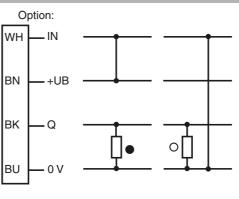
Retro-reflective sensor with polarisation filter

Dimensions LED 0

Electrical connection



O = Light on = Dark on

CE

Model Number

MLV13-54/32/40b/115

with 2 m fixed cable

Features

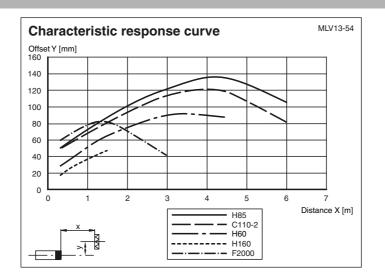
- · Visible red light
- Glare protected with polarisation filter •
- Pre-fault indication •
- Control input for light-/dark switching •
- Protection degree IP67 •

Subject to reasonable modifications due to technical advances.

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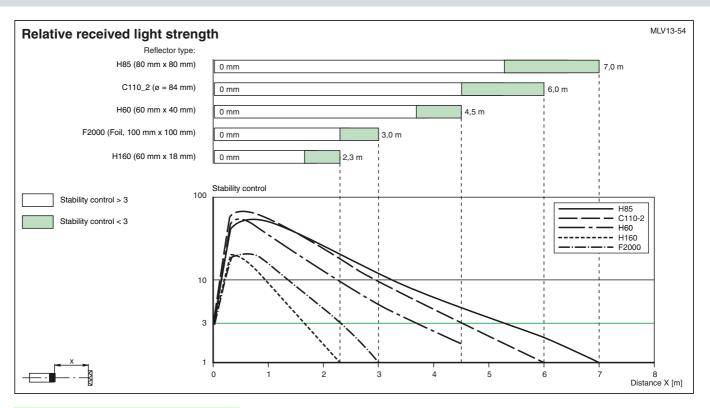
General specifications Effective detection range 0 6 m Threshold detection range 7 m Light source LED Approvals CE Reference target reflector C110-2 Light type red, modulated light	
Threshold detection range 7 m Light source LED Approvals CE Reference target reflector C110-2	
Light source LED Approvals CE Reference target reflector C110-2	
Approvals CE Reference target reflector C110-2	
Reference target reflector C110-2	
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	
Function display switching state: LED yellow pre-fault indicator: LED red	
Operating elements sensitivity adjuster	
Electrical specifications	
Operating voltage 10 30 V DC	
Ripple 10 %	
No-load supply current $I_0 \leq 25$ mA	
Time delay before availability $t_v \leq 80 \text{ ms}$	
Input	
Control input Light ON: +UB Dark ON: 0 V	
Output	
Switching type light/dark switching	
Signal output 1 PNP output, short-circuit proof, protected from reverse polarity, open collector	
Switching voltage max. 30 V DC	
Switching current max. 200 mA	
Voltage drop $U_d \leq 2.5 \text{ V DC}$	
Switching frequency $f \le 500 \text{ Hz}$	
Response time ≤ 1 ms	
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 IP67	
Connection fixed cable 2 m	
Material	
Housing ABS	
Optical face scratch resistant plastic pane	
Mass 40 g	

Curves/Diagrams



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Additional Information

Conventional use:

The reflex light beam switch contains the emitter and receiver in a single housing. The light from transmitter is beamed back from a reflector to the receiver. If an object interrupts the light beam the switching function is initiated.

Mounting instructions:

The sensor can be fastened over the through-holes directly or with the included mounting bracket. The base surface must be flat to avoid distorting the housing during mounting. It is advisable to secure the bolts and screws with washers to prevent misalignment of the sensor.

Instructions for adjustment:

Connect the sensor to operating voltage, the LED green lights up constantly.

Mount suitable reflector opposite light beam switch and align roughly.

The exact adjustment takes by swivelling the sensor horizontally and vertically. With optimum light reception the yellow LED lights up constantly. In case of bad alignment, the red LED lights up.

Object detection check:

Move the object into the light beam. If the object is recorded, the yellow LED goes off. If it isn't going off, reduce the sensitivity with the potentiometer until it goes off. It should light up constantly again when the object is removed.

The red LED lights up if reception deteriorates (e.g. soiled lenses or by maladjustment) and when falling short of the stability control.

lustration:

We recommend that you clean the optical interfaces and check the plug-in connections and screw connections at regular intervals.