

Quick Select Product Guide

Industrial Sensors



Your automation, our passion.


PEPPERL+FUCHS



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Industrial Sensors

Everything for the Perfect Application

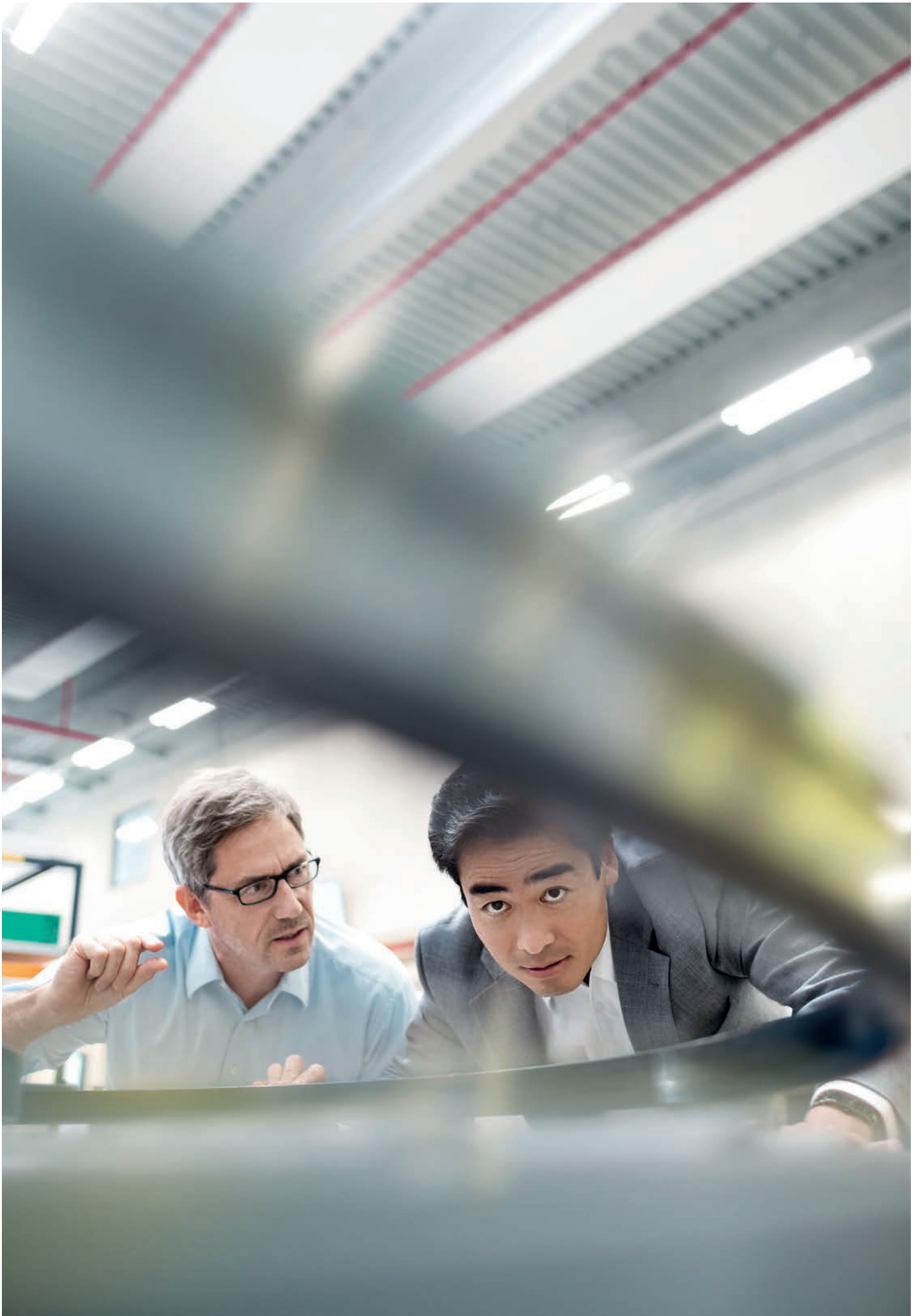
The right solution for every application—this is the Pepperl+Fuchs claim behind all the components, systems and solutions that we have been developing for you in the field of industrial sensors for more than seven decades. Our actions are determined by supporting your applications completely reliably and optimizing them continuously. To achieve the best results, we intensively research your markets and the special challenges you face every day. That is why ongoing dialog with you is essential to our work, as is cooperation on an equal footing. Successful together—is how we work.

Partnership needs proximity. That's why you'll always find your contact partner in more than 50 Pepperl+Fuchs locations worldwide. What's more, our team of experts has been working closely with you for many years on a daily basis to develop customized, individual solutions—as one of only a few, sometimes the only manufacturer in the world offering this service as standard. This is why Pepperl+Fuchs' customized solutions are not only successfully established, but are now one of our most important features.

The widest product range on the market and a huge variety of technologies and operating principles are the basis on which we develop the right solution for every application level. Since the invention of the proximity switch in 1958, we have continued to advance our technologies and to supplement them with groundbreaking innovations. For example, the product range in the Industrial Vision area is now so extensive that it can solve even highly complex vision applications—and it is being expanded more and more. The Pepperl+Fuchs LiDAR sensors are state-of-the-art with products such as the R2000 2-D laser scanner. Pepperl+Fuchs is the leader in ultrasound and time-of-flight technologies and also camera-based positioning systems. In addition, Pepperl+Fuchs provides technological highlights for safety-critical applications, such as the safePGV and safePXV safety sensors or the USi-Safety ultrasonic safety sensor system.

Whether it is conventional applications or complex tasks, such as the digital transformation of your application to Industry 4.0 level: our focus is on rethinking established technologies and turning forward-looking concepts into real innovations. An example of this is industrial communication: To enable the integration of different components, sensors are required for interfaces via IO-Link, CAN, Ethernet, etc. We are equipping our sensors with this and other features so that each intelligent sensor can process even more data and information in the future. To this end, we use the know-how of the entire Pepperl+Fuchs Group: Fresh ideas from young start-ups combined with many years of expertise and experience in automation—therefore paving the way for future challenges.

Let us take you into the future of factory automation!



Pepperl+Fuchs - Automation Industry Partner

For over 70 years, Pepperl+Fuchs has relied on the highest quality standards to develop innovative technologies. This is a claim that has made us one of the world's leading manufacturers of industrial sensors, with a portfolio that provides the exact right solution for each application.

Industrial Sensors from Pepperl+Fuchs

5 technology centers for sensor technology, 500 developers, and a range of over 35,000 products. These figures represent the level of technological expertise at Pepperl+Fuchs and our constant effort to advance innovative ideas to perfection. After all, high-performance technology is a decisive criterion for success in view of the growing demands of dynamic markets.

Decades of experience across all sectors make Pepperl+Fuchs a globally competent partner for factory automation. The vast range of our portfolio not only offers the exact right sensor for the our customers' various standard applications—our experts also work alongside you to develop individual solutions that are perfectly tailored to each of your specific applications.



Strong Partners in the Pepperl+Fuchs Group Network



VMT GmbH: Innovative Vision Systems

VMT Vision Machine Technik Bildverarbeitungssysteme GmbH has 20 years of experience in the fields of image processing, laser measurement technology, and robot vision control. As one of the leading international systems companies, we offer our customers a broad portfolio of standardized and individually configured image processing solutions. A competence center within the powerful Pepperl+Fuchs Group network, which combines cutting-edge technology with the highest level of investment security.

www.vmt-vision-technology.com



Neoception GmbH: Customized IoT Solutions

On the path to a digital future, Neoception GmbH is the company of choice: Its tailor-made industrial IoT services turn conventional products into networked applications with added value. Secure, highly available infrastructure enables digital applications to be implemented ultra-efficiently and future-proof IoT solutions to be introduced smoothly, so that you too can benefit from securely connected processes.

www.neoception.com



ecom: Solutions for Mobile Security and Communication

With ecom, Pepperl+Fuchs acquired a highly specialized partner that has been firmly established in a number of markets as the global market leader for mobile industrial devices such as mobile phones, smartphones, and tablets for hazardous areas for decades. Mobile security and communications solutions allow customers to digitalize their applications quickly and easily, opening up brand-new possibilities and significantly increasing workflow safety, efficiency, and transparency. Conventional applications are perfectly served, while Industry 4.0 applications are optimally prepared.

www.ecom-ex.com

Quick Select Product Guide

Product Pages Structure



Inductive Cubic Standard Sensors

F1 Series

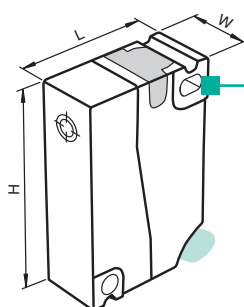


Common Technical Data

Housing length L	26 mm
Housing width W	12 mm
Housing height H	40 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	CCC
NBB2-F1-E2	flush	2 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB2-F1-E2-V3	flush	2 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-A0	flush	4 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-A0-5M	flush	4 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	5000 mm	PVC	
NBB4-F1-A0-V31	flush	4 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-A2	flush	4 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-A2-5M	flush	4 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	5000 mm	PVC	
NBB4-F1-A2-V31	flush	4 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-E0	flush	4 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-E0-V3	flush	4 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-E2	flush	4 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-E2-V3	flush	4 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-E3	flush	4 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-E3-V3	flush	4 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-A0	nonflush	8 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-A0-V31	nonflush	8 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-A2	nonflush	8 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-A2-V31	nonflush	8 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-E0	nonflush	8 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-E0-V3	nonflush	8 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-E2	nonflush	8 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-E2-V3	nonflush	8 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-E3	nonflush	8 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-E3-V3	nonflush	8 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB2-F1-US	flush	2 mm	Two-wire	Normally-open (NO)	AC/DC	25 Hz	20 V	253 V	Fixed cable	2000 mm	PVC	■
NBB4-F1-UO	flush	4 mm	Two-wire	Normally-closed (NC)	AC/DC	25 Hz	20 V	253 V	Fixed cable	2000 mm	PVC	■
NBB4-F1-US	flush	4 mm	Two-wire	Normally-open (NO)	AC/DC	25 Hz	20 V	253 V	Fixed cable	2000 mm	PVC	■



Accessories

V3-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 3-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray
V31-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 4-pin, PUR cable, gray
V31-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 4-pin, PUR cable, gray

Quick overview of approvals

Listed product range

Sample product photo

Common technical data of the products listed below

Selected products with a selection of technical data

Product name with hyperlink to the product detail page

Sample dimensional drawing

Suitable accessories to the above-mentioned products

The Best Sensor Solution Directly from the Inventor

As the inventor of the proximity sensor, Pepperl+Fuchs has continued to further develop and perfect its noncontact, wear-free technology. Having the most experience in the market and a complete portfolio of inductive, capacitive, and magnetic sensors always enables the best sensor solution for every application.

Highest Commitment to Quality

Reliability, process safety, and the highest quality standards—this is what proximity sensors from Pepperl+Fuchs stand for. As a pioneer in sensor technology, our key objective is to offer our customers the highest standard of quality on the market. Using test criteria far beyond the normative requirements, Pepperl+Fuchs sets standards in terms of performance and durability.

Expert Advice Since 1959

Having invented the proximity sensor in 1959, Pepperl+Fuchs has the most extensive experience on the market. Creating solutions for countless applications and developing a worldwide sales network means our customers benefit from practical consulting expertise combined with the greatest technical expertise. Based on this experience, our focus is constantly on the future. Continuous technological advancement makes sure Pepperl+Fuchs always offers products that are perfectly tailored to the requirements of your applications.

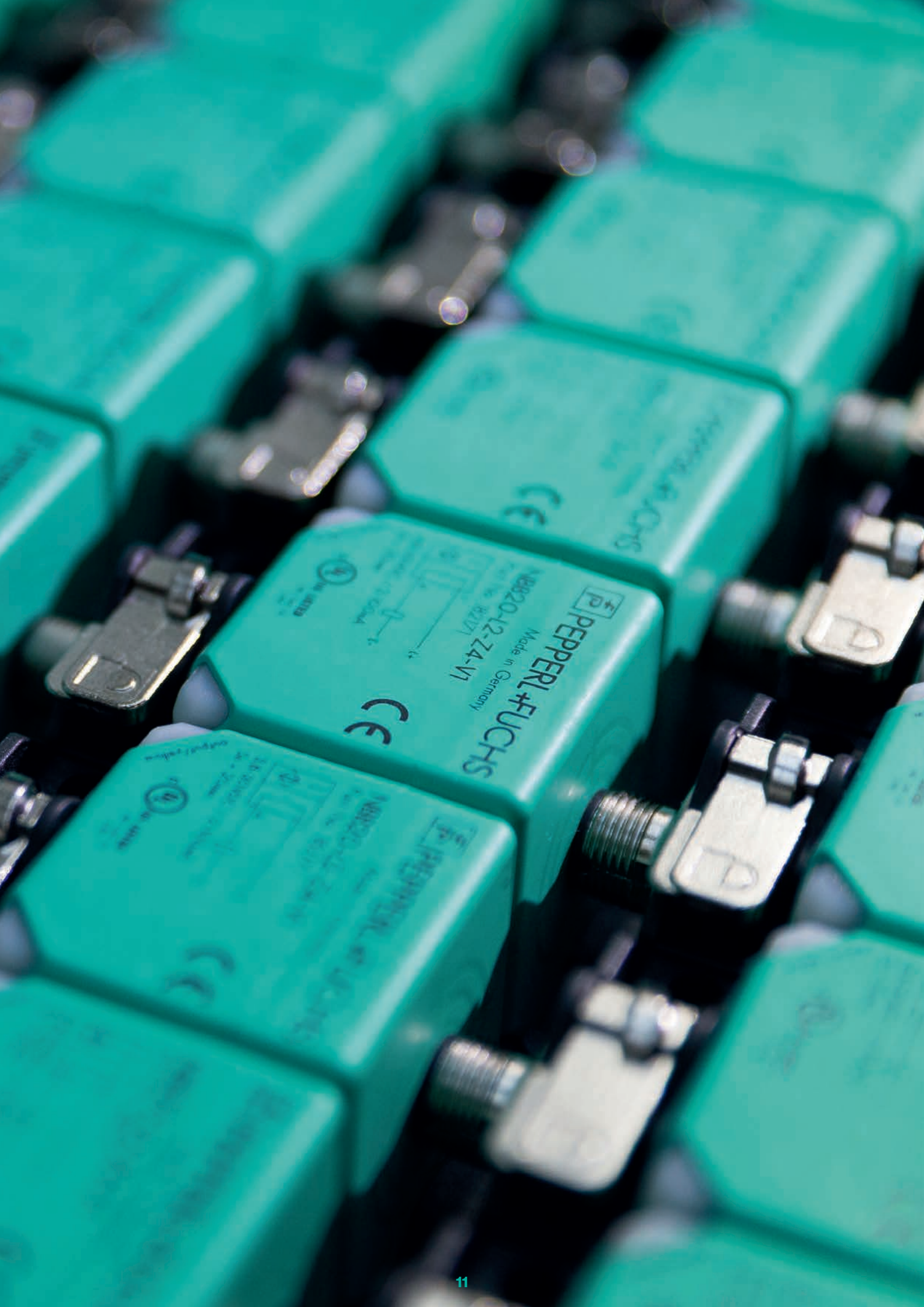
Offering the Optimal Solution Through Customization

Our offering is rounded off by the option to customize your solution: If your perfect sensor is not included in our comprehensive portfolio, our experts will work with you to develop the optimal configuration to suit your needs. This means that Pepperl+Fuchs will always offer the best sensor solution for each and every application.

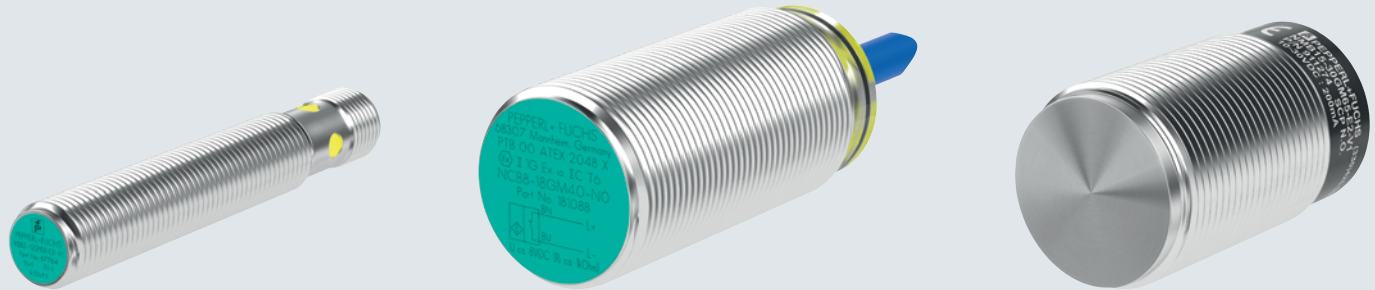


For more information, visit
pepperl-fuchs.com/fa-proximity





Complete Portfolio and Customized Solutions



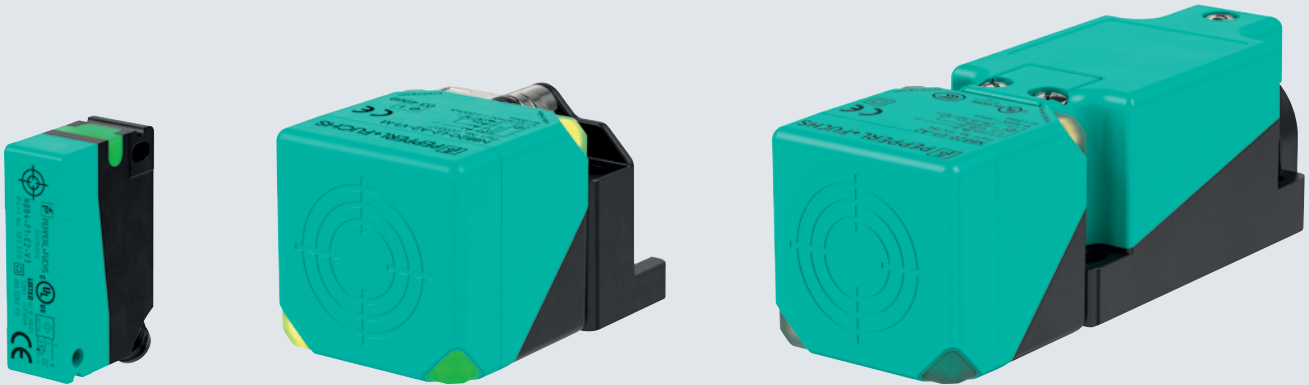
Our comprehensive portfolio of inductive proximity sensors is just as diverse as our customers' applications, offering endless possibilities. Worldwide approvals, various technologies, a wide range of housing designs, materials, and output signals—our portfolio of over 6000 sensors offers maximum flexibility when it comes to choosing the optimum sensor solution.

Typical Applications

- Wear-free, noncontact detection of metallic objects at a distance of up to 100 mm
- Position detection in machine tools
- Monitoring of safe end positions, e.g. for crane applications
- Position querying for skids and thrust plates in automotive manufacturing

Your Benefits at a Glance

- Reliability and process safety for your application thanks to the highest quality standards in sensor production
- The best sensory solution for every application, every time, thanks to our complete portfolio
- Customization beyond the standard portfolio
- Highest levels of robustness and durability even in harsh industrial environments
- Application-specific consulting at the highest technical level thanks to our extensive experience in the market, and our own developments and products



Technical Features

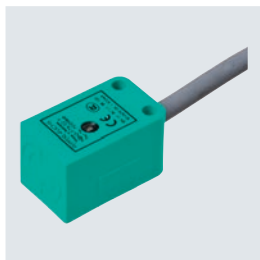
- Wide variety of worldwide approvals, including country and sector-specific approvals (e.g. KOSHA, NEPSI, GL/DNV, UL, CCC, ATEX, IECEx, EAC-Ex, E1, SIL)
- Sensors for all supply voltages (DC, AC, universal current) and output signals (e.g. discrete [two, three, and four-wire], analog, IO-Link, AS-Interface, and NAMUR)
- Wide variety of housing designs and materials
- Complete range of cable and connector types
- Variety of specialist technologies (e.g., metal face sensors, reduction factor 1)
- Sensing ranges from up to 100 mm

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F76 Series

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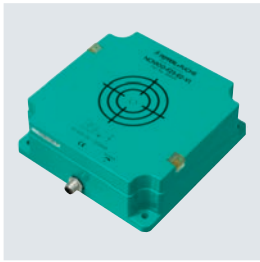
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V3 Series

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F23 Series

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F29 Series

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F33/F33M Series

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F41/F41A Series

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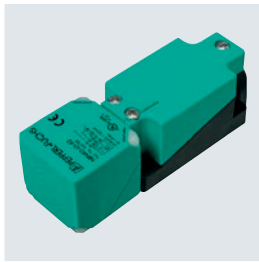
FP Series

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FPS Series

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Varikont Series

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Varikont-L L2/L3 Series

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Inductive Cubic Standard Sensors

F1 Series

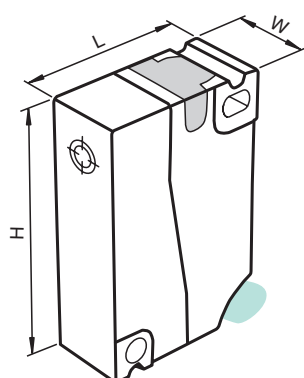


Common Technical Data

Housing length L	26 mm
Housing width W	12 mm
Housing height H	40 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	CCC
NBB2-F1-E2	flush	2 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB2-F1-E2-V3	flush	2 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-A0	flush	4 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-A0 5M	flush	4 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	5000 mm	PVC	
NBB4-F1-A0-V31	flush	4 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-A2	flush	4 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-A2 5M	flush	4 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	5000 mm	PVC	
NBB4-F1-A2-V31	flush	4 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-E0	flush	4 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-E0-V3	flush	4 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-E2	flush	4 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-E2-V3	flush	4 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB4-F1-E3	flush	4 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBB4-F1-E3-V3	flush	4 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-A0	nonflush	8 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-A0-V31	nonflush	8 mm	NPN	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-A2	nonflush	8 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-A2-V31	nonflush	8 mm	PNP	complementary	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-E0	nonflush	8 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-E0-V3	nonflush	8 mm	NPN	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-E2	nonflush	8 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-E2-V3	nonflush	8 mm	PNP	Normally-open (NO)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBN8-F1-E3	nonflush	8 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
NBN8-F1-E3-V3	nonflush	8 mm	PNP	Normally-closed (NC)	DC	1400 Hz	10 V	30 V	M8 connector plug			
NBB2-F1-US	flush	2 mm	Two-wire	Normally-open (NO)	AC/DC	25 Hz	20 V	253 V	Fixed cable	2000 mm	PVC	■
NBB4-F1-UO	flush	4 mm	Two-wire	Normally-closed (NC)	AC/DC	25 Hz	20 V	253 V	Fixed cable	2000 mm	PVC	■
NBB4-F1-US	flush	4 mm	Two-wire	Normally-open (NO)	AC/DC	25 Hz	20 V	253 V	Fixed cable	2000 mm	PVC	■

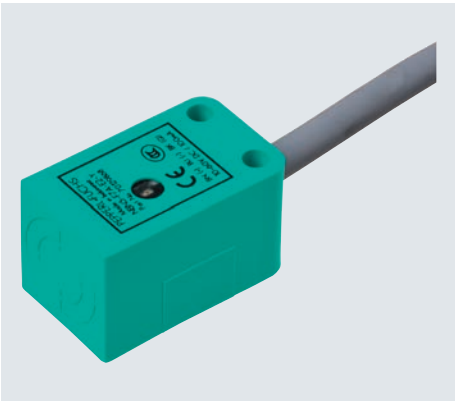


Accessories

V3-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 3-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray
V31-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 4-pin, PUR cable, gray
V31-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 4-pin, PUR cable, gray

Inductive Cubic Standard Sensors

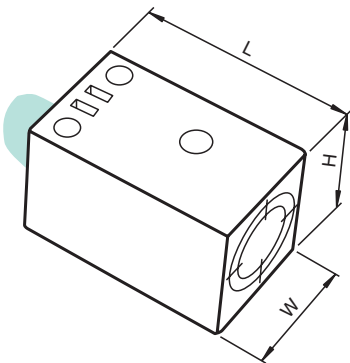
F7 Series



Common Technical Data	
Mechanical installation conditions	nonflush
Detection range	5 mm
Type of output	Three-wire
Type of voltage	DC
Switching frequency	500 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	Fixed cable
Cable material	PVC
Housing length L	28 mm
Housing width W	17 mm
Housing height H	17 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Type of Output	Switching Element Function	Cable Length
NBN5-F7-E0	NPN	Normally-open (NO)	2000 mm
NBN5-F7-E0-5M	NPN	Normally-open (NO)	5000 mm
NBN5-F7-E1	NPN	Normally-closed (NC)	2000 mm
NBN5-F7-E2	PNP	Normally-open (NO)	2000 mm
NBN5-F7-E2-5M	PNP	Normally-open (NO)	5000 mm



Inductive Cubic Standard Sensors

F76 Series

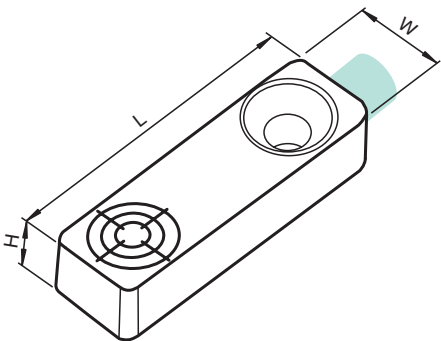


Common Technical Data

Mechanical installation conditions	flush
Detection range	2 mm
Type of output	Three-wire
Type of voltage	DC
Switching frequency	1500 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	Fixed cable
Cable length	5000 mm
Cable material	PVC
Housing length L	25 mm
Housing width W	8 mm
Housing height H	5.5 mm

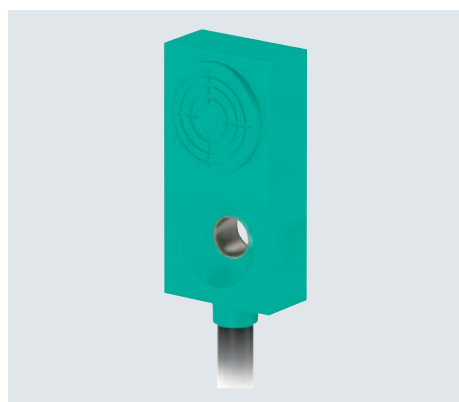
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Type of Output	Switching Element Function
NBB2-F76-E0-0,5M	NPN	Normally-open (NO)
NBB2-F76-E1-0,5M	NPN	Normally-closed (NC)
NBB2-F76-E2-0,5M	PNP	Normally-open (NO)
NBB2-F76-E3-0,5M	PNP	Normally-closed (NC)



Inductive Cubic Standard Sensors

F79 Series

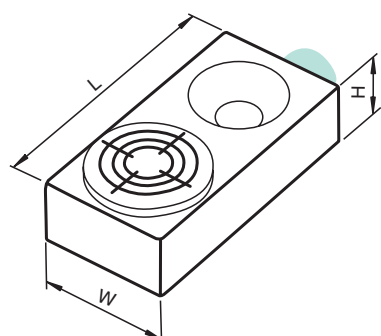


Common Technical Data

Mechanical installation conditions	flush
Detection range	15 mm
Type of output	Three-wire
Type of voltage	DC
Switching frequency	1200 Hz
Operating voltage (min)	5 V
Operating voltage (max)	30 V
Cable material	PVC
Housing length L	16 mm
Housing width W	8 mm
Housing height H	4.7 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Type of Output	Switching Element Function	Connection Type	Cable Length	UL
NBB1,5-F79-E0-0,1M-V3	NPN	Normally-open (NO)	Fixed cable with M8 plug	100 mm	
NBB1,5-F79-E0-0,5M	NPN	Normally-open (NO)	Fixed cable	500 mm	
NBB1,5-F79-E0-5M	NPN	Normally-open (NO)	Fixed cable	5000 mm	
NBB1,5-F79-E1-0,1M-V3	NPN	Normally-closed (NC)	Fixed cable with M8 plug	100 mm	
NBB1,5-F79-E1-0,5M	NPN	Normally-closed (NC)	Fixed cable	500 mm	
NBB1,5-F79-E1-5M	NPN	Normally-closed (NC)	Fixed cable	5000 mm	
NBB1,5-F79-E2-0,1M-V3	PNP	Normally-open (NO)	Fixed cable with M8 plug	100 mm	
NBB1,5-F79-E2-0,5M	PNP	Normally-open (NO)	Fixed cable	500 mm	
NBB1,5-F79-E2-2M	PNP	Normally-open (NO)	Fixed cable	2000 mm	■
NBB1,5-F79-E2-5M	PNP	Normally-open (NO)	Fixed cable	5000 mm	
NBB1,5-F79-E3-0,1M-V3	PNP	Normally-closed (NC)	Fixed cable with M8 plug	100 mm	
NBB1,5-F79-E3-0,5M	PNP	Normally-closed (NC)	Fixed cable	500 mm	
NBB1,5-F79-E3-5M	PNP	Normally-closed (NC)	Fixed cable	5000 mm	



Accessories

V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray
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Inductive Cubic Standard Sensors

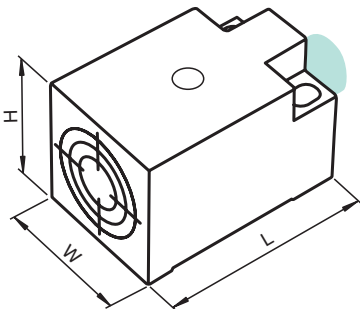
F9 Series



Common Technical Data	
Mechanical installation conditions	flush
Detection range	5 mm
Type of output	Three-wire
Switching element function	Normally-open (NO)
Type of voltage	DC
Switching frequency	500 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing length L	38.5 mm
Housing width W	16 mm
Housing height H	16.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Type of Output	Connection Type	Cable Length	Cable Material
NBB5-F9-E0	NPN	Fixed cable	2000 mm	PVC
NBB5-F9-E0-V3	NPN	8 mm connector plug		
NBB5-F9-E2	PNP	Fixed cable	2000 mm	PVC
NBB5-F9-E2-V3	PNP	8 mm connector plug		



Accessories	
V3-GR-2M-PUR	Single-ended female cordset, M8, snap-locking, straight, A-coded, 3-pin, PUR cable, gray
V3-WR-2M-PUR	Single-ended female cordset, M8, snap-locking, angled, A-coded, 3-pin, PUR cable, gray

Inductive Cubic Standard Sensors

F10 Series



Common Technical Data

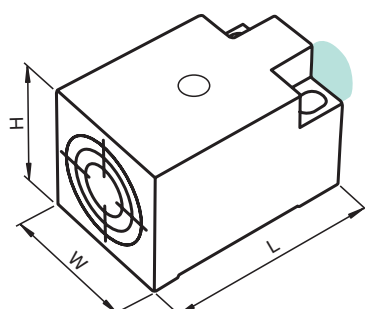
Type of output	Three-wire
Type of voltage	DC
Switching frequency	500 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing length L	38.5 mm
Housing width W	25 mm
Housing height H	25.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Connection Type	Cable Length	Cable Material	EAC
NBB7-F10-E0	flush	7 mm	NPN	Normally-open (NO)	Fixed cable	2000 mm	PVC	
NBB7-F10-E0-V1	flush	7 mm	NPN	Normally-open (NO)	M12 connector plug			
NBB7-F10-E1	flush	7 mm	NPN	Normally-closed (NC)	Fixed cable	2000 mm	PVC	
NBB7-F10-E2	flush	7 mm	PNP	Normally-open (NO)	Fixed cable	2000 mm	PVC	
NBB7-F10-E2-V1	flush	7 mm	PNP	Normally-open (NO)	M12 connector plug			
NBB7-F10-E3	flush	7 mm	PNP	Normally-closed (NC)	Fixed cable	2000 mm	PVC	
NBN10-F10-E0	nonflush	10 mm	NPN	Normally-open (NO)	Fixed cable	2000 mm	PVC	
NBN10-F10-E0-V1	nonflush	10 mm	NPN	Normally-open (NO)	M12 connector plug			
NBN10-F10-E2	nonflush	10 mm	PNP	Normally-open (NO)	Fixed cable	2000 mm	PVC	■
NBN10-F10-E2-V1	nonflush	10 mm	PNP	Normally-open (NO)	M12 connector plug			

Accessories

V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray



Inductive Cubic Standard Sensors

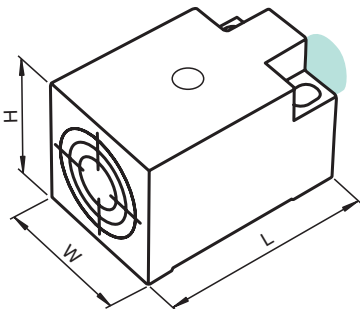
F11 Series



Common Technical Data	
Mechanical installation conditions	nonflush
Detection range	15 mm
Type of output	Three-wire
Switching element function	Normally-open (NO)
Type of voltage	DC
Switching frequency	150 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing length L	38.5 mm
Housing width W	30 mm
Housing height H	30.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Type of Output	Connection Type	Cable Length	Cable Material
NBN15-F11-E0	NPN	Fixed cable	2000 mm	PVC
NBN15-F11-E0-V1	NPN	M12 connector plug		
NBN15-F11-E2	PNP	Fixed cable	2000 mm	PVC
NBN15-F11-E2-V1	PNP	M12 connector plug		



Accessories	
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray

Inductive Cubic Standard Sensors

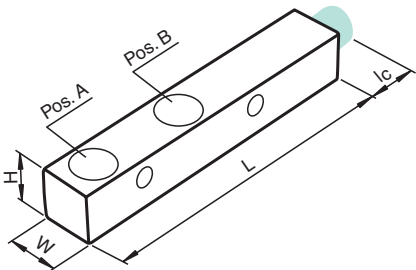
F141 Series



Common Technical Data	
Mechanical installation conditions	flush
Detection range	0.8 mm
Type of output	Three-wire
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	Fixed cable
Cable length	2000 mm
Cable material	PUR
Housing length L	25 mm
Housing width W	5 mm
Housing height H	5 mm

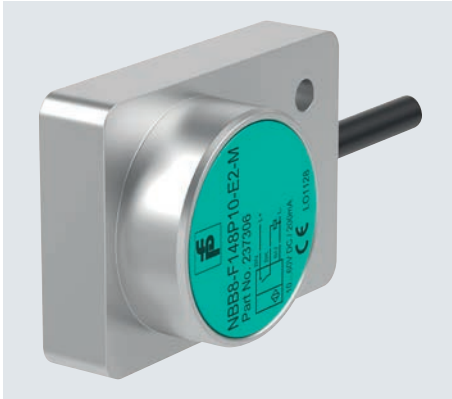
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Type of Output	Switching Element Function	Switching Frequency
NBB0,8-F141-E0	NPN	Normally-open (NO)	10,000 Hz
NBB0,8-F141-E1	NPN	Normally-closed (NC)	2500 Hz
NBB0,8-F141-E2	PNP	Normally-open (NO)	10,000 Hz
NBB0,8-F141-E3	PNP	Normally-closed (NC)	2500 Hz



Inductive Cubic Standard Sensors

F148 Series

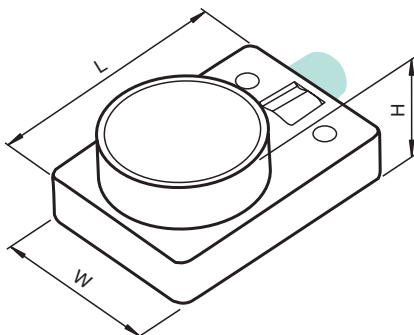


Common Technical Data

Mechanical installation conditions	flush
Type of voltage	DC
Switching frequency	600 Hz
Operating voltage (min)	10 V
Connection type	Fixed cable
Cable length	2000 mm
Cable material	PUR
Housing length L	50 mm
Housing width W	35 mm
Housing height H	20 mm

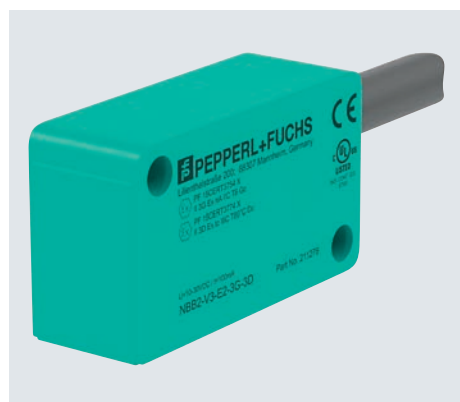
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Type of Output	Switching Element Function	UB (Max)	e1 Type Approval
NBB8-F148P10-E0-M	8 mm	NPN	Normally-open (NO)	60 V	■
NBB8-F148P10-E2-M	8 mm	PNP	Normally-open (NO)	60 V	■
NBB15-F148P10-E0-M	15 mm	NPN	Normally-open (NO)	60 V	■
NBB15-F148P10-E2-M	15 mm	PNP	Normally-open (NO)	60 V	■
NBB15-F148P10-ARO	15 mm	Relay	Normally-closed (NC)	30 V	
NBB15-F148P10-ARS	15 mm	Relay	Normally-open (NO)	30 V	



Inductive Cubic Standard Sensors

V3 Series



Common Technical Data

Type of voltage	DC
Housing length L	16 mm
Housing width W	27.8 mm
Housing height H	10.2 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

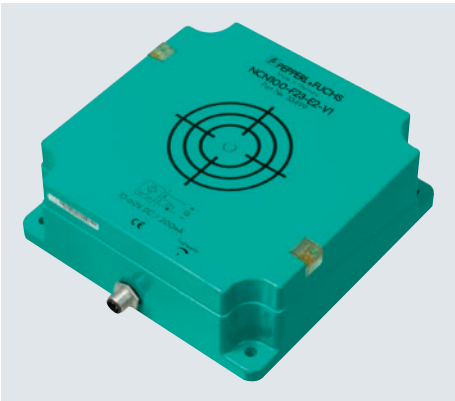
Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	CCC	UL
NBB2-V3-E0	flush	2 mm	NPN	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	130 mm	PVC		■
NBB2-V3-E0-V5	flush	2 mm	NPN	Normally-open (NO)	1000 Hz	10 V	30 V	Faston connector plug				■
NBB2-V3-E2	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	130 mm	PVC		■
NBB2-V3-E2-10M	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	10,000 mm	PVC		■
NBB2-V3-E2-1M	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	1000 mm	PVC		■
NBB2-V3-E2-5M	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	5000 mm	PVC		■
NBB2-V3-E2-V3	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	M8 connector plug				■
NBB2-V3-E2-V5	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	Faston connector plug				■
NBB2-V3-E3	flush	2 mm	PNP	Normally-closed (NC)	1000 Hz	10 V	30 V	Fixed cable	130 mm	PVC		■
NBB2-V3-E3-V3	flush	2 mm	PNP	Normally-closed (NC)	1000 Hz	10 V	30 V	M8 connector plug				■
NBB2-V3-E3-V5	flush	2 mm	PNP	Normally-closed (NC)	1000 Hz	10 V	30 V	Faston connector plug				■
NBB3-V3-E0	flush	3 mm	NPN	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBB3-V3-E0-V3	flush	3 mm	NPN	Normally-open (NO)	1000 Hz	10 V	30 V	M8 connector plug				
NBB3-V3-E1	flush	3 mm	NPN	Normally-closed (NC)	1000 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBB3-V3-E1-V3	flush	3 mm	NPN	Normally-closed (NC)	1000 Hz	10 V	30 V	M8 connector plug				
NBB3-V3-E2	flush	3 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBB3-V3-E2-2M	flush	3 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	2000 mm	PVC		
NBB3-V3-E2-V3	flush	3 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	M8 connector plug				
NBB3-V3-E3	flush	3 mm	PNP	Normally-closed (NC)	1000 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBB3-V3-E3-V3	flush	3 mm	PNP	Normally-closed (NC)	1000 Hz	10 V	30 V	M8 connector plug				
NBN4-V3-E0	nonflush	4 mm	NPN	Normally-open (NO)	500 Hz	10 V	30 V	Fixed cable	130 mm	PVC		■
NBN4-V3-E2	nonflush	4 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	Fixed cable	130 mm	PVC		■
NBN6-V3-E0	nonflush	6 mm	NPN	Normally-open (NO)	500 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBN6-V3-E0-V3	nonflush	6 mm	NPN	Normally-open (NO)	1000 Hz	10 V	30 V	M8 connector plug				
NBN6-V3-E1	nonflush	6 mm	NPN	Normally-closed (NC)	500 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBN6-V3-E1-V3	nonflush	6 mm	NPN	Normally-closed (NC)	1000 Hz	10 V	30 V	M8 connector plug				
NBN6-V3-E2	nonflush	6 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBN6-V3-E2-V3	nonflush	6 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	M8 connector plug				
NBN6-V3-E3	nonflush	6 mm	PNP	Normally-closed (NC)	500 Hz	10 V	30 V	Fixed cable	130 mm	PVC		
NBN6-V3-E3-V3	nonflush	6 mm	PNP	Normally-closed (NC)	1000 Hz	10 V	30 V	M8 connector plug				
NBB3-V3-Z4	flush	3 mm	Two-wire	Normally-open (NO)	2000 Hz	5 V	60 V	Fixed cable	130 mm	PVC	■	■
NBB3-V3-Z5	flush	3 mm	Two-wire	Normally-closed (NC)	2000 Hz	5 V	60 V	Fixed cable	130 mm	PVC	■	■

