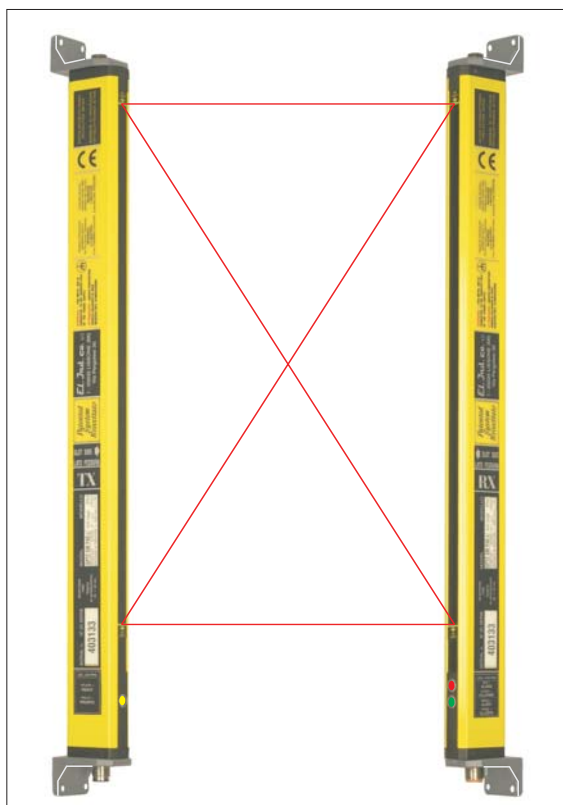


OPT3 SMC P320

Safety Light Curtain TYPE 2 - SIL 2 SILCL 2 PL d
Safety Light Curtain TYPE 4* - SIL 3* SILCL 3 PL e



Detection 320 mm - body

Protected Height 640 ÷ 1920 mm

Range HP ÷ 30 meters

Output 2 switches - ON/OFF

Directives 2006/42/EC - 2004/108/EC - 2006/95/EC

Standards CEI-EN 61496/1 - CEI-CLC/TS 61496-2

Certificate N.0068/ETI - MAC/001-2010 Rev.2

Safety Light Curtain Type2 (*) with the following functions :

Start/Restart : automatic restart of the logic state of the device after an intervention and at its powering on (Standard Model)

SRS/EDM : SRS = start restart automatic /manual after an intervention and at its powering on + EDM (External Device Monitoring) choosing the option SRS/EDM

Test Input

It is supplied in series with a connector output M12 and with orientable support brackets (SMO)

(*) Upgrading to **TYPE 4** through a control unit BOX2/4 which implements the following functions :

- **Outputs** - 2 switches 5A/250V (mobile concatenated relays)
- **EDM** (External Device Monitoring)
- **Led Diagnostic** for failures signalling and detection
- **Contact AUX (Auxiliary) NC** normally closed

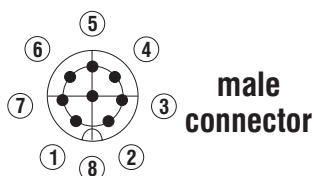
PROTECTED AREAS HEIGHT

| Product Code | Protected Height HP mm | Total Height H mm | Response time ms | Number of controlled rays |
|--------------------|---------------------------|----------------------|---------------------|------------------------------|
| OPT3-SMC-P320-0640 | 640 | 805 | 15 | 2x2 |
| OPT3-SMC-P320-1280 | 1280 | 1445 | 18 | 3x3 |
| OPT3-SMC-P320-1920 | 1920 | 2085 | 20 | 4x4 |

