

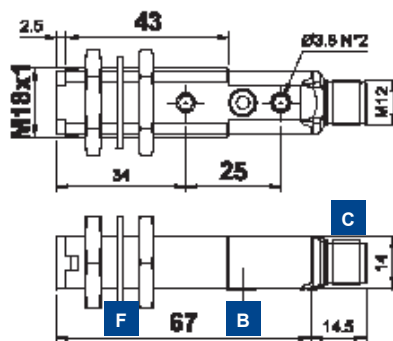
U LUMINESCENCE SENSOR WITH UV EMISSION

The UV light LED emission detects any luminescent reference, even on very reflective surfaces, such as ceramics, metal or mirrored glass. The **EASYtouch™** setting procedures fixes automatically the best detection conditions, simply by pressing the teach-in push-button once, with the luminescent object present. By pressing the teach-in push-button and holding it down until the green light on the rear of the sensor flashes, with the luminescent object present and then pressing the button again in the presence of a luminescent reference you wish to ignore, a higher level of accuracy is obtained.

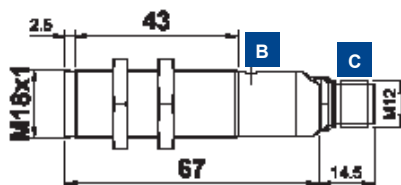


DIMENSIONS

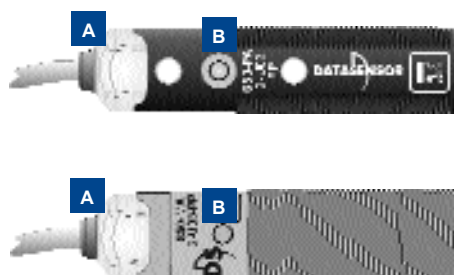
PLASTIC HOUSING



METAL HOUSING



INDICATORS AND SETTINGS



- A** OUTPUT status and READY / ERROR LEDs
- B** Teach-in push-button
- C** M12 connector output
- D** Cable output
- E** Fixing nuts
- F** Fixing gasket

Teach-in button for setting.

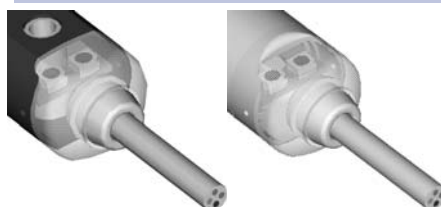
EASYtouch™ provides two setting modes: standard or fine, both obtained by pressing the push-button only once. Please refer to instructions manual for operating details.

ACCESSORIES

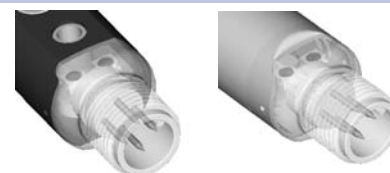
For **dedicated accessories** refer to the **ACCESSORIES** section of this catalogue.

Refer also to **Fibre-optics (A.02)**, **Connectors (A.03)** and **Fixing brackets (A.04)** of the General Catalogue.

