



New light curtain takes centre stage.



Safety light curtains in lean design with high ranges.

- Type 2 and type 4 safety light curtains to IEC 61496.
- Now with SIL to IEC 61508 and PL to ISO 13849.
- Can be installed without dead band. Mounting accessories supplied with the units.
- Ranges selectable on the unit: 0...4 m or 3...12 m.
- Easy to connect via the tried and tested M12 connector (5- or 8-pin).

type 2
SIL 2

type 4
SIL 3

IP 65
IP 67

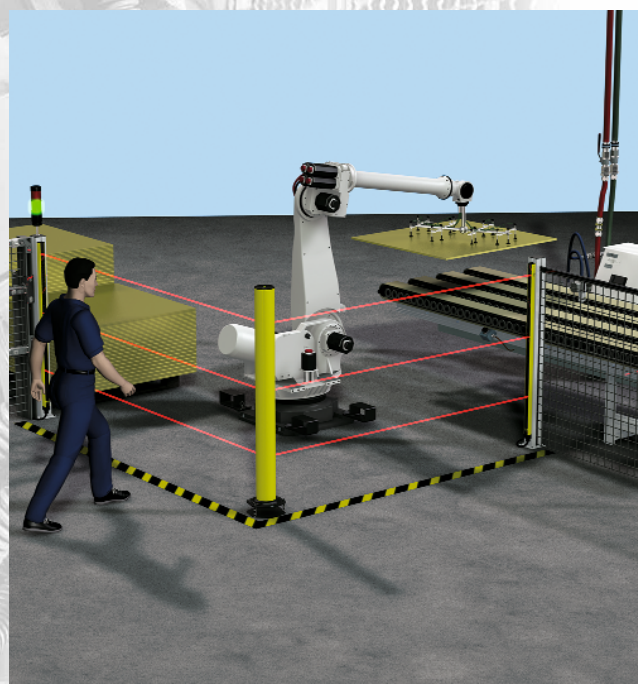
TÜV

Certified safety

The safety light curtains and light grids have been developed in accordance with the current standards and certified by TÜV Süd. They meet the requirements type 2 / SIL2 or type 4 / SIL3. So you are on the safe side if you need primary guarding or access prevention.

Variants

These light curtains are available for protected area heights of 160 mm to 1510 mm in intervals of 150 mm. The resolution (detection capacity) is selectable between 30, 40, 50 or 90 mm. The light grids are available in 2-, 3- or 4-beam version. They all have one thing in common: the very small housing dimensions of only 28 x 30 mm.



fluid sensors
and diagnostic
systems

position
sensors
and object
recognition

bus,
identification
and control systems

Applications: access limitations and primary guarding, robot cells, pick-and-place machines, production lines in industrial automation.

Safety light curtains

Type 2 SIL2	Protected area height [mm]									
Resolution / detection capacity [mm]	160	310	460	610	760	910	1060	1210	1360	1510
Application: hand and operator protection · protected area width 0...4 m / 3...12 m										
30	OY031S	OY032S	OY033S	OY034S	OY035S	OY036S	OY037S	OY038S	OY039S	OY040S
40	OY051S	OY052S	OY053S	OY054S	OY055S	OY056S	OY057S	OY058S	OY059S	OY060S
Application: operator protection · protected area width 0...4 m / 3...12 m										
50		OY072S	OY073S	OY074S	OY075S	OY076S	OY077S	OY078S	OY079S	OY080S
90				OY094S	OY095S	OY096S	OY097S	OY098S	OY099S	OY100S
Type 4 SIL3	Protected area height [mm]									
Resolution / detection capacity [mm]	160	310	460	610	760	910	1060	1210	1360	1510
Application: hand and operator protection · protected area width 0...4 m / 3...12 m										
30	OY041S	OY042S	OY043S	OY044S	OY045S	OY046S	OY047S	OY048S	OY049S	OY050S
40	OY061S	OY062S	OY063S	OY064S	OY065S	OY066S	OY067S	OY068S	OY069S	OY070S
Application: operator protection · protected area width 0...4 m / 3...12 m										
50		OY082S	OY083S	OY084S	OY085S	OY086S	OY087S	OY088S	OY089S	OY090S
90				OY104S	OY105S	OY106S	OY107S	OY108S	OY109S	OY110S

Safety light grid

Application	Number of beams	Distance between beams [mm]	Total height [mm]	Response time [ms]	Order no.
Type 2 / SIL2 · protected area width 0...4 m / 3...12 m					
Operator protection	2	500	653	2.5	OY111S
Operator protection	3	400	953	3	OY112S
Operator protection	4	300	1053	3	OY113S
Type 4 / SIL3 · protected area width 0...4 m / 3...12 m					
Operator protection	2	500	653	2.5	OY114S
Operator protection	3	400	953	3	OY115S
Operator protection	4	300	1053	3	OY116S

Easy installation

Via the T-slot over the whole length on the back the units are easy to mount. Angle brackets are supplied with each unit and do not have to be ordered separately. The units can be installed vertically or horizontally and without dead band on one side.




Easy wiring

The units are configured via the pin connection of the 5- or 8-pin M12 connector. To do so, you need no PC or software. Functions such as EDM (External Device Monitoring), restart or external muting (safety relay G2001S) can be implemented.

