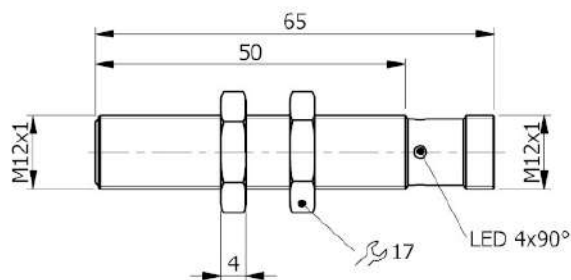


Part number: **I12000031** Model: **SI12-C2 NPN NC H**



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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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=65
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 40

Electrical connection

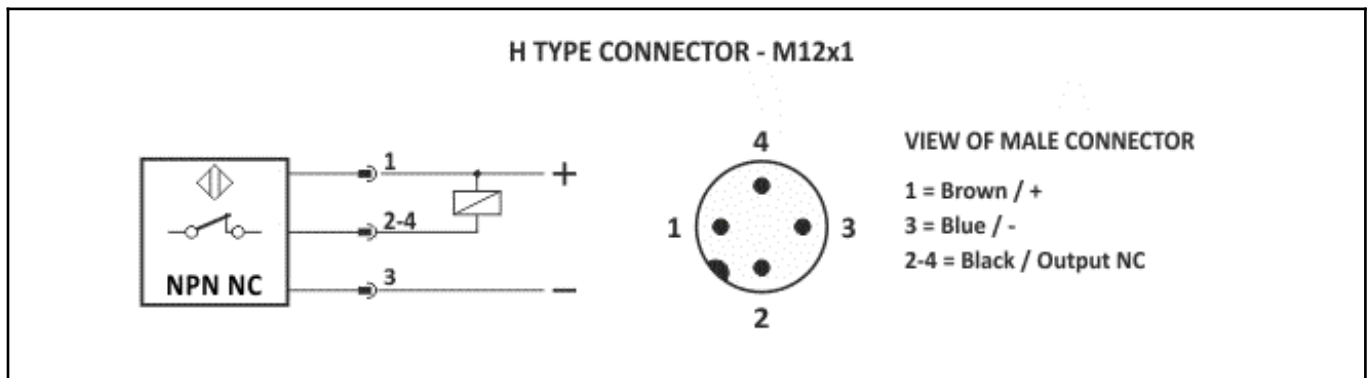
Connector:	H type - M12X1 - Gold plated contacts
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Compliance to Standards / Directives

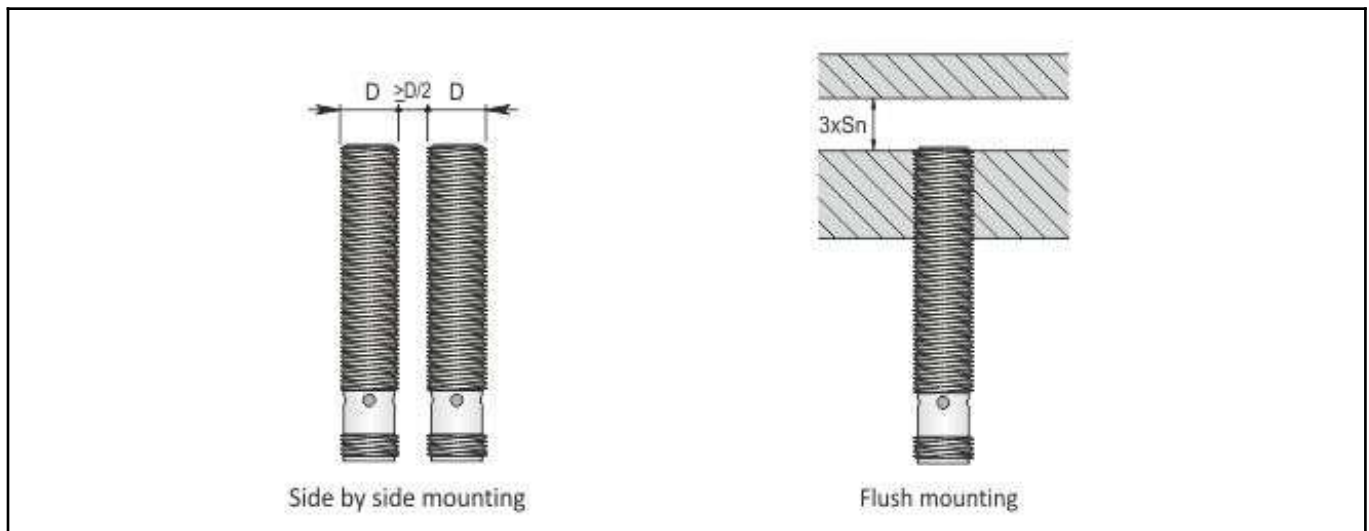
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

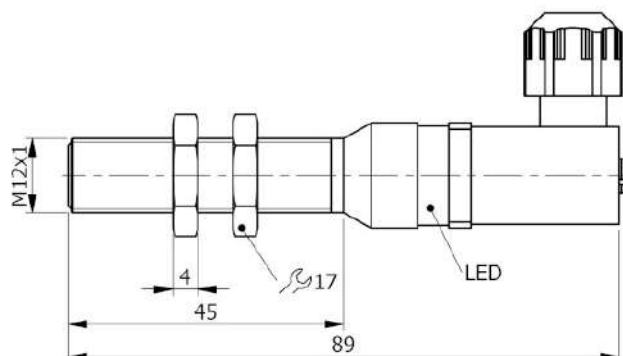
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000034** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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=62
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 55

Electrical connection

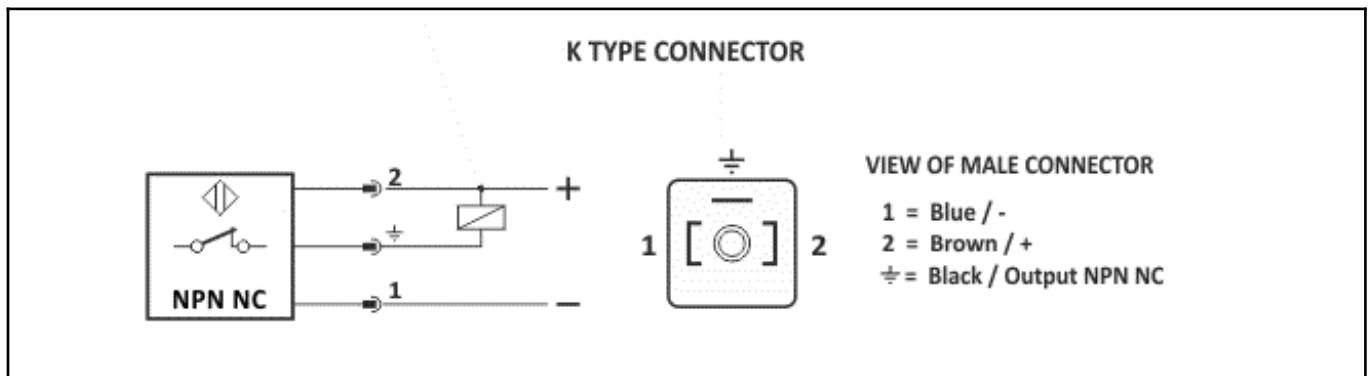
Connector:	K Type - 3 poles - EN 17301-803
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Compliance to Standards / Directives

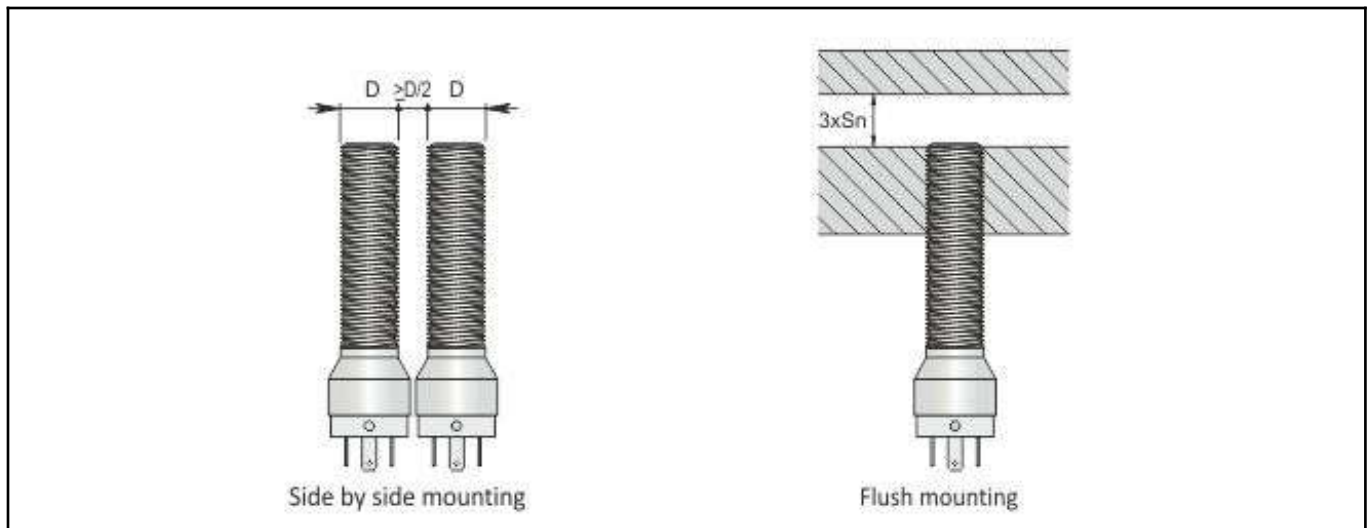
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

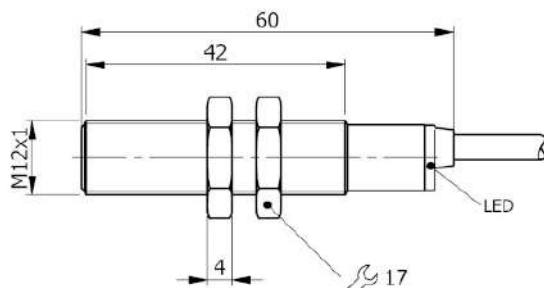
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000203** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth: [g]	220

Electrical connection

Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
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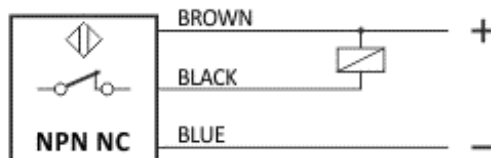
Compliance to Standards / Directives

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

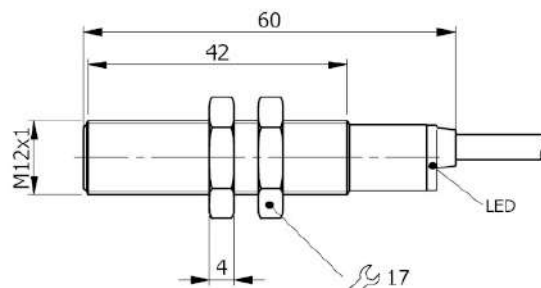


Side by side mounting



Flush mounting

Part number: **I12000201** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth:	[g] 150

