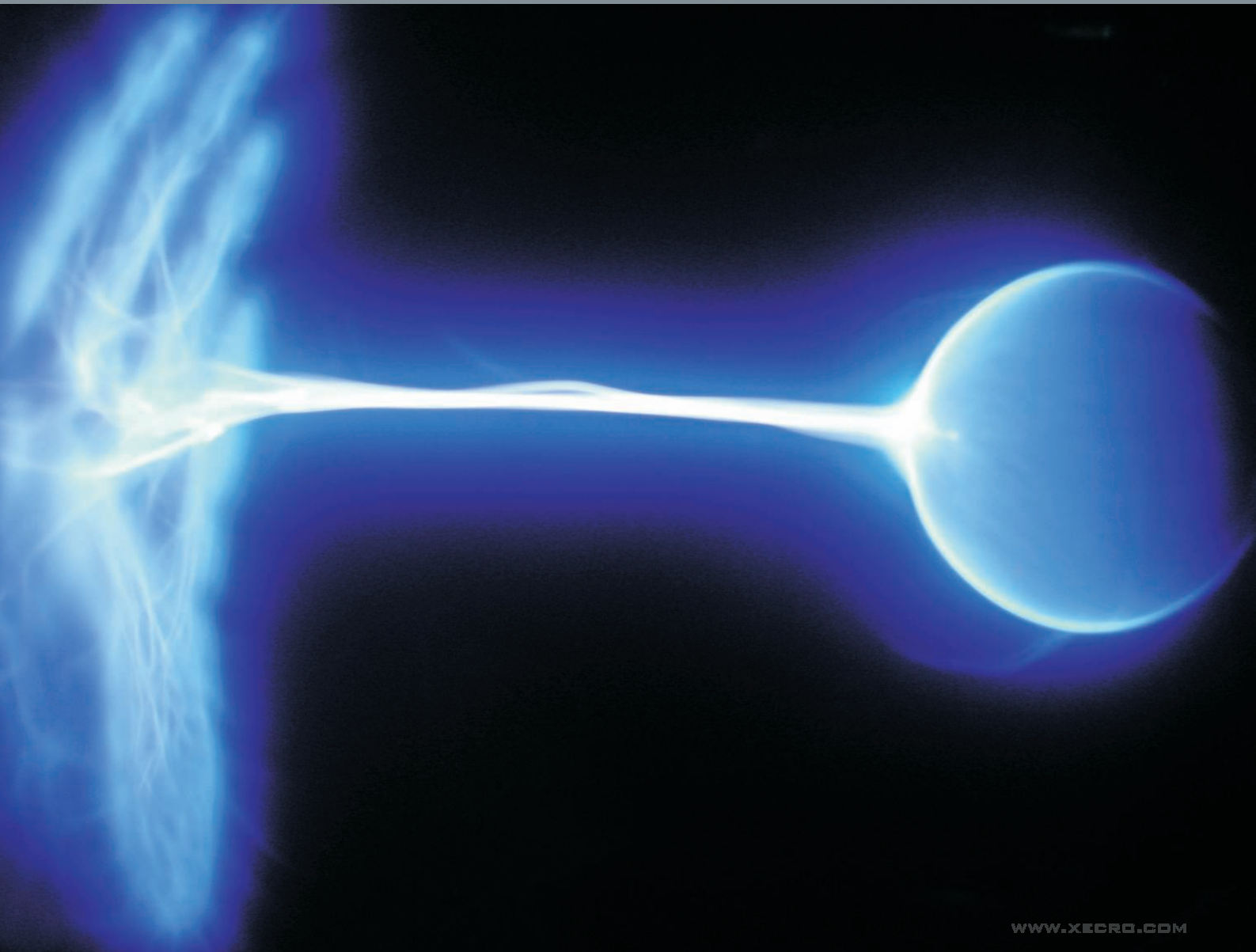




**MOST RELIABLE SENSOR TECHNOLOGY**



3

## Inductive Sensors

Miniature Diameters Ø3, M4, ...  
Shortest housings >18mm<  
Full Stainless Steel Housings  
Extreme Sensing Distances  
High Pressure Proof 500 bar  
High Temperature Proof 150°C

0

## Inductive Ring-Sensors

Complete Range Of Detection Diameters  
Static / Dynamic Modes Available  
Highest Object Speed Of 45m/s  
Adjustable Impulse-Stretch-Unit  
Shielded Against Surrounding Metal

0

## Capacitive Sensors

Small Diameters Ø6.5, M8, ...  
Adjustable Sensing Distance  
Reliable Metal Housings  
High Sensing Distances

0

## Fork-Light Barriers

Complete Range Of Fork Openings  
Infrared, Collimated Red-Light  
Laser Version With Same Dimensions  
Object Detection Down To Ø0.03mm  
Reliable Metal Housings

0

## Tool Center Device

Completely Aligned X-Y-Unit  
Two Free Domed Laser Barriers  
Precision High-Speed Laser Beams

0

## Frame-Light Barriers

Wide Range Of Active Areas  
Static / Dynamic Mode selectable  
Dirt Immune Detection Modes  
Reliable Metal Housings  
Build-In Protection For Optics

**Xecro** is able to accomplish specific customer requirements in the area of inductive, capacitive, magnetic and optical sensors quickly and reliable thanks to our flexible corporate structure. We also make individual industrial electronics with Profibus, Devicenet or Ethernet.

**Inductive Switches in Miniature Housings** are the best choice if space saving solutions in combination with high sensing distances are required. Xecro fulfills these needs with various sub miniature devices.

**Inductive proximity switches** from Xecro comes with increased and extended sensing ranges too, simplifying their use in factory automation applications where the combination of small housings and long sensing distances is required.

On request, many sensors from M12... M30 can be build to be used at operating voltages of up to 55 VDC - perfect if a wide operating voltage range is needed.

**Metal Face Inductive Proximity Switches** from Xecro comes with a one-piece stainless steel housing, including the sensing face. This makes the metal-face sensors absolutely impervious against all liquids and gases which do not corrode stainless steel. Thanks to their full-metal-housing, these sensors are much more resistant against mechanical stress than conventional inductive sensors with an easy to damage plastic sensing surface. Making them more durable in applications where standard sensors often fails and therefore increases machine operating time significantly.

**Ferrous Sensing & Non-Ferrous Sensing** inductive proximity switches from Xecro have the ability to detect only (!) ferrous or non-ferrous metal objects. They come with a one-piece stainless steel housing, including the sensing face.

**Analog Inductive Proximity Switches** from Xecro are made to measure distances instead of simple object detection. The sensors output is highly linear within the ranges specified.

**High Pressure Proof Proximity Switches** are based on Xecros deep scanning technology where the sensor surface and the casing is one continual mechanical unit and therefore requires no ceramic sealing plate. Because of this feature there is no danger of fragments breaking off the sensor and finding their way into the hydraulic system.

**High Temperature Inductive Proximity** switches which operates in temperatures of up to 150°C (302°F) are built into compact stainless steel casings. The sensors are fully integrated; the amplifier and sensor head are in one unit. All sensors can be fitted with a LED to indicate switch position if required, simplifying the mechanical setup.

**Inductive Ring-Sensors** can be used for detecting high velocity objects and as a wire break detector. The maximum object speed of up to 45m/s (147 ft/s) allows the use of objects that are shot with compressed air. These sensors are available with static or dynamic working principle.

Sensors with dynamic detection generate an impulse with a adjustable length as soon as a fast moving object passes the inner ring. Dynamic sensors have a much higher resolution but need a minimum object speed. Sensors with static operation principle activates their output as long as an object is in the inner ring. This makes the static sensor a perfect solution for jam or wire break detection. Special wire break sensors are able to detect copper wires with a minimum diameter of 0.18 mm.

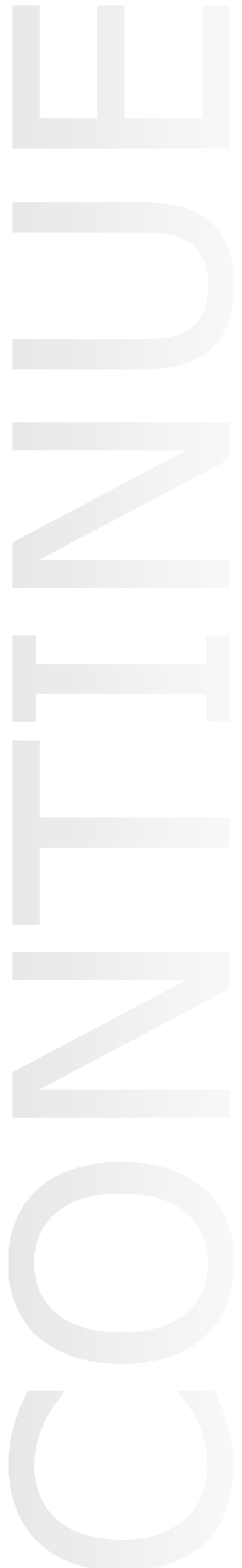
**Capacitive Sensors** with their high quality casing components and high switching frequencies are an excellent choice for almost all industrial purposes. In order to integrate the sensors into different applications the models M12, M18 and M30 are fitted with a potentiometer for adjusting their sensitivity. The potentiometer is also an optional extra for the models M6.5 and M8. For price sensitive high volume applications these sensors can be produced with a plastic casing.

**Fork-Light-Barriers** from Xecro work on the principle of the one way light beam. The electronic circuitry and the optical elements which are protected by mineral glass are built into a very robust metal casing. Time consuming calibration and complicated fitting is not necessary. Even the smallest parts traveling at high speeds can be detected thanks to the ambient light immunity, switch speed and resolution.

**Laser-Fork-Light-Barriers**  
The use of class 2 collimated laser improves the resolution compared to red light versions even more. The laser collimator emits a very small but clearly visible dot and so a very exact aim can be taken on the switch point.

**Robotics Point-of-Origin Units** from Xecro have been designed for robots and other automatic multiple-axis-systems. It provides two precisely mounted, independent, highspeed laser light barriers. Time consuming calibration and complicated fitting is not necessary. Due to the raised laser domes and the performance of the barriers, the robot can pass the center point at full speed, enabling the controller to verify or re-align its point of origin without interrupting the operation.

**Frame-Light-Barriers** from Xecro are very fast, fully integrated light curtains with high resolution which can be switched in two ways: In the statical mode the line out is active as long as an object is in the field of light. The statical mode can be used to capture objects which permanently move uncontrolled through the field of light. e.g. such as during the extrusion of plastics or other materials. In the dynamical mode an impulse with an adjustable length is generated as soon as a fast moving object passes through the field of light. The advantage of this mode is that it is possible to a certain degree to compensate for dirt on optical elements and yet still keep the very high resolution.



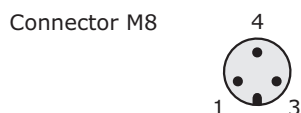
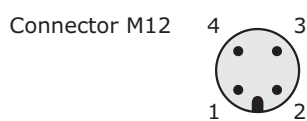
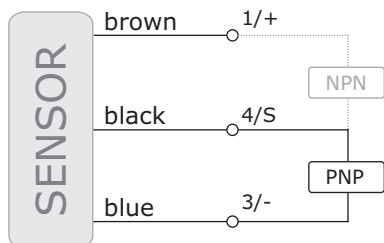


# Inductive Proximity Switches

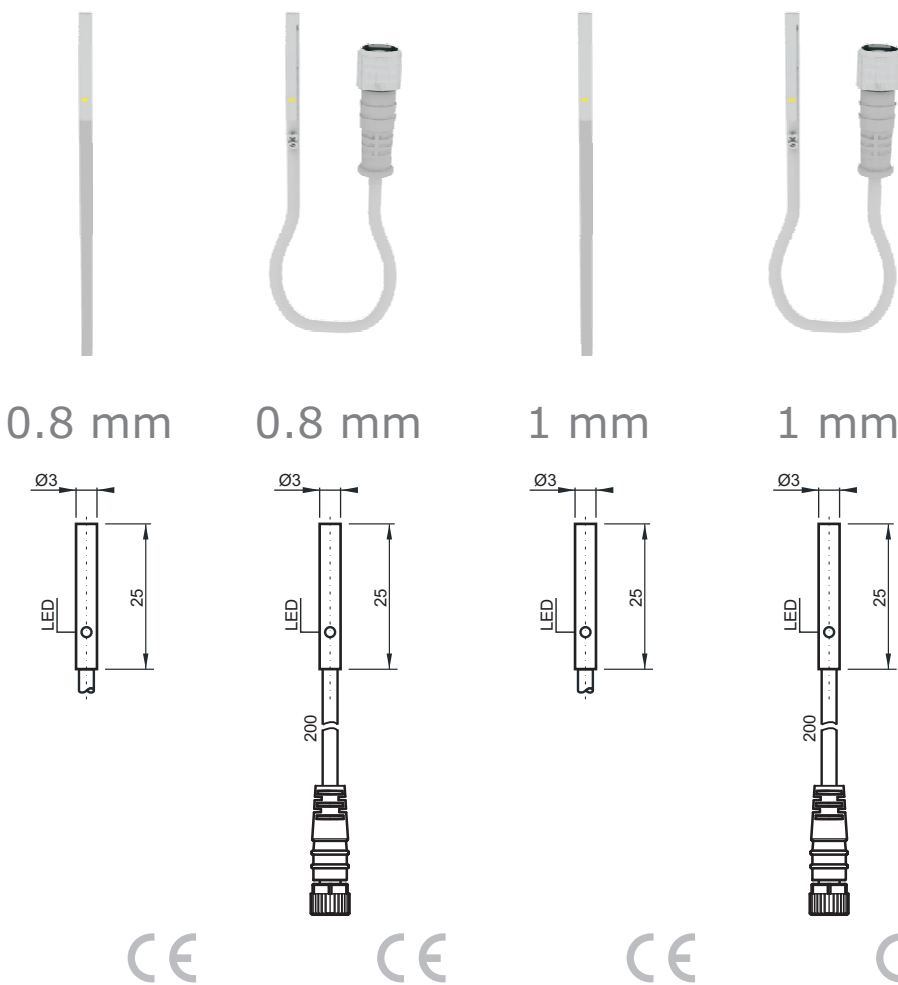
INDUCTIVE

Ø3 mm

## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.

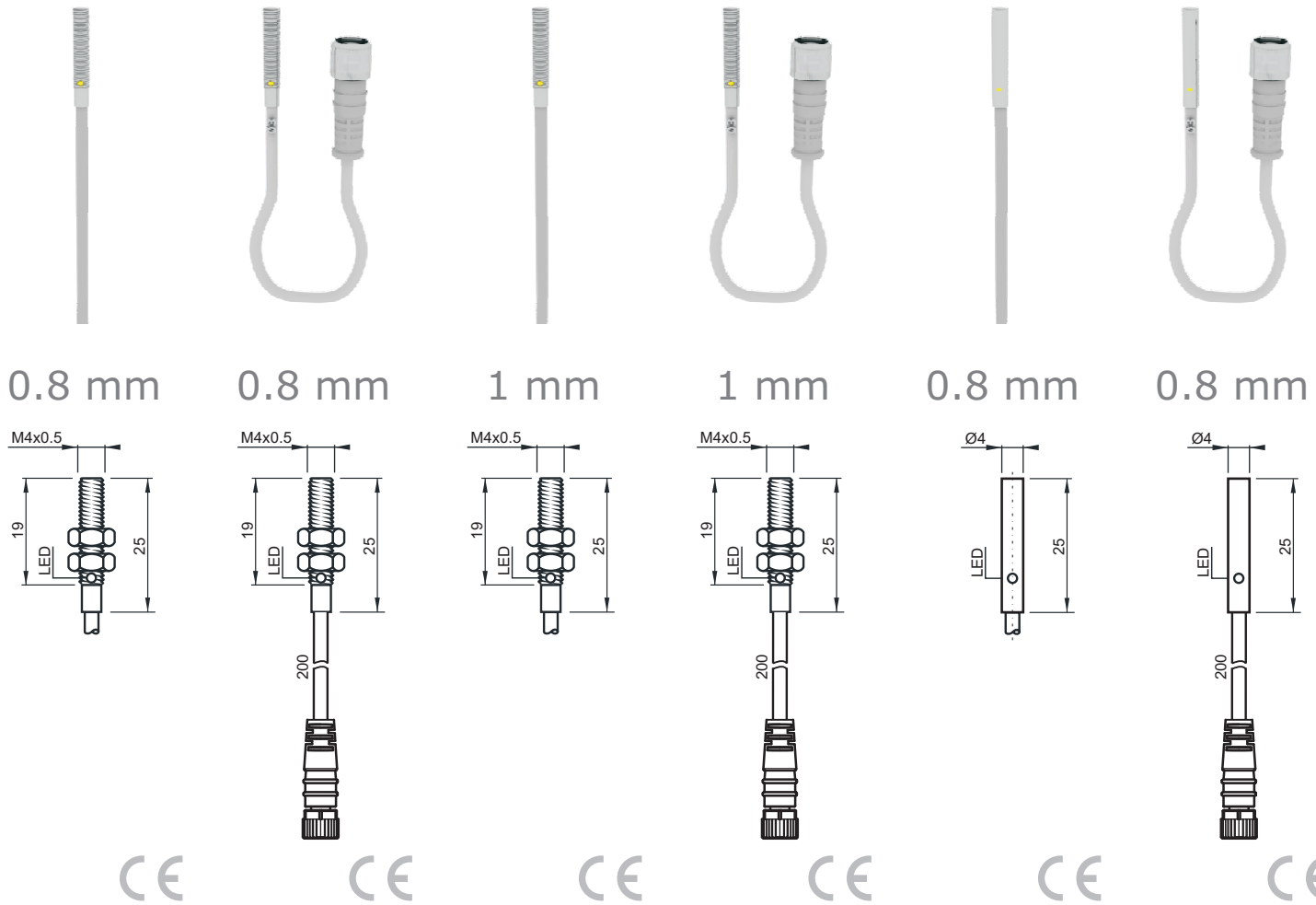


	Ø3 mm	Ø3 mm	Ø3 mm	Ø3 mm
Sensing Distance	0.8 mm - Flush	0.8 mm - Flush	1.0 mm - Flush	1.0 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3-pole, 2m	M8, 3-pole, 200 mm	PVC, 3-pole, 2m	M8, 3-pole, 200 mm
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPSD3 S.8PO25/A2P	IPSD3 S.8PO25/2P8	IPSD3 S1PO25/A2P	IPSD3 S1PO25/2P8
PNP, NC	IPSD3 S.8PC25/A2P	IPSD3 S.8PC25/2P8	IPSD3 S1PC25/A2P	IPSD3 S1PC25/2P8
NPN, NO	IPSD3 S.8NO25/A2P	IPSD3 S.8NO25/2P8	IPSD3 S1NO25/A2P	IPSD3 S1NO25/2P8
NPN, NC	IPSD3 S.8NC25/A2P	IPSD3 S.8NC25/2P8	IPSD3 S1NC25/A2P	IPSD3 S1NC25/2P8

# Inductive Proximity Switches

## M4

## Ø4



M4x0.5	M4x0.5	M4x0.5	M4x0.5	Ø4 mm	Ø4 mm
0.8 mm - Flush	0.8 mm - Flush	1.0 mm - Flush	1.0 mm - Flush	0.8 mm - Flush	0.8 mm - Flush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 120 mA	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA
2000 Hz	2000 Hz	2000 Hz	2000 Hz	2000 Hz	2000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP67	IP67
POM	POM	POM	POM	POM	POM
V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
PVC, 3-pole, 2m	M8, 3-pole, 200 mm	PVC, 3-pole, 2m	M8, 3-pole, 200 mm	M12, 3-pole	M8, 3-pole, 200 mm
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

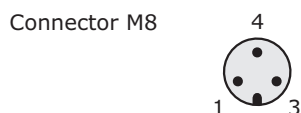
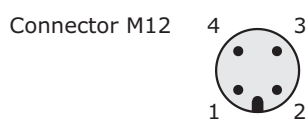
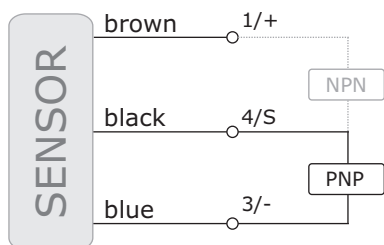
IPSD4 S.8PO25/A2P	IPSD4 S.8PO25/2P8	IPSD4 S1PO25/A2P	IPSD4 S1PO25/2P8	IPSD4 S.8PO25/A2P	IPSD4 S.8PO25/2P8
IPSD4 S.8PC25/A2P	IPSD4 S.8PC25/2P8	IPSD4 S1PC25/A2P	IPSD4 S1PC25/2P8	IPSD4 S.8PC25/A2P	IPSD4 S.8PC25/2P8
IPSD4 S.8NO25/A2P	IPSD4 S.8NO25/2P8	IPSD4 S1NO25/A2P	IPSD4 S1NO25/2P8	IPSD4 S.8NO25/A2P	IPSD4 S.8NO25/2P8
IPSD4 S.8NC25/A2P	IPSD4 S.8NC25/2P8	IPSD4 S1NC25/A2P	IPSD4 S1NC25/2P8	IPSD4 S.8NC25/A2P	IPSD4 S.8NC25/2P8



# Inductive Proximity Switches

INDUCTIVE

## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.

