

### PSA-A

### PRODUCT DESCRIPTION

- Winged aluminium profile.

### CHARACTERISTICS

- Profile for installation of solar panels on inclined roofs.
- Extruded 6063-T6 aluminium alloy profile.
- For outside use.
- Designed for coplanar assembly systems.
- Continuous or interrupted profile assembly options available.
- Direct fixing onto ribs on sheet metal and sandwich panel roofs.
- Side wings with guide grooves for ease of drilling.
- Large 80-mm base to ensure a secure fixing.
- Profile height – 35 mm, with high bending resistance.
- General thickness – 1.8 mm.
- Side grooves for positioning longitudinal connector screws.
- Central groove compatible with INDEXTRUT accessories.



### APPLICATIONS/MOUNTING ACCESSORIES



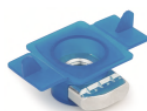
**KFRSC3050 / KFRSCN3050**

These are used in **aluminium coplanar direct fixing systems** as structural elements onto which solar panels can be mounted and supported as either continuous or discontinuous profiles.

In order to attach solar panels to the profile, one of the following assembly accessories should be used:



**PGSA26 / PGSN26**

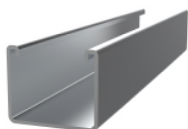


**TURXA208**



**6921I08070**

1. **KFRSC3050 / KFRSCN3050** “quick pre-assembled clamp”.
2. Reference numbers:
  - One **PGSA26 / PGSN26** “simple clamp”.
  - One **TURXA208** “INDEXTUT quick nut”.
  - One **6921I08070** DIN-6921 M8x70 all-thread bolt.



