

CL-GS

PRODUCT DESCRIPTION

- Clamp for fixing photovoltaic modules by clipping

CHARACTERISTICS



- Clamp for fixing photovoltaic modules.
- Quick mounting by clipping onto the solar panel frame.
- Carbon steel.
- Finish Atlantis C4 M.
- For outside use.
- Compatible with any framed module.
- Fixing to the module profile and structure.
- It can be used to fix modules both in the middle and at the ends of the profile.
- Minimum module spacing.
- Quick and intuitive assembly that facilitates assembly and maintenance work without the need for specific installation tools.
- Single-use clip, allowing disassembly with specific tools.
- Compatibility with the following catalogue profiles: PSA-A, PSE-C, PSA-VD, GP-XS y GP-VD.
- It facilitates the electrical bypass between the solar panels and the structure by acting as a bridge between them.

APPLICATION / COMPATIBLE WITH



PSA-A



PSA-AV



PSE-C



GP-XS



GP-VD

Used as a fixing element for photovoltaic modules. It fixes the modules by scratching the surface of the frame with its upper flange. It is clipped onto the various profiles by means of its side tabs.

It can be mounted on any steel rail belonging to the solar range of the current catalogue **GP-XS** "INDETRUT solar perforated rail" or **GP-VD** "INDETRUT solar perforated rail for discontinuous valley fixing" or on the following aluminium profiles belonging to the solar range of the current catalogue, **PSA-A** "aluminium profile with wings", **PSA-AV** "aluminium profile with wings for direct valley fixing" or **PSE-C** "aluminium profile for lateral assembled fixing".

There must be at least 4 clamps per module, there must be at least 2 on each side of the module.

TOOLS FOR ASSEMBLY



You must assembly two **CL-GS** "Rubber separator between panels for CL-GS clips" between panels for a correct fixing.

For more information on how to fit them, please refer to the SC-GSC assembly manual.

