



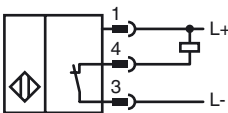
Model Number

NEN6-6,5M45-E1-V3

Features

- Increased operating distance
- 6 mm non-flush

Connection



Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Accessories

BF 6,5

Mounting flange, 6.5 mm

V3-GM

Female connector, M8, 3-pin, field attachable

V3-WM

Female connector, M8, 3-pin, field attachable

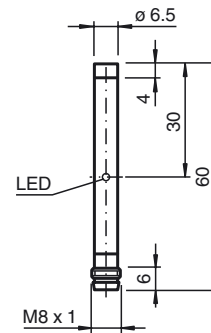
V3-GM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

Dimensions



Technical Data

General specifications

Switching element function	NPN	NC
Rated operating distance	s_n	6 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 4.86 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}		0.5
Reduction factor r_{Cu}		0.45
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.55

Nominal ratings

Installation conditions	
A	in steel 1.0037 (St37): 8 mm
B	12 mm
C	18 mm
F	28 mm
Operating voltage	U_B 10 ... 30 V DC
Switching frequency	f 0 ... 750 Hz
Hysteresis	H 0.06 ... 0.6 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	0.3 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
Indication of the switching state	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	Device connector M8 x 1, 3-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	IP67
Mass	20 g
Tightening torque, fastening screws	max. 2 Nm

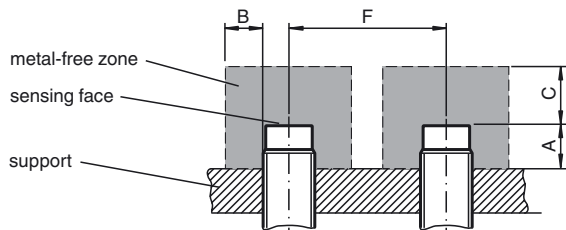
Compliance with standards and directives

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
CCC approval	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.

Installation conditions



Release date: 2012-10-19 14:18 Date of issue: 2012-10-19 231677_eng.xml