

SH-FSD

INSTRUCTION MANUAL



DATASENSING

Floor Support for Devices

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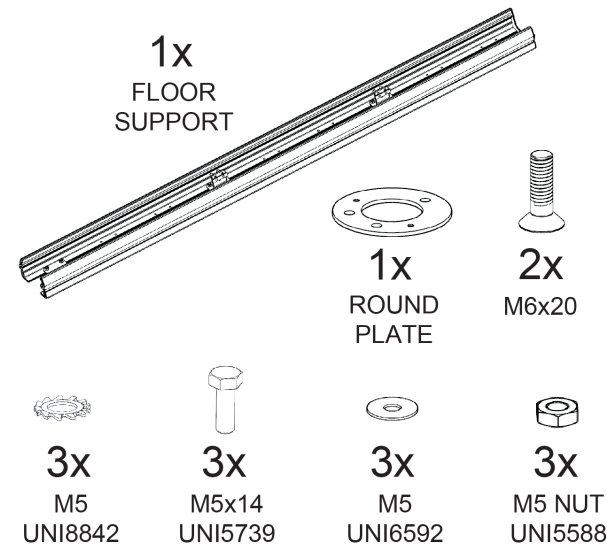
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PACKAGE CONTENTS



GENERAL INFORMATION

SH-FSD is a support made of two aluminum extrusions, securely connected by a base and connecting plates in steel, onto which safety light curtains can be mounted at the desired height and orientation.

Characteristics

- Aluminum extrusions painted in yellow RAL 1003;
- Base and connecting plates in electroplated zinc-coated steel;
- Compatible with SH4, SG2, SG BODY COMPACT, SG4 EXTENDED safety light curtains;
- External grooves for the installation of SG-M series muting accessories or integrated muting arms for SG or SH4;
- Possibility to add two different optional bases; SH-FS-P and SH-FS-PS.

Typical applications

The typical application involves positioning safety light curtains on a floor to protect access points to hazardous areas, either directly (emitter and receiver facing each other), or in combination with similar supports equipped with mirrors (SH-FSM) that allow horizontal reflection of the light curtain beams at a right angle.

For uneven floors, the optional SH-FS-P base increases the contact surface, enables vertical adjustment, and allows 360° rotation. For added shock absorption or vibration damping, the SH-FS-PS base includes adjustable springs.

The support's structure allows for easy cable routing and thorough wash-down operations.



CAUTION: When installing safety light curtains, compliance with EN ISO 13855 - Safety of machinery — Positioning of safeguards with respect to the approach of the human body - is required.

INSTALLATION



NOTE: For Safety Light Curtain alignment procedure, see the Product Reference Guide of each specific model.

Mechanical Mounting

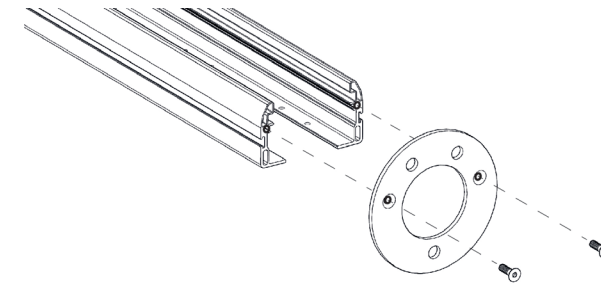
Safety light curtains can be easily fixed on the SH-FSD using the brackets provided with them. Some additional fixing plates are available as accessories to allow some adjustments:

- with SH-FS-P the inclination can be adjusted by means of three dowels and the angular position can be adjusted through 3 rough adjustment slots and 3 fine adjustments slots.
- With SH-FS-PS a double plate with compensation springs are used in order to compensate the effects of uneven floors, vibrations and collisions.

Installation Steps

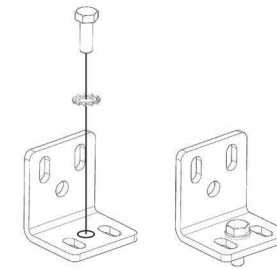
STEP 1

Fix the round plate to the floor support using the M6x20 screws:



STEP 2

In order to mount the angled brackets to the Safety Light Curtain, it is first necessary to insert the lock washer (M5 UNI8842) and screw (M5x14 UNI5739) provided inside the angled brackets as illustrated here:

