



# INDUCTIVE SENSORS

Ø 12

10 ÷ 30 Vdc - 3 WIRES NPN OR PNP OUTPUT

- 2 mm to 4 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M8 or M12 connector models
- Output status LED

IS Series

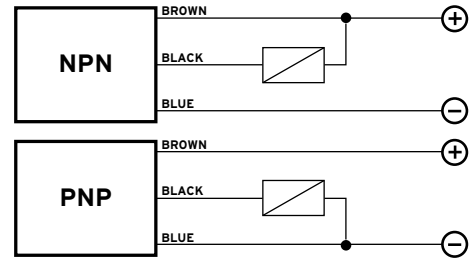


## TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	2 mm	4 mm
POWER SUPPLY	10 ÷ 30 Vdc (-15 / +10%)	
RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT CURRENT	200 mA max.	
CONSUMPTION	< 10 mA @ 24 Vdc	
SATURATION VOLTAGE	< 1.8 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	1000 Hz	
DELAY AT POWER ON	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
PROTECTIONS CIRCUIT	Against polarity reversal - inductive loads	
OPERATING TEMPERATURE	- 25 ÷ +60 °C	
MECHANICAL PROTECTION	IP67	
CONNECTIONS	2 m cable (3 x 0.25 mm <sup>2</sup> )	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT	110 g cable version	60 g M8 connector version
	60 g M12 connector version	

<sup>(4)</sup> Device marking II 3D IP67 T6X.

## CONNECTIONS



## M12 CONNECTOR



View of quadripole male connector

### CONFIGURATION

Outputs	PIN numbers			
	1	2	3	4
(NO or NC)	+		-	NO/NC

## M8 CONNECTOR

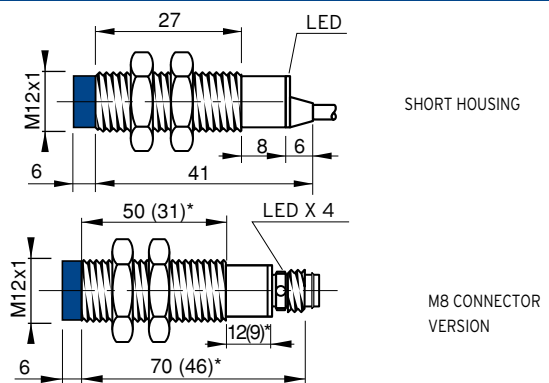


View of tripole male connector

### CONFIGURATION

Outputs	PIN numbers		
	1	3	4
(NO or NC)	+	-	NO/NC

## DIMENSIONS (mm)



(\* The dimensions in brackets refer to short housing models  
**Note:** the front part in blue is valid only for unshielded models



### MODEL SELECTION TABLE

DIAMETER	CONSTRUCTION	OUTPUT	CONNECTION
04 = 4 mm	A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
05 = 5 mm	B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
08 = 8 mm	C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
12 = 12 mm	D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
18 = 18 mm	E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
30 = 30 mm	F= unshielded standard housing, double operating distance	6 = 10-30 Vdc NPN NO-NC	
	G= shielded short housing, double operating distance	7 = 24-230 Vac - 2 wires NO	
	H= unshielded short housing, double operating distance	8 = 24-230 Vac - 2 wires NC	
	I= shielded standard metal housing	9 = 10-30 Vac - 2 wires NO-NC	
	L= unshielded standard metal housing	0 = 12-30 Vac - 4 wires	

