# Type 4 in accordance with EN61496

2, 3 ou 4 beams

Multibeams – detection capability 40 mm









## Ideal for the protection of:

- Robotised area
- Assembly lines
- Automatic storage
- · Access area for wire guided trucks
- ..

#### **Presentation**

SR4O safety light micro barriers satisfy the most demanding safety, ergonomics and productivity criteria governing the protection of people working on machines.

SR4O safety barrier is a photoelectric device :

- 2,3 or 4 beams
- Multibeams with detection capability 40 mm

Ideal for long distance protection with or without mirrors.

Thanks to its small bulk, SR4O becomes perfectly integrated into any installations without further constraints for the designer.

SR4O barrier is composed of an emitter and a receiver equipped with two safety solid state outputs. It's an autonomous barrier with all integrated safety functions, which can work without additional safety external module. SR4O is a type 4 optoelectronic safety device according to standards EN61496-1 and IEC61496-2.

SR4O can be connected to the machine stopping control through either the SWH4 safety modules, or a safety PLC, or another control system.

### **SR40 Choice**

- Multibeams device.
- Dimensions of section : 50x60 mm
- Working range: until 60 m.
- Power supply 24VDC ±20%
- Safety solid state outputs protected against short-circuit and overload.
- Output Diagnostic to prevent any misalignment of the safety barrier or clogging of optical glasses.
- Electrical connection with connectors
- LED integrated supplying information on the condition of the beams and about perfect alignment of the barrier
- Integrated digital display supplying information for troubleshooting.
- Three possible fixation modes of the barrier: behind or on the side with the help of the fastening brackets included, or on the end top (optional fastening brackets).





- ⇒ Important excess gain for hard environnements.
- ⇒ Large range of accessories (mirrors, mechanicals posts, brackets).



### **Technical Characteristics**



| Models                      | SR4OC403H | SR4OC405H | SR4OC407H | SR4OC409H | SR40C411H |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|
| Protected height (mm)       | 610       | 910       | 1210      | 1510      | 1810      |
| Number of beams             | 20        | 30        | 40        | 50        | 60        |
| Overall barrier height (mm) | 736       | 1036      | 1336      | 1636      | 1936      |
| Detection capability (mm)   | 40        | 40        | 40        | 40        | 40        |

| models                        | Multi beams models |                        |     |  |
|-------------------------------|--------------------|------------------------|-----|--|
| models                        | SR4OC02FH          | SR4OC02FH SR4OC03FH SF |     |  |
| Number of beams               | 2                  | 3                      | 4   |  |
| Distance between 2 beams (mm) | 500                | 400                    | 300 |  |

## **Electrical Characteristics**

| Working range SR4O       | m   | 30-60   |
|--------------------------|-----|---|
| Start / restart          |     | Manual or automatic                               |
| Power supply             | VDC | 24V ± 20%   |
| Maximum consumption      | W   | 3 W emitter and 6 W receiver                      |
| Safety output            |     | 2 PNP – 500mA, 24VDC                              |
| Alarm Output             |     | 1 PNP – 100 mA 24 VDC                             |
| Response time            | ms  | From 7 to 28,5 ms                                 |
| Operating temperature    | °C  | From 0 to 55                                      |
| Protection rating        |     | IP65  |
| Dimension of section     | mm  | 50 x 60   |
| Connections              |     | Emitter : M12 – 5 pins<br>Receiver : M23- 19 pins |
| Maximum length of cables | m   | 100<br>(between the barrier and the load)         |

## **Emitter connections**

| EMITTER SR4O   |                  |                         |  |
|----------------|------------------|-------------------------|--|
| Number of pins | Name DESCRIPTION |                         |  |
| 1              | 24VDC            | Power supply (positive) |  |
| 2              | range / TEST1    | Select test / range     |  |
| 3              | 0VDC             | Power supply (negative) |  |
| 4              | range / test 2   | Select test / range     |  |
| 5              | PE               | PE (Ground)             |  |

## **Receiver connections**

| RECEPTEUR SR4 O |                        |  |  |
|-----------------|------------------------|--|--|
| Number of pins  | Name                   | DESCRIPTION                              |  |
| 2               | 0SSD2                  | Safety output                            |  |
| 3               | OSSD1                  | Salety output                            |  |
| 4               | Signal                 | Low optical signal                       |  |
| 6               | 0 VDC                  | Power supply 0 VDC                       |  |
| 11              | Activation EDM         | Remote Activation of external monitoring |  |
| 12              | Terre                  | Connecting to the ground                 |  |
| 13              | Manu / Auto            | Manual or automatic Mode                 |  |
| 14              | Restart                | Restart input                            |  |
| 18              | Contact K1 K2<br>(EDM) | Contacts EDM                             |  |
| 19              | 24VDC                  | Power supply + 24 VDC                    |  |

## **Accessories**

SWH4ADSR2

SWJ0CJ5

SX42WC5

SX42WC10

SWJ0CJBR5

SWJ0CJBE5

| SWJ4MJB2  | Box with Start/restart push button + 2 relays output and EDM.     | SWJ0CJBR10 | 2 straight 19 pins M23 female of to link receiver to SWJ4MJB1,1 |
|-----------|---|------------|---|
| SWH4ADSR1 | Safety relay, with AUTO/MANU restart and EDM integrated functions | SWJ0CJBE10 | 2 straight 5 pins M12 female of to link transmitter to SWJ4M    |

and EDM integrated functions, with the possibility to connect two safety light

barriers and another safety device like emergency push button, safety switch...

Straitght 19 pins M23 female connector

receiver to SWJ4MJB1, 5m cable .

Straight 5 pin M12 female connector , 5m SWPS0

Straight 5 pin M12 female connector, 10m swmb ♦ ♦ cable.

for receiver.5m cable.

cable

connectors to link transmitter to SWJ4MJB1, 10m

connectors

Safety relay, with AUTO/MANU restart SGWELL

SGWELH1

SWJ0CJ10

Set of 4 typ LL mounting brackets

Set of 4typ LH mounting brackets

Straitght 19 pins M23 female connector

for receiver,10m cable

Post for fastenning of the barrier or of a mirror SWMB ♦ ♦

Deviation mirrors to be fixed on a wall or on a frame (possible assembly on posts SWPS0)

2 straight 19 pins M23 connectors to link WAB4♦♦ Deviation mirrors to be fixed on a ground

or a table.

Set of 6 fastening inserts

SWH4LAD3 Laser alignments SAWR02 Safety relays 24 VDC



Les produits présentés dans ce document sont susceptibles d'évolutions. Les descriptions et caractéristiques ne sont pas contractuelles



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