

Cylindrical S18

INDUCTIVE SENSORS M18 x 1

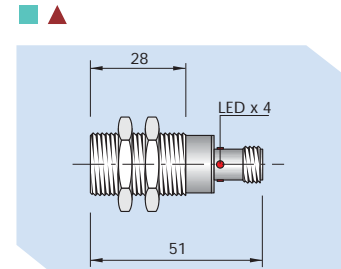
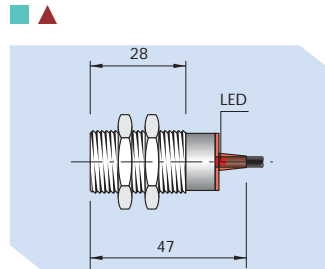


CYLINDRICAL SHORT HOUSING S SERIES
3/4 WIRES D.C.
CONFORMING TO EN 50044
VERSION-C

- STANDARD SWITCHING DISTANCE
- ★ EXTENDED SWITCHING DISTANCE
- ▲ EMBEDDABLE (FLUSH MOUNTING)
- NOT EMBEDDABLE (NON FLUSH MOUNTING)

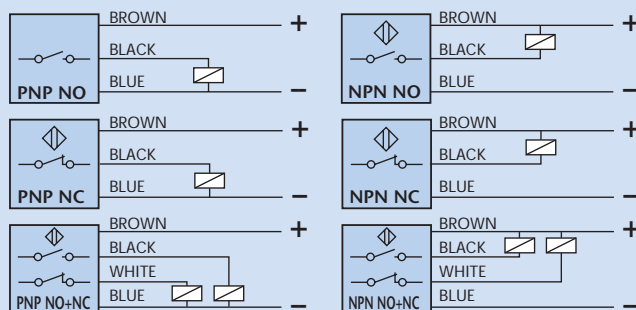
TECHNICAL CHARACTERISTICS

Dimensions mm



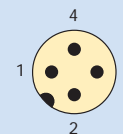
AMPLIFIED 3 WIRES D.C.	NPN	NO	S118 - C5 NPN NO S	S118 - C5 NPN NO H S
		NC	S118 - C5 NPN NC S	S118 - C5 NPN NC H S
	PNP	NO	S118 - C5 PNP NO S	S118 - C5 PNP NO H S
		NC	S118 - C5 PNP NC S	S118 - C5 PNP NC H S
AMPLIFIED 4 WIRES D.C. ANTIPHASE	NPN	NO+NC		
	PNP	NO+NC		
Switching distance (Sn)	mm		5	5
Continuous voltage (residual ripple ≤10%)	V			10 ÷ 30
Hysteresis (%Sn)	mm			< 10%
Switching frequency	Hz			1000
Repeatability	% of Sn			≤ 3
Max output current	mA			200
Absorption at 24Vdc	mA			< 15
Voltage drop (sensor ON)	V			< 1.8
Short circuit protection				Incorporated
Led				Incorporated
Temperature limits	°C			- 25 ÷ + 70
IP rating	IP		67	Depending on connector
Housing				Nickelled brass
Cable PVC	2m		3 x 0.35 mm ²	
Connector plug				H

WIRING DIAGRAMS



N.B.: Upon request cable for sensors with different lengths
3.5 - 5 - 7.5 - 10 metres is available.

CONNECTION WITH H PLUGS FOR THE CONNECTORS SEE PAGE 85



VIEW OF MALE CONNECTOR H

3 WIRES

- 1 = Brown / +
- 3 = Blue / -
- 4 = Black / output NPN-PNP / NO
- 2 = Black / output NPN-PNP / NC

4 WIRES

- 1 = Brown / +
- 3 = Blue / -
- 4 = Black / output NPN-PNP / NO
- 2 = White / output NPN-PNP / NC