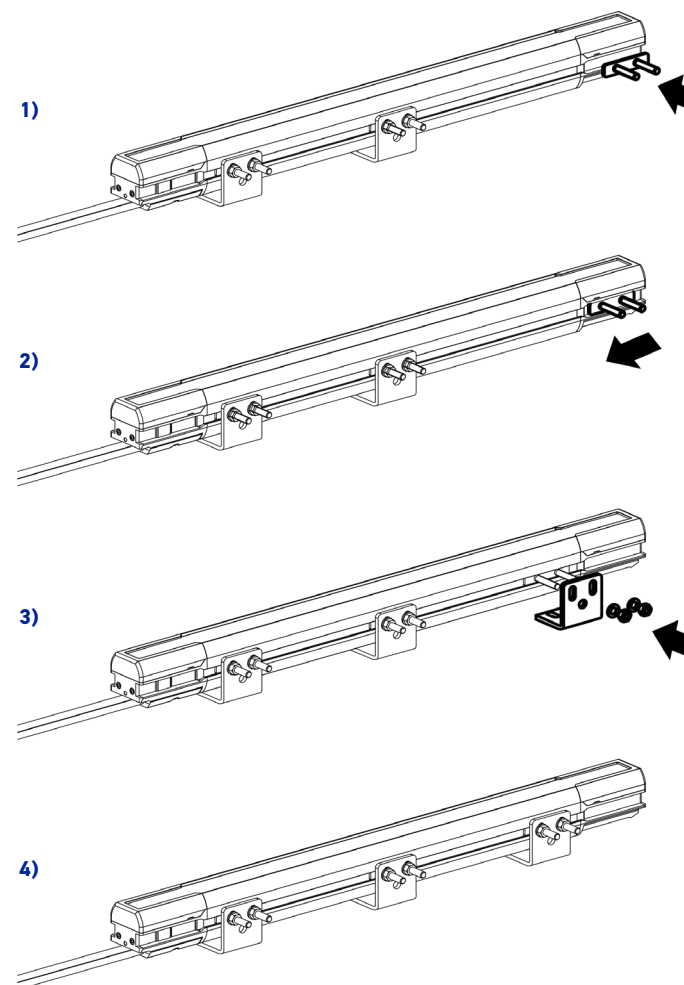


STEP 3

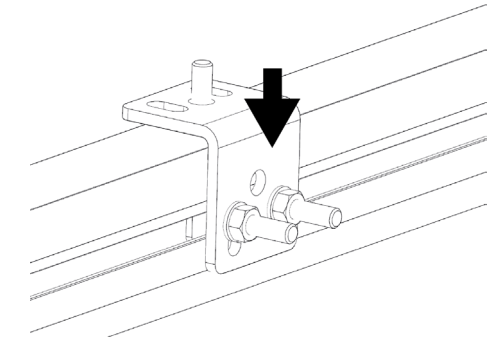
To mount the angled brackets, place the threaded pins metallic insert into the dedicated side seat of the safety light curtain (1); slide the insert towards the metallic drawn profile groove (2). Fix the bracket against the profile by tightening (torque 2.5 Nm) the M5 hexagonal nuts (3-4). It's possible to slide the bracket group along their dedicated rail and fix it once again just working on the above-mentioned nuts.



NOTE: The distance between the angled fixing brackets should follow the pattern described in the attached sheet.



NOTE: Attach all the angled fixing brackets as close to the safety light curtain as possible, as shown in the figure below.

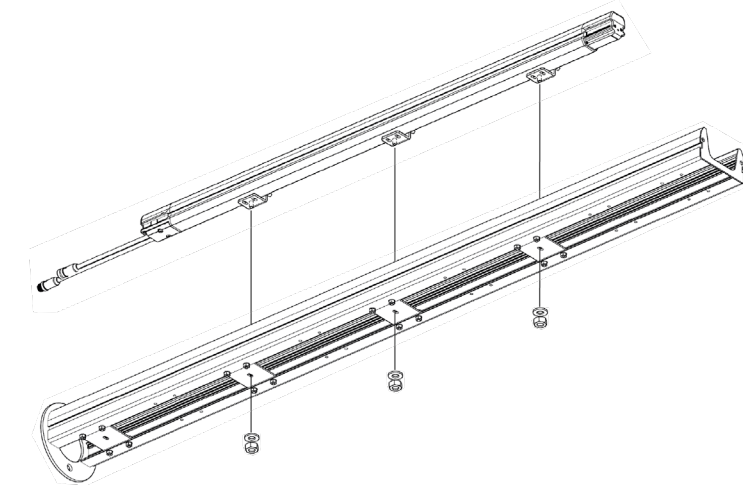


STEP 4

Insert the Safety Light Curtain into the SH-FSD as shown below: the screws of the angled brackets, shall be inserted inside the plates on the stand. Fix the Safety Light Curtain to the SH-FSD by tightening (torque 2.5 Nm) the M5 UNI5588 hexagonal nuts with washers M5 UNI6592 provided.

