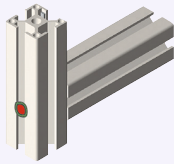
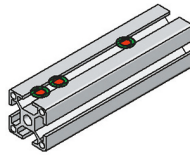


Counterbores in Specified Position

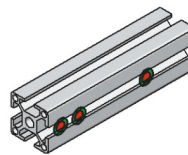
Counterbores useable for various purposes are added at customer specified locations.



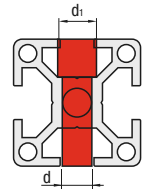
Top to Bottom (Vertical)
XA XB XC XD XE



Right to Left (Horizontal)
YA YB YC YD YE



Cross Section View



Counterbore is added on every slot for multiple slotted extrusions.

Alteration Code Specification Method

- As for the Counterbore, it is possible to select one type of hole diameter in Z selection and specify up to five holes in one direction.
- Specify the desired hole position from the left end.

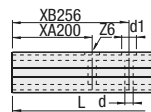
Alterations		Counterboring			
Code	Spec.	Z Selection		XA XB XC XD XE	
		Extrusion Series	Selection	Distance from the Left End (0.5mm Increment)	
Specify Counterbores and Locations	HFS5	6	5.5	9.5	
	HFS6	6	6.5	11	
	GFS6	8	6.5	11	
		8	9	14	
	HFS8(-45) GFS8	6	6.5	11	
		8	9	14	
		12	13	19	



Ordering Example

Part Number

HFS6-3030-500-Z6-XA200-XB256



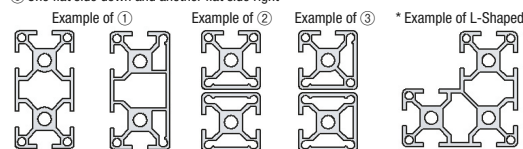
See the table below for the applicable extrusions and alteration charges. Indicated with "-" in the table are not applicable.

Alterations				Counterbores in Specified Position			
Code				From Top to Bottom / From Right to Left			
Features	Type	No.	Page	Counterbored	XA-XE	YA-YE	
Four-Side Slots	HFS5	2020	P529				
	NFS5	2040	P530				
	CAFS	2050	P531				
	HFSY5	2060	P532				
		2070	P533				
3-Side Slot 1-Side Flat	HFSF5	2080	P534				
	NFSF5	2090	P535				
	CAFS	2100	P536				
	HFSY5	2110	P537				
		2120	P538				
Two-Side Slots Two Flats	HFSF5	2020	P529				
	NFSF5	2040	P530				
	CAFS	2050	P531				
	HFSY5	2060	P532				
		2070	P533				
One-Side Slot Three Flats	HFSF5	2020	P529				
	NFSF5	2040	P530				
	CAFS	2050	P531				
	HFSY5	2060	P532				
		2070	P533				
Angled	HFS5	2020	P529				
	NFS5	2040	P530				
	CAFS	2050	P531				
	HFSY5	2060	P532				
		2070	P533				
Black Anodize	HFS5	2020	P529				
	NFS5	2040	P530				
	CAFS	2050	P531				
	HFSY5	2060	P532				
		2070	P533				
Curved	HFS5	2020	P529				
	NFS5	2040	P530				
	CAFS	2050	P531				
	HFSY5	2060	P532				
		2070	P533				
Four-Side Slots	HFS6	3030	P571				
	NFS6	3050	P572				
	CAFS	3070	P573				
	HFSY6	3090	P574				
		3110	P575				
3-Side Slot 1-Side Flat	HFSF6	3030	P572				
	NFSF6	3050	P573				
	CAFS	3070	P574				
	HFSY6	3090	P575				
		3110	P576				
Two-Side Slots Two Flats	HFSF6	3030	P572				
	NFSF6	3050	P573				
	CAFS	3070	P574				
	HFSY6	3090	P575				
		3110	P576				
One-Side Slot Three Flats	HFSF6	3030	P572				
	NFSF6	3050	P573				
	CAFS	3070	P574				
	HFSY6	3090	P575				
		3110	P576				
Light Type	HFS6	3030	P571				
	NFS6	3050	P572				
	CAFS	3070	P573				
	HFSY6	3090	P574				
		3110	P575				
Heavy Type	HFS6	3030	P571				
	NFS6	3050	P572				
	CAFS	3070	P573				
	HFSY6	3090	P574				
		3110	P575				
Angled	HFS6	3030	P571				
	NFS6	3050	P572				
	CAFS	3070	P573				
	HFSY6	3090	P574				
		3110	P575				
Black Anodize	HFS6	3030	P571				
	NFS6	3050	P572				
	CAFS	3070	P573				
	HFSY6	3090	P574				
		3110	P575				
Curved	HFS6	3030	P571				
	NFS6	3050	P572				
	CAFS	3070	P573				
	HFSY6	3090	P574				
		3110	P575				

