



Model Number

NEN20-18GM50-E3

Features

- Increased operating distance
- 20 mm non-flush

Accessories

BF 18

Mounting flange, 18 mm

Technical Data

General specifications

Switching element function		PNP	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	R	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
Switching state indicator		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	cable PUR, 2 m
Core cross-section	0.34 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Mass	100 g
Tightening torque, fastening screws	max. 20 Nm

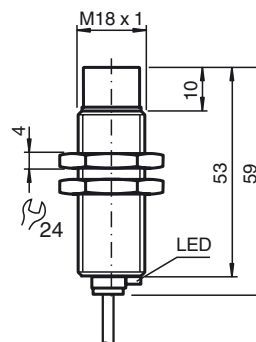
Compliance with standards and directives

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

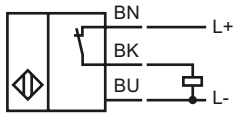
Approvals and certificates

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

