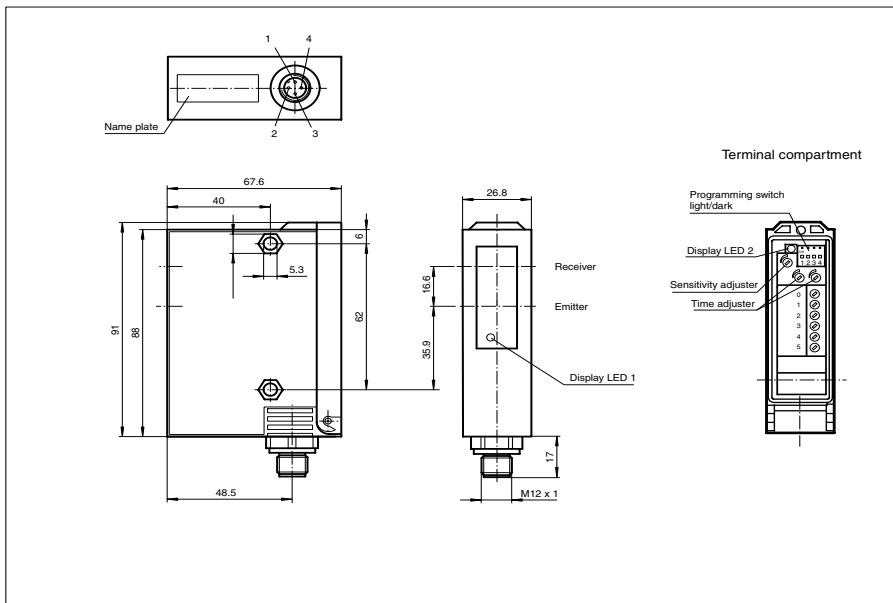




Dimensions



Model Number

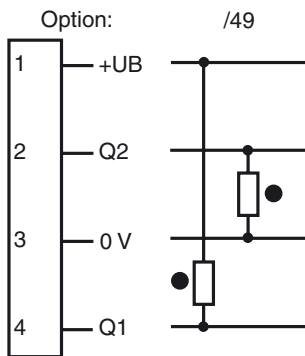
RL24-54/49/92

Retro-reflective sensor with polarization filter
with M12, 4-pin metal connector

Features

- Detection range up to 10 m
- Sturdy plastic housing
- Sensitivity adjuster and light-/dark switch
- Pre-fault indication and output
- 4 programmable time functions

Electrical connection



○ = Light on
● = Dark on

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Technical data**General specifications**

| | |
|----------------------------|---|
| Effective detection range | 0 ... 6000 mm |
| Reflector distance | 0 ... 6000 mm |
| Threshold detection range | 10 m (with C110-2 reflector) |
| Light source | LED |
| Approvals | CE |
| USA | UL |
| Kanada | CSA |
| Light type | red, modulated light |
| Diameter of the light spot | approx. 150 mm at 6000 mm detection range |
| Angle of divergence | approx. 1.4 ° |
| Ambient light limit | 80000 Lux |

Indicators/operating means

| | |
|--------------------|---|
| Function display | LED yellow, frontal and in the terminal compartment, lit up when light beam is free, flashing when falling short of the stability control |
| Operating elements | Programming switch for light/dark ON, timer functions |
| Operating elements | 2 potentiometers for timer functions |
| Operating elements | 1 Potentiometer as sensitivity adjuster |

Electrical specifications

| | | |
|------------------------|-------|----------------|
| Operating voltage | U_B | 10 ... 30 V DC |
| Ripple | | 10 % |
| No-load supply current | I_0 | 40 mA |

Output

| | |
|---------------------|--|
| Switching type | light/dark switching |
| Signal output | 1 npn, 1 pnp synchronised-switching, short-circuit proof, protected against reverse polarity |
| Switching voltage | 30 V DC |
| Switching current | max. 200 mA |
| Switching frequency | f 1000 Hz |
| Response time | 0.5 ms |
| Timer function | GAN, GAB, IAB, GAN-GAB, programmable adjustment range 0.1 ... 10 s |