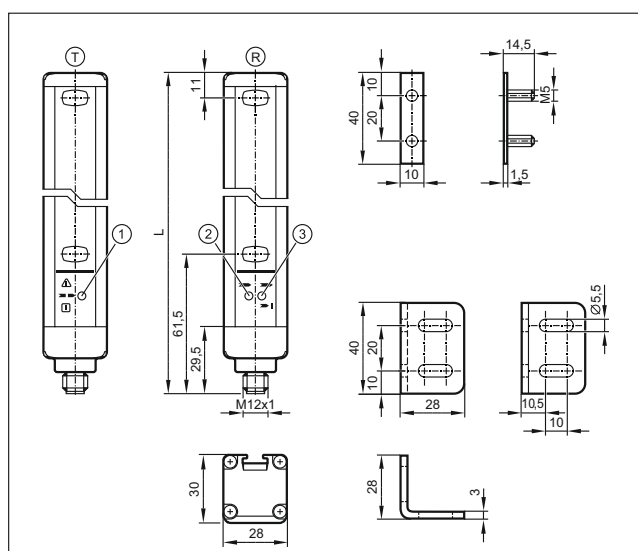
Common technical data		
Operating voltage	[V]	19.2...28.8
Current rating	[mA]	2 x 400
Current consumption	[mA]	
	Transmitter	42
	Receiver	83
Safety outputs (OSSDs)		2 x PNP
Operating temperature	[°C]	-10...55
Protection		IP 65, IP 67
Dimensions (W x D)	[mm]	28 x 30
Connection max. cable length	[m]	M12 connector 100
Safety category		
	IEC 61496-1: 2004	type 2 / type 4 SIL 2 / SIL 3 PL d / PL e
	IEC 61496-2: 2006	
	IEC 61508: 1998	
	ISO 13849-1: 2006	



Accessories

Type	Description	Order no.
	Vibration damper for fixing, set of 4 pcs., rubber, galvanised metal	EY3001
	Vibration damper for fixing, set of 6 pcs., rubber, galvanised metal	EY3002
	Laser adjustment aid for light curtains, visible red light 650 nm	EY3099

Dimensions



T: transmitter, R: receiver

1) LED 3-colour, 2) LED, 3) LED 2-colour



Connectors and splitter boxes

Type	Description	Order no.
	Socket, M12, 5 m, 8-pin, PUR	E12166*
	Socket, M12, 10 m, 8-pin, PUR	E12167*
	Socket, M12, 5 m, 8-pin, PUR	E12168*
	Socket, M12, 10 m, 8-pin, PUR	E12169*
	Socket, M12, 2 m, 5-pin, PUR	EVC070
	Socket, M12, 5 m, 5-pin, PUR	EVC071
	Socket, M12, 10 m, 5-pin, PUR	EVC072
	Socket, M12, 2 m, 5-pin, PUR	EVC073
	Socket, M12, 5 m, 5-pin, PUR	EVC074
	Socket, M12, 10 m, 5-pin, PUR	EVC075

* Pin connection of the ifm sockets

Pin	Colour	Name	Type
1	white	OSSD1	Output
2	brown	24 V DC	–
3	green	OSSD2	Output
4	yellow	K1_K2 / Restart	Input
5	grey	SEL_A	Input
6	pink	SEL_B	Input
7	blue	0 V DC	–
8	red	FE	–

Corner mirror

Description	Order no.
Corner mirror, length 250 mm, with angle bracket, aluminium, galvanised metal	EY1001
Corner mirror, length 400 mm, with angle bracket, aluminium, galvanised metal	EY1002
Corner mirror, length 540 mm, with angle bracket, aluminium, galvanised metal	EY1003
Corner mirror, length 715 mm, with angle bracket, aluminium, galvanised metal	EY1004
Corner mirror, length 885 mm, with angle bracket, aluminium, galvanised metal	EY1005
Corner mirror, length 1060 mm, with angle bracket, aluminium, galvanised metal	EY1006
Corner mirror, length 1230 mm, with angle bracket, aluminium, galvanised metal	EY1007
Corner mirror, length 1400 mm, with angle bracket, aluminium, galvanised metal	EY1008
Corner mirror, length 1450 mm, with angle bracket, aluminium, galvanised metal	EY1009
Corner mirror, length 1600 mm, with angle bracket, aluminium, galvanised metal	EY1010



Multifunctional with the advantage on your side

The safety relay G1501S provides different connection possibilities for safety light curtains, fail-safe inductive sensors or other ESPEs.



The safety relay meets the highest requirement with SIL 3 (IEC 61508).

"Monitored" or "automatic start" are only some of the numerous functions.



The safety relay G2001S is available for external muting. You use AS-i safety at work? ifm electronic has a systematic solution for you.

Be on the safe side with the fail-safe photoelectric and inductive sensors as well as safety relays.


Evaluation unit

Type	Description	Order no.
	Safety relay, multifunctional, 2 relay outputs, without terminals	G1501S
	Safety relay, 2 relay outputs, muting function	G2001S

AS-i bus system

Type	Description	Order no.
	Safe AS-i input module, 2 OSSD inputs via M12 connector	AC007S
	Flat cable lower part, yellow/black	AC5003

Accessories

Type	Description	Order no.
	Set of 5 COMBICON terminals, only for the safety relay G1501S	E11929