Standard of Extrusion Position

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

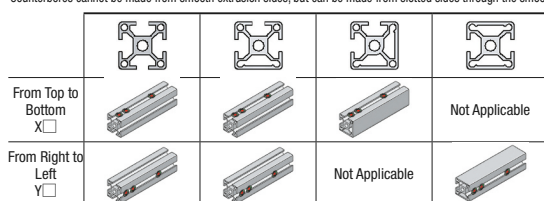
- On the vertical length
- Flat side down
- One flat side down and another flat side right



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

Notes on Flat Sided Extrusions

Counterbores cannot be made from smooth extrusion sides, but can be made from slotted sides through the smooth sides.

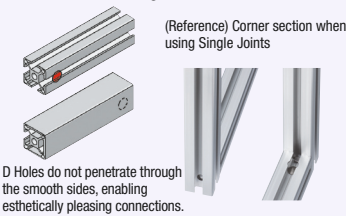


D Type Hole Alterations

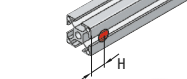
Blind Joints which require this alteration

Single Joints
P609, etc.

Adds D Holes for Single Joint connections.



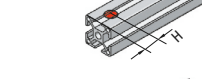
Horizontal on Left End
LDH



Horizontal on Right End
RDH



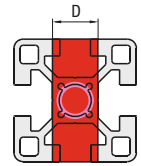
Vertical on Left End
LDV



Vertical on Right End
RDV



Cross Section View



D Hole is added on every slot for multiple slotted extrusions.

Hole Position and Size		D Hole
Extrusion Series	H(mm)	ØD(mm)
HFS6	15	11.1
HFS8	20	13.1
HFS8-45	22.5	15.1



Ordering
Example

Part Number

HFS6-3030-2000-LDH-RDH

See the table below for the applicable extrusions and alteration charges. Indicated with "-" in the table are not applicable.

