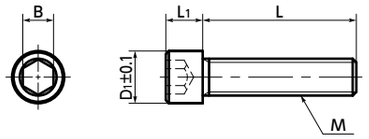
SNS-SD/SNSS-SD Socket Head Cap Screws with Small Head

WEB Selection Tool | WEB CAD Download | SUS Stainless steel | Small Head



- Socket head cap screws with small head diameters. Able to reduce the spot facing diameters compared to standard socket head cap screws.

- Application

Reducing the size of equipment and devices

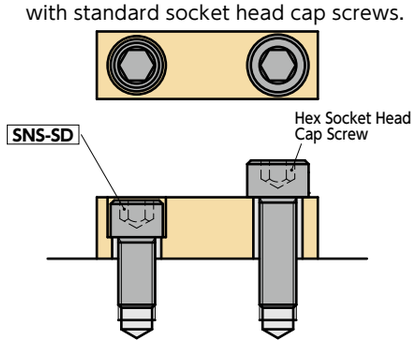
- Material/Finish 1

RoHS2 Compliant

	SNS-SD	SNS-SD-EL	SNSS-SD
Main Body	SCM435 Ferrosoferric Oxide Coating (Black)	SCM435 Electroless Nickel Plating	SUSXM7 (Equivalent to SUS304)
Strength Class	12.9	12.9	A2-70

- 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.



Precautions for Use

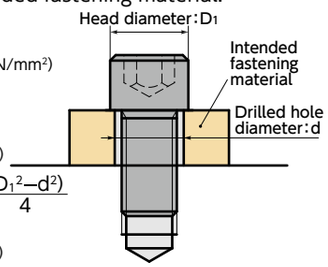
- Since the head bearing surface area is small, bearing surface pressure become high.
- Using the following formula as a reference, ensure that the bearing surface pressure due to screw tightening does not exceed the permitted surface pressure of the intended fastening material.

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

P : Bearing surface pressure (N/mm²)
σ : Bolt stress (N/mm²)
As : Screw effective 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 (mm²)
SNS-M3-SD	4.5	5.03
SNS-M4-SD	5.5	8.78
SNS-M5-SD	7	14.2
SNS-M6-SD	8.5	20.1
SNS-M8-SD	11	36.6
SNS-M10-SD	13.5	58

SNS-SD Steel - Ferrosoferric Oxide Coating

Unit : mm

Part Number	M 2	L 3											D1	L1	B	Mass (g)
SNS-M3-SD	M3	5	6	8	10	12							4.5	3	2.5	0.5 - 0.8
SNS-M4-SD	M4		6	8	10	12	16	20	25				5.5	4	3	1.1 - 2.6
SNS-M5-SD	M5			8	10	12	16	20	25				7	4.5	4	2.1 - 4.2
SNS-M6-SD	M6			8	10	12	16	20	25	30			8.5	5.5	5	3.4 - 7.2
SNS-M8-SD	M8				10	12	16	20	25	30	35		11	7.5	6	7.8 - 16
SNS-M10-SD	M10						16	20	25	30	35	40	13.5	9.5	8	17 - 29

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

- Related Products

Hex socket head cap screws with small heads SNSS-SD(INCH) are available as inch threads.
➡ P.xxxx

- Part number specification

SNS - M5 - 20 - SD
1 2 3 1

Order in number of packs.
Also sold separately from 1 piece up. ➡ P.xxxx

SNS-SD-EL Steel - Electroless Nickel Plating

Unit : mm

Part Number	M 2	L 3											D1	L1	B	Mass (g)
SNS-M3-SD-EL	M3	5	6	8	10	12							4.5	3	2.5	0.5 - 0.8
SNS-M4-SD-EL	M4		6	8	10	12	16	20	25				5.5	4	3	1.1 - 2.6
SNS-M5-SD-EL	M5			8	10	12	16	20	25				7	4.5	4	2.1 - 4.2
SNS-M6-SD-EL	M6			8	10	12	16	20	25	30			8.5	5.5	5	3.4 - 7.2
SNS-M8-SD-EL	M8				10	12	16	20	25	30	35		11	7.5	6	7.8 - 16
SNS-M10-SD-EL	M10						16	20	25	30	35	40	13.5	9.5	8	17 - 29

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

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

SNSS-SD Stainless Steel

Unit : mm

Part Number	M 2	L 3											D1	L1	B	Mass (g)
SNSS-M2-SD	M2	3	4	5	6								3	2	1.5	0.088 - 0.15
SNSS-M2.5-SD	M2.5		4	5	6	8							3.8	2.5	2	0.26 - 0.38
SNSS-M3-SD	M3			5	6	8	10	12					4.5	3	2.5	0.5 - 0.8
SNSS-M4-SD	M4				6	8	10	12	16	20	25		5.5	4	3	1.1 - 2.6
SNSS-M5-SD	M5					8	10	12	16	20	25		7	4.5	4	2.1 - 4.2
SNSS-M6-SD	M6					8	10	12	16	20	25	30	8.5	5.5	5	3.4 - 7.2
SNSS-M8-SD	M8						10	12	16	20	25	30	35	11	7.5	6	7.8 - 16
SNSS-M10-SD	M10								16	20	25	30	35	40	13.5	9.5	8	17 - 29

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

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