

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				•
TYPE 4				•

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

SG BODY COMPACT BASE SG BODY COMPACT MUTING

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

NOTES

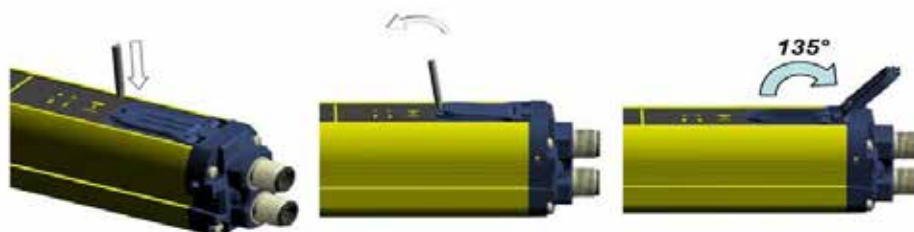
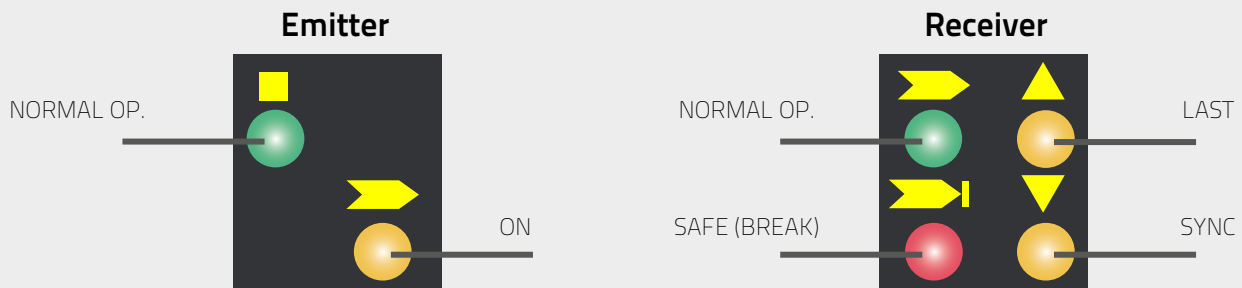
* For detailed informations refer to related Product Manual



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]
EMITTER MAIN CONNECTOR		M12, 4 poles, male 1 = Brown = 24Vdc 3 = Blue = 0 V		
EMITTER SECONDARY CONNECTOR	-----		M12, 5 poles, male 1 = Brown = 24 Vdc 3 = Blue = 0 V	
RECEIVER MAIN CONNECTOR	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 = 0V	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	
EMITTER SECONDARY CONNECTOR	-----		M12, 5 poles, male 1 = Brown = 24 Vdc 2 = White = MUTING2 3 = Blue = 0 V 4 = Black = MUTING1	

