SG BODY BIG BASE
SG BODY BIG MUTING

◆DATALOGIC

Robust housing for harsh environments
Long operating range for perimeter control
Rapid solution for access control with muting
Easy installation and alignment

- 2, 3, 4 beams for body protection
- 40 mm resolution for arm protection and presence detection
- Controlled heights 500, 800, 900 and 1200 mm
- Long operating distance: up to 60 m
- Simple configuration through DIP switches
- Integrated muting lamp (only muting models)
- Anti-interference coding
- External muting enable signal
- Edged or triggered muting dependent override

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	x

S G 2 - B 2 - 0 5 0 - 0 0 - E

TYPE	
2	Type 2
4	Type 4

BEAMS AND RANGE	
B2	2 Beams
B3	3 Beams
B4	4 Beams
BSR2	2 Beams Short Range (only type 4)
BSR3	3 Beams Short Range (only type 4)
BSR4	4 Beams Short Range (only type 4)
BLR2	2 Beams Long Range (only type 4)
BLR3	3 Beams Long Range (only type 4)
BLR4	4 Beams Long Range (only type 4)

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

VERSION	
E	Base: without muting function
W-C	Muting: with integrated muting function

S G 4 - 4 0 - 0 6 0 - 0 0 - E

MONITORED HEIGHT	
060	660 mm
090	960 mm
120	1260 mm

TECHNICAL DATA

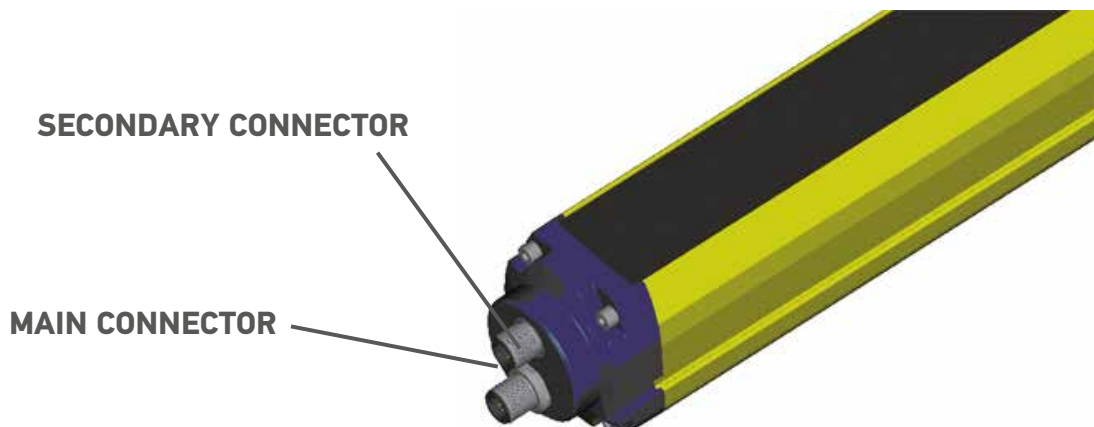|	SG2 BODY BIG BASE [SG2-Bx-xxx-OO-E]	SG2 BODY BIG MUTING [SG2-Bxxx-xxx-OO-W-C]	SG4 BODY BIG BASE [SG4-Bx-xxx-OO-E]	SG4 BODY BIG MUTING [SG4-Bxxx-xxx-OO-W-C]	SG4 LONG RANGE BASE [SG4-40-xxx-OO-E]
GENERAL DATA					
Type (EN61496-1-2)	2		4		
PL (EN ISO 13849-1)	c		e		
SIL (IEC 61508)	1		3		
Resolution	319,75 mm (4 beams) 419,75 mm (3 and 4 beams) 519,75 mm (2 beams)				40 mm
Operating distance	0.5 ... 60 m		6 ... 60 m	0.5 ... 30 m (Short Range model) 6 ... 60 m (Long Range model)	6 ... 60 m
Retroreflective muting arms operating distance (not included)	---	0.5 ... 3 m	---	0.5 ... 3 m (Only for Short Range model)	---
Emitter-Receiver muting arms operating distance	---	0.5 ... 7 m	---	0.5 ... 7 m	---
Protected height	500 mm (2 beams) 800 mm (3 beams) 900 mm or 1200 (4 beams)				660 mm 960 mm 1260 mm
ELECTRICAL DATA					
Power supply (Vdd)	24 Vdc ± 20%				
Outputs	2 PNP				
Output current	0.5 A max/each output				
Capacitive load	2,2 uF max at 25°C				
Response time	11 ... 24 ms depending on model [A]				20 ... 24 ms depending on model [A]
Cables length (for power supply)	70 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				
	Manual/Automatic restart				
	External Device Monitoring (EDM)				
	Coding selection with DIP-SW				
	---	T-Muting/L-Muting	---	T-Muting/L-Muting	---
	---	Muting timeout: 10 min. or ∞	---	Muting timeout: 10 min. or ∞	---
	---	Integrated muting lamp		Integrated muting lamp	---
	---	Override	---	Override	---
	---	Muting enable input	---	Muting enable input	---
	---	Override status output	---	Override status output	---
	---	Muting lamp output	---	Muting lamp output	---

