



Model Number

NEB3-6,5M45-E0

Features

- 3 mm quasi flush
- Extended temperature range
- Double switching distance

Accessories

BF 6,5

Mounting flange, 6.5 mm

Technical Data

General specifications

Switching element function		NPN	NO
Rated operating distance	s_n	3 mm	
Installation		quasi flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 2.43 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 9 mm x 9 mm x 1 mm	
Reduction factor r_{Al}		0.5	
Reduction factor r_{Cu}		0.3	
Reduction factor r_{304}		0.8	
Reduction factor r_{Brass}		0.5	

Nominal ratings

Installation conditions			
A		in steel 1.0037 (St37): 1 mm	
B		6 mm	
C		9 mm	
F		16 mm	
Operating voltage	U_B	10 ... 30 V DC	
Switching frequency	f	0 ... 1500 Hz	
Hysteresis	H	0.03 ... 0.3 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	0.15 mm	
Operating current	I_L	0 ... 200 mA, above 50°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	0.14 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Mass	40 g

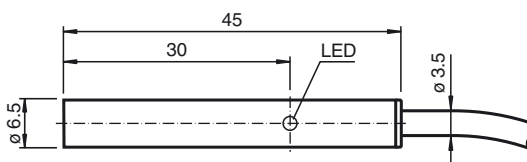
Compliance with standards and directives

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

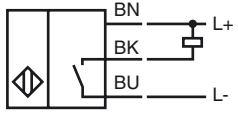
Approvals and certificates

EAC conformity	TR CU 020/2011
UL approval	cULus Listed, General Purpose, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

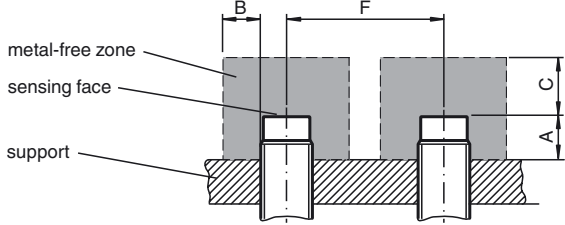
Dimensions



Electrical Connection



Installation Conditions



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