### PRODUCT TABLE

DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-12-A1-03	2 m CABLE	yes	standard	95B061240
IS-12-A1-S1	M8 CONNECTOR	yes	standard	95B061260
IS-12-A1-S2	M12 CONNECTOR	yes	standard	95B061250
IS-12-A2-03	2 m CABLE	yes	standard	95B061270
IS-12-A2-S1	M8 CONNECTOR	yes	standard	95B061290
IS-12-A2-S2	M12 CONNECTOR	yes	standard	95B061280
IS-12-A3-03	2 m CABLE	yes	standard	95B061180
IS-12-A3-S1	M8 CONNECTOR	yes	standard	95B061200
IS-12-A3-S2	M12 CONNECTOR	yes	standard	95B061190
IS-12-A4-03	2 m CABLE	yes	standard	95B061210
IS-12-A4-S1	M8 CONNECTOR	yes	standard	95B061230
IS-12-A4-S2	M12 CONNECTOR	yes	standard	95B061220
IS-12-B1-03	2 m CABLE	yes	short	95B062040
IS-12-B1-S1	M8 CONNECTOR	yes	short	95B062060
IS-12-B1-S2	M12 CONNECTOR	yes	short	95B062050
IS-12-B2-03	2 m CABLE	yes	short	95B062070
IS-12-B2-S1	M8 CONNECTOR	yes	short	95B062090
IS-12-B2-S2	M12 CONNECTOR	yes	short	95B062080
IS-12-B3-03	2 m CABLE	yes	short	95B061980
IS-12-B3-S1	M8 CONNECTOR	yes	short	95B062000
IS-12-B3-S2	M12 CONNECTOR	yes	short	95B061990
IS-12-B4-03	2 m CABLE	yes	short	95B062010
IS-12-B4-S1	M8 CONNECTOR	yes	short	95B062030
IS-12-B4-S2	M12 CONNECTOR	yes	short	95B062020
IS-12-C1-03	2 m CABLE	no	standard	95B061640
IS-12-C1-S1	M8 CONNECTOR	no	standard	95B061660
IS-12-C1-S2	M12 CONNECTOR	no	standard	95B061650
IS-12-C2-03	2 m CABLE	no	standard	95B061670
IS-12-C2-S1	M8 CONNECTOR	no	standard	95B061690
IS-12-C2-S2	M12 CONNECTOR	no	standard	95B061680
IS-12-C3-03	2 m CABLE	no	standard	95B061580
IS-12-C3-S1	M8 CONNECTOR	no	standard	95B061600
IS-12-C3-S2	M12 CONNECTOR	no	standard	95B061590
IS-12-C4-03	2 m CABLE	no	standard	95B061610
IS-12-C4-S1	M8 CONNECTOR	no	standard	95B061630
IS-12-C4-S2	M12 CONNECTOR	no	standard	95B061620
IS-12-D1-03	2 m CABLE	no	short	95B062440
IS-12-D1-S1	M8 CONNECTOR	no	short	95B062460
IS-12-D1-S2	M12 CONNECTOR	no	short	95B062450
IS-12-D2-03	2 m CABLE	no	short	95B062470
IS-12-D2-S1	M8 CONNECTOR	no	short	95B062490
IS-12-D2-S2	M12 CONNECTOR	no	short	95B062480
IS-12-D3-03	2 m CABLE	no	short	95B062380
IS-12-D3-S1	M8 CONNECTOR	no	short	95B062400
IS-12-D3-S2	M12 CONNECTOR	no	short	95B062390
IS-12-D4-03	2 m CABLE	no	short	95B062410
IS-12-D4-S1	M8 CONNECTOR	no	short	95B062430
IS-12-D4-S2	M12 CONNECTOR	no	short	95B062420



# INDUCTIVE SENSORS

## Ø 12 DOUBLE OPERATING DISTANCE 10÷30 Vdc - 3 WIRES NPN OR PNP OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M12 connector models
- Output status LED

IS Series



### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	4 mm	8 mm
POWER SUPPLY	10 ÷ 30 Vdc (-15 / +10%)	
RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT CURRENT	200 mA max.	
CONSUMPTION	< 10 mA @ 24 Vdc	
SATURATION VOLTAGE	< 1.2 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	500 Hz	
DELAY AT POWER ON	≤ 75 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
PROTECTIONS CIRCUIT	Against polarity reversal - inductive loads	
OPERATING TEMPERATURE	-25 ÷ +70 °C	
MECHANICAL PROTECTION	IP67	
CONNECTIONS	2 m cable (3 x 0.25 mm <sup>2</sup> )	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT	110 g cable version 60 g M12 connector version	

### CONNECTIONS



### M12 CONNECTOR



View of  
quadripole  
male  
connector

### CONFIGURATION

Outputs	PIN numbers			
	1	2	3	4
(NO or NC)	+		-	NO/NC

### DIMENSIONS (mm)



**Note:** the front part in blue is valid only for unshielded models


**MODEL SELECTION TABLE**

DIAMETER	CONSTRUCTION	OUTPUT	CONNECTION
04 = 4 mm	A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
05 = 5 mm	B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
08 = 8 mm	C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
12 = 12 mm	D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
18 = 18 mm	E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
30 = 30 mm	F= unshielded standard housing, double operating distance	6 = 10-30 Vdc NPN NO-NC	
	G= shielded short housing, double operating distance	7 = 24-230 Vac - 2 wires NO	
	H= unshielded short housing, double operating distance	8 = 24-230 Vac - 2 wires NC	
	I= shielded standard metal housing	9 = 10-30 Vac - 2 wires NO-NC	
	L= unshielded standard metal housing	0 = 12-30 Vac - 4 wires	

