mm

EXG-12
Quick mounting bracket with dead stop

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

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

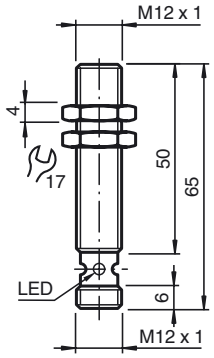
V1-G-2M-PUR
Female cordset, M12, 4-pin, PUR cable

V1-W-2M-PUR
Female cordset, M12, 4-pin, PUR cable

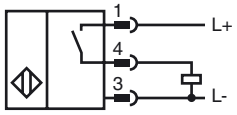
Technical Data

General specifications		
Switching element function		PNP NO
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 1.52 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor r_{Al}		0.3
Reduction factor r_{Cu}		0.2
Reduction factor r_{304}		0.7
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 1500 Hz
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	≤ 17 mA
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
$MTTF_d$		1060 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Connection type		Connector M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
General information		
Scope of delivery		2 self locking nuts in scope of delivery
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
EAC conformity		TR CU 020/2011
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V

Dimensions

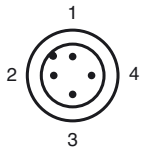


Electrical Connection



Release date: 2016-06-16 14:12 Date of issue: 2016-06-16 087764_eng.xml

Pinout



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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Refer to “General Notes Relating to Pepperl+Fuchs Product Information”.
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