



Indicative image



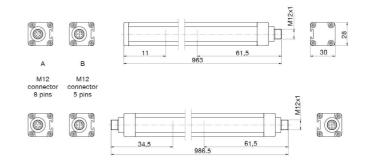






LIGHT CURTAINS TYPE 4 ACCORDING TO IEC 61496-1 AND IEC 61496-2

- Compact housing (28 x 30 mm) and no dead zone on cap
- 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	≤ 20m	
Resolution	40mm	
controlled height	910mm	
number of rays	31	
Effective Aperture Angle	±5°	

Emitter + Receiver

Application

Function Principle

Type	Available functions	Manual/Automatic Restart, EDM
Sil	Safety parameters	
File	Туре	4
PEH 6 Dearg 94,80% MTTF6 100 CFF 80% Output type Call page 18,228,8 years at time Bestried data Departing Voltage 19,228,8 year Load current < 400mA Time delay before availability 29 Interference to external light according to IEC 61496-2 Power Consumption - Receiver 2W foo load! Power Consumption - Emitter 1W Equivalent Resistive Load \$ 6.00 Q Capacitive Load \$ 6.00 Q Capacitive Load \$ 6.00 Q Capacitive Load \$ 6.00 Q Cable Length (Power Supply/Outpur) \$ 100m Cable Length (Power Supply/Outpur) \$ 100m Capacitive Load \$ 28mm (front) x 30mm Connections M12-5 poles (sectiver)	SIL	3
PFHd 1,34 €-08 Dearg 94,80 % MTTFd 100 CFF 80 % Dutput 2 × PNP-ND (CSSD safety output) Response time 6ms Descrical data 6ms Sectoral Quitage 19.2 28.8 Vec Load current ≤ 400 mA Time delay before availability 2e Power Consumption - Receiver 2W (no load) Power Consumption - Receiver 1W Equivatent Resistive Load ≥ 50 Q Capacitive Load ≥ 0.82 μF Cable Length (Power Supply/Quitput) ≤ 100 m Cable Length (Power Supply/Quitput) ≤ 100 m Mechanical data 28 mm (front) x 30 mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature +10°° + +66°° (no condensation) Storage temperature +0°° + +66°° (no condensation) Test/Approvals CF, ett.lus, TüV EMC compatibility According to 2014/30/EU Directive	SILCL	3
MITFed	PL	е
MTFFd	PFHd	1,34E-08
CFF 80% Output type 2 x PNP-ND (OSSD safety output) Response time 6ms Electrical data Fraction (Manage) Deparating Voltage 19.2 28,8 Vec Load current ≤ 400mA Time delay before availability 2s Power Consumption - Receiver 2W (no load) Power Consumption - Emitter 1W Equivalent Resistive Load ≥ 60 Ω Cabel Length (Power Supply/Output) ≤ 100m Cabel Length (Power Supply/Output) ≤ 50m Power Consumption - Emitter MP = 5 poles (emitter) M12-8 poles (receiver) Cabel Length (Power Supply/Output) ≤ 50m Cabel Length (For Master Slave Interconnections MP = 5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C + +85°C (no condensation) Storage temperature -10°C + +85°C (no condensation) Test/Approvals CE, cULus. TŪV EMC compatibility According to 2014/30/EU Directive	Dcavg	94,80%
Dutputs Dutput type 2 x PNP-NQ (DSSD safety output) Response time 6ms Electrical data Electrical data Operating Voltage 19.2 28.8 Voc Load current ≤ 400 mA Time delay before availability 2 s Interference to external light according to IEC 81496-2 Power Consumption - Receiver 2W(no load) Power Consumption - Emitter IW Equivalent Resistive Load ≥ 60 Ω Capacitive Load ≥ 0.82 μF Cabel Length (Power Supply/Output) ≤ 100 m Cable Length (Power Supply/Output) ≤ 50 m Mechanical data Z8mm (front) x 30 mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C + +55°C (no condensation) Storage temperature -25°C + +70°C (no condensation) humidity 95% (no condensation) Test/Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	MTTFd	100
Cutput type 2 x PNP-NQ (QSSD safety output) Response time 6ms Electrical data Feature of the policy of the	CFF	80%
Response time 6ms 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 Cabel Length for Master Slave Interconnections 5 50m Mechanical data 28mm (front) × 30mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C + 65°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	Outputs	
Electrical data Operating Voltage Load current ≤ 400mA Time delay before availability 2s Interference to external light according to IEC 61496-2 Power Consumption - Receiver Power Consumption - Emitter TW Equivalent Resistive Load ≥ 60 Ω Capacitive Load ≥ 0.82 μF Cabel Length (Power Supply/Output) Cable Length for Master Slave Interconnections Mechanical data Dimensions 28mm (front) × 30mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C + +55°C (no condensation) Storage temperature -25°C + +70°C (no condensation) Fest/Approvals Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive		2 x PNP-N0 (OSSD safety output)
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 28mm (front) x 30mm Mechanical data Dimensions Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C + +55°C (no condensation) Storage temperature -25°C + +70°C (no condensation) Invalidity 95% (no condensation) Vest/Approvals CE, CULus, TŪV EMC compatibility According to 2014/30/EU Directive	Response time	6ms
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 Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C ++55°C (no condensation) Storage temperature -25°C ++70°C (no condensation) Interconnections Storage temperature Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	Electrical data	
