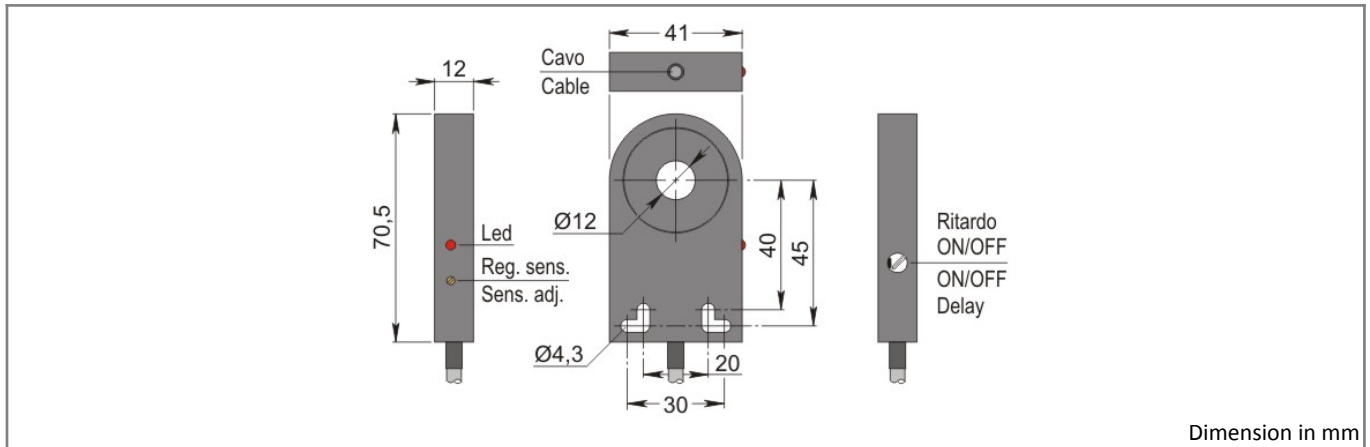


Part number: **SIA000272** Model: **SIA12-CE NPN NO+NC R LC10**



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
Delay ON de-energization: [ms]	100 (when inserted)
Max voltage drop: [V]	< 1.8
Max output current: [mA]	200
Max switching frequency: [Hz]	See instructions for installation
Short circuit protection:	Present
Overload protection:	Present
Detection zone	
Sensing hole diameter: [mm]	12
Minimum detectable object: [mm]	Ø 1.2x2 - Fe360
Accuracy and Deviations	
Correction factor:	Stainless steel: 0.9 - Brass: 0.5 - Aluminium: 0.4 - Copper: 0.4
Hysteresis: [%Sr]	Depends on the sensitivity
Switching point drift: [%Sr]	-1
Repeatability: [%Sn]	< 0.3
Environmental conditions	
Temperature limits: [°C]	-20 / +60 °C
IP rating:	IP65
Display and control elements	
Display:	Output switching status - 1 x LED: Yellow



### Mechanical data

Housing:		Ring
Dimensions:	[Hz]	41 x 12 x 70.5
Materials:		Housing: PC black - Sensing area: PVC black
Mounting:		Not embeddable
Weight:	[g]	330

### Electrical connection

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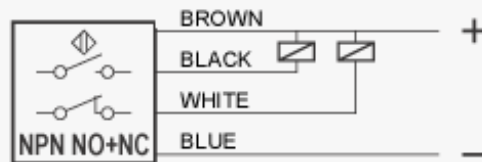
### Compliance to Standards / Directives

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

## 2. NORME DI INSTALLAZIONE

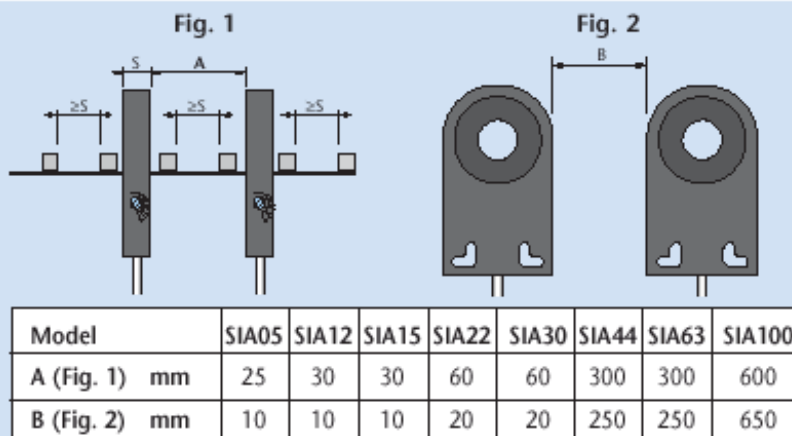
### WIRING DIAGRAM

#### 4 WIRES CABLE - LOGIC NPN NO+NC



### INSTRUCTIONS FOR CORRECT INSTALLATION

#### INSTRUCTIONS FOR CORRECT INSTALLATION



Titolo img 1

**MIN. DIMENSIONS OF THE OBJECT TO DETECT (Fe37)**

Model		SIA12
Lenght	mm	2
Diameter	mm	1.2

**SWITCHING FREQUENCY**

The switching frequency of inductive ring sensors depends on delayed impulse time (**when inserted**) according to the formula :

$$\text{Switching frequency (Hz)} = \frac{1}{(T \text{ impulse} + 10) \text{ mS}}$$

Vice versa, the switching frequency will be between 600+1000 Hz.