## Ø4 M5

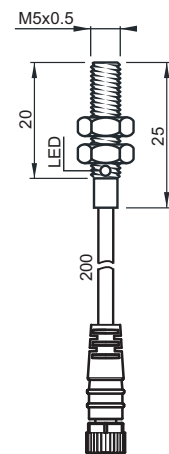
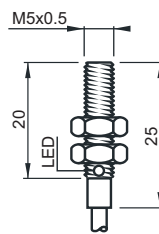
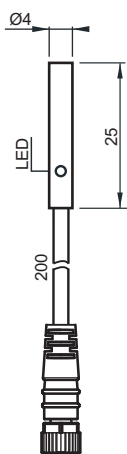
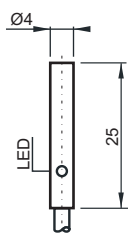


1.5 mm

1.5 mm

0.8 mm

0.8 mm



	Ø4 mm	Ø4 mm	M5x0.5	M5x0.5
Sensing Distance	1.5 mm - Flush	1.5 mm - Flush	0.8 mm - Flush	0.8 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 120 mA	< 1.5 V @ 120 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3-pole, 2m	M8, 3-pole, 200 mm	PVC, 3-pole, 2m	M8, 3-pole, 200 mm
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPSD4 S1.5PO25/A2P	IPSD4 S1.5PO25/2P8	IPS5 S.8PO25/A2P	IPS5 S.8PO25/2P8
PNP, NC	IPSD4 S1.5PC25/A2P	IPSD4 S1.5PC25/2P8	IPS5 S.8PC25/A2P	IPS5 S.8PC25/2P8
NPN, NO	IPSD4 S1.5NO25/A2P	IPSD4 S1.5NO25/2P8	IPS5 S.8NO25/A2P	IPS5 S.8NO25/2P8
NPN, NC	IPSD4 S1.5NC25/A2P	IPSD4 S1.5NC25/2P8	IPS5 S.8NC25/A2P	IPS5 S.8NC25/2P8

# Metal Face Inductive Proximity Switches

M5

5x5



0.8 mm

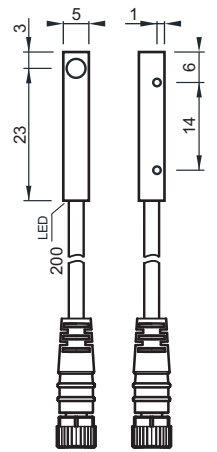
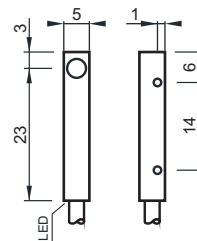
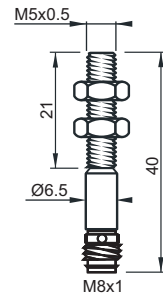
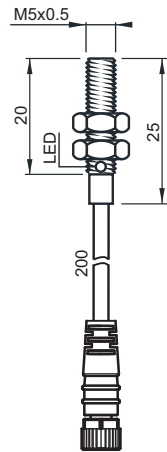
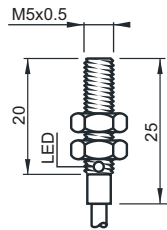
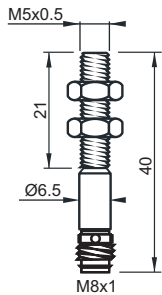
1.5 mm

1.5 mm

1.5 mm

0.8 mm

0.8 mm



M5x0.5

M5x0.5

M5x0.5

M5x0.5

5 x 5

5 x 5

0.8 mm - Flush

1.5 mm - Flush

1.5 mm - Flush

1.5 mm - Flush

0.8 mm - Flush

0.8 mm - Flush

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 2000 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 2000 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 2000 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 2000 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 2000 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 1000 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C

IP67  
 POM  
 V2A - 1.4305  
 M8, 3-pole  
 Incorporated

IP67  
 POM  
 V2A - 1.4305  
 PVC, 3-pole, 2m  
 Incorporated

IP67  
 POM  
 V2A - 1.4305  
 M8, 3-pole, 200 mm  
 Incorporated

IP67  
 POM  
 V2A - 1.4305  
 M8, 3-pole  
 Incorporated

IP67  
 POM  
 Nickel Plated Brass  
 PVC, 3-pole, 2m  
 Incorporated

IP67  
 POM  
 Nickel Plated Brass  
 M8, 3-pole, 200 mm  
 Incorporated

IPS5 S.8PO40/M8  
 IPS5 S.8PC40/M8  
 IPS5 S.8NO40/M8  
 IPS5 S.8NC40/M8

IPS5 S1.5PO25/A2P  
 IPS5 S1.5PC25/A2P  
 IPS5 S1.5NO25/A2P  
 IPS5 S1.5NC25/A2P

IPS5 S1.5PO25/2P8  
 IPS5 S1.5PC25/2P8  
 IPS5 S1.5NO25/2P8  
 IPS5 S1.5NC25/2P8

IPS5 S1.5PO40/M8  
 IPS5 S1.5PC40/M8  
 IPS5 S1.5NO40/M8  
 IPS5 S1.5NC40/M8

IPS55 S.8PO26/A2P  
 IPS55 S.8PC26/A2P  
 IPS55 S.8NO26/A2P  
 IPS55 S.8NC26/A2P

IPS55 S.8PO26/2P8  
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 IPS55 S.8NO26/2P8  
 IPS55 S.8NC26/2P8





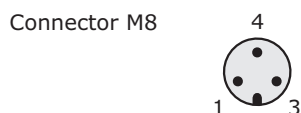
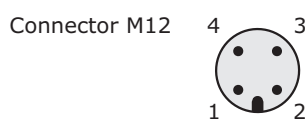
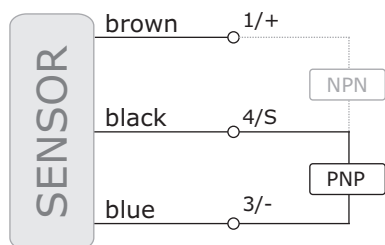
# Inductive Proximity Switches

INDUCTIVE

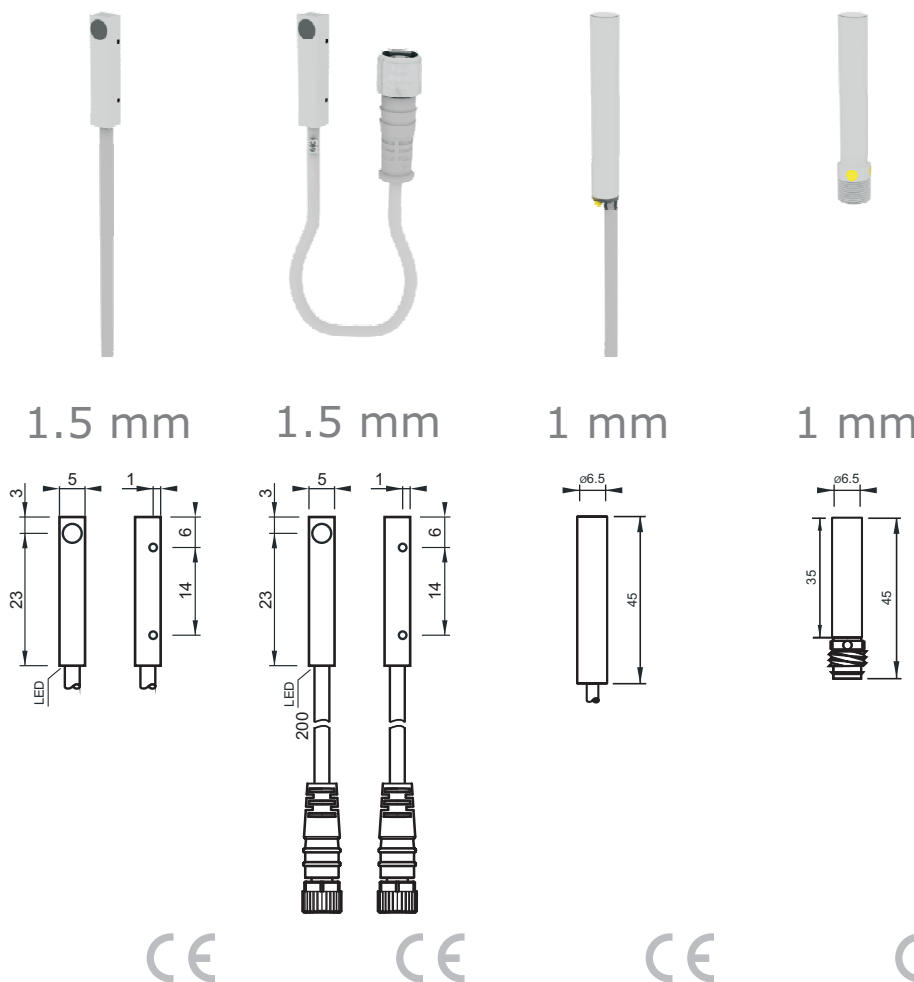
□5x5

∅6.5

## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.



	5 x 5	5 x 5	∅6.5 mm	∅6.5 mm
Sensing Distance	1.5 mm - Flush	1.5 mm - Flush	1 mm - Flush	1 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	1000 Hz	2000 Hz	2000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3-pole, 2m	M8, 3-pole, 200 mm	PVC, 3-pole, 2m	M8, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS55 S1.5PO26/A2P	IPS55 S1.5PO26/2P8	IPSD6 S1PO45/A2P	IPSD6 S1PO45/M8
PNP, NC	IPS55 S1.5PC26/A2P	IPS55 S1.5PC26/2P8	IPSD6 S1PC45/A2P	IPSD6 S1PC45/M8
NPN, NO	IPS55 S1.5NO26/A2P	IPS55 S1.5NO26/2P8	IPSD6 S1NO45/A2P	IPSD6 S1NO45/M8
NPN, NC	IPS55 S1.5NC26/A2P	IPS55 S1.5NC26/2P8	IPSD6 S1NC45/A2P	IPSD6 S1NC45/M8



# Inductive Proximity Switches

Ø6.5



1 mm

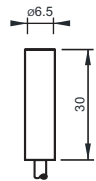
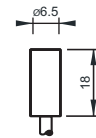
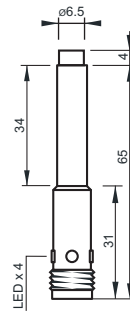
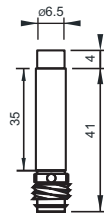
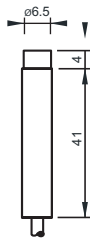
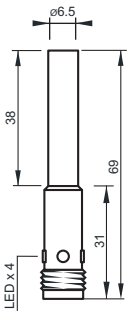
2 mm

2 mm

2 mm

2 mm

2 mm



Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

1 mm - Flush

2 mm - NonFlush

2 mm - NonFlush

2 mm - NonFlush

2 mm - Flush

2 mm - Flush

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

< 8 mA

< 8 mA

< 8 mA

< 8 mA

< 8 mA

< 8 mA

200 mA

200 mA

200 mA

200 mA

200 mA

200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

2000 Hz

1000 Hz

1000 Hz

1000 Hz

2000 Hz

2000 Hz

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

3... 15 %

3... 15 %

3... 15 %

3... 15 %

3... 15 %

3... 15 %

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

IP67

IP67

IP67

IP67

IP67

IP67

POM

POM

POM

POM

POM

POM

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

M12, 3-pole

PVC, 3-pole, 2m

M8, 3-pole

M12, 3-pole

PVC, 3-pole, 2m

PVC, 3-pole, 2m

Incorporated

Incorporated

Incorporated

Incorporated

Incorporated

Incorporated

IPSD6 S1PO69/M12

IPSD6 N2PO45/A2P

IPSD6 N2PO45/M8

IPSD6 N2PO69/M12

IPSD6 S2PO18/A2P

IPSD6 S2PO30/A2P

IPSD6 S1PC69/M12

IPSD6 N2PC45/A2P

IPSD6 N2PC45/M8

IPSD6 N2PC69/M12

IPSD6 S2PC18/A2P

IPSD6 S2PC30/A2P

IPSD6 S1NO69/M12

IPSD6 N2NO45/A2P

IPSD6 N2NO45/M8

IPSD6 N2NO69/M12

IPSD6 S2NO18/A2P

IPSD6 S2NO30/A2P

IPSD6 S1NC69/M12

IPSD6 N2NC45/A2P

IPSD6 N2NC45/M8

IPSD6 N2NC69/M12

IPSD6 S2NC18/A2P

IPSD6 S2NC30/A2P

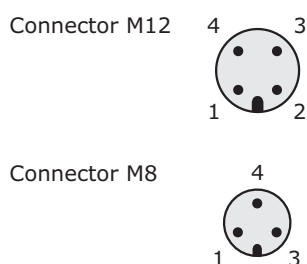
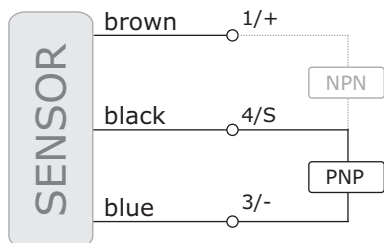


# Inductive Proximity Switches

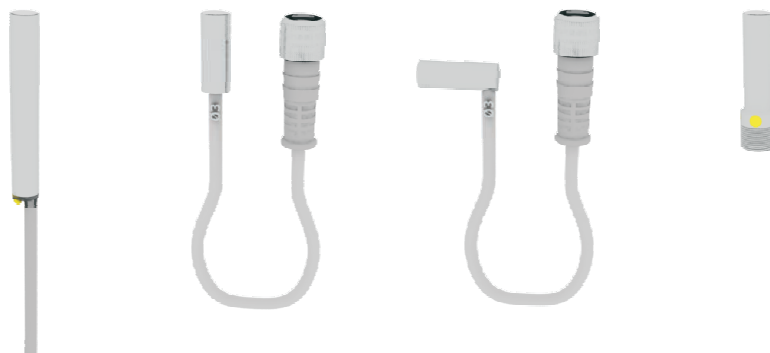
INDUCTIVE

Ø6.5

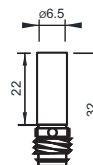
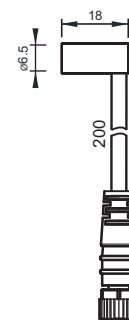
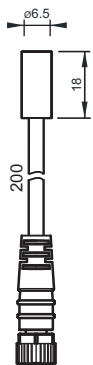
## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.



2 mm      2 mm      2 mm      2 mm



	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
Sensing Distance	2 mm - Flush	2 mm - Flush	2 mm - Flush	2 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3-pole, 2m	M8, 3-pole, 200 mm	M8, 3-pole, 200 mm	M8, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPSD6 S2PO45/A2P	IPSD6 S2PO18/2P8	IPSD6 S2PO18/R2P8	IPSD6 S2PO32/M8
PNP, NC	IPSD6 S2PC45/A2P	IPSD6 S2PC18/2P8	IPSD6 S2PC18/R2P8	IPSD6 S2PC32/M8
NPN, NO	IPSD6 S2NO45/A2P	IPSD6 S2NO18/2P8	IPSD6 S2NO18/R2P8	IPSD6 S2NO32/M8
NPN, NC	IPSD6 S2NC45/A2P	IPSD6 S2NC18/2P8	IPSD6 S2NC18/R2P8	IPSD6 S2NC32/M8

# Inductive Proximity Switches

Ø6.5



2 mm

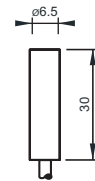
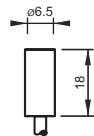
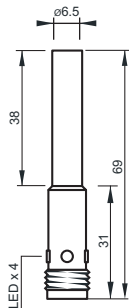
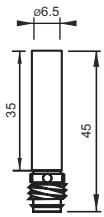
2 mm

2 mm

3 mm

3 mm

3 mm



Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

2 mm - Flush

2 mm - Flush

2 mm - Flush

3 mm - Flush

3 mm - Flush

3 mm - Flush

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

< 8 mA

< 8 mA

< 8 mA

< 8 mA

< 8 mA

< 8 mA

200 mA

200 mA

200 mA

200 mA

200 mA

200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

2000 Hz

2000 Hz

2000 Hz

2000 Hz

1000 Hz

1000 Hz

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

3... 15 %

3... 15 %

3... 15 %

3... 15 %

3... 15 %

3... 15 %

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

IP67

IP67

IP67

IP67

IP67

IP67

POM

POM

POM

POM

POM

POM

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

M8, 3-pole

M8, 3-pole

M12, 3-pole

PVC, 3-pole, 2m

PVC, 3-pole, 2m

PVC, 3-pole, 2m

Incorporated

Incorporated

Incorporated

Incorporated

Incorporated

Incorporated

IPSD6 S2PO45/M8

IPSD6 S2PO60/M8

IPSD6 S2PO69/M12

IPSD6 S3PO18/A2P

IPSD6 S3PO30/A2P

IPSD6 S3PO45/A2P

IPSD6 S2PC45/M8

IPSD6 S2PC60/M8

IPSD6 S2PC69/M12

IPSD6 S3PC18/A2P

IPSD6 S3PC30/A2P

IPSD6 S3PC45/A2P

IPSD6 S2NO45/M8

IPSD6 S2NO60/M8

IPSD6 S2NO69/M12

IPSD6 S3NO18/A2P

IPSD6 S3NO30/A2P

IPSD6 S3NO45/A2P

IPSD6 S2NC45/M8

IPSD6 S2NC60/M8

IPSD6 S2NC69/M12

IPSD6 S3NC18/A2P

IPSD6 S3NC30/A2P

IPSD6 S3NC45/A2P

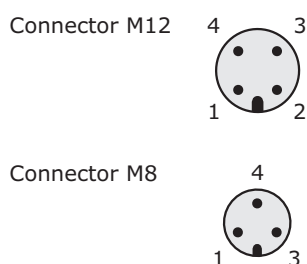
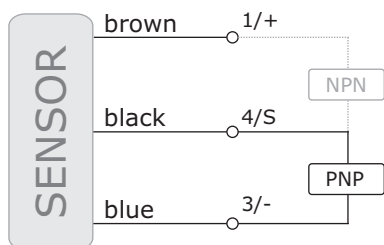


# Inductive Proximity Switches

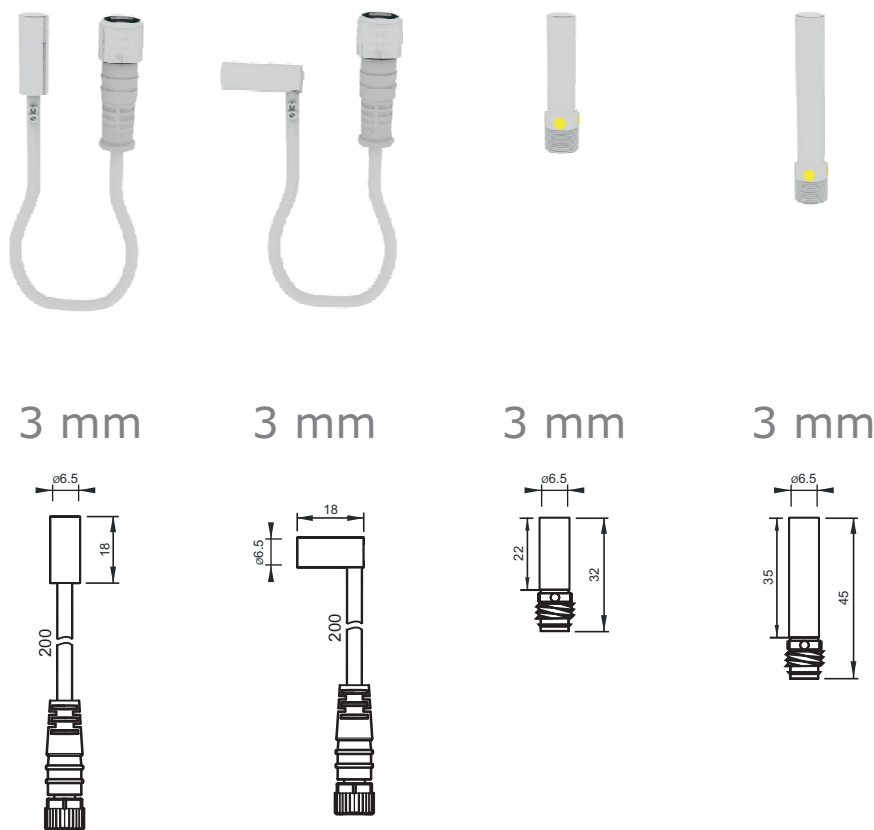
INDUCTIVE

Ø6.5

## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.



