

M8 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

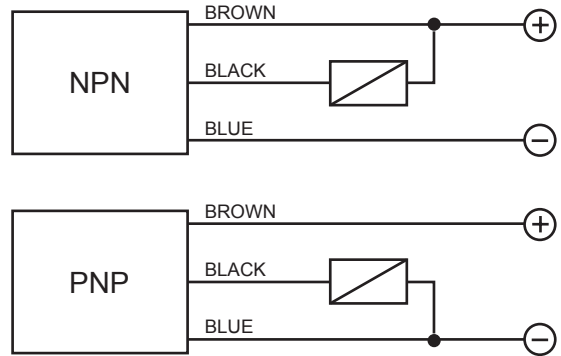


PROXIMITY SWITCHES

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

- Range, 1,5mm to 2mm - flush, non flush
- Short housing models
- Cable or M8 and M12 quick connect models
- Operation LED
- Stainless steel housing

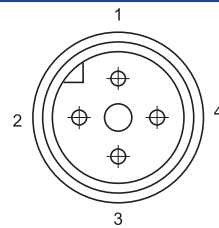
WIRING DIAGRAMS



TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	1,5 mm	2 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	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	3 x 0,14 mm	
HOUSING MATERIAL	Stainless Steel Nickel-plated brass	
WEIGHT - Cable output -	80 g	
WEIGHT - M8 connector output -	40 g	
WEIGHT - M12 connector output -	55 g	

CONNECTION WITH CONNECTOR M12

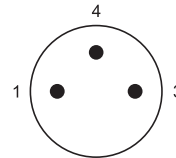


View of quadripole male connector

CONTACTS CONFIGURATION

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

CONNECTION WITH CONNECTOR M8



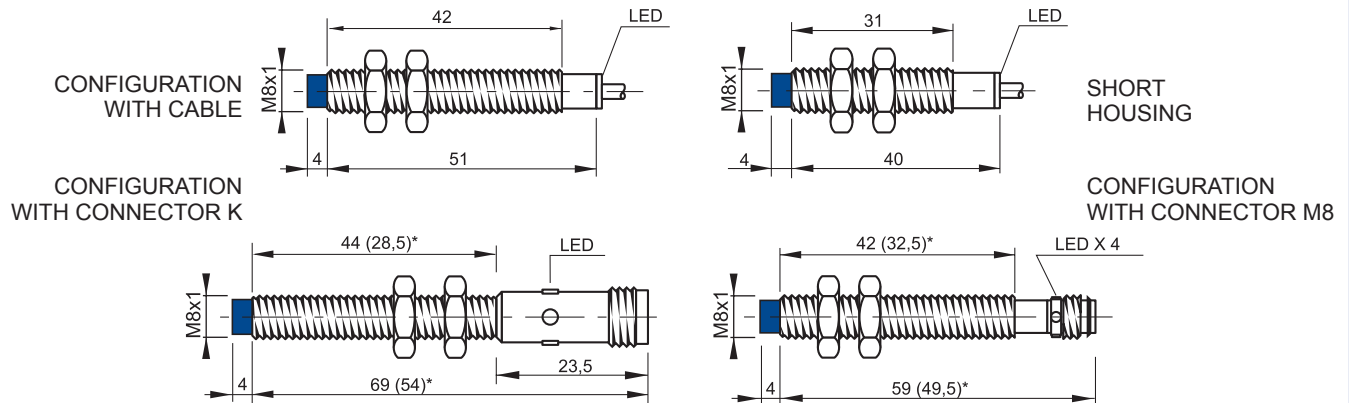
View of triple male connector

CONTACTS CONFIGURATION

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



DIMENSIONS (mm)

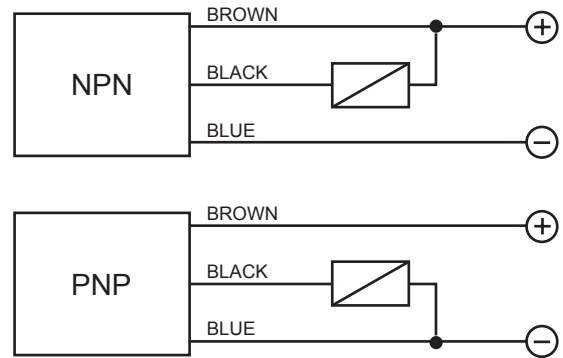


(*) The dimensions into brackets refer to short housing models. Note: the front part in blue refers to non flush models

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

- Range, 2mm to 3mm - flush, non flush
- Short housing models
- 200mA NPN or PNP
- Operation LED
- Cable or M8 and M12 quick connect models

