

# **INDUCTIVE SENSORS**

## Ø 18

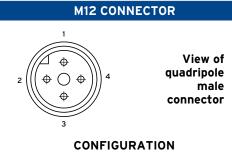
#### 10÷30 Vdc - 3 WIRES NPN OR PNP OUTPUT

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



TECHNICAL DATA				
	SHIELDED	UNSHIELDED		
OPERATING DISTANCE (Sn)	5 mm	8 mm		
POWER SUPPLY	10 ÷ 30 Vdc	(-15 / +10%)		
RIPPLE	≤1	0%		
HYSTERESIS	< 1	0%		
OUTPUT CURRENT	200 m	A 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	≤ 5	0 ms		
REPEATABILITY	≤	3%		
SHORT CIRCUIT PROTECTION	Present (se	lf-resetting)		
PROTECTIONS CIRCUIT	Against polarity reve	ersal - inductive loads		
OPERATING TEMPERATURE	- 25 ÷	+60 °C		
MECHANICAL PROTECTION	IP	67		
CONNECTIONS	2 m cable (3 x 0.25 mm <sup>2</sup> )			
HOUSING MATERIAL	Nickel-plated brass			
WEIGHT	145 g cab	ole version		
	95 g M12 co	nnector cable		

CONNECTIONS BROWN BLACK BLUE PNP BLACK BLUE BLACK BLUE CONNECTIONS



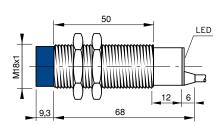
(4) Device marking 🖾 II 3D IP67 T6X.

# CONFIGURATION

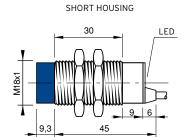
Outputs	PIN numbers				
Outputs	1	2	3	4	
(NO or NC)	+		—	NO/NC	

#### DIMENSIONS (mm)

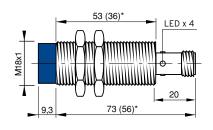
CABLE VERSION



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



M12 CONNECTOR VERSION





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 TAE	BLE	
DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-18-A1-03	2 m CABLE	yes	standard	95B061340
IS-18-A1-S2	M12 CONNECTOR	yes	standard	95B061350
IS-18-A2-03	2 m CABLE	yes	standard	95B061360
IS-18-A2-S2	M12 CONNECTOR	yes	standard	95B061370
IS-18-A3-03	2 m CABLE	yes	standard	95B061300
IS-18-A3-S2	M12 CONNECTOR	yes	standard	95B061310
IS-18-A4-03	2 m CABLE	yes	standard	95B061320
IS-18-A4-S2	M12 CONNECTOR	yes	standard	95B061330
IS-18-B1-03	2 m CABLE	yes	short	95B062140
IS-18-B1-S2	M12 CONNECTOR	yes	short	95B062150
IS-18-B2-03	2 m CABLE	yes	short	95B062160
IS-18-B2-S2	M12 CONNECTOR	yes	short	95B062170
IS-18-B3-03	2 m CABLE	yes	short	95B062100
IS-18-B3-S2	M12 CONNECTOR	yes	short	95B062110
IS-18-B4-03	2 m CABLE	yes	short	95B062120
IS-18-B4-S2	M12 CONNECTOR	yes	short	95B062130
IS-18-C1-03	2 m CABLE	no	standard	95B061740
IS-18-C1-S2	M12 CONNECTOR	no	standard	95B061750
IS-18-C2-03	2 m CABLE	no	standard	95B061760
IS-18-C2-S2	M12 CONNECTOR	no	standard	95B061770
IS-18-C3-03	2 m CABLE	no	standard	95B061700
IS-18-C3-S2	M12 CONNECTOR	no	standard	95B061710
IS-18-C4-03	2 m CABLE	no	standard	95B061720
IS-18-C4-S2	M12 CONNECTOR	no	standard	95B061730
IS-18-D1-03	2 m CABLE	no	short	95B062540
IS-18-D1-S2	M12 CONNECTOR	no	short	95B062550
IS-18-D2-03	2 m CABLE	no	short	95B062560
IS-18-D2-S2	M12 CONNECTOR	no	short	95B062570
IS-18-D3-03	2 m CABLE	no	short	95B062500
IS-18-D3-S2	M12 CONNECTOR	no	short	95B062510
IS-18-D4-03	2 m CABLE	no	short	95B062520
IS-18-D4-S2	M12 CONNECTOR	no	short	95B062530



