LS4ER/40-045F

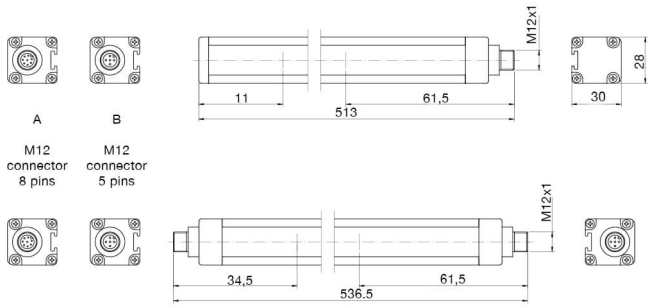
LS4



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	40mm
controlled height	460mm
number of rays	16
Effective Aperture Angle	±5°

Application

Function Principle	Emitter + Receiver (final slave model)

Safety parameters

Type	4
SIL	3
SILCL	2
PL	e
PFHd	8,58E-09
Dcavg	96,90%
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	M12-5 poles (emitter) 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

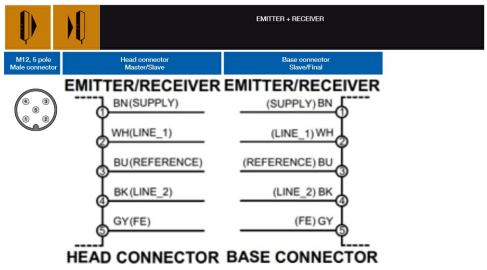
Accessories

Supplied Accessories	ST 204 4S

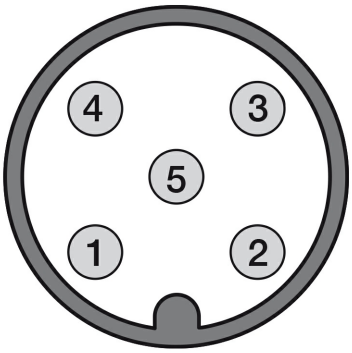
Generical Data

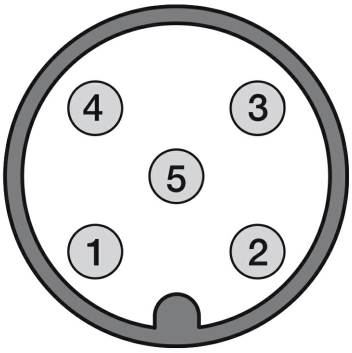
Dimensions	28mm (front) x 30mm
Operating Temperature	-10°C ÷ +55°C (no condensation)
Humidity	95% (no condensation)
Mechanical Protection	IP65, IP67

ELECTRICAL DIAGRAMS OF THE CONNECTIONS



CONNECTOR





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