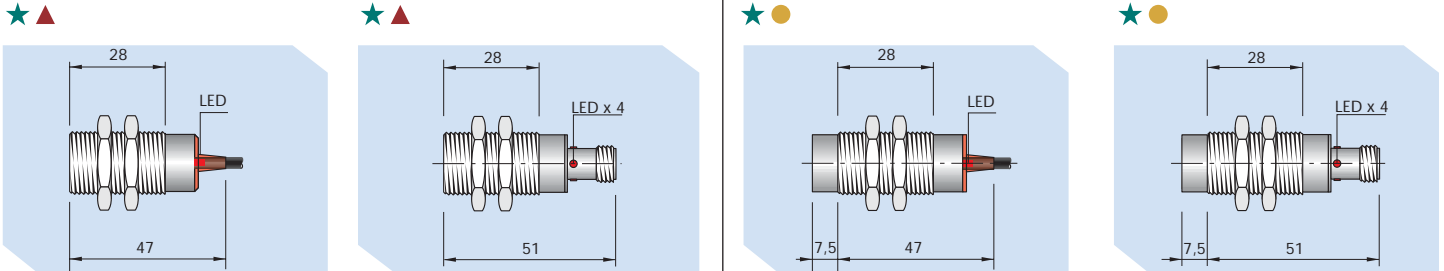
On the 4 wires version with plug H the connector types 14 - 15 must be ordered with 4 wires.

Cylindrical SI18

INDUCTIVE SENSORS M18 x 1



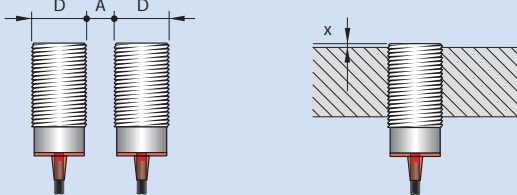
CYLINDRICAL SHORT HOUSING S SERIES
 3/4 WIRES D.C.
 CONFORMING TO EN 50044
 VERSION-C



SI18 - DC8 NPN NO S	SI18 - DC8 NPN NO H S		
SI18 - DC8 NPN NC S	SI18 - DC8 NPN NC H S		
SI18 - DC8 PNP NO S	SI18 - DC8 PNP NO H S		
SI18 - DC8 PNP NC S	SI18 - DC8 PNP NC H S		
SI18 - DC8 NPN NO + NC S	SI18 - DC8 NPN NO + NC H S	SI18 - DCE16 NPN NO + NC S	SI18 - DCE16 NPN NO + NC H S
SI18 - DC8 PNP NO + NC S	SI18 - DC8 PNP NO + NC H S	SI18 - DCE16 PNP NO + NC S	SI18 - DCE16 PNP NO + NC H S
8	8	16	16
10 ÷ 30			
< 10%			
400		200	
≤ 3			
200			
< 15			
< 1.8			
Incorporated			
Incorporated			
- 25 ÷ + 70			
67	Depending on connector	67	Depending on connector
Stainless steel			
3 x 0.35 mm ² - 4 x 0.25 mm ²		4 x 0.25 mm ²	
H		H	

