

1
1.1

Technical Data

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

General Data

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

Model Number

			NBB4-12GM30-E2	NBB4-12GM30-E3	NBB4-12GM40-E0	NBB4-12GM40-E2	NBB4-12GM30-E2-V3	NBB4-12GM30-E2-V1	NBB4-12GM30-E3-V1
Output type	NPN	NO	•						
	PNP	NO		•					
	PNP	NC			•				•
No-load supply current	≤ 15 mA		•	•	•		•	•	•
	≤ 20 mA					•			
Switching frequency	0 ... 1000 Hz		•	•			•	•	•
	0 ... 800 Hz				•	•			
Load 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	Connector M12 x 1, 4-pin							•	•
	Connector M8 x 1, 3-pin								
	cable PVC, 2 m		•	•	•	•			



Properties

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

Benefits

- Extended sensing range means fewer sensor/target impacts

Additional Products

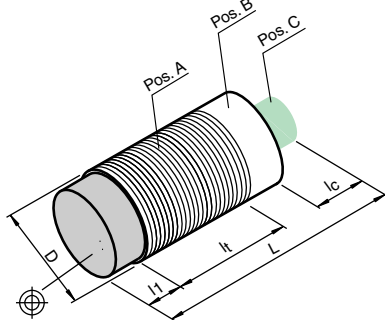
In this series, we offer the following additional products:

NBB4-12GM30-E2-T-V1

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

NBB4-12GM30-E0-V1

Technical data similar to NBB4-12GM30-E2-V1 but:
Output type: NPN, NO
No-load supply current: ≤ 7 mA
Switching frequency: 0 ... 400 Hz



Approvals and Certificates

UL approval	cULus Listed, General Purpose	•	•	•	•	•	•	•	•
CSA approval	cCSAus Listed, General Purpose	•	•	•	•	•	•	•	•
CCC approval	CCC approval / marking not required for sensors rated ≤36 V								

Dimensions

Length L [mm]	30	40	44	45
Diameter D [mm]	M12 x 1			
Thread length l ₁ [mm]	27	37	35	30
Cap length l ₁ [mm]	0			
Connector length l ₃ [mm]	0		9	6
LED position	Pos. C			

Accessories

These and more accessories can be found in chapter 10

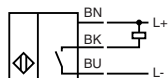
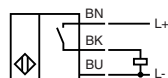
See pages from 970 ... for cordsets See pages 1066 ... for mounting accessories

BF 12	Mounting bracket, 12 mm
EXG-12	Quick mounting bracket with stop
AB-12	Right angled mounting bracket
MH01-M12	Mounting bracket M12 - 1/2" rod type
V3-GM	Female connector, M8, 3-pin, field attachable, straight
V1-G	4-pin, M12 female field-attachable connector, straight
V3-GM-BK2M-PUR-U	Female cordset, M8, 3-pin, PUR cable, straight
V1-G-2M-PUR H/S	Female cordset, M12, 4-pin, irradiated PUR cable, straight
V1-G-BK2M-PUR-U	Female cordset, M12, 4-pin, PUR cable, straight

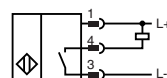
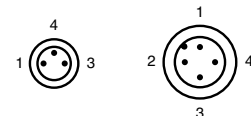
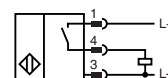
Electrical Connection



NBB4-12GM40-E0

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

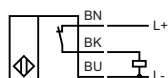
NBB4-12GM30-E0-V1

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

Wire colors in accordance with EN 60947-5-2

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

NBB4-12GM30-E3



NBB4-12GM30-E3-V1