	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
Sensing Distance	3 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	1000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	M8, 3-pole, 200 mm	M8, 3-pole, 200 mm	M8, 3-pole	M8, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPSD6 S3PO18/2P8	IPSD6 S3PO18/R2P8	IPSD6 S3PO32/M8	IPSD6 S3PO45/M8
PNP, NC	IPSD6 S3PC18/2P8	IPSD6 S3PC18/R2P8	IPSD6 S3PC32/M8	IPSD6 S3PC45/M8
NPN, NO	IPSD6 S3NO18/2P8	IPSD6 S3NO18/R2P8	IPSD6 S3NO32/M8	IPSD6 S3NO45/M8
NPN, NC	IPSD6 S3NC18/2P8	IPSD6 S3NC18/R2P8	IPSD6 S3NC32/M8	IPSD6 S3NC45/M8

## Inductive Proximity Switches

Ø6.5



3 mm

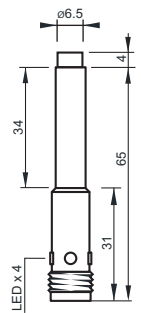
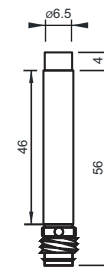
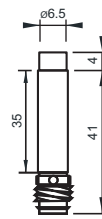
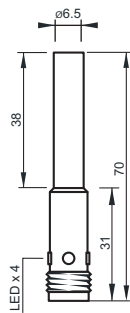
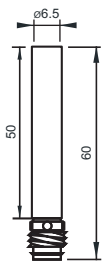
3 mm

4 mm

4 mm

4 mm

4 mm



Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

Ø6.5 mm

3 mm - Flush

3 mm - Flush

4 mm - NonFlush

4 mm - NonFlush

4 mm - NonFlush

4 mm - NonFlush

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

&lt; 8 mA

&lt; 8 mA

&lt; 8 mA

&lt; 8 mA

&lt; 8 mA

&lt; 8 mA

200 mA

200 mA

200 mA

200 mA

200 mA

200 mA

&lt; 1.5 V @ 200 mA

&lt; 1.5 V @ 200 mA

&lt; 1.5 V @ 200 mA

&lt; 1.5 V @ 200 mA

&lt; 1.5 V @ 200 mA

&lt; 1.5 V @ 200 mA

1000 Hz

1000 Hz

1000 Hz

1000 Hz

1000 Hz

1000 Hz

&lt; 1 % (Sn)

&lt; 1 % (Sn)

&lt; 1 % (Sn)

&lt; 1 % (Sn)

&lt; 1 % (Sn)

&lt; 1 % (Sn)

3... 15 %

3... 15 %

3... 15 %

3... 15 %

3... 15 %

3... 15 %

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

IP67

IP67

IP67

IP67

IP67

IP67

POM

POM

POM

POM

POM

POM

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

M8, 3-pole

M12, 3-pole

PVC, 3-pole, 2m

M8, 3-pole

M8, 3-pole

M12, 3-pole

Incorporated

Incorporated

Incorporated

Incorporated

Incorporated

Incorporated

IPSD6 S3PO60/M8

IPSD6 S3PO70/M12

IPSD6 N4PO45/A2P

IPSD6 N4PO45/M8

IPSD6 N4PO60/M8

IPSD6 N4PO69/M12

IPSD6 S3PC60/M8

IPSD6 S3PC70/M12

IPSD6 N4PC45/A2P

IPSD6 N4PC45/M8

IPSD6 N4PC60/M8

IPSD6 N4PC69/M12

IPSD6 S3NO60/M8

IPSD6 S3NO70/M12

IPSD6 N4NO45/A2P

IPSD6 N4NO45/M8

IPSD6 N4NO60/M8

IPSD6 N4NO69/M12

IPSD6 S3NC60/M8

IPSD6 S3NC70/M12

IPSD6 N4NC45/A2P

IPSD6 N4NC45/M8

IPSD6 N4NC60/M8

IPSD6 N4NC69/M12

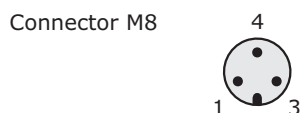
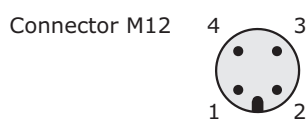
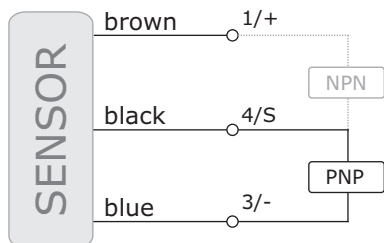


# Inductive Proximity Switches

INDUCTIVE

Ø6.5

## Output Schematics



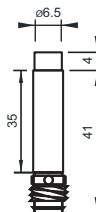
The use of this sensors is not permitted if the safety of people is relying upon it.



6 mm



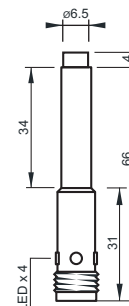
6 mm



6 mm



6 mm



	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
Sensing Distance	6 mm - NonFlush	6 mm - NonFlush	6 mm - NonFlush	6 mm - NonFlush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	500 Hz	500 Hz	500 Hz	500 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3-pole, 2m	M8, 3-pole	M8, 3-pole	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPSD6 N6PO45/A2P	IPSD6 N6PO45/M8	IPSD6 N6PO60/M8	IPSD6 N6PO70/M12
PNP, NC	IPSD6 N6PC45/A2P	IPSD6 N6PC45/M8	IPSD6 N6PC60/M8	IPSD6 N6PC70/M12
NPN, NO	IPSD6 N6NO45/A2P	IPSD6 N6NO45/M8	IPSD6 N6NO60/M8	IPSD6 N6NO70/M12
NPN, NC	IPSD6 N6NC45/A2P	IPSD6 N6NC45/M8	IPSD6 N6NC60/M8	IPSD6 N6NC70/M12

# Inductive Proximity Switches

## M8



1 mm

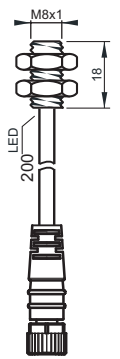
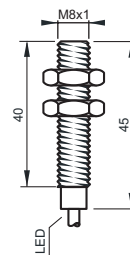
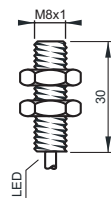
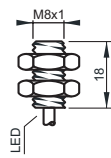
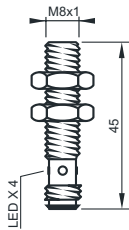
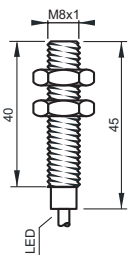
1 mm

2 mm

2 mm

2 mm

2 mm



M8x1	M8x1	M8x1	M8x1	M8x1	M8x1
1 mm - Flush	1 mm - Flush	2 mm - Flush	2 mm - Flush	2 mm - Flush	2 mm - Flush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
2000 Hz	2000 Hz	2000 Hz	2000 Hz	2000 Hz	2000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP67	IP67
POM	POM	POM	POM	POM	POM
V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
PVC, 3-pole, 2m	M8, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m	PVC, 3-pole, 2m	PVC, 3-pole, 2m
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS8 S1PO45/A2P	IPS8 S1PO45/M8	IPS8 S2PO18/A2P	IPS8 S2PO30/A2P	IPS8 S2PO45/A2P	IPS8 S2PO18/2P8
IPS8 S1PC45/A2P	IPS8 S1PC45/M8	IPS8 S2PC18/A2P	IPS8 S2PC30/A2P	IPS8 S2PC45/A2P	IPS8 S2PC18/2P8
IPS8 S1NO45/A2P	IPS8 S1NO45/M8	IPS8 S2NO18/A2P	IPS8 S2NO30/A2P	IPS8 S2NO45/A2P	IPS8 S2NO18/2P8
IPS8 S1NC45/A2P	IPS8 S1NC45/M8	IPS8 S2NC18/A2P	IPS8 S2NC30/A2P	IPS8 S2NC45/A2P	IPS8 S2NC18/2P8



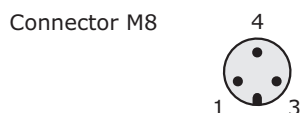
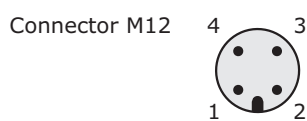
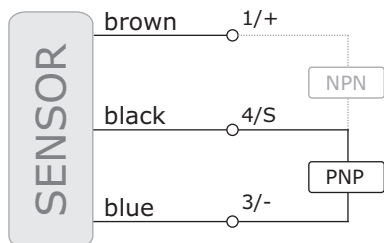


# Inductive Proximity Switches

INDUCTIVE

## M8

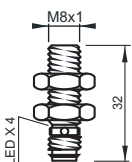
### Output Schematics



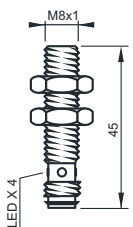
The use of this sensors is not permitted if the safety of people is relying upon it.



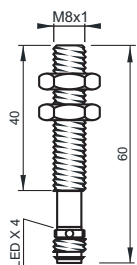
2 mm



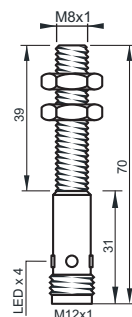
2 mm



2 mm



2 mm



	M8x1	M8x1	M8x1	M8x1
Sensing Distance	2 mm - Flush	2 mm - Flush	2 mm - Flush	2 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	M8, 3-pole	M8, 3-pole	M8, 3-pole	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS8 S2PO32/M8	IPS8 S2PO45/M8	IPS8 S2PO60/M8	IPS8 S2PO70/M12
PNP, NC	IPS8 S2PC32/M8	IPS8 S2PC45/M8	IPS8 S2PC60/M8	IPS8 S2PC70/M12
NPN, NO	IPS8 S2NO32/M8	IPS8 S2NO45/M8	IPS8 S2NO60/M8	IPS8 S2NO70/M12
NPN, NC	IPS8 S2NC32/M8	IPS8 S2NC45/M8	IPS8 S2NC60/M8	IPS8 S2NC70/M12

# Inductive Proximity Switches

## M8



2 mm

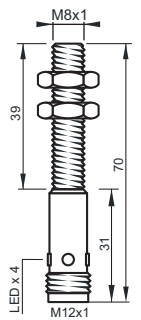
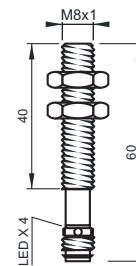
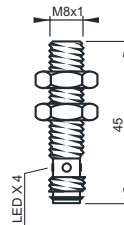
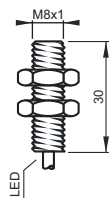
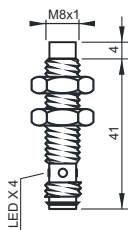
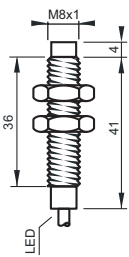
2 mm

2 mm

2 mm

2 mm

2 mm



M8x1	M8x1	M8 Metal Face	M8 Metal Face	M8 Metal Face	M8 Metal Face
2 mm- NonFlush	2 mm- NonFlush	2 mm - Flush	2 mm - Flush	2 mm - Flush	2 mm - Flush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
1000 Hz	1000 Hz	2000 Hz	2000 Hz	2000 Hz	2000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67
POM	POM	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
PVC, 3-pole, 2m	M8, 3-pole	PVC, 3-pole, 2m	M8, 3-pole	M12, 3-pole	M12, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
IPS8 N2PO45/A2P	IPS8 N2PO45/M8	IMF8 S2PO30/A2P	IMF8 S2PO45/M8	IMF8 S2PO60/M8	IMF8 S2PO70/M12
IPS8 N2PC45/A2P	IPS8 N2PC45/M8	IMF8 S2PC30/A2P	IMF8 S2PC45/M8	IMF8 S2PC60/M8	IMF8 S2PC70/M12
IPS8 N2NO45/A2P	IPS8 N2NO45/M8	IMF8 S2NO30/A2P	IMF8 S2NO45/M8	IMF8 S2NO60/M8	IMF8 S2NO70/M12
IPS8 N2NC45/A2P	IPS8 N2NC45/M8	IMF8 S2NC30/A2P	IMF8 S2NC45/M8	IMF8 S2NC60/M8	IMF8 S2NC70/M12

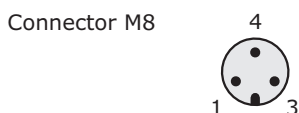
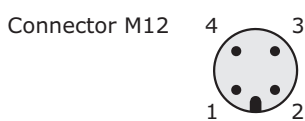
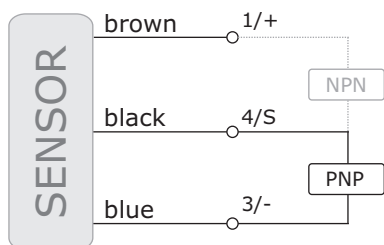


# Inductive Proximity Switches

INDUCTIVE

## M8

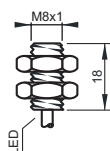
### Output Schematics



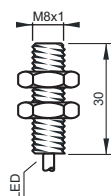
The use of this sensors is not permitted if the safety of people is relying upon it.



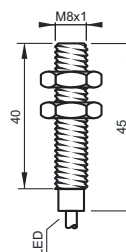
3 mm



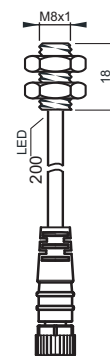
3 mm



3 mm



3 mm



	M8x1	M8x1	M8x1	M8x1
Sensing Distance	3 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	2000 Hz	1000 Hz	2000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3-pole, 2m	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M8, 3-pole, 200 mm
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS8 S3PO18/A2P	IPS8 S3PO30/A2P	IPS8 S3PO45/A2P	IPS8 S3PO18/2P8
PNP, NC	IPS8 S3PC18/A2P	IPS8 S3PC30/A2P	IPS8 S3PC45/A2P	IPS8 S3PC18/2P8
NPN, NO	IPS8 S3NO18/A2P	IPS8 S3NO30/A2P	IPS8 S3NO45/A2P	IPS8 S3NO18/2P8
NPN, NC	IPS8 S3NC18/A2P	IPS8 S3NC30/A2P	IPS8 S3NC45/A2P	IPS8 S3NC18/2P8

# Inductive Proximity Switches

## M8



3 mm

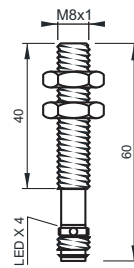
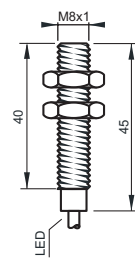
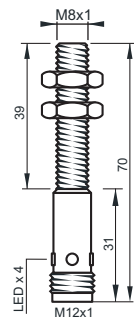
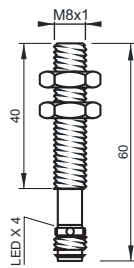
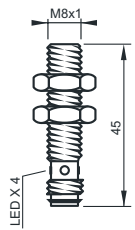
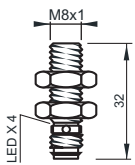
3 mm

3 mm

3 mm

3 mm

3 mm



M8x1	M8x1	M8x1	M8x1	M8x1 Metal Face	M8 Metal Face
3 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
2000 Hz	1000 Hz	1000 Hz	1000 Hz	1000 Hz	2000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67
POM	POM	POM	POM	POM	V2A - 1.4305
V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
M8, 3-pole	M8, 3-pole	M8, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M8, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS8 S3PO32/M8  
 IPS8 S3PC32/M8  
 IPS8 S3NO32/M8  
 IPS8 S3NC32/M8

IPS8 S3PO45/M8  
 IPS8 S3PC45/M8  
 IPS8 S3NO45/M8  
 IPS8 S3NC45/M8

IPS8 S3PO60/M8  
 IPS8 S3PC60/M8  
 IPS8 S3NO60/M8  
 IPS8 S3NC60/M8

IPS8 S3PO70/M12  
 IPS8 S3PC70/M12  
 IPS8 S3NO70/M12  
 IPS8 S3NC70/M12

IMF8 S3PO45/A2P  
 IMF8 S3PC45/A2P  
 IMF8 S3NO45/A2P  
 IMF8 S3NC45/A2P

IMF8 S3PO60/M8  
 IMF8 S3PC60/M8  
 IMF8 S3NO60/M8  
 IMF8 S3NC60/M8

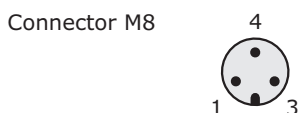
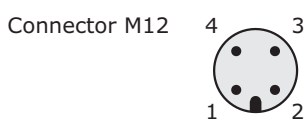
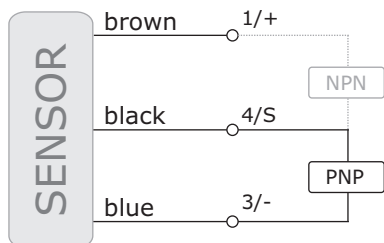


# Inductive Proximity Switches

INDUCTIVE

## M8

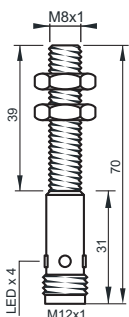
### Output Schematics



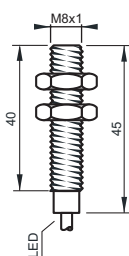
The use of this sensors is not permitted if the safety of people is relying upon it.



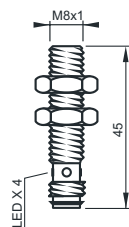
3 mm



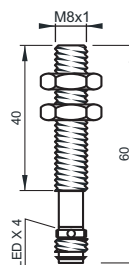
4 mm



4 mm



4 mm



	M8 Metal Face	M8x1	M8x1	M8x1
Sensing Distance	3 mm - Flush	4 mm - Flush	4 mm - Flush	4 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	1000 Hz	1000 Hz	1000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP68, Conn. IP67	IP67	IP67	IP67
Sensing Face Material	V2A - 1.4305	POM	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	M12, 3-pole	PVC, 3-pole, 2m	M8, 3-pole	M8, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IMF8 S3PO70/M12	IPS8 S4PO45/A2P	IPS8 S4PO45/M8	IPS8 S4PO60/M8
PNP, NC	IMF8 S3PC70/M12	IPS8 S4PC45/A2P	IPS8 S4PC45/M8	IPS8 S4PC60/M8
NPN, NO	IMF8 S3NO70/M12	IPS8 S4NO45/A2P	IPS8 S4NO45/M8	IPS8 S4NO60/M8
NPN, NC	IMF8 S3NC70/M12	IPS8 S4NC45/A2P	IPS8 S4NC45/M8	IPS8 S4NC60/M8

# Inductive Proximity Switches

## M8



4 mm

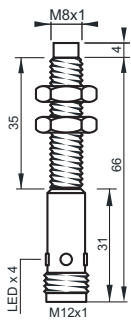
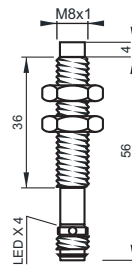
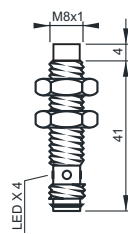
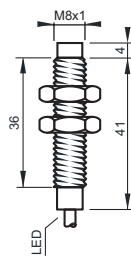
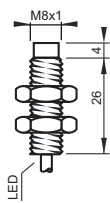
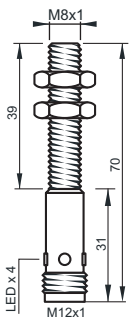
4 mm

4 mm

4 mm

4 mm

4 mm



M8x1	M8x1	M8x1	M8x1	M8x1	M8x1
4 mm - Flush	4 mm- NonFlush	4 mm- NonFlush	4 mm- NonFlush	4 mm- NonFlush	4 mm- NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
1000 Hz	1000 Hz	1000 Hz	1000 Hz	1000 Hz	1000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP67	IP67
POM	POM	POM	POM	POM	POM
V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
M12, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M8, 3-pole	M8, 3-pole	M12, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
IPS8 S4PO70/M12	IPS8 N4PO30/A2P	IPS8 N4PO45/A2P	IPS8 N4PO45/M8	IPS8 N4PO60/M8	IPS8 N4PO70/M12
IPS8 S4PC70/M12	IPS8 N4PC30/A2P	IPS8 N4PC45/A2P	IPS8 N4PC45/M8	IPS8 N4PC60/M8	IPS8 N4PC70/M12
IPS8 S4NO70/M12	IPS8 N4NO30/A2P	IPS8 N4NO45/A2P	IPS8 N4NO45/M8	IPS8 N4NO60/M8	IPS8 N4NO70/M12
IPS8 S4NC70/M12	IPS8 N4NC30/A2P	IPS8 N4NC45/A2P	IPS8 N4NC45/M8	IPS8 N4NC60/M8	IPS8 N4NC70/M12

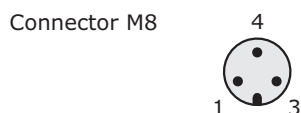
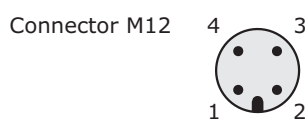
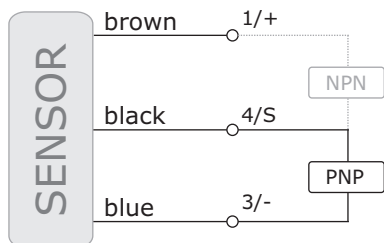


# Inductive Proximity Switches

INDUCTIVE

## M8

### Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.

