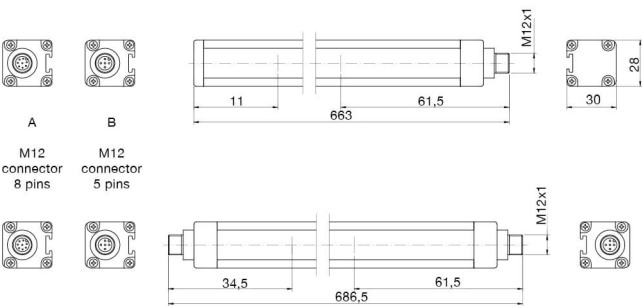




Indicative image



- 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 | 610mm |
| number of rays | 31 |
| Effective Aperture Angle | ±5° |

Application

| | |
|--------------------|---|
| Function Principle | Emitter + Receiver (intermediate slave model) |
|--------------------|---|

Safety parameters

| | |
|-------|----------|
| Type | 4 |
| SIL | 3 |
| SILCL | 3 |
| PL | e |
| PFHd | 1,06E-08 |
| Dcavg | 97,30% |
| MTTFd | 100 |
| CFF | 80% |

Outputs

| | |
|----------------------------------|--|
| Output type | 2 x PNP-N0 (OSSD safety output) |
| Response time | 9ms |
| Response Time (Master + Slave) | $T = [0,11 \cdot (T_{slave} + T_{master}) + 0,9376] \cdot 2$ |
| Response Time (Master + 2 Slave) | $T = [0,11 \cdot (T_{slave1} + T_{slave2} + T_{master}) + 1,0508] \cdot 2$ |

Electrical data

| | |
|--|--------------------------|
| Operating Voltage | 19,2 ... 28,8 Vcc |
| Load current | $\leq 400\text{mA}$ |
| 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 | $\geq 60 \Omega$ |
| Capacitive Load | $\geq 0,82 \mu\text{F}$ |
| Cabel Length (Power Supply/Output) | $\leq 100\text{m}$ |
| Cable Length for Master Slave Interconnections | $\leq 50\text{m}$ |

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) |

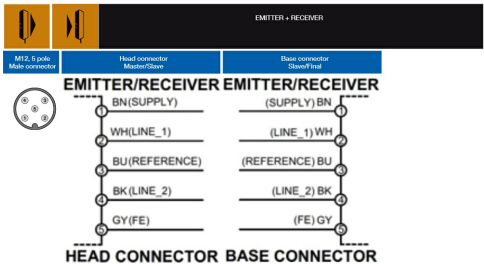
Test/Approvals

| | |
|-----------------------|-----------------------------------|
| 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 |

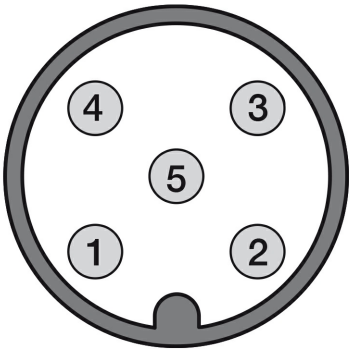
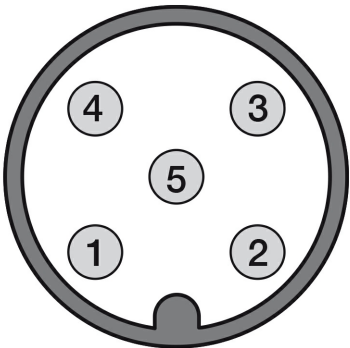
Accessories

| | |
|-----------------------|---------------------------------|
| 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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