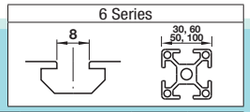
6 Series Aluminum Extrusions

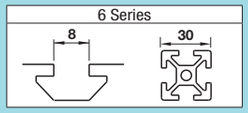
Aluminum Extrusions with Parallel Surfacing / Bent Aluminum Extrusions

6 Series



Fixing Parts			Others	
Brackets	Joints	Nut	Extrusion End Caps	Alterations
P.583 ~ P.600	P.601 ~ P.614	P.617 ~ P.626	P.627	P.755 ~ P.768

6 Series

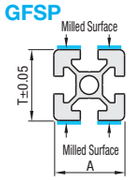


Fixing Parts			Others	
Brackets	Joints	Nut	Extrusion End Caps	Alterations
P.583 ~ P.600	P.601 ~ P.614	P.617 ~ P.626	P.627	P.755 ~ P.768

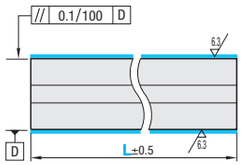
■**Features:** Milled on surfaces. Usable for Linear Guides, etc.

RoHS 10

HFSP
GFSP

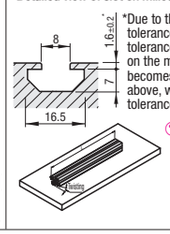


Milled surfaces and cut surfaces are not anodized.



Type	Material	Surface Treatment
HFSP6	EN AC-51400-T5 Equiv.	Clear Anodize
GFSP6	EN AW-6061-T6 Equiv.	

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.

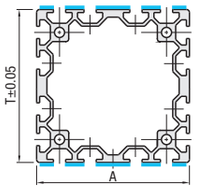
Being extruded sections, products can twist. Supporting overall length of extrusion for use is recommended. See Aluminum Extrusion Tolerance Data on **P.514**.

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.) HFSP6-3030→Ref. fig. HFS6-3030 (P.571))

Square Type

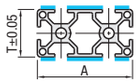
HFSP6-3030

HFSP6-100100

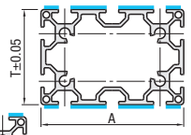


Rectangle Type (Horizontal)

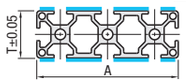
HFSP6-6030



HFSP6-9060

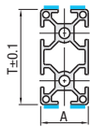


HFSP6-9030

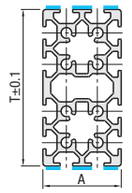


Rectangle Type (Vertical)

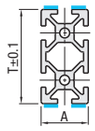
HFSP6-3060



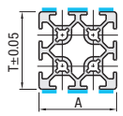
HFSP6-50100



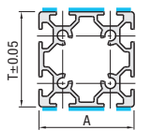
GFSP6-3060



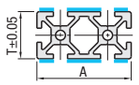
HFSP6-5050



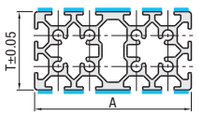
HFSP6-6060



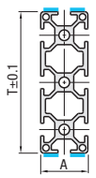
GFSP6-6030



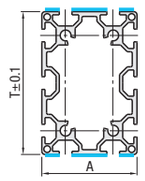
HFSP6-10050



HFSP6-3090

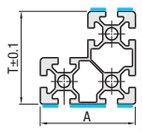


HFSP6-6090



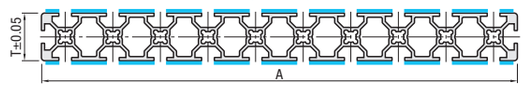
L-Shaped Type

HFSP6-606030



GFSP6-3030

EFSP6-30030



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 ÷) Counterboring XA ~ XE (per Row)		Alteration Charge (Main Body ÷) Wrench Hole Drilling AV ~ EV (per Row)		Tapping (Refer to P.757) Tap Shape	Left LTP	Right RTP	Both TPW
HFSP6	3030	100~3000	HFS6	29.2	30			Z6 d6.5 d11 Z8 d9 d14		D8 Ø8		M8 Depth 24			
	6030			29.2	60										
	3060			59.2	30										
	9030			29.2	90										
	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				-						
	606030			59.2	60										
EFSP6	30030		EFS6	29.2	300										
GFSP6	3030		GFS6	29.2	30										
	6030			29.2	60										
	3060			59.2	30										

Ordering Example: Part Number - L

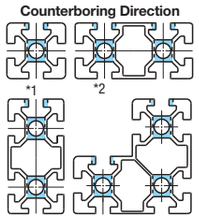
HFSP6-3030 - 300

Alterations Adds a hole at a specified position.