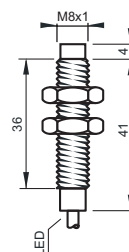
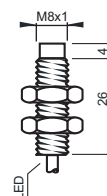
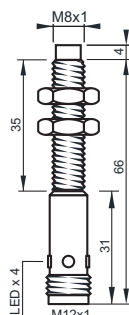
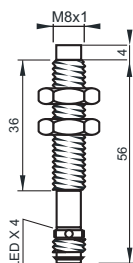


4 mm

4 mm

6 mm

6 mm



M8 Metal Face

M8 Metal Face

M8x1

M8x1

Sensing Distance	4 mm - NonFlush	4 mm - NonFlush	6 mm- NonFlush	6 mm - NonFlush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Pressure Tightness	200 mA	200 mA	200 mA	200 mA
Output Current	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Voltage Drop	1000 Hz	1000 Hz	1000 Hz	500 Hz
Switching Frequency	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Repeatability	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Hysteresis	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Operating Temperature	IP68, Conn. IP67	IP68, Conn. IP67	IP67	IP67
Protection Class	V2A - 1.4305	V2A - 1.4305	POM	POM
Sensing Face Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Housing Material	M8, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m
Connected	Incorporated	Incorporated	Incorporated	Incorporated
Operating-LED				

### Article code

PNP, NO	IMF8 N4PO60/M8	IMF8 N4PO70/M12	IPS8 N6PO30/A2P	IPS8 N6PO45/A2P
PNP, NC	IMF8 N4PC60/M8	IMF8 N4PC70/M12	IPS8 N6PC30/A2P	IPS8 N6PC45/A2P
NPN, NO	IMF8 N4NO60/M8	IMF8 N4NO70/M12	IPS8 N6NO30/A2P	IPS8 N6NO45/A2P
NPN, NC	IMF8 N4NC60/M8	IMF8 N4NC70/M12	IPS8 N6NC30/A2P	IPS8 N6NC45/A2P



## Inductive Proximity Switches

## M8



6 mm

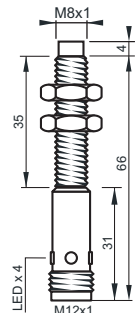
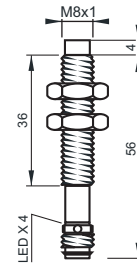
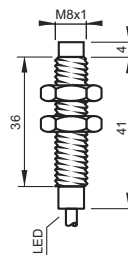
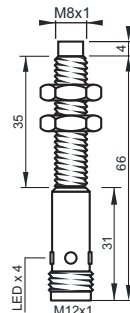
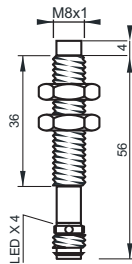
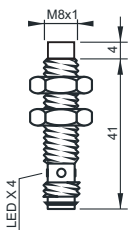
6 mm

6 mm

6 mm

6 mm

6 mm



M8x1	M8x1	M8x1	M8 Metal Face	M8 Metal Face	M8 Metal Face
6 mm - NonFlush	6 mm - NonFlush	6 mm - NonFlush	6 mm - NonFlush	6 mm - NonFlush	6 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
500 Hz	500 Hz	500 Hz	1000 Hz	1000 Hz	1000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67
POM	POM	POM	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
M8, 3-pole	M8, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M8, 3-pole	M12, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS8 N6PO45/M8

IPS8 N6PO60/M8

IPS8 N6PO70/M12

IMF8 N6PO45/M8

IMF8 N6PO60/M8

IMF8 N6PO70/M12

IPS8 N6PC45/M8

IPS8 N6PC60/M8

IPS8 N6PC70/M12

IMF8 N6PC45/M8

IMF8 N6PC60/M8

IMF8 N6PC70/M12

IPS8 N6NO45/M8

IPS8 N6NO60/M8

IPS8 N6NO70/M12

IMF8 N6NO45/M8

IMF8 N6NO60/M8

IMF8 N6NO70/M12

IPS8 N6NC45/M8

IPS8 N6NC60/M8

IPS8 N6NC70/M12

IMF8 N6NC45/M8

IMF8 N6NC60/M8

IMF8 N6NC70/M12

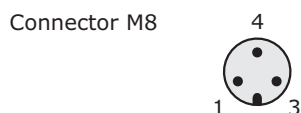
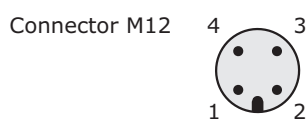
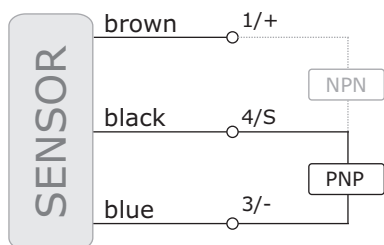


# Inductive Proximity Switches

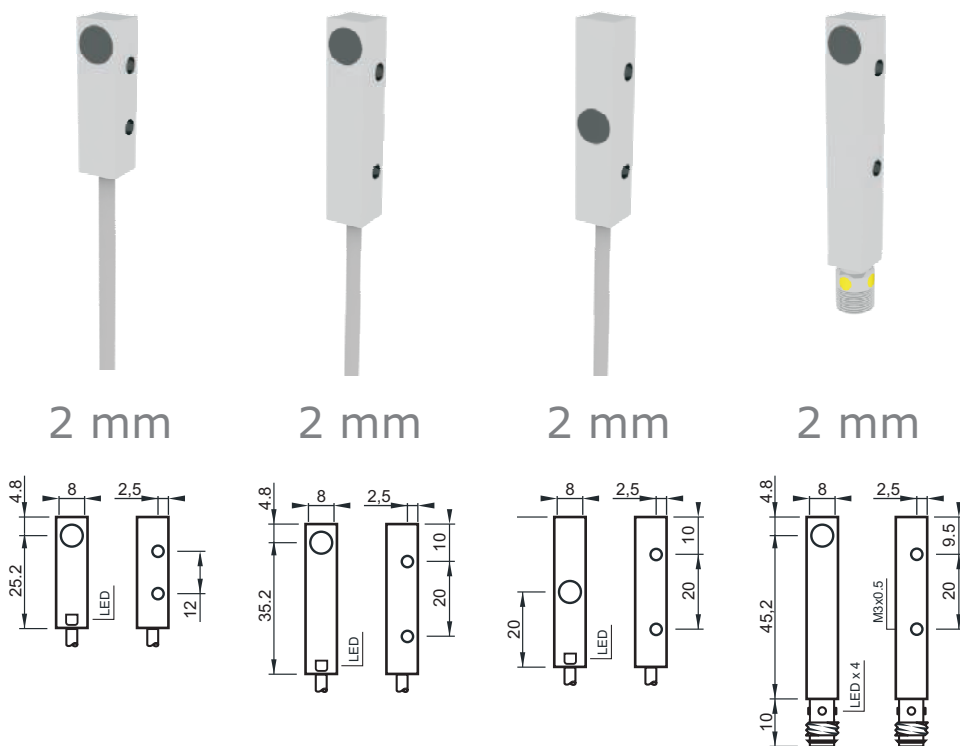
INDUCTIVE

□ 8x8

## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.



	8 x 8	8 x 8	8 x 8	8 x 8
Sensing Distance	2 mm - Flush	2 mm - Flush	2 mm - Flush	2 mm - Flush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Connected	PVC, 3-pole, 2m	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M8, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS88 S2PO30/A2P	IPS88 S2PO40/A2P	IPS88 S2PO40C/A2P	IPS88 S2PO60/M8
PNP, NC	IPS88 S2PC30/A2P	IPS88 S2PC40/A2P	IPS88 S2PC40C/A2P	IPS88 S2PC60/M8
NPN, NO	IPS88 S2NO30/A2P	IPS88 S2NO40/A2P	IPS88 S2NO40C/A2P	IPS88 S2NO60/M8
NPN, NC	IPS88 S2NC30/A2P	IPS88 S2NC40/A2P	IPS88 S2NC40C/A2P	IPS88 S2NC60/M8

# Inductive Proximity Switches

□ 8x8



2 mm

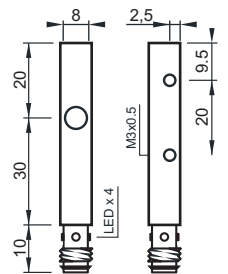
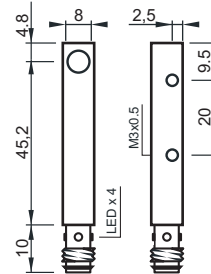
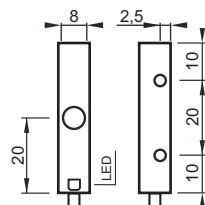
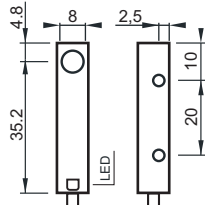
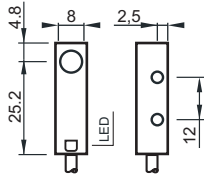
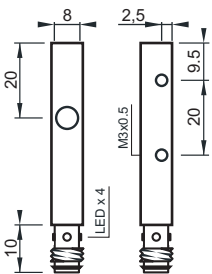
3 mm

3 mm

3 mm

3 mm

3 mm



8 x 8	8 x 8	8 x 8	8 x 8	8 x 8	8 x 8
2 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush	3 mm - Flush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
2000 Hz	1000 Hz	1000 Hz	1000 Hz	1000 Hz	1000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP67	IP67
POM	POM	POM	POM	POM	POM
Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
M8, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M8, 3-pole	M8, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS88 S2PO60C/M8	IPS88 S3PO30/A2P	IPS88 S3PO40/A2P	IPS88 S3PO40C/A2P	IPS88 S3PO60/M8	IPS88 S3PO60C/M8
IPS88 S2PC60C/M8	IPS88 S3PC30/A2P	IPS88 S3PC40/A2P	IPS88 S3PC40C/A2P	IPS88 S3PC60/M8	IPS88 S3PC60C/M8
IPS88 S2NO60C/M8	IPS88 S3NO30/A2P	IPS88 S3NO40/A2P	IPS88 S3NO40C/A2P	IPS88 S3NO60/M8	IPS88 S3NO60C/M8
IPS88 S2NC60C/M8	IPS88 S3NC30/A2P	IPS88 S3NC40/A2P	IPS88 S3NC40C/A2P	IPS88 S3NC60/M8	IPS88 S3NC60C/M8

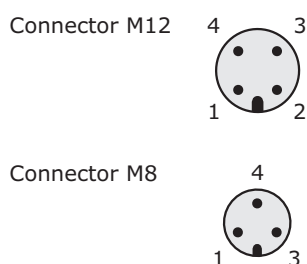
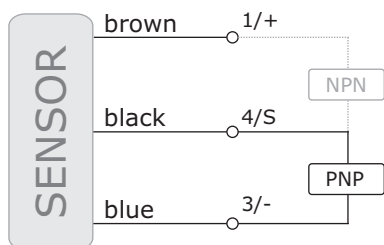


# Inductive Proximity Switches

INDUCTIVE

## M12

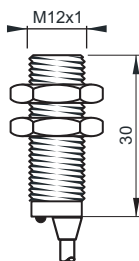
### Output Schematics



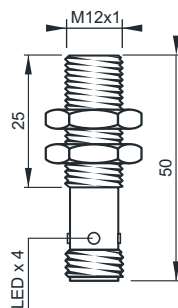
The use of this sensors is not permitted if the safety of people is relying upon it.



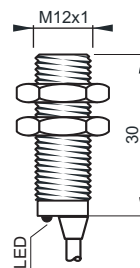
2 mm



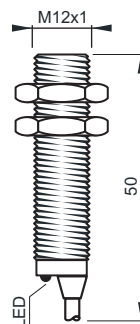
2 mm



4 mm



4 mm



	M12x1	M12x1	M12x1	M12x1
Sensing Distance	2 mm - Flush	2 mm - Flush	4 mm - Flush	4 mm - Flush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Connected	PVC, 3-pole, 2m	M12, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS12 S2PO30/A2P	IPS12 S2PO50/M12	IPS12 S4PO30/A2P	IPS12 S4PO50/A2P
PNP, NC	IPS12 S2PC30/A2P	IPS12 S2PC50/M12	IPS12 S4PC30/A2P	IPS12 S4PC50/A2P
NPN, NO	IPS12 S2NO30/A2P	IPS12 S2NO50/M12	IPS12 S4NO30/A2P	IPS12 S4NO50/A2P
NPN, NC	IPS12 S2NC30/A2P	IPS12 S2NC50/M12	IPS12 S4NC30/A2P	IPS12 S4NC50/A2P
Stainless Steel Housing	On Request	On Request	On Request	On Request

# Inductive Proximity Switches

## M12



4 mm

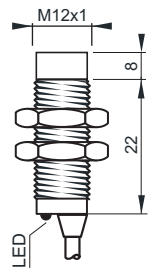
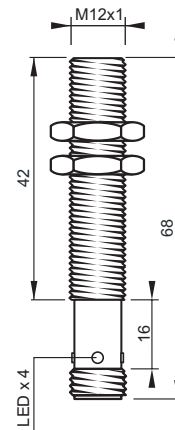
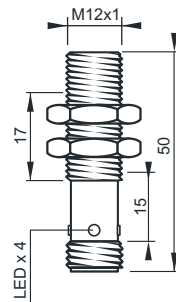
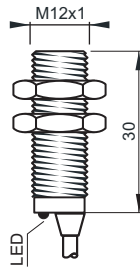
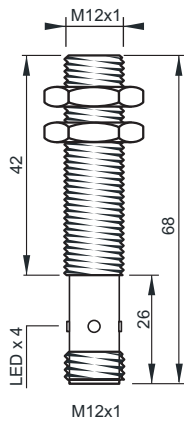
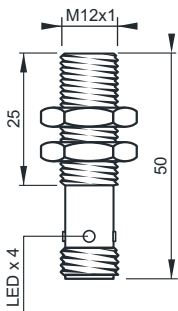
4 mm

4 mm

4 mm

4 mm

4 mm



M12x1	M12x1	M12 Metal Face	M12 Metal Face	M12 Metal Face	M12x1
4 mm - Flush	4 mm - Flush	4 mm - Flush	4 mm - Flush	4 mm - Flush	4 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
1000 Hz	1000 Hz	2000 Hz	2000 Hz	2000 Hz	500 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP67
POM	POM	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	POM
Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	Nickel Plated Brass
M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS12 S4PO50/M12	IPS12 S4PO68/M12	IMF12 S4PO30/A2P	IMF12 S4PO50/M12	IMF12 S4PO68/M12	IPS12 N4PO30/A2P
IPS12 S4PC50/M12	IPS12 S4PC68/M12	IMF12 S4PC30/A2P	IMF12 S4PC50/M12	IMF12 S4PC68/M12	IPS12 N4PC30/A2P
IPS12 S4NO50/M12	IPS12 S4NO68/M12	IMF12 S4NO30/A2P	IMF12 S4NO50/M12	IMF12 S4NO68/M12	IPS12 N4NO30/A2P
IPS12 S4NC50/M12	IPS12 S4NC68/M12	IMF12 S4NC30/A2P	IMF12 S4NC50/M12	IMF12 S4NC68/M12	IPS12 N4NC30/A2P
On Request	On Request				On Request

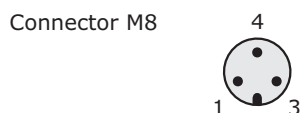
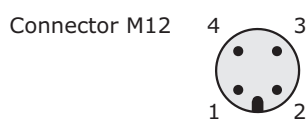
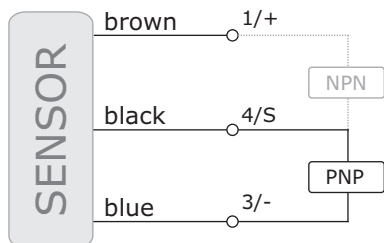


# Inductive Proximity Switches

INDUCTIVE

## M12

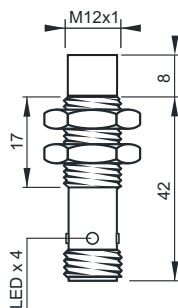
### Output Schematics



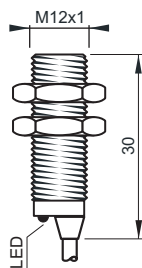
The use of this sensors is not permitted if the safety of people is relying upon it.



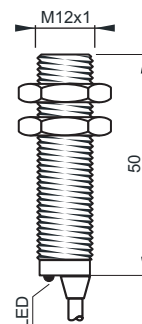
4 mm



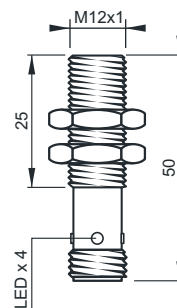
6 mm



6 mm



6 mm



	M12x1	M12x1	M12x1	M12x1
Sensing Distance	4 mm - NonFlush	6 mm - Flush	6 mm - Flush	6 mm - Flush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	500 Hz	800 Hz	800 Hz	1000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Connected	M12, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS12 N4PO50/M12	IPS12 S6PO30/A2P	IPS12 S6PO50/A2P	IPS12 S6PO50/M12
PNP, NC	IPS12 N4PC50/M12	IPS12 S6PC30/A2P	IPS12 S6PC50/A2P	IPS12 S6PC50/M12
NPN, NO	IPS12 N4NO50/M12	IPS12 S6NO30/A2P	IPS12 S6NO50/A2P	IPS12 S6NO50M12
NPN, NC	IPS12 N4NC50/M12	IPS12 S6NC30/A2P	IPS12 S6NC50/A2P	IPS12 S6NC50M12
Stainless Steel Housing	On Request	On Request	On Request	On Request

# Inductive Proximity Switches

## M12



6 mm

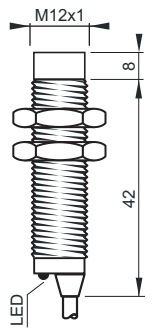
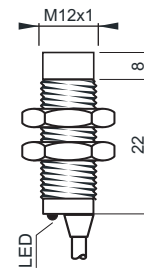
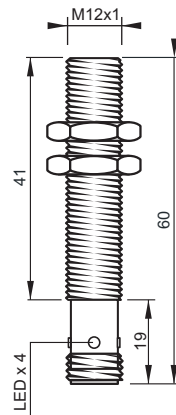
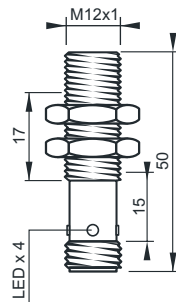
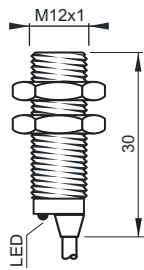
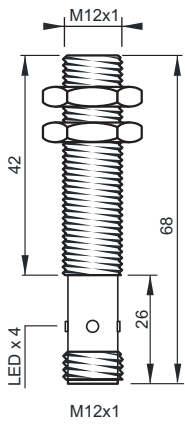
6 mm

6 mm

6 mm

8 mm

8 mm



M12x1	M12 Metal Face	M12 Metal Face	M12 Metal Face	M12x1	M12x1
6 mm - Flush	6 mm - Flush	6 mm - Flush	6 mm - Flush	8 mm - NonFlush	8 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
1000 Hz	2000 Hz	2000 Hz	2000 Hz	500 Hz	500 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP67	IP67
POM	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	POM	POM
Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	Nickel Plated Brass	Nickel Plated Brass
M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS12 S6PO68/M12  
 IPS12 S6PC68/M12  
 IPS12 S6NO68/M12  
 IPS12 S6NC68/M12  
 On Request

IMF12 S6PO30/A2P  
 IMF12 S6PC30/A2P  
 IMF12 S6NO30A2P  
 IMF12 S6NC30/A2P

IMF12 S6PO50/M12  
 IMF12 S6PC50/M12  
 IMF12 S6NO50/M12  
 IMF12 S6NC50/M12

IMF12 S6PO60/M12  
 IMF12 S6PC60/M12  
 IMF12 S6NO60/M12  
 IMF12 S6NC60/M12

IPS12 N8PO30/A2P  
 IPS12 N8PC30/A2P  
 IPS12 N8NO30/A2P  
 IPS12 N8NC30/A2P  
 On Request

IPS12 N8PO50/A2P  
 IPS12 N8PC50/A2P  
 IPS12 N8NO50/A2P  
 IPS12 N8NC50/A2P  
 On Request



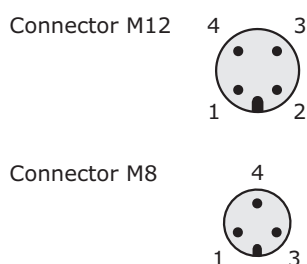
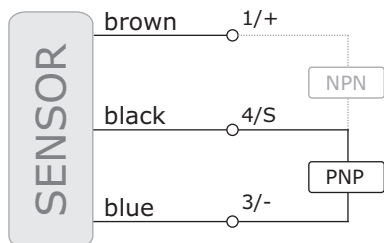


# Inductive Proximity Switches

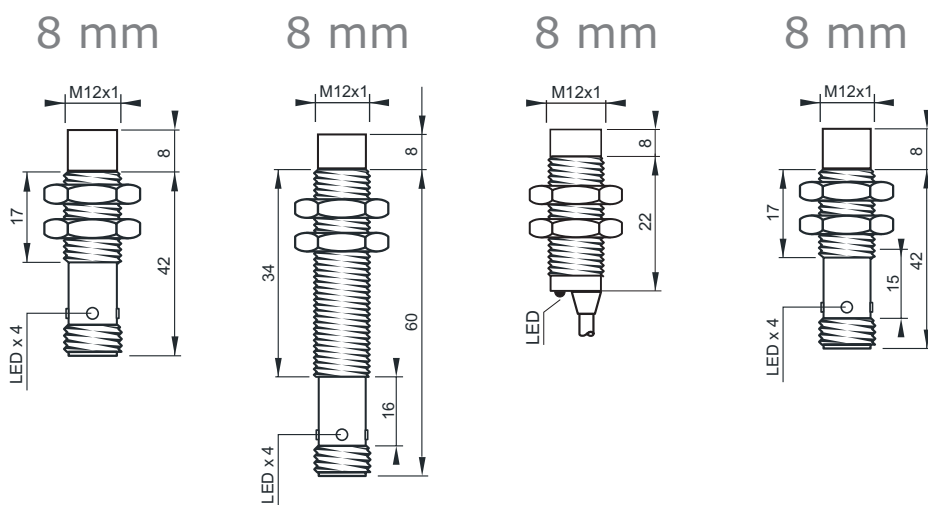
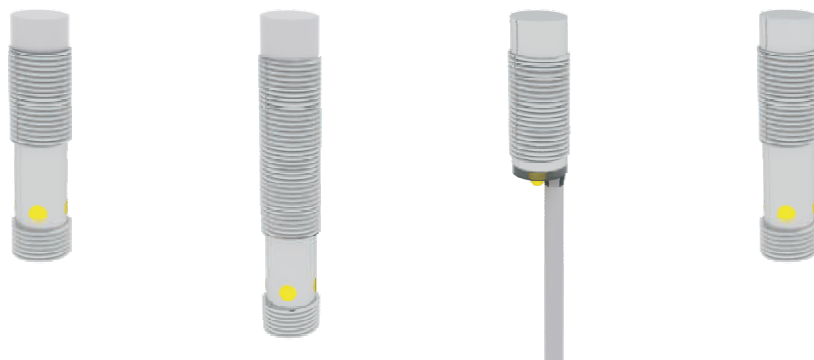
INDUCTIVE

## M12

### Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.



