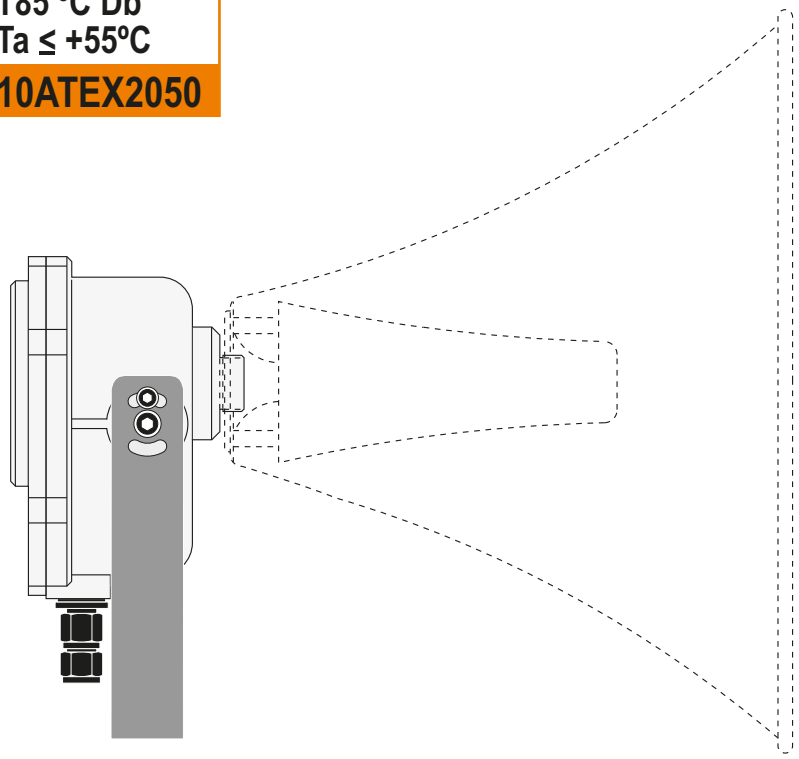
SA-30

EXPLOSION PROOF LOUDSPEAKER

II 2GD
Ex d IIB T3 Gb
Ex t IIIC T85 ºC Db
-20 ºC ≤ Ta ≤ +55ºC

Certificate: **LOM 10ATEX2050**

INSTRUCTIONS MANUAL



WARNING

1. Safety rules according to the legal requirements and standards in each country should be taken into consideration during the installation of the substation.

2. As a common rule, power supply connections should be limited to hooking the P.A. system, when all its explosion proof loudspeakers are properly connected and all its enclosures closed.

3. When the P.A. system is not powered during an installation or maintenance process, necessary precautions should be taken to avoid confusions and an accidental starting up of the unit.

4. The explosion proof SA-30 is classified as:

II 2GD
Ex d IIB T3 Gb
Ex t IIIC T85 ºC Db
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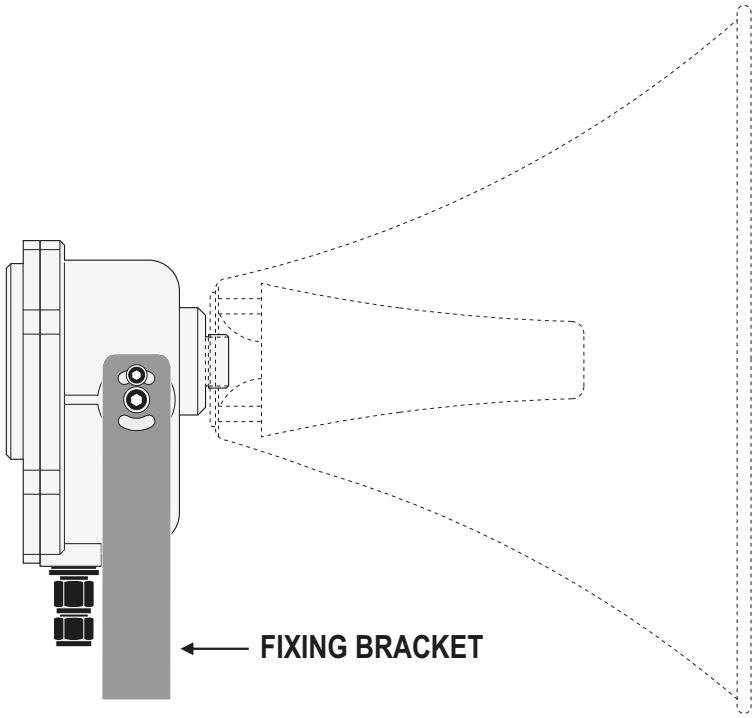
Surface temperature mark “T85ºC” is applicable for areas with combustible dusts but without gaz.

