COMPATIBILITY VADEMECUM FOR REPLACING A SE4-R INSTALLATION WITH THE NEW SG BODY REFLECTOR

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1 INTRODUCTION

The following document is aimed to explain how to replace an existing SE4-R installation with new SG BODY REFLECTOR.

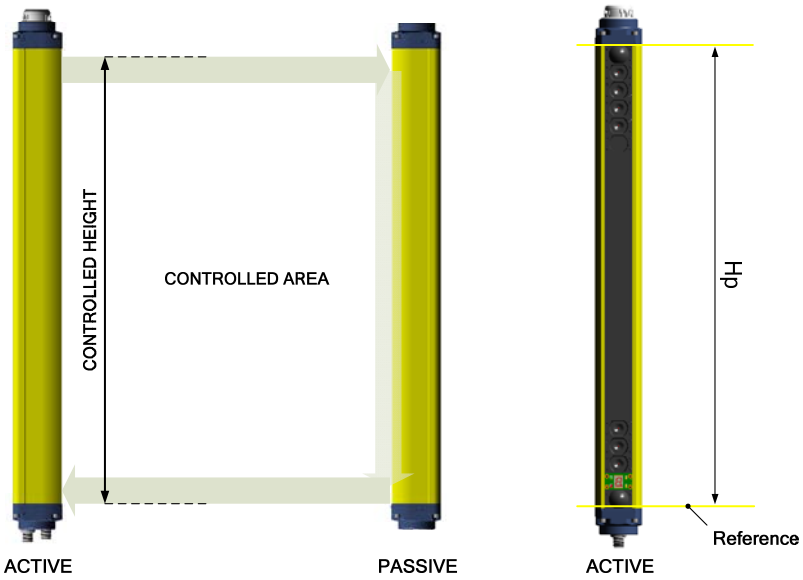
SG BODY REFLECTOR series represents the new generation of safety light curtains with passive unit, developed to replace and empower the existing SE4-R series. For that reason, SG BODY REFLECTOR have been realized to guarantee the maximum compatibility with SE4-R; anyhow, depending on the installation characteristics some expedients must be actuated.

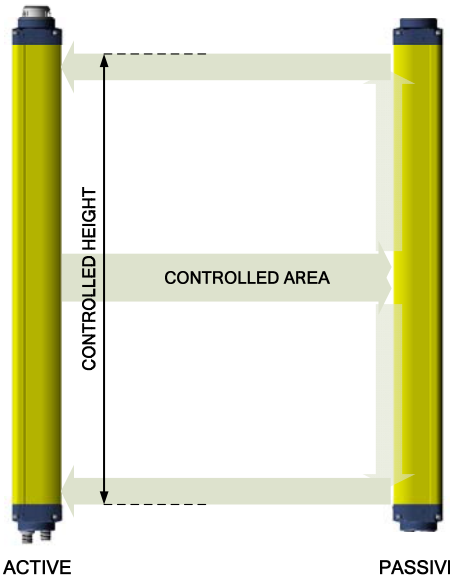
This documents presents the following contents :

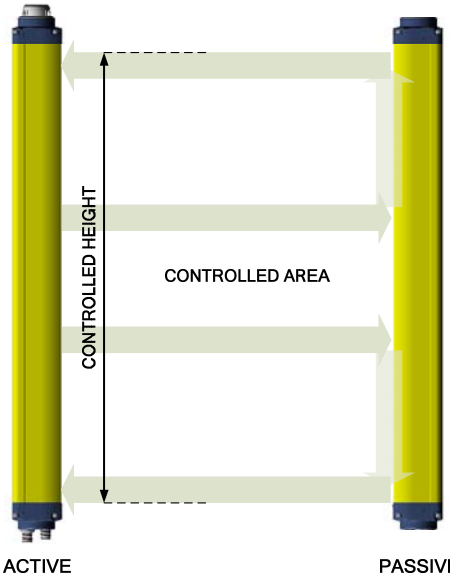
1. SG BODY REFLECTOR main characteristics;
2. SE4-R vs SG BODY REFLECTOR : main differences;
3. Depending on which SE4-R installation has been realized, all the expedients in terms of :
    - Mechanical mounting (with indication of accessory/adaptor kit needed to be ordered);
    - Electrical connections/cabling (with indication of accessory/adaptor kit needed to be ordered);
    - Product configuration and alignment.

2 SG BODY REFLECTOR

2.1 Aspect


CONTROLLED HEIGHT
CONTROLLED AREA
ACTIVE
PASSIVE
Hp
Reference
ACTIVE


CONTROLLED HEIGHT
CONTROLLED AREA
ACTIVE
PASSIVE


CONTROLLED HEIGHT
CONTROLLED AREA
ACTIVE
PASSIVE

2.2 Main Characteristics

- **Heavy duty profile**
- **Operating distance up to 8 meters**
- **2,3,4 beams models with controller height of 500, 800, 900 e 1200mm**
- **2 Versions : BASE and MUTING**
- **Fully integrated safety light curtain**
- **No programming needed: integrated functions are enabled through dedicate wires on product connectors or DIP SWITCHES**
- **Muting models: advanced functions like**
  - **'L' or 'T' configuration;**
  - **Edged/triggered OVERRIDE selectable;**
  - **Automatic restart after OVERRIDE;**
  - **Anti-Bouncing Muting Filter;**
  - **External Muting enable;**
  - **Integrated and external Muting lamp;**
  - **OVERRIDE STATUS SIGNAL;**
  - **Alignment AID function;**
- **Type 4, SIL 3 and PL e**

