

MLV11-54/48/112

Retroreflective sensor

# MLV11-54/48/112

with 5-pin M12 connector, 90° adjustable position

CE



- ◆ Visible red light
- ◆ Automatic adjustment of sensitivity per TEACH-IN
- ◆ Detection of partially transparent objects
- ◆ Parameterisation via optical communication link (e.g. optional time increments)
- ◆ Protection degree IP68
- ◆ All materials approved for food industry applications
- ◆ Multifunction input

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**General specifications**

|                            |                                 |
|----------------------------|---------------------------------|
| Effective detection range  | 0 ... 6 m                       |
| Reflector distance         | 600 ... 6000 mm                 |
| Threshold detection range  | 9 m                             |
| Light source               | LED                             |
| Approvals                  | CE                              |
| Reference target           | H85 reflector                   |
| Light type                 | red, modulated light            |
| Diameter of the light spot | 200 mm at a distance of 6000 mm |
| Ambient light limit        | 10000 Lux                       |

**Indicators/operating means**

|                    |  |
|--------------------|--|
| Operating display  | LED green  |
| Function display   | TEACH-IN: LED green flashing<br>switching state: LED yellow<br>pre-fault indicator: LED red flashing |
| Operating elements | membrane keys for setting sensitivity and TEACH IN   |

**Electrical specifications**

|                                      |                |
|--------------------------------------|----------------|
| Operating voltage                    | 10 ... 30 V DC |
| Ripple                               | 10 %           |
| No-load supply current $I_0$         | $\leq 25$ mA   |
| Time delay before availability $t_v$ | $\leq 80$ ms   |

**Input**

|            |   |
|------------|---|
| Test input | inactive: $\geq 7$ V or unwired; active: $\leq 3$ V |
|------------|---|

**Output**

|                                    |  |
|------------------------------------|--|
| Output of the pre-fault indication | npn, dynamic/static configurable   |
| Switching type                     | light/dark switching   |
| Signal output                      | 2 switch outputs npn, parameterisable as<br>- NO/NC (antivalent)<br>- NO and pre-fault indication<br>- NC and pre-fault indication |
| Switching voltage                  | max. 30 V DC   |
| Switching current                  | max. 200 mA  |
| Voltage drop $U_d$                 | $\leq 2.5$ V   |
| Switching frequency $f$            | $\leq 1000$ Hz   |
| Response time                      | $\leq 0.5$ ms  |
| Timer function                     | parameterisable  |

**Standard conformity**

|           |              |
|-----------|--------------|
| Standards | EN 60947-5-2 |
|-----------|--------------|

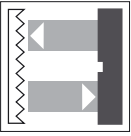
**Ambient conditions**

|                     |                               |
|---------------------|-------------------------------|
| Ambient temperature | -25 ... 70 °C (248 ... 343 K) |
| Storage temperature | -40 ... 70 °C (233 ... 343 K) |

