



Mid range distance sensors Dx60, DS60

DS60-N11121



Model Name > [DS60-N11121](#)
Part No. > [1016492](#)



At a glance

- Measuring range up to 6 m on target and 20 m on reflector
- Safe background suppression of any object in the back (up to 100 m)
- Two invertible switching outputs
- Time-of-flight technology for reliable results
- Precise alignment with red laser light
- Teach-in

Your benefits

- Durable, lightweight housing withstands harsh environments
- Easy one-button teach-in offers fast commissioning
- High switching accuracy increases process reliability, ensuring higher productivity and better quality
- Different measurement options (on object, on reflector or foreground suppression) ensure flexible use and highest reliability within the application
- Both red and infrared laser models enable users to choose the best light source for their application - visible or invisible
- The two switching outputs of the DS60 reduce investment and commissioning costs



Performance

| | |
|----------------------------------|--|
| Measuring range: | 200 mm ... 20,000 mm, on Diamond Grade |
| Response time: | 10 ms |
| Switching frequency: | 50 Hz |
| Light source: | Laser, infrared |
| Laser protection class: | 1 (EN 60825-1) |
| Typ. light spot size (distance): | 200 mm x 200 mm (at 20 m) |
| Additional function: | Inverted switching output |
| Service life: | 50,000 h |

Interfaces

| | |
|---|--------------------|
| Multifunctional input ¹⁾ : | 1x Alignment laser |
| Switching output (max. output current): | 2x NPN (100 mA) |

Output Q short-circuit protected; NPN: HIGH = < 2.5 V / LOW = V_S;

1) Laser on: $V_s - (< 2 \text{ V})$ or open circuit Laser off: $0 \text{ V to } V_s - (> 12 \text{ V})$

Mechanics/electronics

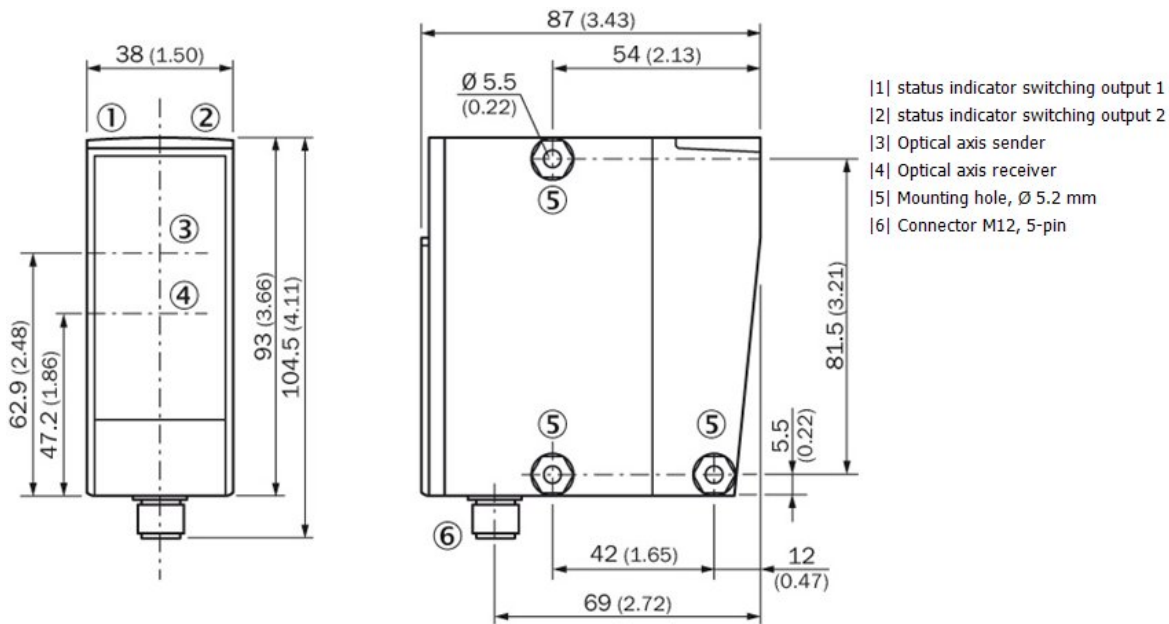
| | |
|--------------------------------------|----------------------|
| Supply voltage V_s ¹⁾ : | DC 18 V ... 30 V |
| Ripple ²⁾ : | $\leq 5 \text{ Vpp}$ |
| Power consumption ³⁾ : | $\leq 3 \text{ W}$ |
| Connection type: | Connector M12, 5-pin |
| Weight: | 202 g |

1) Limit values, reverse-polarity protected, operation in short-circuit protected network, max. 8 A ²⁾ May not fall short of or exceed V_s tolerances ³⁾ Without load

