



Model Number

NEB6-12GM50-E1

Features

- Increased operating distance
- 6 mm flush

Accessories

BF 12

Mounting flange, 12 mm

Technical Data

General specifications

Switching element function		NPN	NC
Rated operating distance	s_n	6 mm	
Installation		quasi flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 4.8 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 18 mm x 18 mm x 1 mm	
Reduction factor r_{Al}		0.28	
Reduction factor r_{Cu}		0.2	
Reduction factor r_{304}		0.7	
Reduction factor r_{Brass}		0.35	

Nominal ratings

Installation conditions			
A		in steel 1.0037 (St37): 2.4 mm in other metal: 1.2 mm	
B		12 mm	
C		18 mm	
F		24 mm	
Operating voltage	U_B	10 ... 30 V DC	
Switching frequency	f	0 ... 800 Hz	
Hysteresis	H	0.06 ... 1.2 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	R	0.3 mm	
Operating current	I_L	0 ... 200 mA, above 70°C ≤ 150 mA	
Off-state current	I_r	≤ 10 μ A	
No-load supply current	I_0	≤ 15 mA	
Time delay before availability	t_v	≤ 50 ms	
Switching state indicator		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	cable PUR, 2 m
Core cross-section	0.34 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Mass	80 g

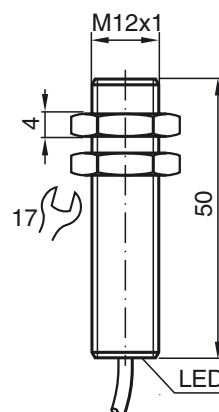
Compliance with standards and directives

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

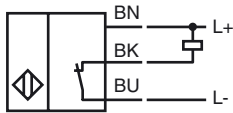
Approvals and certificates

EAC conformity	TR CU 020/2011
UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

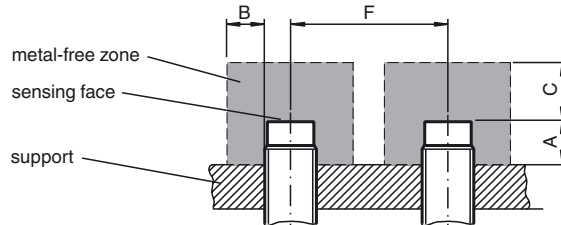
Dimensions



Electrical Connection



Installation Conditions



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