

P R O F I N E S I S

Mounting systems for photovoltaics
Product range



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1. Rail system

1.1. Mounting rails 40x40				
Art.Nr.	Figure	Item	Comments	Price
9664-PROFINESS 1		Mounting rail 40 * 40 mm	Length: 6.100 mm Span width: up to 2,65 Meters* Connection below: DIN 933 M10 (Length according to customer requirement) Connection top: Sliding block M8 New: End capes available	Anodised also available from stock. Price on enquiry ~ 921 g/m
9664-PROFINESS 10		Mounting rail 40 * 40 mm	Length: 6.100 mm and 6.200 mm on stock Span width: up to 2,45 Meters* Connection below: DIN 933 M10 (Length according to customer requirement) Connection top: Sliding block M8 New: End capes available	Black anodised also available from stock. Price on enquiry ~ 779 g/m
9664-PROFINESS 3		Mounting rail 40 * 40 mm	Length: 6.100 mm Span width: up to 2,65 Meters* Connection below: DIN 933 M10 (Length according to customer requirement) Connection top: Square nut M8 New: End capes available	Anodised also available from stock. Price on enquiry ~ 910 g/m Not longer a stock-profile, so minimum order quantity 1.000 kg
9664-PROFINESS 30		Mounting rail 40 * 40 mm	Length: 6.100 mm Span width: up to 2,45 Meters* Connection below: DIN 933 M10 (Length according to customer requirement) Connection top: Square nut M8 New: End capes available	Anodised also available from stock. Price on enquiry ~ 773 g/m Not longer a stock-profile, so minimum order quantity 1.000 kg
9664-PROFINESS 15		Mounting rail 40 * 40 mm	Length: 6.100 mm Span width: up to 2,60 Meters* Connection at the side: Sliding block M8 Connection top: Sliding block M8 New: End capes available	Anodised also available from stock. Price on enquiry ~ 923 g/m Not longer a stock-profile, so minimum order quantity 1.000 kg
9664-PROFINESS 150		Mounting rail 40 * 40 mm	Length: 6.100 mm Span width: up to 2,40 Meters* Connection at the side: Sliding block M8 Connection top: Sliding block M8 New: End capes available	Anodised also available from stock. Price on enquiry ~ 804 g/m

1.1. Mounting rails 80x40

Art.Nr.	Figure	Item	Comments	Price
9664-PROFINESS 16		Mounting-rail 80 * 40 mm	Length: 6.100 mm Span width: up to 3,75 Meters* Connection at the side: Sliding block M8 Connection top: Sliding block M8	Anodised also available from stock. Price on enquiry ~ 1440 g/m Not longer a stock-profile, so minimum order quantity 1.000 kg
9664-PROFINESS 2		Mounting rail 80 * 40 mm	Length: 6.100 mm Span width: up to 3,75 Meters* Connection below: DIN 933 M10 (Length according to customer requirement) Connection top: Sliding block M8	Price on enquiry ~ 1253 g/m

* Design loads:
 • Snow load zone 1 in Germany, terrain elevation 400 meters
 • module load: 0.22 kN/m²
 • Wind load zone 1, railing category 4, even ground
 • Roof pitch 45°
 Static calculations for other conditions, we will send you on request.

1.2. Mounting rails for trapezoidal sheet metal

Art.Nr.	Figure	Item	Comments	Price
9664-PROFINESS 31		Trapezoidal rail Standard version Also available pre-assembled in short pieces	Length: 6,1 Meters or depending on requirements The profiles can be bolted directly to the trapezoidal sheet. Height Standard: 1,3cm Connection top Sliding block M8 EPDM strip 90x3mm 50-meter-roles new in the program!	Price on enquiry ~ 703 g/m
9664-PROFINESS 31-60		Trapezoidal rail High version Also available pre-assembled in short pieces	Length: 6,1 Meters or depending on requirements The profiles can be bolted directly to the trapezoidal sheet. New Version: 6cm height for better ventilation of the modules Connection top Sliding block M8 EPDM strip 90x3mm 50-meter-roles new in the program!	Price on enquiry ~ 1047 g/m
9664-PR31HS		Trapezoidal rail Also available pre-assembled in short pieces	Length: 6,1 Meters or depending on requirements The profiles can be bolted directly to the trapezoidal sheet 4 cm width for screwing in direction of the beam, so that landscape modules can be clamped on the long side	Price on enquiry ~425 g/m

1.3. Mounting rails 50mm height				
Art.Nr.	Figure	Item	Comments	Price
9664-Profiness6		Mounting rail 50 x 39 mm	Length: 6.100 mm Span width: up to 2,40 Meters* Connection below: DIN 933 M10 (Length according to customer requirement) Connection top: Sliding block M8	Price on enquiry ~ 772 g/m
9664-PROFINESS 5		Mounting rail 50 * 40 mm	Length: 6.100 mm Span width: up to 3,15 Meters* Connection below: DIN 933 M10 (Length according to customer requirement) Connection top: Sliding block M8 New: End capes available	Price on enquiry ~ 1002 g/m Not longer a stock-profile, so minimum order quantity 1.000 kg
<p>* Design loads:</p> <ul style="list-style-type: none"> • Snow load zone 1 in Germany, terrain elevation 400 meters • module load: 0.22 kN/m² • Wind load zone 1, railing category 4, even ground • Roof pitch 45° <p>Static calculations for other conditions, we will send you on request.</p>				