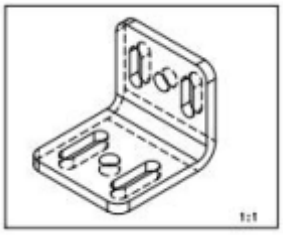
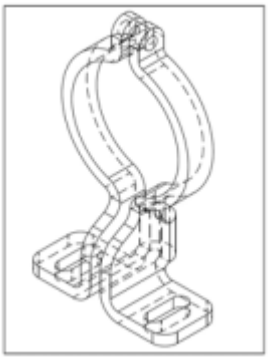
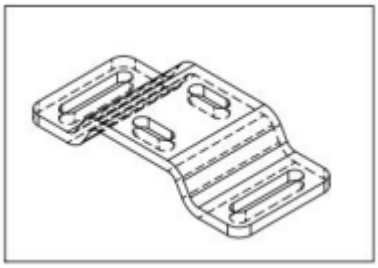
2.3 Main differences respect SE4-R

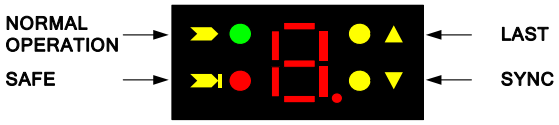
In this section we list the main differences between new SG BODY REFLECTOR and SE4-R with respect of mechanic/housing, installation/activation and use. Every function/spec not explicitly listed is unchanged respect SE4-R.
Moreover, electrical cabling aspects will be clarified in the following sections.

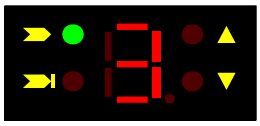
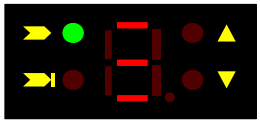
2.3.1 Housing and dimension

SG BODY REFLECTOR	SE4-R
+ Same profile for active and passive units: same height and same section (52x56 mm)	+ Different profile between active: different section (active: 35x40 mm, passive: 52x55 mm) and different height
+ 2 lateral grooves + 1 rear groove	+ 2 lateral grooves

2.3.2 Installation, configuration and activation

SG BODY REFLECTOR	SE4-R
+ 3 different types of fixing brackets : + "L" lateral; + TOP-BOTTOM Rotating; + REAR   	+ Unique "L" lateral SE style
+ FIXING BRACKET NOT AVAILABLE AS OUTFIT BUR SEPOARATELY ORDERABLE AS ACCESSORY	+ 'L' LATERAL AVAILABLE AS OUTFIT
+ Unshielded cables	+ Shielded cables
+ Cables max length : 70 mt	+ Cables max length : 50 mt
+ BASE VERSION: M12 8-poles + MUTING VERSION: M12 12-poles	+ M12 8-poles
+ PLUS FUNCTIONS : edged/triggered OVERRIDE	+ PLUS FUNCTIONS : Edged OVERRIDE
+ PLUS FUNCTIONS: Automatic RESTART after OVERRIDE	+ NOT PRESENT ON STANDARD MODELS

+ PLUS FUNCTIONS: External Muting Enable	+ NOT PRESENT ON STANDARD MODELS
+ MUTING LAMP : + LED Integrated + BULB or LED External 	+ MUTING LAMP : + LED Integrated
+ NO DEAD ZONE	+ DEAD ZONE
+ USER INTERFACE : 4 LED + 7-SEG DISPLAY 	+ USER INTERFACE : 4 LEDs

+ Alignment AID: 1 to 4 intermediate optics alignment level indication + topmost and bottommost LEDs 	+ Topmost and bottommost LEDs
+ Alignment AID: 1 to 3 runtime alignment level bars 	+ NOT PRESENT
+ Accessory Muting Arms – Finite product ordering codes available : 1. Single active arm; 2. Single passive arm; 3. “C” bracktes + 2 Front plates 4. L branch for single active muting arm 5. Y branch for double active muting arms	+ Accessory Muting Arms – Finite product ordering codes available : 1. Single active arm mounted on “C” bracket + ‘L’ branch; 2. Double active arm mounted on “C” bracket + ‘Y’ branch; 3. Single passive arm mounted on “C” bracket + ‘L’ branch; 4. Double passive arm mounted on “C” bracket + ‘Y’ branch;

2.3.3 Product use

SG BODY REFLECTOR	SE4-R
+ 2, 3, 4 beams models with controller height of 500, 800, 900 and 1200mm	+ Only 2 beams version
+ Operating distance : + 8 mt for 2,3 beams and 4 beams 1200mm controller height models; + 6,5 m for 4 beams 900mm controller height;	+ Operating distance : + 7,5 m 2 beams models;
+ 2 beams models : 500mm interaxis	+ 2 beams models : 500mm interaxis
+ 2 Versions : BASE and MUTING	+ ONLY Muting models

2.4 Commercial conditions

SG BODY REFLECTOR series maintains the same SE4-R conditions i.e. :

1. Active and passive units are available as separate ordering codes so sold separately;
2. Complete and pre-assembled 'L' and 'T' models are available for both active and passive unit as finite product ordering codes;
3. Accessory Muting arms to be separately ordered are available;
4. 'L' and 'T' active unit: 'Y' branch to be used to connect Muting arms to the light curtain is provided as outfit;
5. Active unit main cables : NOT PROVIDED AS OUTFIT;

3 SE4-R INSTALLATION REPLACEMENT WITH SG BODY REFLECTOR GUIDE

3.1 Preliminary Remarks

The following is a pure applicative section, we describe punctually how to replace a SE4-R installation with SG BODY REFLECTOR. Number and entity of changes depend on installation/application peculiarities.
For further and more detailed information please refer to DATALOGIC AUTOMATION :

- Mail : service.sensors@datalogic.com
- Phone : **+39 051/6765611**

The application cases we're going to analyze can be grouped from lower to higher complexity as follows:

