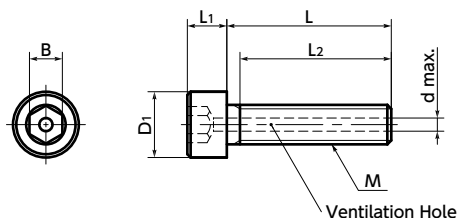


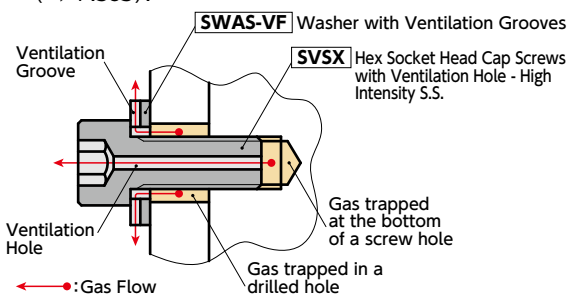
SVSX Hex Socket Head Cap Screws with Ventilation Hole - High Intensity S.S.

WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging Heat-resistance Chemical-proof Non-Magnetic High strength SUS Stainless steel

e-nedzi.com®



- Usage example
Gas trapped at the bottom of a screw hole is released through **SVSX**, and gas trapped in a drilled hole is released through **SWAS-VF** (→ P.583).



Part number specification

SVSX-M5-25-88

Product Code **1** **2** Strength Class

- Made of high strength stainless steel (Strength class 8.8).
- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Excellent heat resistance and corrosion resistance.
- Nonmagnetic.
- About the characteristics of SUS316L HiMo → P.625

Application

Vacuum devices, vacuum chambers, FPD production equipment, semiconductor devices, and electron microscopes

Material/Finish



	SVSX
Main Body	SUS316L HiMo
Strength Class	8.8

Related Products

For ventilation of drilled hole, please use **SWAS-VF**. → P.583



SVSX, which does not have a ventilation hole, is available. → P.625



Part Number	M	1	2	L	D1	L1	L2*1	B	d	Mass (g)
SVSX-M3-88	M3	6	8	10 12 16 20 25	5.5	3	18(L=25)	2.5	1.2	0.71 - 1.6
SVSX-M4-88	M4	6	8	10 12 16 20 25	7	4	Full Thread	3	1.5	1.5 - 3.2
SVSX-M5-88	M5			10 12 16 20 25 30	8.5	5	22(L=30)	4	1.5	2.7 - 5.6
SVSX-M6-88	M6			12 16 20 25 30 10	10	6	Full Thread	5	2	5.1 - 8.3

*1: If the "L" value is other than the value in parentheses, the screw is full thread.

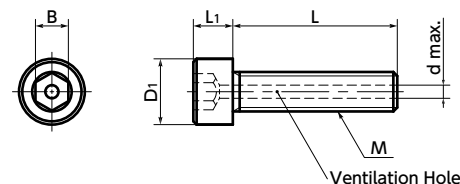
Part Number	Qty per pack
SVSX-M3-88	1
SVSX-M4-88	1
SVSX-M5-88	1
SVSX-M6-88	1

1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Cleanroom washed and packed Available / Add'l charge Not Available Please feel free to contact us

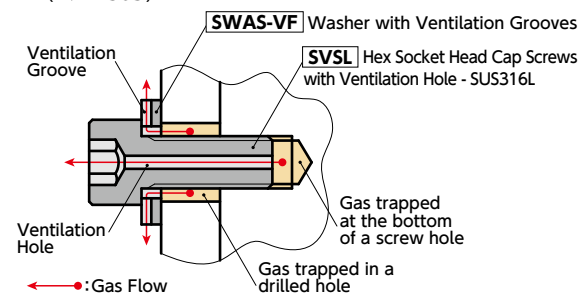
SVSL Hex Socket Head Cap Screws with Ventilation Hole - SUS316L

WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging Heat-resistance SUS Stainless steel

e-nedzi.com®



- Usage example
Gas trapped at the bottom of a screw hole is released through **SVSL**, and gas trapped in a drilled hole is released through **SWAS-VF** (→ P.583).