1.4. Sliding block				
Art.Nr.	Figure	Item	Comments	Price
9431-120901		Sliding block Swivel	for M8 VE = 100 pieces Aluminium Ball from stainless steel A2	On Enquiry

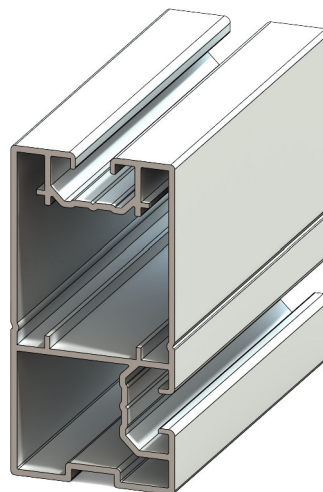
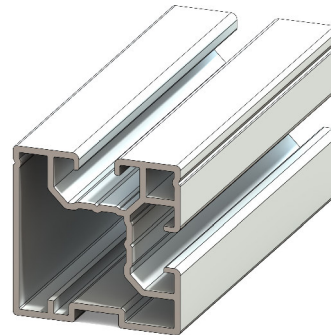
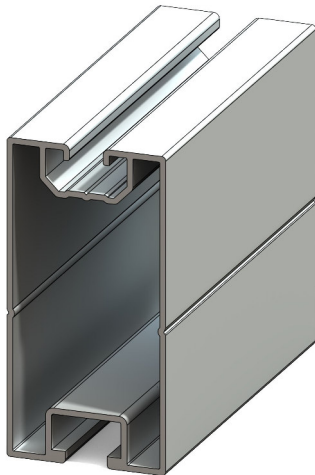
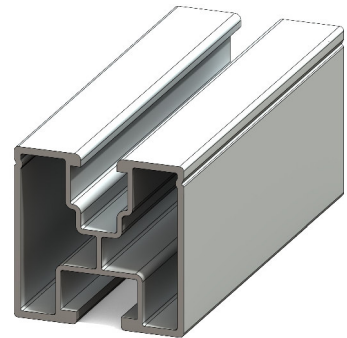
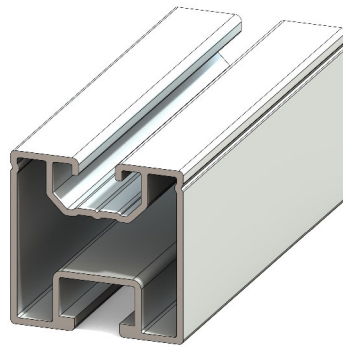
1.5. Accessoires from Aluminium				
Art.Nr.	Figure	Item	Comments	Price
9671-40*40*3 9671-40*40*5 9671-60x40x3		Angle profile Aluminium 40*40*3 40*40*5 60*40*3mm	Length: 6,0 Meters Other Length on Enquiry.	On Enquiry
9671-PROFINESS20		Z-Profile ALU	Z-Profile ALU Length: 6,1 Meters 40*40*40*3 mm Other measures, f.e. 40*60*40*3, On Enquiry	On Enquiry

1.6. Made-to-order mounting rails

Your item number can be placed here!

We can supply any profile imaginable, even according to your drawing.

Please enquire!



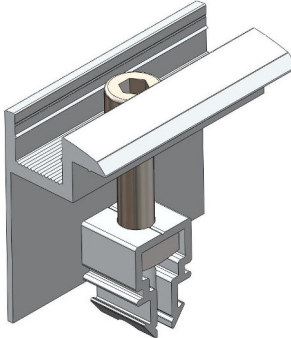
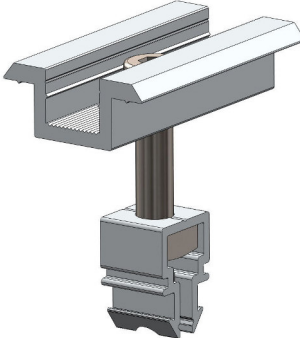


1.7. Simple cross bracing				
Art.Nr.	Figure	Item	Comments	Price
9664-PROFINES S 15 9664-PROFINES S 16			Mounting rail for cross connection, for mounting on lower standard rail Connection at the side: Sliding block M8 Connection top: Sliding block M8 For horizontal installation angle with 9701-PROFINESS 14	Anodised also available from stock. Price on enquiry
9701-PROFINES S 14		Cross bracing connection angle	Assembly of 966415, or PROFINESS16 on 9664-PROFINESS1, PROFINESS2 with 3 screws DIN 912-2-8 * 16 and 3 sliding blocks	Price on enquiry
9701-PROFINES S 23		Cross bracing plate	Mounting profiles with M10 screw connection below, above and below the same profile can be used	Price on enquiry
9664-PROFINES S 2-26			Transfer as an upper cross rail with two mounting plates 9785-M8-Profiness26 and hex bolt 8x16 Also possible with all of the profiles with connection on bottom as simple cross connection!	Price on enquiry 1345 g/m