	M12x1	M12x1	M12 Metal Face	M12 Metal Face
Sensing Distance	8 mm - NonFlush	8 mm - NonFlush	8 mm - NonFlush	8 mm - NonFlush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	500 Hz	500 Hz	500 Hz	1000 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67
Sensing Face Material	POM	POM	V2A - 1.4305	V2A - 1.4305
Housing Material	Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305
Connected	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS12 N8PO50/M12	IPS12 N8PO68/M12	IMF12 N8PO30/A2P	IMF12 N8PO50/M12
PNP, NC	IPS12 N8PC50/M12	IPS12 N8PC68/M12	IMF12 N8PC30/A2P	IMF12 N8PC50/M12
NPN, NO	IPS12 N8NO50/M12	IPS12 N8NO68/M12	IMF12 N8NO30/A2P	IMF12 N8NO50/M12
NPN, NC	IPS12 N8NC50/M12	IPS12 N8NC68/M12	IMF12 N8NC30/A2P	IMF12 N8NC50/M12
Stainless Steel Housing	On Request	On Request		

# Inductive Proximity Switches

## M12



8 mm

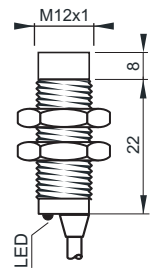
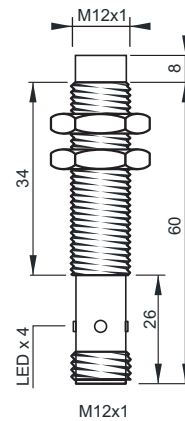
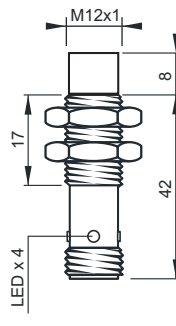
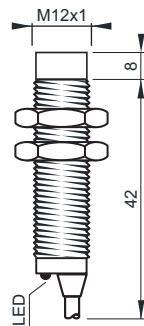
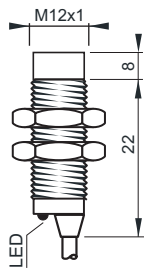
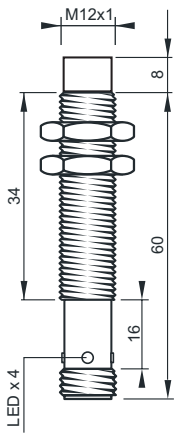
10 mm

10 mm

10 mm

10 mm

10 mm



M12 Metal Face	M12x1	M12x1	M12x1	M12x1	M12 Metal Face
8 mm - NonFlush	10 mm - NonFlush	10 mm - NonFlush	10 mm - NonFlush	10 mm - NonFlush	10 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
1000 Hz	400 Hz	400 Hz	500 Hz	500 Hz	500 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP68, Conn. IP67	IP67	IP67	IP67	IP67	IP68, Conn. IP67
V2A - 1.4305	POM	POM	POM	POM	V2A - 1.4305
V2A - 1.4305	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305
M12, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IMF12 N8PO68/M12	IPS12 N10PO30/A2P	IPS12 N10PO50/A2P	IPS12 N10PO50/M12	IPS12 N10PO68/M12	IMF12 N10PO30/A2P
IMF12 N8PC68/M12	IPS12 N10PC30/A2P	IPS12 N10PC50/A2P	IPS12 N10PC50/M12	IPS12 N10PC68/M12	IMF12 N10PC30/A2P
IMF12 N8NO68/M12	IPS12 N10NO30/A2P	IPS12 N10NO50/A2P	IPS12 N10NO50/M12	IPS12 N10NO68/M12	IMF12 N10NO30/A2P
IMF12 N8NC68/M12	IPS12 N10NC30/A2P	IPS12 N10NC50/A2P	IPS12 N10NC50/M12	IPS12 N10NC68/M12	IMF12 N10NC30/A2P
	On Request	On Request	On Request	On Request	

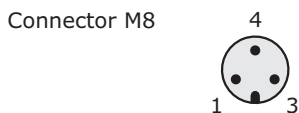
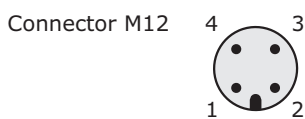
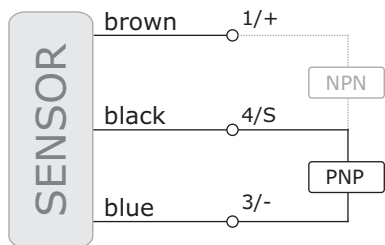


# Inductive Proximity Switches

INDUCTIVE

## M12 M18

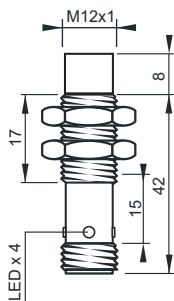
### Output Schematics



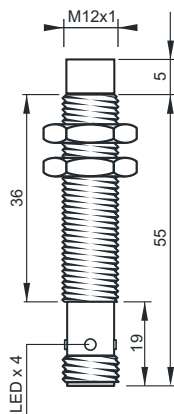
The use of this sensors is not permitted if the safety of people is relying upon it.



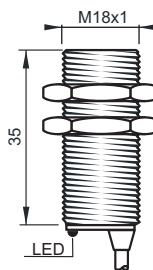
10 mm



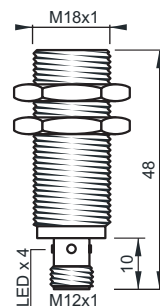
10 mm



5 mm



5 mm



	M12 Metal Face	M12 Metal Face	M18x1	M18x1
Sensing Distance	10 mm - NonFlush	10 mm NonFlush	5 mm - Flush	5 mm - Flush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	1000 Hz	1000 Hz	300 Hz	300 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP68, Conn. IP67	IP68, Conn. IP67	IP67	IP67
Sensing Face Material	V2A - 1.4305	V2A - 1.4305	POM	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	Nickel Plated Brass	Nickel Plated Brass
Connected	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IMF12 N10PO50/M12	IMF12 N10PO60/M12	IPS18 S5PO35/A2P	IPS18 S5PO48/M12
PNP, NC	IMF12 N10PC50/M12	IMF12 N10PC60/M12	IPS18 S5PC35/A2P	IPS18 S5PC48/M12
NPN, NO	IMF12 N10NO50/M12	IMF12 N10NO60/M12	IPS18 S5NO35/A2P	IPS18 S5NO48/M12
NPN, NC	IMF12 N10NC50/M12	IMF12 N10NC60/M12	IPS18 S5NC35/A2P	IPS18 S5NC48/M12
Stainless Steel Housing			On Request	On Request

# Inductive Proximity Switches

## M18



8 mm

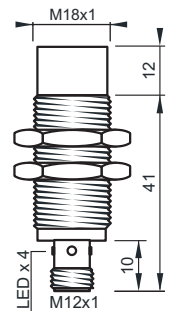
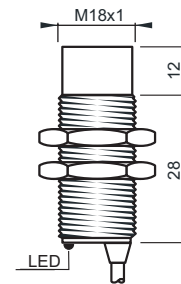
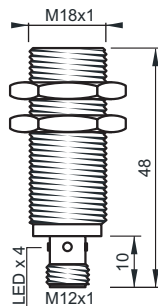
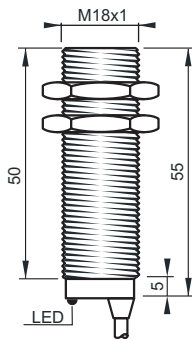
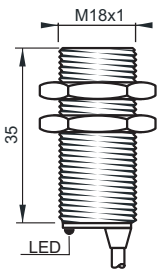
8 mm

8 mm

8 mm

8 mm

8 mm



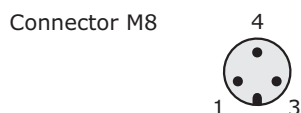
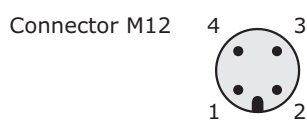
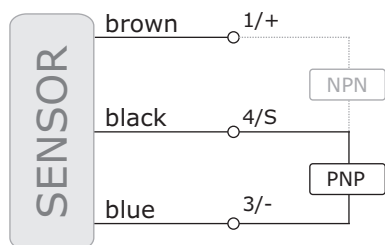
M18x1	M18x1	M18x1	M18x1	M18x1	M18x1
8 mm - Flush	8 mm - Flush	8 mm - Flush	8 mm - Flush	8 mm - NonFlush	8 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
300 Hz	300 Hz	300 Hz	300 Hz	100 Hz	100 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP67	IP67
POM	POM	POM	POM	POM	POM
Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
PVC, 3-pole, 2m	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS18 S8PO35/A2P	IPS18 S8PO55/A2P	IPS18 S8PO48/M12	IPS18 S8PO79/M12	IPS18 N8PO40/A2P	IPS18 N8PO53/M12
IPS18 S8PC35/A2P	IPS18 S8PC55/A2P	IPS18 S8PC48/M12	IPS18 S8PC79/M12	IPS18 N8PC40/A2P	IPS18 N8PC53/M12
IPS18 S8NO35/A2P	IPS18 S8NO55/A2P	IPS18 S8NO48/M12	IPS18 S8NO79/M12	IPS18 N8NO40/A2P	IPS18 N8NO53/M12
IPS18 S8NC35/A2P	IPS18 S8NC55/A2P	IPS18 S8NC48/M12	IPS18 S8NC79/M12	IPS18 N8NC40/A2P	IPS18 N8NC53/M12
On Request	On Request	On Request	On Request	On Request	On Request



## M18

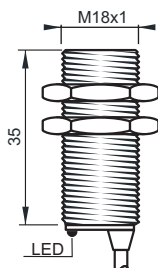
### Output Schematics



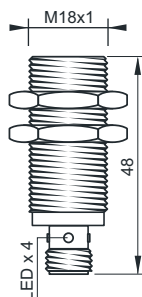
The use of this sensors is not permitted if the safety of people is relying upon it.



8 mm



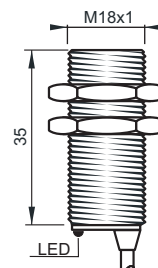
8 mm



8 mm



12 mm



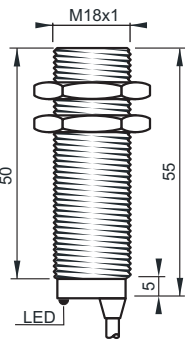
	M18 Metal Face	M18 Metal Face	M18 Metal Face	M18x1
Sensing Distance	8 mm - Flush	8 mm - Flush	8 mm - Flush	12 mm - Flush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	300 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP67
Sensing Face Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	Nickel Plated Brass
Connected	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IMF18 S8PO35/A2P	IMF18 S8PO48/M12	IMF18 S8PO79/M12	IPS18 S12PO35/A2P
PNP, NC	IMF18 S8PC35/A2P	IMF18 S8PC48/M12	IMF18 S8PC79/M12	IPS18 S12PC35/A2P
NPN, NO	IMF18 S8NO35/A2P	IMF18 S8NO48/M12	IMF18 S8NO79/M12	IPS18 S12NO35/A2P
NPN, NC	IMF18 S8NC35/A2P	IMF18 S8NC48/M12	IMF18 S8NC79/M12	IPS18 S12NC35/A2P
Stainless Steel Housing				On Request

# Inductive Proximity Switches

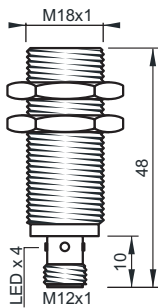
## M18



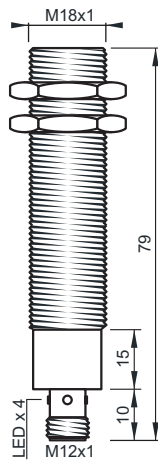
12 mm



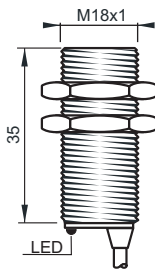
12 mm



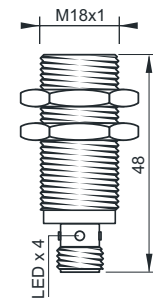
12 mm



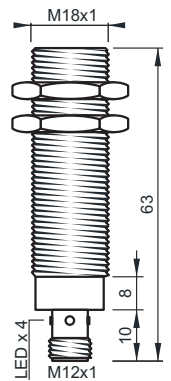
12 mm



12 mm



12 mm



M18x1	M18x1	M18x1	M18 Metal Face	M18 Metal Face	M18 Metal Face
12 mm - Flush	12 mm - Flush	12 mm - Flush	12 mm - Flush	12 mm - Flush	12 mm - Flush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
300 Hz	300 Hz	300 Hz	1000 Hz	1000 Hz	1000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67
POM	POM	POM	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS18 S12PO55/A2P	IPS18 S12PO48/M12	IPS18 S12PO79/M12	IMF18 S12PO35/A2P	IMF18 S12PO48/M12	IMF18 S12PO63/M12
IPS18 S12PC55/A2P	IPS18 S12PC48/M12	IPS18 S12PC79/M12	IMF18 S12PC35/A2P	IMF18 S12PC48/M12	IMF18 S12PC63/M12
IPS18 S12NO55/A2P	IPS18 S12NO48/M12	IPS18 S12NO79/M12	IMF18 S12NO35/A2P	IMF18 S12NO48/M12	IMF18 S12NO63/M12
IPS18 S12NC55/A2P	IPS18 S12NC48/M12	IPS18 S12NC79/M12	IMF18 S12NC35/A2P	IMF18 S12NC48/M12	IMF18 S12NC63/M12
On Request	On Request	On Request			

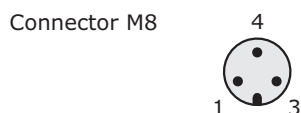
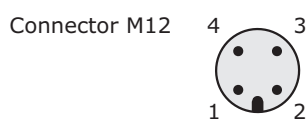
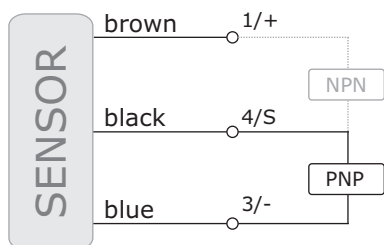


# Inductive Proximity Switches

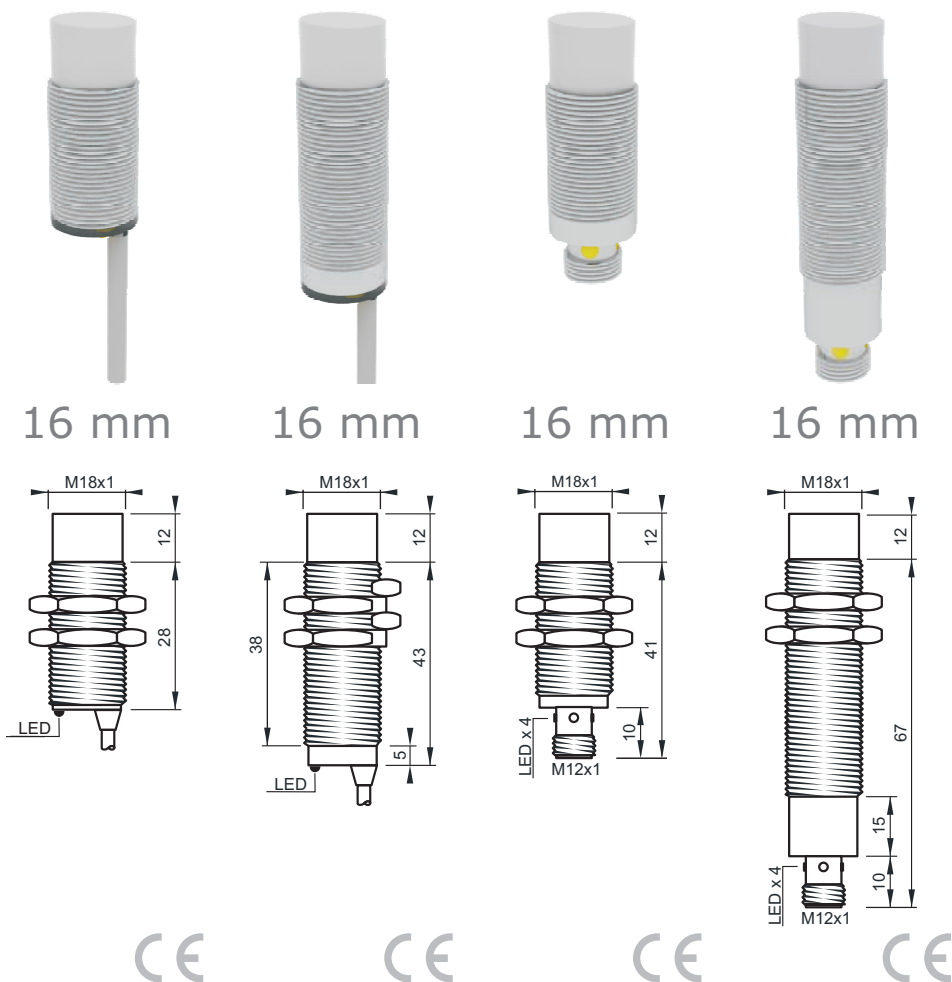
INDUCTIVE

## M18

### Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.

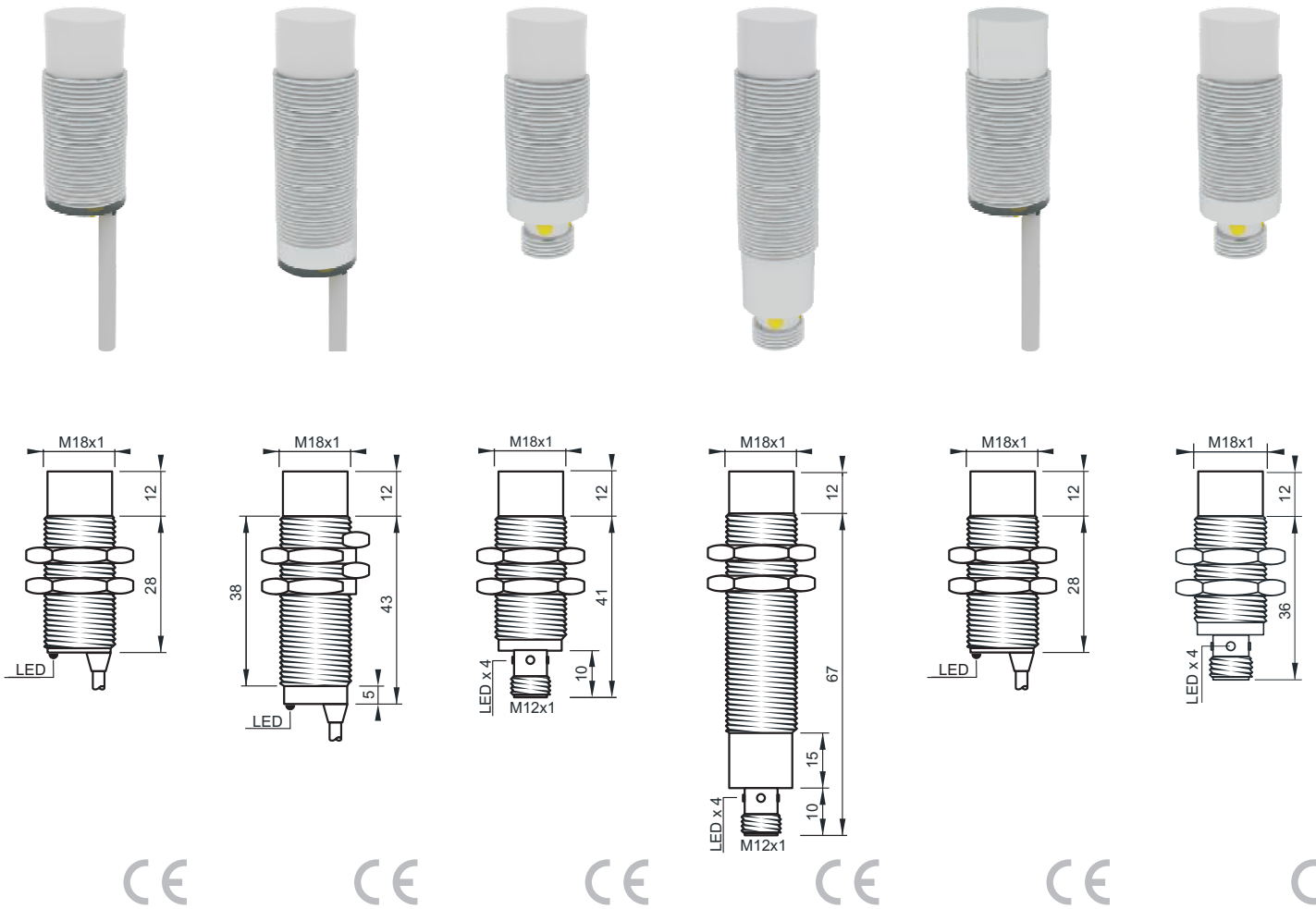


	M18x1	M18x1	M18x1	M18x1
Sensing Distance	16 mm - NonFlush	16 mm - NonFlush	16 mm - NonFlush	16 mm - NonFlush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	100 Hz	100 Hz	100 Hz	100 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Connected	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IPS18 N16PO40/A2P	IPS18 N16PO55/A2P	IPS18 N16PO53/M12	IPS18 N16PO79/M12
PNP, NC	IPS18 N16PC40/A2P	IPS18 N16PC55/A2P	IPS18 N16PC53/M12	IPS18 N16PC79/M12
NPN, NO	IPS18 N16NO40/A2P	IPS18 N16NO55/A2P	IPS18 N16NO53/M12	IPS18 N16NO79/M12
NPN, NC	IPS18 N16NC40/A2P	IPS18 N16NC55/A2P	IPS18 N16NC53/M12	IPS18 N16NC79/M12
Stainless Steel Housing	On Request	On Request	On Request	On Request



## Inductive Proximity Switches

## M18

M18 **Metal Face**

20 mm - NonFlush	20 mm - NonFlush	20 mm - NonFlush	20 mm - NonFlush	20 mm - NonFlush	20 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
100 Hz	100 Hz	100 Hz	100 Hz	1000 Hz	500 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67
POM	POM	POM	POM	V2A - 1.4305	V2A - 1.4305
Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305
PVC, 3-pole, 2m	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
IPS18 N20PO40/A2P	IPS18 N20PO55/A2P	IPS18 N20PO53/M12	IPS18 N20PO79/M12	IMF18 N20PO35/A2P	IMF18 N20PO48/M12
IPS18 N20PC40/A2P	IPS18 N20PC55/A2P	IPS18 N20PC53/M12	IPS18 N20PC79/M12	IMF18 N20PC35/A2P	IMF18 N20PC48/M12
IPS18 N20NO40/A2P	IPS18 N20NO55/A2P	IPS18 N20NO53/M12	IPS18 N20NO79/M12	IMF18 N20NO35/A2P	IMF18 N20NO48/M12
IPS18 N20NC40/A2P	IPS18 N20NC55/A2P	IPS18 N20NC53/M12	IPS18 N20NC79/M12	IMF18 N20NC35/A2P	IMF18 N20NC48/M12
On Request	On Request	On Request	On Request		

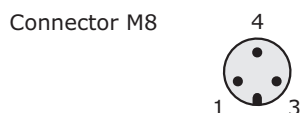
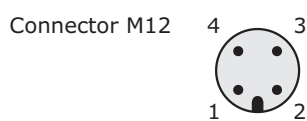
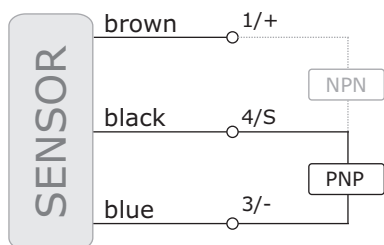




# Inductive Proximity Switches

INDUCTIVE

## Output Schematics

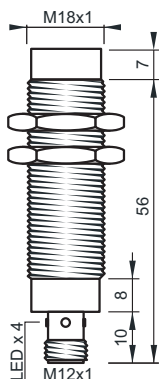


The use of this sensors is not permitted if the safety of people is relying upon it.