TOOLS FOR DISASSEMBLY

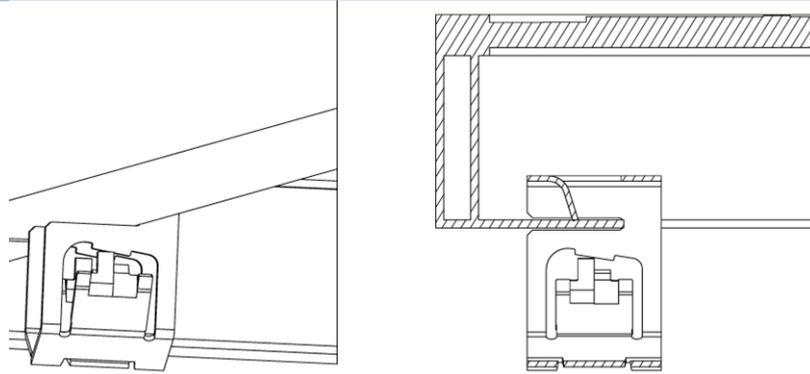


CL-EX

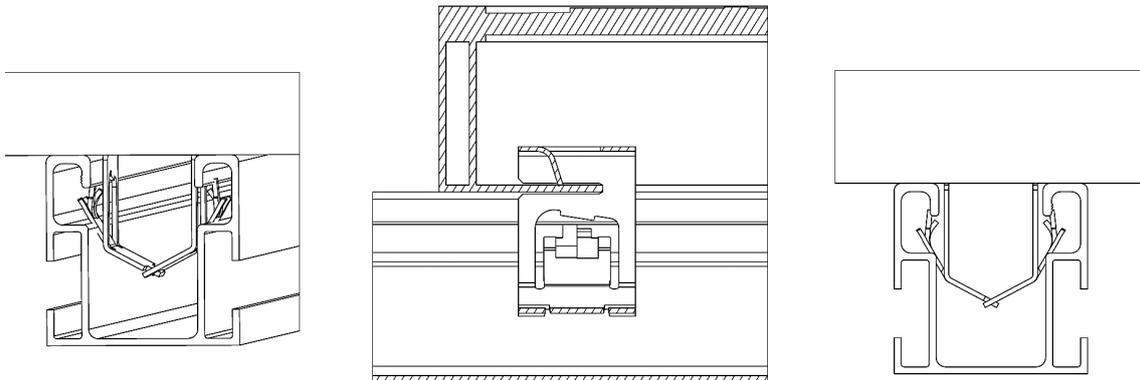


Flat-head screw screwdriver

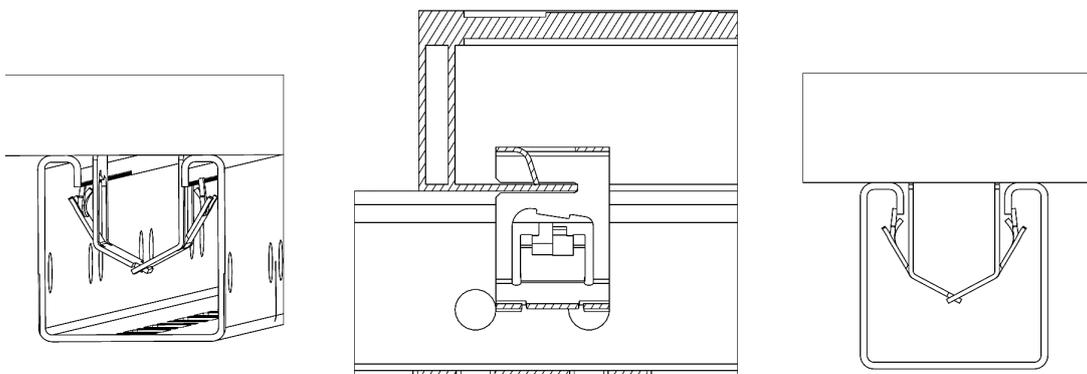
APPLICATION EXAMPLES



Application example 1: Mounting of the clamp on the photovoltaic modules frame



Application example 2: Mounting on aluminium profile for assembled fixing (PSE-C)



Application example 3: Mounting on INDETRUT solar perforated rail (GP-XS)

1. GAMA

ITEM	CODE	PHOTO	DESCRIPTION	FRAMT THICKNESS	MATERIAL	FINISH
1	CLGS1522		Clamp for fixing photovoltaic modules by clipping	1,5 – 2,2 mm	 Carbon steel	 Atlantis C4 M