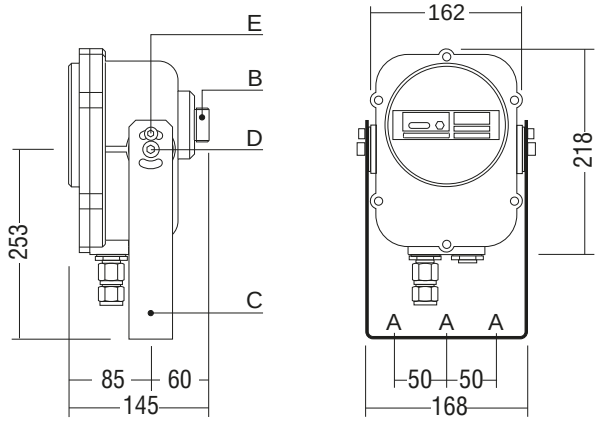
Make sure it is appropriated to be used with the group of gases as well as in the zone where it will be installed.

CONTENTS

1.- INSTALLATION

1.1- Fix the explosion proof loudspeaker SA-30 by means of its braket.





A = 3 ANCHORING DRILLS
(∅11 mm.)

B = HORN CONNECTING THREAD
RW 1" 3/8" (18 hilos)

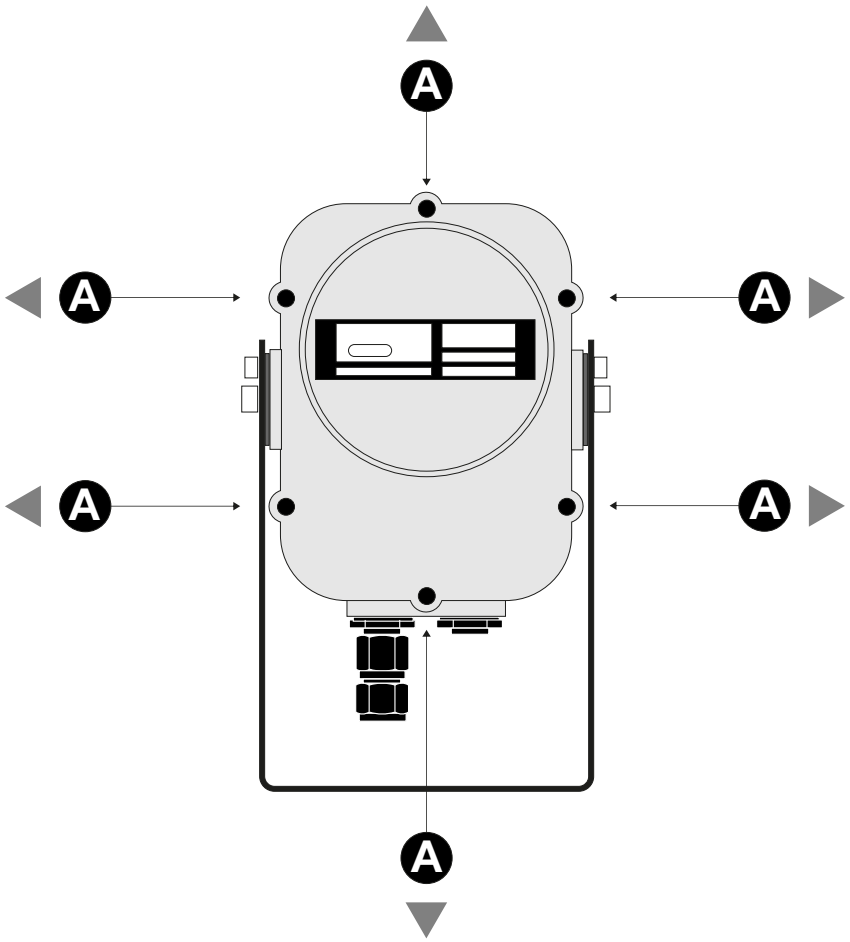
C = FIXING BRACKET

D = VERTICAL DIRECTION SCREW

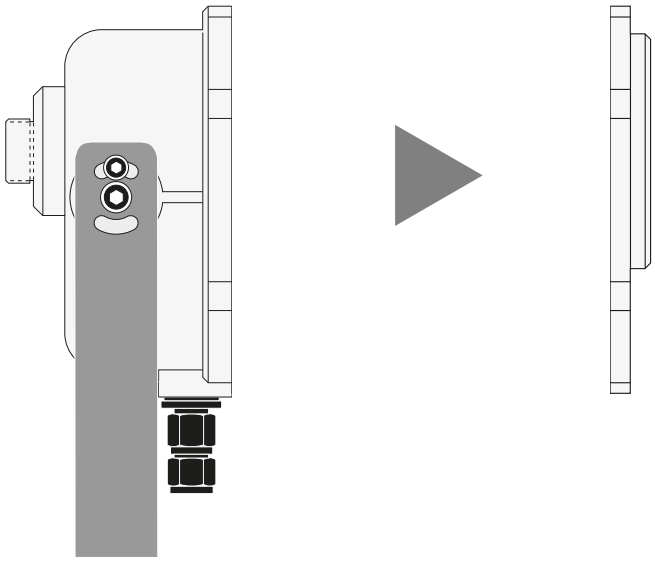
E = FIXING SCREW

LENGTHS IN MILLIMETERS