INSTRUCTIONS FOR CORRECT INSTALLATION

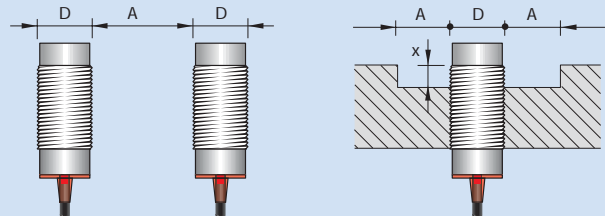
EMBEDDABLE



Side by side mounting
 SI18-C5 $A \geq D/2$
 SI18-DC8 $A \geq D/2$

Flush mounting
 SI18-C5 $X \geq 0$
 SI18-DC8 $X \geq 1.5\text{mm}$

NOT EMBEDDABLE



Side by side mounting
 SI18-DCE16 $A \geq 2D$

Non flush mounting
 SI18-DCE16 $A \geq 2D$ $X \geq 8\text{mm}$

Cylindrical SI18

INDUCTIVE SENSORS M18 x 1

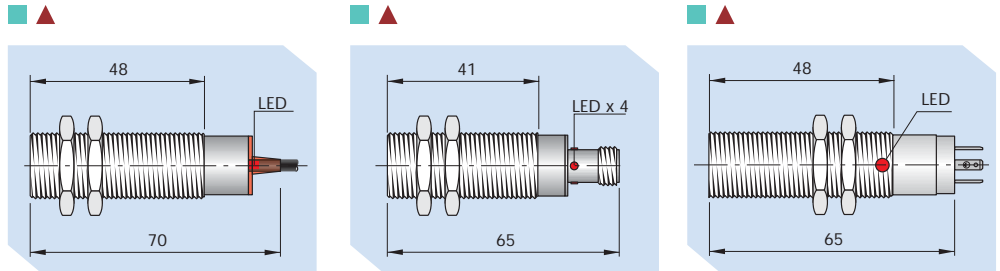


CYLINDRICAL LONG HOUSING
3/4 WIRES D.C.
CONFORMING TO EN 50044
VERSION-C

- STANDARD SWITCHING DISTANCE
- ▲ EMBEDDABLE (FLUSH MOUNTING)
- NOT EMBEDDABLE (NON FLUSH MOUNTING)

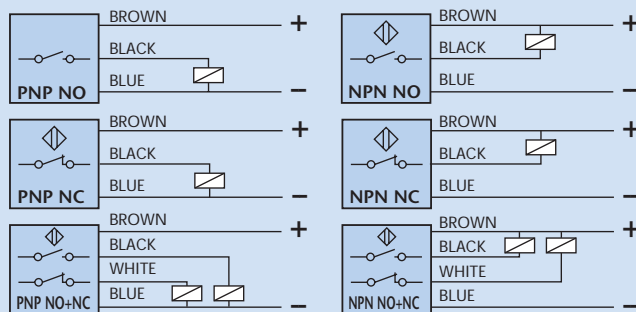
TECHNICAL CHARACTERISTICS

Dimensions mm



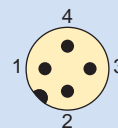
AMPLIFIED 3 WIRES D.C.	NPN	NO	SI18 - C5 NPN NO	SI18 - C5 NPN NO H	SI18 - C5 NPN NO K
		NC	SI18 - C5 NPN NC	SI18 - C5 NPN NC H	SI18 - C5 NPN NC K
	PNP	NO	SI18 - C5 PNP NO	SI18 - C5 PNP NO H	SI18 - C5 PNP NO K
		NC	SI18 - C5 PNP NC	SI18 - C5 PNP NC H	SI18 - C5 PNP NC K
AMPLIFIED 4 WIRES D.C. ANTIPHASE	NPN	NO+NC	SI18 - C5 NPN NO + NC	SI18 - C5 NPN NO + NC H	SI18 - C5 NPN NO + NC K
	PNP	NO+NC	SI18 - C5 PNP NO + NC	SI18 - C5 PNP NO + NC H	SI18 - C5 PNP NO + NC K
Switching distance (Sn)	mm	5	5	5	
Continuous voltage (residual ripple ≤10%)	V	10 ÷ 30			
Hysteresis (%Sn)	mm	< 10%			
Switching frequency	Hz	1000			
Repeatability	% of Sn	≤ 3			
Max output current	mA	200			
Absorption at 24Vdc	mA	< 15			
Voltage drop (sensor ON)	V	< 1.8			
Short circuit protection		Incorporated			
Led		Incorporated			
Temperature limits	°C	- 25 ÷ + 70			
IP rating	IP	67	Depending on connector	65	
Housing		Nickelled brass			
Cable PVC	2m	3 x 0.35 mm ² - 4 x 0.25 mm ²			
Connector plug			H	K (type 11)	

WIRING DIAGRAMS



N.B.: Upon request cable for sensors with different lengths
3.5 - 5 - 7.5 - 10 metres is available.

CONNECTION WITH H - K PLUGS FOR THE CONNECTORS SEE PAGE 85



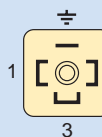
VIEW OF MALE CONNECTOR H

3 WIRES

- 1 = Brown / +
- 3 = Blue / -
- 4 = Black / output NPN-PNP / NO
- 2 = Black / output NPN-PNP / NC

4 WIRES

- 1 = Brown / +
- 3 = Blue / -
- 4 = Black / output NPN-PNP / NO
- 2 = White / output NPN-PNP / NC



