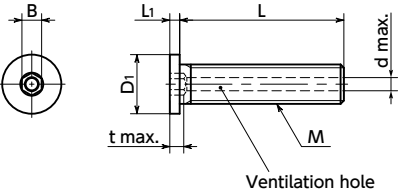


SVSHL-SD Vented Socket Head Cap Screws with Ultra Low Profile & Small Head - 316L Stainless Steel

SUS Stainless steel Vacuum Protrusion Cleanroom wash & packaging Heat-resistance Chemical-proof Non-Magnetic Small Head



Material/Finish

	SVSHL-SD
Main Body	SUS316L
Strength Class	A4 - 70



- Special low profile small head screws with ventilation holes.
- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- 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.
- SUS316L is a stainless steel made by adding Mo to SUS304, so it has high pitting resistance and oxidation resistance. Due to its reduced carbon, it also has high intergranular corrosion resistance. This screw also has corrosion resistance against chemical products and seawater environments that matches or exceeds SUS304.
- Non-magnetic.
- Cleanroom wash/cleanroom packing provided.
- Application

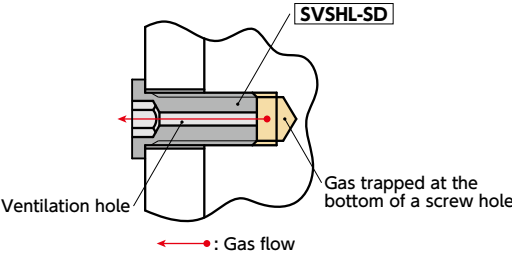
Vacuum devices / Vacuum chambers / FPD production equipment / Semiconductor manufacturing equipment / Electron microscopes

Unit : mm

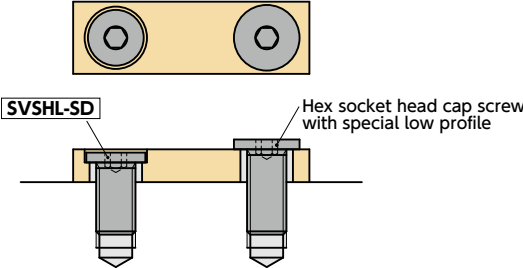
Part Number	M (Coarse)		L	D1	L1	B	t	d	Mass (g)	Qty per Pack
	Nominal of Thread	Pitch								
SVSHL-M3-SD	M3	0.5	6 8 10	5	1.3	1.5	2	1.2	0.32 - 0.49	10
SVSHL-M4-SD	M4	0.7	6 8 10	6	1.5	2	2.5	1.5	0.45 - 0.83	10
SVSHL-M5-SD	M5	0.8	8 10 12	8	1.5	3	3	1.5	0.91 - 1.4	10

When purchasing less volume than one full bag, a separate handling fee is charged. For details, see the Sold Separately Service.

- Usage Example
Effective with vacuum devices and vacuum chambers that require the exhaustion of gas trapped in screw holes.



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.



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.

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

P: Bearing surface pressure (N/mm²)

σ : Bolt stress (N/mm²)

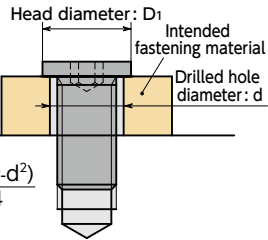
A_s: Screw effective cross-sectional area (mm²)

A: Bearing surface area (mm²)

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

D₁: 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 (mm ²)
SVSHL-M3-SD	5	5.03
SVSHL-M4-SD	6	8.78
SVSHL-M5-SD	8	14.2

Part Number Specification

SVSHL-M3-10-SD

1 2 1

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