

## M12 SERIES

There are millions of inductive sensors deployed in almost every area of factory automation. They detect metal objects contactless and are distinguished by a long operating life and extreme robustness. The Datalogic Automation inductive family provides the right solution to market requirements, offering a wide range of cylindrical and rectangular standard sensors with one or two set switching distances, available also with two, three or four wires connection models, short and standard housing and cable or connector version. Stainless steel version for both harsh environments or for FOOD applications.



## HIGHLIGHTS

- Wide range: suitable practically for all the industrial applications
- Stainless steel versions: suitable for food applications
- 1X and 2 X operating distances: high detection reliability and precise reading
- 2, 3 or 4 wire connection: flexible connection system to meet customer applications

## APPLICATIONS

Automatic warehouse



Automotive



Transportation lines



Packaging lines

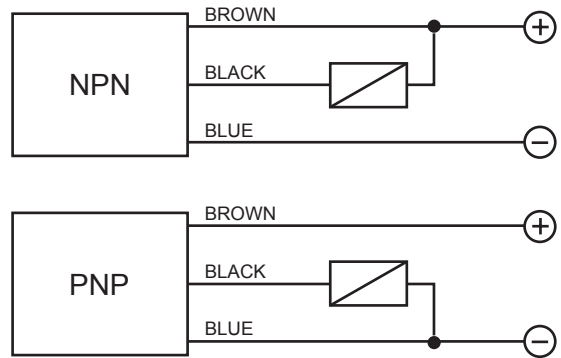


PROXIMITY SWITCHES

**10÷30 V DC - 3 WIRES NPN OR PNP OUTPUT**

- Range, 2mm to 4mm - flush, non flush
- Short housing models
- Cable or M8 and M12 quick connect models
- Operation LED
- Stainless steel housing

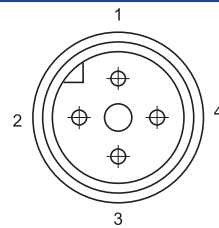
**WIRING DIAGRAMS**



**TECHNICAL DATA**

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm	4 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
MAX. OUTPUT CURRENT	200 mA	
RESIDUAL CURRENT	< 10 mA	
VOLTAGE DROP (Sensor ON)	< 1.8 V (I = 100 mA)	
OPERATION LED	Yellow	
SWITCHING FREQUENCY	1000 Hz	
START UP DELAY	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal - inductive loads	
TEMPERATURE LIMITS	- 25 ÷ +60 °C	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	3 x 0,25 mm <sup>2</sup>	
HOUSING MATERIAL	Nickel-plated brass Stainless steel	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

**CONNECTION WITH CONNECTOR M12**



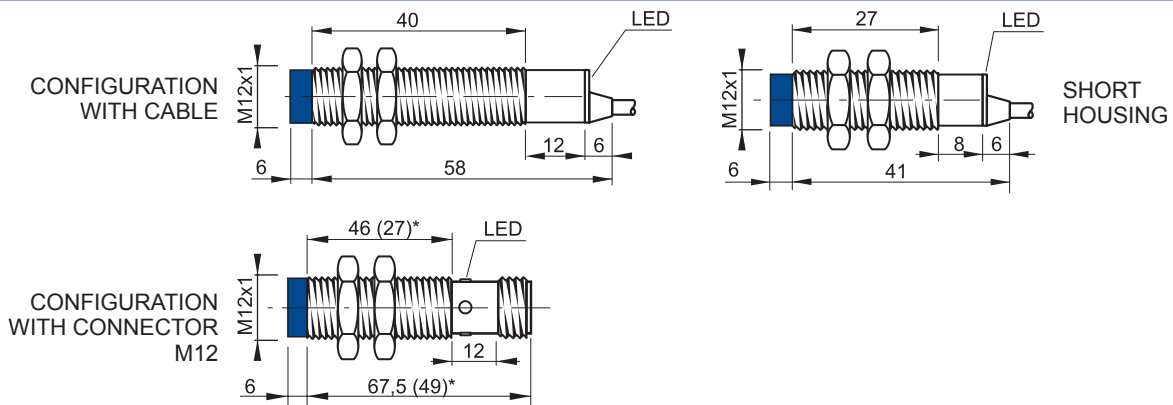
View of quadripole male connector

**CONTACTS CONFIGURATION**

Available	Contacts numbers			
	1	2	3	4
(NO or NC)	+		-	NO/NC



**DIMENSIONS (mm)**



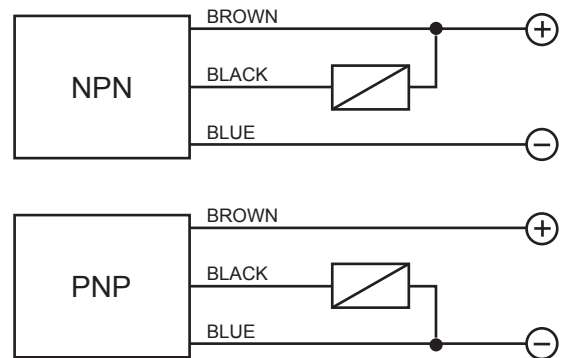
(\* ) The dimensions into brackets refer to short housing models. Note: the front part in blue refers to non flush models

**Ø 12 INCREASED RANGE**

**10÷30 V DC - 3 WIRES NPN OR PNP OUTPUT**

- Range, 4mm to 8mm - flush, non flush
- Short housing models
- Cable or M12 quick connect models
- Operation LED

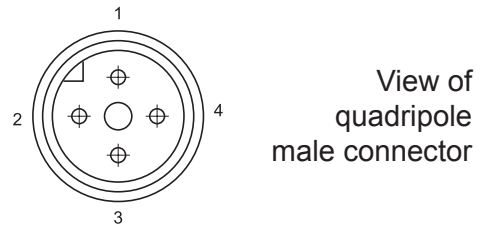
**WIRING DIAGRAMS**



**TECHNICAL DATA**

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	4 mm	8 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
MAX. OUTPUT CURRENT	200 mA	
RESIDUAL CURRENT	< 10 mA	
VOLTAGE DROP (Sensor ON)	< 1.2 V (I = 100 mA)	
OPERATION LED	Yellow	
SWITCHING FREQUENCY	500 Hz	
START UP DELAY	≤ 75 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal inductive loads	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	3 x 0,25 mm <sup>2</sup>	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

