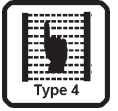# SAFEasy™ TYPE 4 LIGHT CURTAINS

SAFETY DEVICES

- *Integrated light curtains for __FINGER PROTECTION__*
- *Version with 14 mm resolution*
- *Special slot for device setting*
- *35 x 40 mm compact profile*

SE4-FINGER SERIES

The **SAFEasy™** light curtains, according to the IEC 61496-1 e IEC 61496-2 standards, are suitable for finger protection of operators exposed to risks.

Different models with six standard heights ranging from 150 to 900 mm, with 14 mm resolution and operating distance reaching 6 m are available.

Specific dip-switches, that can be reached through a slot present on the front of the receiver protected by a lid and opened with a simple screwdriver, guarantee rapid and safe device setting.

The operator is thus able to configure, according to the specific needs, the manual or automatic Restart, as well as the muting and partial muting functions.

The emitter-receiver units are optically synchronised and contain all the control circuits, inputs and outputs inside the housing.

A wide range of industrial applications, requiring operator safety, can be solved by the **SAFEasy™** light curtains, thanks to the extremely compact dimensions (35x40 mm) and easy connection and installation.

DATASENSOR
value through detection

DATASENSOR

TECHNICAL DATA

Power supply: .... 24 Vdc ± 20%, (SELV/PELV)

Consumption: .... 70 mA max. / 2.1 W (emitter)

100 mA max. / 3 W (receiver without load)

Light emission: .... infrared LED 880 nm

Optic diameter: .... Ø 14 mm

Number of controlled beams: .... refer to table 1

Optic interaxis: .... 7 mm

Resolution: .... 14 mm

Controlled height: .... refer to table 2

Through beam operating distance: .... 0.2 ... 6 m

Receiver inputs: .... external switches for Muting, Test, Restart and Override

Receiver indicators: .... green / red SAFE / BREAK LED

2 yellow ALIGNMENT LEDs

green POWER ON LED

Emitter indicators: .... yellow blinking FAILURE LED

green POWER ON LED

Output type: .... 2 PNP

Output current: .... 0.7 A max.

0.25 A max. (45°C - 55°C)

short-circuit signalling and protection

Response time: .... refer to table 3

Selectable functions: .... Total / partial Muting

Manual / Automatic Restart

refer to table 4

Time-out periods: .... Muting: 10 minutes

Override: 2 minutes

Muting signalling lamp: .... 24 V

3 W min. (125 mA), 7 W max. (300 mA)

Receiver connection: .... 8-pole M12 connector

Emitter connection: .... 4-pole M12 connector

Cable length: .... 50 m max. (with 50 nF capacitive load)

Safety category: .... type 4

Electrical protection: .... class 1

Mechanical protection: IP65

IP67 (connector part)

Housing material: .... aluminium with PC Makrolon plastic caps

Weight: .... 1.2 Kg max. / m of total height

Operating temperature: .... -10 ... +55 °C

Storage temperature: .... -25 ... +70 °C

Reference standards: .... EN 954-1, IEC 61496-1, IEC 61496-2

Other functions: .... SafetyBUS p

Certifications: .... CE c UL US LISTED II3D

TABLES

Model	Beams
SE4 *height 150*	21
SE4 *height 300*	42
SE4 *height 450*	63
SE4 *height 600*	84
SE4 *height 750*	105
SE4 *height 900*	126

Table 1: **NUMBER OF BEAMS**

Model	mm
SE4 *height 150*	161
SE4 *height 300*	308
SE4 *height 450*	455
SE4 *height 600*	602
SE4 *height 750*	749
SE4 *height 900*	896