NOTES

[A] For detailed informations refer to related Product Datasheet or Manual

CONNECTIONS

	SG BODY BIG BASE [SG2/4-Bx-xxx-00-E] / SG4 LONG RANGE BASE [SG4-40-xxx-00-E]	SG BODY BIG MUTING [SG2/4-Bxxx-xxx-00-W-C]
EMITTER MAIN CONNECTOR	M12, 5 poles, male 1 = brown = 24Vdc; 2 = white = TEST; 3 = blue = 0V; 4 = black = EARTH	
EMITTER SECONDARY CONNECTOR	---	M12, 5 poles, male 1 = brown = 24Vdc; 3 = blue = 0V
RECEIVER MAIN CONNECTOR	M12, 8 poles, male 1 = white = RESET/RESTART/RESTART MODE; 2 = brown = 24Vdc; 3 = green = EDM ENABLE; 4 = yellow = EDM; 5 = grey = OSSD1; 6 = pink = OSSD2; 7 = blue = 0V; 8 = red = EARTH	M12 12-pole connector 1 = Brown = 24Vdc; 2 = Blue = 0V; 3 = White = RESET/RESTART/RESTART MODE; 4 = Green = OVERRIDE 1; 5 = Pink = OSSD 2; 6 = Yellow = EDM; 7 = Black = MUTING ENABLE; 8 = Grey = OSSD 1; 9 = Red = OVERRIDE 2; 10 = Violet = LAMP OUTPUT; 11 = Grey-Pink = OVERRIDE STATUS; 12 = Red-Blue = EARTH
RECEIVER SECONDARY CONNECTOR	---	M12, 5 poles, male 1 = brown = 24Vdc; 2 = white = MUTING2; 3 = blue = 0V; 4 = black = MUTING 1

SECONDARY CONNECTOR

MAIN CONNECTOR

ACCESSORIES

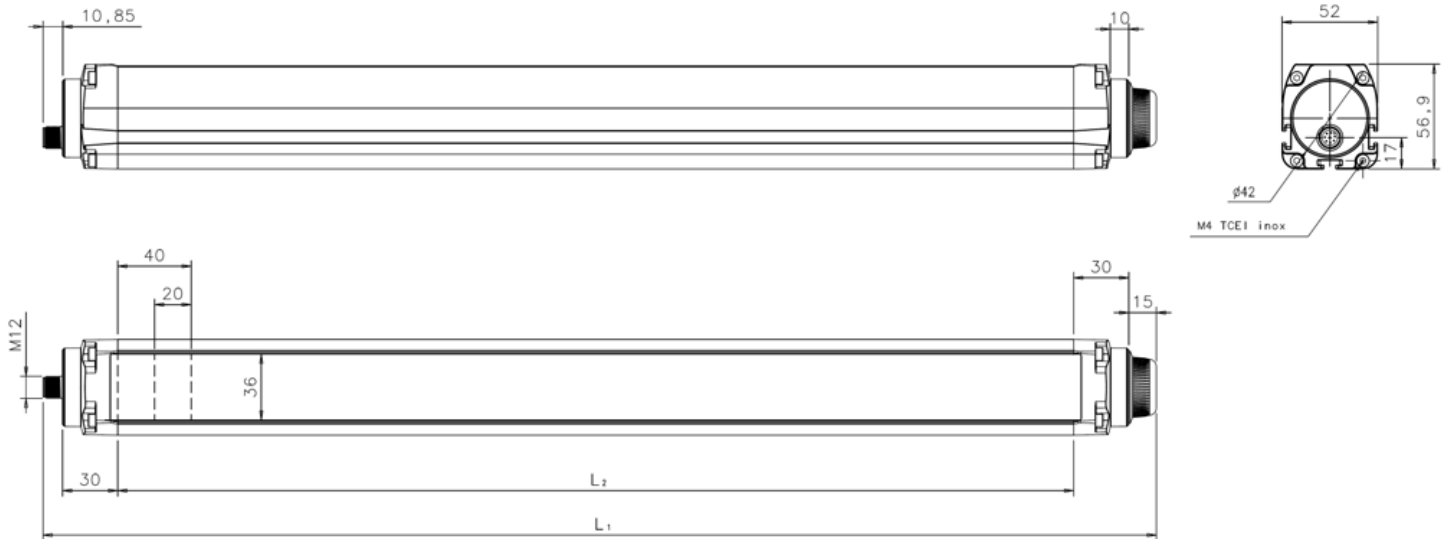|	SG BODY BIG BASE [SG2/4-Bx-xxx-00-E]	SG BODY BIG MUTING [SG2/4-Bxxx-xxx-00-W-C]	SG4 LONG RANGE BASE [SG4-40-xxx-00-E]
	BRACKETS		
Included with the light curtain	None		
Standard angled brackets (4 pcs)	ST-K4STD-SG-BODY BIG		
Rear fixing bracket mounting (4 pcs)	ST-K4REAR-SG BODY BIG		
Rotating brackets (4 pcs)	ST-K4ROT-SG BODY BIG		
Antivibration support (4 pcs/6 pcs) [c]	ST-K4AV ST-K6AV		
Plastic brackets (4 pcs/6 pcs) [c]	ST-KP4MP ST-KP6MP		
	PROTECTION TUBES, STANDS		
IP67/IP69K tubes	---		
Protective stands	SG-PSB series [B]		
Stand plate for SG-PSB	SG-P		
Protective stands mounting brackets (4 Pcs/6 pcs) [c]	ST-PS4-SG BODY ST-PS6-SG BODY		
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 UNIT		
Safety unit	SE-SR2		
Edm relay box [d]	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 70	---
Muting connection box [d]	---	SG-SRT-1	---
External muting lamps	---	LMS series	

