

Capacitive M12 sensors with noise-immune sensor electronics.



Position sensors for universal use.

- Robust stainless steel housing for higher tightening torques.
- Easy setting of the sensing range using a potentiometer.
- High operational reliability by noise-immune electronics.
- Sensing range 4 mm (flush) or 8 mm (non flush) for higher excess gain.
- Clearly visible indication of the sensing range by 4-port LED.

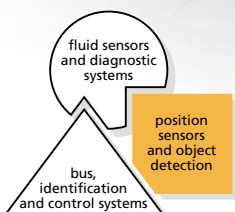
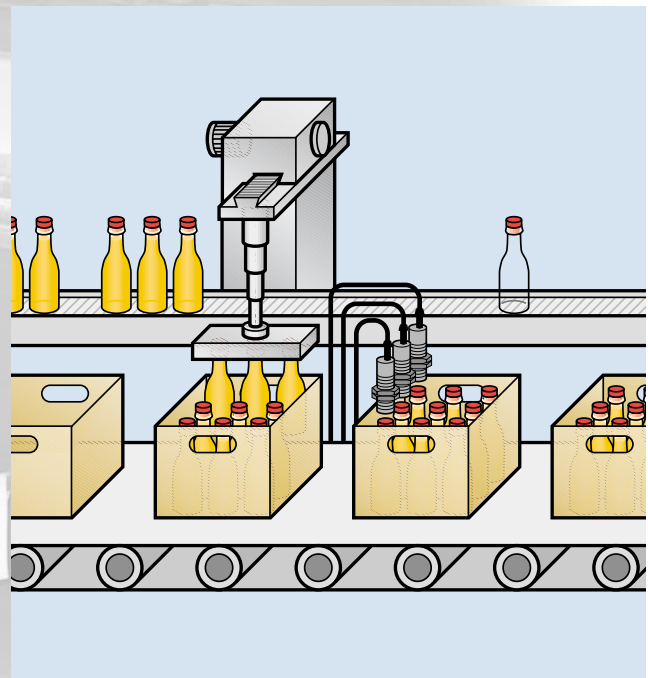
<p>High-grade stainless steel</p>	<p>Adjustable sensing range</p>	<p>Fewer failures</p>	<p>M12 connector</p>
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Use

Capacitive sensors detect metal and non-metal objects without contact. They can be easily adapted to the respective application by adjusting the sensing range using a potentiometer.

Typical applications are in the paper, wood and glass industries. In a packaging system the sensors for example check the presence of the box or monitor it for complete contents.

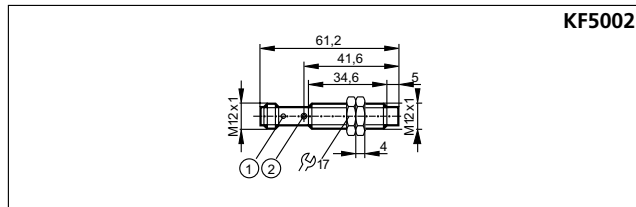
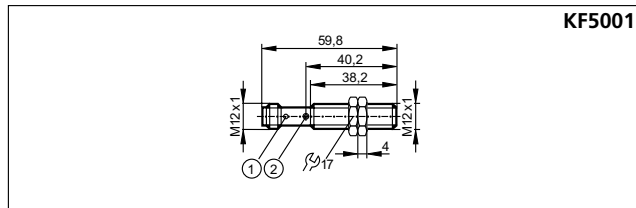
Using the standard M12 connector the sensors can be easily connected to a control monitor.



Position detection of metal and non-metal objects.

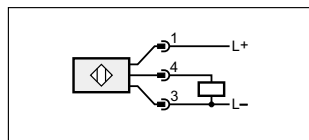
Type	Sensing range [mm]	f [Hz]	Protection rating / class	Operating temperature [°C]	Housing material	I _{load} [mA]	Order no.
M12 connector · output function NO · 3 wire DC PNP							
flush	4	80	IP 65 / III	-25...70	high-grade stainless steel, PEEK	100	KF5001
non flush	8	80	IP 65 / III	-25...70	high-grade stainless steel, PEEK	100	KF5002

Dimensions



- 1) LED
- 2) Potentiometer

Wiring diagram



Accessories

Type	Description	Order no.
	Angle bracket for type M12, stainless steel	E10735
	Mounting clip for type M12, spring steel wire	E11533
	2 lock nuts M12 x 1, high-grade stainless steel	E10025
	10 lock nuts M12 x 1, high-grade stainless steel	E11926
	2 lock nuts M12 x 1, CuZn nickel-plated	E10024
	10 lock nuts M12 x 1, CuZn nickel-plated	E11906

Common technical data

Type KF5001 and KF5002		
Operating voltage [V]		10...36 DC
Current consumption [mA]		< 10
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
Switch point drift of Sr [%]		± 20
Voltage drop [V]		< 2.5
Correction factors		water: 1, glass: ca. 0.6, ceramics: ca. 0.5, PVC: ca. 0.4
Switching status	LED	yellow (4 x 90°)
EMC		EN 60947-5-2

Connectors and splitter boxes

Type	Description	Order no.
	M12 socket 2 m black, PUR cable	E10900
	M12 socket 2 m black, PUR cable	E10906

The sensors are supplied without nuts. They can be ordered separately.

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