**CONNECTION WITH CONNECTOR M12**



View of quadripole male connector

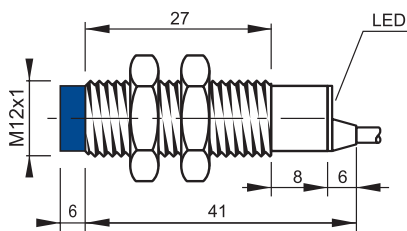
**CONTACTS CONFIGURATION**

Available	Contacts numbers			
	1	2	3	4
(NO or NC)	+		-	NO/NC

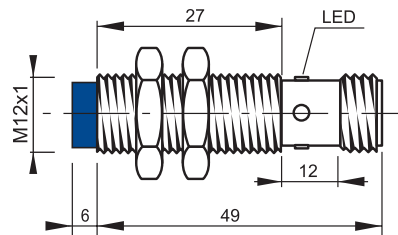


**DIMENSIONS (mm)**

CONFIGURATION WITH CABLE



CONFIGURATION WITH CONNECTOR M12



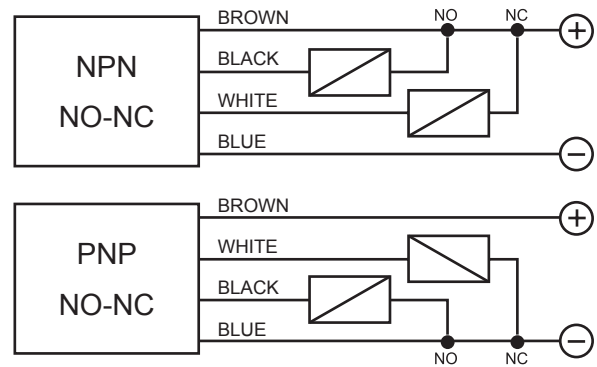
Note: the front part in white refers to non flush models

# Ø 12 INCREASED RANGE

## 10÷30 V DC - 4 WIRES NPN OR PNP OUTPUT

- Range, 4mm to 8mm - flush, non flush
- Short housing models
- Cable or M12 quick connect models
- 200mA NPN or PNP
- Operation LED

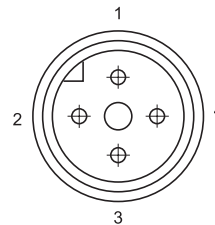
## WIRING DIAGRAMS



## TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	4 mm	8 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
MAX. OUTPUT CURRENT	200 mA	
RESIDUAL CURRENT	< 10 mA	
VOLTAGE DROP (Sensor ON)	< 1.2 V (I = 100 mA)	
OPERATION LED	Yellow	
SWITCHING FREQUENCY	500 Hz	
START UP DELAY	≤ 75 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal inductive loads	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	3 x 0,25 mm <sup>2</sup>	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

## CONNECTION WITH CONNECTOR M12



View of quadripole male connector

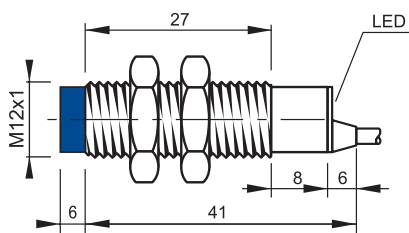
### CONTACTS CONFIGURATION

Available	Contacts numbers			
	1	2	3	4
(NO + NC)	+	NC	-	NO

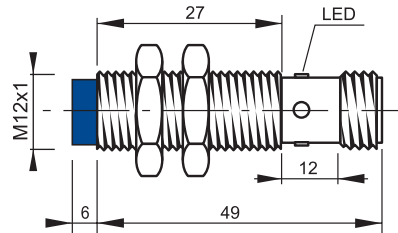


## DIMENSIONS (mm)

CONFIGURATION WITH CABLE



CONFIGURATION WITH CONNECTOR M12



Note: the front part in blue refers to non flush models

**12÷30 V DC - 4 WIRES PROGRAMMABLE OUTPUT**

- Programmable outputs: NPN/PNP, NO or NC
- Cable or M12 quick connect models
- Nickel plated brass

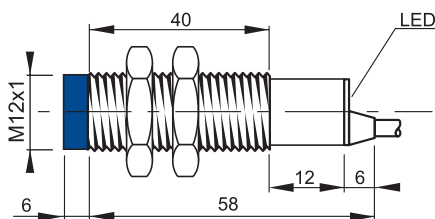
**TECHNICAL DATA**

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm	4 mm
NOMINAL VOLTAGE	12 ÷ 30 VDC (-15/+10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT	NPN or PNP (may be selected)	
CONTACT	NO or NC (may be selected)	
MAX. CURRENT OUTPUT	200 mA	
ABSORPTION AT 24 VDC	< 1.2 mA	
VOLTAGE DROP (Sensor ON)	< 1,8 V (I = 100 mA)	
OPERATION LED	Yellow	
SWITCHING FREQUENCY	1000 Hz	
START UP DELAY	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal - inductive loads	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	4 x 0.25 mm <sup>2</sup>	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

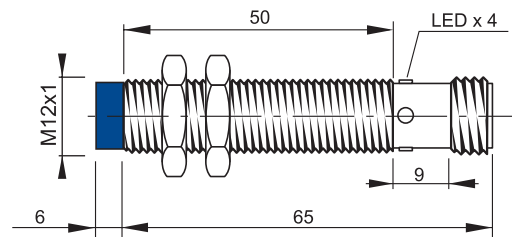


**DIMENSIONS (mm)**

CONFIGURATION WITH CABLE

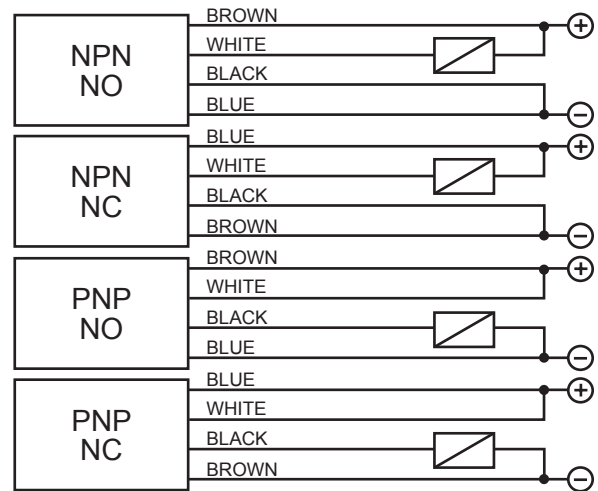


CONFIGURATION WITH CONNECTOR M12



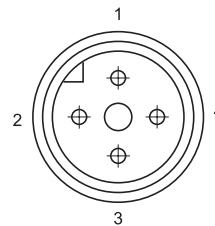
Note: the front part in blue refers to non flush models.