Electrical connection

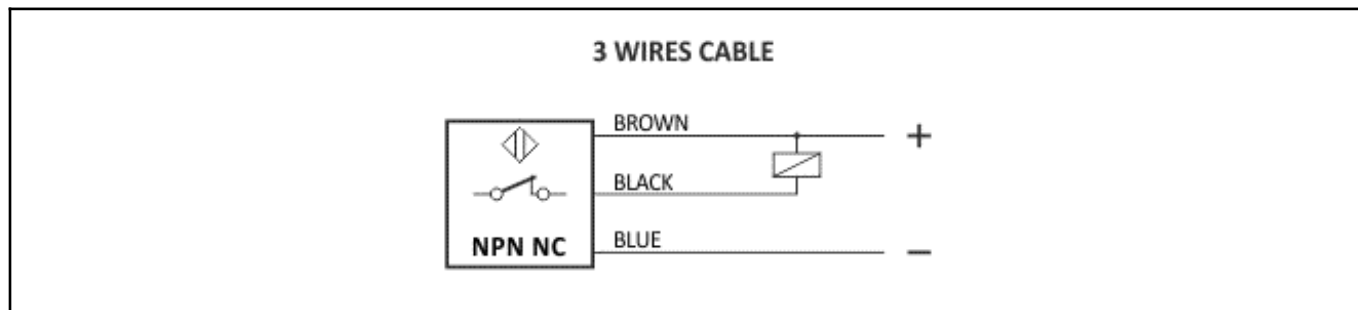
Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
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Compliance to Standards / Directives

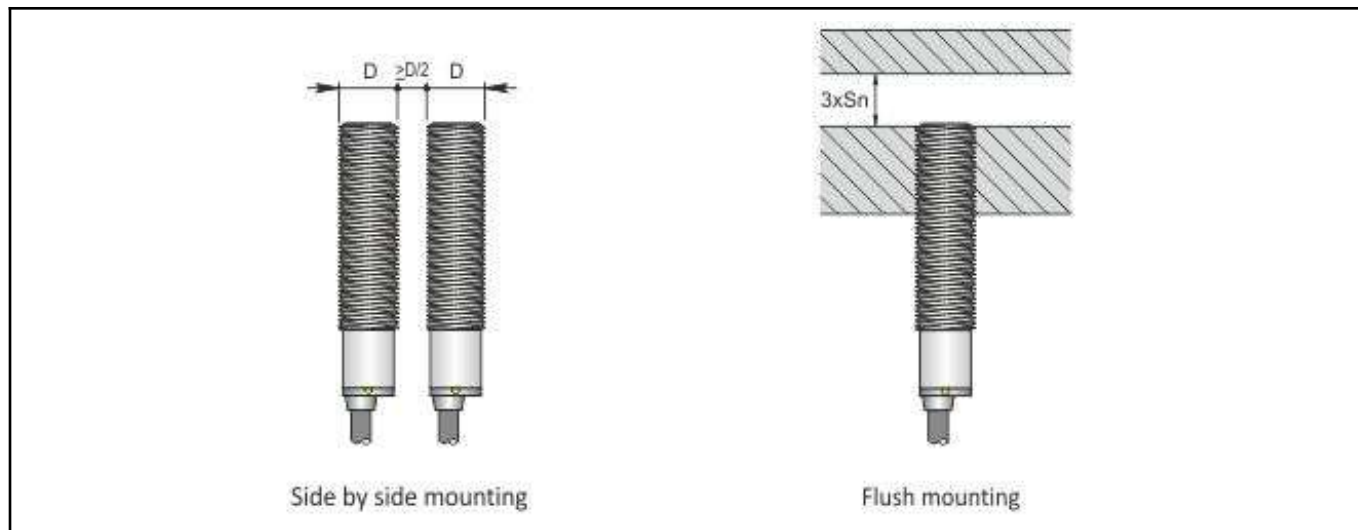
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

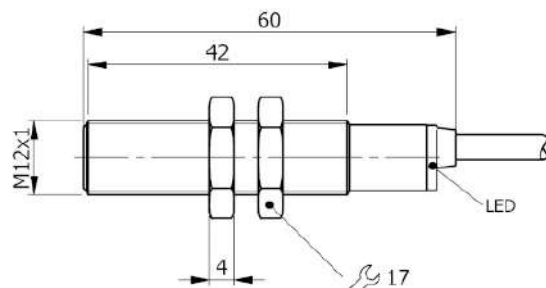
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000038** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 85

Electrical connection

Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
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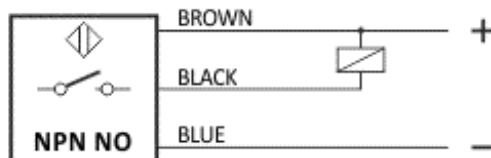
Compliance to Standards / Directives

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

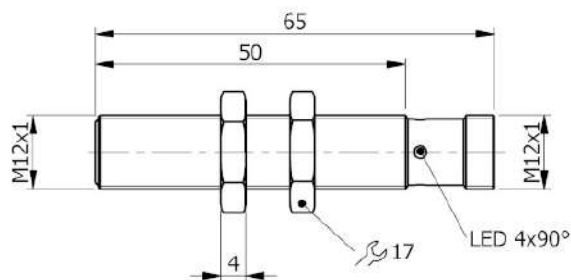


Side by side mounting



Flush mounting

Part number: **I12000039** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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=65
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 40

Electrical connection

Connector:	H type - M12X1 - Gold plated contacts
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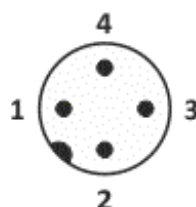
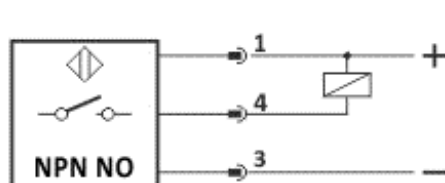
Compliance to Standards / Directives

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

2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

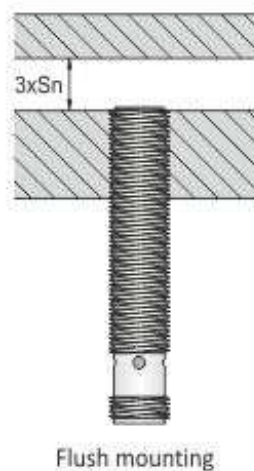
H TYPE CONNECTOR - M12x1



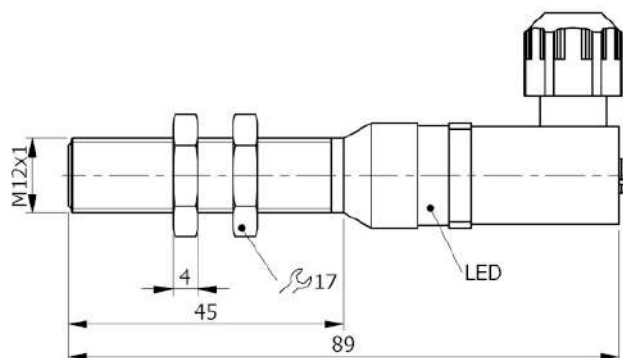
VIEW OF MALE CONNECTOR

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

INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000042** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=62
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 55

Electrical connection

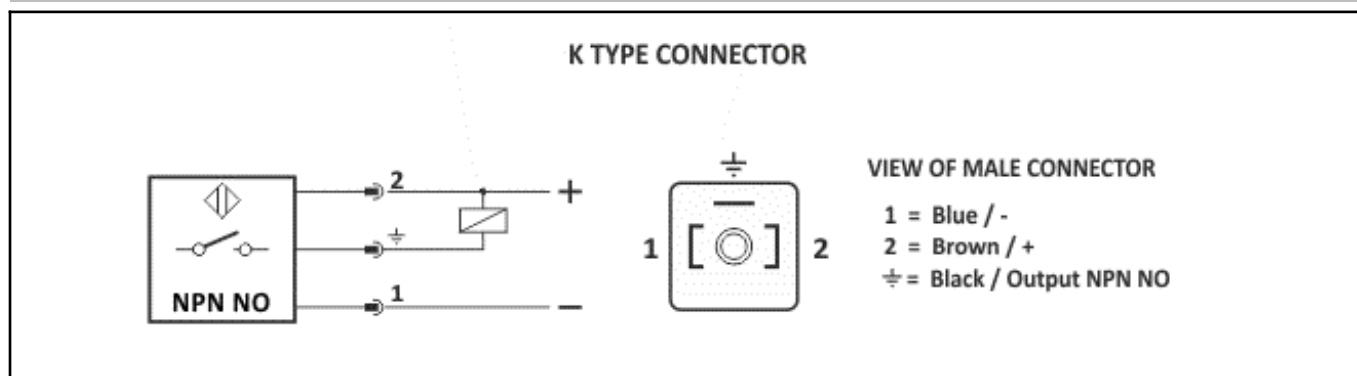
Connector:	K Type - 3 poles - EN 17301-803
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Compliance to Standards / Directives

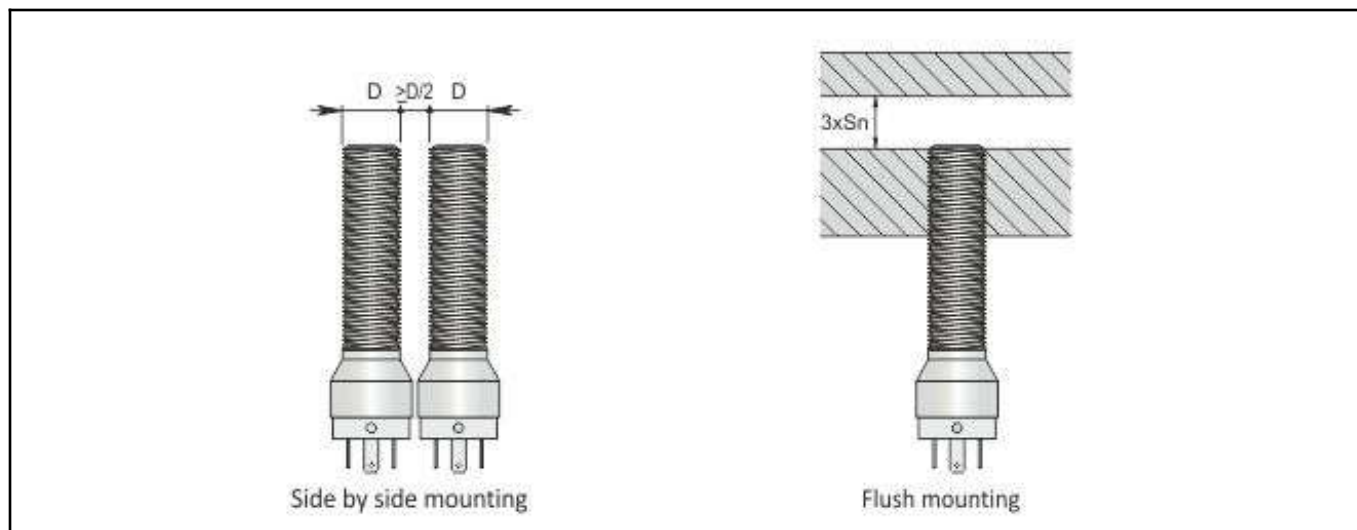
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

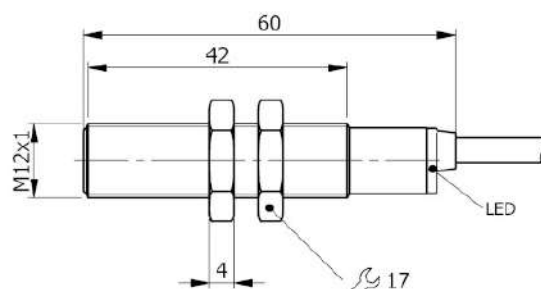
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000211** Model: **SI12-C2 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]	2
Real sensing distance-Sr: [mm]	2 ±10%
Operative distance-So: [mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 220