- Simple passsive unit replacement;
- SE4-R installation realized **WITHOUT MUTING FUNCTION**: simple passive unit replacement or both active and passive units replacement;
- SE4-R installation realized **WITH MUTING FUNCTION BUT WITHOUT MUTING ARMS**: simple passive unit replacement or both active and passive units replacement;

- SE4-R installation realized **WITH MUTING FUNCTION AND MUTING ARMS**: simple passive unit replacement or both active and passive units replacement;

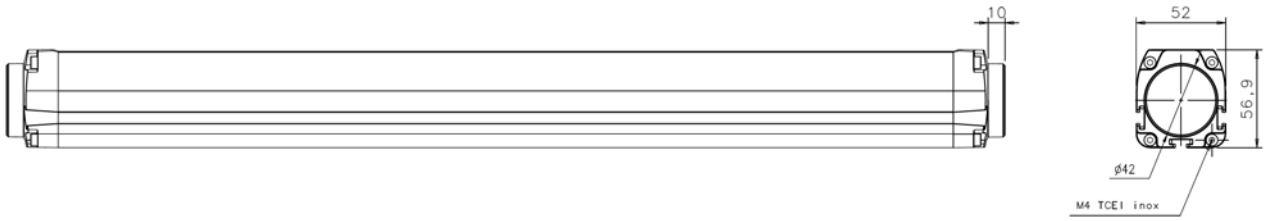
ATTENTION : many of the application cases describe in the following sections origin final **MIXED INSTALLATIONS** I.E. WITH ONE UNIT OF SE4-R AND ONE OF SG BODY REFLECTOR!! DATALOGIC AUTOMATION asked and obtained from **TUV conformity declaration according to Machinery Directive 2006/42/EC, IEC 61496-1 and all other relevant safety standards and guide-lines.**

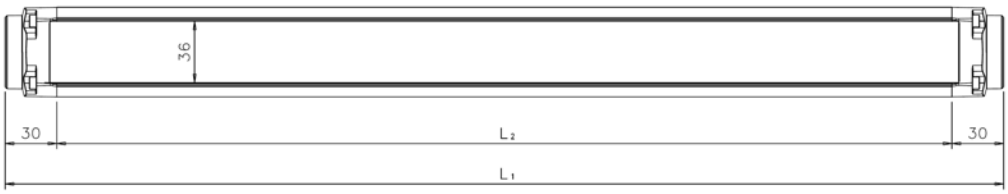
3.2 Simple passive unit replacement

In case of damaged passive unit we have to proceed with its simple replacement with the new one. First of all remember that SE4-R passive is available only in 2 beams versions with model SE4-RDB. Corresponding SG BODY REFLECTOR model is **SG4-RDB2 (957951100)**.

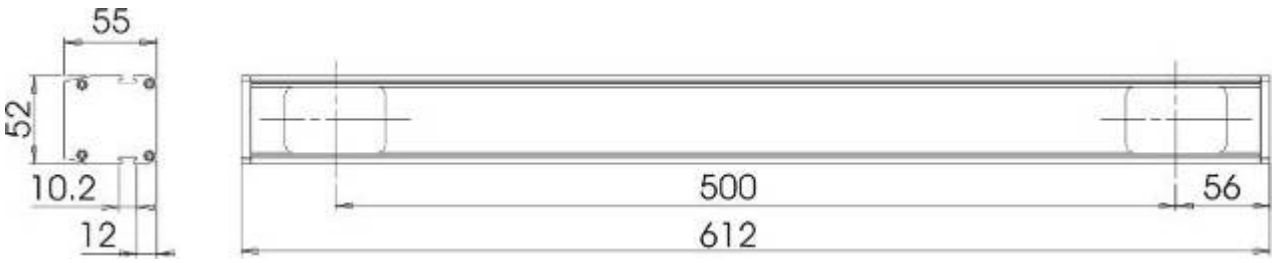
3.2.1 Mechanical mounting

SG4-RDB2 has different but COMPATIBLE dimensions respect SE4-RDB





Model	L1 [mm]	L2 [mm]
SG4-RDB2	580,5	520,5

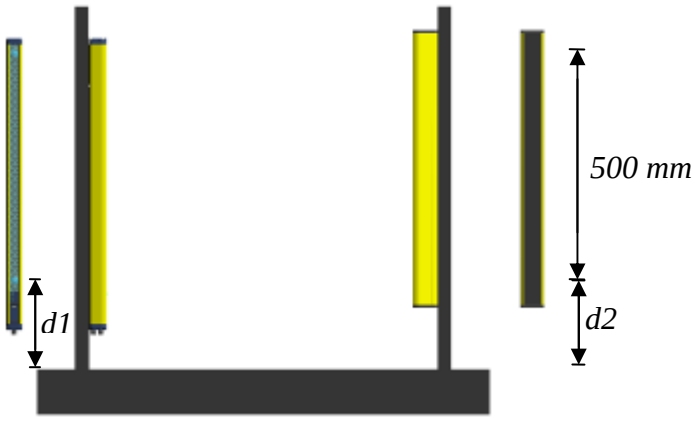


Modello
SE4-RDB

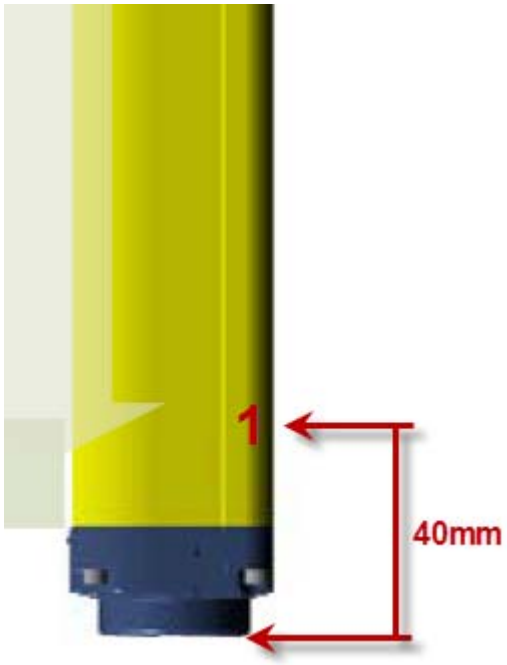
Following actions must be taken:

