



Model Number

NEB3-F41-E2

Features

- 3-wire DC
- Metal housing
- 3 mm quasi flush

Technical Data

General specifications

Switching element function	PNP	NO
Rated operating distance	s_n	3 mm
Installation		quasi flush
Output polarity		DC
Assured operating distance	s_a	0 ... 2.4 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}		0.35
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.45

Nominal ratings

Installation conditions		
B		6 mm
C		9 mm
F		16 mm
G		1 mm
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	0.03 ... 0.3
Reverse polarity protection		reverse polarity protected
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		0.15 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	2134 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 PVC, 2 m
Core cross-section	0.14 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	IP67
Mass	50 g

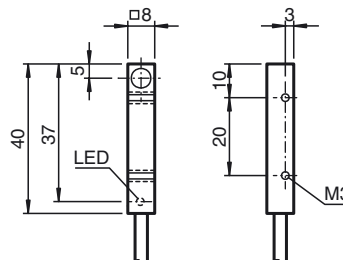
Compliance with standards and directives

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

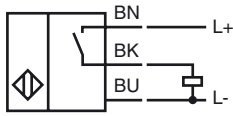
Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

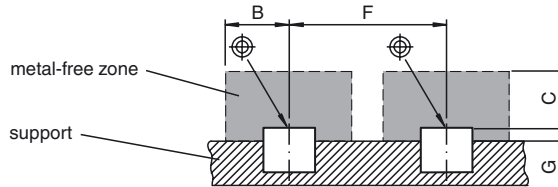
Dimensions



Electrical Connection



Installation Conditions



Release date: 2014-01-29 17:42 Date of issue: 2014-01-29 242305_eng.xml