



Technical Data

For detailed data and product description refer to the data sheets at www.pepperl-fuchs.com

General Data

Rated operating distance	4 mm
Installation	flush
Type of voltage	DC
Operating voltage	10 ... 30 V
Reverse polarity protection	✓
Short-circuit protection	pulsing
Indication of the switching state	LED, yellow
Housing material	brass, nickel-plated
Protection degree	IP67

Model Number

	green = preferred type	NBB4-12GM30-E2	NBB4-12GM30-E3	NBB4-12GM40-E0	NBB4-12GM40-E2	NBB4-12GM30-E2-V3	NBB4-12GM30-E2-V1	NBB4-12GM30-E3-V1
Switching element function	NPN NO	•	•	•	•	•	•	•
	PNP NO	•	•	•	•	•	•	•
	PNP NC	•	•	•	•	•	•	•
No-load supply current	≤ 15 mA	•	•	•	•	•	•	•
	≤ 20 mA	•	•	•	•	•	•	•
Switching frequency	0 ... 1000 Hz	•	•	•	•	•	•	•
	0 ... 800 Hz	•	•	•	•	•	•	•
Operating current	0 ... 150 mA	•	•	•	•	•	•	•
	0 ... 200 mA	•	•	•	•	•	•	•
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)	•	•	•	•	•	•	•
	-40 ... 80 °C (-40 ... 176 °F)	•	•	•	•	•	•	•
	-40 ... 85 °C (-40 ... 185 °F)	•	•	•	•	•	•	•
Connection type	Device connector M12 x 1, 4-pin	•	•	•	•	•	•	•
	Device connector M8 x 1, 3-pin cable PVC, 2 m	•	•	•	•	•	•	•

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.	•	•	•	•	•	•	•

Dimensions

Length L [mm]	30	40	44	45
Diameter D [mm]			12	
Thread length l _t [mm]	27	37	35	30
Cap length l ₁ [mm]			0	
Connector area l _c [mm]		0	9	6
LED position			Pos. C	

Accessories

This and more accessories can be found in chapter 10
 See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

BF 12	Mounting flange, 12 mm
EXG-12	Quick mounting bracket with dead stop
V3-GM-2M-PUR	Cable socket, M8, 3-pin, PUR cable
V1-G-2M-PUR H/S	Female cordset, M12, 4-pin, irradiated PUR cable
V1-G-BK	4-pin, M12 female field-attachable connector
V3-WM-2M-PUR	Cable socket, M8, 3-pin, PUR cable
V1-G-2M-PUR	Cable socket, M12, 4-pin, PUR cable
V1-W-2M-PUR	Cable socket, M12, 4-pin, PUR cable

Properties

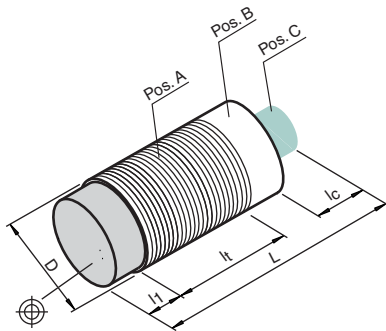
- Ø12 mm housing
- 4 mm, flush mountable
- DC, 3-wire switching output
- Cable and connector versions

Further Products

In this series, we offer additionally:

NBB4-12GM30-E2-T-V1

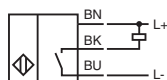
Technical data similar to NBB4-12GM30-E2-V1 but:
 Operating current: 0 ... 100 mA
 Ambient temperature: -25 ... 100 °C (-13 ... 212 °F)



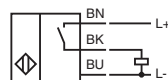
Electrical Connection



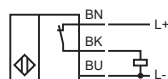
NBB4-12GM40-E0



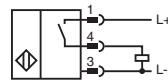
NBB4-12GM40-E2
NBB4-12GM30-E2



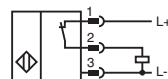
NBB4-12GM30-E3



NBB4-12GM30-E2-T-V1
NBB4-12GM30-E2-V1
NBB4-12GM30-E2-V3



NBB4-12GM30-E3-V1



Wire colors in accordance with EN 60947-5-2

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