1.8. Heavy duty profile				
Art.Nr.	Figure	Item	Comments	Price
9664-Profiness-200		Heavy Duty Profile	Mounting rail ALU 80x100mm Various connectivity options Span width up to 5,70 Meters depending on local conditions and allowable deflection	On Enquiry

2. Rail Connectors				
Art.Nr.	Figure	Item	Comments	Price
9751-PROFINES S12		Rail connector 200mm	For Mounting rails 9664-PROFINESS 1/3/15 You also need 4 selfdrilling screws/connectors for fastening	On Enquiry
9751-PROFINES S 18		Rail connector slide-in 200mm	For Mounting rails 9664-Profiness 1/3/15/16 PROFINESS1/3/15 = 1 Connector / Connection PROFINESS16 = 2 Connectors / Connection	On Enquiry
9557-2-200*40		Rail connector 4-hole 200*40*5mm Round hole M10 Stainless steel A2	Particular for Mounting rail PROFINESS2 (also for PROFINESS1 and PROFINESS3 used) You also need 4 x 6-Hexagon head bolt DIN 933 M10 * 20 + flange nuts with serration 9345-2-10	On Enquiry
9751-PROFINES S 18L		Rail connector slide-in 200mm Light	For Light-Mounting rails 9664-Light 1 and Light 3 Per connection are external 2 connector inserted	On Enquiry

3. Module Assembly

3.1. Module clamps for framed modules				
Art.Nr.	Figure	Item	Comments	Price
9742- PROFINESS4- ...		End clamp ALU	<u>Length:</u> 70 mm <u>Width:</u> 30 mm Please specify module height with your order or enquiry.	On Enquiry
9745- PROFINESS1 3		Middle clamp ALU	<u>Length:</u> 70 mm <u>Width:</u> 36 mm <u>Modul distance:</u> 20mm	On Enquiry
9742- PROFINESSCI ipE		End clamp ALU plus Clip Significantly higher tensile strength than conventional attachments due to special aluminium alloy	End clamp fully assembled with screw, nut and clip connector Please specify module height in your order/enquiry! This convenient clip connection clicks into any top channel of the PROFINESS profiles. Reduced installation time saves your money!	On Enquiry
9745- PROFINESSCI ipM		Middle clamp plus Clip ALU Significantly higher tensile strength than conventional attachments due to special aluminium alloy	Centre clamp fully assembled with screw, nut and clip connector Please specify module height in your order/enquiry! This convenient clip connection clicks into any top channel of the PROFINESS profiles. Reduced installation time saves your money!	On Enquiry

3.2. Screws and accessoires for module clamps

Art.Nr.	Item	Price
Allen screws:		
912-2-8*30	M8*30 mm	On Enquiry
912-2-8*35	M8*35 mm	On Enquiry
912-2-8*40	M8*40 mm	On Enquiry
912-2-8*45	M8*45 mm	On Enquiry
912-2-8*50	M8*50 mm	On Enquiry
912-2-8*55	M8*55 mm	On Enquiry
912-2-8*60	M8*55 mm	On Enquiry
9250-2-8.4	Locking washer A2 8,4mm	On Enquiry

Modul height	Screw for rail with Sliding block	Locking washer (for sliding block channel only)
32 mm	Allen, M8 * 35	
34 mm	Allen, M8 * 35	
35 mm	Allen, M8 * 40	x
36 mm	Allen, M8 * 40	x
38 mm	Allen, M8 * 40	
40 mm	Allen, M8 * 45	x
41 mm	Allen, M8 * 45	x
42 mm	Allen, M8 * 45	
45 mm	Allen, M8 * 50	x
46 mm	Allen, M8 * 50	x
50 mm	Allen, M8 * 55	x

3.3. Module clamps for glass modules

Art.Nr.	Figure	Item	Comments	Price
9745- Laminat M		Middle-/End clamp	<ul style="list-style-type: none"> • Separate upper and lower part • UV resistant EPDM rubber • Modular height adjustable, from 6,5mm glass up • FirstSolar approval You also require one Allen screw DIN 912 A2 8x22	On Enquiry
9742- Laminat M		ALU		

4. Fixings for tiled roofs

4.1. Roof hooks and accessoires made of stainless steel

Art.Nr.	Figure	Item	Comments	Price
9521-Biber30x5A2		Roof hooks beaver tail stainless steel	Hook 30x5mm 0,131kN	On Enquiry
9521-Schiefer 30x5A2		Slate roof hooks stainless steel	Hook 30x5mm 0,887kN	On Enquiry
9521-Schindel 30x5A2		Shingle roof hooks stainless steel	Hook 30x5mm 0,887kN	On Enquiry
9521-2-180x80W 9521-2-180x80 9521-2-150x60 9523-2-157x60		Roof hook Standard Available in stainless steel 1.4301 and 1.4016 and 1.4016 mixed plate / hook 1.4301	Option 1: Plate 180x80x4mm Hook 35x6mm Height 139mm Option 2: Plate 150x60x4mm Hook 30x5mm Height 130mm Option 3: Plate 167x60x5mm Hook 35x8mm Height 150mm	On Enquiry
9525-2-140*56K		Roof hook adjustable Available in stainless steel 1.4301 and 1.4016 and 1.4016 mixed plate / hook 1.4301	Plate 144x56x5 mm Hook 5mm assembled Material: 1.4301	On Enquiry

From Page 35 onwards, you will find an enquiry form for roof hook shapes which you cannot find here. We recommend our special washer-head screws for fastening the roof hooks onto the rafter. (see heading „Screw accessories“)
 We will be happy to send you structural calculations for the roof hooks on request.

