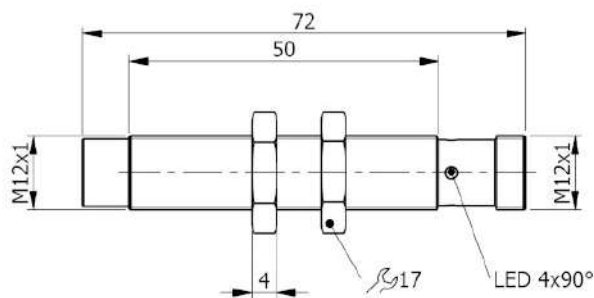


Part number: **I12000078** Model: **SI12-CE4 NPN NC H**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:	Direct current
Working voltage: [V]	10 ÷ 30
Current consumption: [mA]	< 15 mA @ 24Vdc
Protection class:	III
Reverse polarity protection:	Presente

Outputs

Electrical design:	NPN
Function:	NC
Max voltage drop: [V]	< 1.8
Max output current: [mA]	200
Max switching frequency: [Hz]	1000
Short circuit protection:	Present
Overload protection:	Present

Detection zone

Switching distance-Sn: [mm]	4
Real sensing distance-Sr: [mm]	4 ±10%
Operative distance-So: [mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:	Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis: [%Sr]	< 10
Switching point drift: [%Sr]	-10 ÷ +10
Repeatability: [%Sn]	< 3

Environmental conditions

Temperature limits: [°C]	-25 ÷ +85
IP rating:	IP65-IP66-IP67 (depending on connector)

Display and control elements

Display:	Output switching status - 4 x 90° LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=74.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 40

Electrical connection

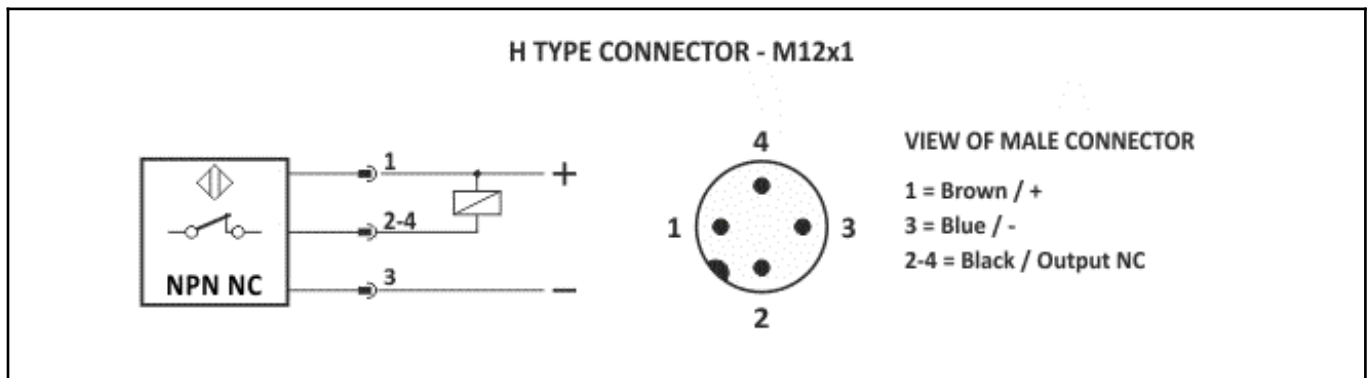
Connector:	H type - M12X1 - Gold plated contacts
------------	---------------------------------------

Compliance to Standards / Directives

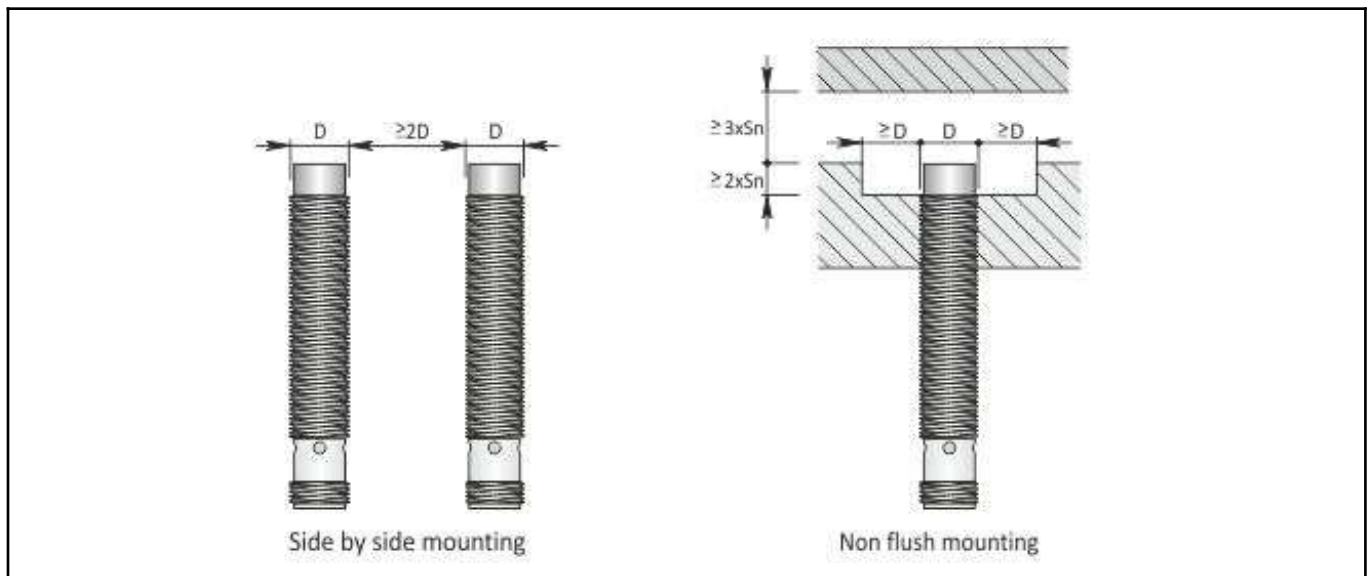
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

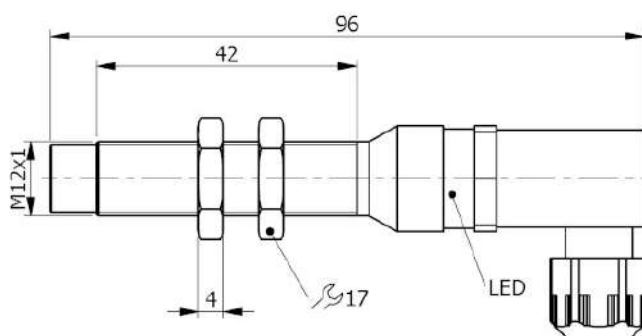
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000081** Model: **SI12-CE4 NPN NC K**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 55

Electrical connection

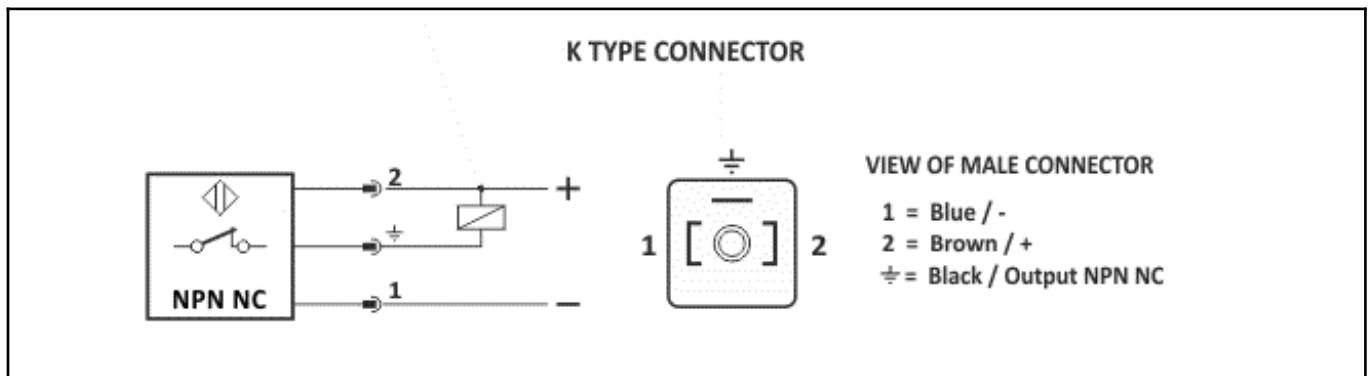
Connector:	K Type - 3 poles - EN 17301-803
------------	---------------------------------

Compliance to Standards / Directives

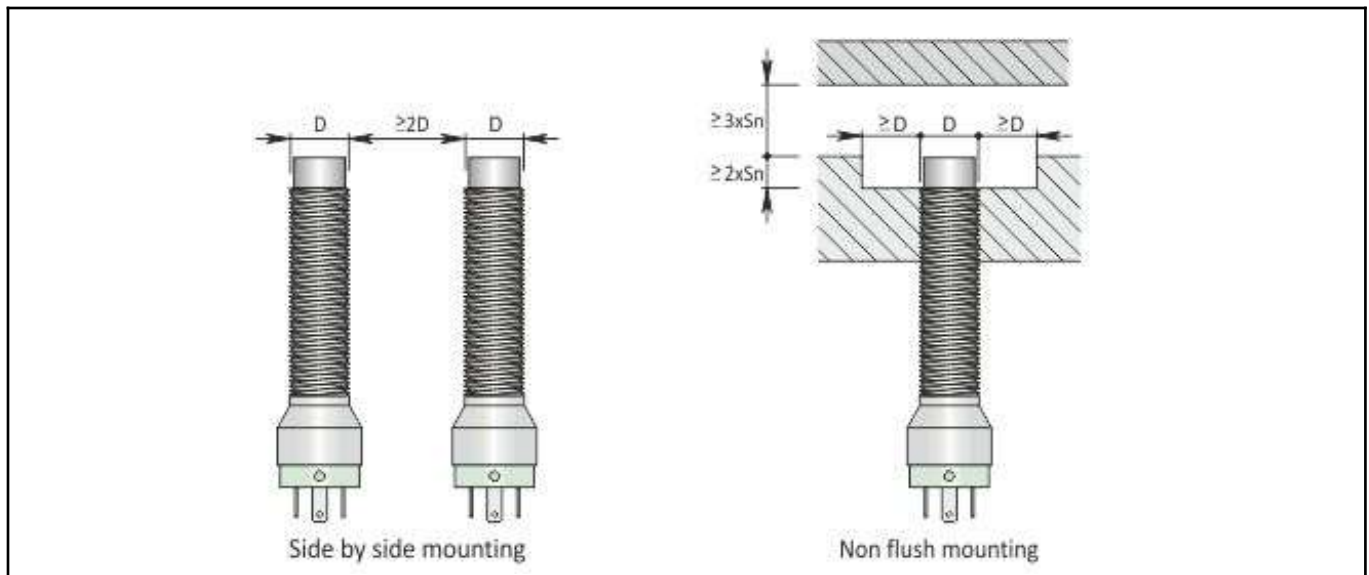
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

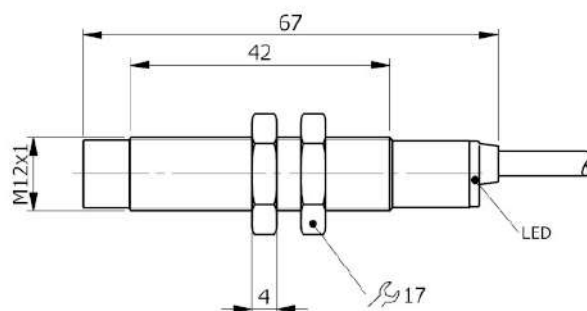
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000243** Model: **SI12-CE4 NPN NC LC10**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 220

Electrical connection

Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
--------	---

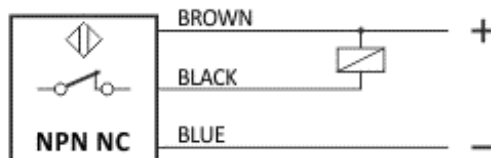
Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

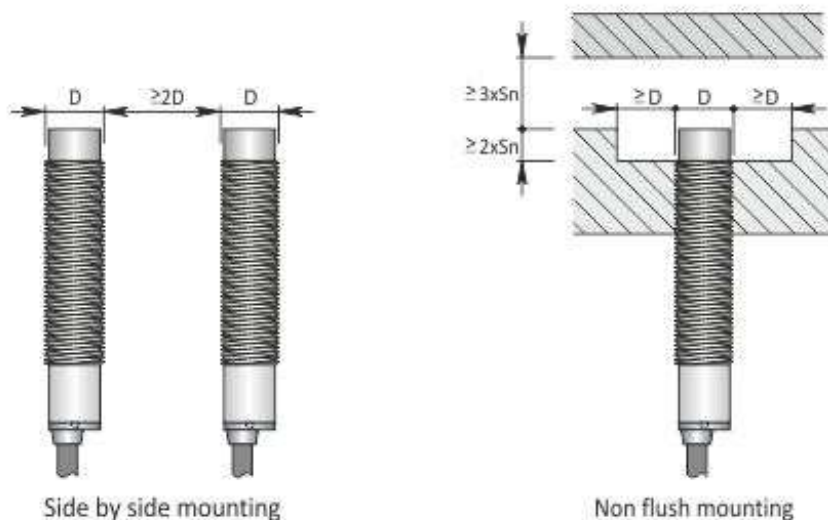
2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

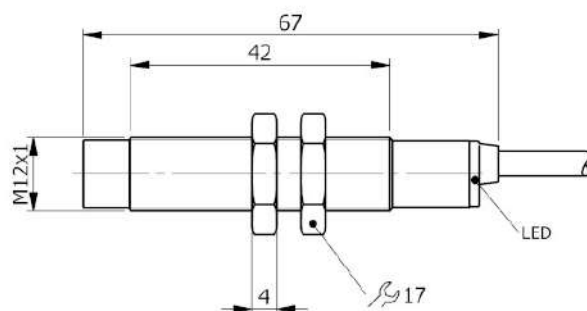
3 WIRES CABLE



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000241** Model: **SI12-CE4 NPN NC LC5**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 150

Electrical connection

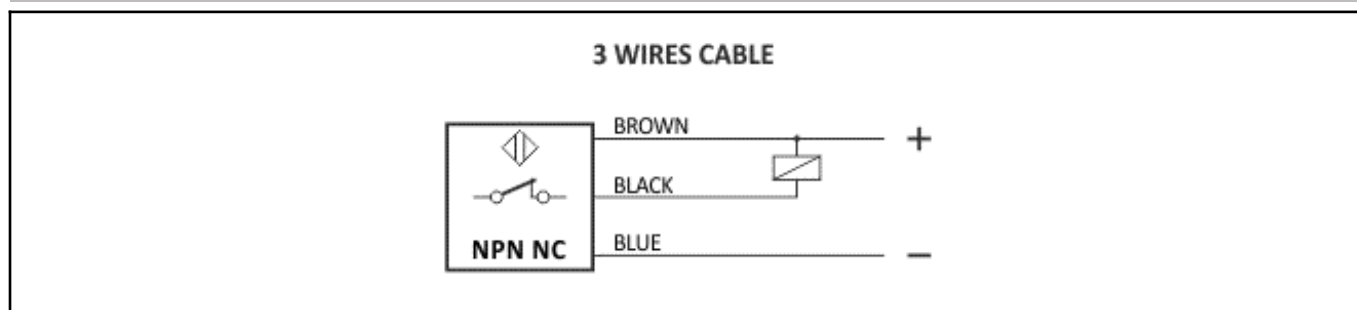
Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

