



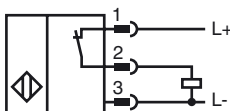
Model Number

NEB12-18GM50-E3-V1

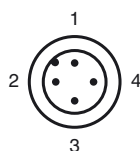
Features

- Increased operating distance
- 12 mm virtually flush

Connection



Pinout



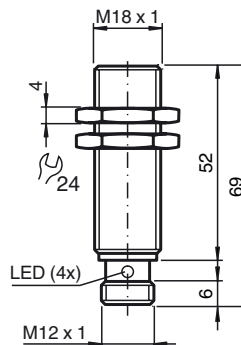
Wire colors in accordance with EN 60947-5-2

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-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		PNP	NC
Rated operating distance	s_n	12 mm	
Installation		virtually flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 9.72 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 36 mm x 36 mm x 1 mm	
Reduction factor r_{Al}		0.26	
Reduction factor r_{Cu}		0.2	
Reduction factor r_{304}		0.63	
Reduction factor r_{Brass}		0.33	
Nominal ratings			
Installation conditions			
A		in steel 1.0037 (St37): 4 mm	
B		14 mm	
C		36 mm	
F		36 mm	
Operating voltage	U_B	10 ... 30 V	
Switching frequency	f	0 ... 500 Hz	
Hysteresis	H	0.12 ... 1.8 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		0.6 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		2650 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		Device connector M12 x 1, 4-pin	
Housing material		brass, nickel-plated	
Sensing face		PBT	
Protection degree		IP67	
Mass		50 g	
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.	

Release date: 2012-09-12 13:40 Date of issue: 2012-09-12 231732_eng.xml

Installation conditions