**WIRING DIAGRAMS**



Thanks to the output status which is not paired with the rest of the circuit, the sensors of this kind of availability give enormous advantages, such as the possibility of obtaining the four output configurations (NPN-NO, NPN-NC, PNP-NO, PNP-NC,) on the same model.

**CONNECTION WITH CONNECTOR M12**



View of quadripole male connector

**CONTACTS CONFIGURATION**

Output	Contacts numbers			
	1	2	3	4
NPN NO	+	NO	-	-
NPN NC	-	NC	+	-
PNP NO	+	+	-	NO
PNP NC	-	+	+	NC

# Ø 12 INCREASED RANGE

## 12÷30 V DC - 4 WIRES PROGRAMMABLE OUTPUT

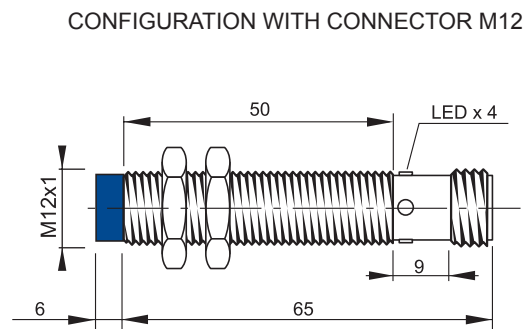
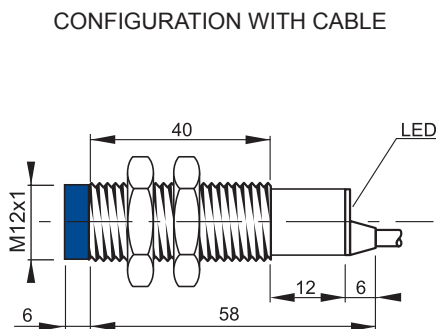
- Range, 4mm to 8mm - flush, non flush
- Programmable outputs: NPN/PNP, NO or NC
- Cable or M12 quick connect models
- Nickel plated brass
- Operation LED
- 200 mA max output

## TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	4 mm	8 mm
NOMINAL VOLTAGE	12 ÷ 30 VDC (-15/+10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT	NPN or PNP (may be selected)	
CONTACT	NO or NC (may be selected)	
MAX. CURRENT OUTPUT	200 mA	
ABSORPTION AT 24 VDC	< 1.2 mA	
VOLTAGE DROP (Sensor ON)	< 1,8 V (I = 100 mA)	
OPERATION LED	Yellow	
SWITCHING FREQUENCY	500 Hz	
START UP DELAY	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal - inductive loads	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	4 x 0.25 mm <sup>2</sup>	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

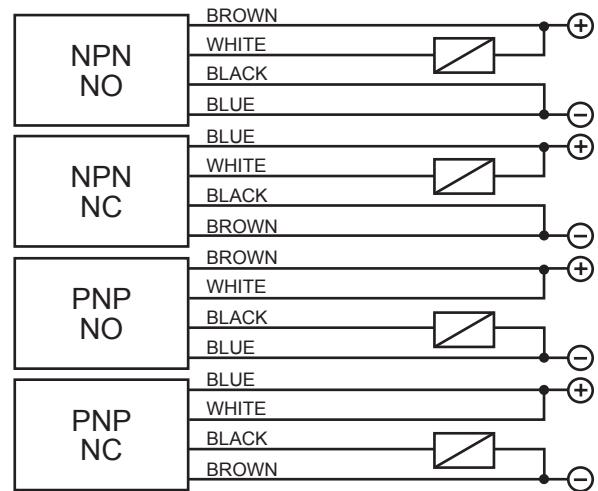


## DIMENSIONS (mm)



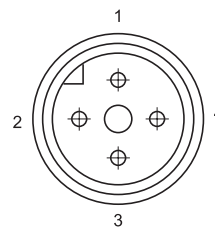
Note: the front part in blue refers to non flush models.

## WIRING DIAGRAMS



Thanks to the output status which is not paired with the rest of the circuit, the sensors of this kind of availability give enormous advantages, such as the possibility of obtaining the four output configurations (NPN-NO, NPN-NC, PNP-NO, PNP-NC,) on the same model.

## CONNECTION WITH CONNECTOR M12



View of quadripole male connector

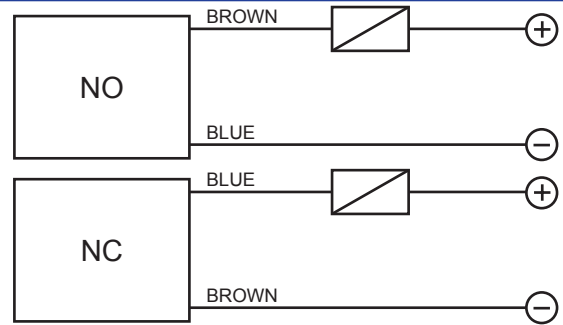
### CONTACTS CONFIGURATION

Output	Contacts numbers			
	1	2	3	4
NPN NO	+	NO	-	-
NPN NC	-	NC	+	-
PNP NO	+	+	-	NO
PNP NC	-	+	+	NC

**10÷30 VDC - 2 WIRES NO-NC PROGRAMMABLE OUTPUT**

- Range, 2mm to 4mm - flush, non flush
- Cable or M12 quick connect models
- Nickel plated brass

**WIRING DIAGRAMS**

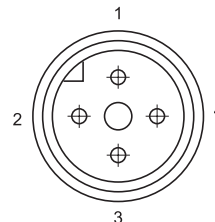


**WARNING:** The load can be indifferently connected in series to the blue wire or to the brown wire to simulate NPN or PNP functioning logic.