5. Solar fixings for sheet metal and eternit roofs

5.1. Pre-assembled dowel screws for timber supporting structures				
Art.Nr.	Figure	Item	Comments	Price
.9216-2-...		Dowel screws hexagon head. pre-assembled (similar picture)	Pre-assembled with 3 serrated nuts WS9345 A2 + EPDM seal WS9218 All dimensions from 10x180 - 12x400 with this pre-assembled item available from stock.	On Enquiry

5.2. Approved dowel screws for timber supporting structures				
Art.Nr.	Figure	Item	Comments	Price
9221-2-...		Dowel screws Allen head. preassembled	Dowel screw for timber supporting structure. with special coating Pre-assembled with nuts, washers and mushroom seal Approval from the construction supervision authority	On Enquiry
9221-2-...		Dowel screws Allen head. preassembled	Dowel screw for timber supporting structure. with special coating Pre-assembled with nuts, washers and calotte (cup) Approval from the construction supervision authority	On Enquiry


5.3. Approved dowel screws for steel supporting structures				
Art.Nr.	Figure	Item	Comments	Price
9222-2-...		Dowel screws Allen head. preassembled	Dowel screw for steel supporting structure. with special coating Pre-assembled with nuts, washers and mushroom seal Approval from the construction supervision authority	On Enquiry
9222-2-...		Dowel screws Allen head. preassembled	Dowel screw for steel supporting structure. with special coating Pre-assembled with nuts. washers and calotte (cup) Approval from the construction supervision authority	On Enquiry

5.4. Adaptor plates for Dowel screws				
Art.Nr.	Figure	Item	Comments	Price
9543-2-82*30*5 9544-2-82*30*5		Adaptor plate Stainless steel A2 for Dowel screws M 10 (9543) M 12 (9544)	L:80mmx B:30mmx H:5mm Round hole: 11/13mm Long hole: 11*29,5mm Material: 1.4301 For Dowel screw M10/12 and M10 For fixing in the bottom rail channel	On Enquiry





Other sizes available on enquiry

5.5. Accessories for sheet metal and Eternit roofs				
Art.Nr.	Figure	Item	Comments	Price
9664-PROFINESS 31 9664-PROFINESS 31-60		Trapezoidal rail	Standard: 1,3cm height Neu: 6cm height for better ventilation of the modules Above channel for Sliding block M8	Price On Enquiry
9583-KALZIP10		Kalzip clamp, angled M10	Kalzip clamp A2 with long slot for rail link M10 Assembled with screw/nut/washer	On Enquiry
9583-Falzklemme		Fold roof clamp	Fold roof clamp A2 with Long hole for rail connection M10 Assembled with bolt / nut / washer	On Enquiry
9581-...		Trapezoidal sheeting panel block A2	4-hole trapezoidal sheeting panel block for fastening directly to the trapezoidal sheeting adjustable We recommend mounting with our building authority approved drilling screws 6.3x25 (Item no. 9191-2-6.3x25)	On Enquiry

6. Accessoires for flat and sheet roofs

6.1. Elevation made from aluminium angle profile				
Art.Nr.	Figure	Item	Comments	Price
9785-...		Elevation of angle sections for upright and landscape of the modules	Rigid support triangles made from angle section e.g. 40x40x3 or 40x40x5 Available in any custom angular dimension	On Enquiry