**PRODUCT TABLE**

DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-12-G1-03	CABLE	yes	short	95B063360
IS-12-G1-S2	M12	yes	short	95B063370
IS-12-G2-03	CABLE	yes	short	95B063380
IS-12-G2-S2	M12	yes	short	95B063390
IS-12-G3-03	CABLE	yes	short	95B063320
IS-12-G3-S2	M12	yes	short	95B063330
IS-12-G4-03	CABLE	yes	short	95B063340
IS-12-G4-S2	M12	yes	short	95B063350
IS-12-H1-03	CABLE	no	short	95B063440
IS-12-H1-S2	M12	no	short	95B063450
IS-12-H2-03	CABLE	no	short	95B063460
IS-12-H2-S2	M12	no	short	95B063470
IS-12-H3-03	CABLE	no	short	95B063400
IS-12-H3-S2	M12	no	short	95B063410
IS-12-H4-03	CABLE	no	short	95B063420
IS-12-H4-S2	M12	no	short	95B063430

# INDUCTIVE SENSORS

## Ø 12 DOUBLE OPERATING DISTANCE 10÷30 Vdc - 4 WIRES NPN OR PNP OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M12 connector models
- 200mA NPN or PNP
- Output status LED

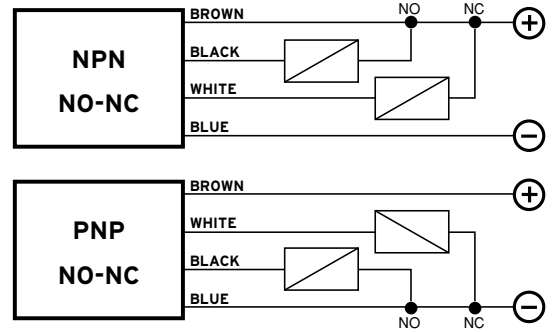
IS Series



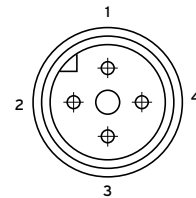
### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	4 mm	8 mm
POWER SUPPLY	10 ÷ 30 Vdc (-15 / +10%)	
RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT CURRENT	200 mA max.	
CONSUMPTION	< 10 mA @ 24 Vdc	
SATURATION VOLTAGE	< 1.2 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	500 Hz	
DELAY AT POWER ON	75 ms	
REPEATABILITY	3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
PROTECTIONS CIRCUIT	Against polarity reversal - inductive loads	
OPERATING TEMPERATURE	-25 ÷ +70 °C	
MECHANICAL PROTECTION	IP67	
CONNECTIONS	2 m cable (3 x 0.25 mm <sup>2</sup> )	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT	110 g cable version 60 g M12 connector version	

### CONNECTIONS



### M12 CONNECTOR



View of  
quadripole  
male  
connector

### CONFIGURATION

Outputs	PIN numbers			
	1	2	3	4
(NO + NC)	+	NC	-	NO

### DIMENSIONS (mm)



Note: the front part in blue is valid only for unshielded models



### MODEL SELECTION TABLE

DIAMETER	CONSTRUCTION	OUTPUT	CONNECTION
04 = 4 mm	A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
05 = 5 mm	B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
08 = 8 mm	C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
12 = 12 mm	D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
18 = 18 mm	E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
30 = 30 mm	F= unshielded standard housing, double operating distance	6 = 10-30 Vdc NPN NO-NC	
	G= shielded short housing, double operating distance	7 = 24-230 Vac - 2 wires NO	
	H= unshielded short housing, double operating distance	8 = 24-230 Vac - 2 wires NC	
	I= shielded standard metal housing	9 = 10-30 Vac - 2 wires NO-NC	
	L= unshielded standard metal housing	0 = 12-30 Vac - 4 wires	

### PRODUCT TABLE

DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-12-G5-03	2 m CABLE	yes	standard	95B062680
IS-12-G5-S2	M12 CONNECTOR	yes	standard	95B062690
IS-12-G6-03	2 m CABLE	yes	standard	95B062660
IS-12-G6-S2	M12 CONNECTOR	yes	standard	95B062670
IS-12-H5-03	2 m CABLE	no	standard	95B062760
IS-12-H5-S2	M12 CONNECTOR	no	standard	95B062770
IS-12-H6-03	2 m CABLE	no	standard	95B062740
IS-12-H6-S2	M12 CONNECTOR	no	standard	95B062750



