



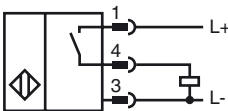
Model Number

NEN6-8GM45-E2-V3

Features

- Increased operating distance
- 6 mm non-flush

Connection



Pinout



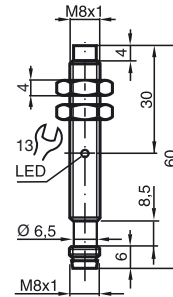
Wire colors in accordance with EN 60947-5-2

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

Accessories

- BF 8**
Mounting flange, 8 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	PNP	NO
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 \leq 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

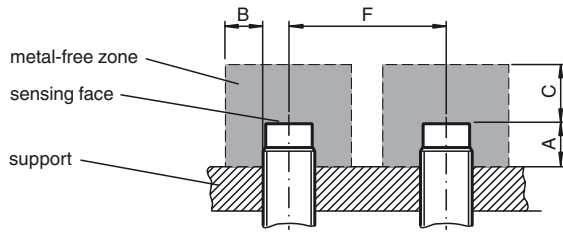
Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

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.

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Installation conditions



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