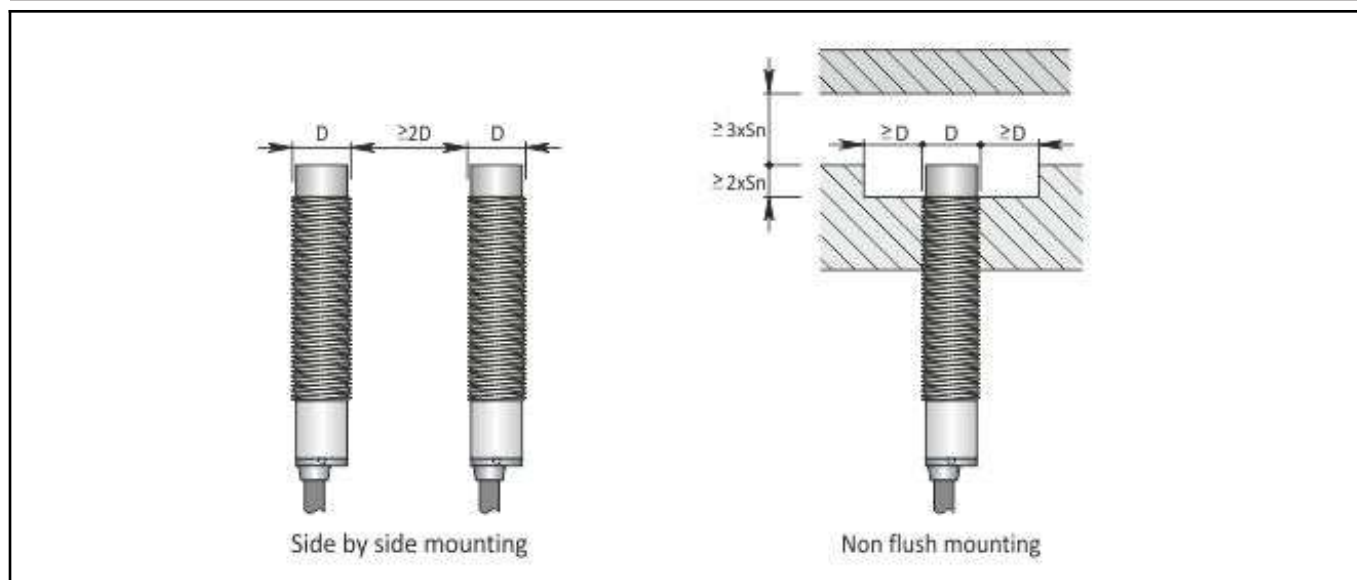
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

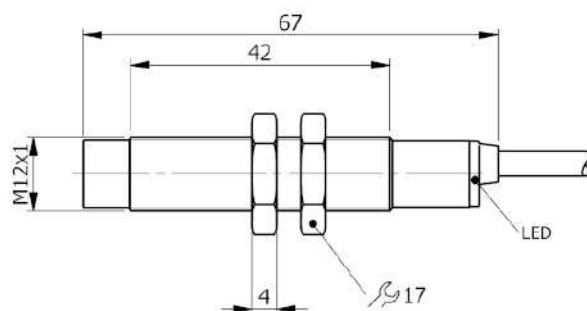
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000085** Model: **SI12-CE4 NPN NO**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions: [mm]	M12x1 - L=67.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth: [g]	85

Electrical connection

Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

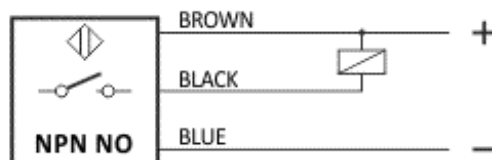
Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

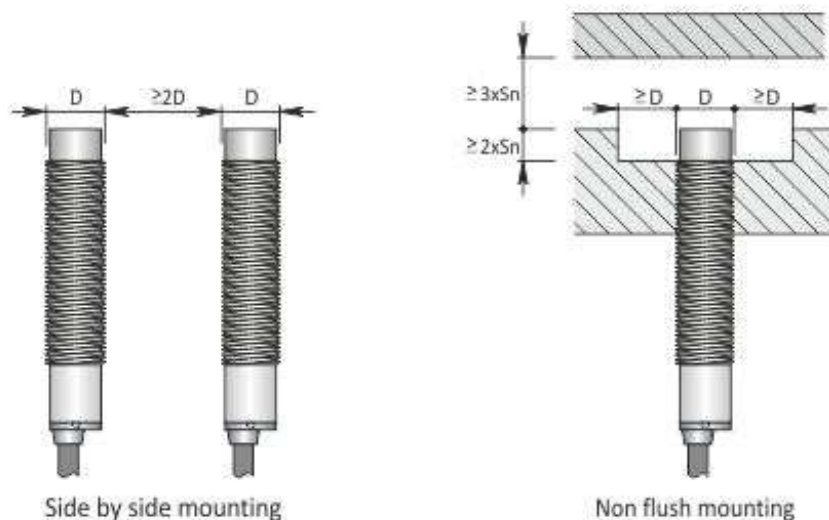
2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

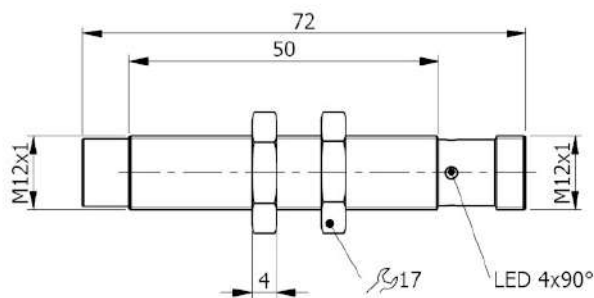
3 WIRES CABLE



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000086** Model: **SI12-CE4 NPN NO H**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67 (depending on connector)

Display and control elements

Display:	Output switching status - 4 x 90° LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=74.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 40

Electrical connection

Connector:	H type - M12X1 - Gold plated contacts
------------	---------------------------------------

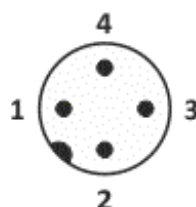
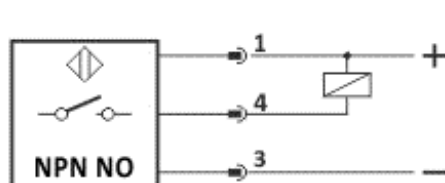
Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

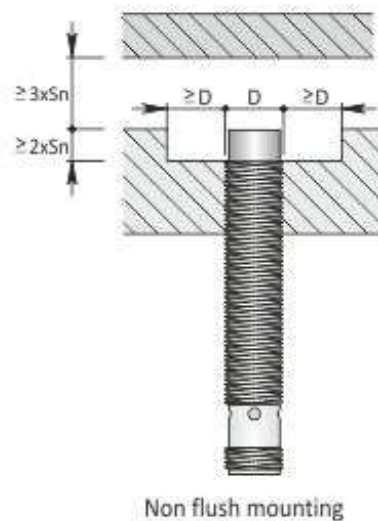
H TYPE CONNECTOR - M12x1



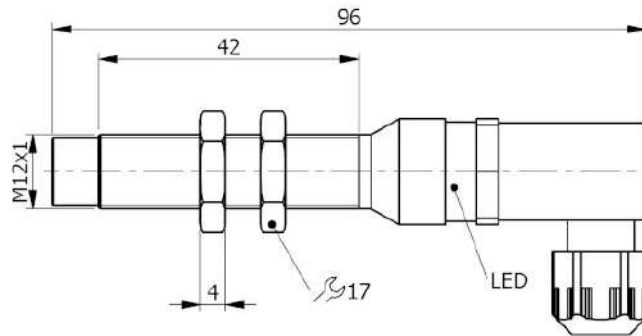
VIEW OF MALE CONNECTOR

1 = Brown / +
3 = Blue / -
4 = Black / Output NO

INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000089** Model: **SI12-CE4 NPN NO K**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 55

Electrical connection

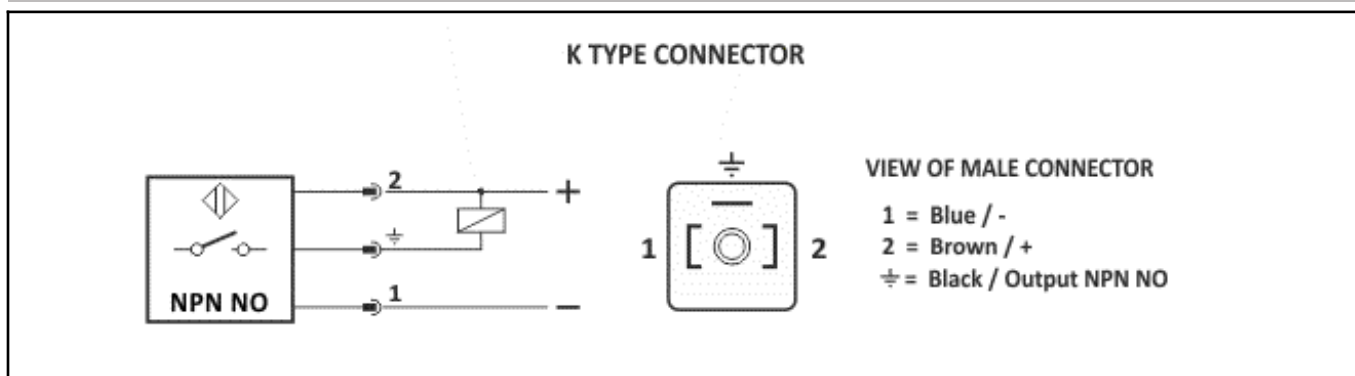
Connector:	K Type - 3 poles - EN 17301-803
------------	---------------------------------

Compliance to Standards / Directives

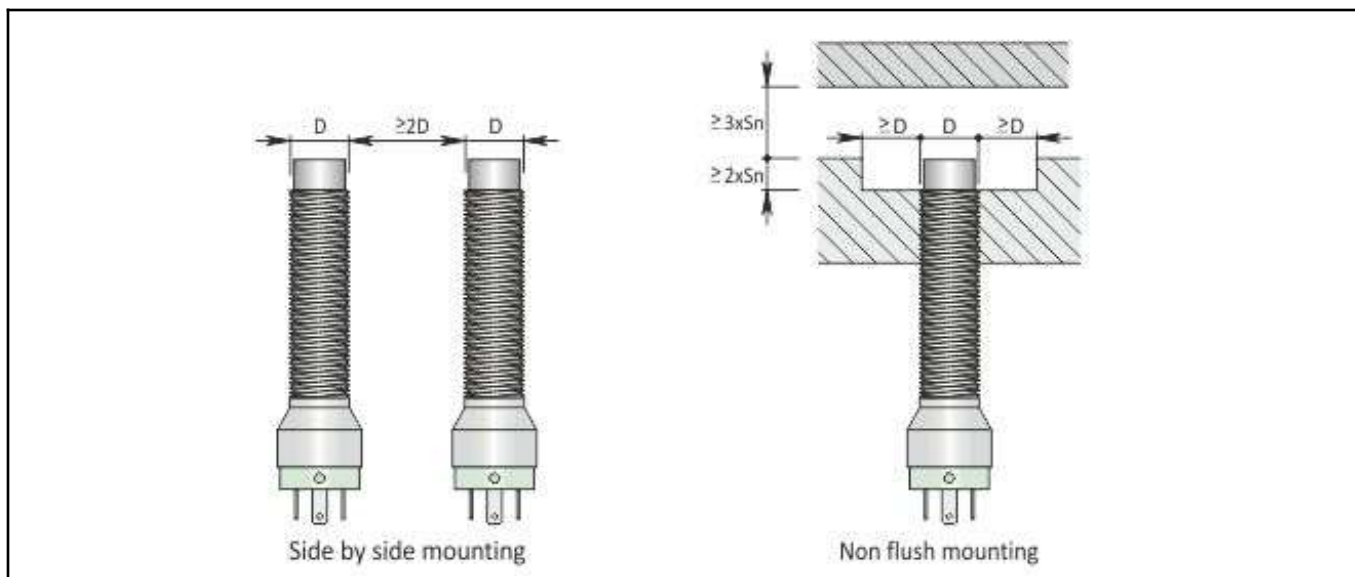
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

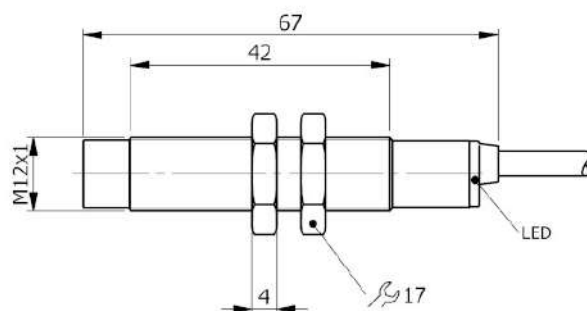
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000251** Model: **SI12-CE4 NPN NO LC10**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 220

Electrical connection

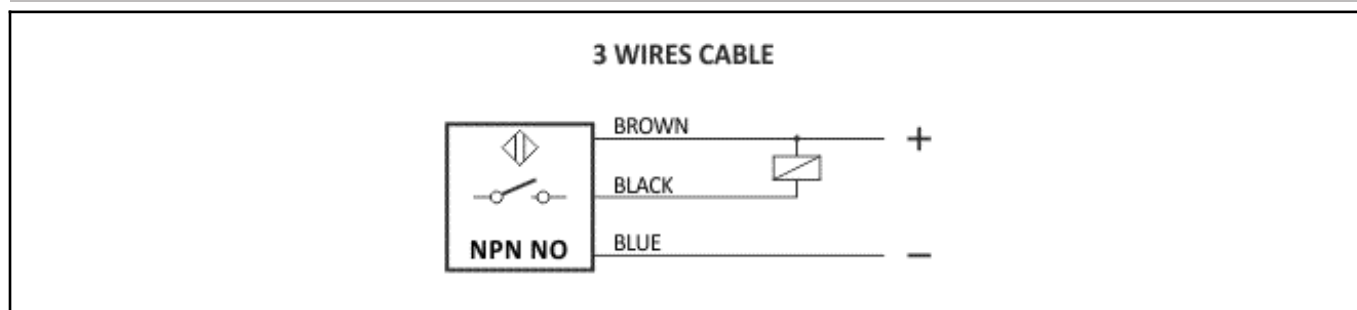
Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
--------	---

Compliance to Standards / Directives

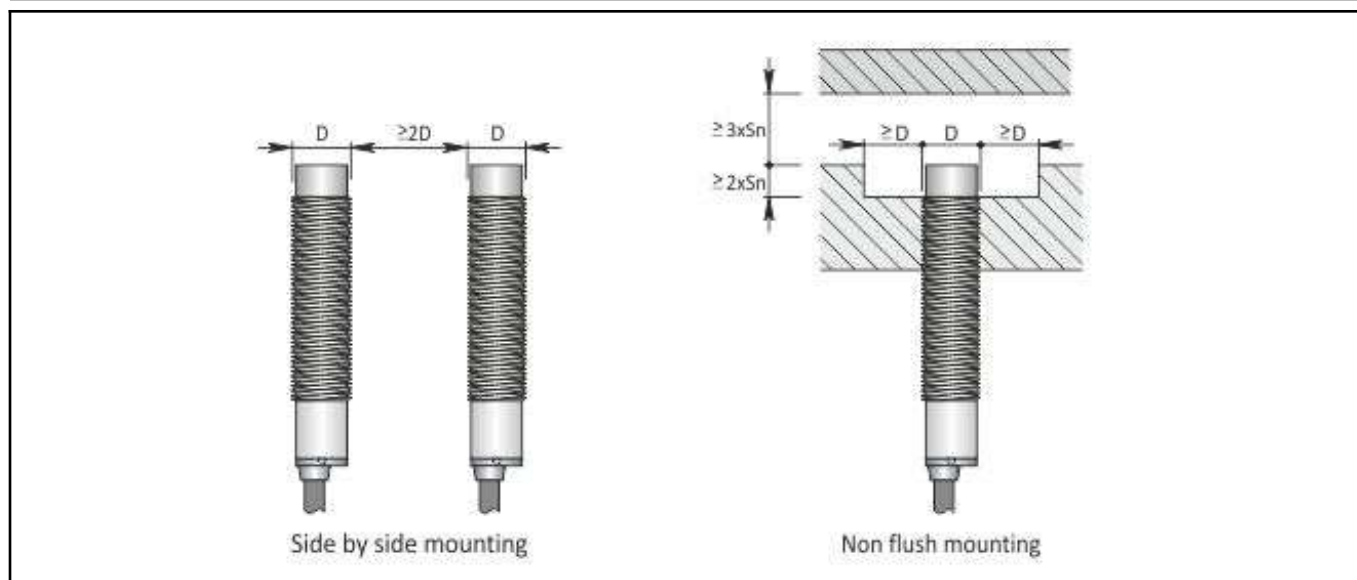
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