NOTES

[B] Not possible with T or L muting arms mounted

[C] Use 6 brackets for light curtains with length ≥ 1200 mm
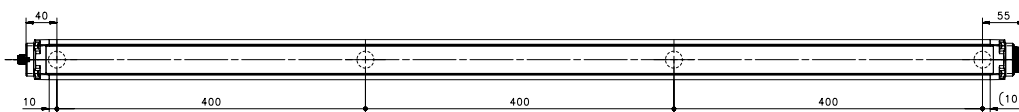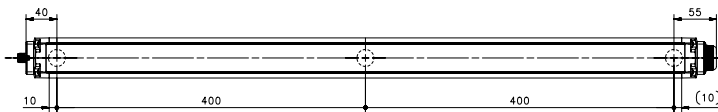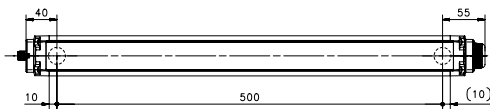
[D] When using EDM Relay Box or Muting connection box, connect EDM input, and be sure EDM function is active on the safety light curtain
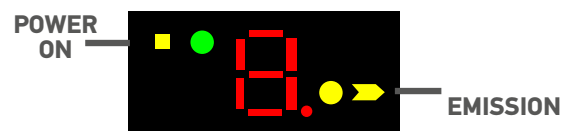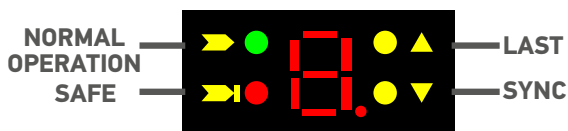
DIMENSIONS (MM)

DIMENSIONS (MM)

MODEL	L1 [mm]	L2 [mm]
SGx-B2-050-OO-E	606,35	520,5
SGx-B3-080-OO-E	906,35	820,5
SGx-B4-090-OO-E	1006,35	920,5
SGx-B4-120-OO-E	1306,35	1220,5
SG4-40-060-OO-E	783,35	700,5
SG4-40-090-OO-E	1083,35	1000,5
SG4-40-120-OO-E	1383,35	1300,5
SGx-Byy2-050-OO-W-C	609,35	520,5
SGx-Byy3-080-OO-W-C	909,35	820,5
SGx-Byy4-090-OO-W-C	1009,35	920,5
SGx-Byy4-120-OO-W-C	1309,35	1220,5