**TECHNICAL DATA**

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm	4 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
MAX. OUTPUT CURRENT	100 mA	
MIN. OUTPUT CURRENT	> 1,6 mA	
RESIDUAL CURRENT	< 1,6 mA	
VOLTAGE DROP	< 6,5 V (I = 100 mA)	
OPERATION LED	Yellow	
SWITCHING FREQUENCY	1000 Hz	
START UP DELAY	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal inductive loads	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	2 x 0.25 mm <sup>2</sup>	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

**CONNECTION WITH CONNECTOR M12**



View of quadripole male connector

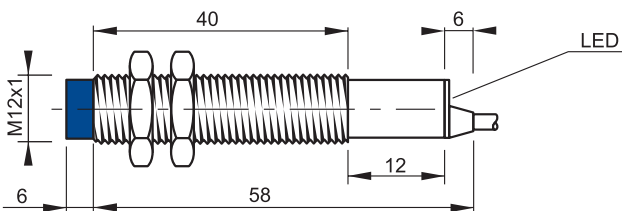
**CONTACTS CONFIGURATION**

Available	Contacts numbers			
	1	2	3	4
NO	+		-	
NC	-		+	

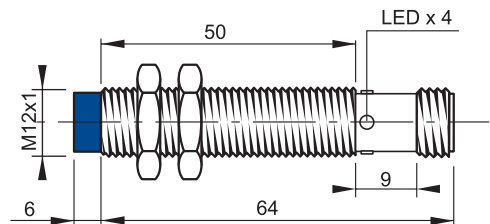


**DIMENSIONS (mm)**

CONFIGURATION WITH CABLE



CONFIGURATION WITH CONNECTOR M12



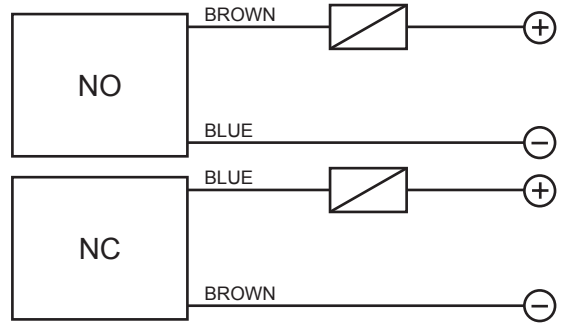
Note: the front part in blue refers to non flush models.

# Ø 12 INCREASED RANGE

## 10÷30 VDC 2 WIRES NO-NC PROGRAMMABLE OUTPUT

- Range, 4mm to 8mm - flush, non flush
- M12 quick connect or integral cable
- Nickel plated brass

## WIRING DIAGRAMS

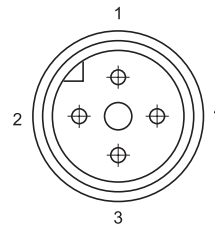


WARNING: The load can be indifferently connected in series to the blue wire or to the brown wire to simulate NPN or PNP functioning logic.

## TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	4 mm	8 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
MAX. OUTPUT CURRENT	100 mA	
MIN. OUTPUT CURRENT	> 1,6 mA	
RESIDUAL CURRENT	< 1,6 mA	
VOLTAGE DROP	< 6,5 V (I = 100 mA)	
OPERATION LED	Yellow	
SWITCHING FREQUENCY	500 Hz	
START UP DELAY	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal inductive loads	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	2 x 0.25 mm <sup>2</sup>	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

## CONNECTION WITH CONNECTOR M12



View of quadripole male connector

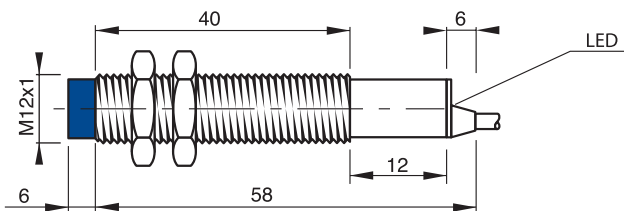
### CONTACTS CONFIGURATION

Available	Contacts numbers			
	1	2	3	4
NO	+		-	
NC	-		+	

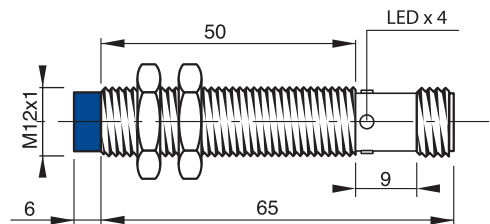


## DIMENSIONS (mm)

CONFIGURATION WITH CABLE



CONFIGURATION WITH CONNECTOR M12

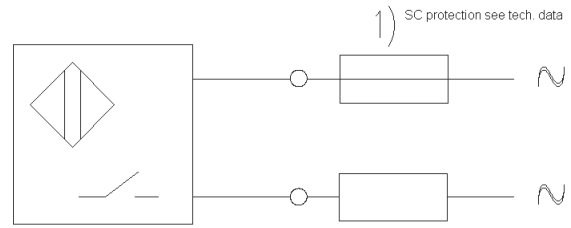


Note: the front part in blue refers to non flush models.

**20÷250 V AC - 2 OR 3 WIRES NO OUTPUT**

- Range, 2mm - flush
- Cable or M12 quick connect models
- Ultra low consumption < 0,7 mA
- Repeatability 5%
- 500mA max output

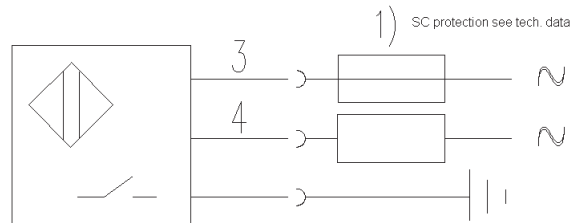
**WIRING DIAGRAMS CABLE VERSION**



**TECHNICAL DATA**

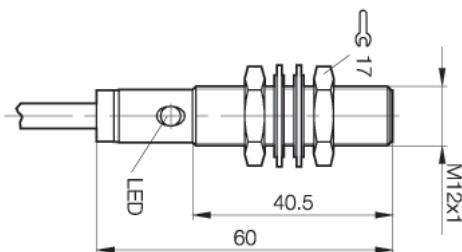
	FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm
NOMINAL VOLTAGE	20 ÷ 250 VAC
NET FREQUENCY	50 ÷ 60 Hz
HYSTERESIS	< 10%
MAX. OUTPUT CURRENT	500 mA
MIN. OUTPUT CURRENT	20 mA
MAX. INRUSH CURRENT (20 ms)	1.5 A
RESIDUAL CURRENT	< 0.7 mA
VOLTAGE DROP (Sensor ON)	< 5 V (I = 100 mA)
OPERATION LED	Yellow
SWITCHING FREQUENCY	25 Hz
START UP DELAY	≤ 300 ms
REPEATABILITY	5%
TEMPERATURE LIMITS	-25 ÷ +70 °C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2 m
CABLE SECTION	2 x 0.25 mm <sup>2</sup>
HOUSING MATERIAL	Nickel-plated brass
WEIGHT - Cable output -	145 g
WEIGHT - M12 connector output -	95 g