Table 2: **CONTROLLED HEIGHT**

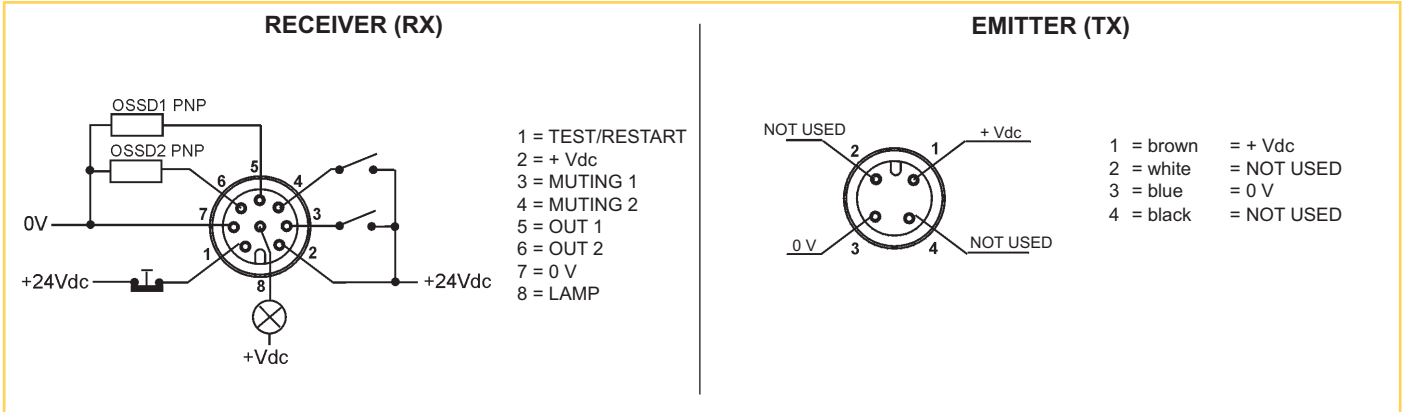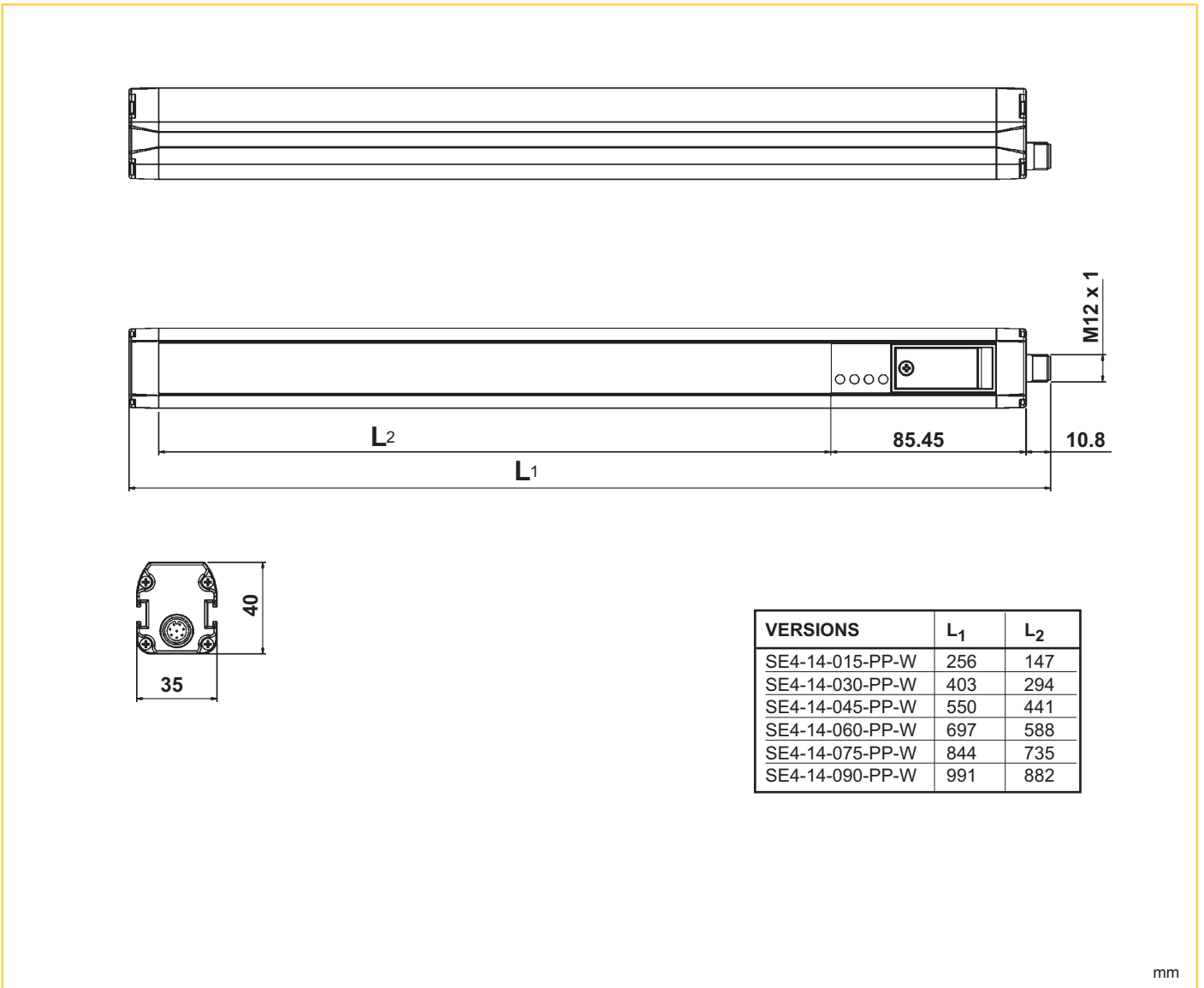| Model	ms
SE4 *height 150*	18
SE4 *height 300*	22
SE4 *height 450*	26
SE4 *height 600*	31
SE4 *height 750*	35
SE4 *height 900*	39