Part number specification

SVSL-M5-25

1 **2**

Order in number of packs.
Also sold separately from 1 piece up. → P.809

Part Number	M	1	2	L	D1	L1	B	d	Mass (g)
SVSL-M3	M3	5	6	8 10 12 16	5.5	3	2.5	1.2	0.67 - 1.2
SVSL-M4	M4	5	6	8 10 12 16 20 25	7	4	3	1.5	1.4 - 3.2
SVSL-M5	M5		6	8 10 12 16 20 25	8.5	5	4	1.5	2.2 - 4.8
SVSL-M6	M6			8 10 12 16 20 25 30	10	6	5	2	4.3 - 8.3
SVSL-M8	M8			12 16 20 25 30 35	13	8	6	2	11 - 19
SVSL-M10	M10			16 20 25 30 35 40	16	10	8	3	21 - 33
SVSL-M12	M12			30 35 40 45	18	12	10	3	39 - 50

Part Number	Qty*1 per pack
SVSL-M3	20
SVSL-M4	20
SVSL-M5	10
SVSL-M6	10
SVSL-M8	10
SVSL-M10	5
SVSL-M12	5

*1: Also sold separately from 1 piece up. → P.809



- Made of SUS316L. Excellent corrosion resistance.
- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Cleanroom wash and cleanroom packing are completed. → P.807

Application

Vacuum devices, vacuum chambers, FPD production equipment, semiconductor devices, and electron microscopes

Material/Finish



	SVSL
Main Body	SUS316L
Strength Class	A4-70

Related Products

For ventilation of drilled hole, please use **SWAS-VF**. → P.583



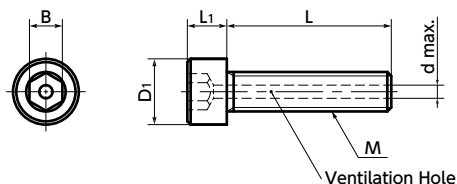
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
Available / Add'l charge Cleanroom washed and packed Available / Add'l charge Not Available Please feel free to contact us

SVST Hex Socket Head Cap Screws with Ventilation Hole - Titanium

e-nedzi.com®

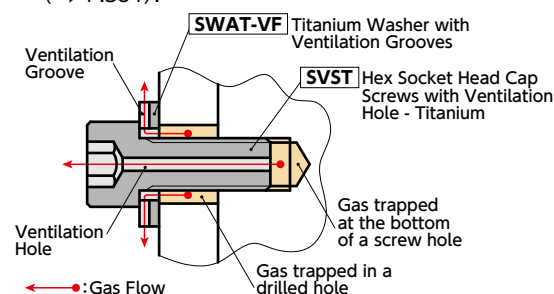


WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging Non-Magnetic



● Usage example

Gas trapped at the bottom of a screw hole is released through **SVST**, and gas trapped in a drilled hole is released through **SWAT-VF** (→ P.584).



● Part number specification

SVST-M5-20

- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Chemical polishing and brightening processing improve the quality of the surface. Outgas quantity is extremely low.
- Nonmagnetic.
- Cleanroom wash and cleanroom packing are completed. → P.807
- The features of brightening processing and titanium → P.633

● Application

Vacuum devices, vacuum chambers, FPD production equipment, semiconductor devices, and electron microscopes

● Material/Finish



	SVST
Main Body	TB340C (Grade 2 Titanium)

● Related Products

SNST Titanium Socket Head Cap Screw without Ventilation hole is available.
→ P.636



Part Number	M	L	D1	L1	B	d	Mass (g)	Qty per pack
SVST-M3-5	M3	5	5.5	3	2.5	1.2	0.38	1
SVST-M3-6	M3	6	5.5	3	2.5	1.2	0.4	1
SVST-M3-8	M3	8	5.5	3	2.5	1.2	0.45	1
SVST-M3-10	M3	10	5.5	3	2.5	1.2	0.5	1
SVST-M3-12	M3	12	5.5	3	2.5	1.2	0.54	1
SVST-M3-16	M3	16	5.5	3	2.5	1.2	0.66	1
SVST-M3-20	M3	20	5.5	3	2.5	1.2	0.77	1
SVST-M4-8	M4	8	7	4	3	1.5	0.94	1
SVST-M4-10	M4	10	7	4	3	1.5	1	1
SVST-M4-12	M4	12	7	4	3	1.5	1.1	1
SVST-M4-16	M4	16	7	4	3	1.5	1.3	1
SVST-M5-10	M5	10	8.5	5	4	1.5	1.5	1
SVST-M5-12	M5	12	8.5	5	4	1.5	1.7	1
SVST-M5-16	M5	16	8.5	5	4	1.5	2	1
SVST-M5-20	M5	20	8.5	5	4	1.5	2.3	1
SVST-M5-25	M5	25	8.5	5	4	1.5	2.7	1

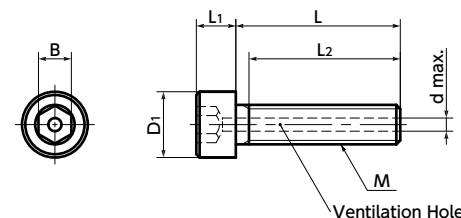
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Cleanroom washed and packed Available / Add'l charge Not Available Please feel free to contact us

