

Model Number

NBB2-8GM30-E2-0,2M-V3

Features

- **2 mm flush**
- **Increased operating distance**
- **Extended temperature range -40 ... +85 °C**

Accessories

BF 8
Mounting flange, 8 mm

V3-GM
Female cordset single-ended, M8, 3-pin, field attachable

V3-WM
Female cordset single-ended, M8, 3-pin, field attachable

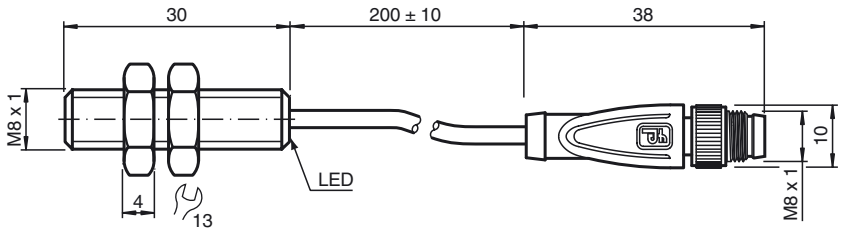
V3-WM-2M-PUR
Female cordset single-ended, M8, 3-pin, PUR cable

EXG-08
Quick mounting bracket with dead stop

Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 8 mm x 8 mm x 1 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.75
Reduction factor r_{Brass}		0.45
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	5 ... 30 V
Switching frequency	f	0 ... 6000 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 1.5 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.2 mA
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 100 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		960 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Cable connector M8 x 1 , PVC , 200 mm
Core cross-section		0.14 mm^2
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Cable		
Cable diameter		3 mm - 0.2 mm
Bending radius		> 12 x cable diameter
General information		
Scope of delivery		2 hex nuts included
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
Approvals and certificates		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤36 V

Dimensions



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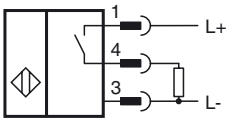
Electrical Connection



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".
Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776 1111 fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
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