Electrical connection

Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
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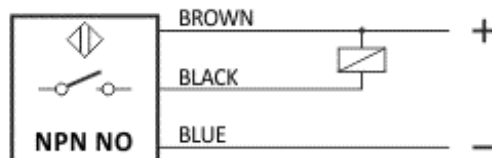
Compliance to Standards / Directives

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

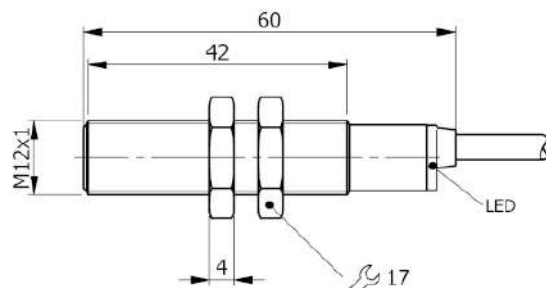


Side by side mounting



Flush mounting

Part number: **I12000209** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth: [g]	150

Electrical connection

Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
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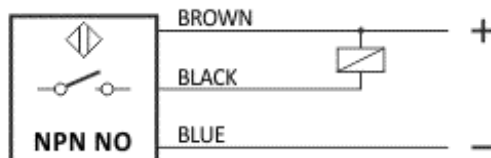
Compliance to Standards / Directives

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

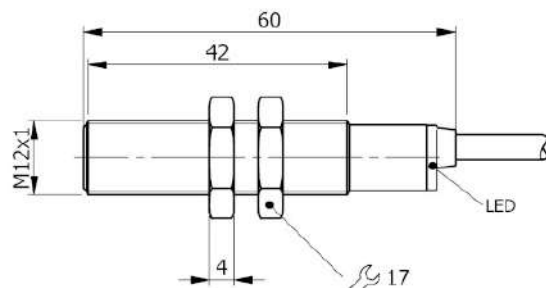


Side by side mounting



Flush mounting

Part number: **I12000047** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 85

Electrical connection

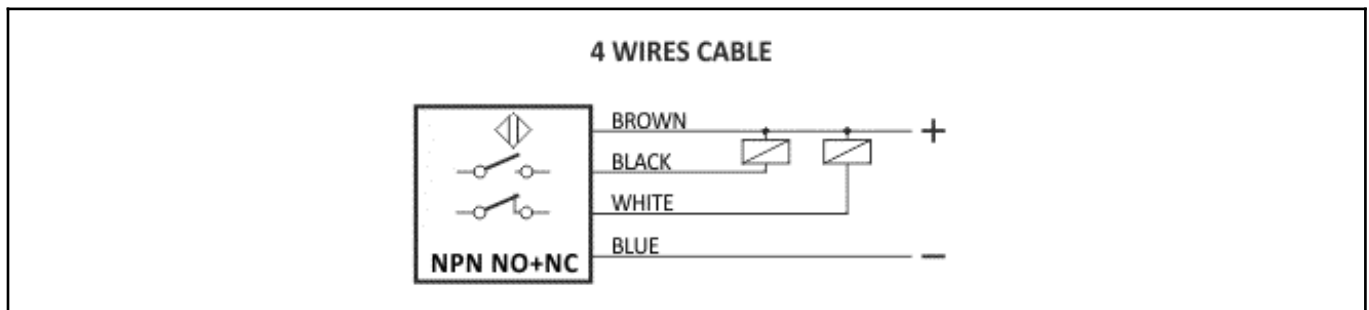
Cable:	2 m - PVC/PVC - 4 x 0.25 mm ²
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Compliance to Standards / Directives

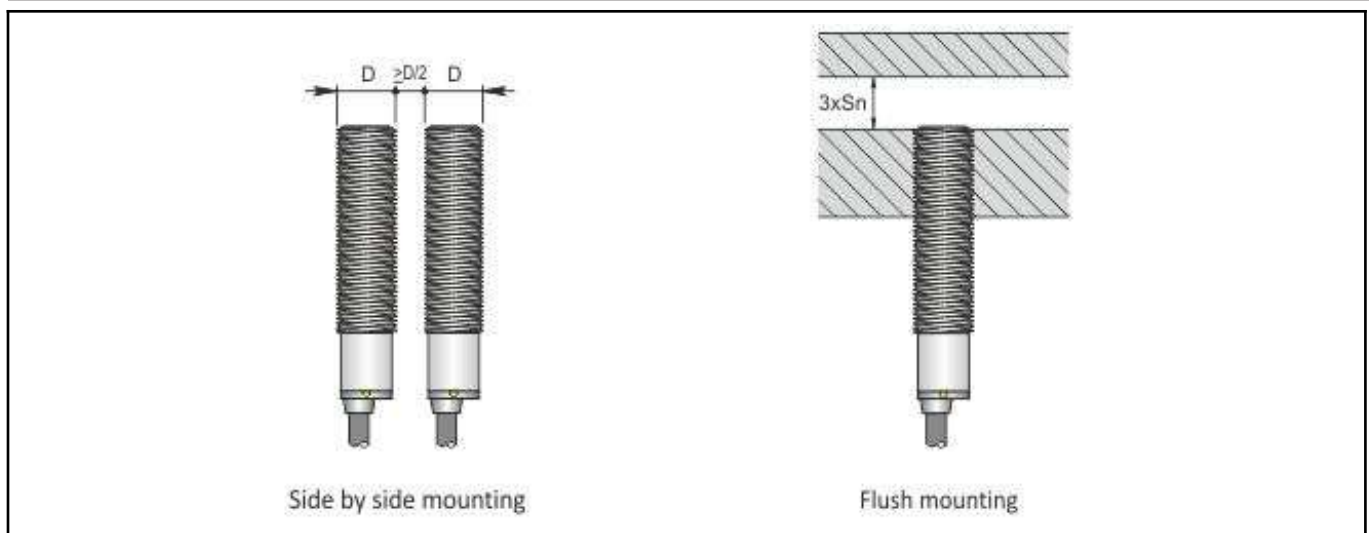
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

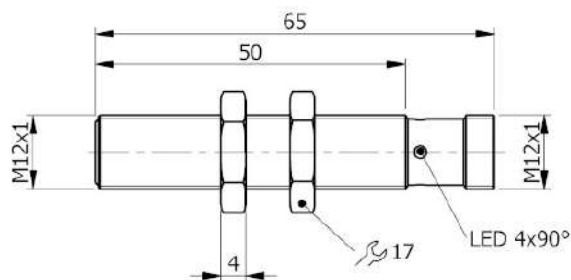
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000048** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=65
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 40

Electrical connection

Connector:	H type - M12X1 - Gold plated contacts
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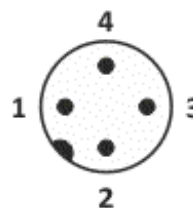
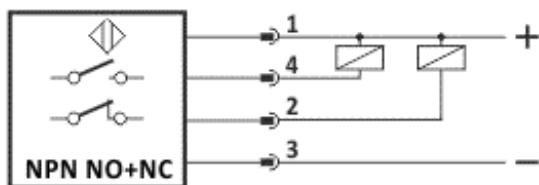
Compliance to Standards / Directives

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

2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

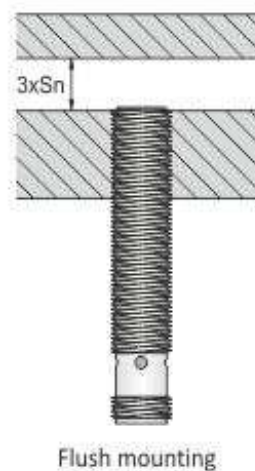
H TYPE CONNECTOR - M12x1



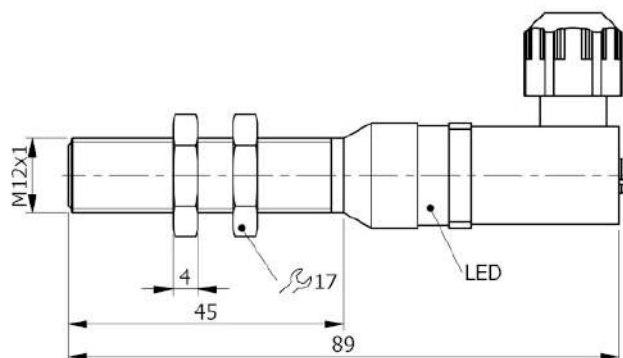
VIEW OF MALE CONNECTOR

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

INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000050** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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=62
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 55

Electrical connection

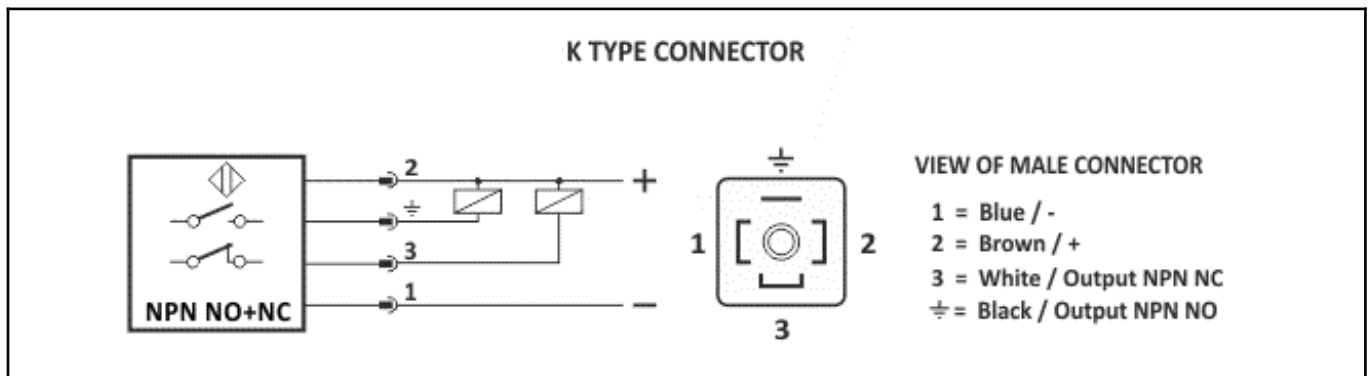
Connector:	K Type - 4 poles - EN 17301-803
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Compliance to Standards / Directives

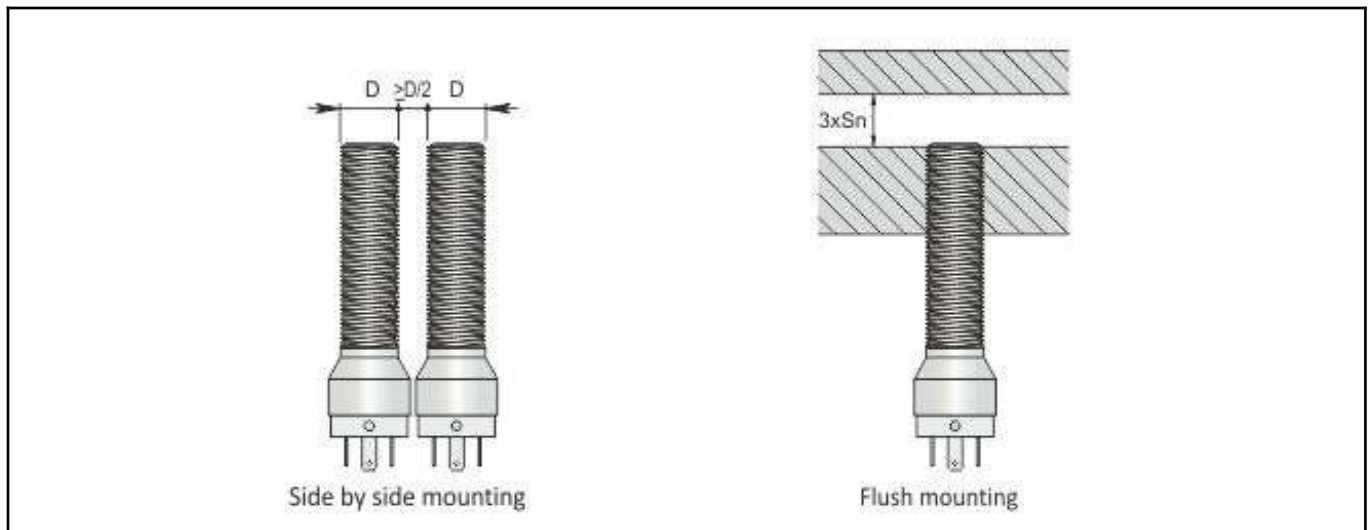
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

