

SG BODY REFLECTOR BASE

SG BODY REFLECTOR MUTING



One active and one passive unit to reduce wiring and installation costs

Robust housing for harsh environments

Easy installation and alignment

Reflective muting arms included in L and T muting version

All advanced features associated to muting function

- 2, 3, 4 beams for body protection
- Controlled heights 500, 800, 900 and 1200 mm
- Up to 8 m operating distance
- Simple configuration through DIP switches
- Integrated muting lamp (muting models)
- Anti-interference coding
- External muting enable signal
- Edged or triggered muting dependent override



APPLICATIONS

- Automatic machines
- Robots
- Automatic assembling lines
- Palletizers and Depalletizers

INDUSTRIES

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

	FINGER	HAND	ARM	BODY
Type 2				
Type 4				x

Active unit

SG4-RB2L-050-00-W

TYPE		BEAMS AND RANGE		MUTING ARMS		MONITORED HEIGHT		VERSION	
4	Type 4	2	2 Beams	---	Linear version: no muting arms included	050	500 mm (2 beams)	E	Base: without integrated muting function
		3	3 Beams	L	L muting arms included	080	800 mm (3 beams)	W	Muting: with integrated muting function
		4	4 Beams	T	T muting arms included	090	900 mm (4beams)	N	SG4-N Body Reflector Muting: muting function with single main connector
						120	1200 mm (4 beams)		

Passive unit

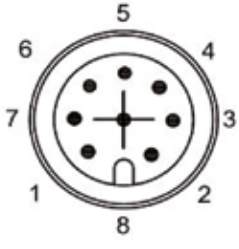
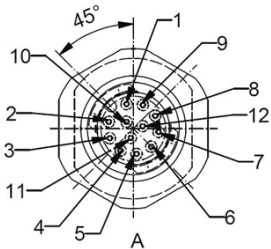
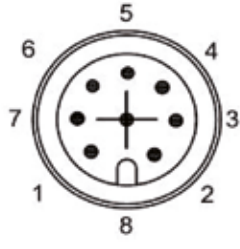
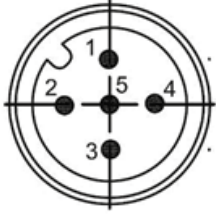
SG4-RDB2L-090

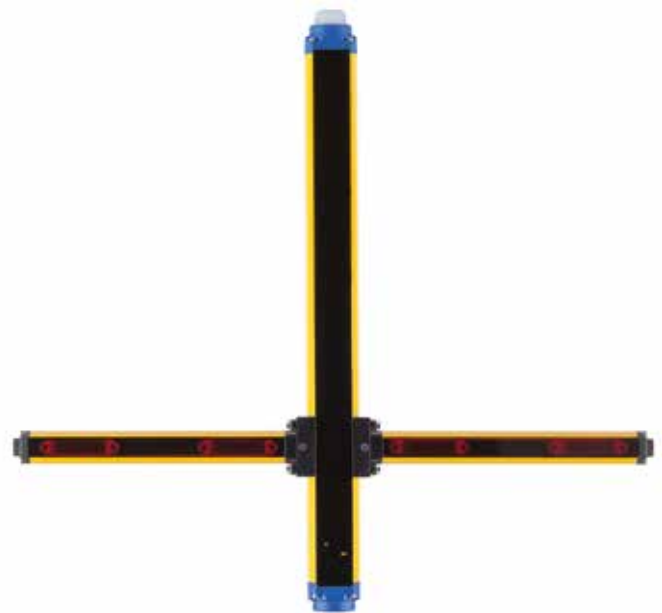
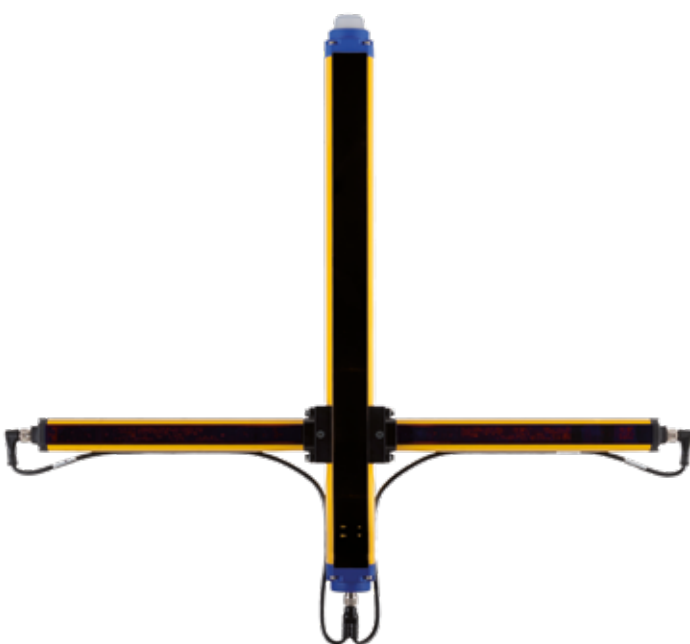
TYPE		BEAMS AND RANGE		MUTING ARMS		MONITORED HEIGHT	
4	Type 4	2	2 Beams	---	Linear version: no muting arms included	---	500 mm (2 beams) or 800 mm (3 beams)
		3	3 Beams	L	L muting arms included	090	900 mm (4 beams)
		4	4 Beams	T	T muting arms included	120	1200 mm (4 beams)

