

MLV11-54/47/112

Reflection light beam switch

MLV11-54/47/112

with 5-pin M12 connector, 90° adjustable position

CE



- ◆ **Detection range up to 9 m**
- ◆ **Glare protected with polarisation filter**
- ◆ **Visible red light**
- ◆ **Pre-fault indication and output (dynamic and static)**
- ◆ **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**

Date of edition 12/10/03

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, alternating 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 switching state: LED yellow 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	≤ 25 mA
Time delay before availability t_v	≤ 80 ms

Input

Test input	inactive: ≤ 3 V or unwired; active: ≥ 7 V
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Output

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

Standard conformity

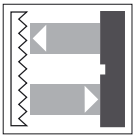
Standards	EN 60947-5-2
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Ambient conditions

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

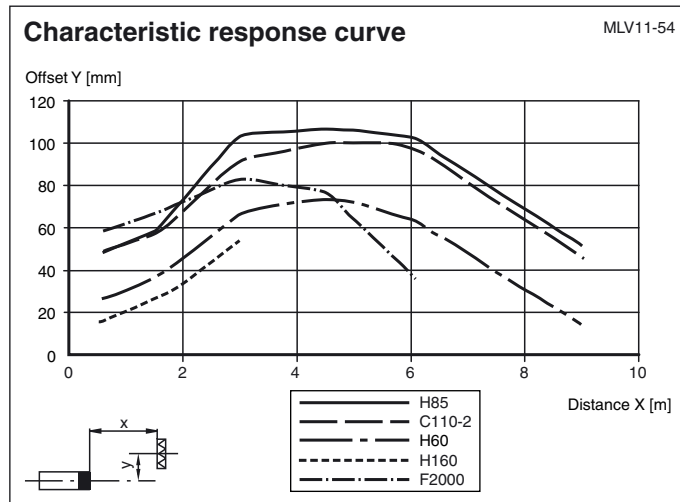
Mechanical specifications

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



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Curves/Diagrams



Relative received light strength

MLV11-54

Reflector type:

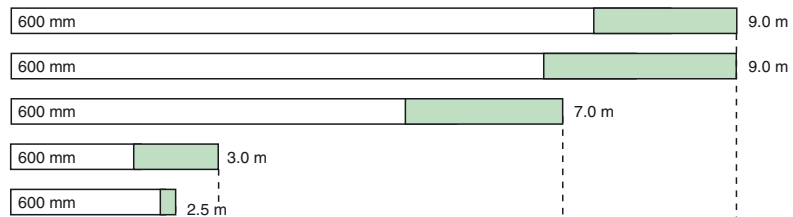
H85 (80 mm x 80 mm)

C110_2 ($\phi = 84$ mm)

H60 (60 mm x 40 mm)

F2000 (foil, 100 mm x 100 mm)

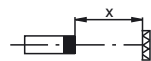
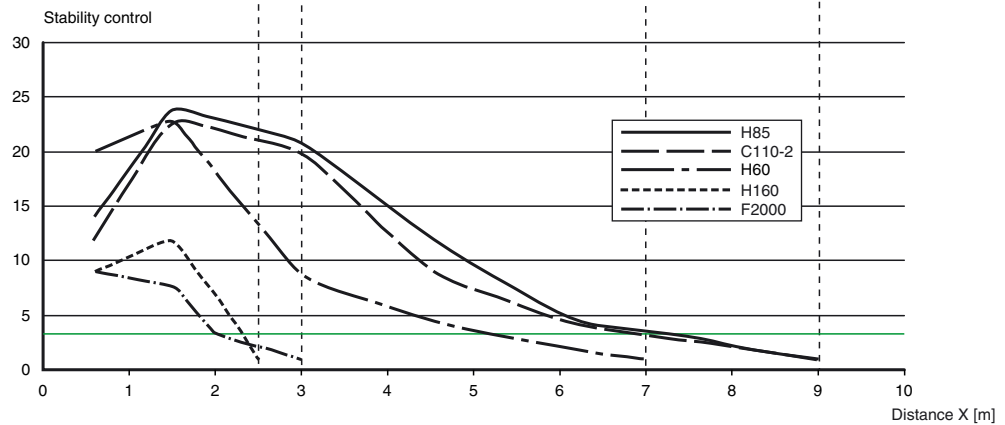
H160 (60 mm x 18 mm)



