

# XECRO

most reliable sensor technology

inductive • capacitive • optoelectronics • touch 'n indicators



## Most Reliable Sensor Technology

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- electric field
- inductive
- capacitive
- optical



## At a Glance

"Talent for innovation and customers orientation are the key factors of our success"

## Think for Technology

XECRO is an independent company with more than 15 years of experience in the sensor industry.

During the years XECRO expanded its knowledge and production line to one of the completest range of inductive and capacitive sensors in the automation industry; focusing on the highest performance available.

Our innovations in this technologies results as the thinnest and shortest sensors, quad sensing distances, high pressure and high temperature resistant proximity switches. XECRO develops, produces and commercializes industrial sensors and general industrial electronics worldwide.

## Global Organization

XECRO is one of the leading companies in inductive and capacitive technology and serves customers in Europe, North and Latin America, Asia, Africa and Middle East. The organization is regulated in accordance with the strict directives of ISO 9001-2000.

XECROs headquarter located in Hanover, Germany, represents the focal point; our business counts with highly motivated management and working team: Financial and Sales dept., R & D, Customer Assistance, Shipping dept. and Warehouse are located in a modern 1100 square meter building.

Customers can benefit from our synergic organization: the production is made by XECRO in Hanover, Germany and in collaboration with selected strategic production facilities inside the EU.

## Dynamic R & D

R & D resources are the heart of the company. Thanks to expertise, gained during the years, in implementing individual solutions for customer applications, we are able to adapt our products to almost any customer needs.

In close cooperation between our business partners and development department, XECRO delivers customized sensor solutions based on the following technologies:

- Electric-Field, human touch devices and touch panels
- Optical
  - dirt resistant
  - miniature construction
  - high temperature resistant
- Capacitive
  - highest performance
  - high temperature resistant
- Inductive
  - highest performance
  - metal face, one piece construction
  - high temperature resistant
  - high pressure proof
  - analog output
  - namur

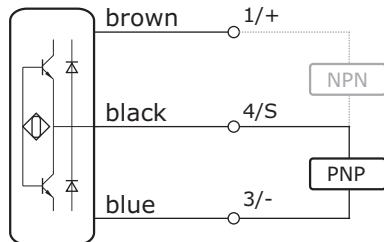
If special housings are required, we design them in 3D.

XECRO has rapid prototyping service for any shape and can provide IGES or STEP files in advance to check that the later integration is possible.

All XECRO products are built with the highest accuracy and are fully tested after production. The CE print on the products confirms with EU and EN standards and directives.



### Output Schematics



Ø3

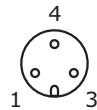
Ø3

Ø3

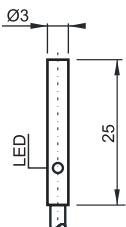
Ø3



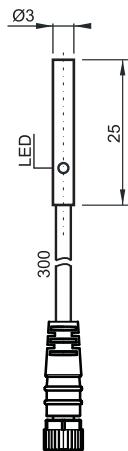
Connector M8



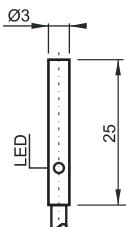
0.6 mm



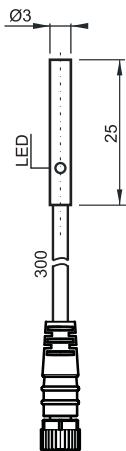
0.6 mm



1 mm



1 mm



### SPECIFICATIONS

	Ø3 mm	Ø3 mm	Ø3 mm	Ø3 mm
Sensing Distance	0.6 mm - Shielded	0.6 mm - Shielded	1.0 mm - Shielded	1.0 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting
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	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	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	High-Flex PVC, 2m built-in	Connector M8, 3-pole, 300 mm	High-Flex PVC, 2m Integrated	Connector M8, 3-pole, 300 mm
Output Indicator				
Article Code		Integrated		Integrated
PNP - NO, 3-wire	IPSD3-S08PO25/A2P	IPSD3-S08PO25/3P8	IPSD3-S1PO25/A2P	IPSD3-S1PO25/3P8
PNP - NC, 3-wire	IPSD3-S08PC25/A2P	IPSD3-S08PC25/3P8	IPSD3-S1PC25/A2P	IPSD3-S1PC25/3P8
NPN - NO, 3-wire	IPSD3-S08NO25/A2P	IPSD3-S08NO25/3P8	IPSD3-S1NO25/A2P	IPSD3-S1NO25/3P8
NPN - NC, 3-wire	IPSD3-S08NC25/A2P	IPSD3-S08NC25/3P8	IPSD3-S1NC25/A2P	IPSD3-S1NC25/3P8

Recommended Connecting Cable

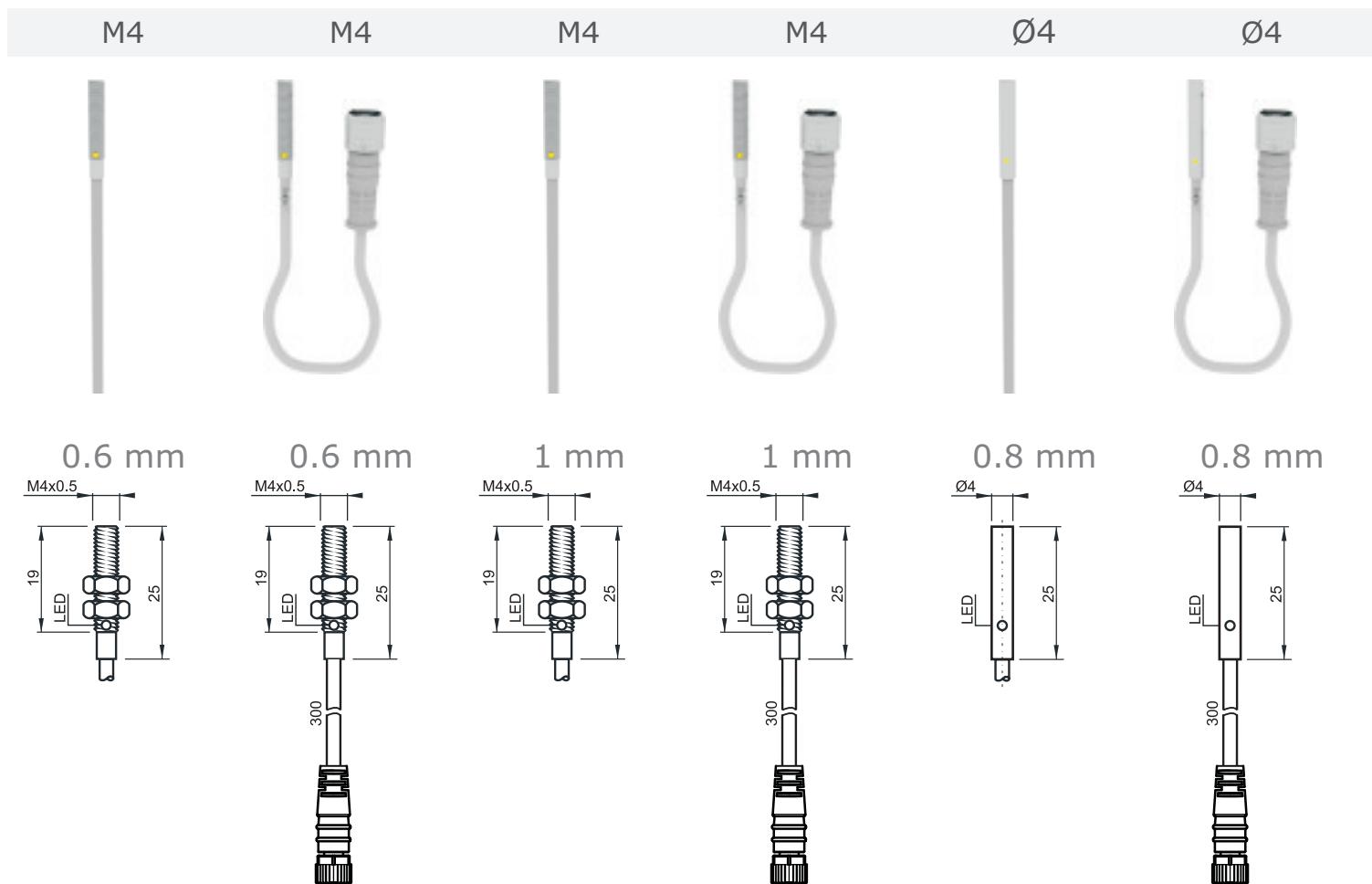
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M8/3...

-

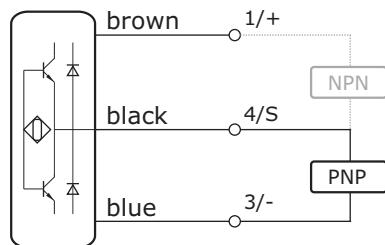
M8/3...

## Inductive Proximity Switches



M4x0.5	M4x0.5	M4x0.5	M4x0.5	Ø4 mm	Ø4 mm
0.6 mm - Shielded	0.6 mm - Shielded	1.0 mm - Shielded	1.0 mm - Shielded	0.8 mm - Shielded	0.8 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole, 300 mm	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole, 300 mm	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole, 300 mm
IPS4-S08PO25/A2P IPS4-S08PC25/A2P	IPS4-S08PO25/3P8 IPS4-S08PC25/3P8	IPS4-S1PO25/A2P IPS4-S1PC25/A2P	IPS4-S1PO25/3P8 IPS4-S1PC25/3P8	IPSD4-S08PO25/A2P IPSD4-S08PC25/A2P	IPSD4-S08PO25/3P8 IPSD4-S08PC25/3P8
IPS4-S08NO25/A2P IPS4-S08NC25/A2P	IPS4-S08NO25/3P8 IPS4-S08NC25/3P8	IPS4-S1NO25/A2P IPS4-S1NC25/A2P	IPS4-S1NO25/3P8 IPS4-S1NC25/3P8	IPSD4-S08NO25/A2P IPSD4-S08NC25/A2P	IPSD4-S08NO25/3P8 IPSD4-S08NC25/3P8
-	M8/3...	-	M8/3...	-	M8/3...

### Output Schematics



Ø4

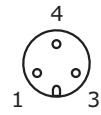
Ø4

M5

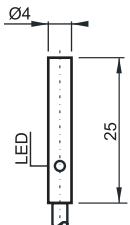
M5



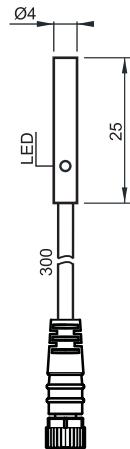
Connector M8



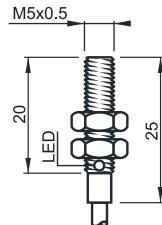
1.5 mm



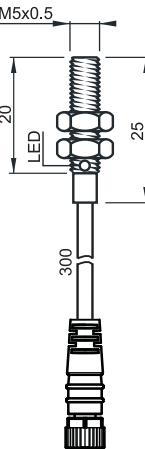
1.5 mm



0.8 mm



0.8 mm



### SPECIFICATIONS

	Ø4 mm	Ø4 mm	M5x0.5	M5x0.5
Sensing Distance	1.5 mm - Shielded	1.5 mm - Shielded	0.8 mm - Shielded	0.8 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting
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	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	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	High-Flex PVC, 2m	Connector M8, 3-pole, 300 mm	High-Flex PVC, 2m	Connector M8, 3-pole, 300 mm
Output Indicator	Integrated	Integrated	Integrated	Integrated
Article Code		Integrated		Integrated
PNP - NO, 3-wire	IPSD4-S1.5PO25/A2P	IPSD4-S1.5PO25/3P8	IPS5-S08PO25/A2P	IPS5-S08PO25/3P8
PNP - NC, 3-wire	IPSD4-S1.5PC25/A2P	IPSD4-S1.5PC25/3P8	IPS5-S08PC25/A2P	IPS5-S08PC25/3P8
NPN - NO, 3-wire	IPSD4-S1.5NO25/A2P	IPSD4-S1.5NO25/3P8	IPS5-S08NO25/A2P	IPS5-S08NO25/3P8
NPN - NC, 3-wire	IPSD4-S1.5NC25/A2P	IPSD4-S1.5NC25/3P8	IPS5-S08NC25/A2P	IPS5-S08NC25/3P8

Recommended Connecting Cable

-

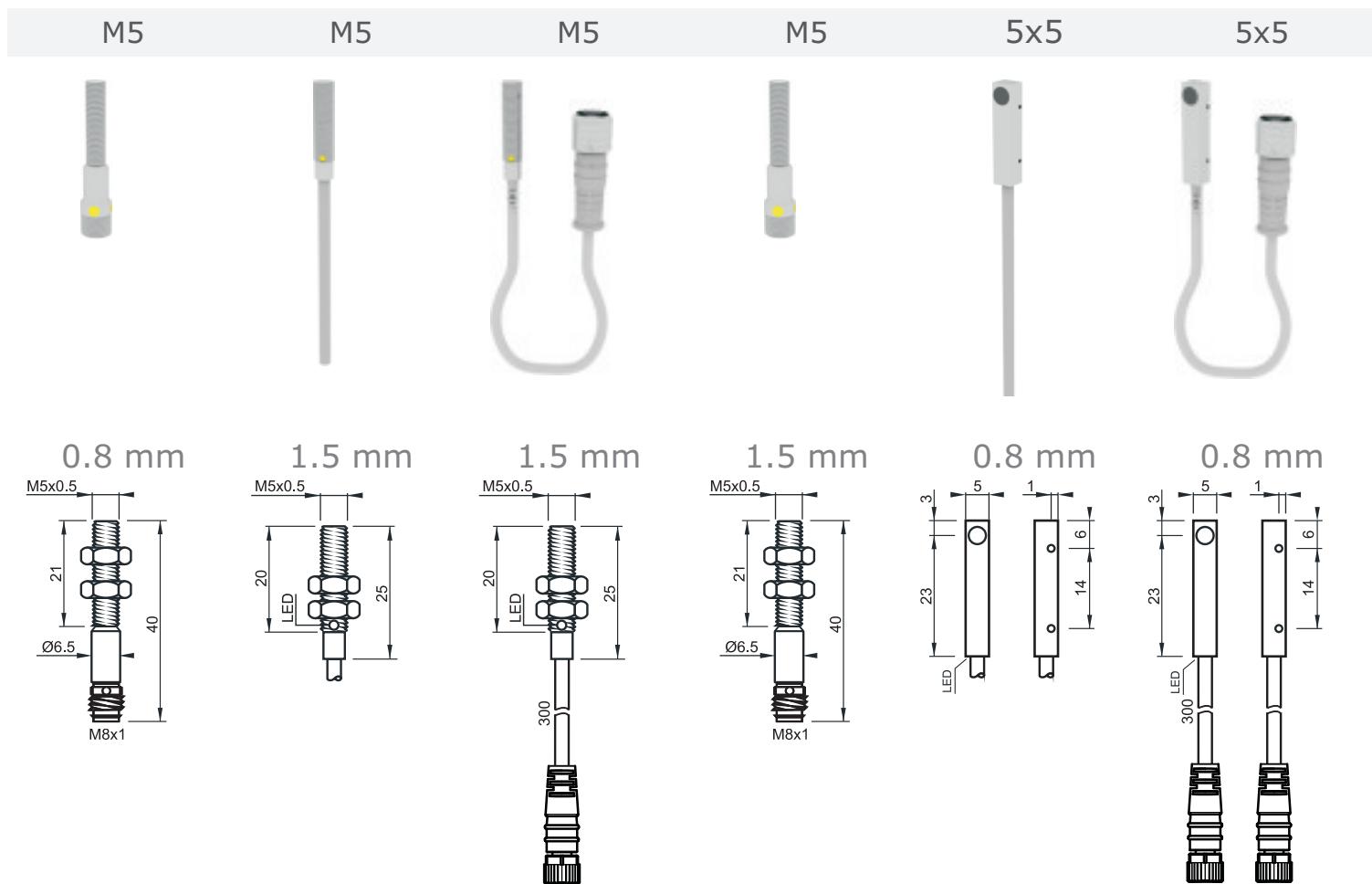
M8/3...

-

M8/3...

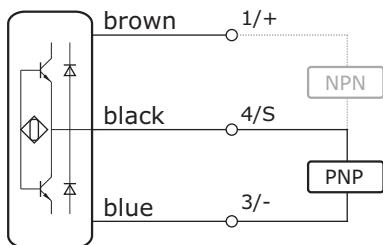
# Inductive Proximity Switches

INDUCTIVE



M5x0.5	M5x0.5	M5x0.5	M5x0.5	5 x 5	5 x 5
0.8 mm - Shielded	1.5 mm - Shielded	1.5 mm - Shielded	1.5 mm - Shielded	0.8 mm - Shielded	0.8 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole, 300 mm Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M8, 3-pole, 300 mm Integrated
IPS5-S08PO40/M8 IPS5-S08PC40/M8	IPS5-S1.5PO25/A2P IPS5-S1.5PC25/A2P	IPS5-S1.5PO25/3P8 IPS5-S1.5PC25/3P8	IPS5-S1.5PO40/M8 IPS5-S1.5PC40/M8	IPS55-S08PO26/A2P IPS55-S08PC 26/A2P	IPS55-S08PO26/3P8 IPS55-S08PC26/3P8
IPS5-S08NO40/M8 IPS5-S08NC40/M8	IPS5-S1.5NO25/A2P IPS5-S1.5NC25/A2P	IPS5-S1.5NO25/3P8 IPS5-S1.5NC25/3P8	IPS5-S1.5NO40/M8 IPS5-S1.5NC40/M8	IPS55-S08NO26/A2P IPS55-S08NC26/A2P	IPS55-S08NO26/3P8 IPS55-S08NC26/3P8
M8/3...	-	M8/3...	M8/3...	-	M8/3...

### Output Schematics

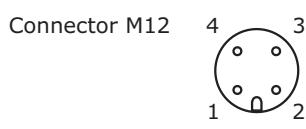


5x5

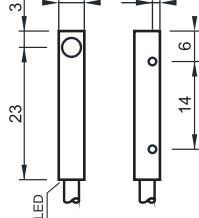
5x5

Ø6.5

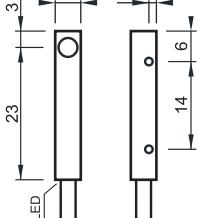
Ø6.5



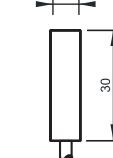
1.5 mm



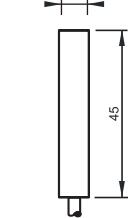
1.5 mm



1 mm



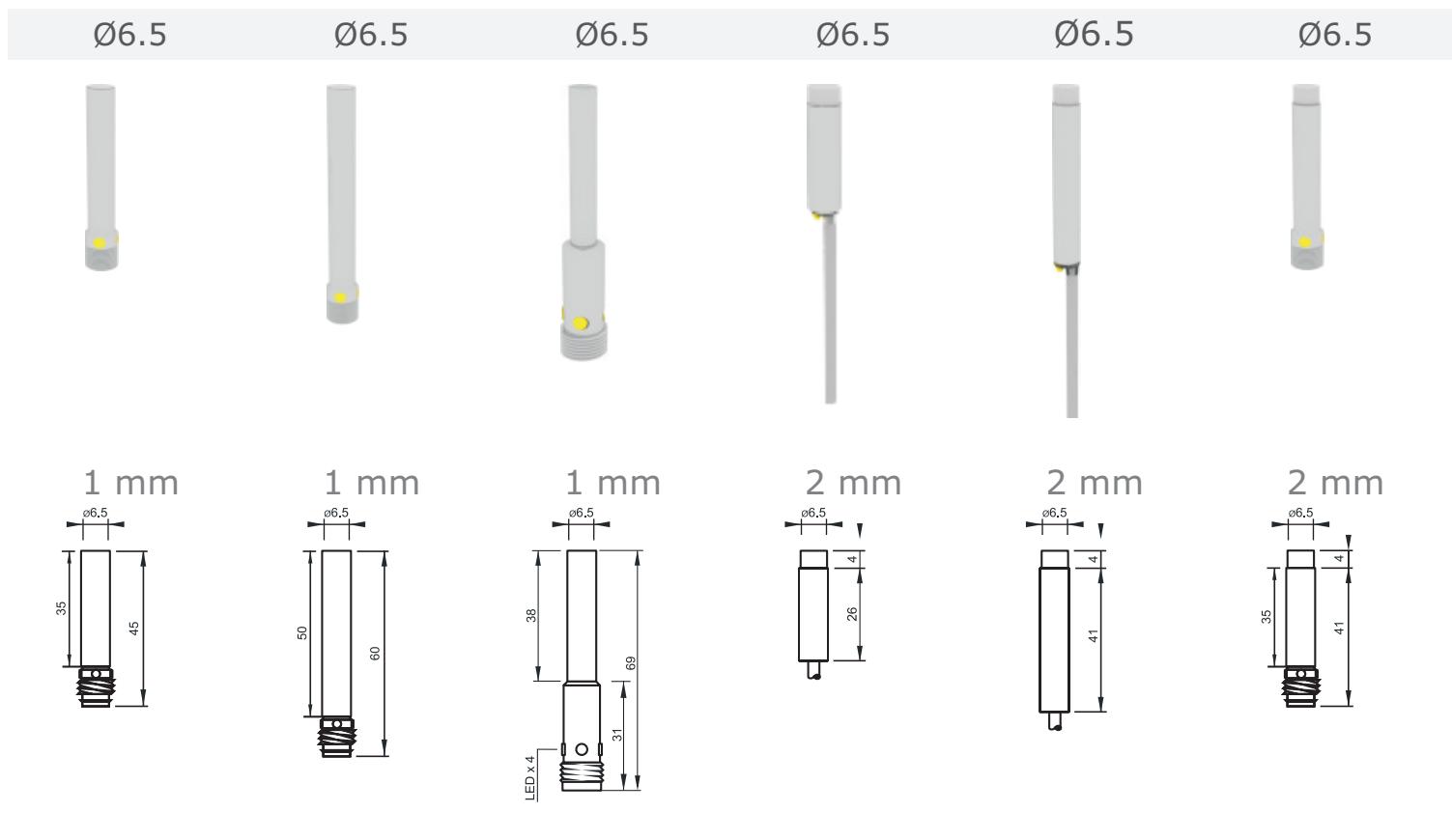
1 mm



### SPECIFICATIONS

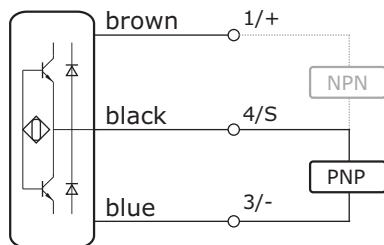
	5 x 5	5 x 5	Ø6.5 mm	Ø6.5 mm
Sensing Distance	1.5 mm - Shielded	1.5 mm - Shielded	1 mm - Shielded	1 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting
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	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	Plated Brass	Plated Brass	1.4305 / SS303	1.4305 / SS303
Connection	High-Flex PVC, 2m	Connector M8, 3-pole, 300 mm	High-Flex PVC, 2m	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated
Article Code		Integrated		
PNP - NO, 3-wire	IPS55-S1.5PO26/A2P	IPS55-S1.5PO26/3P8	IPSD6-S1PO30/A2P	IPSD6-S1PO45/A2P
PNP - NC, 3-wire	IPS55-S1.5PC26/A2P	IPS55-S1.5PC26/3P8	IPSD6-S1PC30/A2P	IPSD6-S1PC45/A2P
NPN - NO, 3-wire	IPS55-S1.5NO26/A2P	IPS55-S1.5NO26/3P8	IPSD6-S1NO30/A2P	IPSD6-S1NO45/A2P
NPN - NC, 3-wire	IPS55-S1.5NC26/A2P	IPS55-S1.5NC26/3P8	IPSD6-S1NC30/A2P	IPSD6-S1NC45/A2P
10...55 VDC - NO, 2-wire				IPSD6-S1DO45/A2P
10...55 VDC - NC, 2-wire				IPSD6-S1DC45/A2P
Recommended Connecting Cable	-	M8/3...	-	-

## Inductive Proximity Switches



Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
1 mm - Shielded	1 mm - Shielded	1 mm - Shielded	2 mm - Unshielded	2 mm - Unshielded	2 mm - Unshielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole, 300 mm Integrated
IPSD6-S1PO45/M8 IPSD6-S1PC45/M8	IPSD6-S1PO60/M8 IPSD6-S1PC60/M8	IPSD6-S1PO69/M12 IPSD6-S1PC69/M12	IPSD6-N2PO30/A2P IPSD6-N2PC30/A2P	IPSD6-N2PO45/A2P IPSD6-N2PC45/A2P	IPSD6-N2PO45/M8 IPSD6-N2PC45/M8
IPSD6-S1NO45/M8 IPSD6-S1NC45/M8	IPSD6-S1NO60/M8 IPSD6-S1NC60/M8	IPSD6-S1NO69/M12 IPSD6-S1NC69/M12	IPSD6-N2NO30/A2P IPSD6-N2NC30/A2P	IPSD6-N2NO45/A2P IPSD6-N2NC45/A2P	IPSD6-N2NO45/M8 IPSD6-N2NC45/M8
M8/3...	IPSD6-S1DO60/M8 IPSD6-S1DC60/M8	IPSD6-S1DO69/M12 IPSD6-S1DC69/M12	IPSD6-N2DO45/A2P IPSD6-N2DC45/A2P	IPSD6-N2DO45/A2P IPSD6-N2DC45/A2P	M8/3...
	M8/3...	M12/3...	-	-	M8/3...

