

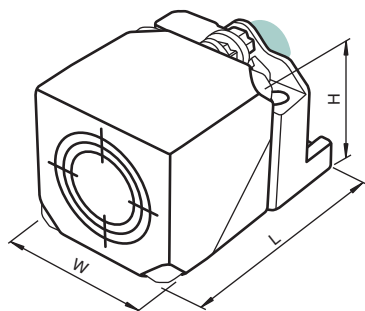


Properties

- Flexible, compact *VariKont-L* housing
- 20 mm, flush and 40 mm, non-flush mountable versions
- DC, 2-wire switching output
- Connector version

Your Benefit

- All-around visible status display
- Sensor head can be aligned in 5 different positions
- Mounting base with quick clamping lever for swift mounting
- Rotatable connector allows all orientations of the attached cordset



Technical Data

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

General Data

Switching frequency	0 ... 30 Hz
Operating current	2 ... 100 mA
Short-circuit protection	pulsing
Indication of the switching state	LED, yellow
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Housing material	PA
Protection degree	IP69K
Connection type	Device connector M12 x 1, 4-pin



Model Number

		NBB20-L2-Z0-V1	NBB20-L2-Z4-V1	NBB20-L2-Z5-V1	NBN40-L2-Z0-V1	NBN40-L2-Z4-V1	NBN40-L2-Z5-V1
Rated operating distance	20 mm	●	●	●			
	40 mm				●	●	●
Installation	flush	●	●	●			
	non-flush				●	●	●
Switching element function	NO	●	●		●	●	
	NC			●			●
Operating voltage	3.8 ... 30 V DC		●	●		●	●
	5 ... 30 V DC	●			●		
Reverse polarity protection	✓		●	●		●	●
	tolerant	●			●		

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]	67
Width W [mm]	40
Height H [mm]	40

Accessories

This and more accessories can be found in chapter 10

See pages from 972 ... for cordsets

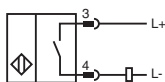
See pages 1068 ... for mounting aids

V1-G-BK	4-pin, M12 female field-attachable connector
V1-W-BK	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
MHW 01	Modular mounting bracket
MH 02-L	Mounting aid

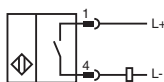
Electrical Connection



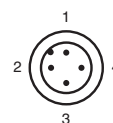
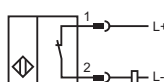
NBB20-L2-Z0-V1
NBN40-L2-Z0-V1



NBB20-L2-Z4-V1
NBN40-L2-Z4-V1



NBB20-L2-Z5-V1
NBN40-L2-Z5-V1



Wire colors in accordance with EN 60947-5-2

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





Properties

- Flexible, compact **VariKont-L** housing
- 20 mm, flush and 40 mm, non-flush mountable versions
- DC, 3-wire and 4-wire switching output versions
- Connector version

Your Benefit

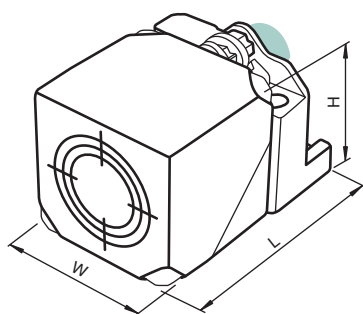
- All-around visible status display
- Sensor head can be aligned in 5 different positions
- Mounting base with quick clamping lever for swift mounting
- Rotatable connector allows all orientations of the attached cordset

Further Products

In this series, we offer additionally:

NBB20-L2-A2-T-V1

Technical data like NBB20-L2-A2-V1 but:
Ambient temperature: -25 ... 100 °C (-13 ... 212 °F)



Technical Data

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

General Data

Operating voltage	10 ... 30 V DC
No-load supply current	≤ 20 mA
Reverse polarity protection	✓
Operating current	0 ... 200 mA
Short-circuit protection	pulsing
Operating voltage display	LED, green
Indication of the switching state	LED, yellow
Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
Housing material	PA
Protection degree	IP69K
Connection type	Device connector M12 x 1, 4-pin