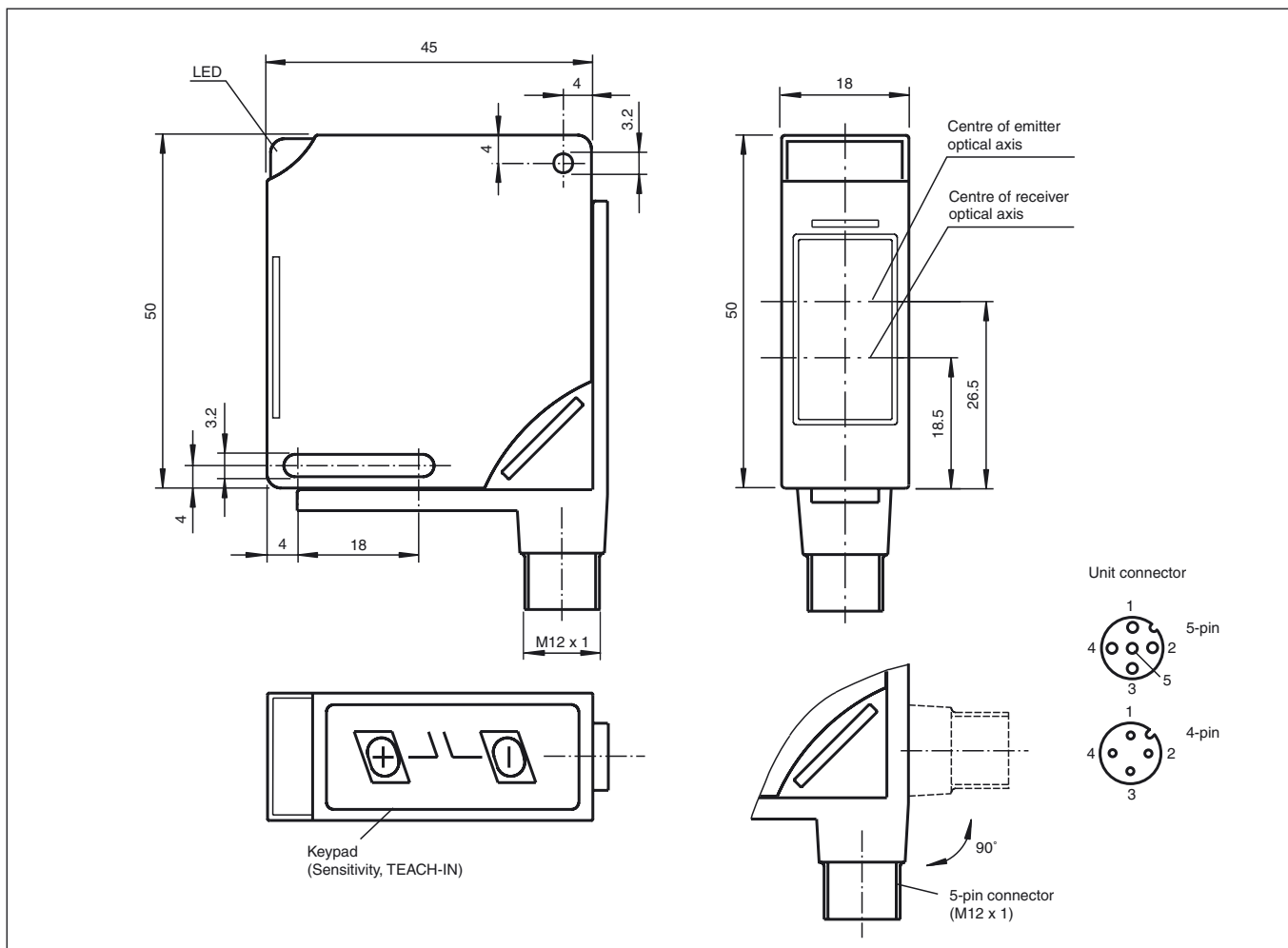
Stability control

Stability control > 3

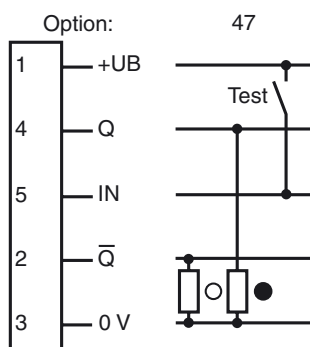
Stability control < 3



Dimensions



Electrical connection



○ = light on, ● = dark on