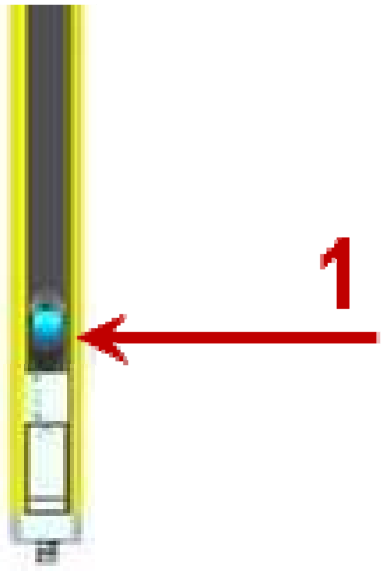
1. Width : it's the same so no impacts on replacement even in case the passive unit is mounted inside a protective self-constructed structure.
2. Depth : SG4-RDB2 is **1,9 mm deeper respect SE4-RDB**;
3. Length : **SE4-RDB IS LONGER THAN SG4-RDB2** so a certain attention must be taken in vertical positioning of the new passive unit. Remember that SE4-R active unit SE4-RA1-PP-W that you have in your installation has a different beam interaxis and DEAD ZONE. SE4-RDB presents and "ARROW" sticker that points to the centre of bottommost beam.

and so defines passive unit mounting and allows to align it with SE4-RA1 active unit corresponding optic.



Then, considering the 40 mm quote, shown in the figure below, between passive profile beginning and centre of bottommost internal mirror, we need to position point 1 in correspondence of SE4-RA1 bottommost optic centre..





PAY ATTENTION TO SG4-RDB2 PASSIVE UNIT ORIENTATION: IF IT'S MOUNTED UPSIDE-DOWN IT BECOMS IMPOSSIBLE TO ALIGN THE 2 UNITS. SO PAY ATTENTION TO **INSTALL IT WITH LATERAL AND REAR LASER MARKING DOWN**.

4. Fixing Brackets : SG BODY REFLECTOR is not provided with outfit brackets. Anyway, **it's possible to keep the existing SE4-R brackets that are fully compatible and fitting SG BODY REFLECTOR grooves.** Otherwise, accessory brackets can be ordered separately.

Ordering N°	Model	Description
95ASE1950	ST-K4STD-SG BODY BIG	SG BODY BIG STANDARD BRACKETS 4 PIECES KIT
95ASE1960	ST-K4ROT-SG BODY BIG	SG BODY BIG ROTATING BRACKETS 4 PIECES KIT
95ASE1970	ST-K4REAR-SG BODY BIG	SG BODY BIG REAR BRACKETS 4 PIECES KIT

5. Passive Muting arms (with Reflector) : this topic will be covered in section 3.4.

3.2.2 Alignment

Proceed following alignment procedure described in SE4-R user manual.

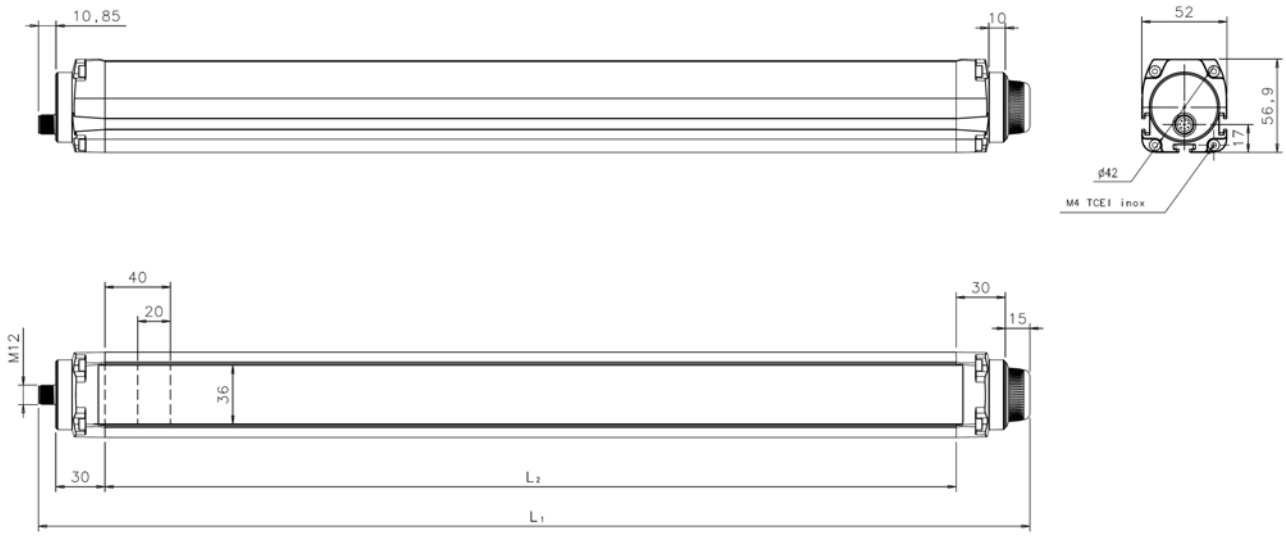
3.3 SE4-R installation realized WITHOUT MUTING FUNCTION: simple active unit replacement or both active and passive units replacement.

