

# SG BODY COMPACT BASE

# SG BODY COMPACT MUTING



Body access detection

Perimeter control

Rapid solution for access control with muting

Easy installation and alignment

L and T muting models provided with Retroreflective Muting Arms

- Two, three or four beams for body protection
- Controlled heights of 500, 800, 900 and 1200 mm
- Long operating distance: up to 50 m
- Simple configuration through DIP switches
- Integrated muting lamp (only on muting models)



## APPLICATIONS

- Automatic machines
- Robots
- Automatic assembly lines
- Palletizers and depalletizers
- Material handling

## INDUSTRIES

- Food & Beverage
- Metalworking
- Automotive
- Wood
- Ceramics

	FINGER	HAND	ARM	BODY
Type 2				x
Type 4				x

**SG2-S2-050-PP-E**

TYPE	
2	Type 2
4	Type 4

BEAMS AND MUTING ARMS	
S2	2 Beams
S3	3 Beams
S4	4 Beams
T2	2 Beams with T muting arms (RRX)
T3	3 Beams with T muting arms (RRX)
L2	2 Beams with L muting arms (RRX)
L3	3 Beams with L muting arms (RRX)

MONITORED HEIGHT	
050	500 mm (2 beams)
080	800 mm (3 beams)
090	900 mm (4 beams)
120	1200 mm (4 beams)

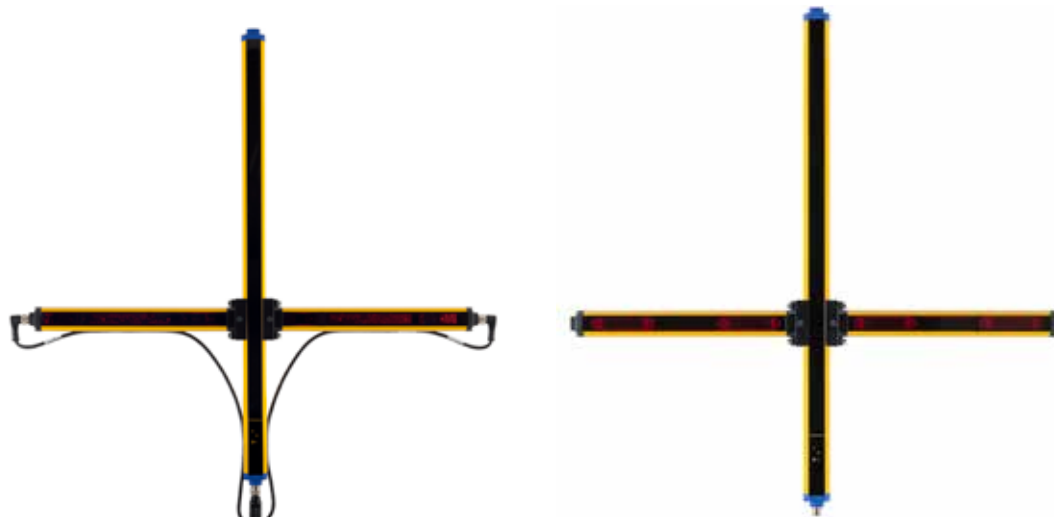
VERSION	
X	Base: only automatic restart
E	Base: auto/man restart, EDM
W	Muting: with muting function
N	SG4-N Body Compact Muting: muting function with single main connector

