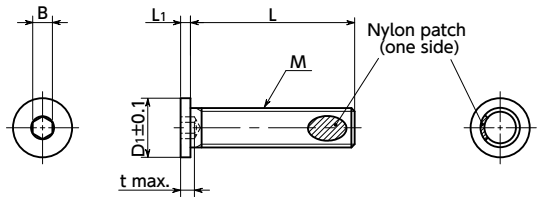


SSH-SD-EL-ALK Socket Head Cap Screws with Ultra Low Profile & Small Head and Nylon Patch

Protrusion Small Head Vibration resistant treatment



Material/Finish

	SSH-SD-EL-ALK
Main Body	SCM435 Electroless Nickel Plating
Nylon Patch	Nylon 11
Strength Class	Thread Part: 10.9 Head *1: 5.8

*1 : Do not exceed the max. tightening torque. Though strength is increased through heat treatment, the head strength is less than that of thread.



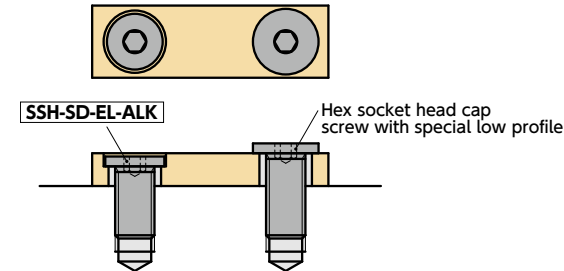
- Special low profile screws with small heads and nylon patch.
- The friction of the nylon adhered to the thread suppresses the return rotation of the thread.
- Even if the tightening force is lost, the return rotation is suppressed, preventing the screws from falling off.
- The heat resistant temperature of the nylon patch is 120°C.
- Able to reduce spot facing diameters compared to standard hex socket head cap screws with special low profile.
- All head heights are 1.5 mm or less.
- For space-saving of equipment/devices and applications with limited overhead space.

Application

Reducing the size of equipment and devices
Screw return and fallout prevented

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.



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)

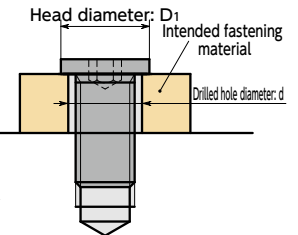
A_s : Screw effective cross-sectional area (mm²)

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)
SSH-M3-SD-EL-ALK	5	5.03
SSH-M4-SD-EL-ALK	6	8.78
SSH-M5-SD-EL-ALK	8	14.2
SSH-M6-SD-EL-ALK	9	20.1
SSH-M8-SD-EL-ALK	11	36.6

Unit : mm

Part Number 1	M (Coarse)		L 2								D1	L1	B	t	Max. Torque *1 (N・m)	Mass (g)	Qty per Pack
	Nominal of Thread	Pitch	6	8	10	12	16	20	25	30							
SSH-M3-SD-EL-ALK	M3	0.5	6	8	10	12					5	1.3	1.5	2	0.7	0.43 - 0.73	10
SSH-M4-SD-EL-ALK	M4	0.7	6	8	10	12	16				6	1.5	2	2.5	1.7	0.74 - 1.54	10
SSH-M5-SD-EL-ALK	M5	0.8	6	8	10	12	16	20			8	1.5	3	3	4.2	1.6 - 3.3	10
SSH-M6-SD-EL-ALK	M6	1	6	8	10	12	16	20	25	30	9	1.5	3	4	6.3	1.9 - 6.1	10
SSH-M8-SD-EL-ALK	M8	1.25		8	10	12	16	20	25	30	11	1.5	4	5	14	3.4 - 10	10

*1 : The maximum tightening torque of the screw body. With reference to the Precautions for Use, consider the seating surface pressure when deciding on the tightening torque. Values in chart are for reference only. They are not guaranteed values.

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

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

Part Number Specification

SSH-M5-20-SD-EL-ALK