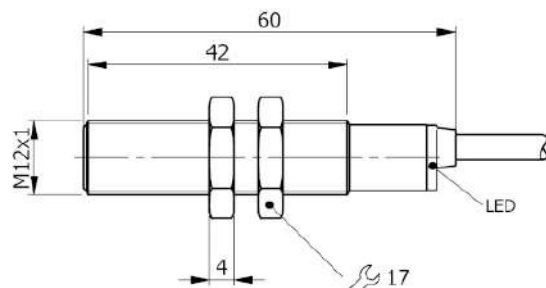
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000219** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 220

Electrical connection

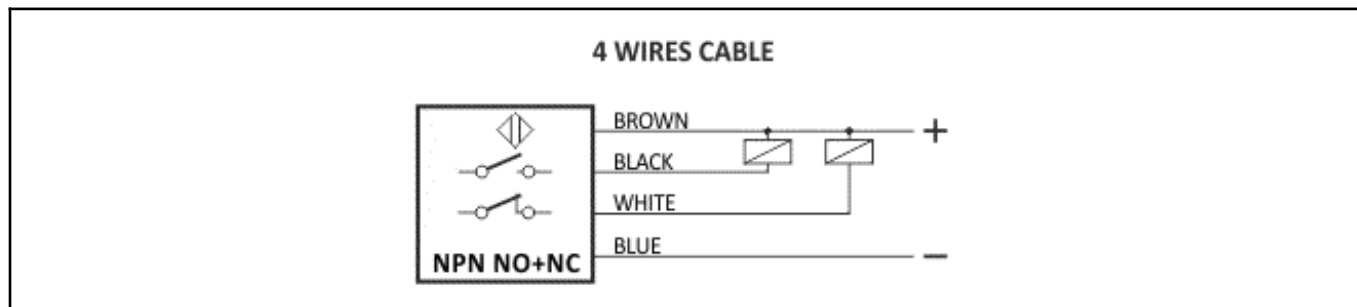
Cable:	10 m - PVC/PVC - 4 x 0.25 mm ²
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Compliance to Standards / Directives

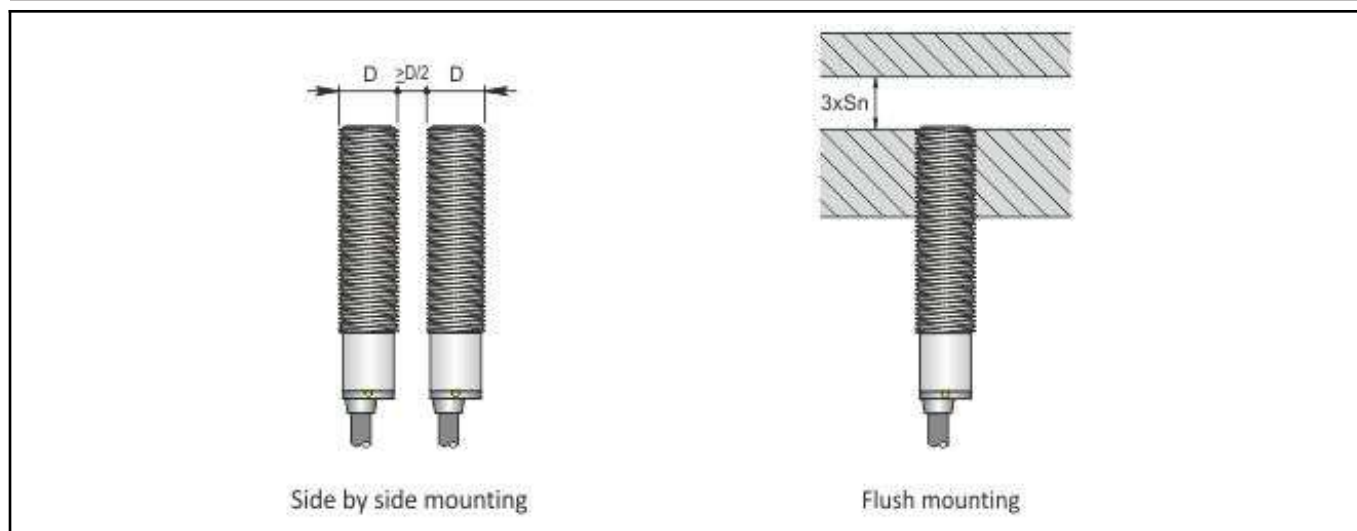
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

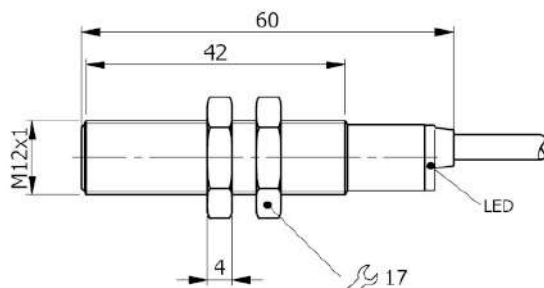
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000217** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 150

Electrical connection

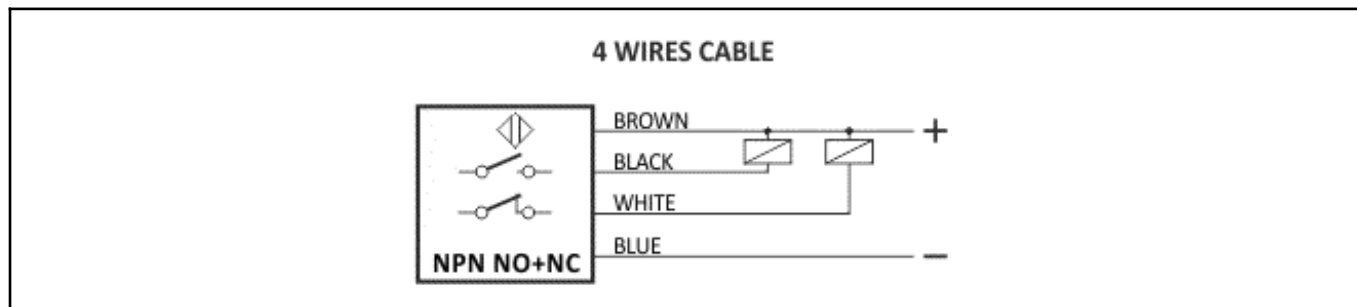
Cable:	5 m - PVC/PVC - 4 x 0.25 mm ²
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Compliance to Standards / Directives

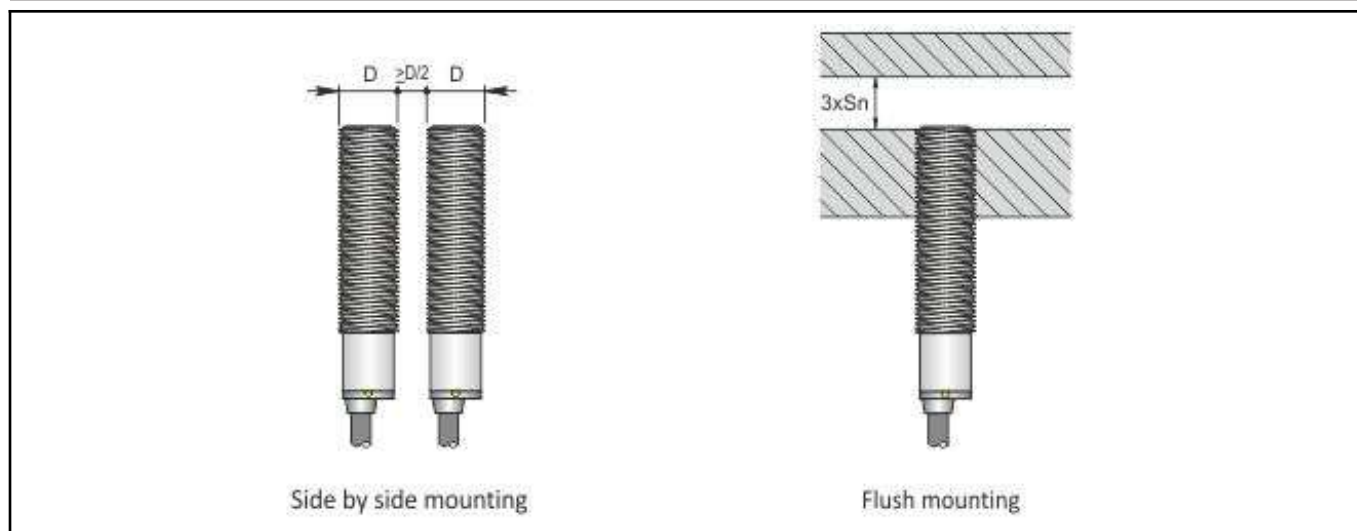
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

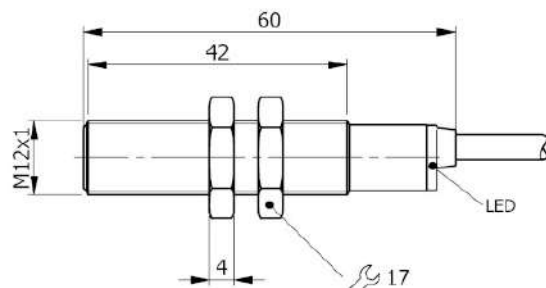
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000053** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth:	[g] 85

Electrical connection

Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
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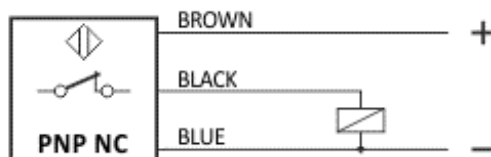
Compliance to Standards / Directives

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

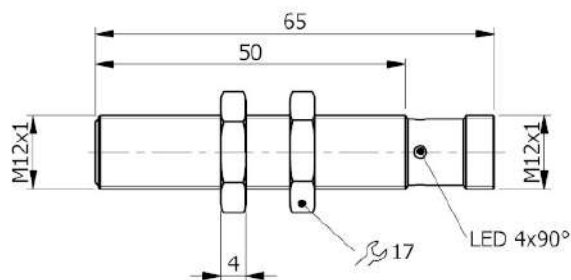


Side by side mounting



Flush mounting

Part number: **I12000054** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=65
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 40