Accessories

V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray
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Inductive Cubic Standard Sensors

F23 Series



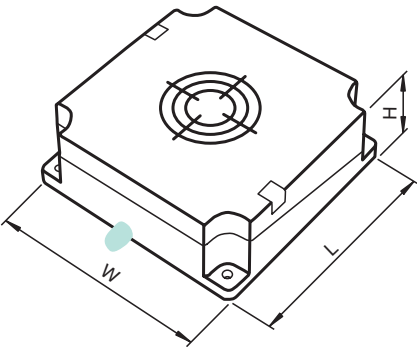
Common Technical Data

Mechanical installation conditions	nonflush
Detection range	100 mm
Type of output	Three-wire
Type of output	PNP
Switching element function	Normally-open (NO)
Type of voltage	DC
Switching frequency	10 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	M12 connector plug
Housing length L	177 mm
Housing width W	177 mm
Housing height H	60.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number

NCN100-F23-E2-V1



Accessories

V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray

Inductive Cubic Standard Sensors

F29 Series

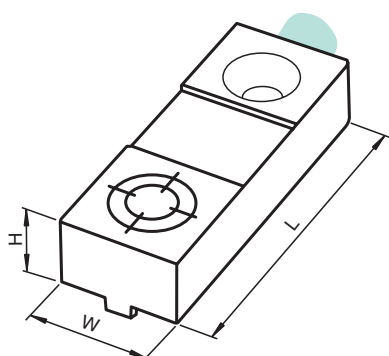


Common Technical Data

Type of voltage	DC
Switching frequency	1000 Hz
Operating voltage (min)	4.75 V
Operating voltage (max)	30 V
Cable material	PVC
Housing length L	27 mm
Housing width W	10 mm
Housing height H	6 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Connection Type	Cable Length
NBB2-F29-A0	flush	2 mm	NPN	complementary	Fixed cable	2000 mm
NBB2-F29-A2	flush	2 mm	PNP	complementary	Fixed cable	2000 mm
NBB2-F29-A2-5M	flush	2 mm	PNP	complementary	Fixed cable	5000 mm
NBB2-F29-E2-5M	flush	2 mm	PNP	Normally-open (NO)	Fixed cable	5000 mm
NBB2-F29-E3	flush	2 mm	PNP	Normally-closed (NC)	Fixed cable	2000 mm
NBN4-F29-A0	nonflush	4 mm	NPN	complementary	Fixed cable	2000 mm
NBN4-F29-A2	nonflush	4 mm	PNP	complementary	Fixed cable	2000 mm
NBN4-F29-E0	nonflush	4 mm	NPN	Normally-open (NO)	Fixed cable	2000 mm
NBN4-F29-E0-5M	nonflush	4 mm	NPN	Normally-open (NO)	Fixed cable	5000 mm
NBN4-F29-E2	nonflush	4 mm	PNP	Normally-open (NO)	Fixed cable	2000 mm
NBN4-F29-E2-5M	nonflush	4 mm	PNP	Normally-open (NO)	Fixed cable	5000 mm
NBN4-F29-E3-5M	nonflush	4 mm	PNP	Normally-closed (NC)	Fixed cable	5000 mm
NBN4-F29-E3-0,5M-V3	nonflush	4 mm	PNP	Normally-closed (NC)	Fixed cable with M8 plug	5000 mm

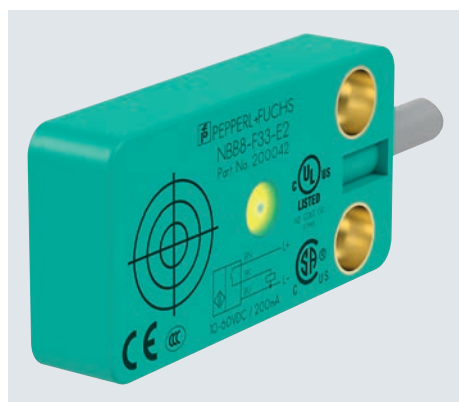


Accessories

V3-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 3-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray

Inductive Cubic Standard Sensors

F33/F33M Series

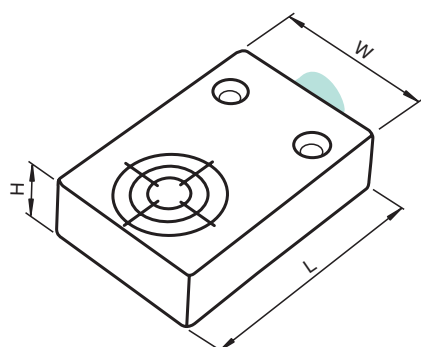


Common Technical Data

Mechanical installation conditions	flush
Type of voltage	DC
Operating voltage (min)	10 V
Cable material	PVC
Housing length L	10 mm
Housing width W	50 mm
Housing height H	25 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Max)	Connection Type	Cable Length	CCC
NBB5-F33-A0	5 mm	NPN	complementary	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33-A2	5 mm	PNP	complementary	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33-A2-5M	5 mm	PNP	complementary	500 Hz	30 V	Fixed cable	5000 mm	
NBB5-F33-E0	5 mm	NPN	Normally-open (NO)	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33-E2	5 mm	PNP	Normally-open (NO)	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33M-A0	5 mm	NPN	complementary	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33M-A2	5 mm	PNP	complementary	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33M-E0	5 mm	NPN	Normally-open (NO)	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33M-E2	5 mm	PNP	Normally-open (NO)	500 Hz	30 V	Fixed cable	2000 mm	
NBB5-F33M-E2-5M	5 mm	PNP	Normally-open (NO)	500 Hz	30 V	Fixed cable	5000 mm	
NBB8-F33-E0	8 mm	NPN	Normally-open (NO)	350 Hz	60 V	Fixed cable	2000 mm	■
NBB8-F33-E1	8 mm	NPN	Normally-closed (NC)	350 Hz	60 V	Fixed cable	2000 mm	■
NBB8-F33-E2	8 mm	PNP	Normally-open (NO)	350 Hz	60 V	Fixed cable	2000 mm	■
NBB8-F33-E2-0,2M-V1	8 mm	PNP	Normally-open (NO)	350 Hz	30 V	Fixed cable with M12 plug	200 mm	
NBB8-F33-E3	8 mm	PNP	Normally-closed (NC)	350 Hz	60 V	Fixed cable	2000 mm	■
NBB8-F33-E3-0,2M-V1	8 mm	PNP	Normally-closed (NC)	350 Hz	30 V	Fixed cable with M12 plug	200 mm	



Accessories

V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray

Inductive Cubic Standard Sensors

F41/F41A Series

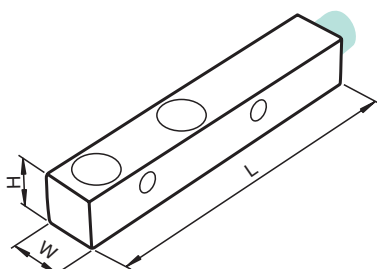


Common Technical Data

Type of output	Three-wire
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing width W	8 mm
Housing height H	8 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L
NBB1,5-F41-E2	flush	1.5 mm	PNP	Normally-open (NO)	1500 Hz	Fixed cable	2000 mm	PVC	40 mm
NBB1,5-F41-E2-V3	flush	1.5 mm	PNP	Normally-open (NO)	1500 Hz	M8 connector plug			46 mm
NBB1,5-F41-E3	flush	1.5 mm	PNP	Normally-closed (NC)	1500 Hz	Fixed cable	2000 mm	PVC	40 mm
NBB1,5-F41-E3-V3	flush	1.5 mm	PNP	Normally-closed (NC)	1500 Hz	M8 connector plug			46 mm
NBB1,5-F41A-E2	flush	1.5 mm	PNP	Normally-open (NO)	1500 Hz	Fixed cable	2000 mm	PVC	40 mm
NBB1,5-F41A-E2-V3	flush	1.5 mm	PNP	Normally-open (NO)	1500 Hz	M8 connector plug			46 mm
NBB1,5-F41A-E3	flush	1.5 mm	PNP	Normally-closed (NC)	1500 Hz	Fixed cable	2000 mm	PVC	40 mm
NBB1,5-F41A-E3-V3	flush	1.5 mm	PNP	Normally-closed (NC)	1500 Hz	M8 connector plug			46 mm
NBB2-F41-E2-V3	flush	2 mm	PNP	Normally-open (NO)	3000 Hz	M8 connector plug			46 mm
NEB3-F41-E0	semi-flush	3 mm	NPN	Normally-open (NO)	1000 Hz	Fixed cable	2000 mm	PVC	40 mm
NEB3-F41-E0-V3	semi-flush	3 mm	NPN	Normally-open (NO)	1000 Hz	M8 connector plug			50 mm
NEB3-F41-E1	semi-flush	3 mm	NPN	Normally-closed (NC)	1000 Hz	Fixed cable	2000 mm	PVC	40 mm
NEB3-F41-E1-V3	semi-flush	3 mm	NPN	Normally-closed (NC)	1000 Hz	M8 connector plug			50 mm
NEB3-F41-E2	semi-flush	3 mm	PNP	Normally-open (NO)	1000 Hz	Fixed cable	2000 mm	PVC	40 mm
NEB3-F41-E2-V3	semi-flush	3 mm	PNP	Normally-open (NO)	1000 Hz	M8 connector plug			50 mm
NEB3-F41-E3	semi-flush	3 mm	PNP	Normally-closed (NC)	1000 Hz	Fixed cable	2000 mm	PVC	40 mm
NEB3-F41-E3-V3	semi-flush	3 mm	PNP	Normally-closed (NC)	1000 Hz	M8 connector plug			50 mm



Accessories

V3-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 3-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray

Inductive Cubic Standard Sensors

FP Series

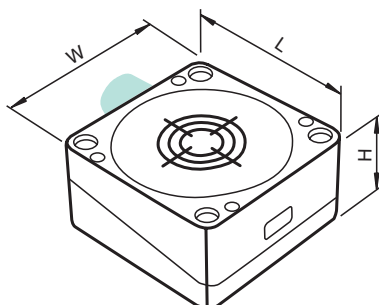


Common Technical Data

UL

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	Width W	Height H	CCC	EAC
NCB40-FP-A2-P1	flush	40 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCB40-FP-A2-P1-V1	flush	40 mm	PNP	complementary	DC	80 Hz	10 V	60 V	M12 connector plug	80 mm	80 mm	40 mm	■	
NCB40-FP-A2-P2	flush	40 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCB40-FP-A2-P4	flush	40 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCB40-FP-A2-P4-V1	flush	40 mm	PNP	complementary	DC	80 Hz	10 V	60 V	M12 connector plug	80 mm	80 mm	40 mm	■	
NCB40-FP-Z2-P1	flush	40 mm	Two-wire	Normally-open/normally-closed (selectable)	DC	50 Hz	10 V	60 V	Terminal compartment	84 mm	84 mm	40 mm	■	
NCB50-FP-A2-P1	flush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	84 mm	84 mm	40 mm	■	
NCB50-FP-A2-P1-V1	flush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	M12 connector plug	84 mm	84 mm	40 mm	■	
NCB50-FP-A2-P4	flush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	84 mm	84 mm	40 mm	■	
NCB50-FP-A2-P4-V1	flush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	M12 connector plug	84 mm	84 mm	40 mm	■	
NCB50-FP-E2-P1	flush	50 mm	PNP	Normally-open (NO)	DC	80 Hz	10 V	60 V	Terminal compartment	84 mm	84 mm	40 mm	■	■
NCB50-FP-E2-P1-V1	flush	50 mm	PNP	Normally-open (NO)	DC	80 Hz	10 V	60 V	M12 connector plug	84 mm	84 mm	40 mm	■	■
NCB50-FP-E2-P4	flush	50 mm	PNP	Normally-open (NO)	DC	80 Hz	10 V	60 V	Terminal compartment	84 mm	84 mm	40 mm	■	
NCB50-FP-E2-P4-V1	flush	50 mm	PNP	Normally-open (NO)	DC	80 Hz	10 V	60 V	M12 connector plug	84 mm	84 mm	40 mm	■	
NCB50-FP-Z2-P1	flush	50 mm	Two-wire	Normally-open/normally-closed (selectable)	DC	80 Hz	10 V	60 V	Terminal compartment	84 mm	84 mm	40 mm	■	
NCB50-FP-Z4-V1	flush	50 mm	Two-wire	Normally-open (NO)	DC	80 Hz	10 V	60 V	M12 connector plug	84 mm	84 mm	40 mm	■	
NCB50-FP-Z5-V1	flush	50 mm	Two-wire	Normally-closed (NC)	DC	80 Hz	10 V	60 V	M12 connector plug	84 mm	84 mm	40 mm	■	
NCN50-FP-A2-P1	nonflush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	80 mm	80 mm	40 mm	■	■
NCN50-FP-A2-P1-V1	nonflush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	M12 connector plug	80 mm	80 mm	40 mm	■	
NCN50-FP-A2-P3	nonflush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCN50-FP-A2-P4	nonflush	50 mm	PNP	complementary	DC	80 Hz	10 V	60 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCN50-FP-Z2-P1	nonflush	50 mm	Two-wire	Normally-open/normally-closed (selectable)	DC	80 Hz	10 V	60 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCN50-FP-Z2-P4	nonflush	50 mm	Two-wire	Normally-open/normally-closed (selectable)	DC	80 Hz	10 V	60 V	Terminal compartment	40 mm	80 mm	80 mm		
NJ60-FP-E2-P2	nonflush	60 mm	PNP	Normally-open (NO)	DC	20 Hz	10 V	30 V	Terminal compartment	80 mm	80 mm	40 mm		
NJ60-FP-E2-P2-V1	nonflush	60 mm	PNP	Normally-open (NO)	DC	20 Hz	10 V	30 V	M12 connector plug	80 mm	80 mm	40 mm		
NCB40-FP-W-P1	flush	40 mm	Two-wire	Normally-open/normally-closed (selectable)	AC	20 Hz	20 V	253 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCN40-FP-W-T-P1	nonflush	40 mm	Two-wire	Normally-open/normally-closed (selectable)	AC	20 Hz	20 V	253 V	Terminal compartment	80 mm	80 mm	40 mm	■	
NCN50-FP-W-P1	nonflush	50 mm	Two-wire	Normally-open/normally-closed (selectable)	AC	20 Hz	20 V	253 V	Terminal compartment	80 mm	80 mm	40 mm	■	



Accessories

V1-G-2M-PUR

Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray

V1-W-2M-PUR

Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray

Inductive Cubic Standard Sensors

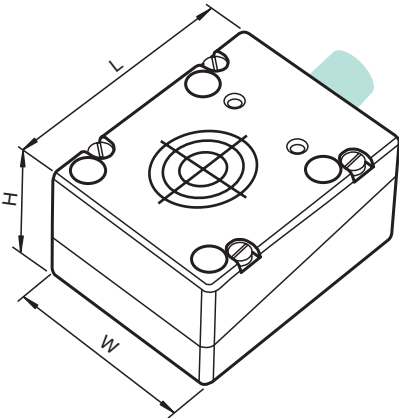
FPS Series



Common Technical Data	
Connection type	Terminal compartment
Housing length L	77 mm
Housing width W	60 mm
Housing height H	41 mm

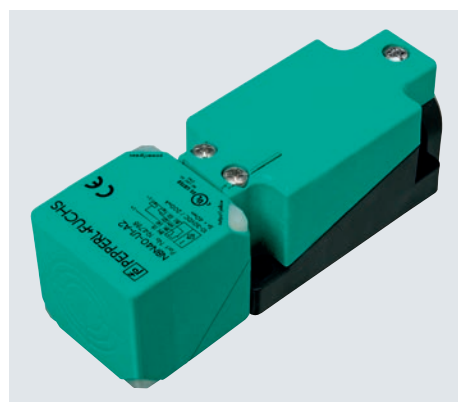
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)
NBB25-FPS-A2	flush	25 mm	PNP	complementary	DC	70 Hz	10 V	30 V
NBN30-FPS-A2	nonflush	30 mm	PNP	complementary	DC	50 Hz	10 V	30 V
NBN30-FPS-E5	nonflush	30 mm	PNP	Normally-open/normally-closed (selectable)	DC	50 Hz	10 V	65 V
NBN30-FPS-UU	nonflush	30 mm	Two-wire	Normally-open/normally-closed (selectable)	AC/DC	25 Hz	20 V	265 V



Inductive Cubic Standard Sensors

Varikont Series



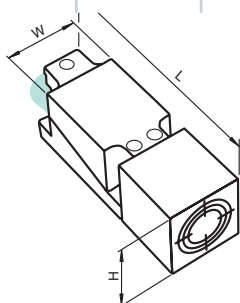
Common Technical Data

UL

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	Width W	Height H	CCC	EAC
NBB20-U1-A0	flush	20 mm	NPN	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U1-A2	flush	20 mm	PNP	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		■
NBB20-U1-A2-V1	flush	20 mm	PNP	complementary	DC	440 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBB20-U1-E0	flush	20 mm	NPN	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U1-E1	flush	20 mm	NPN	Normally-closed (NC)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U1-E2	flush	20 mm	PNP	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		■
NBB20-U1-E2-V1	flush	20 mm	PNP	Normally-open (NO)	DC	440 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBB20-U1-E3	flush	20 mm	PNP	Normally-closed (NC)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U2-A0	flush	20 mm	NPN	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U2-A2	flush	20 mm	PNP	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U2-E0	flush	20 mm	NPN	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U2-E2	flush	20 mm	PNP	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U3-E2	flush	20 mm	PNP	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U3-A2	flush	20 mm	PNP	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U4-A0	flush	20 mm	NPN	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U4-A2	flush	20 mm	PNP	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U4-A2-V1	flush	20 mm	PNP	complementary	DC	440 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBB20-U4-E0	flush	20 mm	NPN	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U4-E2	flush	20 mm	PNP	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U4-E2-V1	flush	20 mm	PNP	Normally-open (NO)	DC	440 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBB20-U10-A2	flush	20 mm	PNP	complementary	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U10-E2	flush	20 mm	PNP	Normally-open (NO)	DC	440 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U1-A0	nonflush	30 mm	NPN	complementary	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U1-A2	nonflush	30 mm	PNP	complementary	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		■
NBN30-U1-A2-V1	nonflush	30 mm	PNP	complementary	DC	230 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN30-U1-E0	nonflush	30 mm	NPN	Normally-open (NO)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U1-E1	nonflush	30 mm	NPN	Normally-closed (NC)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U1-E2	nonflush	30 mm	PNP	Normally-open (NO)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U1-E2-V1	nonflush	30 mm	PNP	Normally-open (NO)	DC	230 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN30-U1-E3	nonflush	30 mm	PNP	Normally-closed (NC)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB30-U1K-A0	flush	30 mm	NPN	complementary	DC	60 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB30-U1K-A2	flush	30 mm	PNP	complementary	DC	60 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB30-U1K-E2	flush	30 mm	PNP	Normally-open (NO)	DC	60 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U2-A2	nonflush	30 mm	PNP	complementary	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U2-E2	nonflush	30 mm	PNP	Normally-open (NO)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U4-A2	nonflush	30 mm	PNP	complementary	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U4-A2-V1	nonflush	30 mm	PNP	complementary	DC	230 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN30-U4-E0	nonflush	30 mm	NPN	Normally-open (NO)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U4-E2	nonflush	30 mm	PNP	Normally-open (NO)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	Width W	Height H	CCC	EAC
NBN30-U4-E2-V1	nonflush	30 mm	PNP	Normally-open (NO)	DC	230 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN30-U10-E2	nonflush	30 mm	PNP	Normally-open (NO)	DC	230 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-A0	nonflush	40 mm	NPN	complementary	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-A2	nonflush	40 mm	PNP	complementary	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-A2-V1	nonflush	40 mm	PNP	complementary	DC	180 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN40-U1-E0	nonflush	40 mm	NPN	Normally-open (NO)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-E1	nonflush	40 mm	NPN	Normally-closed (NC)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-E1-V1	nonflush	40 mm	NPN	Normally-closed (NC)	DC	180 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN40-U1-E2	nonflush	40 mm	PNP	Normally-open (NO)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-E2-V1	nonflush	40 mm	PNP	Normally-open (NO)	DC	180 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN40-U1-E3	nonflush	40 mm	PNP	Normally-closed (NC)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1L-A0	nonflush	40 mm	NPN	complementary	DC	100 Hz	10 V	30 V	Terminal compartment	128 mm	55 mm	55 mm		
NBN40-U1L-A2	nonflush	40 mm	PNP	complementary	DC	100 Hz	10 V	30 V	Terminal compartment	128 mm	55 mm	55 mm		
NBN40-U1L-A2-V1	nonflush	40 mm	PNP	complementary	DC	100 Hz	10 V	30 V	M12 connector plug	128 mm	55 mm	55 mm		
NBN40-U1L-E2	nonflush	40 mm	PNP	Normally-open (NO)	DC	100 Hz	10 V	30 V	Terminal compartment	128 mm	55 mm	55 mm		
NBN40-U10-E2	nonflush	40 mm	PNP	Normally-open (NO)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U2-A2	nonflush	40 mm	PNP	complementary	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U2-E2	nonflush	40 mm	PNP	Normally-open (NO)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U4-A2	nonflush	40 mm	PNP	complementary	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U4-A2-V1	nonflush	40 mm	PNP	complementary	DC	180 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN40-U4-E0	nonflush	40 mm	NPN	Normally-open (NO)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U4-E2	nonflush	40 mm	PNP	Normally-open (NO)	DC	180 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U4-E2-V1	nonflush	40 mm	PNP	Normally-open (NO)	DC	180 Hz	10 V	30 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN40-U4L-A2	nonflush	40 mm	PNP	complementary	DC	100 Hz	10 V	30 V	Terminal compartment	128 mm	55 mm	55 mm		
NBN40-U4L-A2-V1	nonflush	40 mm	PNP	complementary	DC	100 Hz	10 V	30 V	M12 connector plug	128 mm	55 mm	55 mm		
NBN50-U1K-A0	nonflush	50 mm	NPN	complementary	DC	40 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN50-U1K-A2	nonflush	50 mm	PNP	complementary	DC	40 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN50-U1K-E2	nonflush	50 mm	PNP	Normally-open (NO)	DC	40 Hz	10 V	30 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U1-Z2	flush	20 mm	Two-wire	Normally-open/-closed (selectable)	DC	250 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB15-U1-Z2	flush	15 mm	Two-wire	Normally-open/-closed (selectable)	DC	400 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB15-U4-Z2	flush	15 mm	Two-wire	Normally-open/-closed (selectable)	DC	400 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U4-Z2	flush	20 mm	Two-wire	Normally-open/-closed (selectable)	DC	250 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U1-Z2	nonflush	30 mm	Two-wire	Normally-open/-closed (selectable)	DC	150 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN30-U4-Z2	nonflush	30 mm	Two-wire	Normally-open/-closed (selectable)	DC	150 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-Z2	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	DC	100 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1L-Z2	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	DC	100 Hz	5 V	60 V	Terminal compartment	128 mm	55 mm	55 mm		
NBN40-U4-Z2	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	DC	100 Hz	5 V	60 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U4-Z2-V1	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	DC	100 Hz	5 V	60 V	M12 connector plug	118 mm	40 mm	40 mm		
NBN40-U4L-Z2	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	DC	100 Hz	5 V	60 V	Terminal compartment	128 mm	55 mm	55 mm		
NBB20-U1-UU	flush	20 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U2-UU	flush	20 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U3-UU	flush	20 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		
NBB20-U4-UU	flush	20 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U1-UU	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U2-UU	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U3-UU	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		
NBN40-U4-UU	nonflush	40 mm	Two-wire	Normally-open/-closed (selectable)	AC/DC	100 Hz	20 V	275 V	Terminal compartment	118 mm	40 mm	40 mm		



Accessories

MH 04-2681F	Mounting aid for Varikont, +U1+, and +U9* sensors
MHW 01	Modular mounting bracket
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-M20-80	Receptacle, M12/M20; plastic version
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray

Inductive Cubic Standard Sensors

Varikont-L L2/L3 Series



Common Technical Data

Type of voltage	DC
Operating voltage (max)	30 V
Connection type	M12 connector plug
Housing length L	67 mm
Housing width W	40 mm
Housing height H	40 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

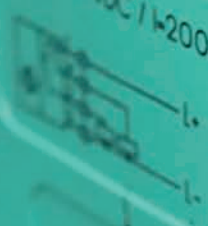
Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	EAC
NBB20-L2-A0-V1	flush	20 mm	NPN	complementary	440 Hz	10 V	
NBB20-L2-A2-V1	flush	20 mm	PNP	complementary	440 Hz	10 V	■
NBB20-L2-E0-V1	flush	20 mm	NPN	Normally-open (NO)	440 Hz	10 V	
NBB20-L2-E2-V1	flush	20 mm	PNP	Normally-open (NO)	440 Hz	10 V	■
NBB20-L2-E3-V1	flush	20 mm	PNP	Normally-closed (NC)	440 Hz	10 V	
NBB20-L2M-A0-V1	flush	20 mm	NPN	complementary	440 Hz	10 V	
NBB20-L2M-A2-V1	flush	20 mm	PNP	complementary	440 Hz	10 V	■
NBB20-L2M-E0-V1	flush	20 mm	NPN	Normally-open (NO)	440 Hz	10 V	
NBB20-L2M-E2-V1	flush	20 mm	PNP	Normally-open (NO)	440 Hz	10 V	■
NBB30-L2K-A0-V1	flush	30 mm	NPN	complementary	60 Hz	10 V	
NBB30-L2K-A2-V1	flush	30 mm	PNP	complementary	60 Hz	10 V	
NBB30-L2K-E2-V1	flush	30 mm	PNP	Normally-open (NO)	60 Hz	10 V	
NBN30-L2-A2-V1	nonflush	30 mm	PNP	complementary	230 Hz	10 V	
NBN30-L2-E2-V1	nonflush	30 mm	PNP	Normally-open (NO)	230 Hz	10 V	
NBN40-L2-A0-V1	nonflush	40 mm	NPN	complementary	180 Hz	10 V	
NBN40-L2-A2-V1	nonflush	40 mm	PNP	complementary	180 Hz	10 V	■
NBN40-L2-E0-V1	nonflush	40 mm	NPN	Normally-open (NO)	180 Hz	10 V	■
NBN40-L2-E2-V1	nonflush	40 mm	PNP	Normally-open (NO)	180 Hz	10 V	■
NBN40-L2-E34-V1	nonflush	40 mm	PNP	Normally-closed (NC)	180 Hz	10 V	
NBN40-L2M-A0-V1	nonflush	40 mm	NPN	complementary	180 Hz	10 V	
NBN40-L2M-A2-V1	nonflush	40 mm	PNP	complementary	180 Hz	10 V	■
NBN40-L2M-E0-V1	nonflush	40 mm	NPN	Normally-open (NO)	180 Hz	10 V	
NBN40-L2M-E2-V1	nonflush	40 mm	PNP	Normally-open (NO)	180 Hz	10 V	
NBN50-L2K-A0-V1	nonflush	50 mm	NPN	complementary	40 Hz	10 V	
NBN50-L2K-A2-V1	nonflush	50 mm	PNP	complementary	40 Hz	10 V	
NBN50-L2K-E2-V1	nonflush	50 mm	PNP	Normally-open (NO)	40 Hz	10 V	
NBB20-L2-Z0-V1	flush	20 mm	Two-wire	Normally-open (NO)	30 Hz	5 V	
NBB20-L2-Z4-V1	flush	20 mm	Two-wire	Normally-open (NO)	30 Hz	3.8 V	
NBB20-L2-Z5-V1	flush	20 mm	Two-wire	Normally-closed (NC)	30 Hz	3.8 V	
NBN40-L2-Z0-V1	nonflush	40 mm	Two-wire	Normally-open (NO)	30 Hz	5 V	
NBN40-L2-Z4-V1	nonflush	40 mm	Two-wire	Normally-open (NO)	30 Hz	3.8 V	
NBN40-L2-Z5-V1	nonflush	40 mm	Two-wire	Normally-closed (NC)	30 Hz	3.8 V	

Accessories

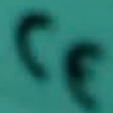
MH 02-L	Mounting aid
MHW 01	Modular mounting bracket
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray



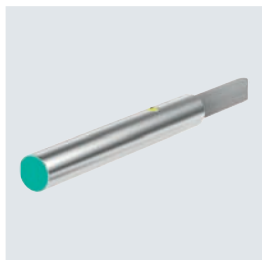
PEPPERL+FUCHS
Made in Germany
NJ30P-A1-A2
Part No. 020995
U=10-30VDC / I=200mA



PEPPERL+FUCHS
Made in Germany
NJ30P-A1-A2
Part No. 020995
U=10-30VDC / I=200mA



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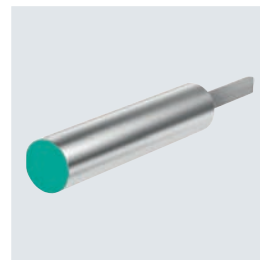
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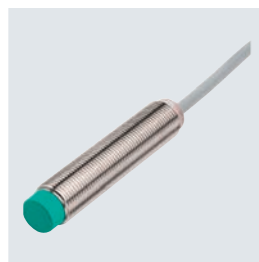
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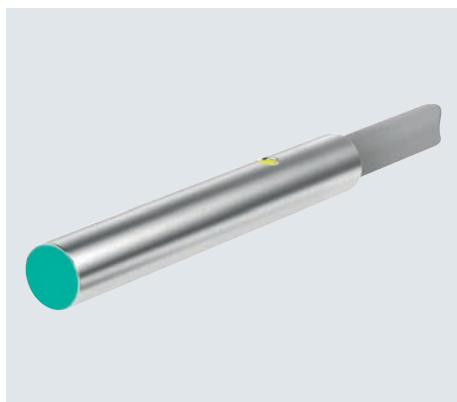
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Inductive Cylindrical Standard Sensors

3 mm Series

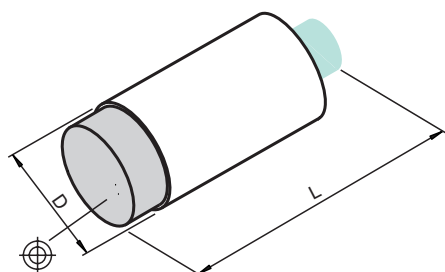


Common Technical Data

Mechanical installation conditions	flush
Type of output	Three-wire
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing length L	22 mm
Housing diameter D	3 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Type of Output	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material
NBB0,6-3M22-E0	0.6 mm	NPN	Normally-open (NO)	1400 Hz	Fixed cable	2000 mm	PUR
NBB0,6-3M22-E0-0,3M-V3	0.6 mm	NPN	Normally-open (NO)	1400 Hz	Fixed cable with M8 plug	300 mm	PVC
NBB0,6-3M22-E1	0.6 mm	NPN	Normally-closed (NC)	1300 Hz	Fixed cable	2000 mm	PUR
NBB0,6-3M22-E2	0.6 mm	PNP	Normally-open (NO)	1400 Hz	Fixed cable	2000 mm	PVC
NBB0,6-3M22-E2-0,3M-V3	0.6 mm	PNP	Normally-open (NO)	1400 Hz	Fixed cable with M8 plug	300 mm	PVC
NBB0,6-3M22-E3	0.6 mm	PNP	Normally-closed (NC)	1300 Hz	Fixed cable	2000 mm	PUR
NBB1-3M22-E0	1 mm	NPN	Normally-open (NO)	700 Hz	Fixed cable	2000 mm	PVC
NBB1-3M22-E0-0,3M-V3	1 mm	NPN	Normally-open (NO)	700 Hz	Fixed cable with M8 plug	300 mm	PVC
NBB1-3M22-E2	1 mm	PNP	Normally-open (NO)	700 Hz	Fixed cable	2000 mm	PUR
NBB1-3M22-E2-0,3M-V3	1 mm	PNP	Normally-open (NO)	700 Hz	Fixed cable with M8 plug	300 mm	PVC



Accessories

BF 4	Mounting adapter, 4 mm
V3-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 3-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray

Inductive Cylindrical Standard Sensors

4 mm Series



Common Technical Data

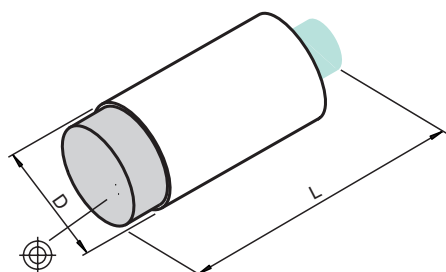
Mechanical installation conditions	flush
Type of output	Three-wire
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing diameter D	4 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Type of Output	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	UL
NBB0,6-4GM22-E0	0.6 mm	NPN	Normally-open (NO)	1400 Hz	Fixed cable	2000 mm	PUR	22 mm	■
NBB0,6-4GM22-E1	0.6 mm	NPN	Normally-closed (NC)	1300 Hz	Fixed cable	2000 mm	PUR	22 mm	■
NBB0,6-4GM22-E2	0.6 mm	PNP	Normally-open (NO)	1400 Hz	Fixed cable	2000 mm	PUR	22 mm	■
NBB0,6-4GM22-E2-0,3M-V3	0.6 mm	PNP	Normally-open (NO)	1400 Hz	Fixed cable with M8 plug	300 mm	PVC	22 mm	■
NBB0,6-4GM22-E3	0.6 mm	PNP	Normally-closed (NC)	1300 Hz	Fixed cable	2000 mm	PUR	22 mm	■
NBB0,8-4M25-E0	0.8 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB0,8-4M25-E0 PUR	0.8 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PUR	25 mm	■
NBB0,8-4M25-E0-0,3M-V3	0.8 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable with M8 plug	300 mm	PVC	25 mm	■
NBB0,8-4M25-E0-V3	0.8 mm	NPN	Normally-open (NO)	3000 Hz	M8 connector plug			45 mm	■
NBB0,8-4M25-E1	0.8 mm	NPN	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB0,8-4M25-E2	0.8 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB0,8-4M25-E2-0,3M-V3	0.8 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable with M8 plug	300 mm	PVC	25 mm	■
NBB0,8-4M25-E2-V3	0.8 mm	PNP	Normally-open (NO)	3000 Hz	M8 connector plug			45 mm	■
NBB0,8-4M25-E3	0.8 mm	PNP	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB0,8-4S25-E2-0,2M-V3	0.8 mm	PNP	Normally-open (NO)	5000 Hz	Fixed cable with M8 plug	200 mm	PVC	25 mm	■
NBB0,8-4M25-E2-5M	0.8 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable	5000 mm	PVC	25 mm	■
NBB1,4GM22-E0	1 mm	NPN	Normally-open (NO)	700 Hz	Fixed cable	2000 mm	PUR	22 mm	■
NBB1,4GM22-E0-0,3M-V3	1 mm	NPN	Normally-open (NO)	700 Hz	Fixed cable with M8 plug	300 mm	PVC	22 mm	■
NBB1,4GM22-E2	1 mm	PNP	Normally-open (NO)	700 Hz	Fixed cable	2000 mm	PUR	22 mm	■
NBB1,4GM22-E2-0,3M-V3	1 mm	PNP	Normally-open (NO)	700 Hz	Fixed cable with M8 plug	300 mm	PVC	22 mm	■
NBB1,4GM22-E2-5M	1 mm	PNP	Normally-open (NO)	700 Hz	Fixed cable	5000 mm	PUR	22 mm	■
NBB1,5-4M25-E0-V3	1.5 mm	NPN	Normally-open (NO)	3000 Hz	M8 connector plug			38 mm	■
NBB1,5-4M25-E0	1.5 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB1,5-4M25-E1	1.5 mm	NPN	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB1,5-4M25-E1-V3	1.5 mm	NPN	Normally-closed (NC)	3000 Hz	M8 connector plug			38 mm	■
NBB1,5-4M25-E2	1.5 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB1,5-4M25-E2-5M-PUR	1.5 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable	5000 mm	PUR	25 mm	■
NBB1,5-4M25-E2-V3	1.5 mm	PNP	Normally-open (NO)	3000 Hz	M8 connector plug			38 mm	■
NBB1,5-4M25-E3	1.5 mm	PNP	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■
NBB1,5-4M25-E3-V3	1.5 mm	PNP	Normally-closed (NC)	3000 Hz	M8 connector plug			38 mm	■

Accessories

BF 4	Mounting adapter, 4 mm
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray



Inductive Cylindrical Standard Sensors

5 mm Series



Common Technical Data

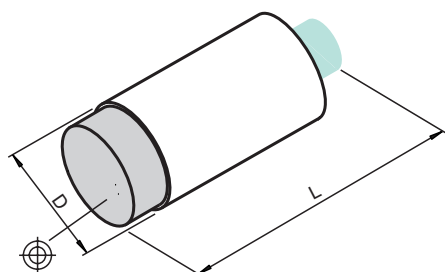
Mechanical installation conditions	flush
Type of output	Three-wire
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing diameter D	5 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Type of Output	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	EAC	UL
NBB0,6-5GS20-E2	0.6 mm	PNP	Normally-open (NO)	5000 Hz	Fixed cable	140 mm	PUR	25 mm		
NBB0,8-5GM25-E0	0.8 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm		■
NBB0,8-5GM25-E0-0,3M-V3	0.8 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable with M8 plug	300 mm	PVC	25 mm		■
NBB0,8-5GM25-E0-V3	0.8 mm	NPN	Normally-open (NO)	3000 Hz	M8 connector plug			45 mm		■
NBB0,8-5GM25-E1	0.8 mm	NPN	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm		■
NBB0,8-5GM25-E1-V3	0.8 mm	NPN	Normally-closed (NC)	3000 Hz	M8 connector plug			45 mm		■
NBB0,8-5GM25-E2	0.8 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm	■	■
NBB0,8-5GM25-E2-0,3M-V3	0.8 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable with M8 plug	300 mm	PVC	25 mm		■
NBB0,8-5GM25-E2-5M	0.8 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable	5000 mm	PVC	25 mm		■
NBB0,8-5GM25-E2-V3	0.8 mm	PNP	Normally-open (NO)	3000 Hz	M8 connector plug			45 mm		■
NBB0,8-5GM25-E3	0.8 mm	PNP	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm		■
NBB1,5-5GM25-E2	1.5 mm	PNP	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm		■
NBB1,5-5GM25-E2-V3	1.5 mm	PNP	Normally-open (NO)	3000 Hz	M8 connector plug			38 mm		■
NBB1,5-5GM25-E3-V3	1.5 mm	PNP	Normally-closed (NC)	3000 Hz	M8 connector plug			38 mm		■
NBB1,5-5GM25-E0	1.5 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm		■
NBB1,5-5GM25-E0-PUR	1.5 mm	NPN	Normally-open (NO)	3000 Hz	Fixed cable	2000 mm	PUR	25 mm		
NBB1,5-5GM25-E0-V3	1.5 mm	NPN	Normally-open (NO)	3000 Hz	M8 connector plug			38 mm		■
NBB1,5-5GM25-E1	1.5 mm	NPN	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm		■
NBB1,5-5GM25-E1-V3	1.5 mm	NPN	Normally-closed (NC)	3000 Hz	M8 connector plug			38 mm		■
NBB1,5-5GM25-E3	1.5 mm	PNP	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	PVC	25 mm		■

Accessories

BF 5	Mounting adapter, 5 mm
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray



Inductive Cylindrical Standard Sensors

6.5 mm Series—with Plug Connection



Common Technical Data

Type of output	Three-wire
Type of voltage	DC
Operating voltage (min)	5 V
Operating voltage (max)	30 V
Housing diameter D	6.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

