

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				▪
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

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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]
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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 $\pm$ 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



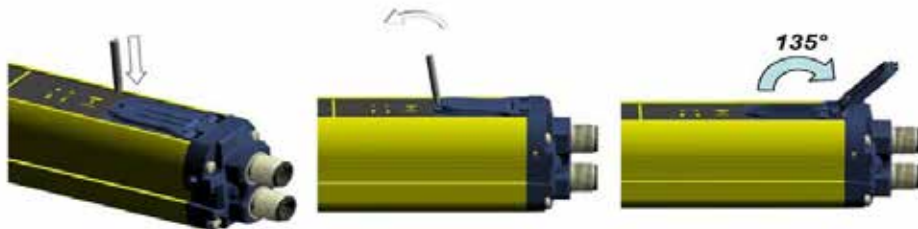
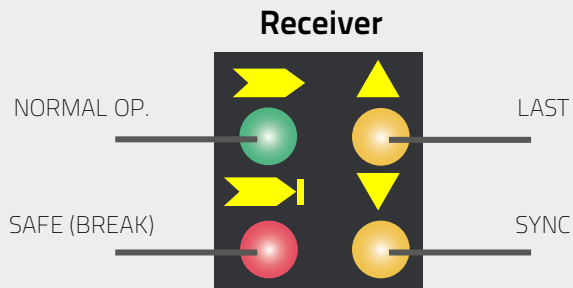
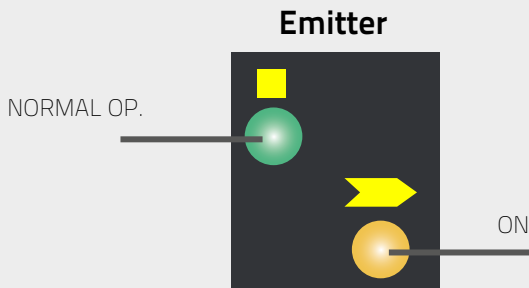
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CONNECTIONS

	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	
RECEIVER 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]

Technical drawing of the M12x1 3000mm LED track lighting system, showing various views and dimensions:

- Top View:** Shows the overall length L_1 and the distance between the end fittings L_2 . The end fitting width is 18mm. The track width is 35mm.
- Side View:** Shows the track height of 41.2mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 96.6mm. The track is labeled M12x1.
- Front View:** Shows the track width of 35mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 691mm.
- Back View:** Shows the track width of 35mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 373mm.
- End View:** Shows the track height of 41mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 96.6mm. The track is labeled M12x1.
- Bottom View:** Shows the track width of 35mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 691mm.
- Side View (Left):** Shows the track height of 41mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 96.6mm. The track is labeled M12x1.
- Side View (Right):** Shows the track height of 41mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 96.6mm. The track is labeled M12x1.
- End View (Left):** Shows the track width of 35mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 691mm.
- End View (Right):** Shows the track width of 35mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 691mm.
- Bottom View (Left):** Shows the track width of 35mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 691mm.
- Bottom View (Right):** Shows the track width of 35mm and the mounting bracket height of 6.7mm. The distance between the end fittings is 691mm.

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

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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	LENGHT (M)	MODEL	ORDER NUMBER
SG BODY COMPACT BASE/ MUTING EMITTER MAIN CONNECTOR [SG2\4-SX-XXX-PP-X/E/W] SG BODY COMPACT BASE RECEIVER MAIN CONNECTOR [SG2\4-SX-XXX-PP-X] SG BODY COMPACT MUTING EMITTER AND RECEIVER SECONDARY CONNECTORS [SG2\4-S/L/TX-XXX-PP-W]	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
	8	Radial	3	CV-A2-22-B-03	95ACC1540
			5	CV-A2-22-B-05	95ACC1550
			10	CV-A2-22-B-10	95ACC1560
			15	CV-A2-22-B-15	95ACC1570
SG BODY COMPACT BASE/ MUTING RECEIVER MAIN CONNECTOR [SG2/4-SX-XXX-PP-E] [SG2/4-S/L/TX-XXX-PP-W]	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
	8	Radial	3	CV-A2-22-B-03	95ACC1540
			5	CV-A2-22-B-05	95ACC1550
			10	CV-A2-22-B-10	95ACC1560
			15	CV-A2-22-B-15	95ACC1570

NOTE

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

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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