Ambient data

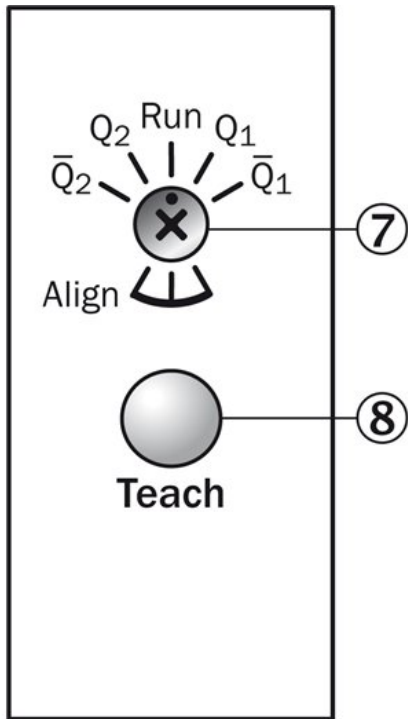
| | |
|----------------------|--|
| Enclosure rating: | IP 67 |
| Protection class: | II |
| EMC: | EN 61000-6-2 EN 60947-5-2 |
| Ambient temperature: | Operation: $-25 \dots 55 \text{ }^\circ\text{C}$ Storage: $-25 \dots 75 \text{ }^\circ\text{C}$ |

Dimensional drawing



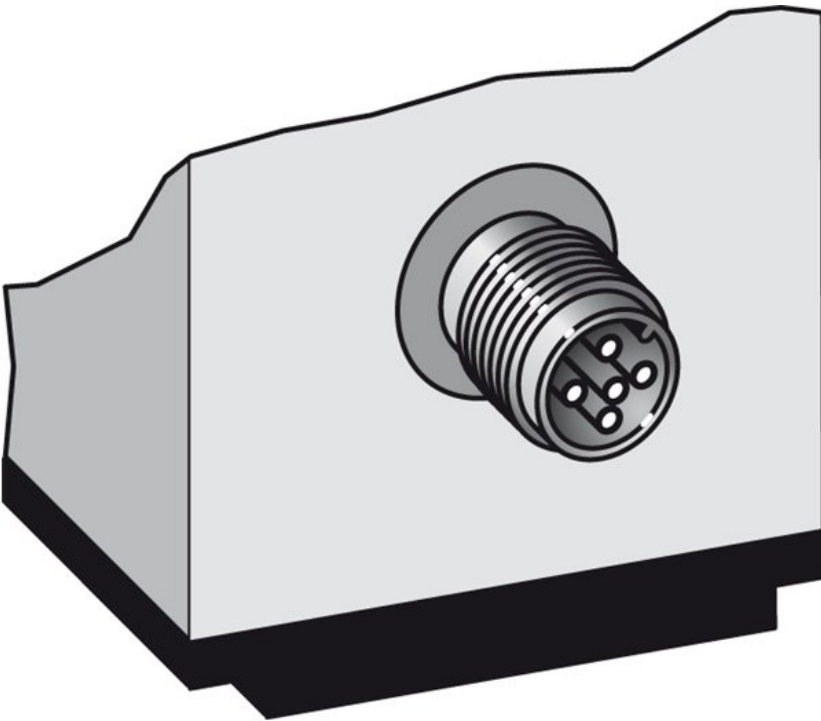
All dimensions in mm (inch)

Adjustment possible

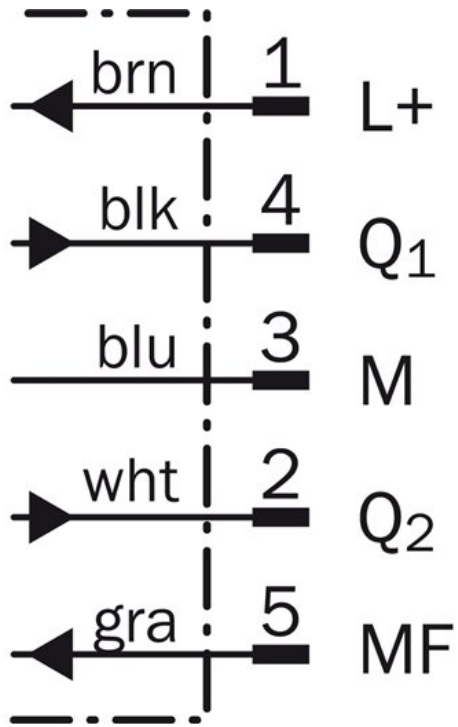


|7| rotary switch
|8| Control element

Connection type



Connection diagram



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