



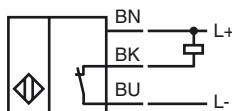
Model Number

NEN20-18GM50-E1

Features

- Increased operating distance
- 20 mm non-flush

Connection



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-2M-PUR

Cable socket, M12, 4-pin, PUR cable

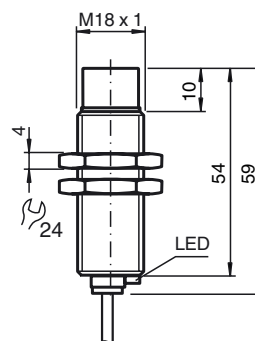
V1-W-2M-PUR

Cable socket, M12, 4-pin, PUR cable

EXG-18

Quick mounting bracket with dead stop

Dimensions



Technical Data

General specifications

Switching element function		NPN	NC
Rated operating distance	s_n	20 mm	
Installation		non-flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 16.2 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 60 mm x 60 mm x 1 mm	
Reduction factor r_{Al}		0.35	
Reduction factor r_{Cu}		0.3	
Reduction factor r_{304}		0.7	
Reduction factor r_{Brass}		0.45	

Nominal ratings

Installation conditions			
A		in steel 1.0037 (St37): 20 mm	
B		30 mm	
C		60 mm	
F		78 mm	
Operating voltage	U_B	10 ... 30 V	
Switching frequency	f	0 ... 200 Hz	
Hysteresis	H	0.1 ... 2 mm	
Reverse polarity protection		yes	
Short-circuit protection		pulsing	
Overload resistance		yes	
Wire breakage protection		yes	
Inductive overvoltage protection		yes	
Surge suppression		yes	
Ripple		10 %	
Voltage drop	U_d	≤ 2 V	
Repeat accuracy		1 mm	
Operating current	I_L	0 ... 200 mA	
Off-state current	I_r	≤ 10 μ A	
No-load supply current	I_0	≤ 11 mA	
Time delay before availability	t_v	≤ 50 ms	
Indication of the switching state		LED, yellow	

Functional safety related parameters

MTTF _d	1960 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	cable PUR, 2 m
Core cross-section	0.34 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	IP67
Mass	100 g
Tightening torque, fastening screws	max. 20 Nm

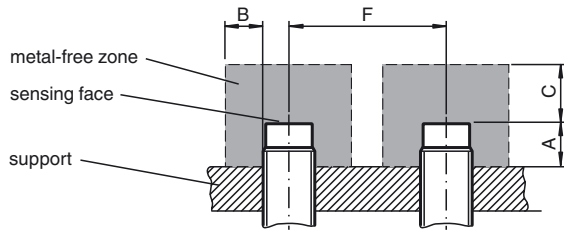
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates

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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Installation conditions



Release date: 2012-09-13 08:38 Date of issue: 2012-09-13 231735_eng.xml