Time delay before availability 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) \$\frac{100m}{5}\$ Cable Length for Master Slave Interconnections Mechanical data Dimensions 28mm (front) x 30mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C + +55°C (no condensation) Storage temperature -25°C + +70°C (no condensation) Test/Approvals Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	Operating Voltage	19,2 28,8 Vcc
Interference to external light Power Consumption - Receiver Power Consumption - Emitter Power Consumption - Emitter IW Equivalent Resistive Load ≥ 60 Ω Capacitive Load ≥ 0.82 μF Cabel Length (Power Supply/Output) Cable Length for Master Slave Interconnections Mechanical data Dimensions 28mm (front) × 30mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C ÷ +55°C (no condensation) Storage temperature -25°C ÷ +70°C (no condensation) Minidity 95% (no condensation) Test/Approvals Approvals CE, CULus, TOV EMC compatibility According to 2014/30/EU Directive	Load current	≤ 400mA
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) ≤ 100 m Cable Length for Master Slave Interconnections Interconnections 28mm (front) × 30mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C + +55°C (no condensation) Storage temperature -25°C + +70°C (no condensation) humidity 95% (no condensation) Test/Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	Time delay before availability	2s
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 28mm (front) x 30mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C ÷ +55°C (no condensation) Storage temperature -25°C + +70°C (no condensation) humidity 95% (no condensation) Test/Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	Interference to external light	according to IEC 61496-2
Equivalent Resistive Load 2 0.82 μF Cabel Length (Power Supply/Output) Cabel Length for Master Slave Interconnections Mechanical data Dimensions 28mm (front) × 30mm Connections M12-5 poles (emitter) M12-8 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	Power Consumption - Receiver	2W (no load)
Capacitive Load ≥ 0,82 μF Cabel Length (Power Supply/Output) ≤ 100 m Cable Length for Master Slave Interconnections ≤ 50 m Mechanical data 28 mm (front) x 30 mm Dimensions 28 mm (front) x 30 mm Connections M12-5 poles (emitter) M12-8 poles (receiver) Operating temperature -10°C ÷ +55°C (no condensation) Storage temperature -25°C ÷ +70°C (no condensation) humidity 95% (no condensation) Test/Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	Power Consumption - Emitter	1W
Cable Length (Power Supply/Output) Cable Length for Master Slave Interconnections Mechanical data Dimensions 28mm (front) × 30mm Connections M12-5 poles (emitter) M12-8 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	Equivalent Resistive Load	≥ 60 Ω
Cable Length for Master Slave Interconnections Mechanical data Dimensions 28mm (front) x 30mm Connections M12-5 poles (emitter) M12-8 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	Capacitive Load	≥ 0,82 µF
Mechanical data Dimensions 28mm (front) × 30mm Connections M12-5 poles (emitter) M12-8 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	Cabel Length (Power Supply/Output)	≤100m
Dimensions 28mm (front) x 30mm Connections M12-5 poles (emitter) M12-8 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		≤50m
Connections M12-5 poles (emitter) M12-8 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	Mechanical data	
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	Dimensions	28mm (front) x 30mm
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	Connections	M12-5 poles (emitter) M12-8 poles (receiver)
humidity 95% (no condensation) Test/Approvals Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	Operating temperature	-10°C ÷ +55°C (no condensation)
Test/Approvals Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	Storage temperature	-25°C ÷ +70°C (no condensation)
Approvals CE, cULus, TÜV EMC compatibility According to 2014/30/EU Directive	humidity	95% (no condensation)
EMC compatibility According to 2014/30/EU Directive	Test/Approvals	
	Approvals	CE, cULus, TÜV
Shocks and vibrations according to IEC 61496-1	EMC compatibility	According to 2014/30/EU Directive
	Shocks and vibrations	according to IEC 61496-1

IP65, IP67

Degree of protection

Supplied Accessories ST 204 4S

Generical Data

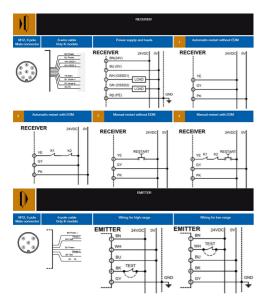
Dimensions 28mm (front) x 30mm

Operating Temperature $-10^{\circ}\text{C} \div +55^{\circ}\text{C}$ (no condensation)

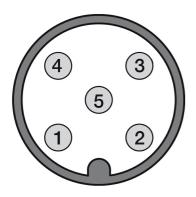
Humidity 95% (no condensation)

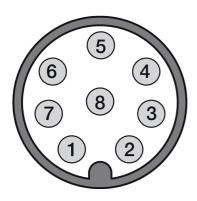
Mechanical Protection IP65, IP67

ELECTRICAL DIAGRAMS OF THE CONNECTIONS



CONNECTOR





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