### M18



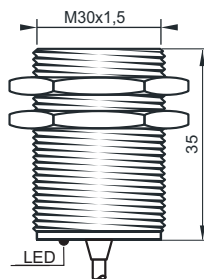
20 mm



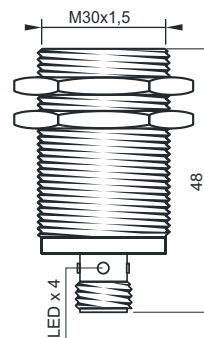
### M30



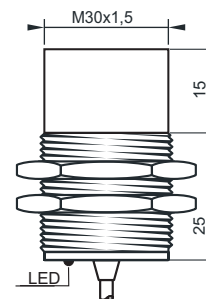
10 mm



10 mm



15 mm



#### M18 Metal Face

#### M30x1.5

#### M30x1.5

#### M30x1.5

	M18 Metal Face	M30x1.5	M30x1.5	M30x1.5
Sensing Distance	20 mm -Non Flush	10 mm - Flush	10 mm - Flush	15 mm - NonFlush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	1000 Hz	150 Hz	150 Hz	100 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP68, Conn. IP67	IP67	IP67	IP67
Sensing Face Material	V2A - 1.4305	POM	POM	POM
Housing Material	V2A - 1.4305	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Connected	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole	PVC, 3-pole, 2m
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated

#### Article code

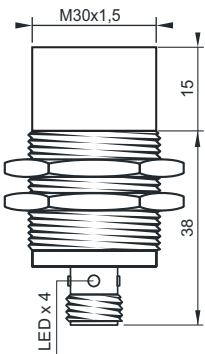
PNP, NO	IMF18 N20PO63/M12	IPS30 S10PO35/A2P	IPS30 S10PO48/M12	IPS30 N15PO40/A2P
PNP, NC	IMF18 N20PC63/M12	IPS30 S10PC35/A2P	IPS30 S10PC48/M12	IPS30 N15PC40/A2P
NPN, NO	IMF18 N20NO63/M12	IPS30 S10NO35/A2P	IPS30 S10NO48/M12	IPS30 N15NO40/A2P
NPN, NC	IMF18 N20NC63/M12	IPS30 S10NC35/A2P	IPS30 S10NC48/M12	IPS30 N15NC40/A2P
Stainless Steel Housing		On Request	On Request	On Request

## Inductive Proximity Switches

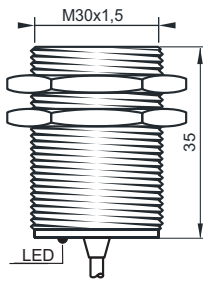
## M30



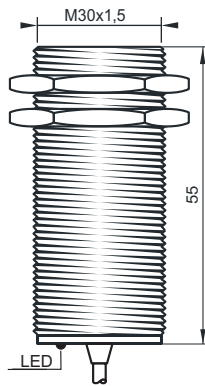
15 mm



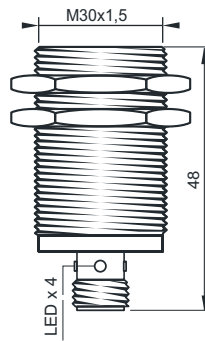
16 mm



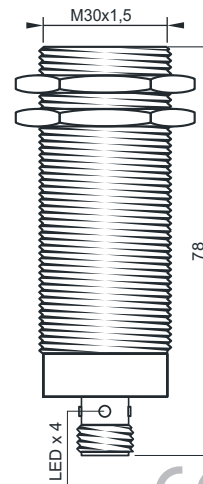
16 mm



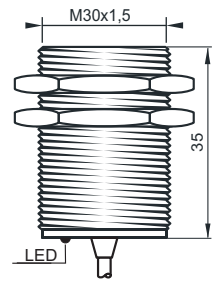
16 mm



16 mm



16 mm



M30x1.5

15 mm - NonFlush

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 100 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C  
 IP67  
 POM  
 Nickel Plated Brass  
 M12, 3-pole  
 Incorporated

M30x1.5

16 mm - Flush

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 150 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C  
 IP67  
 POM  
 Nickel Plated Brass  
 PVC, 3-pole, 2m  
 Incorporated

M30x1.5

16 mm - Flush

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 150 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C  
 IP67  
 POM  
 Nickel Plated Brass  
 PVC, 3-pole, 2m  
 Incorporated

M30x1.5

16 mm - Flush

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 150 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C  
 IP67  
 POM  
 Nickel Plated Brass  
 M12, 3-pole  
 Incorporated

M30x1.5

16 mm - Flush

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 150 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C  
 IP67  
 POM  
 Nickel Plated Brass  
 M12, 3-pole  
 Incorporated

M30 Metal Face

16 mm - Flush

10... 30 VDC  
 < 8 mA  
 200 mA  
 < 1.5 V @ 200 mA  
 300 Hz  
 < 1 % (Sn)  
 3... 15 %  
 -25... +75 °C  
 IP68, Conn. IP67  
 V2A - 1.4305  
 V2A - 1.4305  
 PVC, 3-pole, 2m  
 Incorporated

IPS30 N15PO53/M12  
 IPS30 N15PC53/M12  
 IPS30 N15NO53/M12  
 IPS30 N15NC53/M12  
 On Request

IPS30 S16PO35/A2P  
 IPS30 S16PC35/A2P  
 IPS30 S16NO35/A2P  
 IPS30 S16NC35/A2P  
 On Request

IPS30 S16PO55/A2P  
 IPS30 S16PC55/A2P  
 IPS30 S16NO55/A2P  
 IPS30 S16NC55/A2P  
 On Request

IPS30 S16PO48/M12  
 IPS30 S16PC48/M12  
 IPS30 S16NO48/M12  
 IPS30 S16NC48/M12  
 On Request

IPS30 S16PO78/M12  
 IPS30 S16PC78/M12  
 IPS30 S16NO78/M12  
 IPS30 S16NC78/M12  
 On Request

IMF30 S16PO35/A2P  
 IMF30 S16PC35/A2P  
 IMF30 S16NO35/A2P  
 IMF30 S16NC35/A2P

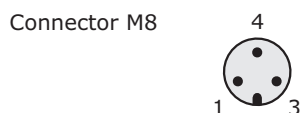
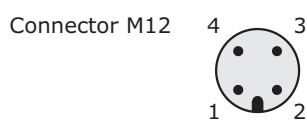
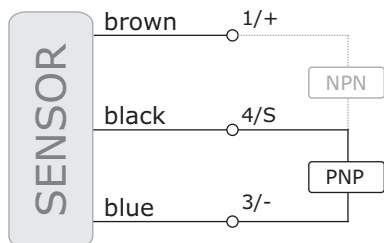


# Inductive Proximity Switches

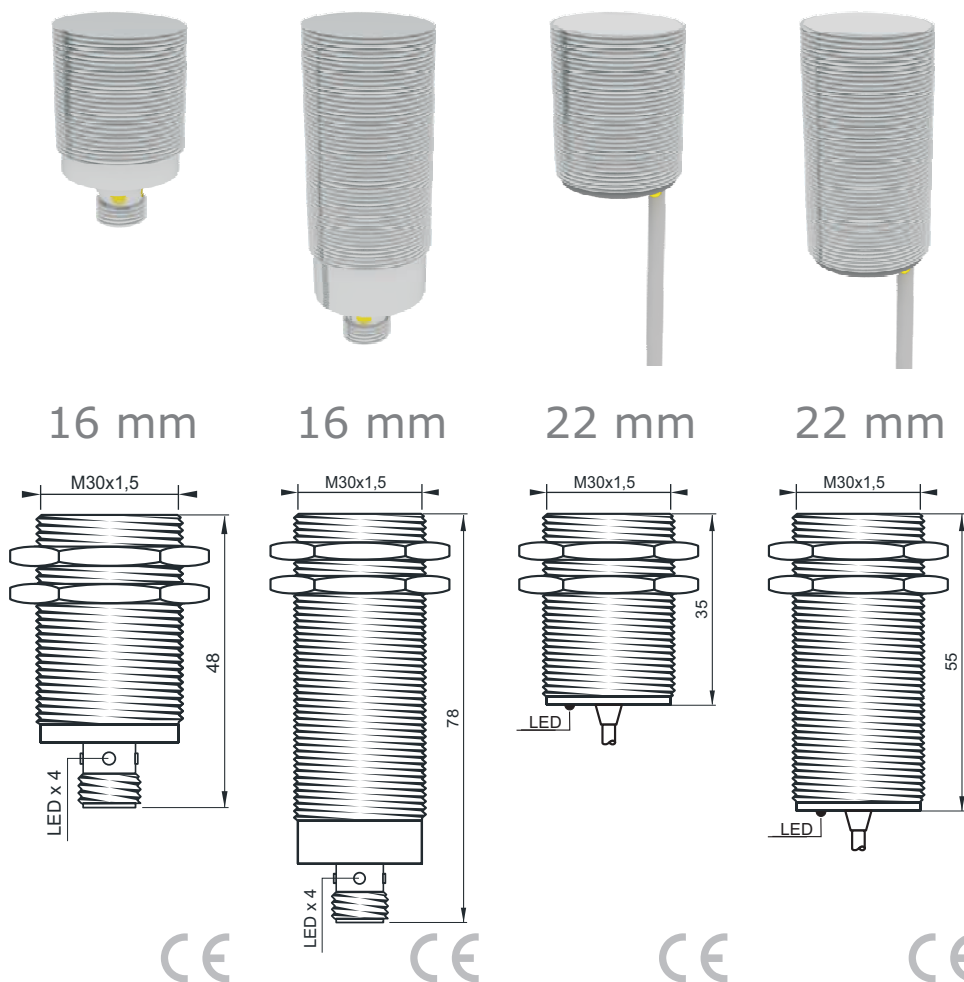
INDUCTIVE

## M30

### Output Schematics



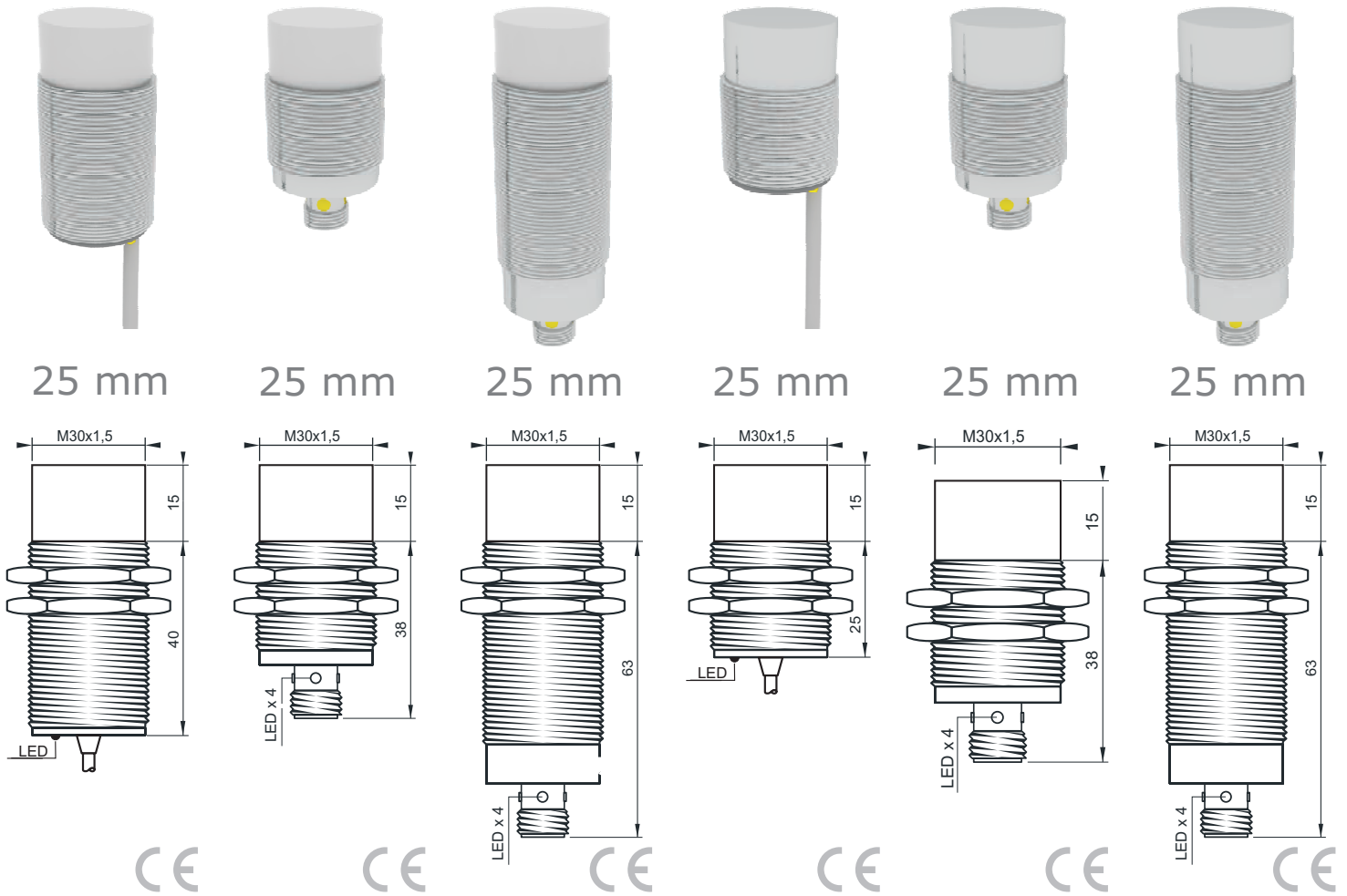
The use of this sensors is not permitted if the safety of people is relying upon it.



	M30 Metal Face	M30 Metal Face	M30x1.5	M30x1.5
Sensing Distance	16 mm - Flush	16 mm - Flush	22 mm - Flush	22 mm - Flush
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	300 Hz	300 Hz	300 Hz	150 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP68, Conn. IP67	IP68, Conn. IP67	IP67	IP67
Sensing Face Material	V2A - 1.4305	V2A - 1.4305	PBT	POM
Housing Material	V2A - 1.4305	V2A - 1.4305	PBT	Nickel Plated Brass
Connected	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	PVC, 3-pole, 2m
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated
<b>Article code</b>				
PNP, NO	IMF30 S16PO48/M12	IMF30 S16PO78/M12	IPS30 S22PO35/A2P	IPS30 S22PO55/A2P
PNP, NC	IMF30 S16PC48/M12	IMF30 S16PC78/M12	IPS30 S22PC35/A2P	IPS30 S22PC55/A2P
NPN, NO	IMF30 S16NO48/M12	IMF30 S16NO78/M12	IPS30 S22NO35/A2P	IPS30 S22NO55/A2P
NPN, NC	IMF30 S16NC48/M12	IMF30 S16NC78/M12	IPS30 S22NC35/A2P	IPS30 S22NC55/A2P
Stainless Steel Housing			On Request	On Request

# Inductive Proximity Switches

## M30



				M30 Metal Face	M30 Metal Face
25 mm - NonFlush	25 mm - NonFlush	25 mm - NonFlush	25 mm - NonFlush	25 mm - NonFlush	25 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
100 Hz	100 Hz	100 Hz	100 Hz	150 Hz	150 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67
POM	POM	POM	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS30 N25PO55/A2P	IPS30 N25PO53/M12	IPS30 N25PO78/M12	IMF30 N25PO40/A2P	IMF30 N25PO53/M12	IMF30 N25PO78/M12
IPS30 N25PC55/A2P	IPS30 N25PC53/M12	IPS30 N25PC78/M12	IMF30 N25PC40/A2P	IMF30 N25PC53/M12	IMF30 N25PC78/M12
IPS30 N25NO55/A2P	IPS30 N25NO53/M12	IPS30 N25NO78/M12	IMF30 N25NO40/A2P	IMF30 N25NO53/M12	IMF30 N25NO78/M12
IPS30 N25NC55/A2P	IPS30 N25NC53/M12	IPS30 N25NC78/M12	IMF30 N25NC40/A2P	IMF30 N25NC53/M12	IMF30 N25NC78/M12
On Request	On Request	On Request	On Request		

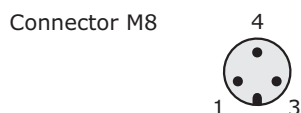
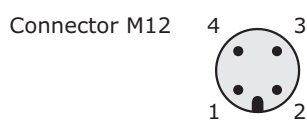
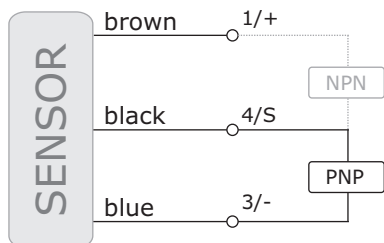


# Inductive Proximity Switches

INDUCTIVE

## M30

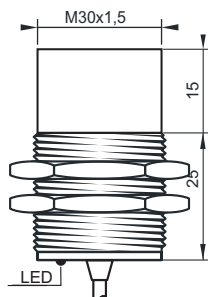
### Output Schematics



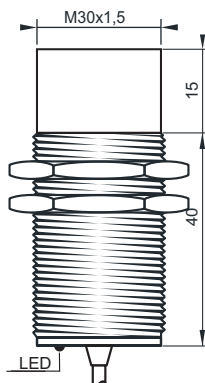
The use of this sensors is not permitted if the safety of people is relying upon it.



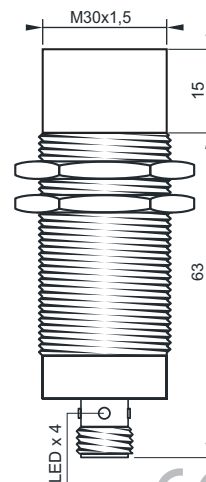
40 mm



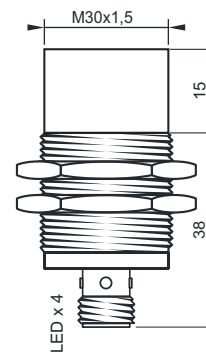
40 mm



40 mm



40 mm



	M30x1.5	M30x1.5	M30x1.5	M30x1.5
Sensing Distance	40 mm - NonFlush	40 mm - NonFlush	40 mm - NonFlush	40 mm - NonFlush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	100 Hz	100 Hz	100 Hz	100 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP67	IP67	IP67	IP67
Sensing Face Material	PBT	POM	POM	POM
Housing Material	PBT	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Connected	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated	Incorporated

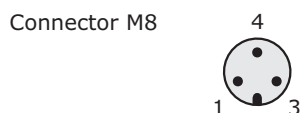
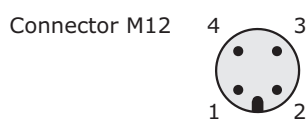
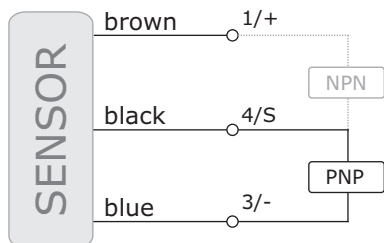
### Article code

PNP, NO	IPS30 N40PO40/A2P	IPS30 N40PO55/A2P	IPS30 N40PO78/M12	IPS30 N40PO53/M12
PNP, NC	IPS30 N40PC40/A2P	IPS30 N40PC55/A2P	IPS30 N40PC78/M12	IPS30 N40PC53/M12
NPN, NO	IPS30 N40NO40/A2P	IPS30 N40NO55/A2P	IPS30 N40NO78/M12	IPS30 N40NO53/M12
NPN, NC	IPS30 N40NC40/A2P	IPS30 N40NC55/A2P	IPS30 N40NC78/M12	IPS30 N40NC53/M12
Stainless Steel Housing	On Request	On Request	On Request	On Request



## M30

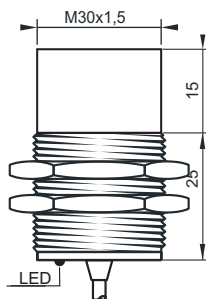
### Output Schematics



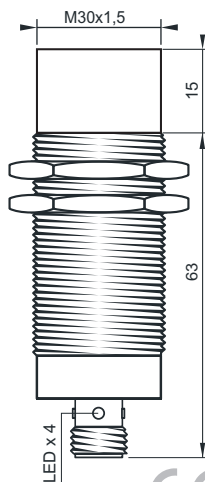
The use of this sensors is not permitted if the safety of people is relying upon it.