6.2. aerodynamic flat roof system

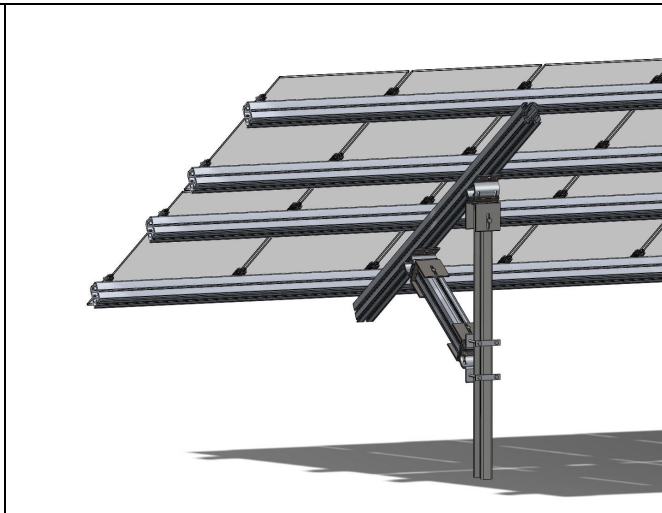
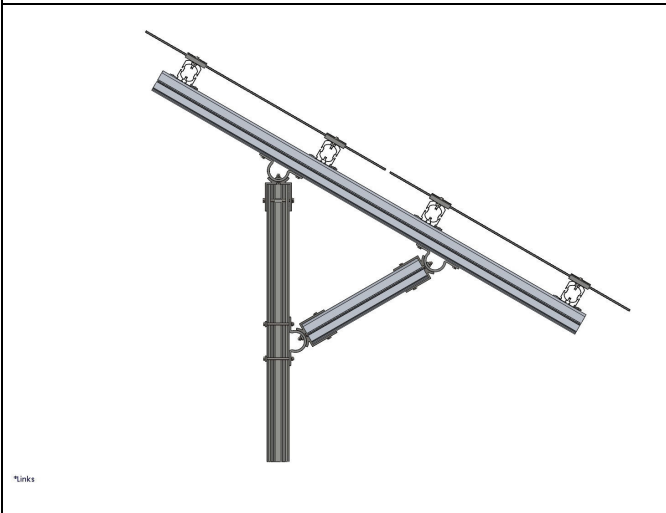
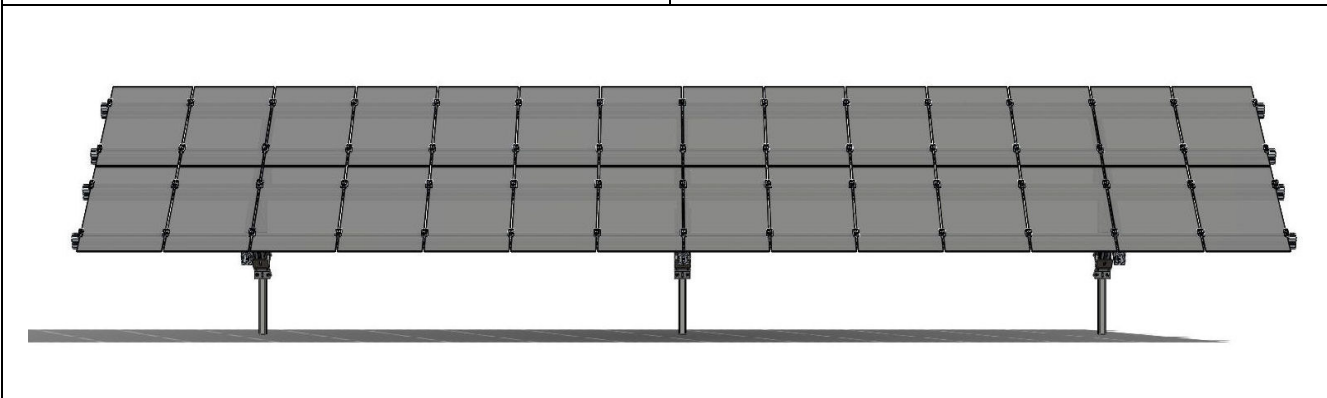
Item description	Items
	
	

For our aerodynamic elevation systems (East / West and South) we have designed separate brochures. Please request our Sales:

(info@profiness.de · : 0208 309 61 90 2 · Fax: 0208 309 61 909

7. Open land installations

Special elevations, even for open-land installations, are available on Enquiry.






*links

8. Screw accessories, solar

For information: Profiness will not only supply you with our innovative solar items but also all the other rustproof connection elements. With 24.000 items permanently available in stock, PROFINESS is not just a supplier with one of the widest and deepest ranges of products on the market but also a global market leader in rust-proof connection elements – available in grades A1 to A5 and in all strength classes. Here is a small selection:

