



# INDUCTIVE SENSORS

Ø 30

10 ÷ 30 Vdc - 3 WIRES NPN OR PNP OUTPUT

- 10 mm to 15 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M12 connector models
- Output status LED

IS Series

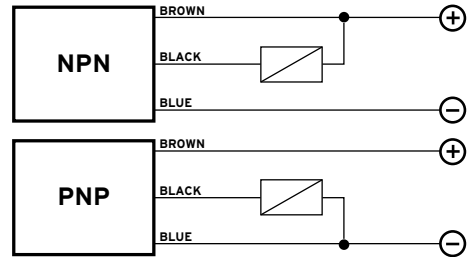


## TECHNICAL DATA

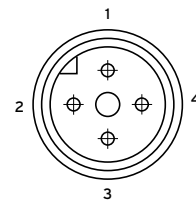
	SHIELDED	UNSHIELDED
OPERATING DISTANCE (S <sub>n</sub> )	10 mm	15 mm
POWER SUPPLY	10 ÷ 30 Vdc (-15 / +10%)	
RIPPLE	≤ 10%	
HYSTERESIS	< 10%	
OUTPUT CURRENT	200 mA max.	
CONSUMPTION	< 10 mA @ 24 Vdc	
SATURATION VOLTAGE	< 1.8 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	300 Hz	
DELAY AT POWER 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	210 g cable version 170 g M12 connector cable	

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

## CONNECTIONS



## M12 CONNECTOR

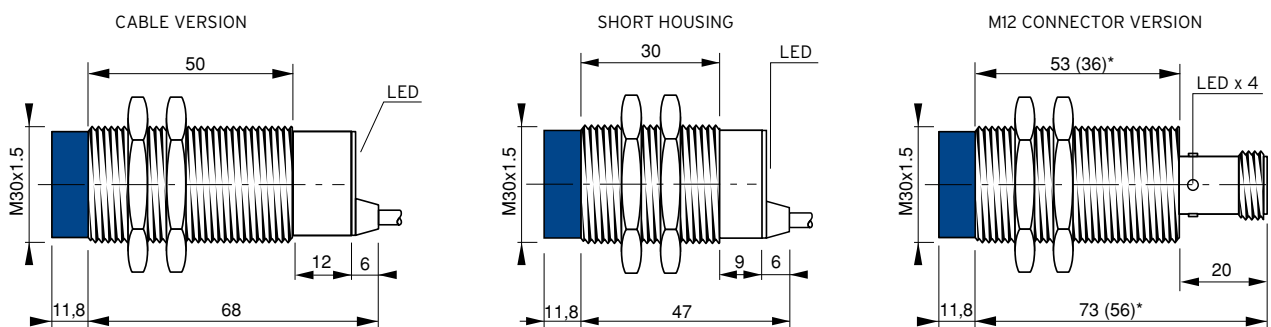


View of quadripole male connector

## CONFIGURATION

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

## 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-30-A1-03	2 m CABLE	yes	standard	95B061420
IS-30-A1-S2	M12 CONNECTOR	yes	standard	95B061430
IS-30-A2-03	2 m CABLE	yes	standard	95B061440
IS-30-A2-S2	M12 CONNECTOR	yes	standard	95B061450
IS-30-A3-03	2 m CABLE	yes	standard	95B061380
IS-30-A3-S2	M12 CONNECTOR	yes	standard	95B061390
IS-30-A4-03	2 m CABLE	yes	standard	95B061400
IS-30-A4-S2	M12 CONNECTOR	yes	standard	95B061410
IS-30-B1-03	2 m CABLE	yes	short	95B062220
IS-30-B1-S2	M12 CONNECTOR	yes	short	95B062230
IS-30-B2-03	2 m CABLE	yes	short	95B062240
IS-30-B2-S2	M12 CONNECTOR	yes	short	95B062250
IS-30-B3-03	2 m CABLE	yes	short	95B062180
IS-30-B3-S2	M12 CONNECTOR	yes	short	95B062190
IS-30-B4-03	2 m CABLE	yes	short	95B062200
IS-30-B4-S2	M12 CONNECTOR	yes	short	95B062210
IS-30-C1-03	2 m CABLE	no	standard	95B061820
IS-30-C1-S2	M12 CONNECTOR	no	standard	95B061830
IS-30-C2-03	2 m CABLE	no	standard	95B061840
IS-30-C2-S2	M12 CONNECTOR	no	standard	95B061850
IS-30-C3-03	2 m CABLE	no	standard	95B061780
IS-30-C3-S2	M12 CONNECTOR	no	standard	95B061790
IS-30-C4-03	2 m CABLE	no	standard	95B061800
IS-30-C4-S2	M12 CONNECTOR	no	standard	95B061810
IS-30-D1-03	2 m CABLE	no	short	95B062620
IS-30-D1-S2	M12 CONNECTOR	no	short	95B062630
IS-30-D2-03	2 m CABLE	no	short	95B062640
IS-30-D2-S2	M12 CONNECTOR	no	short	95B062650
IS-30-D3-03	2 m CABLE	no	short	95B062580
IS-30-D3-S2	M12 CONNECTOR	no	short	95B062590
IS-30-D4-03	2 m CABLE	no	short	95B062600
IS-30-D4-S2	M12 CONNECTOR	no	short	95B062610