TECHNICAL DATA

	SG BODY REFLECTOR BASE [SG4-RBx-xxx-00-E] + [SG4-RDBx]	SG BODY REFLECTOR MUTING [SG4-RBx-xxx-00-W] + [SG4-RDBx] [SG4-RBxL/T-xxx-00-W] + [SG4-RDBxL/T]	SG4-N BODY REFLECTOR MUTING [SG4-RBx-xxx-00-N] + [SG4-RDBx]
GENERAL DATA			
Type (EN61496-1)	4		
PL (EN ISO 13849-1)	e		
SIL (IEC 61508)	3		
Resolution	319,75 mm (4 beams) 419,75 mm (3 and 4 beams) 519,75 mm (2 beams)		
Protected height	500 mm (2 beams) 800 mm (3 beams) 900 mm or 1200 (4 beams)		
Operating distance	0.5 ... 8 m 0.5 ... 6.5 m (for SG4-RB4-090-00-E)	0.5 ... 8 m (for SG4-RBx-xxx-00-W) 0.5 ... 6.5 m (for SG4-RB4-090-00-W) 0.5 ... 3 m (for SG4-RBxL/T-00-W)	0.5 ... 8 m (for SG4-RBx-xxx-00-N) 0.5 ... 6.5 m (for SG4-RB4-090-00-N)
Retroreflective muting arms operating distance (included in T and L models)	---	0.5 ... 3 m	---
Emitter-Receiver muting arms operating distance (not included)	---	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	2,2 uF max at 25°C		
Response time	11 ... 12 ms depending on model *		
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			
	Manual / Automatic restart		
	External Device Monitoring (EDM)		
	Coding selection with DIP-SW		
---	---	T-Muting / L-Muting	
---	---	Integrated muting lamp	
---	---	Muting filter	
---	---	Muting timeout: 10 min. or ∞	
---	---	Muting enable input	---
---	---	Override status output	---
---	---	External muting lamp output	---
---	---	Override	---
	---	Impulsive Override	
NOTES			
* For detailed informations refer to related Product Datasheet or Manual			