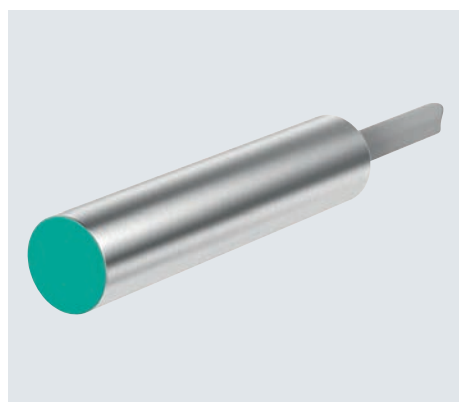
Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L
NBB2-6,5M25-E0-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	M8 connector plug			35 mm
NBB2-6,5M25-E1-V3	flush	2 mm	NPN	Normally-closed (NC)	6000 Hz	M8 connector plug			35 mm
NBB2-6,5M25-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	M8 connector plug			35 mm
NBB2-6,5M25-E3-V3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	M8 connector plug			35 mm
NBB2-6,5M30-E0-0,15M-PUR-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	Fixed cable with M8 plug	150 mm	PUR	30 mm
NBB2-6,5M30-E2-0,15M-PUR-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	Fixed cable with M8 plug	150 mm	PUR	30 mm
NBB2-6,5S16-E2-0,3M-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	Fixed cable with M8 plug	300 mm	PVC	16 mm
NBB2-6,5S20-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	M8 connector plug			30 mm
NBB2-6,5S20-E3-V3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	M8 connector plug			30 mm
NBB2-6,5S35-E0-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	M8 connector plug			45 mm
NBB2-6,5S35-E1-V3	flush	2 mm	NPN	Normally-closed (NC)	6000 Hz	M8 connector plug			45 mm
NBB2-6,5S35-E2-0,3M-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	Fixed cable with M8 plug	300 mm	PVC	35 mm
NBB2-6,5S35-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	M8 connector plug			45 mm
NBB2-6,5S35-E3-V3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	M8 connector plug			45 mm
NBN3-6,5M25-E0-V3	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	M8 connector plug			35 mm
NBN3-6,5M25-E1-V3	nonflush	3 mm	NPN	Normally-closed (NC)	4500 Hz	M8 connector plug			35 mm
NBN3-6,5M25-E2-V3	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	M8 connector plug			35 mm
NBN3-6,5M30-E0-0,3M-V3	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	Fixed cable with M8 plug	300 mm	PVC	30 mm
NEB3-6,5M40-E0-V1	semi-flush	3 mm	NPN	Normally-open (NO)	3500 Hz	M12 connector plug			65 mm
NEB3-6,5M40-E1-V1	semi-flush	3 mm	NPN	Normally-closed (NC)	3500 Hz	M12 connector plug			65 mm
NEB3-6,5M40-E2-V1	semi-flush	3 mm	PNP	Normally-open (NO)	3500 Hz	M12 connector plug			65 mm
NEB3-6,5M40-E3-V1	semi-flush	3 mm	PNP	Normally-closed (NC)	3500 Hz	M12 connector plug			65 mm
NEB3-6,5M45-E0-V3	semi-flush	3 mm	NPN	Normally-open (NO)	3500 Hz	M8 connector plug			55 mm
NEB3-6,5M45-E1-V3	semi-flush	3 mm	NPN	Normally-closed (NC)	3500 Hz	M8 connector plug			55 mm
NEB3-6,5M45-E2-V3	semi-flush	3 mm	PNP	Normally-open (NO)	3500 Hz	M8 connector plug			55 mm
NEB3-6,5M45-E3-V3	semi-flush	3 mm	PNP	Normally-closed (NC)	3500 Hz	M8 connector plug			55 mm
NEN6-6,5M40-E0-V1	nonflush	6 mm	NPN	Normally-open (NO)	1500 Hz	M12 connector plug			65 mm
NEN6-6,5M40-E1-V1	nonflush	6 mm	NPN	Normally-closed (NC)	1500 Hz	M12 connector plug			65 mm
NEN6-6,5M40-E2-V1	nonflush	6 mm	PNP	Normally-open (NO)	1500 Hz	M12 connector plug			65 mm
NEN6-6,5M40-E3-V1	nonflush	6 mm	PNP	Normally-closed (NC)	1500 Hz	M12 connector plug			65 mm
NEN6-6,5M45-E0-V3	nonflush	6 mm	NPN	Normally-open (NO)	1500 Hz	M8 connector plug			55 mm
NEN6-6,5M45-E1-V3	nonflush	6 mm	NPN	Normally-closed (NC)	1500 Hz	M8 connector plug			55 mm
NEN6-6,5M45-E2-V3	nonflush	6 mm	PNP	Normally-open (NO)	1500 Hz	M8 connector plug			55 mm
NEN6-6,5M45-E3-V3	nonflush	6 mm	PNP	Normally-closed (NC)	1500 Hz	M8 connector plug			55 mm

Accessories

BF 6.5	Mounting adapter, 6.5 mm
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray

Inductive Cylindrical Standard Sensors

6.5 mm Series—with Cable Connection



Common Technical Data

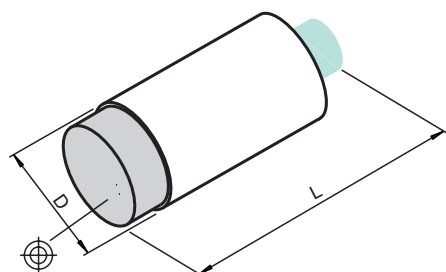
Type of output	Three-wire
Type of voltage	DC
Operating voltage (min)	5 V
Operating voltage (max)	30 V
Connection type	Fixed cable
Housing diameter D	6.5 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	Cable Length	Cable Material	Length L
NBB2-6,5M30-E0	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	2000 mm	PVC	30 mm
NBB2-6,5M30-E2	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	2000 mm	PVC	30 mm
NBB2-6,5M30M-E2-5M	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5000 mm	PVC	30 mm
NBB2-6,5S16-E0	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	2000 mm	PVC	16 mm
NBB2-6,5S16-E2	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	2000 mm	PVC	16 mm
NBB2-6,5S16-E3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	2000 mm	PVC	16 mm
NBB2-6,5S35-E0-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	2000 mm	PUR	35 mm
NBB2-6,5S35-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	2000 mm	PUR	35 mm
NBB2-6,5S40-E0-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	2000 mm	PUR	40 mm
NBB2-6,5S40-E2-5M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5000 mm	PUR	40 mm
NBB2-6,5S40-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	2000 mm	PUR	40 mm
NBB2-6,5S40-E3-PUR	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	2000 mm	PUR	40 mm
NBB2-6,5S50-E0-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	2000 mm	PUR	50 mm
NBB2-6,5S50-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	2000 mm	PUR	50 mm
NBN3-6,5M30-E0	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	2000 mm	PVC	30 mm
NBN3-6,5M30-E2	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	2000 mm	PVC	30 mm
NBN3-6,5S40-E0-PUR	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	2000 mm	PUR	40 mm
NBN3-6,5S40-E2-PUR	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	2000 mm	PUR	40 mm
NEB3-6,5M40-E0-PUR	semi-flush	3 mm	NPN	Normally-open (NO)	3500 Hz	2000 mm	PUR	40 mm
NEB3-6,5M40-E1-PUR	semi-flush	3 mm	NPN	Normally-closed (NC)	3500 Hz	2000 mm	PUR	40 mm
NEB3-6,5M40-E2-PUR	semi-flush	3 mm	PNP	Normally-open (NO)	3500 Hz	2000 mm	PUR	40 mm
NEB3-6,5M40-E3-PUR	semi-flush	3 mm	PNP	Normally-closed (NC)	3500 Hz	2000 mm	PUR	40 mm
NEN6-6,5M40-E0-PUR	nonflush	6 mm	NPN	Normally-open (NO)	1500 Hz	2000 mm	PUR	40 mm
NEN6-6,5M40-E1-PUR	nonflush	6 mm	NPN	Normally-closed (NC)	1500 Hz	2000 mm	PUR	40 mm
NEN6-6,5M40-E2-PUR	nonflush	6 mm	PNP	Normally-open (NO)	1500 Hz	2000 mm	PUR	40 mm
NEN6-6,5M40-E3-PUR	nonflush	6 mm	PNP	Normally-closed (NC)	1500 Hz	2000 mm	PUR	40 mm

Accessories

BF 6.5	Mounting adapter, 6.5 mm
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Inductive Cylindrical Standard Sensors

8 mm Series—with Plug Connection



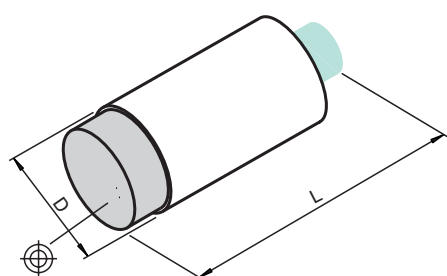
Common Technical Data

Type of voltage	DC
Housing diameter D	8 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Cable Length L	CCC	UL
NCB1,5-8GM50-Z0-V3	flush	1.5 mm	Two-wire	Normally-open (NO)	1200 Hz	5 V	60 V	M8 connector plug			50 mm	■	■
NCB1,5-8GM50-Z1-V3	flush	1.5 mm	Two-wire	Normally-closed (NC)	1200 Hz	5 V	60 V	M8 connector plug			50 mm	■	■
NBB1,5-8GM50-Z3-V3	flush	1.5 mm	Two-wire	Normally-open (NO)	1200 Hz	5 V	60 V	M8 connector plug			48 mm	■	■
NBB2-8GH20-E0-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			40 mm		■
NBB2-8GH20-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			35 mm		■
NBB2-8GH25-E0-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			40 mm		■
NBB2-8GH25-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			40 mm		■
NBB2-8GH40-E0-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			55 mm		■
NBB2-8GH40-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			55 mm		■
NBB2-8GM25-E0-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			40 mm		■
NBB2-8GM25-E1-V3	flush	2 mm	NPN	Normally-closed (NC)	6000 Hz	5 V	30 V	M8 connector plug			40 mm		■
NBB2-8GM25-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			40 mm		■
NBB2-8GM25-E3-V3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	M8 connector plug			40 mm		■
NBB2-8GM30-A0-V1	flush	2 mm	NPN	complementary	6000 Hz	5 V	30 V	M12 connector plug			55 mm		■
NBB2-8GM30-A2-V1	flush	2 mm	PNP	complementary	6000 Hz	5 V	30 V	M12 connector plug			55 mm		■
NBB2-8GM30-E0-V1	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M12 connector plug			55 mm		■
NBB2-8GM30-E2-0,2M-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	Fixed cable with M8 plug	200 mm	PVC	30 mm		■
NBB2-8GM30-E2-0,3M-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	Fixed cable with M8 plug	300 mm	PVC	30 mm		■
NBB2-8GM30-E2-0,5M-PUR-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	Fixed cable with M12 plug	500 mm	PUR	30 mm		■
NBB2-8GM30-E2-0,5M-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	Fixed cable with M12 plug	500 mm	PVC	30 mm		■
NBB2-8GM30-E2-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M12 connector plug			55 mm		■
NBB2-8GM40-A0-V1	flush	2 mm	NPN	complementary	6000 Hz	5 V	30 V	M12 connector plug			65 mm		■
NBB2-8GM40-E2-0,2M-PUR-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	Fixed cable with M12 plug	200 mm	PUR	40 mm		■
NBB2-8GM40-A2-V1	flush	2 mm	PNP	complementary	6000 Hz	5 V	30 V	M12 connector plug			65 mm		■
NBB2-8GM40-E0-V1	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M12 connector plug			65 mm		■
NBB2-8GM40-E0-V3	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			55 mm		■
NBB2-8GM40-E2-0,2M-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	Fixed cable with M12 plug	200 mm	PVC	40 mm		■
NBB2-8GM40-E2-0,3M-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	Fixed cable with M8 plug	300 mm	PVC	40 mm		■
NBB2-8GM40-E2-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M12 connector plug			65 mm		■
NBB2-8GM40-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			55 mm		■
NBB2-8GM40-E3-V1	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	M12 connector plug			65 mm		■
NBB2-8GM40-E3-V3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	M8 connector plug			55 mm		■
NBB2-8GS30-A2-V1	flush	2 mm	PNP	complementary	6000 Hz	5 V	30 V	M12 connector plug			55 mm		■
NBB2-8GS35-E0-V1	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	M12 connector plug			60 mm		■
NBB2-8GS35-E1-V3	flush	2 mm	NPN	Normally-closed (NC)	6000 Hz	5 V	30 V	M8 connector plug			50 mm		■
NBB2-8GS35-E2-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M12 connector plug			60 mm		■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	CCC	UL
NBB2-8GS35-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			50 mm	■	■
NBB2-8GS35-E3-V1	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	M12 connector plug			60 mm	■	■
NBB2-8GS35-E3-V3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	M8 connector plug			50 mm	■	■
NBB2-8GS40-E2-V1	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NBB2-8GS40-E2-V3	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NBB2-8GS40-E3-V1	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NBN2-8GM50-Z1-V3	nonflush	2 mm	Two-wire	Normally-closed (NC)	1200 Hz	5 V	60 V	M8 connector plug			48 mm	■	■
NBN2-8GM50-Z3-V3	nonflush	2 mm	Two-wire	Normally-open (NO)	1200 Hz	5 V	60 V	M8 connector plug			48 mm	■	■
NCN2-8GM50-Z0-V3	nonflush	2 mm	Two-wire	Normally-open (NO)	1200 Hz	5 V	60 V	M8 connector plug			40 mm	■	■
NCN2-8GM50-Z1-V3	nonflush	2 mm	Two-wire	Normally-closed (NC)	1200 Hz	5 V	60 V	M8 connector plug			40 mm	■	■
NEB3-8GM40-E0-V1	flush	3 mm	NPN	Normally-open (NO)	3500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEB3-8GM40-E0-V3	flush	3 mm	NPN	Normally-open (NO)	3500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NEB3-8GM40-E1-V1	flush	3 mm	NPN	Normally-closed (NC)	3500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEB3-8GM40-E1-V3	flush	3 mm	NPN	Normally-closed (NC)	3500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NEB3-8GM40-E2-V1	flush	3 mm	PNP	Normally-open (NO)	3500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEB3-8GM40-E2-V3	flush	3 mm	PNP	Normally-open (NO)	3500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NEB3-8GM40-E3-V1	flush	3 mm	PNP	Normally-closed (NC)	3500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEB3-8GM40-E3-V3	flush	3 mm	PNP	Normally-closed (NC)	3500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NXB2-8GM25-E2-V3	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	M8 connector plug			40 mm	■	■
NBN3-8GM25-E0-V3	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	5 V	30 V	M8 connector plug			40 mm	■	■
NBN3-8GM25-E1-V3	nonflush	3 mm	NPN	Normally-closed (NC)	4500 Hz	5 V	30 V	M8 connector plug			40 mm	■	■
NBN3-8GM25-E2-V3	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	M8 connector plug			40 mm	■	■
NBN3-8GM25-E3-V3	nonflush	3 mm	PNP	Normally-closed (NC)	4500 Hz	5 V	30 V	M8 connector plug			40 mm	■	■
NBN3-8GM30-E0-V1	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	5 V	30 V	M12 connector plug			55 mm	■	■
NBN3-8GM30-E2-V1	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	M12 connector plug			55 mm	■	■
NBN3-8GM40-A0-V1	nonflush	3 mm	NPN	complementary	4500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NBN3-8GM40-A2-V1	nonflush	3 mm	PNP	complementary	4500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NBN3-8GM40-E0-V1	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NBN3-8GM40-E2-V1	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NBN3-8GM40-E2-V3	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NBN3-8GS35-E0-V3	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	5 V	30 V	M8 connector plug			50 mm	■	■
NBN3-8GS35-E1-V3	nonflush	3 mm	NPN	Normally-closed (NC)	4500 Hz	5 V	30 V	M8 connector plug			50 mm	■	■
NBN3-8GS35-E2-V1	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	M12 connector plug			60 mm	■	■
NBN3-8GS35-E2-V3	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	M8 connector plug			50 mm	■	■
NBN3-8GS35-E3-V3	nonflush	3 mm	PNP	Normally-closed (NC)	4500 Hz	5 V	30 V	M8 connector plug			50 mm	■	■
NEB3-8GM15-E2-V3	flush	3 mm	PNP	Normally-open (NO)	3500 Hz	5 V	30 V	M8 connector plug			30 mm	■	■
NEB3-8GM45-E2-V3	flush	3 mm	PNP	Normally-open (NO)	3500 Hz	5 V	30 V	M8 connector plug			60 mm	■	■
NXN3-8GM25-E2-V3	nonflush	3 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	M8 connector plug			40 mm	■	■
NEB4-8GM50-E2-V3	semi-flush	4 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	M8 connector plug			45.5 mm	■	■
NEN6-8GM40-E0-V1	nonflush	6 mm	NPN	Normally-open (NO)	1500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEN6-8GM40-E0-V3	nonflush	6 mm	NPN	Normally-open (NO)	1500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NEN6-8GM40-E1-V1	nonflush	6 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEN6-8GM40-E1-V3	nonflush	6 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NEN6-8GM40-E2-V1	nonflush	6 mm	PNP	Normally-open (NO)	1500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEN6-8GM40-E2-V3	nonflush	6 mm	PNP	Normally-open (NO)	1500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■
NEN6-8GM40-E3-V1	nonflush	6 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	30 V	M12 connector plug			65 mm	■	■
NEN6-8GM40-E3-V3	nonflush	6 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	30 V	M8 connector plug			55 mm	■	■

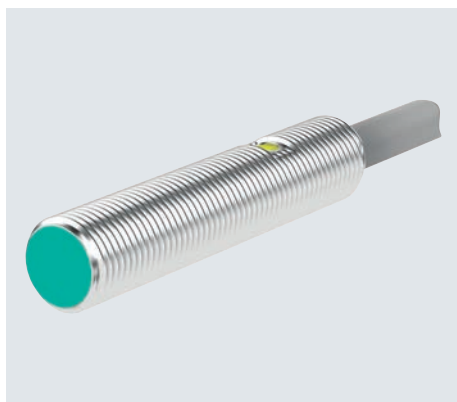


Accessories

BF 8	Mounting adapter, 8 mm
MH-EXG-08	Quick-mounting bracket with fixed stop
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray
V3-WMV4A-5M-PUR	Single-ended female cordset, M8, angled, stainless steel 1.4404, A-coded, 3-pin, PUR cable, gray

Inductive Cylindrical Standard Sensors

8 mm Series—with Cable Connection



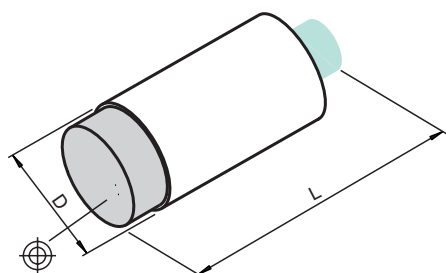
Common Technical Data

Type of voltage	DC
Connection type	Fixed cable
Housing diameter D	8 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CCC	UL
NBB1,5-8GM35-E2-3M-PUR	flush	1.5 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	3000 mm	PUR	35 mm	■	■
NBB1,5-8GM40-Z0	flush	1.5 mm	Two-wire	Normally-open (NO)	1200 Hz	5 V	60 V	2000 mm	PVC	40 mm	■	■
NBB1,5-8GM40-Z1	flush	1.5 mm	Two-wire	Normally-closed (NC)	1200 Hz	5 V	60 V	2000 mm	PVC	40 mm	■	■
NCB1,5-8GM40-Z0	flush	1.5 mm	Two-wire	Normally-open (NO)	1200 Hz	5 V	60 V	2000 mm	PUR	40 mm	■	■
NCB1,5-8GM40-Z1	flush	1.5 mm	Two-wire	Normally-closed (NC)	1200 Hz	5 V	60 V	2000 mm	PUR	40 mm	■	■
NBB2-8GM30-E0	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	30 mm	■	■
NBB2-8GM30-E0-5M-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PUR	30 mm	■	■
NBB2-8GM30-E2	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	30 mm	■	■
NBB2-8GM30-E2-10M	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	10,000 mm	PVC	30 mm	■	■
NBB2-8GM30-E2-5M	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PVC	30 mm	■	■
NBB2-8GM30-E2-5M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PUR	30 mm	■	■
NBB2-8GM30-E3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	2000 mm	PVC	30 mm	■	■
NBB2-8GM30-E3-10M	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	10,000 mm	PVC	30 mm	■	■
NBB2-8GM30-E3-5M	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	5000 mm	PVC	30 mm	■	■
NBB2-8GM35-E2-3M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	3000 mm	PUR	35 mm	■	■
NBB2-8GM40-E2	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	40 mm	■	■
NBB2-8GM40-E3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	2000 mm	PVC	40 mm	■	■
NBB2-8GM50-A0	flush	2 mm	NPN	complementary	6000 Hz	5 V	30 V	2000 mm	PVC	50 mm	■	■
NBB2-8GM50-A2	flush	2 mm	PNP	complementary	6000 Hz	5 V	30 V	2000 mm	PVC	50 mm	■	■
NBB2-8GM50-A2-5M	flush	2 mm	PNP	complementary	6000 Hz	5 V	30 V	5000 mm	PVC	50 mm	■	■
NBB2-8GM50-E0	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	50 mm	■	■
NBB2-8GM50-E0-5M	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PVC	50 mm	■	■
NBB2-8GM50-E2	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	50 mm	■	■
NBB2-8GM50-E2-3M	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	3000 mm	PVC	50 mm	■	■
NBB2-8GM50-E2-5M	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PVC	50 mm	■	■
NBB2-8GM50-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PUR	50 mm	■	■
NBB2-8GS16-E0	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	16 mm	■	■
NBB2-8GS16-E2	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	16 mm	■	■
NBB2-8GS16-E2-3M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	3000 mm	PUR	16 mm	■	■
NBB2-8GS16-E3	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	2000 mm	PVC	16 mm	■	■
NBB2-8GS30-E3-3M-PUR	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	3000 mm	PUR	30 mm	■	■
NBB2-8GS35-E0-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PUR	35 mm	■	■
NBB2-8GS35-E1-PUR	flush	2 mm	NPN	Normally-closed (NC)	6000 Hz	5 V	30 V	2000 mm	PUR	35 mm	■	■
NBB2-8GS35-E2-5M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PUR	35 mm	■	■
NBB2-8GS35-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PUR	35 mm	■	■
NBB2-8GS35-E3-8M-PUR	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	8000 mm	PUR	35 mm	■	■
NBB2-8GS35-E3-PUR	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	2000 mm	PUR	35 mm	■	■
NBB2-8GS40-E0-5M-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PUR	40 mm	■	■
NBB2-8GS40-E0-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PUR	40 mm	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CC	5
NBB2-8GS40-E2-5M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PUR	40 mm		■
NBB2-8GS40-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NBB2-8GS40-E3-10M-PUR	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	10,000 mm	PUR	40 mm		■
NBB2-8GS40-E3-PUR	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NBB2-8GS50-E0-PUR	flush	2 mm	NPN	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PUR	50 mm		■
NBB2-8GS50-E2	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PVC	50 mm		■
NBB2-8GS50-E2-0,6M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	600 mm	PUR	50 mm		■
NBB2-8GS50-E2-3,5M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PUR	50 mm		■
NBB2-8GS50-E2-5M-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	5000 mm	PUR	50 mm		■
NBB2-8GS50-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	6000 Hz	5 V	30 V	2000 mm	PUR	50 mm		■
NBB2-8GS50-E3-PUR	flush	2 mm	PNP	Normally-closed (NC)	6000 Hz	5 V	30 V	2000 mm	PUR	50 mm		■
NBB2-8GS50-A2-PUR	flush	2 mm	PNP	complementary	6000 Hz	5 V	30 V	2000 mm	PUR	50 mm		■
NBN2-8GM40-Z1	nonflush	2 mm	Two-wire	Normally-closed (NC)	1200 Hz	5 V	60 V	2000 mm	PVC	40 mm	■	■
NCN2-8GM40-Z0	nonflush	2 mm	Two-wire	Normally-open (NO)	1200 Hz	5 V	60 V	2000 mm	PUR	40 mm	■	■
NCN2-8GM40-Z1	nonflush	2 mm	Two-wire	Normally-closed (NC)	1200 Hz	5 V	60 V	2000 mm	PUR	40 mm	■	■
NXB2-8GM30-E2	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	2000 mm	PVC	30 mm		
NEB3-8GM40-E0-PUR	flush	3 mm	NPN	Normally-open (NO)	3500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NEB3-8GM40-E1-PUR	flush	3 mm	NPN	Normally-closed (NC)	3500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NEB3-8GM40-E2-PUR	flush	3 mm	PNP	Normally-open (NO)	3500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NEB3-8GM40-E3-PUR	flush	3 mm	PNP	Normally-closed (NC)	3500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NBN3-8GM30-E0	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	5 V	30 V	2000 mm	PVC	30 mm		■
NBN3-8GM30-E2	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	2000 mm	PVC	30 mm		■
NBN3-8GM30-E2-5M	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	5000 mm	PVC	30 mm		■
NBN3-8GM30-E3	nonflush	3 mm	PNP	Normally-closed (NC)	4500 Hz	5 V	30 V	2000 mm	PVC	30 mm		■
NBN3-8GM50-A0	nonflush	3 mm	NPN	complementary	4500 Hz	5 V	30 V	2000 mm	PVC	50 mm		■
NBN3-8GM50-A2	nonflush	3 mm	PNP	complementary	4500 Hz	5 V	30 V	2000 mm	PVC	50 mm		■
NBN3-8GM50-E0	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	5 V	30 V	2000 mm	PVC	50 mm		■
NBN3-8GM50-E2	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	2000 mm	PVC	50 mm		■
NBN3-8GS35-E1-PUR	nonflush	3 mm	NPN	Normally-closed (NC)	4500 Hz	5 V	30 V	2000 mm	PUR	35 mm		■
NBN3-8GS35-E2-5M-PUR	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	5000 mm	PUR	35 mm		■
NBN3-8GS40-E0-PUR	nonflush	3 mm	NPN	Normally-open (NO)	4500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NBN3-8GS40-E2-PUR	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NBN3-8GS40-E2-10M-PUR	nonflush	3 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	10,000 mm	PUR	40 mm		■
NBN3-8GS40-E3-PUR	nonflush	3 mm	PNP	Normally-closed (NC)	4500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NXN3-8GM30-E2	nonflush	3 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	2000 mm	PVC	30 mm		
NBN4-8GM35-E2	nonflush	4 mm	PNP	Normally-open (NO)	4500 Hz	5 V	30 V	2000 mm	PVC	35 mm		■
NEB4-8GM45-E2	semi-flush	4 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	2000 mm	PUR	45 mm		■
NEN6-8GM40-E0-PUR	nonflush	6 mm	NPN	Normally-open (NO)	1500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NEN6-8GM40-E1-PUR	nonflush	6 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NEN6-8GM40-E2-PUR	nonflush	6 mm	PNP	Normally-open (NO)	1500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NEN6-8GM40-E3-PUR	nonflush	6 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	30 V	2000 mm	PUR	40 mm		■
NEN6-8GM40-E0-3M-PUR	nonflush	6 mm	NPN	Normally-open (NO)	1500 Hz	5 V	30 V	3000 mm	PUR	40 mm		■



Accessories

BF 8

Mounting adapter, 8 mm

Inductive Cylindrical Standard Sensors

12 mm Series—with Plug Connection



Common Technical Data

Type of voltage	DC
Housing diameter D	12 mm

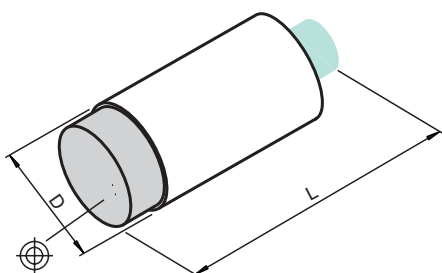
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Material	Length L	CCC	EAC	UL	UKCA
NBB2-12GM30-E2-V1	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBB2-12GM40-E0-V1	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	M12 connector plug		54.5 mm		■	■	■
NBB2-12GM40-E2-V1	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	M12 connector plug		54.5 mm		■	■	■
NBB2-12GM40-Z0-V1	flush	2 mm	Two-wire	Normally-open (NO)	1000 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBB2-12GM40-Z3-V1	flush	2 mm	Two-wire	Normally-open (NO)	1000 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBB2-12GM50-A0-V1	flush	2 mm	NPN	complementary	3500 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB2-12GM50-A2-V1	flush	2 mm	PNP	complementary	3500 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB2-12GM50-E0-V1	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB2-12GM50-E1-V1	flush	2 mm	NPN	Normally-closed (NC)	3500 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB2-12GM50-E2-V1	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB2-12GM50-E3-V1	flush	2 mm	PNP	Normally-closed (NC)	3500 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB2-12GS40-Z4L-V1	flush	2 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V	M12 connector plug		55 mm			■	
NCB2-12GM40-Z0-V1	flush	2 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NCB2-12GM40-Z1-V1	flush	2 mm	Two-wire	Normally-closed (NC)	800 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBB4-12GM30-E0-V1	flush	4 mm	NPN	Normally-open (NO)	2550 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBB4-12GM30-E2-V1	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBB4-12GM30-E2-V3	flush	4 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	M8 connector plug		30 mm		■	■	
NBB4-12GM30-E3-V1	flush	4 mm	PNP	Normally-closed (NC)	2550 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBB4-12GM30-A0-V1	flush	4 mm	NPN	complementary	2550 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBB4-12GM30-A2-V1	flush	4 mm	PNP	complementary	2550 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBB4-12GM50-E2-0,8M-V1	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	Fixed cable with M12 plug	PVC	53 mm		■	■	■
NBB4-12GM50-EI-V1	flush	4 mm	Digital current output		1800 Hz	9 V	30 V	M12 connector plug		65 mm			■	
NBB4-12GM50-E0-V1	flush	4 mm	NPN	Normally-open (NO)	2550 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB4-12GM50-E1-V1	flush	4 mm	NPN	Normally-closed (NC)	2550 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB4-12GM50-E2-V1	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB4-12GM50-E3-V1	flush	4 mm	PNP	Normally-closed (NC)	2550 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB4-12GM50-A0-V1	flush	4 mm	NPN	complementary	2550 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBB4-12GM50-A2-V1	flush	4 mm	PNP	complementary	2550 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN4-12GM30-A0-V1	nonflush	4 mm	NPN	complementary	2650 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBN4-12GM30-A2-V1	nonflush	4 mm	PNP	complementary	2650 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBN4-12GM40-Z0-V1	nonflush	4 mm	Two-wire	Normally-open (NO)	1000 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBN4-12GM40-Z3-V1	nonflush	4 mm	Two-wire	Normally-open (NO)	1000 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBN4-12GM50-A0-V1	nonflush	4 mm	NPN	complementary	2650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN4-12GM50-A2-V1	nonflush	4 mm	PNP	complementary	2650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN4-12GK50-E2-1,5M-V1	nonflush	4 mm	PNP	Normally-open (NO)	1200 Hz	10 V	30 V	Fixed cable with M12 plug		50 mm			■	
NBN4-12GM40-E0-V1	nonflush	4 mm	NPN	Normally-open (NO)	2650 Hz	5 V	36 V	M12 connector plug		54.5 mm		■	■	■
NBN4-12GM40-E2-V1	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V	M12 connector plug		54.5 mm		■	■	■
NBN4-12GM50-E0-V1	nonflush	4 mm	NPN	Normally-open (NO)	2650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Material	Length L	CCC	EAC	UL	UKCA
NBN4-12GM50-E1-V1	nonflush	4 mm	NPN	Normally-closed (NC)	2650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN4-12GM50-E2-V1	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN4-12GM50-E3-V1	nonflush	4 mm	PNP	Normally-closed (NC)	2650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN4-12GS40-Z4L-V1	nonflush	4 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V	M12 connector plug		55 mm			■	
NCB4-12GM40-Z4-V1	flush	4 mm	Two-wire	Normally-open (NO)	1000 Hz	3.5 V	30 V	M12 connector plug		35 mm			■	
NCB4-12GM40-Z5-V1	flush	4 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	M12 connector plug		35 mm			■	
NCB4-12GM40-Z7-V1	flush	4 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	M12 connector plug		35 mm			■	
NCB4-12GM50-E2-V1	flush	4 mm	PNP	Normally-open (NO)	800 Hz	10 V	30 V	M12 connector plug		50 mm			■	
NCN4-12GM40-Z0-V1	nonflush	4 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NCN4-12GM40-Z1-V1	nonflush	4 mm	Two-wire	Normally-closed (NC)	800 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NXB4-12GM50-E2-V1	flush	4 mm	PNP	Normally-open (NO)	450 Hz	10 V	30 V	M12 connector plug		64.5 mm			■	
NEB6-12GM50-E0-V1	semi-flush	6 mm	NPN	Normally-open (NO)	800 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
NEB6-12GM50-E1-V1	semi-flush	6 mm	NPN	Normally-closed (NC)	800 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
NEB6-12GM50-E2-V1	semi-flush	6 mm	PNP	Normally-open (NO)	800 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
NEB6-12GM50-E3-V1	semi-flush	6 mm	PNP	Normally-closed (NC)	800 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
NBN8-12GM30-A0-V1	nonflush	8 mm	NPN	complementary	1650 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBN8-12GM30-A2-V1	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBN8-12GM30-E2-0,4M-PUR-V3	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	Fixed cable with M8 plug	PUR	33 mm		■	■	■
NBN8-12GM30-E2-V1	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBN8-12GM30-E3-V1	nonflush	8 mm	PNP	Normally-closed (NC)	1650 Hz	5 V	36 V	M12 connector plug		44.5 mm		■	■	■
NBN8-12GM35-E3-V1	nonflush	8 mm	PNP	Normally-closed (NC)	1650 Hz	5 V	36 V	M12 connector plug		49.5 mm		■	■	■
NBN8-12GM50-A0-V1	nonflush	8 mm	NPN	complementary	1650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN8-12GM50-A2-V1	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN8-12GM50-E0-V1	nonflush	8 mm	NPN	Normally-open (NO)	1650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN8-12GM50-E2-V1	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	M12 connector plug		64.5 mm		■	■	■
NBN8-12GM50-EI-V1	nonflush	8 mm	Digital current output		1500 Hz	9 V	30 V	M12 connector plug		65 mm			■	
NBN8-12GM70-E1-V1	nonflush	8 mm	NPN	Normally-closed (NC)	1650 Hz	5 V	36 V	M12 connector plug		84.5 mm		■	■	■
NCN8-12GM40-Z4-V1	nonflush	8 mm	Two-wire	Normally-open (NO)	750 Hz	3.5 V	30 V	M12 connector plug		35 mm			■	
NCN8-12GM40-Z5-V1	nonflush	8 mm	Two-wire	Normally-closed (NC)	750 Hz	3.5 V	30 V	M12 connector plug		35 mm			■	
NCN8-12GM40-Z7-V1	nonflush	8 mm	Two-wire	Normally-closed (NC)	750 Hz	3.5 V	30 V	M12 connector plug		35 mm			■	
NEB8-12GM50-E2-V1	semi-flush	8 mm	PNP	Normally-open (NO)	400 Hz	10 V	30 V	M12 connector plug		60 mm			■	
NXN8-12GM50-E2-V1	nonflush	8 mm	PNP	Normally-open (NO)	450 Hz	10 V	30 V	M12 connector plug		64.5 mm			■	
NEN10-12GM50-E0-V1	nonflush	10 mm	NPN	Normally-open (NO)	600 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
NEN10-12GM50-E1-V1	nonflush	10 mm	NPN	Normally-closed (NC)	600 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
NEN10-12GM50-E2-V1	nonflush	10 mm	PNP	Normally-open (NO)	600 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
NEN10-12GM50-E3-V1	nonflush	10 mm	PNP	Normally-closed (NC)	600 Hz	10 V	30 V	M12 connector plug		60 mm		■	■	
IA6-12GM35-IU-V1	semi-flush	6 mm	Analog current output			10 V	30 V	M12 connector plug		45 mm				
IA6-12GM50-IU-V1	semi-flush	6 mm	Analog current output	4 mA ... 20 mA		15 V	30 V	M12 connector plug		60 mm				

Accessories

BF 12	Mounting adapter, 12 mm
BF 12-F	Plastic mounting adapter, 12 mm
MH-EXG-12	Quick-mounting bracket with fixed stop
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-G-2M-PVC	Single-ended female cordset, M12, straight A-coded, 4-pin, PVC cable, gray
V1-G-BK	Single-ended female cordset, straight, M12, 4-pin, field attachable
V1-G-BK2M-PUR-U	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, black, UL-approved, suitable for drag chains, torsion-proof
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PVC	Single-ended female cordset, M12, 4-pin, PVC cable
V1-W-BK	Single-ended female cordset, angled, M12, 4-pin, field attachable
V1-W-BK2M-PUR-U	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, black, UL-approved, suitable for drag chains, torsion-proof
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray



Inductive Cylindrical Standard Sensors

12 mm Series—with Cable Connection



Common Technical Data

Type of voltage	DC
Connection type	Fixed cable
Housing diameter D	12 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CCC	EAC	UL	UKCA
NBB2-12GM30-E2	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	2000 mm	PVC	33 mm	■	■	■	■
NBB2-12GM40-E0	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	2000 mm	PVC	43 mm	■	■	■	■
NBB2-12GM40-E0-5M	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	5000 mm	PVC	43 mm	■	■	■	■
NBB2-12GM40-E1	flush	2 mm	NPN	Normally-closed (NC)	3500 Hz	5 V	36 V	2000 mm	PVC	43 mm	■	■	■	■
NBB2-12GM40-E2	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	2000 mm	PVC	43 mm	■	■	■	■
NBB2-12GM40-E2-3M	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	3000 mm	PVC	43 mm	■	■	■	■
NBB2-12GM40-E3	flush	2 mm	PNP	Normally-closed (NC)	3500 Hz	5 V	36 V	2000 mm	PVC	43 mm	■	■	■	■
NBB2-12GM40-E3-10M	flush	2 mm	PNP	Normally-closed (NC)	3500 Hz	5 V	36 V	10,000 mm	PVC	43 mm	■	■	■	■
NBB2-12GM40-Z0	flush	2 mm	Two-wire	Normally-open (NO)	1000 Hz	5 V	60 V	2000 mm	PVC	40 mm	■	■	■	■
NBB2-12GS40-Z4L	flush	2 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V	2000 mm	PUR	40 mm	■	■	■	■
NBB2-12GK50-E0	flush	2 mm	NPN	Normally-open (NO)	1500 Hz	10 V	30 V	2000 mm	PVC	50 mm	■	■	■	■
NBB2-12GK50-E2	flush	2 mm	PNP	Normally-open (NO)	1500 Hz	10 V	30 V	2000 mm	PVC	50 mm	■	■	■	■
NBB2-12GK60-E2-5M PUR	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	5000 mm	PUR	60 mm	■	■	■	■
NBB2-12GK50-E2-10M	flush	2 mm	PNP	Normally-open (NO)	1500 Hz	10 V	30 V	10,000 mm	PVC	50 mm	■	■	■	■
NBB2-12GM50-A0	flush	2 mm	NPN	complementary	3500 Hz	5 V	36 V	2000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-A2	flush	2 mm	PNP	complementary	3500 Hz	5 V	36 V	2000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E0	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	2000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E0-3M	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	3000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E0-5M	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	5000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E0-6M	flush	2 mm	NPN	Normally-open (NO)	3500 Hz	5 V	36 V	6000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E1	flush	2 mm	NPN	Normally-closed (NC)	3500 Hz	5 V	36 V	2000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E2	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	2000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E2-PUR	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	2000 mm	PUR	53 mm	■	■	■	■
NBB2-12GM50-E2-10M	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	10,000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E2-3M	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	3000 mm	PVC	50 mm	■	■	■	■
NBB2-12GM50-E2-3,5M	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V		PVC	53 mm	■	■	■	■
NBB2-12GM50-E2-5M	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	5000 mm	PVC	53 mm	■	■	■	■
NBB2-12GM50-E2-25M-PUR	flush	2 mm	PNP	Normally-open (NO)	3500 Hz	5 V	36 V	25,000 mm	PUR	53 mm	■	■	■	■
NBB2-12GM50-E3	flush	2 mm	PNP	Normally-closed (NC)	3500 Hz	5 V	36 V	2000 mm	PVC	53 mm	■	■	■	■
NCB2-12GM40-Z0	flush	2 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V	2000 mm	PUR	40 mm	■	■	■	■
NCB2-12GM40-Z0-10M	flush	2 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V	10,000 mm	PUR	40 mm	■	■	■	■
NCB2-12GM40-Z1	flush	2 mm	Two-wire	Normally-closed (NC)	800 Hz	5 V	60 V	2000 mm	PUR	40 mm	■	■	■	■
NBB4-12GM30-E0	flush	4 mm	NPN	Normally-open (NO)	2550 Hz	5 V	36 V	2000 mm	PVC	33 mm	■	■	■	■
NBB4-12GM30-E2	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	2000 mm	PVC	33 mm	■	■	■	■
NBB4-12GM30-E2-5M	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	5000 mm	PVC	30 mm	■	■	■	■
NBB4-12GM30-E3	flush	4 mm	PNP	Normally-closed (NC)	2550 Hz	5 V	36 V	2000 mm	PVC	33 mm	■	■	■	■
NBB4-12GM30-A0	flush	4 mm	NPN	complementary	2550 Hz	5 V	36 V	2000 mm	PVC	33 mm	■	■	■	■
NBB4-12GM30-A2	flush	4 mm	PNP	complementary	2550 Hz	5 V	36 V	2000 mm	PVC	33 mm	■	■	■	■
NBB4-12GM40-E0	flush	4 mm	NPN	Normally-open (NO)	2550 Hz	5 V	36 V	2000 mm	PVC	43 mm	■	■	■	■
NBB4-12GM40-E2	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	2000 mm	PVC	43 mm	■	■	■	■
NBB4-12GM40-A2-8M	flush	4 mm	PNP	complementary	2550 Hz	5 V	36 V	8000 mm	PVC	43 mm	■	■	■	■
NBB4-12GM50-A0	flush	4 mm	NPN	complementary	2550 Hz	5 V	36 V	2000 mm	PVC	53 mm	■	■	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CCC	EAC	UL	UKCA
NBB4-12GM50-A2	flush	4 mm	PNP	complementary	2550 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E0	flush	4 mm	NPN	Normally-open (NO)	2550 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E1	flush	4 mm	NPN	Normally-closed (NC)	2550 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E2	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E2-0,5M	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V		PVC	53 mm		■	■	■
NBB4-12GM50-E2-0,9M	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V		PVC	53 mm		■	■	■
NBB4-12GM50-E2-3M	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	3000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E2-5M	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	5000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E2-7M	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V		PVC	53 mm		■	■	■
NBB4-12GM50-E3	flush	4 mm	PNP	Normally-closed (NC)	2550 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E3-10M	flush	4 mm	PNP	Normally-closed (NC)	2550 Hz	5 V	36 V	10,000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-E3-5M	flush	4 mm	PNP	Normally-closed (NC)	2550 Hz	5 V	36 V	5000 mm	PVC	53 mm		■	■	■
NBB4-12GM50-EI	flush	4 mm	Digital current output		1800 Hz	9 V	30 V	2000 mm	PUR	50 mm			■	
NBB4-12GM60-E2-5M	flush	4 mm	PNP	Normally-open (NO)	2550 Hz	5 V	36 V	5000 mm	PVC	63 mm		■	■	■
NBB4-12GM70-E0	flush	4 mm	NPN	Normally-open (NO)	2550 Hz	5 V	36 V	2000 mm	PVC	73 mm		■	■	■
NBB4-12GM70-E3	flush	4 mm	PNP	Normally-closed (NC)	2550 Hz	5 V	36 V	2000 mm	PVC	73 mm		■	■	■
NBB4-12GS50-EI	flush	4 mm	Digital current output		1400 Hz	9 V	16 V	1000 mm	PUR	50 mm			■	
NBN4-12GM40-E0	nonflush	4 mm	NPN	Normally-open (NO)	2650 Hz	5 V	36 V	2000 mm	PVC	43 mm		■	■	■
NBN4-12GM40-E0-5M	nonflush	4 mm	NPN	Normally-open (NO)	2650 Hz	5 V	36 V	5000 mm	PVC	43 mm		■	■	■
NBN4-12GM40-E2	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V	2000 mm	PVC	43 mm		■	■	■
NBN4-12GM40-Z0	nonflush	4 mm	Two-wire	Normally-open (NO)	700 Hz	5 V	60 V	2000 mm	PVC	40 mm	■		■	
NBN4-12GS40-Z4L	nonflush	4 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V	2000 mm	PUR	40 mm			■	
NBN4-12GK50-E0	nonflush	4 mm	NPN	Normally-open (NO)	1200 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBN4-12GK50-E2	nonflush	4 mm	PNP	Normally-open (NO)	1200 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBN4-12GM50-E0	nonflush	4 mm	NPN	Normally-open (NO)	2650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E0-5M	nonflush	4 mm	NPN	Normally-open (NO)	2650 Hz	5 V	36 V	5000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E0-10M	nonflush	4 mm	NPN	Normally-open (NO)	2650 Hz	5 V	36 V	10,000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E1	nonflush	4 mm	NPN	Normally-closed (NC)	2650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E2	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E2-5M	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V	5000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E2-8M	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V	8000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E2-12M	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V		PVC	53 mm		■	■	■
NBN4-12GM50-E3	nonflush	4 mm	PNP	Normally-closed (NC)	2650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E3-5M	nonflush	4 mm	PNP	Normally-closed (NC)	2650 Hz	5 V	36 V	5000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-E3-6M	nonflush	4 mm	PNP	Normally-closed (NC)	2650 Hz	5 V	36 V	6000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-A0	nonflush	4 mm	NPN	complementary	2650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-A2	nonflush	4 mm	PNP	complementary	2650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN4-12GM50-A2-8M	nonflush	4 mm	PNP	complementary	2650 Hz	5 V	36 V	8000 mm	PVC	53 mm		■	■	■
NBN4-12GM60-E2	nonflush	4 mm	PNP	Normally-open (NO)	2650 Hz	5 V	36 V	2000 mm	PVC	63 mm		■	■	■
NCB4-12GM35-Z4	flush	4 mm	Two-wire	Normally-open (NO)	1000 Hz	3.5 V	30 V	2000 mm	PVC	35 mm			■	
NCB4-12GM35-Z5	flush	4 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	2000 mm	PVC	35 mm			■	
NCN4-12GM40-Z0	nonflush	4 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NCN4-12GM40-Z0-10M	nonflush	4 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V	10,000 mm	PUR	40 mm	■		■	
NCN4-12GM40-Z1	nonflush	4 mm	Two-wire	Normally-closed (NC)	800 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NXB4-12GM50-E2	flush	4 mm	PNP	Normally-open (NO)	450 Hz	10 V	30 V	2000 mm	PVC	53 mm			■	
NEB6-12GM50-E0	semi-flush	6 mm	NPN	Normally-open (NO)	800 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NEB6-12GM50-E1	semi-flush	6 mm	NPN	Normally-closed (NC)	800 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NEB6-12GM50-E2	semi-flush	6 mm	PNP	Normally-open (NO)	800 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NEB6-12GM50-E2-5M	semi-flush	6 mm	PNP	Normally-open (NO)	800 Hz	10 V	30 V	5000 mm	PUR	50 mm		■	■	
NEB6-12GM50-E3	semi-flush	6 mm	PNP	Normally-closed (NC)	800 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NBN8-12GM50-A0	nonflush	8 mm	NPN	complementary	1650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN8-12GM50-A2	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN8-12GM50-E0	nonflush	8 mm	NPN	Normally-open (NO)	1650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN8-12GM50-E2	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	2000 mm	PVC	53 mm		■	■	■
NBN8-12GM50-EI	nonflush	8 mm	Digital current output		1500 Hz	9 V	30 V	2000 mm	PUR	50 mm			■	
NCN8-12GM35-Z4	nonflush	8 mm	Two-wire	Normally-open (NO)	750 Hz	3.5 V	30 V	2000 mm	PVC	35 mm			■	
NCN8-12GM35-Z5	nonflush	8 mm	Two-wire	Normally-closed (NC)	750 Hz	3.5 V	30 V	2000 mm	PVC	35 mm			■	
NEN10-12GM50-E0	nonflush	10 mm	NPN	Normally-open (NO)	600 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NEN10-12GM50-E1	nonflush	10 mm	NPN	Normally-closed (NC)	600 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NEN10-12GM50-E2	nonflush	10 mm	PNP	Normally-open (NO)	600 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NEN10-12GM50-E3	nonflush	10 mm	PNP	Normally-closed (NC)	600 Hz	10 V	30 V	2000 mm	PUR	50 mm		■	■	
NBN8-12GM30-A0	nonflush	8 mm	NPN	complementary	1650 Hz	5 V	36 V	2000 mm	PVC	33 mm		■	■	■
NBN8-12GM30-A2	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	2000 mm	PVC	33 mm		■	■	■
NBN8-12GM50-A2-3M	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	3000 mm	PVC	53 mm		■	■	■
NBN8-12GM30-E2	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	2000 mm	PVC	33 mm		■	■	■
NXN8-12GM50-E2	nonflush	8 mm	PNP	Normally-open (NO)	450 Hz	10 V	30 V	2000 mm	PVC	53 mm			■	

Inductive Cylindrical Standard Sensors

12 mm Series—250 V Version

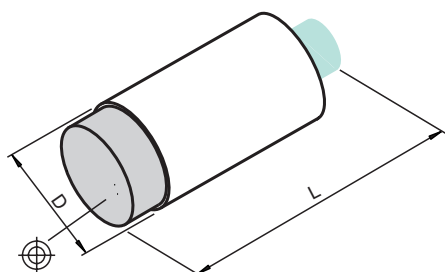


Common Technical Data

Type of output	2-wire
Type of output	Two-wire
Operating voltage (min)	20 V
Housing diameter D	12 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Element Function	Type of Voltage	Switching Frequency	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	CCC
NBB4-12GM65-US-V12	flush	4 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	1/2 inch connector plug			82 mm	■
NBB4-12GM75-US	flush	4 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	75 mm	■
NBN8-12GM65-US-V12	nonflush	8 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	1/2 inch connector plug			82 mm	■
NBN8-12GM75-US	nonflush	8 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	75 mm	■
NJ2-12GM50-WO	flush	2 mm	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NJ2-12GM50-WS	flush	2 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NJ2-12GM50-WS-5M	flush	2 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	5000 mm	PVC	50 mm	■
NJ2-12GM50-WS-V12	flush	2 mm	Normally-open (NO)	AC	20 Hz	253 V	1/2 inch connector plug			50 mm	
NJ4-12GM50-WO	nonflush	4 mm	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NJ4-12GM50-WS	nonflush	4 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NJ4-12GM50-WS-10M	nonflush	4 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	10,000 mm	PVC	50 mm	■
NJ4-12GM50-WS-20M	nonflush	4 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	20,000 mm	PVC	50 mm	
NJ4-12GM50-WS-V12	nonflush	4 mm	Normally-open (NO)	AC	20 Hz	253 V	1/2 inch connector plug			50 mm	■



Accessories

BF 12	Mounting adapter, 12 mm
EXG-12	Quick-mounting bracket with fixed stop
V12-G-YE2M-PVC	Cordset, 1/2"-20 UNF, 3-pin, PVC cable



Inductive Cylindrical Standard Sensors

18 mm Series—with Plug Connection



Common Technical Data

Type of voltage	DC
Housing diameter D	18 mm

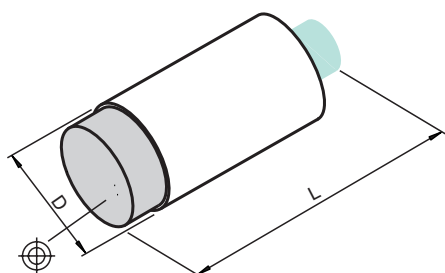
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	CCC	EAC	UL	UKCA
NBB5-18GH40-E2-V1	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	M12 connector plug	39 mm				
NBB5-18GM20-E2-V1	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	M12 connector plug	20 mm			■	
NBB5-18GM40-E0-V1	flush	5 mm	NPN	Normally-open (NO)	1950 Hz	5 V	36 V	M12 connector plug	51 mm		■	■	■
NBB5-18GM40-E2-V1	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	M12 connector plug	56 mm		■	■	■
NBB5-18GM40-E3-V1	flush	5 mm	PNP	Normally-closed (NC)	1950 Hz	5 V	36 V	M12 connector plug	56 mm		■	■	■
NBB5-18GM40-Z0-V1	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NBB5-18GM40-Z3-V1	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NBB5-18GM40-Z3-300MM-V1	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	5 V	60 V	Fixed cable with M12 plug	40 mm	■		■	
NBB5-18GM50-E0-V1	flush	5 mm	NPN	Normally-open (NO)	1950 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB5-18GM50-E2-V1	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB5-18GM50-E3-V1	flush	5 mm	PNP	Normally-closed (NC)	1950 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB5-18GM50-A0-V1	flush	5 mm	NPN	complementary	1950 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB5-18GM50-A2-V1	flush	5 mm	PNP	complementary	1950 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB5-18GS50-Z4L-V1	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V	M12 connector plug	66 mm			■	
NBB5-18GM60-I-V1	flush	5 mm	Analog current output	4 mA ... 20 mA		10 V	30 V	M12 connector plug	75 mm			■	
NBB5-18GM60-I3-V1	flush	5 mm	Analog current output	0 mA ... 20 mA		10 V	30 V	M12 connector plug	75 mm			■	
NCB5-18GM40-Z0-V1	flush	5 mm	Two-wire	Normally-open (NO)	350 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NCB5-18GM40-Z1-V1	flush	5 mm	Two-wire	Normally-closed (NC)	350 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NCB5-18GM40-Z3-V1	flush	5 mm	Two-wire	Normally-open (NO)	350 Hz	5 V	60 V	M12 connector plug	55 mm	■		■	
NBB8-18GM30-E2-V1	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	M12 connector plug	46 mm		■	■	■
NBB8-18GM30-E3-V1	flush	8 mm	PNP	Normally-closed (NC)	1350 Hz	5 V	36 V	M12 connector plug	46 mm		■	■	■
NBB8-18GM30-A0-V1	flush	8 mm	NPN	complementary	1350 Hz	5 V	36 V	M12 connector plug	46 mm		■	■	■
NBB8-18GM30-A2-V1	flush	8 mm	PNP	complementary	1350 Hz	5 V	36 V	M12 connector plug	46 mm		■	■	■
NBB8-18GM50-E0-V1	flush	8 mm	NPN	Normally-open (NO)	1350 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB8-18GM50-E2-V1	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB8-18GM50-EI-V1	flush	8 mm	Digital current output		1300 Hz	9 V	30 V	M12 connector plug	65 mm			■	
NBB8-18GM50-A0-V1	flush	8 mm	NPN	complementary	1350 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB8-18GM50-A2-V1	flush	8 mm	PNP	complementary	1350 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBB8-18GM50-E2-0,2M-V1	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	Fixed cable with M12 plug	56 mm		■	■	■
NBB8-18GM50-E2-0,8M-V1	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	Fixed cable with M12 plug	56 mm		■	■	■
NBB8-18GM60-A2-V1	flush	8 mm	PNP	complementary	1350 Hz	5 V	36 V	M12 connector plug	76 mm		■	■	■
NBN8-18GM40-Z0-V1	nonflush	8 mm	Two-wire	Normally-open (NO)	450 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NBN8-18GM40-Z3-V1	nonflush	8 mm	Two-wire	Normally-open (NO)	450 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NBN8-18GM40-E3-V1	nonflush	8 mm	PNP	Normally-closed (NC)	1650 Hz	5 V	36 V	M12 connector plug	56 mm		■	■	■
NBN8-18GM50-E0-V1	nonflush	8 mm	NPN	Normally-open (NO)	1650 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBN8-18GM50-E2-V1	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBN8-18GM50-A0-V1	nonflush	8 mm	NPN	complementary	1650 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	CCC	EAC	UL	UKCA
NBN8-18GM50-A2-V1	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBN8-18GM60-A2-V1	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	M12 connector plug	76 mm		■	■	■
NBN8-18GM70-E2-V1	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	M12 connector plug	86 mm		■	■	■
NBN8-18GS50-Z4L-V1	nonflush	8 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V	M12 connector plug	66 mm			■	
NCB8-18GM50-E2-V1	flush	8 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	M12 connector plug	50 mm			■	
NCB8-18GM50-Z4-V1	flush	8 mm	Two-wire	Normally-open (NO)	1000 Hz	3.5 V	30 V	M12 connector plug	65 mm			■	
NCB8-18GM50-Z5-V1	flush	8 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	M12 connector plug	60 mm			■	
NCN8-18GM40-Z0-V1	nonflush	8 mm	Two-wire	Normally-open (NO)	300 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NCN8-18GM40-Z1-V1	nonflush	8 mm	Two-wire	Normally-closed (NC)	300 Hz	5 V	60 V	M12 connector plug	40 mm	■		■	
NXB8-18GM50-E2-V1	flush	8 mm	PNP	Normally-open (NO)	150 Hz	10 V	30 V	M12 connector plug	66 mm			■	
NBN12-18GM30-A0-V1	nonflush	12 mm	NPN	complementary	1300 Hz	5 V	36 V	M12 connector plug	46 mm		■	■	■
NBN12-18GM30-A2-V1	nonflush	12 mm	PNP	complementary	1300 Hz	5 V	36 V	M12 connector plug	46 mm		■	■	■
NBN12-18GM30-E2-V1	nonflush	12 mm	PNP	Normally-open (NO)	1300 Hz	5 V	36 V	M12 connector plug	46 mm		■	■	■
NBN12-18GM35-E2-0,15M-V1	nonflush	12 mm	PNP	Normally-open (NO)	1300 Hz	5 V	36 V	Fixed cable with M12 plug	50 mm		■	■	■
NBN12-18GM50-E0-V1	nonflush	12 mm	NPN	Normally-open (NO)	1300 Hz	5 V	36 V	M12 connector plug	65 mm		■	■	■
NBN12-18GM50-E2-V1	nonflush	12 mm	PNP	Normally-open (NO)	1300 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBN12-18GM50-A0-V1	nonflush	12 mm	NPN	complementary	1300 Hz	5 V	36 V	M12 connector plug	65 mm		■	■	■
NBN12-18GM50-A2-V1	nonflush	12 mm	PNP	complementary	1300 Hz	5 V	36 V	M12 connector plug	66 mm		■	■	■
NBN12-18GM50-EI-V1	nonflush	12 mm	Digital current output		1000 Hz	9 V	30 V	M12 connector plug	65 mm			■	
NBN12-18GM70-E1-V1	nonflush	12 mm	NPN	Normally-closed (NC)	1300 Hz	5 V	36 V	M12 connector plug	86 mm		■	■	■
NCN12-18GM50-Z4-V1	nonflush	12 mm	Two-wire	Normally-open (NO)	1000 Hz	3.5 V	30 V	M12 connector plug	60 mm			■	
NCN12-18GM50-Z5-V1	nonflush	12 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	M12 connector plug	60 mm			■	
NCN12-18GM50-Z7-V1	nonflush	12 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	M12 connector plug	60 mm			■	
NEB12-18GM50-E0-V1	semi-flush	12 mm	NPN	Normally-open (NO)	500 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	
NEB12-18GM50-E1-V1	semi-flush	12 mm	NPN	Normally-closed (NC)	500 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	
NEB12-18GM50-E2-V1	semi-flush	12 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	
NEB12-18GM50-E3-V1	semi-flush	12 mm	PNP	Normally-closed (NC)	500 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	
NXN12-18GM50-E2-V1	nonflush	12 mm	PNP	Normally-open (NO)	150 Hz	10 V	30 V	M12 connector plug	65 mm			■	
NEN20-18GM50-E0-V1	nonflush	20 mm	NPN	Normally-open (NO)	200 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	
NEN20-18GM50-E1-V1	nonflush	20 mm	NPN	Normally-closed (NC)	200 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	
NEN20-18GM50-E2-V1	nonflush	20 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	
NEN20-18GM50-E3-V1	nonflush	20 mm	PNP	Normally-closed (NC)	200 Hz	10 V	30 V	M12 connector plug	69 mm		■	■	

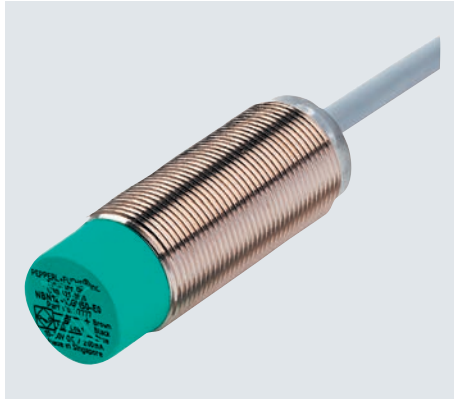
Accessories

BF 18	Mounting adapter, 18 mm
BF 18-F	Plastic mounting adapter, 18 mm
MH 01-M18	Mounting bracket for sensors
MH-EXG-18	Quick-mounting bracket with fixed stop
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-G-2M-PVC	Single-ended female cordset, M12, straight A-coded, 4-pin, PVC cable, gray
V1-G-BK	Single-ended female cordset, straight, M12, 4-pin, field attachable
V1-G-BK2M-PUR-U	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, black, UL-approved, suitable for drag chains, torsion-proof
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PVC	Single-ended female cordset, M12, 4-pin, PVC cable
V1-W-BK	Single-ended female cordset, angled, M12, 4-pin, field attachable
V1-W-BK2M-PUR-U	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, black, UL-approved, suitable for drag chains, torsion-proof



Inductive Cylindrical Standard Sensors

18 mm Series—with Cable Connection



Common Technical Data

Type of voltage	DC
Connection type	Fixed cable
Housing diameter D	18 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CCC	EAC	UL	UKCA
NBB5-18GM20-E2	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	2000 mm	PVC	20 mm			■	
NBB5-18GM40-Z0	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	5 V	60 V	2000 mm	PVC	40 mm	■		■	
NBB5-18GM40-E1	flush	5 mm	NPN	Normally-closed (NC)	1950 Hz	5 V	36 V	2000 mm	PVC	46 mm		■	■	■
NBB5-18GM40-E2	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	2000 mm	PVC	46 mm		■	■	■
NBB5-18GM40-E2-3M	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	3000 mm	PVC	46 mm		■	■	■
NBB5-18GM40-E2-5M	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	5000 mm	PVC	46 mm		■	■	■
NBB5-18GK50-E0	flush	5 mm	NPN	Normally-open (NO)	1000 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBB5-18GK50-E2	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBB5-18GK50-E2-10M	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	10,000 mm	PVC	50 mm			■	
NBB5-18GK50-E2-15M	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBB5-18GK50-E2-40M	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	40,000 mm	PVC	50 mm			■	
NBB5-18GK50-E2-5M	flush	5 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBB5-18GM50-A0	flush	5 mm	NPN	complementary	1950 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-A0-5M	flush	5 mm	NPN	complementary	1950 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-A2	flush	5 mm	PNP	complementary	1950 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-A2-10M	flush	5 mm	PNP	complementary	1950 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-A2-5M	flush	5 mm	PNP	complementary	1950 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E0	flush	5 mm	NPN	Normally-open (NO)	1950 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E0-3M	flush	5 mm	NPN	Normally-open (NO)	1950 Hz	5 V	36 V	3000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E0-5M	flush	5 mm	NPN	Normally-open (NO)	1950 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E2	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E2-10M	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E2-15M	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	15,000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E2-5M	flush	5 mm	PNP	Normally-open (NO)	1950 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E3	flush	5 mm	PNP	Normally-closed (NC)	1950 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBB5-18GM50-E3-5M	flush	5 mm	PNP	Normally-closed (NC)	1950 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBB5-18GS50-Z4L	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V	2000 mm	PUR	56 mm			■	
NBB5-18GM60-I	flush	5 mm	Analog current output	4 mA ... 20 mA		10 V	30 V	2000 mm	PVC	60 mm			■	
NBB5-18GM60-I3	flush	5 mm	Analog current output	0 mA ... 20 mA		10 V	30 V	2000 mm	PVC	60 mm			■	
NBB5-18GM60-E3-5M-PUR	flush	5 mm	PNP	Normally-closed (NC)	1950 Hz	5 V	36 V	5000 mm	PUR	66 mm		■	■	■
NBB5-18GM40-Z0	flush	5 mm	Two-wire	Normally-open (NO)	350 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NBB5-18GM40-Z0-10M	flush	5 mm	Two-wire	Normally-open (NO)	350 Hz	5 V	60 V	10,000 mm	PUR	40 mm	■		■	
NBB5-18GM40-Z1	flush	5 mm	Two-wire	Normally-closed (NC)	350 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NBB8-18GM30-A0	flush	8 mm	NPN	complementary	1350 Hz	5 V	36 V	2000 mm	PVC	36 mm		■	■	■
NBB8-18GM30-A2	flush	8 mm	PNP	complementary	1350 Hz	5 V	36 V	2000 mm	PVC	36 mm		■	■	■
NBB8-18GM30-E2	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	2000 mm	PVC	31 mm		■	■	■
NBB8-18GM30-E2-5M	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	5000 mm	PVC	31 mm		■	■	■
NBB8-18GM30-E3	flush	8 mm	PNP	Normally-closed (NC)	1350 Hz	5 V	36 V	2000 mm	PVC	31 mm		■	■	■
NBB8-18GM50-A0	flush	8 mm	NPN	complementary	1350 Hz	5 V	36 V	2000 mm	PVC	50 mm		■	■	■
NBB8-18GM50-A0-5M	flush	8 mm	NPN	complementary	1350 Hz	5 V	36 V	5000 mm	PVC	50 mm		■	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CCC	EAC	UL	UKCA
NBB8-18GM50-A2	flush	8 mm	PNP	complementary	1350 Hz	5 V	36 V	2000 mm	PVC	50 mm		■	■	■
NBB8-18GM50-A2-10M	flush	8 mm	PNP	complementary	1350 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBB8-18GM50-E0	flush	8 mm	NPN	Normally-open (NO)	1350 Hz	5 V	36 V	2000 mm	PVC	50 mm		■	■	■
NBB8-18GM50-E0-3M	flush	8 mm	NPN	Normally-open (NO)	1350 Hz	5 V	36 V	3000 mm	PVC	56 mm		■	■	■
NBB8-18GM50-E0-5M	flush	8 mm	NPN	Normally-open (NO)	1350 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBB8-18GM50-E1-3M	flush	8 mm	NPN	Normally-closed (NC)	1350 Hz	5 V	36 V	3000 mm	PVC	56 mm		■	■	■
NBB8-18GM50-E2	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBB8-18GM50-E2-5M	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBB8-18GM50-E2-6M	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V		PVC	56 mm		■	■	■
NBB8-18GM50-E2-10M	flush	8 mm	PNP	Normally-open (NO)	1350 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBB8-18GM50-EI	flush	8 mm	Digital current output		1300 Hz	9 V	30 V	2000 mm	PUR	50 mm			■	
NBB8-18GM70-E3	flush	8 mm	PNP	Normally-closed (NC)	1350 Hz	5 V	36 V	2000 mm	PVC	76 mm		■	■	■
NBN8-18GM40-Z0	nonflush	8 mm	Two-wire	Normally-open (NO)	500 Hz	5 V	60 V	2000 mm	PVC	40 mm	■		■	
NBN8-18GK50-A2	nonflush	8 mm	PNP	complementary	500 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBN8-18GK50-A2-10M	nonflush	8 mm	PNP	complementary	500 Hz	10 V	30 V	10,000 mm	PVC	50 mm			■	
NBN8-18GK50-A2-15M	nonflush	8 mm	PNP	complementary	500 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBN8-18GK50-E0	nonflush	8 mm	NPN	Normally-open (NO)	500 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBN8-18GK50-E0-5M	nonflush	8 mm	NPN	Normally-open (NO)	500 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBN8-18GK50-E1-5M	nonflush	8 mm	NPN	Normally-closed (NC)	500 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBN8-18GK50-E2	nonflush	8 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBN8-18GK50-E2-5M	nonflush	8 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBN8-18GK60-E2-5M	nonflush	8 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	5000 mm	PVC	85 mm			■	
NBN8-18GK60-E2-10M	nonflush	8 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	10,000 mm	PVC	85 mm				
NBN8-18GM50-A0	nonflush	8 mm	NPN	complementary	1650 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-A0-10M	nonflush	8 mm	NPN	complementary	1650 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-A2	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-A2-5M	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-A2-10M	nonflush	8 mm	PNP	complementary	1650 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-E0	nonflush	8 mm	NPN	Normally-open (NO)	1650 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-E0-5M	nonflush	8 mm	NPN	Normally-open (NO)	1650 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-E2	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-E2-5M	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-E2-10M	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBN8-18GM50-E2-5M-PUR	nonflush	8 mm	PNP	Normally-open (NO)	1650 Hz	5 V	36 V	5000 mm	PUR	56 mm		■	■	■
NBN8-18GS50-Z4L	nonflush	8 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V	2000 mm	PUR	56 mm			■	
NCB8-18GM50-Z4	flush	8 mm	Two-wire	Normally-open (NO)	1000 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NCB8-18GM50-Z5	flush	8 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NCN8-18GM40-Z0	nonflush	8 mm	Two-wire	Normally-open (NO)	300 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NCN8-18GM40-Z1	nonflush	8 mm	Two-wire	Normally-closed (NC)	300 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NXB8-18GM50-E2	flush	8 mm	PNP	Normally-open (NO)	150 Hz	10 V	30 V	2000 mm	PVC	56 mm			■	
NCN12-18GM50-Z4	nonflush	12 mm	Two-wire	Normally-open (NO)	1000 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NCN12-18GM50-Z5	nonflush	12 mm	Two-wire	Normally-closed (NC)	1000 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NEB12-18GM50-E0	semi-flush	12 mm	NPN	Normally-open (NO)	500 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	
NEB12-18GM50-E1	semi-flush	12 mm	NPN	Normally-closed (NC)	500 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	
NEB12-18GM50-E2	semi-flush	12 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	
NEB12-18GM50-E3	semi-flush	12 mm	PNP	Normally-closed (NC)	500 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	
NBN12-18GM30-A0	nonflush	12 mm	NPN	complementary	1300 Hz	5 V	36 V	2000 mm	PVC	36 mm		■	■	■
NBN12-18GM30-A2	nonflush	12 mm	PNP	complementary	1300 Hz	5 V	36 V	2000 mm	PVC	36 mm		■	■	■
NBN12-18GM30-E2	nonflush	12 mm	PNP	Normally-open (NO)	1300 Hz	5 V	36 V	2000 mm	PVC	36 mm		■	■	■
NBN12-18GM30-E3	nonflush	12 mm	PNP	Normally-closed (NC)	1300 Hz	5 V	36 V	2000 mm	PVC	36 mm		■	■	■
NBN12-18GM35-E3-5M	nonflush	12 mm	PNP	Normally-closed (NC)	1300 Hz	5 V	36 V	5000 mm	PVC	41 mm		■	■	■
NBN12-18GM50-A0	nonflush	12 mm	NPN	complementary	1300 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBN12-18GM50-A2	nonflush	12 mm	PNP	complementary	1300 Hz	5 V	36 V	2000 mm	PVC	51 mm		■	■	■
NBN12-18GM50-E0	nonflush	12 mm	NPN	Normally-open (NO)	1300 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBN12-18GM50-E0-3M	nonflush	12 mm	NPN	Normally-open (NO)	1300 Hz	5 V	36 V	3000 mm	PVC	56 mm		■	■	■
NBN12-18GM50-E0-10M	nonflush	12 mm	NPN	Normally-open (NO)	1300 Hz	5 V	36 V	10,000 mm	PVC	56 mm		■	■	■
NBN12-18GM50-E2	nonflush	12 mm	PNP	Normally-open (NO)	1300 Hz	5 V	36 V	2000 mm	PVC	56 mm		■	■	■
NBN12-18GM50-E2-5M	nonflush	12 mm	PNP	Normally-open (NO)	1300 Hz	5 V	36 V	5000 mm	PVC	56 mm		■	■	■
NBN12-18GM50-EI	nonflush	12 mm	Digital current output		1000 Hz	9 V	30 V	2000 mm	PUR	50 mm			■	
NEB12-18GM50-E2-5M	semi-flush	12 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	5000 mm	PUR	53 mm		■	■	
NXN12-18GM50-E2	nonflush	12 mm	PNP	Normally-open (NO)	150 Hz	10 V	30 V	2000 mm	PVC	56 mm			■	
NEN20-18GM50-E0	nonflush	20 mm	NPN	Normally-open (NO)	200 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	
NEN20-18GM50-E1	nonflush	20 mm	NPN	Normally-closed (NC)	200 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	
NEN20-18GM50-E2	nonflush	20 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	
NEN20-18GM50-E3	nonflush	20 mm	PNP	Normally-closed (NC)	200 Hz	10 V	30 V	2000 mm	PUR	53 mm		■	■	

Inductive Cylindrical Standard Sensors

18 mm Series—250 V Version

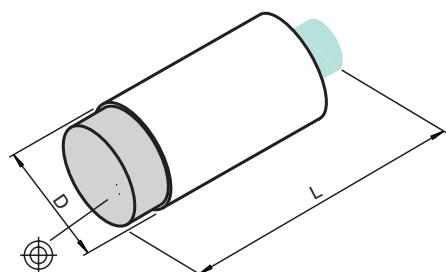


Common Technical Data

Operating voltage (min)	20 V
Housing diameter D	18 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	UL
NBB5-18GM60-WO	flush	5 mm	Two-wire	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	60 mm	■
NBB5-18GM60-WO-V12	flush	5 mm	Two-wire	Normally-closed (NC)	AC	20 Hz	253 V	1/2 inch connector plug			60 mm	■
NBB5-18GM60-WS	flush	5 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	60 mm	■
NBB5-18GM60-WS-10M	flush	5 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	10,000 mm	PVC	60 mm	■
NBB5-18GM60-WS-5M	flush	5 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	5000 mm	PVC	60 mm	■
NBB5-18GM60-WS-V12	flush	5 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	1/2 inch connector plug			60 mm	■
NBB5-18GM80-WO-V93	flush	5 mm	Two-wire	Normally-closed (NC)	AC	20 Hz	253 V	7/8 inch connector plug			80 mm	■
NBB5-18GM80-WS-V93	flush	5 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	7/8 inch connector plug			80 mm	■
NBB8-18GM55-UO-V93	flush	8 mm	Two-wire	Normally-closed (NC)	AC/DC	30 Hz	300 V	7/8 inch connector plug			75 mm	■
NBB8-18GM55-US-V93	flush	8 mm	Two-wire	Normally-open (NO)	AC/DC	30 Hz	300 V	7/8 inch connector plug			75 mm	■
NBB8-18GM60-UO	flush	8 mm	Two-wire	Normally-closed (NC)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	63 mm	■
NBB8-18GM60-UO-V12	flush	8 mm	Two-wire	Normally-closed (NC)	AC/DC	30 Hz	300 V	1/2 inch connector plug			70 mm	■
NBB8-18GM60-US	flush	8 mm	Two-wire	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	63 mm	■
NBB8-18GM60-US-V12	flush	8 mm	Two-wire	Normally-open (NO)	AC/DC	30 Hz	300 V	1/2 inch connector plug			70 mm	■
NBB8-18GM60-US-10M	flush	8 mm	Two-wire	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	10,000 mm	PUR	63 mm	■
NBN8-18GM60-WS	nonflush	8 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	60 mm	■
NBN8-18GM60-WS-V12	nonflush	8 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	1/2 inch connector plug			60 mm	■
NBN8-18GM60-WS-5M	nonflush	8 mm		Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	5000 mm	PVC	60 mm	■
NBN8-18GM60-WO	nonflush	8 mm	Two-wire	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	60 mm	■
NBN8-18GM80-WO-V93	nonflush	8 mm	Two-wire	Normally-closed (NC)	AC	20 Hz	253 V	7/8 inch connector plug			80 mm	■
NBN8-18GM60-WO-10M	nonflush	8 mm		Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	10,000 mm	PVC	60 mm	■
NBN8-18GM80-WS-V93	nonflush	8 mm	Two-wire	Normally-open (NO)	AC	20 Hz	253 V	7/8 inch connector plug			80 mm	■
NBN15-18GM55-UO-V93	nonflush	15 mm	Two-wire	Normally-closed (NC)	AC/DC	30 Hz	300 V	7/8 inch connector plug			75 mm	■
NBN15-18GM55-US-V93	nonflush	15 mm	Two-wire	Normally-open (NO)	AC/DC	30 Hz	300 V	7/8 inch connector plug			75 mm	■
NBN15-18GM60-UO	nonflush	15 mm	Two-wire	Normally-closed (NC)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	63 mm	■
NBN15-18GM60-UO-V12	nonflush	15 mm	Two-wire	Normally-closed (NC)	AC/DC	30 Hz	300 V	1/2 inch connector plug			70 mm	■
NBN15-18GM60-US	nonflush	15 mm	Two-wire	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	63 mm	■
NBN15-18GM60-US-V12	nonflush	15 mm	Two-wire	Normally-open (NO)	AC/DC	30 Hz	300 V	1/2 inch connector plug			70 mm	■



Accessories

BF 18	Mounting adapter, 18 mm
EXG-18	Quick-mounting bracket with fixed stop
V12-G-YE2M-PVC	Cordset, 1/2"-20 UNF, 3-pin, PVC cable
V93-G-YE2M-STOOW	Single-ended female cordset, 7/8", 3-pin, STOOW cable

Inductive Cylindrical Standard Sensors

30 mm Series—with Plug Connection



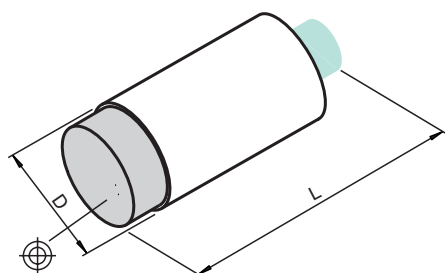
Common Technical Data

Type of voltage	DC
Housing diameter D	30 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Material	Length L	CCC	EAC	UL	UKCA
NBB10-30GM40-Z0-V1	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBB10-30GM40-Z3-V1	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBB10-30GM40-E2-0,69M-PUR-V1	flush	10 mm	PNP	Normally-open (NO)	1100 Hz	5 V	36 V	Fixed cable with M12 plug	PUR	50 mm		■	■	■
NBB10-30GM50-E0-V1	flush	10 mm	NPN	Normally-open (NO)	1100 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB10-30GM50-E2-V1	flush	10 mm	PNP	Normally-open (NO)	1100 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB10-30GM50-E3-V1	flush	10 mm	PNP	Normally-closed (NC)	1100 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB10-30GM50-A0-V1	flush	10 mm	NPN	complementary	1100 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB10-30GM50-A2-V1	flush	10 mm	PNP	complementary	1100 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB10-30GS50-Z4L-V1	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	4 V	30 V	M12 connector plug		66 mm			■	
NCB10-30GM40-Z0-V1	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NCB10-30GM40-Z1-V1	flush	10 mm	Two-wire	Normally-closed (NC)	150 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBB15-30GM30-A0-V1	flush	15 mm	NPN	complementary	550 Hz	5 V	36 V	M12 connector plug		47 mm		■	■	■
NBB15-30GM30-A2-V1	flush	15 mm	PNP	complementary	550 Hz	5 V	36 V	M12 connector plug		47 mm		■	■	■
NBB15-30GM30-E2-V1	flush	15 mm	PNP	Normally-open (NO)	550 Hz	5 V	36 V	M12 connector plug		47 mm		■	■	■
NBB15-30GM30-E3-V1	flush	15 mm	PNP	Normally-closed (NC)	550 Hz	5 V	36 V	M12 connector plug		47 mm		■	■	■
NBB15-30GM50-A0-V1	flush	15 mm	NPN	complementary	550 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB15-30GM50-A2-V1	flush	15 mm	PNP	complementary	550 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB15-30GM50-E0-V1	flush	15 mm	NPN	Normally-open (NO)	550 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB15-30GM50-E2-V1	flush	15 mm	PNP	Normally-open (NO)	550 Hz	5 V	36 V	M12 connector plug		67 mm		■	■	■
NBB15-30GM50-EI-V1	flush	15 mm	Digital current output		700 Hz	9 V	30 V	M12 connector plug		65 mm			■	
NBN15-30GM40-Z0-V1	nonflush	15 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBN15-30GM40-Z3-V1	nonflush	15 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NBN15-30GM50-A0-V1	nonflush	15 mm	NPN	complementary	1150 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN15-30GM50-A2-V1	nonflush	15 mm	PNP	complementary	1150 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN15-30GM50-E0-V1	nonflush	15 mm	NPN	Normally-open (NO)	1150 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN15-30GM50-E2-V1	nonflush	15 mm	PNP	Normally-open (NO)	1150 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN15-30GS50-Z4L-V1	nonflush	15 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V	M12 connector plug		66 mm			■	

