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)

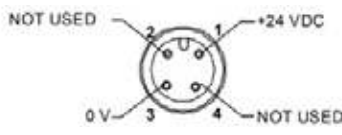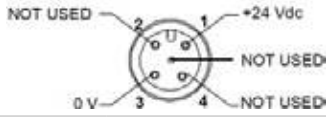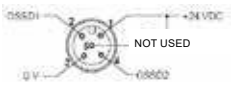| VERSION	
X	Base: only automatic restart
E	Base: auto/man restart, EDM
W	Muting: with muting function
N	SG4-N Body Compact Muting: muting function with single main connector

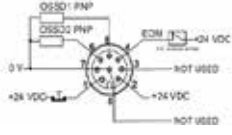DATASENSING
easing automation challenges
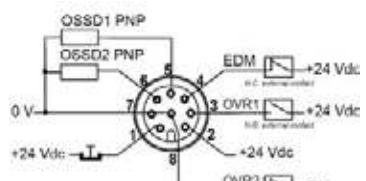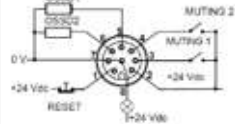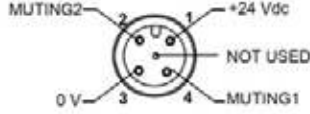
TECHNICAL DATA

|	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]
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)					
Housing Material	Painted aluminium, Polycarbonate					
Window material	PMMA					
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	-----
Impulsive Override (single wire)	-----					On Receiver

NOTES

* For detailed informations refer to related Product Manual
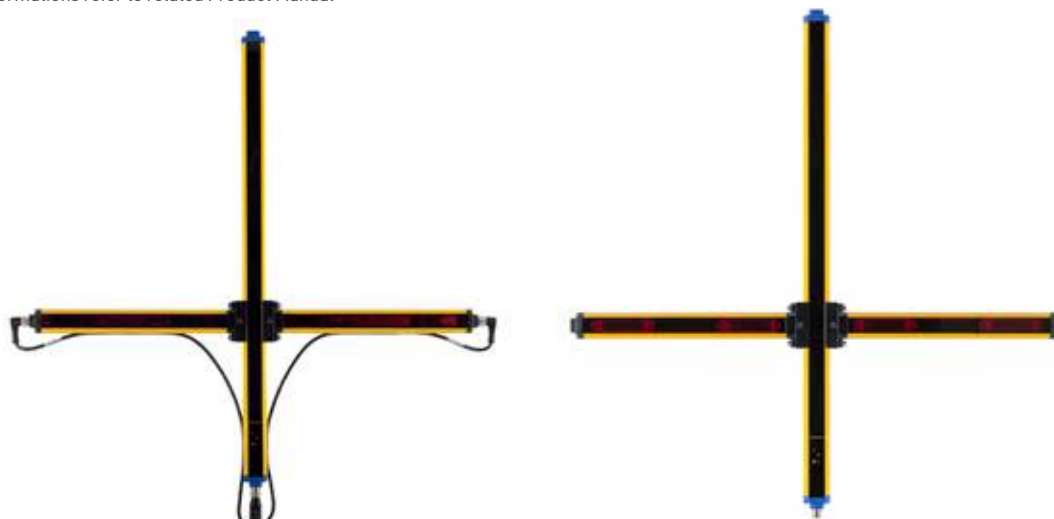
CONNECTIONS

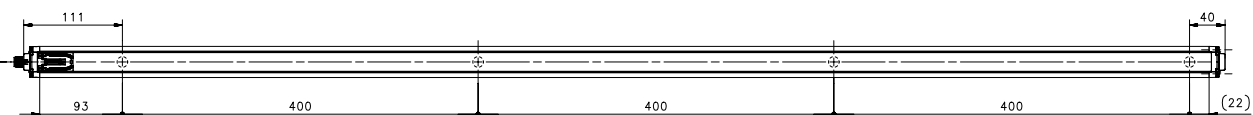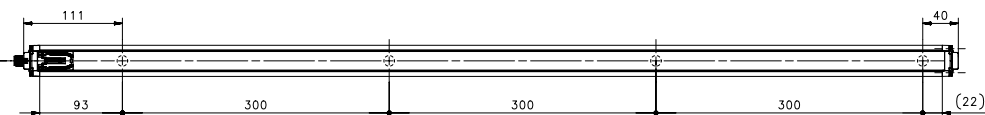|	SG4 BODY COMPACT BASE [SG4-SX-XXX-PP-X]	SG2 BODY COMPACT BASE [SG2-SX-XXX-PP-E] SG4 BODY COMPACT BASE [SG4-SX-XXX-PP-E]	SG2 BODY COMPACT MUTING [SG2-S/L/TX-XXX-PP-W]	SG4 BODY COMPACT MUTING [SG4-S/L/TX-XXX-PP-W]	SG4-N BODY COMPACT MUTING [SG4-SX-XXX-PP-N]
EMITTER MAIN CONNECTOR			M12, 4 poles, male 1 = Brown = 24Vdc 3 = Blue = 0 V NOT USED		
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 NOT USED	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		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
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

Emitter

NORMAL OP.