CONNECTIONS

	SG BODY REFLECTOR BASE [SG4-RBX-XXX-00-E]	SG BODY REFLECTOR MUTING [SG4-RBX-XXX-00-W] [SG4-RBXL/T-XXX-00-W]	SG4-N BODY REFLECTOR MUTING [SG4-RBX-XXX-00-N] + [SG4-RDBX]
ACTIVE UNIT MAIN CONNECTOR	M12, 8 poles, male 1. white = RESET/RESTART/RESTART MODE 2. brown = 24V 3. green = EDM ENABLE 4. yellow = EDM 5. grey = OSSD1 6. pink = OSSD2 7. blue = 0V 8. red = EARTH	M12, 12 poles, male 1. brown = 24Vdc 2. blue = 0 V 3. white = RESET/RESTART/RESTART MODE 4. green = OVERRIDE1 5. pink = OSSD2 6. yellow = EDM 7. black = MUTING ENABLE 8. grey = OSSD1 9 = red = OVERRIDE2 10 = violet = LAMP INPUT 11. grey-pink = OVERRIDE STATUS 12. red-blue = EARTH	1. white = START / RESET / EDM / OVERRIDE 2. brown = +24 VDC 3. green = MUTING 4. yellow = MUTING 2 5. grey = OSSD1 6. pink = OSSD2 7. blue = 0 V 8. red = MUTING LAMP
			
ACTIVE UNIT SECONDARY CONNECTOR	---	M12, 5 poles, male 1 = brown = 24Vdc 2 = white = MUTING2 3 = blue = 0V 4 = black = MUTING1	---
	---		---