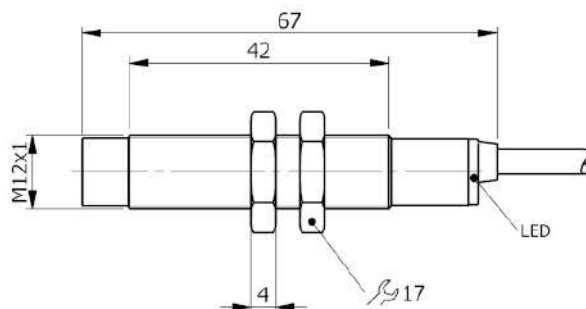
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000249** Model: **SI12-CE4 NPN NO LC5**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions: [mm]	M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth: [g]	150

Electrical connection

Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

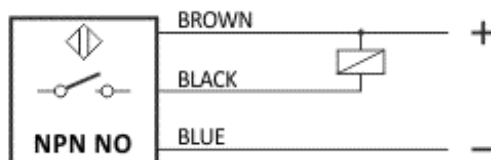
Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

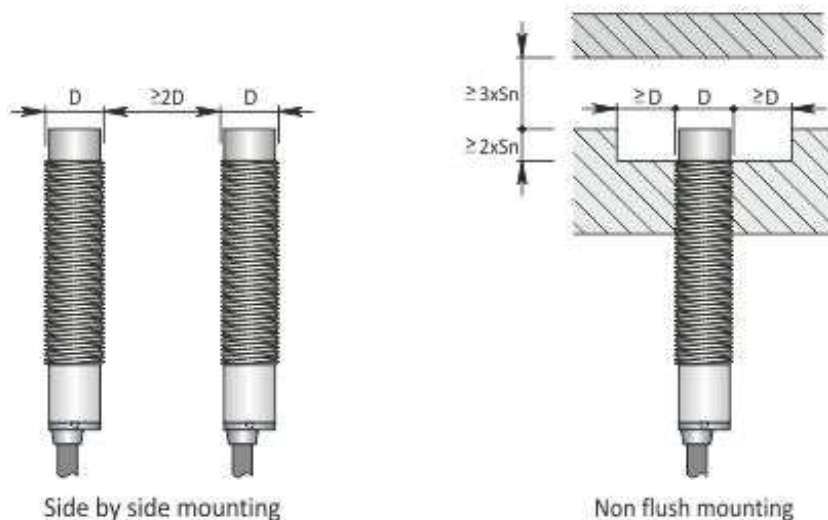
2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

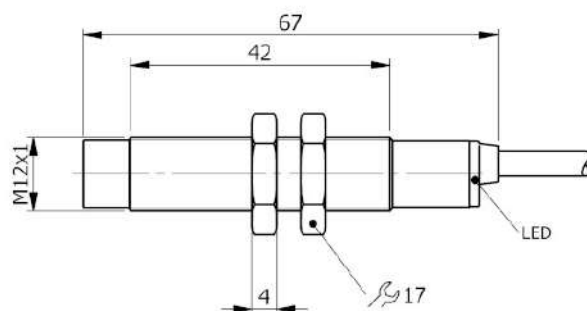
3 WIRES CABLE



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000093** Model: **SI12-CE4 NPN NO+NC**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=67.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 85

Electrical connection

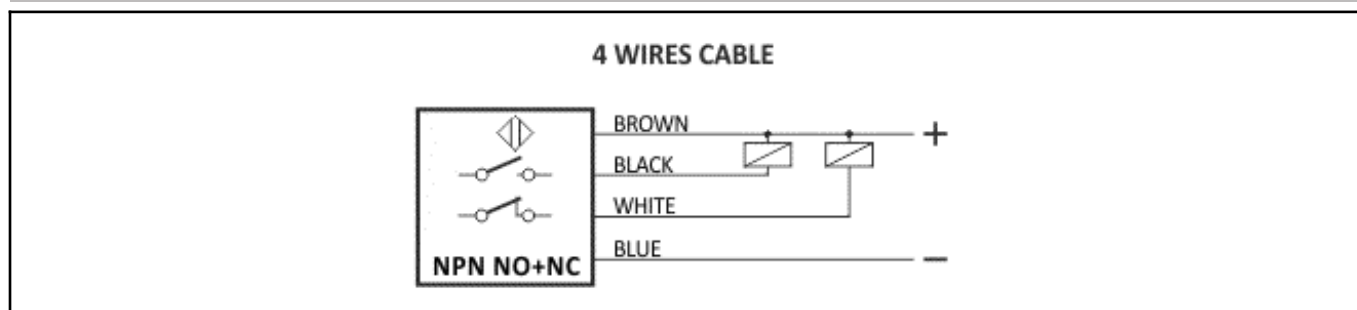
Cable:	2 m - PVC/PVC - 4 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

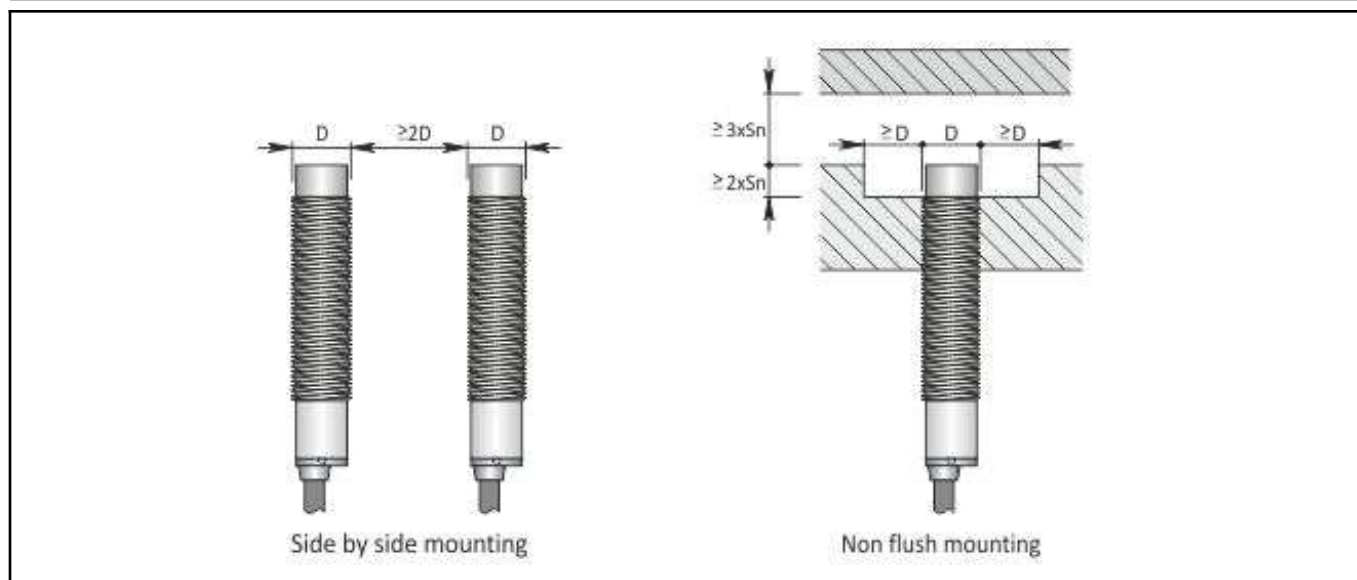
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

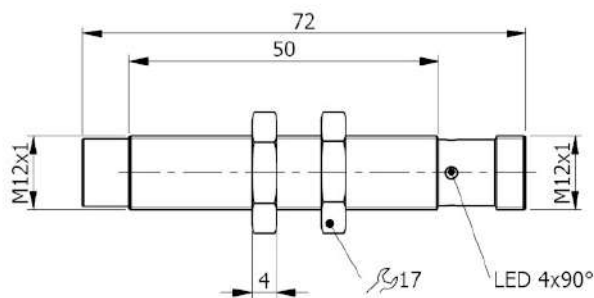
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000094** Model: **SI12-CE4 NPN NO+NC H**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:	Direct current
Working voltage: [V]	10 ÷ 30
Current consumption: [mA]	< 15 mA @ 24Vdc
Protection class:	III
Reverse polarity protection:	Presente

Outputs

Electrical design:	NPN
Function:	NO+NC
Max voltage drop: [V]	< 1.8
Max output current: [mA]	200
Max switching frequency: [Hz]	1000
Short circuit protection:	Present
Overload protection:	Present

Detection zone

Switching distance-Sn: [mm]	4
Real sensing distance-Sr: [mm]	4 ±10%
Operative distance-So: [mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:	Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis: [%Sr]	< 10
Switching point drift: [%Sr]	-10 ÷ +10
Repeatability: [%Sn]	< 3

Environmental conditions

Temperature limits: [°C]	-25 ÷ +70
IP rating:	IP65-IP66-IP67 (depending on connector)

Display and control elements

Display:	Output switching status - 4 x 90° LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=74.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 40

Electrical connection

Connector:	H type - M12X1 - Gold plated contacts
------------	---------------------------------------

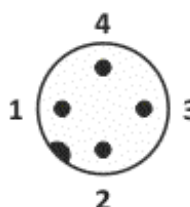
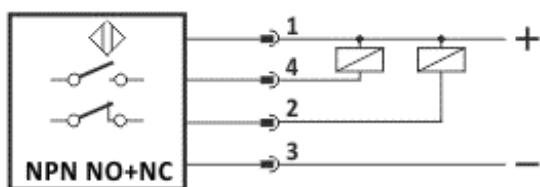
Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

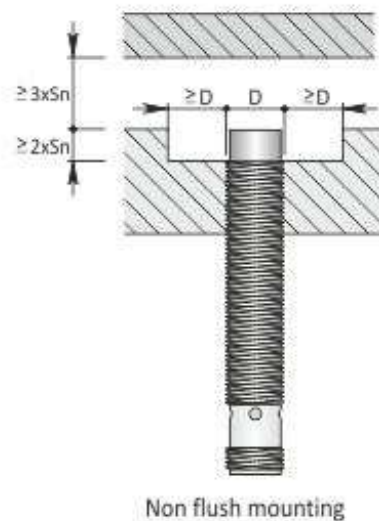
H TYPE CONNECTOR - M12x1



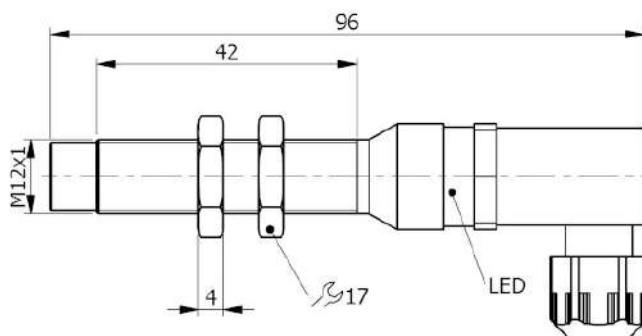
VIEW OF MALE CONNECTOR

- 1 = Brown / +
- 3 = Blue / -
- 2 = White / Output NC
- 4 = Black / Output NO

INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000096** Model: **SI12-CE4 NPN NO+NC K**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 55

Electrical connection

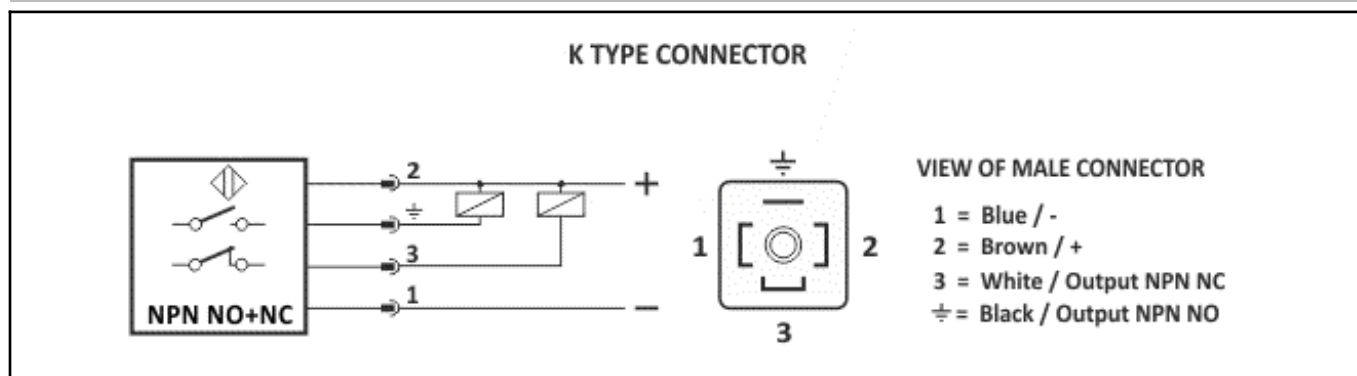
Connector:	K Type - 4 poles - EN 17301-803
------------	---------------------------------

Compliance to Standards / Directives

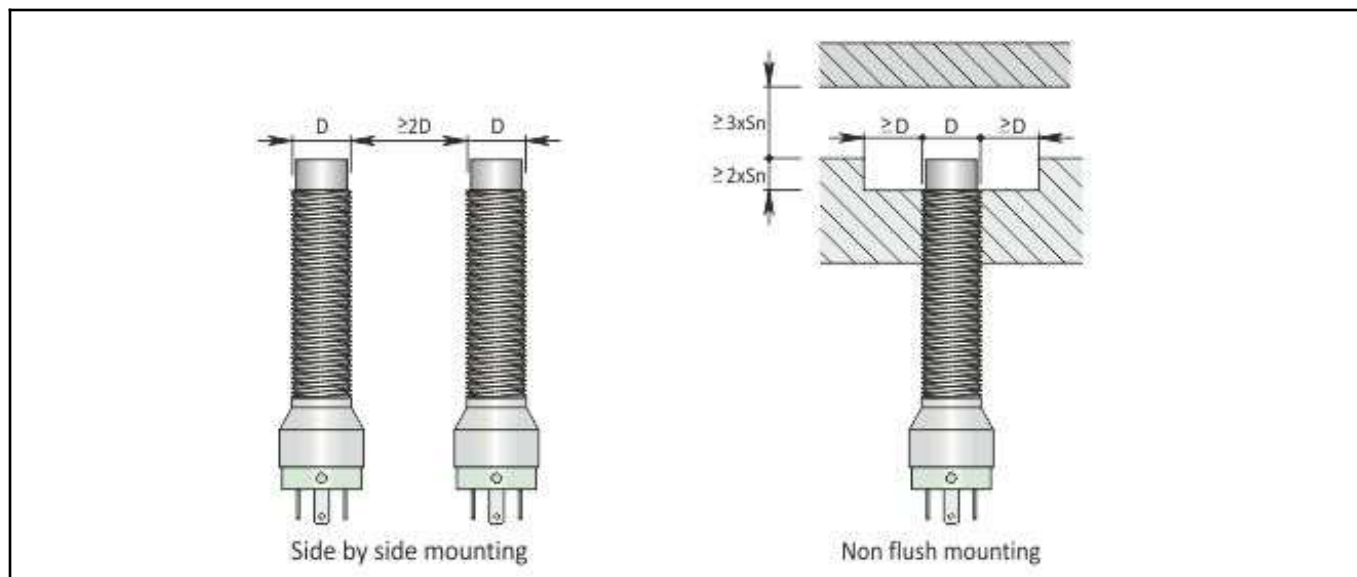
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

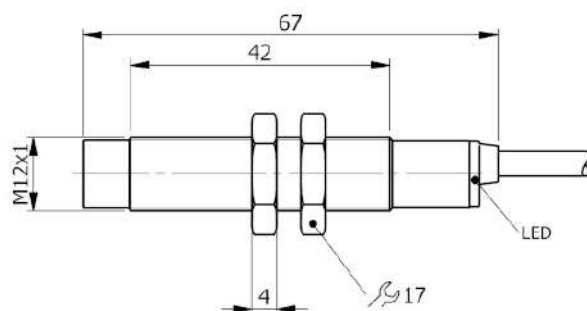
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000259** Model: **SI12-CE4 NPN NO+NC LC10**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 220