# INDUCTIVE SENSORS

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

- 15 mm to 20 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M12 connector models
- Output status LED

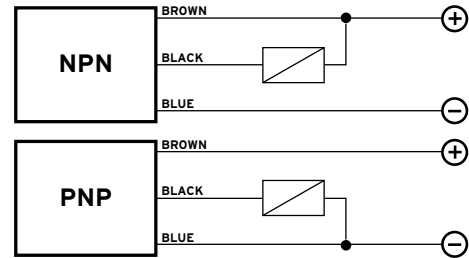
IS Series



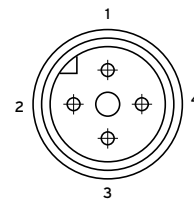
### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	15 mm	20 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	200 Hz	
DELAY AT POWER ON	≤ 75 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
PROTECTION 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	210 g cable version 170 g M12 connector version	

### CONNECTIONS



### M12 CONNECTOR

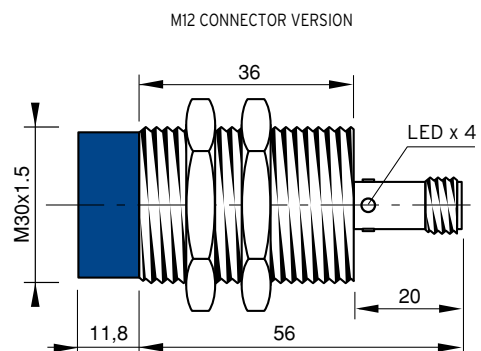
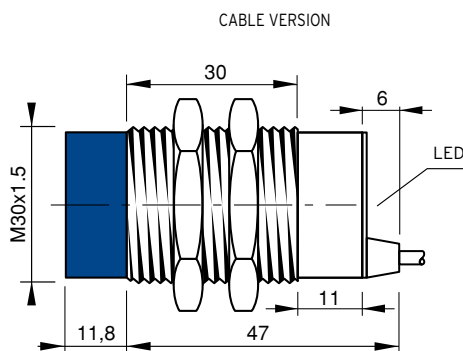


View of  
quadripole  
male  
connector

### 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-30-G1-03	CABLE	yes	short	95B063680
IS-30-G1-S2	M12	yes	short	95B063690
IS-30-G2-03	CABLE	yes	short	95B063700
IS-30-G2-S2	M12	yes	short	95B063710
IS-30-G3-03	CABLE	yes	short	95B063640
IS-30-G3-S2	M12	yes	short	95B063650
IS-30-G4-03	CABLE	yes	short	95B063660
IS-30-G4-S2	M12	yes	short	95B063670
IS-30-H1-03	CABLE	no	short	95B063760
IS-30-H1-S2	M12	no	short	95B063770
IS-30-H2-03	CABLE	no	short	95B063780
IS-30-H2-S2	M12	no	short	95B063790
IS-30-H3-03	CABLE	no	short	95B063720
IS-30-H3-S2	M12	no	short	95B063730
IS-30-H4-03	CABLE	no	short	95B063740
IS-30-H4-S2	M12	no	short	95B063750



# INDUCTIVE SENSORS

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

- 15 mm to 20 mm operating distance - shielded, unshielded
- Short housing
- Cable or M12 connector models
- 200mA NPN or PNP
- Output status LED

