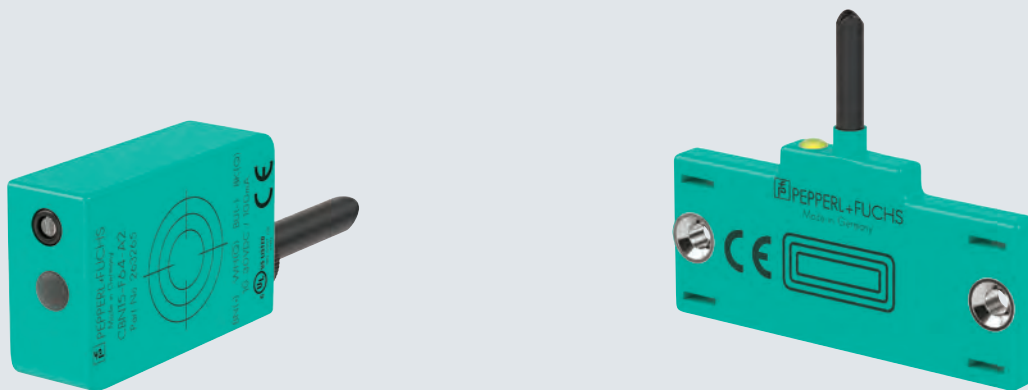


# Capacitive Proximity Sensors

## Reliable Detection of Non-Metallic Objects

If inductive sensors cannot be used with liquids, granulates, or wood, capacitive proximity sensors are the perfect solution. In particular, special versions such as rugged sensors in stainless steel or chemically resistant housing materials guarantee outstanding reliability and service life.

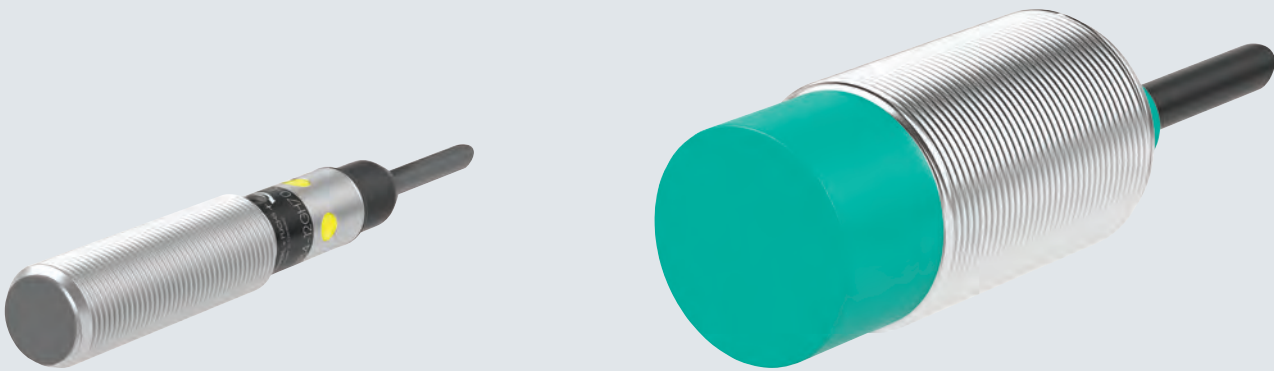


### Typical Applications

- Fill level querying for liquids and solids e.g., in the agricultural or wood-processing industry
- Detection of materials in plastic containers
- Process engineering for the chemical and pharmaceutical industries
- Medical and rehabilitation technology
- Woodworking machines
- Glass and plastic handling

### Your Benefits at a Glance

- Reliability and process safety for your application thanks to the highest quality standards in sensor production
- The perfect solution for detecting non-metallic objects
- Highest levels of robustness and durability even in harsh industrial environments
- Application-specific advice at the highest technical level



### Technical Features

- Sensors for all supply voltages (DC, AC, universal current) and output signals (e.g. two, three, and four-wire, AS-Interface and NAMUR)
- Complete range of cable and connector types
- Variety of special approvals, including for explosion protection
- Especially robust sensors with stainless steel housing and chemically resistant housing materials available
- Sensing ranges from 1 mm to 50 mm available

