LS4ER/30-030S



LS4

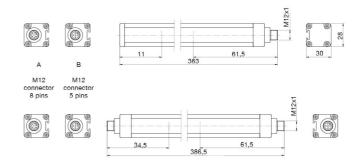


Indicative image



LIGHT CURTAINS TYPE 4 ACCORDING TO IEC 61496-1 AND IEC 61496-2

- Compact housing (28 x 30 mm) and no dead zone on cap side
- Resolution 14 mm for finger protection, 20, 30, 40 mm for hand protection, 50, 90 mm for presence control and 2, 3, 4 beams for body protection/access control
- Controlled distance up to: 3, 4, 6, 10, 12 m
- Base, Standard versions and Master, Slave version to connect up to 3 sets in cascade configuration
- Selectable Automatic/Manual Restart and EDM integrated functions (Standard models)
- Selectable controlled distance
- IP69K protection models (LS4_K) and models with integrated heating system to reach -25°C operating temperature (LS4_H)
- Standard M12 da 5 and 8 poles connectors



| Detection properties | |
|--------------------------|-------|
| Nominal sensing distance | ≤ 12m |
| Resolution | 30mm |
| controlled height | 310mm |
| number of rays | 16 |
| Effective Aperture Angle | ±5° |

Application

Function Principle

Safety parameters

| Туре | 4 | |
|-------|----------|--|
| SIL | 3 | |
| SILCL | 3 | |
| PL | е | |
| PFHd | 8,20E-09 | |
| Dcavg | 97,00% | |
| MTTFd | 100 | |
| CFF | 80% | |

Outputs

| Output type | 2 x PNP-NO (OSSD safety output) | |
|----------------------------------|---|--|
| Response time | 5,5ms | |
| Response Time (Master + Slave) | T=[0,11*(Tslave+Tmaster)+0,9376]*2 | |
| Response Time (Master + 2 Slave) | T=[0,11*(Tslave1+Tslave2+Tmaster)+1,0508]*2 | |

Electrical data

| Operating Voltage | 19,2 28,8 Vcc |
|---|--------------------------|
| Load current | ≤ 400mA |
| Time delay before availability | 2s |
| Interference to external light | according to IEC 61496-2 |
| Power Consumption - Receiver | 2W(no load) |
| Power Consumption - Emitter | 1W |
| Equivalent Resistive Load | ≥ 60 Ω |
| Capacitive Load | ≥ 0,82 µF |
| Cabel Length (Power Supply/Output) | ≤ 100m |
| Cable Length for Master Slave Interconnections | ≤ 50m |

Mechanical data

| Dimensions | 28mm (front) x 30mm |
|-----------------------|--|
| Connections | 2 x M12-5 poles (emitter) 2 x M12 5 poles (receiver) |
| Operating temperature | -10°C ÷ +55°C (no condensation) |
| Storage temperature | -25°C ÷ +70°C (no condensation) |
| humidity | 95% (no condensation) |

Test/Approvals

| Approvals | CE, cULus, TÜV | |
|-----------------------|-----------------------------------|--|
| EMC compatibility | According to 2014/30/EU Directive | |
| Shocks and vibrations | according to IEC 61496-1 | |
| Degree of protection | IP65, IP67 | |

Accessories

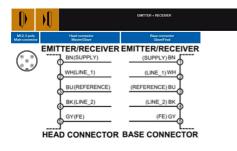
Supplied Accessories

ST 204 4S

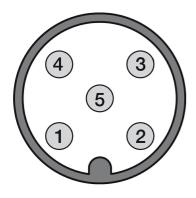
Generical Data

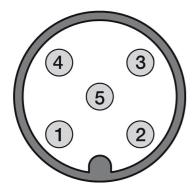
| Dimensions | 28mm (front) x 30mm |
|-----------------------|---------------------------------|
| Operating Temperature | -10°C ÷ +55°C (no condensation) |
| Humidity | 95% (no condensation) |
| Mechanical Protection | IP65, IP67 |
| | |

ELECTRICAL DIAGRAMS OF THE CONNECTIONS



CONNECTOR





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