3.3.1 Simple active unit replacement

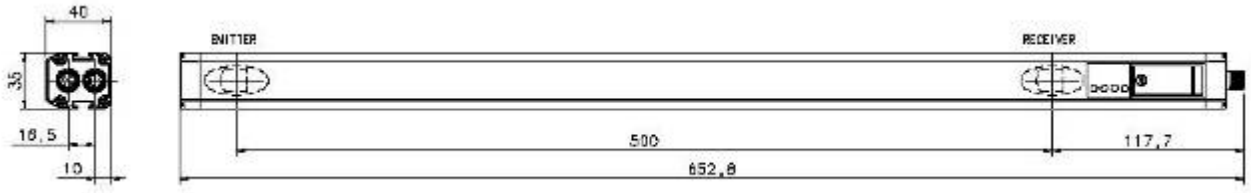
Original passive unit is SE4-RDB model whilst original active is SE4-RA1-PP-W model. Now, if the original replacement DOESN'T IMPLEMENT Muting function, **the new active unit will be BASE model SG4-RB2-050-OO-E**.

3.3.1.1 Mechanical mounting

First of all we have to pay attention to the different dimensions between SE4-RA1 and SG4-RB2



Model	L1 [mm]	L2 [mm]
SG4-RB2-050-OO-E	606,35	520,5



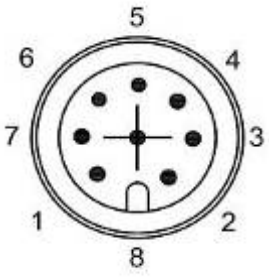
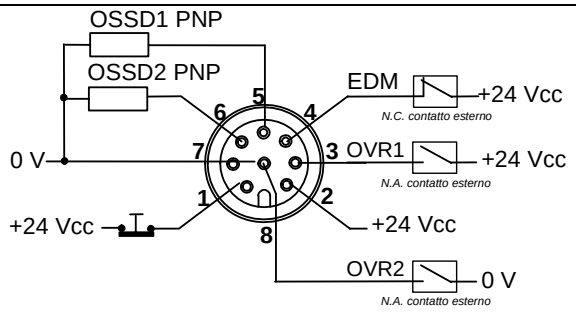
So, SG4-RB2 unit must be mounted being sure that the bottommost optic is positioned at the same quote (from reference point) of the corresponding optic of SE4-RA1.
From dimensional drawing above we can see that in SE4-RA1 that optic is 117,7 mm from connector, whilst in SG4-RB2 the corresponding quote is 50,85 mm. We deduce that with respect to SE4-RA1 original installation, SG4-RB2 unit needs to be raised up of 66,85 mm (referring to the connector).
Even though SG4-RB2 is shorter than SE4-RA1 should not create space or housing problems.
Pay attention to the fact that SG4-RB2 is larger than SE4-RA1 (52 mm against 35 mm) : during mounting we'll need to act on fixing brackets in order to adjust the mutual positions of active and passive unit to have their geometrical axis aligned one to another.

3.3.1.1.1 Fixing Brackets

SG BODY REFLECTOR is not provided with outfit brackets. Anyway, **it's possible to keep the existing SE4-R brackets that are fully compatible and fitting SG BODY REFLECTOR grooves.** Otherwise, accessory brackets can be ordered separately.

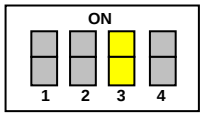
3.3.1.2 Electrical connections

As we're using SG4-RB2 BASE version, active units presents a single M12 8-poles, whilst SE4-RA1 has a main M12 8-poles plus a secondary M12 5-poles for Muting. M12 5-poles won't be discussed because this application is WITHOUT MUTING. For that reason we can maintain the existing cable. Remember simply that SG BODY REFLECTOR requires UNSHIELDED CABLES, whilst SE4-R requires SHIELDED ones : **no problems will occur maintaining the existing shielded cables.**
Connections are different :

SG BODY REFLECTOR	***SE4-R***
	
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 = FUNCTIONAL EARTH	1 = white = TEST/START 2 = brown = +24 Vcc 3 = green = OVERRIDE1 4 = yellow = EDM 5 = grey = OSSD1 6 = pink = OSSD2 7 = blue = 0 V 8 = red = OVERRIDE2

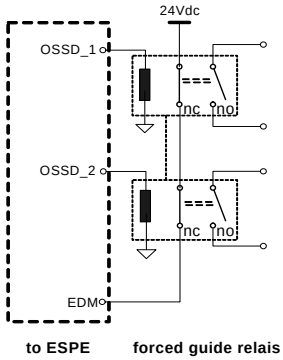
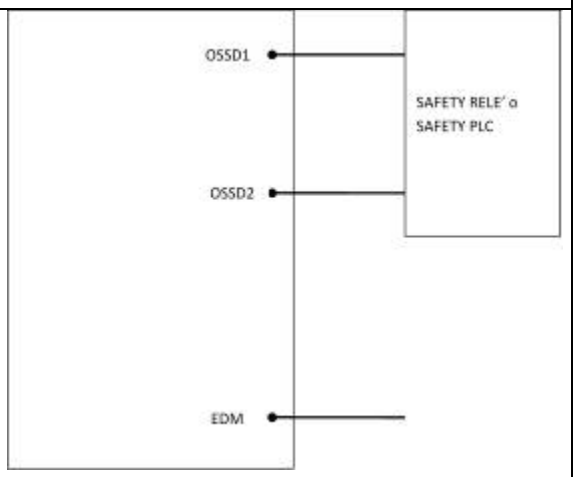
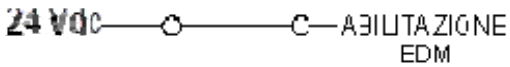
According to the table above, connections that must be modified inside the cabin are the followings :