# Cylindrical Capacitive Proximity Sensors

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# 12 mm Series

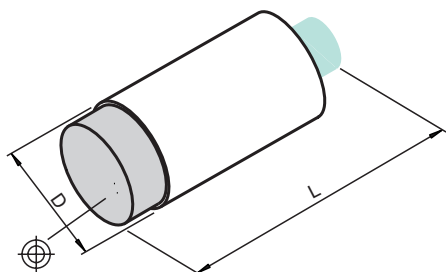


Standard Technical Data	
Switching function	Normally-open (NO)
Voltage type	DC
Housing diameter D	12 mm
CSA	■
UL	■

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Model number	Type of installation	Detection range [mm]	Output type	Output type	Switching frequency [Hz]	UB (min)	UB (max)	Connection type	Cable length [mm]	Cable material	Length L	ATEX	FM
CBB4-12GH60-E0-V1	Flush	4	3-wire	NPN	50	10	36	M12 connector plug			60		
CBB4-12GH60-E2-V1	Flush	4	3-wire	PNP	50	10	36	M12 connector plug			60		
CBB4-12GH70-E0	Flush	4	3-wire	NPN	50	10	36	Fixed cable	2000	PUR	70		
CBB4-12GH70-E2	Flush	4	3-wire	PNP	50	10	36	Fixed cable	2000	PUR	70		
CBN8-12GH60-E2-V1	Non-flush	8	3-wire	PNP	50	10	36	M12 connector plug			61.2		
CJ1-12GK-N	Non-flush	1	2-wire	NAMUR	1	8.2	8.2	Fixed cable	2000	PVC	60	■	■
CJ1-12GK-N-5M	Non-flush	1	2-wire	NAMUR	1	8.2	8.2	Fixed cable	5000	PVC	60	■	■
CJ4-12GK-N	Non-flush	4	2-wire	NAMUR	1	8.2	8.2	Fixed cable	2000	PVC	60	■	■
CJ4-12GK-N-10M	Non-flush	4	2-wire	NAMUR	1	8.2	8.2	Fixed cable	10000	PVC	60	■	■
CJ4-12GK-N-5M	Non-flush	4	2-wire	NAMUR	1	8.2	8.2	Fixed cable	5000	PVC	60	■	■

Accessories	
BF 12	Mounting adapter, 12 mm
V1-G-2M-PUR	Single-ended female cordset, M12, 4-pin, PUR cable
V1-W-2M-PUR	Single-ended female cordset, M12, 4-pin, PUR cable





# 18 mm Series

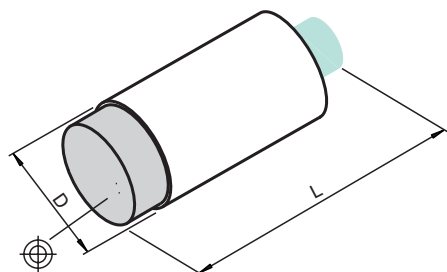


Standard Technical Data	
Switching function	Normally-open (NO)
Voltage type	DC
Housing diameter D	18 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Model number	Type of installation	Detection range [mm]	Output type	Output type	Switching frequency [Hz]	UB (min)	UB (max)	Connection type	Cable length [mm]	Cable material	Ambient temperature (max)	Length L	ATEX	CSA	FM
<b>CBB8-18GK75-E2-V1</b>	Flush	8	3-wire	PNP	100	10	30	M12 connector plug			85	88			
<b>CBB8-18GS75-E0</b>	Flush	8	3-wire	NPN	100	10	30	Fixed cable	2000	PUR	85	75			
<b>CBB8-18GS75-E2</b>	Flush	8	3-wire	PNP	100	10	30	Fixed cable	2000	PUR	85	75			
<b>CBB8-18GS75-E2-V1</b>	Flush	8	3-wire	PNP	100	10	30	M12 connector plug			85	88			
<b>CBN15-18GK75-E2-V1</b>	Non-flush	15	3-wire	PNP	100	10	30	M12 connector plug			85	88			
<b>CBN15-18GS75-E2</b>	Non-flush	15	3-wire	PNP	100	10	30	Fixed cable	2000	PUR	85	75			
<b>CBN15-18GS75-E2-V1</b>	Non-flush	15	3-wire	PNP	100	10	30	M12 connector plug			85	88			
<b>CJ2-18GK-N</b>	Non-flush	2	2-wire	NAMUR	1	8.2	8.2	Fixed cable	2000	PVC	70	80	■	■	■
<b>CJ6-18GK-N</b>	Non-flush	6	2-wire	NAMUR	1	8.2	8.2	Fixed cable	2000	PVC	70	80	■	■	■