VIEW OF MALE CONNECTOR K

3 WIRES

- 1 = Blue / -
- 2 = Brown / +
- 4/≠ = Black / output NPN-PNP / NO-NC

4 WIRES

- 1 = Blue / -
- 2 = Brown / +
- 4/≠ = Black / output NPN-PNP / NO
- 3 = White / output NPN-PNP / NC

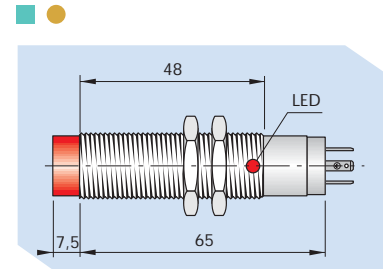
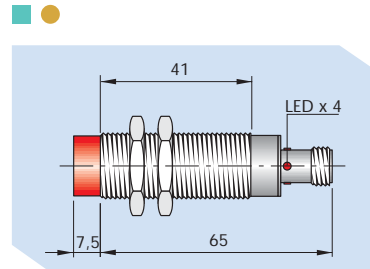
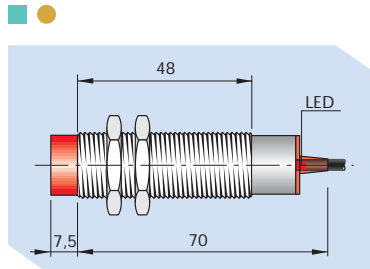
On the 3 wires version with plug K the connector K is supplied with 3 poles.
On the 4 wires version with plug H the connectors types 14 - 15 must be ordered with 4 wires.

Cylindrical SI18

INDUCTIVE SENSORS M18 x 1



CYLINDRICAL LONG HOUSING
3/4 WIRES D.C.
CONFORMING TO EN 50044
VERSION-C



SI18 - CE8 NPN NO

SI18 - CE8 NPN NO H

SI18 - CE8 NPN NO K

SI18 - CE8 NPN NC

SI18 - CE8 NPN NC H

SI18 - CE8 NPN NC K

SI18 - CE8 PNP NO

SI18 - CE8 PNP NO H

SI18 - CE8 PNP NO K

SI18 - CE8 PNP NC

SI18 - CE8 PNP NC H

SI18 - CE8 PNP NC K

SI18 - CE8 NPN NO + NC

SI18 - CE8 NPN NO + NC H

SI18 - CE8 NPN NO + NC K

SI18 - CE8 PNP NO + NC

SI18 - CE8 PNP NO + NC H

SI18 - CE8 PNP NO + NC K

8

8

8

10 ÷ 30

< 10%

1000

≤ 3

200

< 15

< 1.8

Incorporated

Incorporated

- 25 ÷ + 70

67

Depending on connector

65

Nickelled brass

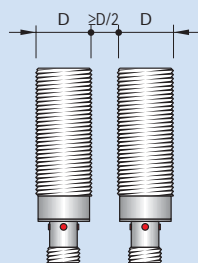
3 x 0.35 mm² - 4 x 0.25 mm²

H

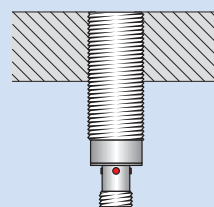
K (type 11)

