

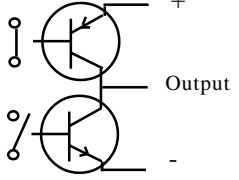
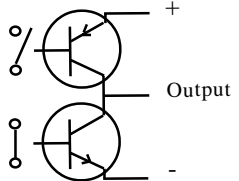


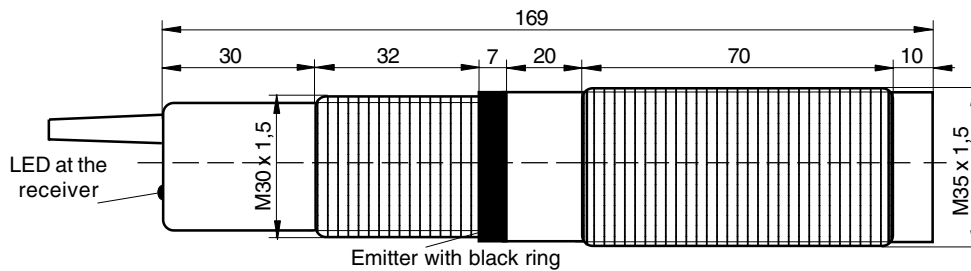
## Light Barrier IRL-...X-S/E



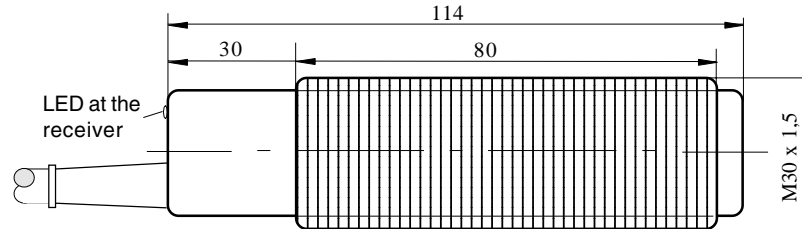
- Strong penetration of polluted atmosphere
- Optimal alignment help by status indication in the receiver optic
- High interference immunity and robust construction

Technical Data	Type	IRL-25X-S/E	IRL-100X-S/E	IRL-300X-S/E	IRL-550X-S/E
Designation		S: Emitter / E: Receiver			
Range		25m	100m	300m	500m
Light Source		Infrared 880nm			
Operating Frequency		100 Hz			
Supply Voltage		20-28 VDC Ripple max 10% Vpp			
Current Consumption emitter		40mA		55mA	
Current Consumption receiver		25mA			
Max. Power Dissipation Emitter		1.12W		1.54W	
Max. Power Dissipation Receiver		0.7W			
Output		push-pull /max. 100mA / short circuit protected			
Ambient Temperature T <sub>A</sub>		-20°C < T <sub>A</sub> < +50°C			
Beam Pattern Emitter		ca.12°	ca. 3.5°		
Housing		M30	M35 - M30 Yellow brass nickel plated		
Enclosure Rating		IP 65 according to EN 60529			
Cable Emitter		2+PE x 0.5mm <sup>2</sup> / L=3m			
Cable Receiver		3+PE x 0.5mm <sup>2</sup> / L=3m			
Accessories		2 clamps or 4 nuts M30	4 nuts M35		
LED display		LED red: Light beam interrupted or bad alignment LED yellow: Bad alignment or lens pollution LED green: Optimal alignment LED red blinking: Short circuit at the output			
Modus and LED indication		 Light beam not interrupted LED ON, yellow or green		 Light beam interrupted LED ON, red	
Connection layout		Receiver                      Emitter brown = +                      brown = + blue = -                              blue = - black = Output			
Connection layout, X-function Pole reversal connection		Receiver                      Emitter brown = -                      brown = + blue = +                              blue = - black = Output			
X-Function: Pole reversal connection of supply voltage is followed by an inverse function of the output					

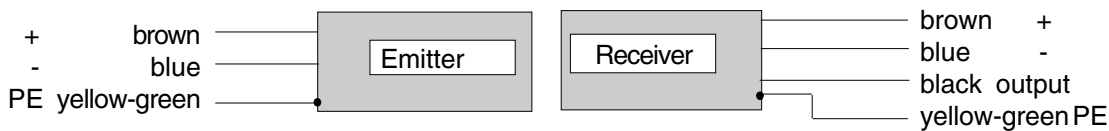
Dimension IRL-100X-S/E; IRL-300X-S/E; IRL-550X-S/E; same dimensions for emitter and receiver



Dimensions IRL-25X-S/E; same dimensions for emitter and receiver



Connection Layout:



## Operating manual

### Mounting description

The connection scheme is to observe. The light barriers must only be used with the voltage shown on the identification label. The connection cable must not be installed parallel to high voltage cables.

### Function

At normal connection of the supply voltage to the receiver:

If the light beam is not interrupted and the LED at the receiver shows green or yellow, the output switches to high "+". If the light beam is interrupted the LED shows red and the output switches to low "-".

Inverse connection of the power supply at the receiver:

The output function is inverted. If the light beam is free and the LED at the receiver shows green or yellow, the output switches to low "-". If the light beam is interrupted, the LED shows red and the output switches to high "+".

### Output

The output of the receiver is a push-pull type. The load can be connected to plus or minus.

### Maintenance

The light barrier IRL-...X-S/E does not require any special maintenance. Should the sensor lenses become dirty, they should be cleaned by a non aggressive medium. Equipment should only be repaired or serviced by the manufacturer.

### Safety information

Should the sensor cable be broken or the sensor in any way becomes defect, the output may show any mode. When installing and operating the light barrier, it is necessary to take into consideration the relevant regulations.

### Standards met

EN 50081-1/-2, EN 50082-1/-2,  
Machine directives: 89/392/EWG, 93/68/EWG  
Low voltage directives:  
73/23/EWG, 93/68/EWG  
EMC: 89/336/EWG, 91/263/EWG, 92/31/EWG,  
93/68/EWG

### General notes

We reserve the right to modify our equipment. The light barriers are designed such way, that it has the least possible adverse effect on the environment. It neither emit or contain any damaging or siliconized substances and use a minimum of energy and resources. No longer usable or irreparable units must be disposed of in accordance with local waste disposal regulations.

lrl\_x\_e1/SEP.11,00/HB/HW

Group

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