



# LS2

## LS2ER/30-090

Safety, T2-PLd 30mm h=910mm 12m ,STD  
LIGHT CURTAINS TYPE 2 ACCORDING TO IEC 61496-1 AND  
2

## OVERVIEW

- Compact housing (28 x 30 mm) and no dead zone on cap side
- Resolution 30, 40, 50, 90 mm for hand protection and presence control and 2, 3, 4 beams for body protection/access control
- Controlled distance up to: 3, 4, 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 (LS2\_K) and models with integrated heating system to reach -25°C operating temperature (LS2\_H)
- Standard M12 da 5 and 8 poles connectors



## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	0...4 / 0...12 m
Resolution	30mm
controlled height	910mm

number of rays	46
Effective Aperture Angle	$\leq \pm 5^\circ$

### Application

Function Principle	Emitter + Receiver
Available functions	Manual/Automatic Restart, EDM
Description	Compact standard
Functions	Hand prot. res. 30 mm

### Safety parameters

Type	Type 2 safety light curtain (A/M)
SIL	1
SILCL	1
PL	c
PFHd	5,19E-08
Dcavg	
MTTFd	207,6 years
CFF	80%

### Outputs

Output type	2 x PNP-NO (OSSD safety output) with EDM
Response time	13 ms

## Electrical data

Operating Voltage	24 Vdc $\pm$ 20%
Load current	$\leq$ 400mA each output
Time delay before availability	2s
Interference to external light	according to IEC 61496-2
Power Consumption - Receiver	$\leq$ 2W (no load)
Power Consumption - Emitter	$\leq$ 1W
Equivalent Resistive Load	$\geq$ 60 $\Omega$
Capacitive Load	$\geq$ 0,82 $\mu$ F
Cabel Length (Power Supply/Output)	$\leq$ 100m
Cable Length for Master Slave Interconnections	$\leq$ 50m

## Mechanical data

Dimensions	28mm (front) x 30mm
Connections	M12-5 poles (emitter) M12-8 poles (receiver)
Operating temperature	-10°C $\div$ +55°C (no condensation)
Storage temperature	-25...+ 70°C
humidity	95% (no condensation)
Vibrations	Width 0.35 mm, frequency 10 ... 55Hz; 20 sweep per axis, 1octave/min (EN

60068-2-6)

Shocks

16 ms (10 G) 1,000 shocks per axis (EN 60068-2-29)

#### 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

28x30x963 mm

Operating Temperature

-10 ... +55°C

Humidity

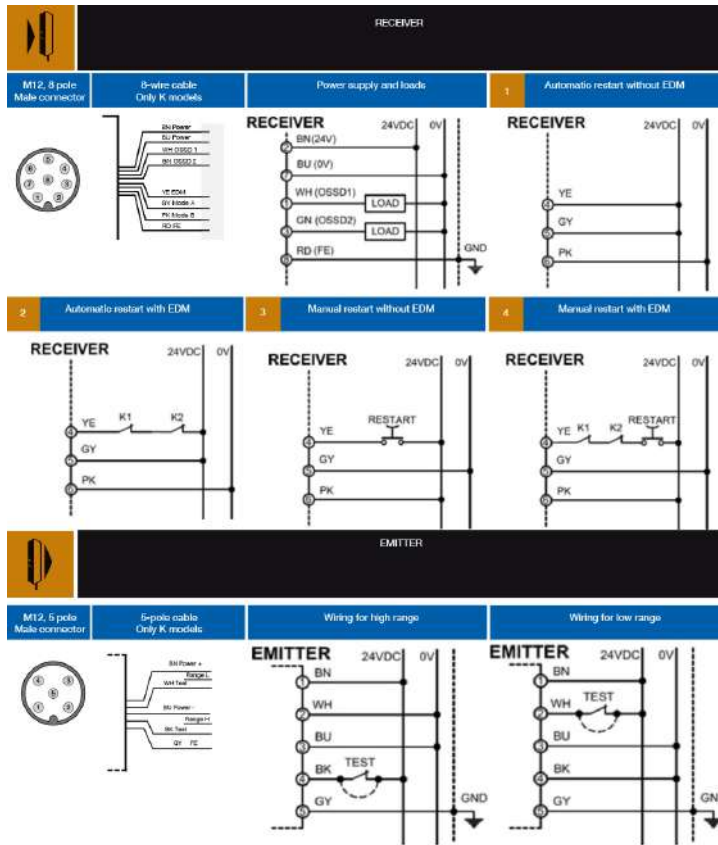
95% (no condensation)

Mechanical Protection

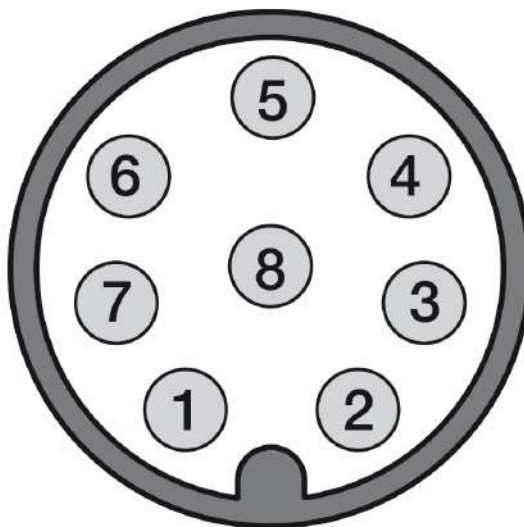
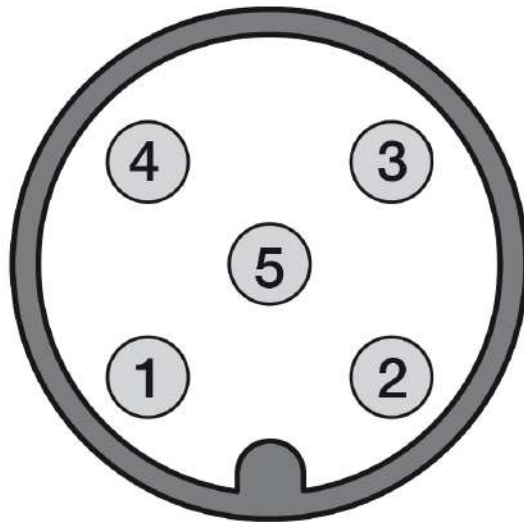
IP65, IP67

## CONNECTIONS

Electrical diagram

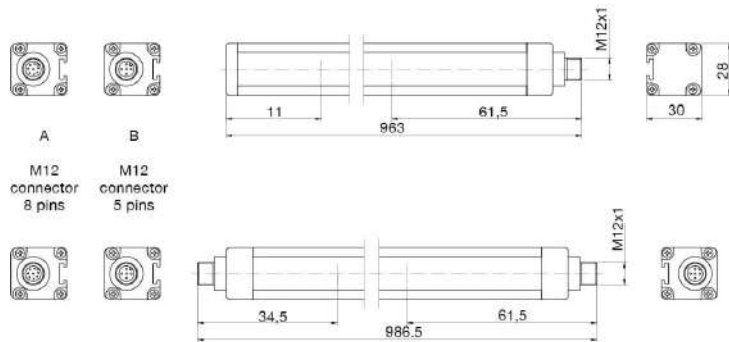


Connector



# OTHERS

Dimensions



**Datasensing  
S.r.l.**

Strada S.Caterina, 235  
 41122 Modena (MO)  
 Tel. 059 420411  
 Fax 059 253973  
 E-mail  
 info@datasensing.com

**date of  
printing**  
 01/07/2024  
 09:14:41