SVLS Socket Head Cap Screws with Ventilation Hole with Low Profile

e-nedzi.com®



WEB Selection Tool CAD Download Vacuum Protusion Cleanroom wash & packaging SUS Stainless steel



● Application



Vacuum devices, vacuum chambers, FPD production equipment, semiconductor devices, and electron microscopes

● Material/Finish

	SVLS
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Socket head cap screws have low head heights. These screws are intended for the reduction of the size of machinery and device and applications with limited overhead space.
- Cleanroom wash and cleanroom packing are completed. → P.807

Unit : mm																	
Part Number	M	L 									D1	L1	B*2	t	L2*1	d	Mass (g)
																	
SVLS-M3	M3	6	8	10	12						5.5	2	2	1.5	Full Thread	1.2	0.53 - 0.78
SVLS-M4	M4	6	8	10	12	16					7	2.8	2.5	2.3	Full Thread	1.5	1.1 - 1.9
SVLS-M5	M5		8	10	12	16	20				8.5	3.5	3	2.7	Full Thread	1.5	1.8 - 3.3
SVLS-M6	M6		8	10	12	16	20				10	4	4	3	Full Thread	2	3.1 - 5.3
SVLS-M8	M8			10	12	16	20	25	30	35	13	5	5	3.8	22(L=35)	2	7.2 - 16
SVLS-M10	M10					16	20	25	30		16	6	6	4.5	Full Thread	3	15 - 22

*1: If the "L" value is other than the value in parentheses, the screw is full thread.

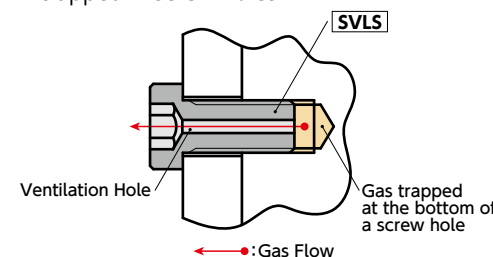
*2: The hexagonal width across flats of **SVLS-M10** has been changed from 7 mm to 6 mm.

Part Number	Qty*1 per pack
SVLS-M3	20
SVLS-M4	20
SVLS-M5	10
SVLS-M6	10
SVLS-M8	10
SVLS-M10	5

*1: Also sold separately from 1 piece up. → P.809

● Usage example

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



● Part number specification

SVLS-M5-20

Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
Available / Add'l charge Cleanroom washed and packed Available / Add'l charge Not Available Please feel free to contact us

e-nedzi.com®

SVFT

Phillips Cross Recessed Flat Head Titanium Machine Screws (with Ventilation Hole)

WEB Selection Tool

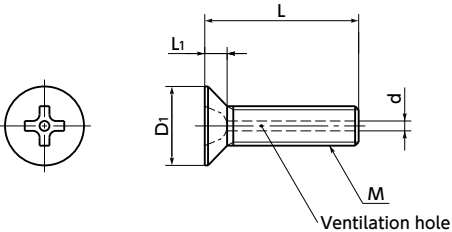
CAD Download

Vacuum

Cleanroom wash & packaging

Non-Magnetic

Lightweight



- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Flat head screw type whose head does not protrude after tightening.
- The surface is reformed by special chemical polishing and bright heat treatment. The amount of outgas is ultralow.
- Nonmagnetic.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807
- About bright heat treatment and titanium properties ➡ P.633

• Application
Vacuum device / Vacuum container / FPD production device / Semiconductor manufacturing device / Electron microscope

	SVFT
Main body	TW270 (Type 1 titanium)

Part Number	M	L	L1	D1	d max.	Mass (g)
SVFT-M3	M3	6	8	10	12	0.18 - 0.23
SVFT-M4	M4	6	8	10	12	0.34 - 0.49

Part Number	Qty per pack*1
SVFT-M3	10
SVFT-M4	10

*1 : Also sold separately from 1 piece up. ➡ P.809

• Related Products

Phillips cross recessed flat head titanium machine screw without ventilation hole **SNFT** is available. ➡ P.640



• Part number specification

SVFT-M4-12



Order in number of packs.
Also sold separately from 1 piece up. ➡ P.809

Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us

e-nedzi.com®

SVPS

Phillips Cross Recessed Pan Head Machine Screw (with Ventilation Hole)

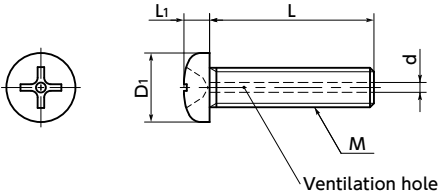
WEB Selection Tool

CAD Download

Vacuum

Cleanroom wash & packaging

SUS Stainless steel



- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

• Application
Vacuum device / Vacuum container / FPD production device / Semiconductor manufacturing device / Electron microscope

