

KFS-MA

PRODUCT DESCRIPTION

- Double threaded bolt kit. Stainless steel A2

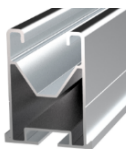
CHARACTERISTICS

- Includes one double threaded screw for wood in A2-70 stainless steel.
- Includes three DIN-6923 knurled bolts in A2-70 stainless steel.
- Includes one EPDM ARS-S seal washer.
- For outside use
- Hexagonal end for screwdriver installation.
- Self-tapping pointed DIN-571 type-C screw.
- Guarantees watertightness on roof through the ARS-S joint.
- Attach under roof to wood sub-structure.
- Suitable for use with chemical anchors.

ASSESSMENTS



APLICACIONES / COMPLEMENTOS MONTAJE



PSE-A

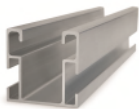


KFSFIM08



PMO1012

Used in **coplanar aluminium assembly systems** to attach solar panels to under-roof sub-structures. When assembling a **PSE-A** "aluminium profile for assembled fixing", a **PMO1012** "plate for double-threaded screw" and a **KFSFIM08** "cross connector for bottom fixing kit" are used on each double-threaded screw.



PSE-C



KFSFIM08



PMOL1012

Used coplanar assembled aluminum system, for mounting solar panels, it is used as a fixing element to the substructure below the roof. In the assembly of the **PSE-C** "Aluminum solar profile for assembled fixing", the following accessories were used: a unit of **PMOL1012** "mounting L-plate for double-threaded screws", and a unit of **KFSFIM08** "cross connector for fixing".



GP-XS



D603I08016



D6923I0808



PMO1012

Used in **Atlantis steel coplanar systems** to attach solar panels to under-roof sub-structures. When mounting a **GP-XS** "INDEXTRUT solar perforated guide", a **PMO1012** "plate for double-threaded screw", a **D603I08016** "16 mm DIN-603 M8 bolt" and a **D6923I0808** "DIN-6923 M8 nut", both in A2-70 stainless steel, are used on each double-threaded screw.