Electrical connection

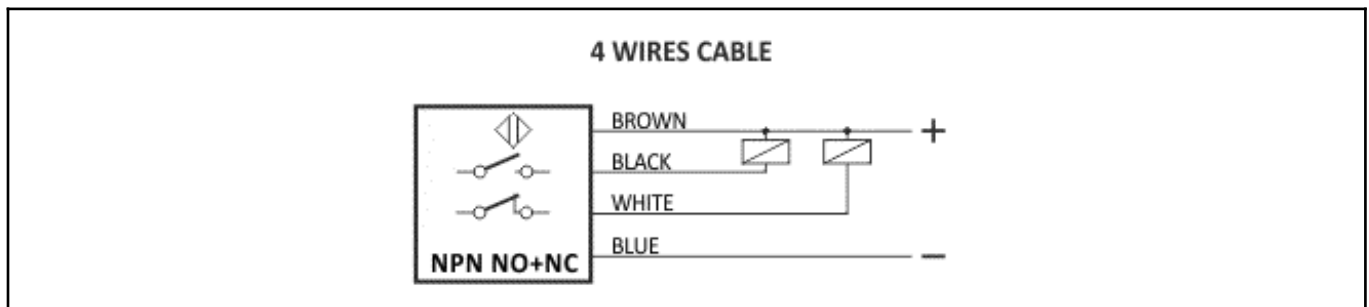
Cable:	10 m - PVC/PVC - 4 x 0.25 mm ²
--------	---

Compliance to Standards / Directives

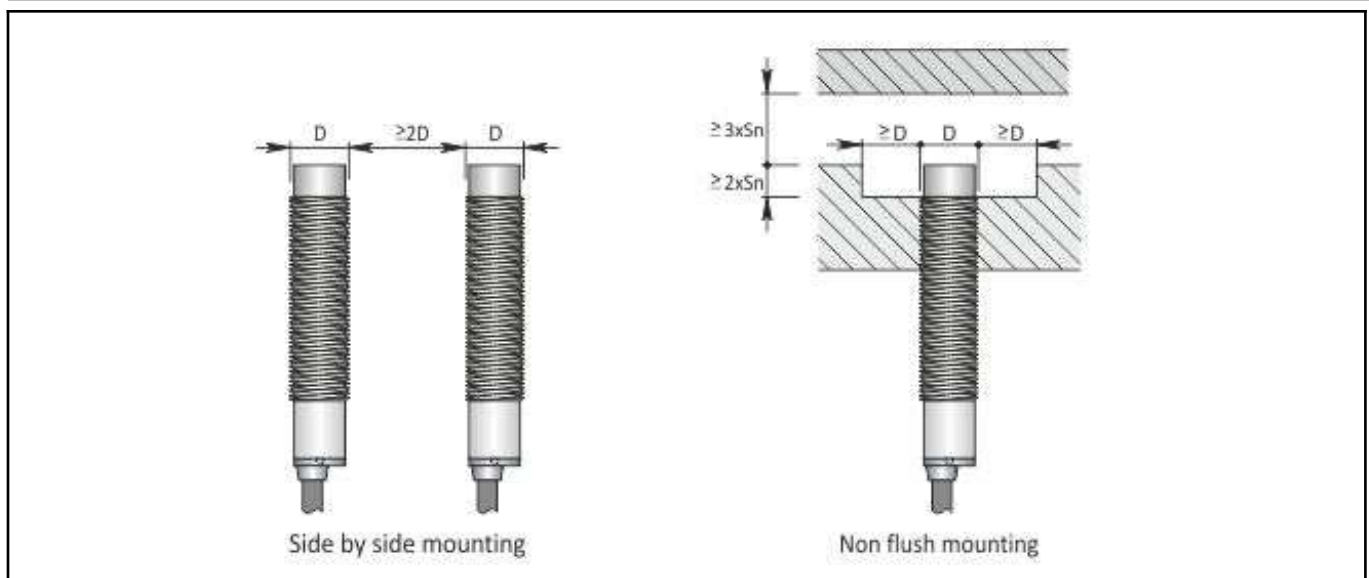
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

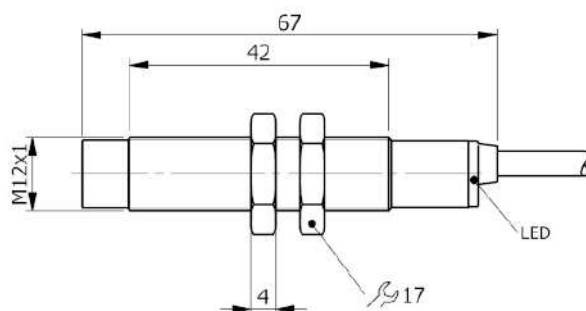
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000257** Model: **SI12-CE4 NPN NO+NC LC5**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 150

Electrical connection

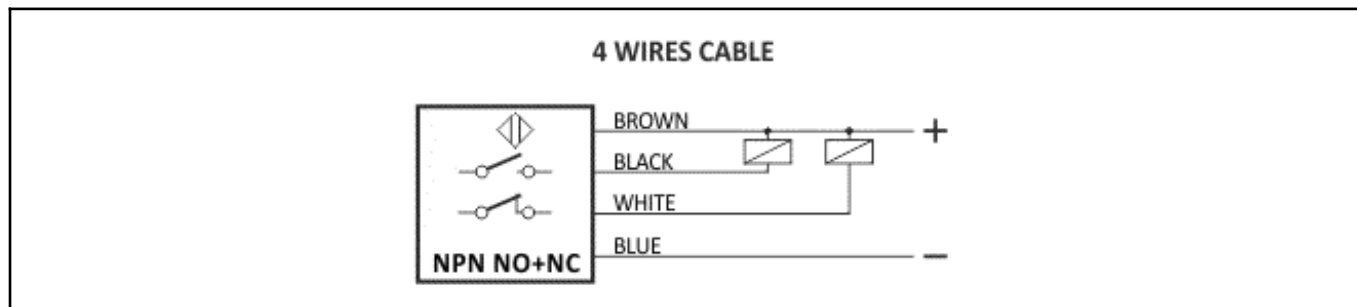
Cable:	5 m - PVC/PVC - 4 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

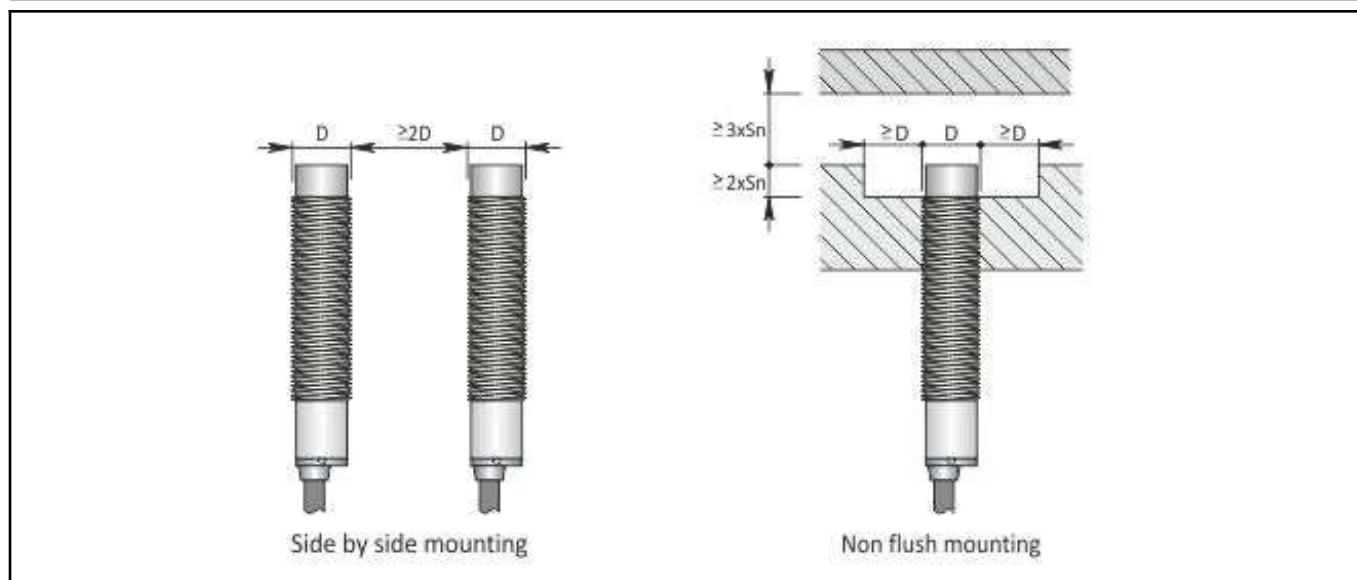
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

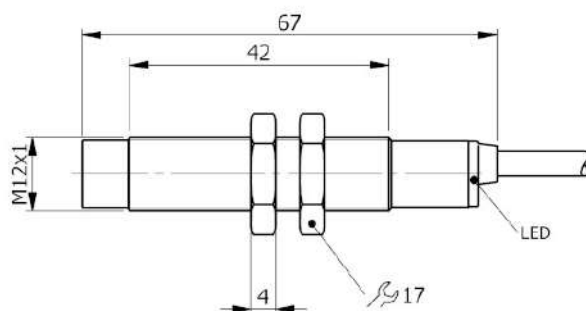
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000099** Model: **SI12-CE4 PNP NC**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=67.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 85

Electrical connection

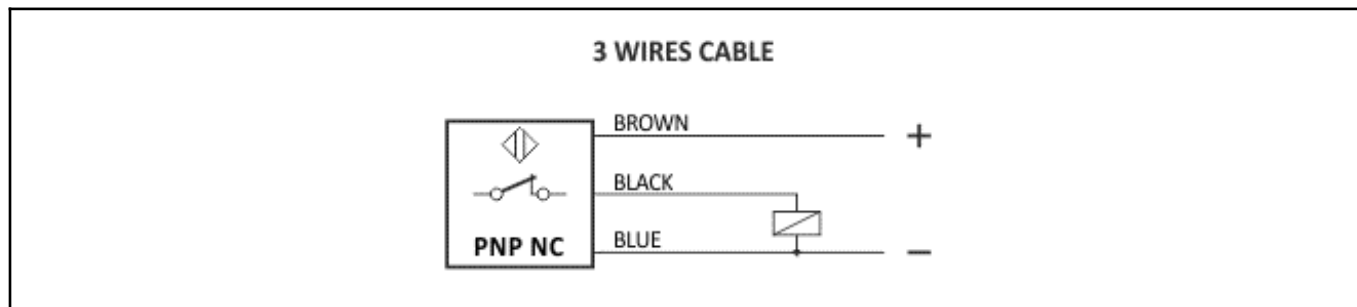
Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

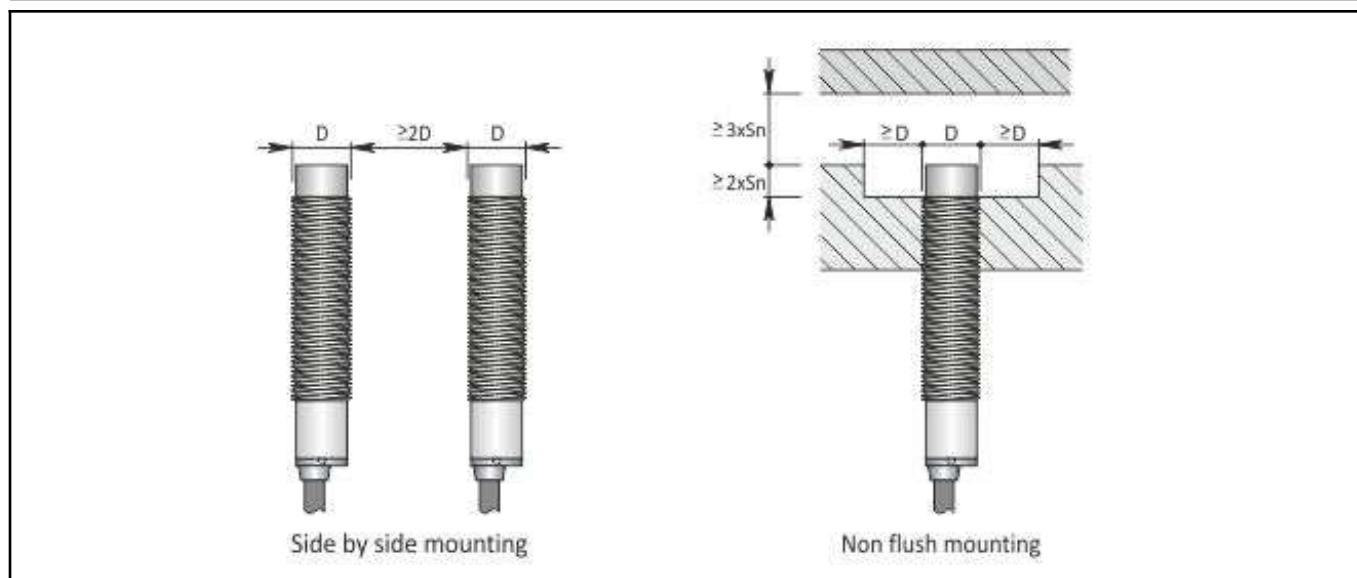
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

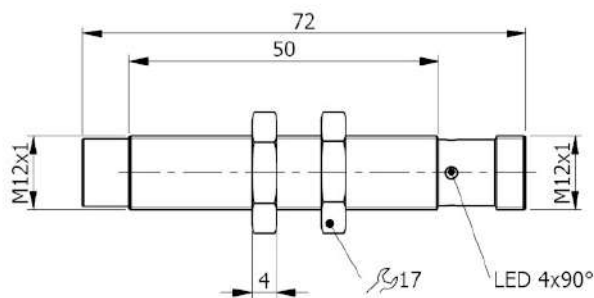
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000100** Model: **SI12-CE4 PNP NC H**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:	Direct current
Working voltage: [V]	10 ÷ 30
Current consumption: [mA]	< 15 mA @ 24Vdc
Protection class:	III
Reverse polarity protection:	Presente

Outputs

Electrical design:	PNP
Function:	NC
Max voltage drop: [V]	< 1.8
Max output current: [mA]	200
Max switching frequency: [Hz]	1000
Short circuit protection:	Present
Overload protection:	Present

Detection zone

Switching distance-Sn: [mm]	4
Real sensing distance-Sr: [mm]	4 ±10%
Operative distance-So: [mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:	Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis: [%Sr]	< 10
Switching point drift: [%Sr]	-10 ÷ +10
Repeatability: [%Sn]	< 3

Environmental conditions

Temperature limits: [°C]	-25 ÷ +85
IP rating:	IP65-IP66-IP67 (depending on connector)

Display and control elements

Display:	Output switching status - 4 x 90° LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=74.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 40

Electrical connection

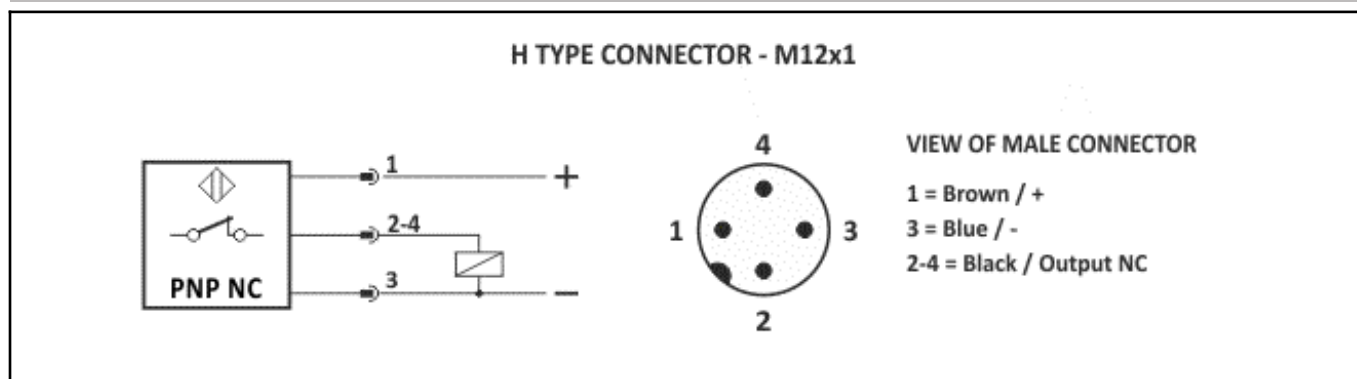
Connector:	H type - M12X1 - Gold plated contacts
------------	---------------------------------------