Electrical connection

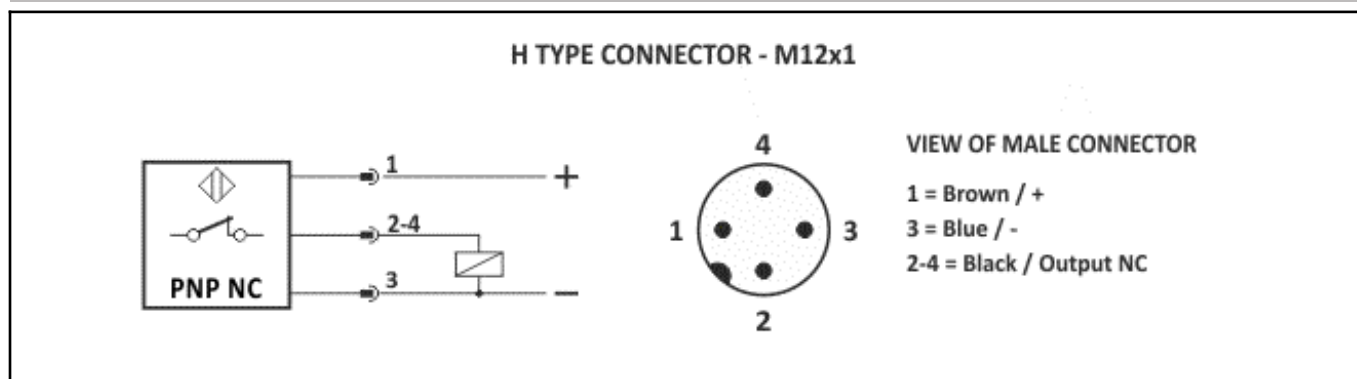
Connector:	H type - M12X1 - Gold plated contacts
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Compliance to Standards / Directives

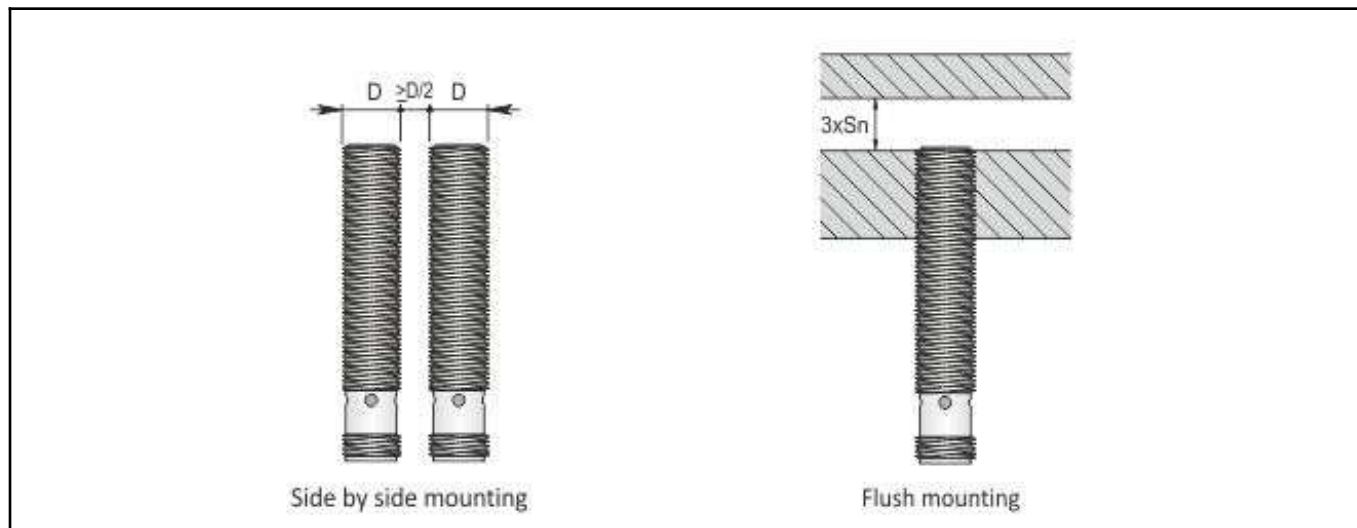
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

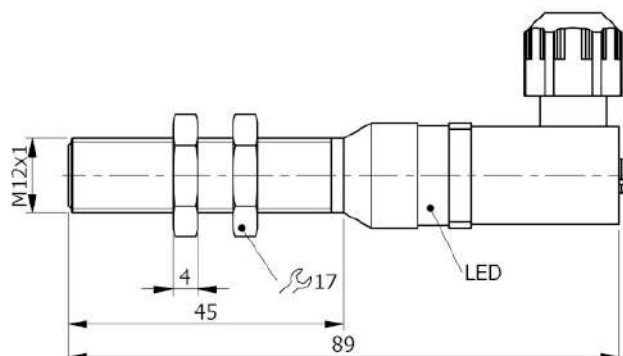
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000057** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=62
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 55

Electrical connection

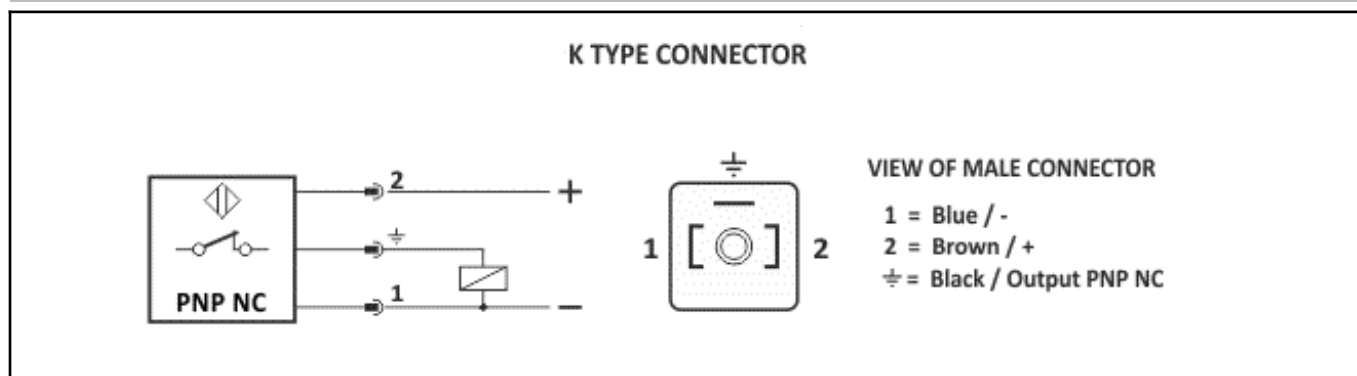
Connector:	K Type - 3 poles - EN 17301-803
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Compliance to Standards / Directives

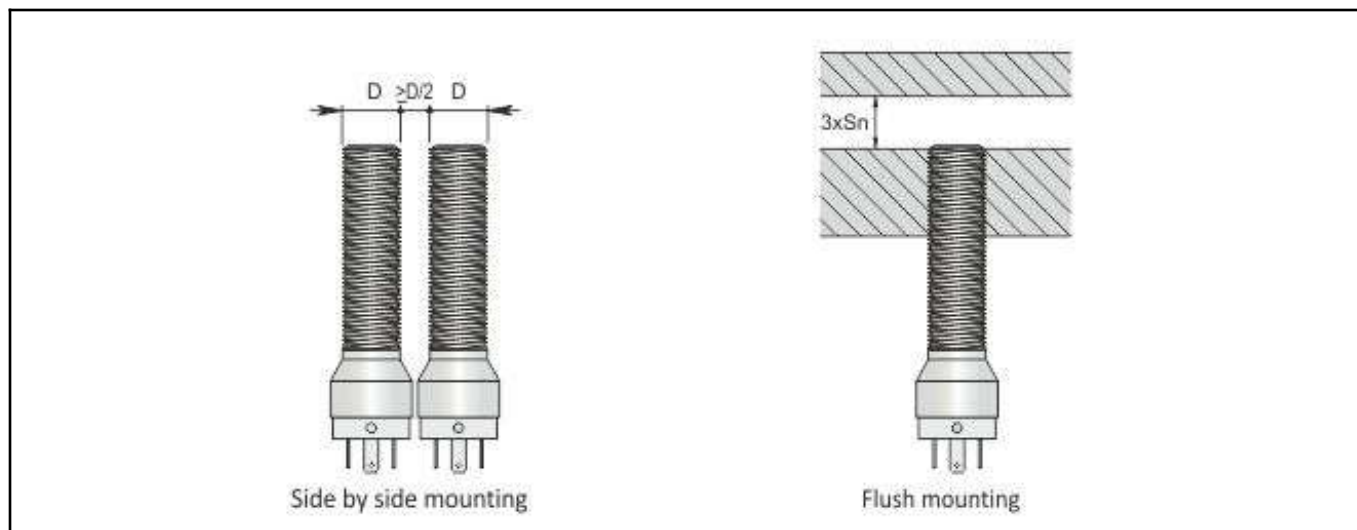
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

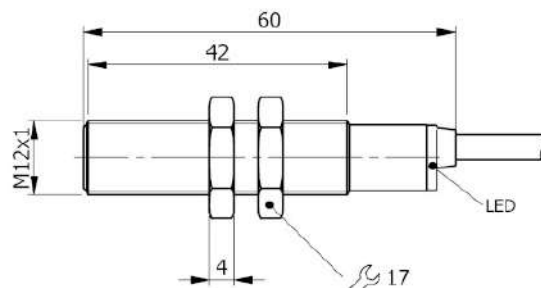
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000223** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth:	[g] 220

Electrical connection

Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
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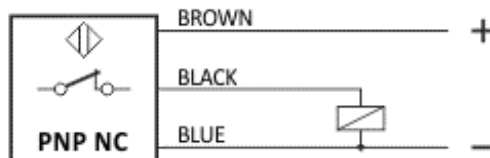
Compliance to Standards / Directives

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

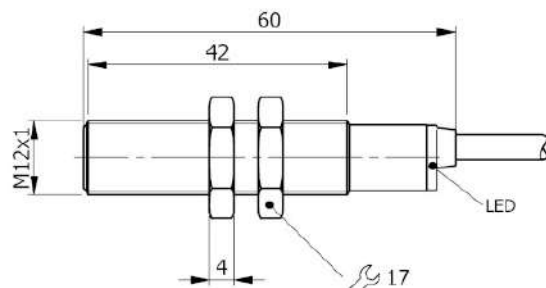


Side by side mounting



Flush mounting

Part number: **I12000221** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth:	[g] 150

Electrical connection

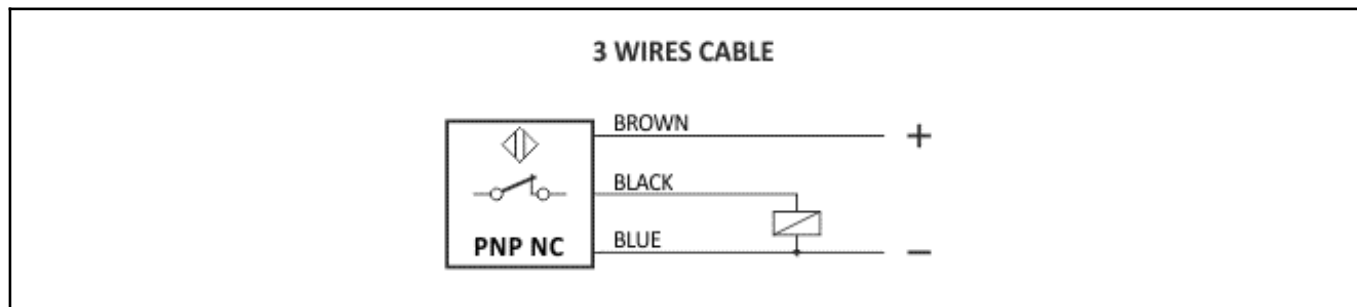
Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
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Compliance to Standards / Directives