**WIRING DIAGRAMS CONNECTOR VERSION**

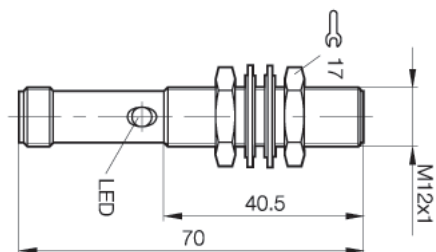


**DIMENSIONS (mm)**

CONFIGURATION WITH CABLE



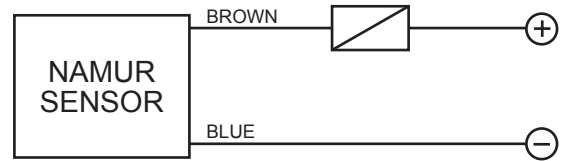
CONFIGURATION WITH CONNECTOR M12



### NAMUR

- 5÷24 V DC - 2 WIRES
- Range, 2mm to 4mm - flush, non flush
- Nickel plated brass
- Cable or M8 and M12 quick connect models

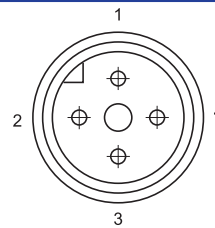
### WIRING DIAGRAMS



### TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm	4 mm
NOMINAL VOLTAGE (Load resistance 1 K)	7.7 ÷ 9 V DC	
DC SUPPLY VOLTAGE	5 ÷ 24 V DC	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	≤ 10%	
OUTPUT CURRENT (Metal present)	≤ 1 mA	
OUTPUT CURRENT (Metal absent)	≤ 3 mA	
SWITCHING FREQUENCY	2000 Hz	
REPEATABILITY	≤ 3%	
TEMPERATURE LIMITS	-25 ÷ +60 °C	
PROTECTION DEGREE	IP 67	
DEVICE MARKING	II 3D IP67 T6X	
CABLE LENGTH	2 m	
CABLE SECTION	2 x 0.25 mm <sup>2</sup>	
HOUSING MATERIAL	Stainles - Steel	
WEIGHT - Cable output -	110 g	
WEIGHT - M12 connector output -	60 g	

### CONNECTION WITH CONNECTOR M12



View of quadripole male connector

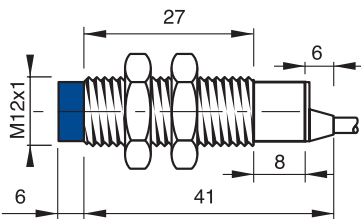
#### CONTACTS CONFIGURATION

Available	Contacts numbers			
	1	2	3	4
NAMUR	+		-	

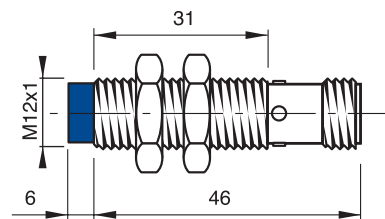


### DIMENSIONS (mm)

CONFIGURATION WITH CABLE



CONFIGURATION WITH CONNECTOR M12

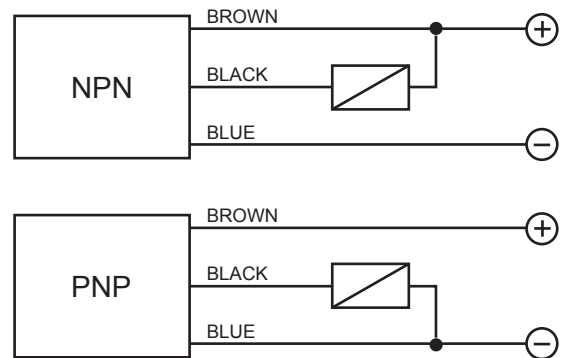


Note: the front part in blue refers to non flush models

**10÷30 V DC - 3 WIRES NPN OR PNP OUTPUT**

- Range, 3mm - flush
- Ambient temperature up to 150 °C
- FLUSH models
- Cable versions
- Stainless steel housing

**WIRING DIAGRAMS**

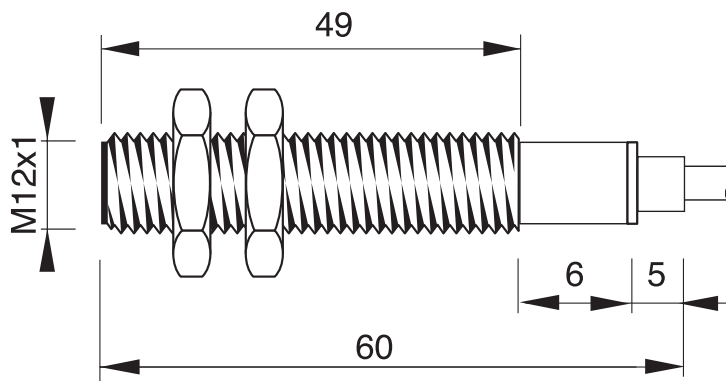


**TECHNICAL DATA**

	FLUSH
NOMINAL SWITCHING DISTANCE (S <sub>n</sub> )	3 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)
RESIDUAL RIPPLE	≤ 15%
HYSTERESIS	< 15%
MAX. OUTPUT CURRENT	100 mA
RESIDUAL CURRENT	< 3 mA
VOLTAGE DROP (Sensor ON)	< 1.8 V
OPERATION LED	Not present
SWITCHING FREQUENCY	500 Hz
LOAD RESISTOR	100 KOhm
REPEATABILITY	≤ 3%
SHORT CIRCUIT PROTECTION	Present (self-resetting)
ELECTRIC PROTECTIONS	Against polarity reversal
TEMPERATURE LIMITS	- 25 ÷ +150 °C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2 m
CABLE SECTION	3 x 0,25 mm <sup>2</sup>
CABLE MATERIAL	Silicon
HOUSING MATERIAL	Stainless steel
WEIGHT - Cable output -	110 g