**PSAUN200**



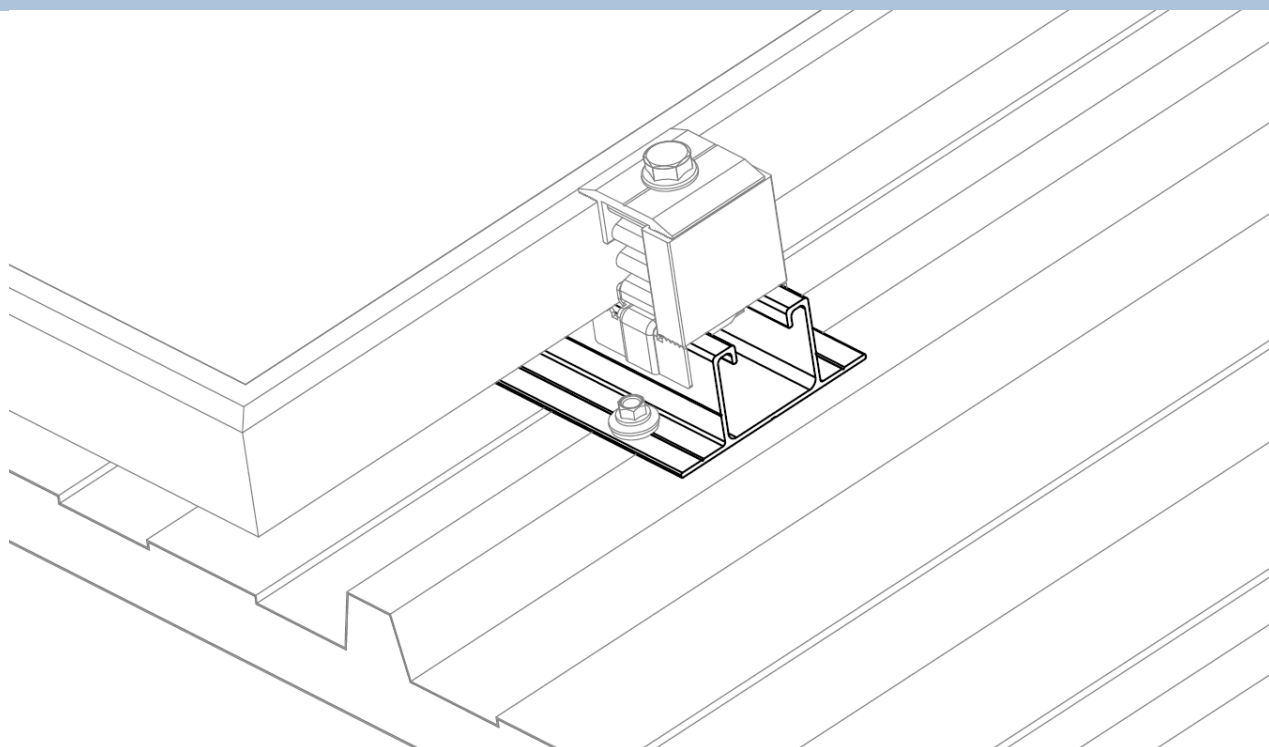
**ABEI5519**

When mounted as continuous profiles to form lengthwise connections between profiles, the assembly accessory **PSAUN200** “winged aluminium profile connector” is used, with the attachment made using stainless steel A2-70 **ABEI5519** “DIN-7504-K self-drilling screws”. These screws are easily positioned thanks to the grooves in the sides of the profiles.

### BASE MATERIAL/FIXING ACCESSORIES

<b>BASE MATERIAL</b>			<b>FIXING ACCESSORIES</b>		
				<b>RE-TE</b> Watertight trebol rivet	
				<b>TAC-N/TAC-B</b> Atlantis/Bi-metal thin sheet screw	
	<b>Sandwich panel</b>	<b>Metal sheet</b>		<b>DIN-7504-K RE NI + ARVUL</b> Atlantis C4-M self-drilling screw	<b>CS-B</b> Butylene adhesive sealing tape

### APPLICATION EXAMPLES



Application example 1: Direct fixing to roof via stitching screws

## 1. RANGE

ITEM	CODE	PHOTO	DESCRIPTION	LENGTH	MATERIAL
1	PSAA0400		Winged aluminium profile	400 mm	 6063-T6 aluminium
	PSAA1250			1250 mm	
	PSAA1875			1875 mm	
	PSAA2500			2500 mm	
	PSAA3625			3625 mm	
	PSAA4400			4400 mm	
	PSAA4800			4800 mm	