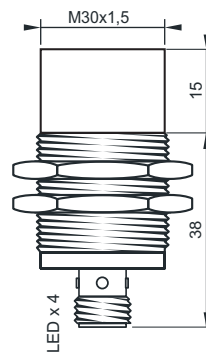
40 mm



40 mm



40 mm

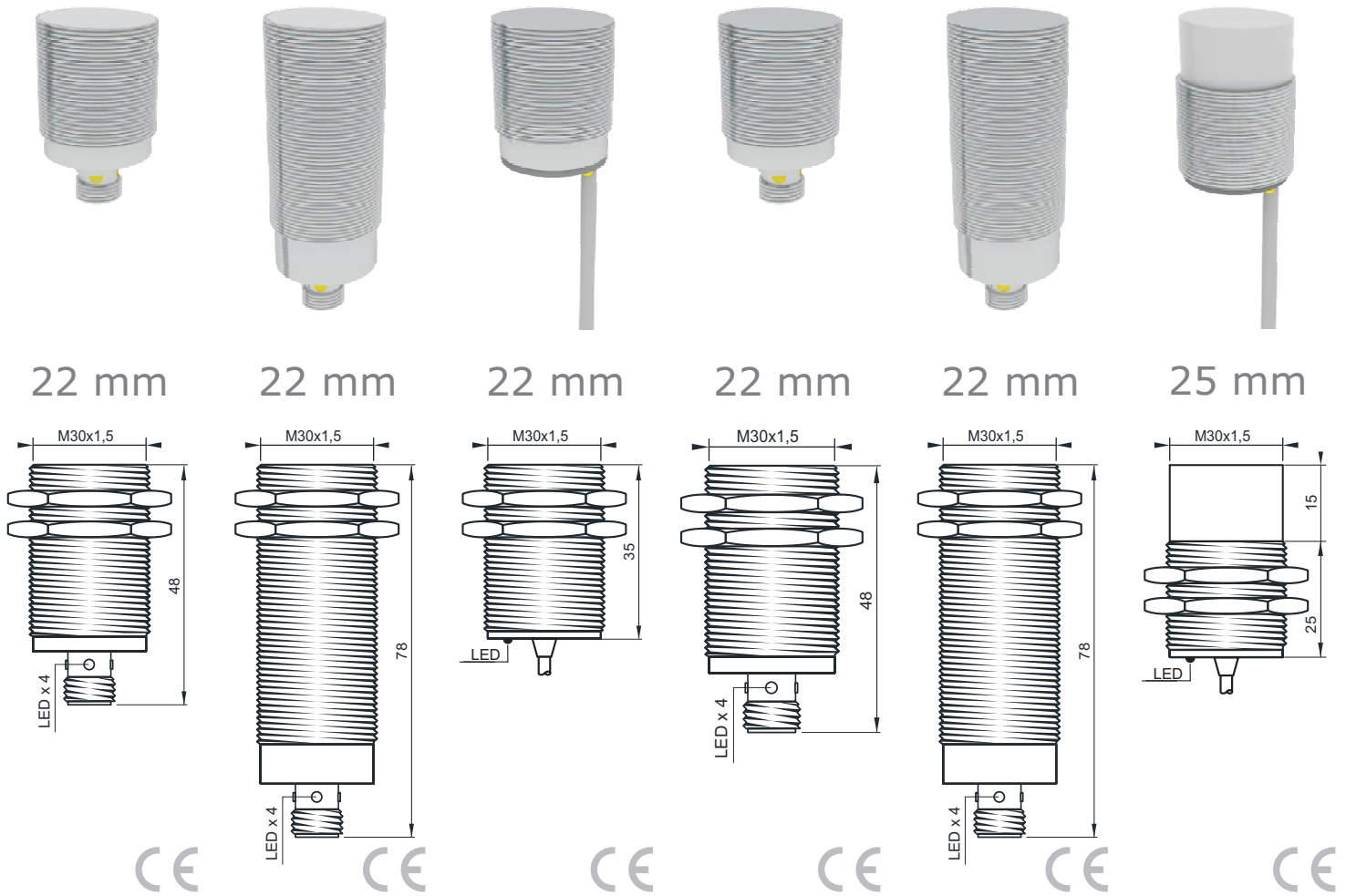


	M30 Metal Face	M30 Metal Face	M30 Metal Face
Sensing Distance	40 mm - NonFlush	40 mm - NonFlush	40 mm - NonFlush
Operating Voltage	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>	10... 30 V <sub>DC</sub>
Current Consumption	< 8 mA	< 8 mA	< 8 mA
Output Current	200 mA	200 mA	200 mA
Voltage Drop	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
Switching Frequency	100 Hz	150 Hz	150 Hz
Repeatability	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
Hysteresis	3... 15 %	3... 15 %	3... 15 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67
Sensing Face Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole
Operating-LED	Incorporated	Incorporated	Incorporated
Article code			
PNP, NO	IMF30 N40PO40/A2P	IMF30 N40PO78/M12	IMF30 N40PO53/M12
PNP, NC	IMF30 N40PC40/A2P	IMF30 N40PC78/M12	IMF30 N40PC53/M12
NPN, NO	IMF30 N40NO40/A2P	IMF30 N40NO78/M12	IMF30 N40NO53/M12
NPN, NC	IMF30 N40NC40/A2P	IMF30 N40NC78/M12	IMF30 N40NC53/M12
Stainless Steel Housing	On Request		



## Inductive Proximity Switches

## M30



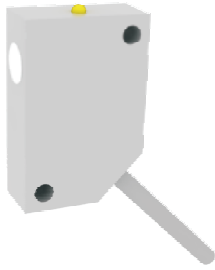
M30x1.5	M30x1.5	M30 Metal Face	M30 Metal Face	M30 Metal Face	M30x1.5
22 mm - Flush	22 mm - Flush	22 mm - Flush	22 mm - Flush	22 mm - Flush	25 mm - NonFlush
10... 30 Vdc	10... 30 Vdc	10... 30 Vdc	10... 30 Vdc	10... 30 Vdc	10... 30 Vdc
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
300 Hz	150 Hz	300 Hz	300 Hz	300 Hz	100 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP68, Conn. IP67	IP67
POM	POM	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	POM
Nickel Plated Brass	Nickel Plated Brass	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	Nickel Plated Brass
M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m	M12, 3-pole	M12, 3-pole	PVC, 3-pole, 2m
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

IPS30 S22PO48/M12	IPS30 S22PO78/M12	IMF30 S22PO35/A2P	IMF30 S22PO48/M12	IMF30 S22PO78/M12	IPS30 N25PO40/A2P
IPS30 S22PC48/M12	IPS30 S22PC78/M12	IMF30 S22PC35/A2P	IMF30 S22PC48/M12	IMF30 S22PC78/M12	IPS30 N25PC40/A2P
IPS30 S22NO48/M12	IPS30 S22NO78/M12	IMF30 S22NO35/A2P	IMF30 S22NO48/M12	IMF30 S22NO78/M12	IPS30 N25NO40/A2P
IPS30 S22NC48/M12	IPS30 S22NC78/M12	IMF30 S22NC35/A2P	IMF30 S22NC48/M12	IMF30 S22NC78/M12	IPS30 N25NC40/A2P
On Request	On Request				On Request
	-				
	-				

# Inductive Proximity Switches

## □25x40

## □16x28



2 mm

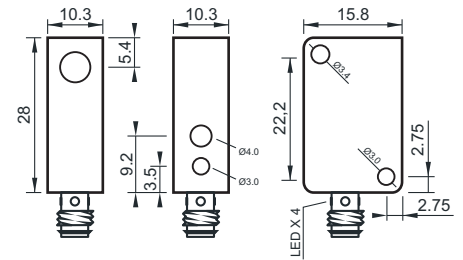
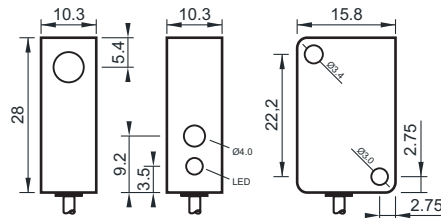
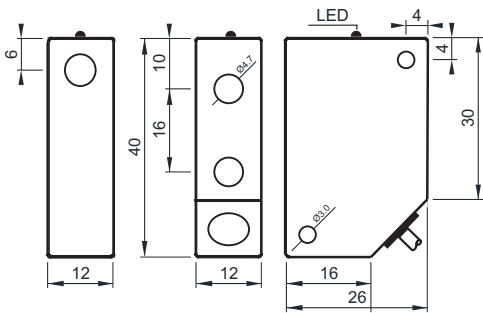
4 mm

2 mm

4 mm

2 mm

4 mm



25 x 40 x 12 mm	25 x 40 x 12 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm
2 mm - Flush	4 mm - NonFlush	2 mm - Flush	4 mm - NonFlush	2 mm - Flush	4 mm - NonFlush
10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA	< 1.5 V @ 200 mA
300 Hz	100 Hz	2000 Hz	2000 Hz	2000 Hz	2000 Hz
< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)	< 1 % (Sn)
3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %	3... 15 %
-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
IP67	IP67	IP67	IP67	IP67	IP67
PBT	PBT	die-cast	die-cast	die-cast	die-cast
PBT	PBT	die-cast	die-cast	die-cast	die-cast
PVC, 3-pole, 2m	PVC, 3-pole, 2m	PVC, 3-pole, 2m	PVC, 3-pole, 2m	M8, 3-pole	M8, 3-pole
Incorporated	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
IPS2540 S2POS/A2P	IPS2540 N4POS/A2P	IPS1628 S2POS/A2P	IPS1628 N4POS/A2P	IPS1628 S2POS/M8	IPS1628 N4POS/M8
IPS2540 S2PCS/A2P	IPS2540 N4PCS/A2P	IPS1628 S2PCS/A2P	IPS1628 N4PCS/A2P	IPS1628 S2PCS/M8	IPS1628 N4PCS/M8
IPS2540 S2NOS/A2P	IPS2540 N4NOS/A2P	IPS1628 S2NOS/A2P	IPS1628 N4NOS/A2P	IPS1628 S2NOS/M8	IPS1628 N4NOS/M8
IPS2540 S2NCS/A2P	IPS2540 N4NCS/A2P	IPS1628 S2NCS/A2P	IPS1628 N4NCS/A2P	IPS1628 S2NCS/M8	IPS1628 N4NCS/M8



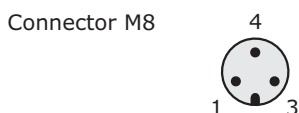
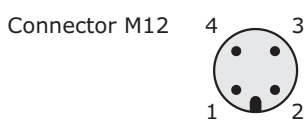
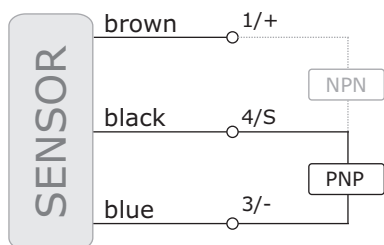


# Inductive Proximity Switches

## Ferrous / Non-Ferrous Sensing only

INDUCTIVE

### Output Schematics



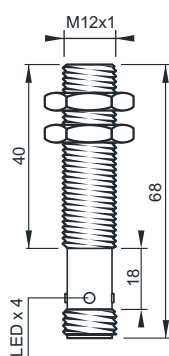
The use of this sensors is not permitted if the safety of people is relying upon it.

M12

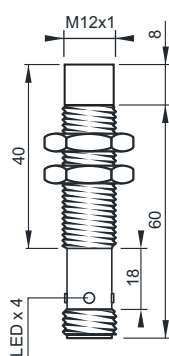
M18



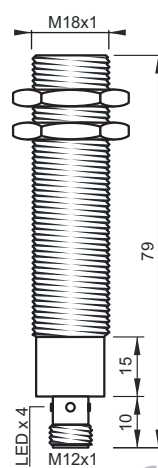
2 mm



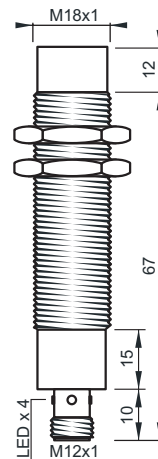
4 mm



5 mm



8 mm



M12x1 - Ferrous

M12x1 - Ferrous

M18x1 - Ferrous

M18x1 - Ferrous

Sensing Distance

2 mm - Flush  
See Article Code

4 mm - NonFlush  
See Article Code

5 mm - Flush  
See Article Code

8 mm - NonFlush  
See Article Code

Operating Voltage

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

Current Consumption

< 8 mA

< 8 mA

< 8 mA

< 8 mA

Output Current

200 mA

200 mA

200 mA

200 mA

Voltage Drop

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

< 1.5 V @ 200 mA

Switching Frequency

2000 Hz

1000 Hz

1000 Hz

500 Hz

Repeatability

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

< 1 % (Sn)

Hysteresis

3... 15 %

3... 15 %

3... 15 %

3... 15 %

Operating Temperature

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

Protection Class

IP68, Conn. IP67

IP68, Conn. IP67

IP68, Conn. IP67

IP68, Conn. IP67

Sensing Face Material

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

Housing Material

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

Connected

M12, 3-pole

M12, 3-pole

M12, 3-pole

M12, 3-pole

Operating-LED

Incorporated

Incorporated

Incorporated

Incorporated

### Article code

PNP, NO » Ferrous Sensing

IFE12 S2PO68/M12

IFE12 N4PO68/M12

IFE18 S5PO79/M12

IFE18 N8PO79/M12

PNP, NC » Ferrous Sensing

IFE12 S2PC68/M12

IFE12 N4PC68/M12

IFE18 S5PC79/M12

IFE18 N8PC79/M12

NPN, NO » Ferrous Sensing

IFE12 S2NO68/M12

IFE12 N4NO68/M12

IFE18 S5NO79/M12

IFE18 N8NO79/M12

NPN, NC » Ferrous Sensing

IFE12 S2NC68/M12

IFE12 N4NC68/M12

IFE18 S5NC79/M12

IFE18 N8NC79/M12

PNP, NO » Non-Ferrous Sensing

INF12 S2PO68/M12

INF12 N4PO68/M12

INF18 S5PO79/M12

INF18 N8PO79/M12

PNP, NC » Non-Ferrous Sensing

INF12 S2PC68/M12

INF12 N4PC68/M12

INF18 S5PC79/M12

INF18 N8PC79/M12

NPN, NO » Non-Ferrous Sensing

INF12 S2NO68/M12

INF12 N4NO68/M12

INF18 S5NO79/M12

INF18 N8NO79/M12

NPN, NC » Non-Ferrous Sensing

INF12 S2NC68/M12

INF12 N4NC68/M12

INF18 S5NC79/M12

INF18 N8NC79/M12



# Inductive Proximity Switches

## Analog - Voltage / Current

INDUCTIVE

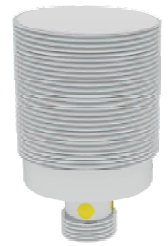
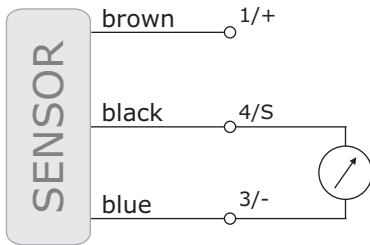
M8

M12

M18

M30

### Output Schematics

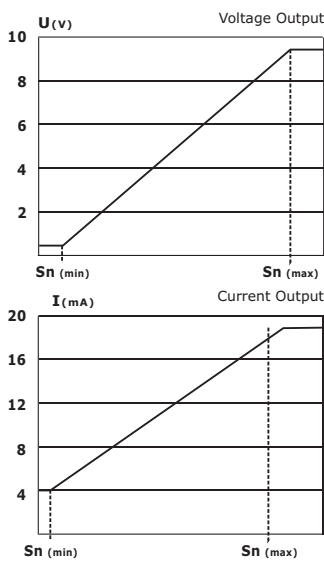
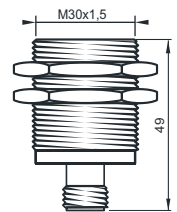
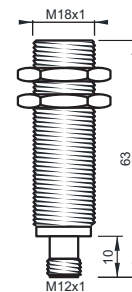
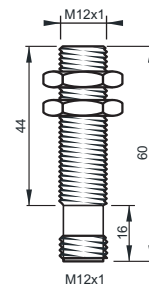
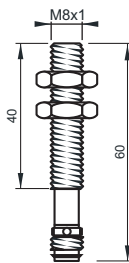


4 mm

6 mm

10 mm

20 mm



The use of this sensors is not permitted if the safety of people is relying upon it.



	M8x1 Analog	M12x1 Analog	M18x1 Analog	M30x1.5 Analog
Measuring Distance (Sn)	0... 4 mm	0... 6 mm	0... 10 mm	0... 20 mm
Mounting	Flush	Flush	Flush	Flush
Operating Voltage	18... 30 VDC	18... 30 VDC	18... 30 VDC	18... 30 VDC
Current Consumption	< 35 mA	< 35 mA	< 35 mA	< 35 mA
Voltage Load	> 2 kΩ	> 2 kΩ	> 2 kΩ	> 2 kΩ
Linearity	< 5 % (Sn)	< 5 % (Sn)	< 5 % (Sn)	< 5 % (Sn)
Repeatability	0.02 mm	0.02 mm	0.02 mm	0.02 mm
Temperature Drift	< 5 % (Sn)	< 5 % (Sn)	< 5 % (Sn)	< 5 % (Sn)
Output Following Frequency	100 Hz	100 Hz	100 Hz	100 Hz
Output Function	See Article Code	See Article Code	See Article Code	See Article Code
Operating Temperature	0... 70 °C	0... 70 °C	0... 70 °C	0... 70 °C
Protection Class	IP67	IP67	IP67	IP67
Housing Material	Chrome Plated Brass	Chrome Plated Brass	Chrome Plated Brass	Chrome Plated Brass
Connected	M8, 3-pole	M12, 3-pole	M12, 3-pole	M12, 3-pole
Operating-LED	-	-	-	-

PNP, Analog Voltage (0... 10 Vdc)	IA8 S4V010/M8	IA12 S6V010/M12	IA18 S10V010/M12	IA30 S20V010/M12
PNP, Analog Current (4... 20 mA)	IA8 S4I420/M8	IA12 S6I420/M12	IA18 S10I420/M12	IA30 S20I420/M12

Cable Exit

On Request

On Request

On Request

On Request

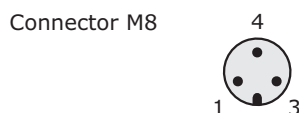
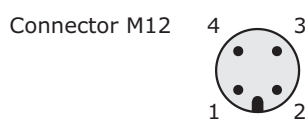
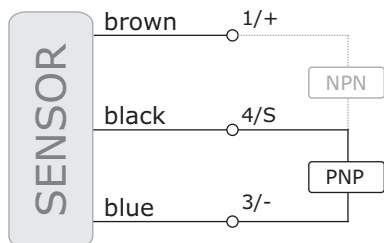


# Inductive Proximity Switches High Pressure Proof (500 bar)

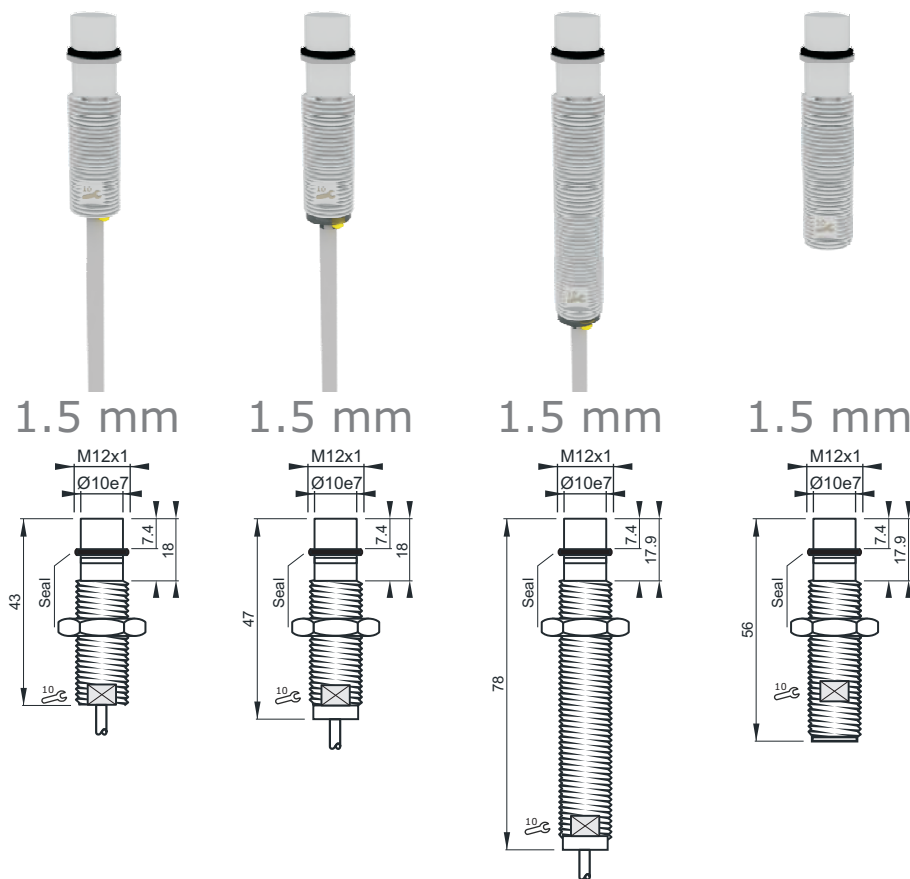
INDUCTIVE

## M12

### Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.