**DIMENSIONS (mm)**

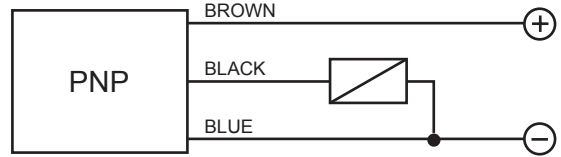


# Ø 12 WELD FIELD IMMUNE

## 10÷30 VDC - 3 WIRES PNP OUTPUT

- Range, 2mm to 4mm - flush, non flush
- Stainless steel housing
- M12 quick connect models
- Operation LED

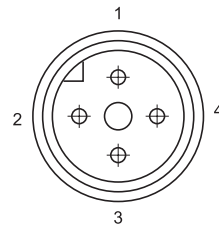
## WIRING DIAGRAMS



## TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm	4 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 15%	
MAX. OUTPUT CURRENT	200 mA	
RESIDUAL CURRENT	< 10 mA	
VOLTAGE DROP (Sensor ON)	< 1.5 V (I = 100 mA)	
OPERATION LED	Present	
SWITCHING FREQUENCY	2000 Hz	1000 Hz
REPEATABILITY	≤ 1%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
ACTIVE FACE MATERIAL	ETFE	
HOUSING MATERIAL	Stainless Steel	
WEIGHT - M12 Connector output -	60 g	

## CONNECTION WITH CONNECTOR M12



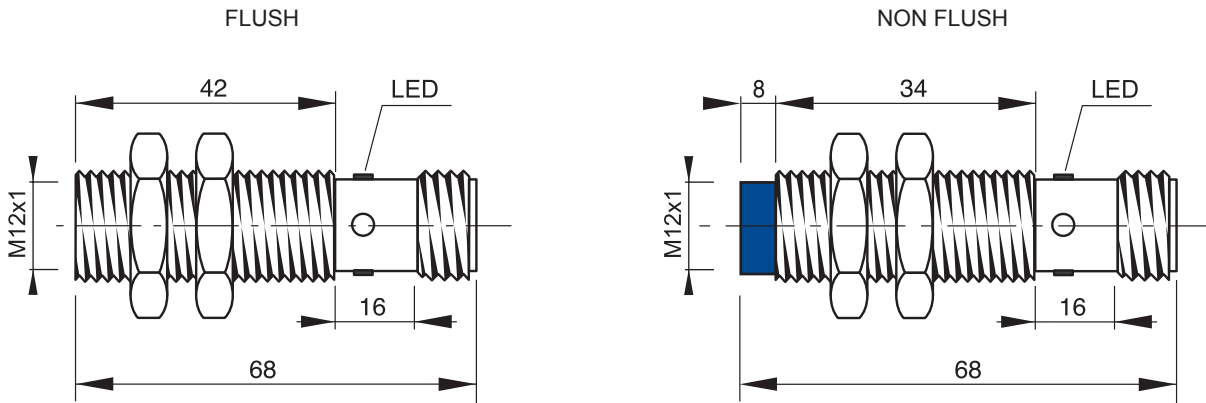
View of quadripole male connector

### CONTACTS CONFIGURATION

Available	Contacts numbers			
	1	2	3	4
NO	+		-	NO



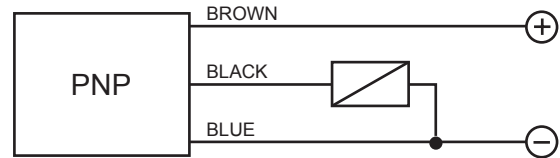
## DIMENSIONS (mm)



**10÷30 VDC - 3 WIRES PNP OUTPUT**

- Range, 2mm to 4mm - flush, non flush
- Stainless steel housing
- M12 quick connect models
- Operation LED

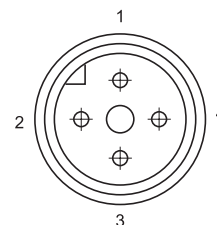
**WIRING DIAGRAMS**



**TECHNICAL DATA**

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm	4 mm
NOMINAL VOLTAGE	10 ÷ 30 VDC (-15 / +10%)	
RESIDUAL RIPPLE	≤ 10%	
HYSTERESIS	< 15%	
MAX. OUTPUT CURRENT	200 mA	
RESIDUAL CURRENT	< 10 mA	
VOLTAGE DROP (Sensor ON)	< 1.5 V (I = 100 mA)	
OPERATION LED	Present	
SWITCHING FREQUENCY	2000 Hz	1000 Hz
REPEATABILITY	≤ 1%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
TEMPERATURE LIMITS	- 25 ÷ +70 °C	
PROTECTION DEGREE	IP 67	
ACTIVE FACE MATERIAL	Stainless Steel	
HOUSING MATERIAL	Stainless Steel	
WEIGHT - M12 Connector output -	60 g	