# TECHNICAL DATA

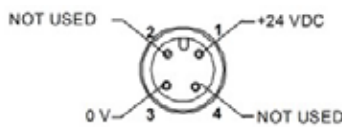
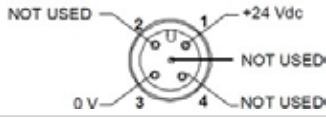
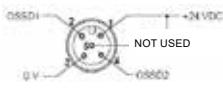
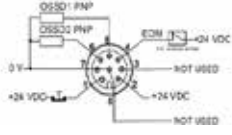
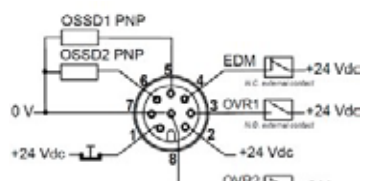
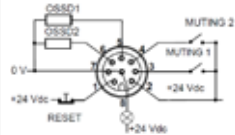
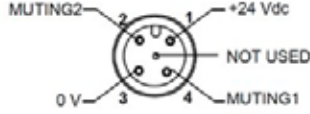
	SG2 BODY COMPACT BASE [SG2-Sx-xxx-PP-E]	SG2 BODY COMPACT MUTING [SG2-S/L/Tx-xxx-PP-W]	SG4 BODY COMPACT BASE [SG4-Sx-xxx-PP-X]	SG4 BODY COMPACT BASE [SG4-Sx-xxx-PP-E]	SG4 BODY COMPACT MUTING [SG4-S/L/Tx-xxx-PP-W]	SG4-N BODY COMPACT MUTING [SG4-Sx-xxx-PP-N]
<b>GENERAL DATA</b>						
<b>Type (EN61496-1)</b>	2				4	
<b>PL (EN ISO 13849-1)</b>	c				e	
<b>SIL (IEC 61508)</b>	1				3	
<b>Resolution</b>	315 mm (4 beams) 415 mm (3 and 4 beams) 515 mm (2 beams)					
<b>Protected height</b>	515 mm (2 beams) 815 mm (3 beams) 915 mm or 1215 (4 beams)					
<b>Operating distance</b>	0.5 ... 50 m					
<b>Retroreflective muting arms operating distance (included in L and T versions)</b>	-----	0.5 ... 3 m		-----	0.5 ... 3 m	
<b>Emitter-Receiver muting arms operating distance</b>	-----	0.5 ... 7 m		-----	0.5 ... 7 m	
<b>ELECTRICAL DATA</b>						
<b>Power supply (Vdd)</b>	24 Vdc ± 20%					
<b>Outputs</b>	2 PNP					
<b>Output current</b>	0.5 A max / each output					
<b>Capacitive load</b>	65 nF max at 25°C					
<b>Response time</b>	14 ... 16 ms depending on model *					
<b>Cables length (for power supply)</b>	50 m max.					
<b>MECHANICAL AND ENVIRONMENTAL DATA</b>						
<b>Operating temperature</b>	0 ... +55 °C					
<b>Humidity</b>	15 ... 95 % (no condensation)					
<b>Mechanical protection</b>	IP 65 (EN 60529)					
<b>Housing Material</b>	Painted aluminium, Polycarbonate					
<b>Window material</b>	PMMA					
<b>FUNCTIONS</b>						
<b>Test Input</b>	On Receiver		N/A	On Receiver		
<b>Restart</b>	Automatic / Manual		Automatic	Automatic / Manual		
<b>EDM (External Device Monitoring)</b>	On Receiver		N/A	On Receiver		
<b>Muting type (Selectable with DIP-sw)*</b>	-----	T-Muting / L-Muting	N/A	-----	T-Muting / L-Muting	
<b>Muting time-out (Selectable with DIP-sw)*</b>	-----	10 min. or ∞	N/A	-----	10 min. or ∞	
<b>Override</b>	-----	On Receiver	N/A	-----	On Receiver	-----
<b>Impulsive Override (single wire)</b>	-----				On Receiver	

**NOTES**

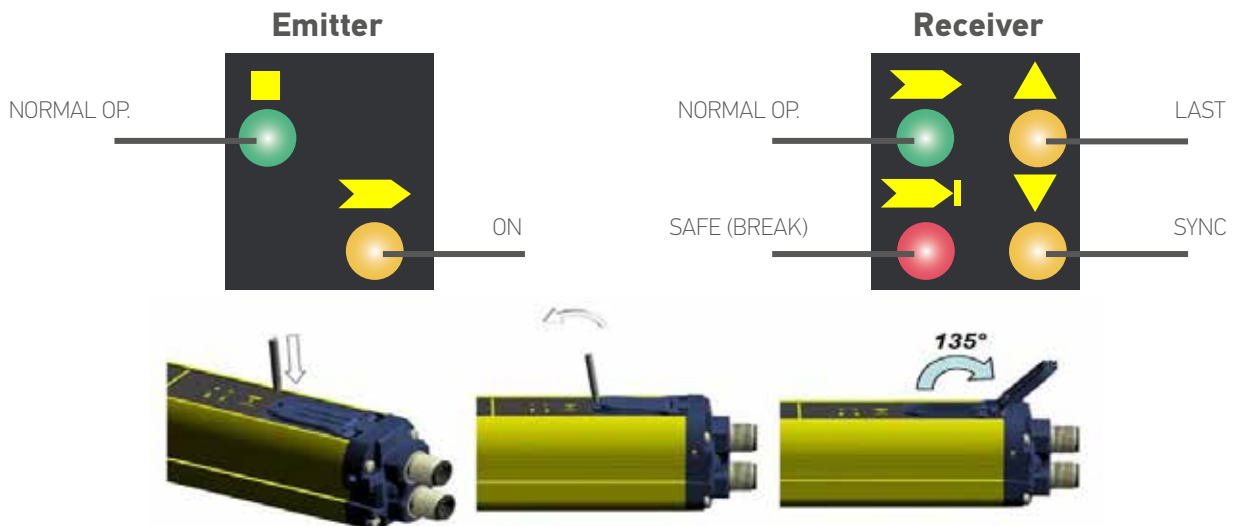
\* For detailed informations refer to related Product Manual