# INDUCTIVE SENSORS Ø 18 DOUBLE OPERATING DISTANCE 10÷30 Vdc - 3 WIRES NPN OR PNP OUTPUT

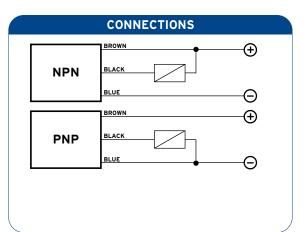
• 8 mm to 14 mm operating distance - shielded, unshielded

- Short housing models
  Cable or M12 connector models
- Output status LED

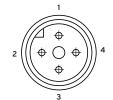


IECHNICAL DATA				
	SHIELDED	UNSHIELDED		
OPERATING DISTANCE (Sn)	8 mm	14 mm		
POWER SUPPLY	10 ÷ 30 Vdc	(-15 / +10%)		
RIPPLE	≤1	0%		
HYSTERESIS	< 1	0%		
OUTPUT CURRENT	200 m	A max.		
CONSUMPTION	< 10 mA	@ 24 Vdc		
SATURATION VOLTAGE	< 1.2 V (l	= 100 mA)		
INDICATORS	Yello	w LED		
SWITCHING FREQUENCY	400	400 Hz		
DELAY AT POWER ON	≤7:	≤ 75 ms		
REPEATABILITY	≤.	≤ 3%		
SHORT CIRCUIT PROTECTION	Present (se	lf-resetting)		
PROTECTIONS CIRCUIT	Against polarity reve	ersal - inductive loads		
OPERATING TEMPERATURE	- 25 ÷	+70 °C		
MECHANICAL PROTECTION	IP	67		
CONNECTIONS	2 m cable (3	x 0.25 mm²)		
HOUSING MATERIAL	Nickel-pla	ated brass		
WEIGHT	145 g cab	ole version		
	95 g M12 con	nector version		

TECHNICAL DATA



M12 CONNECTOR

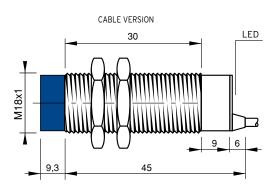


View of quadripole male connector

#### CONFIGURATION

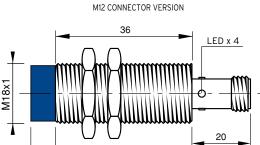
Outputs		PIN nu	imbers	
Outputs	1	2	3	4
(NO or NC)	+		—	NO/NC

#### **DIMENSIONS (mm)**



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





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### 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-18-G1-03	CABLE	yes	short	95B063520
IS-18-G1-S2	M12	yes	short	95B063530
IS-18-G2-03	CABLE	yes	short	95B063540
IS-18-G2-S2	M12	yes	short	95B063550
IS-18-G3-03	CABLE	yes	short	95B063480
IS-18-G3-S2	M12	yes	short	95B063490
IS-18-G4-03	CABLE	yes	short	95B063500
IS-18-G4-S2	M12	yes	short	95B063510
IS-18-H1-03	CABLE	no	short	95B063600
IS-18-H1-S2	M12	no	short	95B063610
IS-18-H2-03	CABLE	no	short	95B063620
IS-18-H2-S2	M12	no	short	95B063630
IS-18-H3-03	CABLE	no	short	95B063560
IS-18-H3-S2	M12	no	short	95B063570
IS-18-H4-03	CABLE	no	short	95B063580
IS-18-H4-S2	M12	no	short	95B063590



