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Proximity Sensors, Inductive Sensors, cylindrical



Properties

- Ø18 mm housing
- 5 mm, flush mountable
- DC, 3-wire switching output
- Cable and connector versions

Technical Data

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

General Data

Rated operating distance	5 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

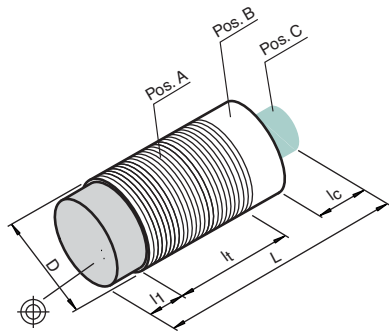
		NBB5-18GM20-E2	NBB5-18GM40-E1	NBB5-18GM40-E2	NBB5-18GM20-E2-V1	NBB5-18GM40-E0-V1	NBB5-18GM40-E2-V1	NBB5-18GM40-E3-V1
Switching element function	NPN NO		●		●			
	NPN NC							
	PNP NO	●		●	●		●	
	PNP NC							●
No-load supply current	≤ 15 mA		●		●	●	●	
	≤ 20 mA	●		●	●			●
Switching frequency	0 ... 800 Hz							●
	0 ... 1000 Hz	●	●	●	●	●	●	
Operating current	0 ... 100 mA	●	●	●	●	●	●	
	0 ... 200 mA							●
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)	●	●	●	●	●	●	●
	-40 ... 70 °C (-40 ... 158 °F)				●			
Connection type	Device connector M12 x 1 , 4-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]	20	40	40	35	50	50	50
Diameter D [mm]				18			
Thread length l _t [mm]	17	37	37	20	39	39	39
Cap length l ₁ [mm]				0			
Connector area l _c [mm]		0		15		11	
LED position				Pos. C		Pos. A	

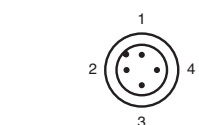
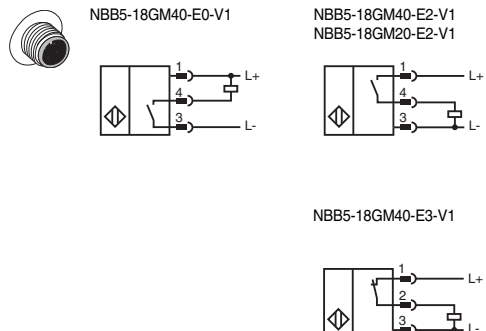
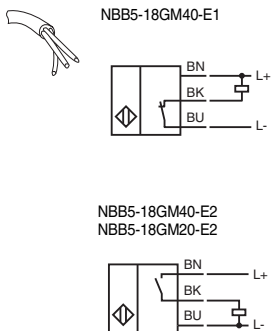


Accessories This and more accessories can be found in chapter 10

See pages from 972 ... for cordsets See pages 1068 ... for mounting aids

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

Electrical Connection



Wire colors in accordance with EN 60947-5-2

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



Technical Data

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General Data

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Installation	flush
Type of voltage	DC
Operating voltage	10 ... 30 V
No-load supply current	≤ 20 mA
Reverse polarity protection	✓
Switching frequency	0 ... 800 Hz
Operating current	0 ... 200 mA
Short-circuit protection	pulsing
Indication of the switching state	LED, yellow
Housing material	brass, nickel-plated
Protection degree	IP67

Properties

- Ø18 mm housing
- 5 mm, flush mountable
- DC, 3-wire and 4-wire switching output versions
- Cable and connector versions

Further Products

In this series, we offer additionally:

NBB5-18GM50-E2-T-V1

Technical data like NBB5-18GM50-E2-V1 but:
Ambient temperature: -25 ... 100 °C (-13 ... 212 °F)
Connection type: Device connector M12 x 1 , 3-pin

Model Number

	NBB5-18GM50-E0	NBB5-18GM50-E2	NBB5-18GM50-E3	NBB5-18GM60-A0	NBB5-18GM60-A2	NBB5-18GM50-E0-V1	NBB5-18GM50-E2-V1	NBB5-18GM50-E3-V1	NBB5-18GM60-A0-V1	NBB5-18GM60-A2-V1
Switching element function										
Ambient temperature										
Connection type										

Approvals and Certificates

Protection class	II									
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.									

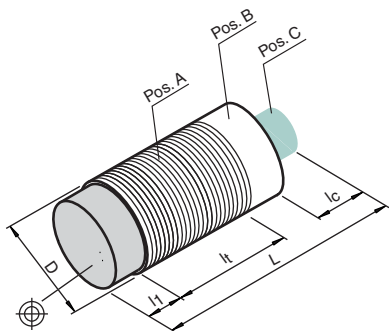
Dimensions

Length L [mm]	50	60	65	70
Diameter D [mm]		18		
Thread length l _t [mm]	47	60	50	60
Cap length l ₁ [mm]		0		
Connector area l _c [mm]	0		15	10
LED position			Pos. C	

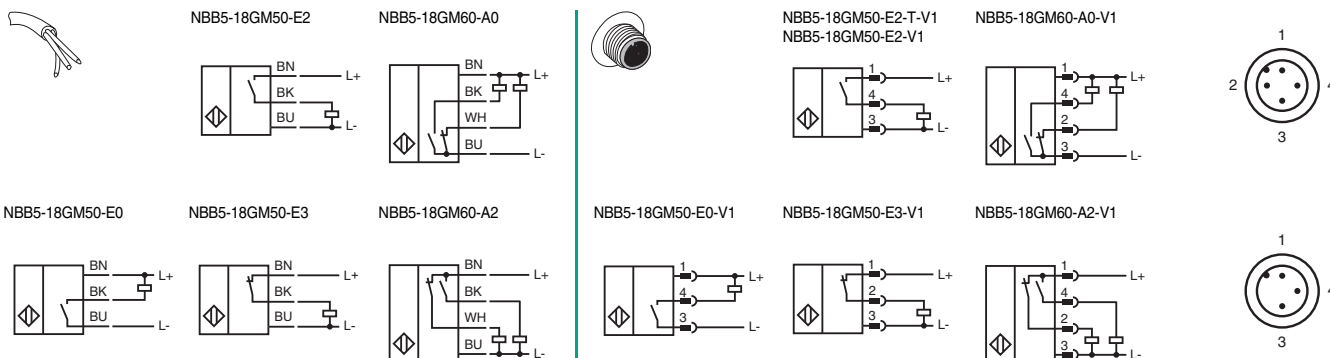
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Electrical Connection



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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