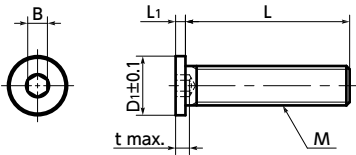


# SSH-SD/SSHS-SD

Socket Head Cap Screws with Extreme Low & Small Head

WEB Selection Tool CAD Download SUS Stainless steel Protusion Small Head



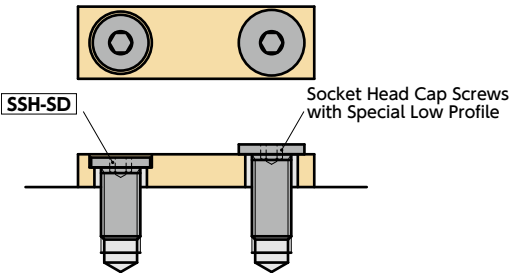
- Socket head cap screws with special low profiles and small head diameters. This makes it possible to reduce the spot facing diameter compared to standard socket head cap screws with special low profiles.

### ● Application

Reducing the size of equipment and devices

### ● Usage example

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



SSHS-SD



SSH-SD-EL

SSH-SD



### Precautions for Use

- Since the head bearing surface area is small, bearing surface pressure becomes high.
- 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.

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

P : Bearing surface pressure (N/mm<sup>2</sup>)

σ : Bolt stress (N/mm<sup>2</sup>)

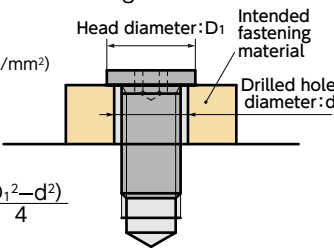
As : Screw effective sectional area (mm<sup>2</sup>)

A : Bearing surface area (mm<sup>2</sup>)

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

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 (mm <sup>2</sup> )
SSH-M3-SD	5	5.03
SSH-M4-SD	6	8.78
SSH-M5-SD	8	14.2
SSH-M6-SD	9	20.1
SSH-M8-SD	11	36.6
SSH-M10-SD	13.5	58

SSH-SD Made of Steel · Ferrosoferric Oxide Film

Part Number	M	L	D <sub>1</sub>	L <sub>1</sub>	B	t	Max. Torque*1 (N·m)	Mass (g)
SSH-M3-SD	M3	6 8 10 12	5	1.3	1.5	2	0.7	0.4 - 0.7
SSH-M4-SD	M4	6 8 10 12 16	6	1.5	2	2.5	1.7	0.7 - 1.5
SSH-M5-SD	M5	6 8 10 12 16 20	8	1.5	3	3	6.2	1.2 - 2.9
SSH-M6-SD	M6	6 8 10 12 16 20 25 30	9	1.5	3	4	6.3	1.6 - 5.8
SSH-M8-SD	M8	8 10 12 16 20 25 30	11	1.5	4	5	14	3.1 - 10
SSH-M10-SD	M10	10 12 16 20 25 30	13.5	1.5	5	6	27	5.7 - 16

\*1 : The maximum tightening torque of the screw body.

Part Number	Qty per pack*1
SSH-M3-SD	10
SSH-M4-SD	10
SSH-M5-SD	10
SSH-M6-SD	10
SSH-M8-SD	10
SSH-M10-SD	10

\*1 : Also sold separately from 1 piece up. ➡ P.xxxx

1 Individual Sales ➡ P.xxxx Cleanroom Wash & Packaging ➡ P.xxxx Screw Length Adjustment ➡ P.xxxx Vibration Resistant ➡ P.xxxx Modification process for captive use ➡ P.xxxx Available / Add'l charge Please feel free to contact us Available / Add'l charge Available / Add'l charge Please feel free to contact us

### ● Material/Finish

	SSH-SD	SSH-SD-EL	SSHS-SB
Main Body	SCM435 Ferrosoferric Oxide Coating (Black)	SCM435 Electroless Nickel Plating	SUSXM7 (Equivalent to SUS304)
Strength Class	Thread : 10.9 Head*1 : 5.8 (M3 - M8) 4.8 (M10)	Thread : 10.9 Head*1 : 5.8 (M3 - M8) 4.8 (M10)	A2-50

\*1 : Do not exceed the maximum tightening torque. While strength is increased through heat treatment, the head strength is less than the thread strength.

RoHS2 Compliant

### ● Part number specification

SSH-M5-20-SD-EL

Order in number of packs.

Also sold separately from 1 piece up. ➡ P.xxxx

SSH-SD-EL Made of Steel · Electroless Nickel Plating

Part Number	M	L	D <sub>1</sub>	L <sub>1</sub>	B	t	Max. Torque*1 (N·m)	Mass (g)
SSH-M3-SD-EL	M3	6 8 10 12	5	1.3	1.5	2	0.7	0.4 - 0.7
SSH-M4-SD-EL	M4	6 8 10 12 16	6	1.5	2	2.5	1.7	0.7 - 1.5
SSH-M5-SD-EL	M5	6 8 10 12 16 20	8	1.5	3	3	6.2	1.2 - 2.9
SSH-M6-SD-EL	M6	6 8 10 12 16 20 25 30	9	1.5	3	4	6.3	1.6 - 5.8
SSH-M8-SD-EL	M8	8 10 12 16 20 25 30	11	1.5	4	5	14	3.1 - 10
SSH-M10-SD-EL	M10	10 12 16 20 25 30	13.5	1.5	5	6	27	5.7 - 16

\*1 : The maximum tightening torque of the screw body.

Part Number	Qty per pack*1
SSH-M3-SD-EL	10
SSH-M4-SD-EL	10
SSH-M5-SD-EL	10
SSH-M6-SD-EL	10
SSH-M8-SD-EL	10
SSH-M10-SD-EL	10

\*1 : Also sold separately from 1 piece up. ➡ P.xxxx

SSHS-SD Made of Stainless Steel

Part Number	M	L	D <sub>1</sub>	L <sub>1</sub>	B	t	Max. Torque*1 (N·m)	Mass (g)
SSHS-M2-SD	M2	5 6 8	3.2	1.1	1.3	1.2	0.18	0.087 - 0.15
SSHS-M2.5-SD	M2.5	5 6 8	4	1.3	1.3	1.5	0.36	0.19 - 0.28
SSHS-M3-SD	M3	6 8 10 12	5	1.3	1.5	2	0.6	0.4 - 0.7
SSHS-M4-SD	M4	6 8 10 12 16	6	1.5	2	2.5	1.5	0.7 - 1.5
SSHS-M5-SD	M5	6 8 10 12 16 20	8	1.5	3	3	3.1	1.2 - 2.9
SSHS-M6-SD	M6	6 8 10 12 16 20 25 30	9	1.5	3	4	5.3	1.6 - 5.8
SSHS-M8-SD	M8	8 10 12 16 20 25 30	11	1.5	4	5	12	3.1 - 10
SSHS-M10-SD	M10	10 12 16 20 25 30	13.5	1.5	5	6	25	5.7 - 16

\*1 : The maximum tightening torque of the screw body.

Part Number	Qty per pack*1
SSHS-M2-SD	10
SSHS-M2.5-SD	10
SSHS-M3-SD	10
SSHS-M4-SD	10
SSHS-M5-SD	10
SSHS-M6-SD	10
SSHS-M8-SD	10
SSHS-M10-SD	10

\*1 : Also sold separately from 1 piece up. ➡ P.xxxx