1. PIN 3 : not used in the original installation (SE4-R WITHOUT MUTING APPLICATION), whilst now it must be used for EDM eanbling7disabling. In SE4-R EDM enabling is done by DIP-SWITCH 3 :

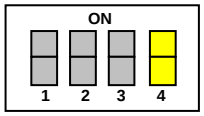


dip-sw	Function	ON	OFF
1	Muting Time-Out	10 min.	∞
2	Muting	T Config (4 beams)	L Config (2 beams)
3	EDM	ENABLED	DISABLED
4	RESTART	Automatic	Manual

Now we have to proceed through PIN 3. Following the corresponding connections :

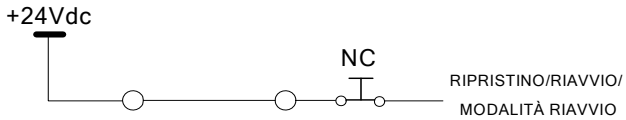
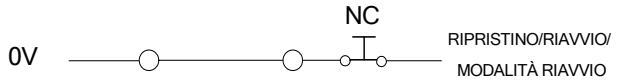
Line	*Behaviour*	*Connection lay-out*
EDM	(EDM ENABLE: active)	
EDM ENABLING	EDM ENABLE:	
EDM	(EDM ENABLE: non active)	
EDM ENABLING	EDM DISABLE	

2. PIN 1 : in the existing installation is TEST/RESTART. This function is maintained, EXCEPT FROM TEST FUNCTION THAT'S NOT IMPLEMENTED ANYMORE. Cabling changes: in SG4-RB2 this is MANUAL/AUTOMATIC RESTART MODE SELECTION whilst in SE4-RA1 is realized through DIP 4 (see below)



dip-sw	Function	ON	OFF
1	Muting Time-Out	10 min.	∞
2	Muting	T Config (4 beams)	L Config (2 beams)
3	EDM	ENABLED	DISABLED
4	RESTART	Automatic	Manual

Now, depending on the RESTART MODE required, the following cablings must be done

Line	*Behaviour*	*Connection lay-out*
RESET/RESTART/RESTART MODE	AUTOMATIC	
RESET/RESTART/RESTART MODE	MANUAL	

3. PIN 8 : in SG4-RB2 is FUNCTIONAL EARTH so it must connected inside machine cabin. Differently, in SE4-RA1 EARTH connection was performed through dedicate nut and screw inserted inside one of the lateral grooves.
   This regard, SE4-R active unit earth connection type effects the electrical protection class of the device we intend to assure :

** Electricla Protection	Class 1	Class 3
Protective Earth	Compulsory	Not admitted
Earth Connection Symbol	Compulsory	Not admitted
Low Voltage Protection with protective Separation (SELV or PELV)	Recommended	Compulsory

Instead of SG Body must be connected as CLASS III equipment (SELV/PELV power supply),as shown in the table below.

Electrical Protection	Connection lay-out	NOTE
Class III	SELV / PELV	---

User can decide if connect FUNCTIONAL EARTH wire or leave it floating.

3.3.1.3 Product Configuration

SG4-RB2 BASE version is not equipped with DIP SWITCHES. Available integrated functions, like EDM e MAN/AUTO RESTART, are configurable through dedicate wires on M12 8-poles connector. Please refer to section 3.3.1.2.

3.3.1.4 Alignment

Please follow alignment procedure described on SG4 BODY REFELCTOR user manual, taking advantage of the presence of 7-seg display on SG4-RB2 active unit.

3.3.2 Replacement of both active and passive unit

In this case we start from the following existing codes

- Active : SE4-RA1-PP-W;
- Passive : SE4-RDB.

Supposed to be replaced by respectively

- Active : SG4-RB2-050-OO-W;
- Passive : SG4-RDB2.

As this is a NON MUTING APPLICATION the procedures to replace both units are respectively described in section 3.3.1 for active unit and section 3.2 for passive one.

3.4 SE4-R installation realized WITH MUTING FUNCTION BUT WITHOUT MUTING ARMS: simple passive unit replacement or both active and active units replacement.

3.4.1 Simple active unit replacement

Original passive is SE4-RDB, active is SE4-RA1-PP-W. Now, if the existing installation is with MUTING function, **new active unit will have to be REFLECTOR MUTING SG4-RB2-050-OO-W model**. Moreover, as we don't have muting arms i.e. it's not a L' or 'T' installation, procedure is much easier.

3.4.1.1 Mechanical mounting and fixing brackets

Operations to be followed are described in section 3.3.1.1 e 3.3.1.1.1.

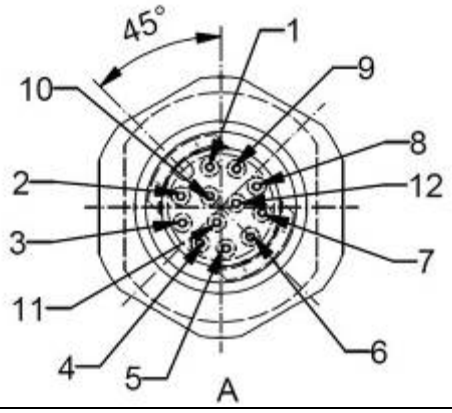
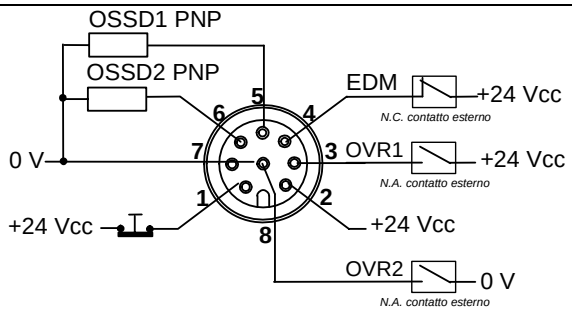
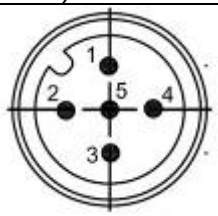
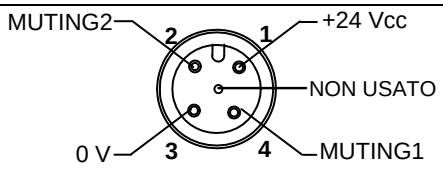
3.4.1.2 Electrical connections