STAINLESS STEEL SCREW

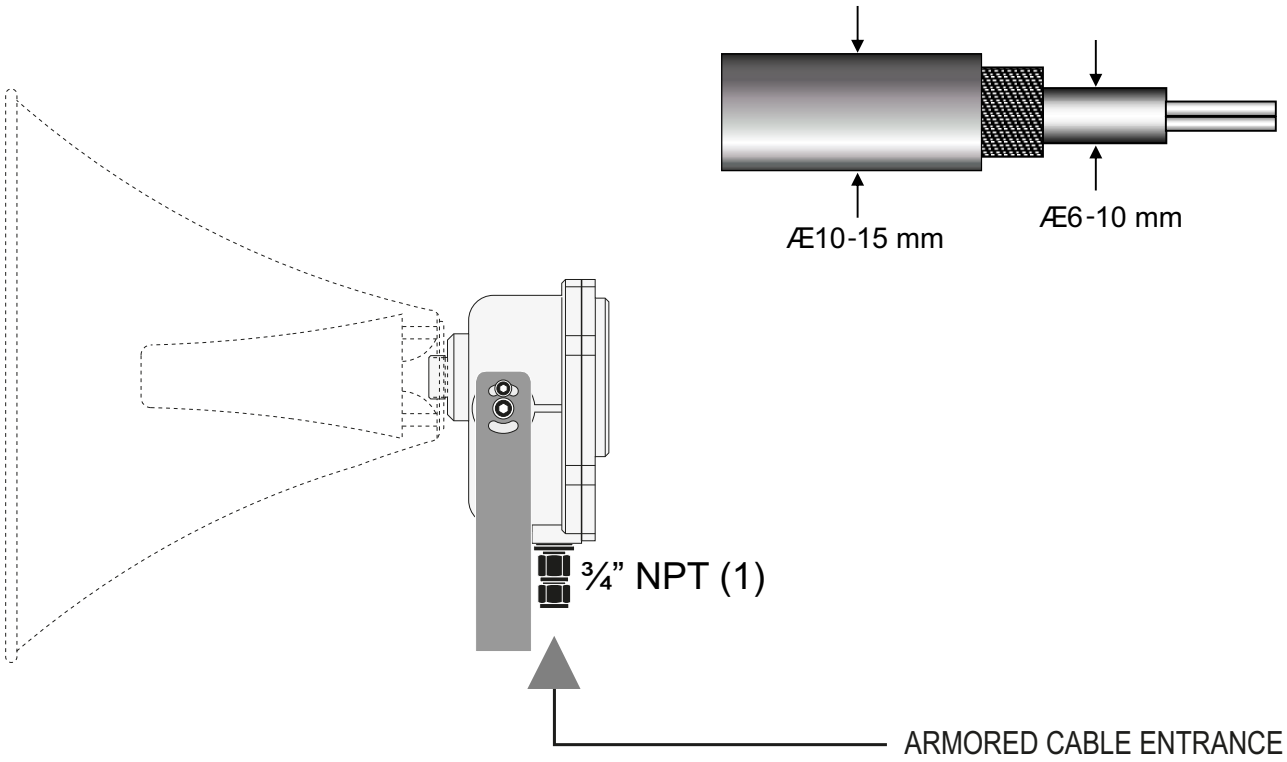
1.2- Remove the closing screws from the cover Ⓐ



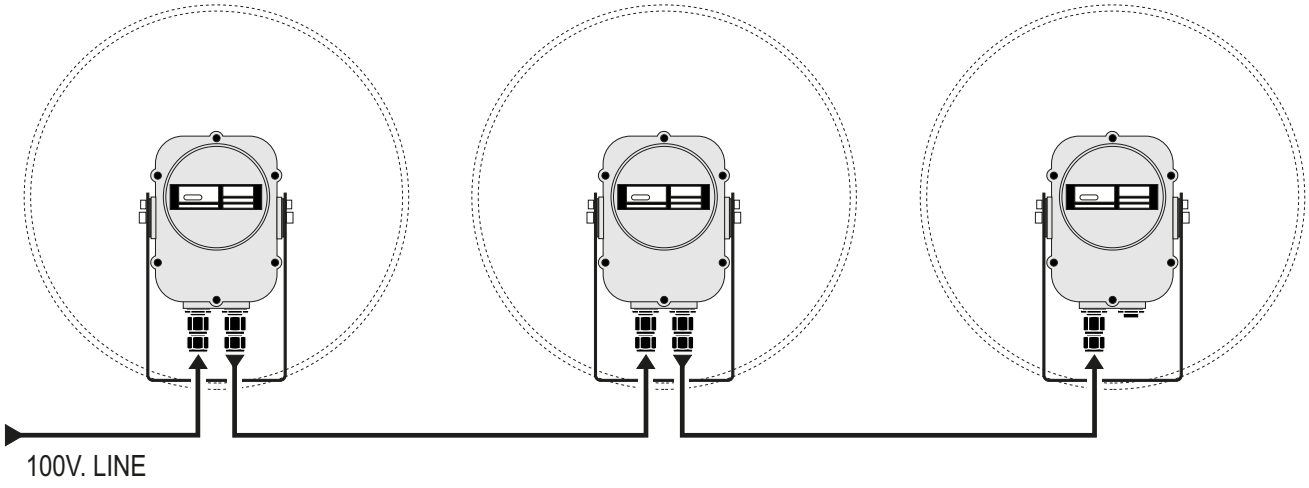
1.3- Remove the rear cover.
Precautions should be taken in order not to damage the flat joint.