Accessories	
<b>BF 18</b>	Mounting adapter, 18 mm
<b>EXG-18</b>	Quick-mounting bracket with fixed stop
<b>V1-G-2M-PUR</b>	Single-ended female cordset, M12, 4-pin, PUR cable
<b>V1-W-2M-PUR</b>	Single-ended female cordset, M12, 4-pin, PUR cable





# 30 mm Series

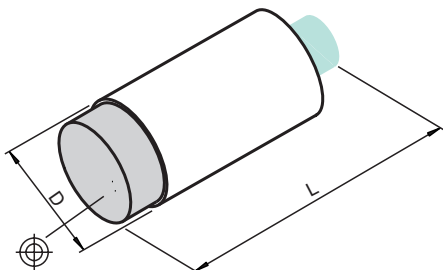


Standard Technical Data	
Housing diameter D	30 mm

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

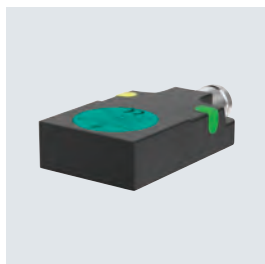
Model number	Type of installation	Detection range [mm]	Output type	Output type	Switching function	Voltage type	Switching frequency [Hz]	UB (min)	UB (max)	Connection type	Ambient temperature (min)	Length L	CCC	ATEX	UL
<b>CBB10-30GKK-A2</b>	Flush	10	4-wire	PNP	Complementary	DC	100	10	30	Terminal compartment	-25	115			■
<b>CBB10-30GKK-W</b>	Flush	10	2-wire	2-wire	Normally open/close selectable	AC	50	20	250	Terminal compartment	-25	115			
<b>CBN15-30GK60-A0</b>	Non-flush	15	4-wire	NPN	Complementary	DC	10	10	30	Fixed cable	-25	60			■
<b>CBN15-30GK60-A2</b>	Non-flush	15	4-wire	PNP	Complementary	DC	10	10	30	Fixed cable	-25	60			■
<b>CBN15-30GK60-E0</b>	Non-flush	15	3-wire	NPN	Normally-open (NO)	DC	10	10	30	Fixed cable	-25	60			■
<b>CBN15-30GK60-E2</b>	Non-flush	15	3-wire	PNP	Normally-open (NO)	DC	10	10	30	Fixed cable	-25	60			■
<b>CBN15-30GK60-E2-5M</b>	Non-flush	15	3-wire	PNP	Normally-open (NO)	DC	10	10	30	Fixed cable	-25	60			■
<b>CCB10-30GS55-N1</b>	Flush	10	2-wire	NAMUR	Normally-open (NO)	DC	50	8.2	8.2	Fixed cable	-20	80		■	■
<b>CCB10-30GS55-N1-V1</b>	Flush	10	2-wire	NAMUR	Normally-open (NO)	DC	50	8.2	8.2	M12 connector plug	-20	80		■	■
<b>CCN15-30GS60-A0</b>	Non-flush	15	4-wire	NPN	Complementary	DC	10	10	60	Fixed cable	-25	60	■		■
<b>CCN15-30GS60-A2</b>	Non-flush	15	4-wire	PNP	Complementary	DC	10	10	60	Fixed cable	-25	60	■		■
<b>CCN15-30GS60-A2-V1</b>	Non-flush	15	4-wire	PNP	Complementary	DC	10	10	60	M12 connector plug	-25	60	■		■
<b>CCN15-30GS60-E0</b>	Non-flush	15	3-wire	NPN	Normally-open (NO)	DC	10	10	60	Fixed cable	-25	60	■		■
<b>CCN15-30GS60-E2</b>	Non-flush	15	3-wire	PNP	Normally-open (NO)	DC	10	10	60	Fixed cable	-25	60	■		■
<b>CCN15-30GS60-E2-V1</b>	Non-flush	15	3-wire	PNP	Normally-open (NO)	DC	10	10	60	M12 connector plug	-25	60	■		■
<b>CJ10-30GK-WO</b>	Non-flush	10	2-wire	2-wire	Normally-closed (NC)	AC	10	20	253	Fixed cable	-25	80	■		■
<b>CJ10-30GK-WS</b>	Non-flush	10	2-wire	2-wire	Normally-open (NO)	AC	10	20	253	Fixed cable	-25	80	■		■
<b>CJ10-30GM-WO</b>	Non-flush	10	2-wire	2-wire	Normally-closed (NC)	AC	10	20	253	Fixed cable	-25	80	■		■
<b>CJ10-30GM-WS</b>	Non-flush	10	2-wire	2-wire	Normally-open (NO)	AC	10	20	253	Fixed cable	-25	80	■		■