### Output Schematics

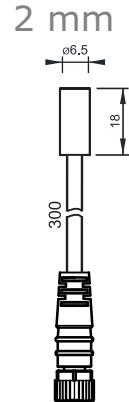
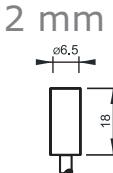
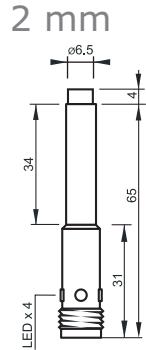
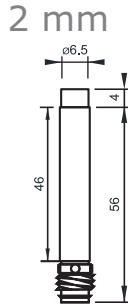
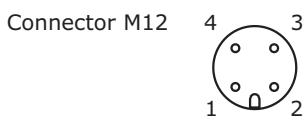


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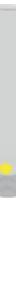
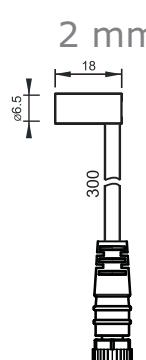
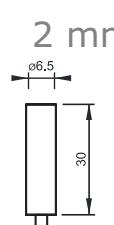
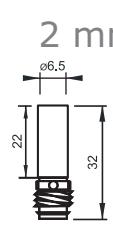
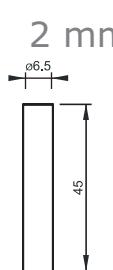
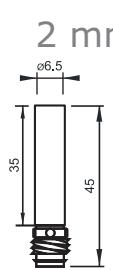
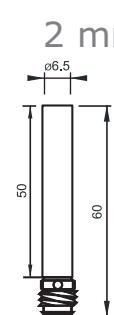
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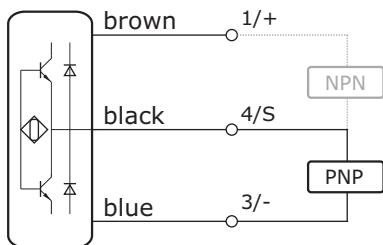
### SPECIFICATIONS

	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
Sensing Distance	2 mm - Unshielded	2 mm - Unshielded	2 mm - Shielded	2 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 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	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	Connector M8, 3-pole	Connector M12, 4-pole	High-Flex PVC, 2m	Connector M8, 3-pole, 300 mm
Output Indicator	Integrated	Integrated	Integrated	Integrated
Article Code				
PNP - NO, 3-wire	IPSD6-N2PO60/M8	IPSD6-N2PO69/M12	IPSD6-S2PO18/A2P	IPSD6-S2PO18/3P8
PNP - NC, 3-wire	IPSD6-N2PC60/M8	IPSD6-S1PC69/M12	IPSD6-S2PC18/A2P	IPSD6-S2PC18/3P8
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPSD6-N2NO60/M8	IPSD6-N2NO69/M12	IPSD6-S2NO18/A2P	IPSD6-S2NO18/3P8
NPN - NC, 3-wire	IPSD6-N2NC60/M8	IPSD6-N2NC69/M12	IPSD6-S2NC18/A2P	IPSD6-S2NC18/3P8
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire	IPSD6-N2DO60/M8	IPSD6-N2DO69/M12		
10...55 VDC - NC, 2-wire	IPSD6-N2DC60/M8	IPSD6-N2DC69/M12		
Recommended Connecting Cable	M8/3...	M12/3...	-	M8/3...

## Inductive Proximity Switches

Ø6.5	Ø6.5	Ø6.5	Ø6.5	Ø6.5	Ø6.5
					
					
Ø6.5 mm 2 mm - Shielded	Ø6.5 mm 2 mm - Shielded	Ø6.5 mm 2 mm - Shielded	Ø6.5 mm 2 mm - Shielded	Ø6.5 mm 2 mm - Shielded	Ø6.5 mm 2 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole, 300 mm Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole, 300 mm Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated
IPSD6-S2PO18/R3P8 IPSD6-S2PC18/R3P8	IPSD6-S2PO30/A2P IPSD6-S2PC30/A2P	IPSD6-S2PO32/M8 IPSD6-S2PC32/M8	IPSD6-S2PO45/A2P IPSD6-S2PC45/A2P	IPSD6-S2PO45/M8 IPSD6-S2PC45/M8	IPSD6-S2PO60/M8 IPSD6-S2PC60/M8
IPSD6-S2NO18/R3P8 IPSD6-S2NC18/R3P8	IPSD6-S2NO30/A2P IPSD6-S2NC30/A2P	IPSD6-S2NO32/M8 IPSD6-S2NC32/M8	IPSD6-S2NO45/A2P IPSD6-S2NC45/A2P	IPSD6-S2NO45/M8 IPSD6-S2NC45/M8	IPSD6-S2NO60/M8 IPSD6-S2NC60/M8
M8/3...	-	M8/3...	-	M8/3...	M8/3...

### Output Schematics

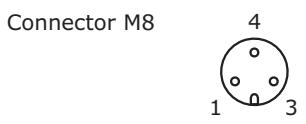
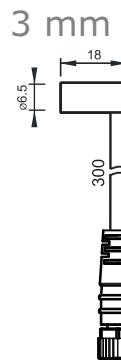
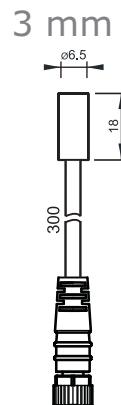
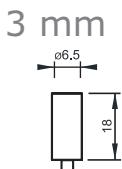
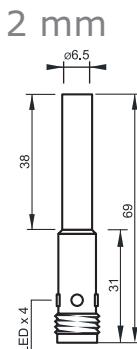
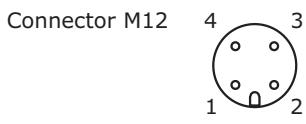


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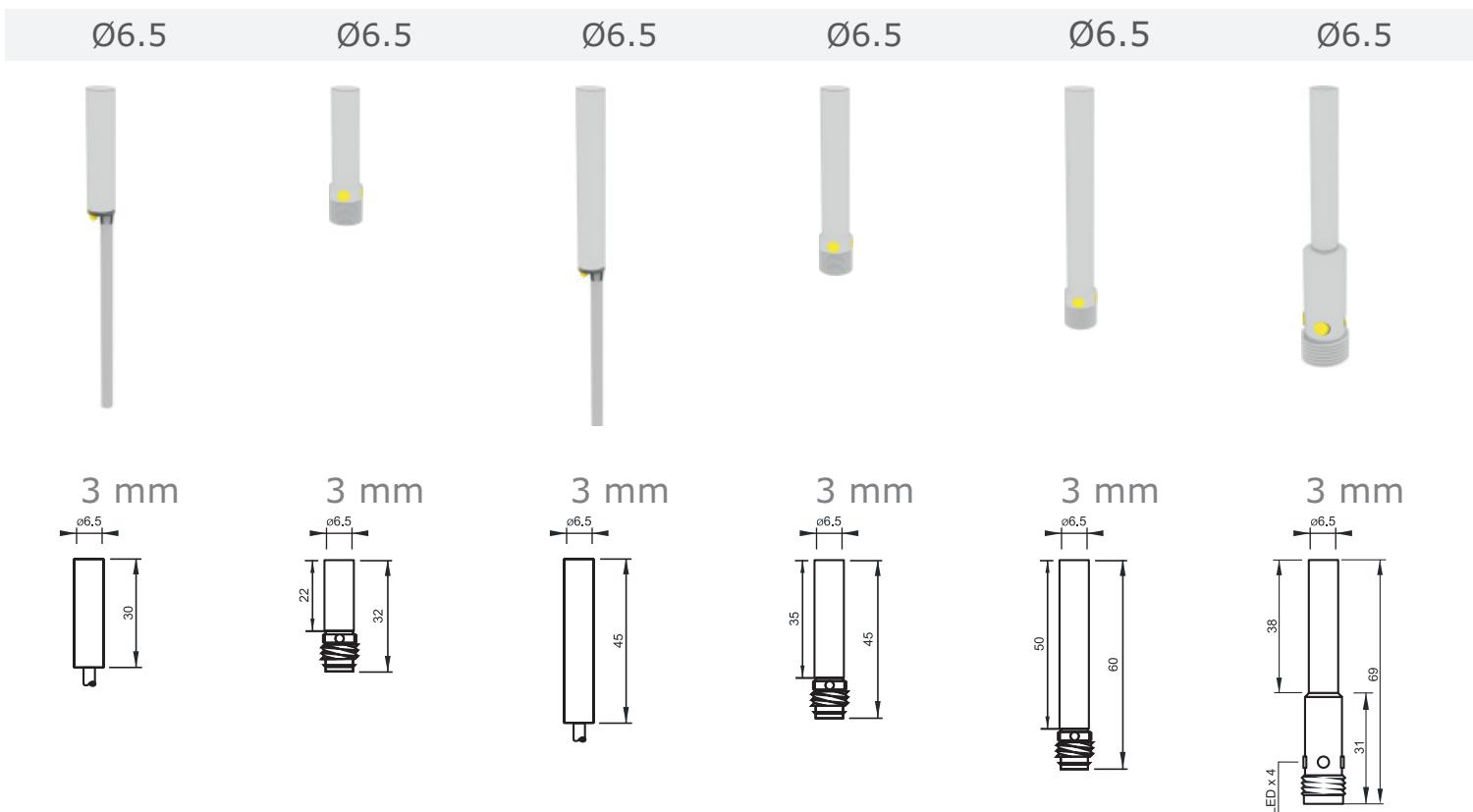
Ø6.5



### SPECIFICATIONS

	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
Sensing Distance	2 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting
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	IP67	IP67	IP67	IP67
Sensing Face Material	POM	POM	POM	POM
Housing Material	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	Connector M12, 4-pole	High-Flex PVC, 2m	Connector M8, 3-pole, 300 mm	Connector M8, 3-pole, 300 mm
Output Indicator	Integrated	Integrated	Integrated	Integrated
Article Code				
PNP - NO, 3-wire	IPSD6-S2PO69/M12	IPSD6-S3PO18/A2P	IPSD6-S3PO18/3P8	IPSD6-S3PO18/R3P8
PNP - NC, 3-wire	IPSD6-S2PC69/M12	IPSD6-S3PC18/A2P	IPSD6-S3PC18/3P8	IPSD6-S3PC18/R3P8
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPSD6-S2NO69/M12	IPSD6-S3NO18/A2P	IPSD6-S3NO18/3P8	IPSD6-S3NO18/R3P8
NPN - NC, 3-wire	IPSD6-S2NC69/M12	IPSD6-S3NC18/A2P	IPSD6-S3NC18/3P8	IPSD6-S3NC18/R3P8
NPN - NO+NC, 4-wire				
Recommended Connecting Cable	M12/3...	-	M8/3...	M8/3...

## Inductive Proximity Switches



Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
3 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M12, 4-pole Integrated

IPSD6-S3PO30/A2P	IPSD6-S3PO32/M8	IPSD6-S3PO45/A2P	IPSD6-S3PO45/M8	IPSD6-S3PO60/M8	IPSD6-S3PO70/M12
IPSD6-S3PC30/A2P	IPSD6-S3PC32/M8	IPSD6-S3PC45/A2P	IPSD6-S3PC45/M8	IPSD6-S3PC60/M8	IPSD6-S3PC70/M12
IPSD6-S3NO30/A2P	IPSD6-S3NO32/M8	IPSD6-S3NO45/A2P	IPSD6-S3NO45/M8	IPSD6-S3NO60/M8	IPSD6-S3NO70/M12
IPSD6-S3NC30/A2P	IPSD6-S3NC32/M8	IPSD6-S3NC45/A2P	IPSD6-S3NC45/M8	IPSD6-S3NC60/M8	IPSD6-S3NC70/M12

M8/3...

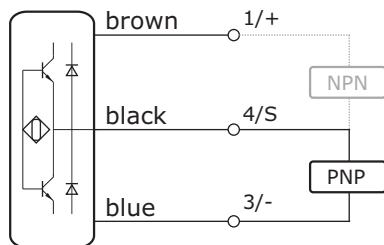
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M8/3...

M8/3...

M12/3...

### Output Schematics

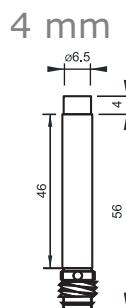
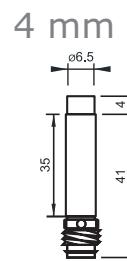
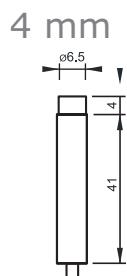
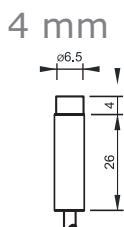
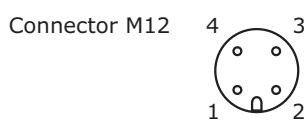


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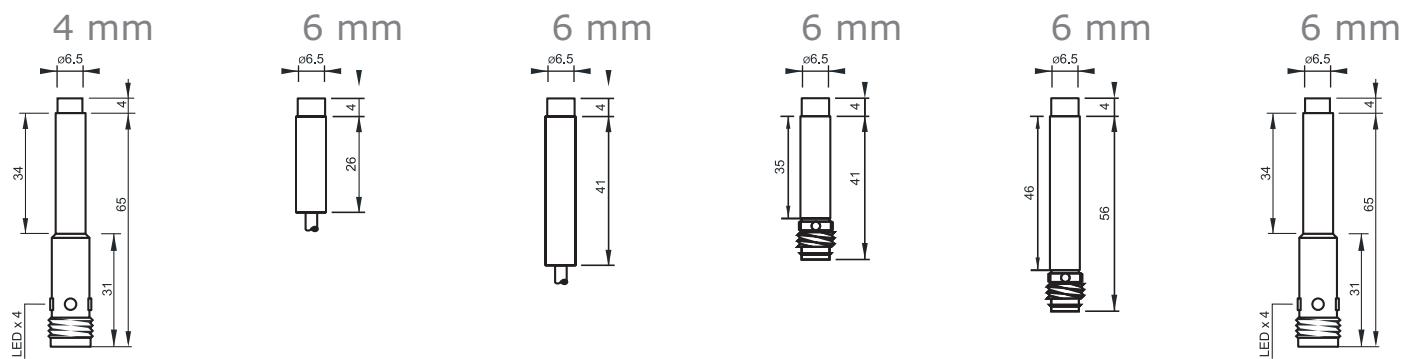
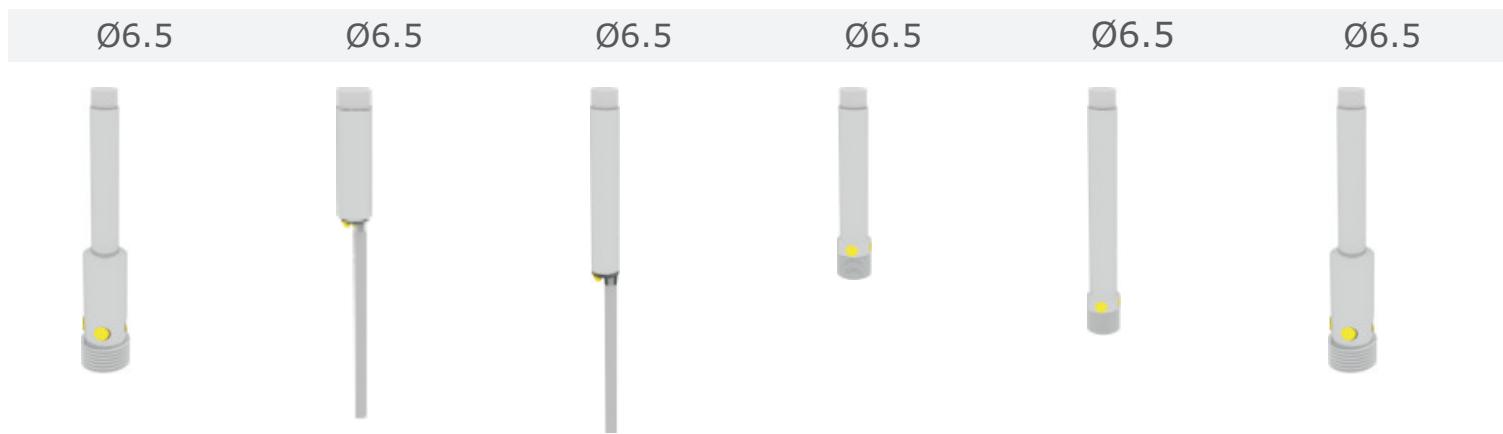
Ø6.5



### SPECIFICATIONS

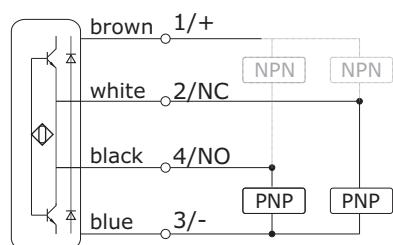
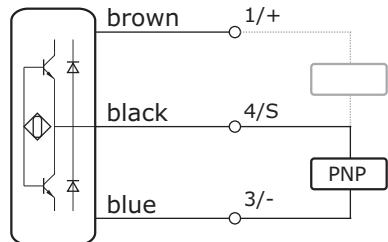
	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
Sensing Distance	4 mm - Unshielded			
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Repeatability	< 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	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	Connector M8, 3-pole	Connector M8, 3-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated
Article Code				
PNP - NO, 3-wire	IPSD6-N4PO30/A2P	IPSD6-N4PO45/A2P	IPSD6-N4PO45/M8	IPSD6-N4PO60/M8
PNP - NC, 3-wire	IPSD6-N4PC30/A2P	IPSD6-N4PC45/A2P	IPSD6-N4PC45/M8	IPSD6-N4PC60/M8
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPSD6-N4NO30/A2P	IPSD6-N4NO30/A2P	IPSD6-N4NO45/M8	IPSD6-N4NO60/M8
NPN - NC, 3-wire	IPSD6-N4NC30/A2P	IPSD6-N4NC45/A2P	IPSD6-N4NC45/M8	IPSD6-N4NC60/M8
NPN - NO+NC, 4-wire				
Recommended Connecting Cable	-	-	M8/3...	M8/3...

## Inductive Proximity Switches



Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm	Ø6.5 mm
4 mm - Unshielded	6 mm - Unshielded	6 mm - Unshielded	6 mm - Unshielded	6 mm - Unshielded	6 mm - Unshielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M12, 4-pole Integrated
IPSD6-N4PO69/M12 IPSD6-N4PC69/M12	IPSD6-N6PO30/A2P IPSD6-N6P305/A2P	IPSD6-N6PO45/A2P IPSD6-N6PC45/A2P	IPSD6-N6PO45/M8 IPSD6-N6PC45/M8	IPSD6-N6PO60/M8 IPSD6-N6PC60/M8	IPSD6-N6PO70/M12 IPSD6-N6PC70/M12
IPSD6-N4NO69/M12 IPSD6-N4NC69/M12	IPSD6-N63045/A2P IPSD6-N30C45/A2P	IPSD6-N6NO45/A2P IPSD6-N6NC45/A2P	IPSD6-N6NO45/M8 IPSD6-N6NC45/M8	IPSD6-N6NO60/M8 IPSD6-N6NC60/M8	IPSD6-N6NO70/M12 IPSD6-N6NC70/M12
M12/3...	-	-	M8/3...	M8/3...	M12/3...

### Output Schematics



Connector M12  
4 3 2 1



M8

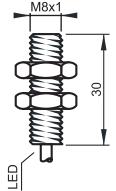
M8

M8

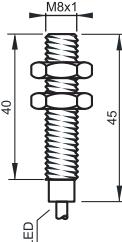
M8



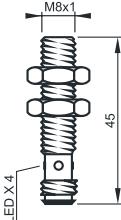
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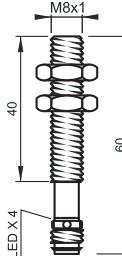
1 mm



1 mm



1 mm



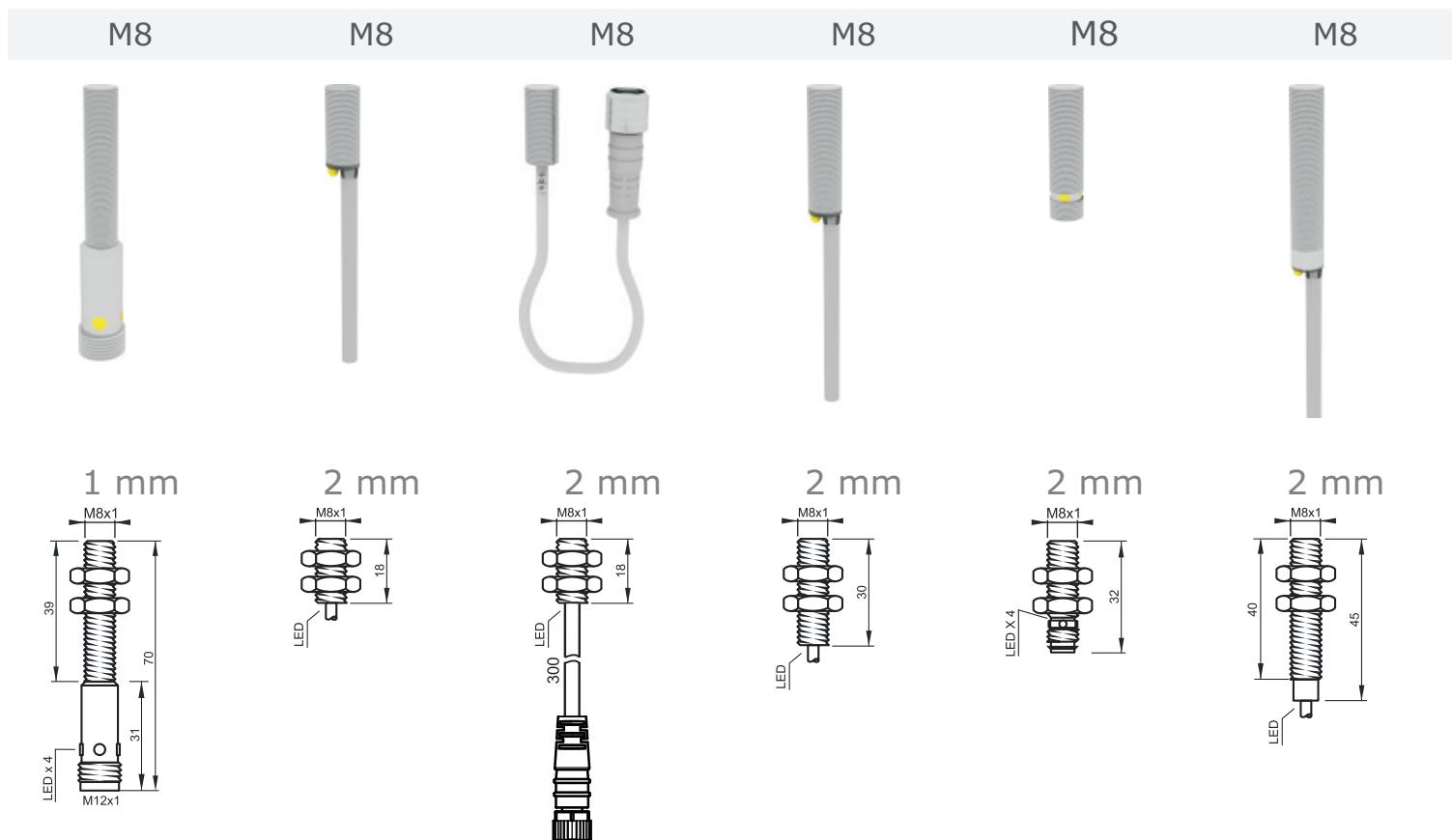
### SPECIFICATIONS

	M8x1	M8x1	M8x1	M8x1
Sensing Distance	1 mm - Shielded			
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 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	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	Connector M8, 3-pole	Connector M8, 3-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

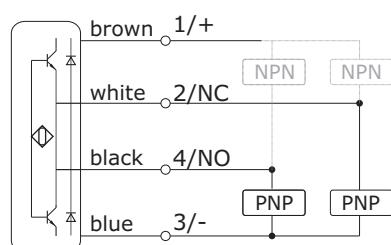
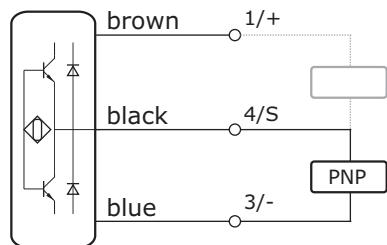
PNP - NO, 3-wire	IPS8-S1PO30/A2P	IPS8-S1PO45/A2P	IPS8-S1PO45/M8	IPS8-S1PO60/M8
PNP - NC, 3-wire	IPS8-S1PC30/A2P	IPS8-S1PC45/A2P	IPS8-S1PC45/M8	IPS8-S1PC60/M8
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS8-S1NO30/A2P	IPS8-S1NO45/A2P	IPS8-S1NO45/M8	IPS8-S1NO60/M8
NPN - NC, 3-wire	IPS8-S1NC30/A2P	IPS8-S1NC45/A2P	IPS8-S1NC45/M8	IPS8-S1NC60/M8
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire		IPS8-S1DO45/A2P		IPS8-S1DO60/M8
10...55 VDC - NC, 2-wire		IPS8-S1DC45/A2P		IPS8-S1DC60/M8
Recommended Connecting Cable	-	-	M8/3...	M8/3...