**OPERATING DISTANCE (Sn)** 

POWER SUPPLY

OUTPUT CURRENT

SATURATION VOLTAGE

SWITCHING FREQUENCY

SHORT CIRCUIT PROTECTION

OPERATING TEMPERATURE

MECHANICAL PROTECTION

DELAY AT POWER ON

PROTECTION CIRCUIT

REPEATABILITY

CONNECTIONS

WEIGHT

HOUSING MATERIAL

CONSUMPTION

INDICATORS

RIPPLE

HYSTERESIS

# INDUCTIVE SENSORS Ø 18 DOUBLE OPERATING DISTANCE 10÷30 Vdc - 4 WIRES NPN OR PNP OUTPUT

• 8 mm to 14 mm operating distance - shielded, unshielded

UNSHIELDED

14 mm

- Short housing models
- 200mA NPN or PNP
- Output status LED

**TECHNICAL DATA** 

Cable or M12 connector models

SHIELDED

8 mm

10 ÷ 30 Vdc (-15 / +10%)

≤10%

< 10%

200 mA max.

< 10 mA @ 24 Vdc

< 1.2 V (I = 100 mA)

Yellow LED

400 Hz

≤ 75 ms

≤3%

Present (self-resetting)

Against polarity reversal - inductive loads

- 25 ÷ +70 °C

IP67

2 m cable (3 x 0.25 mm<sup>2</sup>)

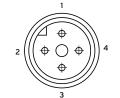
Nickel-plated brass

145 g cable version

95 g M12 connector version

	CONNECTIONS	
NPN	BROWN NO NC BLACK	Ð
NO-NC	BLUE	Θ
PNP		Ð
NO-NC	BLACK BLUE NO NC	Θ

#### M12 CONNECTOR

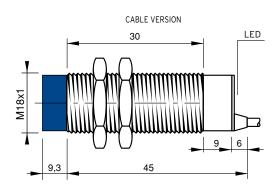


View of quadripole male connector

#### CONFIGURATION

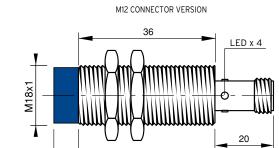
Outputs		PIN nu	imbers	
Outputs	1	2	3	4
(NO + NC)	+	NC	—	NO

#### **DIMENSIONS (mm)**



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

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**IS Series** 





### 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-18-G5-03	2 m CABLE	yes	standard	95B062720
IS-18-G5-S2	M12 CONNECTOR	yes	standard	95B062730
IS-18-G6-03	2 m CABLE	yes	standard	95B062700
IS-18-G6-S2	M12 CONNECTOR	yes	standard	95B062710
IS-18-H5-03	2 m CABLE	no	standard	95B062800
IS-18-H5-S2	M12 CONNECTOR	no	standard	95B062810
IS-18-H6-03	2 m CABLE	no	standard	95B062780
IS-18-H6-S2	M12 CONNECTOR	no	standard	95B062790



# INDUCTIVE SENSORS Ø 18 DOUBLE OPERATING DISTANCE 12÷30 Vdc - 4 WIRES PROGRAMMABLE OUTPUT

• 8 mm to 14 mm operating distance - shielded, unshielded

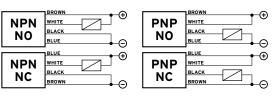
- Programmable outputs: NPN/PNP, NO or NC
- Cable models
- Nickel-plated brass
- Output status LED
- 200 mA max output

#### TECHNICAL DATA

	SHIELDED	UNSHIELDED
OPERATING DISTANCE (Sn)	8 mm	14 mm
POWER SUPPLY	12 ÷ 30 Vdc	(-15/+10%)
RIPPLE	≤1	0%
HYSTERESIS	< 1	0%
OUTPUT	NPN o PNP (m	ay be selected)
CONTACT	NO o NC (ma	y be selected)
OUTPUT CURRENT	200 m	A max.
CONSUMPTION	< 1.2 mA @ 24 Vdc	
SATURATION VOLTAGE	< 1,8 V (I = 100 mA)	
INDICATORS	Yellow LED	
SWITCHING FREQUENCY	400 Hz	
DELAY AT POWER ON	≤ 50 ms	
REPEATABILITY	≤3%	
SHORT CIRCUIT PROTECTION	Present (se	lf-resetting)
PROTECTIONS CIRCUIT	Against polarity reve	ersal - inductive loads
OPERATING TEMPERATURE	- 25 ÷	+70 °C
MECHANICAL PROTECTION	IP	67
CONNECTIONS	2 m cable (4	x 0.25 mm <sup>2</sup> )
HOUSING MATERIAL	Nickel-pla	ated brass
WEIGHT	145 g cab	le version
(1) Device marking 🖾 II 3D IP67 T6X.		