# CONNECTIONS

	SG4 BODY COMPACT BASE [SG4-SX-XXX-PP-X]	SG2 BODY COMPACT BASE [SG2-SX-XXX-PP-E] SG4 BODY COMPACT BASE [SG4-SX-XXX-PP-E]	SG2 BODY COMPACT MUTING [SG2-S/L/TX-XXX-PP-W]	SG4 BODY COMPACT MUTING [SG4-S/L/TX-XXX-PP-W]	SG4-N BODY COMPACT MUTING [SG4-SX-XXX-PP-N]
<b>EMITTER MAIN CONNECTOR</b>			M12, 4 poles, male 1 = Brown = 24Vdc 3 = Blue = 0 V		
<b>EMITTER SECONDARY CONNECTOR</b>	-----		M12, 5 poles, male 1 = Brown = 24 Vdc 3 = Blue = 0 V		
<b>RECEIVER MAIN CONNECTOR</b>	M12, 5 poles, male 1 = Brown = 24Vdc 2 = White = OSSD1 3 = Blue = 0 V 4 = Black = OSSD2 	M12, 8 poles, male 1 = white = TEST / START 2 = brown = 24 Vdc 4 = yellow = EDM 5 = grey = OSSD 1 6 = pink = OSSD 2 7 = blue = 0 V 	M12, 8 poles, male 1 = white = TEST / START 2 = brown = 24 VDC 3 = green = OVERRIDE 1 4 = yellow = EDM 5 = grey = OSSD 1 6 = pink = OSSD 2 7 = blue = 0V 8 = red = OVERRIDE 2 		M12, 8 poles, male 1 = white = RESTART / RE-SET / EDM / OVERRIDE 2 = brown = 24 VDC 3 = green = MUTING 1 4 = yellow = MUTING 2 5 = grey = OSSD 1 6 = pink = OSSD 2 7 = blue = 0V 8 = red = MUTING LAMP 
<b>RECEIVER SECONDARY CONNECTOR</b>	-----		M12, 5 poles, male 1 = Brown = 24 Vdc 2 = White = MUTING2 3 = Blue = 0 V 4 = Black = MUTING1		

