

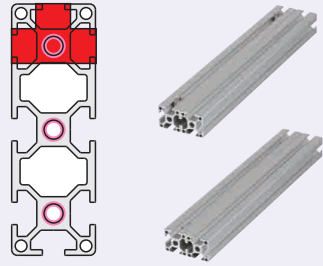
L Hole Alterations

Blind Joints which require this alteration

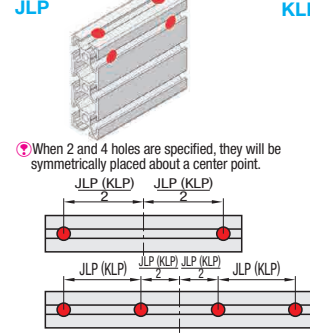
Parallel Joints
P554, etc.

Drilling of L Holes for Parallel Joint Connections.

(Reference) Corner section when using Parallel Joints

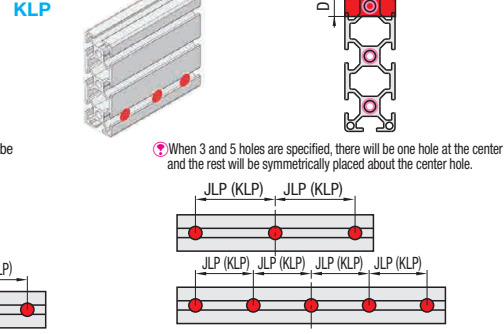


L Holes Crisscross on Bottom
JLP



When 2 and 4 holes are specified, they will be symmetrically placed about a center point.

L Holes Crisscross on Top
KLP



When 3 and 5 holes are specified, there will be one hole at the center and the rest will be symmetrically placed about the center hole.

For extrusions with multiple slots on one surface, only a slot on each end will be hole machined.

Alteration	Hole Pitch (1mm Increment)	H (Number of Holes)	No.	D
JLP	D+4.9- L-D-10 H-1	2 3 4 5	5	7.1
KLP			6	11.1
			8	13.1

Ordering Example
Part Number
HFS6 - 3090 - 1200 - JLP1100 - H2
HFS8 - 4080 - 1800 - KLP870 - H3
HFS8 - 4080 - 1800 - JLP870 - KLP870-H3

Hole pitch on Top/Bottom can be separately specified, but the number of holes will be equal on top and bottom.
See the table below for the applicable extrusions and alteration charges. Indicated with "-" in the table are not applicable.

Alterations	L Hole (Charge per 1 Hole Location)		L Hole Dia.
	Crisscross on Top Section	Crisscross on Bottom Section	
Code	JLP	KLP	
Features			
Four-Side Slots			
3-Side Slot 1 Side Flat			
Two-Side Slots Two Flats			
Two Slots on Opposite Sides			
One-Side Slot Three Flats			
Angled			
Black Anodize			
Curved			
Four-Side Slots			
3-Side Slot 1 Side Flat			
Two-Side Slots Two Flats			
Two Slots on Opposite Sides			
One-Side Slot Three Flats			
Light Type			
Heavy Type			
Angled			
Black Anodize			
Curved			

Alterations	L Hole (Charge per 1 Hole Location)		L Hole Dia.
	Crisscross on Top Section	Crisscross on Bottom Section	
Code	JLP	KLP	
Features			
Four-Side Slots			
3-Side Slot 1 Side Flat			
Two-Side Slots Two Flats			
Two Slots on Opposite Sides			
One-Side Slot Three Flats			
Light Type			
Angled			
Black Anodize			
Curved			

* Number of holes determines the alteration fee. (Price in the Table x Number of Holes)

Other Special Alterations

End plates mounting for GFS series

Machines countersink and tapped hole in order to mount the end plate for high rigidity aluminum extrusions.

Alterations Code	Hole Machining for End Plate Mounting		
	LTS	RTS	TSW
Spec.	Machined on the Left End Screw End Plate Extrusion Countersink Depth 36* * Depth 24 for GFS6 Series	Machined on the Right End Extrusion Screw End Plate Countersink Depth 36* * Depth 24 for GFS6 Series	Machined on both ends. Countersink Depth 36* Countersink Depth 36* * Depth 24 for GFS6 Series
Applicable Extrusion	Applicable Screw		
GFS6-3030	SHFBS8-15 x 1 pc.		
GFS6-3060	SHFBS8-15 x 2 pcs.		
GFS8-4040	SHFBS12-20 x 1 pc.		
GFS8-4545			
GFS8-5050			
GFS8-6060			
GFS8-4080			
GFS8-4590	SHFBS12-20 x 2 pcs.		
GFS8-50100			
GFS8-9090			
GFS8-100100			
GFS8-100200			

* Screws are not included.

