

Model Number

NEN10-12GM50-E2-V1

Features

- **Increased operating distance**
- **10 mm non-flush**

Accessories

EXG-12
Quick mounting bracket with dead stop

BF 12
Mounting flange, 12 mm

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

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

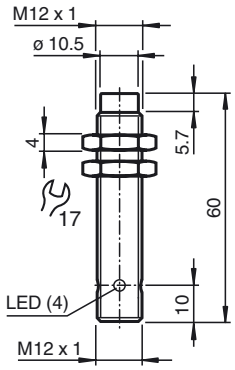
V1-G-2M-PUR
Female cordset, M12, 4-pin, PUR cable

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

Technical Data

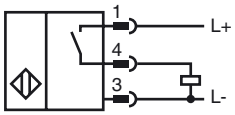
General specifications		
Switching element function		PNP NO
Rated operating distance	s_n	10 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 8.1 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 30 mm x 30 mm x 1 mm
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.75
Reduction factor r_{Brass}		0.45
Nominal ratings		
Installation conditions		
A		in steel 1.0037 (St37): 10 mm
B		16 mm
C		30 mm
F		42 mm
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 600 Hz
Hysteresis	H	0.06 ... 1 mm
Reverse polarity protection		yes
Short-circuit protection		pulsing
Overload resistance		yes
Wire breakage protection		yes
Surge suppression		yes
Ripple		10 %
Voltage drop	U_d	≤ 2 V
Repeat accuracy		0.3 mm
Operating current	I_L	0 ... 200 mA , above 70°C ≤ 150 mA
Off-state current	I_r	≤ 10 µA
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 50 ms
Switching state indication		LED, yellow
Functional safety related parameters		
$MTTF_d$		1740 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Protection degree		IP67
Mass		20 g
Tightening torque, fastening screws		max. 10 Nm
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V

Dimensions

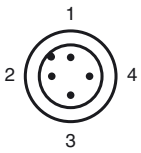


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Electrical Connection



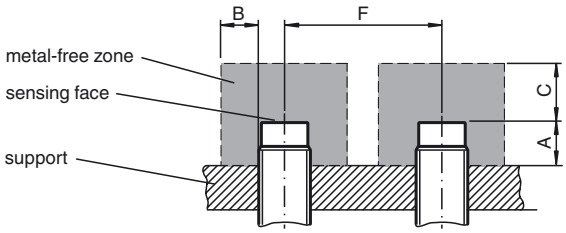
Pinout



Wire colors in accordance with EN 60947-5-2

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

Installation Conditions



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