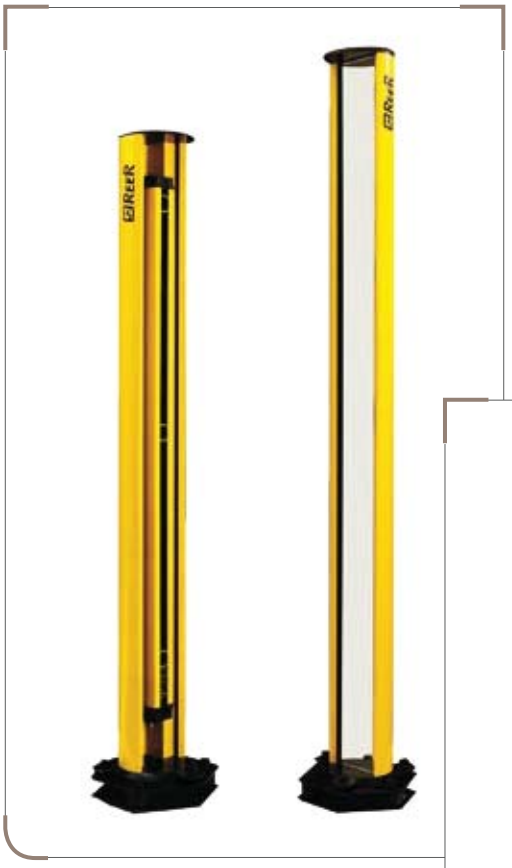
ACCESSORIES



FMC

Support columns for Reer safety light curtains and for deflection mirrors, designed to provide secure fastening to the floor, fast installation, and a simple and precise adjustment of the optical alignment of the system.

MAIN FEATURES

- Steel base with springs for a perfect adjustment of the column vertical axis.
- Columns made by aluminium extrusion poles, with adjustable angular orientation.
- Easy assembling and disassembling of the light curtain in order to adjust the first beam's height, easy adjustment of the first beam's height.
- FMC B models for light curtains.
- FMC B_R models for light curtains complete with PG11 rear union for light curtain cable sheath.
- FMC S models with pre-assembled deflector mirrors to realize perimeter protections up to 4 sides.
- Optical power Reduction factor 15% (for each mirror).
- Special models equipped with mirror with protective anti-fragmentation film available on request.
- Steel foundation inserts included with the product.
- Built-in spirit level for a correct positioning of the vertical axis.

- Can be used with the following light curtains:
- Admiral
- Janus
- Vision
- Metron

WARNING !

The following rules should be taken into consideration when using deflector mirrors:

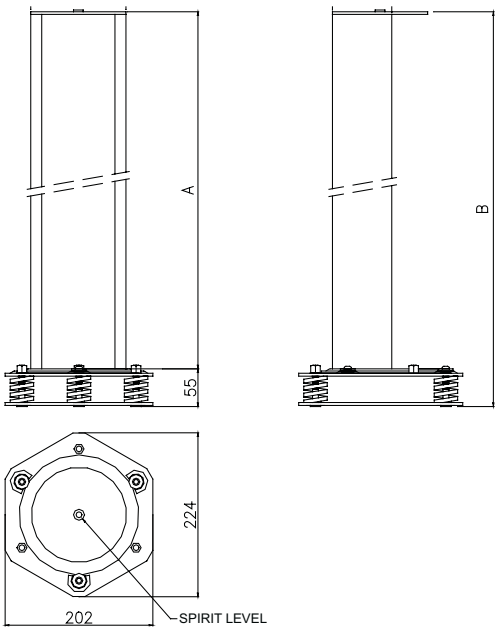
- the working distance (range) is given by the sum of the lengths of all the sides giving access to the protected area.
- for each mirror used the maximum working range between the Emitter and the Receiver is reduced by 15%.
- place the mirrors so as to ensure compliance with the minimum safety distance on each side from which the danger zone can be accessed.
- when light curtains and grids are working with long distance or with deflector mirrors, it is recommendable to use the LAD laser pointer for a quick and reliable alignment of the system.