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Material	Length L	CCC	EAC	UL	UKCA
NCB15-30GM50-Z4-V1	flush	15 mm	Two-wire	Normally-open (NO)	500 Hz	3.5 V	30 V	M12 connector plug		48 mm			■	
NCB15-30GM50-Z5-V1	flush	15 mm	Two-wire	Normally-closed (NC)	500 Hz	3.5 V	30 V	M12 connector plug		48 mm			■	
NCN15-30GM40-Z0-V1	nonflush	15 mm	Two-wire	Normally-open (NO)	100 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NCN15-30GM40-Z1-V1	nonflush	15 mm	Two-wire	Normally-closed (NC)	100 Hz	5 V	60 V	M12 connector plug		40 mm	■		■	
NXB15-30GM50-E2-V1	flush	15 mm	PNP	Normally-open (NO)	100 Hz	10 V	30 V	M12 connector plug		67 mm			■	
NBN20-30GM50-EI-V1	nonflush	20 mm	Digital current output		1000 Hz	9 V	30 V	M12 connector plug		65 mm			■	
NEB22-30GM60-E0-V1	semi-flush	22 mm	NPN	Normally-open (NO)	150 Hz	10 V	30 V	M12 connector plug		73.5 mm				
NEB22-30GM60-E2-V1	semi-flush	22 mm	PNP	Normally-open (NO)	150 Hz	10 V	30 V	M12 connector plug		73.5 mm			■	
NEB22-30GM60-E3-V1	semi-flush	22 mm	PNP	Normally-closed (NC)	150 Hz	10 V	30 V	M12 connector plug		73.5 mm				
NBN25-30GM35-A0-V1	nonflush	25 mm	NPN	complementary	400 Hz	5 V	36 V	M12 connector plug		51 mm		■	■	■
NBN25-30GM35-A2-V1	nonflush	25 mm	PNP	complementary	400 Hz	5 V	36 V	M12 connector plug		51 mm		■	■	■
NBN25-30GM35-E2-V1	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	M12 connector plug		51 mm		■	■	■
NBN25-30GM50-E0-V1	nonflush	25 mm	NPN	Normally-open (NO)	400 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN25-30GM50-E2-V1	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN25-30GM50-E3-V1	nonflush	25 mm	PNP	Normally-closed (NC)	400 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN25-30GM60-E2-V1	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	M12 connector plug		66 mm		■	■	■
NBN25-30GM70-E1-V1	nonflush	25 mm	NPN	Normally-closed (NC)	400 Hz	5 V	36 V	M12 connector plug		86 mm		■	■	■
NCN25-30GM50-Z4-V1	nonflush	25 mm	Two-wire	Normally-open (NO)	500 Hz	3.5 V	30 V	M12 connector plug		48 mm			■	
NXN25-30GM50-E2-V1	nonflush	25 mm	PNP	Normally-open (NO)	100 Hz	10 V	30 V	M12 connector plug		66 mm			■	
NEN40-30GM60-E0-V1	nonflush	40 mm	NPN	Normally-open (NO)	100 Hz	10 V	30 V	M12 connector plug		73.5 mm				
NEN40-30GM60-E2-V1	nonflush	40 mm	PNP	Normally-open (NO)	100 Hz	10 V	30 V	M12 connector plug		73.5 mm			■	
NEN40-30GM60-E3-V1	nonflush	40 mm	PNP	Normally-closed (NC)	100 Hz	10 V	30 V	M12 connector plug		73.5 mm				

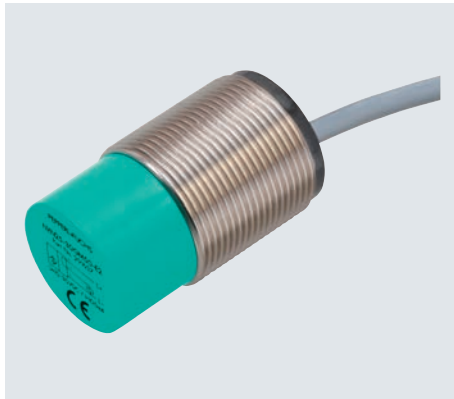


Accessories

BF 30	Mounting adapter, 30 mm
BF 30-F	Plastic mounting adapter, 30 mm
MH-EXG-30	Quick-mounting bracket with fixed stop
V1-G-2M-PUR	Single-ended female cordset, M12, straight A-coded, 4-pin, PUR cable, gray
V1-G-2M-PVC	Single-ended female cordset, M12, straight A-coded, 4-pin, PVC cable, gray
V1-G-BK	Single-ended female cordset, straight, M12, 4-pin, field attachable
V1-G-BK2M-PUR-U	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, black, UL-approved, suitable for drag chains, torsion-proof
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PVC	Single-ended female cordset, M12, 4-pin, PVC cable
V1-W-BK	Single-ended female cordset, angled, M12, 4-pin, field attachable
V1-W-BK2M-PUR-U	Single-ended female cordset, M12, angled, A-coded, 4-pin, PUR cable, black, UL-approved, suitable for drag chains, torsion-proof

Inductive Cylindrical Standard Sensors

30 mm Series—with Cable Connection



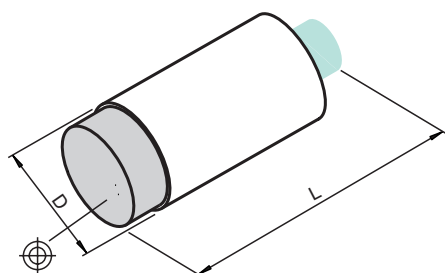
Common Technical Data

Type of voltage	DC
Connection type	Fixed cable
Housing diameter D	30 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CCC	EAC	UL	UKCA
NBB8-30GM60-I3	flush	8 mm	Analog current output	0 mA ... 20 mA		15 V	30 V	2000 mm	PVC	60 mm			■	
NBB10-30GM40-E2	flush	10 mm	PNP	Normally-open (NO)	1100 Hz	5 V	36 V	2000 mm	PVC	50 mm		■	■	■
NBB10-30GM50-E0	flush	10 mm	NPN	Normally-open (NO)	1100 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBB10-30GM50-E2	flush	10 mm	PNP	Normally-open (NO)	1100 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBB10-30GK50-E0	flush	10 mm	NPN	Normally-open (NO)	200 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBB10-30GK50-E2	flush	10 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBB10-30GK50-E2-10M	flush	10 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	10,000 mm	PVC	50 mm			■	
NBB10-30GK50-E2-15M	flush	10 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBB10-30GM40-Z0	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	2000 mm	PVC	40 mm	■		■	
NBB10-30GS50-Z4L	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	4 V	30 V	2000 mm	PUR	61 mm			■	
NBB10-30GK50-E2-30M	flush	10 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	30,000 mm	PVC	50 mm			■	
NBB10-30GM50-A0	flush	10 mm	NPN	complementary	1100 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBB10-30GM50-A2	flush	10 mm	PNP	complementary	1100 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBB10-30GM50-A2-5M	flush	10 mm	PNP	complementary	1100 Hz	5 V	36 V	5000 mm	PVC	60 mm		■	■	■
NBB10-30GM50-E0-5M	flush	10 mm	NPN	Normally-open (NO)	1100 Hz	5 V	36 V	5000 mm	PVC	60 mm		■	■	■
NBB10-30GM50-E0-10M	flush	10 mm	NPN	Normally-open (NO)	1100 Hz	5 V	36 V	10,000 mm	PVC	60 mm		■	■	■
NBB10-30GM50-E2-5M	flush	10 mm	PNP	Normally-open (NO)	1100 Hz	5 V	36 V	5000 mm	PVC	60 mm		■	■	■
NBB10-30GM50-E2-10M	flush	10 mm	PNP	Normally-open (NO)	1100 Hz	5 V	36 V	10,000 mm	PVC	60 mm		■	■	■
NCB10-30GM40-Z0	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NCB10-30GM40-Z1	flush	10 mm	Two-wire	Normally-closed (NC)	150 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NBB15-30GM30-A0	flush	15 mm	NPN	complementary	550 Hz	5 V	36 V	2000 mm	PVC	40 mm		■	■	■
NBB15-30GM30-A2	flush	15 mm	PNP	complementary	550 Hz	5 V	36 V	2000 mm	PVC	40 mm		■	■	■
NBB15-30GM30-E2	flush	15 mm	PNP	Normally-open (NO)	550 Hz	5 V	36 V	2000 mm	PVC	40 mm		■	■	■
NBB15-30GM30-E3	flush	15 mm	PNP	Normally-closed (NC)	550 Hz	5 V	36 V	2000 mm	PVC	40 mm		■	■	■
NBB15-30GM50-E0	flush	15 mm	NPN	Normally-open (NO)	550 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBB15-30GM50-E2	flush	15 mm	PNP	Normally-open (NO)	550 Hz	5 V	36 V	2000 mm	PVC	40 mm		■	■	■
NBB15-30GM50-E2-10M	flush	15 mm	PNP	Normally-open (NO)	550 Hz	5 V	36 V	10,000 mm	PVC	60 mm		■	■	■
NBB15-30GM50-EI	flush	15 mm	Digital current output		700 Hz	9 V	30 V	2000 mm	PUR	50 mm			■	
NBB15-30GM50-A0	flush	15 mm	NPN	complementary	550 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBB15-30GM50-A2	flush	15 mm	PNP	complementary	550 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBB15-30GM50-A2-10M	flush	15 mm	PNP	complementary	550 Hz	5 V	36 V	10,000 mm	PVC	60 mm		■	■	■
NBB15-30GM70-E3	flush	15 mm	PNP	Normally-closed (NC)	550 Hz	5 V	36 V	2000 mm	PVC	80 mm		■	■	■
NBN15-30GM40-Z0	nonflush	15 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V	2000 mm	PVC	40 mm	■		■	
NBN15-30GM50-E2	nonflush	15 mm	PNP	Normally-open (NO)	1150 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBN15-30GK50-E0	nonflush	15 mm	NPN	Normally-open (NO)	200 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBN15-30GK50-E2	nonflush	15 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	2000 mm	PVC	50 mm			■	
NBN15-30GK50-E2-25M	nonflush	15 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V	5000 mm	PVC	50 mm			■	
NBN15-30GM50-A0	nonflush	15 mm	NPN	complementary	1150 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBN15-30GM50-A2	nonflush	15 mm	PNP	complementary	1150 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Cable Length	Cable Material	Length L	CCC	EAC	UL	UKCA
NBN15-30GM50-A2-5M	nonflush	15 mm	PNP	complementary	1150 Hz	5 V	36 V	5000 mm	PVC	59 mm		■	■	■
NBN15-30GM50-E0	nonflush	15 mm	NPN	Normally-open (NO)	1150 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBN15-30GM50-E0-5M	nonflush	15 mm	NPN	Normally-open (NO)	1150 Hz	5 V	36 V	5000 mm	PVC	59 mm		■	■	■
NBN15-30GM50-E2-5M	nonflush	15 mm	PNP	Normally-open (NO)	1150 Hz	5 V	36 V	5000 mm	PVC	59 mm		■	■	■
NBN15-30GM60-I3	nonflush	15 mm	Analog current output	0 mA ... 20 mA		15 V	30 V	2000 mm	PVC	60 mm			■	
NBN15-30GM60-I3-5M	nonflush	15 mm	Analog current output	0 mA ... 20 mA		15 V	30 V	5000 mm	PVC	60 mm			■	
NBN15-30GS50-Z4L	nonflush	15 mm	Two-wire	Normally-open (NO)	150 Hz	4 V	30 V	2000 mm	PUR	61 mm			■	
NCB15-30GM50-Z4	flush	15 mm	Two-wire	Normally-open (NO)	500 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NCB15-30GM50-Z5	flush	15 mm	Two-wire	Normally-closed (NC)	500 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NCN15-30GM40-Z0	nonflush	15 mm	Two-wire	Normally-open (NO)	100 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NCN15-30GM40-Z0-10M	nonflush	15 mm	Two-wire	Normally-open (NO)	100 Hz	5 V	60 V	10,000 mm	PUR	40 mm	■		■	
NCN15-30GM40-Z1	nonflush	15 mm	Two-wire	Normally-closed (NC)	100 Hz	5 V	60 V	2000 mm	PUR	40 mm	■		■	
NXB15-30GM50-E2	flush	15 mm	PNP	Normally-open (NO)	100 Hz	10 V	30 V	2000 mm	PVC	60 mm			■	
NBN20-30GM50-EI	nonflush	20 mm	Digital current output		1000 Hz	9 V	30 V	2000 mm	PUR	50 mm			■	
NEB22-30GM60-E0	semi-flush	22 mm	NPN	Normally-open (NO)	150 Hz	10 V	30 V	2000 mm	PVC	60 mm				
NEB22-30GM60-E2	semi-flush	22 mm	PNP	Normally-open (NO)	150 Hz	10 V	30 V	2000 mm	PVC	60 mm				
NBN25-30GM35-A0	nonflush	25 mm	NPN	complementary	400 Hz	5 V	36 V	2000 mm	PVC	44 mm		■	■	■
NBN25-30GM35-A2	nonflush	25 mm	PNP	complementary	400 Hz	5 V	36 V	2000 mm	PVC	44 mm		■	■	■
NBN25-30GM35-E2	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	2000 mm	PVC	44 mm		■	■	■
NBN25-30GM50-E0	nonflush	25 mm	NPN	Normally-open (NO)	400 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBN25-30GM50-E2	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	2000 mm	PVC	60 mm		■	■	■
NBN25-30GM50-E2-5M	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	5000 mm	PVC	59 mm		■	■	■
NCN25-30GM50-Z4	nonflush	25 mm	Two-wire	Normally-open (NO)	500 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NCN25-30GM50-Z5	nonflush	25 mm	Two-wire	Normally-closed (NC)	500 Hz	3.5 V	30 V	2000 mm	PVC	48 mm			■	
NBN25-30GM70-E2	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	2000 mm	PVC	79 mm		■	■	■
NBN25-30GM70-E2-5M	nonflush	25 mm	PNP	Normally-open (NO)	400 Hz	5 V	36 V	5000 mm	PVC	79 mm		■	■	■
NXN25-30GM50-E2	nonflush	25 mm	PNP	Normally-open (NO)	100 Hz	10 V	30 V	2000 mm	PVC	59 mm			■	
NEN40-30GM60-E0	nonflush	40 mm	NPN	Normally-open (NO)	100 Hz	10 V	30 V	2000 mm	PVC	60 mm				
NEN40-30GM60-E2	nonflush	40 mm	PNP	Normally-open (NO)	100 Hz	10 V	30 V	2000 mm	PVC	60 mm				



Accessories

BF 18-F	Plastic mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
BF 30-F	Plastic mounting adapter, 30 mm
MH 01-M18	Mounting bracket for sensors
MH-EXG-30	Quick-mounting bracket with fixed stop

Inductive Cylindrical Standard Sensors

30 mm Series—250 V Version



Common Technical Data

Type of output	Two-wire
Operating voltage (min)	20 V
Housing diameter D	30 mm
UL	■

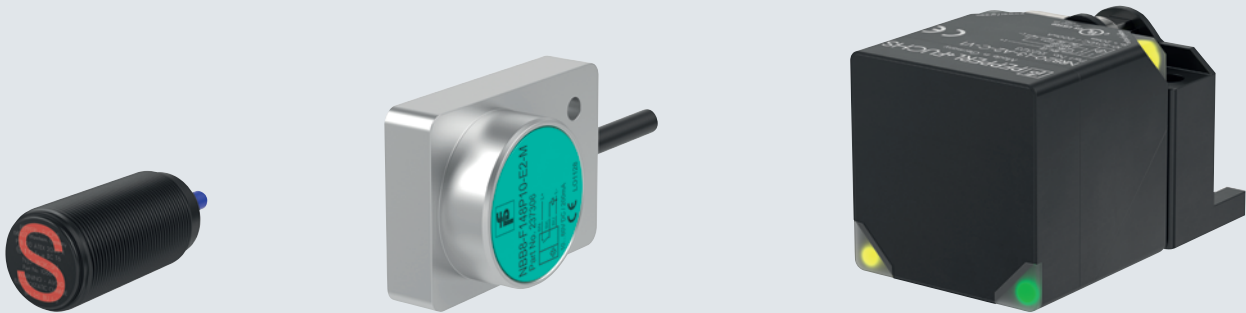
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Element Function	Type of Voltage	Switching Frequency	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	CCC
NBB10-30GKK-WO	flush	10 mm	Normally-closed (NC)	AC	20 Hz	250 V	Terminal compartment			115 mm	■
NBB10-30GKK-WS	flush	10 mm	Normally-open (NO)	AC	20 Hz	250 V	Terminal compartment			115 mm	■
NBB10-30GM50-WO	flush	10 mm	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NBB10-30GM50-WO-10M	flush	10 mm	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	10,000 mm	PVC	50 mm	■
NBB10-30GM50-WO-5M	flush	10 mm	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	5000 mm	PVC	50 mm	■
NBB10-30GM50-WO-V12	flush	10 mm	Normally-closed (NC)	AC	20 Hz	253 V	1/2 inch connector plug			60 mm	■
NBB10-30GM50-WO-V93	flush	10 mm	Normally-closed (NC)	AC	20 Hz	253 V	7/8 inch connector plug			50 mm	■
NBB10-30GM50-WS	flush	10 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NBB10-30GM50-WS-10M	flush	10 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	10,000 mm	PVC	50 mm	■
NBB10-30GM50-WS-V12	flush	10 mm	Normally-open (NO)	AC	20 Hz	253 V	1/2 inch connector plug			60 mm	■
NBB10-30GM50-WS-V93	flush	10 mm	Normally-open (NO)	AC	20 Hz	253 V	7/8 inch connector plug			50 mm	■
NBB15-30GKK-WO	flush	15 mm	Normally-closed (NC)	AC	20 Hz	250 V	Terminal compartment			115 mm	■
NBB15-30GKK-WS	flush	15 mm	Normally-open (NO)	AC	20 Hz	250 V	Terminal compartment			115 mm	■
NBB15-30GM50-UO	flush	15 mm	Normally-closed (NC)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	50 mm	■
NBB15-30GM50-UO-5M	flush	15 mm	Normally-closed (NC)	AC/DC	30 Hz	300 V	Fixed cable	5000 mm	PUR	50 mm	■
NBB15-30GM50-UO-V12	flush	15 mm	Normally-closed (NC)	AC/DC	30 Hz	300 V	M12 connector plug			60 mm	■
NBB15-30GM50-UO-V93	flush	15 mm	Normally-closed (NC)	AC/DC	30 Hz	300 V	7/8 inch connector plug			65 mm	■
NBB15-30GM50-US	flush	15 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	50 mm	■
NBB15-30GM50-US-5M	flush	15 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	5000 mm	PUR	50 mm	■
NBB15-30GM50-US-8M	flush	15 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	8000 mm	PUR	50 mm	■
NBB15-30GM50-US-V12	flush	15 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	1/2 inch connector plug			60 mm	■
NBB15-30GM50-US-V93	flush	15 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	7/8 inch connector plug			65 mm	■
NBB15-30GM50-WO	semi-flush	15 mm	Normally-closed (NC)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NBB15-30GM50-WO-V12	semi-flush	15 mm	Normally-closed (NC)	AC	20 Hz	253 V	1/2 inch connector plug			60 mm	■
NBB15-30GM50-WO-V93	semi-flush	15 mm	Normally-closed (NC)	AC	20 Hz	253 V	7/8 inch connector plug			50 mm	■
NBB15-30GM50-WS	semi-flush	15 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	2000 mm	PVC	50 mm	■
NBB15-30GM50-WS-5M	semi-flush	15 mm	Normally-open (NO)	AC	20 Hz	253 V	Fixed cable	5000 mm	PVC	50 mm	■
NBB15-30GM50-WS-V12	semi-flush	15 mm	Normally-open (NO)	AC	20 Hz	253 V	1/2 inch connector plug			60 mm	■
NBB15-30GM50-WS-V93	semi-flush	15 mm	Normally-open (NO)	AC	20 Hz	253 V	7/8 inch connector plug			50 mm	■
NBN25-30GM50-UO	nonflush	25 mm	Normally-closed (NC)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	51 mm	■
NBN25-30GM50-UO-V12	nonflush	25 mm	Normally-closed (NC)	AC/DC	30 Hz	300 V	1/2 inch connector plug			60 mm	■
NBN25-30GM50-UO-V93	nonflush	25 mm	Normally-closed (NC)	AC/DC	30 Hz	300 V	7/8 inch connector plug			65 mm	■
NBN25-30GM50-US	nonflush	25 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	2000 mm	PUR	51 mm	■
NBN25-30GM50-US-V12	nonflush	25 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	1/2 inch connector plug			60 mm	■
NBN25-30GM50-US-V93	nonflush	25 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	7/8 inch connector plug			65 mm	■
NBN25-30GM65-US-5M	nonflush	25 mm	Normally-open (NO)	AC/DC	30 Hz	300 V	Fixed cable	5000 mm	PUR	51 mm	■

Accessories

V12-G-YE2M-PVC	Cordset, 1/2"-20 UNF, 3-pin, PVC cable
V93-G-YE2M-STOOW	Single-ended female cordset, 7/8", 3-pin, STOOW cable

Specialized Sensors for Specific Tasks



Whether it is for welding work in automotive manufacturing, severe temperature fluctuations in mobile applications, or specific safety requirements in hazardous areas, Pepperl+Fuchs offers the best sensor to meet any challenge.

Industry-Specific Special Sensors

In addition to the scope of our comprehensive standard portfolio, different industries also place their own specific requirements on sensor technology. The automotive, mobile equipment, and process industries are three extreme examples where intrinsically safe NAMUR sensors are used. In addition to these three areas, Pepperl+Fuchs offers a range of sensors specifically tailored to individual industry requirements.

Typical Applications

- Position querying in the welding areas of automotive manufacturing
- Valve position feedback in explosion-hazardous areas
- Outrigger monitoring for mobile cranes

Your Benefits at a Glance

- Largest portfolio of sensors for explosion protection with global approvals (e.g. ATEX, IECEx, EAC-Ex), e.g., for the process industry
- Weld-proof sensors for maximum robustness, e.g., in automotive manufacturing
- Pressure-resistant sensors for maximum resistance when used in hydraulic cylinders, for example
- Extremely resistant sensors with E1 approval for use on public roads in the mobile equipment industry
- Reduction factor 1 sensors with the same switching distance with all metals for maximum flexibility, e.g., in mechanical engineering



Proximity Sensors in Special Housing Designs

In addition to industry-specific solutions, sensors often have to be adapted to specific installation conditions. As well as the countless cylindrical and cubic standard housing designs, the Pepperl+Fuchs portfolio also includes special housing designs that have been specially adapted to the spatial conditions of certain applications.

Typical Applications

- Ring-shaped proximity sensors for detecting and counting small parts or detecting fill levels
- F58 housing design: detection of two different target positions in minimal space, e.g., for power clamps

The Benefits of Selected Sensors at a Glance

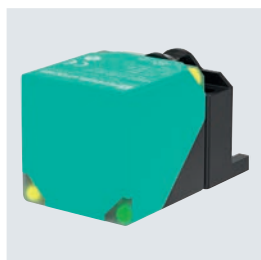
Ring-Shaped Proximity Sensors with RC/RJ Housing Design:

- Reliable detection of even the smallest parts due to high accuracy
- High passing speed of up to 10 m/s
- Bistable models with direction detection
- NAMUR versions with explosion protection approval for Zone 1

F58 Housing Design for Power Clamps:

- Special housing design with two sensors connected to the main housing via a flexible cable
- Flexible installation thanks to the rotating M12 connector
- A number of sensor housing designs available for minimal installation space
- Easy diagnosis via a bright LED strip around the edge

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Cylindrical Sensors with Reduction Factor 1

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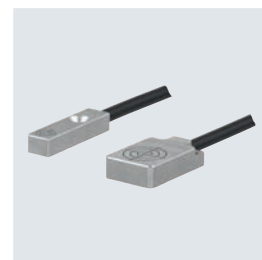
Cubic Weld-Proof Sensors with Reduction Factor 1

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Cylindrical Weld-Proof Sensors with Reduction Factor 1

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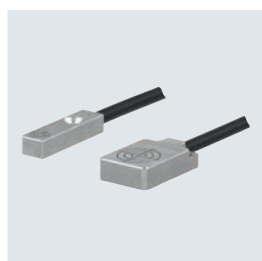
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Cylindrical Sensors with Metal Face

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Cubic Weld-Proof Sensors with Metal Face

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Cubic Weld-Proof Sensors

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Cubic Sensors with Extended Temperature Range (100 °C)

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Cylindrical Sensors with Extended Temperature Range (100 °C)

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Cylindrical High-Temperature Sensors (150 °C – 250 °C)

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**Pressure-Resistant
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**Cubic Sensors for
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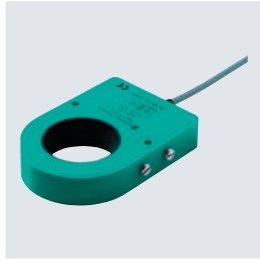
**Cylindrical Sensors
for Mobile Equip-
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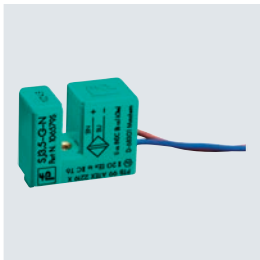
**Ring Diameter
21 mm**

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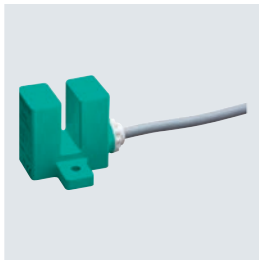
**Ring Diameter
43 mm**

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**Slot Width
3.5 mm**

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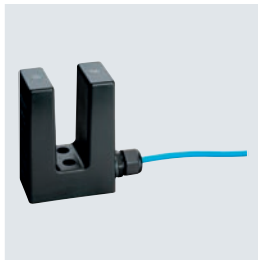
**Slot Width
10 mm**

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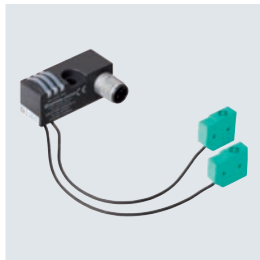
**Slot Width
15 mm**

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**Slot Width
30 mm**

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**Sensors for
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**Safety Sensors with
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**Safety Sensors with
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**Cubic Sensors for
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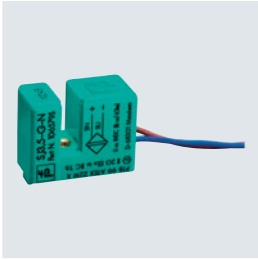
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**Ring-Shaped
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**Slot-Shaped
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**Dual Sensor
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**Dual Sensor
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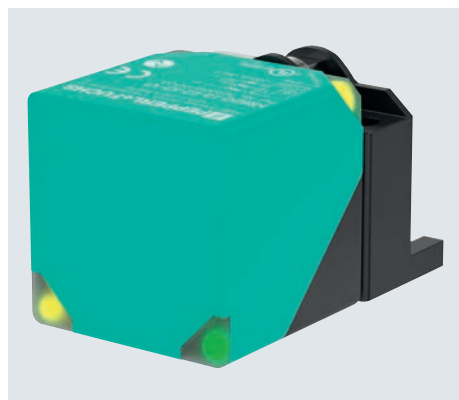


**Dual Sensor
F31K2 Series**

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Inductive Cubic Proximity Sensors with Reduction Factor 1

Cubic Sensors with Reduction Factor 1



Common Technical Data

Special features	Reduction factor 1
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing height H	40 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	Connection Type	Length L	Width W
NRB20-L3-A2-V1	flush	20 mm	PNP	complementary	440 Hz	M12 connector plug	67 mm	40 mm
NRB20-L3-E2-V1	flush	20 mm	PNP	Normally-open (NO)	440 Hz	M12 connector plug	67 mm	40 mm
NRB20-U1-A2	flush	20 mm	PNP	complementary	440 Hz	Terminal compartment	118 mm	40 mm
NRB20-U1-E2-V1	flush	20 mm	PNP	Normally-open (NO)	440 Hz	M12 connector plug	118 mm	40 mm
NRN35-L3-A2-V1	Non-flush	35 mm	PNP	complementary	180 Hz	M12 connector plug	67 mm	40 mm
NRN40-L3K-A0-V1	Non-flush	40 mm	NPN	complementary	180 Hz	M12 connector plug	67 mm	40 mm
NRN40-L3K-A2-V1	nonflush	40 mm	PNP	complementary	180 Hz	M12 connector plug	67 mm	40 mm
NRN40-U1-A2	nonflush	40 mm	PNP	complementary	180 Hz	Terminal compartment	118 mm	40 mm
NRN40-U1-E2-V1	nonflush	40 mm	PNP	Normally-open (NO)	180 Hz	M12 connector plug	118 mm	40 mm
NRB50-FP-A2-P3-V1	flush	50 mm	PNP	complementary	80 Hz	M12 connector plug	84 mm	84 mm
NRB50-FP-E2-P3-V1	flush	50 mm	PNP	Normally-open (NO)	80 Hz	M12 connector plug	84 mm	84 mm
NRN75-FP-A2-P3	nonflush	75 mm	PNP	complementary	50 Hz	Terminal compartment	80 mm	80 mm
NRN75-FP-A2-P3-V1	nonflush	75 mm	PNP	complementary	50 Hz	M12 connector plug	80 mm	80 mm

Highlights

- Maximum flexibility—wide range of sensors for material-independent detection of metallic objects with identical sensing range
- Highly rugged and weld-proof sensors with degree of protection up to IP68/IP69K for use in harsh industrial environments

Brief Description

The broad portfolio of reduction factor 1 sensors from Pepperl+Fuchs enables maximum flexibility in the design of machines and plants. This is ensured through industry-standard cylindrical and cubic housing designs, different cable versions, variants with IO-Link, and weld-proof and chemically resistant special sensors for particularly harsh operational conditions. Users benefit from Pepperl+Fuchs' technological expertise and many years of experience as pioneers of inductive sensor technology as part of customer and application-specific adaptations.

Accessories

MH 02-L	Mounting aid
MH 04-2681F	Mounting aid for VariKont, +U1+, and +U9* sensors
MHW 01	Modular mounting bracket
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Inductive Cylindrical Proximity Sensors with Reduction Factor 1

Cylindrical Sensors with Reduction Factor 1



Common Technical Data

Special features	Reduction factor 1
Type of output	PNP
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	Diameter D	EAC
NRB2-6,5S40-E2-V3	flush	2 mm	Normally-open (NO)	4000 Hz	M8 connector plug			40 mm	6.5 mm	
NRB2-8GH40-E2	flush	2 mm	Normally-open (NO)	4000 Hz	Fixed cable	2000 mm	PVC	40 mm	8 mm	
NRB2-8GH40-E2-V1	flush	2 mm	Normally-open (NO)	4000 Hz	M12 connector plug			40 mm	8 mm	
NRB2-8GS40-E2-V1	flush	2 mm	Normally-open (NO)	4000 Hz	M12 connector plug			40 mm	8 mm	
NRB2-8GS40-E2-V3	flush	2 mm	Normally-open (NO)	4000 Hz	M8 connector plug			40 mm	8 mm	■
NRB3-12GS40-E2-V1	flush	3 mm	Normally-open (NO)	2000 Hz	M12 connector plug			55 mm	12 mm	
NRB4-12GH40-E2	flush	4 mm	Normally-open (NO)	2000 Hz	Fixed cable	2000 mm	PVC	40 mm	12 mm	
NRB4-12GH40-E2-V1	flush	4 mm	Normally-open (NO)	2000 Hz	M12 connector plug			55 mm	12 mm	
NRB4-12GS40-A2-V1	flush	4 mm	complementary	2000 Hz	M12 connector plug			55 mm	12 mm	
NRB4-12GS40-E2	flush	4 mm	Normally-open (NO)	2000 Hz	Fixed cable	2000 mm	PVC	40 mm	12 mm	
NRB4-12GS40-E2-V1	flush	4 mm	Normally-open (NO)	2000 Hz	M12 connector plug			55 mm	12 mm	■
NRB4-12GS40-E3-V1	flush	4 mm	Normally-closed (NC)	2000 Hz	M12 connector plug			55 mm	12 mm	
NRB6-18GS40-E2-V1	flush	6 mm	Normally-open (NO)	1200 Hz	M12 connector plug			55 mm	18 mm	
NRN6-6,5S40-E2-V3	nonflush	6 mm	Normally-open (NO)	2500 Hz	M8 connector plug			40 mm	6.5 mm	
NRN6-8GH40-E2	nonflush	6 mm	Normally-open (NO)	2500 Hz	Fixed cable	2000 mm	PVC	40 mm	8 mm	
NRN6-8GH40-E2-V1	nonflush	6 mm	Normally-open (NO)	2500 Hz	M12 connector plug			40 mm	8 mm	
NRN6-8GS40-E2-V1	nonflush	6 mm	Normally-open (NO)	2500 Hz	M12 connector plug			40 mm	8 mm	
NRN6-8GS40-E2-V3	nonflush	6 mm	Normally-open (NO)	2500 Hz	M8 connector plug			40 mm	8 mm	
NRB8-18GH40-E2	flush	8 mm	Normally-open (NO)	1200 Hz	Fixed cable	2000 mm	PVC	45 mm	18 mm	
NRB8-18GH40-E2-V1	flush	8 mm	Normally-open (NO)	1200 Hz	M12 connector plug			55 mm	18 mm	
NRB8-18GS40-A2-V1	flush	8 mm	complementary	1200 Hz	M12 connector plug			55 mm	18 mm	
NRB8-18GS40-E2-V1	flush	8 mm	Normally-open (NO)	1200 Hz	M12 connector plug			55 mm	18 mm	
NRB8-18GS50-E2	flush	8 mm	Normally-open (NO)	1200 Hz	Fixed cable	2000 mm	PVC	55 mm	18 mm	
NRB8-18GS50-E2-V1	flush	8 mm	Normally-open (NO)	1200 Hz	M12 connector plug			65 mm	18 mm	
NRB8-18GS50-E3-V1	flush	8 mm	Normally-closed (NC)	1200 Hz	M12 connector plug			65 mm	18 mm	
NRN10-12GH40-E2	nonflush	10 mm	Normally-open (NO)	1500 Hz	Fixed cable	2000 mm	PVC	40 mm	12 mm	
NRN10-12GH40-E2-V1	nonflush	10 mm	Normally-open (NO)	1500 Hz	M12 connector plug			55 mm	12 mm	
NRN10-12GS40-A2-V1	nonflush	10 mm	complementary	1500 Hz	M12 connector plug			55 mm	12 mm	
NRN10-12GS40-E2	nonflush	10 mm	Normally-open (NO)	1500 Hz	Fixed cable	2000 mm	PVC	40 mm	12 mm	
NRN10-12GS40-E2-V1	nonflush	10 mm	Normally-open (NO)	1500 Hz	M12 connector plug			55 mm	12 mm	
NRN10-12GS40-E3-V1	nonflush	10 mm	Normally-closed (NC)	1500 Hz	M12 connector plug			55 mm	12 mm	
NRB12-18GS40-E2-V1	semi-flush	12 mm	Normally-open (NO)	600 Hz	M12 connector plug			40 mm	18 mm	
NRB13-30GS50-E2-V1	flush	13 mm	Normally-open (NO)	750 Hz	M12 connector plug			65 mm	30 mm	
NRB15-30GH50-E2	flush	15 mm	Normally-open (NO)	750 Hz	Fixed cable	2000 mm	PVC	50 mm	30 mm	
NRB15-30GH50-E2-V1	flush	15 mm	Normally-open (NO)	750 Hz	M12 connector plug			65 mm	30 mm	
NRB15-30GS50-E2	flush	15 mm	Normally-open (NO)	750 Hz	Fixed cable	2000 mm	PVC	50 mm	30 mm	
NRB15-30GS50-E2-V1	flush	15 mm	Normally-open (NO)	750 Hz	M12 connector plug			65 mm	30 mm	
NRB15-30GS50-E3-V1	flush	15 mm	Normally-closed (NC)	750 Hz	M12 connector plug			65 mm	30 mm	
NRN15-18GH40-E2	nonflush	15 mm	Normally-open (NO)	800 Hz	Fixed cable	2000 mm	PVC	45 mm	18 mm	
NRN15-18GH40-E2-V1	nonflush	15 mm	Normally-open (NO)	800 Hz	M12 connector plug			55 mm	18 mm	
NRN15-18GS40-A2-V1	nonflush	15 mm	complementary	800 Hz	M12 connector plug			55 mm	18 mm	
NRN15-18GS40-E2-V1	nonflush	15 mm	Normally-open (NO)	800 Hz	M12 connector plug			55 mm	18 mm	
NRN15-18GS50-E2	nonflush	15 mm	Normally-open (NO)	800 Hz	Fixed cable	2000 mm	PVC	55 mm	18 mm	
NRN15-18GS50-E2-V1	nonflush	15 mm	Normally-open (NO)	800 Hz	M12 connector plug			65 mm	18 mm	
NRN15-18GS50-E3-V1	nonflush	15 mm	Normally-closed (NC)	800 Hz	M12 connector plug			65 mm	18 mm	
NRN30-30GH50-E2	nonflush	30 mm	Normally-open (NO)	300 Hz	Fixed cable	2000 mm	PVC	50 mm	30 mm	
NRN30-30GH50-E2-V1	nonflush	30 mm	Normally-open (NO)	300 Hz	M12 connector plug			65 mm	30 mm	
NRN30-30GS50-E2	nonflush	30 mm	Normally-open (NO)	300 Hz	Fixed cable	2000 mm	PVC	50 mm	30 mm	
NRN30-30GS50-E2-V1	nonflush	30 mm	Normally-open (NO)	300 Hz	M12 connector plug			65 mm	30 mm	
NRN30-30GS50-E3-V1	nonflush	30 mm	Normally-closed (NC)	300 Hz	M12 connector plug			65 mm	30 mm	

Highlights

- Maximum flexibility—wide range of sensors for material-independent detection of metallic objects with identical sensing range
- Highly rugged and weld-proof sensors with degree of protection up to IP68/IP69K for use in harsh industrial environments

Brief Description

The broad portfolio of reduction factor 1 sensors from Pepperl+Fuchs enables maximum flexibility in the design of machines and plants. This is ensured through industry-standard cylindrical and cubic housing designs, different cable versions, variants with IO-Link, and weld-proof and chemically resistant special sensors for particularly harsh operational conditions. Users benefit from Pepperl+Fuchs' technological expertise and many years of experience as pioneers of inductive sensor technology as part of customer and application-specific adaptations.

Accessories	
BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
BF 6,5	Mounting adapter, 6.5 mm
BF 8	Mounting adapter, 8 mm
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Inductive Cubic Weld-Proof Proximity Sensors with Reduction Factor 1

Cubic Weld-Proof Sensors with Reduction Factor 1



Common Technical Data

Special features	Welding resistant; reduction factor 1
Type of output	PNP
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	M12 connector plug
Housing height H	40 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Element Function	Switching Frequency	Length L	Width W
NRB20-L3-A2-C-V1	flush	20 mm	complementary	440 Hz	67 mm	40 mm
NRB20-L3-E2-C-V1	flush	20 mm	Normally-open (NO)	440 Hz	67 mm	40 mm
NRB20-L3M-A2-C3-V1	flush	20 mm	complementary	440 Hz	67 mm	40 mm
NRN35-L3-A2-C-V1	nonflush	35 mm	complementary	180 Hz	67 mm	40 mm
NRN35-L3-E2-C-V1	nonflush	35 mm	Normally-open (NO)	180 Hz	67 mm	40 mm
NRN40-L3K-A2-C-V1	nonflush	40 mm	complementary	180 Hz	67 mm	40 mm
NRN40-L3K-E2-C-V1	nonflush	40 mm	Normally-open (NO)	180 Hz	67 mm	40 mm
NRB50-FP-A2-C-P3-V1	flush	50 mm	complementary	1 Hz	84 mm	84 mm
NRB50-FP-E2-C-P3-V1	flush	50 mm	Normally-open (NO)	1 Hz	84 mm	84 mm
NRN75-FP-A2-C-P3-V1	nonflush	75 mm	complementary	1 Hz	80 mm	80 mm
NRN75-FP-E2-C-P3-V1	nonflush	75 mm	Normally-open (NO)	1 Hz	80 mm	80 mm

Highlights

- Maximum flexibility—wide range of sensors for material-independent detection of metallic objects with identical sensing range
- Highly rugged and weld-proof sensors with degree of protection up to IP68/IP69K for use in harsh industrial environments
- Extremely durable thanks to rugged IP67 and IP68 housing designs with resilient PTFE coating or weld-proof plastic

Brief Description

The broad portfolio of reduction factor 1 sensors from Pepperl+Fuchs enables maximum flexibility in the design of machines and plants. This is ensured through industry-standard cylindrical and cubic housing designs, different cable versions, variants with IO-Link, and weld-proof and chemically resistant special sensors for particularly harsh operational conditions. Users benefit from Pepperl+Fuchs' technological expertise and many years of experience as pioneers of inductive sensor technology as part of customer and application-specific adaptations.