	SVPS
Main body	SUSXM7 (Equivalent to SUS304)

Part Number	M	L	L1	D1	d max.	Mass (g)
SVPS-M3	M3	8	10	12	16	0.61 - 0.94
SVPS-M4	M4	10	12	16	20	1.3 - 2.1
SVPS-M5	M5	12	16	20	25	2.7 - 4.2
SVPS-M6	M6	12	16	20	25	4.3 - 7.4
SVPS-M8	M8	20	25	30	35	11 - 16

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

*1 : Also sold separately from 1 piece up. ➡ P.809

• Related Products

For ventilation of drilled hole, please use **SWAS-VF**. ➡ P.583



• Part number specification

SVPS-M4-12



Order in number of packs.
Also sold separately from 1 piece up. ➡ P.809

Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us

e-nedzi.com®

SVPT

Phillips Cross Recessed Pan Head Titanium Machine Screws (with Ventilation Hole)

WEB Selection Tool

CAD Download

Vacuum

Cleanroom wash & packaging

Non-Magnetic

Lightweight



- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Chemical polishing and brightening processing improve the quality of the surface. Outgas quantity is extremely low.
- Nonmagnetic.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807
- The features of brightening processing and titanium ➡ P.633

• Application

Vacuum device / Vacuum container / FPD production device / Semiconductor manufacturing device / Electron microscope

• Material/Finish

SVPT

RoHS2 Compliant

Main body

TW270 (Type 1 titanium)

Part Number	M	L								D1	L1	d max.	Mass (g)
		6	8	10	12	16	20	25	30				
SVPT-M3	M3	6	8	10	12	16	20			5.5	2	1.2	0.31 - 0.63
SVPT-M4	M4	6	8	10	12	16	20	25		7	2.6	1.5	0.59 - 1.4
SVPT-M5	M5		8	10	12	16	20	25	30	9	3.3	1.5	1.3 - 2.8

Part Number	Qty per pack*1
SVPT-M3	10
SVPT-M4	10
SVPT-M5	10

*1 : Also sold separately from 1 piece up. ➡ P.809

• Related Products

Phillips cross recessed pan head titanium machine screw without ventilation hole **SNPT** is available. ➡ P.638

• Part number specification

SVPT-M4-12

1

2

Order in number of packs.

Also sold separately from 1 piece up. ➡ P.809

Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us

e-nedzi.com®

SVTS

Hex Socket Set Screws (with Ventilation Hole)

WEB Selection Tool

CAD Download

Vacuum

Cleanroom wash & packaging

SUS Stainless steel



- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

• Application

Vacuum device / Vacuum container / FPD production device / Semiconductor manufacturing device / Electron microscope

• Material/Finish

SVTS

RoHS2 Compliant

Main body

SUSXM7 (Equivalent to SUS304)

Unit : mm

Part Number	M	L										B	a	t max.	d max.	Mass (g)
SVTS-M3	M3	4	6	8	10		15					1.5	0.4	0.3	1.2	0.2 - 0.7
SVTS-M4	M4		6	8	10		15	20				2	0.4	0.3	1.5	0.4 - 1.6
SVTS-M5	M5		6	8	10	12	15	20	25			2.5	0.5	0.5	1.5	0.7- 3.1
SVTS-M6	M6			8	10	12	15	20	25	30		3	0.5	0.5	2	1.4 - 5.3
SVTS-M8	M8				10	12		20	25	30	35	4	0.6	0.5	2	3.2 - 11.2

Part Number	Qty per pack*1
SVTS-M3	20
SVTS-M4	20
SVTS-M5	20
SVTS-M6	20
SVTS-M8	20

*1 : Also sold separately from 1 piece up. ➡ P.809

• Part number specification

SVTS-M5-10

1

2

Order in number of packs.

Also sold separately from 1 piece up. ➡ P.809

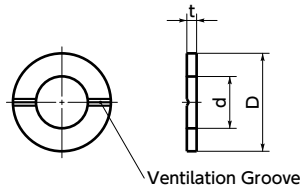
Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Cleanroom washed and packed	Not Available	Not Available	Not Available

SWAS-VF Washers with Ventilation Grooves

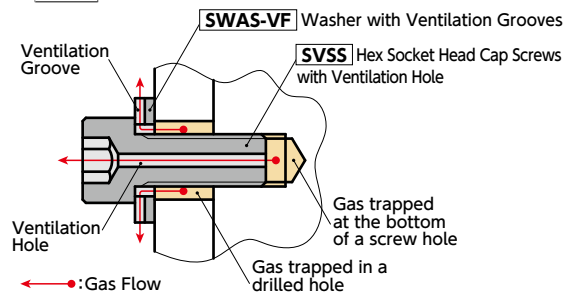
e-nedzi.com®



WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging SUS Stainless steel



- Usage example
Gas trapped in drilled holes is released through **SWAS-VF**, and gas trapped in screw holes is released by screws with ventilation holes such as **SVSS** (→ P.565).



