

5 Series Aluminum Extrusions

Aluminum Extrusions with Parallel Surfacing

5 Series		Fixing Parts		Others	
		Brackets	Joints	Nut	Extrusion End Caps
P535	P551	P557	P557	P755	
P550	P554	P566	P567	P768	

5 Series Aluminum Extrusions

Bent Extrusions / Brackets for Reinforcement

5 Series		Fixing Parts		Others	
		Brackets	Joints	Nut	Extrusion End Cap
P535	P551	P557	P557	P755	
P550	P554	P566	P567	P768	

Features: Milled on upper and lower surfaces. Usable for Linear Guides, etc.

HFSP

Milled Surface

Milled Surface

Milled Surface

RoHS 10

Milled surfaces and cut surfaces are not anodized.

0.1/100 D

6.3

L±0.5

Material : A6N01SS-T5

Surface Treatment: Clear Anodize

Detailed view of slot on milled surface

*Due to the extrusion tolerance, the thickness tolerance of the slot on the milled surface becomes as shown above, while T dimension tolerance is ±0.1.

Being extruded sections, products can twist. Supporting overall length of extrusion for use is recommended. See Aluminum Extrusion Tolerance Data on P.514.

For detailed dimensions and shapes EXCEPT the slots on the milled surface, A and T dimensions, please refer to the drawing of the product of the below Part Number without "P". (Ex.) HFSP5-2020 → Ref. fig. HFSS-2020(P.529)

Square Type HFSP5-2020	Rectangle Type (Horizontal) HFSP5-4020	HFSP5-6040	Rectangle Type (Vertical) HFSP5-2040	HFSP5-2060	HFSP5-2080	L-Shaped Type HFSP5-404020
HFSP5-2525	HFSP5-5025	HFSP5-6020	HFSP5-2550	HFSP5-4060	HFSP5-4080	
HFSP5-4040	HFSP5-8040	HFSP5-8020				

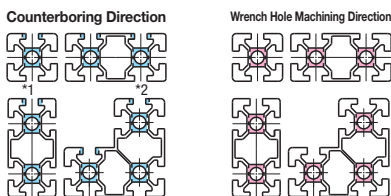
Part Number	L 0.5mm Increment	Extrusion Series	T	A	Unit Price (Less than 300mm)	Unit Price/m (300mm or More)	Alteration Charge (Main Body +)		Tapping (See P.757)				
							Counterboring XA - XE (per Row)	Wrench Hole Drilling AV - EV (per Row)	Tap Shape	Left LTP	Right RTP	Both TPW	
HFSP5	2020	100-3000	HFSS	19.2	20			25 d5.5 d19.5	D7 Ø7.35	M5 Depth 15			
	4020			19.2	40								
	2040			39.2	20								
	2525			24.2	25								
	5025			24.2	50								
	2550			49.2	25								
	6020			19.2	60								
	2060			59.2	20								
	8020			19.2	80								
	2080			79.2	20								
	4040			39.2	40								
	6040			39.2	60								
	4060			59.2	40								
	8040			39.2	80								
	4080			79.2	40								
404020	39.2	40											

Ordering Example: Part Number - L
HFSP5-2020 - 300

Alterations Adds a hole at a specified position.

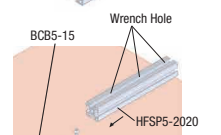
Nuts for Extrusions Use nuts for aluminum extrusions on P557-566.

Alterations Code	Counterboring					Wrench Hole						
	Z Selection	XA	XB	XC	XD	XE	D Selection	AV	BV	CV	DV	EV
Spec.	Z	d	d1	Distance from the Left End Plane mm			D	Distance from the Left End Plane mm				
Specifications of Hole Size and Position	5	5.5	9.5	7-(L-7)			7	7-(L-7)				
	6	6.5	11									

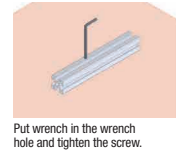


Orientation Example: HFSP5 - 404020 - 150 - Z5 - XA20 - XB45 - XC80 - XD120
HFSP5 - 2020 - 2000 - D7 - AV100 - BV120 - CV1000 - DV1880 - EV1900
HFSP5 - 4040 - 800 - LTP

Example Linear Guides



Installed button screws temporarily in reference planes, then slide the frame to fixing position, passing screw heads through frame slot.



Put wrench in the wrench hole and tighten the screw.

*1 When the cross section is rectangle (vertical), counterboring is not available for extrusions exceeding 60mm in the length direction.
*2 When the cross section is L-shaped, counterboring is not available for extrusions exceeding 60mm in longitudinal direction, except for the lower portion.

Features: Bending is applied to HFSS-2020. Combination use with Bent Panel (P.968) is possible.

Bent Extrusions

RoHS 10

HFSMG5

Bending is applied after anodizing; therefore, bent section may slightly discolor and becomes white.

(For dedicated Bent Panels, refer to P.968)

Material : A6N01SS-T5

Surface Treatment: Clear Anodize

HFSFMG5

Only this side of HFSFMG5 has no slot.

R : Length to the Extrusion Center

When R=140, the frame slot may be deformed and becomes narrower in width at the spot where the frame is bent. Therefore, slot nut cannot be used.

Part Number	A	B	R*
Type	No.	1mm Increment	1mm Increment
HFSMG	5-2020	200-1500	200-1000
HFSFMG			140
			300
			500

Type	Series	Mass kg/m	Sectional Area mm ²	Cross Sectional Moment of Inertia mm ⁴
HFSMG	HFS5	0.50	183	0.742x10 ⁴
HFSFMG				0.742x10 ⁴

* Bent panels for R300 and R500 are not available.

Ordering Example: Part Number - A - B - R
HFSMG5-2020 - A350 - B700 - R140

Part Number	A	Unit Price																
		R140				R300				R500								
Type	No.	B		B		B		B		B		B						
HFSMG	5-2020	200-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	400-500	501-600	601-700	701-800	801-900	901-1000	600-700	701-800	801-900
		301-400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		401-500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		501-600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		601-700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		701-800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		801-900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		901-1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1001-1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1101-1200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1201-1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1301-1400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1401-1500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Features: Reinforcement Brackets machined from extrusions. Usable on locations needing more strength after connecting with brackets.

Brackets for Reinforcement

RoHS 10

HFBL5-2020

Material : A6N01SS-T5

Surface Treatment: Clear Anodize

HFBL5-4020

Part Number	L 1mm Increment	Applicable Screw and Nut				L100-300		L301-500		
		Screw	Nut	Quantity	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate		
2020		CBM5-8	HNTT5-5	2	1-4 (pc/s)	5-20	21-50	1-4 (pc/s)	5-20	21-50
HFBL5	100-500			2						
2040				4						
4020				2						

Alterations Part Number - L - (C, SET, SST, SEU, SSU, SEP, SSP, SEC)
HFBL5-2020 - 300 - SET

Alterations Code	Code	Spec.	Applicable Bracket
SET	SET (Stainless Steel)	Applicable screws and nuts for fixing the brackets on extrusions come in a set. (Adds to the bracket price.)	HFBL5-2020
SST	SST (Stainless Steel)	(Ex.) When HFBL5 is specified	HFBL5-2040
SEU	SEU (Pre-Assembly Insertion Spring Nuts)		HFBL5-4020
SSU	SSU (Pre-Assembly Insertion Spring Nuts)		
SEP	SEP (Post-Assembly Insertion Spring Nuts)		
SSP	SSP (Post-Assembly Insertion Spring Nuts)		

* Not RoHS compliant when -SET, -SEU or -SEP are specified.