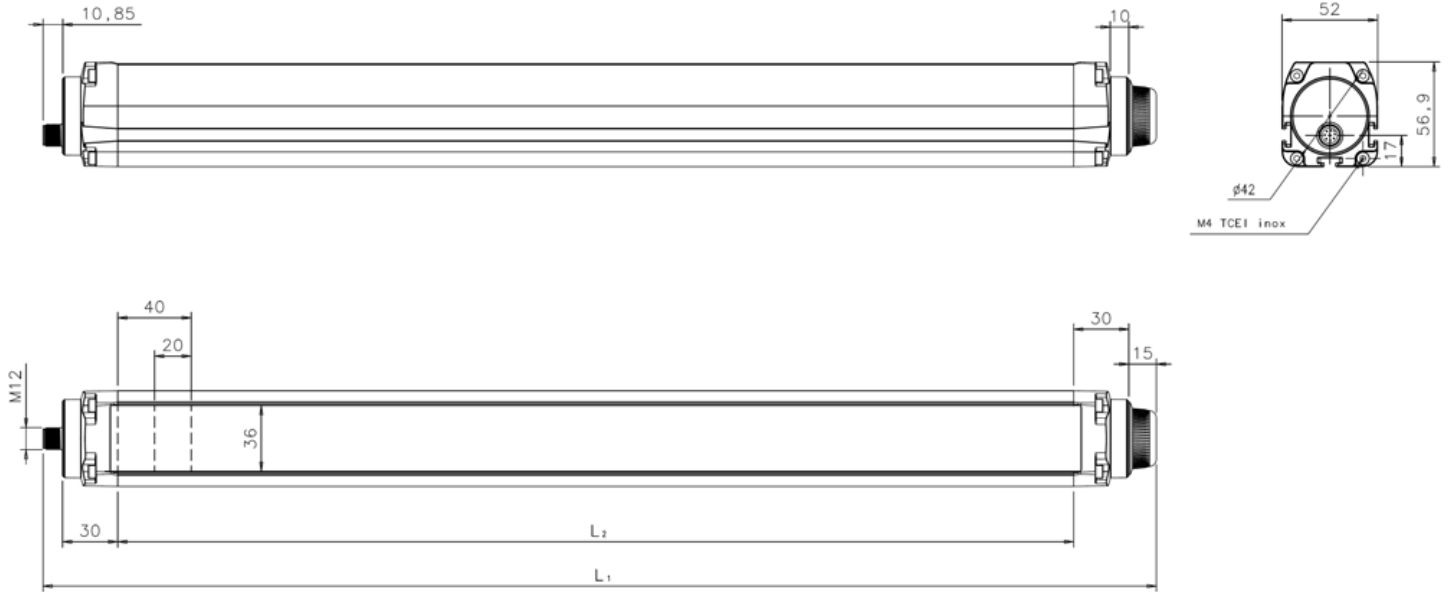


ACCESSORIES

	SG BODY REFLECTOR BASE [SG4-RBX-XXX-00-E] + [SG4-RDBX]	SG BODY REFLECTOR MUTING [SG4-RBX-XXX-00-W] + [SG4-RDBX] [SG4-RBXL/T-XXX-00-W] + [SG4-RDBXL/T]	SG4-N BODY REFLECTOR MUTING [SG4-RBX-XXX-00-N] + [SG4-RDBX]
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-K4R0T-SG BODY BIG		
Antivibration support (4 pcs/6 pcs) ***	ST-K4AV ST-K6AV		
Plastic brackets (4 pcs/6 pcs) ***	ST-KP4MP ST-KP6MP		
PROTECTION TUBES, STANDS			
IP67/IP69K Tubes	---		
Protective Stands	SG-PSB series *		
Stand Plate for SG-PSB	SG-P		
Protective Stands Mounting Brackets (4 pcs/6 pcs) ****	ST-PS4-SG BODY ST-PS6-SG BODY		
Floor columns	SE-S Series		
SAFETY UNITS			
Safety Unit	SE-SR2		
EDM Relay Box ***	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 accessories section	---
Muting Connection box ***	---	SG-SRT-1 or SG-SRT-2	---
External muting lamps	---	LMS Series	
NOTES			
* Not possible with T or L muting arms mounted			
** Use 6 brackets for light curtains with length \geq 1200 mm			
*** When using EDM Relay Box or Muting connection boxes, connect EDM input, and be sure EDM function is active on the safety light curtain			

