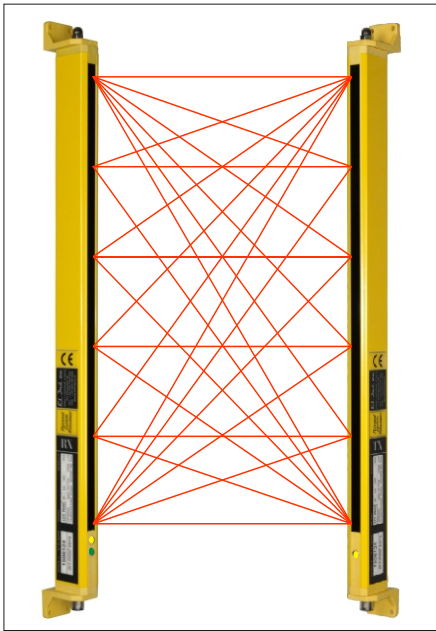


# PROTECT - P036

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



Resolution	36 mm - hand
Protected Height	144 ÷ 2088 mm
Range	HP ÷ 16 meters
Output	2 switches - ON/OFF
Directives	2006/42/EC - 2014/30/EC - 2014/35/EC
Standards	CEI-EN 61496-1:2014 - CEI-EN 61496-2:2014
Certificate	N.0068/ETI - MAC/029-2015

Light curtain Type 3 (\*) with :

- TEST INPUT

- EDM function = External Device Monitoring

- SRS = manual start restart after an intervention and switch on the device

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

(\*) Upgrading to TYPE 4 through a control unit "LEVEL 4 CONTROL" which implements the following functions :

- Outputs 2 switches 5A/250V (safety relays)

- Led Diagnostic for failures signalling

- EDM (External Device Monitoring)

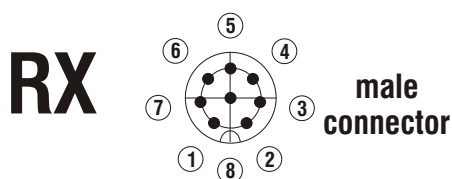
- Contact AUX (Auxiliary) NC normally closed

## PROTECTED AREAS HEIGHT

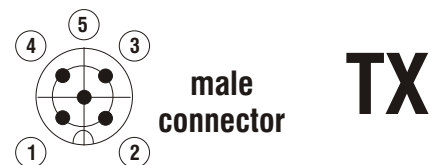
Product Code	Protected Height mm HP	Total Height mm H / SMO	Total Height mm H / SEA	Response time ms	Number of controlled rays
PROTECT - P036	144	269	219	14	3x3
PROTECT - P036	216	341	291	16	4x4
PROTECT - P036	288	413	363	18	5x5
PROTECT - P036	360	485	435	20	6x6
PROTECT - P036	432	557	507	22	7x7
PROTECT - P036	504	629	579	24	8x8
PROTECT - P036	576	701	651	26	9x9
PROTECT - P036	648	773	723	28	10x10
PROTECT - P036	720	845	795	30	11x11
PROTECT - P036	792	917	867	32	12x12
PROTECT - P036	864	989	939	34	13x13
PROTECT - P036	936	1061	1011	36	14x14
PROTECT - P036	1008	1133	1083	38	15x15
PROTECT - P036	1080	1205	1155	40	16x16
PROTECT - P036	1152	1277	1227	42	17x17
PROTECT - P036	1224	1349	1299	44	18x18
PROTECT - P036	1296	1421	1371	46	19x19
PROTECT - P036	1368	1493	1443	48	20x20
PROTECT - P036	1440	1565	1515	50	21x21
PROTECT - P036	1512	1637	1587	52	22x22
PROTECT - P036	1584	1709	1659	54	23x23
PROTECT - P036	1656	1781	1731	56	24x24
PROTECT - P036	1728	1853	1803	58	25x25
PROTECT - P036	1800	1925	1875	60	26x26
PROTECT - P036	1872	1997	1947	62	27x27
PROTECT - P036	1944	2069	2019	64	28x28
PROTECT - P036	2016	2141	2091	66	29x29
PROTECT - P036	2088	2213	2163	68	30x30