# Inductive Proximity Switches



M8x1	M8x1	M8x1	M8x1	M8x1	M8x1
1 mm - Shielded	2 mm - Shielded	2 mm - Shielded	2 mm - Shielded	2 mm - Shielded	2 mm - Shielded
10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting
< 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
1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connector M12, 4-pole Integrated	High-Flex PVC, 2m Integrated	Connector M8, 3-pole, 300 mm	High-Flex PVC, 2m Integrated	Connector M8, 3-pole Integrated	High-Flex PVC, 2m Integrated
IPS8-S1PO70/M12	IPS8-S2PO18/A2P	IPS8-S2PO18/3P8	IPS8-S2PO30/A2P	IPS8-S2PO32/M8	IPS8-S2PO45/A2P
IPS8-S1PC70/M12	IPS8-S2PC18/A2P	IPS8-S2PC18/3P8	IPS8-S2PC30/A2P	IPS8-S2PC32/M8	IPS8-S2PC45/A2P
IPS8-S1NO70/M12	IPS8-S2NO18/A2P	IPS8-S2NO18/3P8	IPS8-S2NO30/A2P	IPS8-S2NO32/M8	IPS8-S2NO45/A2P
IPS8-S1NC70/M12	IPS8-S2NC18/A2P	IPS8-S2NC18/3P8	IPS8-S2NC30/A2P	IPS8-S2NC32/M8	IPS8-S2NC45/A2P
IPS8-S1DO70/M12			IPS8-S2NCO30/A2P		IPS8-S2NCO45/A2P
IPS8-S1DC70/M12					
M8/3...	-	M8/3...	-	M8/3...	-

### Output Schematics



Connector M12  
4 3  
1 2



M8



M8



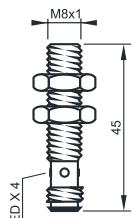
M8



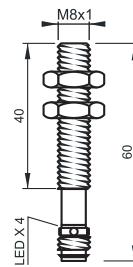
M8



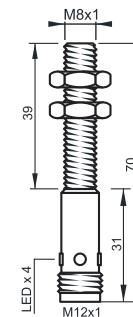
2 mm



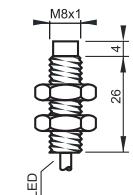
2 mm



2 mm



2 mm



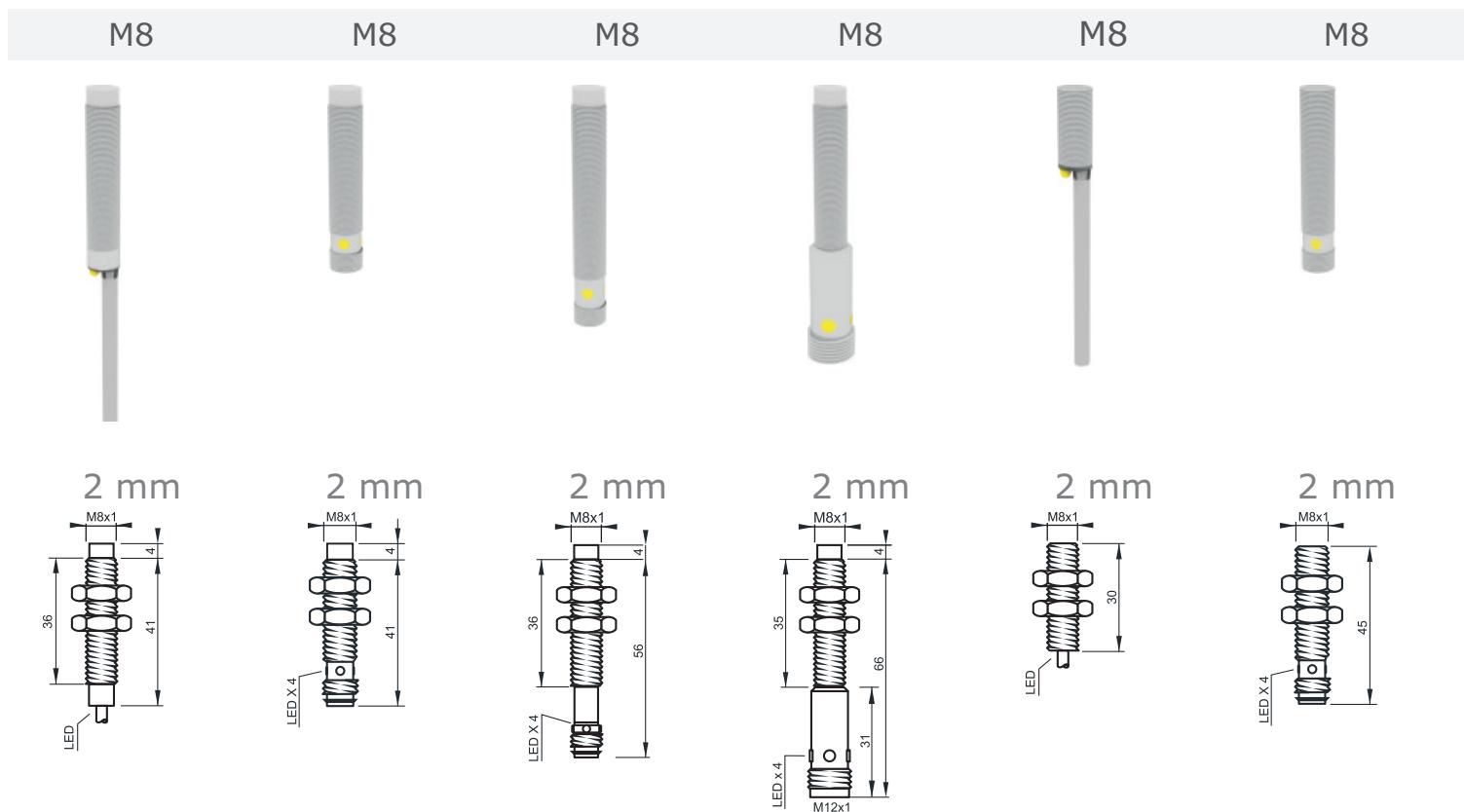
### SPECIFICATIONS

	M8x1	M8x1	M8x1	M8x1
Sensing Distance	2 mm - Shielded	2 mm - Shielded	2 mm - Shielded	2 mm - Unshielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 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	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	Connector M8, 3-pole	Connector M8, 3-pole	Connector M12, 4-pole	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

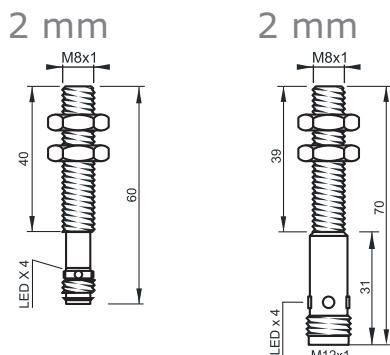
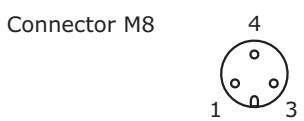
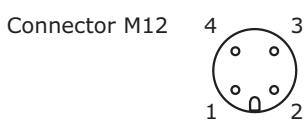
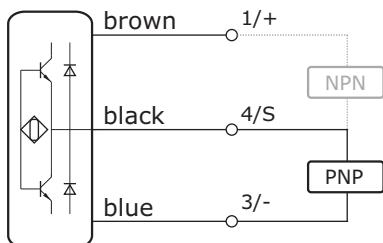
PNP - NO, 3-wire	IPS8-S2PO45/M8	IPS8-S2PO60/M8	IPS8-S2PO70/M12	IPS8-N2PO30/A2P
PNP - NC, 3-wire	IPS8-S2PC45/M8	IPS8-S2PC60/M8	IPS8-S2PC70/M12	IPS8-N2PC30/A2P
PNP - NO+NC, 4-wire	IPS8-S2PCO45/M8	IPS8-S2PCO60/M8	IPS8-S2PCO70/M12	
NPN - NO, 3-wire	IPS8-S2NO45/M8	IPS8-S2NO60/M8	IPS8-S2NO70/M12	IPS8-N2NO30/A2P
NPN - NC, 3-wire	IPS8-S2NC45/M8	IPS8-S2NC60/M8	IPS8-S2NC70/M12	IPS8-N2NC30/A2P
NPN - NO+NC, 4-wire	IPS8-S2NCO45/M8	IPS8-S2NCO60/M8	IPS8-S2NCO70/M12	
10...55 VDC - NO, 2-wire				
10...55 VDC - NC, 2-wire				
Recommended Connecting Cable	M8/3... / M8/4...	M8/3... / M8/4...	M12/3... / M12/4...	-

# Inductive Proximity Switches



M8x1	M8x1	M8x1	M8x1	M8 Metal Face	M8 Metal Face
2 mm - Unshielded	2 mm - Unshielded	2 mm - Unshielded	2 mm - Unshielded	2 mm - Shielded	2 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 Connector M8, 3-pole Integrated
IPS8-N2PO45/A2P	IPS8-N2PO45/M8	IPS8-N2PO60/M8	IPS8-N2PO70/M12	IMF8-S2PO30/A2P	IMF8-S2PO45/M8
IPS8-N2PC45/A2P	IPS8-N2PC45/M8	IPS8-N2PC60/M8	IPS8-N2PC70/M12	IMF8-S2PC30/A2P	IMF8-S2PC45/M8
IPS8-N2NO45/A2P	IPS8-N2NO45/M8	IPS8-N2NO60/M8	IPS8-N2NO70/M12	IMF8-S2NO30/A2P	IMF8-S2NO45/M8
IPS8-N2NC45/A2P	IPS8-N2NC45/M8	IPS8-N2NC60/M8	IPS8-N2NC70/M12	IMF8-S2NC30/A2P	IMF8-S2NC45/M8
IPS8-N2DO45/A2P		IPS8-N2DO60/M8	IPS8-N2DO70/M12		
IPS8-N2DC45/A2P		IPS8-N2DC60/M8	IPS8-N2DC70/M12		
-	M8/3...	M8/3...	M8/3...	-	M8/3...

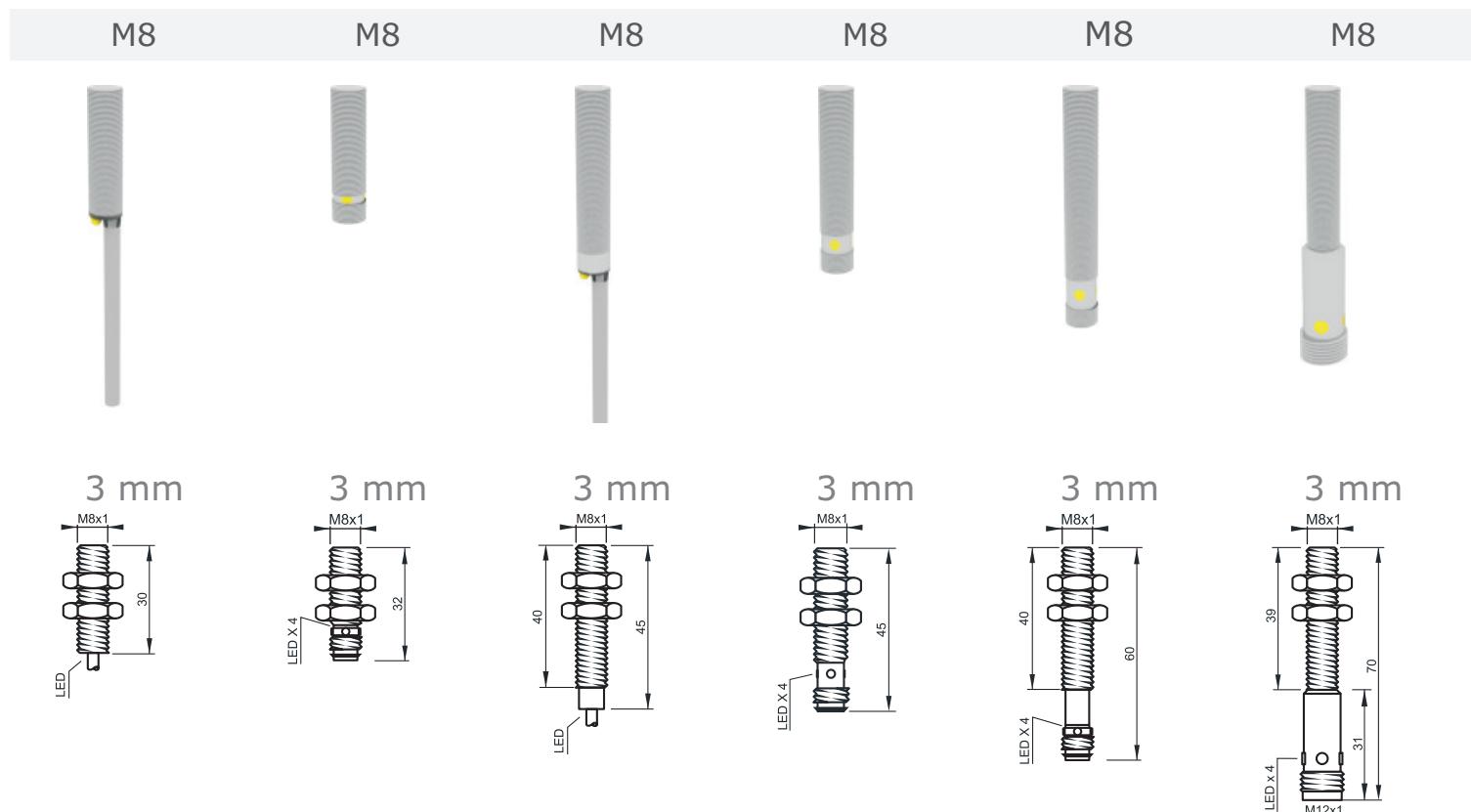
### Output Schematics



### SPECIFICATIONS

	M8 Metal Face	M8 Metal Face	M8x1	M8x1
Sensing Distance	2 mm - Shielded	2 mm - Shielded	3 mm - Shielded	3 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Repeatability	< 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	IP69k, Conn. IP67	IP69k, Conn. IP67	IP67	IP67
Sensing Face Material	1.4305 / SS303	1.4305 / SS303	POM	POM
Housing Material	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	Connector M8, 3-pole	Connector M12, 4-pole	High-Flex PVC, 2m	Connector M8, 3-pole, 300 mm
Output Indicator	Integrated	Integrated	Integrated	Integrated
Article Code				
PNP - NO, 3-wire	IMF8-S2PO60/M8	IMF8-S2PO70/M12	IPS8-S3PO18/A2P	IPS8-S3PO18/3P8
PNP - NC, 3-wire	IMF8-S2PC60/M8	IMF8-S2PC70/M12	IPS8-S3PC18/A2P	IPS8-S3PC18/3P8
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IMF8-S2NO60/M8	IMF8-S2NO70/M12	IPS8-S3NO18/A2P	IPS8-S3NO18/3P8
NPN - NC, 3-wire	IMF8-S2NC60/M8	IMF8-S2NC70/M12	IPS8-S3NC18/A2P	IPS8-S3NC18/3P8
NPN - NO+NC, 4-wire				
Recommended Connecting Cable	M8/3...	M12/3...	-	M8/3...

# Inductive Proximity Switches



M8x1	M8x1	M8x1	M8x1	M8x1	M8x1
3 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M12, 4-pole Integrated

IPS8-S3PO30/A2P	IPS8-S3PO32/M8	IPS8-S3PO45/A2P	IPS8-S3PO45/M8	IPS8-S3PO60/M8	IPS8-S3PO70/M12
IPS8-S3PC30/A2P	IPS8-S3PC32/M8	IPS8-S3PC45/A2P	IPS8-S3PC45/M8	IPS8-S3PC60/M8	IPS8-S3PC70/M12
IPS8-S3NO30/A2P	IPS8-S3NO32/M8	IPS8-S3NO45/A2P	IPS8-S3NO45/M8	IPS8-S3NO60/M8	IPS8-S3NO70/M12
IPS8-S3NC30/A2P	IPS8-S3NC32/M8	IPS8-S3NC45/A2P	IPS8-S3NC45/M8	IPS8-S3NC60/M8	IPS8-S3NC70/M12

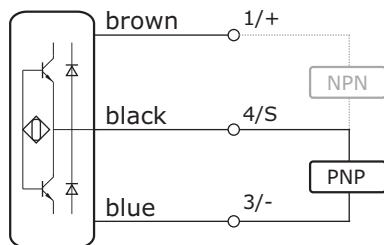
M8/3...

M8/3...

M8/3...

M12/3...

### Output Schematics

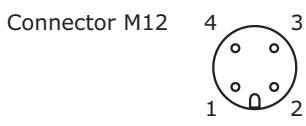


M8

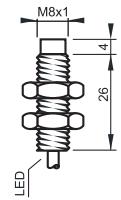
M8

M8

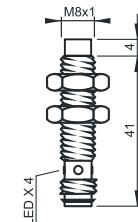
M8



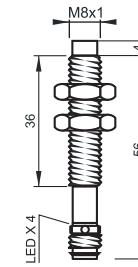
3.5 mm



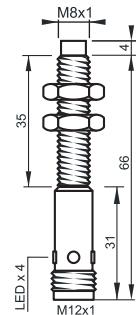
3.5 mm



3.5 mm



3.5 mm



### SPECIFICATIONS

	M8 Metal Face	M8 Metal Face	M8 Metal Face	M8 Metal Face
Sensing Distance	3.5 mm - Unshielded			
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Repeatability	< 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	IP69k, Conn. IP67	IP69k, Conn. IP67	IP69k, Conn. IP67	IP69k, Conn. IP67
Sensing Face Material	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Housing Material	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	High-Flex PVC, 2m	Connector M8, 3-pole	Connector M8, 3-pole	Connector M12, 4-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IMF8-N4PO30/A2P	IMF8-N4PO45/M8	IMF8-N4PO60/M8	IMF8-N4PO70/M12
PNP - NC, 3-wire	IMF8-N4PC30/A2P	IMF8-N4PC45/M8	IMF8-N4PC60/M8	IMF8-N4PC70/M12
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IMF8-N4NO30/A2P	IMF8-N4NO45/M8	IMF8-N4NO60/M8	IMF8-N4NO70/M12
NPN - NC, 3-wire	IMF8-N4NC30/A2P	IMF8-N4NC45/M8	IMF8-N4NC60/M8	IMF8-N4NC70/M12
NPN - NO+NC, 4-wire				

Recommended Connecting Cable

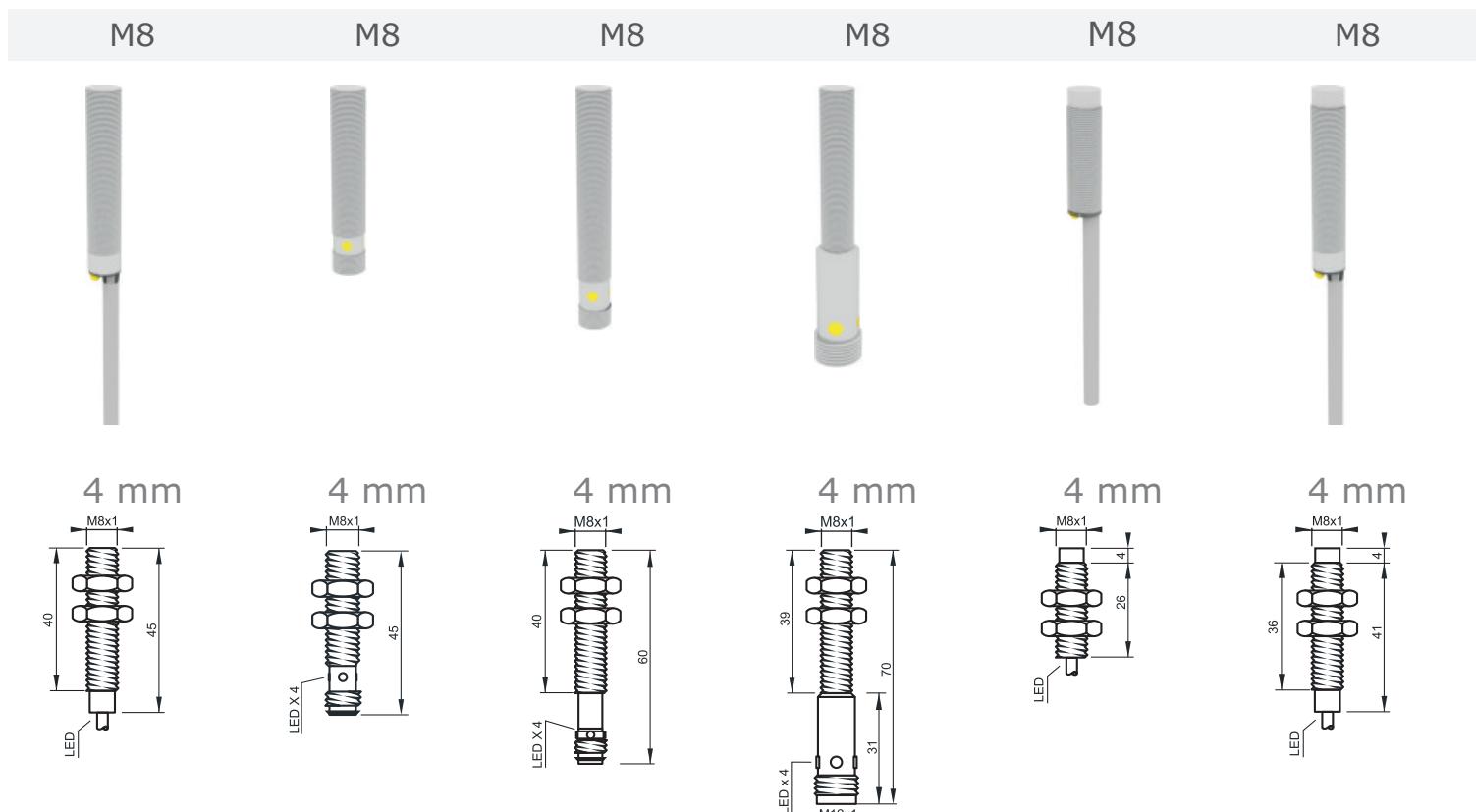
-

M8/3...

