L-G/F THROUGH BEAM WITH RED LASER EMISSION

The high operating distance, typical of the emitter and receiver system, is notably increased thanks to the use of visible red laser emission. The laser beam can be easily aligned and offers excellent detection resolution of even small objects. The class 1 laser emission, according to EN 60825-1, guarantees maximum safety for the operators in all applications.



DIMENSIONS









DINO

RECEIVER

Z21.15

| | \supset |
|--|-----------|
| | |

EMITTER



Single-turn trimmer for sensitivity adjustment. Rotate clockwise to increase the operating distance.

Decrease sensitivity to increase resolution.

ACCESSORIES

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

Refer also to Connectors (A.03) and Fixing Brackets (A.04) of the General Catalogue

CONNECTIONS





S60-PA-5

EMITTER



RECEIVER





4

60 m 🖪

TECHNICAL DATA

| | | S60-PL-2-F01-NN | S60-PL-2-F01-PP | S60-PL-2-G00-XG | S50-PL-5-F01-NN | S50-PL-5-F01-PP | S50-PL-5-G00-XG |
|------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Operating distance: | 0 60 m | • | • | • | • | • | • |
| Power supply: | 10 30 Vdc ¹ | | • | • | • | • | • |
| Ripple: | <2 Vpp | | • | • | • | • | • |
| Consumption: | < 35 mA | | • | • | • | • | • |
| Light emission: | red Laser 650 nm ² | | | • | | | • |
| | class 1 FN 60825-1 | | | - | | | _ |
| | class II CDRH21 CFR 1040.10 | | | | | | |
| Resolution: | | | | | | | _ |
| | aprox. 6 mm a 0.5 m | • | • | | • | | |
| | aprox.10 mm over 2 m | • | • | | • | | |
| - | | | | | | | _ |
| Setting: | sensitivity trimmer 3 | • | • | | • | | |
| Indicators: | | | | | | | |
| | vellow OUTPUT LED | • | • | | • | • | |
| | green POWER ON LED | • | • | • | • | • | • |
| Output type: | | | | | | | |
| | PNP. NA and NC | | • | | | • | |
| | NPN. NA and NC | • | | | • | | |
| Output current: | ≤ 100 mA | • | • | | | • | |
| Saturation voltage: | ≤2 V | • | ٠ | | ٠ | • | |
| Response time: | 333 us | | • | | | • | |
| Switching frequency: | 1.5 kHz | • | • | | • | • | |
| Operating mode: | dark on NO / light on NC | | • | | • | • | |
| Auxiliary functions: | Test + 4 | | | • | | | • |
| Connection: | | | | | | | |
| | 2 m Ø 4 mm cable ⁵ | • | ٠ | ٠ | | | |
| | M12 4-pole connector 6 | | | | | • | ٠ |
| Electrical protection: | class 2 | • | • | • | | • | • |
| Mechanical protection: | IP67 | • | ٠ | ٠ | • | • | • |
| Protection devices: | A, B ⁷ | • | ٠ | ٠ | • | • | ٠ |
| Housing material: | ABS | | • | ٠ | | • | • |
| Lens material: | window in PMMA [®] | • | ٠ | ٠ | ٠ | • | ٠ |
| Weight: | | | | | | | |
| | 90 g max. | • | • | ٠ | | | |
| | 40 g max. | | | | | | • |
| Operating temperature: | -10 +50°C | ٠ | ٠ | ٠ | \bullet | • | • |
| Storage temperature: | -25 +70°C | • | • | ٠ | ٠ | • | • |
| Reference standard: | EN 60947-5-2, | • | • | ٠ | ٠ | • | • |
| | EN 60825-1, CDRH21 CFR 1040.10 | | | ٠ | | | • |
| | | - | | | | | |

SELECTION TABLE

| receiver - 2 m cable | | | | | | |
|--------------------------|---------------------------------|-----|--|--|--|--|
| S60-PL-2-F01-NN | 956201570 | NPN | | | | |
| S60-PL-2-F01-PP | 956201420 | PNP | | | | |
| | | | | | | |
| emitter - 2 m cable | | | | | | |
| S60-PL-2-G00-XG | 956201430 | | | | | |
| | | | | | | |
| receiver - M12 connector | | | | | | |
| S60-PL-5-F01-NN | 60-PL-5-F01-NN 956201270 NF | | | | | |
| S60-PL-5-F01-PP | 956201140 | PNP | | | | |
| | | | | | | |

emitter - M12 connector S60-PL-5-G00-XG 956201150

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

TECHNICAL NOTES

- ¹ Limit values
- ² Average life of 50.000 h with T_A = +25 °C
- ³ 270° trimmer
- ⁴ Emitter off with Test+ connected to +Vdc Emitter on with Test+ not connected or connected to 0V
- ⁵ PVC, 4 x 0.14 mm²
- ⁶ Connector can be blocked on two positions
- ⁷ A reverse polarity protection
 - B overload and short-circuit protection on receiver outputs
- ⁸ Internal lenses in glass and Polycarbonate





DETECTION DIAGRAMS