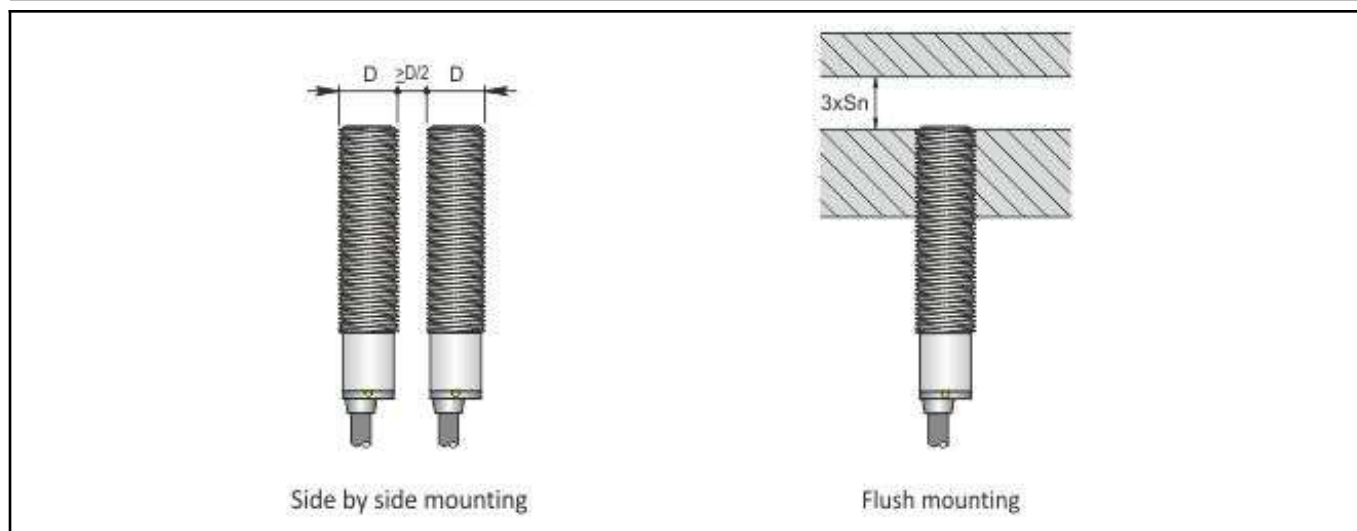
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

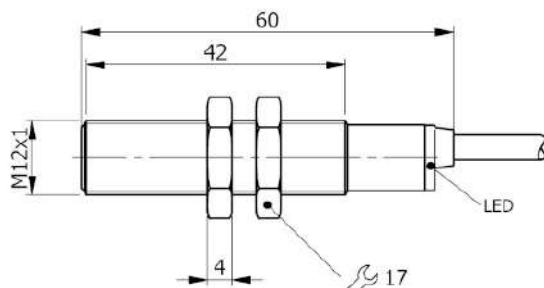
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000030** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 85

Electrical connection

Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
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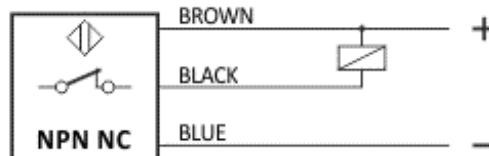
Compliance to Standards / Directives

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

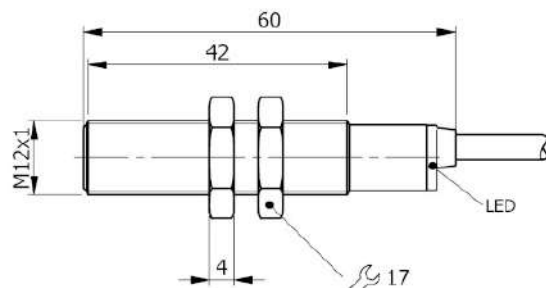


Side by side mounting



Flush mounting

Part number: **I12000061** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth:	[g] 85

Electrical connection

Cable:	2 m - PVC/PVC - 3 x 0.25 mm ²
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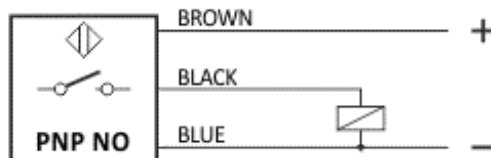
Compliance to Standards / Directives

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

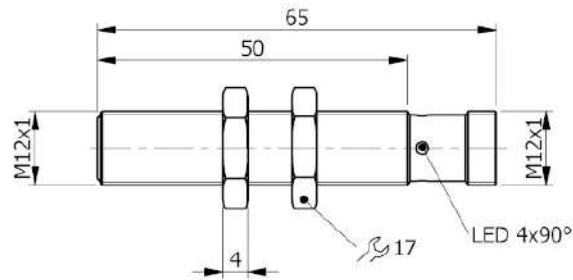


Side by side mounting



Flush mounting

Part number: **I12000062** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=65
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 40

Electrical connection

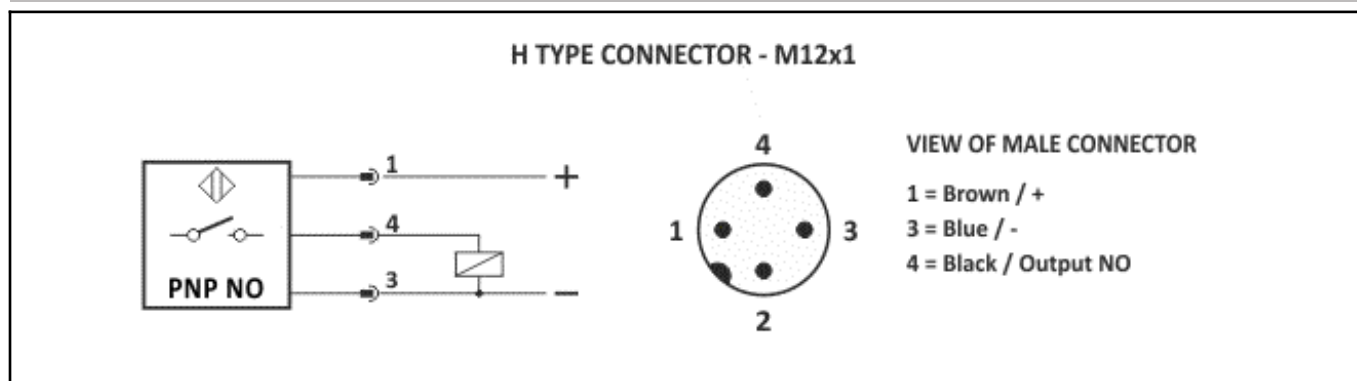
Connector:	H type - M12X1 - Gold plated contacts
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Compliance to Standards / Directives

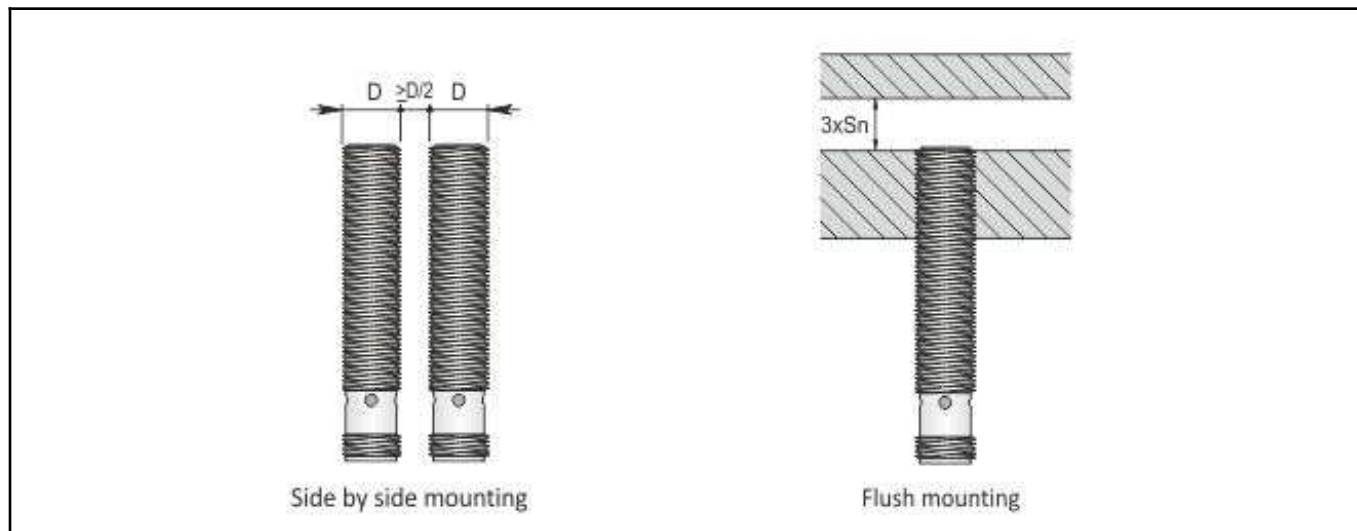
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

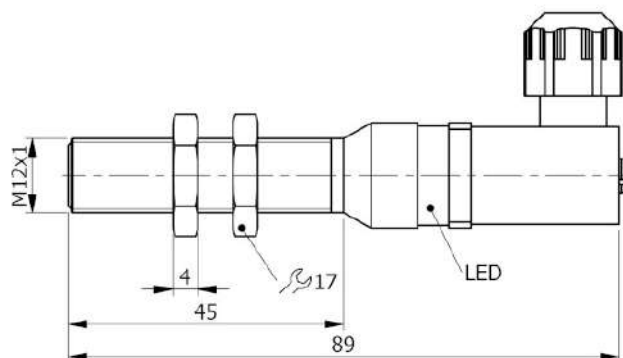
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000065** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=62
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 55

Electrical connection

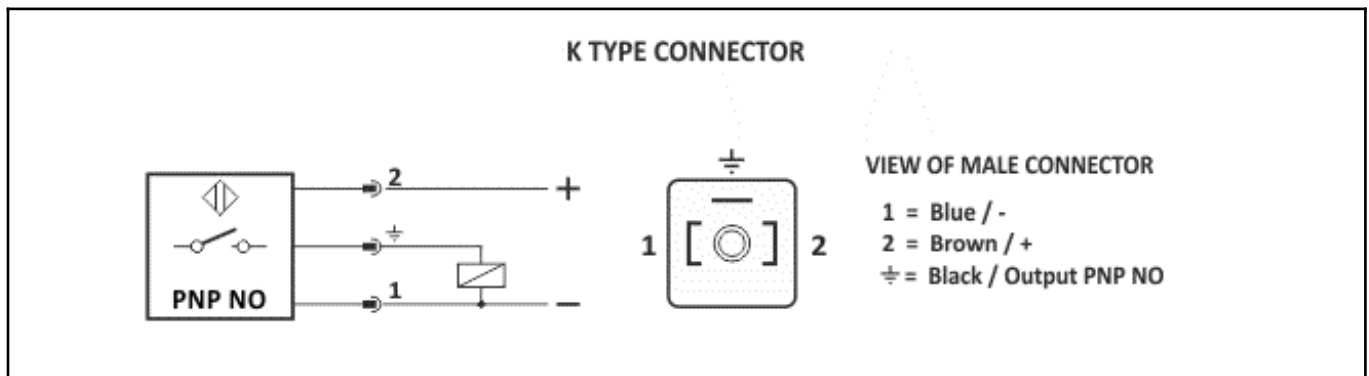
Connector:	K Type - 3 poles - EN 17301-803
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Compliance to Standards / Directives