Compliance to Standards / Directives

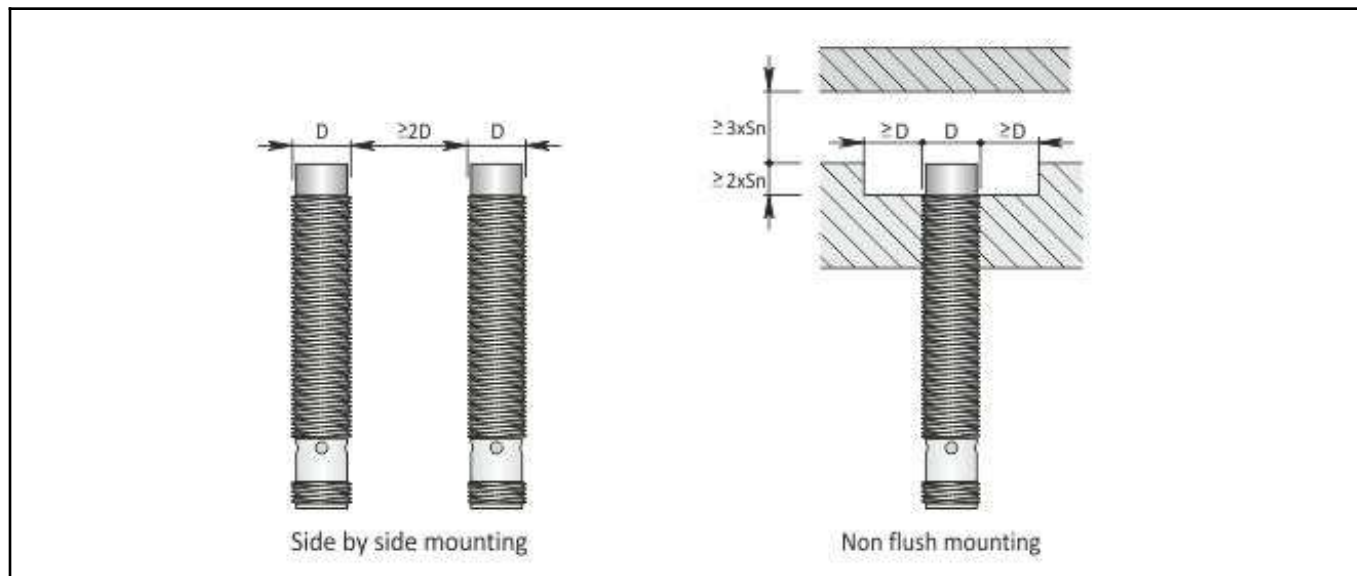
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

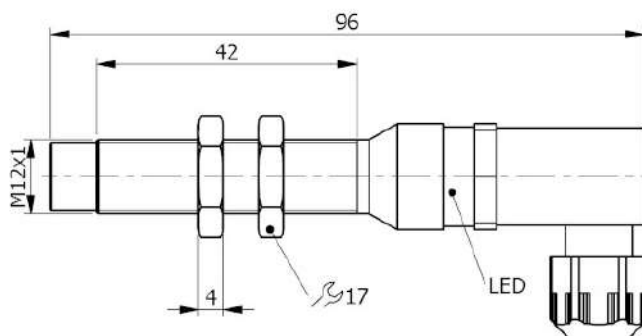
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000103** Model: **SI12-CE4 PNP NC K**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 55

Electrical connection

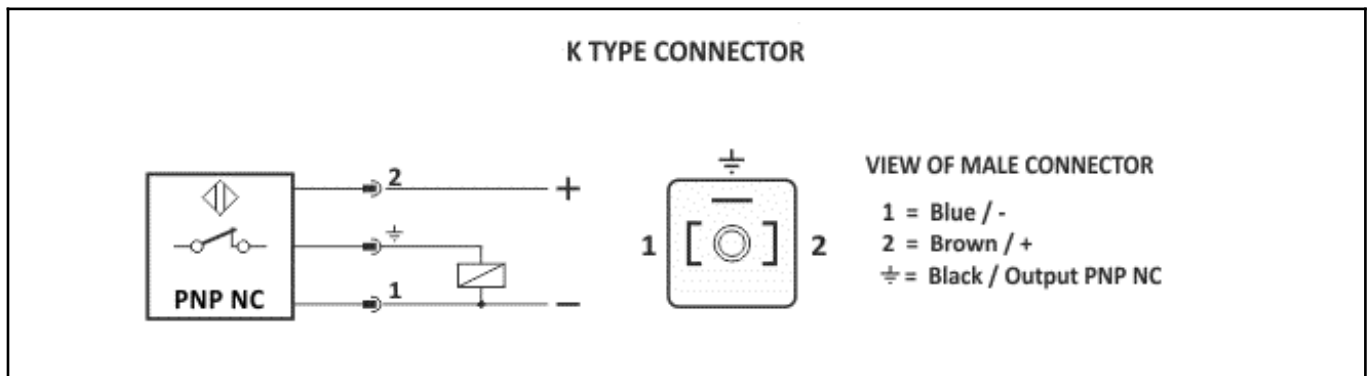
Connector:	K Type - 3 poles - EN 17301-803
------------	---------------------------------

Compliance to Standards / Directives

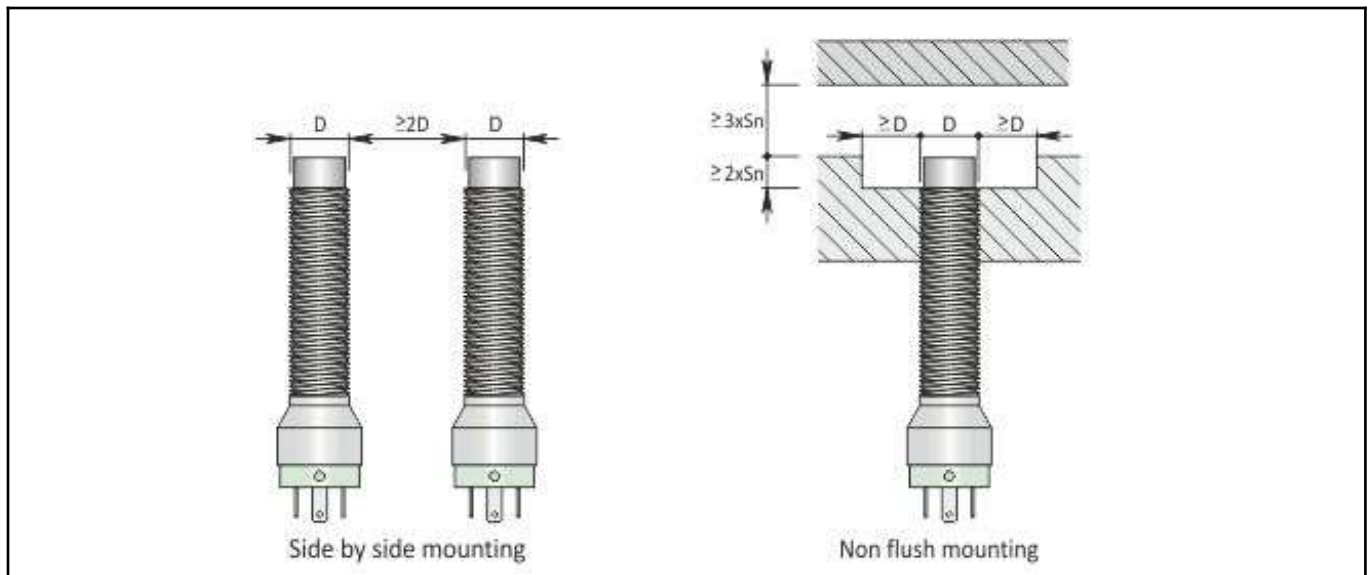
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

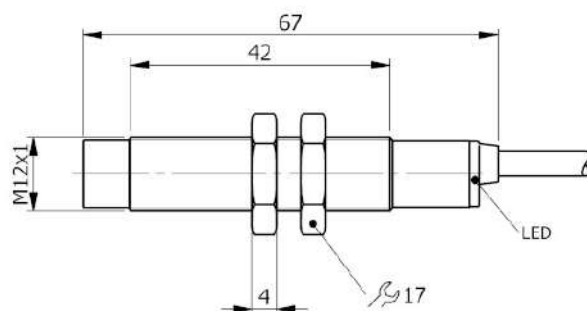
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000263** Model: **SI12-CE4 PNP NC LC10**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 220

Electrical connection

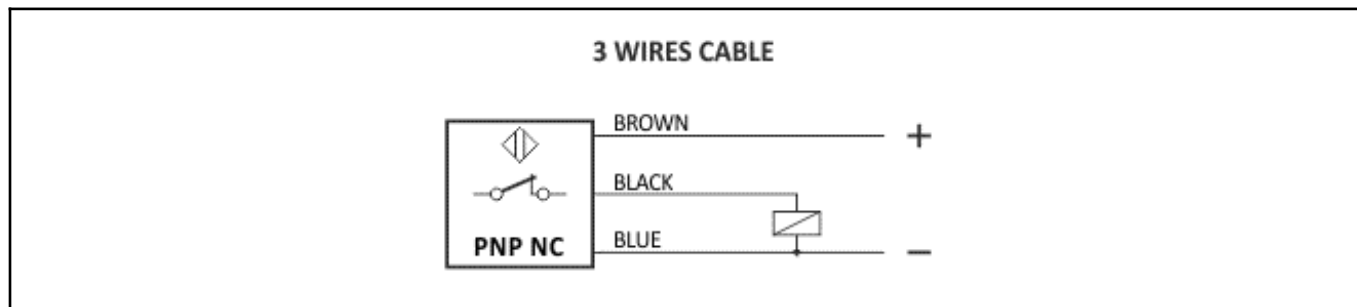
Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
--------	---

Compliance to Standards / Directives

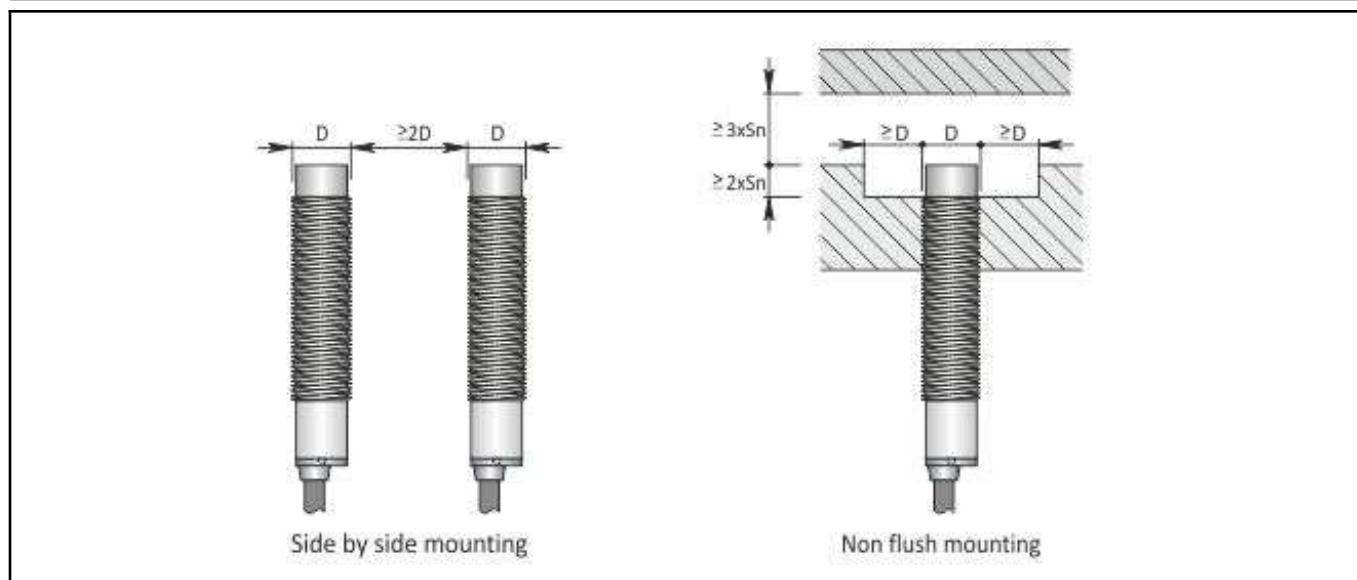
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

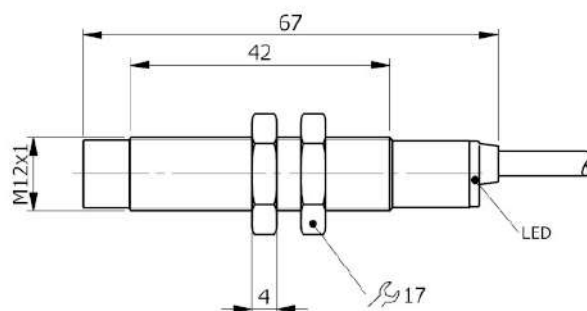
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000261** Model: **SI12-CE4 PNP NC LC5**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 150

Electrical connection

Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

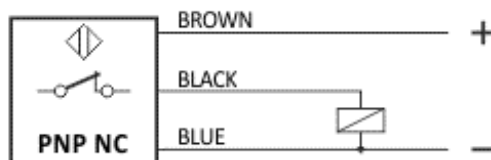
Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

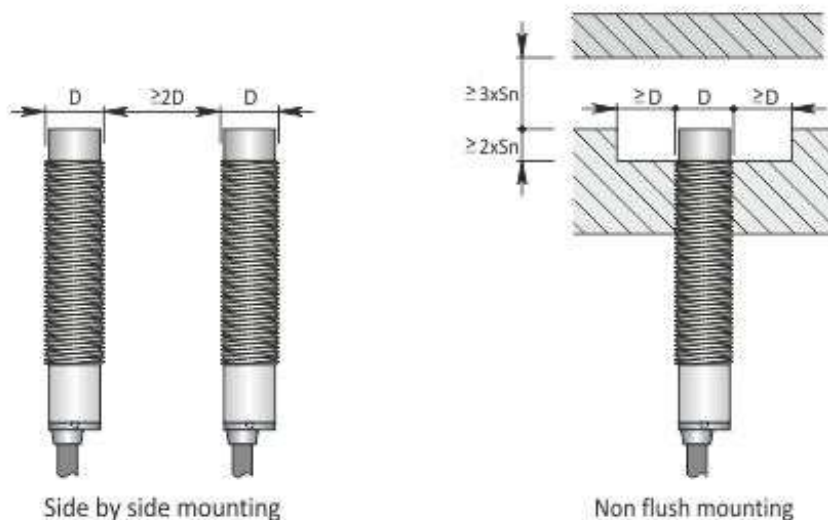
2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

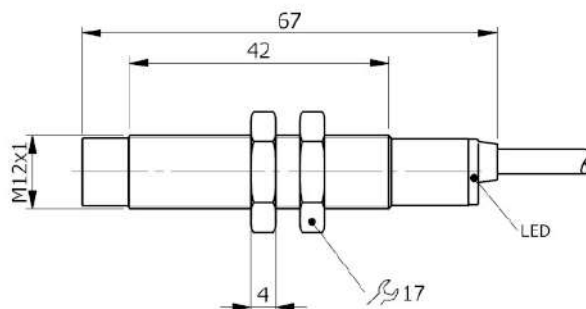
3 WIRES CABLE



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000077** Model: **SI12-CE4 NPN NC**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		NPN
Function:		NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=67.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 85

Electrical connection

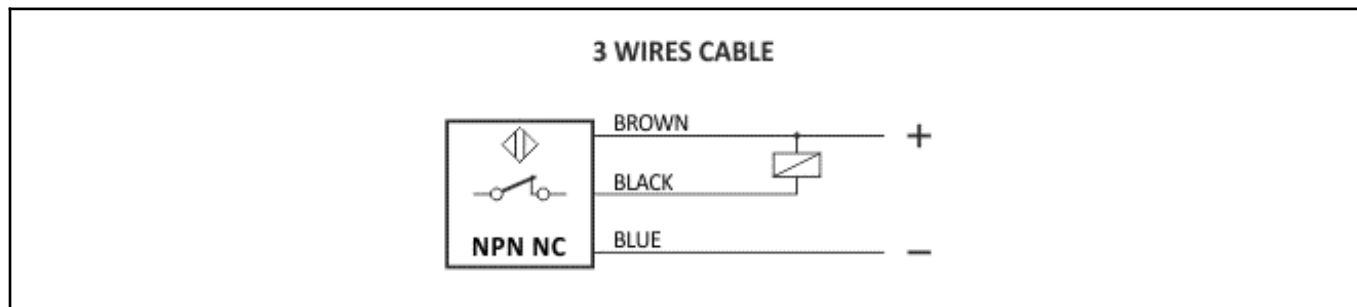
Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