TECHNICAL FEATURES AND DIMENSIONS mm

COLUMNS FOR LIGHT GRIDS / CURTAINS					
Standard models	**FMC-B2**	**FMC-B3**	**FMC-B4**	**FMC-B1700**	**FMC-B2000**
Models with PG11 rear union for cable sheath	**FMC-B2R**	**FMC-B3R**	**FMC-B4R**	**FMC-B1700R**	**FMC-B2000R**
Overall height with base mm	1055	1255	1385	1725	2025
or light grids/curtains with	2 beams	3 beams	4 beams	controlled height up to 1360 mm	controlled height up to 1660 mm

COLUMNS WITH DEFLECTION MIRROR					
MODELS	**FMC-S2**	**FMC-S3**	**FMC-S4**	**FMC-S1700**	**FMC-S2000**
Overall height with base mm	1055	1255	1385	1725	2025
or light grids/curtains with	2 beams	3 beams	4 beams	controlled height up to 1360 mm	controlled height up to 1660 mm

BASE FOR COLUMNS	
Model	**FMC-CB**
One base must be ordered for each column	



Model	A	B
COLUMNS FOR LIGHT GRIDS / CURTAINS		
FMC-B2	1000	1055
FMC-B3	1200	1255
FMC-B4	1330	1385
FMC-B1700	1670	1725
FMC-B2000	1970	2025
COLUMNS WITH DEFLECTION MIRROR		
FMC-S2	1000	1055
FMC-S3	1200	1255
FMC-S4	1330	1385
FMC-S1700	1670	1725
FMC-S2000	1970	2025
BASE FOR COLUMNS		
FMC-CB	202 x 224 x 55 h	

Each floor mounting columns includes multi-language instruction manual.

For ordering codes see page 135

SP

The SP deflection mirrors make it possible to create perimeter protection of areas with access points on multiple sides, with a considerable reduction of costs.
This solution eliminates the need to use more than one safety light curtain.

MAIN FEATURES

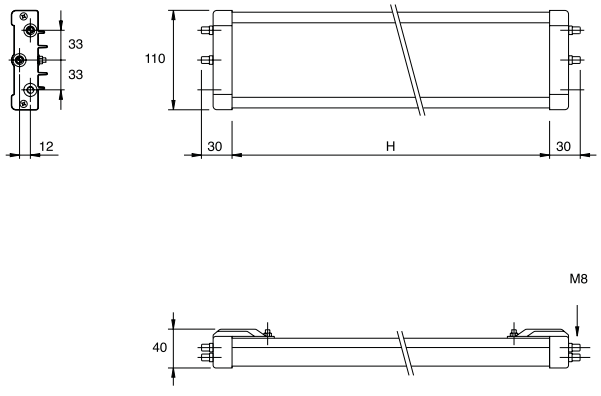
- Extruded aluminium section bar.
- Mirror pre-fitted with heights from 250 to 1900 mm.
- Angular orientation adjustable using supplied brackets.
- Optical power Reduction factor 15% (for each mirror).
- Special models equipped with mirror with protective anti-fragmentation film available on request.
- Can be used to realise perimeter protection up to 4 sides.

MODELS AND MIRROR-LIGHT CURTAIN COMBINATIONS

Mirror	For light grids/curtains with protected height mm	For light grids with
SP 100 S	160	
SP 300 S	310	
SP 400 S	460	
SP 600 S	610	2 beams
SP 700 S	760	
SP 900 S	910	3 beams
SP 1100 S	1060	4 beams
SP 1200 S	1210	
SP 1300 S	1360	
SP 1500 S	1510	
SP 1600 S	1660	
SP 1800 S	1810	

DIMENSIONS mm

Model	H
SP 100 S	250
SP 300 S	400
SP 400 S	540
SP 600 S	715
SP 700 S	885
SP 900 S	1060
SP 1100 S	1230
SP 1200 S	1400
SP 1300 S	1450
SP 1500 S	1600
SP 1600 S	1750
SP 1800 S	1900



Each mirror is supplied with two adjustable fixing brackets

Each SP Mirror includes multi-language instruction manual.