Safety Category	TYPE 3 - SIL 2 SILCL2 PL d / TYPE 4* - SIL 3* SILCL3 PL e
Power Supply	24Vdc ± 10%
Absorption TX unit	80 mA max
Absorption RX unit	70 mA max
Output	2 switches SW1 - SW2 (ON/OFF) free from potential 0,3 Acc @ 24Vdc/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><b>TX Unit</b></p> <ul style="list-style-type: none"> <li>- Yellow Led = Power Supply</li> </ul> <p><b>RX Unit</b></p> <p><b>BICOLOR LED</b> {</p> <ul style="list-style-type: none"> <li>Green = Active Protection</li> <li>Red = Alarm</li> </ul> <ul style="list-style-type: none"> <li>- Yellow Led = Manual Operation</li> </ul> <p>Note : for more insight into the light signals see Chapter <b>INSTALLATION - WIRING - DIAGNOSTICS</b> of <b>INSTRUCTION MANUAL</b></p>
Housing	Polished aluminium RAL1021
Housing Section	22 x 36 mm
Protection Degree	IP54 (opzional IP67 - IP69K)
Working Temperature	0 / +55 °C
PFHd	10 <sup>-8</sup> until to < 10 <sup>-7</sup>
RX Connection	Fully shielded cable PUR/PP - lenght 10 meters pre-wires with connector female straight M12 8 poles (non included in the supply)
TX Connection	Fully shielded cable PUR/PP - lenght 10 meters pre-wires with connector female straight M12 5 poles (non included in the supply)
Fixing	SMO - orientable support brackets (standard version) SEA - antivibrating elastic supports (optional)

PIN OUT CONNECTOR M12



- 1) White = EDM / (SRS optional)
  - 2) Brown = + 24Vdc
  - 3) Green = SW1
  - 4) Yellow = SW2
  - 5) Grey =
  - 6) Pink =
  - 7) Blue = -
  - 8) Red = MODE
  - Shield =
- } CONTACTS IN ALARM STATE