1.4- Connect the unit by means of armored cable.



1.5- It is possible to install several explosion proof loudspeakers in cascade, replacing the obturation unit (¾" NPT) by an explosion proof cable gland ¾ " NPT (1).

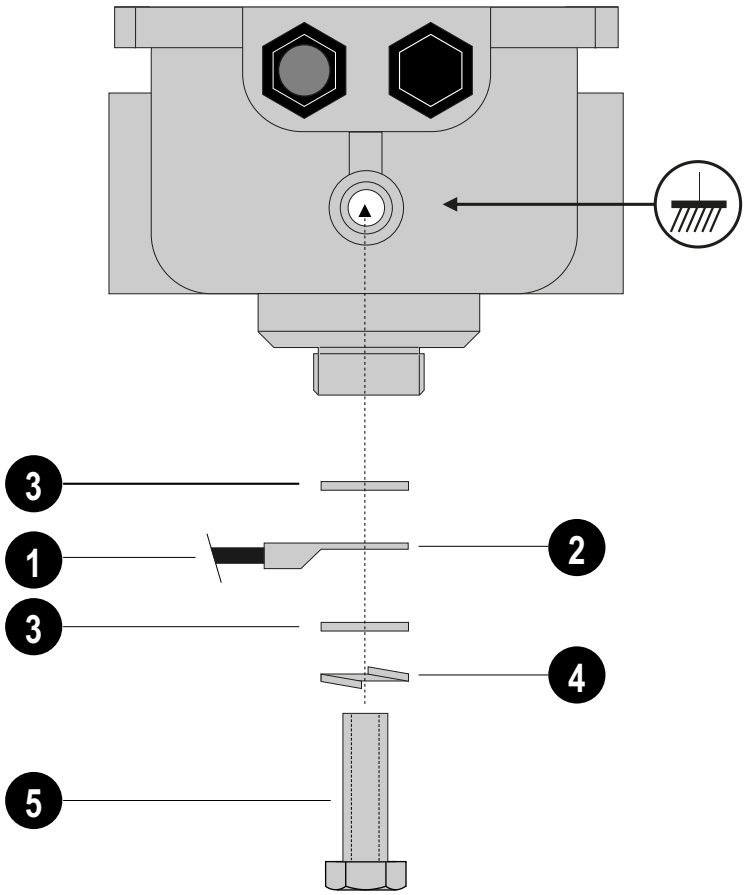


(1). The cable glands as well as the obturation unit having a ¾" NPT thread must be screwed in the enclosure, introducing at lest six threads and pressing conveniently to avoid an accidental slacken.

1.6- Connect the cabinet to earth using a wire with a section greater or equal to 10 mm^2.