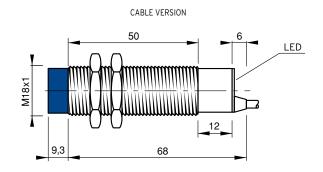
CONNECTIONS

**IS Series** 



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



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-18-E0-03	CABLE	yes	standard	95B063850



# **INDUCTIVE SENSORS** Ø 18 DOUBLE OPERATING DISTANCE 10+30 Vdc - 2 WIRES NO-NC PROGRAMABLE OUTPUT

**IS Series** 

• 8 mm to 14 mm operating distance - shielded, unshielded

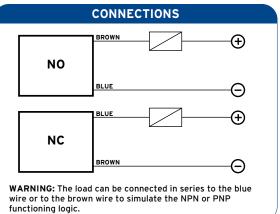
Cable models

• Nickel-plated brass

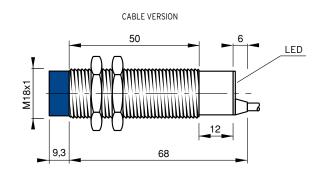


#### **TECHNICAL DATA**

	SHIELDED UN	ISHIELDED	
OPERATING DISTANCE (Sn)	8 mm	14 mm	
POWER SUPPLY	10 ÷ 30 Vdc (-15 /	+10%)	
RIPPLE	≤10%		
HYSTERESIS	< 10%		
OUTPUT CURRENT	100 mA max	κ.	
OUTPUT CURRENT	> 1,6 mA mi	n.	
INRUSH CURRENT	< 1,6 mA		
SATURATION VOLTAGE	< 6,5 V (I = 100 mA)		
INDICATORS	Yellow LED		
SWITCHING FREQUENCY	400 Hz		
DELAY AT POWER ON	≤ 50 ms		
REPEATABILITY	≤3%		
SHORT CIRCUIT PROTECTION	Present (self-rese	etting)	
PROTECTIONS CIRCUIT	Against polarity reversal -	inductive loads	
OPERATING TEMPERATURE	- 25 ÷ +70 °(	2	
MECHANICAL PROTECTION	IP67		
CONNECTIONS	2 m cable (2 x 0.2	5 mm²)	
HOUSING MATERIAL	Nickel-plated brass		
WEIGHT	145 g cable ver	sion	



#### **DIMENSIONS (mm)**



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



CONSTRUCTION	OUTPUT	CONNECTION
A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
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	
	A= shielded standard housing B= shielded short housing C= unshielded standard housing D= unshielded standard housing E= shielded standard housing, double operating distance F= unshielded standard housing, double operating distance G= shielded short housing, double operating distance H= unshielded short housing, double operating distance I= shielded standard metal housing	A= shielded standard housing1 = 10-30 Vdc PNP NOB= shielded short housing2 = 10-30 Vdc PNP NCC= unshielded standard housing3 = 10-30 Vdc NPN NOD= unshielded short housing4 = 10-30 Vdc NPN NOE= shielded standard housing, double operating distance5 = 10-30 Vdc NPN NCF= unshielded standard housing, double operating distance6 = 10-30 Vdc NPN NO-NCG= shielded short housing, double operating distance7 = 24-230 Vac - 2 wires NOH= unshielded short housing, double operating distance8 = 24-230 Vac - 2 wires NCI= shielded standard metal housing9 = 10-30 Vac - 2 wires NO-NC

PRODUCT TABLE				
DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-18-E9-03	CABLE	yes	standard	95B063810



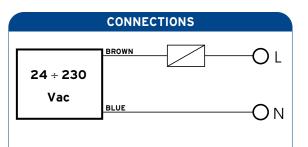
# **INDUCTIVE SENSORS**

# Ø 18

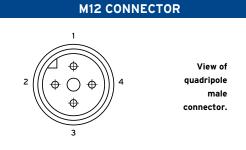
## 24+230 Vac - 2 WIRES NO OR NC OUTPUT

- 5 mm to 8 mm operating distance shielded, unshielded
- Cable or M12 connector models
- Very low consumption < 0,7 mA Inrush current (20ms) 1.5A
- 300mA max output

