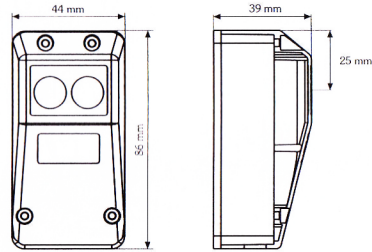


RP 25 reflective photo-electric switch

- range 0.5...15m, depending on the type of reflector
- immune to external light sources
- high degree of protection
- optional cable entry
- terminal compartment
- polarisation filter optical system
- test input
- operating voltage 10-40VDC or 24VAC ±25%
- protected against power supply polarity reversal
- relay output
- easy adjustment of the optical sensor
- dirt indicator
- LED alignment indication



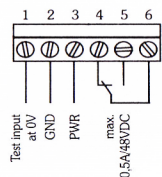
Declaration of conformity
 EMC directive 2014/30/EU
 EN 61000-6-2 and EN 61000-6-3



Technical data

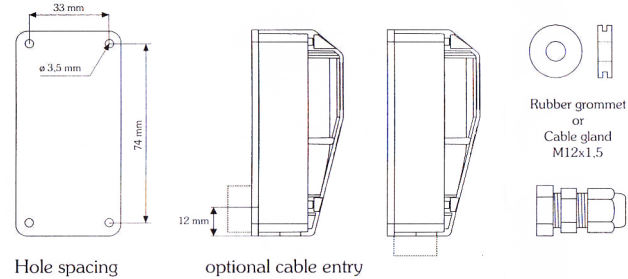
| | | | |
|---------------------------------|--|---|---|
| operating voltage | 10...40VDC 24VAC, ± 25% | ranges | R30/60 = 0,5...8m RD82 SW4 = 0,5...12m R100/100 = 0,5...15m |
| operational current consumption | <100ms after power on max. 30mA/24V | indications | dual LED red/green |
| type of light | red, 680nm pulsed, polarised | light beam interrupted | = lights up red |
| aperture angle | approx. 1.5° total angle | light beam uninterrupted, spare critical function capacity. | = flashes red at 4Hz |
| output | relay, changeover contact | light beam uninterrupted, high spare function capacity. | = lights up green |
| switch rating | min. 1mA/min. 5VDC max. 0.6A/50VAC max. 0.5A/48VDC (resistive load) | additional function | test input (when 0V at terminal 1 the transmitter switches off) |
| response time | <10ms, detection of light beam interruption | type of connection | screw terminal max. 1.5mm ² |
| relay delay | when the light beam is uninterrupted again, the relay picks up with 100ms delay | casing material | lower part: ABS-GF15% upper part: PMMA, red |
| type of switching | responsive to brightness, i.e. the relay picks up when the light beam is uninterrupted | degree of protection | IP67, to EN60529 |
| | | operating temp. | -25°...60°C |
| | | storage temp. | -35°...80°C |
| | | weight | approx. 60g |
| | | size | 86x44x39mm ³ (LxWxH) |

Terminal assignments



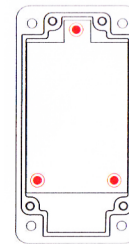
Note: For test purposes the photo-electric switch switches the transmitter off when GND is applied to terminal 1. For reasons of safety the photo-electric switch is responsive to brightness, so that the relay picks up when the light beam is uninterrupted.

Size

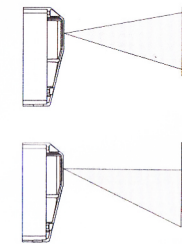


Note:
 The cable entry is moulded into the lower part of the casing and can be broken out. Either the rubber grommet or the cable gland (both supplied) can be used.

Fine adjustment



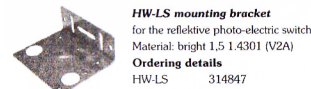
After mounting the photo-switch the light beam can be adjusted using 3 screws.
Important note!
 The optical sensor is spring-mounted. All 3 screws are unscrewed by 1 turn factory-made, the maximum is 3 turns. The optical sensor is optimally aligned when the green LED lights up constantly.



LED lights up:
 100 % of the cone of light is hitting the reflector

LED flashing:
 Less than 100 % of the cone of light is hitting the reflector

Accessories



HW-LS mounting bracket
 for the reflective photo-electric switch
 Material: bright 1.5 1.4301 (V2A)
Ordering details
 HW-LS 314847



HW-RD82 mounting bracket
 for the RD82-SW4 reflector
 Material: bright 1.5 1.4301 (V2A)
Ordering details
 HW-RD82 314848



RD82 SW4 reflector
 Mounting: screwable
 Range: approx. 12m with RP20
Ordering details
 RD82 SW4 314811



WSH-RD82 rain cover
 for the reflector RD82-SW4
 protection against rain, hail and snow, impact resistant, UV-stable
 material: PA6 GF15
Ordering details
 WSH-RD82 315316



WSH-LS rain cover
 for the reflective photo-electric switch RP20/RP25,
 protection against rain, hail and snow, impact resistant, UV-stable
 material: PA6 GF15
Ordering details
 WSH-LS 315315



R30/60 reflector
 Mounting: screwable
 Range: approx. 8m with RP20
Ordering details
 R30/60 314810



Anti-condensation cover for RD82 SW4 reflector
ISO RD82
 Material: Polystyrene or Neopor
Ordering details
 ISO-RD82 314849



Anti-condensation cover for R30/60 reflector
ISO R30/60
 Material: Polystyrene or Neopor
Ordering details
 ISO-R30/60 314850