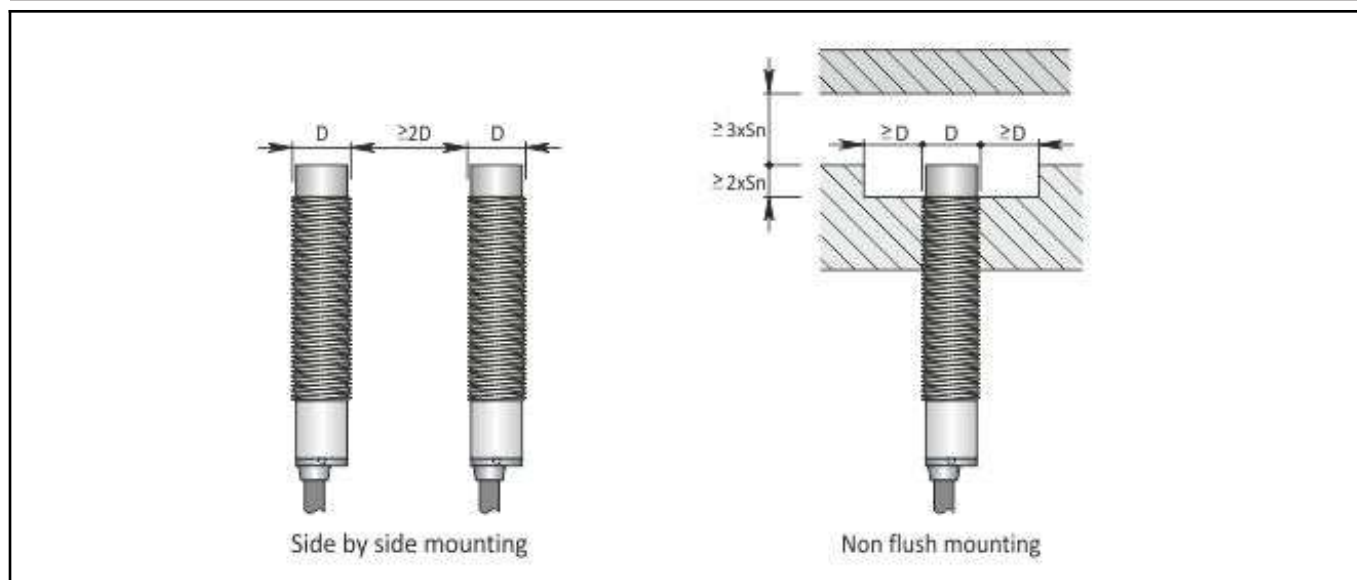
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

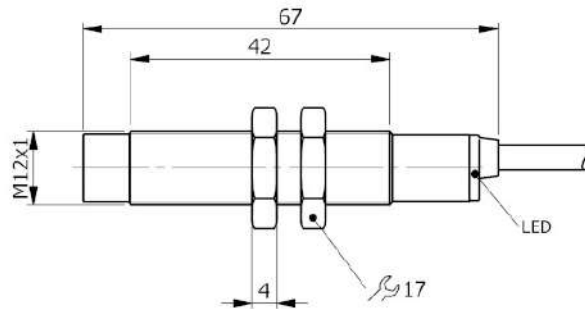
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000107** Model: **SI12-CE4 PNP NO**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=67.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 85

Electrical connection

Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

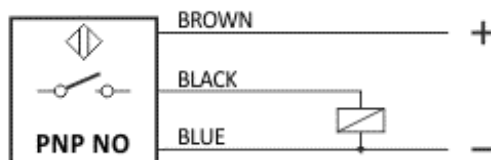
Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

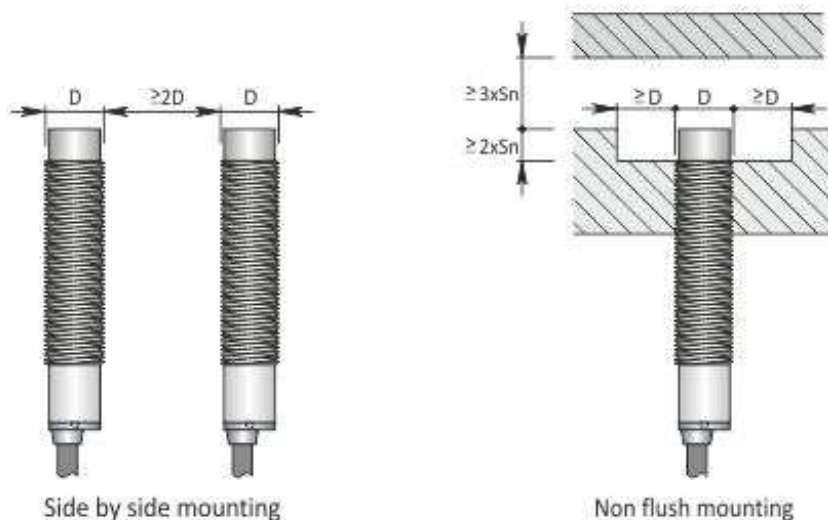
2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

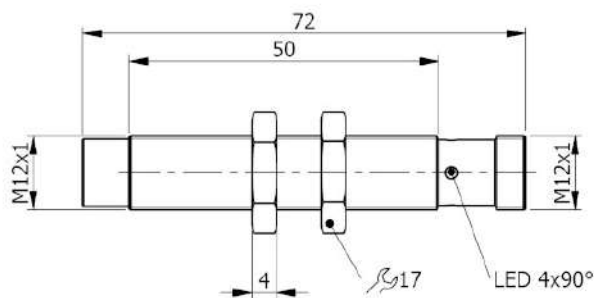
3 WIRES CABLE



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000108** Model: **SI12-CE4 PNP NO H**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:	Direct current
Working voltage: [V]	10 ÷ 30
Current consumption: [mA]	< 15 mA @ 24Vdc
Protection class:	III
Reverse polarity protection:	Presente

Outputs

Electrical design:	PNP
Function:	NO
Max voltage drop: [V]	< 1.8
Max output current: [mA]	200
Max switching frequency: [Hz]	1000
Short circuit protection:	Present
Overload protection:	Present

Detection zone

Switching distance-Sn: [mm]	4
Real sensing distance-Sr: [mm]	4 ±10%
Operative distance-So: [mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:	Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis: [%Sr]	< 10
Switching point drift: [%Sr]	-10 ÷ +10
Repeatability: [%Sn]	< 3

Environmental conditions

Temperature limits: [°C]	-25 ÷ +85
IP rating:	IP65-IP66-IP67 (depending on connector)

Display and control elements

Display:	Output switching status - 4 x 90° LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=74.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 40

Electrical connection

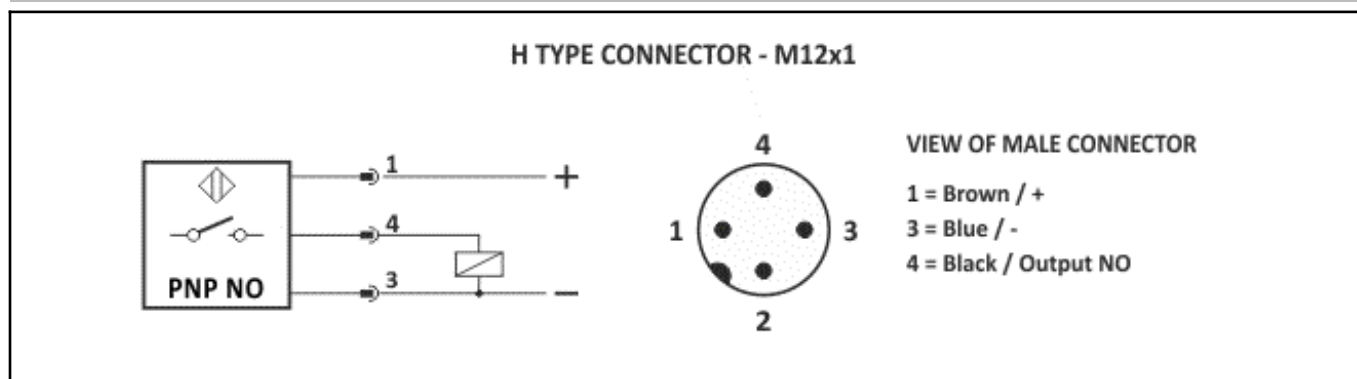
Connector:	H type - M12X1 - Gold plated contacts
------------	---------------------------------------

Compliance to Standards / Directives

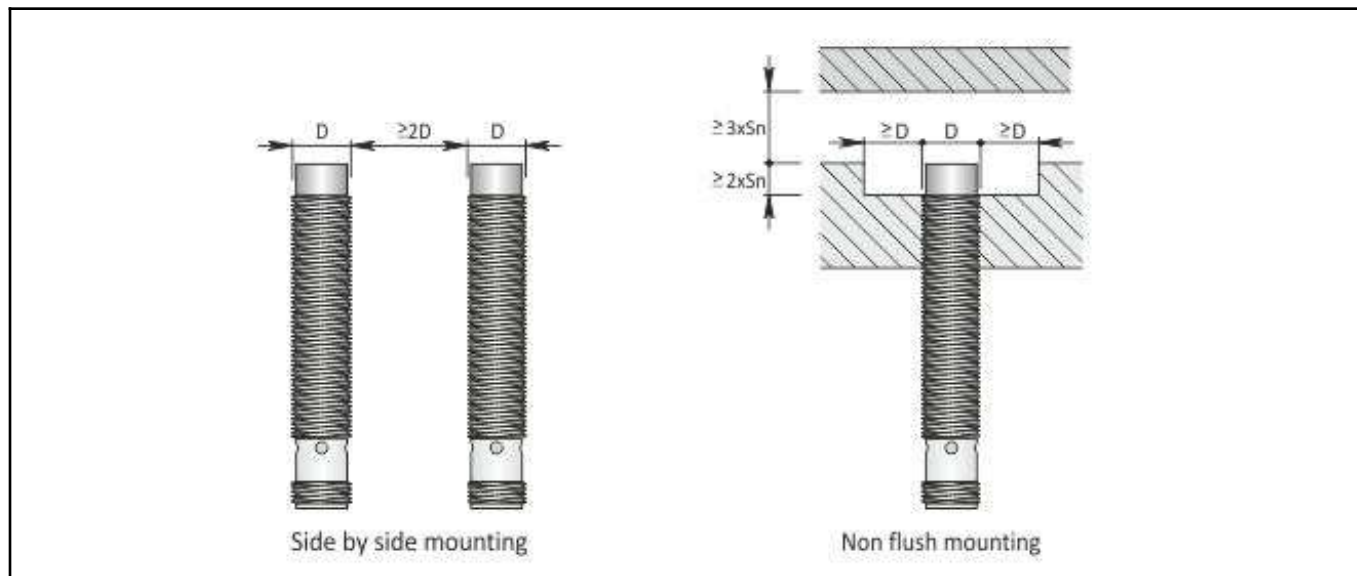
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

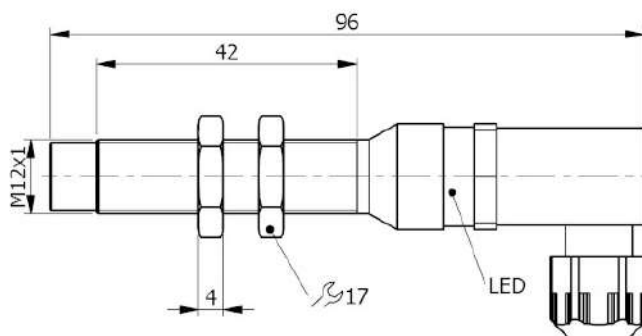
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000111** Model: **SI12-CE4 PNP NO K**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 55

Electrical connection

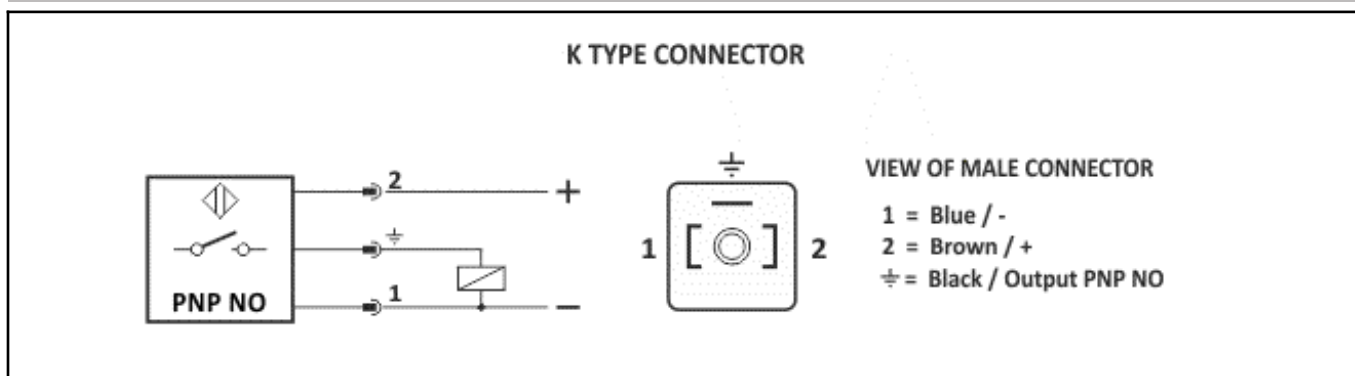
Connector:	K Type - 3 poles - EN 17301-803
------------	---------------------------------

Compliance to Standards / Directives

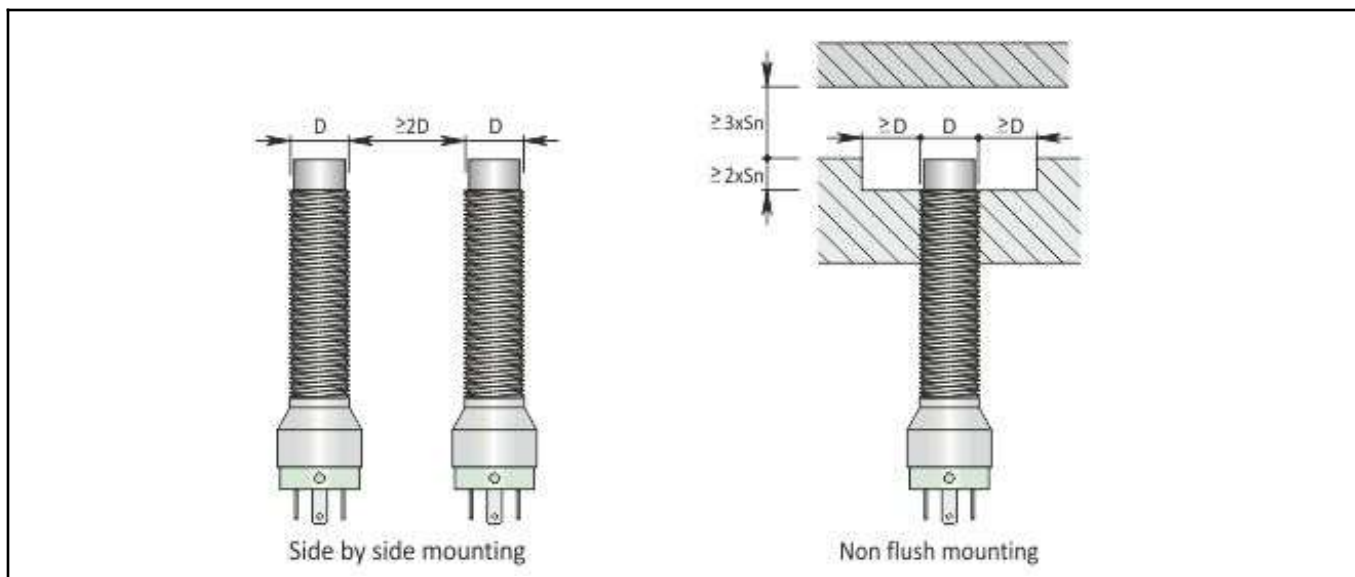
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

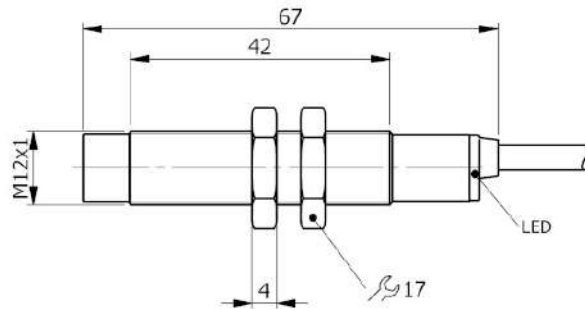
2. NORME DI INSTALLAZIONE

WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000271** Model: **SI12-CE4 PNP NO LC10**