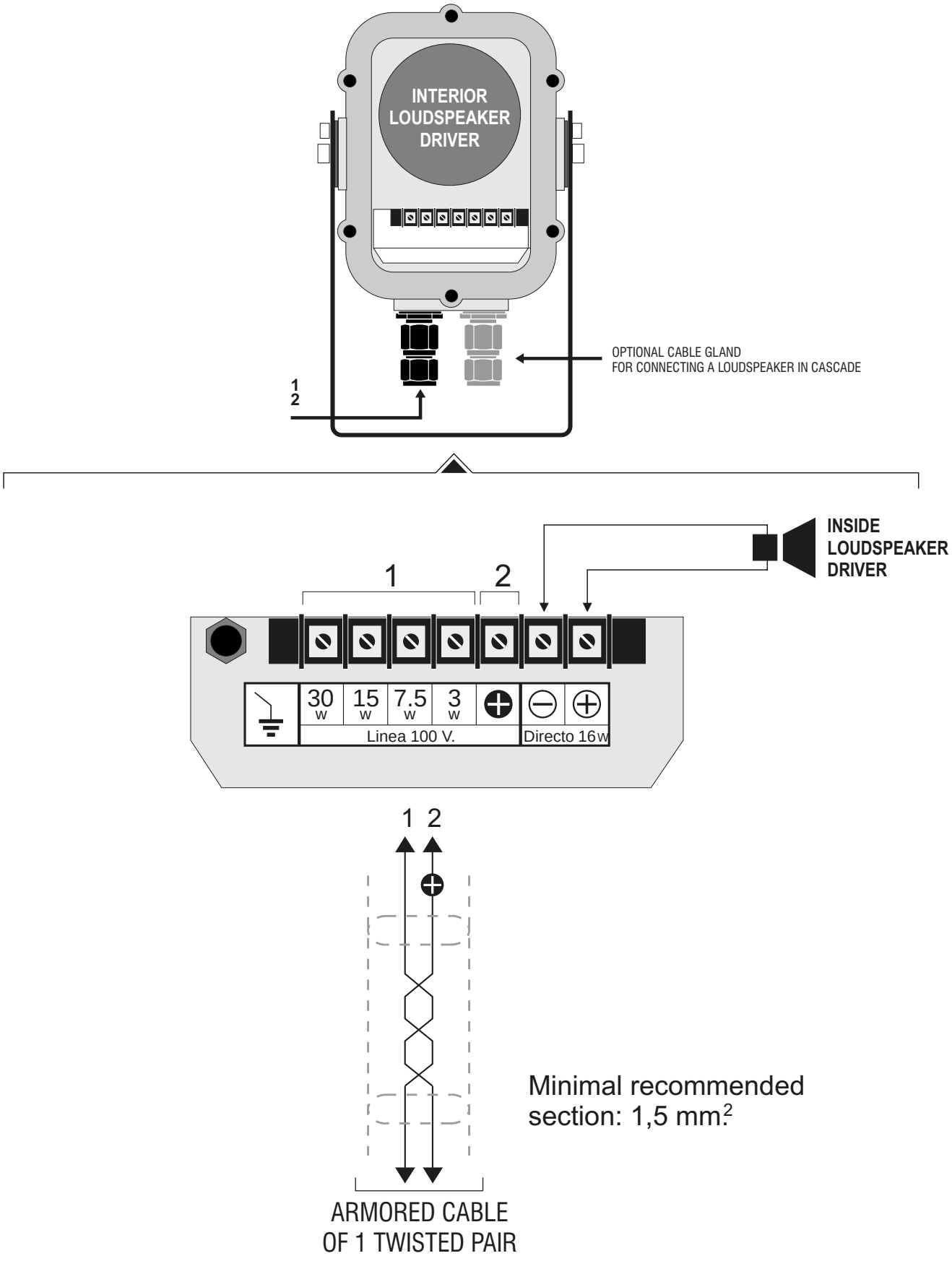
The project specifications with respect to the earth connecting network should be taken into account.

(EXTERIOR ENCLOSURE)
EARTH CONNECTING EXAMPLE



1. EQUIPOTENTIAL UNION CONDUCTOR OF EXTERNAL MASS (Section 10 mm^2)
2. ROUND SPADE TERMINAL
3. FLAT WASHER (DIN 125) M6 - STAINLESS
4. GROWER WASHER (DIN 7980) M6 - STAINLESS
5. M6x12 (DIN 933) STAINLESS SCREW