M8/3...

M12/3...

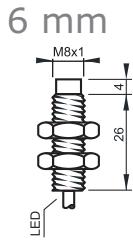
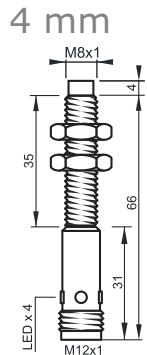
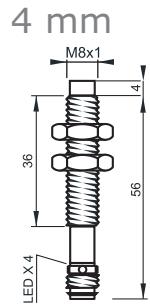
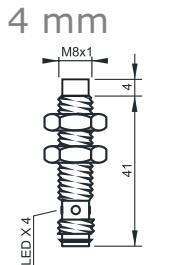
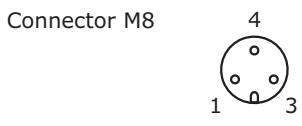
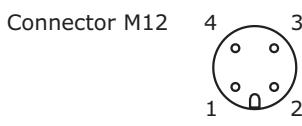
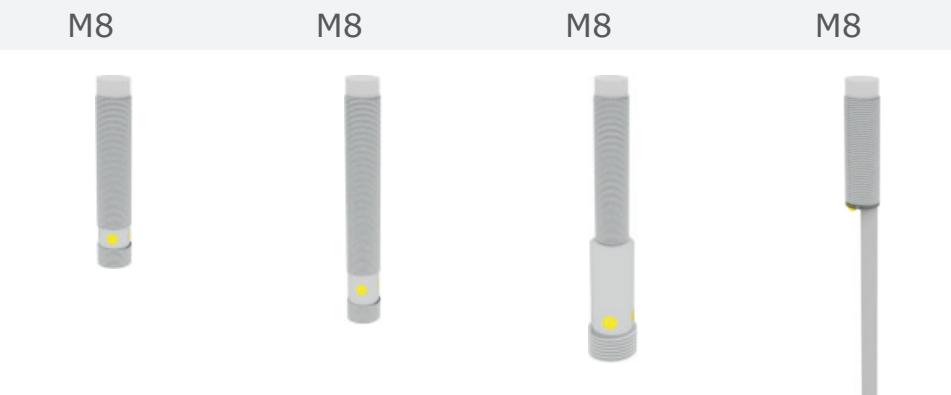
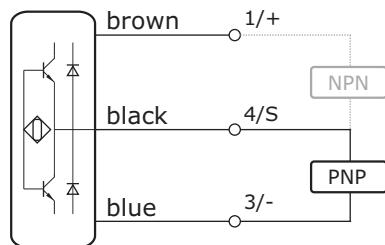
# Inductive Proximity Switches



M8 Performance	M8 Performance	M8 Performance	M8 Performance	M8x1	M8x1
4 mm - Shielded	4 mm - Shielded	4 mm - Shielded	4 mm - Shielded	4 mm - Unshielded	4 mm - Unshielded
10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in	10...30 VDC, 3-wire built-in
< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA	< 8 mA
200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting	built-in - self resetting
< 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	500 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
Plated Brass	Plated Brass	Plated Brass	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
High-Flex PVC, 2m Integrated	Connector M8, 3-pole Integrated	Connector M8, 3-pole Integrated	Connector M12, 4-pole Integrated	High-Flex PVC, 2m Integrated	High-Flex PVC, 2m Integrated

IPS8-S4PO45/A2P	IPS8-S4PO45/M8	IPS8-S4PO60/M8	IPS8-S4PO70/M12	IPS8-N4PO30/A2P	IPS8-N4PO45/A2P
IPS8-S4PC45/A2P	IPS8-S4PC45/M8	IPS8-S4PC60/M8	IPS8-S4PC70/M12	IPS8-N4PC30/A2P	IPS8-N4PC45/A2P
IPS8-S4NO45/A2P	IPS8-S4NO45/M8	IPS8-S4NO60/M8	IPS8-S4NO70/M12	IPS8-N4NO30/A2P	IPS8-N4NO45/A2P
IPS8-S4NC45/A2P	IPS8-S4NC45/M8	IPS8-S4NC60/M8	IPS8-S4NC70/M12	IPS8-N4NC30/A2P	IPS8-N4NC45/A2P

### Output Schematics



### SPECIFICATIONS

	M8x1	M8x1	M8x1	M8x1
Sensing Distance	4 mm - Unshielded	4 mm - Unshielded	4 mm - Unshielded	6 mm - Unshielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	500 Hz
Repeatability	< 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	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303	1.4305 / SS303
Connection	Connector M8, 3-pole	Connector M8, 3-pole	Connector M12, 4-pole	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated
Article Code				
PNP - NO, 3-wire	IPS8-N4PO45/M8	IPS8-N4PO60/M8	IPS8-N4PO70/M12	IPS8-N6PO30/A2P
PNP - NC, 3-wire	IPS8-N4PC45/M8	IPS8-N4PC60/M8	IPS8-N4PC70/M12	IPS8-N6PC30/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS8-N4NO45/M8	IPS8-N4NO60/M8	IPS8-N4NO70/M12	IPS8-N6NO30/A2P
NPN - NC, 3-wire	IPS8-N4NC45/M8	IPS8-N4NC60/M8	IPS8-N4NC70/M12	IPS8-N6NC30/A2P
NPN - NO+NC, 4-wire				

Recommended Connecting Cable

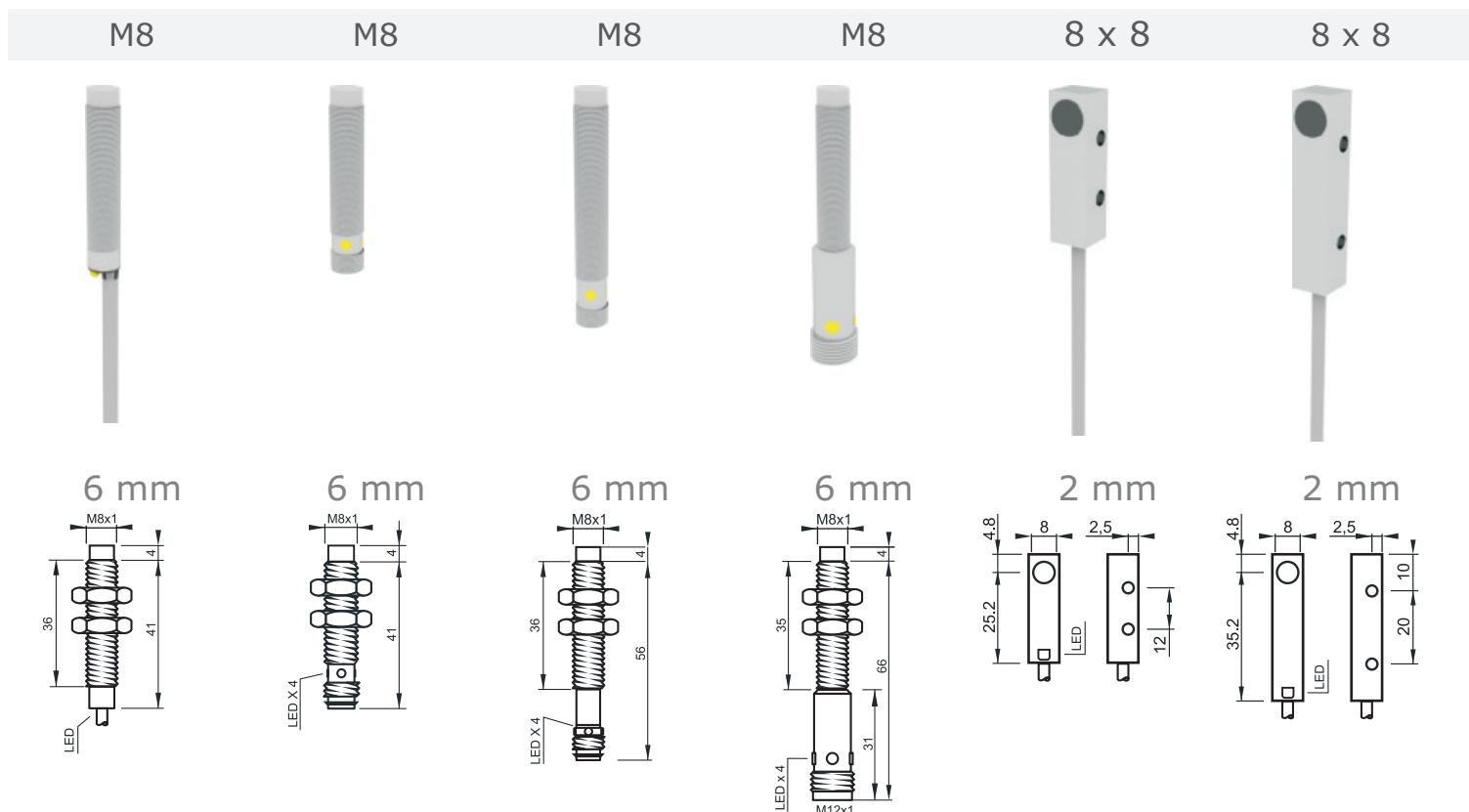
M8/3...

M8/3...

M12/3...

-

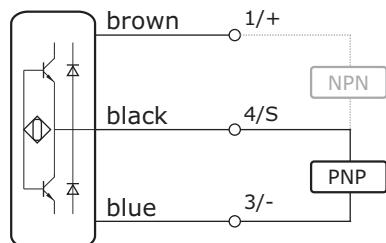
# Inductive Proximity Switches



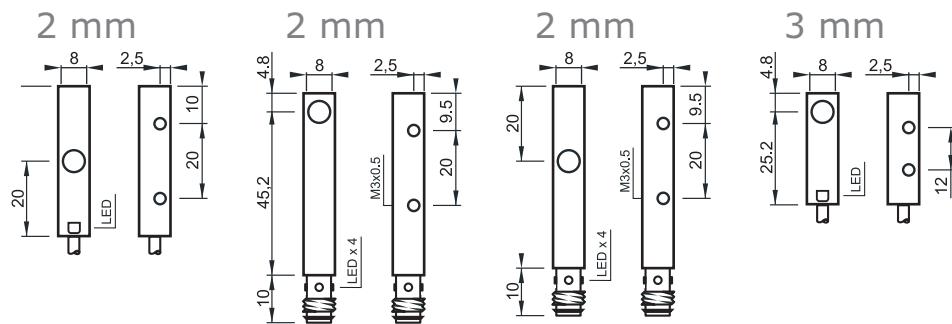
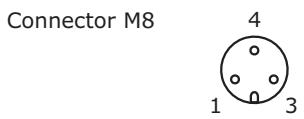
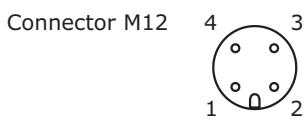
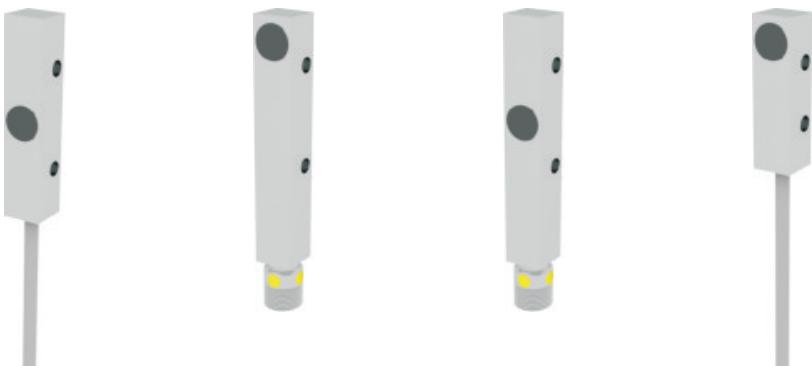
M8x1	M8x1	M8x1	M8x1	8 x 8	8 x 8
6 mm - Unshielded	6 mm - Unshielded	6 mm - Unshielded	6 mm - Unshielded	2 mm - Shielded	2 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated

IPS8-N6PO45/A2P IPS8-N6PC45/A2P	IPS8-N6PO45/M8 IPS8-N6PC45/M8	IPS8-N6PO60/M8 IPS8-N6PC60/M8	IPS8-N6PO70/M12 IPS8-N6PC70/M12	IPS88-S2PO30/A2P IPS88-S2PC30/A2P	IPS88-S2PO40/A2P IPS88-S2PC40/A2P
IPS8-N6NO45/A2P IPS8-N6NC45/A2P	IPS8-N6NO45/M8 IPS8-N6NC45/M8	IPS8-N6NO60/M8 IPS8-N6NC60/M8	IPS8-N6NO70/M12 IPS8-N6NC70/M12	IPS88-S2NO30/A2P IPS88-S2NC30/A2P	IPS88-S2NO40/A2P IPS88-S2NC40/A2P

### Output Schematics



8 x 8      8 x 8      8 x 8      8 x 8



### SPECIFICATIONS

	8 x 8	8 x 8	8 x 8	8 x 8
Sensing Distance	2 mm - Shielded	2 mm - Shielded	2 mm - Shielded	3 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	1000 Hz
Repeatability	< 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	Plated Brass	Plated Brass	Plated Brass	Plated Brass
Connection	High-Flex PVC, 2m	Connector M8, 3-pole	Connector M8, 3-pole	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

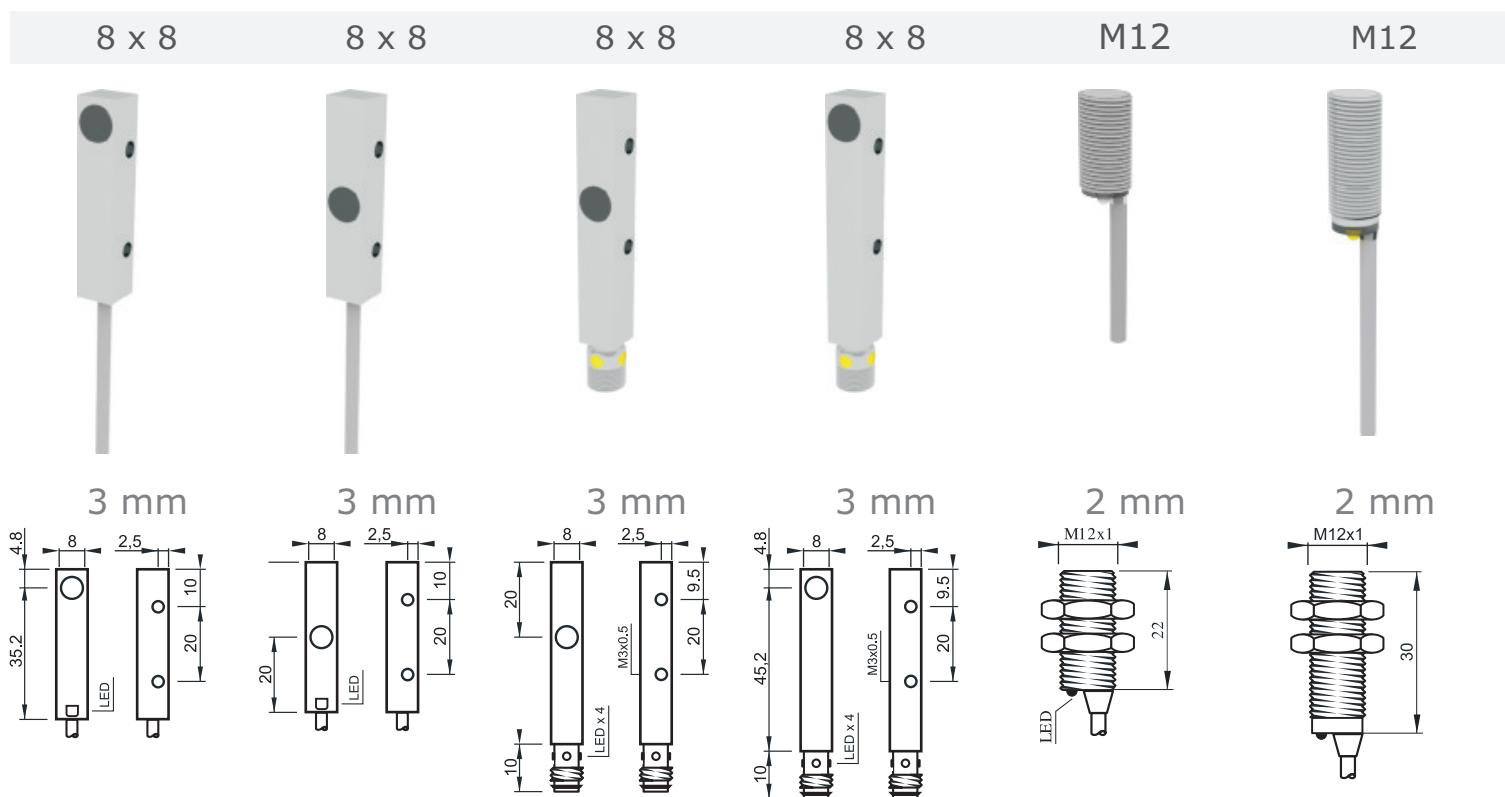
### Article Code

PNP - NO, 3-wire	IPS88-S2PO40C/A2P	IPS88-S2PO60/M8	IPS88-S2PO60C/M8	IPS88-S3PO30/A2P
PNP - NC, 3-wire	IPS88-S2PC40C/A2P	IPS88-S2PC60/M8	IPS88-S2PC60C/M8	IPS88-S3PC30/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS88-S2NO40C/A2P	IPS88-S2NO60/M8	IPS88-S2NO60C/M8	IPS88-S3NO30/A2P
NPN - NC, 3-wire	IPS88-S2NC40C/A2P	IPS88-S2NC60/M8	IPS88-S2NC60C/M8	IPS88-S3NC30/A2P
NPN - NO+NC, 4-wire				

Recommended Connecting Cable

-      M8/3...      M8/3...      -

# Inductive Proximity Switches



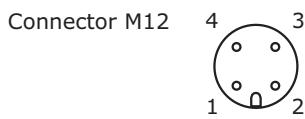
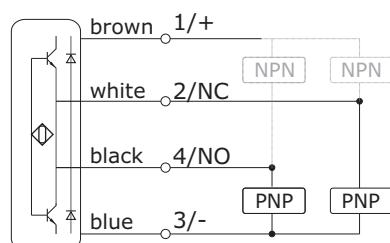
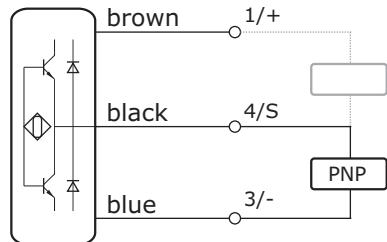
8 x 8	8 x 8	8 x 8	8 x 8	M12x1	M12x1
3 mm - Shielded	3 mm - Shielded	3 mm - Shielded	3mm - Shielded	2 mm - Shielded	2 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated

IPS88-S3PO40/A2P	IPS88-S3PO40C/A2P	IPS88-S3PO60C/M8	IPS88-S3PO60/M8	IPS12-S2PO22/A2P	IPS12-S2PO30/A2P
IPS88-S3PC40/A2P	IPS88-S3PC40C/A2P	IPS88-S3PC60C/M8	IPS88-S3PC60/M8	IPS12-S2PC22/A2P	IPS12-S2PC30/A2P
IPS88-S3NO40/A2P	IPS88-S3NO40C/A2P	IPS88-S3NO60C/M8	IPS88-S3NO60/M8	IPS12-S2NO22/A2P	IPS12-S2NO30/A2P
IPS88-S3NC40/A2P	IPS88-S3NC40C/A2P	IPS88-S3NC60C/M8	IPS88-S3NC60/M8	IPS12-S2NC30/A2P	IPS12-S2NC30/A2P

M8/3...

M8/3...

### Output Schematics



**Not to be used for Safety Applications**

M12



M12



M12



M12



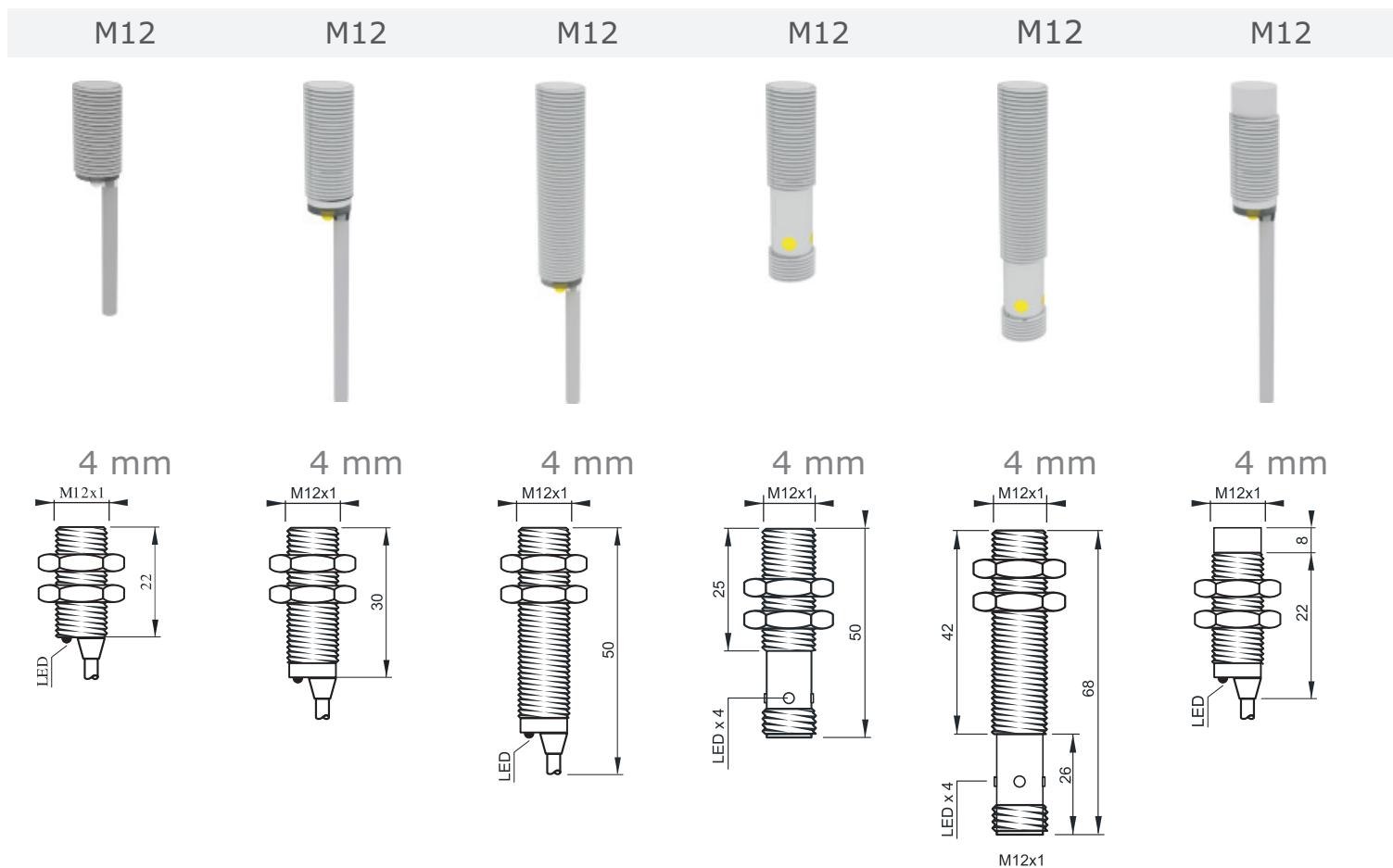
### SPECIFICATIONS

	M12x1	M12x1	M12x1	M12x1
Sensing Distance	2 mm - Shielded			
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	2000 Hz
Repeatability	< 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	Plated Brass	Plated Brass	Plated Brass	Plated Brass
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	Connector M12, 4-pole	Connector M12, 4-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

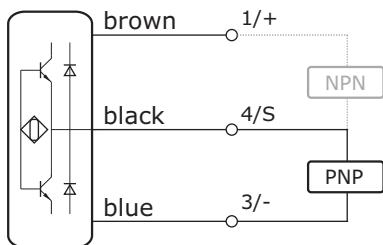
PNP - NO, 3-wire	IPS12-S2PO30/A2P	IPS12-S2PO50/A2P	IPS12-S2PO50/M12	IPS12-S2PO68/M12
PNP - NC, 3-wire	IPS12-S2PC30/A2P	IPS12-S2PC50/A2P	IPS12-S2PC50/M12	IPS12-S2PC68/M12
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS12-S2NO30/A2P	IPS12-S2NO50/A2P	IPS12-S2NO50/M12	IPS12-S2NO68/M12
NPN - NC, 3-wire	IPS12-S2NC30/A2P	IPS12-S2NC50/A2P	IPS12-S2NC50/M12	IPS12-S2NC68/M12
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire		IPS12-S2DO50/A2P		IPS12-S2DO68/M12
10...55 VDC - NC, 2-wire		IPS12-S2DC50/A2P		IPS12-S2DC68/M12
Recommended Connecting Cable	-		M12/3...	M12/3...