Accessories

MH 02-L	Mounting aid
MH 04-2681F	Mounting aid for VariKont, +U1+, and +U9* sensors
MHW 01	Modular mounting bracket
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Inductive Cylindrical Weld-Proof Proximity Sensors with Reduction Factor 1

Cylindrical Weld-Proof Sensors with Reduction Factor 1



Common Technical Data

Special features	Welding resistant; reduction factor 1
Type of output	PNP
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	Diameter D
NRB1,5-8GM40-E2-C-V1	flush	1.5 mm	Normally-open (NO)	1000 Hz	M12 connector plug			40 mm	8 mm
NRB2-12GM40-E2-C-V1	flush	2 mm	Normally-open (NO)	2000 Hz	M12 connector plug			55 mm	12 mm
NRB2-8GM40-E2-C-V1	flush	2 mm	Normally-open (NO)	1000 Hz	M12 connector plug			40 mm	8 mm
NRB3-12GM40-E2-C-V1	flush	3 mm	Normally-open (NO)	2000 Hz	M12 connector plug			55 mm	12 mm
NRB4-12GM40-A2-C	flush	4 mm	complementary	2000 Hz	Fixed cable	2000 mm	PUR	40 mm	12 mm
NRB4-12GM40-E2-C-V1	flush	4 mm	Normally-open (NO)	2000 Hz	M12 connector plug			55 mm	12 mm
NRB4-12GM50-E2-C-V1	flush	4 mm	Normally-open (NO)	2000 Hz	M12 connector plug			65 mm	12 mm
NRB5-18GM40-E2-C-V1	flush	5 mm	Normally-open (NO)	600 Hz	M12 connector plug			55 mm	18 mm
NRB5-18GM50-E2-C-V1	flush	5 mm	Normally-open (NO)	600 Hz	M12 connector plug			65 mm	18 mm
NRB6-18GM40-E2-C-V1	flush	6 mm	Normally-open (NO)	600 Hz	M12 connector plug			55 mm	18 mm
NRN6-8GM40-E2-C-V1	nonflush	6 mm	Normally-open (NO)	400 Hz	M12 connector plug			40 mm	8 mm
NRB8-18GM40-E2-C-V1	flush	8 mm	Normally-open (NO)	600 Hz	M12 connector plug			55 mm	18 mm
NRB8-18GM50-A2-C	flush	8 mm	complementary	600 Hz	Fixed cable	2000 mm	PUR	55 mm	18 mm
NRB8-18GM50-E2-C-V1	flush	8 mm	Normally-open (NO)	600 Hz	M12 connector plug			65 mm	18 mm
NRB10-30GM50-E2-C-V1	flush	10 mm	Normally-open (NO)	750 Hz	M12 connector plug			65 mm	30 mm
NRN10-12GM40-A2-C	nonflush	10 mm	complementary	1000 Hz	Fixed cable	2000 mm	PUR	40 mm	12 mm
NRN10-12GM40-E2-C-V1	nonflush	10 mm	Normally-open (NO)	1000 Hz	M12 connector plug			55 mm	12 mm
NRB12-18GM40-E2-C-V1	semi-flush	12 mm	Normally-open (NO)	600 Hz	M12 connector plug			40 mm	18 mm
NRN12-18GM50-E2-C-V1	nonflush	12 mm	Normally-open (NO)	500 Hz	M12 connector plug			65 mm	18 mm
NRB13-30GM50-E2-C-V1	flush	13 mm	Normally-open (NO)	750 Hz	M12 connector plug			65 mm	30 mm
NRB15-30GM50-A2-C	flush	15 mm	complementary	750 Hz	Fixed cable	2000 mm	PUR	50 mm	30 mm
NRB15-30GM50-E2-C-V1	flush	15 mm	Normally-open (NO)	750 Hz	M12 connector plug			65 mm	30 mm
NRN15-18GM50-A2-C	nonflush	15 mm	complementary	800 Hz	Fixed cable	2000 mm	PUR	55 mm	18 mm
NRN15-18GM50-E2-C-V1	nonflush	15 mm	Normally-open (NO)	500 Hz	M12 connector plug			65 mm	18 mm
NRN20-30GM50-E2-C-V1	nonflush	20 mm	Normally-open (NO)	300 Hz	M12 connector plug			65 mm	30 mm
NRN30-30GM50-A2-C	nonflush	30 mm	complementary	300 Hz	Fixed cable	2000 mm	PUR	50 mm	30 mm
NRN30-30GM50-E2-C-V1	nonflush	30 mm	Normally-open (NO)	300 Hz	M12 connector plug			65 mm	30 mm

Highlights

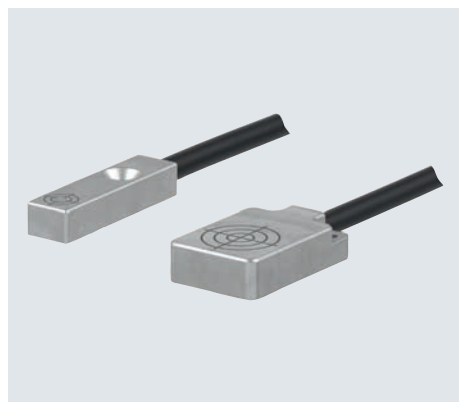
- Maximum flexibility—wide range of sensors for material-independent detection of metallic objects with identical sensing range
- Highly rugged and weld-proof sensors with degree of protection up to IP68/IP69K for use in harsh industrial environments
- Extremely durable thanks to rugged IP67 and IP68 housing designs with resilient PTFE coating or weld-proof plastic

Accessories

BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
BF 8	Mounting adapter, 8 mm
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Inductive Cubic Proximity Sensors with Metal Face

Cubic Sensors with Metal Face



Common Technical Data

Special features	Metal face
Mechanical installation conditions	flush
Type of output	Three-wire
Switching element function	Normally-open (NO)
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Cable material	PUR
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Type of Output	Switching Frequency	Connection Type	Cable Length	Length L	Width W	Height H
NMB2-F76M-E2-FE-150 mm-V1	2 mm	PNP	80 Hz	Fixed cable with M12 plug	150 mm	30 mm	7.9 mm	5.5 mm
NMB2-F76M-E2-FE-150 mm-V3	2 mm	PNP	80 Hz	Fixed cable with M8 plug	150 mm	30 mm	7.9 mm	5.5 mm
NMB6-F104M-E0-FE-200 mm-V3	6 mm	NPN	20 Hz	Fixed cable with M8 plug	200 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-FE	6 mm	PNP	20 Hz	Fixed cable	2000 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-FE-200 mm-V1	6 mm	PNP	20 Hz	Fixed cable with M12 plug	200 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-FE-200 mm-V3	6 mm	PNP	20 Hz	Fixed cable with M8 plug	200 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-NFE	6 mm	PNP	20 Hz	Fixed cable	2000 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-NFE-200 mm-V1	6 mm	PNP	20 Hz	Fixed cable with M12 plug	200 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-NFE-200 mm-V3	6 mm	PNP	20 Hz	Fixed cable with M8 plug	200 mm	32 mm	20 mm	8 mm

Highlights

- Resistant to harsh ambient conditions such as humidity and mechanical shocks
- A self-contained, stainless-steel housing with metal sensing face ensures corrosion resistance, impermeability, pressure resistance, wear resistance, durability, reliability, and increased plant availability
- Extended switching distance

Brief Description

In extremely harsh industrial environments, inductive sensors are often exposed to mechanical stress that can shorten their life cycle. For example, when used in machine tools, high forces, abrasion, and aggressive media act on the sensors. For this type of application, Pepperl+Fuchs offers "Metal Face" sensors, which are perfectly protected under especially adverse conditions by their self-contained stainless steel housing with an active sensing face. All FE types are only suitable for ferromagnetic targets and all NFE types for non-ferromagnetic targets.

Accessories

V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V1-W-OR2M-POC	Single-ended female cordset, M12, angled A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V3-GM-OR5M-POC	Single-ended female cordset, M8, angled, A-coded, 3-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V3-WM-OR5M-POC	Single-ended female cordset, M8, angled, A-coded, 3-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules

Inductive Cylindrical Proximity Sensors with Metal Face

Cylindrical Sensors with Metal Face



Common Technical Data

Special features	Metal face
Switching element function	Normally-open (NO)
UL	■

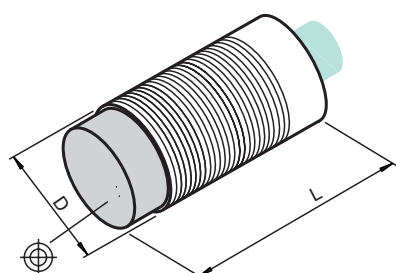
For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	Diameter D	CCC
NMB1,5-8GM35-E0-FE	flush	1.5 mm	NPN	DC	80 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	35 mm	8 mm	
NMB1,5-8GM35-E0-FE-150 mm-V1	flush	1.5 mm	NPN	DC	80 Hz	10 V	30 V	Fixed cable with M12 plug	150 mm	PUR	35 mm	8 mm	
NMB1,5-8GM35-E2-FE	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	35 mm	8 mm	
NMB1,5-8GM35-E2-FE-150 mm-V1	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	Fixed cable with M12 plug	150 mm	PUR	35 mm	8 mm	
NMB1,5-8GM35-E2-FE-150 mm-V3	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	Fixed cable with M8 plug	150 mm	PUR	35 mm	8 mm	
NMB1,5-8GM35-E2-FE-1M-V1	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	Fixed cable with M12 plug	1000 mm	PUR	35 mm	8 mm	
NMB1,5-8GM50-E2-FE	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	40 mm	8 mm	
NMB1,5-8GM50-E2-FE-V1	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	M12 connector plug			50 mm	8 mm	
NMB1,5-8GM50-E2-FE-V3	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	M8 connector plug			50 mm	8 mm	
NMB1,5-8GM65-E2-FE-V1	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	M12 connector plug			40 mm	8 mm	
NMB1,5-8GM65-E2-FE-V3	flush	1.5 mm	PNP	DC	80 Hz	10 V	30 V	M8 connector plug			40 mm	8 mm	
NMB2-12GM55-E2-FE	flush	2 mm	PNP	DC	100 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	12 mm	
NMB2-12GM65-E0-FE-V1	flush	2 mm	NPN	DC	100 Hz	10 V	30 V	M12 connector plug			65 mm	12 mm	
NMB2-12GM65-E2-FE-V1	flush	2 mm	PNP	DC	100 Hz	10 V	30 V	M12 connector plug			65 mm	12 mm	
NMB2-12GM65-E2-NFE-V1	flush	2 mm	PNP	DC	15 Hz	10 V	30 V	M12 connector plug			65 mm	12 mm	
NMB2-12GM80-US-FE	flush	2 mm	Two-wire	AC/DC	30 Hz	20 V	300 V	Fixed cable	2000 mm	PUR	80 mm	12 mm	■
NMB2-12GM85-US-FE-V12	flush	2 mm	Two-wire	AC/DC	30 Hz	20 V	300 V	1/2 inch connector plug			85 mm	12 mm	■
NMB3-8GM35-E0	flush	3 mm	NPN	DC	360 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	35 mm	8 mm	
NMB3-8GM35-E2	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	35 mm	8 mm	
NMB3-8GM35-E2-150 mm-V1	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	Fixed cable with M12 plug	150 mm	PUR	35 mm	8 mm	
NMB3-8GM35-E2-150 mm-V3	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	Fixed cable with M8 plug	150 mm	PUR	35 mm	8 mm	
NMB3-8GM50-E0-V1	flush	3 mm	NPN	DC	360 Hz	10 V	30 V	M12 connector plug			50 mm	8 mm	
NMB3-8GM50-E2	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	50 mm	8 mm	
NMB3-8GM50-E2-V1	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	M12 connector plug			50 mm	8 mm	
NMB3-8GM50-E2-V3	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	M8 connector plug			50 mm	8 mm	
NMB3-8GM65-E2-V1	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	M12 connector plug			65 mm	8 mm	
NMB3-8GM65-E2-V3	flush	3 mm	PNP	DC	360 Hz	10 V	30 V	M8 connector plug			65 mm	8 mm	
NMB5-12GM55-E0	flush	5 mm	NPN	DC	360 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	12 mm	
NMB5-12GM55-E2	flush	5 mm	PNP	DC	360 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	12 mm	
NMB5-18GM55-E2-FE	flush	5 mm	PNP	DC	15 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	18 mm	
NMB5-12GM65-E0-V1	flush	5 mm	NPN	DC	360 Hz	10 V	30 V	M12 connector plug			65 mm	12 mm	
NMB5-12GM65-E2-V1	flush	5 mm	PNP	DC	360 Hz	10 V	30 V	M12 connector plug			65 mm	12 mm	
NMB5-18GM65-E0-FE-V1	flush	5 mm	NPN	DC	15 Hz	10 V	30 V	M12 connector plug			50 mm	18 mm	
NMB5-18GM65-E2-FE-V1	flush	5 mm	PNP	DC	15 Hz	10 V	30 V	M12 connector plug			50 mm	18 mm	
NMB5-18GM80-US-FE	flush	5 mm	Two-wire	AC/DC	15 Hz	20 V	300 V	Fixed cable	2000 mm	PUR	80 mm	18 mm	■
NMB5-18GM85-US-FE-V12	flush	5 mm	Two-wire	AC/DC	15 Hz	20 V	300 V	1/2 inch connector plug			90 mm	18 mm	■
NMB6-12GH50-E2	flush	6 mm	PNP	DC	600 Hz	10 V	30 V	Fixed cable	2000 mm	TPE	69 mm	12 mm	
NMB6-12GH50-E2-V1	flush	6 mm	PNP	DC	600 Hz	10 V	30 V	M12 connector plug			60 mm	12 mm	

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	Diameter D	CCC
NMB8-30GM55-E2-FE	flush	8 mm	PNP	DC	10 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	30 mm	
NMB8-30GM65-E0-FE-V1	flush	8 mm	NPN	DC	10 Hz	10 V	30 V	M12 connector plug			65 mm	30 mm	
NMB8-30GM65-E2-FE-V1	flush	8 mm	PNP	DC	10 Hz	10 V	30 V	M12 connector plug			65 mm	30 mm	
NMB8-30GM80-US-FE	flush	8 mm	Two-wire	AC/DC	10 Hz	20 V	300 V	Fixed cable	2000 mm	PUR	80 mm	30 mm	■
NMB8-30GM85-US-FE-V12	flush	8 mm	Two-wire	AC/DC	10 Hz	20 V	300 V	1/2 inch connector plug			70 mm	30 mm	
NMB10-18GH50-E2	flush	10 mm	PNP	DC	300 Hz	10 V	30 V	Fixed cable	2000 mm	TPE	70 mm	18 mm	
NMB10-18GH50-E2-V1	flush	10 mm	PNP	DC	300 Hz	10 V	30 V	M12 connector plug			63.5 mm	18 mm	
NMN10-12GH50-E2	nonflush	10 mm	PNP	DC	400 Hz	10 V	30 V	Fixed cable	2000 mm	TPE	69 mm	12 mm	
NMN10-12GH50-E2-V1	nonflush	10 mm	PNP	DC	400 Hz	10 V	30 V	M12 connector plug			60 mm	12 mm	
NMB10-18GM55-E0	flush	10 mm	NPN	DC	240 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	18 mm	
NMB10-18GM55-E2	flush	10 mm	PNP	DC	240 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	18 mm	
NMB10-18GM65-E0-V1	flush	10 mm	NPN	DC	240 Hz	10 V	30 V	M12 connector plug			65 mm	18 mm	
NMB10-18GM65-E2-V1	flush	10 mm	PNP	DC	240 Hz	10 V	30 V	M12 connector plug			65 mm	18 mm	
NMB15-30GM55-E0	flush	15 mm	NPN	DC	150 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	30 mm	
NMB15-30GM55-E2	flush	15 mm	PNP	DC	150 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	55 mm	30 mm	
NMB15-30GM65-E0-V1	flush	15 mm	NPN	DC	150 Hz	10 V	30 V	M12 connector plug			65 mm	30 mm	
NMB15-30GM65-E2-V1	flush	15 mm	PNP	DC	150 Hz	10 V	30 V	M12 connector plug			65 mm	30 mm	
NMN20-18GH50-E2	nonflush	20 mm	PNP	DC	200 Hz	10 V	30 V	Fixed cable	2000 mm	TPE	70 mm	18 mm	
NMN20-18GH50-E2-V1	nonflush	20 mm	PNP	DC	200 Hz	10 V	30 V	M12 connector plug			63.5 mm	18 mm	

Highlights

- Resistant to harsh ambient conditions such as humidity and mechanical shocks
- A self-contained, stainless-steel housing with metal sensing face ensures corrosion resistance, impermeability, pressure resistance, wear resistance, durability, reliability, and increased plant availability
- Extended switching distance



Brief Description

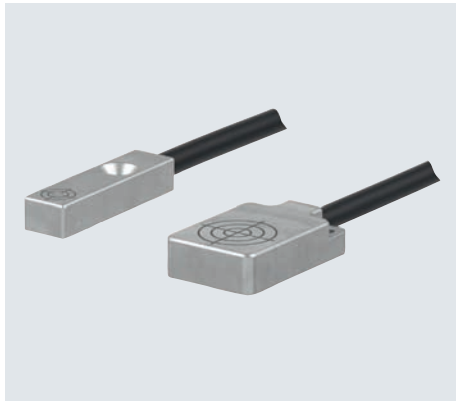
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Accessories

AB-12	Mounting aid
AB-18	Mounting aid
AB-30	Mounting aid
BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-G-BK2M-PUR-U	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, black, UL-approved, suitable for drag chains, torsion-proof
V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules

Inductive Cubic Weld-Proof Proximity Sensors with Metal Face

Cubic Weld-Proof Sensors with Metal Face



Common Technical Data

Special features	Welding resistant; metal face
Mechanical installation conditions	flush
Type of output	Three-wire
Type of output	PNP
Switching element function	Normally-open (NO)
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Cable material	POC

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Switching Frequency	Connection Type	Cable Length	Length L	Width W	Height H
NMB2-F76M-E2-C-FE-150 mm-V1	2 mm	80 Hz	Fixed cable with M12 plug	150 mm	30 mm	7.9 mm	5.5 mm
NMB2-F76M-E2-C-FE-150 mm-V3	2 mm	80 Hz	Fixed cable with M8 plug	150 mm	30 mm	7.9 mm	5.5 mm
NMB6-F104M-E2-C-FE-200 mm-V1	6 mm	2 Hz	Fixed cable with M12 plug	200 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-C-FE-200 mm-V3	6 mm	2 Hz	Fixed cable with M8 plug	200 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-C-NFE-200 mm-V1	6 mm	2 Hz	Fixed cable with M12 plug	200 mm	32 mm	20 mm	8 mm
NMB6-F104M-E2-C-NFE-200 mm-V3	6 mm	2 Hz	Fixed cable with M8 plug	200 mm	32 mm	20 mm	8 mm

Highlights

- Resistant to harsh ambient conditions such as humidity and mechanical shocks
- A self-contained, stainless-steel housing with metal sensing face ensures corrosion resistance, impermeability, pressure resistance, wear resistance, durability, reliability, and increased plant availability
- C-series "Metal Face" sensors are resistant to weld splatter
- Extended switching distance

Brief Description

In extremely harsh industrial environments, inductive sensors are often exposed to mechanical stress that can shorten their life cycle. For example, when used in machine tools, high forces, abrasion, and aggressive media act on the sensors. For this type of application, Pepperl+Fuchs offers "Metal Face" sensors, which are perfectly protected under especially adverse conditions by their self-contained stainless steel housing with an active sensing face. All FE types are only suitable for ferromagnetic targets and all NFE types for non-ferromagnetic targets.

Accessories

V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V1-W-OR2M-POC	Single-ended female cordset, M12, angled A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V3-GM-OR5M-POC	Single-ended female cordset, M8, angled, A-coded, 3-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray
V3-WM-OR5M-POC	Single-ended female cordset, M8, angled, A-coded, 3-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules

Inductive Cylindrical Weld-Proof Proximity Sensors with Metal Face

Cylindrical Weld-Proof Sensors with Metal Face



Common Technical Data

Special features	Welding resistant; metal face
Mechanical installation conditions	flush
Switching element function	Normally-open (NO)
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Type of Output	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	Diameter D	CCO
NMB1,5-8GM23-Z3-C-FE-850 mm-V1	1.5 mm	Two-wire	DC	5 Hz	6 V	30 V	Fixed cable with M12 plug	850 mm	TPE	23 mm	8 mm	
NMB1,5-8GM35-E2-C-FE-150 mm-V1	1.5 mm	PNP	DC	5 Hz	10 V	30 V	Fixed cable with M12 plug	150 mm	PVC	35 mm	8 mm	
NMB1,5-8GM35-E2-C-FE-150 mm-V3	1.5 mm	PNP	DC	5 Hz	10 V	30 V	Fixed cable with M8 plug	150 mm	PVC	35 mm	8 mm	
NMB1,5-8GM50-E2-C-FE-V1	1.5 mm	PNP	DC	5 Hz	10 V	30 V	M12 connector plug			40 mm	8 mm	
NMB2-12GM40-Z3-C-FE-300 mm-V1	2 mm	Two-wire	DC	5 Hz	6 V	30 V	Fixed cable with M12 plug	300 mm	POC	40 mm	12 mm	
NMB2-12GM65-E2-C-FE-V1	2 mm	PNP	DC	5 Hz	10 V	30 V	M12 connector plug			44 mm	12 mm	
NMB2-12GM85-US-C-FE-V12	2 mm	Two-wire	AC/DC	30 Hz	20 V	300 V	1/2 inch connector plug			85 mm	12 mm	■
NMB3-8GM35-E2-C-150 mm-V1	3 mm	PNP	DC	5 Hz	10 V	30 V	Fixed cable with M12 plug	150 mm	TPE	35 mm	8 mm	
NMB3-8GM35-E2-C-150 mm-V3	3 mm	PNP	DC	5 Hz	10 V	30 V	Fixed cable with M8 plug	150 mm	TPE	35 mm	8 mm	
NMB3-8GM50-E2-C-V1	3 mm	PNP	DC	5 Hz	10 V	30 V	M12 connector plug			50 mm	8 mm	
NMB5-12GM65-E2-C-V1	5 mm	PNP	DC	5 Hz	10 V	30 V	M12 connector plug			65 mm	12 mm	
NMB5-18GM55-Z3-C-FE-300 mm-V1	5 mm	Two-wire	DC	5 Hz	6 V	30 V	Fixed cable with M12 plug	300 mm	POC	55 mm	18 mm	
NMB5-18GM65-E2-C-FE-V1	5 mm	PNP	DC	5 Hz	10 V	30 V	M12 connector plug			65 mm	18 mm	
NMB5-18GM85-US-C-FE-V12	5 mm	Two-wire	AC/DC	5 Hz	20 V	300 V	1/2 inch connector plug			90 mm	18 mm	■
NMB8-30GM55-Z3-C-FE-300 mm-V1	8 mm	Two-wire	DC	5 Hz	6 V	30 V	Fixed cable with M12 plug	300 mm	POC	55 mm	30 mm	
NMB8-30GM65-E2-C-FE-V1	8 mm	PNP	DC	2 Hz	10 V	30 V	M12 connector plug			40 mm	30 mm	
NMB10-18GM65-E2-C-V1	10 mm	PNP	DC	5 Hz	10 V	30 V	M12 connector plug			65 mm	18 mm	
NMB15-30GM65-E2-C-V1	15 mm	PNP	DC	5 Hz	10 V	30 V	M12 connector plug			65 mm	30 mm	

Highlights

- Resistant to harsh ambient conditions such as humidity and mechanical shocks
- A self-contained, stainless-steel housing with metal sensing face ensures corrosion resistance, impermeability, pressure resistance, wear resistance, durability, reliability, and increased plant availability
- C-series "Metal Face" sensors are resistant to weld splatter
- Extended switching distance

Accessories

AB-12	Mounting aid
AB-18	Mounting aid
AB-30	Mounting aid
BF 12	Mounting adapter, 12 mm
BF 8	Mounting adapter, 8 mm
V1-G-OR2M-POC	Single-ended female cordset, M12, straight, A-coded, 4-pin, POC cable, welding-bead resistant, orange
V12-G-YE2M-PUR-H/S	Single-ended female cordset, 1/2"-20 UNF, 3-pin, PUR cable, irradiated

Brief Description

In extremely harsh industrial environments, inductive sensors are often exposed to mechanical stress that can shorten their life cycle.

For example, when used in machine tools, high forces, abrasion, and aggressive media act on the sensors. For this type of application, Pepperl+Fuchs offers "Metal Face" sensors, which are perfectly protected under especially adverse conditions by their self-contained stainless steel housing with an active sensing face. All FE types are only suitable for ferromagnetic targets and all NFE types for non-ferromagnetic targets.

Inductive Cubic Weld-Proof Proximity Sensors

Cubic Weld-Proof Sensors



Common Technical Data

Special features	Welding resistant
Type of output	PNP
Type of voltage	DC
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	Width W	Height H	CCC
NBN4-F29-E2-C	nonflush	4 mm	Normally-open (NO)	1000 Hz	4.8 V	30 V	Fixed cable	2000 mm	PVC	27 mm	10 mm	6 mm	
NBN4-F29A-E2-C	nonflush	4 mm	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	2000 mm	PUR irradiated	9 mm	27 mm	10 mm	
NBN4-F29A-E2-C-0,6M-V3	nonflush	4 mm	Normally-open (NO)	1000 Hz	10 V	30 V	Fixed cable	6000 mm	PVC	9 mm	27 mm	10 mm	
NBB20-L3M-A2-C3-V1	flush	20 mm	complementary	5 Hz	10 V	30 V	M12 connector plug			67 mm	40 mm	40 mm	
NBB20-L2-A2-C-V1	flush	20 mm	complementary	5 Hz	10 V	30 V	M12 connector plug			67 mm	40 mm	40 mm	
NBB20-L2-E2-C-V1	flush	20 mm	Normally-open (NO)	5 Hz	10 V	30 V	M12 connector plug			67 mm	40 mm	40 mm	
NBB20-U1-E2-C	flush	20 mm	Normally-open (NO)	5 Hz	10 V	30 V	M12 connector plug			118 mm	40 mm	40 mm	
NBB20-U4-E2-C	flush	20 mm	Normally-open (NO)	5 Hz	10 V	30 V	Terminal compartment			118 mm	40 mm	40 mm	
NCB50-FP-A2-C-P3-V1	flush	50 mm	complementary	1 Hz	10 V	60 V	M12 connector plug			84 mm	84 mm	40 mm	■
NCB50-FP-E2-C-P1-V1	flush	50 mm	Normally-open (NO)	1 Hz	10 V	60 V	M12 connector plug			84 mm	84 mm	40 mm	■
NCB50-FP-E2-C-P3-V1	flush	50 mm	Normally-open (NO)	1 Hz	10 V	30 V	M12 connector plug			84 mm	84 mm	40 mm	
NCB50-FP-E34-C-P3-V1	flush	50 mm	Normally-closed (NC)	1 Hz	10 V	60 V	M12 connector plug			84 mm	84 mm	40 mm	■

Highlights

- Safe switching characteristics due to high magnetic field resistance
- Extremely durable due to rugged IP67 and IP68 housing designs with resilient PTFE coating or weld-proof plastic

Brief Description

Resistant to magnetic fields and welding sparks. Weld-proof sensors with a degree of protection up to IP68 are the ideal detection solution in welding areas and other harsh operating environments. An assembly with two coupled air coils makes them insensitive to magnetic fields which can occur during electric welding or through frequency inverters. The sensor electronics themselves also guarantee the highest level of immunity to EMC interference. The housing design of the various versions also ensures maximum durability and availability.

Accessories

MH 02-L	Mounting aid
MH 04-2681F	Mounting aid for VariKont, +U1+, and +U9* sensors
MHW 01	Modular mounting bracket
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-M20-80	Receptacle, M12/M20; plastic version
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray
V3-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 3-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray

Inductive Cylindrical Weld-Proof Proximity Sensors

Cylindrical Weld-Proof Sensors



Common Technical Data

Special features	Welding resistant
Type of output	Three-wire
Switching element function	Normally-open (NO)
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	Diameter D
NBB1,5-8GM30-E2-C-V1	flush	1.5 mm	PNP	1800 Hz	M12 connector plug			30 mm	8 mm
NBB1,5-8GM40-E2-C	flush	1.5 mm	PNP	1800 Hz	Fixed cable	2000 mm	PVC	40 mm	8 mm
NBB1,5-8GM40-E2-C-0,4M-V1	flush	1.5 mm	PNP	1800 Hz	Fixed cable with M12 plug	4000 mm	PUR	40 mm	8 mm
NBB1,5-8GM40-E2-C-V3	flush	1.5 mm	PNP	1800 Hz	M8 connector plug			40 mm	8 mm
NBB2-12GM50-E2-C-V1	flush	2 mm	PNP	1500 Hz	M12 connector plug			49 mm	12 mm
NBB2-12GM50-E0-C-V1	flush	2 mm	NPN	1500 Hz	M12 connector plug			49 mm	12 mm
NBB2-12GM50-E2-C	flush	2 mm	PNP	1500 Hz	Fixed cable	2000 mm	PVC	50 mm	12 mm
NBB2-12GM50-E2-C3-V1	flush	2 mm	PNP	1500 Hz	M12 connector plug			49 mm	12 mm
NBN3-8GM30-E2-C-V1	nonflush	3 mm	PNP	50 Hz	M12 connector plug			35 mm	8 mm
NBN4-12GM50-E2-C	nonflush	4 mm	PNP	1200 Hz	Fixed cable	2000 mm	PVC	50 mm	12 mm
NBN4-12GM50-E2-C-V1	nonflush	4 mm	PNP	1200 Hz	M12 connector plug			46 mm	12 mm
NBB5-18GM50-E0-C-V1	flush	5 mm	NPN	800 Hz	M12 connector plug			50 mm	18 mm
NBB5-18GM50-E2-C-V1	flush	5 mm	PNP	800 Hz	M12 connector plug			50 mm	18 mm
NBB5-18GM50-E2-C3-V1	flush	5 mm	PNP	800 Hz	M12 connector plug			50 mm	18 mm
NBN8-18GM50-E2-C-V1	nonflush	8 mm	PNP	500 Hz	M12 connector plug			50 mm	18 mm
NBB10-30GM50-E2-C-V1	flush	10 mm	PNP	10 Hz	M12 connector plug			50 mm	30 mm
NBB10-30GM50-E2-C3-V1	flush	10 mm	PNP	10 Hz	M12 connector plug			50 mm	30 mm
NBN15-30GM50-E2-C-V1	nonflush	15 mm	PNP	10 Hz	M12 connector plug			50 mm	30 mm

Highlights

- Safe switching characteristics due to high magnetic field resistance
- Extremely durable due to rugged IP67 and IP68 housing designs with resilient PTFE coating or weld-proof plastic

Accessories

BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
BF 8	Mounting adapter, 8 mm
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray
V1-W-OR2M-POC	Single-ended female cordset, M12, angled A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules

Brief Description

Resistant to magnetic fields and welding sparks. Weld-proof sensors with a degree of protection up to IP68 are the ideal detection solution in welding areas and other harsh operating environments. An assembly with two coupled air coils makes them insensitive to magnetic fields which can occur during electric welding or through frequency inverters. The sensor electronics themselves also guarantee the highest level of immunity to EMC interference. The housing design of the various versions also ensures maximum durability and availability. The brass sleeves of the cylindrical sensors are PTFE coated, ensuring they are also protected against welding sparks and metal chips.

Inductive Cubic Proximity Sensors with Extended Temperature Range up to 100 °C

Cubic Sensors with Extended Temperature Range (100 °C)



Common Technical Data

Special features	Extended Temperature Range
Type of voltage	DC
Operating voltage (min)	10 V
Ambient conditions (max)	100 °C
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Max)	Connection Type	Ambient Temperature (Min)	Length L	Width W	Height H	EAC
NBB20-L2-A2-T-V1	flush	20 mm	PNP	complementary	440 Hz	30 V	M12 connector plug	-25 °C	67 mm	40 mm	40 mm	■
NBB20-L2M-A2-T-V1	flush	20 mm	PNP	complementary	440 Hz	30 V	M12 connector plug	-25 °C	67 mm	40 mm	40 mm	■
NBB20-U1-A0-T	flush	20 mm	NPN	complementary	440 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	
NBB20-U1-A2-T	flush	20 mm	PNP	complementary	440 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	■
NBB20-U1-A2-T-V1	flush	20 mm	PNP	complementary	440 Hz	30 V	M12 connector plug	-25 °C	118 mm	40 mm	40 mm	■
NBB20-U1-E2-T-V1	flush	20 mm	PNP	Normally-open (NO)	440 Hz	30 V	M12 connector plug	-25 °C	118 mm	40 mm	40 mm	
NBB20-U2-A2-T	flush	20 mm	PNP	complementary	440 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	
NBB20-U4-A0-T	flush	20 mm	NPN	complementary	440 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	
NBB20-U4-A2-T	flush	20 mm	PNP	complementary	440 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	
NBN30-U1-A2-T	nonflush	30 mm	PNP	complementary	230 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	■
NBN30-U1-A2-T-V1	nonflush	30 mm	PNP	complementary	230 Hz	30 V	M12 connector plug	-25 °C	118 mm	40 mm	40 mm	
NBN40-U1-A2-T	nonflush	40 mm	PNP	complementary	180 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	■
NBN40-U1-A2-T-V1	nonflush	40 mm	PNP	complementary	180 Hz	30 V	M12 connector plug	-25 °C	118 mm	40 mm	40 mm	
NBN40-U1L-A0-T	nonflush	40 mm	NPN	complementary	100 Hz	60 V	Terminal compartment	-25 °C	128 mm	55 mm	55 mm	
NBN40-U1L-A2-T	nonflush	40 mm	PNP	complementary	100 Hz	60 V	Terminal compartment	-25 °C	128 mm	55 mm	55 mm	
NBN40-U2-A2-T	nonflush	40 mm	PNP	complementary	180 Hz	30 V	Terminal compartment	-25 °C	118 mm	40 mm	40 mm	
NCB40-FP-A2-T-P1	flush	40 mm	PNP	complementary	80 Hz	30 V	Terminal compartment	-40 °C	80 mm	80 mm	40 mm	
NCB40-FP-A2-T-P1-V1	flush	40 mm	PNP	complementary	80 Hz	30 V	M12 connector plug	-25 °C	80 mm	80 mm	40 mm	

Highlights

- Established and proven solution for applications in the automotive industry
- Reliable at high temperatures up to 100 °C

Accessories

MH 02-L	Mounting aid
MH 04-2681F	Mounting aid for VariKont, +U1+, and +U9* sensors
MHW 01	Modular mounting bracket
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-M20-80	Receptacle, M12/M20; plastic version
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Brief Description

The portfolio of sensors with extended temperature range includes versions with different cable lengths, adapted to the respective application. A further advantage is the fact that the sensing range is already calibrated in the hot zone. This eliminates a work step and makes commissioning much faster and more cost-effective.

Inductive Cylindrical Proximity Sensors with Extended Temperature Range up to 100 °C

Cylindrical Sensors with Extended Temperature Range (100 °C)



Common Technical Data

Special features	Extended Temperature Range
Type of voltage	DC
Ambient conditions (min)	-25 °C
Ambient conditions (max)	100 °C

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	Diameter D	EAC	UL
NBB1-8GS50-Z0-T	flush	1 mm	Two-wire	Normally-open (NO)	1500 Hz	15 V	34 V	Fixed cable	2000 mm	PUR	50 mm	8 mm		
NBB1,5-8GS30-E2-T	flush	1.5 mm	PNP	Normally-open (NO)	1500 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	34.5 mm	8 mm		■
NBB1,5-8GS40-E2-T-V3	flush	1.5 mm	PNP	Normally-open (NO)	1500 Hz	10 V	30 V	M8 connector plug			45 mm	8 mm		
NBB2-12GM50-E2-T-V1	flush	2 mm	PNP	Normally-open (NO)	1200 Hz	10 V	65 V	M12 connector plug			65 mm	12 mm		
NBB2-12GM60-E2-T	flush	2 mm	PNP	Normally-open (NO)	1200 Hz	10 V	65 V	Fixed cable	2000 mm	PUR	56 mm	12 mm		■
NBB4-12GM30-E2-T-V1	flush	4 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V	M12 connector plug			30 mm	12 mm		■
NBN4-12GM40-E2-T-V1	nonflush	4 mm	PNP	Normally-open (NO)	800 Hz	10 V	30 V	M12 connector plug			37 mm	12 mm		
NBN4-12GM60-E2-T-V1	nonflush	4 mm	PNP	Normally-open (NO)	800 Hz	10 V	30 V	M12 connector plug			56 mm	12 mm		
NBB5-18GM50-E2-T-V1	flush	5 mm	PNP	Normally-open (NO)	800 Hz	10 V	30 V	M12 connector plug			69 mm	18 mm		
NBN8-18GM50-E2-T	nonflush	8 mm	PNP	Normally-open (NO)	300 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	59 mm	18 mm		
NBN8-18GM50-E2-T-V1	nonflush	8 mm	PNP	Normally-open (NO)	300 Hz	10 V	30 V	M12 connector plug			69 mm	18 mm		
NBB10-30GM50-E2-T	flush	10 mm	PNP	Normally-open (NO)	300 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	54 mm	30 mm		
NBB10-30GM50-E2-T-V1	flush	10 mm	PNP	Normally-open (NO)	300 Hz	10 V	65 V	M12 connector plug			69 mm	30 mm		■
NBB10-30GM50-Z0-T	flush	10 mm	Two-wire	Normally-open (NO)	300 Hz	15 V	30 V	Fixed cable	2000 mm	PUR	54 mm	30 mm		
NBN15-30GM50-E3-T-V1	nonflush	15 mm	PNP	Normally-closed (NC)	300 Hz	10 V	30 V	M12 connector plug			69 mm	30 mm		
NJ10-30GK-E-T	flush	10 mm	NPN	Normally-open (NO)	300 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	80 mm	30 mm		■
NJ10-30GK-E2-T	flush	10 mm	PNP	Normally-open (NO)	300 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	80 mm	30 mm		■
NJ15-30GK-E-T	nonflush	15 mm	NPN	Normally-open (NO)	300 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	80 mm	30 mm		■
NJ15-30GK-E2-T	nonflush	15 mm	PNP	Normally-open (NO)	300 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	80 mm	30 mm		■
NJ15-30GK-E2-T-5M	nonflush	15 mm	PNP	Normally-open (NO)	300 Hz	10 V	30 V	Fixed cable	5000 mm	PUR	80 mm	30 mm		■

Highlights

- Established and proven solution for applications in the automotive industry
- Reliable at high temperatures up to 100 °C

Accessories

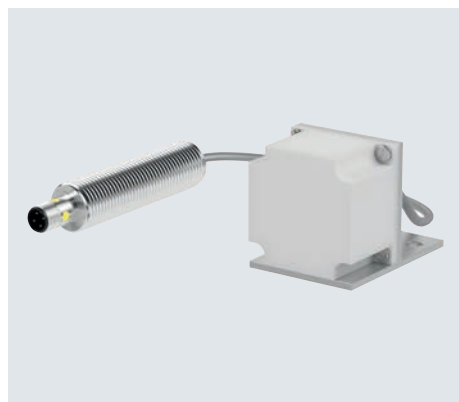
BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
BF 8	Mounting adapter, 8 mm
EXG-12	Quick-mounting bracket with fixed stop
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray
V3-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 3-pin, PUR cable, gray

Brief Description

The portfolio of sensors with extended temperature range includes versions with different cable lengths, adapted to the respective application. A further advantage is the fact that the sensing range is already calibrated in the hot zone. This eliminates a work step and makes commissioning much faster and more cost-effective.

Inductive Cubic Proximity Sensors in High-Temperature Version 150 °C – 250 °C

Cubic High-Temperature Sensors (150 °C – 250 °C)



Common Technical Data

Special features	High temperature
Mechanical installation conditions	Flush mountable
Type of output	Four-wire
Type of output	PNP
Switching element function	complementary
Type of voltage	DC
Switching frequency	20 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	M12 connector plug
Housing length L	56 mm
Housing width W	44 mm
Housing height H	40 mm
UL	■

Model Number	Detection Range	Ambient Temperature (Min)	Ambient Temperature (Max)
NCN20-F35-A2-250-10M-V1	20 mm	0 °C	250 °C
NCN20-F35-A2-250-20M-V1	20 mm	0 °C	250 °C
NCN25-F35-A2-250-15M-V1	25 mm	0 °C	250 °C
NCN25-F35-A2-250-V1	25 mm	0 °C	250 °C

Highlights

- Established and proven solution for applications in the automotive industry
- Reliable at high temperatures up to 250 °C
- Quick and easy commissioning thanks to sensor calibration in high temperatures
- Easy-to-integrate sensor structure with an extremely slim control interface

Brief Description

The high-temperature sensors of the F35 series have been specially developed for use in the hot range up to 250 degrees. They consist of a sensor head with separate electronics. Both components are connected via a specially developed cable that meets the high requirements. The control interface in the metric 18-piece housing with M12 plug-in connection is easily integrated into the system with its slim design. It can be mounted in a suitable location outside the hot zone, while the sensor is located inside the hot zone.

