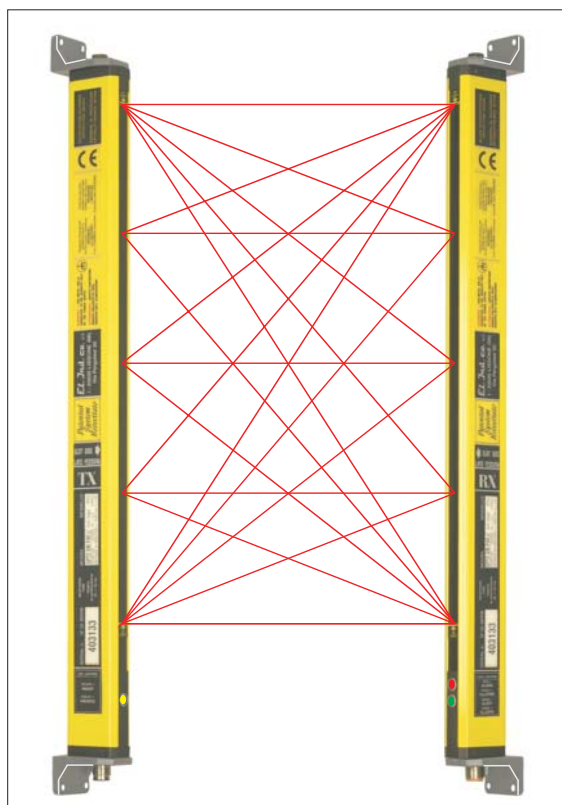


# OPT3 SMC P080

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



Resolution 80 mm - arm

Protected Height 320 ÷ 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) - **Led Diagnostic** for failures signalling and detection
- **EDM** (External Device Monitoring) - **Contact AUX (Auxiliary) NC** normally closed

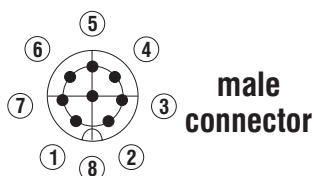
## PROTECTED AREAS HEIGHT

Product Code	Protected Height HP mm	Total Height H mm	Response time ms	Number of controlled rays
OPT3-SMC-P080-0320	320	485	18	3x3
OPT3-SMC-P080-0480	480	645	20	4x4
OPT3-SMC-P080-0640	640	805	23	5x5
OPT3-SMC-P080-0800	800	965	25	6x6
OPT3-SMC-P080-0960	960	1125	28	7x7
OPT3-SMC-P080-1120	1120	1285	30	8x8
OPT3-SMC-P080-1280	1280	1445	33	9x9
OPT3-SMC-P080-1440	1440	1605	35	10x10
OPT3-SMC-P080-1600	1600	1765	38	11x11
OPT3-SMC-P080-1760	1760	1925	40	12x12
OPT3-SMC-P080-1920	1920	2085	43	13x13

<b>Safety Category</b>	TYPE 2 - SIL 2    SILCL 2 PL d / TIPO 4* - SIL 3*    SILCL 3 PL e
<b>Power Supply</b>	24Vdc $\pm$ 10%
<b>Absorption TX Unit</b>	80 mA max
<b>Absorption RX Unit</b>	70 mA max
<b>Output</b>	2 switches SW1 - SW2 (ON/OFF) free from potential 1Adc/ac @ 40Vdc/ac
<b>Output Protection</b>	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
<b>LED Signallings</b>	<p><b>TX Unit</b></p> <ul style="list-style-type: none"> <li>- Yellow Led = Power Supply</li> </ul> <p><b>RX Unit</b></p> <ul style="list-style-type: none"> <li>- Green Led = Active Protection</li> <li>- Red Led = Alarm</li> <li>- Orange Led ON = Manual Operation</li> <li>- Orange Led blinking = Waiting for RESTART</li> <li>- Orange Led OFF = Automatic Operation</li> </ul> <p><i>present only with the OPTION SRS/EDM</i></p>
<b>Housing</b>	Polished aluminium RAL1021
<b>Housing Section</b>	22 x 36 mm
<b>Protection Degree</b>	IP54 (option IP67 - IP69K)
<b>Working Temperature</b>	0 / +55 °C
<b>RX Connection</b>	Connector M12 female 8 poles shielded - lenght 10 meters
<b>TX Connection</b>	Connector M12 female 5 poles shielded - lenght 10 meters
<b>Fixing</b>	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 =

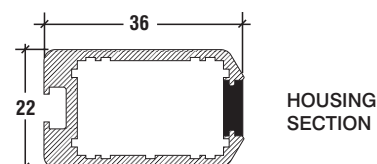
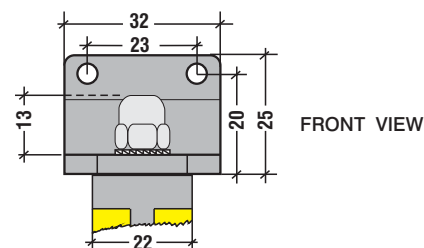
**TEST INPUT** = Connect the 2 threads, white and black is simulated the interruption of the curtain test the correct opening of the outputs SW1 - SW2 of the receiving unit

<sup>(1)</sup>Leave close if not used

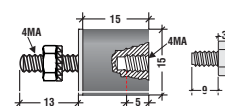
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The drawing shows two modules, RX and TX, with the following dimensions and labels:

- Overall Dimensions:**
  - Width: 45
  - Height: 66
  - Module Height: 36
  - Mounting Hole Diameter: 2 HOLES  $\varnothing 4$
- Module RX (Left):**
  - Label: **RX**
  - Slot Side: **SLOT SIDE** (indicated by an arrow pointing right)
  - HP Limit: **HP LIMIT** (indicated by an arrow pointing left)
  - LED Indicators: **LED ORANGE** and **LED GREEN / RED** (indicated by arrows pointing left)
- Module TX (Right):**
  - Label: **TX**
  - Slot Side: **SLOT SIDE** (indicated by an arrow pointing left)
  - HP Limit: **HP LIMIT** (indicated by an arrow pointing right)
  - Range Regulator: **REG** (indicated by an arrow pointing up)
  - LED Indicator: **LED YELLOW** (indicated by an arrow pointing right)
- Other Dimensions:**
  - Distance between module centers:  $31 \pm 1$
  - Distance from top edge to module top: 25
  - Distance from bottom edge to module bottom: 25
  - Distance from module top to HP Limit: 36
  - Distance from module bottom to HP Limit: 36
  - Distance from HP Limit to LED indicators: 84  $\pm 1$



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



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

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

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

Product Code	Distance	Mounting	OPTIONS (°°)	Maximum Range between TX and RX
OPT3-SMC-P080-0800	- - - -	- 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

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