

FLIPS PLUS PHOTOCELLS (23102205)

The **FLIPS PLUS** are photocells made of nylon with glass fiber, equipped with an EMI screen that ensures operation even in the presence of electromagnetic disturbances. They can also be synchronized if powered in 24Vac; they are equipped with a relay output with 1A contact capacity and can be adjusted by $\pm 90^\circ$ along the horizontal axis and by $\pm 5^\circ$ along the vertical axis, to allow easy installation. The FLIPS PLUS have been designed for installations where it is necessary to apply two superimposed photocells, without colliding each other; to obtain this result, it is sufficient to power the photocells in 24V~ and cross the power supplies: if the TX and RX of the first photocell are powered with a black cable on 0V~ and with a red cable on 24V~, then the TX and RX of the second photocell must have the red cable on 0V~ and the black cable on 24V~

CARTON INVENTORY

1 RX receiver photocell
1 TX transmitter photocell
1 KIT for fixing
1 Instruction

OPTIONAL ACCESSORIES:
Aluminum cover (23101195)
to replace the nylon cover

TECHNICAL DATA		TECHNICAL DATA	
Range	15 meters **	Absorption	TX: 30 mA RX: 30 mA
Signal	Modulated infrared	Operating temperature	- 15° C ⚡ + 60° C ⚡
Wavelength	880 nm	Relay contact rating	24V - 1A Max
Modulation frequency	1000 Hz	Humidity	From 5% to 90% - non condensing
Power supply	12/24V \equiv /V~	Dimensions	129 x 48 x 42 mm
** THE RANGE OF THE DEVICE CAN BE REDUCED BY UP TO 70% IN CASE OF BAD WEATHER CONDITIONS (FOG, RAIN, ETC.)		Storage temperature	- 20° C ⚡ + 70° C ⚡
		Protection degree	IP 55

TX - TRANSMITTER PHOTOCCELL INSTALLATION

- Place the TX photocell by the use of the appropriate fixing screws according to the nature of the surface
- Insert the cables in the housing and make the connections as indicated **on the next page** according to the type of application required (12V or 24V~ or 24V \equiv ; synchronized or not synchronized)
- Arrange the cables so that the excess is removed
- Fix the TX photocell
- Seal the sheath and any holes that may convey foreign bodies inside the plastic case

RX - RECEIVER PHOTOCCELL INSTALLATION

- Place the RX photocell on the opposite surface and align it with the TX photocell
- Insert the cables in the appropriate housing and make the connections as indicated **on the next page** according to the type of application required (12V or 24V~ or 24V \equiv ; synchronized or not synchronized)
- Arrange the cables so that the excess is removed
- Fix the RX photocell in front position and perfectly aligned on the same axis and at the same height as the associated TX photocell. Adjust the alignment of the circuit if necessary (**see next page**)
- Seal the sheath and any holes that may convey foreign bodies inside the plastic case

Once the installation for both the TX and the RX photocell is complete, power the photocells (12V or 24V~ or 24V \equiv) and check their alignment: if the connection, positioning and alignment of the photocells is correct, the red LED on the RX photocell will be on

IMPORTANT NOTE - FOR THE «SYNCHRONIZED PHOTOCELLS» FUNCTION, THE POWER SUPPLY MUST NECESSARILY BE 12V/24V~ (AC)

CHECKING

- Interrupt the infrared ray several times with a black card (or something opaque to the infrared) checking:
- the response (exchange) of the relay
 - that the red LED on the RX photocell turns off every time the beam is interrupted

LED OPERATION

RED LED ON: device ALIGNED

RED LED OFF: device NOT ALIGNED

English

OPENING

USE
«TORX T20»
SCREWDRIVER

DIMENSIONS

99.5 mm
24 mm

PHOTOCELL TX

23 mm
55 mm
JP1
0V 12V 24V

PHOTOCELL RX

23 mm
55 mm
L1
JP1
0V 12V 24V C NO NC

POSITIONING

OPERATION
IN ALIGNED
POSITION

OPERATION
IN NON-ALIGNED
POSITION

ASSEMBLY

1 2*

* IF THE CABLE COMES FROM BELOW, FIRST PASS THE CABLE AND THEN INSERT THE BLOCK

ELECTRIC CABLES

1 2 3

1 - MAKE A HOLE ON THE RUBBER FILM

2 - PASS THE ELECTRIC CABLE

3 - INSERT THE PLASTIC BLOCK

CABLE HOLE

IF THE CABLE COMES FROM THE BACK, USE THE HOLE INDICATED BY THE ARROW

TX SYNCHRONIZATION (24Vac)

TX 1 TX 2

JP1 JP1

0V 12V 24V 0V 12V 24V

RX SYNCHRONIZATION (24Vac)

RX 1 RX 2

L1 JP1 L1 JP1

0V 12V 24V C NO NC 0V 12V 24V C NO NC

JP1 ADJUSTMENT

JP1 → JP1 ON
SYNCHRONIZATION
ENABLED

JP1 → JP1 OFF
SYNCHRONIZATION
DISABLED

THE POSITION OF JP1
MUST BE THE SAME ON
BOTH PHOTOCELLS

HORIZONTAL ALIGNMENT

FRONT HOLE

A

THE «A» FIXING SCREW ON THE FRONT HOLE ALLOWS THE ALIGNMENT ONLY ON THE HORIZONTAL AXIS BY $\pm 90^\circ$

TIGHTEN THE SCREW AT THE END OF THE ALIGNMENT OPERATION

$\pm 90^\circ$

VERTICAL ALIGNMENT

REAR HOLE

B

THE «B» FIXING SCREW ON THE REAR HOLE ALLOWS THE PERPENDICULAR ALIGNMENT BY $\pm 5^\circ$ ONLY IF THE HORIZONTAL ALIGNMENT IS 0°

$\pm 5^\circ$