Accessories	
<b>BF 30</b>	Mounting adapter, 30 mm
<b>V1-G-2M-PUR</b>	Single-ended female cordset, M12, 4-pin, PUR cable
<b>V1-G-N4-5M-PUR</b>	Single-ended female cordset, M12, 4-pin, NAMUR, PUR cable
<b>V1-G-N4-5M-PVC</b>	Single-ended female cordset, M12, 4-pin, NAMUR, PVC cable
<b>V1-W-2M-PUR</b>	Single-ended female cordset, M12, 4-pin, PUR cable
<b>V1-W-N4-2M-PVC</b>	Single-ended female cordset, M12, 4-pin, NAMUR, PVC cable
<b>V1-W-N4-5M-PUR</b>	Single-ended female cordset, M12, 4-pin, NAMUR, PUR cable
<b>V1-W-N4-5M-PVC</b>	Single-ended female cordset, M12, 4-pin, NAMUR, PVC cable

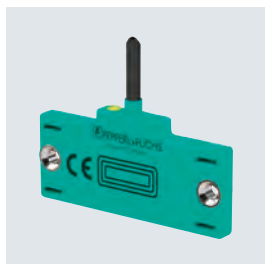


# Cybic-Style Capacitive Proximity Sensors

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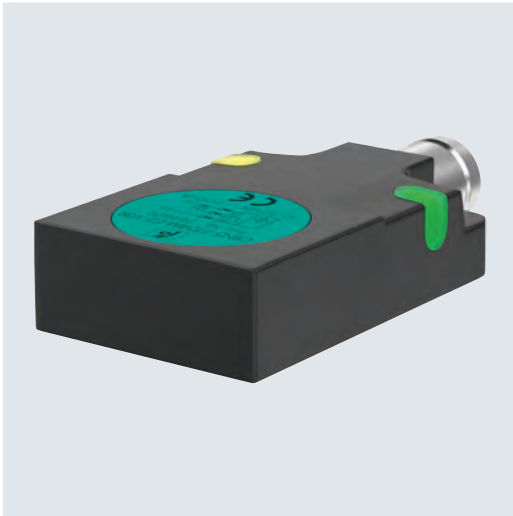


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# F104 Series

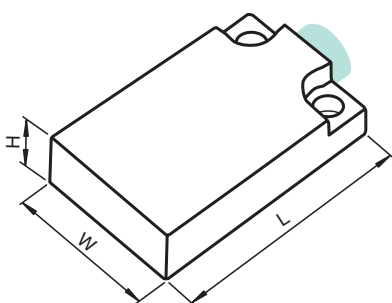


### Standard Technical Data

Type of installation	Non-flush
Detection range	5 mm
Output type	3-wire
Output type	PNP
Switching function	Normally-open (NO)
Voltage type	DC
Switching frequency	100 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Housing length L	32 mm
Housing width W	20 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](http://www.pepperl-fuchs.com).