Accessories

BF 18	Mounting adapter, 18 mm
SH-F35	Protective hood for mechanical protection and humidity applications
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Inductive Cylindrical Proximity Sensors in High-Temperature Version 150 °C – 250 °C

Cylindrical High-Temperature Sensors (150 °C – 250 °C)



Common Technical Data	
Special features	High temperature
Type of output	2-wire
Type of output	NAMUR
Switching element function	Normally-closed (NC)
Type of voltage	DC
Rated voltage	8.2 V
Connection type	Fixed cable
UL	■
ATEX	■
IECEX	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Frequency	Cable Length	Ambient Temperature (Min)	Ambient Temperature (Max)	Length L	Diameter D	EAC
NJ5-18GK-N-150-15M	flush	5 mm	500 Hz	15,000 mm	-40 °C	150 °C	47 mm	18 mm	■
NJ8-18GK-N-150-15M	nonflush	8 mm	200 Hz	15,000 mm	-40 °C	150 °C	47 mm	18 mm	■
NJ4-30GM-N-200	flush	4 mm	1000 Hz	5000 mm	0 °C	200 °C	75 mm	30 mm	
NJ4-30GM-N-200-10M	flush	4 mm	1000 Hz	10,000 mm	0 °C	200 °C	75 mm	30 mm	
NJ5-18GK-N-150	flush	5 mm	500 Hz	2000 mm	-40 °C	150 °C	47 mm	18 mm	■
NJ8-18GK-N-150	nonflush	8 mm	200 Hz	2000 mm	-40 °C	150 °C	47 mm	18 mm	■
NJ8-18GK-N-150-10M	nonflush	8 mm	200 Hz	10,000 mm	-40 °C	150 °C	47 mm	18 mm	■
NJ15-30GK-N-150	nonflush	15 mm	100 Hz	2000 mm	-25 °C	150 °C	47 mm	30 mm	

Highlights

- Established and proven solution for applications in the automotive industry
- Reliable at high temperatures up to 250 °C
- Quick and easy commissioning thanks to sensor calibration in high temperatures
- Easy-to-integrate sensor structure with an extremely slim control interface

Brief Description

The portfolio of high-temperature sensors includes versions with different cable lengths, adapted to the respective application. A further advantage is the fact that the sensing range is already calibrated in the hot zone. This eliminates a work step and makes commissioning much more straightforward and cost-effective.

Accessories	
BF 30	Mounting adapter, 30 mm

Inductive Proximity Sensors with IO-Link

Sensors with IO-Link



Common Technical Data

Type of output	Three-wire
Type of output	PNP
Switching element function	Normally-open/normally-closed (selectable)
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	Width W	Height H	Diameter D
NRB20-L3-E2-IO-V1	flush	20 mm	440 Hz	M12 connector plug			67 mm	40 mm	40 mm	
NRB20-L3-E2-IO-C-V1	flush	20 mm	440 Hz	M12 connector plug			67 mm	40 mm	40 mm	
NRB20-U1-E2-IO	flush	20 mm	440 Hz	Terminal compartment			118 mm	40 mm	40 mm	
NRN40-L3K-E2-IO-V1	nonflush	40 mm	180 Hz	M12 connector plug			67 mm	40 mm	40 mm	
NRN40-L3K-E2-IO-C-V1	nonflush	40 mm	180 Hz	M12 connector plug			67 mm	40 mm	40 mm	
NRN40-U1-E2-IO-V1	nonflush	40 mm	180 Hz	M12 connector plug			118 mm	40 mm	40 mm	
NRB4-12GM40-E2-IO-C	flush	4 mm	2000 Hz	Fixed cable	2000 mm	PUR	40 mm			12 mm
NRB4-12GM40-E2-IO-C-V1	flush	4 mm	2000 Hz	M12 connector plug			55 mm			12 mm
NRB4-12GS40-E2-IO	flush	4 mm	2000 Hz	Fixed cable	2000 mm	PVC	40 mm			12 mm
NRB4-12GS40-E2-IO-V1	flush	4 mm	2000 Hz	M12 connector plug			55 mm			12 mm
NRB8-18GM40-E2-IO-C	flush	8 mm	1500 Hz	Fixed cable	2000 mm	PUR	45 mm			18 mm
NRB8-18GM40-E2-IO-C-V1	flush	8 mm	1500 Hz	M12 connector plug			55 mm			18 mm
NRB8-18GS40-E2-IO	flush	8 mm	1500 Hz	Fixed cable	2000 mm	PVC	45 mm			18 mm
NRB8-18GS40-E2-IO-V1	flush	8 mm	1500 Hz	M12 connector plug			55 mm			18 mm
NRN10-12GM40-E2-IO-C	nonflush	10 mm	1300 Hz	Fixed cable	2000 mm	PUR	40 mm			12 mm
NRN10-12GM40-E2-IO-C-V1	nonflush	10 mm	1300 Hz	M12 connector plug			55 mm			12 mm
NRN10-12GS40-E2-IO	nonflush	10 mm	1300 Hz	Fixed cable	2000 mm	PVC	40 mm			12 mm
NRN10-12GS40-E2-IO-V1	nonflush	10 mm	1300 Hz	M12 connector plug			55 mm			12 mm
NRN15-18GM40-E2-IO-C	nonflush	15 mm	550 Hz	Fixed cable	2000 mm	PUR	40 mm			18 mm
NRN15-18GM40-E2-IO-C-V1	nonflush	15 mm	550 Hz	M12 connector plug			55 mm			18 mm
NRN15-18GS40-E2-IO	nonflush	15 mm	550 Hz	Fixed cable	2000 mm	PVC	40 mm			18 mm
NRN15-18GS40-E2-IO-V1	nonflush	15 mm	550 Hz	M12 connector plug			55 mm			18 mm
NRB15-30GM50-E2-IO-C	flush	15 mm	600 Hz	Fixed cable	2000 mm	PUR	40 mm			30 mm
NRB15-30GM50-E2-IO-C-V1	flush	15 mm	600 Hz	M12 connector plug			65 mm			30 mm
NRB15-30GS50-E2-IO-V1	flush	15 mm	600 Hz	M12 connector plug			65 mm			30 mm
NRB15-30GS50-E2-IO	flush	15 mm	600 Hz	Fixed cable	2000 mm	PVC	40 mm			30 mm
NRN30-30GM50-E2-IO-C	nonflush	30 mm	680 Hz	Fixed cable	2000 mm	PUR	50 mm			30 mm
NRN30-30GM50-E2-IO-C-V1	nonflush	30 mm	680 Hz	M12 connector plug			65 mm			30 mm
NRN30-30GS50-E2-IO	nonflush	30 mm	680 Hz	Fixed cable	2000 mm	PVC	50 mm			30 mm
NRN30-30GS50-E2-IO-V1	nonflush	30 mm	680 Hz	M12 connector plug			65 mm			30 mm

Highlights

- IO-Link interface for servicing and process data
- Possible to set switch point mode or window mode operation
- Possible to set switching function, stability alarm and pulse extension mode

Accessories

BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
ICE1-8IOL-G30L-V1D	Ethernet IO-Link module with 8 inputs/outputs

Pressure-Resistant Inductive Proximity Sensors

Pressure-Resistant Sensors



Common Technical Data

Special features	Pressure resistant
Mechanical installation conditions	flush
Type of voltage	DC
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Detection Range	Pressure Resistant up to	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	SIL	Connection Type	Length L	Diameter D	CCC	EAC	ATEX	IECEx
NCB1,5-12GM45-E2-D-V1	1.5 mm	500 bar	PNP	Normally-open (NO)	600 Hz	10 V	30 V		M12 connector plug	56 mm	12 mm				
NCB1,5-12GM60-E2-D-V1	1.5 mm	500 bar	PNP	Normally-open (NO)	600 Hz	10 V	30 V		M12 connector plug	69 mm	12 mm				
NCB1,5-18GM60-E2-D	1.5 mm	350 bar	PNP	Normally-open (NO)	1500 Hz	10 V	60 V		Fixed cable	57 mm	18 mm	■			
NCB1,5-12GM70-E2-D-V1	1.5 mm	500 bar	PNP	Normally-open (NO)	600 Hz	10 V	30 V		M12 connector plug	93 mm	12 mm				
NCB1,5-18GM60-E2-D-V1	1.5 mm	350 bar	PNP	Normally-open (NO)	1500 Hz	10 V	60 V		M12 connector plug	65 mm	18 mm	■			
NCB1,5-18GM60-E3-D-V1	1.5 mm	350 bar	PNP	Normally-closed (NC)	1500 Hz	10 V	60 V		M12 connector plug	65 mm	18 mm	■			
NCB3-14GM65-E2-D-V1	3 mm	500 bar	PNP	Normally-open (NO)	500 Hz	10 V	30 V		M12 connector plug	65 mm	12 mm				
NJ1,5-18GM-N-D	1.5 mm	350 bar	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	50 mm	18 mm		■	■	■
NJ1,5-18GM-N-D-10M	1.5 mm	350 bar	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	50 mm	18 mm		■	■	■
NJ1,5-18GM-N-D-V1	1.5 mm	350 bar	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	M12 connector plug	35 mm	18 mm		■	■	■

Highlights

- Extremely rugged design for pressures up to 1000 bar
- Optimized portfolio that is perfectly tailored to applications in hydraulic and pneumatic cylinders
- Different sensing ranges, output and connection options guarantee optimal application solutions

Brief Description

Pressure-resistant proximity sensors are typically used in applications involving high hydraulic and pneumatic pressures to detect components within the pressure range. The required pressure resistance is achieved via a ceramic front face that is embedded in the stainless steel housing. This enables flush assembly. These special sensors are mainly used, for example, to determine the end position of pistons in hydraulic and pneumatic cylinders. Some sensors in the Pepperl+Fuchs product range are designed for operating pressures of up to 500 bar and offer reliable protection against pressure peaks of up to 1000 bar. In addition, the portfolio offers variants with different operating distances, housing designs, and output and connection options that guarantee an optimal application solution.

Accessories

V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-G-N-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 2-pin, PUR cable, blue, NAMUR
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray
V1-W-N-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 2-pin, PUR cable, blue, NAMUR

Inductive Cubic Proximity Sensors for Mobile Equipment

Cubic Sensors for Mobile Equipment



Common Technical Data

Special features	Mobile equipment
Type of voltage	DC
e1 type approval	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	Length L	Width W	Height H	CCC	UL
NBB8-F148P10-E0-M	flush	8 mm	NPN	Normally-open (NO)	600 Hz	10 V	60 V	Fixed cable	2000 mm	PUR	50 mm	35 mm	20 mm		
NBB8-F148P10-E2-M	flush	8 mm	PNP	Normally-open (NO)	600 Hz	10 V	60 V	Fixed cable	2000 mm	PUR	50 mm	35 mm	20 mm		
NBB15-F148P10-E0-M	flush	15 mm	NPN	Normally-open (NO)	600 Hz	10 V	60 V	Fixed cable	2000 mm	PUR	50 mm	35 mm	20 mm		
NBB15-F148P10-E2-M	flush	15 mm	PNP	Normally-open (NO)	600 Hz	10 V	60 V	Fixed cable	2000 mm	PUR	50 mm	35 mm	20 mm		
NBB8-F33-A2-M1	flush	8 mm	PNP	complementary	350 Hz	10 V	30 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBB8-F33-E0-M	flush	8 mm	NPN	Normally-open (NO)	350 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBB8-F33-E1-M	flush	8 mm	NPN	Normally-closed (NC)	350 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBB8-F33-E2-M	flush	8 mm	PNP	Normally-open (NO)	350 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBB8-F33-E3-M	flush	8 mm	PNP	Normally-closed (NC)	350 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBN10-F33-E0-M	nonflush	10 mm	NPN	Normally-open (NO)	200 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBN10-F33-E1-M	nonflush	10 mm	NPN	Normally-closed (NC)	200 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBN10-F33-E2-M	nonflush	10 mm	PNP	Normally-open (NO)	200 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBN10-F33-E3-M	nonflush	10 mm	PNP	Normally-closed (NC)	200 Hz	5 V	60 V	Fixed cable	2000 mm	PUR	10 mm	50 mm	25 mm	■	■
NBB20-L2-A2-V1-M	flush	20 mm	PNP	complementary	200 Hz	10 V	60 V	M12 connector plug			67 mm	40 mm	40 mm	■	■
NBB20-L2M-A0-V1-M	flush	20 mm	NPN	complementary	200 Hz	10 V	60 V	M12 connector plug			67 mm	40 mm	40 mm	■	■
NBB20-L2M-A2-V1-M	flush	20 mm	PNP	complementary	200 Hz	10 V	60 V	M12 connector plug			67 mm	40 mm	40 mm	■	■
NBB20-U1-A0-M	flush	20 mm	NPN	complementary	200 Hz	10 V	60 V	Terminal compartment			118 mm	40 mm	40 mm	■	■
NBB20-U1-A2-M	flush	20 mm	PNP	complementary	200 Hz	10 V	60 V	Terminal compartment			118 mm	40 mm	40 mm	■	■
NBB20-U4-A0-M	flush	20 mm	NPN	complementary	200 Hz	10 V	60 V	Terminal compartment			118 mm	40 mm	40 mm	■	■
NBN40-L2-A0-V1-M	nonflush	40 mm	NPN	complementary	150 Hz	10 V	60 V	M12 connector plug			67 mm	40 mm	40 mm	■	■
NBN40-L2-A2-V1-M	nonflush	40 mm	PNP	complementary	150 Hz	10 V	60 V	M12 connector plug			67 mm	40 mm	40 mm	■	■
NBN40-L2M-A0-V1-M	nonflush	40 mm	NPN	complementary	150 Hz	10 V	60 V	M12 connector plug			67 mm	40 mm	40 mm	■	■
NBN40-L2M-A2-V1-M	nonflush	40 mm	PNP	complementary	150 Hz	10 V	60 V	M12 connector plug			67 mm	40 mm	40 mm	■	■
NBN40-U1-A0-M	nonflush	40 mm	NPN	complementary	150 Hz	10 V	60 V	Terminal compartment			118 mm	40 mm	40 mm	■	■
NBN40-U1-A2-M	nonflush	40 mm	PNP	complementary	150 Hz	10 V	60 V	Terminal compartment			118 mm	40 mm	40 mm	■	■

Highlights

- Maximum mechanical and electrical properties for reliable operation in the harshest outdoor conditions
- Optimized for mobile equipment (E1 type approval for use on public roads)
- Comprehensive portfolio and application-specific adaptations for excellent flexibility in sensor selection
- The highest quality standards (internal testing according to criteria far beyond the normative requirements)

Brief Description

High Reliability Under the Toughest Conditions

Applications in the mobile equipment sector place incredibly specific demands on sensor technology. In addition to approval for road traffic (E1 type approval), proximity sensors in this field must also have EMC immunity. Other typical requirements include high impermeability, resistance to shocks, vibrations, and chemicals, and an extended temperature range of -40 °C to +85 °C. With this in mind, Pepperl+Fuchs offers an extremely broad portfolio that guarantees maximum flexibility. The selection includes exceptionally rugged devices, which, thanks to a special internal test procedure, ensure a level of impermeability beyond the IP68 standard—a new benchmark in quality.

Inductive Cylindrical Proximity Sensors for Mobile Equipment

Cylindrical Sensors for Mobile Equipment



Common Technical Data

Special features	Mobile equipment
Type of voltage	DC
e1 type approval	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	Diameter D	CCC	EAC	UL
NBB4-12GM35-A0-M1	flush	4 mm	NPN	complementary	2200 Hz	7 V	30 V	Fixed cable	35 mm	12 mm			■
NBB4-12GM35-A2-V1-M1	flush	4 mm	PNP	complementary	2200 Hz	7 V	30 V	M12 connector plug	51 mm	12 mm			■
NBB4-12GK50-E0-M	flush	4 mm	NPN	Normally-open (NO)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GK50-E1-M	flush	4 mm	NPN	Normally-closed (NC)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GK50-E2-M	flush	4 mm	PNP	Normally-open (NO)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GK50-E3-M	flush	4 mm	PNP	Normally-closed (NC)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GM50-A0-M1	flush	4 mm	NPN	complementary	2200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBB4-12GM50-A0-V1-M1	flush	4 mm	NPN	complementary	2200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBB4-12GM50-A2-M1	flush	4 mm	PNP	complementary	2200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBB4-12GM50-A2-V1-M1	flush	4 mm	PNP	complementary	2200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBB4-12GM50-E0-M	flush	4 mm	NPN	Normally-open (NO)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GM50-E0-M1	flush	4 mm	NPN	Normally-open (NO)	2200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBB4-12GM50-E0-V1-M	flush	4 mm	NPN	Normally-open (NO)	2500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■
NBB4-12GM50-E0-V1-M1	flush	4 mm	NPN	Normally-open (NO)	2200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBB4-12GM50-E1-M	flush	4 mm	NPN	Normally-closed (NC)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GM50-E1-M1	flush	4 mm	NPN	Normally-closed (NC)	2200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBB4-12GM50-E1-V1-M	flush	4 mm	NPN	Normally-closed (NC)	2500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■
NBB4-12GM50-E1-V1-M1	flush	4 mm	NPN	Normally-closed (NC)	2200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBB4-12GM50-E2-M	flush	4 mm	PNP	Normally-open (NO)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GM50-E2-V1-M	flush	4 mm	PNP	Normally-open (NO)	2500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■
NBB4-12GM50-E2-V1-M1	flush	4 mm	PNP	Normally-open (NO)	2200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBB4-12GM50-E3-M	flush	4 mm	PNP	Normally-closed (NC)	2500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBB4-12GM50-E3-M1	flush	4 mm	PNP	Normally-closed (NC)	2200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBB4-12GM50-E3-V1-M	flush	4 mm	PNP	Normally-closed (NC)	2500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■
NBB4-12GM50-E2-M1	flush	4 mm	PNP	Normally-open (NO)	2200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBB4-12GM50-E3-V1-M1	flush	4 mm	PNP	Normally-closed (NC)	2200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBB4-12GM50-EI-M1	flush	4 mm	Digital current output		1800 Hz	9 V	30 V	Fixed cable	50 mm	12 mm			■
NBB4-12GM50-EI-V1-M1	flush	4 mm	Digital current output		1800 Hz	9 V	30 V	M12 connector plug	65 mm	12 mm			■
NBN4-12GM35-A2-V1-M1	nonflush	4 mm	PNP	complementary	1200 Hz	7 V	30 V	M12 connector plug	51 mm	12 mm			■
NBB5-18GK50-E0-M	flush	5 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBB5-18GK50-E1-M	flush	5 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBB5-18GK50-E2-M	flush	5 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBB5-18GK50-E3-M	flush	5 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBN7-12GK50-E0-M	nonflush	7 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GK50-E1-M	nonflush	7 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GK50-E2-M	nonflush	7 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GK50-E3-M	nonflush	7 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GM50-E0-M	nonflush	7 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GM50-E0-V1-M	nonflush	7 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■
NBN7-12GM50-E1-M	nonflush	7 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GM50-E1-V1-M	nonflush	7 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■
NBN7-12GM50-E2-M	nonflush	7 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GM50-E2-V1-M	nonflush	7 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	Diameter D	CCC	EAC	UL
NBN7-12GM50-E3-M	nonflush	7 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	50 mm	12 mm	■		■
NBN7-12GM50-E3-V1-M	nonflush	7 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	M12 connector plug	66 mm	12 mm	■		■
NBB8-18GM35-A0-M1	flush	8 mm	NPN	complementary	1600 Hz	7 V	30 V	Fixed cable	35 mm	18 mm			■
NBB8-18GM50-E1-V1-M1	flush	8 mm	Digital current output		1300 Hz	9 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB8-18GM50-A0-M1	flush	8 mm	NPN	complementary	1600 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBB8-18GM50-A0-V1-M1	flush	8 mm	NPN	complementary	1600 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB8-18GM50-A2-M1	flush	8 mm	PNP	complementary	1600 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBB8-18GM50-A2-V1-M1	flush	8 mm	PNP	complementary	1600 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB8-18GM50-E0-M	flush	8 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	■
NBB8-18GM50-E0-M1	flush	8 mm	NPN	Normally-open (NO)	1600 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBB8-18GM50-E0-V1-M	flush	8 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	■
NBB8-18GM50-E0-V1-M1	flush	8 mm	NPN	Normally-open (NO)	1600 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB8-18GM50-E1-M	flush	8 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	■
NBB8-18GM50-E1-M1	flush	8 mm	NPN	Normally-closed (NC)	1600 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBB8-18GM50-E1-V1-M	flush	8 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	■
NBB8-18GM50-E1-V1-M1	flush	8 mm	NPN	Normally-closed (NC)	1600 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB8-18GM50-E2-M	flush	8 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	■
NBB8-18GM50-E2-M1	flush	8 mm	PNP	Normally-open (NO)	1600 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBB8-18GM50-E2-V1-M	flush	8 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	■
NBB8-18GM50-E2-V1-M1	flush	8 mm	PNP	Normally-open (NO)	1600 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB8-18GM50-E3-M	flush	8 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	■
NBB8-18GM50-E3-M1	flush	8 mm	PNP	Normally-closed (NC)	1600 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBB8-18GM50-E3-V1-M	flush	8 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	■
NBB8-18GM50-E3-V1-M1	flush	8 mm	PNP	Normally-closed (NC)	1600 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB8-18GM50-EI-M	flush	8 mm	Digital current output		1300 Hz	9 V	30 V	Fixed cable	50 mm	18 mm			■
NBN8-12GM50-A0-M1	nonflush	8 mm	NPN	complementary	1200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBN8-12GM50-A0-V1-M1	nonflush	8 mm	NPN	complementary	1200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBN8-12GM50-A2-M1	nonflush	8 mm	PNP	complementary	1200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBN8-12GM50-A2-V1-M1	nonflush	8 mm	PNP	complementary	1200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBN8-12GM50-E0-M1	nonflush	8 mm	NPN	Normally-open (NO)	1200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBN8-12GM50-E0-V1-M1	nonflush	8 mm	NPN	Normally-open (NO)	1200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBN8-12GM50-E1-M1	nonflush	8 mm	NPN	Normally-closed (NC)	1200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBN8-12GM50-E1-V1-M1	nonflush	8 mm	NPN	Normally-closed (NC)	1200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBN8-12GM50-E2-M	nonflush	8 mm	PNP	Normally-open (NO)	1200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBN8-12GM50-E2-V1-M1	nonflush	8 mm	PNP	Normally-open (NO)	1200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBN8-12GM50-E3-M1	nonflush	8 mm	PNP	Normally-closed (NC)	1200 Hz	7 V	30 V	Fixed cable	50 mm	12 mm			■
NBN8-12GM50-E3-V1-M1	nonflush	8 mm	PNP	Normally-closed (NC)	1200 Hz	7 V	30 V	M12 connector plug	66 mm	12 mm			■
NBN8-12GM50-EI-M1	nonflush	8 mm	Digital current output		1500 Hz	9 V	30 V	Fixed cable	50 mm	12 mm			■
NBN8-12GM50-EI-V1-M1	nonflush	8 mm	Digital current output		1500 Hz	9 V	30 V	M12 connector plug	65 mm	12 mm			■
NBB10-30GK50-E0-M	flush	10 mm	NPN	Normally-open (NO)	800 Hz	5 V	60 V	Fixed cable	63 mm	30 mm	■		■
NBB10-30GK50-E1-M	flush	10 mm	NPN	Normally-closed (NC)	800 Hz	5 V	60 V	Fixed cable	63 mm	30 mm	■		■
NBB10-30GK50-E2-M	flush	10 mm	PNP	Normally-open (NO)	800 Hz	5 V	60 V	Fixed cable	63 mm	30 mm			■
NBB10-30GK50-E3-M	flush	10 mm	PNP	Normally-closed (NC)	800 Hz	5 V	60 V	Fixed cable	63 mm	30 mm	■		■
NBN12-18GK50-E0-M	nonflush	12 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBN12-18GK50-E1-M	nonflush	12 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBN12-18GK50-E2-M	nonflush	12 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBN12-18GK50-E3-M	nonflush	12 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	58 mm	18 mm	■		■
NBN12-18GM50-A0-M1	nonflush	12 mm	NPN	complementary	1200 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBN12-18GM50-A0-V1-M1	nonflush	12 mm	NPN	complementary	1200 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBN12-18GM50-A2-M1	nonflush	12 mm	PNP	complementary	1200 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBN12-18GM50-A2-V1-M1	nonflush	12 mm	PNP	complementary	1200 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBN12-18GM50-E0-M	nonflush	12 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	
NBN12-18GM50-E0-M1	nonflush	12 mm	NPN	Normally-open (NO)	1200 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBN12-18GM50-E0-V1-M	nonflush	12 mm	NPN	Normally-open (NO)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	
NBN12-18GM50-E0-V1-M1	nonflush	12 mm	NPN	Normally-open (NO)	1200 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBN12-18GM50-E1-M	nonflush	12 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	■
NBN12-18GM50-E1-M1	nonflush	12 mm	NPN	Normally-closed (NC)	1200 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBN12-18GM50-E1-V1-M	nonflush	12 mm	NPN	Normally-closed (NC)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	
NBN12-18GM50-E1-V1-M1	nonflush	12 mm	NPN	Normally-closed (NC)	1200 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBN12-18GM50-E2-M	nonflush	12 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	
NBN12-18GM50-E2-M1	nonflush	12 mm	PNP	Normally-open (NO)	1200 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■
NBN12-18GM50-E2-V1-M	nonflush	12 mm	PNP	Normally-open (NO)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	
NBN12-18GM50-E2-V1-M1	nonflush	12 mm	PNP	Normally-open (NO)	1200 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBN12-18GM50-E3-M	nonflush	12 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	Fixed cable	55 mm	18 mm	■	■	■
NBN12-18GM50-E3-M1	nonflush	12 mm	PNP	Normally-closed (NC)	1200 Hz	7 V	30 V	Fixed cable	50 mm	18 mm			■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	Diameter D	CCC	EAC	UL
NBN12-18GM50-E3-V1-M	nonflush	12 mm	PNP	Normally-closed (NC)	1500 Hz	5 V	60 V	M12 connector plug	65 mm	18 mm	■	■	■
NBN12-18GM50-E3-V1-M1	nonflush	12 mm	PNP	Normally-closed (NC)	1200 Hz	7 V	30 V	M12 connector plug	65 mm	18 mm			■
NBN12-18GM50-EI-M1	nonflush	12 mm	Digital current output		1000 Hz	9 V	30 V	Fixed cable	50 mm	18 mm			■
NBN12-18GM50-EI-V1-M1	nonflush	12 mm	Digital current output		1000 Hz	9 V	30 V	M12 connector plug	65 mm	18 mm			■
NBB15-30GM35-A0-M1	flush	15 mm	NPN	complementary	500 Hz	7 V	30 V	Fixed cable	35 mm	30 mm			■
NBB15-30GM50-A0-M1	flush	15 mm	NPN	complementary	500 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBB15-30GM50-A0-V1-M1	flush	15 mm	NPN	complementary	500 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBB15-30GM50-A2-M1	flush	15 mm	PNP	complementary	500 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBB15-30GM50-A2-V1-M1	flush	15 mm	PNP	complementary	500 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBB15-30GM50-E0-M	flush	15 mm	NPN	Normally-open (NO)	600 Hz	5 V	60 V	Fixed cable	61 mm	30 mm	■	■	■
NBB15-30GM50-E0-M1	flush	15 mm	NPN	Normally-open (NO)	500 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBB15-30GM50-E0-V1-M	flush	15 mm	NPN	Normally-open (NO)	600 Hz	5 V	60 V	M12 connector plug	66 mm	30 mm	■	■	■
NBB15-30GM50-E0-V1-M1	flush	15 mm	NPN	Normally-open (NO)	500 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBB15-30GM50-E1-M	flush	15 mm	NPN	Normally-closed (NC)	600 Hz	5 V	60 V	Fixed cable	61 mm	30 mm	■	■	■
NBB15-30GM50-E1-M1	flush	15 mm	NPN	Normally-closed (NC)	500 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBB15-30GM50-E1-V1-M	flush	15 mm	NPN	Normally-closed (NC)	600 Hz	5 V	60 V	M12 connector plug	66 mm	30 mm	■	■	■
NBB15-30GM50-E1-V1-M1	flush	15 mm	NPN	Normally-closed (NC)	500 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBB15-30GM50-E2-M	flush	15 mm	PNP	Normally-open (NO)	600 Hz	5 V	60 V	Fixed cable	61 mm	30 mm	■	■	■
NBB15-30GM50-E2-M1	flush	15 mm	PNP	Normally-open (NO)	500 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBB15-30GM50-E2-V1-M	flush	15 mm	PNP	Normally-open (NO)	600 Hz	5 V	60 V	M12 connector plug	66 mm	30 mm	■	■	■
NBB15-30GM50-E2-V1-M1	flush	15 mm	PNP	Normally-open (NO)	500 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBB15-30GM50-E3-M	flush	15 mm	PNP	Normally-closed (NC)	600 Hz	5 V	60 V	Fixed cable	61 mm	30 mm	■	■	■
NBB15-30GM50-E3-M1	flush	15 mm	PNP	Normally-closed (NC)	500 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBB15-30GM50-E3-V1-M	flush	15 mm	PNP	Normally-closed (NC)	600 Hz	5 V	60 V	M12 connector plug	66 mm	30 mm	■	■	■
NBB15-30GM50-E3-V1-M1	flush	15 mm	PNP	Normally-closed (NC)	500 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBB15-30GM50-EI-M1	flush	15 mm	Digital current output		700 Hz	9 V	30 V	Fixed cable	50 mm	30 mm			■
NBB15-30GM50-EI-V1-M1	flush	15 mm	Digital current output		700 Hz	9 V	30 V	M12 connector plug	65 mm	30 mm			■
NBN15-30GM50-A2-V1-M1	nonflush	15 mm	PNP	complementary	450 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBN20-30GM50-EI-M1	nonflush	20 mm	Digital current output		1000 Hz	9 V	30 V	Fixed cable	50 mm	30 mm			■
NBN20-30GM50-EI-V1-M1	nonflush	20 mm	Digital current output		1000 Hz	9 V	30 V	M12 connector plug	65 mm	30 mm			■
NBN25-30GK50-E0-M	nonflush	25 mm	NPN	Normally-open (NO)	200 Hz	5 V	60 V	Fixed cable	63 mm	30 mm	■		■
NBN25-30GK50-E1-M	nonflush	25 mm	NPN	Normally-closed (NC)	200 Hz	5 V	60 V	Fixed cable	63 mm	30 mm	■		■
NBN25-30GK50-E2-M	nonflush	25 mm	PNP	Normally-open (NO)	200 Hz	5 V	60 V	Fixed cable	63 mm	30 mm	■		■
NBN25-30GK50-E3-M	nonflush	25 mm	PNP	Normally-closed (NC)	200 Hz	5 V	60 V	Fixed cable	63 mm	30 mm	■		■
NBN25-30GM40-E2-M1	nonflush	25 mm	PNP	Normally-open (NO)	450 Hz	7 V	30 V	Fixed cable	40 mm	30 mm			■
NBN25-30GM50-A0-M1	nonflush	25 mm	NPN	complementary	450 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBN25-30GM50-A0-V1-M1	nonflush	25 mm	NPN	complementary	450 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBN25-30GM50-A2-M1	nonflush	25 mm	PNP	complementary	450 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■
NBN25-30GM50-A2-V1-M1	nonflush	25 mm	PNP	complementary	450 Hz	7 V	30 V	M12 connector plug	66 mm	30 mm			■
NBN25-30GM50-E0-M	nonflush	25 mm	NPN	Normally-open (NO)	200 Hz	5 V	60 V	Fixed cable	61 mm	30 mm	■	■	■
NBN25-30GM50-E0-M1	nonflush	25 mm	NPN	Normally-open (NO)	450 Hz	7 V	30 V	Fixed cable	50 mm	30 mm			■

Highlights

- Maximum mechanical and electrical properties for reliable operation in the harshest outdoor conditions
- Optimized for mobile equipment (E1 type approval for use on public roads)
- Comprehensive portfolio and application-specific adaptations for excellent flexibility in sensor selection
- The highest quality standards (internal testing according to criteria far beyond the normative requirements)

Accessories

BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
EXG-12	Quick-mounting bracket with fixed stop
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

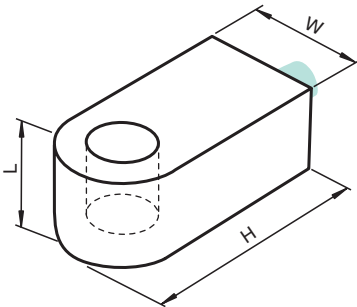
Ring-Shaped Inductive Proximity Sensors

Ring Diameter 21 mm



Common Technical Data	
Detection range	21 mm
Type of output	Three-wire
Type of output	PNP
Switching element function	Normally-open (NO)
Type of voltage	DC
Switching frequency	1000 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Cable material	PVC
Housing length L	20 mm
Housing width W	45 mm
Housing height H	80 mm
UL	■

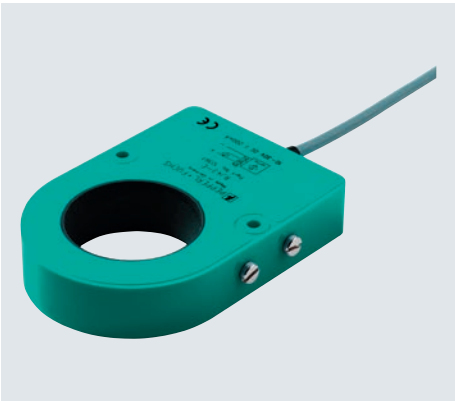
Model Number	Connection Type	Cable Length
RJ21-E2	Fixed cable	2000 mm
RJ21-E2-0,1M-V1	Fixed cable with M12 plug	100 mm



Accessories	
V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Ring-Shaped Inductive Proximity Sensors

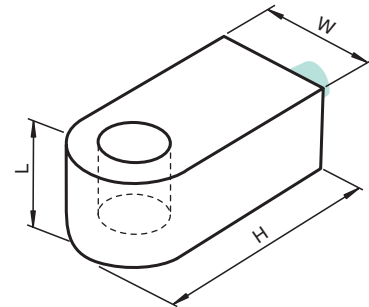
Ring Diameter 43 mm



Common Technical Data	
Detection range	43 mm
Type of output	Three-wire
Type of output	PNP
Switching element function	Normally-open (NO)
Type of voltage	DC
Switching frequency	500 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	Fixed cable
Cable length	2000 mm
Cable material	PVC
Housing length L	20 mm
Housing width W	70 mm
Housing height H	100 mm
UL	■

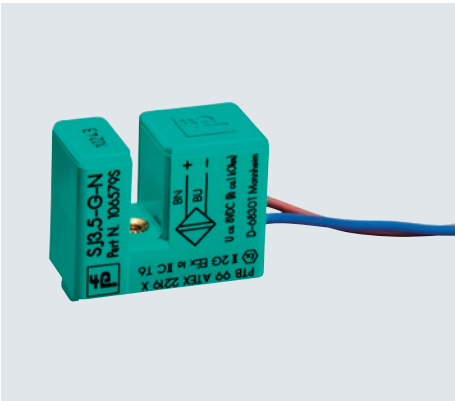
Model Number

RJ43-E2



Slotted Inductive Proximity Sensors

Slot Width 3.5 mm

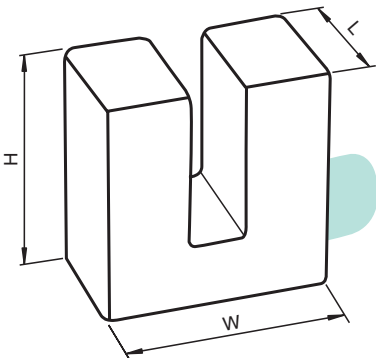


Common Technical Data

Detection range	3.5 mm
Type of output	Three-wire
Type of output	PNP
Type of voltage	DC
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing width W	10 mm
Housing height H	15 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L
SB3,5-A2	complementary	3000 Hz	Fixed cable	500 mm	PVC	19 mm
SB3,5-A2-0,5M-V31	complementary	3000 Hz	Fixed cable with M8 plug	500 mm	PVC	19 mm
SB3,5-E2	Normally-open (NO)	3000 Hz	Stranded wires	500 mm		19.5 mm
SB3,5-E2-BU	Normally-open (NO)	3000 Hz	Stranded wires	500 mm		19.5 mm
SB3,5-G-E2	Normally-open (NO)	2000 Hz	Stranded wires	135 mm	PVC	19.5 mm
SB3,5-G-E2-2M	Normally-open (NO)	2000 Hz	Fixed cable	2000 mm	PVC	19.5 mm

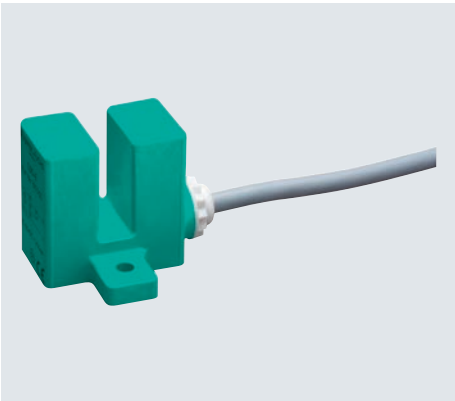


Accessories

V31-GM-2M-PUR	Single-ended female cordset, M8, straight, A-coded, 4-pin, PUR cable, gray
V31-WM-2M-PUR	Single-ended female cordset, M8, angled, A-coded, 4-pin, PUR cable, gray

Slotted Inductive Proximity Sensors

Slot Width 10 mm

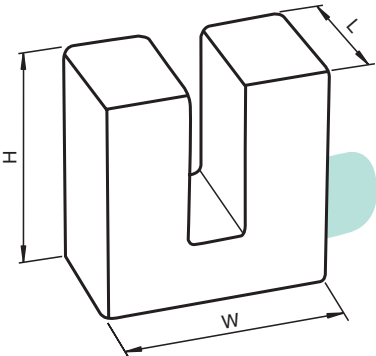


Common Technical Data	
Detection range	10 mm
Type of output	Three-wire
Switching element function	Normally-open (NO)
Type of voltage	DC
Switching frequency	1000 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	Fixed cable
Cable length	2000 mm
Cable material	PVC
Housing length L	44 mm
Housing width W	55 mm
Housing height H	45 mm
UL	■

Model Number

SJ10-E	NPN
SJ10-E2	PNP

Type of Output



Slotted Inductive Proximity Sensors

Slot Width 15 mm

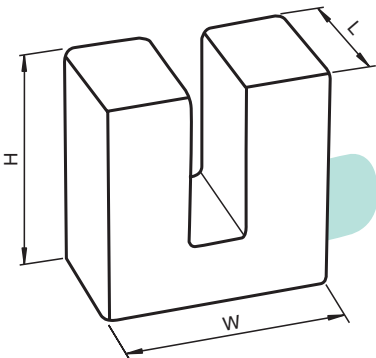


Common Technical Data

Detection range	15 mm
Housing length L	48 mm
Housing width W	30 mm
Housing height H	60 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Cable Length	Cable Material	CCC
SJ15-WS	Two-wire	Normally-open (NO)	AC	25 Hz	20 V	253 V	Fixed cable	2000 mm	PVC	■
SJ15-A2	PNP	complementary	DC	500 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
SJ15-A2-V1	PNP	complementary	DC	500 Hz	10 V	30 V	M12 connector plug			
SJ15-E	NPN	Normally-open (NO)	DC	500 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
SJ15-E2	PNP	Normally-open (NO)	DC	500 Hz	10 V	30 V	Fixed cable	2000 mm	PVC	
SJ15-E2-4M	PNP	Normally-open (NO)	DC	500 Hz	10 V	30 V	Fixed cable	4000 mm	PVC	

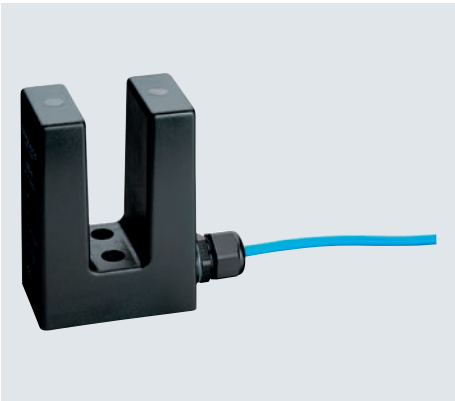


Accessories

V1-G-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 4-pin, PUR cable, gray
V1-W-2M-PUR	Single-ended female cordset, M12, angled A-coded, 4-pin, PUR cable, gray

Slotted Inductive Proximity Sensors

Slot Width 30 mm

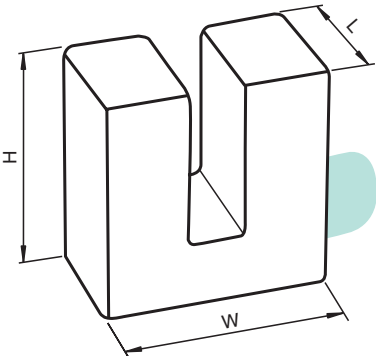


Common Technical Data	
Detection range	30 mm
Type of output	Four-wire
Switching element function	complementary
Type of voltage	DC
Switching frequency	150 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	Fixed cable
Cable length	2000 mm
Cable material	PVC
Housing length L	84 mm
Housing width W	51 mm
Housing height H	110 mm
UL	■