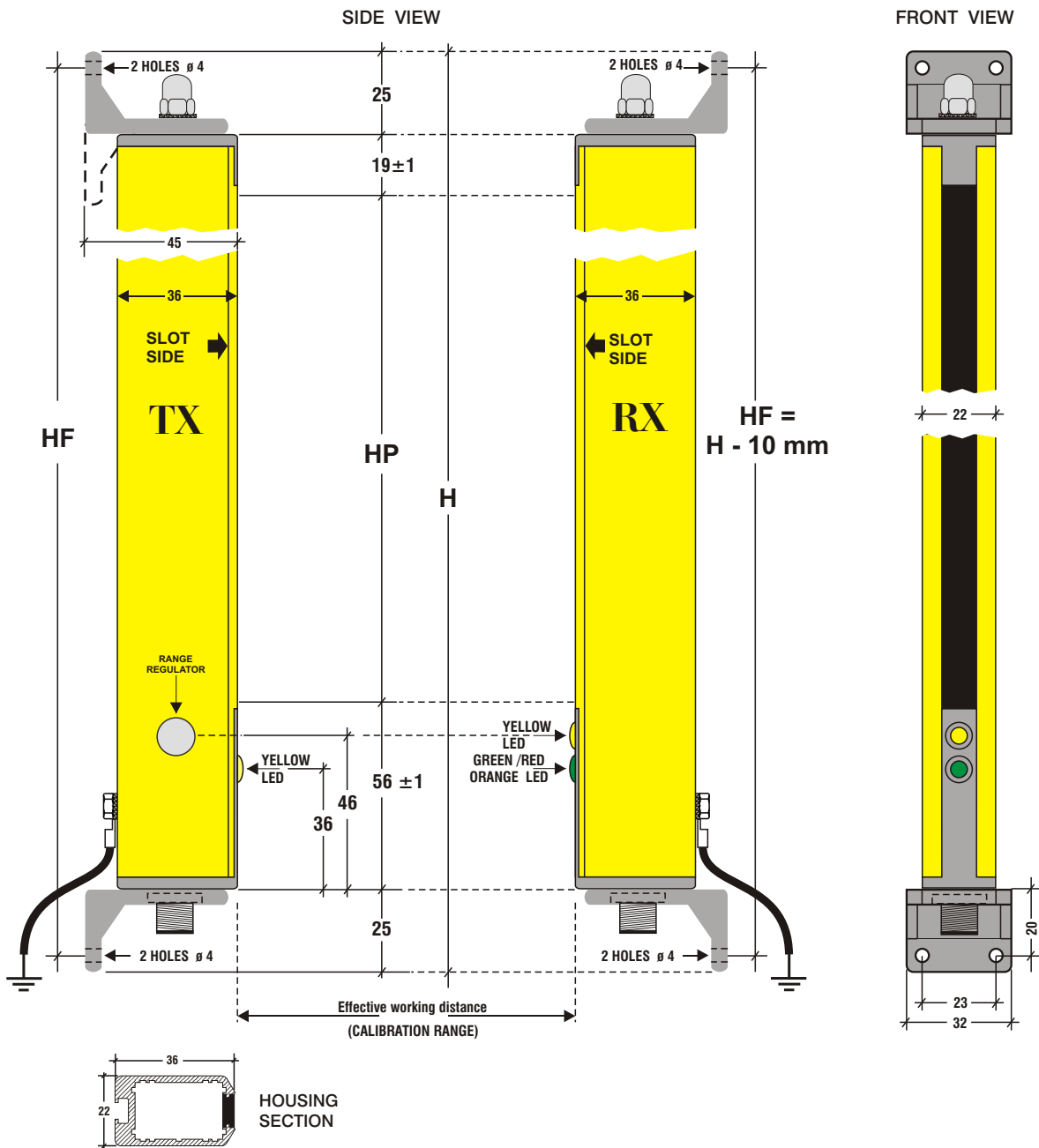


- 1) Brown = + 24Vcc
- 2) White = TEST INPUT
- 3) Blue = -
- 4) Black = TEST INPUT
- 5) Grey = N.C.
- Shield =

**TEST INPUT** = Opening contact TEST INPUT (PIN2/4) is simulated the interruption of the curtain and testing the correct opening of the outputs SW1 - SW2 of the receiving unit

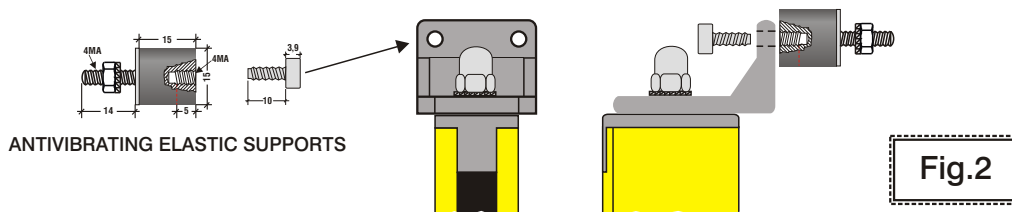
VERSION MOUNTING SOLUTION "SMO" (STANDARD)

