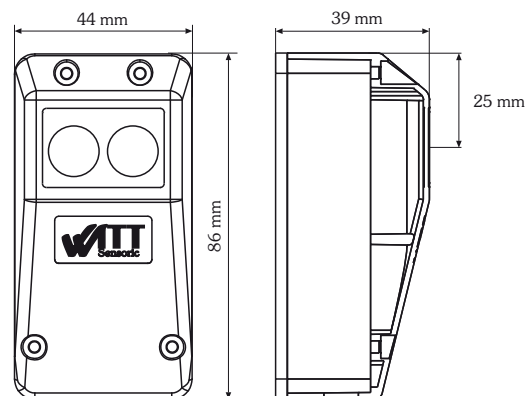


RP25 reflective photo-electric switch

RP25 reflective photo-electric switch

- reflective photo-electric switch with polarisation filter
- 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 $\pm 25\%$
- protected against power supply polarity reversal
- relay output
- easy adjustment of the optical sensor
- soiling indication
- LED alignment indication



Declaration of conformity

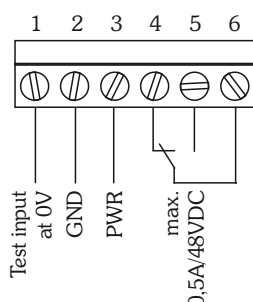
EMC directive 89/336/EEC
EN 61000-6-2 and EN 61000-6-4



Technical data

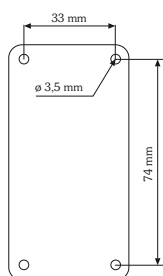
Operating voltage	10...40VDC 24VAC, $\pm 25\%$	Ranges	RD82 SW4 0.5...12m R100/100 0.5...15m R30/60 0.5...8m
Operational	<100ms after power on	Indications	Dual LED red/green
Current consumption	max. 30mA/24V	Light beam interrupted =	lights up red
Type of light	red, 680nm pulsed, polarised	Light beam uninterrupted, spare critical function capacity.	= flashes red at 4Hz
Aperture	approx. 1.5° total angle	Light beam uninterrupted, high spare function capacity.	= lights up green
Output	Relay, changeover contact	Additional function	Test input (when 0V at terminal 1 the transmitter switches off)
Switch rating	min. 1mA/min. 5VDC max. 0.6A/50VAC max. 0.5A/48VDC (resistive load)	Type of connection	Screw terminal max. 1.5mm ²
Response time	<10ms, detection of light beam interruption	Casing material	Lower part: ABS-GF15% Upper part: PMMA, red
Relay delay	When the light beam is uninterrupted again, the relay picks up with 100ms delay	Degree of protection	IP 67, to EN60529
Type of switching	Responsive to brightness, i.e. The relay picks up when the light beam is uninterrupted	Operating temperature	-25°...60°C
		Storage temperature	-35°...80°C
		Weight	approx. 60g
		Size	86x44x39mm ³ (LxWxH)

Terminal assignments

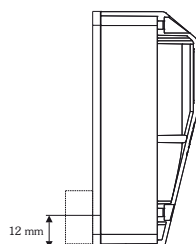


Note:

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.



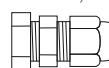
Hole spacing



optional cable entry

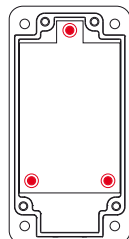


Rubber grommet
or
Cable gland
M12x1,5



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



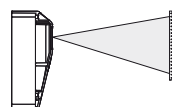
After mounting the photo-switch the light beam can be adjusted using 3 screws.



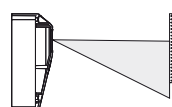
Important note!

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



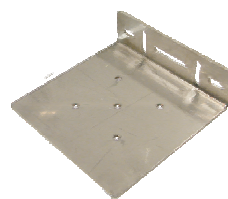
LED flashing:
Less than 100 % of the cone of light is hitting the reflector

HW-LS20 mounting bracket

for the reflektive photo-electric switch
Material: bright 1,5 1.4301 (V2A)

Ordering details

HW-LS20 1.113 870



HW-RD82 mounting bracket

for the RD82-SW4 reflector
Material: bright 1,5 1.4301 (V2A)

Ordering details

HW-RD82 1.113 871

Anti-condensation cover
for RD82 SW4 reflector

ISO RD82

Material: Polystyrene or Neopor, silver-grey

Ordering details

ISO-RD82 1.113 873



Anti-condensation cover
for R30/60 reflector

ISO R30/60

Material: Polystyrene or Neopor, silver-grey

Ordering details

ISO-R30/60 1.113 874

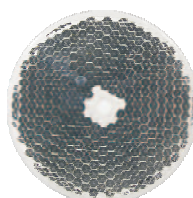


RD82 SW4 reflector

Mounting: screwable
Range: approx. 12m with RP20

Ordering details

RD82 SW4 1.113 812



R30/60 reflector

Mounting: screwable
Range: approx. 8m with RP20

Ordering details

R30/60 1.113 811



Ordering details

RP25 (only)	1.114 100
Included in the scope of supply:	cable gland M12x1,5 and pass-through grommet
RP25 set	1.114 105
Included in the scope of supply	RD82 SW4 reflector, cable gland M12x1.5 and pass-through grommet