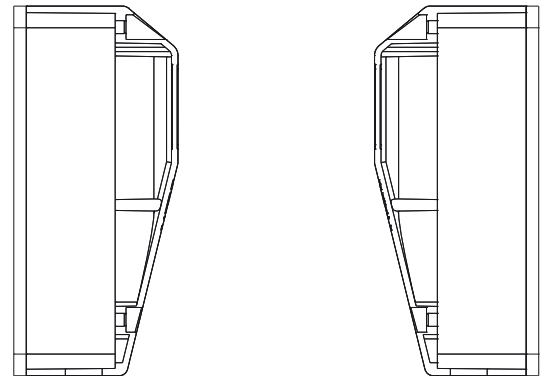


# EL25 through-beam photo-electric switch

## EL25

- Range 0.5... 20m
- Insensitive against ambient light
- High degree of protection
- Optional cable entry
- Terminal compartment
- Test input
- Operating voltage 10-40VDC or 24VAC  $\pm 25\%$
- Protected against power supply polarity reversal
- Relay output
- Easy adjustment of the transmitter
- Soiling indication
- LED alignment indication

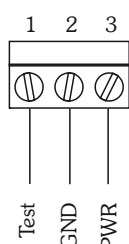


### Technical data

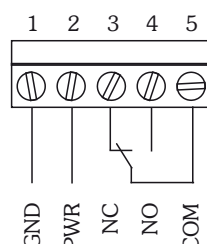
Range	0.5...20m
Operating voltage	10...40VDC 24VAC, $\pm 25\%$
Current consumption	transmitter <25mA receiver <30mA
Type of light	IR, 880nm
Aperture	15° round angle
Output	Relay, changeover contact
Switch rating	min. 1mA/ min. 5VDC max. 0.6A / 50VAC max. 0.5A / 48VDC
Type of switching	light-on or dark-on see configuration
Test	positive or negative polarity
Switching threshold	5.3V (positive) 4.2V (negative)
Output delay	<20ms, light beam interrupted

Relay delay	100ms when the light beam is uninterrupted again, the relay picks up with 100ms delay
Indications	transmitter: yellow = operational, flashing = test run receiver: red = light beam interrupted, yellow = light beam ok flashing = spare critical function capacity (e.g.: soiling)
Type of connection	screw terminal max. 1.5mm <sup>2</sup>
Casing material	lower part: ABS-GF15% upper part: PMMA, red
Index of Protection	IP67, to EN60529
Operating temperature	-25...60°C
Storage temperature	-35...80°C
Weight	approx. 60g
Size	86x44x39 mm <sup>3</sup> (LxWxH)

### Terminal assignments



**Transmitter**

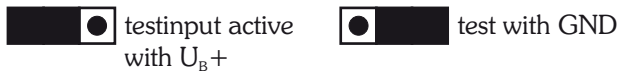


**Receiver**

## Configuration

### Transmitter

configuration of test run polarity



The test input is activated after connecting the adjusted voltage to input 1 of the transmitter. The transmitter is deactivated and the indicator LED flashes.

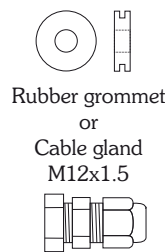
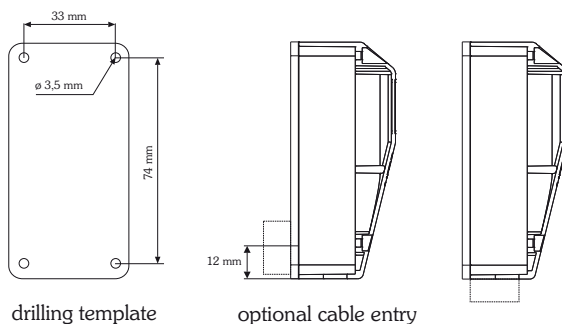
### Receiver

configure the type of switching



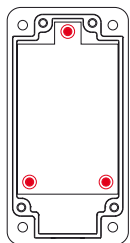
When light-on the relay picks up, if the light beam is uninterrupted  
When dark-on the relay picks up, if the light beam is interrupted

## Drilling template / optional cable entry



**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



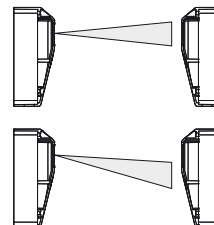
After mounting the photo-switch the light beam can be adjusted using 3 screws.



### Important note!

The optical sensor is spring-mounted. All 3 screws are unscrewed by 1 turn factory-made, the maximum is 3 turns.

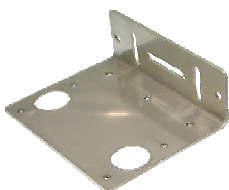
The optical sensor is optimally aligned when the yellow LED lights up constantly.



LED lights up yellow:  
100 % of the cone of light meets the receiver

LED flashing:  
Less than 100 % of the cone of light meets the receiver

## Accessories



### HW-LS20 mounting bracket

Material: bright 1.5 1.4301 (V2A)

### Ordering details

HW-LS20 1.113 870

## Ordering details

Model		item number
EL25S	transmitter	1.114 180
EL25E	receiver	1.114 185
Included in the scope of supply:		2 cable glands M12x1.5 and 2 pass-through grommets

## Declaration of conformity

EMC directive 2004/108/EEC  
EN 61000-6-2 and EN 61000-6-4