INSTRUCTIONS FOR CORRECT INSTALLATION

EMBEDDABLE

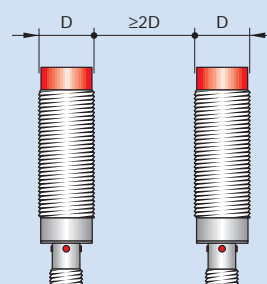


Side by side mounting

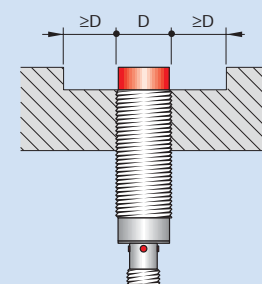


Flush mounting

NOT EMBEDDABLE



Side by side mounting



Non flush mounting

Cylindrical SI18

INDUCTIVE SENSORS M18 x 1



CYLINDRICAL LONG HOUSING

2 WIRES D.C.

CONFORMING TO EN 50040 - EN 50044

VERSION-B

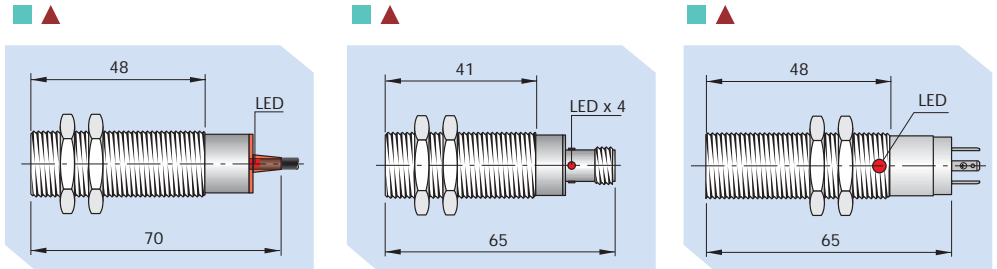
■ STANDARD SWITCHING DISTANCE

▲ EMBEDDABLE (FLUSH MOUNTING)

● NOT EMBEDDABLE (NON FLUSH MOUNTING)

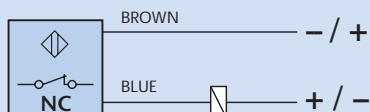
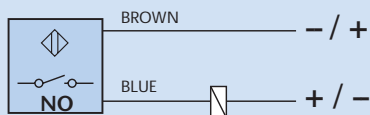
TECHNICAL CHARACTERISTICS

Dimensions mm



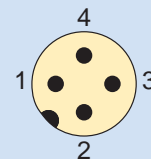
AMPLIFIED	NO	SI18 - B5 NO	SI18 - B5 NO H	SI18 - B5 NO K
2 WIRES D.C.	NC	SI18 - B5 NC	SI18 - B5 NC H	SI18 - B5 NC K
Switching distance (Sn)	mm	5	5	5
Continuous voltage (residual ripple ≤10%)	V	10 ÷ 55		
Hysteresis (%Sn)	mm	< 10%		
Switching frequency	Hz	1000		
Repeatability	% of Sn	≤ 3		
Max output current	mA	100		
Min. output current	mA	1.5		
Residual current	mA	< 0.6		
Voltage drop (sensor ON)	V	< 6.5		
Short circuit protection		Incorporated		
Led		Incorporated		
Temperature limits	°C	- 25 ÷ + 70		
IP rating	IP	67	Depending on connector	65
Housing		Nickelled brass		
Cable PVC	2m	2 x 0.50 mm ²		
Connector plug			H	K (type 11)

WIRING DIAGRAMS (2 WIRES NON POLARIZED)

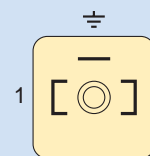


N.B.: Upon request cable for sensors with different lengths
3.5 - 5 - 7.5 - 10 metres is available.

CONNECTION WITH H - K PLUGS FOR THE CONNECTORS SEE PAGE 85



VIEW OF MALE CONNECTOR **H**
3 / 4 = Function NO (Black-blue)*
1 / 2 = Function NC (White-brown)*
(Non polarized)
* The wire colour are referred to the connector with cable only.



VIEW OF MALE CONNECTOR **K**
1 / 2 = Function NO
1 / 2 = Function NC
(Non polarized)

Cylindrical SI18

INDUCTIVE SENSORS M18 x 1

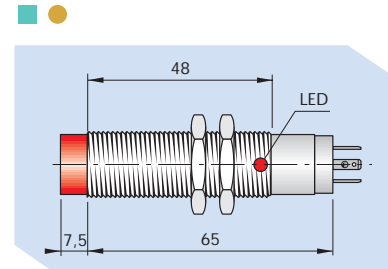
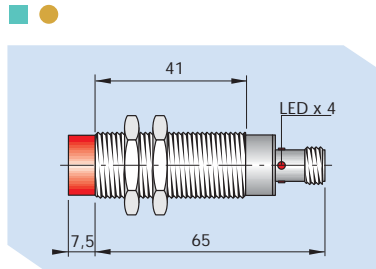
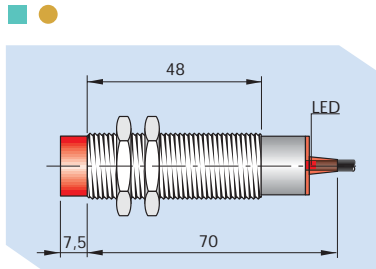