**Mechanical specifications**

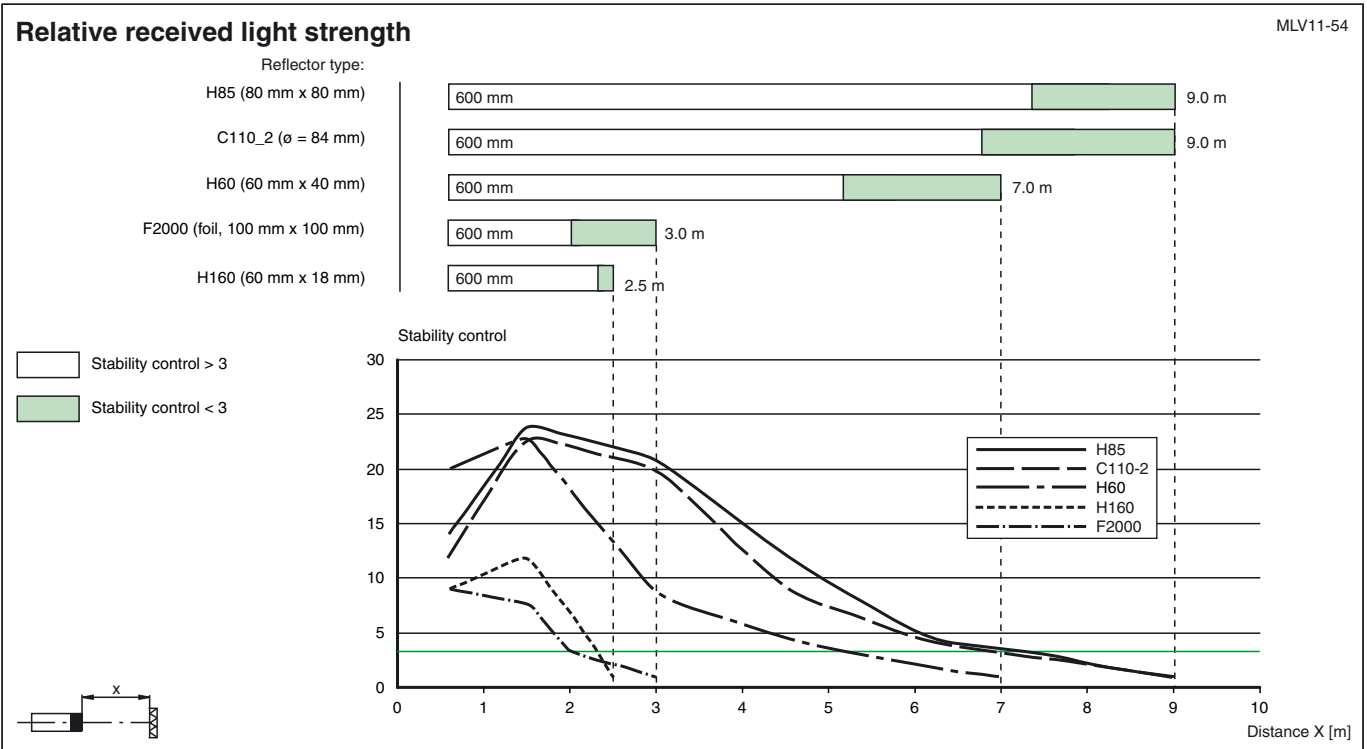
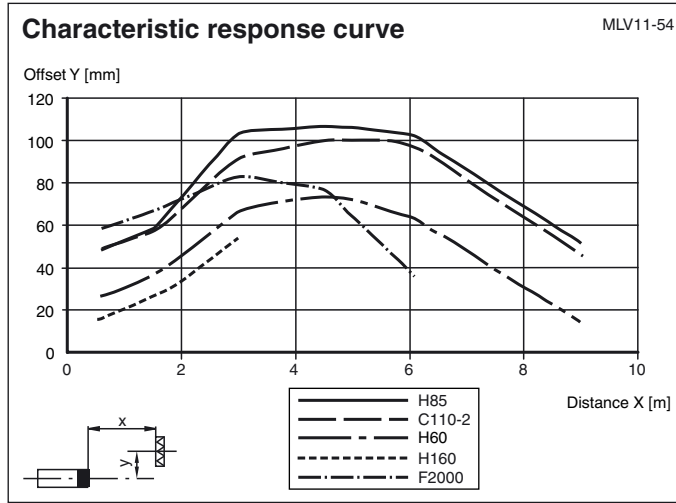
|                   |  |
|-------------------|--|
| Protection degree | IP68   |
| Connection        | 5-pin M12 x 1 connector, 90° adjustable position |
| Material          |  |
| Housing           | PBT  |
| Optical face      | scratch resistant plastic pane                   |
| Mass              | 60 g   |

