

# Aluminum Extrusions (HFS6 Series)

Minimal Corner Radius / Slot Width Mixed (50, 100 mm Square)

HFS6 Series		Fixing Parts			Others	
Brackets	Nuts	Joints	Extrusion End Caps	Alteration		
P.2735-2753	P.2756-2763	P.2844-2857	P.2764-2765	P.2862-2875		

Features: Corner radiuses are small as R0.3, can be used side by side as a base.

HFS6 Series Aluminum Extrusions – Minimal Corner Radius

Materials: A6N01SS-T5 Aluminum Alloy  
Surface Treatment: Clear Anodize

Red circle shows the position of tapping for alteration.

(See below for detailed dimensions.)

⚠ Clear Anodize is not available for cut surfaces and machined parts.

Details of slot

16.5  
8  
7  
2  
120°  
0.3  
Enlarged View of A

HFSV6-3030

HFSV6-3060

Part Number		L 0.5 mm Increment	Mass kg/m	Sectional Area mm²	Cross Sectional Moment of Inertia mm⁴	
HFSV6	3030	50-4000	0.91	335	2.91 x 10⁴	2.91 x 10⁴
	3060		1.60	594	5.41 x 10⁴	20.83 x 10⁴

**Part Number Example**

Part Number - L  
HFSV6-3030 - 1200

**Part Number Alterations**

Alterations are available for Configurable Length Extrusions. For details, refer to P.2862-2875

**Features**

HFSV Series  
Small gap collects small amounts of dust.

Existing HFS Series

4-R0.3  
4-R2

**Application Example**

Effective use is to align frames, as shown below.

HFSV6-3060 multiple pieces

Enlarged Back Side  
HBLFSD6

Features: Mixed Slot Width Extrusions of HFS5 and HFS6 series.

HFS6 Series Aluminum Extrusions – Slot Width Mixed

RoHS10

Red circle shows the position of tapping for alteration.

(See below for detailed dimensions.)

⚠ Cut surfaces are not anodized.

Material: A6N01SS-T5 Aluminum Alloy  
Surface Treatment: Clear Anodize

HFS6-5H-3030

HFS6-5Y-2030

Part Number			L 0.5 mm Increment	Mass kg/m	Sectional Area mm²	Cross Sectional Moment of Inertia mm⁴	
Type	Shapes	No.	50-4000	1.04	388	3.08 x 10⁴	3.51 x 10⁴
HFS6-5	H	3030		0.70	260	1.10 x 10⁴	2.61 x 10⁴
	Y	2030					

**Part Number Example**

Part Number - L  
HFS6-5H-3030 - 800

**Part Number Alterations**

Part Number - L - (Alteration Code)  
HFS6-5H-3030 - 800 - TPW

**Application Example**

HBLTSS  
HFS6-5H-3030

Alterations		Tapping (Main Body +)			Left	Right	Both
Spec.	Code	Tap Shape					
HFS6-5	H	3030	M8 Depth 24	LTP	RTP	TPW	

⚠ Not applicable to HFS6-5Y-2030.

# Extrusions (HFS6 Series)

Parallel Chamfered (50, 100 mm Square)

HFS6 Series		Fixing Parts			Others	
Brackets	Nuts	Joints	Extrusion End Caps	Alteration		
P.2735-2753	P.2753-2763	P.2844-2857	P.2764-2765	P.2862-2875		

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

HFS6 Series Extrusions – Parallel Chamfered

RoHS10

HFSP GFSP

Milled Surface  
T±0.1  
Milled Surface A

0.1/100 D  
6.3  
L±0.5  
6.3

⚠ Milled surfaces and cut surfaces are not anodized.

Detailed View of Slot on Milled Surface

8  
1.6±0.2  
7  
16.5

⚠ Being extruded sections, products can twist. It is recommended to support overall length of extrusion when using. See tolerance data on aluminum extrusions on P.2685.

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

Twisting

⚠ 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.) HFSP6-3030 → Ref. fig. HFS6-3030 (Refer to P.2723.)

**Square Type**  
HFSP6-3030  
T±0.05  
A

**Rectangle Type (Horizontal)**  
HFSP6-6030  
T±0.05  
A

**Rectangle Type (Vertical)**  
HFSP6-9060  
T±0.05  
A

**Rectangle Type (Vertical)**  
HFSP6-3060  
T±0.1  
A

**Rectangle Type (Vertical)**  
HFSP6-50100  
T±0.1  
A

**Rectangle Type (Vertical)**  
GFSP6-3060  
T±0.1  
A

**Rectangle Type (Horizontal)**  
HFSP6-9030  
T±0.05  
A

**Rectangle Type (Horizontal)**  
HFSP6-5050  
T±0.05  
A

**Rectangle Type (Horizontal)**  
HFSP6-6060  
T±0.05  
A

**Rectangle Type (Horizontal)**  
GFSP6-6030  
T±0.05  
A

**Rectangle Type (Horizontal)**  
HFSP6-10050  
T±0.05  
A

**Rectangle Type (Horizontal)**  
HFSP6-3090  
T±0.1  
A

**Rectangle Type (Horizontal)**  
HFSP6-6090  
T±0.1  
A

**L-Shaped Type**  
HFSP6-606030  
T±0.1  
A

Part Number	L 0.5mm Increment	Extrusion Series	T	A
HFSP6	3030	HFS6	29.2	30
	6030		29.2	60
	3060		59.2	30
	3090		29.2	30
	3090		89.2	30
	5050		49.2	50
	10050		49.2	100
	50100		99.2	50
	100100		99.2	100
	6060		59.2	60
	9060		59.2	90
	6090		89.2	60
GFSP6	606030	GFS6	59.2	60
	3030		29.2	30
	6030		29.2	60
	3060		59.2	30

**Counterboring Direction**

1  
2

**Wrench Hole Machining Direction**

1  
2

\*1. When the cross section is rectangle (vertical), counterboring is not available for extrusions exceeding 60 mm in the longitudinal direction.

\*2. When the cross section is L-shaped, counterboring is only applicable to the lower section of extrusions exceeding 60 mm in length direction.

**Part Number Example**

Part Number - L  
HFSP6-3030 - 300

**Part Number Example**

HFSP6 - 606030 - 150 - Z6 - XA20 - XB45 - XC80 - XD120  
HFSP6 - 3030 - 2000 - D8 - AV100 - BV120 - CV1000 - DV1880 - EV1900  
HFSP6 - 3030 - 800 - LTP

**Part Number Alterations**

Drilling hole at a specified position can be done.

Nuts for Extrusion  
Please use nuts for aluminum extrusions.  
For the nuts, refer to P.2756-2763

Alterations	Counterboring					Wrench Hole						
Code	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 & Hole Position	6	6.5	11	7-L-7			8	7-L-7				
	8	9	14									

⚠ When the cross section is L-shaped, select distance from left end with lower section in front.