



RL27-54-G/40b/48/112

Reflection light beam switch with polarisation filter

# RL27-54-G/40b/48/112

with 5-pin M12 connector, 90° adjustable position

CE



- ◆ Detection range up to 6 m
- ◆ Detection of transparent objects, i.e. clear glass, PET and transparent foils
- ◆ Glare protected with polarisation filter
- ◆ Visible red light
- ◆ Pre-fault indication and output (dynamic and static)
- ◆ Automatic adjustment of sensitivity per TEACH-IN
- ◆ Parameterisation via optical communication link (e.g. optional time increments)
- ◆ Protection degree IP67
- ◆ Multifunction input

Date of edition 12/10/03

**General specifications**

Effective detection range	0 ... 6 m
Reflector distance	700 ... 6000 mm
Light source	LED
Approvals	CE
Reference target	reflector C110_2
Light type	red, alternating light
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 $I_0$	$\leq 25$ mA
Time delay before availability $t_v$	$\leq 50$ ms

**Input**

Test input	inactive: $\geq 7$ V or unwired; active: $\leq 3$ V
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**Output**

Output of the pre-fault indication	npn, dynamic/static configurable
Switching type	light/dark switching
Signal output	2 switch outputs npn, 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 $U_d$	$\leq 2.5$ V DC
Switching frequency $f$	$\leq 1$ kHz
Response time	$\leq 0.5$ ms
Timer function	parameterisable

**Standard conformity**

Standards	EN 60947-5-2
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**Ambient conditions**

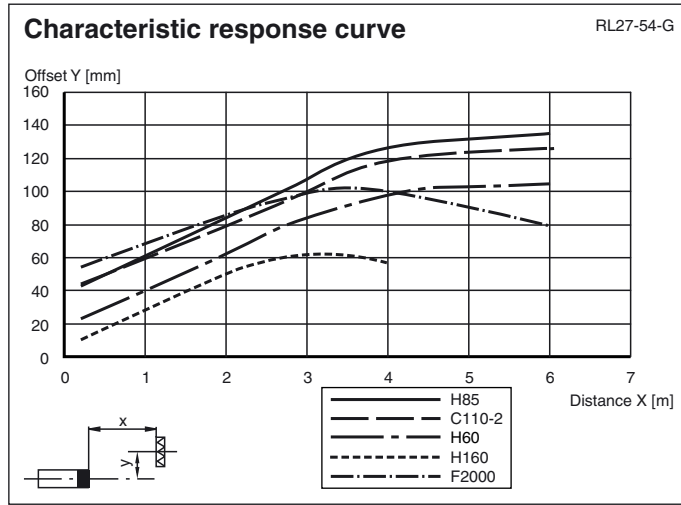
Ambient temperature	-25 ... 70 °C (248 ... 343 K)
Storage temperature	-40 ... 70 °C (233 ... 343 K)

**Mechanical specifications**

Protection degree	IP67
Connection	5-pin M12 x 1 connector, 90° adjustable position
Material	
Housing	ABS
Optical face	scratch resistant plastic lens
Mass	65 g



Curves/Diagrams



### Relative received light strength

RL27-54-G

Reflector type:

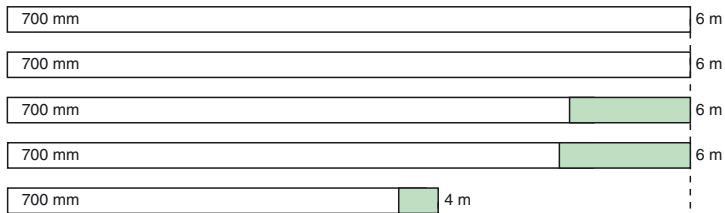
H85 (80 mm x 80 mm)

C110\_2 (ø = 84 mm)

H60 (60 mm x 40 mm)

F2000 (Foil, 100 mm x 100 mm)

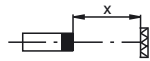
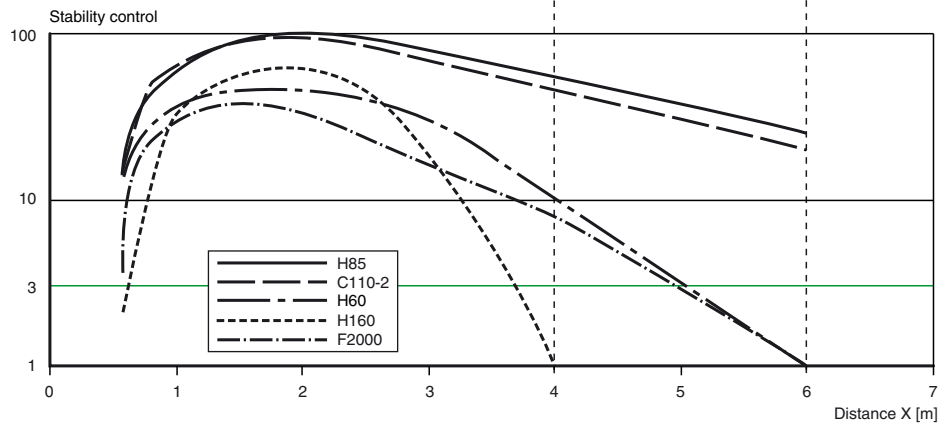
H160 (60 mm x 18 mm)