First of all we have to keep in consideration that SG4-RDB2 "Muting" has a M12 12-poles connector as main connector; so we have to distinguish 2 cases :

1. We would like to maintain the original "SE4-R configuration",using only the common functions;
2. We intend to realize a full muting application using all the functions available in SG BODY REFLECTOR "MUTING";

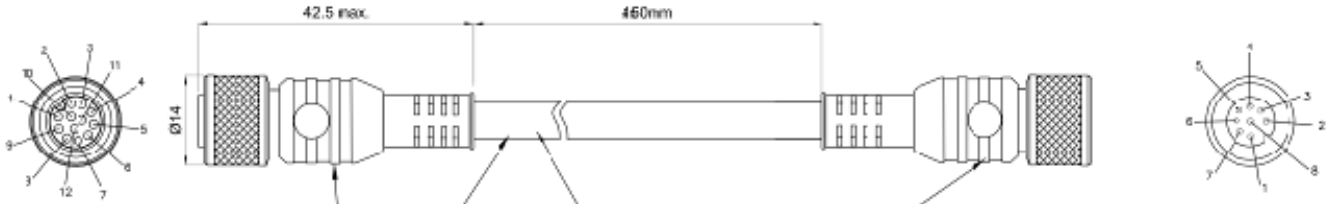
3.4.1.2.1 SE4-R "Muting" configuration to be maintained

SE4-R active unit has M12 8-poles plus M12 5-poles whilst SG BODY REFLECTOR has M12 12-poles plus M12 5-poles.

SG BODY REFLECTOR	***SE4-R***
	
M12 12-poles: 1. 24V (brown) 2. 0V (blue) 3. RESET/RESTART/RESTART MODE (white) 4. OVERRIDE 1 (green) 5. OSSD 2 (pink) 6. EDM (yellow) 7. MUTING ENABLE(black) 8. OSSD 1 (grey) 9. OVERRIDE 2 (red) 10. LAMP OUTPUT (purple) 11. OVERRIDE STATUS (grey-pink) 12. EARTH (red-blue)	M12 8-poles: 1 = white = TEST/START 2 = brown = +24 Vcc 3 = green = OVERRIDE1 4 = yellow = EDM 5 = grey = OSSD1 6 = pink = OSSD2 7 = blue = 0 V 8 = red = OVERRIDE2
	
M12 5-poles: 1. 24V (brown) 2. MUTING 2 (white) 3. 0V (blue) 4. MUTING 1 (black) 5. NOT USED (grey)	M12 5-poles: 1 = brown = +24 Vdc 2 = white = MUTING2 3 = blue = 0 V 4 = black = MUTING1 5 = grey = NON USATO

As shown in the table above secondary M12 5-poles connector is the same so Muting connections remain the same.
Main connector is different, so in order to maintain the SE4-R functioning and not to change the existing cable we need to apply an adaptor branch between SG4-RB2 M12 12-poles connector and M12 8-poles connector of the existing cable.
This adaptor CONNECTS TOGETHER THE CORRESPONDING WIRES ACCORDING TO THE TABLE BELOW.

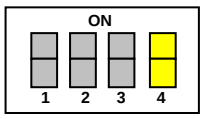
Model	Ordering Code
CS-R1-40-B-0015	95ASE2020



CN1 M12 12-poles Female	*Wire Colour*	*CN2 M12 8-poles Male*
1	BROWN	2
2	BLUE	7
3	WHITE	1
4	GREEN	3
5	PINK	6
6	YELLOW	4
7		
8	GREY	5
9	RED	8
10		
11		
12		

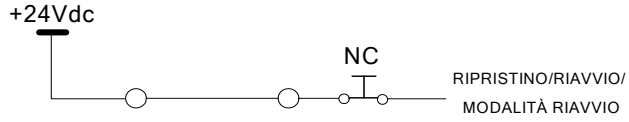
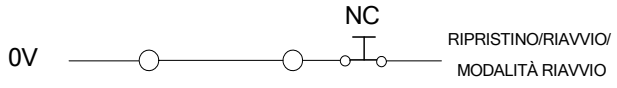
The following connections must be changed :

1. PIN 1 (8-POLES) : : in the existing installation is TEST/RESTART. This function is maintained, EXCEPT FROM TEST FUNCTION THAT'S NOT IMPLEMENTED ANYMORE. Cabling changes: in SG4-RB2 this is MANUAL/AUTOMATIC RESTART MODE SELECTION whilst in SE4-RA1 is realized through DIP 4 (see below)



dip-sw	Function	ON	OFF
1	Muting Time-Out	10 min.	∞
2	Muting	T Config (4 beams)	L Config (2 beams)
3	EDM	ENABLED	DISABLED
4	RESTART	Automatic	Manual

Now, depending on the RESTART MODE required, the following cablings must be done

Line	*Behaviour*	*Connection lay-out*
RESET/RESTART/RESTART MODE	AUTOMATIC	
RESET/RESTART/RESTART MODE	MANUAL	

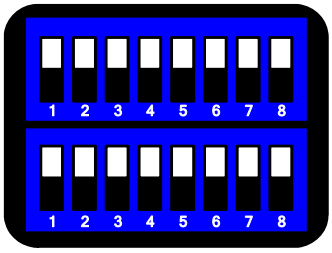
3.4.1.2.2 Use SG4-RB2 with its full MUTING potential

In this case we do have to replace M12 8-poles existing cables with a new M12 12-poles and follow the connections instructions reported on SG4-RB2 user manual.