- The ventilation groove easily releases gas trapped in the drill holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Cleanroom wash and cleanroom packing are completed. → P.807
- **SWAS-VF-PC** has an improved surface coarseness by chemical polishing. Outgas quantity is extremely low. Suitable for the use under medium vacuum environments.
- Combine this item with screws with ventilation holes, such as **SVSS** Socket Head Cap Screw with Ventilation Hole. → P.565

● Application

Vacuum devices, vacuum chambers, FPD production equipment, semiconductor devices, and electron microscopes

● Material/Finish



	SWAS-VF	SWAS-VF-PC
Main Body	SUS304	SUS304 Chemical Polish

SWAS-VF No Surface Treatment	SWAS-VF-PC Chemical Polish	Common dimensions					Qty*1 per pack
Part Number 1	Part Number 1	Nominal	d	D	t	Mass (g)	
SWAS-3-VF	SWAS-3-VF-PC	3	3.2	7	0.5	0.12	20
SWAS-4-VF	SWAS-4-VF-PC	4	4.3	9	0.8	0.31	20
SWAS-5-VF	SWAS-5-VF-PC	5	5.3	10	1	0.44	10
SWAS-6-VF	SWAS-6-VF-PC	6	6.4	12.5	1.6	1.1	10
SWAS-8-VF	SWAS-8-VF-PC	8	8.4	17	1.6	2.1	10
SWAS-10-VF	SWAS-10-VF-PC	10	10.5	21	2	4	5
SWAS-12-VF	SWAS-12-VF-PC	12	13	24	2.5	6.2	5

*1: Also sold separately from 1 piece up. → P.809

● Related Products

SVSS
Socket Head Cap Screws with Ventilation Hole
→ P.565



SVSS-MOS
Socket Head Cap Screws with Ventilation Hole - MoS₂ Shot
→ P.569



● Part number specification

SWAS-5-VF-PC



Order in number of packs.
Also sold separately from 1 piece up. → P.809

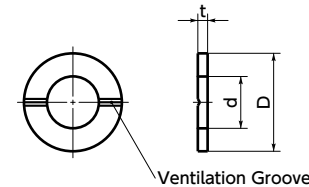
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Cleanroom washed and packed	Not Available	Not Available	Not Available

SWAT-VF Washers with Ventilation Grooves - Titanium

e-nedzi.com®



WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging Non-Magnetic



- The ventilation groove easily releases gas trapped in the drill holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Cleanroom wash and cleanroom packing are completed. → P.807
- Combine this item with **SVST** Socket Head Cap Screws with Ventilation Hole-titanium (→ P.573).

● Application

Vacuum devices, vacuum chambers, FPD production equipment, semiconductor devices, and electron microscopes

● Material/Finish



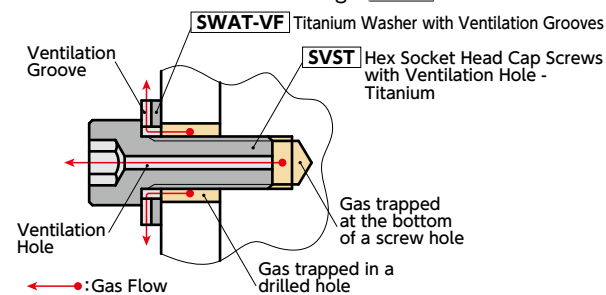
	SWAT-VF
Main Body	TP340C (Grade 2 Titanium)

Part Number 1	Nominal	d	D	t	Mass (g)	Qty per pack
SWAT-3-VF	3	3.2	7	0.5	0.068	1
SWAT-4-VF	4	4.3	9	0.8	0.18	1
SWAT-5-VF	5	5.3	10	1	0.25	1

Unit : mm

● Usage example

Gas trapped at the bottom of a screw hole is released through **SWAT-VF**, and gas trapped in a drilled hole is released through **SVST** (→ P.573).



● Related Products

SWAT Titanium Washers without a ventilation groove is available. → P.643



● Part number specification

SWAT-4-VF

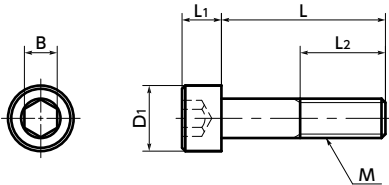


1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available



SNSX Hex Socket Head Cap Screws - High Intensity S.S.