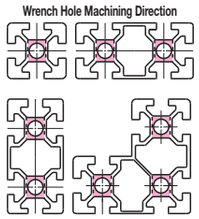
Alterations	Counterboring							Wrench Hole					
Code	Z Selection			XA	XB	XC	XD	XE	D Selection	AV	BV	CV	DV	EV
Spec.	Z	d	d1	Distance from the Left End Plane mm					D	Distance from the Left End Plane mm				
Specifications of Hole Size and Position	6	6.5	11	7~(L-7)					8	7~(L-7)				
	8	9	14											

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

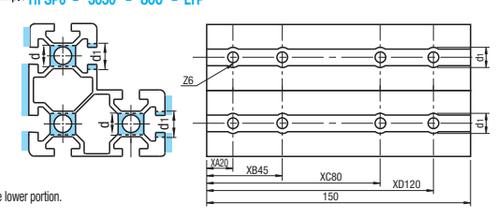
Counterboring Direction



Wrench Hole Machining Direction



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



*1 When the cross section is rectangle (vertical), counterboring is not available for extrusions exceeding 60mm in the longitudinal 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 HFS6-3030.

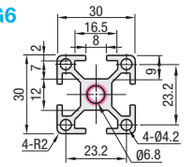
■Bent Aluminum Extrusions

RoHS 10

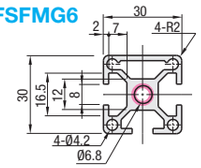
Bending is applied after anodizing; therefore, bent section may slightly discolor and becomes white.

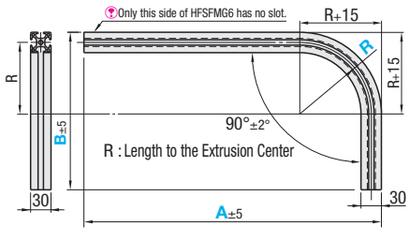
A and B dimensions not indicated in the price list are not available.

HFSMG6



HFSFMG6





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

M Material: EN AC-51400-T5 Equiv. S Surface Treatment: Clear Anodize

Ordering Example

Part Number	-	A	-	B	-	R
HFSMG6-3030	-	A350	-	B700	-	R140

Part Number Type	Part Number No.	A 1mm Increment	B 1mm Increment	R*	Series	Mass kg/m	Sectional Area mm²	Cross Sectional Moment of Inertia mm⁴ ℓx	ℓy
HFSMG HFSFMG	6-3030	200~1500	200~1000	140 300* 500*	HFS6	0.90	333	2.83x10⁴	2.83x10⁴

* Bent panels for R300 and R500 are not available.

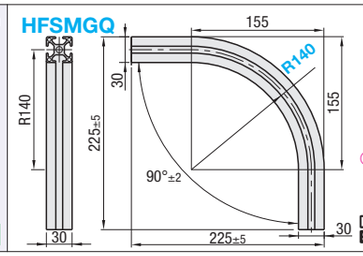
Part Number Type	Part Number No.	A	Unit Price R140 B 200~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000	R300 B 400~500	501~600	601~700	701~800	801~900	901~1000	R500 B 600~700	701~800	801~900
HFSMG HFSFMG	6-3030	200~300									-	-	-	-	-	-	-	-	-
		301~400									-	-	-	-	-	-	-	-	-
		401~500															-	-	-
		501~600															-	-	-
		601~700																	
		701~800																	-
		801~900																-	-
		901~1000															-	-	-
		1001~1100															-	-	-
		1101~1200															-	-	-
		1201~1300															-	-	-
		1301~1400															-	-	-
		1401~1500															-	-	-

■**Features:** Bent Aluminum Extrusions with a 140mm R.

■90-Degree Bent Aluminum Extrusions for Corner

RoHS 10

HFSMGQ



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

M Material: EN AC-51400-T5 Equiv.
S Surface Treatment: Anodize

Ordering Example

Part Number	-	R
HFSMGQ6-3030	-	R140

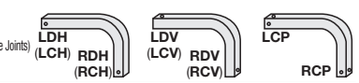
Part Number	R	Slot Width	Mass kg	Sectional Area mm²	Cross Sectional Moment of Inertia mm⁴ ℓx	ℓy	Unit Price Qty. 1 - 8	Volume Discount Rate 9~120
HFSMGQ6-3030	140	8	0.8	333	2.83x10⁴	2.83x10⁴		

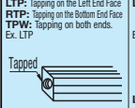
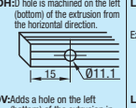
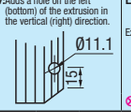
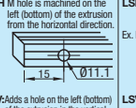
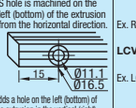
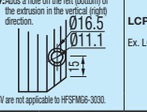
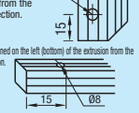
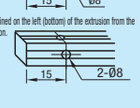
Alterations

Ordering Example

Part Number	-	A	-	B	-	R	-	(LTP, RTP, TPW---etc.)
HFSMG6-3030	-	A400	-	B500	-	R140	-	LTP-RCV

Blind Joint (Pre-Assembly Insertion Double Joints) Connecting Examples



Alterations Code	Tapping (See P.757) LTP	RTP	TPW	D Type Hole (See P.764) LDH	LDV	RDH	RDV	M Type Hole (See P.766) LMH	LMV	RMH	RMV	S Hole (See P.765) LSH	LSV	RSH	RSV	Wrench Hole (See P.759) LCH	LCV	LCP	RCH	RCV	RCP
Spec.	Tapping to the center hole. Tap Shape M12 Depth 36 **LTP:** Tapping on the Left End Face **RTP:** Tapping on the Bottom End Face **TPW:** Tapping on both ends. Ex. LTP 			Adds D type hole in specified position. Can be connected with Single Joints (**P.609**). **LDH, RDH:** D hole is machined on the left (bottom) of the extrusion from the horizontal direction. Ex. LDH  **LDV, RDV:** Adds a hole on the left (bottom) of the extrusion in the vertical (right) direction. Ex. RDV 				Adds M type hole in specified position. Can be connected with Center Joint (**P.605**). **LMH, RMH** M hole is machined on the left (bottom) of the extrusion from the horizontal direction. Ex. LMH  **LMV, RMV:** Adds a hole on the left (bottom) of the extrusion in the vertical (right) direction. Ex. RMV  ⊗LMV and RMV is not applicable to HFSFMG6-3030.				Adds S type hole in the specified position. Can be connected with Pre-Assembly Insertion Double Joints (**P.611**). **LSH, RSH:** S hole is machined on the left (bottom) of the extrusion from the horizontal direction. Ex. LSH  **LSV, RSV:** Adds a hole on the left (bottom) of the extrusion in the vertical (right) direction. Ex. RSV  ⊗LSV and RSV are not applicable to HFSFMG6-3030.		**LCH, RCH:** Wrench hole is machined on the left (bottom) of the extrusion from the horizontal direction. Ex. RCH  **LCV, RCV:** Wrench hole is machined on the left (bottom) of the extrusion from the vertical (right) direction. Ex. LCV  **LCP, RCP:** Wrench hole is machined on the left (bottom) of the extrusion from the vertical (right) direction. Ex. LCP 					
Applicable Extrusion																					
HFSMG6-3030 HFSFMG6-3030 HFSMGQ6-3030																					

When the tapping and D, M, S or wrench holes are specified in combination, tap depth is the distance to D, M, S or wrench holes.