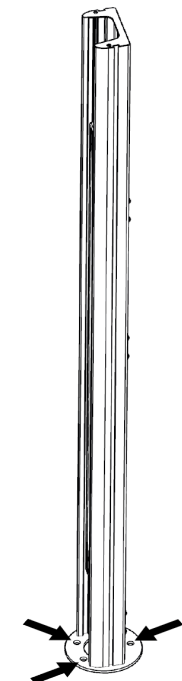


NOTE: The distance between the angled fixing brackets should follow the pattern described in the attached sheet.



STEP 5

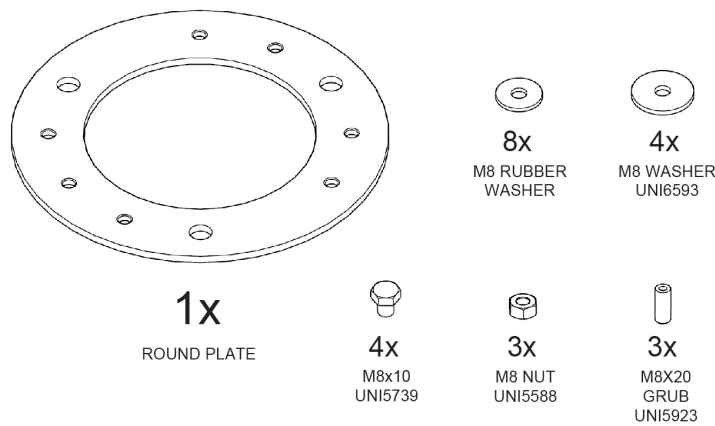
Fix the SH-FSD to the floor using the three holes (M10) on the base.



SH-FS-P ADJUSTABLE PLATE

With SH-FS-P the inclination can be adjusted by means of three dowels and the angular position can be adjusted through 3 rough adjustment slots and 3 fine adjustments slots.

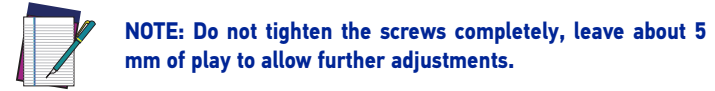
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INSTALLATION STEPS

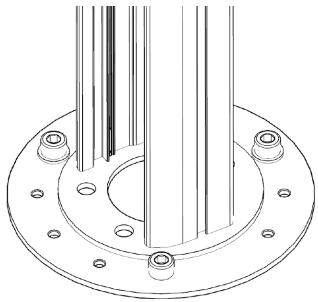
STEP 1

Place the SH-FS-P to the floor using three holes on the base and M10 screws with washers (not provided).



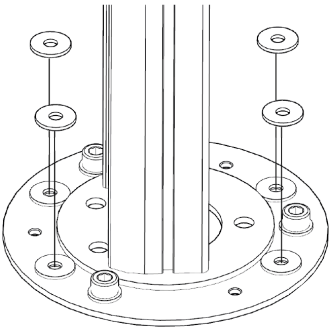
STEP 2

Place the SH-FSD with Safety Light Curtain on the SH-FS-P:



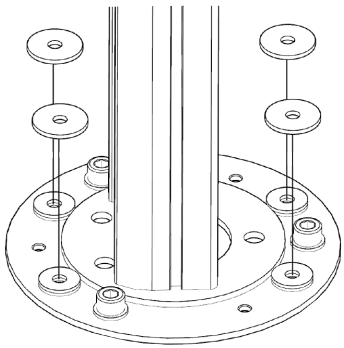
STEP 3

Place four rubber washers pairs on the holes as shown in the figure:



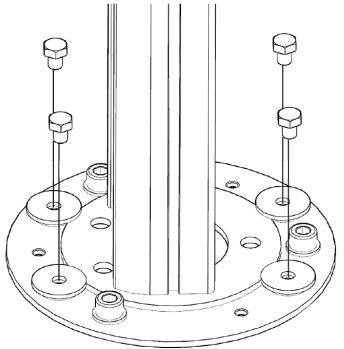
STEP 4

Place the four special washers on the rubber washers as shown in the figure:



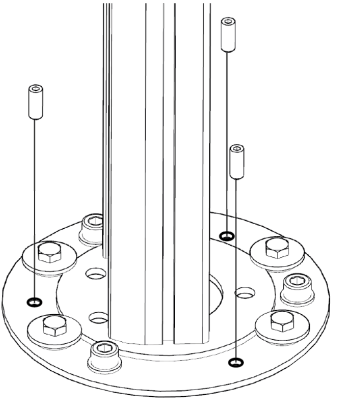
STEP 5

Place four M8 screws on the four special washer. Do not tighten the screws completely, leave some play to allow further adjustments.