# Inductive Proximity Switches



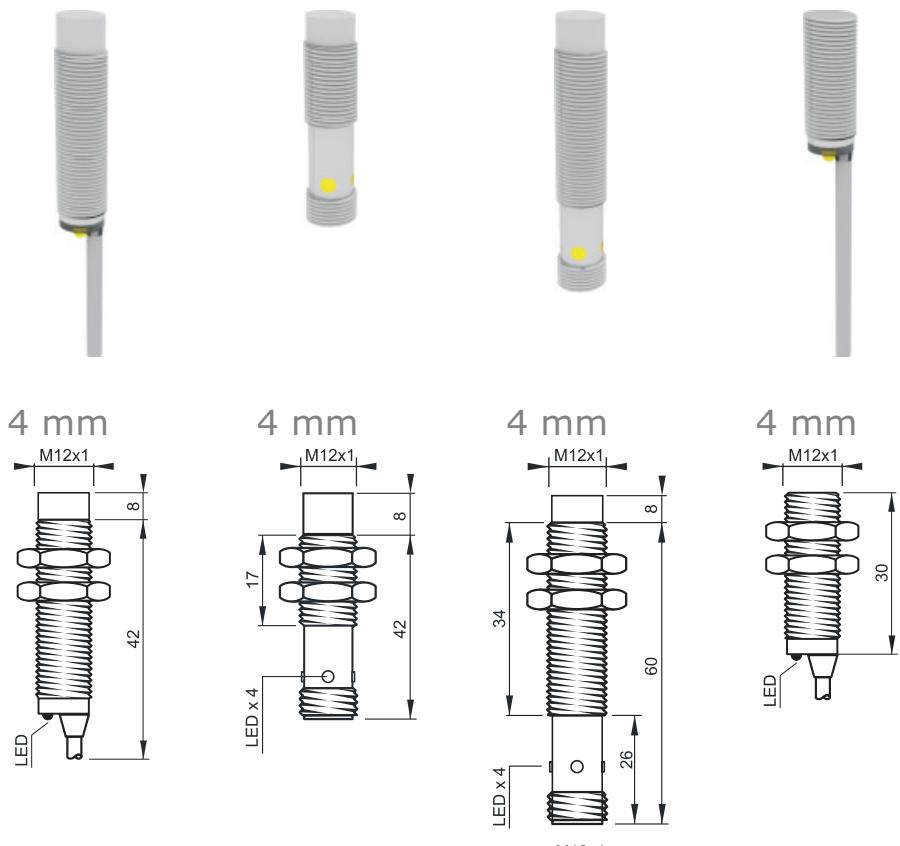
M12x1	M12x1	M12x1	M12x1	M12x1	M12x1
4 mm - Shielded	4 mm - Unshielded				
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated
IPS12-S4PO22/A2P IPS12-S4PC22/A2P IPS12-S4NO22/A2P IPS12-S4NC22/A2P	IPS12-S4PO30/A2P IPS12-S4PC30/A2P IPS12-S4PCO30/A2P IPS12-S4NO30/A2P IPS12-S4NC30/A2P IPS12-S4NCO30/A2P	IPS12-S4PO50/A2P IPS12-S4PC50/A2P IPS12-S4PCO50/A2P IPS12-S4NO50/A2P IPS12-S4NC50/A2P IPS12-S4NCO50/A2P IPS12-S4DO50/A2P IPS12-S4DC50/A2P	IPS12-S4PO50/M12 IPS12-S4PC50/M12 IPS12-S4PCO50/M12 IPS12-S4NO50/M12 IPS12-S4NC50/M12 IPS12-S4NCO50/M12 IPS12-S4DO50/M12 IPS12-S4DC50/M12	IPS12-S4PO68/M12 IPS12-S4PC68/M12 IPS12-S4PCO68/M12 IPS12-S4NO68/M12 IPS12-S4NC68/M12 IPS12-S4NCO68/M12 IPS12-S4DO68/M12 IPS12-S4DC68/M12	IPS12-N4PO30/A2P IPS12-N4PC30/A2P IPS12-N4NO30/A2P IPS12-N4NC30/A2P IPS12-N4NCO30/A2P
-	-	-	M12/3... / M12/4...	M12/3... / M12/4...	-

### Output Schematics



M12 M12 M12 M12

Connector M12 4 3  
1 2



### SPECIFICATIONS

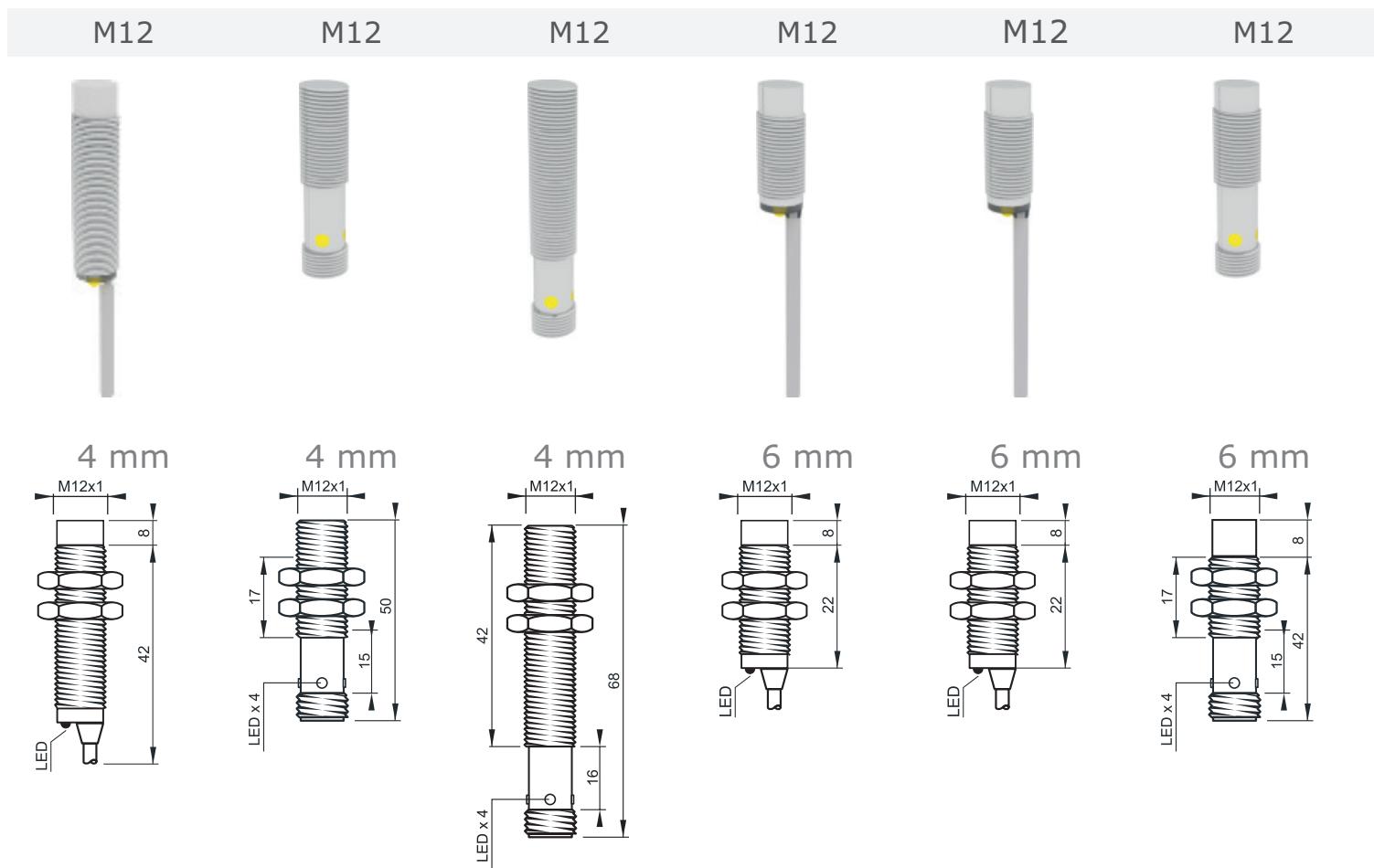
	M12x1	M12x1	M12x1	M12 Metal Face
Sensing Distance	4 mm - Unshielded	4 mm - Unshielded	4 mm - Unshielded	4 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Repeatability	< 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	IP69k, Conn. IP67
Sensing Face Material	POM	POM	POM	1.4305 / SS303
Housing Material	Plated Brass	Plated Brass	Plated Brass	1.4305 / SS303
Connection	High-Flex PVC, 2m	Connector M12, 4-pole	Connector M12, 4-pole	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS12-N4PO50/A2P	IPS12-N4PO50/M12	IPS12-N4PO68/M12	IMF12-S4PO30/A2P
PNP - NC, 3-wire	IPS12-N4PC50/A2P	IPS12-N4PC50/M12	IPS12-N4PC68/M12	IMF12-S4PC30/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS12-N4NO50/A2P	IPS12-N4NO50/M12	IPS12-N4NO68/M12	IMF12-S4NO30/A2P
NPN - NC, 3-wire	IPS12-N4NC50/A2P	IPS12-N4NC50/M12	IPS12-N4NC68/M12	IMF12-S4NC30/A2P
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire	IPS12-N4DO50/A2P		IPS12-N4DO68/M12	
10...55 VDC - NC, 2-wire	IPS12-N4DC50/A2P		IPS12-N4DC68/M12	
Recommended Connecting Cable	-	M12/3...	M12/3...	-

# Inductive Proximity Switches

INDUCTIVE



M12 Metal Face	M12 Metal Face	M12 Metal Face	M12 Metal Face	M12 Metal Face	M12 Metal Face
4 mm - Shielded	4 mm - Shielded	4 mm - Shielded	6 mm - Unshielded	6 mm - Unshielded	6 mm - Unshielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 Connector M12, 4-pole Integrated
IMF12-S4PO50/A2P IMF12-S4PC50/A2P	IMF12-S4PO50/M12 IMF12-S4PC50/M12	IMF12-S4PO68/M12 IMF12-S4PC68/M12	IMF12-N6PO30/A2P IMF12-N6PC30/A2P	IMF12-N6PO50/A2P IMF12-N6PC50/A2P	IMF12-N6PO50/M12 IMF12-N6PC50/M12
IMF12-S4NO50/A2P IMF12-S4NC50/A2P	IMF12-S4NO50/M12 IMF12-S4NC50/M12	IMF12-S4NO68/M12 IMF12-S4NC68/M12	IMF12-N6NO30/A2P IMF12-N6NC30/A2P	IMF12-N6NO50/A2P IMF12-N6NC50/A2P	IMF12-N6NO50/M12 IMF12-N6NC50/M12

M12/3...

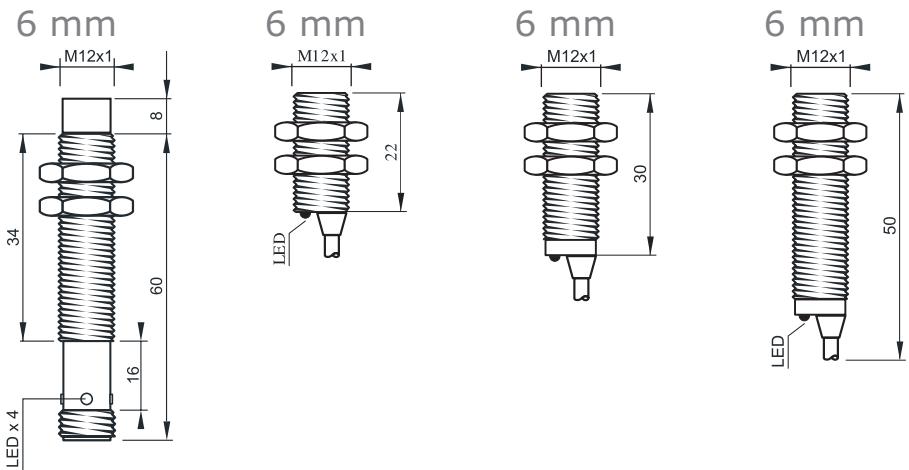
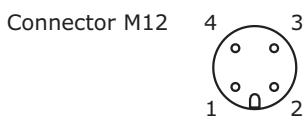
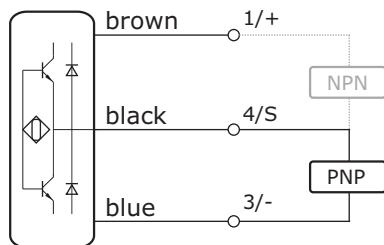
M12/3...

-

-

M12/3...

### Output Schematics



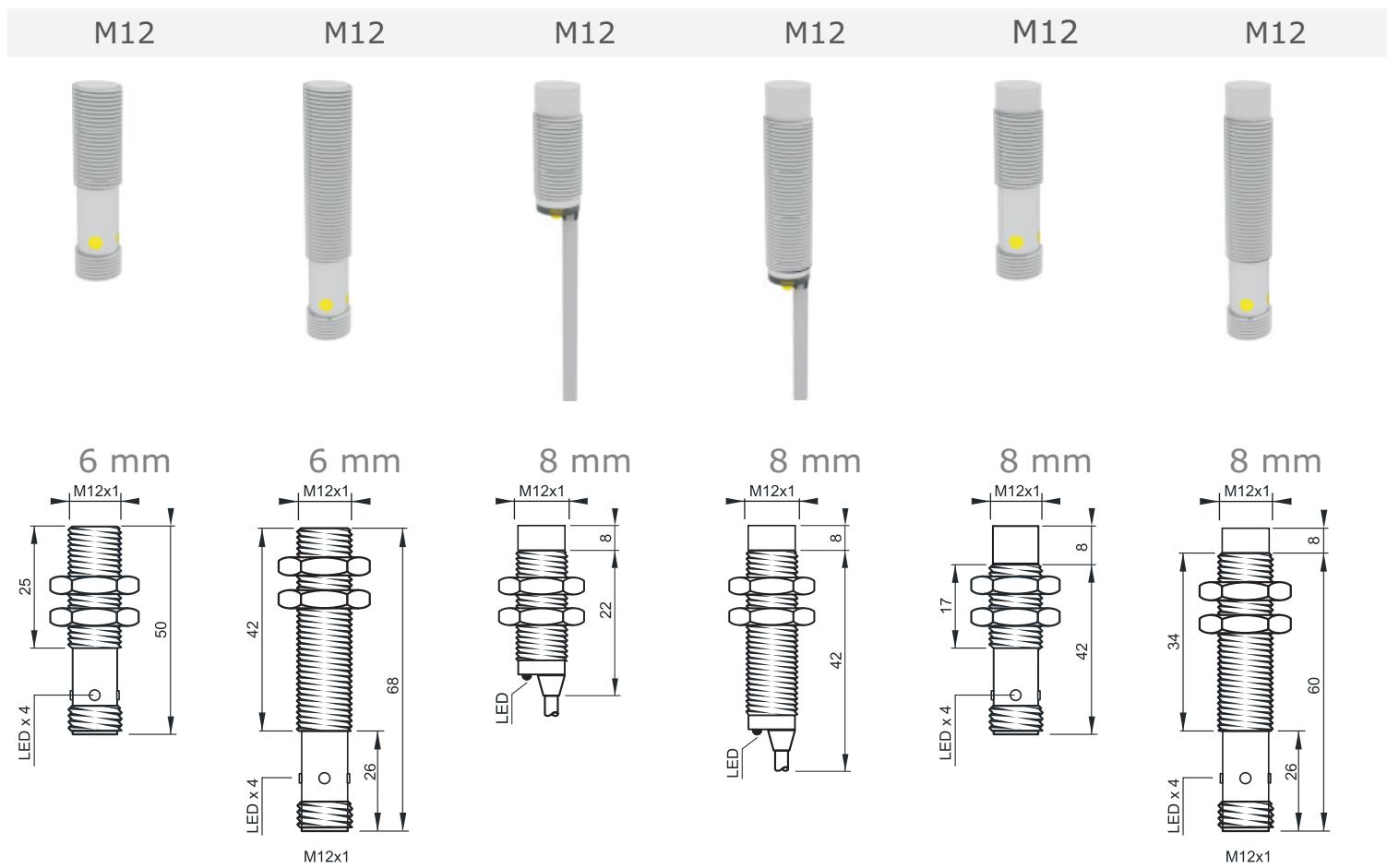
### SPECIFICATIONS

	M12 Metal Face	M12x1	M12x1	M12x1
Sensing Distance	6 mm - Unshielded	6 mm - Shielded	6 mm - Shielded	6 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	800 Hz	800 Hz	800 Hz	800 Hz
Repeatability	< 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	IP69k, Conn. IP67	IP67	IP67	IP67
Sensing Face Material	1.4305 / SS303	POM	POM	POM
Housing Material	1.4305 / SS303	Plated Brass	Plated Brass	Plated Brass
Connection	Connector M12, 4-pole	High-Flex PVC, 2m	High-Flex PVC, 2m	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

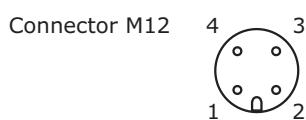
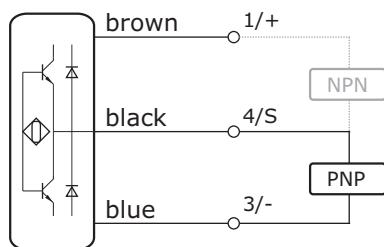
PNP - NO, 3-wire	IMF12-N6PO68/M12	IPS12-S6PO22/A2P	IPS12-S6PO30/A2P	IPS12-S6PO50/A2P
PNP - NC, 3-wire	IMF12-N6PC68/M12	IPS12-S6PC22/A2P	IPS12-S6PC30/A2P	IPS12-S6PC50/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IMF12-N6NO68/M12	IPS12-S6NO22/A2P	IPS12-S6NO30/A2P	IPS12-S6NO50/A2P
NPN - NC, 3-wire	IMF12-N6NC68/M12	IPS12-S6NC30/A2P	IPS12-S6NC30/A2P	IPS12-S6NC50/A2P
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire				
10...55 VDC - NC, 2-wire				
Recommended Connecting Cable	M12/3...	-	-	-

# Inductive Proximity Switches



M12x1	M12x1	M12x1	M12x1	M12x1	M12x1
6 mm - Shielded	6 mm - Shielded	8 mm - Unshielded	8 mm - Unshielded	8 mm - Unshielded	8 mm - Unshielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 800 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 800 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated
IPS12-S6PO50/M12 IPS12-S6PC50/M12	IPS12-S6PO68/M12 IPS12-S6PC68/M12	IPS12-N8PO30/A2P IPS12-N8PC30/A2P	IPS12-N8PO50/A2P IPS12-N8PC50/A2P	IPS12-N8PO50/M12 IPS12-N8PC50/M12	IPS12-N8PO68/M12 IPS12-N8PC68/M12
IPS12-S6NO50M12 IPS12-S6NC50M12	IPS12-S6NO68/M12 IPS12-S6NC68/M12	IPS12-N8NO30/A2P IPS12-N8NC30/A2P	IPS12-N8NO50/A2P IPS12-N8NC50/A2P	IPS12-N8NO50/M12 IPS12-N8NC50/M12	IPS12-N8NO68/M12 IPS12-N8NC68/M12
M12/3...	M12/3...	-	-	M12/3...	IPS12-N8DO68/M12 IPS12-N8DC68/M12 M12/3...

### Output Schematics



M12



M12



M12



M12



### SPECIFICATIONS

	M12x1	M12x1	M12x1	M12x1
Sensing Distance	8 mm - Shielded	8 mm - Shielded	10 mm - Unshielded	10 mm - Unshielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	500 Hz	500 Hz	400 Hz	400 Hz
Repeatability	< 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	Plated Brass	Plated Brass	Plated Brass	Plated Brass
Connection	High-Flex PVC, 2m	Connector M12, 4-pole	High-Flex PVC, 2m	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS12-S8PO30/A2P	IPS12-S8PO50/M12	IPS12-N10PO30/A2P	IPS12-N10PO50/A2P
PNP - NC, 3-wire	IPS12-S8PC30/A2P	IPS12-S8PC50/M12	IPS12-N10PC30/A2P	IPS12-N10PC50/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS12-S8NO30/A2P	IPS12-S8NO50/M12	IPS12-N10NO30/A2P	IPS12-N10NO50/A2P
NPN - NC, 3-wire	IPS12-S8NC30/A2P	IPS12-S8NC50/M12	IPS12-N10NC30/A2P	IPS12-N10NC50/A2P
NPN - NO+NC, 4-wire				

10...55 VDC - NO, 2-wire

10...55 VDC - NC, 2-wire

Recommended Connecting Cable

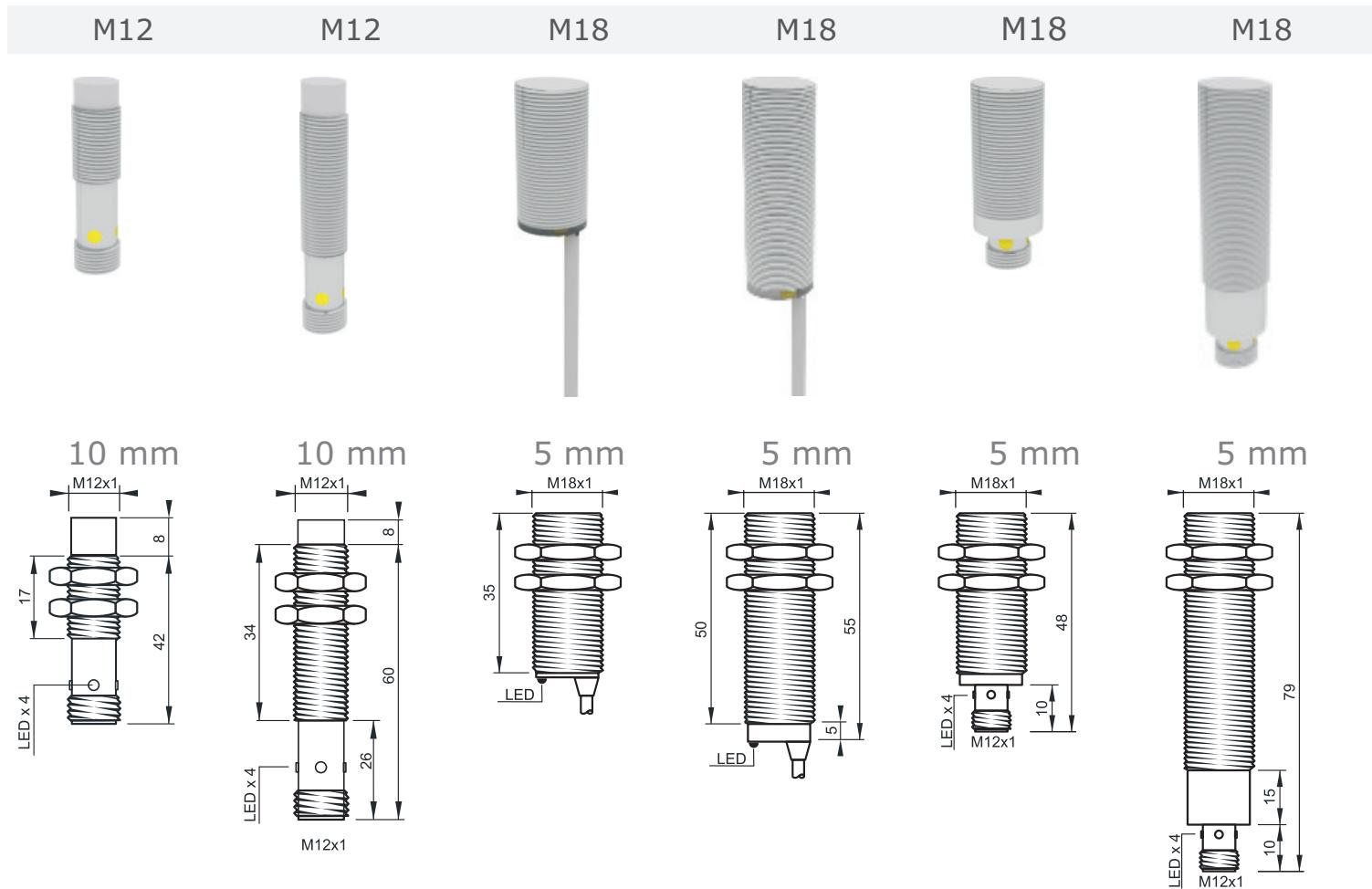
- M12/3...

