

Model Number

NBB2-8GH20-E2-V3

Features

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

Accessories

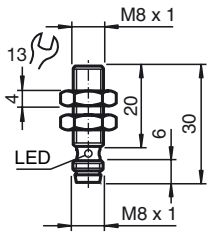
BF 8
Mounting flange, 8 mm
V3-GMV4A-5M-PUR

V3-WMV4A-5M-PUR

Technical Data

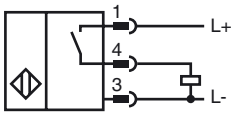
General specifications		
Switching element function		PNP NO
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Reduction factor r_{Al}		0.25
Reduction factor r_{Cu}		0.2
Reduction factor r_{304}		0.63
Reduction factor r_{Brass}		0.31
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		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
Switching state indicator		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)
Degree of protection		IP67
Mass		10 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		CCC approval / marking not required for products rated ≤36 V

Dimensions



Release date: 2015-10-26 15:01 Date of issue: 2015-10-26 216679_eng.xml

Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

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Refer to “General Notes Relating to Pepperl+Fuchs Product Information”.
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