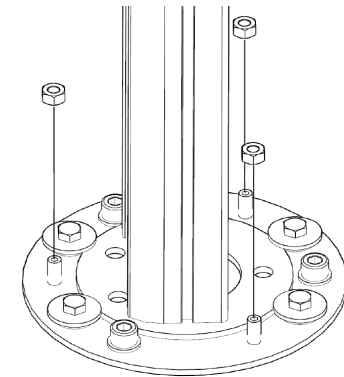
STEP 6

Insert the three grub screws into the holes as shown in the figure:



STEP 7

Insert the three nuts on the grub screws. Do not tighten the screws completely:



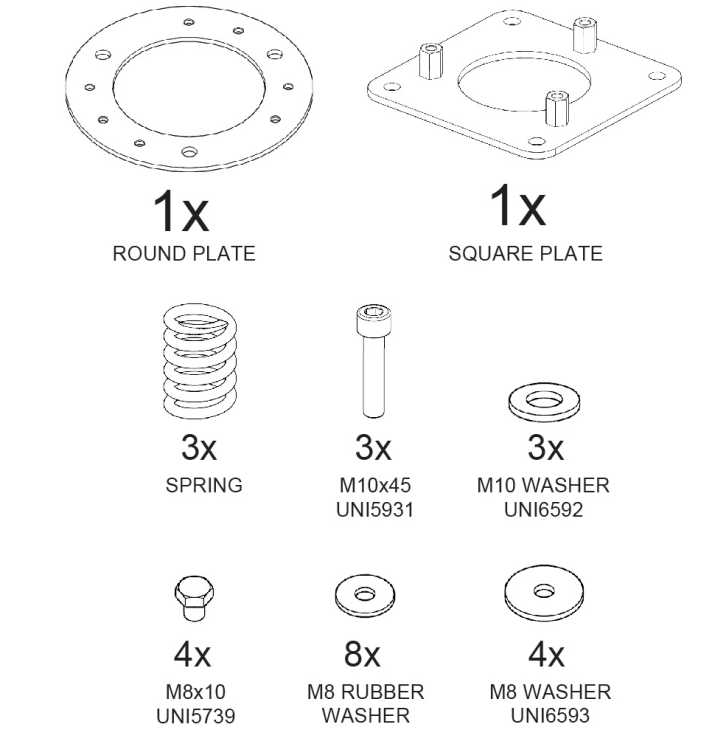
Adjusting the vertical axis and the angular position of the plates

Adjustment on the vertical axis is made by acting on the grubs. Once the desired inclination is obtained, tighten the nuts (refer to step 7). The angular position is achieved by simply rotating the stand. Once the position desired is reached, tighten the four screws (refer to step 5). When angular position and inclination are set, it is possible to fix the SH-FSD with SH-FS-P to the floor by tightenng the three screws (refer to step 1).

SH-FS-PS ADJUSTABLE PLATE WITH SPRINGS

SH-FS-PS provides an extra plate, to compensate for the effects of collisions, vibrations and uneven floor surfaces for the installation of a double plate with compensation springs.

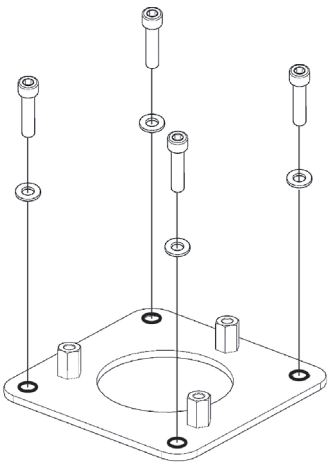
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INSTALLATION STEPS