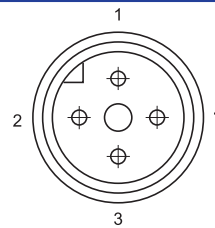
WIRING DIAGRAMS



TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	2 mm	3 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 0,14 mm ²	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT - Cable output -	80 g	
WEIGHT - M8 connector output -	40 g	
WEIGHT - M12 connector output -	55 g	

CONNECTION WITH CONNECTOR M12

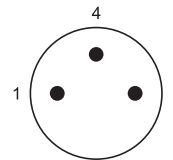


View of quadripole male connector

CONTACTS CONFIGURATION

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

CONNECTION WITH CONNECTOR M8



View of triple male connector

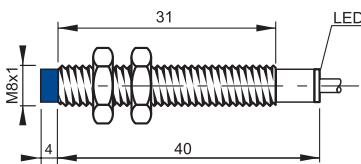
CONTACTS CONFIGURATION

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

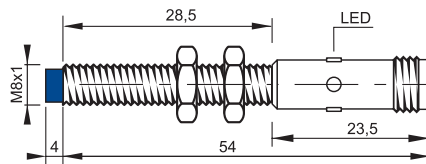


DIMENSIONS (mm)

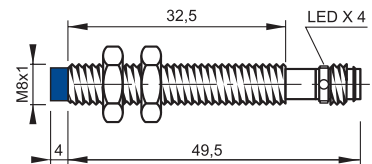
CONFIGURATION WITH CABLE



CONFIGURATION WITH CONNECTOR M12



CONFIGURATION WITH CONNECTOR M8

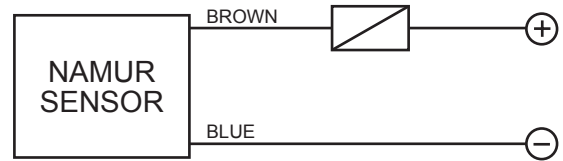


Note: the front part in blue refers to non flush models

NAMUR

- 5÷24 V DC - 2 WIRES
- Range, 1mm to 2mm - flush, non flush
- Cable or M8 and M12 quick connect models

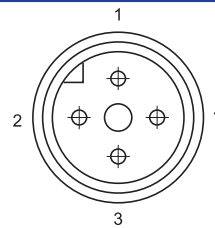
WIRING DIAGRAMS



TECHNICAL DATA

	FLUSH	NON FLUSH
NOMINAL SWITCHING DISTANCE (Sn)	1 mm	2 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 ²	
HOUSING MATERIAL	Stainless Steel	
WEIGHT - Cable output -	80 g	
WEIGHT - M8 connector output -	35 g	
WEIGHT - M12 connector output -	55 g	

CONNECTION WITH CONNECTOR M12

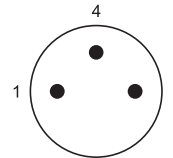


View of quadripole male connector

CONTACTS CONFIGURATION

Available	Contacts numbers			
	1	2	3	4
NAMUR	+		-	

CONNECTION WITH CONNECTOR M8



View of triple male connector

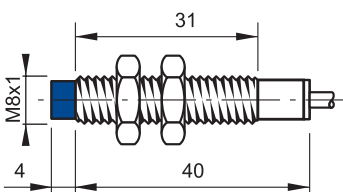
CONTACTS CONFIGURATION

Available	Contacts numbers		
	1	3	4
NAMUR	+	-	

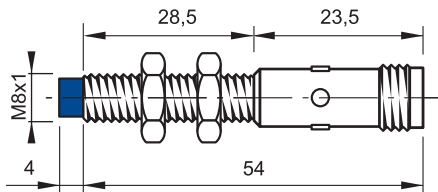


DIMENSIONS (mm)