M12x1 - 500 bar M12x1 - 500 bar M12x1 - 500 bar M12x1 - 500 bar

	M12x1 - 500 bar	M12x1 - 500 bar	M12x1 - 500 bar	M12x1 - 500 bar
Sensing Distance	1.5 mm - Flush	1.5 mm - Flush	1.5 mm - Flush	1.5 mm - Flush
Operating Voltage	10... 35 VDC	10... 35 VDC	10... 35 VDC	10... 35 VDC
Current Consumption	< 5 mA	< 5 mA	< 5 mA	< 5 mA
Pressure Tightness	500 bar / 7250 PSI	500 bar / 7250 PSI	500 bar / 7250 PSI	500 bar / 7250 PSI
Output Current	150 mA	150 mA	150 mA	150 mA
Voltage Drop	2.5 V @ 150 mA	2.5 V @ 150 mA	2.5 V @ 150 mA	2.5 V @ 150 mA
Switching Frequency	50 Hz	50 Hz	50 Hz	50 Hz
Repeatability	< 3 %	< 3 %	< 3 %	< 3 %
Hysteresis	< 20 %	< 20 %	< 20 %	< 20 %
Operating Temperature	-25... +75 °C	-25... +75 °C	-25... +75 °C	-25... +75 °C
Protection Class	IP69k, IP 67	IP69k, IP 67	IP69k, IP 67	IP69k, IP 67
Sensing Face Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Housing Material	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305	V2A - 1.4305
Connected	PVC, 3x0.14, 2m	PVC, 3x0.14, 2m	PVC, 3x0.14, 2m	M12x1
Operating-LED	* On Request	* On Request	* On Request	-

### Article code

PNP, NO	IHP12 1.5PO43/N2P	IHP12 1.5PO47/N2P	IHP12 1.5PO78/N2P	IHP12 1.5PO56/N12
PNP, NC	IHP12 1.5PC43/N2P	IHP12 1.5PC47/N2P	IHP12 1.5PC78/N2P	IHP12 1.5PC56/N12
NPN, NO	IHP12 1.5NO43/N2P	IHP12 1.5NO47/N2P	IHP12 1.5NO78/N2P	IHP12 1.5NO56/N12
NPN, NC	IHP12 1.5NC43/N2P	IHP12 1.5NC47/N2P	IHP12 1.5NC78/N2P	IHP12 1.5NC56/N12

# Inductive Proximity Switches High Pressure Proof (500 bar)

## M12



1.5 mm

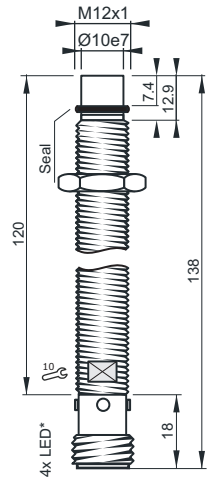
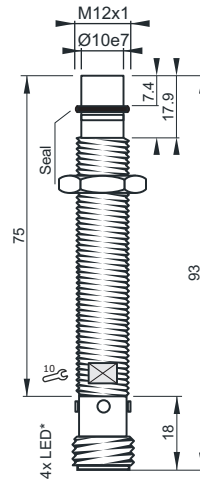
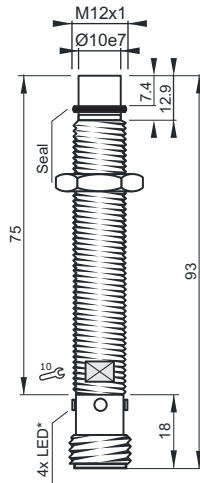
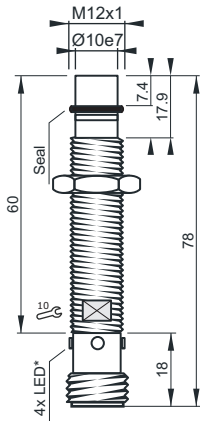
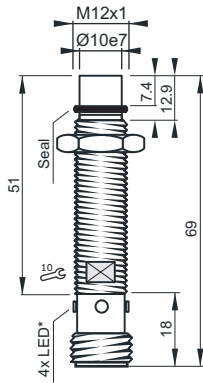
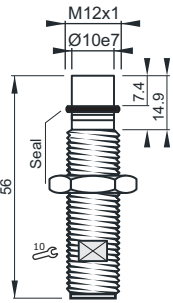
1.5 mm

1.5 mm

1.5 mm

1.5 mm

1.5 mm



M12x1 - 500 bar

M12x1 - 500 bar

M12x1 - 500 bar

M12x1 - 500 bar

M12x1 - 500 bar

M12x1 - 500 bar

1.5 mm - Flush

1.5 mm - Flush

1.5 mm - Flush

1.5 mm - Flush

1.5 mm - Flush

1.5 mm - Flush

10... 35 Vdc

10... 35 Vdc

10... 35 Vdc

10... 35 Vdc

10... 35 Vdc

10... 35 Vdc

< 5 mA

< 5 mA

< 5 mA

< 5 mA

< 5 mA

< 5 mA

500 bar / 7250 PSI

500 bar / 7250 PSI

500 bar / 7250 PSI

500 bar / 7250 PSI

500 bar / 7250 PSI

500 bar / 7250 PSI

150 mA

150 mA

150 mA

150 mA

150 mA

150 mA

2.5 V @ 150 mA

2.5 V @ 150 mA

2.5 V @ 150 mA

2.5 V @ 150 mA

2.5 V @ 150 mA

2.5 V @ 150 mA

50 Hz

50 Hz

50 Hz

50 Hz

50 Hz

50 Hz

< 3 %

< 3 %

< 3 %

< 3 %

< 3 %

< 3 %

< 20 %

< 20 %

< 20 %

< 20 %

< 20 %

< 20 %

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

-25... +75 °C

IP69k, IP 67

IP69k, IP 67

IP69k, IP 67

IP69k, IP 67

IP69k, IP 67

IP69k, IP 67

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

M12x1

M12x1

M12x1

M12x1

M12x1

M12x1

-

\* On Request

\* On Request

\* On Request

\* On Request

\* On Request

IHP12 1.5PO57/N12

IHP12 1.5PO69/M12

IHP12 1.5PO78/M12

IHP12 1.5PO93/A12

IHP12 1.5PO94/A12

IHP12 1.5PO138/A12

IHP12 1.5PC57/N12

IHP12 1.5PC69/M12

IHP12 1.5PC78/M12

IHP12 1.5PC93/A12

IHP12 1.5PC94/A12

IHP12 1.5PC138/A12

IHP12 1.5NO57/N12

IHP12 1.5NO69/M12

IHP12 1.5NO78/M12

IHP12 1.5NO93/A12

IHP12 1.5NO94/A12

IHP12 1.5NO138/A12

IHP12 1.5NC57/N12

IHP12 1.5NC69/M12

IHP12 1.5NC78/M12

IHP12 1.5NC93/A12

IHP12 1.5NC94/A12

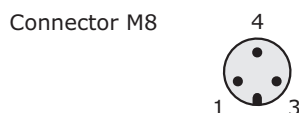
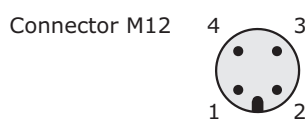
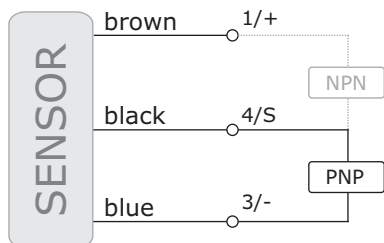
IHP12 1.5NC138/A12



# Inductive Proximity Switches High Temperature

INDUCTIVE

## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.

M8

M12

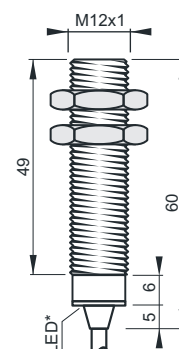
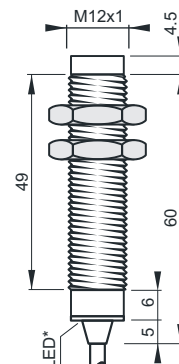
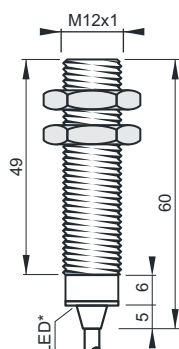
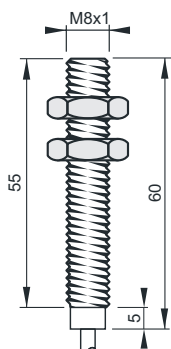


140 °C

130 °C

130 °C

150 °C



M8x1 - 140 °C

M12x1 - 130 °C

M12x1 - 130 °C

M12x1 - 150 °C

Sensing Distance

2.0 mm

3.0 mm - Flush

4.0 mm - NonFlush

3.0 mm - Flush

Amplifier

Fully Embedded

Fully Embedded

Fully Embedded

Fully Embedded

Operating Voltage

10... 35 V<sub>DC</sub>

10... 35 V<sub>DC</sub>

10... 35 V<sub>DC</sub>

10... 35 V<sub>DC</sub>

Current Consumption

< 5 mA

< 5 mA

< 5 mA

< 5 mA

Output Current

120 mA

120 mA

120 mA

120 mA

Voltage Drop

2 V @ 120 mA

2 V @ 120 mA

2 V @ 120 mA

2 V @ 120 mA

Switching Frequency

800 Hz

500 Hz

500 Hz

500 Hz

Repeatability

< 3 %

< 3 %

< 3 %

< 3 %

Hysteresis

3... 15 %

3... 15 %

3... 15 %

3... 15 %

Operating Temperature

-25... +140 °C

-25... +130 °C

-25... +130 °C

-25... +150 °C

Thermal Stress

permanent

permanent

permanent

permanent

Protection Class

IP 67

IP 67

IP 67

IP 67

Housing Material

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

V2A - 1.4305

Connected

2m, Silicone

2m, Silicone

2m, Silicone

2m, Silicone

Operating-LED

\* Incorporated

\* Incorporated

\* Incorporated

\* Incorporated

Article code

PNP, NO

IHT8 A2PO60/A2S

IHT12 A3PO60/A2S

IHT12 A4PO64/A2S

IHT12 B3PO60/A2S

PNP, NC

IHT8 A2PC60/A2S

IHT12 A3PC60/A2S

IHT12 A4PC64/A2S

IHT12 B3PC60/A2S

NPN, NO

IHT8 A2NO60/A2S

IHT12 A3NO60/A2S

IHT12 A4NO64/A2S

IHT12 B3NO60/A2S

NPN, NC

IHT8 A2NC60/A2S

IHT12 A3NC60/A2S

IHT12 A4NC64/A2S

IHT12 B3NC60/A2S

Option: Teflon Cable

replace S by T

replace S by T

replace S by T

replace S by T

Option: Silicon Free Housing

-

add F to article code

add F to article code

add F to article code

\* Only for mechanical setup - LED possibly dies if operated at temperatures beyond 130°C (266 °F). Led functionality is not covered by warranty !

# Inductive Proximity Switches High Temperature

## M12

## M18

## M30



150 °C

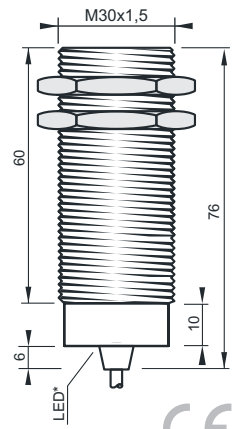
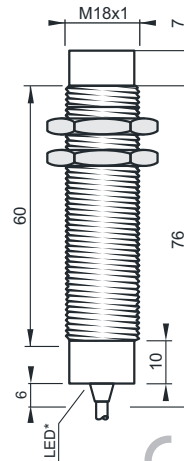
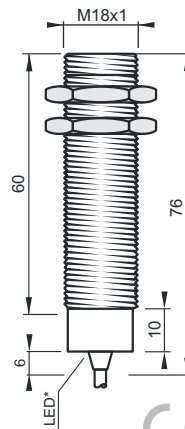
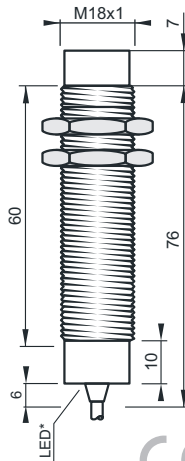
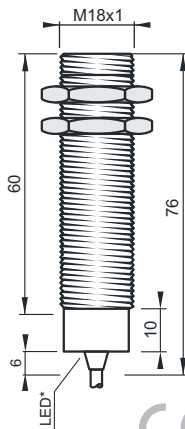
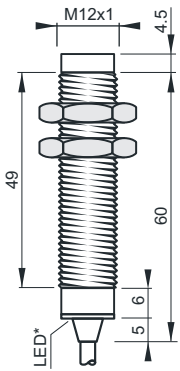
130 °C

130 °C

150 °C

150 °C

130 °C



M12x1 - 150 °C

M18x1 - 130 °C

M18x1 - 130 °C

M18x1 - 150 °C

M18x1 - 150 °C

M30x1.5 - 130 °C

4 mm - NonFlush  
Fully Embedded  
10... 35 VDC  
< 5 mA  
120 mA  
2 V @ 120 mA  
500 Hz  
< 3 %  
3... 15 %  
-25... +150 °C  
permanent  
IP 67  
V2A - 1.4305  
2m, Silicone  
\* Incorporated

5 mm - Flush  
Fully Embedded  
10... 35 VDC  
< 5 mA  
150 mA  
2 V @ 80 mA  
500 Hz  
< 3 %  
3... 15 %  
-25... +130 °C  
permanent  
IP 67  
V2A - 1.4305  
2m, Silicone  
\* Incorporated

8 mm - NonFlush  
Fully Embedded  
10... 35 VDC  
< 5 mA  
150 mA  
2 V @ 80 mA  
500 Hz  
< 3 %  
3... 15 %  
-25... +130 °C  
permanent  
IP 67  
V2A - 1.4305  
2m, Silicone  
\* Incorporated

5 mm - Flush  
Fully Embedded  
10... 35 VDC  
< 5 mA  
150 mA  
2 V @ 150 mA  
500 Hz  
< 3 %  
3... 15 %  
-25... +150 °C  
permanent  
IP 67  
V2A - 1.4305  
2m, Silicone  
\* Incorporated

8 mm - NonFlush  
Fully Embedded  
10... 35 VDC  
< 5 mA  
150 mA  
2 V @ 150 mA  
500 Hz  
< 3 %  
3... 15 %  
-25... +150 °C  
permanent  
IP 67  
V2A - 1.4305  
2m, Silicone  
\* Incorporated

10 mm - Flush  
Fully Embedded  
10... 35 VDC  
< 5 mA  
150 mA  
2 V @ 150 mA  
200 Hz  
< 3 %  
3... 15 %  
-25... +130 °C  
permanent  
IP 67  
V2A - 1.4305  
2m, Silicone  
\* Incorporated

IHT12 B4PO64/A2S  
IHT12 B4PC64/A2S  
IHT12 B4NO64/A2S  
IHT12 B4NC64/A2S

IHT18 A5PO76/A2S  
IHT18 A5PC76/A2S  
IHT18 A5NO76/A2S  
IHT18 A5NC76/A2S

IHT18 A8PO83/A2S  
IHT18 A8PC83/A2S  
IHT18 A8NO83/A2S  
IHT18 A8NC83/A2S

IHT18 B5PO76/A2S  
IHT18 B5PC76/A2S  
IHT18 B5NO76/A2S  
IHT18 B5NC76/A2S

IHT18 B8PO83/A2S  
IHT18 B8PC83/A2S  
IHT18 B8NO83/A2S  
IHT18 B8NC83/A2S

IHT30 A10PO76/A2S  
IHT30 A10PC76/A2S  
IHT30 A10NO76/A2S  
IHT30 A10NC76/A2S

replace S by T  
add F to article code

replace S by T  
add F to article code

replace S by T  
add F to article code

replace S by T  
add F to article code

replace S by T  
add F to article code

replace S by T  
add F to article code

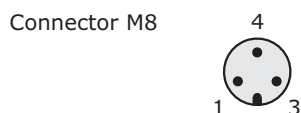
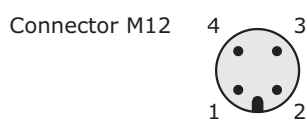
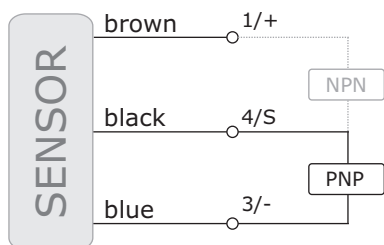
\* Only for mechanical setup - LED possibly dies if operated at temperatures beyond 130°C (266 °F). Led functionality is not covered by warranty !



# Inductive Proximity Switches High Temperature

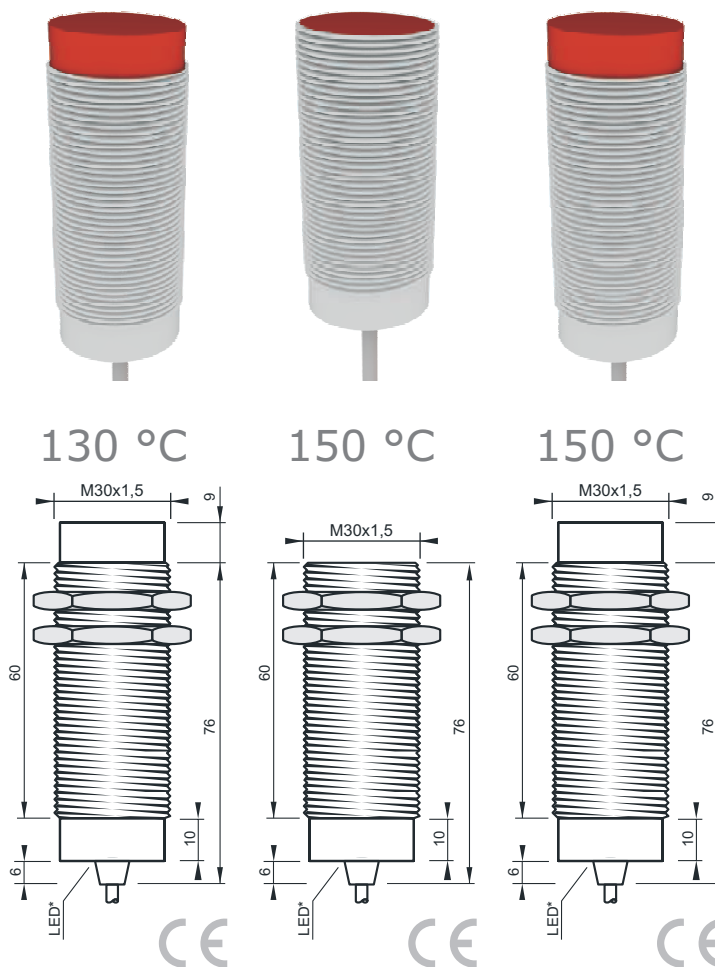
INDUCTIVE

## Output Schematics



The use of this sensors is not permitted if the safety of people is relying upon it.

## M30



M30x1.5 - 130 °C

M30x1.5 - 150 °C

M30x1.5 - 150 °C

Sensing Distance

Amplifier

Operating Voltage

Current Consumption

Output Current

Voltage Drop

Switching Frequency

Repeatability

Hysteresis

Operating Temperature

Thermal Stress

Protection Class

Housing Material

Connected

Operating-LED

Article code

15 mm - NonFlush

Fully Embedded

10... 35 V<sub>DC</sub>

< 5 mA

150 mA

2 V @ 150 mA

200 Hz

< 3%

3... 15 %

-25... +130 °C

permanent

IP 67

V2A - 1.4305

2m, Silicone

\* Incorporated

IHT30 A15PO85/A2S

IHT30 A15PC85/A2S

IHT30 A15NO85/A2S

IHT30 A15NC85/A2S

10 mm - Flush

Fully Embedded

10... 35 V<sub>DC</sub>

< 5 mA

150 mA

2 V @ 150 mA

200 Hz

< 3%

3... 15 %

-25... +150 °C

permanent

IP 67

V2A - 1.4305

2m, Silicone

\* Incorporated

IHT30 B10PO76/A2S

IHT30 B10PC76/A2S

IHT30 B10NO76/A2S

IHT30 B10NC76/A2S

15 mm - NonFlush

Fully Embedded

10... 35 V<sub>DC</sub>

< 5 mA

150 mA

2 V @ 150 mA

200 Hz

< 3%

3... 15 %

-25... +150 °C

permanent

IP 67

V2A - 1.4305

2m, Silicone

\* Incorporated

IHT30 B15PO85/A2S

IHT30 B15PC85/A2S

IHT30 B15NO85/A2S

IHT30 B15NC85/A2S

Option: Teflon Cable

Option: Silicon Free Housing

replace S by T

add F to article code

replace S by T

add F to article code

replace S by T

add F to article code

\* Only for mechanical setup - LED possibly dies if operated at temperatures beyond 130°C (266 °F). Led functionality is not covered by warranty !



