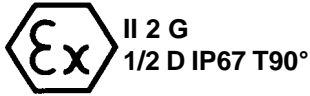
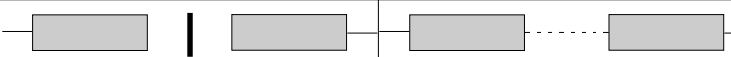
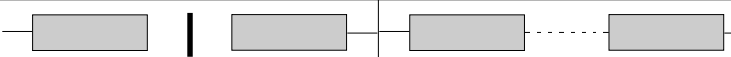
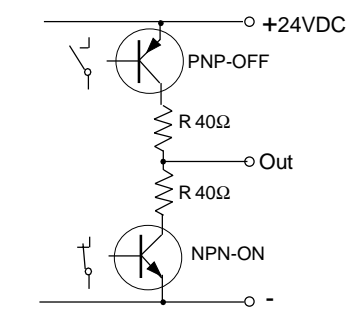
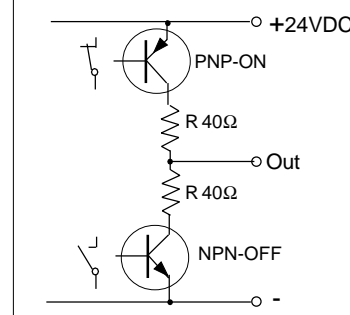


Laser Light Barrier IRL/ILD-L80-S/E

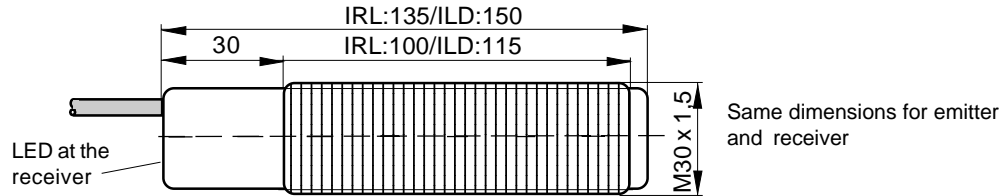


- Laser Class 2
- visible Red Light
- also for applications in Ex-Zone 1,21 ATEX approved (Type of protection EEx d IIC T6)

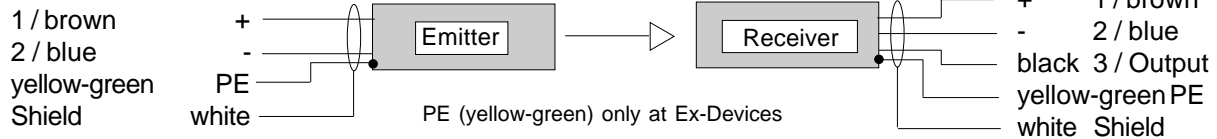
ISO 9001 ATEX

Technical Data	Type Standard Type EEx d	IRL-L80-S/E ILD-L80-S/E
Designation		S: Emitter / E: Receiver
Laser Class / Laser Output Power		Class 2 / P < 1mW
Lase Beam Diameter		approximative 8mm at 10m
Wave Length		650-670nm / visible red
Range		80m
minimum Detectable Object Size		20mm
Switching Frequency		1000Hz
Output Response Time		0.5ms
Voltage Supply		20 VDC to 28VDC
Current Consumption		Emitter: 35 mA / Receiver: 8mA
maximum Power Dissipation		Emitter: 980mW / Receiver: 224mW
Output		1 x Push-Pull
Output Impedance		40Ω
Housing		M30, Yellow Brass, Nickel plated
Enclosure Rating, IRL-L80-S/E		IP 65 at EN 60529
Enclosure Rating, ILD-L80-S/E		IP 67 at EN 60529
Operating Temperature TA		0°C < TA < +50°C
Connection Cable, Standard-Device		2/3 x AWG24 (0.2mm ²) + Shield / L=3m / grey covered
Connection Cable, Ex-Device		2/3 x 0.5mm ² + Shield / L=10m / clear covered
Accessories included		2 Clamps M30 or 4 Nuts M30
Options		plug-type connection: Designation: IRL-L80-S/E-C cable length up to 100m devices with special high flexible cable for trailing: Designation: IRL-L80-S/E-K
LED Indication Output Function		
Connection Diagram	<p style="text-align: center;">Light Beam interrupted LED extinguished</p> 	<p style="text-align: center;">Light Beam not interrupted LED shows yellow</p> 
Receiver:		
1 / brown	= +	
2 / blue	= -	
3 / black	= Output	
yellow-green	= PE	
white	= Shield	
Emitter:		
1 / brown	= +	
2 / blue	= -	
yellow-green	= PE	
white	= Shield	

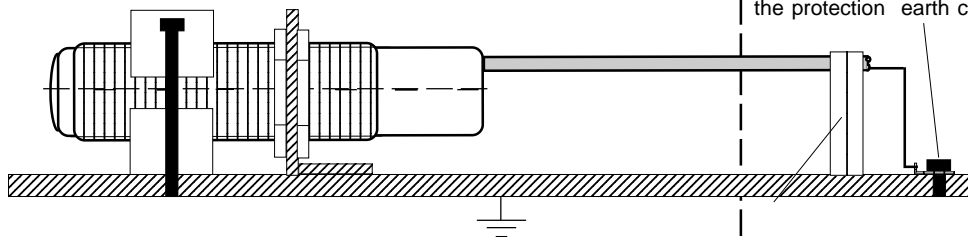
Dimensions:



Connection Diagram:



Equipotential Bonding at Ex d Devices:



Operating Manual:

Ex Protection:

It is necessary to take into consideration the valid international and national rules and regulations. The local equipotential bonding have to be done by a reliable, noncorrosive holding of the protection earth connection.. The protective earth wire (PE) is solid connected inside the housing. The cable must be protected against damages. To connect cables inside hazardous locations only use certificated Ex e housings. All cable terminals must be connected outside hazardous locations. Additional optical lenses are not allowed in hazardous locations.

Connection Prescriptions

Do not exceed the maximum ratings. The electrical connections must be exactly as shown in the connection diagram. The cable shield must be connected short. The cable shield should be connected to the protection earth, large-surfaced. Connection cables must not be installed parallel to high voltage cables.

Mechanical Mounting Prescriptions

Because Lasers have a very small aperture angle, mount the light barriers free from vibrations and shocks. If it is practicable, protect the lenses from contamination.

Function

If the light beam is not interrupted, then the output switches to high level. The receiver LED shows yellow. If the light beam is interrupted, then the output switches to low level. The receiver LED is extinguished.

Laser Safety

Safety Notes for Laser Installations of Class 2.

- The instructions for planning and installation must be followed in accordance with EN 60825-1
- Do not stare into Laser Beam

Maintenance

The light barrier does not require any special maintenance. Contaminated lenses are to clean with a non aggressive medium. Equipment must only be repaired or serviced by the manufacturer.

Safety Informations

This light barrier is not suitable for accident prevention. If the device breaks down, the output can switch on any state. For installing and using the light barrier, it is necessary to take into consideration the relevant international and other national regulations. ATEX 118a, ElexV, TRbF, TRD, UVV, EX-RL.

Standards met:

- EN 50014, EN 50018, EN 60825, EN 50081-1/-2, EN 50082-1/-2,
- Ex-Protection: ATEX100a (94/9/EG, 76/117/EWG
- Machine Directive: 89/392/EWG, 91/368/EWG, 93/44/EWG, 93/68/EWG
- Low Voltage Directive: 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. Our equipment is 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.

Approvals:

DMT 99 ATEX E 056

IrlL80eAPR.19,00/HB

Group

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