- -

- -

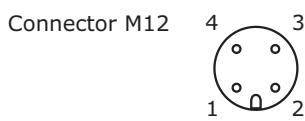
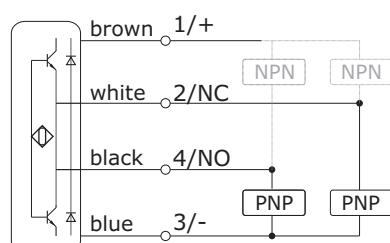
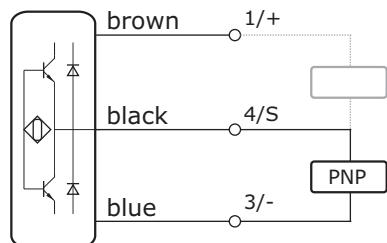
# Inductive Proximity Switches

INDUCTIVE

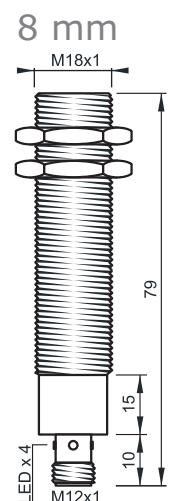
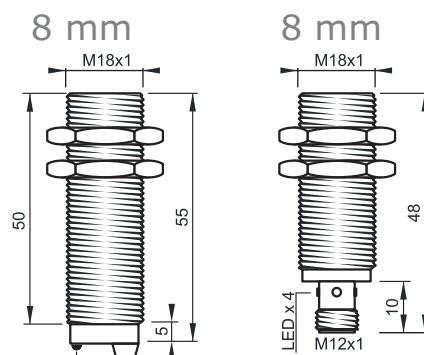
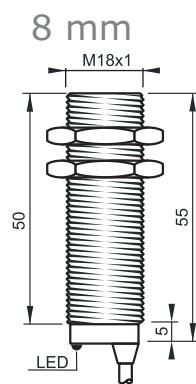
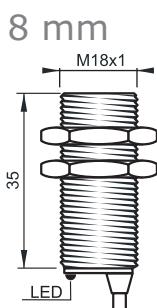


M12x1	M12x1	M18x1	M18x1	M18x1	M18x1
10 mm - Unshielded	10 mm - Unshielded	5 mm - Shielded	5 mm - Shielded	5 mm - Shielded	5 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 400 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 400 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated
IPS12-N10PO50/M12 IPS12-N10PC50/M12	IPS12-N10PO68/M12 IPS12-N10PC68/M12	IPS18-S5PO35/A2P IPS18-S5PC35/A2P	IPS18-S5PO55/A2P IPS18-S5PC55/A2P	IPS179S5PO4-/M12 IPS179S5PC4-/M12	IPS18-S5PO48/M12 IPS18-S5PC48/M12
IPS12-N10NO50/M12 IPS12-N10NC50/M12	IPS12-N10NO68/M12 IPS12-N10NC68/M12	IPS18-S5NO35/A2P IPS18-S5NC35/A2P	IPS18-S5NO55/A2P IPS18-S5NC55/A2P	IPS179S5NO4-/M12 IPS18-S5NC79/M12	IPS18-S5NO48/M12 IPS18-S5NC48/M12
M12/3...	M12/3...	-	IPS18-S5DO55/A2P IPS18-S5DC55/A2P	IPS18-S5DO79/M12 IPS18-S5DC79/M12	M12/3...
			-	M12/3...	M12/3...

### Output Schematics



M18 M18 M18 M18



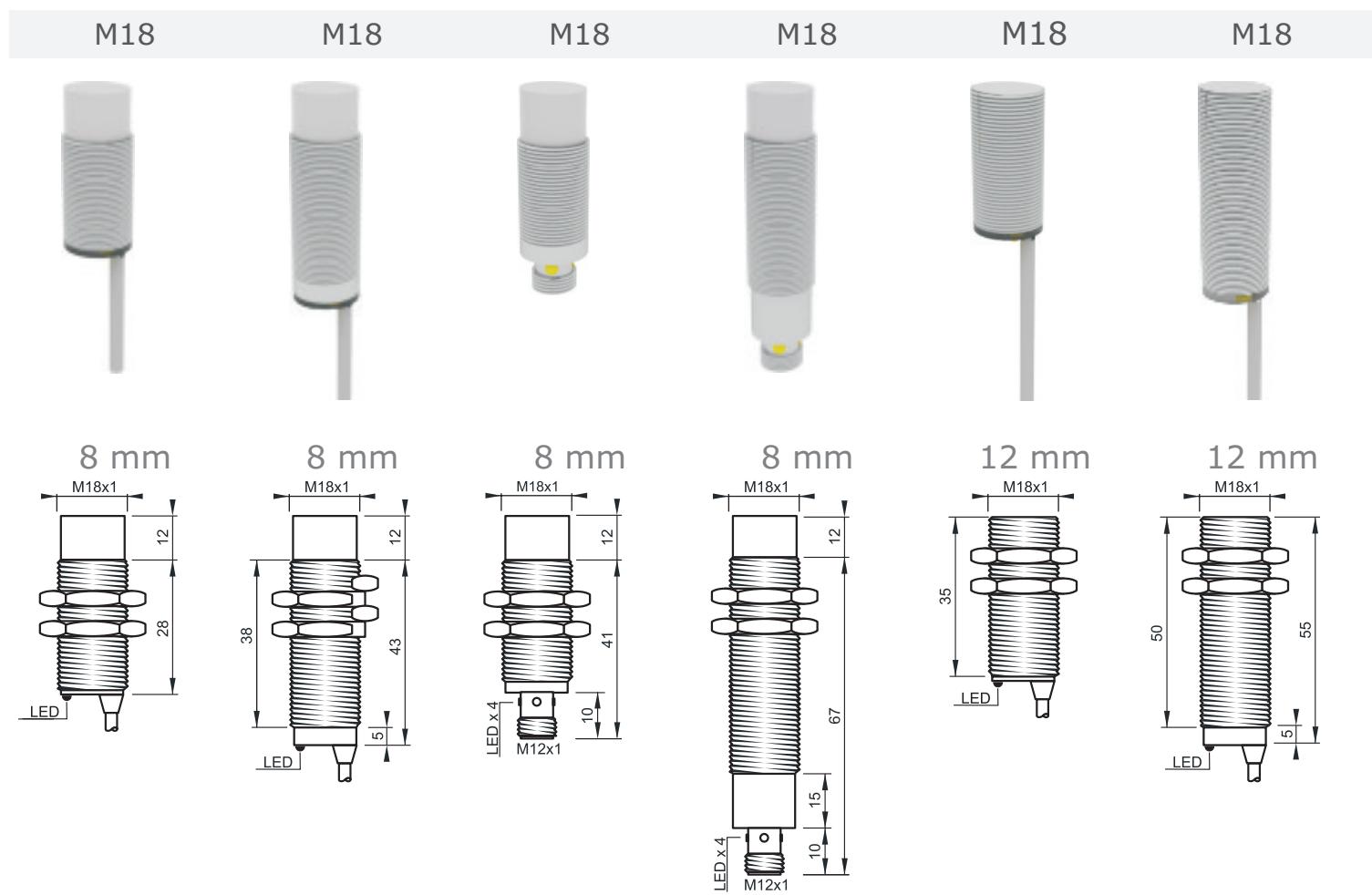
### SPECIFICATIONS

	M18x1	M18x1	M18x1	M18x1
Sensing Distance	8 mm - Shielded			
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	500 Hz	500 Hz	500 Hz	500 Hz
Repeatability	< 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	Plated Brass	Plated Brass	Plated Brass	Plated Brass
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	Connector M12, 4-pole	Connector M12, 4-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

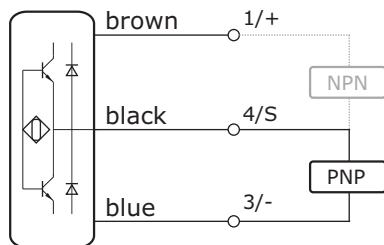
PNP - NO, 3-wire	IPS18-S8PO35/A2P	IPS18-S8PO55/A2P	IPS18-S8PO48/M12	IPS18-S8PO79/M12
PNP - NC, 3-wire	IPS18-S8PC35/A2P	IPS18-S8PC55/A2P	IPS18-S8PC48/M12	IPS18-S8PC79/M12
PNP - NO+NC, 4-wire	IPS18-S8PCO35/A2P	IPS18-S8PCO55/A2P	IPS18-S8PCO48/M12	IPS18-S8PCO79/M12
NPN - NO, 3-wire	IPS18-S8NO35/A2P	IPS18-S8NO55/A2P	IPS18-S8NO48/M12	IPS18-S8NO79/M12
NPN - NC, 3-wire	IPS18-S8NC35/A2P	IPS18-S8NC55/A2P	IPS18-S8NC48/M12	IPS18-S8NC79/M12
NPN - NO+NC, 4-wire	IPS18-S8NCO35/A2P	IPS18-S8NCO55/A2P	IPS18-S8NCO48/M12	IPS18-S8NCO79/M12
10...55 VDC - NO, 2-wire		IPS18-S8DO55/A2P		IPS18-S8DO79/M12
10...55 VDC - NC, 2-wire		IPS18-S8DC55/A2P		IPS18-S8DC79/M12
Recommended Connecting Cable	-		M12/3... / M12/4...	M12/3... / M12/4...

# Inductive Proximity Switches



M18x1	M18x1	M18x1	M18x1	M18x1	M18x1
8 mm - Unshielded	8 mm - Unshielded	8 mm - Unshielded	8 mm - Unshielded	12 mm - Shielded	12 mm - Shielded
10...30 VDC, 3-wire integrado < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated
IPS18-N8PO40/A2P IPS18-N8PC40/A2P	IPS18-N8PO55/A2P IPS18-N8PC55/A2P	IPS18-N8PO53/M12 IPS18-N8PC53/M12	IPS18-N8PO79/M12 IPS18-N8PC79/M12	IPS18-S12PO35/A2P IPS18-S12PC35/A2P	IPS18-S12PO55/A2P IPS18-S12PC55/A2P
IPS18-N8NO40/A2P IPS18-N8NC40/A2P	IPS18-N8NO55/A2P IPS18-N8NC55/A2P	IPS18-N8NO53/M12 IPS18-N8NC53/M12	IPS18-N8NO79/M12 IPS18-N8NC79/M12	IPS18-S12NO35/A2P IPS18-S12NC35/A2P	IPS18-S12NO55/A2P IPS18-S12NC55/A2P
-	IPS18-N8DO55/A2P IPS18-N8DC55/A2P	-	IPS18-N8DO79/M12 IPS18-N8DC79/M12	-	IPS18-S12NC35/A2P
		M12/3...	M12/3...		

### Output Schematics

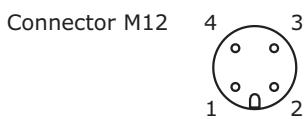


M18

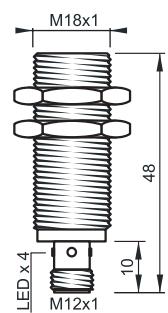
M18

M18

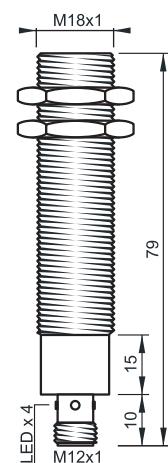
M18



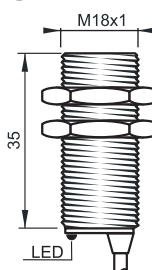
12 mm



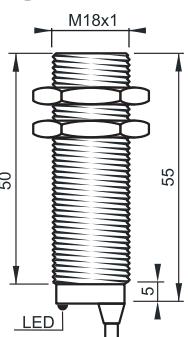
12 mm



8 mm



8 mm



### SPECIFICATIONS

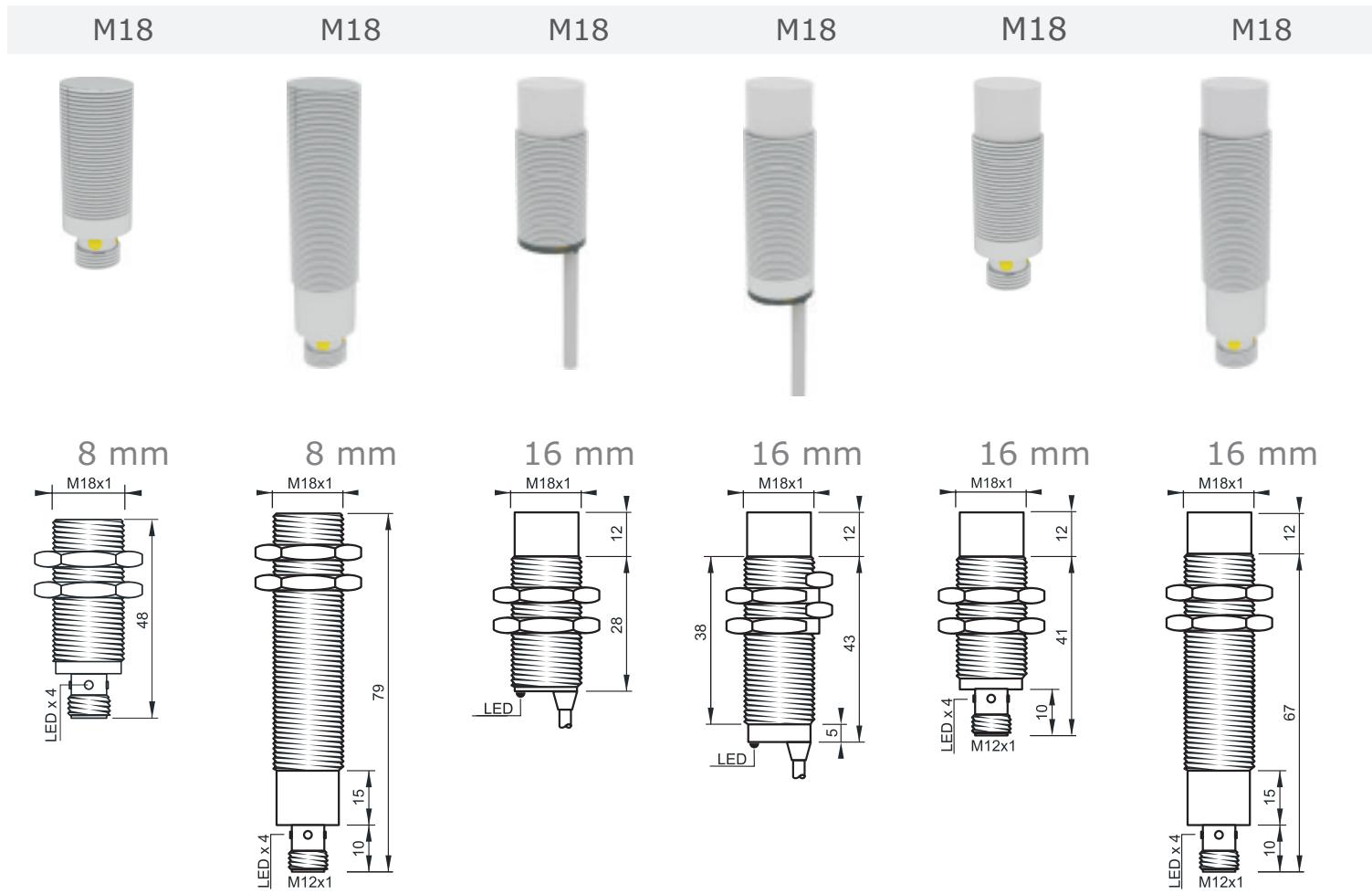
	M18x1	M18x1	M18 Metal Face	M18 Metal Face
Sensing Distance	12 mm - Shielded	12 mm - Shielded	8 mm - Shielded	8 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	300 Hz	300 Hz	1000 Hz	1000 Hz
Repeatability	< 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	IP69k, Conn. IP67	IP69k, Conn. IP67
Sensing Face Material	POM	POM	1.4305 / SS303	1.4305 / SS303
Housing Material	Plated Brass	Plated Brass	1.4305 / SS303	1.4305 / SS303
Connection	Connector M12, 4-pole	Connector M12, 4-pole	High-Flex PVC, 2m	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS18-S12PO48/M12	IPS18-S12PO79/M12	IMF18-S8PO35/A2P	IMF18-S8PO55/A2P
PNP - NC, 3-wire	IPS18-S12PC48/M12	IPS18-S12PC79/M12	IMF18-S8PC35/A2P	IMF18-S8PC55/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS18-S12NO48/M12	IPS18-S12NO79/M12	IMF18-S8NO35/A2P	IMF18-S8NO55/A2P
NPN - NC, 3-wire	IPS18-S12NC48/M12	IPS18-S12NC79/M12	IMF18-S8NC35/A2P	IMF18-S8NC55/A2P
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire				
10...55 VDC - NC, 2-wire				
Recommended Connecting Cable	M12/3...	M12/3...	-	-

# Inductive Proximity Switches

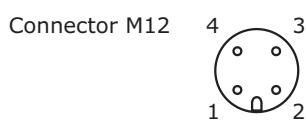
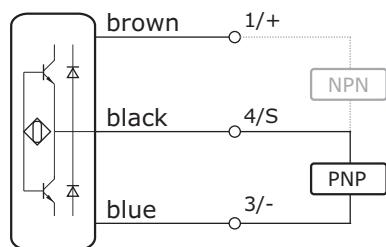
INDUCTIVE



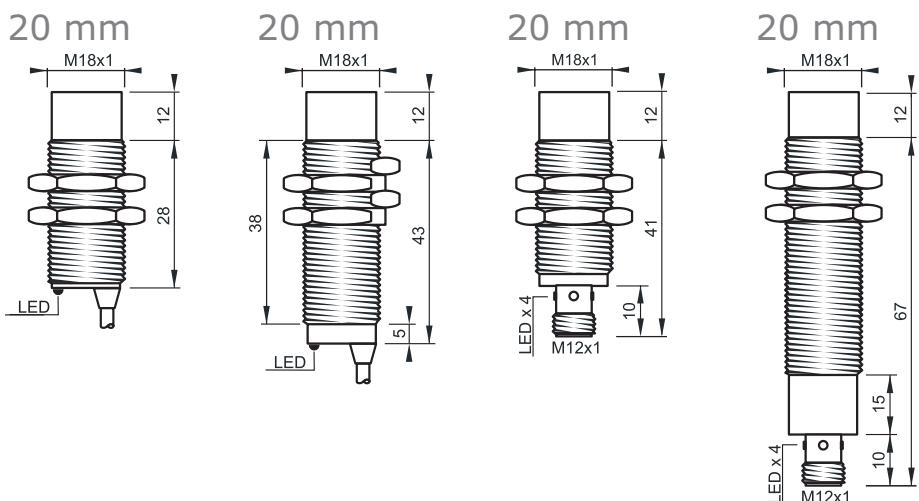
M18 Metal Face	M18 Metal Face	M18x1	M18x1	M18x1	M18x1
8 mm - Shielded	8 mm - Shielded	16 mm - Unshielded			
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP69k, Conn. IP67 1.4305 / SS303 1.4305 / SS303 Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated

IMF18-S8PO48/M12	IMF18-S8PO79/M12	IPS18-N16PO40/A2P	IPS18-N16PO55/A2P	IPS18-N16PO53/M12	IPS18-N16PO79/M12
IMF18-S8PC48/M12	IMF18-S8PC79/M12	IPS18-N16PC40/A2P	IPS18-N16PC55/A2P	IPS18-N16PC53/M12	IPS18-N16PC79/M12
IMF18-S8NO48/M12	IMF18-S8NO79/M12	IPS18-N16NO40/A2P	IPS18-N16NO55/A2P	IPS18-N16NO53/M12	IPS18-N16NO79/M12
IMF18-S8NC48/M12	IMF18-S8NC79/M12	IPS18-N16NC40/A2P	IPS18-N16NC55/A2P	IPS18-N16NC53/M12	IPS18-N16NC79/M12
M12/3...	M12/3...	-	IPS18-N16DO55/A2P IPS18-N16DC55/A2P	M12/3...	IPS18-N16DO79/M12 IPS18-N16DC79/M12
			-	M12/3...	M12/3...