Standard conformity

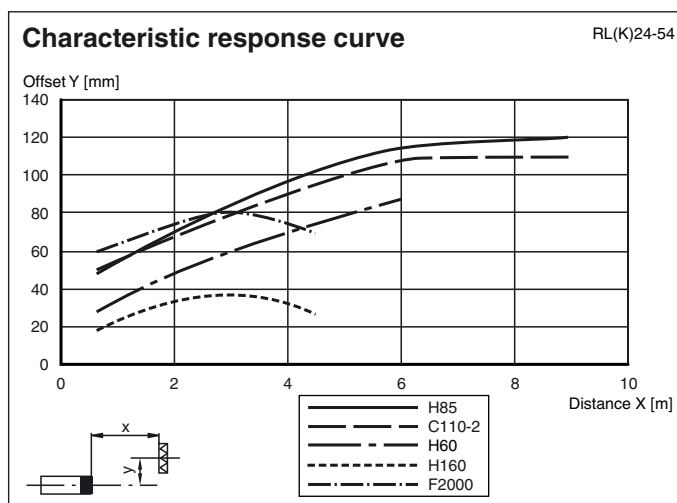
| | |
|-----------|--------------|
| Standards | EN 60947-5-2 |
|-----------|--------------|

Ambient conditions

| | |
|---------------------|-------------------------------|
| Ambient temperature | -20 ... 60 °C (253 ... 333 K) |
| Storage temperature | -20 ... 75 °C (253 ... 348 K) |

Mechanical specifications

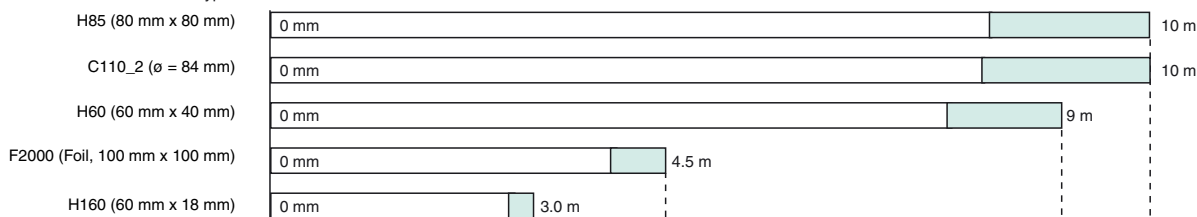
| | |
|-------------------|----------------------|
| Protection degree | IP65 |
| Connection | M12 connector, 4-pin |
| Material | |
| Housing | GF17 |
| Optical face | glass |
| Mass | 100 g |

Curves/Diagrams

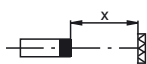
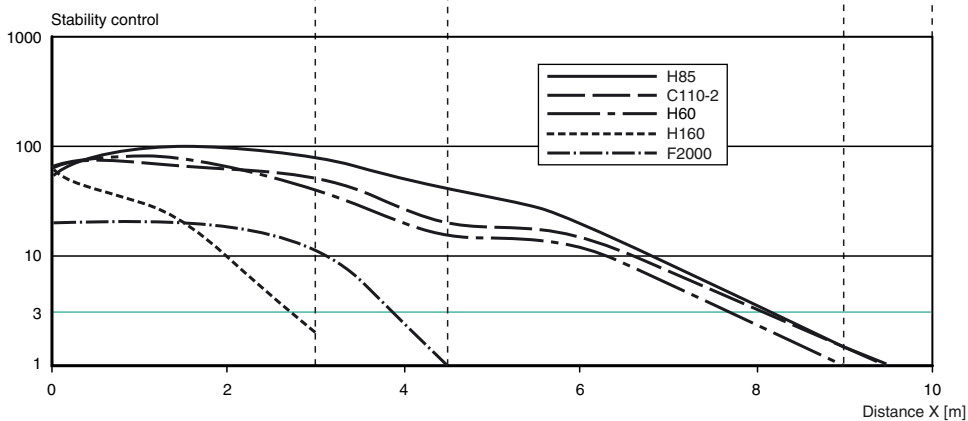
RL(K)24-54

Relative received light strength

Reflector type:



Stability control > 3
 Stability control < 3



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Subject to modifications without notice

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