# INDUCTIVE SENSORS

## Ø 12 DOUBLE OPERATING DISTANCE 12÷30 Vdc - 4 WIRES PROGRAMMABLE OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Programmable outputs: NPN/PNP, NO or NC
- Cable models
- Nickel plated brass
- Output status LED
- 200 mA max output

IS Series



### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	4 mm	8 mm
POWER SUPPLY	12 ÷ 30 Vdc (-15/+10%)	
RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT	NPN or PNP (selectable)	
CONTACT	NO or NC (selectable)	
OUTPUT CURRENT	200 mA max.	
CONSUMPTION	< 1.2 mA @ 24 Vdc	
SATURATION VOLTAGE	< 1,8 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	500 Hz	
DELAY AT POWER ON	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
PROTECTIONS CIRCUIT	Against polarity reversal - inductive loads	
OPERATING TEMPERATURE	- 25 ÷ +70 °C	
MECHANICAL PROTECTION	IP67	
CONNECTIONS	2 m cable (4 x 0.25 mm <sup>2</sup> )	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT	110 g cable version	

<sup>(1)</sup> Device marking II 3D IP67 T6X.

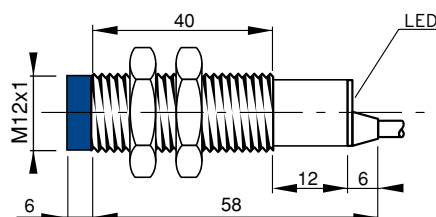
### CONNECTIONS



These sensors, thanks to the unpaired output circuit offer 4 output configurations (NPN-NO, NPN-NC, PNP-NO, PNP-NC) on the same model.

### DIMENSIONS (mm)

CABLE VERSION



**Note:** the front part in blue is valid only for unshielded models



### MODEL SELECTION TABLE

DIAMETER	CONSTRUCTION	OUTPUT	CONNECTION
04 = 4 mm	A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
05 = 5 mm	B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
08 = 8 mm	C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
12 = 12 mm	D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
18 = 18 mm	E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
30 = 30 mm	F= unshielded standard housing, double operating distance	6 = 10-30 Vdc NPN NO-NC	
	G= shielded short housing, double operating distance	7 = 24-230 Vac - 2 wires NO	
	H= unshielded short housing, double operating distance	8 = 24-230 Vac - 2 wires NC	
	I= shielded standard metal housing	9 = 10-30 Vac - 2 wires NO-NC	
	L= unshielded standard metal housing	0 = 12-30 Vac - 4 wires	

### PRODUCT TABLE

DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-12-E0-03	CABLE	yes	standard	95B063840





# INDUCTIVE SENSORS

**Ø 12 DOUBLE OPERATING DISTANCE**  
**10÷30 Vdc 2 WIRES NO-NC PROGRAMMABLE OUTPUT**

- 4 mm to 8 mm operating distance - shielded, unshielded
- Cable models
- Nickel plated brass

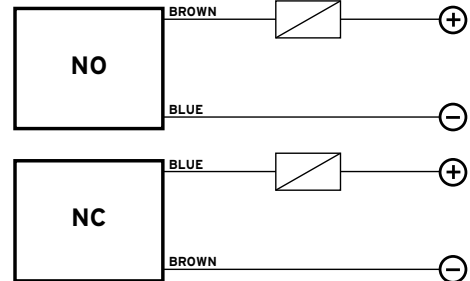
**IS Series**



## TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	4 mm	8 mm
POWER SUPPLY	10 ÷ 30 Vdc (-15 / +10%)	
RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT CURRENT	100 mA max.	
OUTPUT CURRENT	> 1,6 mA min.	
CONSUMPTION	< 1,6 mA @ 24 Vdc	
SATURATION VOLTAGE	< 6,5 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	500 Hz	
DELAY AT POWER ON	≤ 50 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
PROTECTIONS CIRCUIT	Against polarity reversal - inductive loads	
OPERATING TEMPERATURE	- 25 ÷ +70 °C	
MECHANICAL PROTECTION	IP67	
CONNECTIONS	2 m cable (2 x 0.25 mm <sup>2</sup> )	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT	110 g cable version	