Model Number

green = preferred type

		NBB20-L2-E0-V1	NBB20-L2-E2-V1	NBB20-L2-A0-V1	NBB20-L2-A2-V1	NBN40-L2-E0-V1	NBN40-L2-E2-V1	NBN40-L2-A0-V1	NBN40-L2-A2-V1
Rated operating distance	20 mm	●	●	●	●				
	40 mm					●	●	●	●
Installation	flush	●	●	●	●				
	non-flush					●	●	●	●
Switching element function	NPN NO/NC			●				●	
	NPN NO	●				●			
	PNP NO/NC				●				●
	PNP NO		●				●		
Switching frequency	0 ... 100 Hz					●	●	●	●
	0 ... 150 Hz	●	●	●	●				

Approvals and Certificates

UL approval	cULus Listed, General Purpose	●	●	●	●	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●	●	●	●	●
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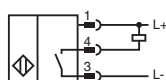
See pages 1068 ... for mounting aids

V1-G-BK	4-pin, M12 female field-attachable connector
V1-W-BK	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
MHW 01	Modular mounting bracket
MH 02-L	Mounting aid

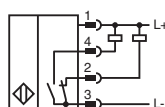
Electrical Connection



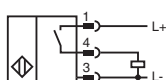
NBB20-L2-E0-V1
NBN40-L2-E0-V1



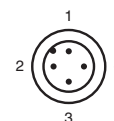
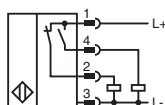
NBB20-L2-A0-V1
NBN40-L2-A0-V1



NBB20-L2-E2-V1
NBN40-L2-E2-V1



NBB20-L2-A2-T-V1
NBB20-L2-A2-V1
NBN40-L2-A2-V1



Wire colors in accordance with EN 60947-5-2

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No-load supply current	≤ 20 mA
Reverse polarity protection	✓
Operating current	0 ... 200 mA
Short-circuit protection	pulsing
Operating voltage display	LED, green
Indication of the switching state	LED, yellow
Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
Housing material	PA-GF35 metal base Xylan coated metal mounting flange Xylan coated.
Protection degree	IP69K
Connection type	Device connector M12 x 1, 4-pin



Properties

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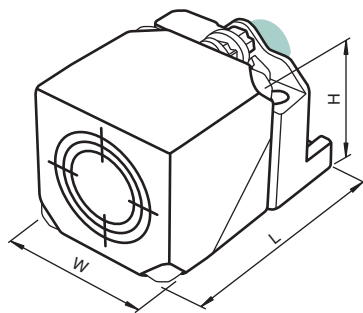
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In this series, we offer additionally:

NBB20-L2M-A2-T-V1

Technical data like NBB20-L2M-A2-V1 but:
Ambient temperature: -25 ... 100 °C (-13 ... 212 °F)
Housing material: PA-GF35
metal base powder coated
metal mounting flange powder coated.



Model Number

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Rated operating distance	20 mm	●	●	●	●				
	40 mm					●	●	●	●
Installation	flush	●	●	●	●				
	non-flush					●	●	●	●
Switching element function	NPN NO/NC			●				●	
	NPN NO	●							
	PNP NO/NC				●				●
	PNP NO		●			●			
Switching frequency	0 ... 100 Hz					●	●	●	●
	0 ... 150 Hz	●	●	●	●				

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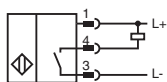
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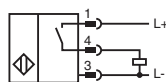
Electrical Connection



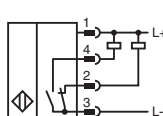
NBB20-L2M-E0-V1
NBN40-L2M-E0-V1



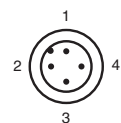
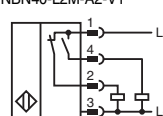
NBB20-L2M-E2-V1
NBN40-L2M-E2-V1



NBB20-L2M-A0-V1
NBN40-L2M-A0-V1



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