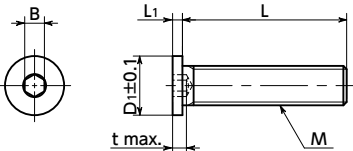


SSHT-SD Socket Head Cap Screws with Ultra Low Small Head - Titanium

Vacuum Protrusion Cleanroom wash & packaging Chemical-proof Non-Magnetic Lightweight Small Head



Material/Finish

	SSHT-SD
Main Body	TW340 (Grade 2 Titanium)

Precautions for Use

- Since the head bearing surface area is small, the bearing surface pressure increases.
- Using the following formula as a reference, ensure that the bearing surface pressure due to screw tightening does not exceed the permitted surface pressure of the intended fastening material.

$$P = \sigma \frac{As}{A}$$

P: Bearing surface pressure (N/mm²)  
σ: Bolt stress (N/mm²)  
As: Screw effective cross-sectional area (mm²)  
A: Bearing surface area (mm²)

Bearing surface area  $A = \pi \frac{(D_1^2 - d^2)}{4}$

D<sub>1</sub>: Head diameter (mm)  
d: Drilled hole diameter (mm)

Head Diameter and Screw Effective Cross-Sectional Area

Part Number	Head Diameter (mm)	Screw Effective Cross-Sectional Area (mm²)
SSHT-M3-SD	5	5.03
SSHT-M4-SD	6	8.78
SSHT-M5-SD	8	14.2
SSHT-M6-SD	9	20.1

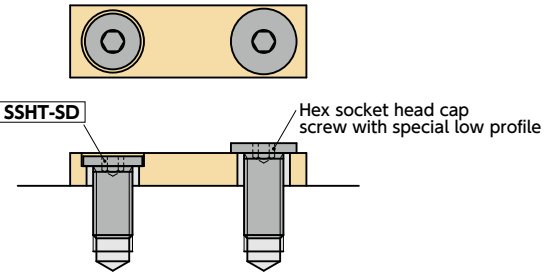


- Pure titanium hex socket head cap screws with special low profile small heads.
- All head heights are 1.5 mm or less. For space-saving of equipment/devices and applications with limited overhead space.
- Because the head diameter is small, spot facing diameters can be reduced compared to standard hex socket head cap screws with ultra low heads.
- 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.
- For the properties of titanium materials, see "Properties of Titanium."

Application

Reducing the size and weight of equipment and devices  
Lighter-weight automobiles, aircrafts/ aerospace equipment, robots, etc.  
FPD production equipment / Semiconductor manufacturing equipment / Electrical and electronic equipment / Offshore instruments / Plating facilities

- Usage Example  
It is possible to perform spot facing and hide the head in locations where spot facing is not possible with standard hex socket head cap screws with special low profiles.



Unit : mm

Part Number	M (Coarse)		L				D <sub>1</sub>	L <sub>1</sub>	B	t	Max. Tightening Torque *1 (N·m)	Mass (g)
	Nominal of Thread	Pitch										
SSHT-M3-SD	M3	0.5	6	8	10		5	1.3	1.5	2	0.6	0.2 - 0.29
SSHT-M4-SD	M4	0.7		8	10	12	6	1.5	2	2.5	1.2	0.44 - 0.61
SSHT-M5-SD	M5	0.8			10	12	8	1.5	3	3	2.5	0.6 - 1.03
SSHT-M6-SD	M6	1			10	12	9	1.5	3	4	5	1 - 1.59

\*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number Specification

SSHT-M3-10-SD

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