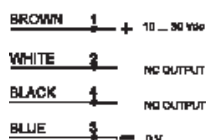
CONNECTIONS



S50-XX-2



S50-XX-5



TECHNICAL DATA

| | | S50-PA-2-U03-NN | S50-PA-2-U03-PP | S50-PA-5-U03-NN | S50-PA-5-U03-PP | S50-MA-2-U03-NN | S50-MA-2-U03-PP | S50-MA-5-U03-NN | S50-MA-5-U03-PP |
|-----------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Operating distance: | 8 ... 20 mm | ● | ● | ● | ● | ● | ● | ● | ● |
| Power supply: | 10 ... 30 Vdc ¹ | ● | ● | ● | ● | ● | ● | ● | ● |
| Ripple: | ≤ 2 Vpp | ● | ● | ● | ● | ● | ● | ● | ● |
| Consumption: | ≤ 25 mA | ● | ● | ● | ● | ● | ● | ● | ● |
| Light emission: | UV LED 370 nm ² | ● | ● | ● | ● | ● | ● | ● | ● |
| Spot dimension: | approx. 3 mm at 20 mm | ● | ● | ● | ● | ● | ● | ● | ● |
| Minimum detectable object: | 0.5 mm | ● | ● | ● | ● | ● | ● | ● | ● |
| Setting: | teach-in push-button | ● | ● | ● | ● | ● | ● | ● | ● |
| Setting procedure: | teach-in <i>EASYtouch</i> TM | ● | ● | ● | ● | ● | ● | ● | ● |
| Indicators: | | | | | | | | | |
| | yellow OUTPUT LED | ● | ● | ● | ● | ● | ● | ● | ● |
| | green / red READY / ERROR LED | ● | ● | ● | ● | ● | ● | ● | ● |
| Output type: | | | | | | | | | |
| | PNP, NO and NC | | ● | | ● | | ● | | ● |
| | NPN, NO and NC | ● | | ● | | ● | | ● | |
| Output current: | ≤ 100 mA | ● | ● | ● | ● | ● | ● | ● | ● |
| Saturation voltage: | ≤ 2 V | ● | ● | ● | ● | ● | ● | ● | ● |
| Response time: | 500 μs | ● | ● | ● | ● | ● | ● | ● | ● |
| Switching frequency: | 1 kHz | ● | ● | ● | ● | ● | ● | ● | ● |
| Operating mode: | | | | | | | | | |
| | dark with <i>EASYtouch</i> TM | ● | ● | ● | ● | ● | ● | ● | ● |
| | automatic dark / light with fine acq. | ● | ● | ● | ● | ● | ● | ● | ● |
| Connection: | | | | | | | | | |
| | 2 m Ø 4 mm cable ³ | ● | ● | | | ● | ● | | |
| | M12 4-pole connector ⁴ | | | ● | ● | | | ● | ● |
| Electrical protection: | class 2 | ● | ● | ● | ● | ● | ● | ● | ● |
| Mechanical protection: | IP67 | ● | ● | ● | ● | ● | ● | ● | ● |
| Protection devices: | A, B ⁵ | ● | ● | ● | ● | ● | ● | ● | ● |
| Housing material: | | | | | | | | | |
| | PBT | ● | ● | ● | | | | | |
| | nickel plated brass | | | | | ● | ● | ● | ● |
| Lens material: | PMMA | ● | ● | ● | ● | ● | ● | ● | ● |
| Weight: | | | | | | | | | |
| | 75 g max. | ● | ● | | | | | | |
| | 25 g max. | | | ● | ● | | | | |
| | 110 g max. | | | | | ● | ● | | |
| | 60 g max. | | | | | | | ● | ● |
| Operating temperature: | -25 ... +55°C | ● | ● | ● | ● | ● | ● | ● | ● |
| Storage temperature: | -25 ... +70°C | ● | ● | ● | ● | ● | ● | ● | ● |
| Reference standard: | EN 60947-5-2 | ● | ● | ● | ● | ● | ● | ● | ● |

SELECTION TABLE

plastic - axial optics - 2 m cable

| | | |
|-----------------|-----------|-----|
| S50-PA-2-U03-NN | 952001700 | NPN |
| S50-PA-2-U03-PP | 952001300 | PNP |

metal - axial optics - 2 m cable

| | | |
|-----------------|-----------|-----|
| S50-MA-2-U03-NN | 952021580 | NPN |
| S50-MA-2-U03-PP | 952021100 | PNP |

plastic - axial optics - M12 connector

| | | |
|-----------------|-----------|-----|
| S50-PA-5-U03-NN | 952001590 | NPN |
| S50-PA-5-U03-PP | 952001310 | PNP |

metal - axial optics - M12 connector

| | | |
|-----------------|-----------|-----|
| S50-MA-5-U03-NN | 952021740 | NPN |
| S50-MA-5-U03-PP | 952021300 | PNP |

All the ordering codes and information are summarised in the last pages of this catalogue.

TECHNICAL NOTES

¹ Limit values

² Average life of 100.000 h with $T_A = +25^\circ\text{C}$

³ PVC, 4 x 0.14 mm²

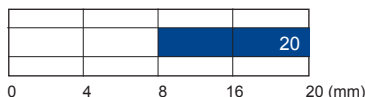
⁴ Compatible with quick connection systems

⁵ A - reverse polarity protection

B - overload and short-circuit protection on the outputs



DETECTION DIAGRAMS



■ Operating distance