## 2. INSTALLATION INFORMATION

### 2.1 PSA-A

### Winged aluminium profile.

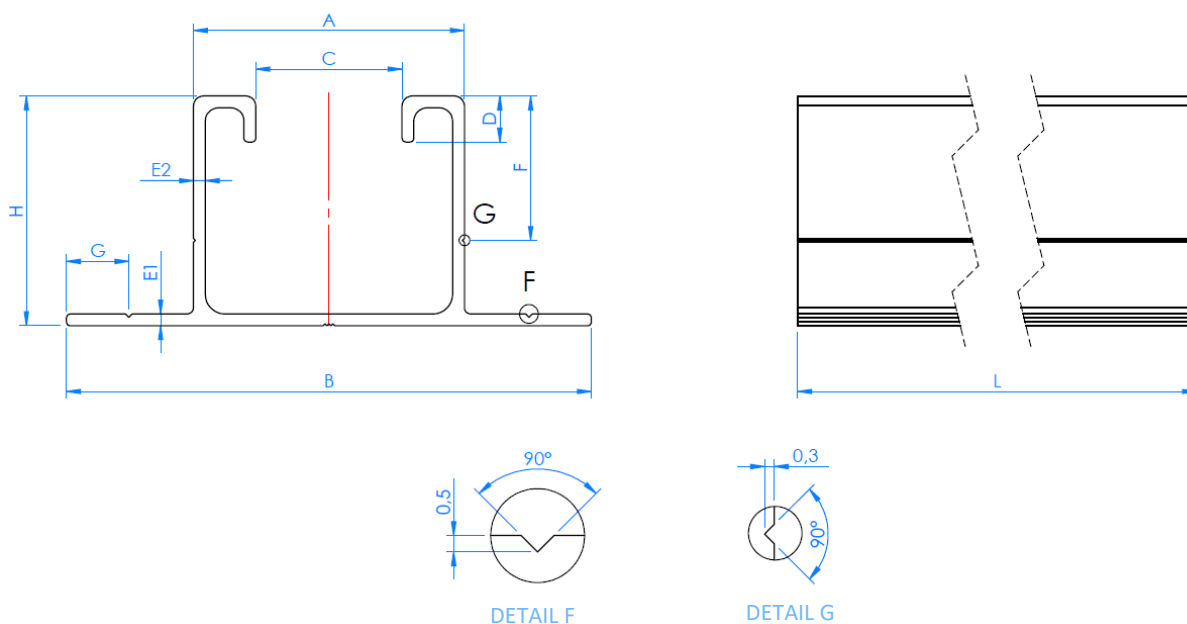


Material	Assembly accessories		
<p>6063-T6 aluminium</p>	<p>KFRSC3050 / KFRSCN3050 Quick pre-assembled clamp</p>	<p>PSAUN200 Winged aluminium profile connector</p>	<p>ABE15519 A2 DIN-7504-K bolt</p>
	<p>PGSA26 / PGSN26 Simple clamp</p>	<p>TURXA208 INDETRUT quick nut</p>	<p>6921108070 A2-70 DIN-6921 stainless steel bolt</p>
Base materials		Fixing accessories	
<p>Metal sheet</p>	<p>Sandwich panel</p>	<p>TAC-N/TAC-B Atlantis/Bimetal thin sheet screw</p>	<p>CS-B Butylene adhesive sealing tape</p>
		<p>DIN-7504-K RE NI + ARVUL Atlantis C4-M self-drilling screw</p>	
		<p>RE-TE Watertight trebol rivet</p>	

Measurement table

Code	A (mm)	B (mm)	C (mm)	D (mm)	E1 (mm)	E2 (mm)	F (mm)	G (mm)	H (mm)	L (mm)
PSAA0400	41	80	22	7	1,8	1,8	22	9,5	35	400
PSAA1250	41	80	22	7	1,8	1,8	22	9,5	35	1250
PSAA1875	41	80	22	7	1,8	1,8	22	9,5	35	1875
PSAA2500	41	80	22	7	1,8	1,8	22	9,5	35	2500
PSAA3625	41	80	22	7	1,8	1,8	22	9,5	35	3625
PSAA4400	41	80	22	7	1,8	1,8	22	9,5	35	4400
PSAA4800	41	80	22	7	1,8	1,8	22	9,5	35	4800

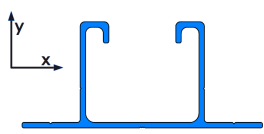
Drawing



### Mechanical properties of the material

	Yield strength $F_{y0.2}$ (N/mm <sup>2</sup> )	Ultimate load $F_u$ (N/mm <sup>2</sup> )	Elastic modulus $E$ (N/mm <sup>2</sup> )	Transverse elastic modulus $G$ (N/mm <sup>2</sup> )	Linear expansion coefficient $\alpha_L$ ( $\mu\text{m/mK}$ )	Specific weight $\rho$ (kg/m <sup>3</sup> )
EN AW-6063-T6 aluminium	170	215	69,500	26,100	23.5	2,700

### Mechanical properties of the profile.

	Area $S$ (cm <sup>2</sup> )	Moment of inertia $I_x$ (cm <sup>4</sup> )	Moment of inertia $I_y$ (cm <sup>4</sup> )	Section modulus $W_x$ (cm <sup>3</sup> )	Section modulus $W_y$ (cm <sup>3</sup> )	Linear weight $W$ (kg/m)
 <p>PSA-A</p>	3.14	5.43	13.33	2.4	3.33	0.85