INDICATORS

NORMAL OPERATION
SAFE
LAST
SYNC

POWER ON
EMISSION

MODEL SELECTION AND ORDER INFORMATION

	BODY PROTECTION					ARM PROTECTION PRESENCE DETECTION		
	SG2 BODY BIG BASE [SG2-BX-XXX-OO-E]	**ORDER CODE**		**SG4 BODY BIG BASE [SG4-BX-XXX-OO-E]**	**ORDER CODE**		**SG4 LONG RANGE BASE [SG4-40-XXX-OO-E]**	**ORDER CODE**
WITHOUT MUTING	SG2-B2-050-OO-E	957851240	**WITHOUT MUTING**	SG4-B2-050-OO-E	957851280	**LONG RANGE**	SG4-40-060-OO-E	957851570
	SG2-B3-080-OO-E	957851250		SG4-B3-080-OO-E	957851290		SG4-40-090-OO-E	957851580
	SG2-B4-090-OO-E	957851260		SG4-B4-090-OO-E	957851300		SG4-40-120-OO-E	957851590
	SG2-B4-120-OO-E	957851270		SG4-B4-120-OO-E	957851310		---	---
	SG2 BODY BIG MUTING [SG2-BXXX-XXX-OO-W-C]	**ORDER CODE**		**SG4 BODY BIG MUTING [SG4-BXXX-XXX-OO-W-C]**	**ORDER CODE**			
WITH INTEGRATED MUTING	SG2-B2-050-OO-W-C	957851320	**SHORT RANGE**	SG4-BSR2-050-OO-W-C	957851400		---	---
	SG2-B3-080-OO-W-C	957851330		SG4-BSR3-080-OO-W-C	957851410		---	---
	SG2-B4-090-OO-W-C	957851340		SG4-BSR4-090-OO-W-C	957851420		---	---
	SG2-B4-120-OO-W-C	957851350		SG4-BSR4-120-OO-W-C	957851430		---	---
	---	---	**LONG RANGE**	SG4-BLR2-050-OO-W-C	957851360		---	---
	---	---		SG4-BLR3-080-OO-W-C	957851370		---	---
	---	---		SG4-BLR4-090-OO-W-C	957851380		---	---
	---	---		SG4-BLR4-120-OO-W-C	957851390		---	---

CABLES

	TRANSMITTER CABLE (MAIN CONNECTOR)	**LENGTH (m)**	**ORDER CODE**
SG BODY BIG BASE [SG2-Bx-xxx-OO-E] [SG4-Bx-xxx-OO-E]	CS -A1-03-U-03	3	95ASE 1170
	CS -A1-03-U-05	5	95ASE 1180
SG4 LONG RANGE BASE [SG4-40-xxx-OO-E]	CS -A1-03-U-10	10	95ASE 1190
	CS -A1-03-U-15	15	95ASE 1200
SG BODY BIG MUTING [SG2-Bx-xxx-OO-W-C] [SG4-Bxxx-xxx-OO-W-C]	CS -A1-03-U-25	25	95ASE 1210
	CS -A1-03-U-50	50	95A252700

	RECEIVER CABLE (MAIN CONNECTOR)	**LENGTH (m)**	**ORDER CODE**
SG BODY BIG BASE [SG2-Bx-xxx-OO-E] [SG4-Bx-xxx-OO-E]	CS -A1-06-U-03	3	95ASE1220
	CS -A1-06-U-05	5	95ASE1230
	CS -A1-06-U-10	10	95ASE1240
SG4 LONG RANGE BASE [SG4-40-xxx-OO-E]	CS -A1-06-U-15	15	95ASE1250
	CS -A1-06-U-25	25	95ASE1260
	CS -A1-06-U-50	50	95A252710
	CS -A1-10-U-03	3	95A252720
	CS -A1-10-U-05	5	95A252730
SG BODY BIG MUTING [SG2-Bx-xxx-OO-W-C] [SG4-Bxxx-xxx-OO-W-C]	CS -A1-10-U-10	10	95A252740
	CS -A1-10-U-15	15	95A252750
	CS -A1-10-U-25	25	95A252760
	CS -A1-10-U-50	50	95A252770

	TRANSMITTER CABLE (SECONDARY CONNECTOR) **RECEIVER CABLE (SECONDARY CONNECTOR)**	**LENGTH (m)**	**ORDER CODE**
SG BODY BIG MUTING [SG2-Bx-xxx-OO-W-C] [SG4-Bxxx-xxx-OO-W-C]	CS -A1-03-U-03	3	95ASE 1170
	CS -A1-03-U-05	5	95ASE 1180
	CS -A1-03-U-10	10	95ASE 1190
	CS -A1-03-U-15	15	95ASE 1200
	CS -A1-03-U-25	25	95ASE 1210
	CS -A1-03-U-50	50	95A252700

NOTES

All cables have axial connectors