Model number	Connection type	Cable length [mm]	Cable material
CBN5-F104M-E2	Fixed cable	2000	PUR
CBN5-F104M-E2-V3R	8 mm connector plug		

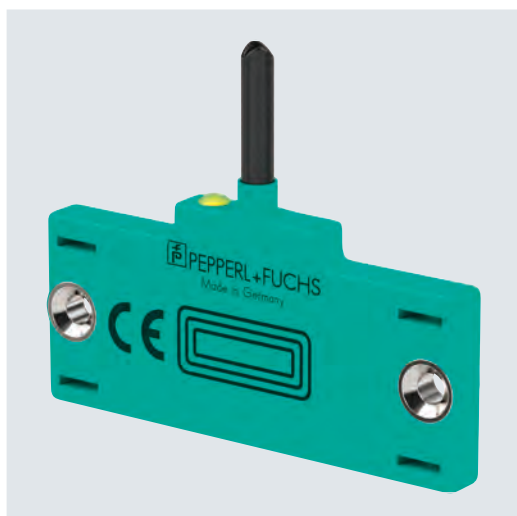


### Accessories

V3-WR-2M-PUR	Single-ended female cordset, M8 snap-locking, 3-pin, PUR cable
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## F46/F46A Series

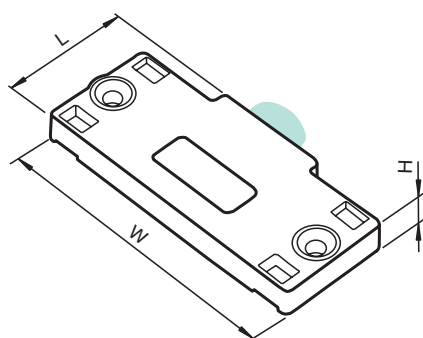


### Standard Technical Data

Type of installation	Non-flush
Output type	3-wire
Voltage type	DC
Operating voltage (max)	30 V
Connection type	Fixed cable
Housing width W	50 mm

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Model number	Detection range [mm]	Output type	Switching function	Switching frequency [Hz]	UB (min)	Cable length [mm]	Cable material	Ambient temperature (min)	Ambient temperature (max)	Length L	Height H	CSA	UL
CBN10-F46-E0	10	NPN	Normally-open (NO)	5	10	2000	PVC	-25	70	25	5	■	■
CBN10-F46-E2	10	PNP	Normally-open (NO)	5	10	2000	PVC	-25	70	25	5	■	■
CBN10-F46-E2-10M	10	PNP	Normally-open (NO)	5	10	10000	PVC	-25	70	25	5	■	■
CBN10-F46-E3	10	PNP	Normally-closed (NC)	5	10	2000	PVC	-25	70	25	5	■	■
CBN10-F46C-EI	7	Digital current output		5	9	2000	PUR	-40	85	30.4	10.5		
CBN2-F46-E0	2	NPN	Normally-open (NO)	10	10	2000	PVC	-25	70	25	5	■	■
CBN2-F46-E1	2	NPN	Normally-closed (NC)	10	10	2000	PVC	-25	70	25	5	■	■
CBN2-F46-E2	2	PNP	Normally-open (NO)	10	10	2000	PVC	-25	70	25	5	■	■
CBN2-F46-E3	2	PNP	Normally-closed (NC)	10	10	2000	PVC	-25	70	20	5	■	■
CBN5-F46-E0	5	NPN	Normally-open (NO)	10	10	2000	PVC	-25	70	25	5	■	■
CBN5-F46-E1	5	NPN	Normally-closed (NC)	10	10	2000	PVC	-25	70	25	5	■	■
CBN5-F46-E2	5	PNP	Normally-open (NO)	10	10	2000	PVC	-25	70	25	5	■	■
CBN5-F46-E3	5	PNP	Normally-closed (NC)	10	10	2000	PVC	-25	70	25	5	■	■
CCN5-F46A-E0	5	NPN	Normally-open (NO)	10	10	2000	FEP	-25	70	30.4	10.5	■	■
CCN5-F46A-E1	5	NPN	Normally-closed (NC)	10	10	2000	FEP	-25	70	30.4	10.5	■	■
CCN5-F46A-E2	5	PNP	Normally-open (NO)	10	10	2000	FEP	-25	70	30.4	10.5	■	■
CCN5-F46A-E3	5	PNP	Normally-closed (NC)	10	10	2000	FEP	-25	70	30.4	10.5	■	■