WEB Selection Tool WEB CAD Download SUS Stainless steel Heat-resistance Chemical-proof Non-Magnetic High strength



● Application

FPD production equipment, semiconductor devices, sputtering equipment, aquatic applications, and general industrial machines

● Material/Finish

RoHS2 Compliant

	SNSX-88	SNSX-109
Main Body	SUS316L HiMo	SUS316L HiMo
Strength Class	8.8	10.9

SNSX-88														Unit : mm	
Part Number	M	L								Strength Class	D1	L1	B	L2*1	Mass (g)
SNSX-M3-88	M3	6	8	10	12	16	20	25		8.8	5.5	3	2.5	18(L=25)	0.71 - 1.6
SNSX-M4-88	M4	6	8	10	12	16	20	25		8.8	7	4	3	Full Thread	1.5 - 3.2
SNSX-M5-88	M5			10	12	16	20	25	30	8.8	8.5	5	4	22(L=30)	2.7 - 5.6
SNSX-M6-88	M6				12	16	20	25	30	8.8	10	6	5	Full Thread	5.1 - 8.3
SNSX-M8-88	M8					16	20	25	30	8.8	13	8	6	28(L=40)	12 - 21

*1 : If the " L " value is other than the value in parentheses, the screw is full thread.

Part Number	Qty per pack
SNSX-M3-88	1
SNSX-M4-88	1
SNSX-M5-88	1
SNSX-M6-88	1
SNSX-M8-88	1

SNSX-109														Unit : mm	
Part Number	M	L								Strength Class	D1	L1	B	L2*1	Mass (g)
SNSX-M6-109	M6	16	20	25	30	40	50			10.9	10	6	5	24(L≥40)	5.8 - 13
SNSX-M8-109	M8	16	20	25	30	40	50			10.9	13	8	6	28(L≥40)	12 - 25
SNSX-M10-109	M10		20	25	30	40	50			10.9	16	10	8	32(L=50)	23 - 39
SNSX-M12-109	M12				30	40	50			10.9	18	12	10	Full Thread	39 - 55

*1 : If the " L " value is other than the value in parentheses, the screw is full thread.

Part Number	Qty per pack
SNSX-M6-109	1
SNSX-M8-109	1
SNSX-M10-109	1
SNSX-M12-109	1

- High intensity socket head cap screws are made of stainless steel. (Strength Class 8.8 or 10.9)
- For applications that require both high strength and corrosion resistance.
- High strength per a screw is useful for space and weight saving by decreasing thread diameter and number.
- Screws with excellent heat resistance and corrosion resistance.
- Nonmagnetic.

● Mechanical property

Part Number・Strength Class\Property	Tensile Strength (N / mm ²)	Proof Stress (N / mm ²)	Elongation after Break Minimum (mm)
A2-50・A4-50	500	210	0.6d
A2-70・A4-70	700	450	0.4d
SNSX-88 8.8	800	640	0.3d
SNSX-109 10.9	1,000	900	0.2d

● Values in chart are for reference only. They are not guaranteed values.

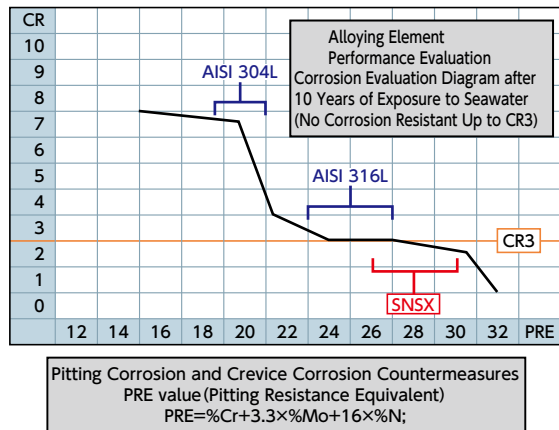
● Durability by temperature (N/mm²)

Part Number・Material	20℃	100℃	200℃	300℃	400℃	500℃	600℃
SNSX-88 SUS316L HiMo	640	576	576	544	512	480	448
SNSX-109 SUS316L HiMo	900	855	855	855	810	810	765
SUSXM7	450	382	360	337	315	—	—
SCM435	1,100	1,020	925	825	—	—	—

● Values in chart are for reference only. They are not guaranteed values.

- Result of corrosion test by metal materials SUS316L HiMo steel used in SNSX is a special steel alloy with reduced carbon and increased Cr, Ni, and Mo. Reducing carbon shows an increased resistance to grain boundary corrosion cracking, and adding Cr and Mo increases resistance to pitting corrosion and crevice corrosion. In addition, adding Ni effectively reduces the risk of stress corrosion cracking.

The chart above shows the degree of corrosion after 10 years of exposure to conditions similar to seawater environment, and there was no corrosion for CR3 or lower.