**CONNECTION WITH CONNECTOR M12**



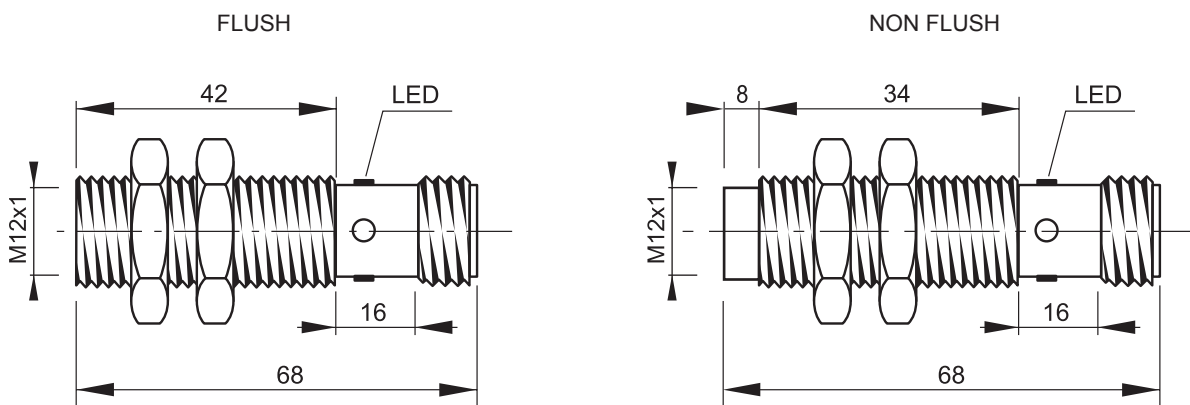
View of quadripole male connector

**CONTACTS CONFIGURATION**

Available	Contacts numbers			
	1	2	3	4
NO	+		-	NO



**DIMENSIONS (mm)**



## MODEL SELECTION AND ORDER INFORMATION

### 2MT CABLE

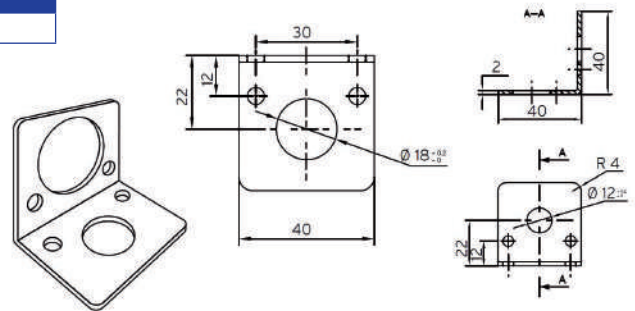
CODE	MODEL	RANGE	HOUSING	STEEL AISI316L	FLUSH	WIRES	NPN/PNP	NO/NC
95B061181	IS-12-A3-03	1X	STANDARD		•	3	NPN	NO
95B061211	IS-12-A4-03	1X	STANDARD		•	3	NPN	NC
95B061241	IS-12-A1-03	1X	STANDARD		•	3	PNP	NO
95B061271	IS-12-A2-03	1X	STANDARD		•	3	PNP	NC
95B061581	IS-12-C3-03	1X	STANDARD			3	NPN	NO
95B061611	IS-12-C4-03	1X	STANDARD			3	NPN	NC
95B061641	IS-12-C1-03	1X	STANDARD			3	PNP	NO
95B061671	IS-12-C2-03	1X	STANDARD			3	PNP	NC
95B061981	IS-12-B3-03	1X	SHORT		•	3	NPN	NO
95B062011	IS-12-B4-03	1X	SHORT		•	3	NPN	NC
95B062041	IS-12-B1-03	1X	SHORT		•	3	PNP	NO
95B062071	IS-12-B2-03	1X	SHORT		•	3	PNP	NC
95B062381	IS-12-D3-03	1X	SHORT			3	NPN	NO
95B062411	IS-12-D4-03	1X	SHORT			3	NPN	NC
95B062441	IS-12-D1-03	1X	SHORT			3	PNP	NO
95B062471	IS-12-D2-03	1X	SHORT			3	PNP	NC
95B062661	IS-12-G6-03	2X	SHORT		•	4	NPN	NO-NC
95B062681	IS-12-G5-03	2X	SHORT		•	4	PNP	NO-NC
95B062741	IS-12-H6-03	2X	SHORT			4	NPN	NO-NC
95B062761	IS-12-H5-03	2X	SHORT			4	PNP	NO-NC
95B063321	IS-12-G3-03	2X	SHORT		•	3	NPN	NO
95B063341	IS-12-G4-03	2X	SHORT		•	3	NPN	NC
95B063361	IS-12-G1-03	2X	SHORT		•	3	PNP	NO
95B063381	IS-12-G2-03	2X	SHORT		•	3	PNP	NC
95B063401	IS-12-H3-03	2X	SHORT			3	NPN	NO
95B063421	IS-12-H4-03	2X	SHORT			3	NPN	NC
95B063441	IS-12-H1-03	2X	SHORT			3	PNP	NO
95B063461	IS-12-H2-03	2X	SHORT			3	PNP	NC
95B063801	IS-12-G9-03	2X	SHORT		•	2		PROG
95B063841	IS-12-G0-03	2X	SHORT		•	4	PROG	PROG
95B064030	IS-12-A0-03	1X	STANDARD		•	4	PROG	PROG
95B064040	IS-12-B0-03	1X	SHORT			4	PROG	PROG
95B064050	IS-12-H0-03	2X	SHORT			4	PROG	PROG
95B064100	IS-12-A9-03	1X	STANDARD		•	2		PROG
95B064110	IS-12-B9-03	1X	SHORT			2		PROG
95B064120	IS-12-H9-03	2X	SHORT			2		PROG
95B064160	IS-12-A20-03	1X	STANDARD		•	2		
95B064170	IS-12-C20-03	1X	STANDARD			2		
95B060680	IS-12-A15-03	1X	STANDARD		•	2		NO

