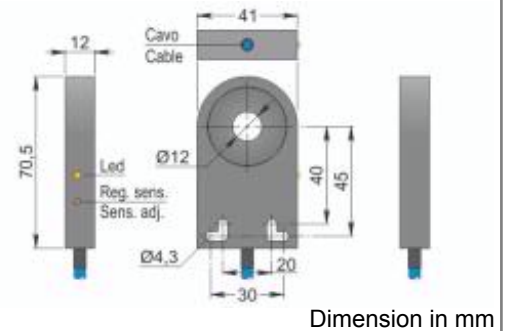




**Part number: YIA000057 - Model: SIA12-NE LC10 AGD1**



### TECHNICAL CHARACTERISTICS

|  |  |
|--|--|
| Power supply:                            | Direct current   |
| Working voltage:                         | 8.2 Vdc (1Kohm)  |
| Sensing hole diameter (mm):              | 12   |
| Minimum detectable object (mm):          | Ø 1.2 x 2  |
| Output type:                             | Namur  |
| Max. switching frequency:                | 600 ÷ 1000 Hz  |
| Repeatability (%Sn):                     | < = 0.3  |
| Current absorption at 8.2V:              | Target detected < = 1 mA - Target not detected >= 3 mA   |
| Led indicator:                           | Present  |
| Operating temperature limits:            | -25 ÷ +60 °C   |
| Storage temperature limits:              | -30 ÷ +70 °C   |
| IP rating:                               | IP 67  |
| Housing material:                        | Plastic  |
| Cable type:                              | 2x0.25 mm <sup>2</sup> PVC   |
| Weight:                                  | 260 g  |
| Mechanical characteristics:              | SIA05 41x70x12   |
| Connection type:                         | Cable 10 m   |
| Explosive atmosphere type:               | Mixture Air/gas and/or Air/Dust  |
| Equipment category:                      | 1G / 1D  |
| Installation area:                       | Gas: Zone 0, Zone 1 and Zone 2 - Dust: Zone 20, Zone 21 and Zone22                                 |
| Protection method:                       | Intrinsically safe   |
| Marking:                                 | Gas: II 1G Ex ia IIB T5 Ga - Dust: II 1D Ex ia IIIC T100°C Da IP66 -25< Ta                         |
| Safety information:                      | Connection to certified intrinsically safe circuits only with the following values : Uo < = 17 V , |
| Conforming standard:                     | EN60079-0, EN60079-11, EN60079-26 and EN60947-5-6  |
| EC-type examination certificate - ATEX:  | IMQ 13 ATEX 019  |
| Certificate of conformity (CoC) - IECEx: | IECEx IMQ 13.0012X   |



Part number: YIA000057 - Model: SIA12-NE LC10 AGD1

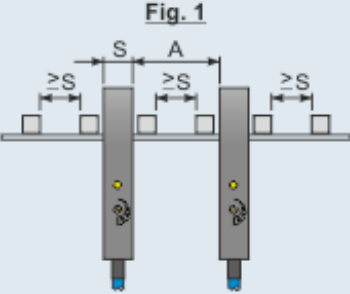
**WIRING DIAGRAM**



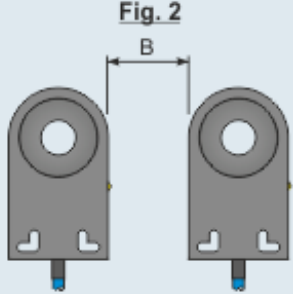
**INSTRUCTIONS FOR CORRECT INSTALLATION**

**INSTRUCTIONS FOR CORRECT INSTALLATION**

**Fig. 1**



**Fig. 2**

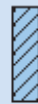


| Model         | SIA05 | SIA12 | SIA15 | SIA22 | SIA30 | SIA44 | SIA63 |
|---------------|-------|-------|-------|-------|-------|-------|-------|
| A (Fig. 1) mm | 25    | 30    | 30    | 60    | 60    | 300   | 300   |
| B (Fig. 2) mm | 10    | 10    | 10    | 20    | 20    | 250   | 250   |

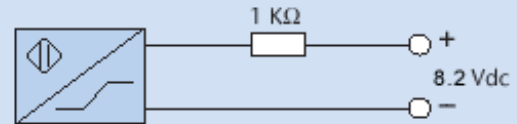
## WORKING PRINCIPLE



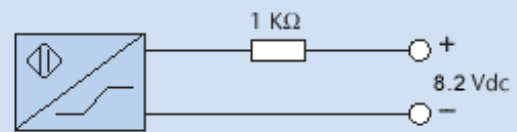
Metallic plate



In presence of metal  $I \leq 1 \text{ mA @ } 8.2 \text{ V}$



In absence of metal  $I \geq 3 \text{ mA @ } 8.2 \text{ V}$



The NAMUR EX sensors are electronic devices whose absorbed current varies in the presence of a metallic object. The difference between these sensors and traditional sensors is the absence of amplifier trigger stages.