Fig.1



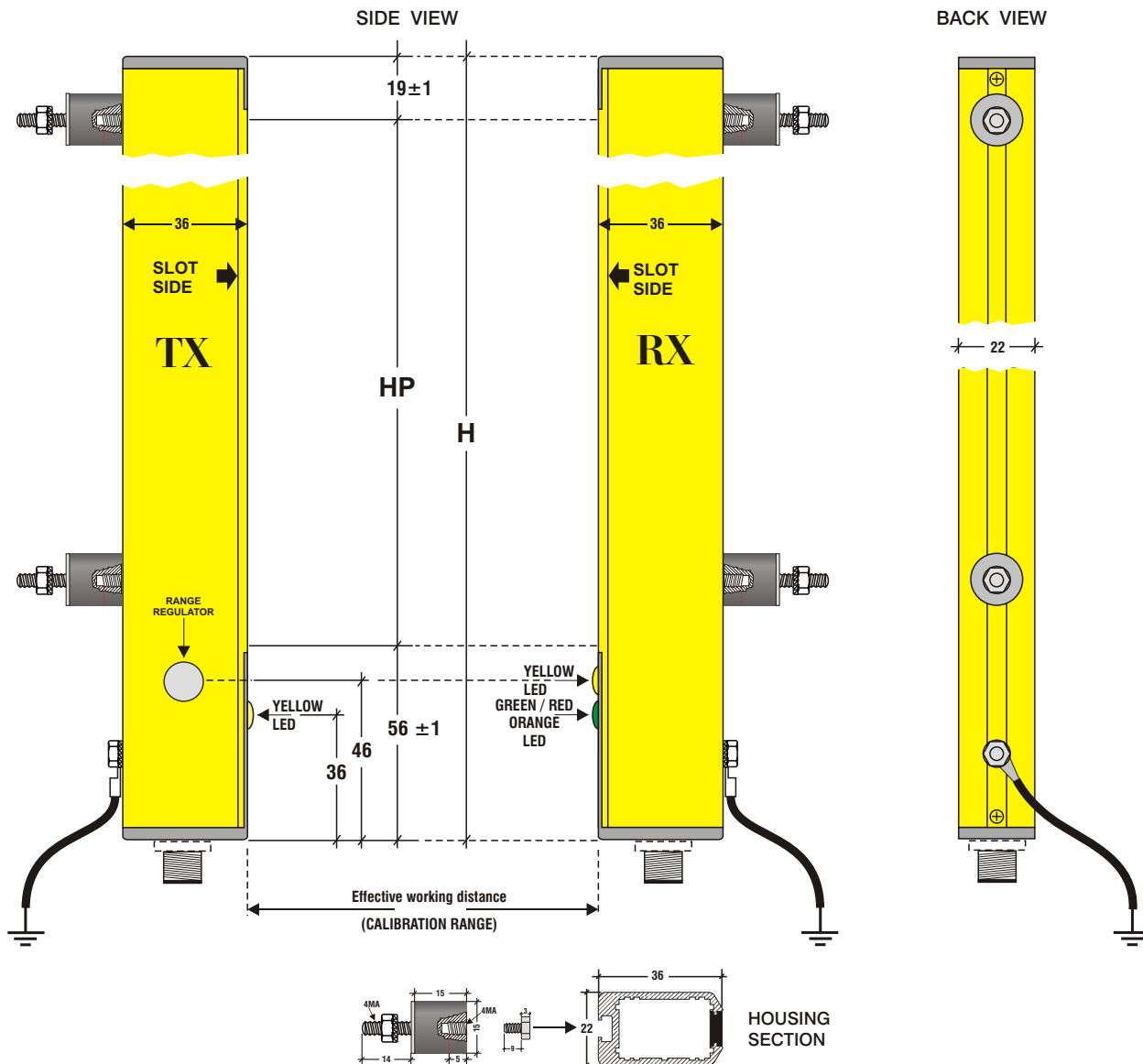
KIT - 8A (accessory)

Separately you can purchase KIT - 8A (see ACCESSORIES section) consists of a box of N° 8 antivibrating elastic supports, inclusive of the respective screws, to apply to SMO brackets (upper/lower) as shown in Fig.2.



## VERSION MOUNTING SOLUTION "SEA" (OPTIONAL)

Fig.3

**Note :**

With the SEA fixing solution, a number of anti-vibration elastic supports proportional to the total height H, are inserted at the factory in the rear rail of the light curtain, as shown in Fig.3.