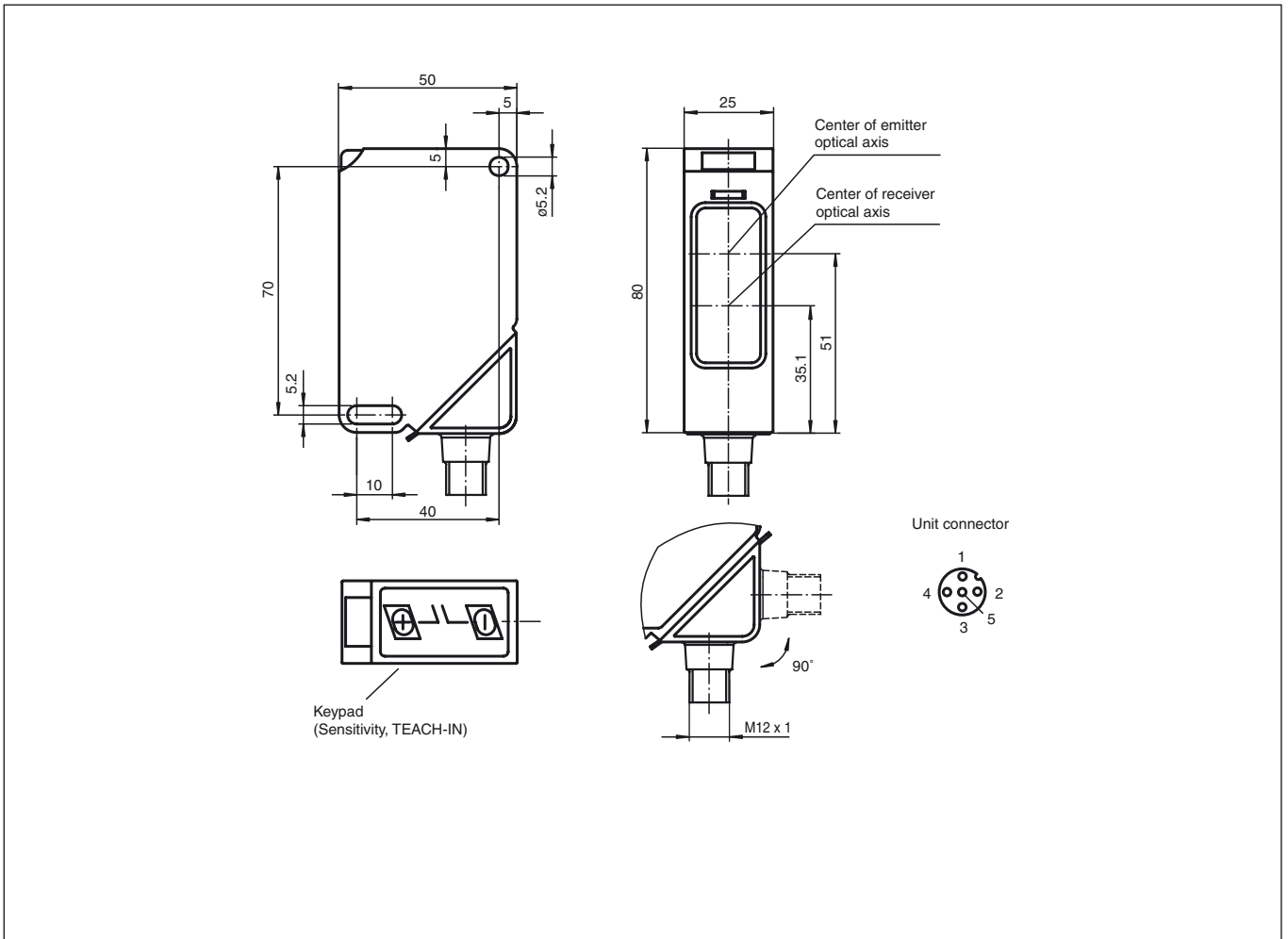
Stability control

□ Stability control > 3

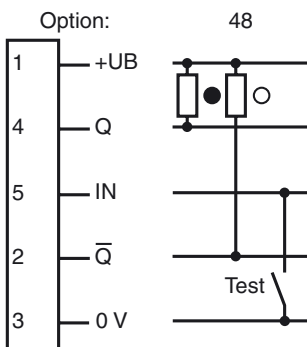
■ Stability control < 3



Dimensions



Electrical connection



○ = light on, ● = dark on