| | |
|----------------------------|--|
| Safety Category | TYPE 2 - SIL 2 SILCL 2 PL d / TIPO 4* - SIL 3* SILCL 3 PL e |
| Power Supply | 24Vdc \pm 10% |
| Absorption TX Unit | 80 mA max |
| Absorption RX Unit | 70 mA max |
| Output | 2 switches SW1 - SW2 (ON/OFF) free from potential 1Adc/ac @ 40Vdc/ac |
| Output Protection | Short circuit and overcharge through self restoring fuses. After an overcharge or shortcircuit it is necessary to power off and wait some seconds before the normal working restart |
| LED Signallings | <p>TX Unit</p> <ul style="list-style-type: none"> - Yellow Led = Power Supply <p>RX Unit</p> <ul style="list-style-type: none"> - Green Led = Active Protection - Red Led = Alarm - Orange Led ON = Manual Operation - Orange Led blinking = Waiting for RESTART - Orange Led OFF = Automatic Operation <p><i>present only with the OPTION SRS/EDM</i></p> |
| Housing | Polished aluminium RAL1021 |
| Housing Section | 22 x 36 mm |
| Protection Degree | IP54 (option IP67 - IP69K) |
| Working Temperature | 0 / +55 °C |
| RX Connection | Connector M12 female 8 poles shielded - lenght 10 meters |
| TX Connection | Connector M12 female 5 poles shielded - lenght 10 meters |
| Fixing | SMO (orientable support brackets) |

CONNECTION ELECTRIC DIAGRAM (Standard Model)

RX



- 1) White = N.C.
- 2) Brown = + 24Vdc
- 3) Green = SW1
- 4) Yellow = SW2
- 5) Grey = SW2
- 6) Pink = SW1
- 7) Blue = -
- 8) Red = N.C.
- Shield =

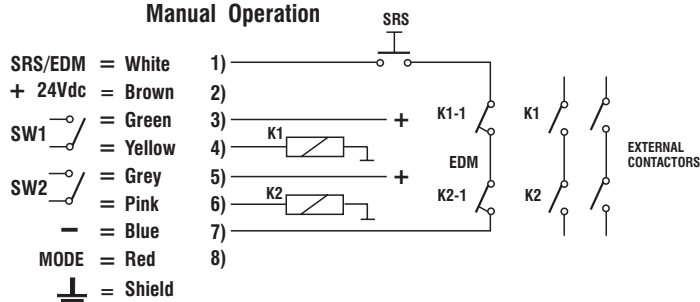
TX



- 1) Brown = + 24Vdc
- 2) White = TEST INPUT
- 3) Blue = -
- 4) Black = TEST INPUT
- 5) Grey = N.C.
- Shield =

TEST INPUT = Connect the 2 threads, white and black is simulated the interruption of the curtain test the correct opening of the outputs SW1 - SW2 of the receiving unit

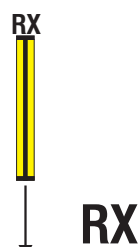
Manual Operation



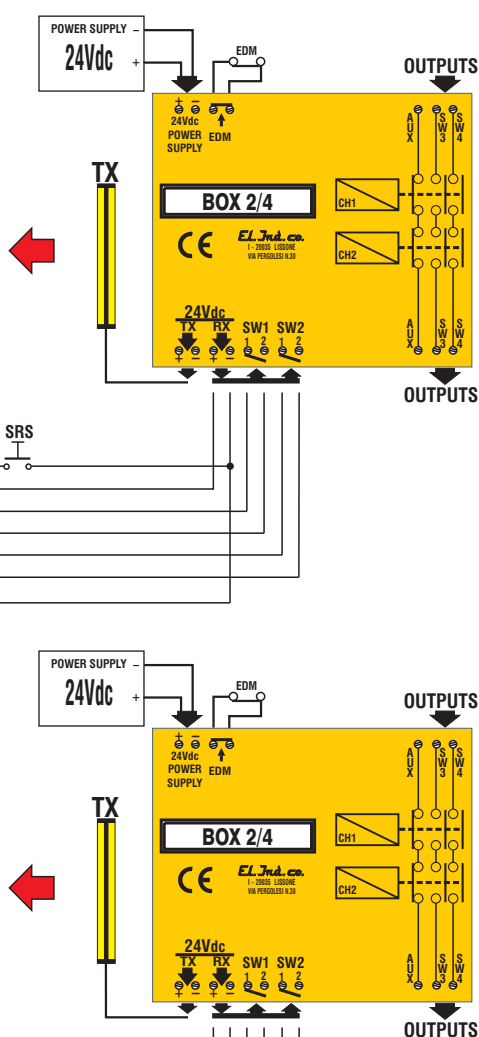
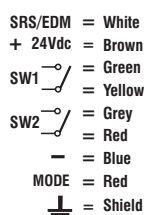
| | RED | WHITE ⁽¹⁾ | |
|------------------|--------|----------------------|-------|
| | MODE | SRS | EDM |
| AUTOMATIC | 0 Volt | ✗ | ✓ / ✗ |
| MANUAL | NC | ✓ | ✓ / ✗ |