3.4.1.3 Product configuration

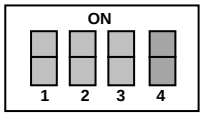
SG4-RB2 “Muting” has configuration DIP SWITCHES like SE4-R, just some more (8 vs 4). Now, if we intend to reproduce same SE4-R original configuration we need to adjust just some of them whilst the other will remain unchanged :

SG BODY REFLECTOR



	ON	OFF
1: Time-out Muting	10 min	∞
2: T/L Muting	T	L
3: Muting Filter	DISABLED	ENABLED
4: Override RESTART	MANUAL	AUTOMATIC
5: Override MODE	EDGED	TRIGGERED
6: EDM ENABLE	EDM ON	EDM OFF
7: not used	-	-
8: not used	-	-

SE4-R



dip-sw	Function	ON	OFF
1	Muting Time-Out	10 min.	∞
2	Muting	T Config (4 beams)	L Config (2 beams)
3	EDM	ENABLED	DISABLED
4	RESTART	Automatic	Manual

So, to reproduce same SE4-R original configuration we need to proceed as follows :

1. Be sure to reproduce the same configuration of SE4-R 4 DIP on the correspondent SG4-RB2 ones, following this logic

SE4-RA1 DIP	***Function***	***SG4-RB2 DIP***
1	Muting Time-Out	1
2	Muting	2
3	EDM	6
4	RESTART	Refer to section 3.4.1.2.1)

2. SG4-RB2 Remaining DIP are referred to additional or non selectable functions in SE4-R. For that reason to reproduce a SE4-R set-up they must be configured as follows :

SE4-RA1 DIP	***Function***	***CONFIGURATION***
3	Muting Filter	ON : Disabled
4	Override Restart	ON : Manual
5	Override Mode	ON : Edged
7	Not used	
8	Not used	

Otherwise the aforementioned functions and corresponding DIPs could be activated, aware that some more intervention could be necessary

3.4.1.4 Alignment

Please follow alignment procedure described on SG4 BODY REFELCTOR user manual, taking advantage of the presence of 7-seg display on SG4-RB2 active unit.

3.4.2 Replacement of both active and passive unit

In this case we start from the following existing codes

- Active : SE4-RA1-PP-W;
- Passive : SE4-RDB.

Supposed to be replaced by respectively

- Active : SG4-RB2-050-OO-W;
- Passive : SG4-RDB2.

As it's a MUTING APPLICATION WITHOUT MUTING ARMS we have to refer to section 3.4.1 for active unit replacement and section 3.2 for passive unit replacement.

3.5 SE4-R installation realized WITH MUTING FUNCTION AND MUTING ARMS: simple active unit replacement or both active and passive units replacement.

3.5.1 Simple active unit replacement

Original passive unit is SE4-RDB model and active one is SE4-RA1-PP-W model. Now, if original installation is WITH MUTING FUNCTION, **new active unit must be REFLECTOR MUTING**. Furthermore, as the installation foresee MUTING ARMS i.e. it's a 'L' or a 'T' installation, the replacement procedure has to consider also this aspect. First of all, **WE DO NOT NEED TO REPLACE MUTING ARMS : WE CAN MAINTAIN THE EXISTING ONES**. Due that we need to order **SG4-RB2-050-OO-W.** Of course, there's no contraindications in replacement of the entire active unit with muting arms; in this case models are:

- SG4-RB2L-050-OO-W;
- SG4-RB2T-050-OO-W.

This section will treat just the case of simple active barrier replacement because the entire replacement (barrier + arms) has to be considered a complete new installation, exhaustively described in SG BODY REFLECTOR user manual.

3.5.1.1 Mechanical mounting and fixing brackets

For what concerns safety light curtain refer to section 3.4.1.1. Moreover, here we have to consider Muting arms mounting. SE4-RA1 active unit is narrower than active unit SG4-RB2 so system made by original muting arms together with "C" central brackets can't be used as it is.
We must replace "C" central bracket and corresponding front fixing plates :

It's sufficient to order the following accessory :

Model	Ordering Code
SG-CB-B	95ASE1920

And replace them. Muting arms alignment will have to be done during re-alignment of the entire system.

3.5.1.2 Electrical connections

Refer to section 3.4.1.2. Of course, secondary M12 5-poles connector has to be connected to single or double Muting arm in accord with this is a 'L' or a 'T' configuration by means of the specific branch cable already present in the application.

3.5.1.3 Product configuration

Refer to section 3.4.1.3.

3.5.1.4 Alignment

Please follow alignment procedure described on SG4 BODY REFELCTOR user manual, taking advantage of the presence of 7-seg display on SG4-RB2 active unit.
Of course it's necessary to align also Muting arms, following the corresponding procedure described in the dedicate section of SG4 BODY REFELCTOR user manual as well..

3.5.2 Replacement of both active and passive unit

Refer to section 3.5.1 for active unit replacement whilst refer to section 3.2 fo passive unit replacement taking into consideration the fact that we have to adapt passive Muting arms..
As well as active Muting arms, passive Muting arms can be maintained together with "C" central bracket. We have just to change the front fixing plate by ordering the following accessory kit :

Model	Ordering Code
SG-MFB	95ASE2030