2. INSTALLATION INFORMATION

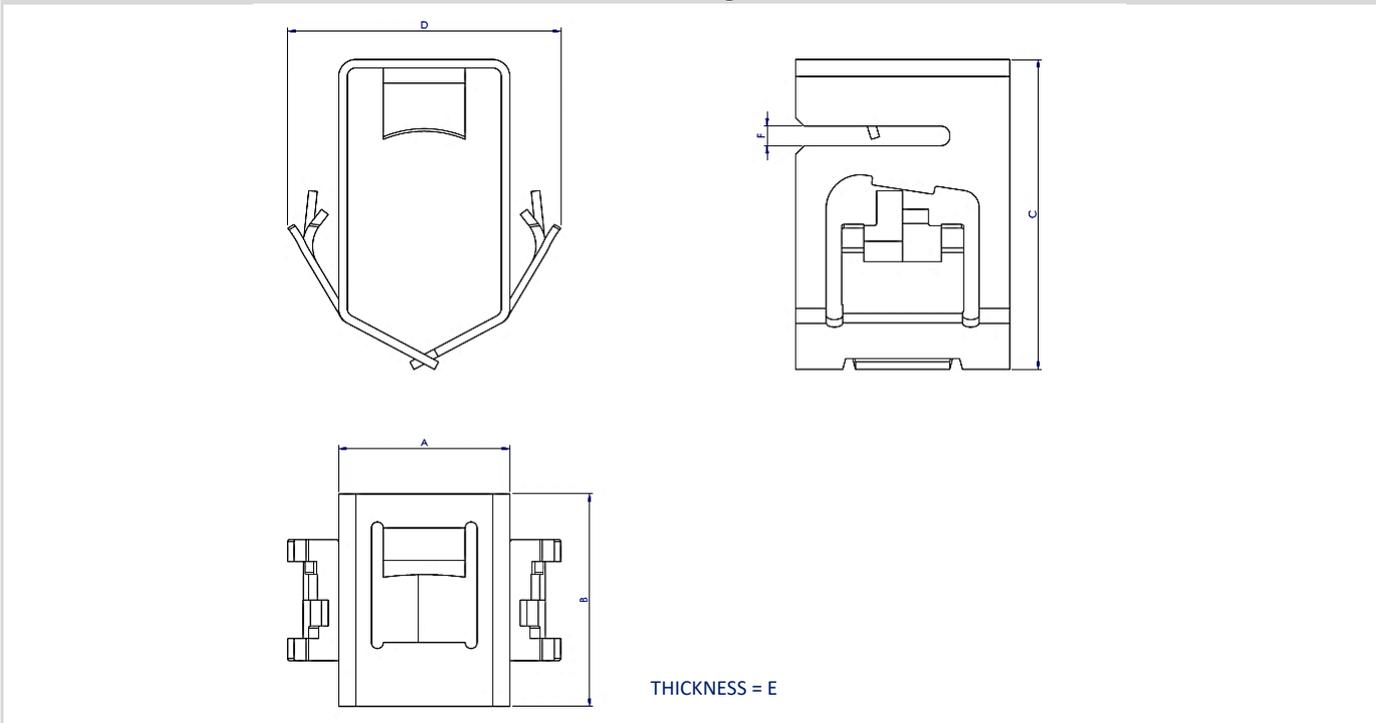
2.1 CL-GS Clamp for fixing photovoltaic modules by clipping

	Material	Finish	Compatible with		
	 Carbon steel	 Atlantis C4 M	 PSA-AV Aluminium profile with wings for discontinuous direct valley fixing.	 GP-XS INDEXTRUT solar perforated guide. Atlantis C4-M steel.	 PSA-A Winged aluminum profile.
			 PSE-C Aluminium profile for side mounting.	 GP-VD INDEXTRUT solar perforated guide for fixing in discontinuous valley. Atlantis C4-M steel.	

Measurement table

Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
CLGS1522	20	25	36.6	31.9	1	2.3

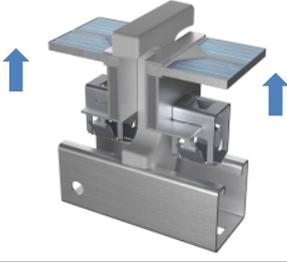
Drawing



Mechanical properties of the manual			
	Yield strength Fy0,2 (N/mm ²)	Ultimate tensile strength Fu (N/mm ²)	Hardness HV
Carbon steel	480	520	160

Process of assembly		
Step	Representative photo	Description
Step 1 Fixing the clamp to the frame		Insert clamp into the module frame. The upper flange must scratch part of the frame to fix its position and prevent it from being easily removed. It is important that the clamp's recess touches the frame and that the clamp does not touch any holes in the frame when it is fixed.
Step 2 Installation to profile		Press the panel (with the clamp already fixed) on the profile where you want to anchor it until you hear a click for each of the clamps on the module.
Step 3 Final position		It is important to check that the module is properly anchored by pulling it out and to visually check that the clamp is correctly fitted into the profiles.

Process of disassembly		
Step	Representative photo	Description
Step 1 Insert the tool in the profile		Insert the tool inside the profile near the clamp to be removed.

<p>Step 2 Apply pressure perpendicular to the profile</p>		<p>Use force to open the profile and allow the clamp to spring out of position.</p>
<p>Step 3 Remove the clamp when it springs out</p>		<p>Remove the clamp and proceed in the same way for the rest of the clamps.</p>
<p>Step 4 Lift upper flange</p>		<p>With the help of a flat-head pliers it is necessary to lift the upper flange that scratches the frame.</p>
<p>Step 5 Removing the clamp</p>		<p>Remove the clamp and proceed in the same way for the rest of the clamps. The clamps are for single use only.</p>