**MODEL SELECTION AND ORDER INFORMATION**
**M12 CONNECTOR**

CODE	MODEL	RANGE	HOUSING	STEEL AISI316L	FLUSH	WIRES	NPN/PNP	NO/NC
95B060000	IS-12-O1-S2	2X	SHORT	•	•	3	PNP	
95B060010	IS-12-O2-S2	2X	SHORT	•	•	3	PNP	
95B060020	IS-12-O3-S2	2X	SHORT	•	•	3	NPN	
95B060030	IS-12-O4-S2	2X	SHORT	•	•	3	NPN	
95B060040	IS-12-P1-S2	2X	SHORT	•		3	PNP	
95B060050	IS-12-P2-S2	2X	SHORT	•		3	PNP	
95B060060	IS-12-P3-S2	2X	SHORT	•		3	NPN	
95B060070	IS-12-P4-S2	2X	SHORT	•		3	NPN	
95B060240	IS-12-M1-S2	1X	SHORT	•	•	3	PNP	
95B060250	IS-12-M2-S2	1X	SHORT	•	•	3	PNP	
95B060260	IS-12-M3-S2	1X	SHORT	•	•	3	NPN	
95B060270	IS-12-M4-S2	1X	SHORT	•	•	3	NPN	
95B060280	IS-12-N1-S2	1X	SHORT	•		3	PNP	
95B060290	IS-12-N2-S2	1X	SHORT	•		3	PNP	
95B060300	IS-12-N3-S2	1X	SHORT	•		3	NPN	
95B060310	IS-12-N4-S2	1X	SHORT	•		3	NPN	
95B061191	IS-12-A3-S2	1X	STANDARD		•	3	NPN	
95B061221	IS-12-A4-S2	1X	STANDARD		•	3	NPN	
95B061251	IS-12-A1-S2	1X	STANDARD		•	3	PNP	
95B061281	IS-12-A2-S2	1X	STANDARD		•	3	PNP	
95B061591	IS-12-C3-S2	1X	STANDARD			3	NPN	
95B061621	IS-12-C4-S2	1X	STANDARD			3	NPN	
95B061651	IS-12-C1-S2	1X	STANDARD			3	PNP	
95B061681	IS-12-C2-S2	1X	STANDARD			3	PNP	
95B061991	IS-12-B3-S2	1X	SHORT		•	3	NPN	
95B062021	IS-12-B4-S2	1X	SHORT		•	3	NPN	
95B062051	IS-12-B1-S2	1X	SHORT		•	3	PNP	
95B062081	IS-12-B2-S2	1X	SHORT		•	3	PNP	
95B062391	IS-12-D3-S2	1X	SHORT			3	NPN	
95B062421	IS-12-D4-S2	1X	SHORT			3	NPN	
95B062451	IS-12-D1-S2	1X	SHORT			3	PNP	
95B062481	IS-12-D2-S2	1X	SHORT			3	PNP	
95B062671	IS-12-G6-S2	2X	SHORT		•	4	NPN	
95B062691	IS-12-G5-S2	2X	SHORT		•	4	PNP	
95B062751	IS-12-H6-S2	2X	SHORT			4	NPN	
95B062771	IS-12-H5-S2	2X	SHORT			4	PNP	
95B063331	IS-12-G3-S2	2X	SHORT		•	3	NPN	
95B063351	IS-12-G4-S2	2X	SHORT		•	3	NPN	
95B063371	IS-12-G1-S2	2X	SHORT		•	3	PNP	
95B063391	IS-12-G2-S2	2X	SHORT		•	3	PNP	
95B063411	IS-12-H3-S2	2X	SHORT			3	NPN	
95B063431	IS-12-H4-S2	2X	SHORT			3	NPN	
95B063451	IS-12-H1-S2	2X	SHORT			3	PNP	
95B063471	IS-12-H2-S2	2X	SHORT			3	PNP	
95B063931	IS-12-A9-S2	1X	STANDARD		•	2		PROG
95B064060	IS-12-A0-S2	1X	STANDARD		•	4	PROG	PROG
95B064070	IS-12-G0-S2	2X	SHORT		•	4	PROG	PROG
95B064080	IS-12-B0-S2	1X	SHORT			4	PROG	PROG
95B064090	IS-12-H0-S2	2X	SHORT			4	PROG	PROG
95B064130	IS-12-G9-S2	2X	SHORT		•	2		PROG
95B064140	IS-12-B9-S2	1X	SHORT			2		PROG
95B064150	IS-12-H9-S2	2X	SHORT			2		PROG
95B064180	IS-12-A20-S2	1X	STANDARD		•	2		
95B064190	IS-12-C20-S2	1X	STANDARD			2		
95B060690	IS-12-A15-S2	1X	STANDARD		•	2		NO
95B065340	IS-12-I1-S2	1X	STANDARD	•		2	PNP	NO
95B063871	IS-12-L1-S2	1X	STANDARD	•	•	2	PNP	NO
95B065360	IS-F12-S1-S2	1X	STANDARD			2	PNP	NO
95B065370	IS-F12-T1-S2	1X	STANDARD		•	2	PNP	NO

## ACCESSORY SELECTION AND ORDER INFORMATION

CODE	MODEL	DESCRIPTION
95ACC3340	ST1218	ST1218 Brackets M12/M18 sensors



**Material:** stainless steel.

**Weight 40 g**

## MODEL DESCRIPTION

IS - 04 - A1 - 03

### DIAMETER

04 = 4mm  
 05 = 5mm  
 65 = 6,5mm  
 08 = 8mm  
 12 = 12mm  
 18 = 18mm  
 30 = 30mm  
 40 = 40x40mm SQUARE  
 80 = 80x80mm SQUARE  
 88 = 8x8mm SQUARE

### CONSTRUCTION

A= flush standard housing  
 B= flush short housing  
 BB= flush extra short housing  
 C= non flush standard housing  
 D= non flush short housing  
 E= flush standard housing double range  
 F= non flush standard housing double range  
 G= flush short housing double range  
 GG= flush extra short housing double range  
 H= non flush short housing double range  
 I= flush standard housing metal face  
 L= non flush standard housing metal face  
 M= flush short housing steel  
 N= non flush short housing steel  
 O= flush short housing steel double range  
 P= non flush short housing steel double range  
 Q= flush 8x8mm square housing  
 R= flush 8x8mm square housing double range  
 S= flush standard housing steel  
 T= non flush standard housing steel  
 U= flush standard housing steel double range  
 V= non flush standard housing steel double range  
 W= flush 40x40mm square housing  
 X= flush 40x40mm short square housing  
 Y= non flush 40x40mm square housing  
 Z= non flush 40x40mm short square housing

### OUTPUT

1 = 10-30 Vdc PNP NO  
 2 = 10-30 Vdc PNP NC  
 3 = 10-30 Vdc NPN NO  
 4 = 10-30 Vdc NPN NC  
 5 = 10-30 Vdc PNP NO-NC  
 6 = 10-30 Vdc NPN NO-NC  
 7 = 24-230Vac - 2 wires NO  
 8 = 24-230Vac - 2 wires NC  
 9 = 10-30 Vdc - 2 wires NO-NC  
 0 = 10-30 Vdc - 4 wires  
 11 = Analog 4-20mA  
 12 = Analog 0-10V  
 13 = Analog 0-10V/4-20mA  
 14 = Analog 0-5V/1-5mA  
 15 = 20-250Vac/Vdc-2 and 3 wires NO  
 20 = NAMUR

### CONNECTION

02 = Cable 500mm  
 03 = Cable 2mt  
 04 = Cable 700mm  
 S1 = M8 connector  
 S2 = M12 connector  
 S3 = terminal block\*  
 S4 = unf 1/2"

\* only for square housing version

**Note:** Not all code combinations are available. Please refer to alphabetical model index for the list of available models.



The company endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use, the company can guarantee only the data indicated in the instruction manual supplied with the products.