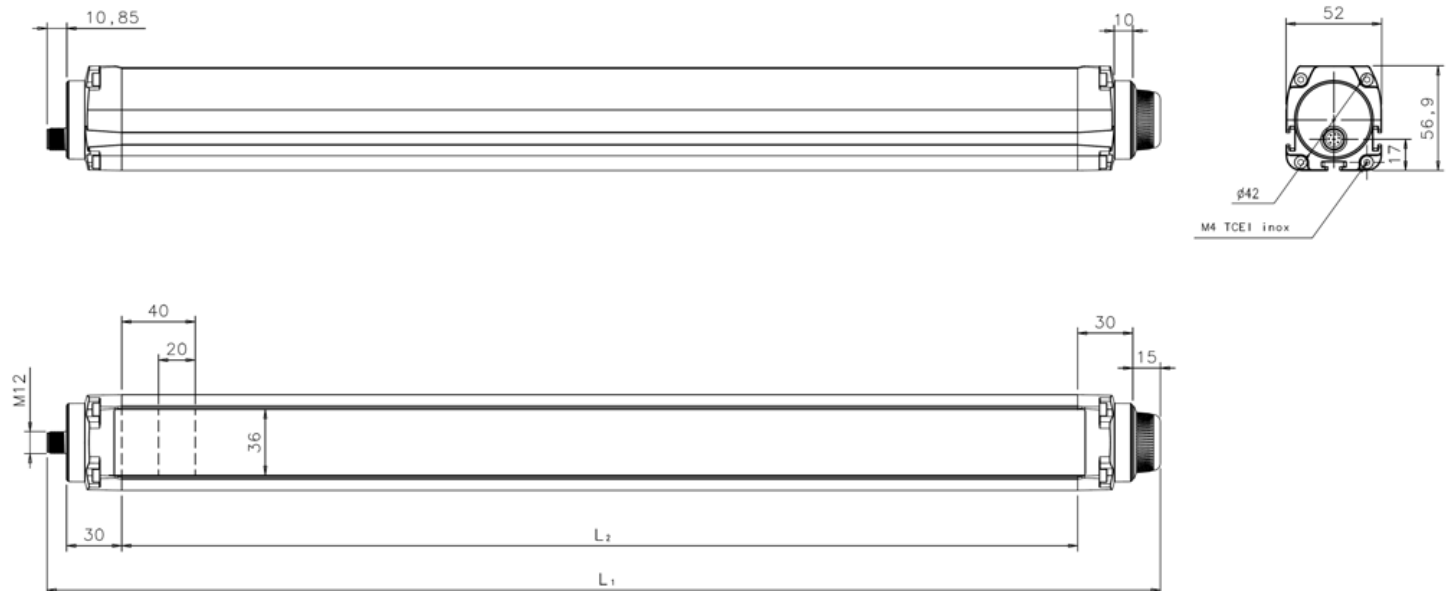
DIMENSIONS

SG BODY REFLECTOR BASE - ACTIVE UNIT



MODEL	L1 [mm]	L2 [mm]
SGx-RB2-050-00-E	606,35	520,5
SGx-RB3-080-00-E	906,35	820,5
SGx-RB4-090-00-E	1006,35	920,5
SGx-RB4-120-00-E	1306,35	1220,5

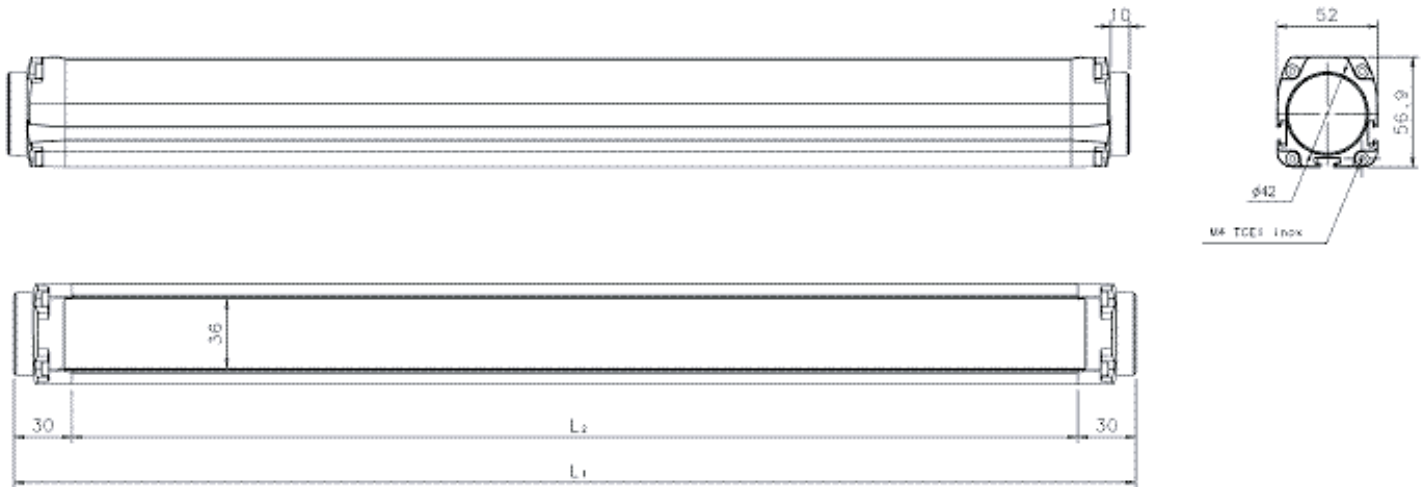
SG BODY REFLECTOR MUTING - ACTIVE UNIT



MODEL	L1 [mm]	L2 [mm]
SGx-RB2y-050-00-W	609,35	520,5
SGx-RB3y-080-00-W	909,35	820,5
SGx-RB4y-090-00-W	1009,35	920,5
SGx-RB4y-120-00-W	1309,35	1220,5

