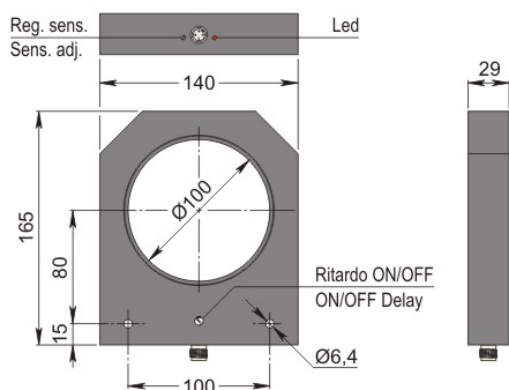


Part number: **SIA000158** Model: **SIA100-CE PNP NO+NC H R**



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
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]	100
Minimum detectable object:	[mm]	Ø 12x20 - 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 - 4 x 90° LED: Yellow
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Mechanical data

Housing:		Ring
Dimensions:	[Hz]	140 x 29 x 165
Materials:		Housing: PVC black - Sensing area: PVC black
Mounting:		Not embeddable
Weigth:	[g]	650

Electrical connection

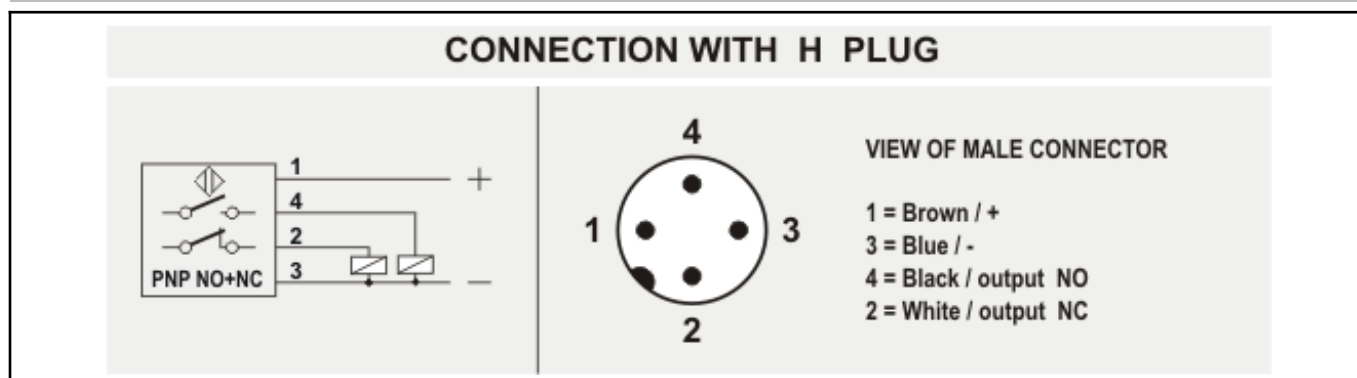
Connector:	H type - M12X1 - Gold plated contacts
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Compliance to Standards / Directives

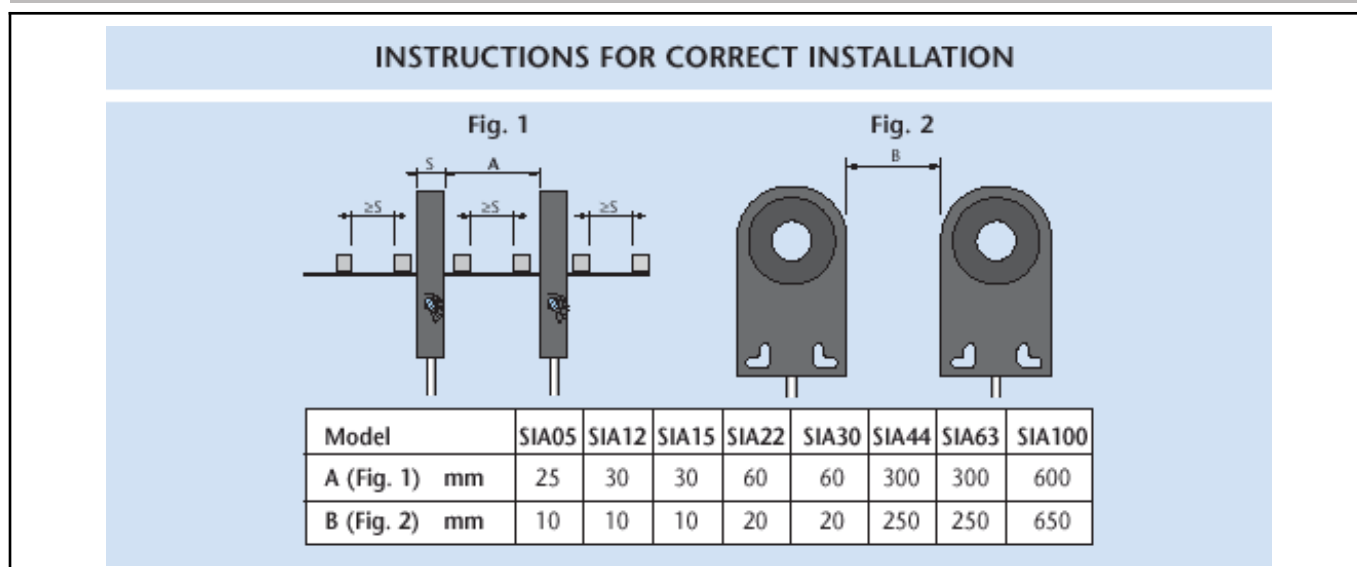
Directives compliance:	2014/30/EU -Electromagnetic compatibility directive (EMC)
Standards compliance:	EN60947-5-2 - Product standard

2. NORME DI INSTALLAZIONE

WIRING DIAGRAM



INSTRUCTIONS FOR CORRECT INSTALLATION



Titolo img 1

MIN. DIMENSIONS OF THE OBJECT TO DETECT (Fe37)

Model		SIA100
Lenght	mm	20
Diameter	mm	12

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 100 Hz.