ROOF/SUB-STRUCTURE/FIXING ACCESSORIES

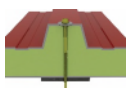
ROOF



TILE



METAL SHEET



SANDWICH PANEL

SUB-STRUCTURE BASE MATERIAL



WOOD



HOLLOW CONCRETE



HOLLOW BRICK

FIXING ACCESSORIES



Chemical anchor



MO-TM
Metal sleeve for chemical anchor

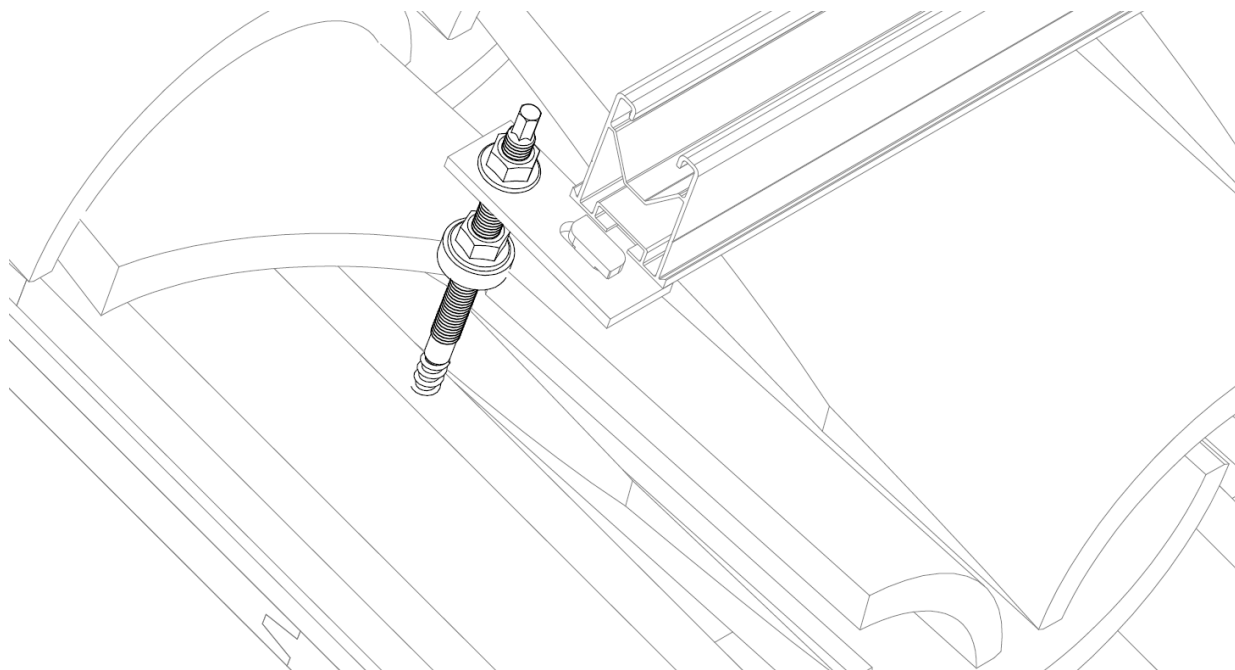


MO-TN
Sleeve for chemical anchor

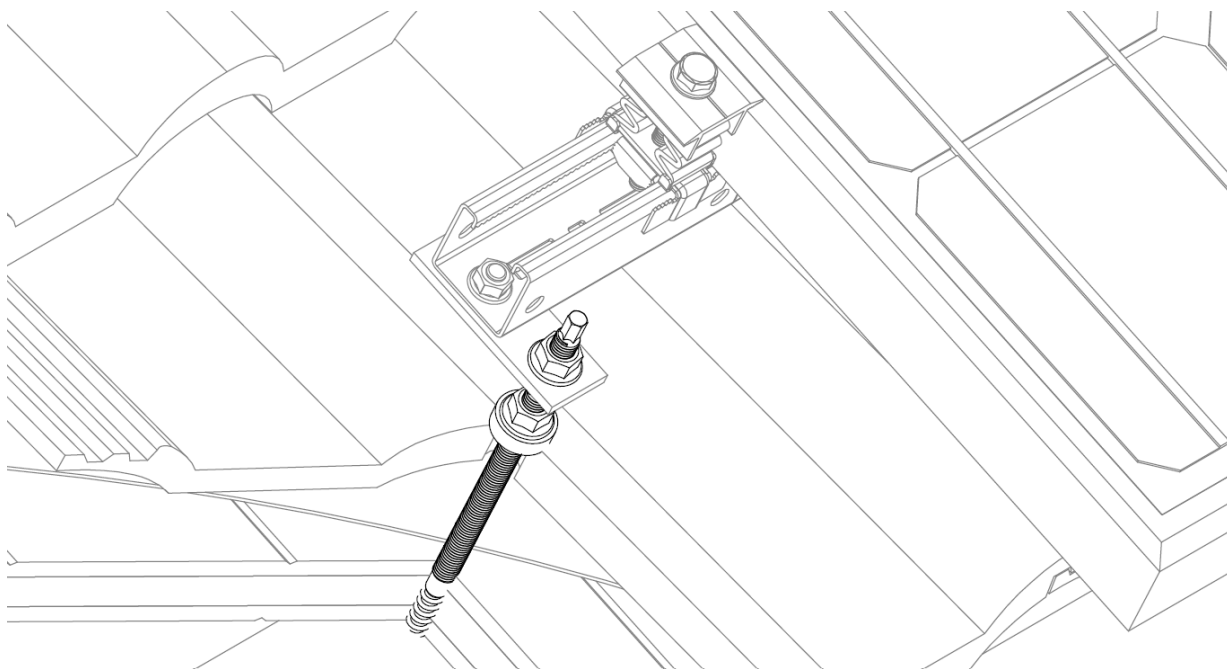


MO-TL
Large sleeve for chemical anchor

APPLICATION EXAMPLES






Application example 1: Mounting of the PSE-A profile on curved roof tiles.



Application example 2: Mounting of GP-XS perforated guide on concrete roof tiles.

1. RANGE

ITEM	CODE	PHOTO	DESCRIPTION	METRIC	LENGTH	MATERIAL	
1	KFSMA10200		Double threaded bolt kit. Stainless steel A2	M10	200 mm		
	KFSMA10250			M10	250 mm		
	KFSMA12300			M12	300 mm		
	KFSMA12350			M12	350 mm		