TECHNICAL DATA						
	SHIELDED UNSHIELDED					
OPERATING DISTANCE (Sn)	5 mm	8 mm				
POWER SUPPLY	24 ÷ 230 Va	c (-15/+10%)				
NET FREQUENCY	50 ÷	60 Hz				
HYSTERESIS	< '	10%				
OUTPUT CURRENT	300 m	iA max.				
OUTPUT CURRENT	20 m	A min.				
INRUSH CURRENT	1,5 A ma	ıx. (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	IF	67				
CONNECTIONS	2 m cable (2	2 x 0.25 mm²)				
HOUSING MATERIAL	Nickel-plated brass					
WEIGHT	145 g cal	ole version				
	95 g M12 co	nnector cable				



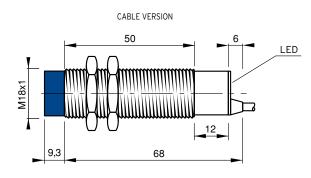
Warning: Output short circuit are not possible. Wrong supply cable connections can damage the sensor. Therefore sensors whose output status is short-circuited will not be replaced under warranty.



#### CONFIGURATION

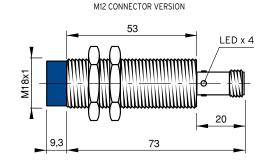
Outputs	PIN numbers				
Outputs	1 2 3 4				
(NO or NC)	L		N		

#### **DIMENSIONS (mm)**



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





# **IS Series**





### 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	
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	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-18-A7-03	2 m CABLE	yes	standard	95B062860
IS-18-A7-S2	M12 CONNECTOR	yes	standard	95B062870
IS-18-A8-03	2 m CABLE	yes	standard	95B062880
IS-18-A8-S2	M12 CONNECTOR	yes	standard	95B062890
IS-18-C7-03	2 m CABLE	no	standard	95B062980
IS-18-C7-S2	M12 CONNECTOR	no	standard	95B062990
IS-18-C8-03	2 m CABLE	no	standard	95B063000
IS-18-C8-S2	M12 CONNECTOR	no	standard	95B063010



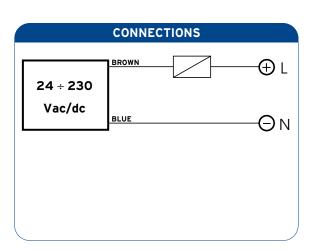
# INDUCTIVE SENSORS Ø 18 DOUBLE OPERATING DISTANCE 24÷230 Vac/dc - 2 WIRES NO OR NC OUTPUT

• 8 mm to 14 mm operating distance - shielded, unshielded

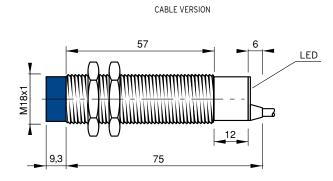
- Short circuit protection AC/DC
- Cable models
- Inrush current (20ms) 2.5A
- 350mA max output

#### TECHNICAL DATA

	SHIELDED	UNSHIELDED	
OPERATING DISTANCE (Sn)	8 mm	14 mm	
POWER SUPPLY	24 ÷ 230 Vac /	/dc (-15/+10%)	
NET FREQUENCY	50 ÷	60 Hz	
HYSTERESIS	<`	10%	
OUTPUT CURRENT	350 m	IA max.	
OUTPUT CURRENT	4 m/	A min.	
INRUSH CURRENT	2,5 A ma	ıx. (20 ms)	
RESIDUAL CURRENT	< 1,	5 mA	
SATURATION VOLTAGE	< 6 V (l=100 mA)		
INDICATORS	Yellow LED		
SWITCHING FREQUENCY	12 Hz		
DELAY AT POWER ON	≤ 30	)0 ms	
SHORT CIRCUIT PROTECTION	Present (mar	nual resetting)	
REPEATABILITY	≤	3%	
OPERATING TEMPERATURE	-25 ÷	+70 °C	
MECHANICAL PROTECTION	IP	67	
CONNECTIONS	2 m cable (2	2 x 0.25 mm²)	
HOUSING MATERIAL	Nickel-plated brass		
WEIGHT	145 g cał	ole version	