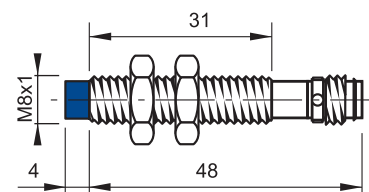
CONFIGURATION WITH CABLE



CONFIGURATION WITH CONNECTOR M12



CONFIGURATION WITH CONNECTOR M8



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

MODEL SELECTION AND ORDER INFORMATION
2MT CABLE

CODE	MODEL	RANGE	HOUSING	STEEL AISI304	FLUSH	WIRES	NPN/PNP	NO/NC
95B061061	IS-08-A3-03	1X	STANDARD		•	3	NPN	NO
95B061861	IS-08-B3-03	1X	SHORT		•	3	NPN	NO
95B061091	IS-08-A4-03	1X	STANDARD		•	3	NPN	NC
95B061891	IS-08-B4-03	1X	SHORT		•	3	NPN	NC
95B061121	IS-08-A1-03	1X	STANDARD		•	3	PNP	NO
95B061921	IS-08-B1-03	1X	SHORT		•	3	PNP	NO
95B061151	IS-08-A2-03	1X	STANDARD		•	3	PNP	NC
95B061951	IS-08-B2-03	1X	SHORT		•	3	PNP	NC
95B062291	IS-08-D4-03	1X	SHORT			3	NPN	NC
95B061521	IS-08-C1-03	1X	STANDARD			3	PNP	NO
95B062321	IS-08-D1-03	1X	SHORT			3	PNP	NO
95B061551	IS-08-C2-03	1X	STANDARD			3	PNP	NC
95B062351	IS-08-D2-03	1X	SHORT			3	PNP	NC
95B066330	IS-08-G3-03	2X	SHORT		•	3	NPN	NO
95B066340	IS-08-M3-03	1X	SHORT	•	•	3	NPN	NO
95B066350	IS-08-G4-03	2X	SHORT		•	3	NPN	NC
95B066360	IS-08-M4-03	1X	SHORT	•	•	3	NPN	NC
95B066370	IS-08-G1-03	2X	SHORT		•	3	PNP	NO
95B066380	IS-08-M1-03	1X	SHORT	•	•	3	PNP	NO
95B066390	IS-08-G2-03	1X	SHORT		•	3	PNP	NC
95B066400	IS-08-M2-03	1X	SHORT	•	•	3	PNP	NC
95B066410	IS-08-C3-03	1X	STANDARD			3	NPN	NO
95B066420	IS-08-H3-03	2X	SHORT			3	NPN	NO
95B066430	IS-08-D3-03	1X	SHORT			3	NPN	NO
95B066440	IS-08-N3-03	1X	SHORT	•		3	NPN	NO
95B066450	IS-08-C4-03	1X	STANDARD			3	NPN	NC
95B066460	IS-08-H4-03	2X	SHORT			3	NPN	NC
95B066470	IS-08-N4-03	1X	SHORT	•		3	NPN	NC
95B066480	IS-08-H1-03	2X	SHORT			3	PNP	NO
95B066490	IS-08-N1-03	1X	SHORT	•		3	PNP	NO
95B066500	IS-08-H2-03	2X	SHORT			3	PNP	NC
95B066510	IS-08-N2-03	1X	SHORT	•		3	PNP	NC
95B066740	IS-08-A20-03	1X	STANDARD		•	2		
95B066750	IS-08-C20-03	1X	STANDARD			2		
95B066760	IS-08-A20-03	1X	STANDARD	•	•	2		
95B066770	IS-08-C20-03	1X	STANDARD	•		2		

MODEL SELECTION AND ORDER INFORMATION

M8 CONNECTOR

CODE	MODEL	RANGE	HOUSING	STEEL AISI304	FLUSH	WIRES	NPN/PNP	NO/NC
95B061081	IS-08-A3-S1	1X	STANDARD		•	3	NPN	NO
95B061111	IS-08-A4-S1	1X	STANDARD		•	3	NPN	NC
95B063131	IS-08-G4-S1	2X	STANDARD		•	3	NPN	NC
95B061141	IS-08-A1-S1	1X	STANDARD		•	3	PNP	NO
95B061171	IS-08-A2-S1	1X	STANDARD		•	3	PNP	NC
95B061481	IS-08-C3-S1	1X	STANDARD			3	NPN	NO
95B061511	IS-08-C4-S1	1X	STANDARD			3	NPN	NC
95B063251	IS-08-H4-S1	2X	STANDARD			3	NPN	NC
95B061541	IS-08-C1-S1	1X	STANDARD			3	PNP	NO
95B061571	IS-08-C2-S1	1X	STANDARD			3	PNP	NC
95B066780	IS-08-A20-S1	1X	STANDARD	•	•	2		
95B066790	IS-08-C20-S1	1X	STANDARD	•		2		
95B066800	IS-08-G3-S1	2X	SHORT		•	3	NPN	NO
95B066810	IS-08-B3-S1	1X	SHORT		•	3	NPN	NO
95B066820	IS-08-M3-S1	1X	SHORT	•	•	3	NPN	NO
95B066830	IS-08-B4-S1	1X	SHORT		•	3	NPN	NC
95B066840	IS-08-M4-S1	1X	SHORT	•	•	3	NPN	NC
95B066850	IS-08-G1-S1	2X	SHORT		•	3	PNP	NO
95B066860	IS-08-B1-S1	1X	SHORT		•	3	PNP	NO
95B066870	IS-08-M1-S1	1X	SHORT	•	•	3	PNP	NO
95B066880	IS-08-G2-S1	2X	SHORT		•	3	PNP	NC
95B066890	IS-08-B2-S1	1X	SHORT		•	3	PNP	NC
95B066900	IS-08-M2-S1	1X	SHORT	•	•	3	PNP	NC
95B066910	IS-08-H3-S1	2X	SHORT			3	NPN	NO
95B066920	IS-08-D3-S1	1X	SHORT			3	NPN	NO
95B066930	IS-08-N3-S1	1X	SHORT	•		3	NPN	NO
95B066940	IS-08-D4-S1	1X	SHORT			3	NPN	NC
95B066950	IS-08-N4-S1	1X	SHORT	•		3	NPN	NC
95B066960	IS-08-H1-S1	2X	SHORT			3	PNP	NO
95B066970	IS-08-D1-S1	1X	SHORT			3	PNP	NO
95B066980	IS-08-N1-S1	1X	SHORT	•		3	PNP	NO
95B066990	IS-08-H2-S1	2X	SHORT			3	PNP	NC
95B067000	IS-08-D2-S1	1X	SHORT			3	PNP	NC
95B067010	IS-08-N2-S1	1X	SHORT	•		3	PNP	NC