# F64 Series



### Standard Technical Data

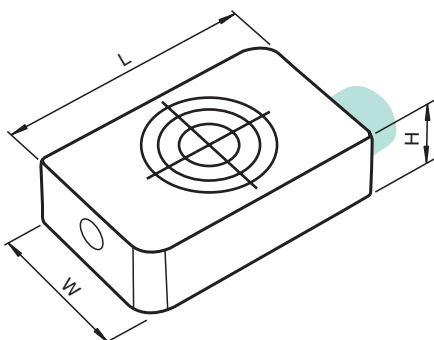
<b>Special features</b>	Magnetic field resistant
<b>Type of installation</b>	Non-flush
<b>Detection range</b>	15 mm
<b>Output type</b>	PNP
<b>Voltage type</b>	DC
<b>Switching frequency</b>	100 Hz
<b>Operating voltage (min)</b>	10 V
<b>Operating voltage (max)</b>	30 V
<b>Connection type</b>	Fixed cable
<b>Cable Length</b>	2000 mm
<b>Cable material</b>	PUR
<b>Housing length L</b>	40 mm
<b>Housing width W</b>	25 mm
<b>Housing height H</b>	12 mm
<b>UL</b>	■

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Model number	Output type	Switching function
CBN15-F64-A2	4-wire	Complementary
CBN15-F64-E2	3-wire	Normally-open (NO)

### Accessories

MH-F64	Mounting base
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## FP Series

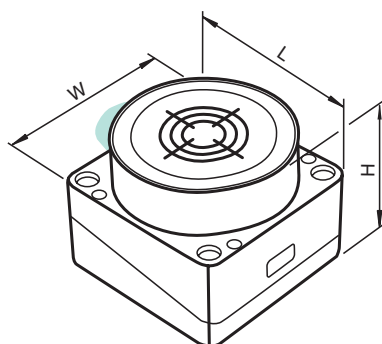


### Standard Technical Data

Type of installation	Non-flush
Detection range	40 mm
Output type	4-wire
Switching function	Complementary
Voltage type	DC
Switching frequency	10 Hz
Operating voltage (min)	10 V
Operating voltage (max)	60 V
Connection type	Terminal compartment
Housing length L	40 mm
Housing width W	80 mm
Housing height H	80 mm
UL	■

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Model number	Output type
CJ40-FP-A0-P1	NPN
CJ40-FP-A2-P1	PNP



# VariKont Series

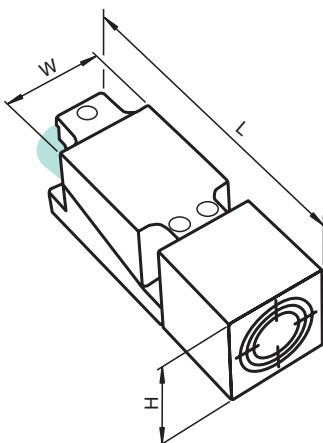


### Standard Technical Data

Type of installation	Flush
Detection range	15 mm
Output type	4-wire
Output type	PNP
Switching function	Complementary
Voltage type	DC
Switching frequency	10 Hz
Operating voltage (min)	10 V
Operating voltage (max)	30 V
Connection type	Terminal compartment
Housing length L	118 mm
Housing width W	40 mm
Housing height H	40 mm
CSA	■
UL	■

For detailed data and description, see the datasheet. Further products can be found online at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Model number	
CJ15+U1+A2	
CJ15+U4+A2	



Accessories	
MHW 01	Modular mounting bracket