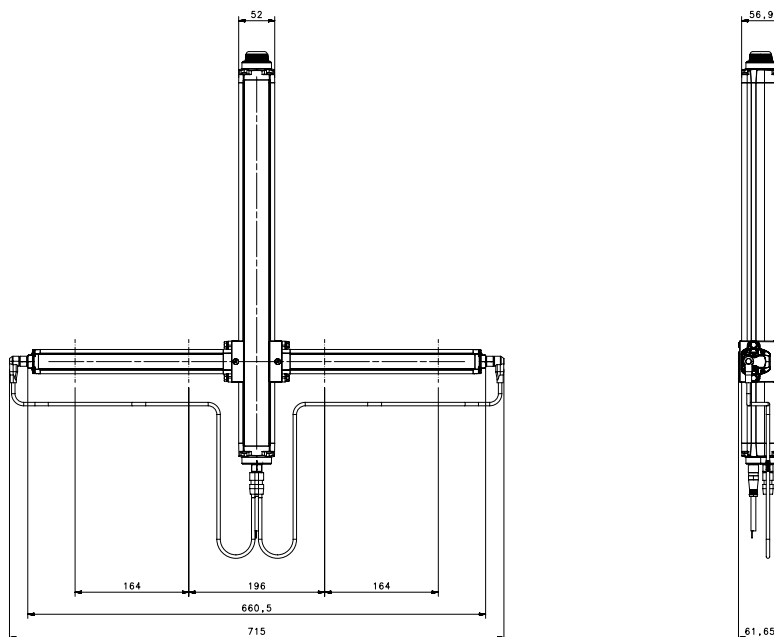
DIMENSIONS

SG BODY REFLECTOR BASE - PASSIVE UNIT • SG BODY REFLECTOR MUTING - PASSIVE UNIT



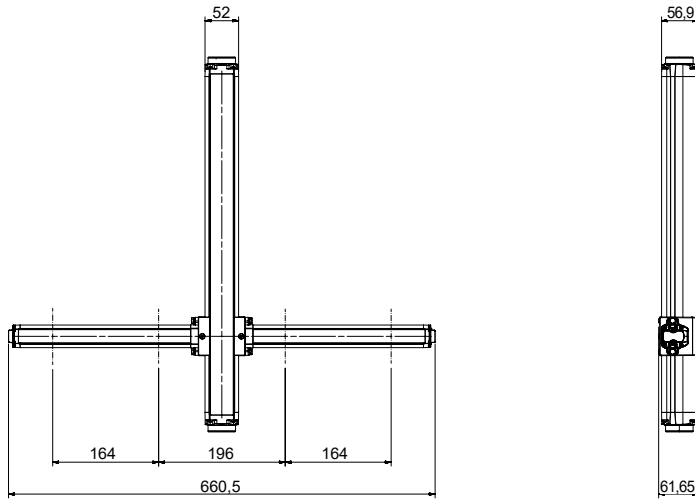
MODEL	L1 [mm]	L2 [mm]
SG4-RDB2	580,5	520,5
SG4-RDB2L	580,5	520,5
SG4-RDB2T	580,5	520,5
SG4-RDB3	880,5	820,5
SG4-RDB3L	880,5	820,5
SG4-RDB3T	880,5	820,5
SG4-RDB4-090	980,5	920,5
SG4-RDB4-120	1280,5	1220,5