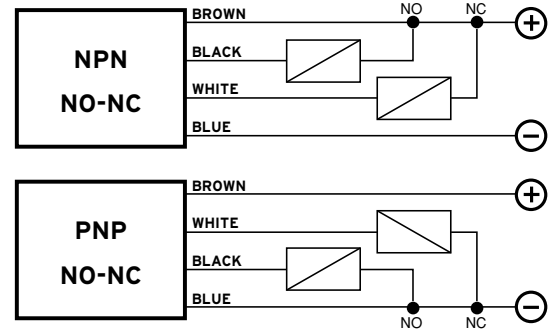
IS Series



### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	15 mm	20 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	200 Hz	
DELAY AT POWER ON	≤ 75 ms	
REPEATABILITY	≤ 3%	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
PROTECTION 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	210 g cable version 170 g M12 connector version	

### CONNECTIONS



### M12 CONNECTOR

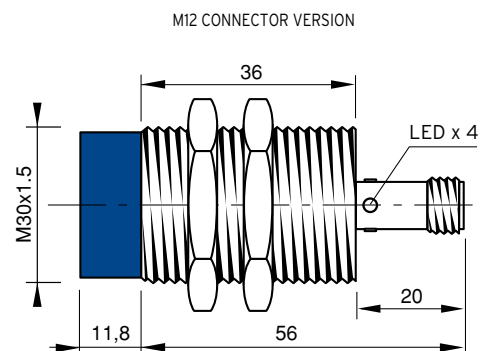
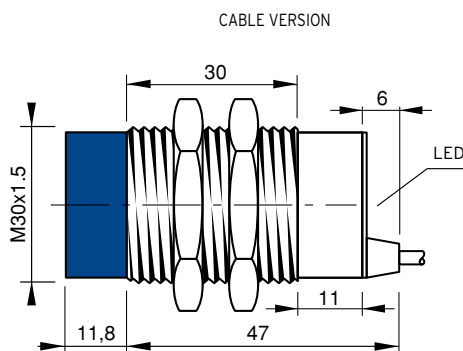


View of  
quadripole  
male  
connector

### 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-30-G5-03	CABLE	yes	short	95B063820
IS-30-G5-S2	M12	yes	short	95B063830



# INDUCTIVE SENSORS

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

- 15 mm to 20 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

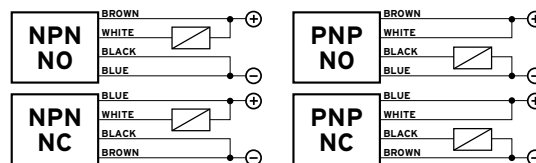


### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	15 mm	20 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	200 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	210 g cable version	
	170 g M12 connector cable	

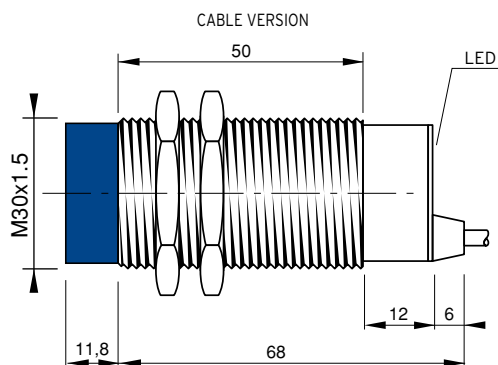
<sup>(1)</sup> Device marking II 3D IP67 T6X.

### 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)



**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-30-E0-03	CABLE	yes	standard	95B063860





# INDUCTIVE SENSORS

Ø 30

24÷230 Vac - 2 WIRES WIRES NO OR NC OUTPUT

- 10 mm to 15 mm operating distance - shielded, unshielded
- Cable or M12 connector models
- Very low consumption < 0,7 mA
- Inrush current (20ms) 1.5A
- 300mA max output

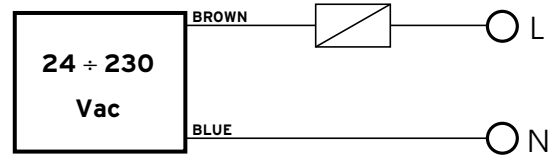
IS Series



## TECHNICAL DATA

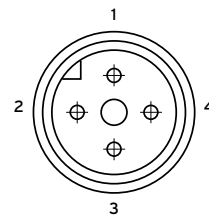
	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	10 mm	15 mm
POWER SUPPLY	24 ÷ 230 Vac (-15/+10%)	
NET FREQUENCY	50 ÷ 60 Hz	
HYSTERESIS	< 10%	
OUTPUT CURRENT	300 mA max.	
OUTPUT CURRENT	20 mA min.	
INRUSH CURRENT	1,5 A max. (20 ms)	
RESIDUAL CURRENT	< 0,7 mA	
SATURATION VOLTAGE	< 5 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	12 Hz	
DELAY AT POWER ON	≤ 300 ms	
REPEATABILITY	≤ 3%	
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	210 g cable version	
	170 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