# INDICATORS AND DIP SWITCHES

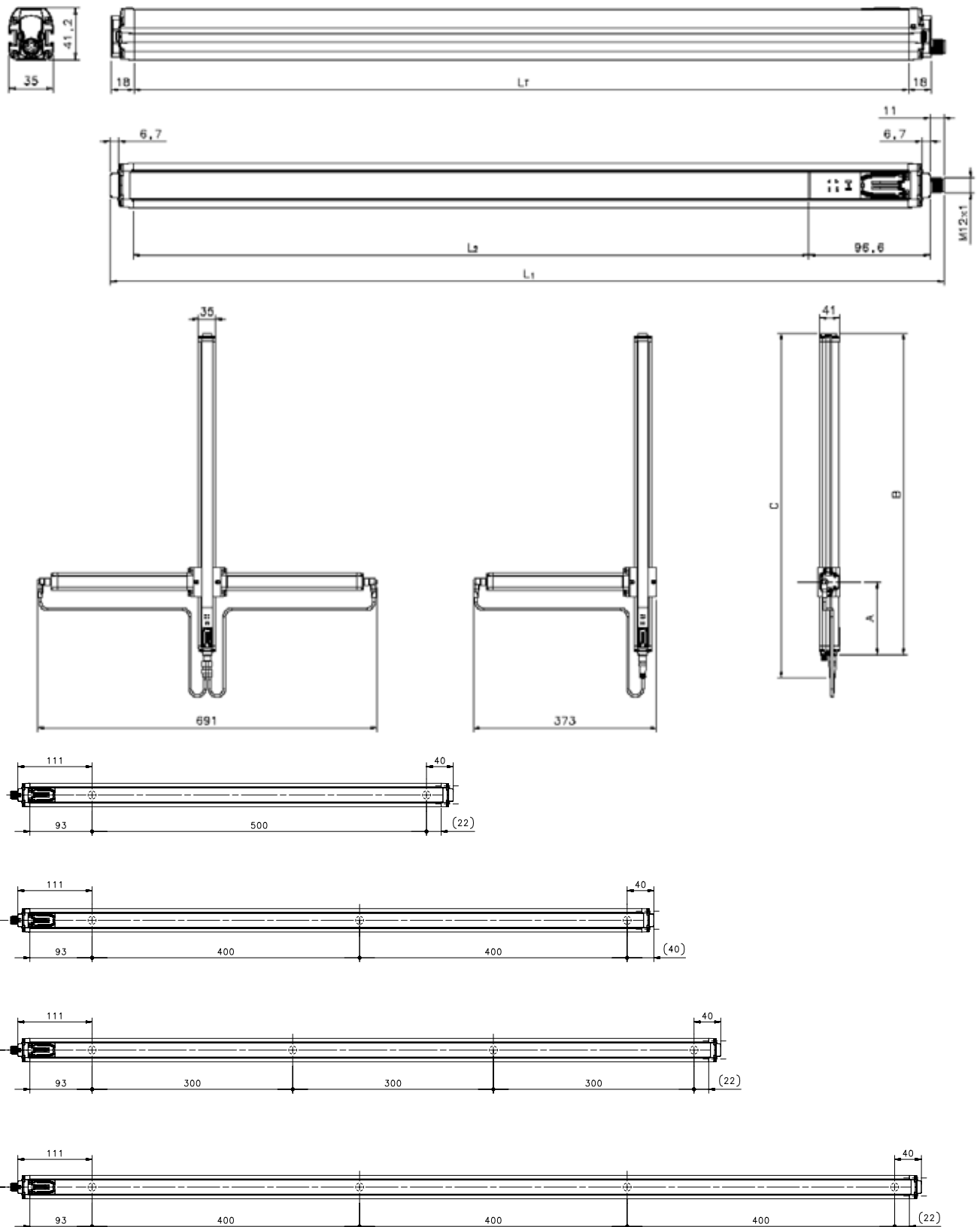


DIP-SW	FUNCTION	ON	OFF
1, 5			
2, 6			
3, 7	EDM	Deactivated	Activated
4, 8	Restart	Automatic	Manual

NOTE

DIP SW are not present on SG4 BODY COMPACT BASE models with -X final: [SGx-Sx-xxx-PP-X]

# DIMENSIONS



MODEL	L1 (mm)	L2 (mm)	A (mm)	B (mm)	C (mm)
SGx-S/L/Tx-050-PP-x	662	538.4	120-260	653	700
SGx-S/L/Tx-080-PP-x	962	838.4	120-260	953	1000
SGx-S/L/Tx-090-PP-x	1062.5	938.4	120-260	1053	1100
SGx-S/L/Tx-120-PP-x	1362.5	1238.4	120-260	1353	1400

# MODEL SELECTION AND ORDER INFORMATION

		SG2 BODY COMPACT BASE [SG2-SX-XXX-PP-E]	ORDER CODE	SG4 BODY COMPACT BASE [SG4-SX-XXX-PP-E]	ORDER CODE	
ONLY AUTOMATIC RESTART NO EDM				SG4-S2-050-PP-X	957851600	
				SG4-S3-080-PP-X	957851610	
				SG4-S4-090-PP-X	957851620	
				SG4-S4-120-PP-X	957851630	
WITH EDM AND MANUAL RESTART		SG2-S2-050-PP-E	957851000	SG4-S2-050-PP-E	957851040	
		SG2-S3-080-PP-E	957851010	SG4-S3-080-PP-E	957851050	
		SG2-S4-090-PP-E	957851020	SG4-S4-090-PP-E	957851060	
		SG2-S4-120-PP-E	957851030	SG4-S4-120-PP-E	957851070	
WITH INTEGRATED MUTING	WITHOUT MUTING ARMS	SG2 BODY COMPACT MUTING [SG2-S/L/TX-XXX-PP-W]	ORDER CODE	SG4 BODY COMPACT MUTING [SG4-S/L/TX-XXX-PP-W]	ORDER CODE	
			SG2-S2-050-PP-W	957851080	SG4-S2-050-PP-W	957851160
			SG2-S3-080-PP-W	957851090	SG4-S3-080-PP-W	957851170
			SG2-S4-090-PP-W	957851100	SG4-S4-090-PP-W	957851180
	WITH L MUTING ARMS		SG2-S4-120-PP-W	957851110	SG4-S4-120-PP-W	957851190
			SG2-L2-050-PP-W	957851120	SG4-L2-050-PP-W	957851200
			SG2-L3-080-PP-W	957851130	SG4-L3-080-PP-W	957851210
	WITH T MUTING ARMS		SG2-T2-050-PP-W	957851140	SG4-T2-050-PP-W	957851220
			SG2-T3-080-PP-W	957851150	SG4-T3-080-PP-W	957851230
WITH INTEGRATED MUTING ON MAIN CONNECTOR	WITHOUT MUTING ARMS			SG4 BODY COMPACT MUTING [SG4-S/L/TX-XXX-PP-W]	ORDER CODE	
				SG4-S2-050-PP-N	957851640	
				SG4-S3-080-PP-N	957851650	
				SG4-S4-090-PP-N	957851660	
				SG4-S4-120-PP-N	957851670	