SG BODY REFLECTOR BASE WITH T MUTING ARMS - ACTIVE SIDE



DIMENSIONS

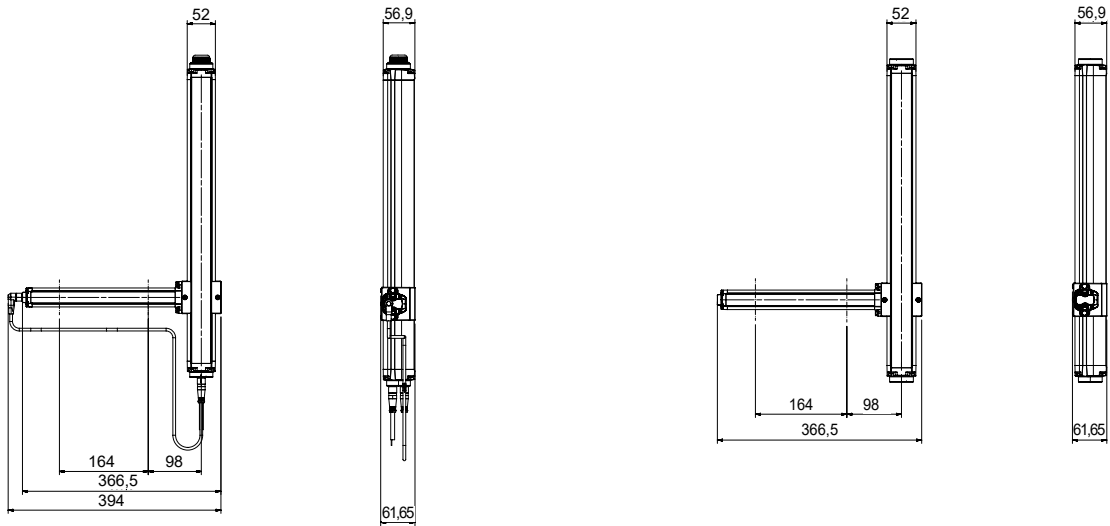
SG BODY REFLECTOR MUTING WITH T MUTING ARMS - PASSIVE SIDE



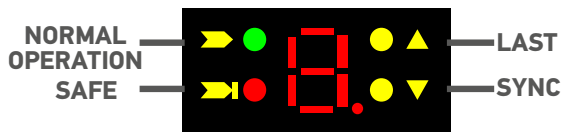
SG BODY REFLECTOR MUTING WITH L MUTING ARM

ACTIVE SIDE

PASSIVE SIDE



INDICATORS



MODEL SELECTION AND ORDER INFORMATION

	SG4 BODY REFLECTOR BASE [SG4-RBX-XXX-00-E]	ORDER NUMBER	SG4 BODY REFLECTOR MUTING [SG4-RBX-XXX-00-W]	ORDER NUMBER	SG4-N BODY REFLECTOR MUTING [SG4-RBX-XXX-00-N] + [SG4-RDBX]	ORDER NUMBER
ACTIVE SIDE	SG4-RB2-050-00-E	957951000	LINEAR (WITHOUT MUTING ARMS)		LINEAR (WITHOUT MUTING ARMS)	
	SG4-RB3-080-00-E	957951010	SG4-RB2-050-00-W	957951030	SG4-RB2-050-00-N	957951220
	SG4-RB4-090-00-E	957951190	SG4-RB3-080-00-W	957951040	SG4-RB3-080-00-N	957951230
	SG4-RB4-120-00-E	957951020	SG4-RB4-090-00-W	957951180	SG4-RB4-090-00-N	957951240
	---	---	SG4-RB4-120-00-W	957951050	SG4-RB4-120-00-N	957951250
	---	---	WITH T MUTING ARMS			
	---	---	SG4-RB2T-050-00-W	957951080		
	---	---	SG4-RB3T-080-00-W	957951090		
	---	---	WITH L MUTING ARMS			
	---	---	SG4-RB2L-050-00-W	957951060		
		SG4-RB3L-080-00-W	957951070			
PASSIVE SIDE	SG4 BODY REFLECTOR BASE [SG4-RDBX] [SG4-RDBX-XXX]	ORDER NUMBER	SG4 BODY BIG MUTING [SG4-RDBX] [SG4-RDBXL/T]	ORDER NUMBER	SG4 BODY REFLECTOR BASE [SG4-RDBX] [SG4-RDBX-XXX]	ORDER NUMBER
	SG4-RDB2	957951100	LINEAR (WITHOUT MUTING ARMS)			
	SG4-RDB3	957951110	SG4-RDB2	957951100	SG4-RDB2	957951100
	SG4-RDB4-090	957951170	SG4-RDB3	957951110	SG4-RDB3	957951110
	SG4-RDB4-120	957951120	SG4-RDB4-090	957951170	SG4-RDB4-090	957951170
	---	---	SG4-RDB4-120	957951120	SG4-RDB4-120	957951120
	---	---	WITH T MUTING ARMS			
	---	---	SG4-RDB2T	957951150		
	---	---	SG4-RDB3T	957951160		
	---	---	WITH L MUTING ARMS			
---	---	SG4-RDB2L	957951130			
---	---	SG4-RDB3L	957951140			
IMPORTANT NOTES						

