Model Number

NBB5-18GM40-Z0-V1
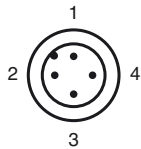
Features

- **5 mm flush**
- **Extended temperature range**
- **2-wire DC**

Connection
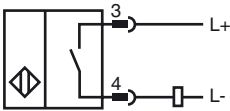
Pinout

Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Accessories

V1-G
4-pin, M12 female field-attachable connector
V1-W
4-pin, M12 female field-attachable connector
V1-G-2M-PUR
Cable socket, M12, 4-pin, PUR cable
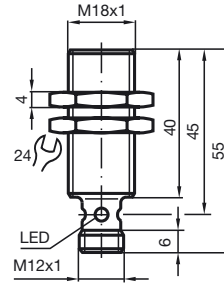**V1-W-2M-PUR**
Cable socket, M12, 4-pin, PUR cable
BF 18
Mounting flange, 18 mm
EXG-18
Quick mounting bracket with dead stop

Dimensions

Technical Data

General specifications

Switching element function		DC NO
Rated operating distance	s_n	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 4.05 mm (-25 ... 70 °C (-13 ... 158 °F))
		0 ... 3.8 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor r_{Al}		0.34
Reduction factor r_{Cu}		0.31
Reduction factor r_{304}		0.72

Nominal ratings

Operating voltage	U_B	5 ... 60 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	1 ... 10 typ. 5 %
Reverse polarity protected		tolerant
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Operating current	I_L	2 ... 100 mA
Lowest operating current	I_m	2 mA
Off-state current	I_r	0 ... 0.5 mA typ.
Indication of the switching state		Multihole-LED, yellow

Functional safety related parameters

$MTTF_d$		1870 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %

Ambient conditions

Ambient temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

Connection type	Device connector M12 x 1 , 4-pin
Housing material	brass, nickel-plated
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	Certified by China Compulsory Certification (CCC)

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