## CABLES

	POLES	CONNECTOR	LENGTH (M)	MODEL	ORDER NUMBER
SG BODY COMPACT BASE/MUTING EMITTER MAIN CONNECTOR [SG2\4-SX-XXX-PP-X/E/W/N]	4	Axial	3	CV-A1-22-B-03	95ACC1480
			5	CV-A1-22-B-05	95ACC1490
			10	CV-A1-22-B-10	95ACC1500
			15	CV-A1-22-B-15	95ACC2070
			25	CV-A1-22-B-25	95ACC2090
SG BODY COMPACT BASE RECEIVER MAIN CONNECTOR [SG2\4-SX-XXX-PP-X]	4	Radial	3	CV-A2-22-B-03	95ACC1540
			5	CV-A2-22-B-05	95ACC1550
			10	CV-A2-22-B-10	95ACC1560
SG BODY COMPACT MUTING EMITTER AND RECEIVER SECONDARY CONNECTORS [SG2\4-S/L/TX-XXX-PP-W]	8	Axial	3	CV-A1-26-B-03	95ACC1510
			5	CV-A1-26-B-05	95ACC1520
			10	CV-A1-26-B-10	95ACC1530
			15	CV-A1-26-B-15	95ACC2080
			25	CV-A1-26-B-25	95ACC2100
		Radial	3	CV-A2-26-B-03	95ACC1600
			5	CV-A2-26-B-05	95ACC1610
			10	CV-A2-26-B-10	95ACC1620

### NOTE

The cables for the secondary connector of SG BODY COMPACT MUTING T and L are provided within the package

# ACCESSORIES

SG4 BODY COMPACT BASE [SG4-SX-XXX-PP-X]	SG2 BODY COMPACT BASE SG4 BODY COMPACT BASE [SG2/4-SX-XXX-PP-E]	SG2 BODY COMPACT MUTING SG4 BODY COMPACT MUTING [SG2/4-S/L/TX-XXX-PP-W]	SG4-N BODY COMPACT MUTING [SG4-SX-XXX-PP-N]
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## BRACKETS

Standard angled brackets (4 pcs) <sup>1</sup>	ST-KSTD (included)		
Rotating brackets (4 pcs)	ST-K4ROT-SG BODY COMPACT		
Antivibration support (4 Pcs / 6 pcs) <sup>3</sup>	ST-K4AV ST-K6AV		
Orientable support (4 pcs / 6 pcs) <sup>3</sup>	ST-K40R ST-K60R		
Plastic brackets (4 pcs / 6 pcs) <sup>3</sup>	ST-KP4MP ST-KP6MP		

## PROTECTION TUBES AND STANDS

IP67/IP69K tubes	-----		
Protective stands	SG-PSB series <sup>2</sup>		
Stand plate for SG-PSB	SG-P		
Protective stands mounting brackets (4 pcs / 6 pcs) <sup>3</sup>	ST-PS4-SG-SE ST-PS6-SG-SE		
Floor columns	SE-S Series		

## MIRRORS

Protective stands with single mirrors	SG-PSM series		
Deviating mirrors mounting kit for SG-PSB	ST-PS-DM		
Deviating mirrors	SG-DM series		
Mirror mounting bracket	ST-DM		

## SAFETY UNITS

Safety unit	SE-SR2		
Edm relay box <sup>4</sup>	---	CS ME-03VU24-Y14	
Safety control unit for single beams and SLC	SG-BWS-T4-MT		

## ALIGNMENT TOOL

Laser pointer	SG-LP		
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## ACCESSORIES FOR MUTING

Muting arms, brackets and cables	---	See page 77	---
Muting connection box	---	SG-SRT-1 ****	---
External muting lamps	---	LMS Series	

## NOTES

<sup>1</sup> 1200 mm models are provided with 6 pcs standard brackets

<sup>2</sup> Not possible with T or L muting arms mounted

<sup>3</sup> Use 6 brackets for light curtains with length >= 1200 mm

<sup>4</sup> When using EDM Relay Box or Muting connection box, connect EDM input, and be sure EDM function is active on the safety light curtain