Table 3: **RESPONSE TIME**

ON

1 2 3 4
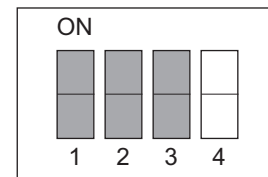
GREY dip-switches: total / partial Muting selection

WHITE dip-switches: manual / auto. Restart selection

Table 4: **DIP-SWITCH SELECTION**

CONNECTIONS

RECEIVER (RX)

OSSD1 PNP
OSSD2 PNP
0V
+24Vdc
+24Vdc
+Vdc

1 = TEST/RESTART
2 = + Vdc
3 = MUTING 1
4 = MUTING 2
5 = OUT 1
6 = OUT 2
7 = 0 V
8 = LAMP

EMITTER (TX)

NOT USED
+ Vdc
0 V
NOT USED

1 = brown = + Vdc
2 = white = NOT USED
3 = blue = 0 V
4 = black = NOT USED

DIMENSIONS

L_2

L_1

85.45

10.8

M12 x 1

40

35

VERSIONS	L_1	L_2
SE4-14-015-PP-W	256	147
SE4-14-030-PP-W	403	294
SE4-14-045-PP-W	550	441
SE4-14-060-PP-W	697	588
SE4-14-075-PP-W	844	735
SE4-14-090-PP-W	991	882

mm

MODEL SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	CODE N°
SE4-14-015-PP-W	type 4 safety light curtain h=150 mm	957201150
SE4-14-030-PP-W	type 4 safety light curtain h=300 mm	957201160
SE4-14-045-PP-W	type 4 safety light curtain h=450 mm	957201170
SE4-14-060-PP-W	type 4 safety light curtain h=600 mm	957201180
SE4-14-075-PP-W	type 4 safety light curtain h=750 mm	957201190
SE4-14-090-PP-W	type 4 safety light curtain h=900 mm	957201370

ACCESSORY SELECTION AND ORDER INFORMATION

*Please refer also to **Safey Device Accessories***

Note: All the accessories have to be ordered separately

Distributed by:

HEADQUARTERS

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