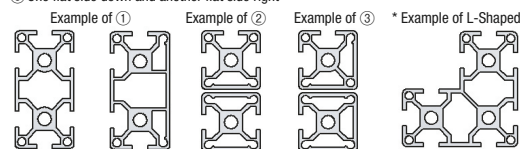
Alterations				D Hole Dia.	D Hole			
Code					Left Side		Right Side	
Features	Type	No.	Page		Horizontally	Vertically	Horizontally	Vertically
				LDH	LDV	RDH	RDV	
Four-Side Slots	HFS6	3030	P573					
	EF6	3060	P576					
	NFS6	30120						
	GF6	5050						
	CAF6	50100	P579					
	HFSY6	100100						
		606030	P575					
		30300	P577					
		3030	P578					
		3060	P576					
3-Side Slot 1-Side Flat	HFS6	3030	P572					
	EF6	3060	P574					
	NFS6	5050	P579					
Two-Side Slots Two Flats	HFS6	3030	P575					
	EF6	3060	P577					
	NFS6	5050	P576					
Two Slots on Opposite Sides	HFS6	3030	P572					
	EF6	3060	P574					
One-Side Slot Three Flats	HFS6	3030	P572					
	EF6	3060	P571					
Light Type	NFS6	3030	P573					
	HFS6	5050	P579					
Heavy Type	NFS6	5050	P575					
	HFS6	5050	P575					
Angled	HFS30A6							
	HFS45A6	30	P578					
	HFS60A6							
Black Anodize		3030	P571					
		3060	P573					
	HFSB6	3090	P576					
	EF6B6	30120						
	NFSB6	5050						
	NFSB6	50100	P579					
		100100						
		6060	P575					
	HFSB6							
	EF6B6							
	3030	P572						
	HFSB6							
	EF6B6							
Curved	HFSB6							
	NFSB6	3060	P573					
	HFSR6	3030	P578					
	HFSR6	606030						
Four-Side Slots	HFS6	4040	P631					
	EF6	4080	P633					
	NFS6	40120	P636					
	NFS6	40160						
	GF6	8000	P635					
	CAF6	80160	P636					
	HFSY6	808040	P637					
		6060	P635					
		4040	P632					
		4080	P634					
3-Side Slot 1-Side Flat	HFS6	4080	P634					
	EF6	4080	P634					
	NFS6	4080	P634					
Two-Side Slots Two Flats	HFS6	4040	P632					
	EF6	4080	P634					
	NFS6	4080	P634					
Two Slots on Opposite Sides	HFS6	4040	P632					
	EF6	4080	P634					
One-Side Slot Three Flats	HFS6	4040	P632					
	EF6	4080	P634					
Light Type	HFS6	4040	P631					
	NFS6	4080	P633					
Angled	HFS30A8							
	HFS45A8	40	P637					
	HFS60A8							
Black Anodize		4040	P631					
		4080	P633					
	HFSB8	40120	P636					
	EF6B8	40160	P636					
		8000	P635					
		80160	P636					
	HFSB8							
	EF6B8							
	HFSB8	4040	P632					
	EF6B8							
Curved	HFSB8	4040	P631					
	HFSR8	4080	P633					
	HFSR8	4040	P637					
	HFSR8	606040						

Alterations				D Hole Dia.	D Hole			
Code					Left Side		Right Side	
Features	Type	No.	Page		Horizontally	Vertically	Horizontally	Vertically
					LDH	LDV	RDH	RDV
Four-Side Slots	HFS8	4545	P681	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
	NFS8	45180	P685	-	-	-	-	
	GF8	5050	P687	-	-	-	-	
	CAF8	60100	P689	-	-	-	-	
	HFS8	9090	P685	-	-	-	-	
	EF8	90180	P686	-	-	-	-	
	CAF8	909045	P686	-	-	-	-	
		100100	P688	-	-	-	-	
		100200	P688	-	-	-	-	
3-Side Slot 1-Side Flat	HFS8	4545	P682	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
Two-Side Slots Two Flats	NFS8	5050	P687	-	-	-	-	
	GF8	5050	P689	-	-	-	-	
Two Slots on Opposite Sides	HFS8	4545	P683	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
1-Side Slot 3-Sides Flat	NFS8	5050	P687	-	-	-	-	
	GF8	5050	P689	-	-	-	-	
Light Type Four-Side Slots	HFS8	4545	P683	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
Three-Side Slots Two-Side Slots	NFS8	5050	P687	-	-	-	-	
	GF8	6060	P689	-	-	-	-	
Angled	HFS8	4545	P683	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
	NFS8	4545	P683	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
	NFS8	45180	P685	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
	NFS8	5050	P687	-	-	-	-	
	GF8	50100	P689	-	-	-	-	
	HFS8	9090	P685	-	-	-	-	
	EF8	90180	P686	-	-	-	-	
Black Anodize	CAF8	909045	P686	-	-	-	-	
	HFS8	100100	P688	-	-	-	-	
	EF8	100200	P688	-	-	-	-	
	HFS8	4545	P681	-	-	-	-	
	EF8	4590	P684	-	-	-	-	
	NFS8	45180	P685	-	-	-	-	
	GF8	5050	P687	-	-	-	-	
	CAF8	60100	P689	-	-	-	-	
	HFS8	9090	P685	-	-	-	-	
	EF8	90180	P686	-	-	-	-	
Curved	CAF8	909045	P686	-	-	-	-	
	HFS8	4545	P681	-	-	-	-	

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

D Holes in flat surface direction are blind holes, and do not penetrate through the flat surface.