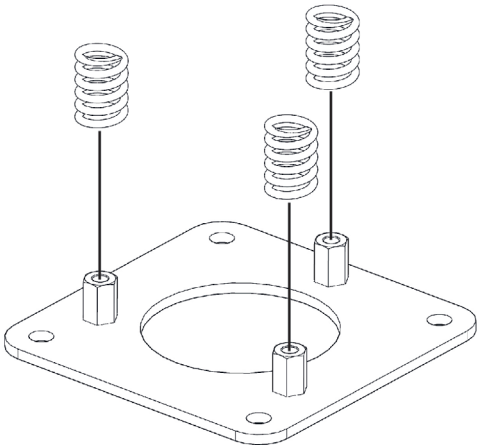
STEP 1

Fix the square plate to the floor using the three holes on the base and M12 screws with washers (not provided):



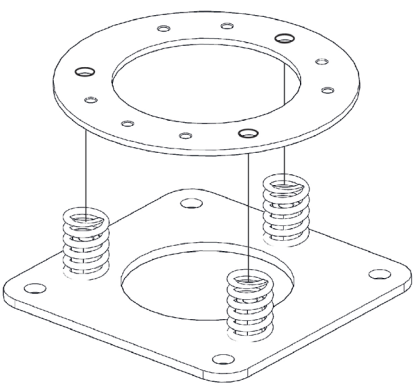
STEP 2

Place the three Springs on the Hex Spacers:



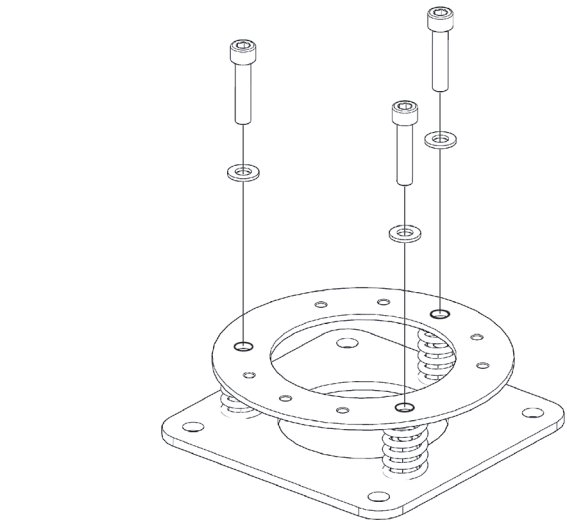
STEP 3

Place the round bracket on the springs by centering the mounting holes as in the figure:



STEP 4

Fix the round bracket using the M5 screws with washers.