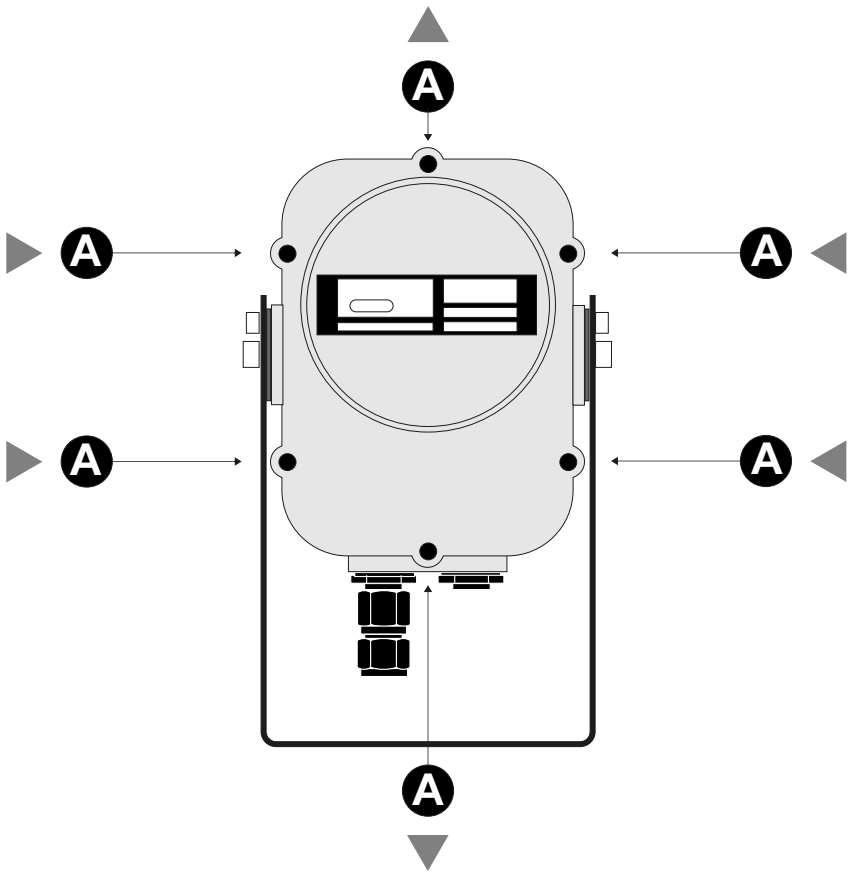
1.7- As next, connect the SA-30 according to the corresponding scheme:



Minimal recommended section: 1,5 mm^2

1.8- Grease the joint (*) and close the enclosure using the six fixing screws (**A**).

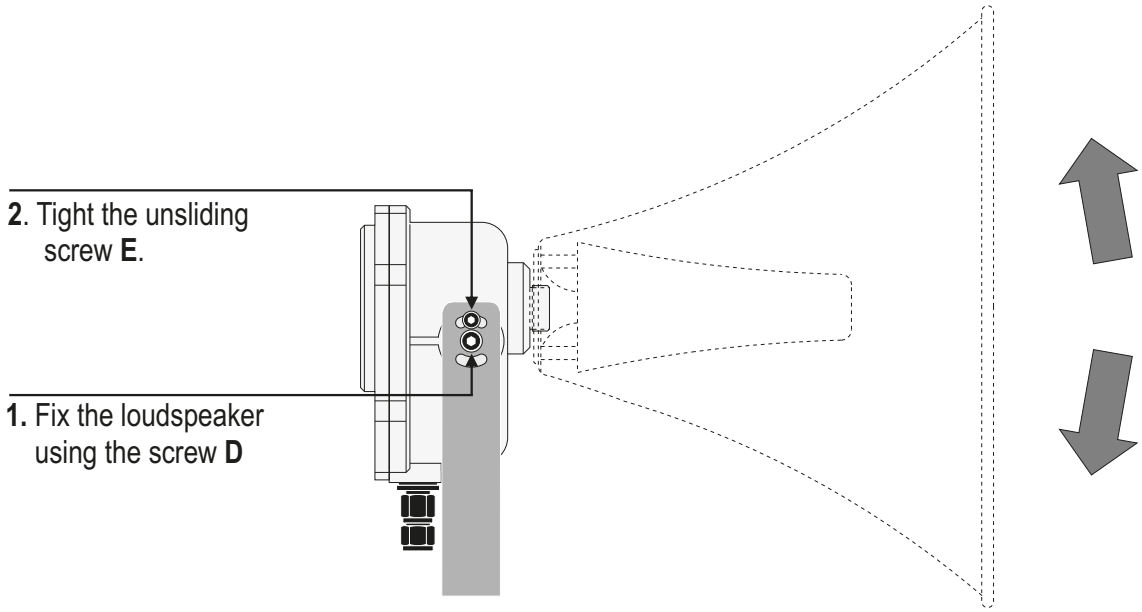
Be especially careful that the flat joint suits correctly in all its perimeter.(**)