ON

Receiver

NORMAL OP.

SAFE (BREAK)

LAST

SYNC

135°
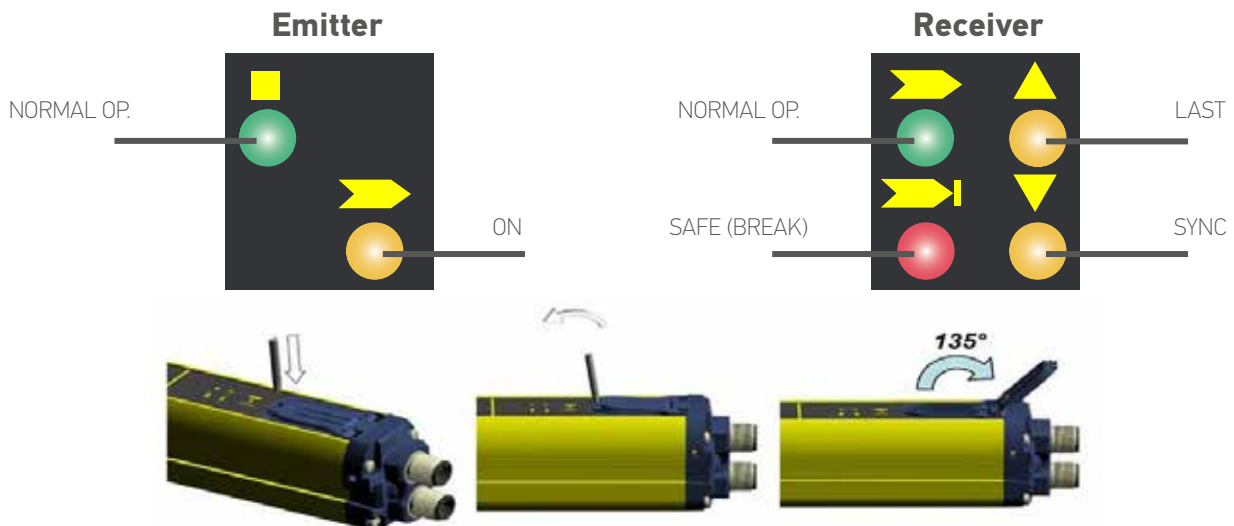
DIP-SW	FUNCTION	ON	OFF
1, 5			
2, 6			
3, 7	EDM	Deactivated	Activated
4, 8	Restart	Automatic	Manual