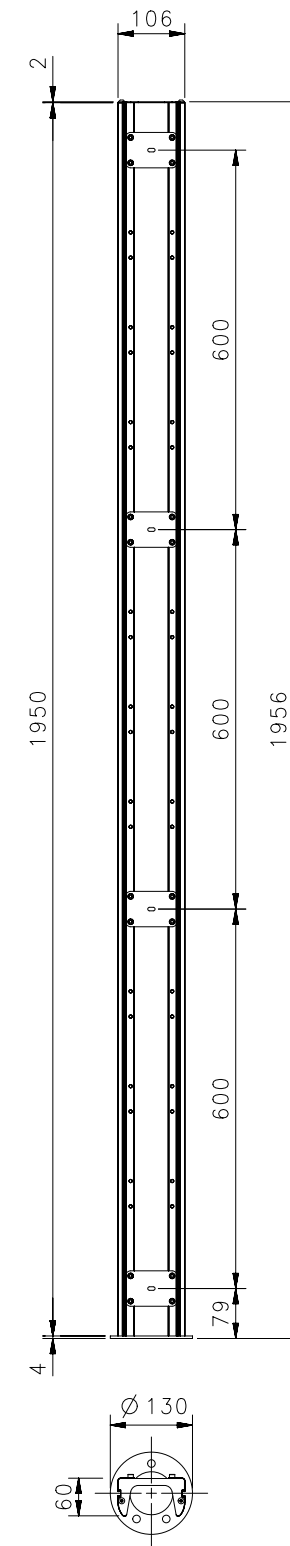
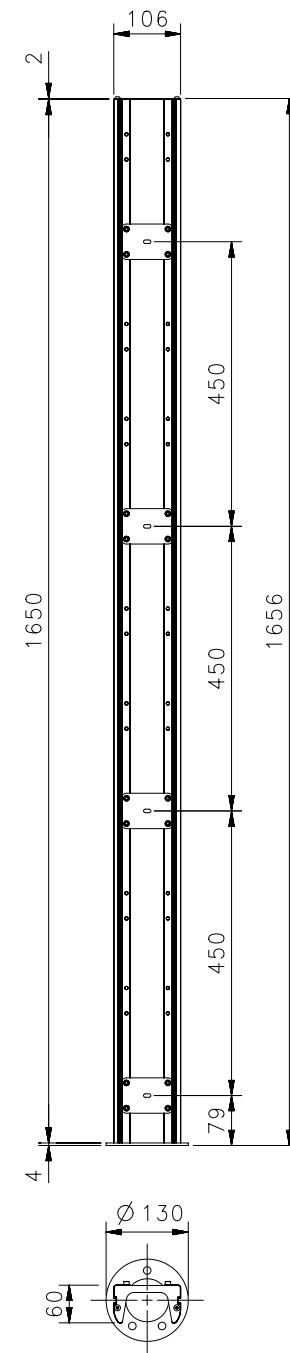
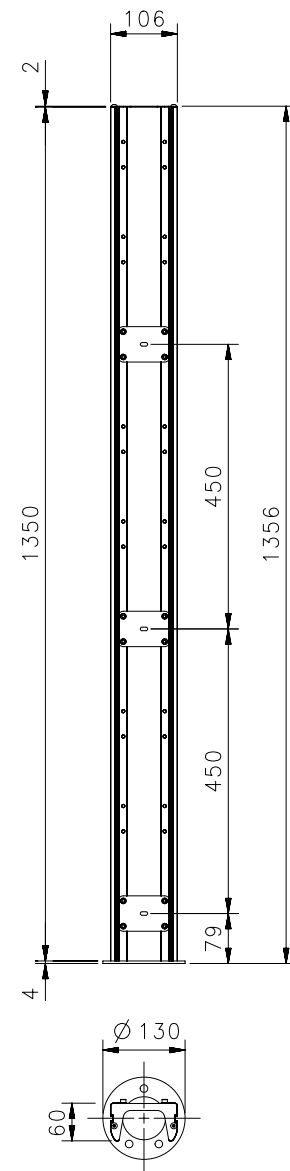
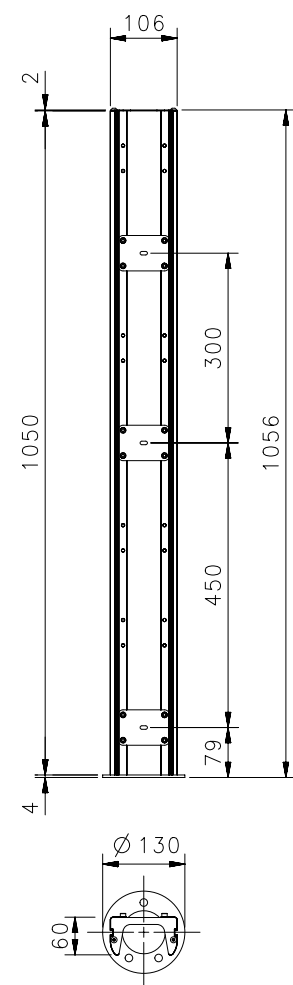
STEP 5

Follow the mounting procedure of the SH-FS-P to fix the SH-FSD with Safety Light Curtain.

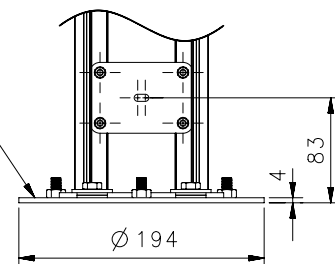
Adjusting the vertical axis and the angular position of the plates

Adjustment on the vertical axis is made by acting on the grubs. Once the desired inclination is obtained, tighten the the nuts. The angular position is achieved by simply rotating the stand. Once the position desired is reached, tighten the four screws.

ORDER INFORMATION		
Part number	Model	Description
95ASE0056	SH-FSD-900	SH Floor support device 900 mm
95ASE0057	SH-FSD-1200	SH Floor support device 1200 mm
95ASE0058	SH-FSD-1500	SH Floor support device 1500 mm
95ASE0059	SH-FSD-1800	SH Floor support device 1800 mm
95ASE0060	SH-FS-P	SH Floor support 360° adjusting plate
95ASE0061	SH-FS-PS	SH Floor support 360° adjusting plate with springs



MOUNTED WITH SH-FS-P
SUPPORT BASE SIMPLE
278232600
SH-FS-P



MOUNTED WITH SH-FS-PS
PLATE FOR SPRINGS
278241900
SH-FS-PS