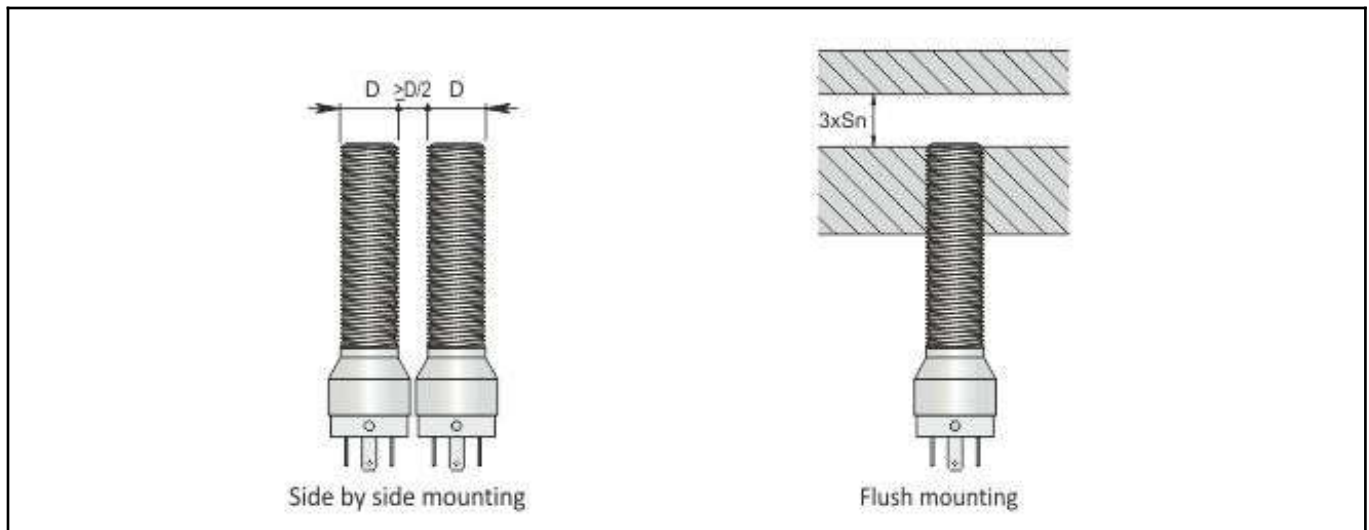
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

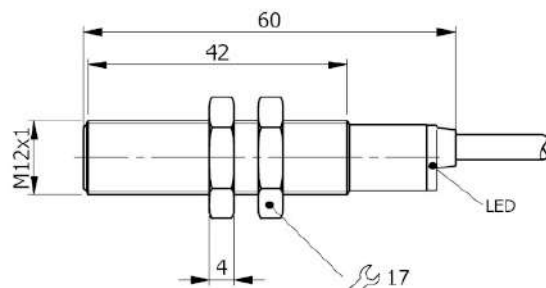
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000231** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions: [mm]	M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth: [g]	220

Electrical connection

Cable:	10 m - PVC/PVC - 3 x 0.25 mm ²
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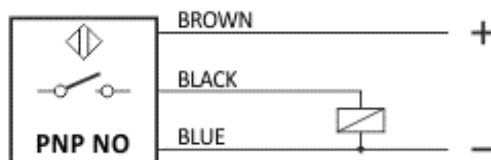
Compliance to Standards / Directives

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



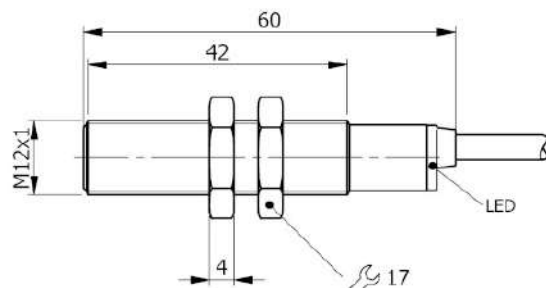
INSTRUCTIONS FOR CORRECT INSTALLATION



Side by side mounting



Flush mounting

Part number: **I12000229** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions: [mm]	M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weigth: [g]	150

Electrical connection

Cable:	5 m - PVC/PVC - 3 x 0.25 mm ²
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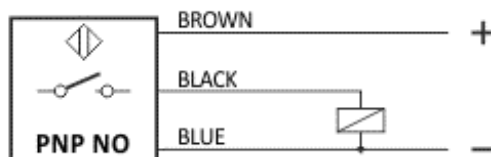
Compliance to Standards / Directives

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

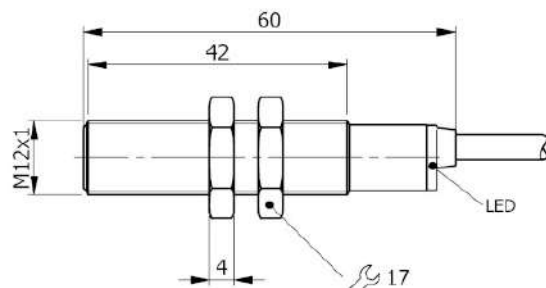


Side by side mounting



Flush mounting

Part number: **I12000071** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 85

Electrical connection

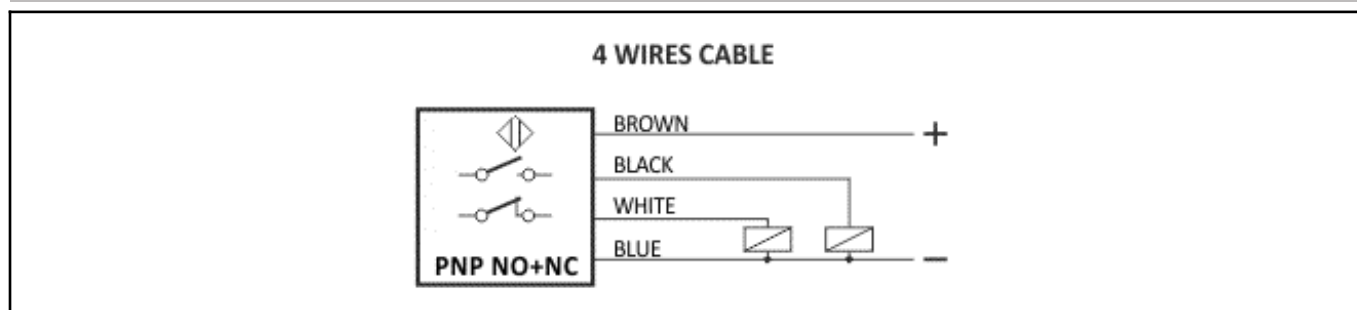
Cable:	2 m - PVC/PVC - 4 x 0.25 mm ²
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Compliance to Standards / Directives

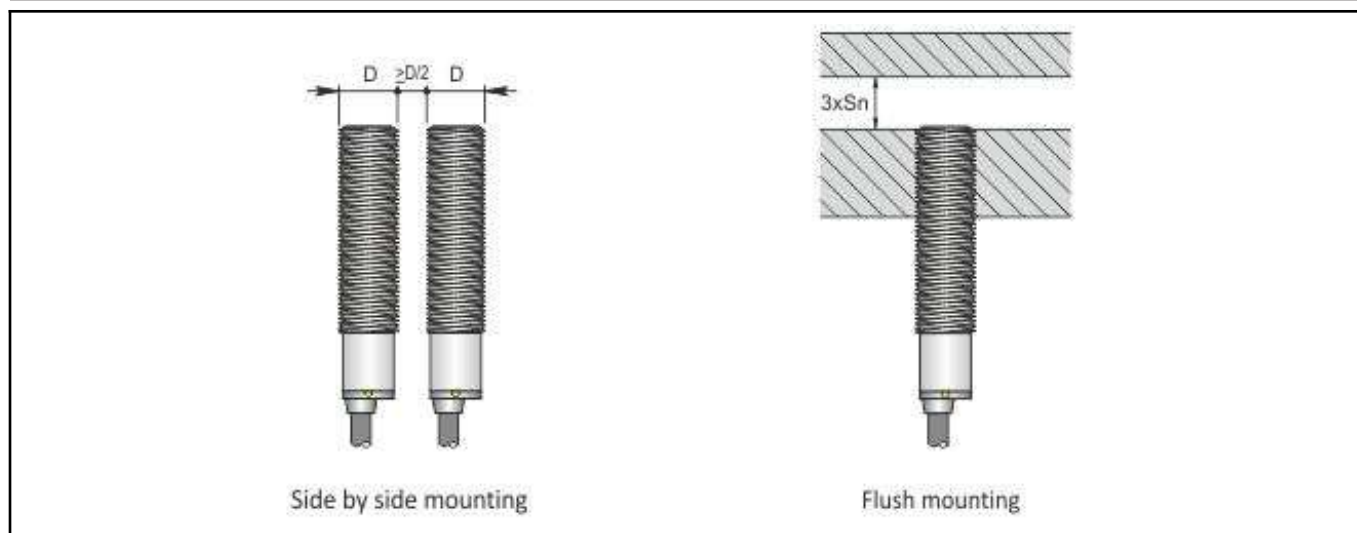
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

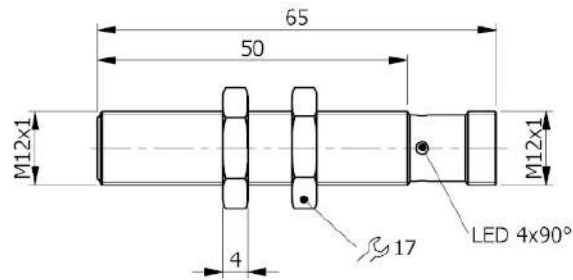
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000072** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions: [mm]	M12x1 - L=65
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth: [g]	40

Electrical connection

Connector:	H type - M12X1 - Gold plated contacts
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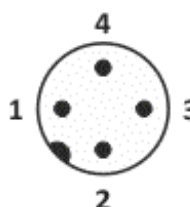
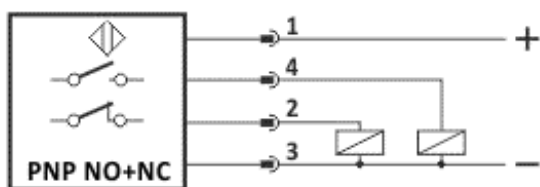
Compliance to Standards / Directives

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

2. NORME DI INSTALLAZIONE

WIRING DIAGRAM

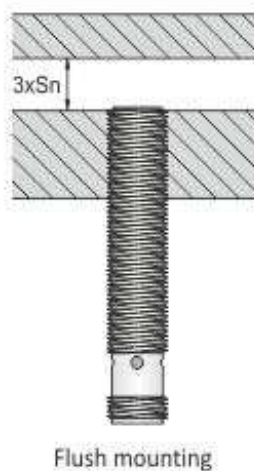
H TYPE CONNECTOR - M12x1



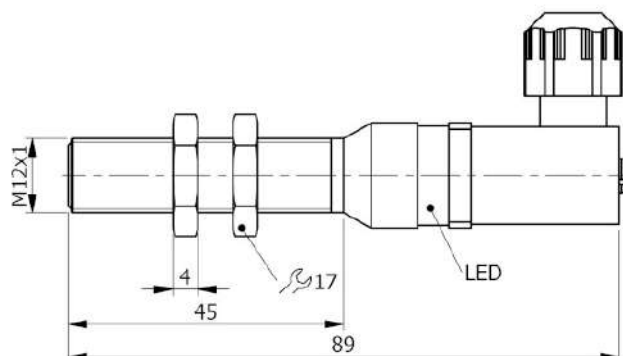
VIEW OF MALE CONNECTOR

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

INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000074** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=62
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 55