### Output Schematics



M18 M18 M18 M18



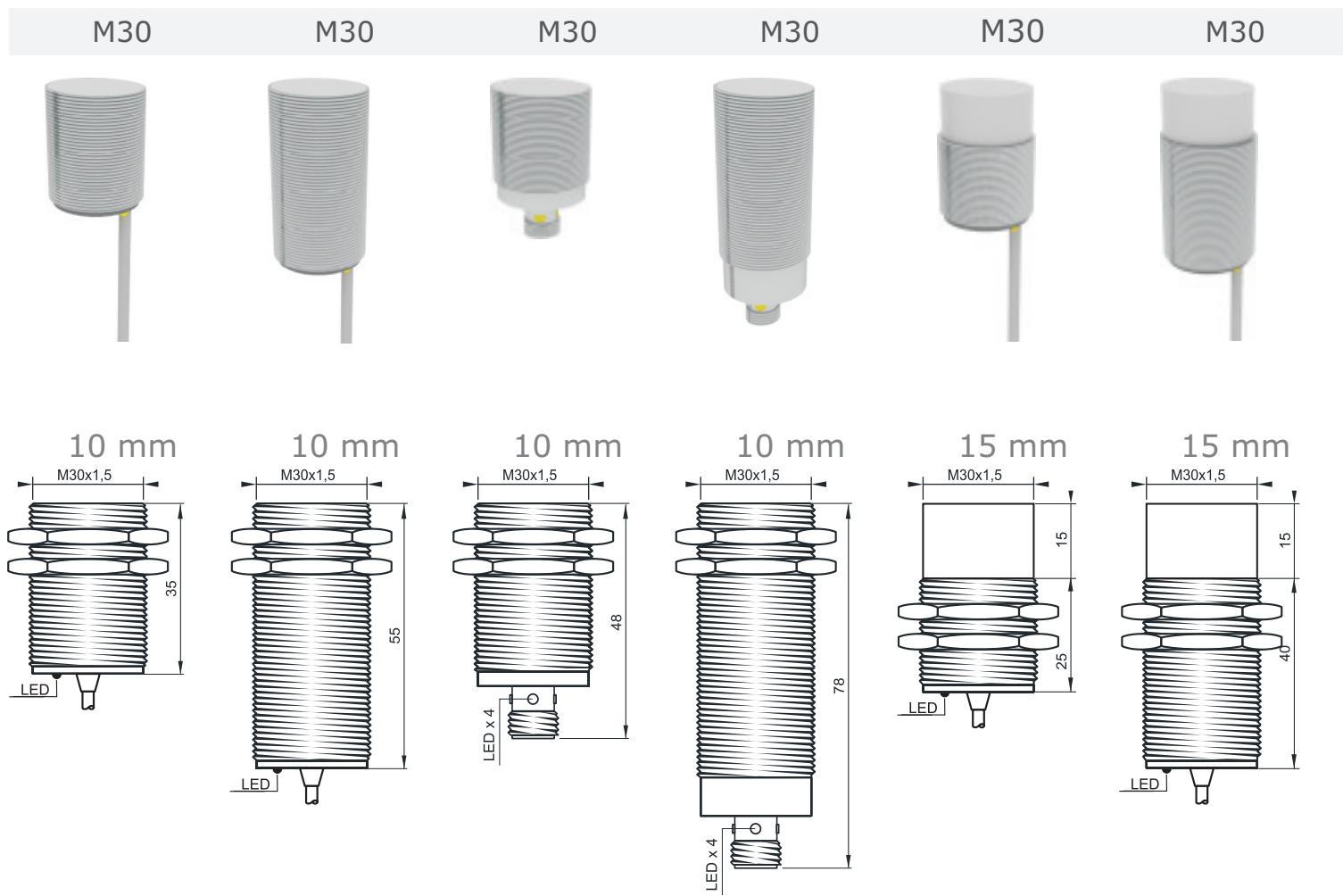
### SPECIFICATIONS

	M18x1	M18x1	M18x1	M18x1
Sensing Distance	20 mm - Unshielded			
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	100 Hz	100 Hz	100 Hz	100 Hz
Repeatability	< 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	Plated Brass	Plated Brass	Plated Brass	Plated Brass
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	Connector M12, 4-pole	Connector M12, 4-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

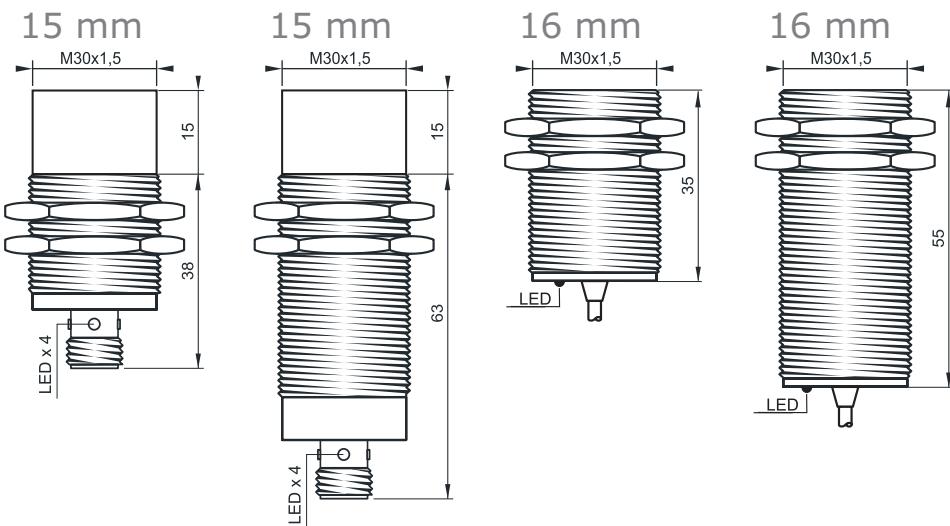
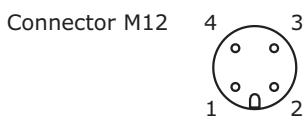
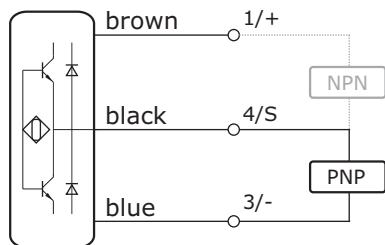
PNP - NO, 3-wire	IPS18-N20PO40/A2P	IPS18-N20PO55/A2P	IPS18-N20PO53/M12	IPS18-N20PO79/M12
PNP - NC, 3-wire	IPS18-N20PC40/A2P	IPS18-N20PC55/A2P	IPS18-N20PC53/M12	IPS18-N20PC79/M12
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS18-N20NO40/A2P	IPS18-N20NO55/A2P	IPS18-N20NO53/M12	IPS18-N20NO79/M12
NPN - NC, 3-wire	IPS18-N20NC40/A2P	IPS18-N20NC55/A2P	IPS18-N20NC53/M12	IPS18-N20NC79/M12
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire				
10...55 VDC - NC, 2-wire				
Recommended Connecting Cable	-	-	M12/3...	M12/3...

## Inductive Proximity Switches



M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5
10 mm - Shielded	10 mm - Shielded	10 mm - Shielded	10 mm - Shielded	15 mm - Unshielded	15 mm - Unshielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated
IPS30-S10PO35/A2P IPS30-S10PC35/A2P	IPS30-S10PO55/A2P IPS30-S10PC55/A2P	IPS30-S10PO48/M12 IPS30-S10PC48/M12	IPS30-S10PO79/M12 IPS30-S10PC79/M12	IPS30-N15PO40/A2P IPS30-N15PC40/A2P	IPS30-N15PO55/A2P IPS30-N15PC55/A2P
IPS30-S10NO35/A2P IPS30-S10NC35/A2P	IPS30-S10NO55/A2P IPS30-S10NC55/A2P	IPS30-S10NO48/M12 IPS30-S10NC48/M12	IPS30-S10NO79/M12 IPS30-S10NC79/M12	IPS30-N15NO40/A2P IPS30-N15NC40/A2P	IPS30-N15NO55/A2P IPS30-N15NC55/A2P
- - - - -	IPS30-S10DO55/A2P IPS30-S10DC55/A2P - - -	IPS30-S10DO79/M12 IPS30-S10DC79/M12 M12/3...	IPS30-S10DO79/M12 IPS30-S10DC79/M12 M12/3...	IPS30-N15DO55/A2P IPS30-N15DC55/A2P - -	IPS30-N15DO55/A2P IPS30-N15DC55/A2P -

### Output Schematics



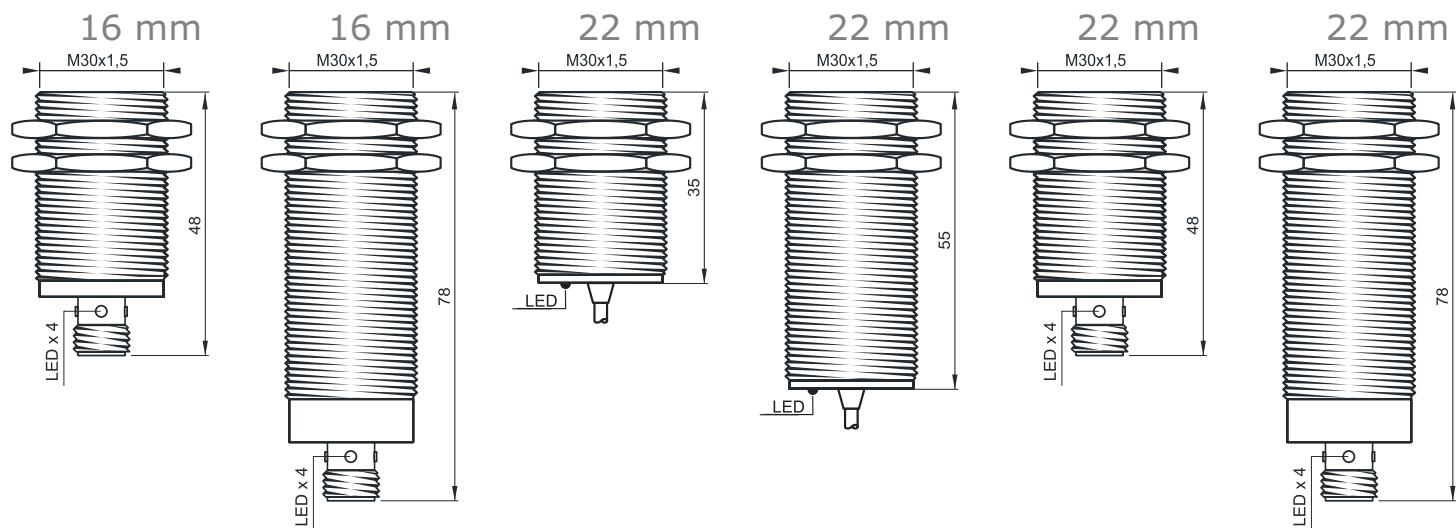
### SPECIFICATIONS

	M30x1.5	M30x1.5	M30x1.5	M30x1.5
Sensing Distance	15 mm - Unshielded	15 mm - Unshielded	16 mm - Shielded	16 mm - Shielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	150 Hz	150 Hz	150 Hz	150 Hz
Repeatability	< 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	Plated Brass	Plated Brass	Plated Brass	Plated Brass
Connection	Connector M12, 4-pole	Connector M12, 4-pole	High-Flex PVC, 2m	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS30-N15PO53/M12	IPS30-N15PO79/M12	IPS30-S16PO35/A2P	IPS30-S16PO55/A2P
PNP - NC, 3-wire	IPS30-N15PC53/M12	IPS30-N15PC79/M12	IPS30-S16PC35/A2P	IPS30-S16PC55/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS30-N15NO53/M12	IPS30-N15NO79/M12	IPS30-S16NO35/A2P	IPS30-S16NO55/A2P
NPN - NC, 3-wire	IPS30-N15NC53/M12	IPS30-N15NC79/M12	IPS30-S16NC35/A2P	IPS30-S16NC55/A2P
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire		IPS30-N15DO79/M12		IPS30-S16DO55/A2P
10...55 VDC - NC, 2-wire		IPS30-N15DC79/M12		IPS30-S16DC55/A2P
Recommended Connecting Cable	M12/3...	M12/3...	-	-

# Inductive Proximity Switches



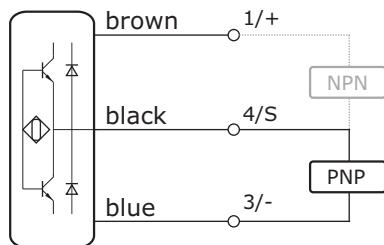
M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5
16 mm - Shielded	16 mm - Shielded	22 mm - Shielded	22 mm - Shielded	22 mm - Shielded	22 mm - Shielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 150 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 300 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass Connector M12, 4-pole Integrated

IPS30-S16PO48/M12 IPS30-S16PO79/M12 IPS30-S22PO35/A2P IPS30-S22PO55/A2P IPS30-S22PO48/M12 IPS30-S22PO79/M12  
IPS30-S16PC48/M12 IPS30-S16PC79/M12 IPS30-S22PC35/A2P IPS30-S22PC55/A2P IPS30-S22PC48/M12 IPS30-S22PC79/M12

IPS30-S16NO48/M12 IPS30-S16NO79/M12 IPS30-S22NO35/A2P IPS30-S22NO55/A2P IPS30-S22NO48/M12 IPS30-S22NO79/M12  
IPS30-S16NC48/M12 IPS30-S16NC79/M12 IPS30-S22NC35/A2P IPS30-S22NC55/A2P IPS30-S22NC48/M12 IPS30-S22NC79/M12

IPS30-S16DO79/M12 IPS30-S16DC79/M12 M12/3... M12/3... M12/3... M12/3...

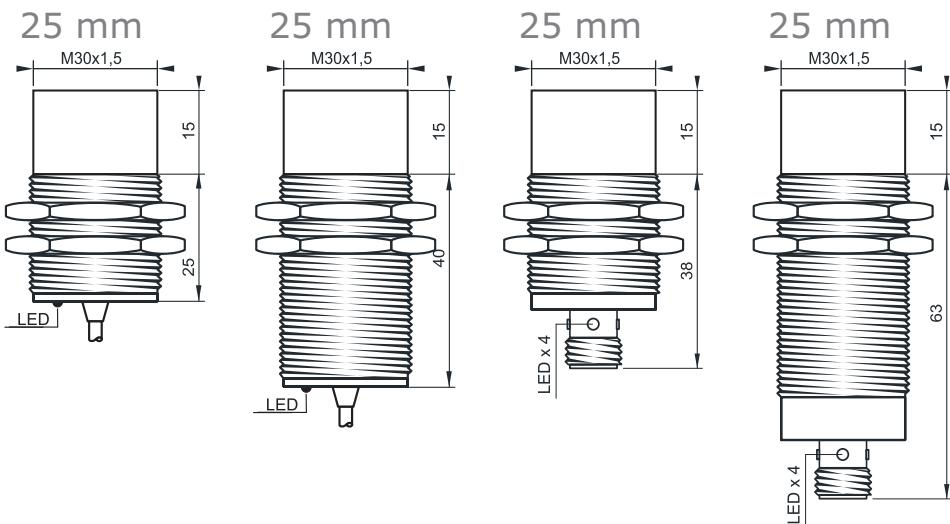
### Output Schematics



M30 M30 M30 M30



Connector M12 4  
1 2 3



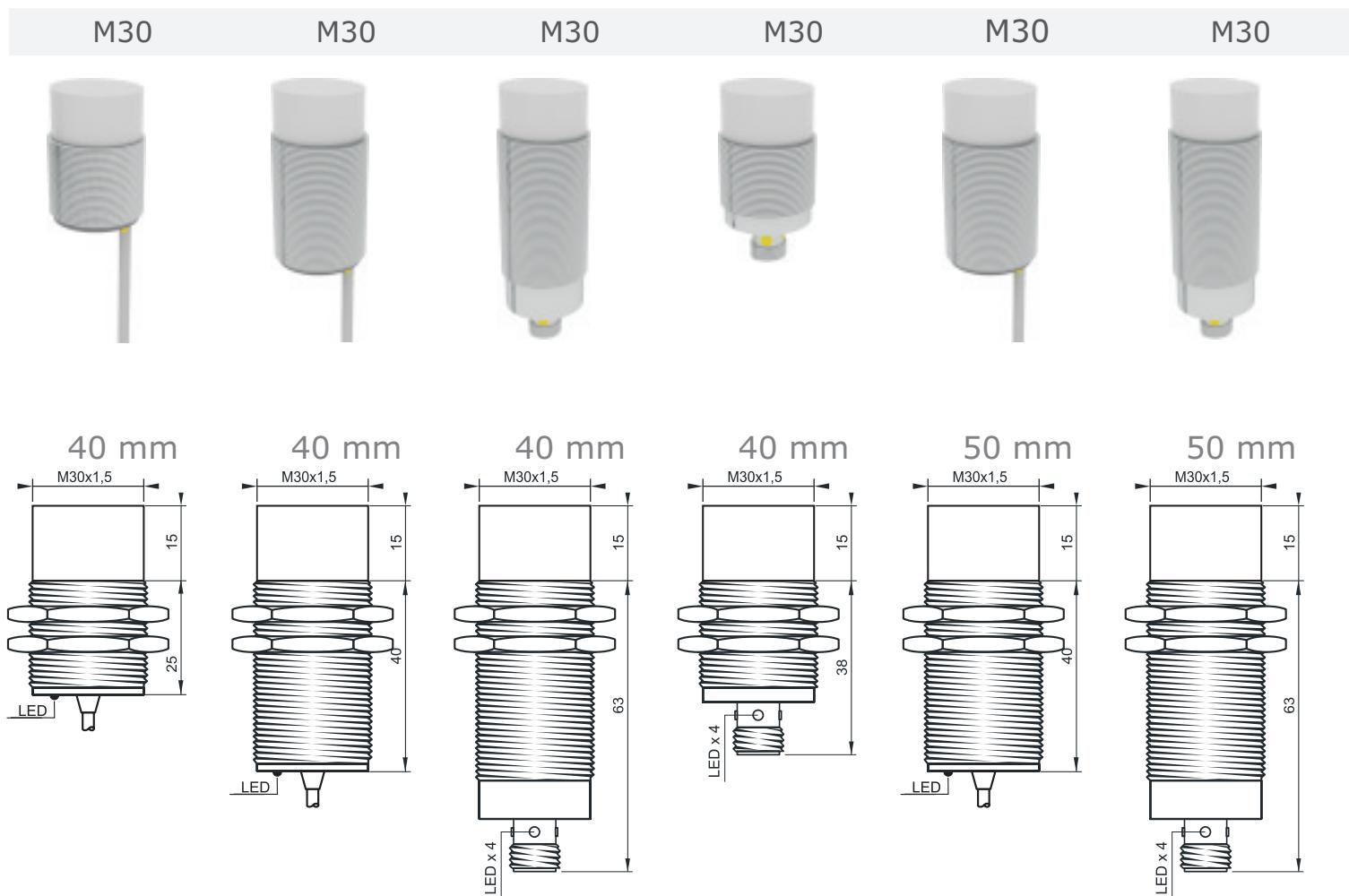
### SPECIFICATIONS

	M30x1.5	M30x1.5	M30x1.5	M30x1.5
Sensing Distance	25 mm - Unshielded			
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	100 Hz	100 Hz	100 Hz	100 Hz
Repeatability	< 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	Plated Brass	Plated Brass	Plated Brass	Plated Brass
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	Connector M12, 4-pole	Connector M12, 4-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS30-N25PO40/A2P	IPS30-N25PO55/A2P	IPS30-N25PO53/M12	IPS30-N25PO79/M12
PNP - NC, 3-wire	IPS30-N25PC40/A2P	IPS30-N25PC55/A2P	IPS30-N25PC53/M12	IPS30-N25PC79/M12
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS30-N25NO40/A2P	IPS30-N25NO55/A2P	IPS30-N25NO53/M12	IPS30-N25NO79/M12
NPN - NC, 3-wire	IPS30-N25NC40/A2P	IPS30-N25NC55/A2P	IPS30-N25NC53/M12	IPS30-N25NC79/M12
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire		IPS30-N25DO55/A2P		IPS30-N25DO79/M12
10...55 VDC - NC, 2-wire		IPS30-N25DC55/A2P		IPS30-N25DC79/M12
Recommended Connecting Cable	-	-	M12/3...	M12/3...

# Inductive Proximity Switches



M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5
40 mm - Unshielded	50 mm - Unshielded	50 mm - Unshielded			
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 100 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 100 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 100 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 100 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 100 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 100 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 POM Plated Brass High-Flex PVC, 2m Integrated

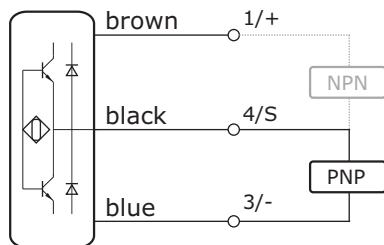
IPS30-N40PO40/A2P IPS30-N40PC40/A2P	IPS30-N40PO55/A2P IPS30-N40PC55/A2P	IPS30-N40PO79/M12 IPS30-N40PC79/M12	IPS30-N40PO53/M12 IPS30-N40PC53/M12	IPS30-N50PO55/A2P IPS30-N50PC55/A2P	IPS30-N50PO79/M12 IPS30-N50PC79/M12
IPS30-N40NO40/A2P IPS30-N40NC40/A2P	IPS30-N40NO55/A2P IPS30-N40NC55/A2P	IPS30-N40NO79/M12 IPS30-N40NC79/M12	IPS30-N40NO53/M12 IPS30-N40NC53/M12	IPS30-N50NO55/A2P IPS30-N50NC55/A2P	IPS30-N50NO79/M12 IPS30-N50NC79/M12

M12/3...

M12/3...

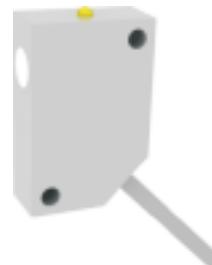
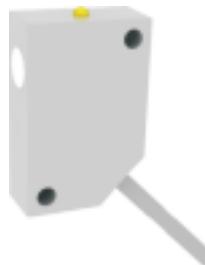
M12/3...