⁽¹⁾Leave close if not used

To connect the TX refer to the diagram on page 2

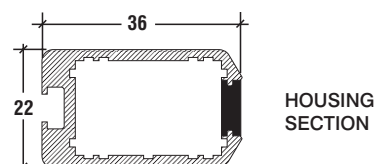
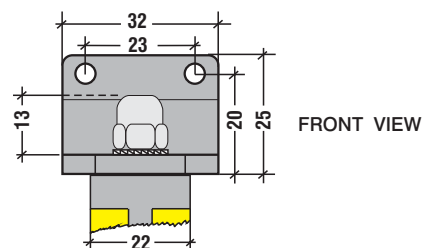
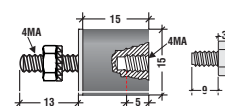


Automatic Operation



The drawing shows two modules, RX and TX, with the following dimensions and labels:

- Overall Width:** 45
- Module Width:** 36
- Top Mounting:** 2 HOLES $\varnothing 4$
- HP LIMIT:** Indicated on both sides of the module width.
- Module Height:** 84 ± 1
- Module Label:** RX
- Slot Side:** Indicated with an arrow pointing to the right.
- LED Indicators:**
 - LED ORANGE
 - LED GREEN / RED
- Module Height (TX):** 66
- Module Label:** TX
- Slot Side:** Indicated with an arrow pointing to the left.
- REG (Range Regulator):** Indicated with an arrow pointing to the right.
- LED Indicator:** LED YELLOW
- Bottom Mounting:** 2 HOLES $\varnothing 4$


$$HF = H - 10 \text{ mm}$$


SUPPEL70 =
Elastic supports
antivibrating sliding
on all the lenght
(OPTIONS)

| | |
|--------------|---|
| SRS / EDM | Start Restart automatic/manual + EDM (External Device Monitoring) |
| OUTPUT CABLE | Output with direct cable length 5 meters |
| SUPPEL 70 | Supports for the direct mounting of the profile (not orientable) |
| CB60 IP67 | IP67 protection |
| CB60 IP69K | IP69K protection |

| | |
|--------------------|--|
| COD 5 | Cable TX M12 - 5 poles shielded 10 meters included in the supply |
| COD 8 | Cable RX M12 - 8 poles shielded 10 meters included in the supply |
| BOX 2/4 (*) | External control unit for TYPE 4 upgrading |
| BOX-MUT | External control unit for neutralization - MUTING |
| SPV100 | Mirrors at V for enclosures |
| SPV100 PLUS | Mirrors at V UNBREAKABLE for enclosures |

| Product Code | Distance | Mounting | OPTIONS (°) | Maximum Range between TX and RX |
|--------------------|----------|----------|-------------|---|
| OPT3-SMC-P320-0640 | - - - - | - SMO | - - - - | NR = HP ... 6 meters MR = 6 ... 16 meters HR = 16 ... 30 meters |

To be indicated on the order. The Light Curtain will be supplied pre-calibrated for an **immediate adjustment**

EL Ind. co.

DECEMBER 2012

page 4/4