Electrical connection

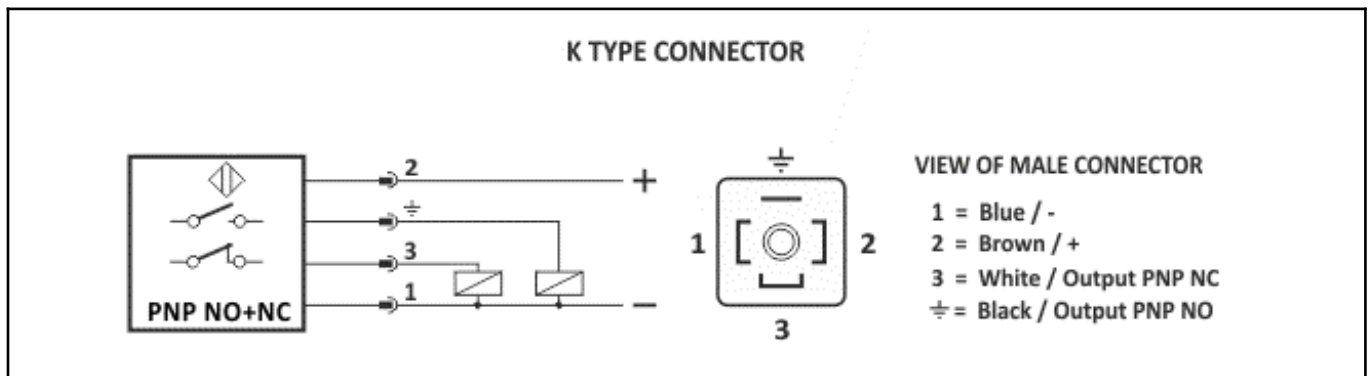
Connector:	K Type - 4 poles - EN 17301-803
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Compliance to Standards / Directives

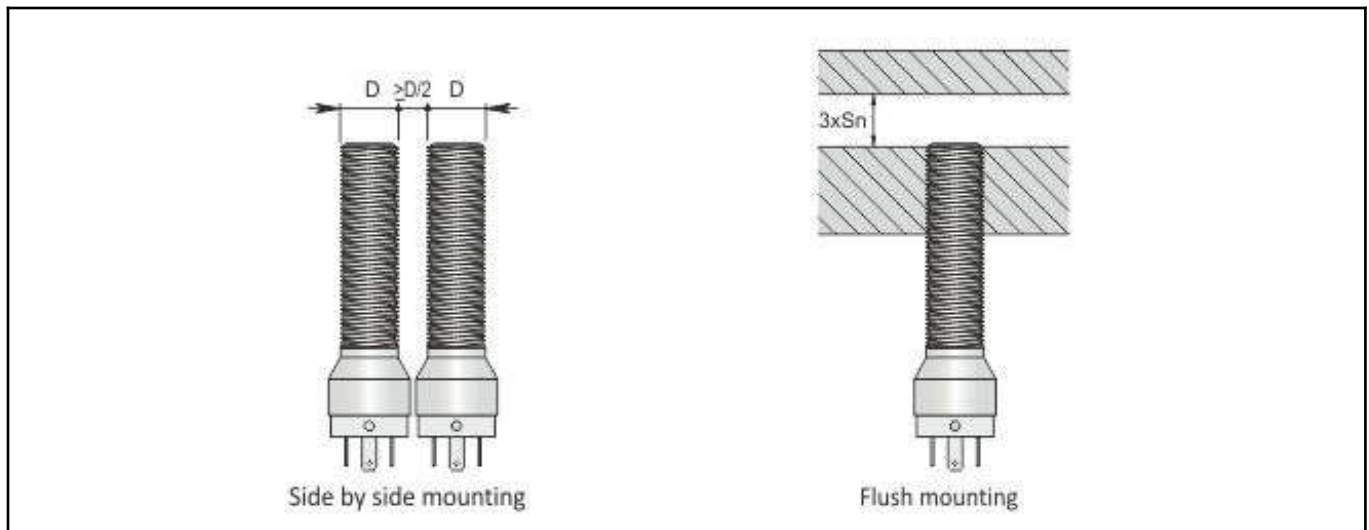
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

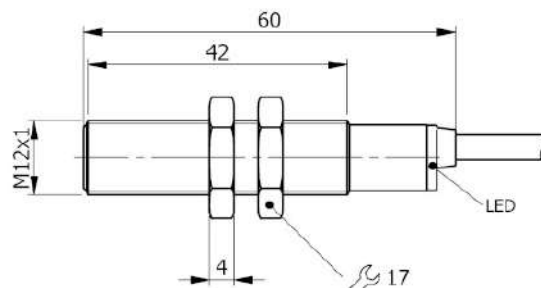
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000239** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions: [mm]	M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth: [g]	220

Electrical connection

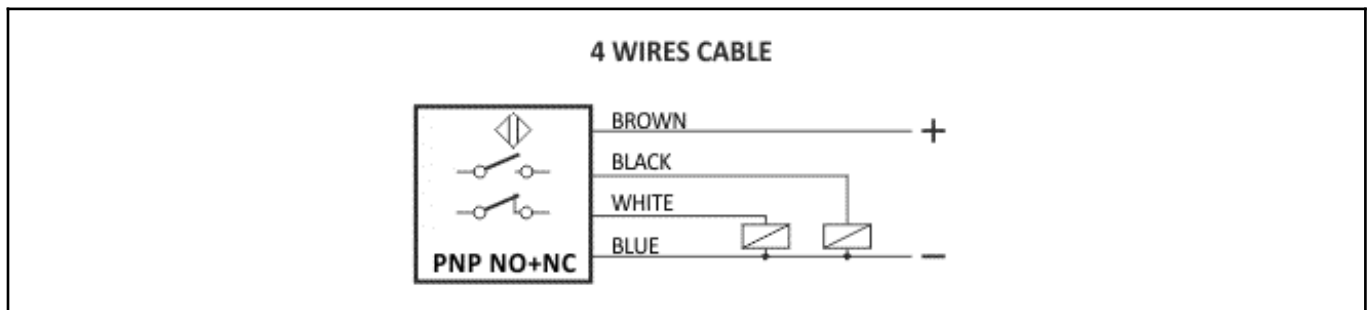
Cable:	10 m - PVC/PVC - 4 x 0.25 mm ²
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Compliance to Standards / Directives

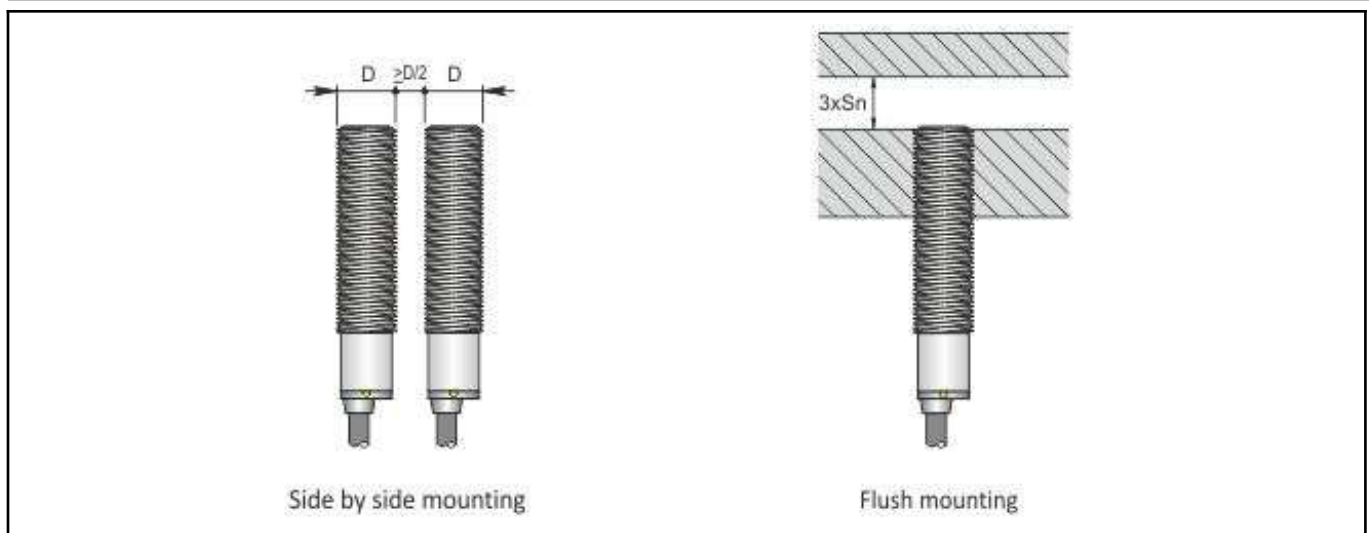
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

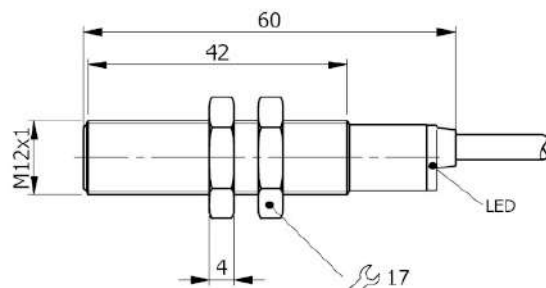
WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Part number: **I12000237** Model: **SI12-C2 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]	2
Real sensing distance-Sr:	[mm]	2 ±10%
Operative distance-So:	[mm]	0 ÷ 1.62

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
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Mechanical data

Housing:	Threded type
Thread designation:	M12x1
Dimensions:	[mm] M12x1 - L=61
Materials:	Housing: Nickel-plated brass - Sensing area: POM red - Lock nuts: Nickel-plated brass
Mounting:	Embeddable
Weighth:	[g] 150

Electrical connection

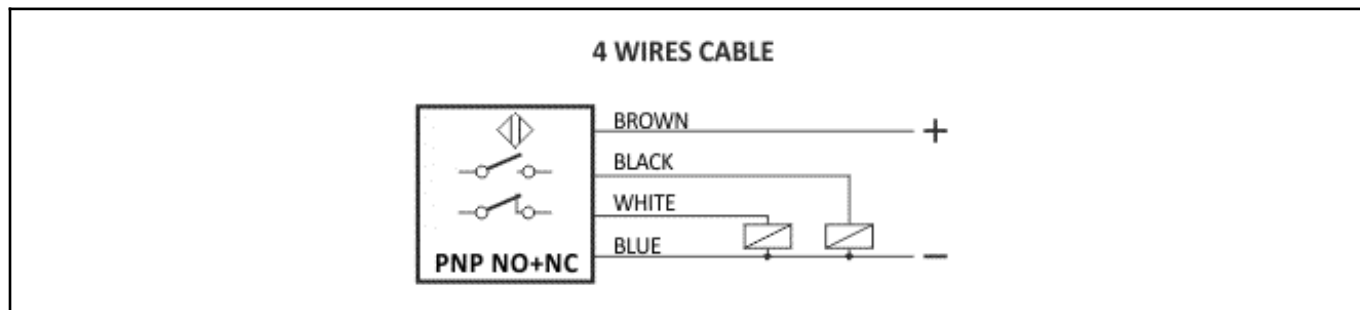
Cable:	5 m - PVC/PVC - 4 x 0.25 mm ²
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Compliance to Standards / Directives

Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
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WIRING DIAGRAM



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