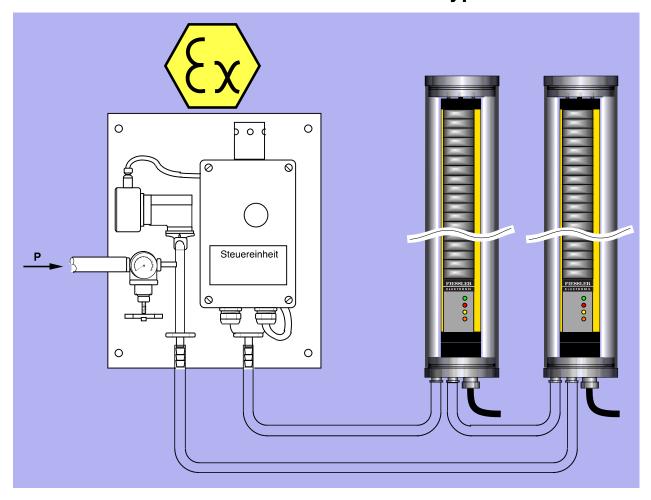


EEx-P protection for light curtains EEx-P protection for light grids Type xLVT and xLCT





EEx-p for safety light curtains type xLVT and xLCT



Use in explosive areas (dust / gas)



Ex hazardous areas of the categories 2 and 3, zone 1, 2, 21 and 22

optional

Ex-protection according ATEX 94/9 / ATEX 95

Protected enclosure

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Application



With the classification "protected enclosure" according EN 50014 and EN 50016 inside of an EExp housing an over pressure will be generated by forcing in air or an inert gas. It serves to prevent the ingress of the surrounding atmosphere, which may consist of a potentially explosive gas mixture.

The protected enclosure will be purged by forcing air or inert gas with a volume 5 times of the housing volume for removing all of the hazardous gas before energising the safety light curtain xLVT/xLCT.

In a situation where the inside pressure of the housing falls below 0,5 mbar, all components of the safety light curtain will be shut off by the control unit.

In combination with the EEx-p control system, the safety light curtain with protected enclosure can be used in zones 1,2,21 and 22.

The control unit can be operated with 12VDC, 24VDC, 24VAC, 110VAC, 120VAC, 230VAC, 250VAC, 48 ...62 Hz.

In case of decrease of pressure, the normally open contact of the relay will be open. The complete power supply for the safety light curtain will be shut off.

The system xLVT....EEx-p consists of xLVT transmitter, xLVT receiver and EEx-p controller.

Additionally, both housing covers have connections for pressure air hoses.

Technical data

Ex-protection:

according ATEX 94/9 / ATEX 95 inside an EX-zone Zone 1 or 2

II 2G EEx e m ia [p] [ia] IIC T4 oder II 2G EEx d m ia [p] [ia] IIC T4

Protection type:

control unit IP 65, safety light curtain IP 67

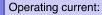
Power consumption:

2.0 VA, without external consumer



12VDC, 24VDC and 24VAC, 110VAC, 120VAC, 230VAC,

250VAC, 48 ...62 Hz



terminal 6, 7, 8, 9 AC: U = 250VAC, I = 12,0 Amp with cos ö = 1 DC:

U= 30VDC, I = 3,0 A

Pressure measurement range:0 ... 25,0 mbar

Flow measurement range:

0,2 m3/h - 40 m3/h

Ambient operating temp.:

-30°C...+60°C (T4)

Storage temperature:

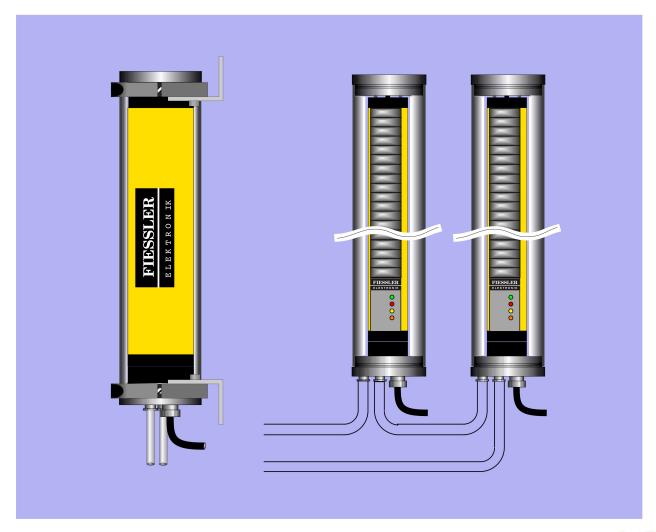
-40°C...+70°C,non condensing

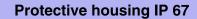
Purging time:

0... 99 Min. in steps of 1 second



Protective housing IP 67 for light barrier Type xLVT and xLCT







DIN EN ISO 9001



Increased requirements concerning tightness

Application: chemical environments

optional

Application: food industry

Application: Ex hazardous areas



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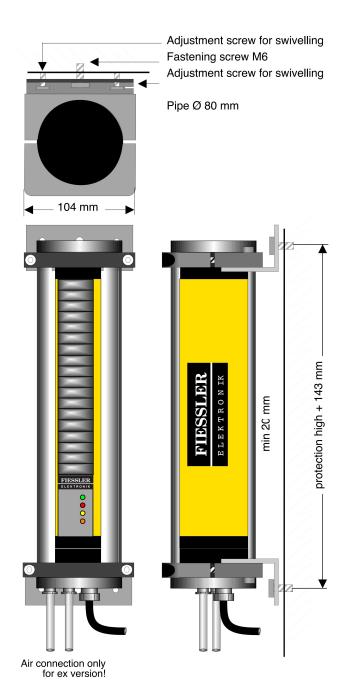
Function:

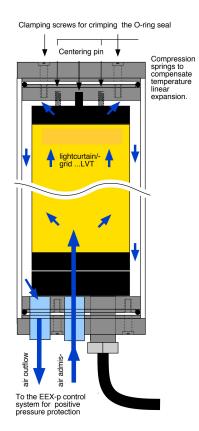
The optionally available additional housing SGH 80 has been designed for the accommodation of the components of the safety light barriers of the types ...LVT and their variants. It allows the utilisation of these light barriers even if special requirements concerning their air-tightness apply. Other applications are: - chemical or explosive environment e.g. filter press, - food industry (GMP).

Specification for EEx - p

A version with plug-in compressed air supply is available for the application in ex hazardous areas of the categories 2 and 3, zones 1, 2, 21 and 22.

In this case, an ex-free volume is created inside the protection housing by constant positive pressure of inert gas or compressed air. The positive pressure prevents the penetration of explosive gases into the equipment.





Access connecting terminals:



Material: Plexiglas and stainless steel