For ordering codes see page 135

WARNING !

The following rules should be taken into consideration when using deflector mirrors:
- the working distance (range) is given by the sum of the lengths of all the sides giving access to the protected area.
- for each mirror used the maximum working range between the Emitter and the Receiver is reduced by 15%.
- place the mirrors so as to ensure compliance with the minimum safety distance on each side from which the danger zone can be accessed.
- when light curtains and grids are working with long distance or with deflector mirrors, it is recommendable to use the LAD laser pointer for a quick and reliable alignment of the system.

AS-i CI5

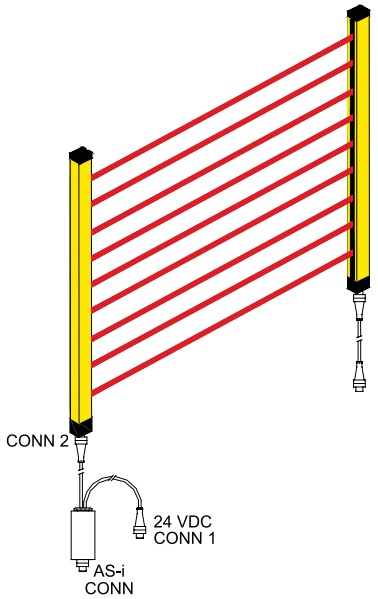
MAIN FEATURES

- Input module for 2 monitored PNP semiconductor outputs for safety light curtains and light grids
- AS-Interface LED status display
- AS-Interface M12 connector
- Thermoplastic enclosure
- Robust construction
- Protection ratings IP 67

TECHNICAL FEATURES

Safety		Type 4
Enclosure		glass-fibre reinforced thermoplastic, self-extinguishing
AS-i connection type		connector M12 x 1
Protection rating		IP 67
AS-i operating voltage		26.5 ... 31.6 Vdc, via AS-i, reverse-polarity proof
AS-i operating current		≤ 50 mA
AS-i specification		
(V 2.1)		Profile: S-0.B IO-Code: 0x0 ID-Code: 0xB ID-Code1: 0xF ID-Code2: 0xE
Inputs		
Contact	Status	Data bits
1	on	D0/D1 = dynamic code transmission
1	off	D0/D1 = static code "00"
2	on	D2/D3 = dynamic code transmission
2	off	D2/D3 = static code "00"
Outputs		A0...A3 not used
Parameter bits		P0...P3 not used
Input module address		default on address 0, programmable via the AS-Interface Master or Hand-held programming device
Signalling		AS-i voltage and communications OSSD1/2 enabling status
Power supply for light curtain		PELV power supply to IEC 364-4-41
Operating temperature °C		- 25 ÷ 60
Response time ms		≤ 20
Module dimensions		M30 x 1,5, lenght 70mm
Cable length		CONN1 = 500 mm CONN2 = 2000 mm

For ordering codes see page 135



Note:

- A separate address connector is not available as an option. The addressing must take place via the cable end or the M12 connector.
- The wiring diagram shows a light curtain with a safety input module AS-i CI5 connected to the AS-i Safety at Work system.
- The AS-i CI5 is directly connected to the light curtain receiver CONN 1. The light curtain receives its 24 VDC power supply via the second M12-cable connection CONN 2.
- The AS-i CI5 itself is connected via the M12 connector (AS-i CONN) to the AS-i network. The module has to be previously programmed with an individual adress (1 - 31).
- The light curtain emitter has to be connected separately.

CE

Safety level: **Type 4**.
Complying with:

- EN 50295 "Controller and device interface systems - AS-i"
- EN 60947-5-1 "Control circuit devices and switching elements"
- EN 954-1 "Safety-Related Parts of Control Systems - General Principles"
- EN 61496-1 "Electro-sensitive protective equipment - General requirements"
- UL (C + US) mark for USA and Canada

LAD

MAIN FEATURES

The LAD laser alignment device makes it possible to obtain a fast and reliable optical alignment of the Reer light curtains of the **Admiral**, **Vision**, **Metron** and **Janus** series; they are also compatible with the use of the **FMC** floor mounting columns.