1) Active and passive sides must be ordered separately

2) Brackets are not included in the SG4 BODY REFLECTOR packing and must be ordered separately (see accessories table)

CABLES

	ACTIVE UNIT (MAIN CONNECTOR)	LENGTH (M)	ORDER CODE
SG4 BODY REFLECTOR BASE [SG4-RBX-XXX-00-E]	CS-A1-06-U-03	3	95ASE1220
	CS-A1-06-U-05	5	95ASE1230
	CS-A1-06-U-10	10	95ASE1240
	CS-A1-06-U-15	15	95ASE1250
	CS-A1-06-U-25	25	95ASE1260
SG4-N BODY REFLECTOR MUTING [SG4-RBX-XXX-00-N]	CS-A1-06-U-50	50	95A252710
	CS-A1-10-U-03	3	95A252720
	CS-A1-10-U-05	5	95A252730
SG4 BODY REFLECTOR MUTING [SG4-RBX-XXX-00-W]	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
	ACTIVE UNIT (SECONDARY CONNECTOR)	LENGTH (M)	ORDER CODE
SG4 BODY REFLECTOR MUTING [SG4-RBX-XXX-00-W]	CS-A1-03-U-03	3	95ASE1170
	CS-A1-03-U-05	5	95ASE1180
	CS-A1-03-U-10	10	95ASE1190
	CS-A1-03-U-15	15	95ASE1200
	CS-A1-03-U-25	25	95ASE1210
	CS-A1-03-U-50	50	95A252700

NOTES

All cables have axial connectors

SG2 MUTING SG4 EXTENDED



State-of-the-art technology and versatility
 Easily adaptable to the machine structure
 Maximum application flexibility with configurable advanced functions
 Complete diagnostic and monitoring online

- No dead zone
- Pigtail cable with M12 connector
- Cascade connection of up to 3 units
- Up to 20m operating range and 1800m protected height
- Compact dimensions (35 x 41 mm section)
- Anti-interference coding
- Integrated Muting function
- Floating Blanking, Fixed Blanking and Reduced Resolution
- Configurable with:
 - Autoteaching
 - Pushbuttons for common configuration
 - Graphic User Interface for complete parametrisation
- Ethernet Interface for programming, monitoring and error logging



APPLICATIONS

- Automatic machines Robots
- Automatic assembling lines
- Palletizers and Depalletizers

INDUSTRIES

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

	FINGER	HAND	ARM	BODY
Type 2		x		
Type 4	x	x		

SG4-14-030-00-P

TYPE	
2	Type 2
4	Type 4

MONITORED HEIGHT	
030	300 mm
045	450 mm
...	
180	1800 mm

RESOLUTION	
14	Finger: 14 mm (only Type 4)
30	Hand: 30 mm

VERSION	
W	Basic Configuration Mode
P	Cascadable Advanced Configuration Mode Programmable with GUI
N	SG4-N: muting function with single main connector