2. INSTALLATION INFORMATION

2.1 KFS-MA

Double threaded bolt kit. Stainless steel A2

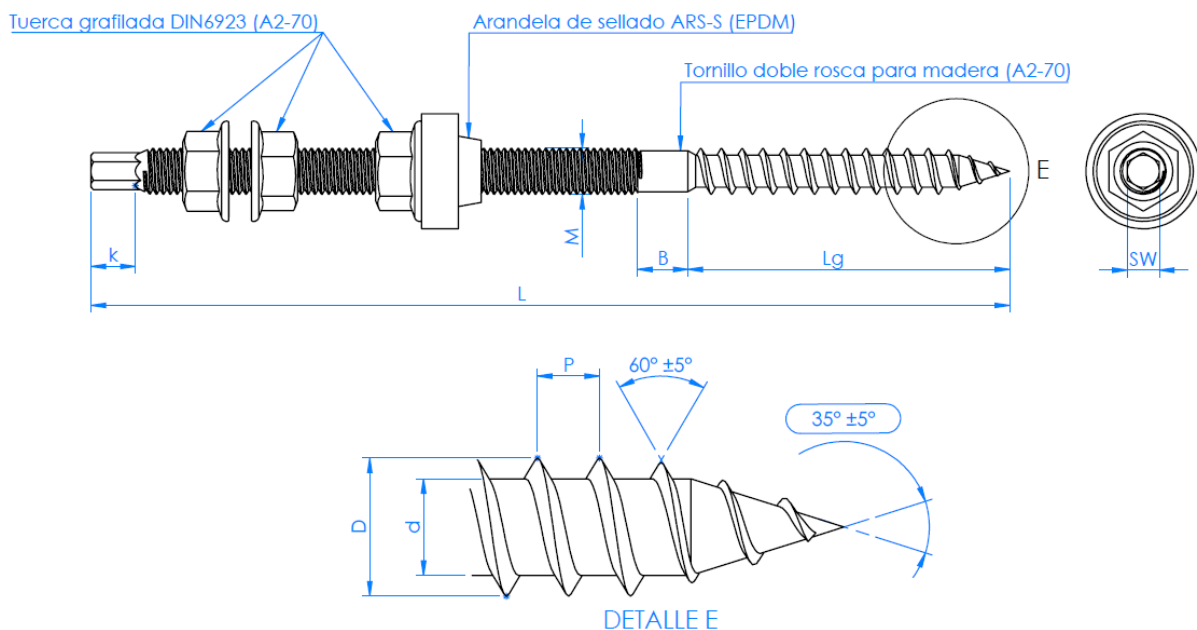


Material	Assembly accessories		Roof	
AISI-304	603108016 + D6923IM08 DIN-603 M8x16 + DIN-6923 M8	KFSFIM08 Cross connector for bottom fixing	Tile	Metal sheet
EPDM	PMO	PMO-L	Sandwich panel	
Sub-structure base material			Fixing accessories	
Wood	Hollow concrete	Hollow brick	Chemical anchor	MO-TM Metal sleeve for chemical anchor
				MO-TN Nylon sleeve for chemical anchor
				MO-TL Large nylon sleeve for chemical anchor

Measurement table

Code	M	L (mm)	Lg (mm)	ØD (mm)	Ød (mm)	P (mm)	B (mm)	SW (mm)	K (mm)	Washer EPDM
KFSMA10200	M10	200	70	10	7	4,5	10	7	10	ARSS10
KFSMA10250	M10	250	70	10	7	4,5	10	7	10	ARSS10
KFSMA12300	M12	300	90	12	9	5	20	9	12	ARSS12
KFSMA12350	M12	350	90	12	9	5	20	9	12	ARSS12

Drawing



TECHNICAL PROPERTIES			
Essential characteristics	Features		
	Unit	M10	M12
Characteristic plastic modulus M_y, k	[Nmm]	41348	68353
Characteristic withdrawal parameter (throughout the fibre) f_{ax}, k with $\rho_k = 450 \text{ kg/m}^3$	[N/mm ²]	12,23	13,77
Characteristic withdrawal parameter (perpendicular to the fibre) f_{ax}, k with $\rho_k = 450 \text{ kg/m}^3$	[N/mm ²]	8,68	9,85
Characteristic head pull-through parameter f_{head}, k with $\rho_k = 450 \text{ kg/m}^3$	[N/mm ²]	20,76	21,0
Characteristic tensile strength f_{tens}, k	[kN]	30,12	37,3
Characteristic torsional ratio with $\rho_k = 450 \text{ kg/m}^3$	-	4,80*	4,80*
EN 1995-1-1 corrosion protection.	-	Class 3	Class 3

(*) Pre-drilled. Harmonised technical specification: EN 14592:2008 + A1:2012

Table showing installation parameters

Installation on base material

Code	Installation wrench (mm)	Installation on wood \varnothing drill hole (mm)	Installation with chemical anchor
KFSMA10200	Sw7	7	See technical data sheets for the chemical anchors used
KFSMA10250	Sw7	7	See technical data sheets for the chemical anchors used
KFSMA12300	Sw9	10	See technical data sheets for the chemical anchors used
KFSMA12350	Sw9	10	See technical data sheets for the chemical anchors used

Assembly of PMO/ PMO-L plate **Installation of joint on roof**

Code	Metric/Wrench (M/Sw)	Maximum tightening torque (Nm)	\varnothing Roof drill hole (mm)	Metric/Wrench (M/Sw)	Maximum tightening torque (Nm)
KFSMA10200	M10 / Sw15	28	16	M10 / Sw15	Until adjustment of the joint (See Figure)
KFSMA10250	M10 / Sw15	28	16	M10 / Sw15	Until adjustment of the joint (See Figure)
KFSMA12300	M12 / Sw18	45	16	M12 / Sw18	Until adjustment of the joint (See Figure)
KFSMA12350	M12 / Sw18	45	16	M12 / Sw18	Until adjustment of the joint (See Figure)