MODEL SELECTION AND ORDER INFORMATION
M12 CONNECTOR

CODE	MODEL	RANGE	HOUSING	STEEL AISI304	FLUSH	WIRES	NPN/PNP	NO/NC
95B061071	IS-08-A3-S2	1X	STANDARD		•	3	NPN	NO
95B061101	IS-08-A4-S2	1X	STANDARD		•	3	NPN	NC
95B061131	IS-08-A1-S2	1X	STANDARD		•	3	PNP	NO
95B061161	IS-08-A2-S2	1X	STANDARD		•	3	PNP	NC
95B061471	IS-08-C3-S2	1X	STANDARD			3	NPN	NO
95B061501	IS-08-C4-S2	1X	STANDARD			3	NPN	NC
95B063241	IS-08-H4-S2	2X	SHORT			3	NPN	NC
95B061531	IS-08-C1-S2	1X	STANDARD			3	PNP	NO
95B061561	IS-08-C2-S2	1X	STANDARD			3	PNP	NC
95B063301	IS-08-H2-S2	1X	SHORT			3	PNP	NC
95B066520	IS-08-G3-S2	2X	SHORT		•	3	NPN	NO
95B066530	IS-08-B3-S2	1X	SHORT		•	3	NPN	NO
95B066540	IS-08-M3-S2	1X	SHORT	•	•	3	NPN	NO
95B066550	IS-08-G4-S2	2X	SHORT		•	3	NPN	NC
95B066560	IS-08-B4-S2	1X	SHORT		•	3	NPN	NC
95B066570	IS-08-M4-S2	1X	SHORT	•	•	3	NPN	NC
95B066580	IS-08-G1-S2	2X	SHORT		•	3	PNP	NO
95B066590	IS-08-B1-S2	1X	SHORT		•	3	PNP	NO
95B066600	IS-08-M1-S2	1X	SHORT	•	•	3	PNP	NO
95B066610	IS-08-G2-S2	2X	SHORT		•	3	PNP	NC
95B066620	IS-08-B2-S2	1X	SHORT		•	3	PNP	NC
95B066630	IS-08-M2-S2	1X	SHORT	•	•	3	PNP	NC
95B066640	IS-08-H3-S2	2X	SHORT			3	NPN	NO
95B066650	IS-08-D3-S2	1X	SHORT			3	NPN	NO
95B066660	IS-08-N3-S2	1X	SHORT	•		3	NPN	NO
95B066670	IS-08-D4-S2	1X	SHORT			3	NPN	NC
95B066680	IS-08-N4-S2	1X	SHORT	•		3	NPN	NC
95B066690	IS-08-H1-S2	2X	SHORT			3	PNP	NO
95B066700	IS-08-D1-S2	1X	SHORT			3	PNP	NO
95B066710	IS-08-N1-S2	1X	SHORT	•		3	PNP	NO
95B066720	IS-08-D2-S2	1X	SHORT			3	PNP	NC
95B066730	IS-08-N2-S2	1X	SHORT	•		3	PNP	NC
95B066760	IS-08-A20-S2	1X	STANDARD	•	•	2		
95B066770	IS-08-C20-S2	1x	STANDARD	•		2		

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.