## CONNECTIONS



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

## DIMENSIONS (mm)



**Note:** the front part in blue is valid only for unshielded models



### MODEL SELECTION TABLE

DIAMETER	CONSTRUCTION	OUTPUT	CONNECTION
04 = 4 mm	A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
05 = 5 mm	B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
08 = 8 mm	C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
12 = 12 mm	D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
18 = 18 mm	E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
30 = 30 mm	F= unshielded standard housing, double operating distance	6 = 10-30 Vdc NPN NO-NC	
	G= shielded short housing, double operating distance	7 = 24-230 Vac - 2 wires NO	
	H= unshielded short housing, double operating distance	8 = 24-230 Vac - 2 wires NC	
	I= shielded standard metal housing	9 = 10-30 Vac - 2 wires NO-NC	
	L= unshielded standard metal housing	0 = 12-30 Vac - 4 wires	

### PRODUCT TABLE

DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-12-E9-03	CABLE	yes	standard	95B063800



# INDUCTIVE SENSORS

Ø 12

24 ÷ 230 Vac - 2 WIRES NO OR NC OUTPUT

- 2 mm to 4 mm operating distance - shielded, unshielded
- Cable or M12 connector models
- Very low consumption < 0,7 mA
- Inrush current (20ms) 1.5A
- 350 mA max output

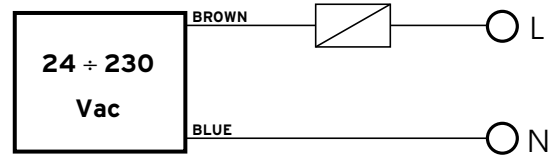
IS Series



## TECHNICAL DATA

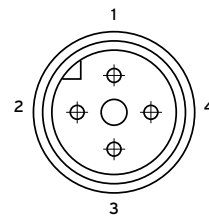
	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	2 mm	4 mm
POWER SUPPLY	24 ÷ 230 Vac (-15/+10%)	
RIPPLE	50 ÷ 60 Hz	
HYSTERESIS	< 10%	
OUTPUT CURRENT	350 mA max.	
OUTPUT CURRENT	20 mA min.	
INRUSH CURRENT	1,5 A max. (20 ms)	
CONSUMPTION	< 0,7 mA	
SATURATION VOLTAGE	< 5 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	12 Hz	
DELAY AT POWER ON	≤ 300 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	-25 ÷ +70 °C	
MECHANICAL PROTECTION	IP67	
CONNECTIONS	2 m cable (2 x 0.25 mm <sup>2</sup> )	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT	110 g cable version 60 g M12 connector cable	

## CONNECTIONS



**Warning:** Output short circuit are not possible. Wrong supply cable connections can damage the sensor. Therefore sensors whose output status is short-circuited will not be replaced under warranty.

## M12 CONNECTOR



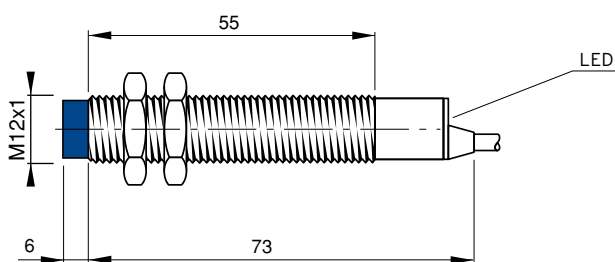
View of quadripole male connector.

## CONFIGURATION

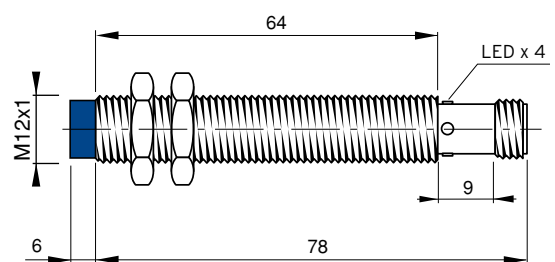
Outputs	PIN numbers			
	1	2	3	4
(NO or NC)	L		N	

## DIMENSIONS (mm)

CABLE VERSION



M12 CONNECTOR VERSION



**Note:** the front part in blue is valid only for unshielded models



### MODEL SELECTION TABLE

DIAMETER	CONSTRUCTION	OUTPUT	CONNECTION
04 = 4 mm	A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
05 = 5 mm	B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
08 = 8 mm	C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
12 = 12 mm	D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
18 = 18 mm	E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
30 = 30 mm	F= unshielded standard housing, double operating distance	6 = 10-30 Vdc NPN NO-NC	
	G= shielded short housing, double operating distance	7 = 24-230 Vac - 2 wires NO	
	H= unshielded short housing, double operating distance	8 = 24-230 Vac - 2 wires NC	
	I= shielded standard metal housing	9 = 10-30 Vac - 2 wires NO-NC	
	L= unshielded standard metal housing	0 = 12-30 Vac - 4 wires	