### Output Schematics

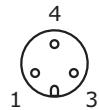


25x40

25x40

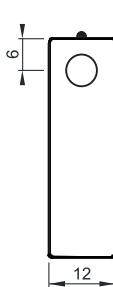


Connector M8

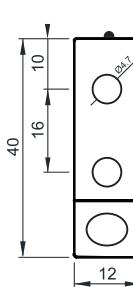


Not to be  
used for  
Safety  
Applications

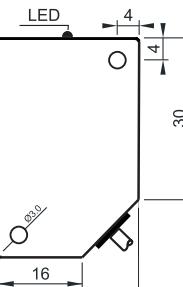
2 mm



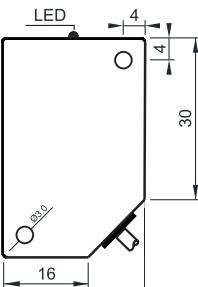
4 mm



4 mm



8 mm



### SPECIFICATIONS

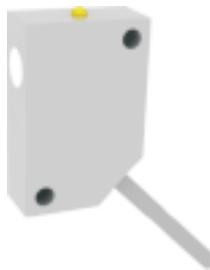
	25 x 40 x 12 mm			
Sensing Distance	2 mm - Shielded	4 mm - Unshielded	4 mm - Shielded	8 mm - Unshielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	2000 Hz	1000 Hz	500 Hz
Repeatability	< 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 Head	PBT	PBT	PBT	PBT
Housing Material	PBT	PBT	PBT	PBT
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	High-Flex PVC, 2m	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS2540-S2POS/A2P	IPS2540-N4POS/A2P	IPS2540-S4POS/A2P	IPS2540-N4POS/A2P
PNP - NC, 3-wire	IPS2540-S2PCS/A2P	IPS2540-N4PCS/A2P	IPS2540-S4PCS/A2P	IPS2540-N8PCS/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS2540-S2NOS/A2P	IPS2540-N4NOS/A2P	IPS2540-S4NOS/A2P	IPS2540-N8NOS/A2P
NPN - NC, 3-wire	IPS2540-S2NCS/A2P	IPS2540-N4NCS/A2P	IPS2540-S4NCS/A2P	IPS2540-N8NCS/A2P
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire	IPS2540-S2DOS/A2P	IPS2540-N4DOS/A2P		
10...55 VDC - NC, 2-wire	IPS2540-S2DCS/A2P	IPS2540-N4DCS/A2P		
Recommended Connecting Cable	-	-	-	-

# Inductive Proximity Switches

25x40



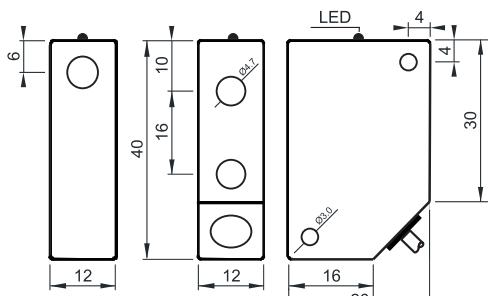
16x28



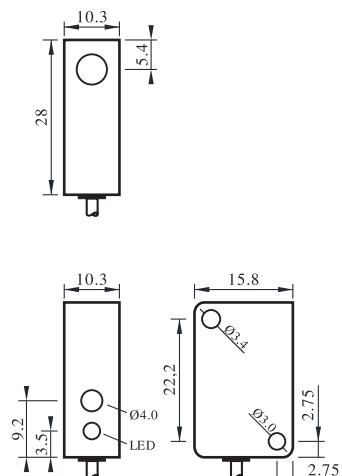
16x28



6 mm

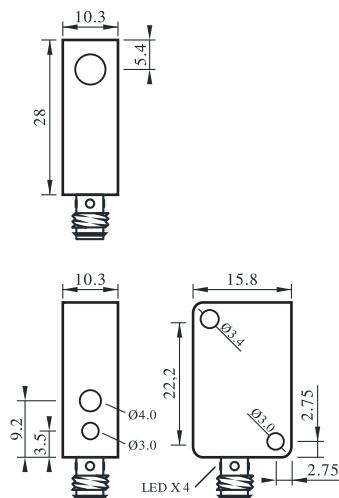


1 mm



2 mm

1 mm



2 mm

## 25 x 40 x 12 mm

6 mm - Shielded

10...30 VDC, 3-wire  
built-in

&lt; 8 mA

200 mA

built-in - self resetting

&lt; 1.5 V @ 200 mA

800 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

High-Flex PVC, 2m

Integrated

## 16 x 28 x 10 mm

1 mm - Shielded

10...30 VDC, 3-wire  
built-in

&lt; 8 mA

200 mA

built-in - self resetting

&lt; 1.5 V @ 200 mA

2000 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

High-Flex PVC, 2m

Integrated

## 16 x 28 x 10 mm

2 mm - Unshielded

10...30 VDC, 3-wire  
built-in

&lt; 8 mA

200 mA

built-in - self resetting

&lt; 1.5 V @ 200 mA

2000 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

Connector M8, 3-pole

Integrated

## 16 x 28 x 10 mm

1 mm - Shielded

10...30 VDC, 3-wire  
built-in

&lt; 8 mA

200 mA

built-in - self resetting

&lt; 1.5 V @ 200 mA

2000 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

Connector M8, 3-pole

Integrated

IPS2540-S6POS/A2P

IPS2540-S6PCS/A2P

IPS2540-S6NOS/A2P

IPS2540-S6NCS/A2P

IPS1628-S1POS/A2P

IPS1628-S1PCS/A2P

IPS1628-S1NOS/A2P

IPS1628-S1NCS/A2P

IPS1628-N2POS/A2P

IPS1628-N2PCS/A2P

IPS1628-N2NOS/A2P

IPS1628-N2NCS/A2P

IPS1628-S1POS/M8

IPS1628-S1PCS/M8

IPS1628-S1NOS/M8

IPS1628-S1NCS/M8

IPS1628-N2POS/M8

IPS1628-N2PCS/M8

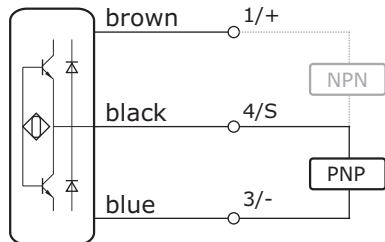
IPS1628-N2NOS/M8

IPS1628-N2NCS/M8

M8/3...

M8/3...

### Output Schematics

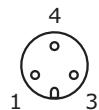


16x28

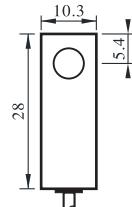
16x28



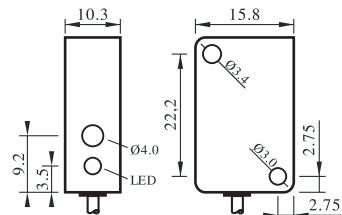
Connector M8



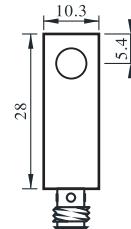
2 mm



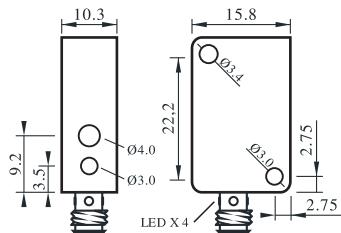
4 mm



2 mm



4 mm



**Not to be used for Safety Applications**

### SPECIFICATIONS

	16 x 28 x 10 mm			
Sensing Distance	2 mm - Shielded	4 mm - Unshielded	3 mm - Shielded	6 mm - Unshielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	1000 Hz	2000 Hz	1000 Hz
Repeatability	< 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 Head	PBT	PBT	PBT	PBT
Housing Material	PBT	PBT	PBT	PBT
Connection	High-Flex PVC, 2m	High-Flex PVC, 2m	Connector M8, 3-pole	Connector M8, 3-pole
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS1628-S2POS/A2P	IPS1628-N4POS/A2P	IPS1628-S2POS/M8	IPS1628-N4POS/M8
PNP - NC, 3-wire	IPS1628-S2PCS/A2P	IPS1628-N4PCS/A2P	IPS1628-S2PCS/M8	IPS1628-N4PCS/M8
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS1628-S2NOS/A2P	IPS1628-N4NOS/A2P	IPS1628-S2NOS/M8	IPS1628-N4NOS/M8
NPN - NC, 3-wire	IPS1628-S2NCS/A2P	IPS1628-N4NCS/A2P	IPS1628-S2NCS/M8	IPS1628-N4NCS/M8
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire				
10...55 VDC - NC, 2-wire				
Recommended Connecting Cable	-	-	M8/3...	M8/3...

# Inductive Proximity Switches

16x28



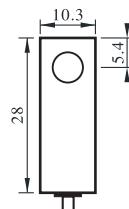
16x28



16x28

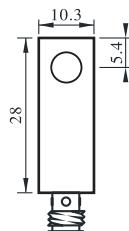


3 mm

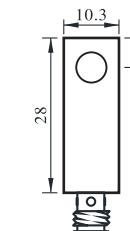


6 mm

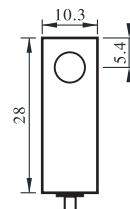
3 mm



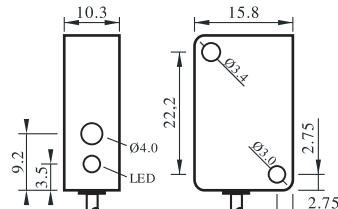
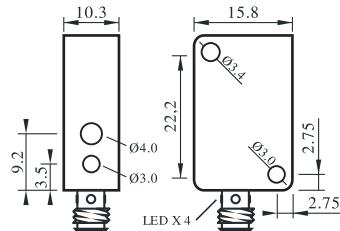
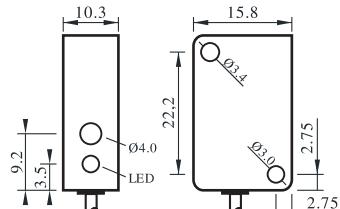
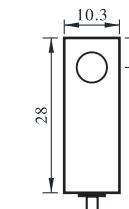
6 mm



1 mm



2 mm

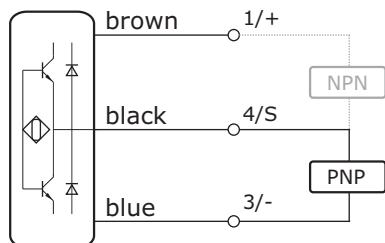


16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm
3 mm - Shielded	6 mm - Unshielded	3 mm - Shielded	6 mm - Unshielded	1 mm - Shielded	2 mm - Unshielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT High-Flex PVC, 2m Integrated
IPS1628-S3POS/A2P IPS1628-S3PCS/A2P	IPS1628-N6POS/A2P IPS1628-N6PCS/A2P	IPS1628-S3POS/M8 IPS1628-S3PCS/M8	IPS1628-N6POS/M8 IPS1628-N6PCS/M8	IPS1628-S1POS/A2P IPS1628-S1PCS/A2P	IPS1628-N2POS/A2P IPS1628-N2PCS/A2P
IPS1628-S3NOS/A2P IPS1628-S3NCS/A2P	IPS1628-N6NOS/A2P IPS1628-N6NCS/A2P	IPS1628-S3NOS/M8 IPS1628-S3NCS/M8	IPS1628-N6NOS/M8 IPS1628-N6NCS/M8	IPS1628-S1NOS/A2P IPS1628-S1NCS/A2P	IPS1628-N2NOS/A2P IPS1628-N2NCS/A2P

M8/3...

M8/3...

### Output Schematics

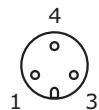


16x28

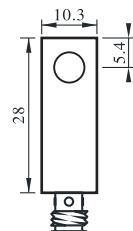
16x28



Connector M8



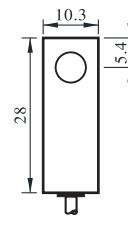
1 mm



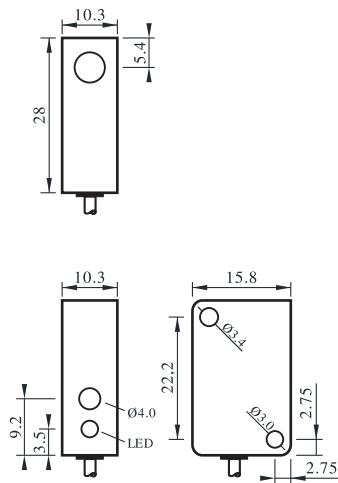
2 mm



2 mm



4 mm



### SPECIFICATIONS

	16 x 28 x 10 mm			
Sensing Distance	1 mm - Shielded	2 mm - Unshielded	2 mm - Shielded	4 mm - Unshielded
Operating Voltage	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire	10...30 VDC, 3-wire
Reverse Polarity Protection	built-in	built-in	built-in	built-in
Current Consumption	< 8 mA	< 8 mA	< 8 mA	< 8 mA
Current Load Capability	200 mA	200 mA	200 mA	200 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 1.5 V @ 200 mA			
Switching Frequency	2000 Hz	2000 Hz	2000 Hz	1000 Hz
Repeatability	< 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 Head	PBT	PBT	PBT	PBT
Housing Material	PBT	PBT	PBT	PBT
Connection	Connector M8, 3-pole	Connector M8, 3-pole	High-Flex PVC, 2m	High-Flex PVC, 2m
Output Indicator	Integrated	Integrated	Integrated	Integrated

### Article Code

PNP - NO, 3-wire	IPS1628-S1POS/M8	IPS1628-N2POS/M8	IPS1628-S2POS/A2P	IPS1628-N4POS/A2P
PNP - NC, 3-wire	IPS1628-S1PCS/M8	IPS1628-N2PCS/M8	IPS1628-S2PCS/A2P	IPS1628-N4PCS/A2P
PNP - NO+NC, 4-wire				
NPN - NO, 3-wire	IPS1628-S1NOS/M8	IPS1628-N24NOS/M8	IPS1628-S2NOS/A2P	IPS1628-N4NOS/A2P
NPN - NC, 3-wire	IPS1628-S1NCS/M8	IPS1628-N2NCS/M8	IPS1628-S2NCS/A2P	IPS1628-N4NCS/A2P
NPN - NO+NC, 4-wire				
10...55 VDC - NO, 2-wire				
10...55 VDC - NC, 2-wire				
Recommended Connecting Cable	M8/3...	M8/3...	-	-

# Inductive Proximity Switches

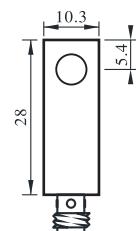
16x28

16x28

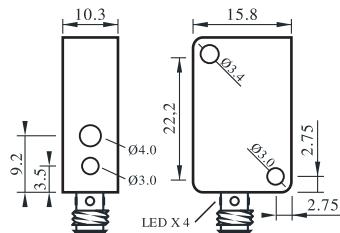
16x28



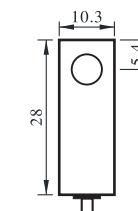
2 mm



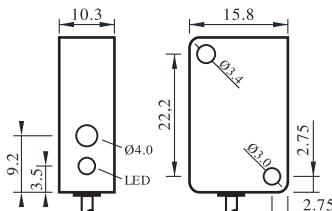
4 mm



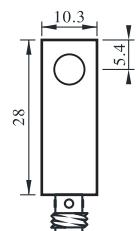
3 mm



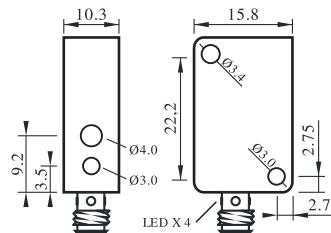
6 mm



3 mm

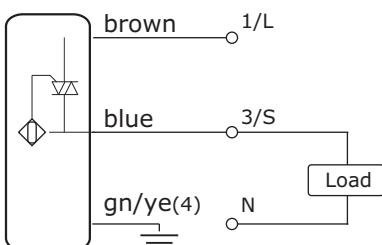
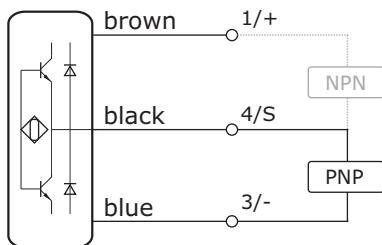


6 mm

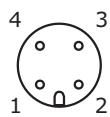


16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm	16 x 28 x 10 mm
3 mm - Shielded	6 mm - Unshielded	3 mm - Shielded	6 mm - Unshielded	3 mm - Shielded	6 mm - Unshielded
10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 2000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT High-Flex PVC, 2m Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 1000 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT Connector M8, 3-pole Integrated	10...30 VDC, 3-wire built-in < 8 mA 200 mA built-in - self resetting < 1.5 V @ 200 mA 500 Hz < 1 % (Sn) 3...15 % -25...75 °C IP67 PBT PBT Connector M8, 3-pole Integrated
IPS1628-S2POS/M8 IPS1628-S2PCS/M8	IPS1628-N4POS/M8 IPS1628-N4PCS/M8	IPS1628-S3POS/A2P IPS1628-S3PCS/A2P	IPS1628-N6POS/A2P IPS1628-N6PCS/A2P	IPS1628-S3POS/M8 IPS1628-S3PCS/M8	IPS1628-N6POS/M8 IPS1628-N6PCS/M8
IPS1628-S2NOS/M8 IPS1628-S2NCS/M8	IPS1628-N4NOS/M8 IPS1628-N4NCS/M8	IPS1628-S3NOS/A2P IPS1628-S3NCS/A2P	IPS1628-N6NOS/A2P IPS1628-N6NCS/A2P	IPS1628-S3NOS/M8 IPS1628-S3NCS/M8	IPS1628-N6NOS/M8 IPS1628-N6NCS/M8
M8/3...	M8/3...	-	-	M8/3...	M8/3...

## Output Schematics



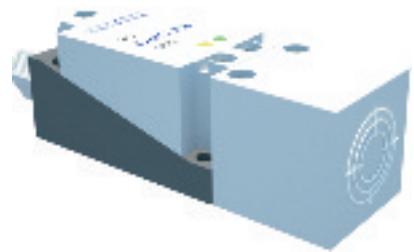
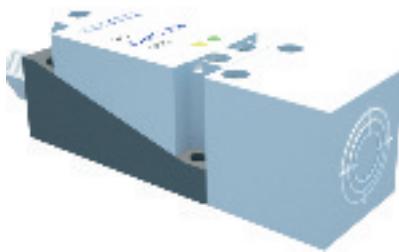
Connector M12



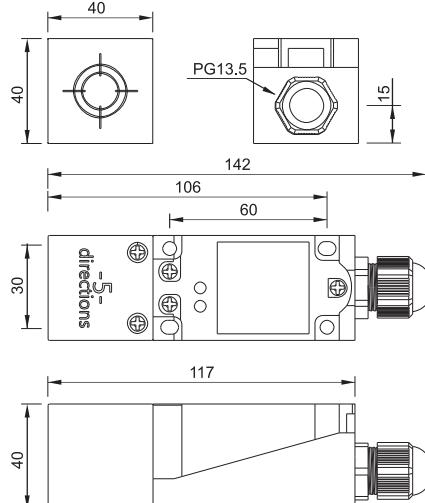
**Not to be used for Safety Applications**

40x40

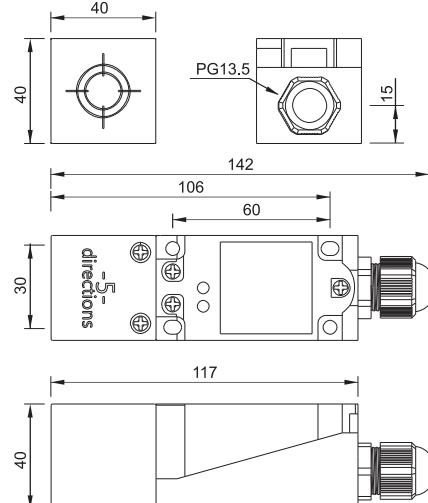
40x40



15 mm



20 mm



## SPECIFICATIONS

	40x40 mm	40x40 mm	40x40 mm	40x40 mm
Sensing Distance	15 mm - Shielded	15 mm - Shielded	20 mm - Semi	20 mm - Semi
Operating Voltage	10... 30   10... 55 VDC	20... 250 VAC, 2-wire	10... 30   10... 55 VDC	20... 250 VAC, 2-wire
Reverse Polarity Protection	built-in	not required	built-in	not required
Idle Current	< 11 mA	< 2 mA (Idle Current)	< 11 mA	< 2 mA (Idle Current)
Current Load Capability	200 mA	400 mA	200 mA	400 mA
Short Circuit Protection	built-in - self resetting			
Voltage Drop	< 2 V @ 200 mA	< 8 V @ 400 mA	< 2 V @ 200 mA	< 8 V @ 400 mA
Switching Frequency	120 Hz	25 Hz	120 Hz	25 Hz
Repeatability	< 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	PBT	PBT	PBT
Housing Material	PBT	PBT	PBT	PBT
Connection	PG13.5, Terminal	PG13.5, Terminal	PG13.5, Terminal	PG13.5, Terminal
Output Indicator	Integrated	Integrated	Integrated	Integrated

## Article Code

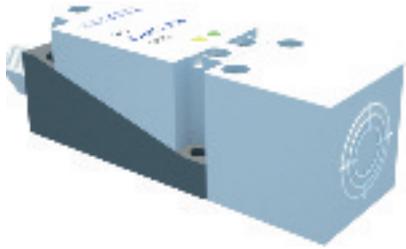
3-wire NO+NC, PNP	IPS40-S15PCOL/PG13	IPS40-S20PCOL/PG13
3-wire NO+NC, NPN	IPS40-S15NCOL/PG13	IPS40-S20NCOL/PG13
2-wire NO, 10... 55 VDC	IPS40-S15DOL/PG13	IPS40-S20DOL/PG13
2-wire NC, 10... 55 VDC	IPS40-S15DCL/PG13	IPS40-S20DCL/PG13
2-wire NO, 20... 250 VAC		IPS40-S20AOL/PG13
2-wire NC, 20... 250 VAC		IPS40-S20ACL/PG13

Recommended Connecting Cable

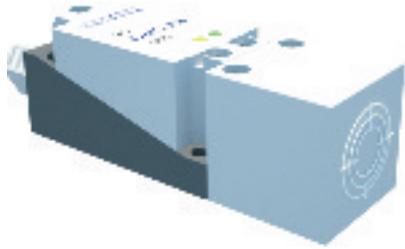
# Inductive Proximity Switches

## 10...30 VDC | 20... 250 VAC

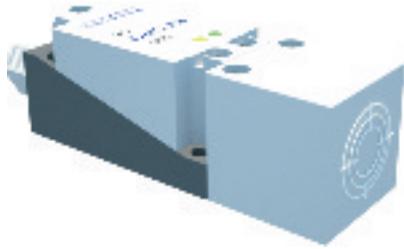
40x40



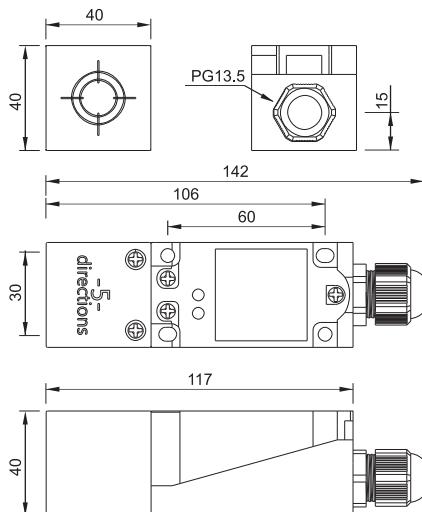
40x40



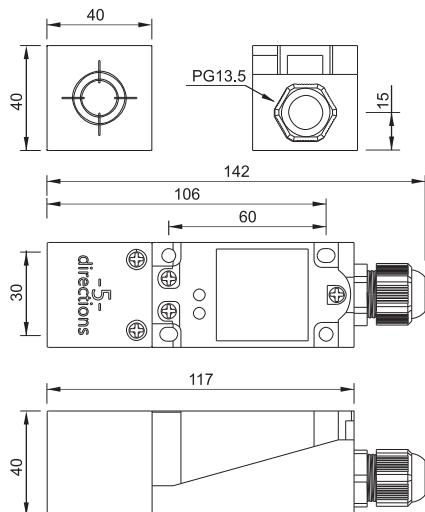
40x40



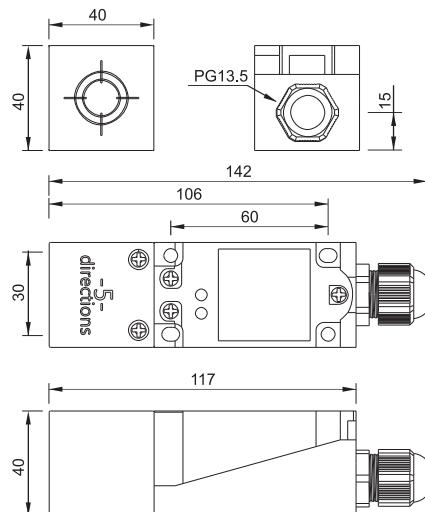
25 mm



30 mm



40 mm



## 40x40 mm

25 mm - Shielded

10... 30 | 10... 55 VDC

built-in

&lt; 11 mA

200 mA

built-in - self resetting

&lt; 2 V @ 200 mA

120 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

PG13.5, Terminal

Integrated

## 40x40 mm

30 mm - Unshielded

10... 30 | 10... 55 VDC

built-in

&lt; 11 mA

200 mA

built-in - self resetting

&lt; 2 V @ 200 mA

120 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

PG13.5, Terminal

Integrated

## 40x40 mm

30 mm - Unshielded

20... 250 VAC, 2-wire

built-in

&lt; 2 mA (Idle Current)

400 mA

built-in - self resetting

&lt; 8 V @ 400 mA

25 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

PG13.5, Terminal

Integrated

## 40x40 mm

40 mm - Unshielded

10... 30 | 10... 55 VDC

built-in

&lt; 11 mA

200 mA

built-in - self resetting

&lt; 2 V @ 200 mA

120 Hz

&lt; 1 % (Sn)

3...15 %

-25...75 °C

IP67

PBT

PBT

PG13.5, Terminal

Integrated

IPS40-S25PCOL/PG13

IPS40-S25NCOL/PG13

IPS40-N30PCOL/PG13

IPS40-N30NCOL/PG13

IPS40-N30DOL/PG13

IPS40-N30DCL/PG13

IPS40-N40PCOL/PG13

IPS40-N40NCOL/PG13

IPS40-N30AOL/PG13

IPS40-N30ACL/PG13

PNP / NPN  
2-wire DC  
2-wire AC  
NAMUR  
Temperature Proof  
Pressure Proof  
Analog Voltage

**SHIELDED**  
**UNSHIELDED**

## INDUCTIVE SENSORS

0.6 mm 0.8 mm 1.0 mm 1.5 mm 2.0 mm 3.0 mm 4.0 mm 5.0 mm 6.0 mm 8.0 mm 10 mm 12 mm 15 mm 16 mm 20 mm 22 mm 25 mm 30 mm 40 mm 50 mm