NOTE

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

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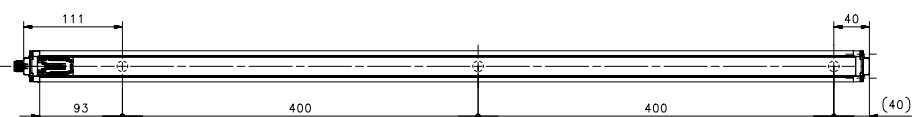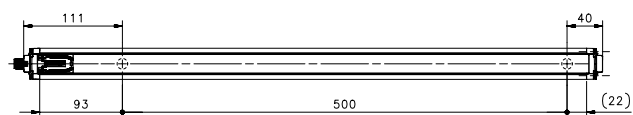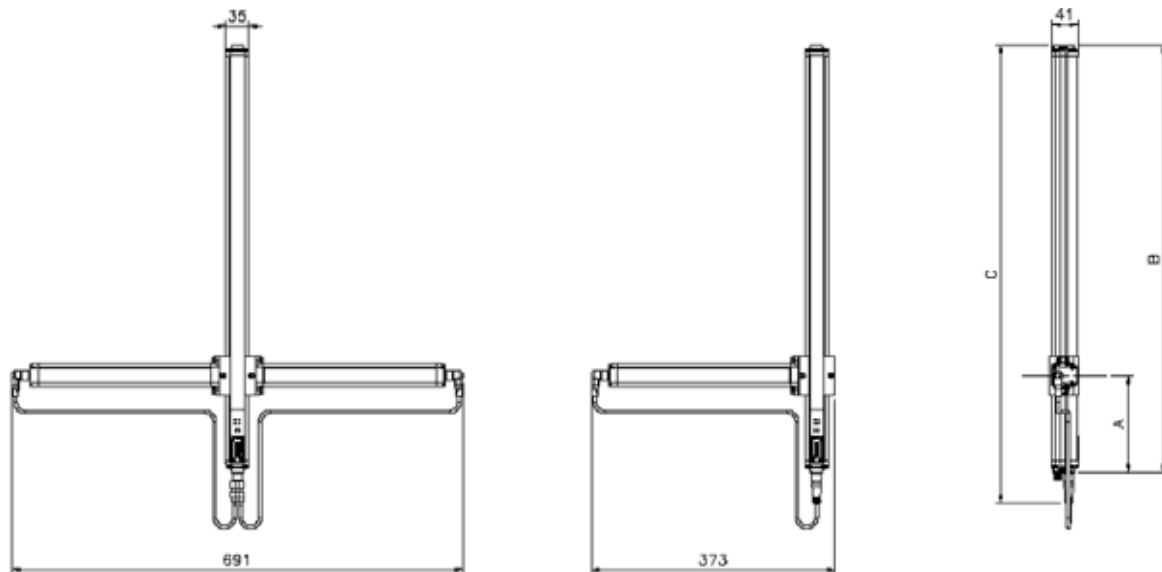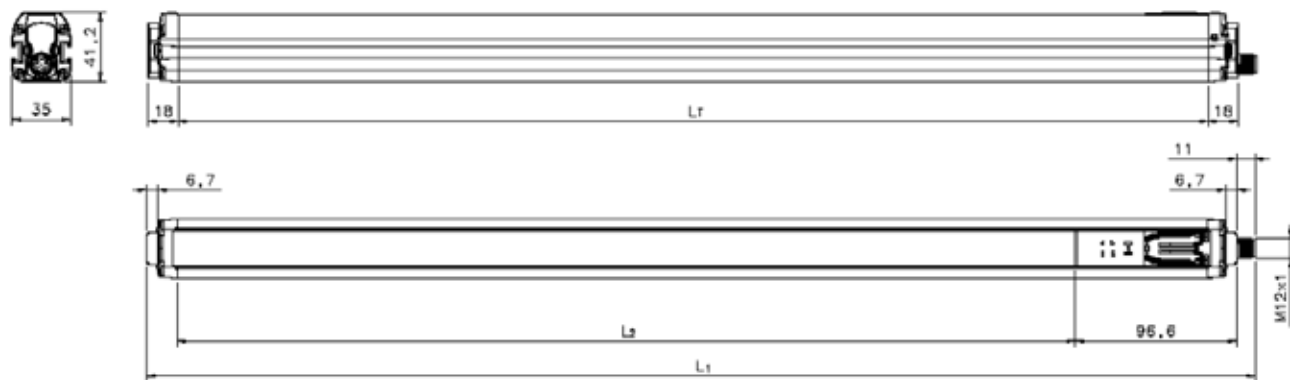
MODEL	L1 (mm)	L2 (mm)	A (mm)	B (mm)	C (mm)
SGx-S/L/Tx-050-PP-x	662	538.4	120-260	653	700
SGx-S/L/Tx-080-PP-x	962	838.4	120-260	953	1000
SGx-S/L/Tx-090-PP-x	1062.5	938.4	120-260	1053	1100
SGx-S/L/Tx-120-PP-x	1362.5	1238.4	120-260	1353	1400

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

		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
WITH INTEGRATED MUTING	**WITHOUT MUTING ARMS**	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

				SG4 BODY COMPACT MUTING [SG4-S/L/TX-XXX-PP-W]	ORDER CODE
WITH INTEGRATED MUTING ON MAIN CONNECTOR	**WITHOUT MUTING ARMS**			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	LENGHT (M)	MODEL	ORDER NUMBER
SG BODY COMPACT BASE/MUTING EMITTER MAIN CONNECTOR [SG2\4-SX-XXX-PP-X/E/W/N] **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
		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/MUTING RECEIVER MAIN CONNECTOR [SG2/4-SX-XXX-PP-E] [SG2/4-S/L/TX-XXX-PP-W] [SG4-SX-XXX-PP-N]	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]
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	SG-LP			
ACCESSORIES FOR MUTING				
Muting arms, brackets and cables	---		See page 77	---
Muting connection box	---		SG-SRT-1 ****	---
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 >= 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

COLTERLEC™

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