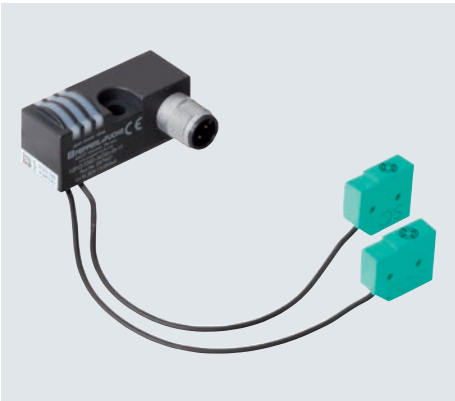
Model Number

SJ30-A	NPN
SJ30-A2	PNP

Type of Output



Sensors for Power Clamps



Common Technical Data	
Housing width W	18 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Type of Voltage	Switching Frequency	UB (Min)	UB (Max)	Connection Type	Length L	Height H
NBN2-F581-100S16-E8-V1	nonflush	2 mm	PNP	Normally-open (NO)	DC	100 Hz	10 V	30 V	M12 connector plug	47 mm	18 mm
NBN2-F581-100S6-E10-V1	nonflush	2 mm	NPN	Normally-open (NO)	DC	25 Hz	10 V	30 V	M12 connector plug	47 mm	18 mm
NBN2-F581-140S6-E8-V1	nonflush	2 mm	PNP	Normally-open (NO)	DC	25 Hz	10 V	30 V	M12 connector plug	47 mm	18 mm
NBN2-F581-270S15-E8-V1	nonflush	2 mm	PNP	Normally-open (NO)	DC	100 Hz	10 V	30 V	M12 connector plug	28 mm	18 mm
NBN2-F581-60/180S6-E8-V1	nonflush	2 mm	PNP	Normally-open (NO)	DC	25 Hz	10 V	30 V	M12 connector plug	47 mm	18 mm
NBN2-F58S-100S3-E8-V1	nonflush	2 mm	PNP	Normally-open (NO)	DC	100 Hz	10 V	30 V	M12 connector plug	34 mm	13.8 mm
NBN2-F58xxA3-100S18	nonflush	2 mm								47 mm	8 mm
NBxx-F58D3x3-E8-V1			PNP	Normally-open (NO)	DC	100 Hz	10 V	30 V	M12 connector plug	46.5 mm	18.5 mm

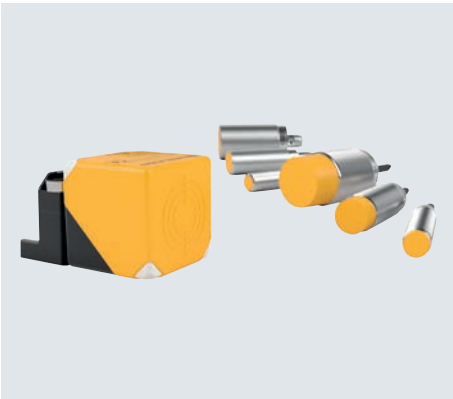
Highlights

- Completely halogen- and silicone-free
- Use in constant and alternating field welding systems

Accessories	
V1-G-OR2M-POC	Single-ended female cordset, M12, straight A-coded, 4-pin, POC cable, welding-bead resistant, orange, suitable for robots, torsion-proof, oil-resistant, cross-linked molecules

Safety Sensors Approved According to the Machinery Directive

Safety Sensors with OSSD Output



Common Technical Data	
Special features	Safety sensor
Type of output	Four-wire
Type of output	PNP
Switching element function	Normally-open (NO)
Type of voltage	DC
Operating voltage (min)	18 V
Operating voltage (max)	30 V
SIL	2
Performance Level PL	PL d
EAC	■
TÜV	■
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	Width W	Height H	Diameter D	e1
NSB15-L2M-2E2-V1-S2D2	flush	15 mm	10 Hz	M12 connector plug			67 mm	40 mm	40 mm		
NSN20-L2M-2E2-V1-S2D2	nonflush	20 mm	10 Hz	M12 connector plug			67 mm	40 mm	40 mm		
NSB2-12GH45-2E2-V1-M1-S2D2	flush	2 mm	30 Hz	M12 connector plug			65 mm			12 mm	■
NSB2-12GH45-2E2-V1-S2D2	flush	2 mm	30 Hz	M12 connector plug			65 mm			12 mm	
NSB2-12GM45-2E2-V1-M1-S2D2	flush	2 mm	30 Hz	M12 connector plug			65 mm			12 mm	■
NSB2-12GM45-2E2-V1-S2D2	flush	2 mm	30 Hz	M12 connector plug			65 mm			12 mm	
NSB2-12GH50-2E2-PUR-S2D2	flush	2 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	
NSB2-12GH50-2E2-M1-S2D2	flush	2 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	■
NSB2-12GM50-2E2-M1-S2D2	flush	2 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	■
NSB2-12GM50-2E2-PUR-S2D2	flush	2 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	
NSB2-12GH50-2E2-S2D2	flush	2 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			12 mm	
NSB2-12GM50-2E2-S2D2	flush	2 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			12 mm	
NSN4-12GH45-2E2-V1-S2D2	nonflush	4 mm	30 Hz	M12 connector plug			65 mm			12 mm	
NSN4-12GH45-2E2-V1-M1-S2D2	nonflush	4 mm	30 Hz	M12 connector plug			65 mm			12 mm	■
NSN4-12GM45-2E2-V1-S2D2	nonflush	4 mm	30 Hz	M12 connector plug			65 mm			12 mm	
NSN4-12GM45-2E2-V1-M1-S2D2	nonflush	4 mm	30 Hz	M12 connector plug			65 mm			12 mm	■
NSN4-12GH50-2E2-M1-S2D2	nonflush	4 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	■
NSN4-12GH50-2E2-PUR-S2D2	nonflush	4 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	
NSN4-12GH50-2E2-S2D2	nonflush	4 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			12 mm	
NSN4-12GM50-2E2-PUR-S2D2	nonflush	4 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	
NSN4-12GM50-2E2-S2D2	nonflush	4 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			12 mm	
NSN4-12GM50-2E2-M1-S2D2	nonflush	4 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			12 mm	■
NSB5-18GH45-2E2-V1-S2D2	flush	5 mm	30 Hz	M12 connector plug			65 mm			18 mm	
NSB5-18GH45-2E2-V1-M1-S2D2	flush	5 mm	30 Hz	M12 connector plug			65 mm			18 mm	■
NSB5-18GM45-2E2-V1-S2D2	flush	5 mm	30 Hz	M12 connector plug			65 mm			18 mm	
NSB5-18GM45-2E2-V1-M1-S2D2	flush	5 mm	30 Hz	M12 connector plug			65 mm			18 mm	■
NSB5-18GH50-2E2-M1-S2D2	flush	5 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	■
NSB5-18GH50-2E2-PUR-S2D2	flush	5 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	
NSB5-18GH50-2E2-S2D2	flush	5 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			18 mm	
NSB5-18GM50-2E2-PUR-S2D2	flush	5 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	
NSB5-18GM50-2E2-S2D2	flush	5 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			18 mm	
NSB5-18GM50-2E2-M1-S2D2	flush	5 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	■
NSN8-18GH45-2E2-V1-S2D2	nonflush	8 mm	30 Hz	M12 connector plug			65 mm			18 mm	
NSN8-18GH45-2E2-V1-M1-S2D2	nonflush	8 mm	30 Hz	M12 connector plug			65 mm			18 mm	■
NSN8-18GM45-2E2-V1-S2D2	nonflush	8 mm	30 Hz	M12 connector plug			65 mm			18 mm	
NSN8-18GM45-2E2-V1-M1-S2D2	nonflush	8 mm	30 Hz	M12 connector plug			65 mm			18 mm	■
NSN8-18GH50-2E2-M1-S2D2	nonflush	8 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	■
NSN8-18GH50-2E2-PUR-S2D2	nonflush	8 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	
NSN8-18GH50-2E2-S2D2	nonflush	8 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			18 mm	
NSN8-18GM50-2E2-S2D2	nonflush	8 mm	30 Hz	Fixed cable	2000 mm	PVC	60 mm			18 mm	
NSN8-18GM50-2E2-PUR-S2D2	nonflush	8 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	

Model Number	Mechanical Installation Conditions	Detection Range	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	Width W	Height H	Diameter D	e1
NSN8-18GM50-2E2-M1-S2D2	nonflush	8 mm	30 Hz	Fixed cable	2000 mm	PUR	60 mm			18 mm	■
NSB10-30GH50-2E2-PUR-S2D2	flush	10 mm	30 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	
NSB10-30GH50-2E2-S2D2	flush	10 mm	30 Hz	Fixed cable	2000 mm	PVC	65 mm			30 mm	
NSB10-30GH50-2E2-V1-S2D2	flush	10 mm	30 Hz	M12 connector plug			70 mm			30 mm	
NSB10-30GH50-2E2-M1-S2D2	flush	10 mm	30 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	■
NSB10-30GH50-2E2-V1-M1-S2D2	flush	10 mm	30 Hz	M12 connector plug			70 mm			30 mm	■
NSB10-30GM50-2E2-PUR-S2D2	flush	10 mm	30 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	
NSB10-30GM50-2E2-S2D2	flush	10 mm	30 Hz	Fixed cable	2000 mm	PVC	65 mm			30 mm	
NSB10-30GM50-2E2-V1-S2D2	flush	10 mm	30 Hz	M12 connector plug			70 mm			30 mm	
NSB10-30GM50-2E2-M1-S2D2	flush	10 mm	30 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	■
NSB10-30GM50-2E2-V1-M1-S2D2	flush	10 mm	30 Hz	M12 connector plug			70 mm			30 mm	■
NSN15-30GH50-2E2-V1-S2D2	nonflush	15 mm	20 Hz	M12 connector plug			70 mm			30 mm	
NSN15-30GH50-2E2-M1-S2D2	nonflush	15 mm	20 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	■
NSN15-30GH50-2E2-PUR-S2D2	nonflush	15 mm	20 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	
NSN15-30GH50-2E2-S2D2	nonflush	15 mm	20 Hz	Fixed cable	2000 mm	PVC	65 mm			30 mm	
NSN15-30GH50-2E2-V1-M1-S2D2	nonflush	15 mm	20 Hz	M12 connector plug			70 mm			30 mm	■
NSN15-30GM50-2E2-PUR-S2D2	nonflush	15 mm	20 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	
NSN15-30GM50-2E2-V1-S2D2	nonflush	15 mm	20 Hz	M12 connector plug			70 mm			30 mm	
NSN15-30GM50-2E2-S2D2	nonflush	15 mm	20 Hz	Fixed cable	2000 mm	PVC	65 mm			30 mm	
NSN15-30GM50-2E2-M1-S2D2	nonflush	15 mm	20 Hz	Fixed cable	2000 mm	PUR	65 mm			30 mm	■
NSN15-30GM50-2E2-V1-M1-S2D2	nonflush	15 mm	20 Hz	M12 connector plug			70 mm			30 mm	■

Highlights

- OSSD interface for direct connection to the safety control or I/O module
- Use of standard metal actuators with no dead band in front of the sensor—no adjustment required
- Ideal for demanding applications with extended temperature range and E1 approval
- High safety values for reduced inspection intervals and easier integration into the safety loop

Brief Description

Intelligent Technology, Simple Handling

The inductive safety sensors from Pepperl+Fuchs have been approved according to functional safety SIL 2 and Machinery Directive PL d. With redundant implementation, SIL 3/PL e can even be achieved. High safety characteristics enable easy integration into the safety loop and considerably extend the operating intervals. Thanks to the intelligent electronics, the sensors do not have a dead band. This means that no minimum distance needs to be maintained between the sensor and the target. Simple standard metal targets can be used for detection; no special coding is required. A standardized OSSD interface and comprehensive safety documentation ensure quick and easy integration of the new safety sensors.

Accessories

BF 12	Mounting adapter, 12 mm
BF 18	Mounting adapter, 18 mm
BF 30	Mounting adapter, 30 mm
MH 02-L	Mounting aid
MHW 01	Modular mounting bracket
V1-G-S-BK2M-PUR-A-V1-G	Double-ended cordset, M12 socket, gray, straight, to M12 plug, gray, straight, A-coded, 4-pin, PUR cable, weld-splatter resistant, black, UL-approved, suitable for drag chains, torsion-proof
V1-W-S-BK2M-PUR-A-V1-G	Double-ended cordset, M12 socket, yellow, angled, straight, A-coded, 4-pin, PUR cable, weld-splatter resistant, black, UL-approved, suitable for drag chains, torsion-proof

Safety Sensors Approved According to the Machinery Directive

Safety Sensors with NAMUR Output and Ex Approval



Common Technical Data	
Special features	Safety sensor
Type of output	2-wire
Type of output	NAMUR with safety function
Type of voltage	DC
Rated voltage	8.2 V
SIL	3
UL	■
ATEX	■
IECEx	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Switching Element Function	Switching Frequency	Connection Type	Cable Length	Cable Material	Length L	Width W	Height H	Diameter D	EAC
NJ2-11-SN	flush	2 mm	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	silicone	31 mm			11 mm	
NJ2-11-SN-G	flush	2 mm	Normally-closed (NC)	3000 Hz	Fixed cable	2000 mm	silicone	30 mm			14 mm	■
NJ2-11-SN-G-5M	flush	2 mm	Normally-closed (NC)	3000 Hz	Fixed cable	5000 mm	silicone	30 mm			14 mm	■
NJ2-11-SN-G-10M	flush	2 mm	Normally-closed (NC)	3000 Hz	Fixed cable	10,000 mm	silicone	30 mm			14 mm	■
NJ2-12GK-SN	flush	2 mm	Normally-closed (NC)	2000 Hz	Fixed cable	2000 mm	silicone	34 mm			12 mm	■
NJ2-12GK-SN-0,3M	flush	2 mm	Normally-closed (NC)	2000 Hz	Fixed cable	300 mm	silicone	34 mm			12 mm	
NJ2-12GK-SN-10M	flush	2 mm	Normally-closed (NC)	2000 Hz	Fixed cable	10,000 mm	silicone	34 mm			12 mm	■
NJ3-18GK-S1N	flush	3 mm	Normally-open (NO)	200 Hz	Fixed cable	2000 mm	silicone	39 mm			18 mm	■
NJ3-18GK-S1N-5M	flush	3 mm	Normally-open (NO)	200 Hz	Fixed cable	5000 mm	silicone	39 mm			18 mm	■
NJ3-18GK-S1N-10M	flush	3 mm	Normally-open (NO)	200 Hz	Fixed cable	10,000 mm	silicone	39 mm			18 mm	■
NJ4-12GK-SN	nonflush	4 mm	Normally-closed (NC)	1500 Hz	Fixed cable	2000 mm	silicone	34 mm			12 mm	■
NJ4-12GK-SN-15M	nonflush	4 mm	Normally-closed (NC)	1500 Hz	Fixed cable	15,000 mm	silicone	34 mm			12 mm	■
NJ5-18GK-SN	flush	5 mm	Normally-closed (NC)	500 Hz	Fixed cable	2000 mm	silicone	39 mm			18 mm	■
NJ5-18GK-SN-5M	flush	5 mm	Normally-closed (NC)	500 Hz	Fixed cable	5000 mm	silicone	39 mm			18 mm	■
NJ5-18GK-SN-10M	flush	5 mm	Normally-closed (NC)	500 Hz	Fixed cable	10,000 mm	silicone	39 mm			18 mm	■
NJ5-18GK-SN-15M	flush	5 mm	Normally-closed (NC)	500 Hz	Fixed cable	15,000 mm	silicone	39 mm			18 mm	■
NJ5-30GK-S1N	flush	5 mm	Normally-open (NO)	150 Hz	Fixed cable	2000 mm	silicone	40 mm			30 mm	■
NJ5-30GK-S1N-5M	flush	5 mm	Normally-open (NO)	150 Hz	Fixed cable	5000 mm	silicone	40 mm			30 mm	■
NJ5-30GK-S1N-10M	flush	5 mm	Normally-open (NO)	150 Hz	Fixed cable	10,000 mm	silicone	40 mm			30 mm	■
NJ5-30GK-S1N-15M	flush	5 mm	Normally-open (NO)	150 Hz	Fixed cable	15,000 mm	silicone	40 mm			30 mm	■
NJ6-22-SN	flush	6 mm	Normally-closed (NC)	2000 Hz	Fixed cable	2000 mm	silicone	35 mm			22 mm	
NJ6-22-SN-10M	flush	6 mm	Normally-closed (NC)	2000 Hz	Fixed cable	10,000 mm	silicone	35 mm			22 mm	
NJ6-22-SN-G	flush	6 mm	Normally-closed (NC)	2000 Hz	Fixed cable	2000 mm	silicone	35 mm			28.3 mm	
NJ6-22-SN-G-3M	flush	6 mm	Normally-closed (NC)	2000 Hz	Fixed cable	3000 mm	silicone	35 mm			28.3 mm	
NJ6-22-SN-G-10M	flush	6 mm	Normally-closed (NC)	2000 Hz	Fixed cable	10,000 mm	silicone	35 mm			28.3 mm	
NJ8-18GK-SN	nonflush	8 mm	Normally-closed (NC)	200 Hz	Fixed cable	2000 mm	silicone	39 mm			18 mm	■
NJ8-18GK-SN-10M	nonflush	8 mm	Normally-closed (NC)	200 Hz	Fixed cable	10,000 mm	silicone	39 mm			18 mm	■
NJ10-30GK-SN	flush	10 mm	Normally-closed (NC)	300 Hz	Fixed cable	2000 mm	silicone	40 mm			30 mm	■
NJ10-30GK-SN-10M	flush	10 mm	Normally-closed (NC)	300 Hz	Fixed cable	10,000 mm	silicone	40 mm			30 mm	■
NJ10-30GK-SN-15M	flush	10 mm	Normally-closed (NC)	300 Hz	Fixed cable	15,000 mm	silicone	40 mm			30 mm	■
NJ10-30GK-SN-25M	flush	10 mm	Normally-closed (NC)	300 Hz	Fixed cable	25,000 mm	silicone	40 mm			30 mm	■
NJ10-30GK-SN-40M	flush	10 mm	Normally-closed (NC)	300 Hz	Fixed cable	40,000 mm	silicone	40 mm			30 mm	■
NJ15-30GK-SN-5M	nonflush	15 mm	Normally-closed (NC)	100 Hz	Fixed cable	5000 mm	silicone	40 mm			30 mm	■
NJ15-30GK-SN-15M	nonflush	15 mm	Normally-closed (NC)	100 Hz	Fixed cable	15,000 mm	silicone	40 mm			30 mm	■
NJ15-30GK-SN-20M	nonflush	15 mm	Normally-closed (NC)	100 Hz	Fixed cable	20,000 mm	silicone	40 mm			30 mm	■
NJ15-30GK-SN	nonflush	15 mm	Normally-closed (NC)	100 Hz	Fixed cable	2000 mm	silicone	40 mm			30 mm	■
NJ40-FP-SN-P1	nonflush	40 mm	Normally-closed (NC)	100 Hz	Terminal compartment			80 mm	80 mm	40 mm		■
SJ2-SN		2 mm	Normally-closed (NC)	5000 Hz	Stranded wires	500 mm	PVC	8 mm	15 mm	13 mm		■
SJ3.5-S1N		3.5 mm	Normally-open (NO)	2500 Hz	Stranded wires	500 mm	PVC	19.5 mm	10 mm	15 mm		■
SJ3.5-SN		3.5 mm	Normally-closed (NC)	3000 Hz	Stranded wires	500 mm	PVC	19.5 mm	10 mm	15 mm		■

Inductive Cubic Proximity Sensors in Ex Version

Cubic Sensors for the Hazardous Area



Common Technical Data	
Type of voltage	DC
ATEX	■
IECEX	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	SIL	Connection Type	Length L	Width W	Height H	EAC	UL
NBB2-V3-E2-3G-3D	flush	2 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V		Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NBB2-V3-Z4L-3G-3D	flush	2 mm	Two-wire	Normally-open (NO)	700 Hz	3.7 V	30 V		Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NCB2-V3-N0	flush	2 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V	2	Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NCB2-V3-N0-2M	flush	2 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NBB3-V3-Z4-3G-3D	flush	3 mm	Two-wire	Normally-open (NO)	2000 Hz	5 V	60 V		Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NBN4-V3-E2-3G-3D	nonflush	4 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V		Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NCN4-V3-N0	nonflush	4 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V	2	Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NCN4-V3-N0-V5	nonflush	4 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Faston connector plug	16 mm	27.8 mm	10.2 mm	■	■
NBB15-U1K-N0	flush	15 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBB15-U2K-N0	flush	15 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBB15-U4K-N0	flush	15 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBB15-U4K-N0-V1	flush	15 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V		M12 connector plug	118 mm	40 mm	40 mm	■	■
NBB20-U1K-N0	flush	20 mm	NAMUR	Normally-closed (NC)	250 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBB20-U4K-N0	flush	20 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBB20-U4K-N0-V1	flush	20 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V		M12 connector plug	118 mm	40 mm	40 mm	■	■
NBB20-L2-A2-V1-3G-3D	flush	20 mm	PNP	complementary	440 Hz	10 V	30 V		M12 connector plug	67 mm	40 mm	40 mm	■	■
NBB20-L2-E2-V1-3G-3D	flush	20 mm	PNP	Normally-open (NO)	440 Hz	10 V	30 V		M12 connector plug	67 mm	40 mm	40 mm	■	■
NCB20-L2-N0-V1	flush	20 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V	2	M12 connector plug	67 mm	40 mm	40 mm	■	■
NBN30-U1K-N0	nonflush	30 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBN30-U4K-N0	nonflush	30 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBN30-U4K-N0-V1	nonflush	30 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		M12 connector plug	118 mm	40 mm	40 mm	■	■
NBN40-U1K-N0	nonflush	40 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBN40-U1K-N0-V1	nonflush	40 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		M12 connector plug	118 mm	40 mm	40 mm	■	■
NBN40-U1LK-N0	nonflush	40 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		Terminal compartment	128 mm	55 mm	55 mm	■	■
NBN40-U1LK-N0-V1	nonflush	40 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		M12 connector plug	128 mm	55 mm	55 mm	■	■
NBN40-U2K-N0	nonflush	40 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBN40-U4K-N0	nonflush	40 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		Terminal compartment	118 mm	40 mm	40 mm	■	■
NBN40-U4K-N0-V1	nonflush	40 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		M12 connector plug	118 mm	40 mm	40 mm	■	■
NBN40-U4LK-N0	nonflush	40 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		Terminal compartment	128 mm	55 mm	55 mm	■	■
NBN40-L2-A2-V1-3G-3D	nonflush	40 mm	PNP	complementary	180 Hz	10 V	30 V		M12 connector plug	67 mm	40 mm	40 mm	■	■
NBN40-U4LK-N0-V1	nonflush	40 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		M12 connector plug	128 mm	55 mm	55 mm	■	■
NBN40-L2-E2-V1-3G-3D	nonflush	40 mm	PNP	Normally-open (NO)	180 Hz	10 V	30 V		M12 connector plug	67 mm	40 mm	40 mm	■	■
NCB40-FP-N0-P1	flush	40 mm	NAMUR	Normally-closed (NC)	80 Hz	8.2 V	8.2 V		Terminal compartment	83 mm	83 mm	40 mm	■	■
NCB40-FP-N0-P1-V1	flush	40 mm	NAMUR	Normally-closed (NC)	80 Hz	8.2 V	8.2 V		M12 connector plug	83 mm	83 mm	40 mm	■	■
NCB40-FP-N0-P4	flush	40 mm	NAMUR	Normally-closed (NC)	80 Hz	8.2 V	8.2 V		Terminal compartment	83 mm	83 mm	40 mm	■	■
NCN40-L2-N0-V1	nonflush	40 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V	2	M12 connector plug	67 mm	40 mm	40 mm	■	■
NCN50-FP-N0-P4-V1	nonflush	50 mm	NAMUR	Normally-closed (NC)	80 Hz	8.2 V	8.2 V		M12 connector plug	80 mm	80 mm	40 mm	■	■
NJ1,5-F-N	nonflush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V		Stranded wires	8 mm	8 mm	10 mm	■	■
NJ2-V3-N	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V	2	Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NJ2-V3-N-V5	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V	2	Faston connector plug	16 mm	27.8 mm	10.2 mm	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	SIL	Connection Type	Length L	Width W	Height H	EAC	UL
NJ2-V3-N-0,075M	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V	2	Fixed cable	16 mm	27.8 mm	10.2 mm	■	■
NJ4-F-N	nonflush	4 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	53.4 mm	40 mm	17 mm		
NJ6-F-N	flush	6 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V		Fixed cable	12 mm	45 mm	30 mm	■	
NJ6-F-N-10M	flush	6 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V		Fixed cable	20 mm	45 mm	30 mm		
NJ6-F-N-5M	flush	6 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V		Fixed cable	12 mm	45 mm	30 mm	■	
NJ10-F-N	nonflush	10 mm	NAMUR	Normally-closed (NC)	3000 Hz	8.2 V	8.2 V		Fixed cable	20 mm	45 mm	30 mm	■	
NJ15-M1K-N	nonflush	15 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		Terminal compartment	91 mm	30 mm	30 mm	■	
NJ15-M1K-N-V1	nonflush	15 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		M12 connector plug	91 mm	30 mm	30 mm	■	
NJ50-FP-N-P1	nonflush	50 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		Terminal compartment	80 mm	80 mm	40 mm	■	
NJ50-FP-N-P4	nonflush	50 mm	NAMUR	Normally-closed (NC)	100 Hz	8.2 V	8.2 V		Terminal compartment	80 mm	80 mm	40 mm	■	

Highlights

- Rectangular sensors with operating distances from 1.5 mm to 50 mm
- Versions up to SIL 2 available

Brief Description

As a leader in explosion protection technology, Pepperl+Fuchs is known for its extensive experience and in-depth application expertise in this field. Our comprehensive portfolio of ideal components is a testament to this. In addition to our intrinsically safe NAMUR sensors and interface modules, we also offer numerous proximity sensors with the appropriate certification.

Accessories

KCD2-E2L	Sensor output interface terminal with lead breakage detection
MH 02-L	Mounting aid
MH 04-2057B	Mounting aid for VariKont and +U1+ sensors
MH 04-2681F	Mounting aid for VariKont, +U1+, and +U9* sensors
MHW 01	Modular mounting bracket
V1-G-N-2M-PUR	Single-ended female cordset, M12, straight, A-coded, 2-pin, PUR cable, blue, NAMUR
V1-W-2M-PUR	Single-ended female cordset, M12, angled, A-coded, 2-pin, PUR cable, blue, NAMUR

Inductive Cylindrical Proximity Sensors in Ex Version

Cylindrical Sensors for the Hazardous Area



Common Technical Data	
Type of voltage	DC
ATEX	■
IECEx	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	SIL	Connection Type	Length L	Diameter D	EAC	UL
NCB1,5-6,5M25-N0	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	25 mm	6.5 mm	■	■
NCB1,5-6,5M25-N0-5M	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	25 mm	6.5 mm	■	■
NCB1,5-6,5M25-N0-10M	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	25 mm	6.5 mm	■	■
NCB1,5-6,5M25-N0-V1	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		M12 connector plug	25 mm	6.5 mm	■	■
NCB1,5-8GM25-N0	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	25 mm	8 mm	■	■
NCB1,5-8GM25-N0-5M	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	25 mm	8 mm	■	■
NCB1,5-8GM25-N0-10M	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		Fixed cable	25 mm	8 mm	■	■
NCB1,5-8GM25-N0-V1	flush	1.5 mm	NAMUR	Normally-closed (NC)	2000 Hz	8.2 V	8.2 V		M12 connector plug	48.5 mm	8 mm	■	■
NBB2-12GM60-A2-3G-3D	flush	2 mm	PNP	complementary	1000 Hz	10 V	30 V		Fixed cable	60 mm	12 mm		■
NBB2-12GM40-Z0-3G-3D	flush	2 mm	Two-wire	Normally-open (NO)	1000 Hz	5 V	60 V		Fixed cable	40 mm	12 mm		■
NBB2-12GS40-Z4L-3G-3D	flush	2 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V		Fixed cable	40 mm	12 mm		■
NBB2-12GS40-Z4L-V1-3G-3D	flush	2 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V		M12 connector plug	55 mm	12 mm		■
NCB2-12GK35-N0	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V	2	Fixed cable	35 mm	12 mm		■
NCB2-12GM35-N0	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V	2	Fixed cable	35 mm	12 mm	■	■
NCB2-12GM35-N0-5M	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V		Fixed cable	35 mm	12 mm	■	■
NCB2-12GM35-N0-10M	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V		Fixed cable	35 mm	12 mm	■	■
NCB2-12GM35-N0-21M	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V		Fixed cable	35 mm	12 mm	■	■
NCB2-12GM35-N0-V1	flush	2 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V	2	M12 connector plug	34 mm	12 mm	■	■
NCB2-12GM40-E2-3G-3D	flush	2 mm	PNP	Normally-open (NO)	2500 Hz	10 V	30 V		Fixed cable	40 mm	12 mm		■
NCB2-12GM40-E2-3G-3D-5M	flush	2 mm	PNP	Normally-open (NO)	2500 Hz	10 V	30 V		Fixed cable	40 mm	12 mm		■
NCB2-12GM40-Z0-V1-3G-3D	flush	2 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V		M12 connector plug	40 mm	12 mm		■
NBB4-12GM50-E2-3G-3D	flush	4 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V		Fixed cable	50 mm	12 mm		■
NBB4-12GM50-E2-V1-3G-3D	flush	4 mm	PNP	Normally-open (NO)	1000 Hz	10 V	30 V		M12 connector plug	49 mm	12 mm		■
NBN4-12GS40-Z4L-3G-3D	nonflush	4 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V		Fixed cable	40 mm	12 mm		■
NBN4-12GS40-Z4L-V1-3G-3D	nonflush	4 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V		M12 connector plug	55 mm	12 mm		■
NCB4-12GM40-N0	flush	4 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	12 mm	■	■
NCB4-12GM40-N0-5M	flush	4 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V		Fixed cable	40 mm	12 mm	■	■
NCB4-12GM40-N0-10M	flush	4 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V		Fixed cable	40 mm	12 mm	■	■
NCB4-12GM40-N0-V1	flush	4 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V	2	M12 connector plug	40 mm	12 mm	■	■
NCN4-12GK35-N0	nonflush	4 mm	NAMUR	Normally-closed (NC)	800 Hz	8.2 V	8.2 V	2	Fixed cable	35 mm	12 mm		■
NCN4-12GM35-N0	nonflush	4 mm	NAMUR	Normally-closed (NC)	800 Hz	8.2 V	8.2 V	2	Fixed cable	35 mm	12 mm	■	■
NCN4-12GM35-N0-5M	nonflush	4 mm	NAMUR	Normally-closed (NC)	800 Hz	8.2 V	8.2 V		Fixed cable	35 mm	12 mm	■	■
NCN4-12GM35-N0-10M	nonflush	4 mm	NAMUR	Normally-closed (NC)	800 Hz	8.2 V	8.2 V		Fixed cable	35 mm	12 mm	■	■
NCN4-12GM35-N0-V1	nonflush	4 mm	NAMUR	Normally-closed (NC)	800 Hz	8.2 V	8.2 V	2	M12 connector plug	40 mm	12 mm	■	■
NCN4-12GM40-E2-3G-3D	nonflush	4 mm	PNP	Normally-open (NO)	2200 Hz	10 V	30 V		Fixed cable	40 mm	12 mm		■
NCN4-12GM40-E2-V1-3G-3D	nonflush	4 mm	PNP	Normally-open (NO)	2200 Hz	10 V	30 V		M12 connector plug	52 mm	12 mm		■
NCN4-12GM40-Z0-3G-3D	nonflush	4 mm	Two-wire	Normally-open (NO)	800 Hz	5 V	60 V		Fixed cable	40 mm	12 mm		■
NBB5-18GS50-Z4L-3G-3D	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V		Fixed cable	56 mm	18 mm		■
NBB5-18GS50-Z4L-V1-3G-3D	flush	5 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V		M12 connector plug	66 mm	18 mm		■
NCB5-18GK40-N0	flush	5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm		■
NCB5-18GM40-N0	flush	5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■

Model Number	Mechanical Installation Conditions	Detection Range	Type of Output	Switching Element Function	Switching Frequency	UB (Min)	UB (Max)	SIL	Connection Type	Length L	Diameter D	EAC	UL
NCB5-18GM40-N0-5M	flush	5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■
NCB5-18GM40-N0-10M	flush	5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■
NCB5-18GM40-N0-15M	flush	5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■
NCB5-18GM40-N0-V1	flush	5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	M12 connector plug	40 mm	18 mm	■	■
NCB5-18GM40-Z0-3G-3D	flush	5 mm	Two-wire	Normally-open (NO)	350 Hz	5 V	60 V		Fixed cable	40 mm	18 mm		■
NCB5-18GM40-Z0-3G-3D-10M	flush	5 mm	Two-wire	Normally-open (NO)	350 Hz	5 V	60 V		Fixed cable	40 mm	18 mm		■
NCB5-18GM40-Z1-3G-3D	flush	5 mm	Two-wire	Normally-closed (NC)	350 Hz	5 V	60 V		Fixed cable	40 mm	18 mm		■
NCB5-18GM70-N0	flush	5 mm	NAMUR	Normally-closed (NC)	1000 Hz	8.2 V	8.2 V		Fixed cable	70 mm	18 mm		■
NBB8-18GM50-E2-3G-3D	flush	8 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V		Fixed cable	50 mm	18 mm		■
NBB8-18GM50-E2-3G-3D-5M	flush	8 mm	PNP	Normally-open (NO)	500 Hz	10 V	30 V		Fixed cable	50 mm	18 mm		■
NBN8-18GS50-Z4L-3G-3D	nonflush	8 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V		Fixed cable	56 mm	18 mm		■
NBN8-18GS50-Z4L-V1-3G-3D	nonflush	8 mm	Two-wire	Normally-open (NO)	500 Hz	4 V	30 V		M12 connector plug	66 mm	18 mm		■
NCB8-18GM40-N0	flush	8 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■
NCB8-18GM40-N0-5M	flush	8 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V		Fixed cable	40 mm	18 mm	■	■
NCB8-18GM40-N0-10M	flush	8 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V		Fixed cable	40 mm	18 mm	■	■
NCB8-18GM70-N0-20M-V1	flush	8 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V		Fixed cable	70 mm	18 mm		■
NCB8-18GM40-N0-V1	flush	8 mm	NAMUR	Normally-closed (NC)	1500 Hz	8.2 V	8.2 V	2	M12 connector plug	40 mm	18 mm	■	■
NCN8-18GK40-N0	nonflush	8 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V		Fixed cable	40 mm	18 mm		■
NCN8-18GM40-N0	nonflush	8 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■
NCN8-18GM40-N0-5M	nonflush	8 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■
NCN8-18GM40-N0-10M	nonflush	8 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	18 mm	■	■
NCN8-18GM40-N0-V1	nonflush	8 mm	NAMUR	Normally-closed (NC)	300 Hz	8.2 V	8.2 V	2	M12 connector plug	40 mm	18 mm	■	■
NCN8-18GM40-Z0-3G-3D	nonflush	8 mm	Two-wire	Normally-open (NO)	300 Hz	5 V	60 V		Fixed cable	40 mm	18 mm		■
NCN8-18GM50-E2-3G-3D	nonflush	8 mm	PNP	Normally-open (NO)	400 Hz	10 V	60 V		Fixed cable	50 mm	18 mm		
NCN8-18GM50-E2-3G-3D-5M	nonflush	8 mm	PNP	Normally-open (NO)	400 Hz	10 V	60 V		Fixed cable	50 mm	18 mm		
NBB10-30GS50-Z4L-3G-3D	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	4 V	30 V		Fixed cable	61 mm	30 mm		■
NCB10-30GK40-N0	flush	10 mm	NAMUR	Normally-closed (NC)	200 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm		■
NCB10-30GM40-Z0-3G-3D	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V		Fixed cable	40 mm	30 mm		■
NCB10-30GM40-Z0-V1-3G-3D	flush	10 mm	Two-wire	Normally-open (NO)	150 Hz	5 V	60 V		M12 connector plug	40 mm	30 mm		■
NCB10-30GM40-N0	flush	10 mm	NAMUR	Normally-closed (NC)	200 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	30 mm	■	■
NCB10-30GM40-N0-5M	flush	10 mm	NAMUR	Normally-closed (NC)	200 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm	■	■
NCB10-30GM40-N0-10M	flush	10 mm	NAMUR	Normally-closed (NC)	200 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm	■	■
NCB10-30GM40-N0-15M	flush	10 mm	NAMUR	Normally-closed (NC)	200 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm	■	■
NCB10-30GM40-N0-50M	flush	10 mm	NAMUR	Normally-closed (NC)	200 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm		■
NCB10-30GM40-N0-V1	flush	10 mm	NAMUR	Normally-closed (NC)	200 Hz	8.2 V	8.2 V	2	M12 connector plug	55 mm	30 mm	■	■
NCB10-30GM40-Z1-3G-3D	flush	10 mm	Two-wire	Normally-closed (NC)	150 Hz	5 V	60 V		Fixed cable	40 mm	30 mm		■
NBB15-30GM50-E2-3G-3D	flush	15 mm	PNP	Normally-open (NO)	200 Hz	10 V	30 V		Fixed cable	50 mm	30 mm		■
NBN15-30GS50-Z4L-3G-3D	nonflush	15 mm	Two-wire	Normally-open (NO)	700 Hz	4 V	30 V		Fixed cable	61 mm	30 mm		■
NCB15-30GM40-N0	semi-flush	15 mm	NAMUR	Normally-closed (NC)	450 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	30 mm	■	■
NCB15-30GM40-N0-5M	semi-flush	15 mm	NAMUR	Normally-closed (NC)	450 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm	■	■
NCB15-30GM40-N0-10M	semi-flush	15 mm	NAMUR	Normally-closed (NC)	450 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm	■	■
NCB15-30GM40-N0-V1	semi-flush	15 mm	NAMUR	Normally-closed (NC)	450 Hz	8.2 V	8.2 V	2	M12 connector plug	40 mm	30 mm	■	■
NCN15-30GM40-Z0-3G-3D	nonflush	15 mm	Two-wire	Normally-open (NO)	100 Hz	5 V	60 V		Fixed cable	40 mm	30 mm		■
NCN15-30GK40-N0	nonflush	15 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm		■
NCN15-30GM40-N0	nonflush	15 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	30 mm	■	■
NCN15-30GM40-N0-10M	nonflush	15 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V	2	Fixed cable	40 mm	30 mm	■	■
NCN15-30GM40-N0-20M	nonflush	15 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm	■	■
NCN15-30GM40-N0-30M	nonflush	15 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V		Fixed cable	40 mm	30 mm	■	■
NCN15-30GM40-N0-V1	nonflush	15 mm	NAMUR	Normally-closed (NC)	150 Hz	8.2 V	8.2 V	2	M12 connector plug	55 mm	30 mm	■	■
NJ0,8-4,5-N	flush	0.8 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	20 mm	4.5 mm		■
NJ0,8-5GM-N	flush	0.8 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	20 mm	5 mm	■	■
NJ0,8-5GM-N-5M	flush	0.8 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	20 mm	5 mm	■	■
NJ0,8-5GM-N-10M	flush	0.8 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	20 mm	5 mm	■	■
NJ1,5-6,5-N	flush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	22 mm	6.5 mm	■	■
NJ1,5-6,5-N-5M	flush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	22 mm	6.5 mm	■	■
NJ1,5-6,5-N-15M	flush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	22 mm	6.5 mm	■	■
NJ1,5-8GM-N	flush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	22 mm	8 mm	■	■
NJ1,5-8GM-N-5M	flush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	22 mm	8 mm	■	■
NJ1,5-8GM-N-10M	flush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	Fixed cable	22 mm	8 mm	■	■
NJ1,5-8GM-N-V1	flush	1.5 mm	NAMUR	Normally-closed (NC)	5000 Hz	8.2 V	8.2 V	2	M12 connector plug	20 mm	8 mm	■	■
NJ1,5-18GM-N-D	flush	1.5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	50 mm	18 mm	■	■
NJ1,5-18GM-N-D-10M	flush	1.5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	Fixed cable	50 mm	18 mm	■	■
NJ1,5-18GM-N-D-V1	flush	1.5 mm	NAMUR	Normally-closed (NC)	400 Hz	8.2 V	8.2 V	2	M12 connector plug	35 mm	18 mm	■	■
NJ2-11-N	flush	2 mm	NAMUR	Normally-closed (NC)	3000 Hz	8.2 V	8.2 V	2	Fixed cable	31 mm	11 mm		■