(*) to grease the joint use grease made of a coloidal bisulphide of molybdenum suspension.

(**) each enclosure consists of a cover-bottom set which is interiorly identified by a stamped number in the cover and in the bottom, to avoid accidental interchanges during the assembling-disassembling process.

1.9- Put the loudspeaker in a vertical direction with a suitable slope.



2.- MAINTENANCE

Once the installation and commissioning of the intercom system are ended, it will be necessary to make periodical revisions of the loudspeakers SA-30 in order to keep their safety and efficiency.

The enclosure of the loudspeaker SA-30 is made in aluminium fusing, stainless steel screws, etc. It has an IP-66 protection degree and it is appropriate for industrial environments.

A first revision after three months of the system commissioning is recommended. Afterwards, the periodicity will be established according to the property maintenance protocols. At least, a revision per year.

These revisions must be made by specialists, following the suitable safety norms according to legal requirements.

Procedure:

1. Verify if the unit is operating correctly.

2. Disconnect the power supply (with the common precautions, signalization, etc.)

3. Disassemble the exponential horn of the loudspeaker.

4. Clean the filters using a paintbrush which should be clean and dry. There must be no corrosion.

5. Assemble the exponential horn.

6. Disassemble the rear cover of the loudspeaker specially keeping the flat joint, the way it is described for the assembling.

7. Examine the enclosure as well as the flat joint and the filters.
In order to guarantee an appropriate protection there must be no corrosion neither damages.

8. Examine the internal connections, cables, terminals, etc. as well as the transformer and the loudspeaker's engine.

9. The next step is to grease the flat joint.

10. Assemble again the cover, as explained for the assembling.

(*) to grease the joint use grease made of a
Coloidal bisulphide of molybdenum suspension

Repairs:

If necessary, the elements such as the transformer and the loudspeaker's driver can be substituted, only and exclusively by original spares.

The protection enclosure is composed by a set of elements: cover, bottom, filters, etc. Once it is assembled during the manufacturing process, the enclosure is tested in order to guarantee security according to the Directive 94/9/CE.

The enclosure (including all its components) can only be repaired and tested by the manufacturer, as indicated in the previous paragraph.

EU DECLARATION OF CONFORMITY

UNIÓN DESARROLLOS ELECTRÓNICOS S.A.

Address:
C/ Montilla, 2
08970 SANT JOAN DESPI (BARCELONA)
SPAIN

Declares that the product:

SPEAKER MOTOR Model SA-30

With marking:

II 2GD
Ex d IIB T3 Gb
Ex t IIIC T85 ºC Db
-20 ºC < Ta < +55ºC

Certificate No.: LOM 10ATEX2050

Serial Number:

Conforms to ATEX Directive 2014/34/EU

Applicable standards:

EN IEC 60079-0:2018, EN 60079-1:2014 and IEC 60079-31:2022/COR1:2023

In order to comply with section 1.2.7 of Annex II of Directive 2014/34/EU, and to eliminate electrical hazards, the following standard has been used:

IEC 62368-1:2023

Notification of the Quality System by the L.O.M. Entity.
Notified Body number 0163.

Notification number: **LOM 10ATEX9094**

Sant Joan Despí, 12 March 2024

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