

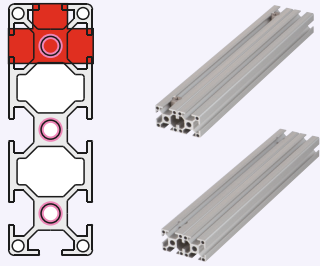
# L Hole Alterations

Blind Joints which require this alteration

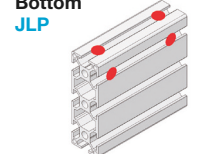
Parallel Joints  
P554, etc.

Drilling of L Holes for Parallel Joint Connections.

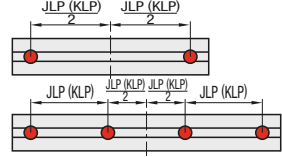
(Reference) Corner section when using Parallel Joints



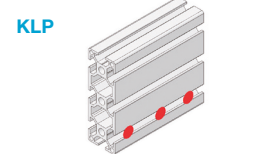
**L Holes Crisscross on Bottom**  
JLP



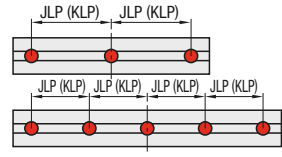
When 2 and 4 holes are specified, they will be symmetrically placed about a center point.



**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	5	7.1
KLP	H-1	2 3 4 5	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)		
	Crisscross on Top Section	Crisscross on Bottom Section	
Code	JLP	KLP	
Four-Side Slots	-	-	-
3-Side Slot 1Side 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 1Side Flat	-	-	-
Two-Side Slots Two Flats	-	-	-
Two Slots on Opposite Sides	-	-	-
One-Side Slot Three Flats	-	-	-
Light Type	-	-	-
Heavy 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	GFS6-3030	GFS6-3060 GFS8-4040 GFS8-4545 GFS8-5050 GFS8-6060	GFS8-4080 GFS8-4590 GFS8-50100 GFS8-9090 GFS8-100100 GFS8-100200
Applicable Screw	SHFBS8-15 x 1 pc.	SHFBS8-15 x 2 pcs. SHFBS12-20 x 1 pc.	SHFBS12-20 x 2 pcs.

Screws are not included.

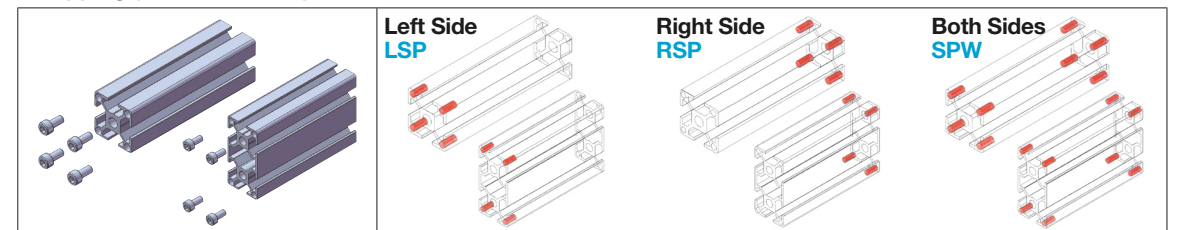
## End plates mounting for HFSR5-404020 and HFSR6-606030

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	HFSR5-404020 HFSR6-606030		
Applicable Screw	SHFBS5-6 SHFBS8-12		

Screws are not included.

## Tapping (Corner Section)

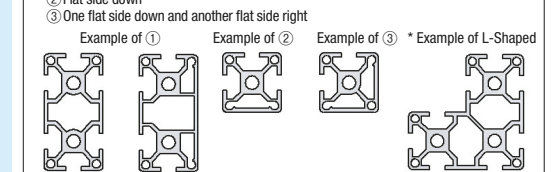


Alterations Code	Tapping End Tapping			
	Tap Shape	Number of Tapped Holes (per End)	Left	Right
Extrusion Features <td></td> <td></td> <td>LSP</td> <td>RSP</td>			LSP	RSP
Four-Side Slots	CAF6	3030 P571 3060 P573 3090 P575 3090 P576 30120 P577 6090 P577 60120 P578 606030 P578		
3-Side Slot 1Side Flat	HFSF6	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 P572		

Ordering Example  
 Part Number  
 HFS6 - 3030 - 500 - LSP  
 HFST6 - 3060 - 500 - SPW

## Standard of Extrusion Position

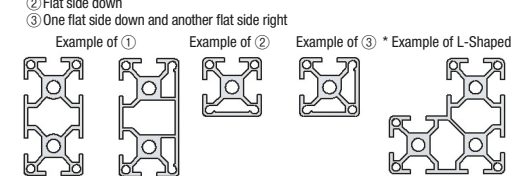
Placing method of the extrusion, which is a basis to determine right and left is shown as follows.  
 ① On the vertical length  
 ② Flat side down  
 ③ One flat side down and another flat side right



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

## Standard of Extrusion Position

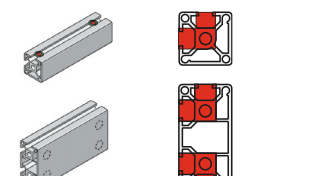
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When the extrusion is on the vertical length and also has a flat side, ① has the priority.

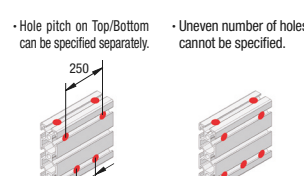
## Additional Info. on Smooth Sided Extrusions

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.