CYLINDRICAL LONG HOUSING

2 WIRES D.C.

CONFORMING TO EN 50040 - EN 50044

VERSION-B



SI18 - BE8 NO

SI18 - BE8 NO H

SI18 - BE8 NO K

SI18 - BE8 NC

SI18 - BE8 NC H

SI18 - BE8 NC K

8

8

8

10 ÷ 55

< 10%

1000

≤ 3

100

1.5

< 0.6

< 6.5

Incorporated

Incorporated

- 25 ÷ + 70

67

Depending on connector

65

Nickelled brass

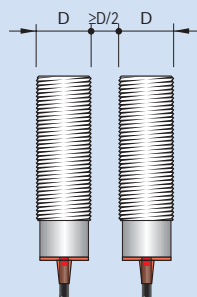
2 x 0.50 mm²

H

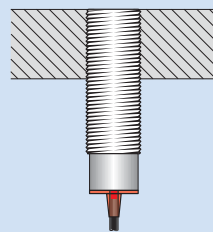
K (type 11)

INSTRUCTIONS FOR CORRECT INSTALLATION

EMBEDDABLE

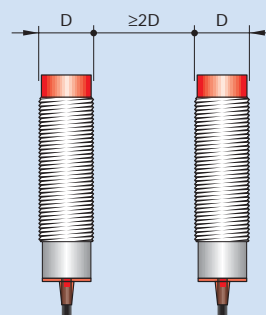


Side by side mounting

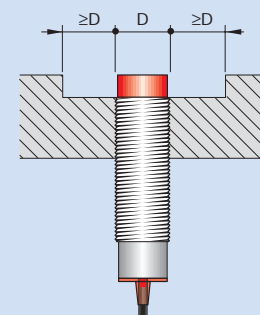


Flush mounting

NOT EMBEDDABLE



Side by side mounting



Non flush mounting

Cylindrical SI18

INDUCTIVE SENSORS M18 x 1



CYLINDRICAL LONG HOUSING

2 WIRES A.C.

CONFORMING TO EN 50036 - EN 50044

VERSION-A

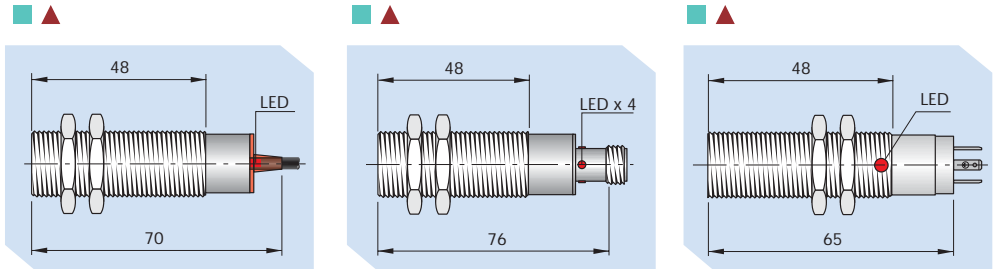
■ STANDARD SWITCHING DISTANCE

▲ EMBEDDABLE (FLUSH MOUNTING)

● NOT EMBEDDABLE (NON FLUSH MOUNTING)

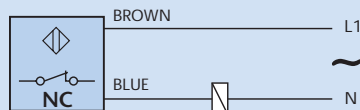
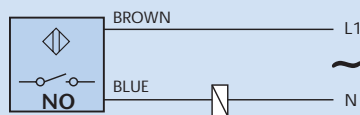
TECHNICAL CHARACTERISTICS

