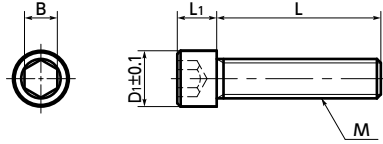


# SNS-SD/SNSS-SD Socket Head Cap Screws with Small Head

SUS Stainless steel Small Head



● Application

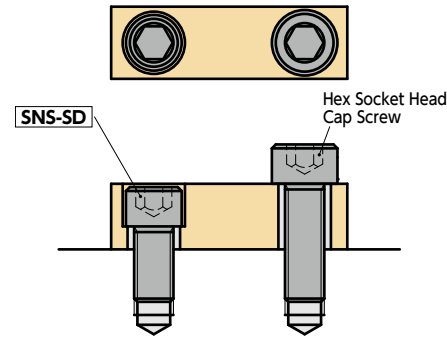
Reducing the size of equipment and devices

● Material/Finish

	SNS-SD	SNS-SD-EL	SNSS-SD
Main Body	SCM435 Ferrosferric 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.



- Socket head cap screws with small head diameters. Able to reduce the spot facing diameters compared to 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/mm<sup>2</sup>)  
 $\sigma$ : Bolt stress (N/mm<sup>2</sup>)  
 $As$ : Screw effective sectional area (mm<sup>2</sup>)  
 $A$ : Bearing surface area (mm<sup>2</sup>)

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

$D_1$ : 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> )
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 - Ferrosferric Oxide Coating

Part Number	M (Coarse)		L												D1	L1	B	Mass (g)	Qty per pack	
	Nominal of Thread	Pitch	3	4	5	6	8	10	12	16	20	25	30	35						40
SNS-M3-SD	M3	0.5	5	6	8	10	12									4.5	3	2.5	0.5 - 0.8	10
SNS-M4-SD	M4	0.7		6	8	10	12	16	20	25						5.5	4	3	1.1 - 2.6	10
SNS-M5-SD	M5	0.8			8	10	12	16	20	25	30					7	4.5	4	2.1 - 4.2	10
SNS-M6-SD	M6	1				8	10	12	16	20	25	30				8.5	5.5	5	3.4 - 7.2	10
SNS-M8-SD	M8	1.25					10	12	16	20	25	30	35			11	7.5	6	7.8 - 16	10
SNS-M10-SD	M10	1.5							16	20	25	30	35	40		13.5	9.5	8	17 - 29	10

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

SNS-SD-EL Steel - Electroless Nickel Plating

Part Number	M (Coarse)		L												D1	L1	B	Mass (g)	Qty per pack	
	Nominal of Thread	Pitch	3	4	5	6	8	10	12	16	20	25	30	35						40
SNS-M3-SD-EL	M3	0.5	5	6	8	10	12									4.5	3	2.5	0.5 - 0.8	10
SNS-M4-SD-EL	M4	0.7		6	8	10	12	16	20	25						5.5	4	3	1.1 - 2.6	10
SNS-M5-SD-EL	M5	0.8			8	10	12	16	20	25	30					7	4.5	4	2.1 - 4.2	10
SNS-M6-SD-EL	M6	1				8	10	12	16	20	25	30				8.5	5.5	5	3.4 - 7.2	10
SNS-M8-SD-EL	M8	1.25					10	12	16	20	25	30	35			11	7.5	6	7.8 - 16	10
SNS-M10-SD-EL	M10	1.5							16	20	25	30	35	40		13.5	9.5	8	17 - 29	10

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

SNSS-SD Stainless Steel

Part Number	M (Coarse)		L												D1	L1	B	Mass (g)	Qty per pack	
	Nominal of Thread	Pitch	3	4	5	6	8	10	12	16	20	25	30	35						40
SNSS-M2-SD	M2	0.4	3	4	5	6										3	2	1.5	0.088 - 0.15	10
SNSS-M2.5-SD	M2.5	0.45		4	5	6	8									3.8	2.5	2	0.26 - 0.38	10
SNSS-M3-SD	M3	0.5			5	6	8	10	12							4.5	3	2.5	0.5 - 0.8	10
SNSS-M4-SD	M4	0.7				6	8	10	12	16	20	25				5.5	4	3	1.1 - 2.6	10
SNSS-M5-SD	M5	0.8					8	10	12	16	20	25	30			7	4.5	4	2.1 - 4.2	10
SNSS-M6-SD	M6	1						8	10	12	16	20	25	30		8.5	5.5	5	3.4 - 7.2	10
SNSS-M8-SD	M8	1.25							10	12	16	20	25	30	35	11	7.5	6	7.8 - 16	10
SNSS-M10-SD	M10	1.5									16	20	25	30	35	40	13.5	9.5	17 - 29	10

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

● Part number specification

**SNS-M5-20-SD**  
1 2 3 1