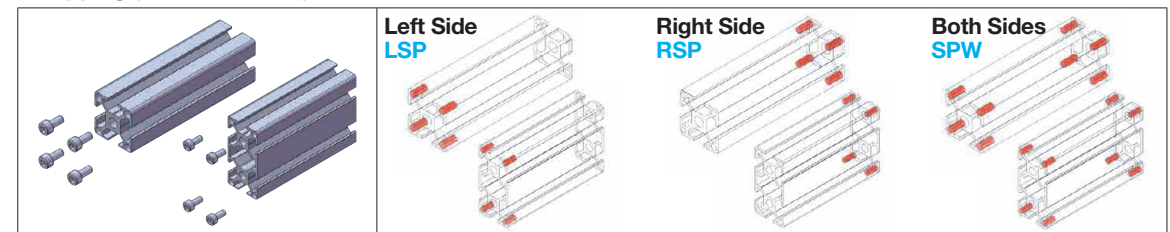
End plates mounting for HFSR5-404020 and HFSR6-606030

Machines countersunk and tapped holes to mount the plates on P555, 568, 615, 628.

Alterations Code	Hole Machining for End Plate Mounting		
	LTS	RTS	TSW
Spec.	The diagram below shows the basic extrusion position. LTS: Machined on the Left End RTS: Machined on the Right End TSW: Machined on Both Ends		
Applicable Extrusion	Applicable Screw		
HFSR5-404020	SHFBS5-6		
HFSR6-606030	SHFBS8-12		

* Screws are not included.

Tapping (Corner Section)

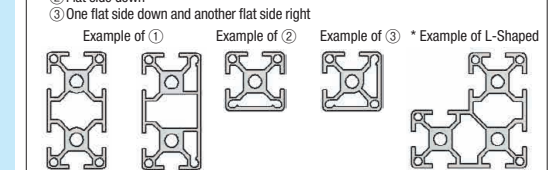


Alterations Code	Tapping End Tapping				
	Tap Shape	Number of Tapped Holes (per End)	Left LSP	Right RSP	Both SPW
Extrusion Features					
HFS6 Series	Four-Side Slots	CAF6	3030	P571	
			3060	P573	
			3030	P573	
			3060	P573	
			3090	P576	
			30120	P577	
	HFSV6	3030	P580		
		3060	P578		
	3-Side Slot 1 Side Flat	HFSF6	3030	P572	
			3060	P574	
	Two-Side Slots Two Flats	HFST6	3030	P572	
			3060	P574	
Two Slots on Opposite Sides	HFSH6	3030	P572		
		3060	P574		
One-Side Slot Three Flats	HFSC6	3030	P572		
		3060	P574		
Black Anodize	HFSB6	3030	P571		
		3060	P573		
HFSFB6	3030	3030	P572		
		3060	P572		

Ordering Example
Part Number
HFS6 - 3030 - 500 - LSP
HFS6 - 3060 - 500 - SPW

Standard of Extrusion Position

Placing method of the extrusion, which is a basis to determine right and left is shown as follows.

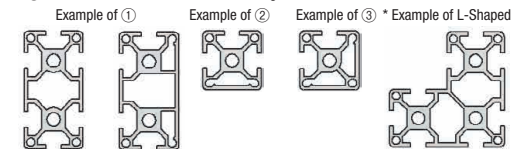


When the extrusion is on the vertical length and also has a flat side, ① has the priority.
For center section tapping, see P.757.

Standard of Extrusion Position

Placing method of the extrusion, which is a basis to determine right and left is shown as follows.

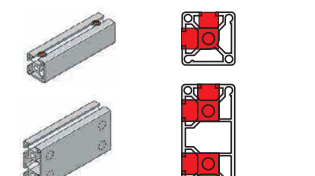
- On the vertical length
- Flat side down
- One flat side down and another flat side right



When the extrusion is on the vertical length and also has a flat side, ① has the priority.

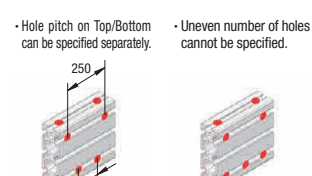
Additional Info. on Smooth Sided Extrusions

Holes in smooth side direction are blind holes, and do not penetrate through the smooth side.



Notes on JLP / KLP Combination Use

Hole pitch on Top/Bottom can be separately specified, but the number of holes will be equal on top and bottom.



Hole pitch on Top/Bottom can be specified separately.
Uneven number of holes cannot be specified.