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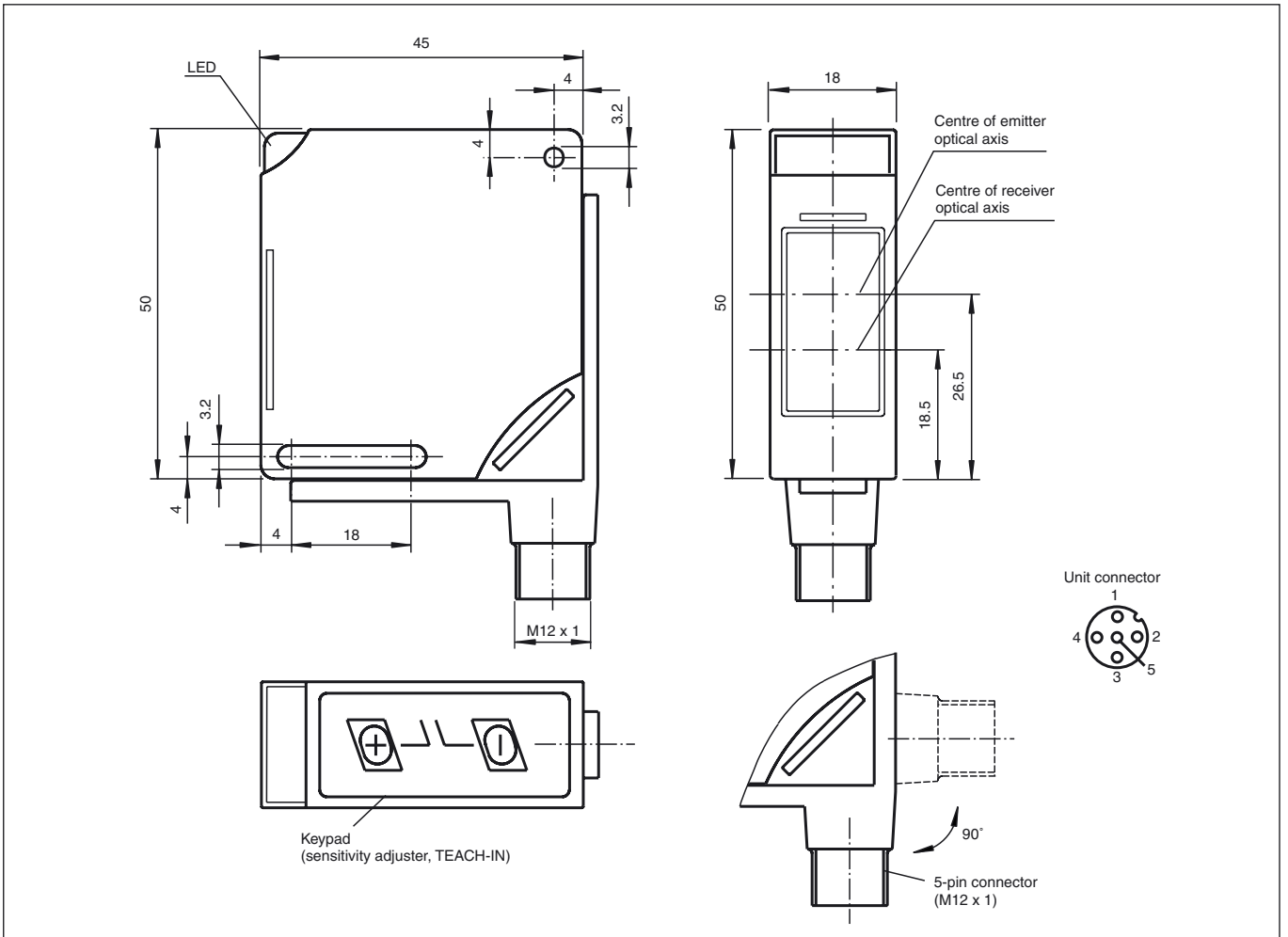
# MLV11-54/48/112

## Curves/Diagrams

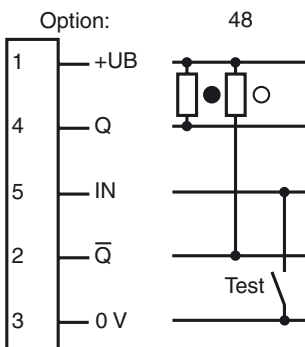


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Dimensions



Electrical connection



○ = light on, ● = dark on

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