● Sulfuric acid corrosion test (H2SO4, 50℃ and mm / year)

Part Number・Material\Density	3%	10%	20%
SUS304	1.08	3	—
SUS316, SUS316L	0	0.3	1.3
SNSX-88 SNSX-109	0	0	0.44

● Values in chart are for reference only. They are not guaranteed values.

● Magnetic permeability comparison

Part Number・Material	Amplitude Permeability
SNSX-88 SUS316L HiMo	1.006
SNSX-109 SUS316L HiMo	1.007
SNSL SUS316L	1.015
SUSXM7	1.4

● Values in chart are for reference only. They are not guaranteed values.

● Related Products

SNSX, a type with a ventilation hole is available.
➡ P.571

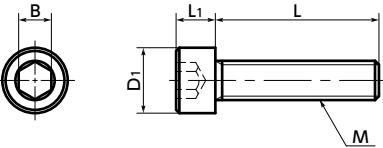


● Part number specification

SNSX - M3 - 25 - 88

Product Code 1 2 3

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Please feel free to contact us	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



● Material/Finish

	SNSL
Main Body	SUS316L
Strength Class	A4-70

RoHS2 Compliant

- These screws have corrosion resistibility against chemical products and seawater environments that matches or exceeds SUS304.
- Nonmagnetic.
- SUS316L is a stainless steel made by adding Mo to SUS304, so it has high pitting corrosion and oxidation resistance. Due to its reduced carbon, it also has high intergranular corrosion resistibility.
- High strength even under high temperatures because of basic components include Mo.
- Application
FPD production equipment, semiconductor devices, aquatic applications, and general industrial machines

Unit : mm													
Part Number	M	L									D1	L1	Mass (g)
SNSL-M3	M3	5	6	8	10	12	16				5.5	3	0.67 - 1.2
SNSL-M4	M4	5	6	8	10	12	16	20	25		7	4	1.4 - 3.2
SNSL-M5	M5		6	8	10	12	16	20	25		8.5	5	2.2 - 4.8
SNSL-M6	M6			8	10	12	16	20	25	30	10	6	4.3 - 8.3
SNSL-M8	M8					12	16	20	25	30	13	8	11 - 19

Part Number	Qty*1 per pack
SNSL-M3	5
SNSL-M4	5
SNSL-M5	5
SNSL-M6	5
SNSL-M8	5

*1 : Also sold separately from 1 piece up. ➡ P.809

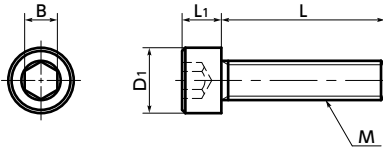
● Part number specification

SNSL-M5-16



Order in number of packs.
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



● Mechanical property

	SUS310S
Tensile Strength (N/mm ²)	520 or Higher
0.2% Proof Stress (N/mm ²)	205 or Higher
Elongation (%)	40 or Higher
Hardness (HRB)	90 or Less

● Values in chart are for reference only. They are not guaranteed values.

● Physical property

	SUS310S
Specific Gravity	7.98
Heat Resistance Temperature*1 (°C)	700
Electric Resistance (μΩ · m)	0.78
Specific Heat (J/kg · K)	500
Thermal Conductivity (W / (m · K))	14
Linear Expansion Coefficient (K ⁻¹)	15.9×10 ⁻⁶

- *1 : This is the heat resistance temperature of the SUS310S material.
- Values in chart are for reference only. They are not guaranteed values.
- When heated to 700 deg C, tensile strength drops approximately 60% and proof stress drops approximately 40%.
- Make sure to carry out tests under the same condition of actual use in advance to confirm safety.

- Compared to SUS304, SUS310S has excellent heat resistance, oxidation resistance, and nitric acid resistance compared to SUS304.
- Austenitic series stainless steel with high Ni content, which is effective for corrosion resistance and high temperature characteristics.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

● Application

FPD production equipment, semiconductor devices, nitric acid plants, and aquatic applications

● Material/Finish

	SNSJ
Main Body	SUS310S

RoHS2 Compliant

● Part number specification

SNSJ-M5-16



Unit : mm																
Part Number 1	M	L 2										D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
SNSJ-M3	M3	6	8	10	12	16	20					5.5	3	2.5	2610	0.71 - 1.4
SNSJ-M4	M4		8	10	12	16	20	25				7	4	3	4560	1.7 - 3.2
SNSJ-M5	M5			10	12	16	20	25				8.5	5	4	7380	2.7 - 4.8
SNSJ-M6	M6				12	16	20	25	30			10	6	5	10400	5.1 - 8.3
SNSJ-M8	M8					16	20	25	30	35		13	8	6	19000	12 - 19
SNSJ-M10	M10						20	25	30	35	40	16	10	8	30100	23 - 33

*1 : Values in chart are for reference only. They are not guaranteed values.