The LAD devices emit a laser beam with **visible red light** with **useful range up to 100 m**.

Their use is recommended for aligning light curtains that operate over long distances or multiple sides with the use of deflection mirrors.

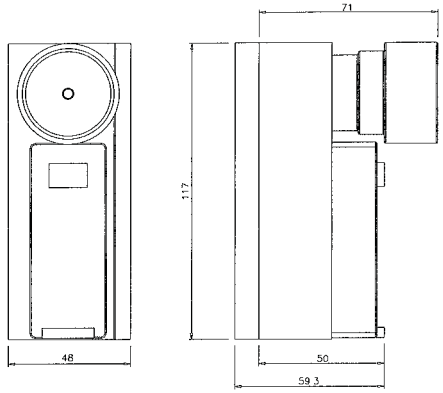
TECHNICAL FEATURES

Light source	laser diode – wavelength 650 nm
Class light source	II – EN 60825-1
Range m	100
Beam divergence mrd	< 0,5
Max. power mW	1
Power supply Vdc	3 (2 AAA batteries)
Fastening	quick fastening to the light curtains
Dimensions (h x w x d) mm	117 x 48 x 80 - LAD 2 70 x 78 x 70 - LAD 3

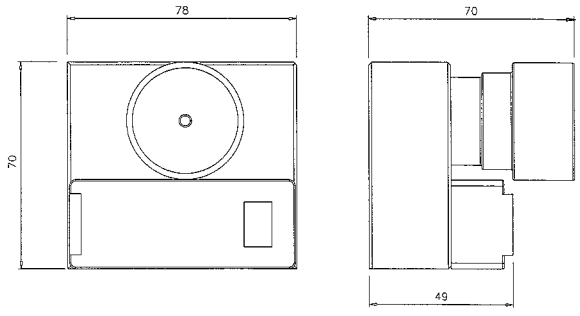
Model	for
LAD 2	Admiral - Vision - Metron
LAD 3	Janus

DIMENSIONS mm

LAD 2



LAD 3



Each LAD model includes multi-language instruction manual.

For ordering codes see page 135

SFB

MAIN FEATURES

The SFB swivel brackets allow the rotation of the light curtain around its longitudinal axis, as well as the adjustment of its vertical and horizontal position.

The use of the SFB swivel brackets is recommended to align those Admiral, Vision and Metron light curtains which are employed in applications having a long range or using deflector mirrors.

SFB swivel brackets can only be used with Admiral, Vision or Metron.

TECHNICAL FEATURES

Model	Description
SFB	set of 4 swivel brackets
One set must be ordered for each light curtain (couple emitter + receiver)	
For ordering codes see page 135	

SAV

MAIN FEATURES

The SAV vibration dampers have been designed to avoid mechanical damage to the light curtains installed in those applications which have a high level of vibrations.
The unprotected light curtains might resent the vibrations produced by e.g. presses, **weaving machines**, etc.

! **In these cases, the use of SAV vibration dampers is highly recommended**.

- SAV 1 and SAV 2 dampers are to be used with Janus light curtains.
- SAV 3 and SAV 4 dampers are to be used with Admiral, Vision and Metron.

TECHNICAL FEATURES

models and light curtains conbination		
Model	**Description**	**for light grids/curtains with protected height mm / beams**
SAV 1	set 4 vibrations dampers	310 ÷ 1060 / 2 – 3 - 4
SAV 2	set 6 vibrations dampers	1210 ÷ 1810
SAV 3	set 2 vibrations dampers	160 ÷ 1060 / 2 – 3 - 4
SAV 4	set 3 vibrations dampers	1210 ÷ 1810
2 sets must be ordered for each light curtain (1 set for the emitter + 1 for the receiver)		
For ordering codes see page 135		