Dimensions mm



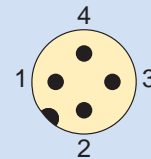
	NO	SI18 - A5 NO	SI18 - A5 NO H	SI18 - A5 NO K
		SI18 - A5 NC	SI18 - A5 NC H	SI18 - A5 NC K
AMPLIFIED	NO			
2 WIRES A.C.	NC			
Switching distance (Sn)	mm	5	5	5
voltage 50÷ 60 Hz	V	20 ÷ 250		
Hysteresis (%Sn)	mm	< 10%		
Switching frequency	Hz	12		
Repeatability	% of Sn	≤ 3		
Max output current	mA	300		
Min. output current	mA	5		
Max. peak current for 20ms	A	1.5		
Residual current	mA	< 1		
Voltage drop	V	< 6		
Led		Incorporated		
Temperature limits	°C	- 25 ÷ + 70		
IP rating	IP	67	Depending on connector	65
Housing		Nickelled brass		
Cable PVC	2m	2 x 0.50 mm ²		
Connector plug			H	K (type 11)

WIRING DIAGRAMS



N.B.: Upon request cable for sensors with different lengths
3.5 - 5 - 7.5 - 10 metres is available.

CONNECTION WITH H - K PLUGS FOR THE CONNECTORS SEE PAGE 85

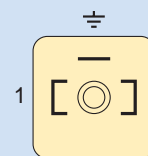


VIEW OF MALE CONNECTOR H

3 / 4 = Function NO (Black-blue)*

1 / 2 = Function NC (White-brown)*

* The wire colour are referred to the connector with cable only.



VIEW OF MALE CONNECTOR K

1 / 2 = Function NO

1 / 2 = Function NC

Cylindrical SI18

INDUCTIVE SENSORS M18 x 1

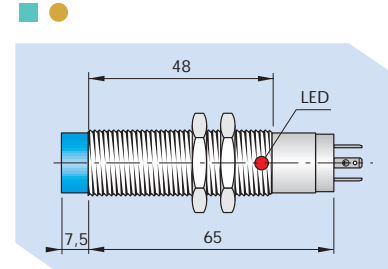
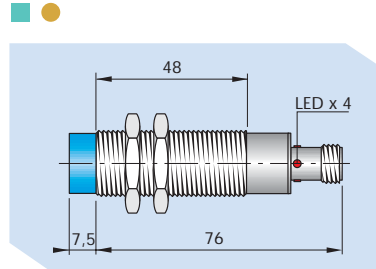
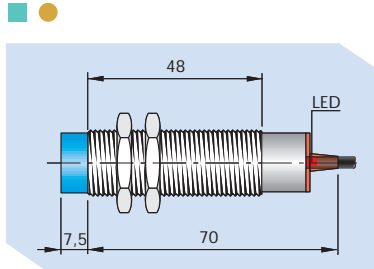


CYLINDRICAL LONG HOUSING

2 WIRES A.C.

CONFORMING TO EN 50036 - EN 50044

VERSION-A



SI18 - AE8 NO

SI18 - AE8 NO H

SI18 - AE8 NO K

SI18 - AE8 NC

SI18 - AE8 NC H

SI18 - AE8 NC K

8

8

8

20 ÷ 250

< 10%

12

≤ 3

300

5

1.5

< 1

< 6

Incorporated

- 25 ÷ + 70

67

Depending on connector

65

Nickelled brass

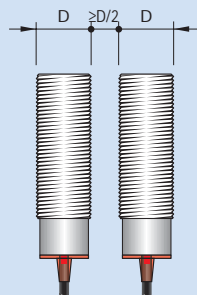
2 x 0.50 mm²

H

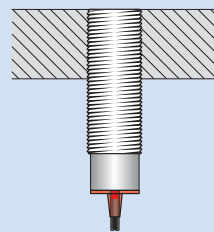
K (type 11)

INSTRUCTIONS FOR CORRECT INSTALLATION

EMBEDDABLE

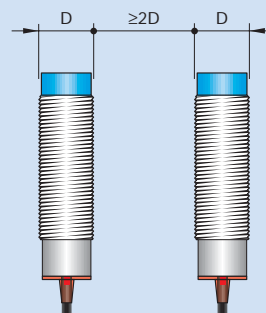


Side by side mounting

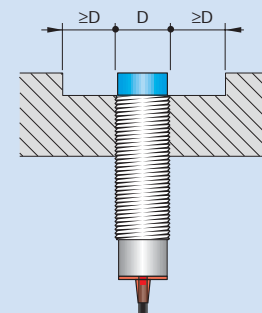


Flush mounting

NOT EMBEDDABLE



Side by side mounting



Non flush mounting