The antivibrating elastic supports can slide freely in the rear guide so as to facilitate the final mounting at the desired points.

This solution allows to reduce the total dimensions while maintaining the ability to meet the mechanical vibrations.

Additional antivibrating elastic supports can be requested by the customer when ordering.

OPTIONS

SRS	Manual Restart
SEA	Antivibrating elastic supports (see Fig.3)
CB60 IP67	IP67 protection in transparent cylindric
CB60 IP69K	IP69K protection in transparent cylindric

ACCESSORIES

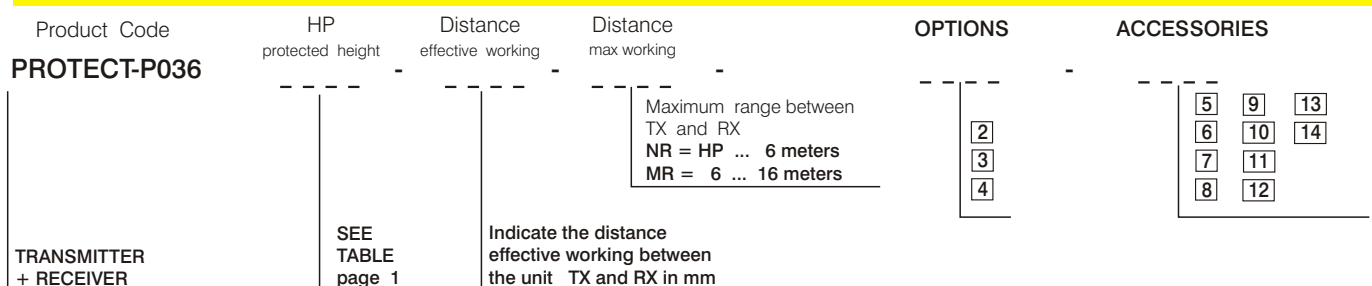
COD 5	Fully shielded cable PUR/PP - lenght 10 meters pre-wires with connector female straight M12 5 poles (non included in the supply)
COD 8	Fully shielded cable PUR/PP - lenght 10 meters pre-wires with connector female straight M12 8 poles (non included in the supply)
LEVEL 4 CONTROL	External control unit for TYPE 4 upgrading
MUTE CONTROL	External control unit for neutralization MUTING
SPV100	Mirror column for enclosures (depending on the HP protected of the light curtain, check on the respective technical sheet SPV100 the HU of the mirror)
SPV100 PLUS	Mirror column <b>UNBREAKABLE</b> for enclosures (depending on the HP protected of the light curtain, check on the respective technical sheet SPV100PLUS the HU of the mirror)
BTO	Orientable Ground Base in INOX 135x150mm to use with SPV100 - SPV100 PLUS
COLV	Triangular column to allocate the light curtain for construction enclosures
COLV + BTO	Triangular column to V + Orientable Ground Base in INOX 135x150mm to use with SPV100 - SPV100 PLUS
KIT - 8A	Kit of N°. 8 antivibrating elastic supports including the respective screws to be applied to SMO brackets (upper / lower) as shown in Fig.2

HOW TO ORDER THE OPTIONS and THE ACCESSORIES

SRS	1	COD 5	5
SEA	2	COD 8	6
CB60 IP67	3	LEVEL 4 CONTROL	7
CB60 IP69K	4	MUTE CONTROL	8
		SPV100	9
		SPV100 PLUS	10
		BTO	11
		COLV	12
		COLV + BTO	13
		KIT - 8A	14

INSERT NUMBER CORRESPONDING IN ORDER LIGHT CURTAIN

HOW TO ORDER THE LIGHT CURTAIN



Example

PROTECT - P036 - 720 - 1000 - NR + [1][2][-] + [5][6][7][-][-][-][-][-]