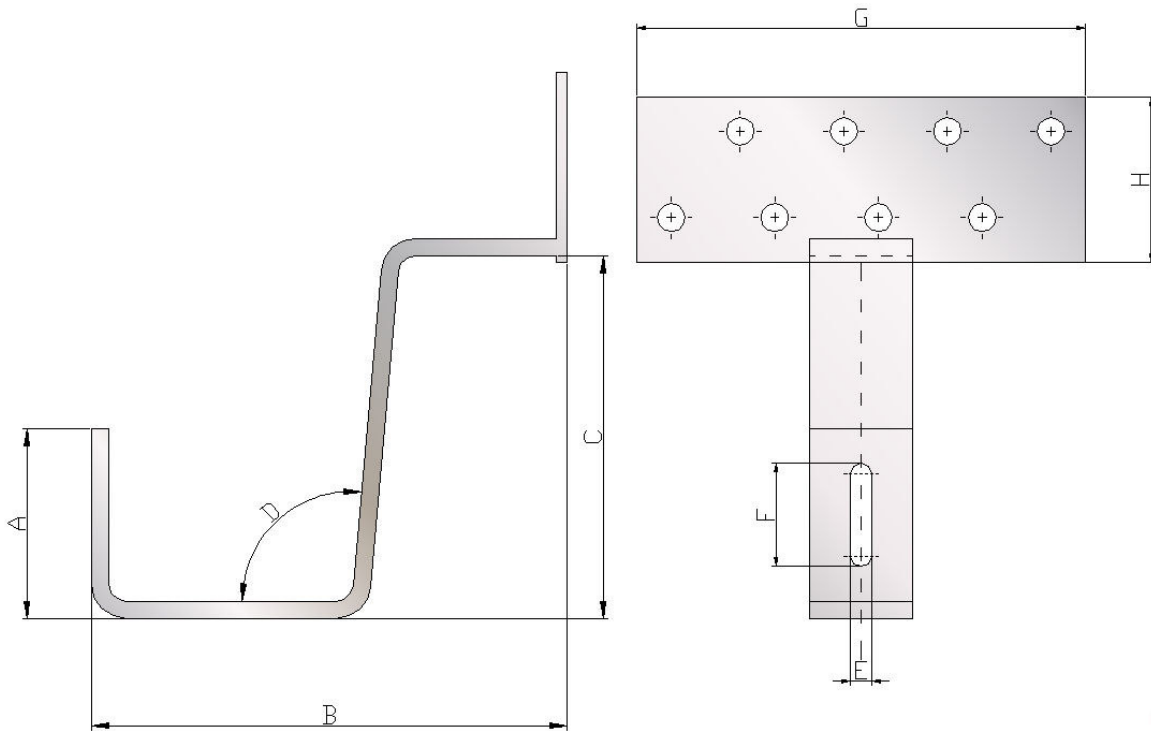
Art.Nr.	Figure	Item	Comments	Price															
9810-0-.....*.....		Washer head screws with TX drive. stainless steel. hardened Approved by the construction supervision authority for fastening roof hooks etc.	M8*80	On Enquiry															
			M8*100	On Enquiry															
			M8*120	On Enquiry															
571-2-.....*.....		Hexagon head – wood screws for fastening roof hooks etc.	8*80 10*80 8*100 10*100 8*120 10*120 8*140 10*140 8*160 10*160 8*180 10*180 8*200 10*200 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry															
912-2-.....*..... 912-4-.....*.....		Cheese head Allen screw in A2 and A4 according to DIN912	for fastening our module clamps etc. see table under 7.) Module clamps	On Enquiry															
933-2-.....*..... 933-4-.....*.....		Hexagon head screw full thread in A2 and A4 according to DIN933	including size M10x25 for bottom rail channel Item 9664-PROFINESS1	On Enquiry															
9415-2-.....*..... 9415-4-.....*.....		Hammerhead screw A2 and A4 for mounting rail Type 28/15 according to PROFINESS standard WS9415 (other rail types available on enquiry)	M8*20 M10*20 M8*25 M10*25 M8*30 M10*30 M8*35 M10*40 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry															
9021-2-..... 9021-4-.....		Washer with large external diameter in A2 and A4 according to DIN9021	<table border="0"> <tr> <td></td> <td>innen-</td> <td>außen-</td> </tr> <tr> <td>für:</td> <td>(mm)</td> <td>(mm)</td> </tr> <tr> <td>M8</td> <td>8,4</td> <td>24,0</td> </tr> <tr> <td>M10</td> <td>10,5</td> <td>30,0</td> </tr> <tr> <td>M12</td> <td>13,0</td> <td>37,0</td> </tr> </table> Additional sizes in stock!! Visit: www.profiness.de		innen-	außen-	für:	(mm)	(mm)	M8	8,4	24,0	M10	10,5	30,0	M12	13,0	37,0	On Enquiry
	innen-	außen-																	
für:	(mm)	(mm)																	
M8	8,4	24,0																	
M10	10,5	30,0																	
M12	13,0	37,0																	

Art.Nr.	Figure	Item	Comments	Price
125-2-..... 125-4-.....		Washer in A2 and A4 according to DIN125	für: innen- (mm) außen- (mm) M8 8,4 16,0 M10 10,5 20,0 M12 13,0 24,0 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry
9250-2-....		Locking washers "S" for our module clamps etc. see table under Point 7.)Module clamps	für: innen- (mm) außen- (mm) M8 8,4 13,0 M10 10,5 16,0 M12 13,0 18,0 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry
603-2-..... *..... 603-4-..... *.....		Mushroom head square neck bolt in A2 and A4 according to DIN603	M10*20 M10*25 M10*25 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry
557-2-..... 557-4-.....		Square nut in A2 and A4 according to DIN557	M8 M10 M12 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry
934-2-..... 934-4-.....		Hexagon nut in A2 and A4 according to DIN934	M8 M10 M12 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry
985-2-..... 985-4-.....		Stop nut thin in A2 and A4 according to DIN985	M8 M10 M12 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry
9345-2-..... 9345-4-.....		Hexagon nut similar to DIN 6923 with flange and serration in A2 and A4	M8 M10 M12 Additional sizes in stock!! Visit: www.profiness.de	On Enquiry

9360-2-...		VA compound anchor mortar cartridge VA-P	For fastening dowel screws in concrete	On Enquiry
9495-ZN-...		Star inserts for TX drive	Material: Zinc diecast For TX sizes 10-40	On Enquiry
5401-2-40-6,25		Ball for driving in	Balls Niro 304 6.25 mm Grade40 For securing Allen screws SW6	On Enquiry

Order/Enquiry sheet for pan roof hooks

Pan roof hooks:



Please enter your particular dimensions:

A	B	C	D	E	F	G	H

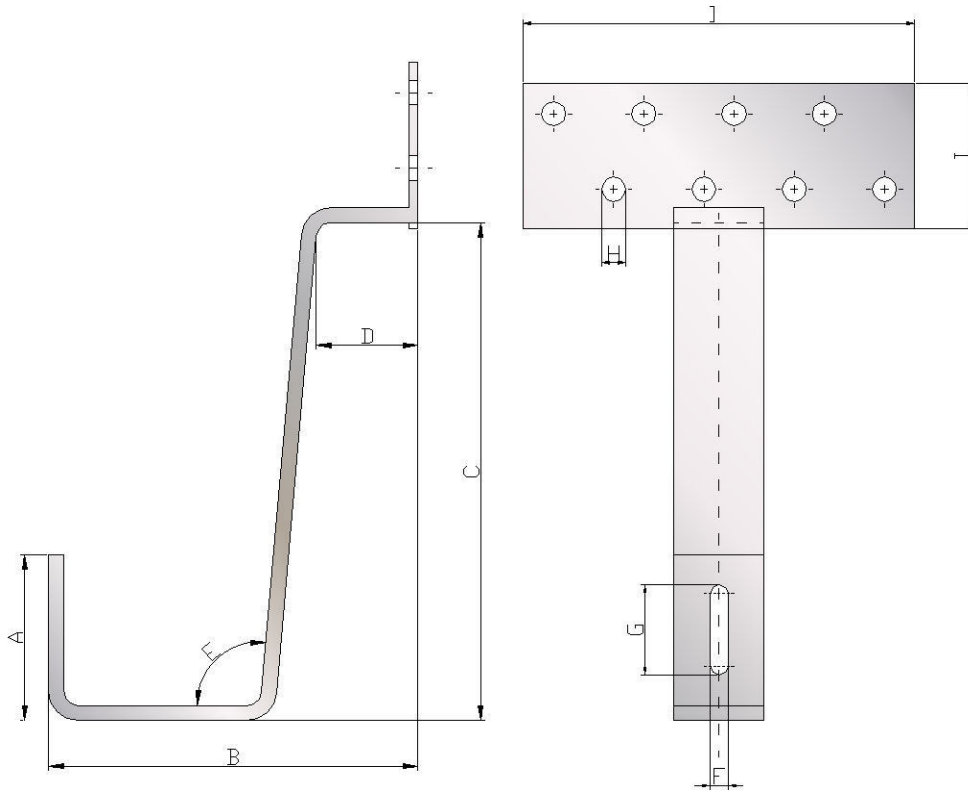
Number of pieces:

Delivery address:

We make them out of 5 mm thick stainless steel 1.4301 unless instructed otherwise

Order/Enquiry sheet for flat-tail roof hooks:

Flat-tail roof hook:



Please enter your particular dimensions:

A	B	C	D	E	F	G	H	I	J

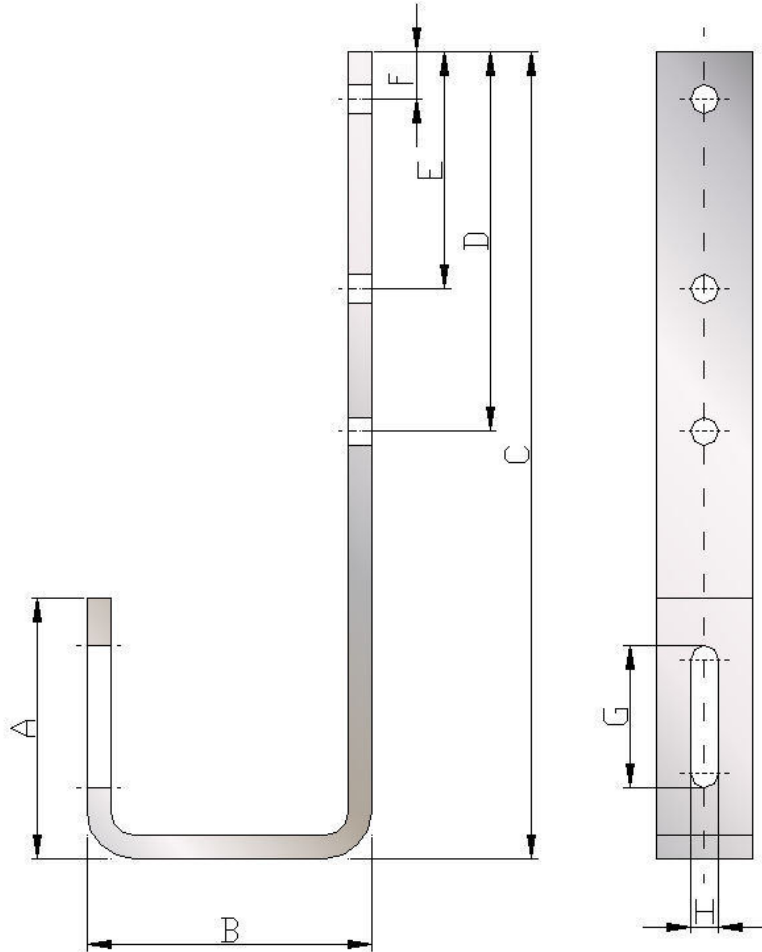
Number of pieces:

Delivery address:

We make them out of 5 mm thick stainless steel 1.4301 unless instructed otherwise

Order/Enquiry sheet for slate roof hooks

Slate roof hook:



Please enter your particular dimensions:

