

# Optionals

# Watertight enclosure for barrier protection

The HTB5-CY enclosure is ideal for protecting barriers against dust, or oil and water jets.

It is not recommended in Atex environments.

It can house all models of Red-Beam barriers of the "Basic line".



#### **Technical details**

Compatible models: HTBR-HTBRS-HTBRL-HTBM

Material: Transparent PMMA tube

• Enclosure rating : IP68

• Fire class : Class E

Resistance to atmospeherical agents: alkali - weak acids

Breaking strength: 70 MPa

Working temperature : 0 + 70°C without heater
Working temperature : -25°C + 70°C with heater

Available lengths: for barriers from 150mm up to 1950mm
Cable output: M12 with 5 pins / 8 pins

Fastening with wall brackets (provided)

#### **Laser Pointer**

All Advanced models and the M line Red Beam safety light curtains can be equipped with a laser pointer placed on top of the receiver, or on top of the emitter in case of the M line.

This allows to align long range safety light curtains with ease. The visible red light laser can be easily switched on using the F2 button and, after the optical alignment, it turns off at system restart, without needing the pressure of any button.

**Technical details** 

Wavelength: 670 nm ± 10% Optical power: < 5 mW Power consumption: < 50 mA Divergence: < 2 mrad

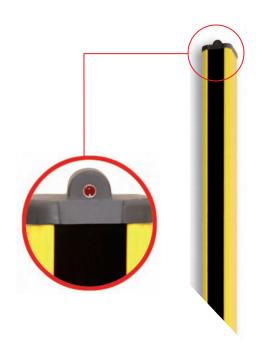
Diameter of the beam: 3 mm

Optic: plastic lens

Safety class (EN 60 82 5 - 1): 3R

Class 3R: continuous laser with power lower than 5 mW, that emits radiation with wavelength between 302,5 nm and  $10^5$  nm, where the vision of the beam or its reflection on a mirror surface is potentially hazardous with or without optical instruments (the risk is lower than with Class 3B laser).

Do not stare into the laser beam.





## Power supply HTB5 - AL01 e AL02

Accessory for the power supply of all Red Beam products. It is provided with the required protections against short circuits and electric glitches.

- Input: 110 Vac (AL01) / 230 Vac (AL02)
- Output: 24 Vcc
- Light indicating proper functioning
- Protected from overvoltage
- Safety category: 4
- Enclosure rating: IP20

The AL-01 and AL02 power supplies are intended to power each individual Red Beam device, it is not recommended to use them for other purposes.

When using the power supply, the 24 Vdc output must not be used to power additional devices.

All type 4 ESPE powered in CC must have their individual power source, compliant with EN 61558.



#### **Cables**

To power its safety light curtains, Red Beam uses shielded cables available in various lengths, according to the customer needs.

For Basic line safety light curtains we offer shielded cables with connectors M12 with 5 pins (straight or curved at 90 degree).

For M line safety light curtains, there's the M12 family of cables with 8 pins, to be used on the receiver only.

For Advanced line safety light curtains there's the M23 family of cables with 16 pins, to be used on the receiver only.





# **Fixing brackets**



**HTB5-ST17** is a sliding bracket with a fastening pin. Each safety light curtain comes with a 4 pieces kit, which includes the fastening screws.



The "cradle-like" fastening bracket **HTB5-ST18** allows to adjust the safety light curtain position, permitting to conveniently tilt and rotate both the emitter and the receiver. These are optional elements; four of them are provided with each safety light curtain pair.



The "corner" bracket **HTB5-ST19** allows to position the safety light curtain at 90° in respect to the fastening point. These are optional elements; four of them are provided with each safety light curtain pair.



The bracket **HTB5-ST21** allows to fix a single arm on L line safety light curtains. It is supplied in 2 pieces, together with grub screws for fastening.



The bracket **HTB5-ST22** allows to fix two arms on T line safety light curtains. It is supplied in 2 pieces, together with grub screws for fastening.



### **Columns & Mirrors**

Using mirrors to deflect the beam, it is possible to cover large areas.

The deflecting mirrors, fastened to mirror-holding/safety light curtain-holding columns, are available in various height according the customer needs.

They are used to create a perimeter protection around hazardous areas, protecting more than one side with just one safety light curtain. They are usually employed in robotized areas, machine centers, presses and similar.

The usage of mirrors entails a 10-15% reduction of the range for each unit; to solve this inconvenience, the mirrors are usually paired with safety light curtains with increased range.

Mirror-holding and safety light curtain-holding columns provide a solid fixing to the floor, a quick installation and an easy and accurate optical alignment of the system.

Suitable to protect: automatic punching-machines, cutting lines, robotized areas, assembly lines, palletizing robots.

#### Main features:

- The base is available in two versions:
- A Steel base equipped with elastomer springs for an accurate adjustment of the vertical axis.
  - B Fastening with adjustment directly on the floor.
- Columns in extruded aluminum with adjustable angular orientation
- Simple assembly and disassembly of the safety light curtain with the possibility to regulate the height of the first heam
- Width of the mirror with wall fastening: 130 mm.
- Diameter of the mirror-holding/safety light curtain-holding column: 130 mm.