Dimension in mm

**1. TECHNICAL CHARACTERISTICS****Electrical data**

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions: [mm]	M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth: [g]	220

Electrical connection

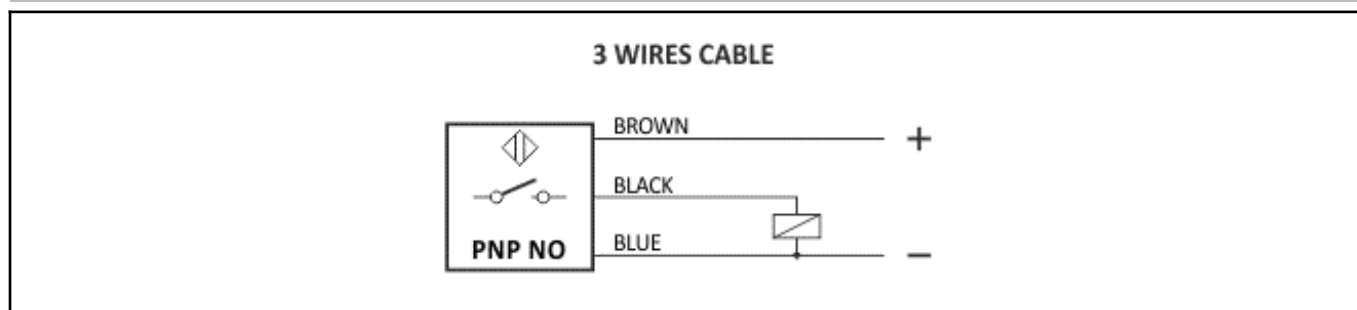
Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
--------	---

Compliance to Standards / Directives

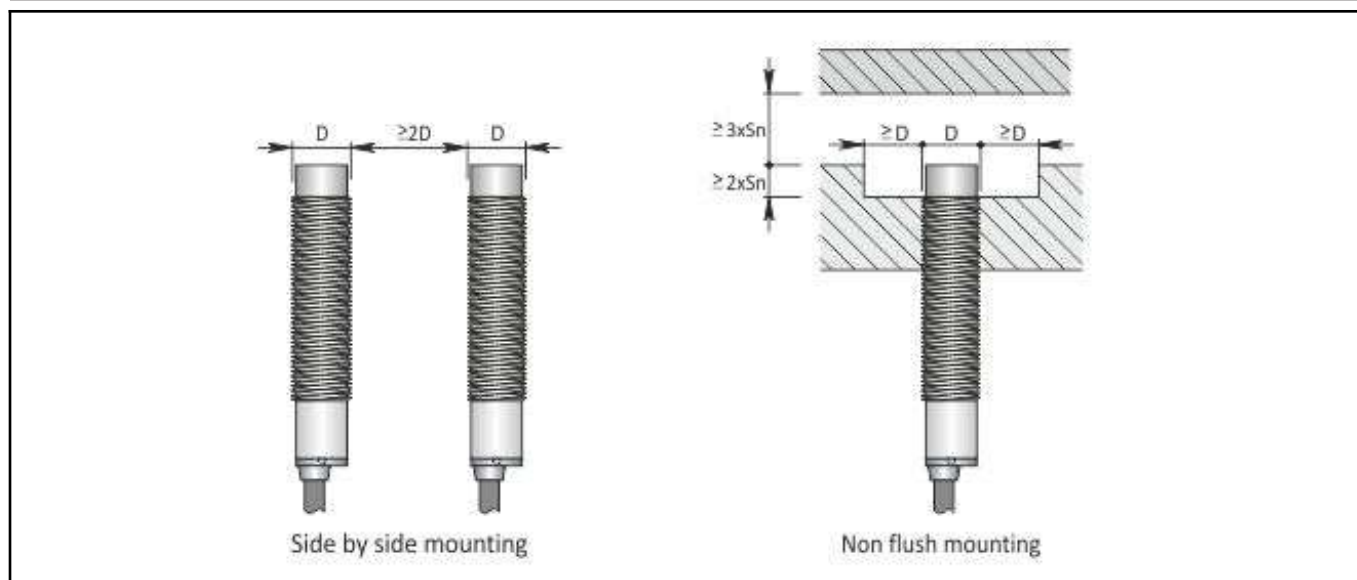
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

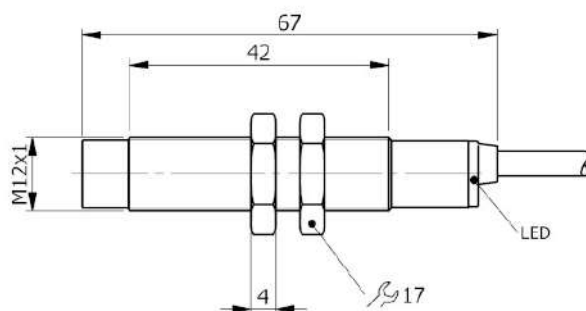
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000269** Model: **SI12-CE4 PNP NO LC5**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +85
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 150

Electrical connection

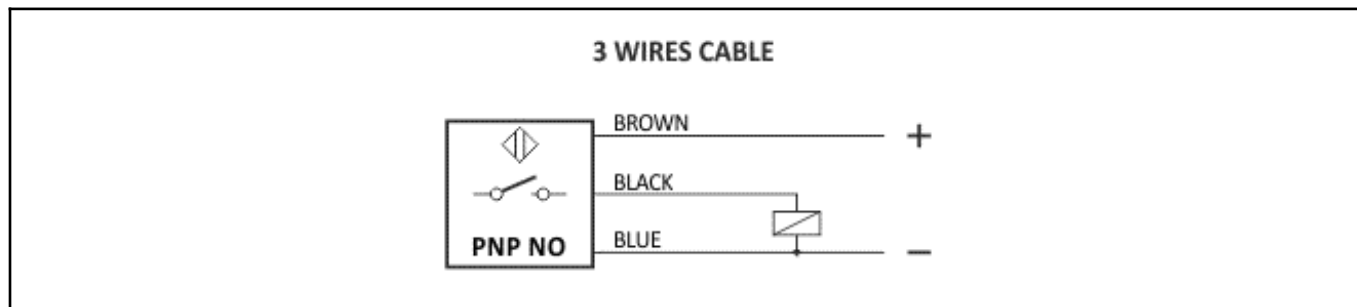
Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

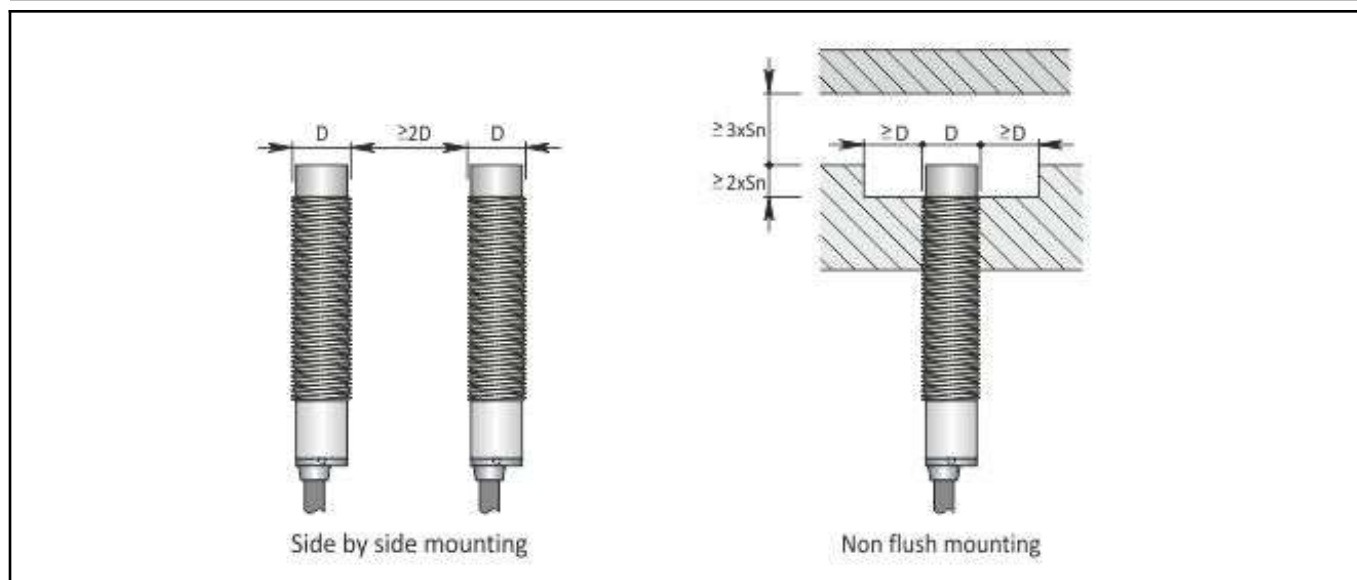
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

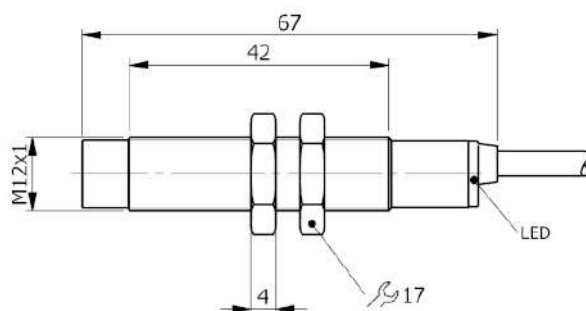
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000115** Model: **SI12-CE4 PNP NO+NC**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=67.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 85

Electrical connection

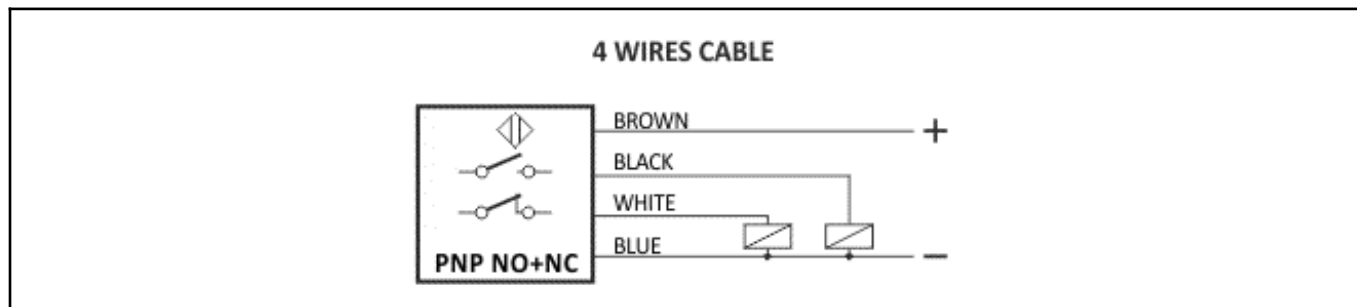
Cable:	2 m - PVC/PVC - 4 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

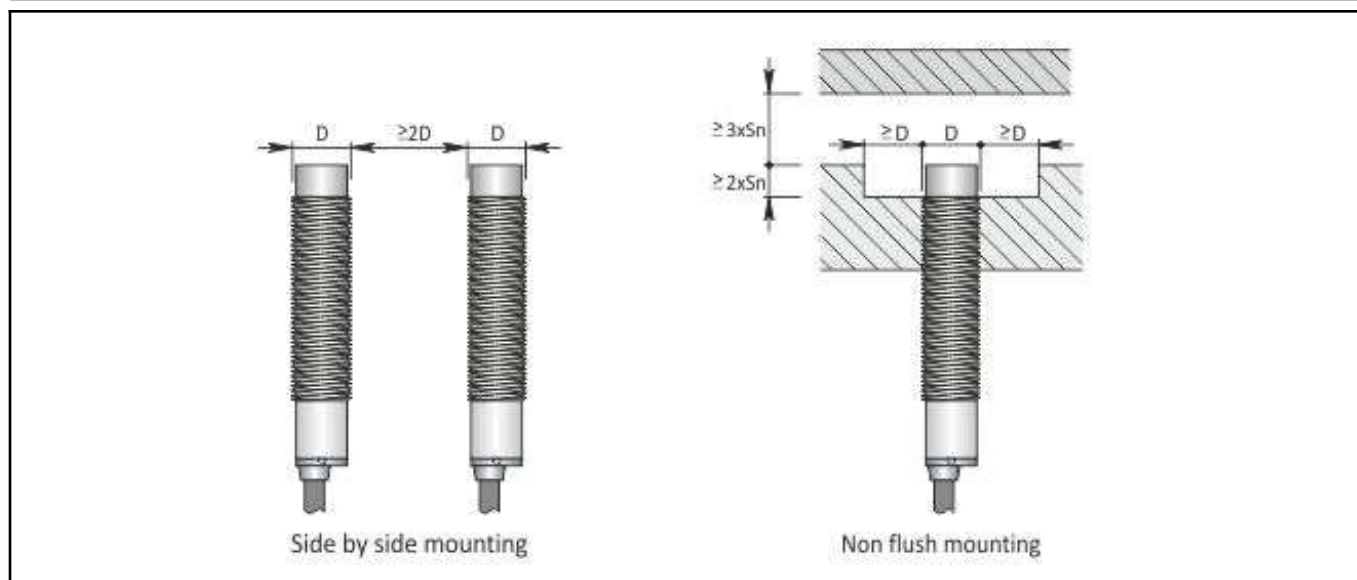
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

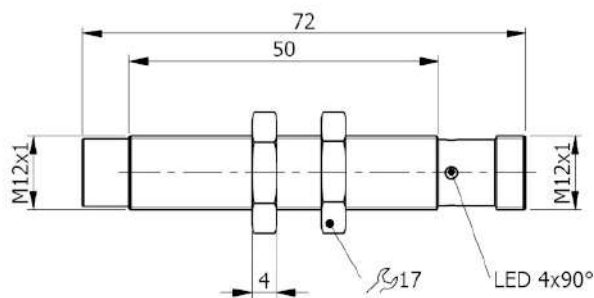
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000116** Model: **SI12-CE4 PNP NO+NC H**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:	Direct current
Working voltage: [V]	10 ÷ 30
Current consumption: [mA]	< 15 mA @ 24Vdc
Protection class:	III
Reverse polarity protection:	Presente

Outputs

Electrical design:	PNP
Function:	NO+NC
Max voltage drop: [V]	< 1.8
Max output current: [mA]	200
Max switching frequency: [Hz]	1000
Short circuit protection:	Present
Overload protection:	Present

Detection zone

Switching distance-Sn: [mm]	4
Real sensing distance-Sr: [mm]	4 ±10%
Operative distance-So: [mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:	Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis: [%Sr]	< 10
Switching point drift: [%Sr]	-10 ÷ +10
Repeatability: [%Sn]	< 3

Environmental conditions

Temperature limits: [°C]	-25 ÷ +70
IP rating:	IP65-IP66-IP67 (depending on connector)

Display and control elements

Display:	Output switching status - 4 x 90° LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=74.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 40

Electrical connection

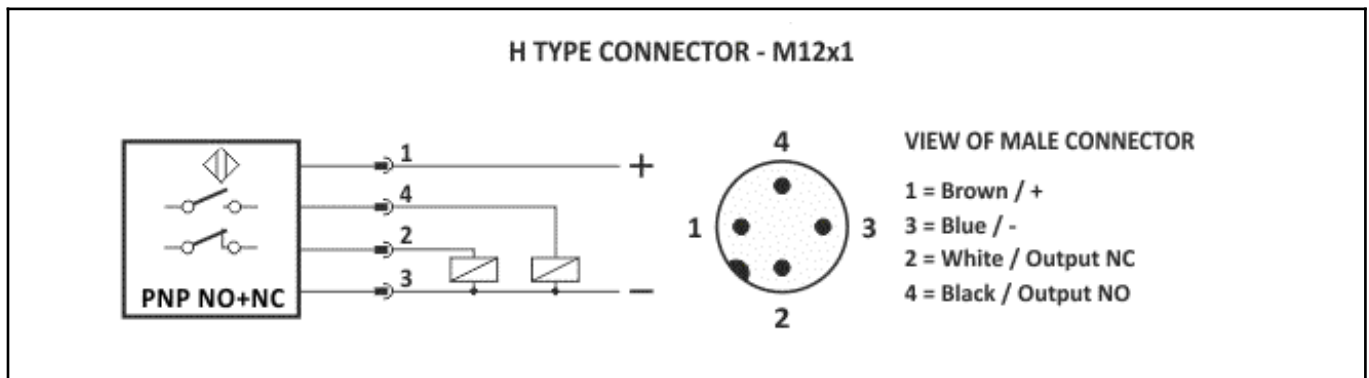
Connector:	H type - M12X1 - Gold plated contacts
------------	---------------------------------------