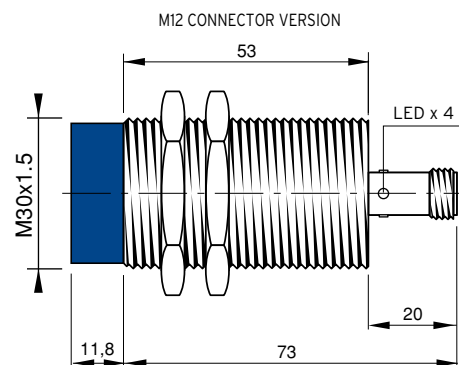
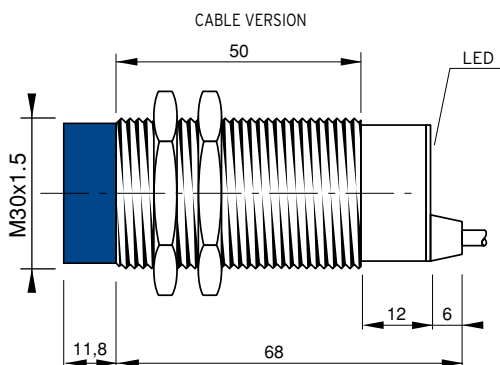


View of quadripole male connector.

## CONFIGURATION

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

## DIMENSIONS (mm)



**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
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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-30-A7-03	CABLE 2m	yes	standard	95B062900
IS-30-A7-S2	M12 CONNECTOR	yes	standard	95B062910
IS-30-A8-03	CABLE 2m	yes	standard	95B062920
IS-30-A8-S2	M12 CONNECTOR	yes	standard	95B062930
IS-30-C7-03	CABLE 2m	no	standard	95B063020
IS-30-C7-S2	M12 CONNECTOR	no	standard	95B063030
IS-30-C8-03	CABLE 2m	no	standard	95B063040
IS-30-C8-S2	M12 CONNECTOR	no	standard	95B063050



# INDUCTIVE SENSORS

## Ø 30 DOUBLE OPERATING DISTANCE 24÷230 Vac/dc - 2 WIRES NO OR NC OUTPUT

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

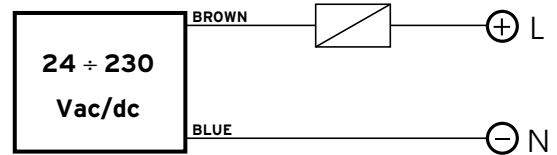
IS Series



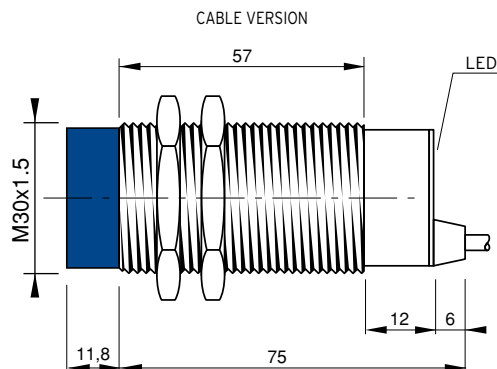
### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	15 mm	20 mm
POWER SUPPLY	24 ÷ 230 Vac/dc (-15/+10%)	
NET FREQUENCY	50 ÷ 60 Hz	
HYSTERESIS	< 10%	
OUTPUT CURRENT	350 mA max.	
OUTPUT CURRENT	4 mA min.	
INRUSH CURRENT	2,5 A max. (20 ms)	
RESIDUAL CURRENT	< 1,5 mA	
SATURATION VOLTAGE	< 6 V (I=100mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	12 Hz	
DELAY AT POWER ON	≤ 300 ms	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
REPEATABILITY	≤ 3%	
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	210 g cable version	

### CONNECTIONS



### DIMENSIONS (mm)



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