INDICATORS AND DIP SWITCHES

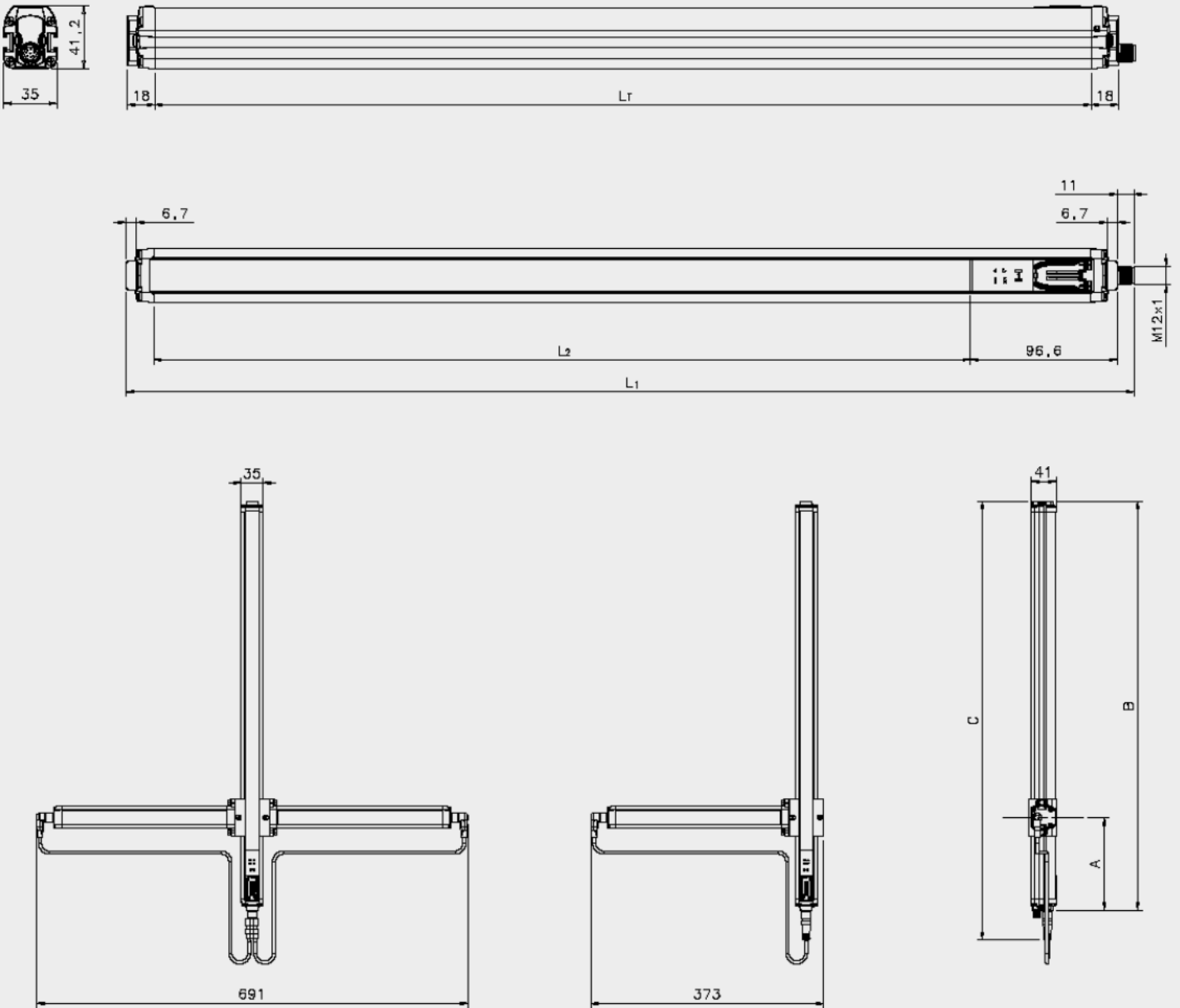


DIP-SW	FUNCTION	ON	OFF
1, 5			
2, 6			
3, 7	EDM	Deactivated	Activated
4, 8	Restart	Automatic	Manual

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
	SG2-S4-120-PP-W	957851110	SG4-S4-120-PP-W	957851190	
	WITH L MUTING ARMS	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

CABLES

	POLES	CONNECTOR	LENGTH (M)	MODEL	ORDER NUMBER
SG BODY COMPACT BASE EMITTER MAIN CONNECTOR [SG2\4-SX-XXX-PP-X\E] SG BODY COMPACT BASE RECEIVER MAIN CONNECTOR [SG2\4-SX-XXX-PP-X]	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 MUTING EMITTER AND RECEIVER MAIN CONNECTORS [SG2\4-S/L/TX-XXX-PP-W]		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 BASE [SG2-SX-XXX-PP-E] [SG4-SX-XXX-PP-E] SG BODY COMPACT MUTING [SG2-S/L/TX-XXX-PP-W] [SG4-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
SG BODY COMPACT MUTING (LINEAR) [SG2-SX-XXX-PP-W] [SG4-SX-XXX-PP-W]	5	Axial	3	CS-A1-03-U-03	95ASE1170
			5	CS-A1-03-U-05	95ASE1180
			10	CS-A1-03-U-10	95ASE1190
			15	CS-A1-03-U-15	95ASE1200
			25	CS-A1-03-U-25	95ASE1210

NOTES

* For detailed informations refer to related Product Manual

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]
BRACKETS			
Standard angled brackets (4 pcs) ¹		ST-KSTD (included)	
Rotating brackets (4 pcs)		ST-K4ROT-SG BODY COMPACT	
Antivibration support (4 Pcs / 6 pcs) ³		ST-K4AV ST-K6AV	
Orientable support (4 pcs / 6 pcs) ³		ST-K4OR ST-K6OR	
Plastic brackets (4 pcs / 6 pcs) ³		ST-KP4MP ST-KP6MP	
PROTECTION TUBES AND STANDS			
IP67/IP69K tubes		-----	
Protective stands		SG-PSB series ²	
Stand plate for SG-PSB		SG-P	
Protective stands mounting brackets (4 pcs / 6 pcs) ³		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 ⁴	---	CS ME-03VU24-Y14	
Safety control unit for single beams and SLC		SG-BWS-T4-MT	
ALIGNMENT TOOL			
Laser pointer		P	
ACCESSORIES FOR MUTING			
Muting arms, brackets and cables	---	See page 77 of safety reference guide	
Muting connection box	---	SG-SRT-1 ⁴	
External muting lamps	---	LMS Series	

NOTES

¹ 1200 mm models are provided with 6 pcs standard brackets

² Not possible with T or L muting arms mounted

³ Use 6 brackets for light curtains with length \geq 1200 mm

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