



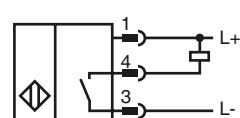
Model Number

NBB5-F9-E0-V3

Features

- 5 mm flush
- 3-wire DC

Connection



Pinout



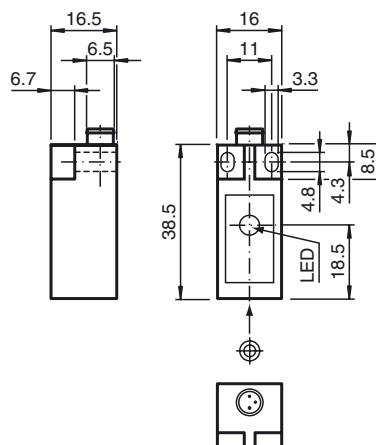
Wire colors in accordance with EN 60947-5-2

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

Accessories

- V3-GM**
Female connector, M8, 3-pin, field attachable
- V3-WM**
Female connector, M8, 3-pin, field attachable
- V3-WR-5M-PUR**
Cable connector
- V3-WR-E2-5M-PUR**
M8 cable socket.

Dimensions



Technical Data

General specifications			
Switching element function		NPN	NO
Rated operating distance	s_n	5 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 4.05 mm	
Reduction factor r_{Al}		0.3	
Reduction factor r_{Cu}		0.2	
Reduction factor r_{304}		0.6	
Nominal ratings			
Operating voltage	U_B	10 ... 30 V DC	
Switching frequency	f	0 ... 500 Hz	
Reverse polarity protected		reverse polarity protected	
Short-circuit protection		pulsing	
Voltage drop	U_d	≤ 3 V	
Operating current	I_L	0 ... 150 mA	
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C	
No-load supply current	I_0	≤ 15 mA	
Indication of the switching state		LED, yellow	
Functional safety related parameters			
MTTF _d		3170 a	
Mission Time (T_M)		20 a	
Diagnostic Coverage (DC)		0 %	
Ambient conditions			
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)	
Mechanical specifications			
Connection type		Device connector M8 x 1 , 3-pin	
Housing material		PBT	
Sensing face		PBT	
Protection degree		IP67	
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
CSA approval	cCSAus Listed, General Purpose
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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