



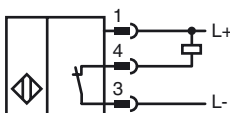
Model Number

NEN6-8GM45-E1-V3

Features

- Increased operating distance
- 6 mm non-flush

Connection



Pinout



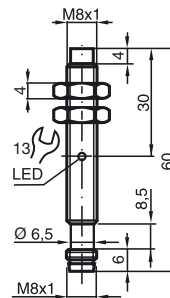
Wire colors in accordance with EN 60947-5-2

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

Accessories

- BF 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		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 \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

