



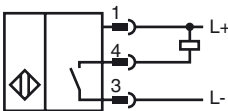
**Model Number**

NBB4-F1-E0-V3-Y218696

**Features**

- Basic series
- 4 mm flush

**Connection**



**Pinout**



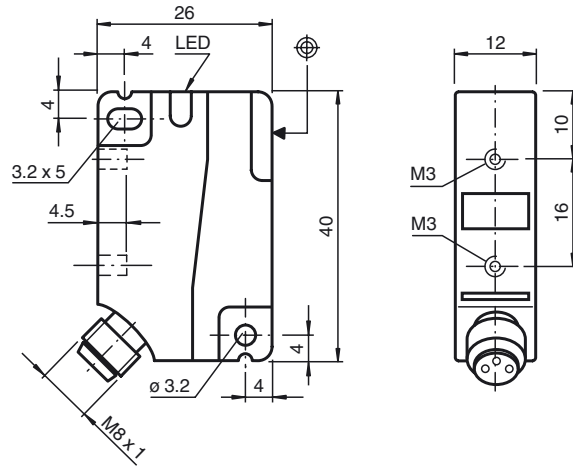
Wire colors in accordance with EN 60947-5-2

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

**Accessories**

- V3-WM**  
Female connector, M8, 3-pin, field attachable
- V3-GM**  
Female connector, M8, 3-pin, field attachable
- V3-WM-2M-PUR**  
Cable socket, M8, 3-pin, PUR cable
- V3-GM-2M-PUR**  
Cable socket, M8, 3-pin, PUR cable

**Dimensions**



**Technical Data**

**General specifications**

Switching element function	NPN	NO
Rated operating distance	$s_n$	4 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 3.24 mm
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.45
Reduction factor $r_{304}$		0.8
Reduction factor $r_{Brass}$		0.55

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 1400 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protected		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.5$ V
Rated insulation voltage	$U_{BIS}$	60 V
Operating current	$I_L$	0 ... 250 mA
Off-state current	$I_r$	0 ... 0.01 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 15$ mA
Indication of the switching state		LED, yellow

**Ambient conditions**

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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**Mechanical specifications**

Connection type	M8 x 1 connector, 3-pin
Housing material	PA
Sensing face	PA
Protection degree	IP67
Tightening torque, fastening screws	Threading M3 max: 1.1 Nm

**Compliance with standards and directives**

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

**Approvals and certificates**

Protection class	II
Rated insulation voltage	$U_i$ 60 V
Design-impulse-voltage withstand	$U_{imp}$ 800 V
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose

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