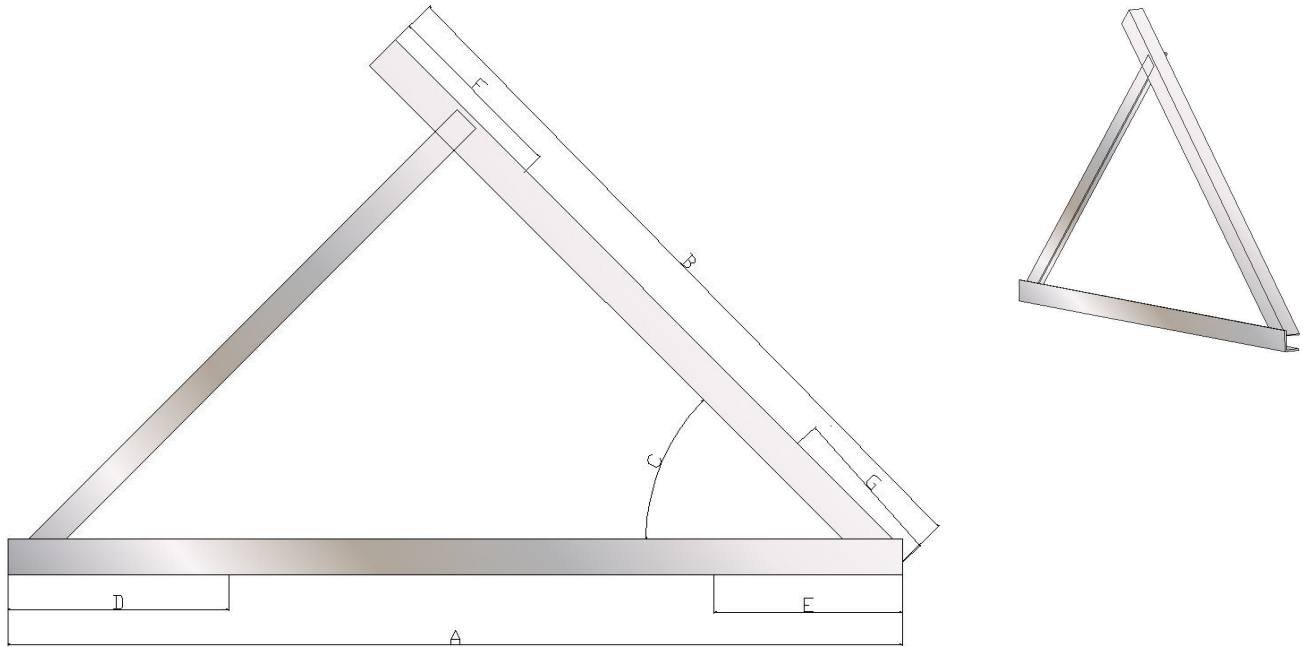
A	B	C	D	E	F	G	H

Number of pieces:

Delivery address:

We make them out of 5 mm thick stainless steel 1.4301 unless instructed otherwise

Order/Enquiry sheet for elevations



Please enter your particular dimensions:

A	B	C	D	E	F	G

Material (e.g. angle 40 x 40 x 3):

Number of pieces:

Delivery address:

Enquiry / Calculation Form

Name:

Address:

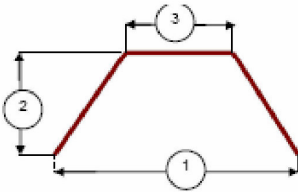
Phone:..... Fax: e-mail:

Type of fixing: On roof Elevation

Roof cladding: Clay tiles Concrete tiles Trapezoidal sheets Corrugated sheets Eternit

Manufacturer/other information:

Trapezoidal sheet --> If you do not know the manufacturer and the ID:



1) Jaw length in mm

2) Shank length in mm

3) Neck length in mm

Please note: With sandwich elements. specify total height (Trapezoidal sheet + insulation = element thickness)

Building information: Building height (from ground to ridge in m)

Snow-load zone (KN/qm): Wind-load zone: Roof pitch: (in degrees)

Category: Within Germany . . . Coastal area (5 km strip) Island

Roof specifications: Rafters Purlins Spacing between rafters/purlins in cm.
(centre to centre)

Material of rafters/purlins (**supporting structure**): Concrete Steel Timber

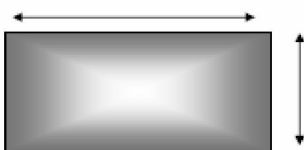
Dimensions of roof battens (**width x height in cm**):

Module specifications: Number of modules: Modultyp:

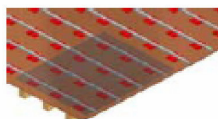
Dimensions of module (please specify anyway) **length x width x height in mm**:

Alignment of module:: upright crosswise Weight of module (in g)

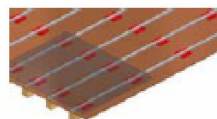
Roof dimensions:



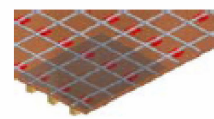
Profile placement:



horizontal placement
(parallel to ridge)



vertical placement
(perpendicular to ridge)



cross bracing
(with base rail)



Mounting systems for photovoltaic



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Contact	
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