### PRODUCT TABLE

DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-12-A7-03	2 m CABLE	yes	standard	95B062820
IS-12-A7-S2	M12 CONNECTOR	yes	standard	95B062830
IS-12-A8-03	2 m CABLE	yes	standard	95B062840
IS-12-A8-S2	M12 CONNECTOR	yes	standard	95B062850
IS-12-C7-03	2 m CABLE	no	standard	95B062940
IS-12-C7-S2	M12 CONNECTOR	no	standard	95B062950
IS-12-C8-03	2 m CABLE	no	standard	95B062960
IS-12-C8-S2	M12 CONNECTOR	no	standard	95B062970



# INDUCTIVE SENSORS

## Ø 12 DOUBLE OPERATING DISTANCE 24÷230 Vac/dc - 2 WIRES WIRES NO OR NC OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Short circuit protection AC/DC
- Cable models
- Inrush current (20ms) 2.5A
- 350mA max output

IS Series



### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (S <sub>n</sub> )	4 mm	8 mm
POWER SUPPLY	24 ÷ 230 Vca/dc (-15/+10%)	
RIPPLE	50 ÷ 60 Hz	
HYSTERESIS	< 10%	
OUTPUT CURRENT	350 mA max.	
OUTPUT CURRENT	4 mA min.	
INRUSH CURRENT	2,5 A max. (20 ms)	
CONSUMPTION	< 1,5 mA	
SATURATION VOLTAGE	< 6 V (I=100mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	12 Hz	
DELAY AT POWER ON	≤ 300 ms	
REPEATABILITY	Present (manual resetting)	
OPERATING TEMPERATURE	≤ 3%	
SHORT CIRCUIT PROTECTION	-25 ÷ +70 °C	
MECHANICAL PROTECTION	IP67	
CONNECTIONS	2 m cable (2 x 0.25 mm <sup>2</sup> )	
HOUSING MATERIAL	Nickel-plated brass	
WEIGHT	110 g cable version	

### CONNECTIONS



### DIMENSIONS (mm)



**Note:** the front part in blue is valid only for unshielded models



### MODEL SELECTION TABLE

DIAMETER	CONSTRUCTION	OUTPUT	CONNECTION
04 = 4 mm	A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
05 = 5 mm	B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
08 = 8 mm	C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
12 = 12 mm	D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
18 = 18 mm	E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
30 = 30 mm	F= unshielded standard housing, double operating distance	6 = 10-30 Vdc NPN NO-NC	
	G= shielded short housing, double operating distance	7 = 24-230 Vac - 2 wires NO	
	H= unshielded short housing, double operating distance	8 = 24-230 Vac - 2 wires NC	
	I= shielded standard metal housing	9 = 10-30 Vac - 2 wires NO-NC	
	L= unshielded standard metal housing	0 = 12-30 Vac - 4 wires	

### PRODUCT TABLE

DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-12-E7-03	CABLE	yes	standard	95B063890

# INDUCTIVE SENSORS

Ø 12

10÷30 Vdc - 3 WIRES PNP OUTPUT

- 2 mm to 4 mm operating distance - shielded, unshielded
- Stainless steel housing
- Cable or M12 connector models
- Output status LED

IS Series



## TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	2 mm	4 mm
POWER SUPPLY	10 ÷ 30 Vdc (-15 / +10%)	
RIPPLE	≤ 10%	
HYSTERESIS	< 15%	
OUTPUT CURRENT	200 mA max.	
CONSUMPTION	< 10 mA @ 24 Vdc	
SATURATION VOLTAGE	< 1.5 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	2000 Hz	1000 Hz
REPEATABILITY	≤ 1%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
OPERATING TEMPERATURE	- 25 ÷ +70 °C	
MECHANICAL PROTECTION	IP67	
ACTIVE FACE MATERIAL	Stainless steel	
HOUSING MATERIAL	Stainless steel	
WEIGHT	60 g cable version	

## CONNECTIONS



## M12 CONNECTOR



View of quadripole male connector.

## CONFIGURATION

Outputs	PIN numbers			
	1	2	3	4
NO	+		-	NO

## DIMENSIONS (mm)