#### DIMENSIONS (mm)



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

# **IS Series**





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-18-E7-03	CABLE	yes	standard	95B063900



# **INDUCTIVE SENSORS**

# Ø 18

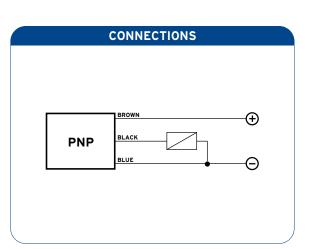
# 10÷30 Vdc - 3 WIRES PNP OUTPUT

- 5 mm to 8 mm operating distance shielded, unshielded
- Stainless steel housing
  Cable or M12 connector models
- Output status LED





#### **TECHNICAL DATA** SHIELDED UNSHIELDED OPERATING DISTANCE (Sn) 8 mm 5 mm POWER SUPPLY 10 ÷ 30 Vdc (-15 / +10%) RIPPLE $\leq 10\%$ HYSTERESIS < 15% OUTPUT CURRENT 200 mA max. RESIDUAL CURRENT < 10 mA SATURATION VOLTAGE < 1.5 V (I = 100 mA) INDICATORS Yellow LED 1000 Hz SWITCHING FREQUENCY 500 Hz REPEATABILITY $\leq 1\%$ Present (self-resetting) SHORT CIRCUIT PROTECTION OPERATING TEMPERATURE - 25 ÷ +70 °C MECHANICAL PROTECTION IP67 ACTIVE FACE MATERIAL Stainless steel HOUSING MATERIAL Stainless steel WEIGHT 95 g cable version



M12 CONNECTOR



View of quadripole male connector.

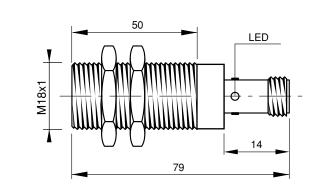
#### CONFIGURATION

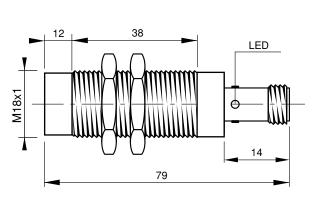
Outputs	PIN numbers				
Oulpuis	1	2	3	4	
NO	+		—	NO	

#### DIMENSIONS (mm)

SHIELDED

UNSHIELDED







CONSTRUCTION	OUTPUT	CONNECTION
A= shielded standard housing	1 = 10-30 Vdc PNP NO	02 = 500 mm CABLE
B= shielded short housing	2 = 10-30 Vdc PNP NC	03 = 2 m CABLE
C= unshielded standard housing	3 = 10-30 Vdc NPN NO	S1 = M8 CONN.
D= unshielded short housing	4 = 10-30 Vdc NPN NC	S2 = M12 CONN.
E= shielded standard housing, double operating distance	5 = 10-30 Vdc PNP NO-NC	
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	
	A= shielded standard housing B= shielded short housing C= unshielded standard housing D= unshielded short housing E= shielded standard housing, double operating distance F= unshielded standard housing, double operating distance G= shielded short housing, double operating distance H= unshielded short housing, double operating distance I= shielded standard metal housing	A= shielded standard housing1 = 10-30 Vdc PNP NOB= shielded short housing2 = 10-30 Vdc PNP NCC= unshielded standard housing3 = 10-30 Vdc NPN NOD= unshielded short housing4 = 10-30 Vdc NPN NOE= shielded standard housing, double operating distance5 = 10-30 Vdc NPN NCF= unshielded standard housing, double operating distance6 = 10-30 Vdc NPN NO-NCG= shielded short housing, double operating distance7 = 24-230 Vac - 2 wires NOH= unshielded short housing, double operating distance8 = 24-230 Vac - 2 wires NCI= shielded standard metal housing9 = 10-30 Vac - 2 wires NO-NC

PRODUCT TABLE				
DESCRIPTION	CONNECTION	SHIELDED	HOUSING	ORDER CODE
IS-18-L5-S2	M12	no	standard	95B063880