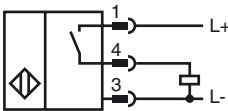CE   CSA C US   c UL us

Model Number

NBB2-8GH40-E2-V3

Features

- **Increased operating distance**
- **Materials used compliant with FDA**
- **Housing with stainless steel (V4A; 1.4435)**

Connection

L+
1
4
3
L-

Pinout

4
1 ( ) 3

Wire colors in accordance with EN 60947-5-2

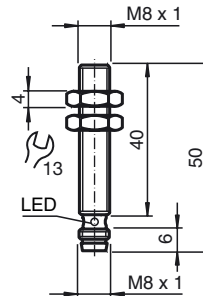|		
1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Accessories

BF 8
Mounting flange, 8 mm

V3-GMV4A-5M-PUR

V3-WMV4A-5M-PUR

Dimensions

M8 x 1
4
13
40
50
LED
6
M8 x 1

Technical Data

General specifications

Switching element function		PNP	NO
Rated operating distance	s_n	2 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 1.62 mm	
Reduction factor r_{Al}		0.25	
Reduction factor r_{Cu}		0.2	
Reduction factor r_{304}		0.63	
Reduction factor r_{Brass}		0.31	

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protected		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ. 10 µA at 25 °C
No-load supply current	I_0	≤ 15 mA
Indication of the switching state		Multihole-LED, yellow

Functional safety related parameters

$MTTF_d$	2750 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	M8 x 1 connector, 3-pin
Housing material	Stainless steel 1.4435 / AISI 316L
Sensing face	LCP, (conforms with FDA)
Protection degree	IP67
Mass	7 g

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.