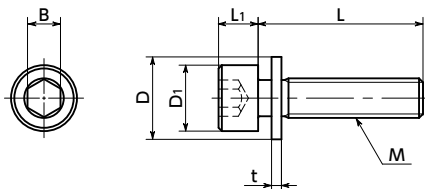


# SNS11T Titanium Hex Socket Head Cap Screws with Captive Washers



- Vacuum
- Cleanroom wash & packaging
- Chemical-proof
- Non-Magnetic
- Lightweight
- Easy operation



## Material/Finish



	<b>SNS11T</b>
Screw Body	TW340 (Grade 2 Titanium)
Plain Washer*1	TP340 (Grade 2 Titanium)

\*1: The material of **SNS11T-M3** is TP270 (grade 1 titanium).

## Mechanical Properties

	TW270 (Grade 1 Titanium)	TW340 (Grade 2 Titanium)
Tensile Strength (N/mm <sup>2</sup> )	270 - 410	340 - 510
0.2% Proof Load (N/mm <sup>2</sup> )	165 or More	215 or More
Elongation (%)	27 or More	23 or More

• Values in chart are for reference only. They are not guaranteed values.

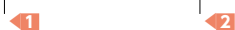
## Physical Properties

	TW270 (Grade 1 Titanium)	TW340 (Grade 2 Titanium)
Specific Gravity	4.51	
Melting Point (°C)	1668	
Longitudinal Elastic Modulus (GPa)	106	
Thermal Conductivity (W/(m·K))	17.16	
Linear Expansion Coefficient (K <sup>-1</sup> )	8.4 × 10 <sup>-6</sup>	
Electric Resistance (μΩ·m)	0.55	
Amplitude Permeability (μ)	1.0001 (Nonmagnetic)	

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## Part Number Specification

### SNS11T-M3-10



Batch cleanroom packing is provided for orders containing multiple items of the same size.

- Titanium hex socket head cap screws with captive washers.
- Plain washers are integrated into the screws, preventing concerns about fallout issues. (Washer abbreviation: I=1)
- When using a washer in spot facing, workability is improved because the bolt and washer can be mounted and removed at the same time.
- The specific gravity is approximately 60% that of stainless steel.
- Non-magnetic.
- Excellent chemical resistance / seawater resistance.
- Special chemical polishing and brightening treatment improve the quality of the surface. Additionally, products have been cleanroom washed and packed. Cleanroom specification prevents oil and dirt from adhering.

**SNS11T**



**Unprocessed**



## Application

Lighter-weight automobiles, aircrafts/aerospace equipment, robots, etc.  
 FPD production equipment / Semiconductor manufacturing equipment /  
 Electrical and electronic equipment / Offshore instruments / Plating facilities /  
 General industrial equipment

Unit : mm

Part Number	M (Coarse)		L	D <sub>1</sub>	D	L <sub>1</sub>	B	t	Mass (g)
	Nominal of Thread	Pitch							
<b>SNS11T-M3</b>	M3	0.5	8 10 12 16	5.5	7	3	2.5	0.5	0.52 - 0.73
<b>SNS11T-M4</b>	M4	0.7	8 10 12 16 20	7	9	4	3	0.8	1.1 - 1.7
<b>SNS11T-M5</b>	M5	0.8	10 12 16 20 25	8.5	10	5	4	1	1.8 - 3
<b>SNS11T-M6</b>	M6	1	12 16 20 25 30	10	12.5	6	5	1.5	3.6 - 5.4

Individual Sales	Cleanroom Wash & Packaging	Screw Length Adjustment	Vibration Resistant	Modification process for captive use
1 piece in 1 pack	Cleanroom washed and packed	Not Available	Available / Add'l charge	Not Available