

Sheet Metal Brackets

HFS5 Series

Sheet Metal Brackets

HPTTS5 SHPTTS5

HPTTD5

Type	Material	Surface Treatment	Applicable Screw and Nut		
			Screw	Nut	Qty.
HPTTS	Low Carbon Steel	Bright Chromate Plating	M5-8	M5	4
SHPTTS					4
SHPTTS	304 Stainless Steel	—			8

Part Number	Mass (g)	T	Applicable Screw and Nut		
			Screw	Nut	Qty.
HPTTS5	52	3.2	M5-8	M5	4
SHPTTS5		2			4
HPTTD5	97	2.3			8



Sheet Metal Brackets

HPTBS5 SHPTBS5

HPTBD5 SHPTBD5

HPTBDW5 SHPTBDW5

HPTGS5

Type	Material	Surface Treatment	Applicable Screw and Nut		
			Screw	Nut	Qty.
HPTBS	Low Carbon Steel	Bright Chromate Plating	M5-8	M5	2
HPTBD					2
HPTBDW					8
HPTGS					4
SHPTBS	304 Stainless Steel	—			8
SHPTBD					8
SHPTBDW					4

Part Number	Mass (g)	T	Applicable Screw and Nut		
			Screw	Nut	Qty.
HPTBS5	10	2.3	M5-8	M5	2
SHPTBS5		2			2
HPTBD5	21	2.3			4
SHPTBD5		2			4
HPTBDW5	58	3.2			8
SHPTBDW5		3			8
HPTGS5	64	2.3			4



⚠ Not RoHS compliant when -SET specified.

Alteration	Code	Spec.	Part Number
Applicable Screws and Nuts Set	SET	Applicable screws and nuts for mounting each plate on extrusions come in a set.	HPTTS5
			SHPTTS5
			HPTTD5
			HPTBS5
			SHPTBS5
			HPTBD5
			SHPTBD5
			HPTBDW5
			SHPTBDW5
			HPTGS5



Nuts for Aluminum Extrusions

Guide

Pre-Assembly Insertion Nuts Slide the nuts into slots from the ends before assembly. Less play in the slot makes it easy to tighten the screws.

Shapes	Product Name	Not RoHS compliant	Page	Temporary Holding Function	Price	Thread Locking	Stainless Steel Type	Applicable Stoppers
Standard	Pre-Assembly Insertion Nuts	HNTT	2710, 2756, 2796, 2831		Good			HNST/SHNST
	Pre-Assembly Insertion Nuts (Thread Locking Adhesive Type)	HNTTV	2710, 2756, 2796, 2831		Acceptable	Good (Adhesive) ¹⁾		HNST/SHNST
	Pre-Assembly Insertion Nuts (Thread Locking Resin Coating Type)	HNTTZ	2710, 2756, 2796, 2831		Acceptable	Good (Resin Coating) ²⁾		HNST/SHNST
	Pre-Assembly Insertion Nuts Stainless Steel Sintering Type	HNTTSN	2710, 2756, 2796, 2831		Good		Good (316 Stainless Steel Equivalent, Sintered)	HNST/SHNST
	Pre-Assembly Insertion Nuts Stainless Steel Type	HNTTSS	2710, 2756, 2796, 2831		Acceptable		Good (303 Stainless Steel)	HNST/SHNST
	Pre-Assembly Insertion Nuts Stainless Steel Sheet Metal Type	HNTTBS	2711		Excellent		Good (304 Stainless Steel)	—
With Temporary Holding Function	Stopper Integrated Nuts	HNTE	2712, 2757, 2797, 2832	Good	Good ³⁾			—
	Pre-Assembly Insertion Spring Nuts	HNTU	2712, 2757, 2797, 2832	Good	Good ⁴⁾			—
	Pre-Assembly Insertion Spring Nuts (Thread Locking Adhesive Type)	HNTUV	2712, 2757, 2797, 2832	Good	Acceptable	Good (Adhesive) ¹⁾		—
	Pre-Assembly Insertion Spring Nuts (Thread Locking Resin Coating Type)	HNTUZ	2712, 2757, 2797, 2832	Good	Acceptable	Good (Resin Coating) ²⁾		—
	Pre-Assembly Insertion Spring Nuts Stainless Steel Sintering Type	SHNTU	2712, 2757, 2797, 2832	Good	Acceptable		Good (304 Stainless Steel Equivalent, Sintering)	—
	Others	Pre-Assembly Insertion Lock Nuts ⁵⁾	HNTC	2713, 2758, 2798, 2833		Acceptable		
Pre-Assembly Insertion Short Nuts ⁶⁾		HNTJ	2713, 2758, 2798, 2833		Acceptable			—
Pre-Assembly Insertion Offset Nuts ⁷⁾		HNTSN	2758, 2798, 2833		Acceptable		Good (304 Stainless Steel Equivalent, Sintering)	HNST/SHNST
Pre-Assembly Insertion Square Nuts		HNTK	2713, 2758, 2798, 2833		Excellent			HNTKST
Long Nuts	Long Nuts	HNTLF or Other	2719, 2763, 2803, 2838					—
	Long Nuts Stainless Steel Type	SHNTLF or Other	2719, 2763, 2803, 2838				Good (303 Stainless Steel)	—

Other Features

- *1 Thread Locking Adhesive Type: Nuts with thread locker applied on the inside of tap. Anaerobic adhesive is used. The property decreases after loosening.
- *2 Thread Locking Resin Coating Type: Nuts with thread locking resin coated on the inside of tap. The effect lasts even after repeated tightening and loosening many times.
- *3 Price of Stopper Integrated Nut: More economical than the total price of Pre-Assembly Insertion Nut HNTT and Resin Stopper HNST.
- *4 Price of Pre-Assembly Insertion Spring Nut: Equivalent to the total price of Pre-Assembly Insertion Nut HNTT and Resin Stopper HNST.
- *5 Pre-Assembly Insertion Lock Nut: The nut can be fixed in place by tightening the included set screw. Convenient when fixing the nuts in position by themselves for sensor mounting and removing panels repeatedly.
- *6 Pre-Assembly Insertion Short Nut: The length of slot is shorter for limited space compared to Pre-Assembly Insertion Nut HNTT.
- *7 Pre-Assembly Insertion Offset Nuts: Hole position is offset. When connecting the extrusions at corners with Pre-Assembly Insertion Double Joint (refer to P.2854), the nut does not protrude from the extrusion.

Post-Assembly Insertion Nuts Since the nuts can be inserted into slots at any arbitrary position, installation is possible even after assembly.

Shapes	Product Name	Not RoHS Compliant	Page	Temporary Holding Function	Price	Thread Locking	Stainless Steel Type	Applicable Stoppers	
Standard	Post-Assembly Insertion Stopper Nuts	HNTA	2714, 2759, 2799, 2834		Good			HNAST/HNBST	
	Post-Assembly Insertion Stopper Nuts (Thread Locking Adhesive Type)	HNTAV	2714, 2759, 2799, 2834		Acceptable	Good (Adhesive) ¹⁾		HNAST/HNBST	
	Post-Assembly Insertion Stopper Nuts (Thread Locking Resin Coating Type)	HNTAZ	2714, 2759, 2799, 2834		Acceptable	Good (Resin Coating) ²⁾		HNAST/HNBST	
	Post-Assembly Insertion Stopper Nuts Stainless Steel Sintering Type	HNTASN	2714, 2759, 2799, 2834		Good		Good (316 Stainless Steel Equivalent, Sintered)	HNAST/HNBST	
	Post-Assembly Insertion Stopper Nuts Stainless Steel Type	HNTASS	2714, 2759, 2799, 2834		Acceptable		Good (303 Stainless Steel)	HNAST/HNBST	
	Post-Assembly Insertion Nuts	HNTF	2714, 2759, 2799, 2834		Acceptable			—	
	Post-Assembly Insertion Nuts (Thread Locking Adhesive Type)	HNTFV	2714, 2759, 2799, 2834		Acceptable	Good (Adhesive) ¹⁾		—	
	Post-Assembly Insertion Nuts (Thread Locking Resin Coating Type)	HNTFZ	2714, 2759, 2799, 2834		Acceptable	Good (Resin Coating) ²⁾		—	
	Post-Assembly Insertion Nuts Stainless Steel Sintering Type	HNTFSN	2714, 2759, 2799, 2834		Acceptable		Good (316 Stainless Steel Equivalent, Sintered)	—	
	Post-Assembly Insertion Nuts with Leaf Springs	HNTAP	2715, 2760, 2800, 2835		Good	Good ³⁾		—	
With Temporary Holding Function	Post-Assembly Insertion Spring Nuts	HNTU	2715, 2760, 2800, 2835	Good	Good ⁴⁾			—	
	Post-Assembly Insertion Spring Nuts (Thread Locking Adhesive Type)	HNTUV	2715, 2760, 2800, 2835	Good	Acceptable	Good (Adhesive) ¹⁾		—	
	Post-Assembly Insertion Spring Nuts (Thread Locking Resin Coating Type)	HNTUZ	2715, 2760, 2800, 2835	Good	Acceptable	Good (Resin Coating) ²⁾		—	
	Post-Assembly Insertion Spring Nuts Stainless Steel Sintering Type	SHNTU	2715, 2760, 2800, 2835	Good	Acceptable		Good (316 Stainless Steel Equivalent, Sintered)	—	
	Others	Post-Assembly Insertion Lock Nuts ⁵⁾	HNTR	2716, 2761, 2801, 2836		Acceptable			—
		Post-Assembly Insertion Lock Nuts Stainless Steel Sintering Type ¹⁰⁾	HNTRSN	2716, 2761, 2801, 2836		Acceptable		Good (316 Stainless Steel Equivalent, Sintered)	—
Lock Nuts with Leaf Springs ¹¹⁾		HNTRP	2716, 2761, 2801, 2836	Good	Acceptable			—	
Post-Assembly Insertion Short Nuts ¹²⁾		HNTAJ	2716, 2761, 2801, 2836	Good	Acceptable			—	
Long Nuts	Long Nuts	HNTALF or Other	2718, 2763, 2803, 2838					—	
	Long Nuts Stainless Steel Type	SHNTALF or Other	2718, 2763, 2803, 2838				Good (303 Stainless Steel)	—	

Other Features

- *8 Price of Post-Assembly Insertion Nut with a Leaf Spring: More economical than the total price of Post-Assembly Insertion Nut HNTA and Resin Stopper HNAST.
- *9 Price of Post-Assembly Insertion Spring Nut: Equivalent to the total price of Post-Assembly Insertion Nut HNTT and Resin Stopper HNAST.
- *10 Post-Assembly Insertion Lock Nut: The nut can be fixed in place by tightening the included set screw. Convenient when fixing the nuts in position by themselves for sensor mounting and removing panels repeatedly.
- *11 Lock Nut with a Leaf Spring: Leaf Spring prevents the nut from slipping off from vertically-placed extrusions, making for easy nut positioning. Also the nut can be fixed in place by tightening the included set screw.
- *12 Post-Assembly Insertion Short Nut: The length of slot is short for limited spaces. Convenient for installing sensors or other components closely in combination.