Compliance to Standards / Directives

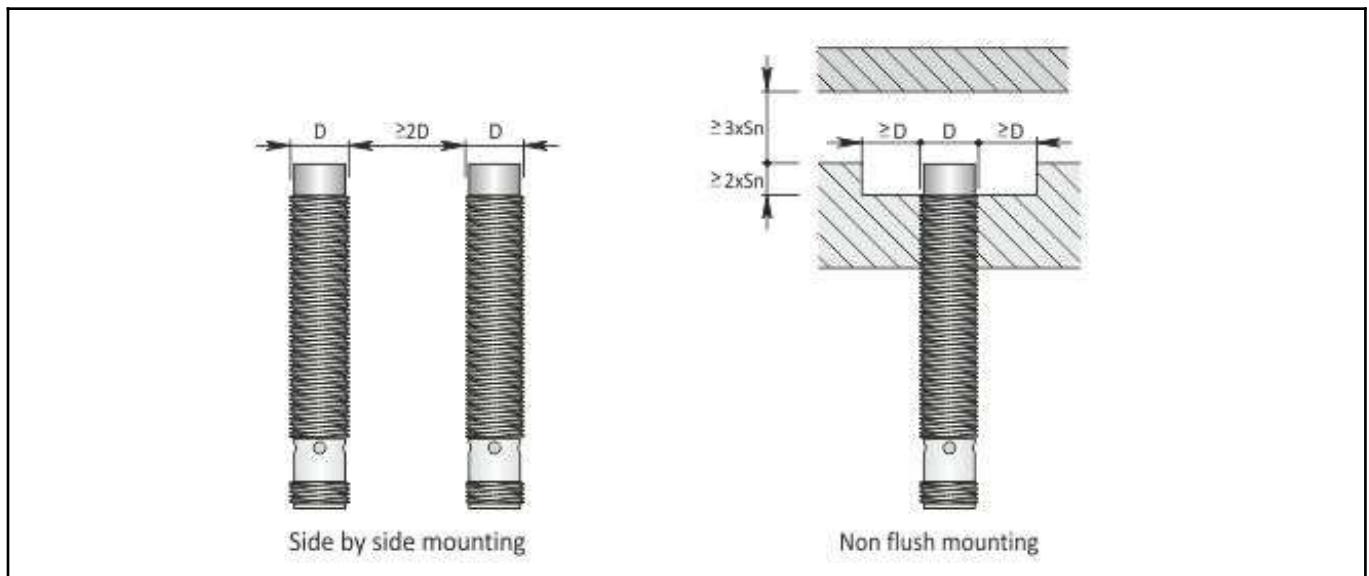
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

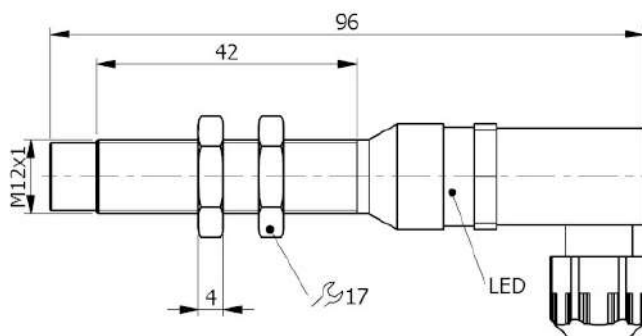
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000118** Model: **SI12-CE4 PNP NO+NC K**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weighth:	[g] 55

Electrical connection

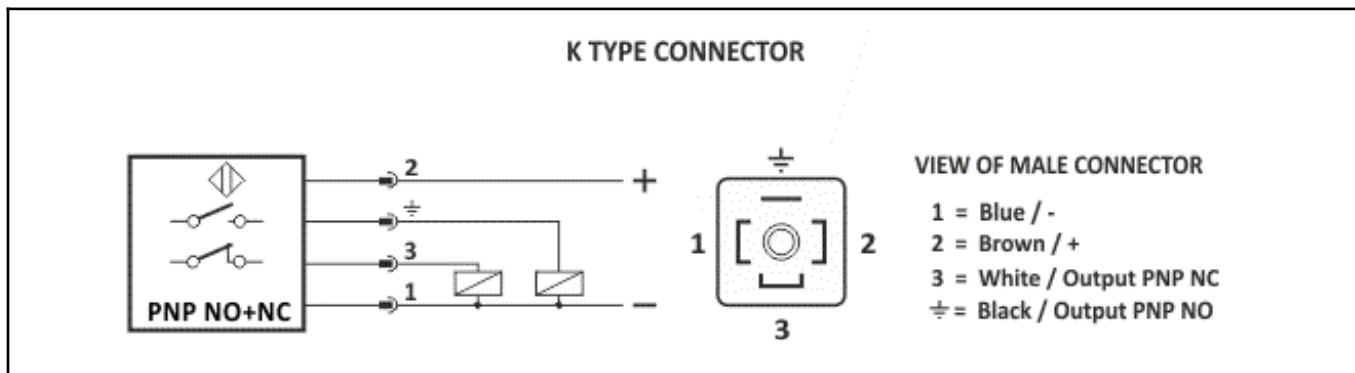
Connector:	K Type - 4 poles - EN 17301-803
------------	---------------------------------

Compliance to Standards / Directives

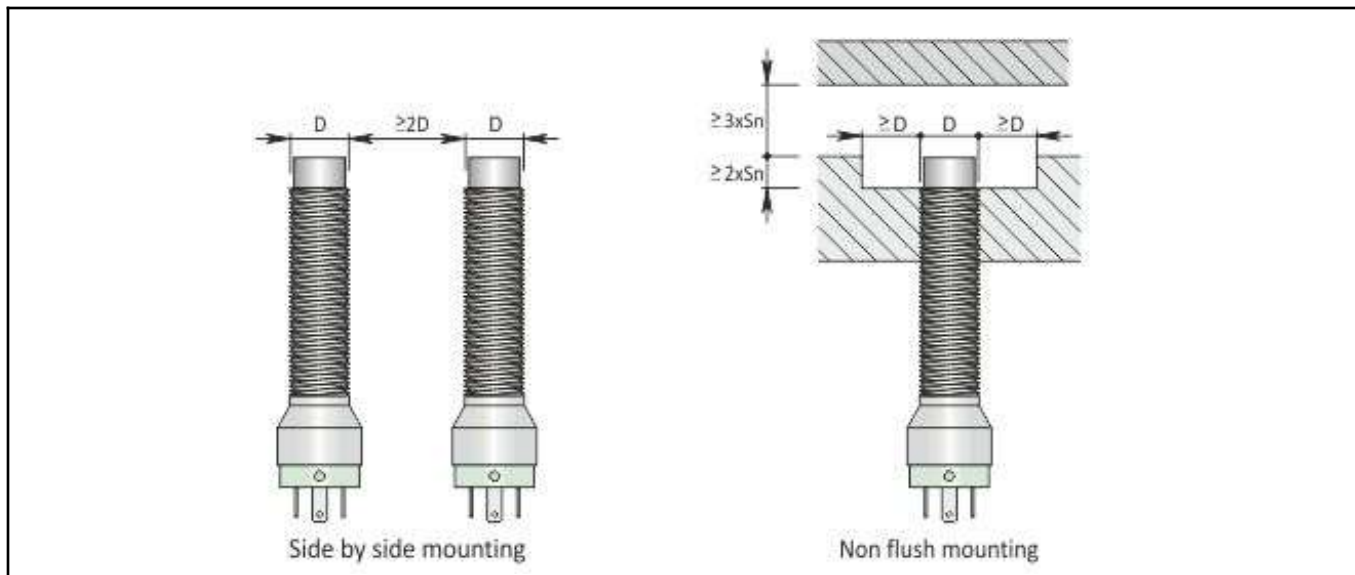
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

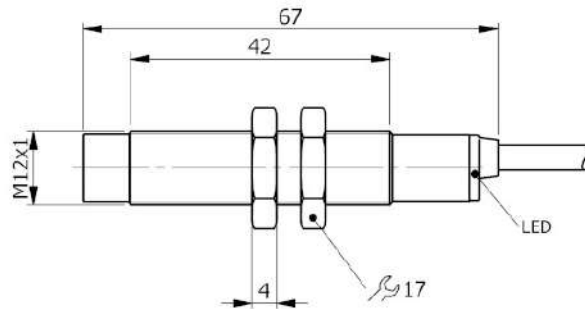
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000279** Model: **SI12-CE4 PNP NO+NC LC10**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 220

Electrical connection

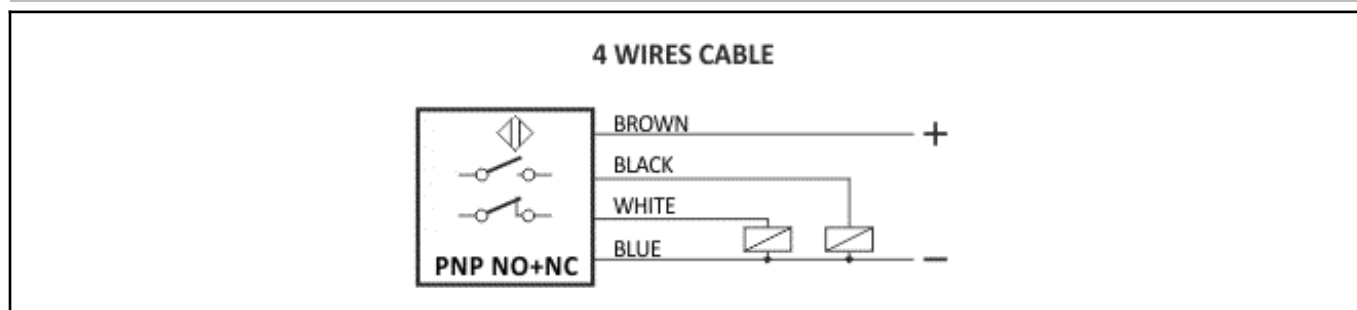
Cable:	10 m - PVC/PVC - 4 x 0.25 mm ²
--------	---

Compliance to Standards / Directives

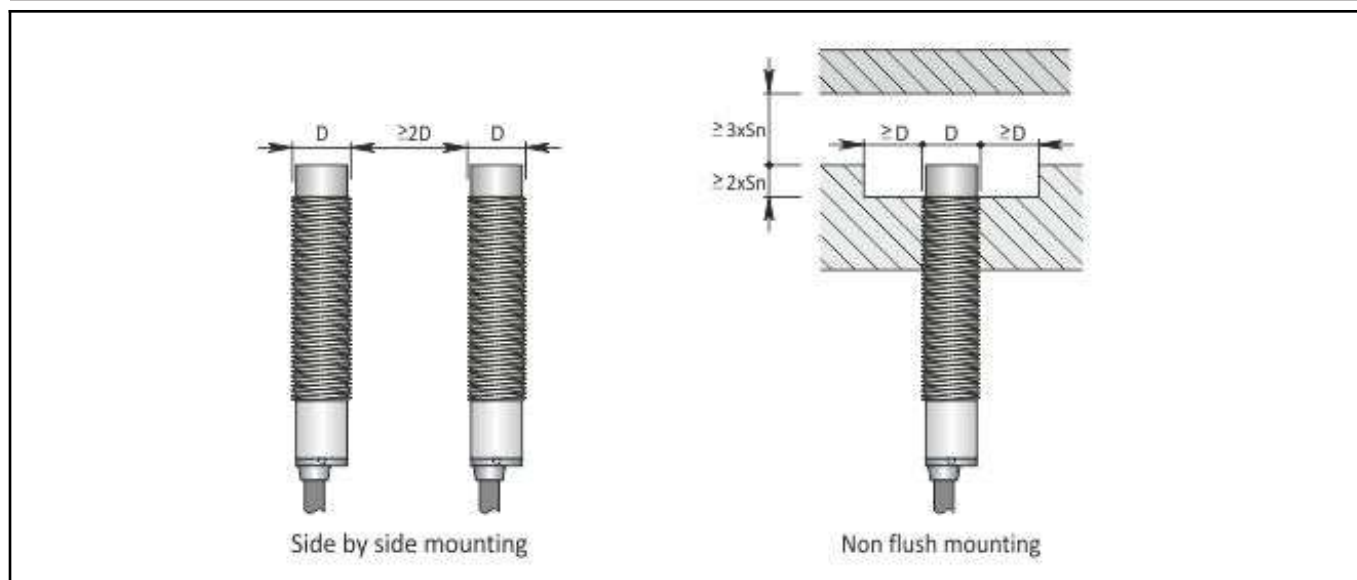
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

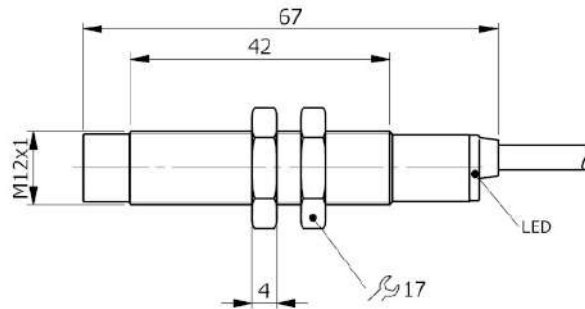
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000277** Model: **SI12-CE4 PNP NO+NC LC5**



Dimension in mm



1. TECHNICAL CHARACTERISTICS

Electrical data

Power supply type:		Direct current
Working voltage:	[V]	10 ÷ 30
Current consumption:	[mA]	< 15 mA @ 24Vdc
Protection class:		III
Reverse polarity protection:		Presente

Outputs

Electrical design:		PNP
Function:		NO+NC
Max voltage drop:	[V]	< 1.8
Max output current:	[mA]	200
Max switching frequency:	[Hz]	1000
Short circuit protection:		Present
Overload protection:		Present

Detection zone

Switching distance-Sn:	[mm]	4
Real sensing distance-Sr:	[mm]	4 ±10%
Operative distance-So:	[mm]	0 ÷ 3.24

Accuracy and Deviations

Correction factor:		Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis:	[%Sr]	< 10
Switching point drift:	[%Sr]	-10 ÷ +10
Repeatability:	[%Sn]	< 3

Environmental conditions

Temperature limits:	[°C]	-25 ÷ +70
IP rating:		IP65-IP66-IP67

Display and control elements

Display:	Output switching status - 1 x LED: Yellow
----------	---

Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=68.5
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Not embeddable
Weigth:	[g] 150

Electrical connection

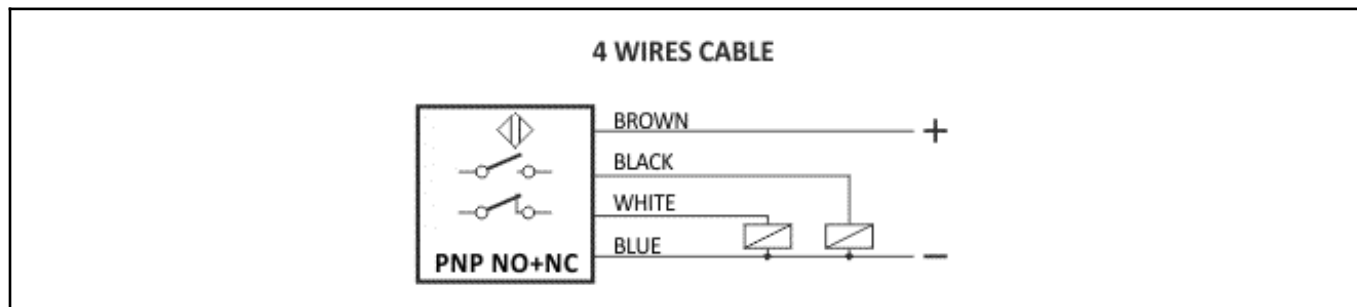
Cable:	5 m - PVC/PVC - 4 x 0.25 mm ²
--------	--

Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION