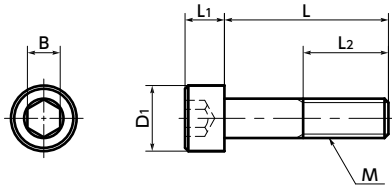
Part Number	Qty per pack
SNSJ-M3	1
SNSJ-M4	1
SNSJ-M5	1
SNSJ-M6	1
SNSJ-M8	1
SNSJ-M10	1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

SNSTG Hex Socket Head Cap Screws - High Intensity Titanium Alloy

WEB Selection Tool WEB CAD Download Cleanroom wash & packaging Non-Magnetic High strength Lightweight

e-nedzi.com



Physical property

	Ti-6Al-4V (64 Titanium)
Specific Gravity	4.43
Melting Point (°C)	1540
Longitudinal Elastic Modulus (GPa)	113
Thermal Conductivity (W/(m·K))	7.5
Linear Expansion Coefficient (K ⁻¹)	8.8×10 ⁻⁶
Electric Resistance (μΩ·m)	1.7
Amplitude Permeability (μ)	1.0002 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

Mechanical property

	Ti-6Al-4V (64 Titanium)
Tensile Strength (N/mm ²)	895 or Higher
0.2% Proof Stress (N/mm ²)	825 or Higher
Elongation (%)	10 or Higher

• Values in chart are for reference only. They are not guaranteed values.

- Screws made of high strength titanium alloy.
- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- These screws are resistant to corrosion and are particularly strong against seawater.
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.
- About the properties of titanium ➡ P.633

Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, and aquatic applications

Material/Finish



	SNSTG
Main Body	Ti-6Al-4V (64 Titanium)

Part number specification

SNSTG-M5-20



Unit : mm

Part Number	M	L	D1	L1	B	L2*1	Tension*2 Rupture Load (N)	Mass (g)
SNSTG-M3	M3	6 8 10 12 16 20	5.5	3	2.5	Full Thread	5240	0.4 - 0.77
SNSTG-M4	M4	8 10 12 16 20 25 30	7	4	3	Full Thread	8850	0.94 - 2.1
SNSTG-M5	M5	10 12 16 20 25 30 35	8.5	5	4	Full Thread	14700	1.5 - 3.6
SNSTG-M6	M6	10 12 16 20 25 30 35 40 45 50	10	6	5	45(L=50)	20800	2.7 - 7.5
SNSTG-M8	M8	16 20 25 30 35 40 45 50	13	8	6	45(L=50)	33700	6.9 - 14
SNSTG-M10	M10	16 20 25 30 35 40 45 50	16	10	8	45(L=50)	58900	12 - 22

*1 : If the "L" value is not in parentheses, the screw is full thread.

*2 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNSTG-M3	1
SNSTG-M4	1
SNSTG-M5	1
SNSTG-M6	1
SNSTG-M8	1
SNSTG-M10	1

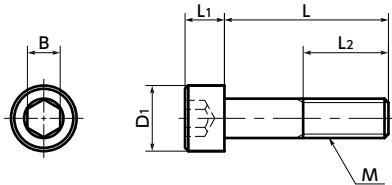
1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

e-nedzi.com



SNST Hex Socket Head Cap Screws - Titanium

WEB Selection Tool WEB CAD Download Cleanroom wash & packaging Chemical-proof Non-Magnetic Lightweight



Physical property

	TB340C (Grade 2 Titanium)
Specific Gravity	4.51
Melting Point (°C)	1668
Longitudinal Elastic Modulus (GPa)	106
Thermal Conductivity (W/(m·K))	17.16
Linear Expansion Coefficient (K ⁻¹)	8.4×10 ⁻⁶
Electric Resistance (μΩ·m)	0.55
Amplitude Permeability (μ)	1.0001 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

Mechanical property

	TB340C (Grade 2 Titanium)
Tensile Strength (N/mm ²)	340 - 510
0.2% Proof Stress (N/mm ²)	215 or Higher
Elongation (%)	23 or Higher

• Values in chart are for reference only. They are not guaranteed values.

Part number specification

SNST-M5-20



- Specific gravity is approximately by 60% of stainless steel.
- Nonmagnetic.
- Excellent chemical and seawater resistance.
- About the features of titanium ➡ P.633

• Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.

SNST

Unprocessed



Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

Material/Finish



	SNST
Main Body	TB340C (Grade 2 Titanium)

Unit : mm

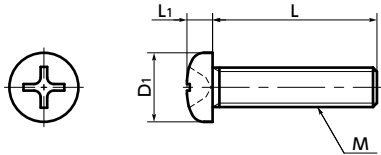
Part Number	M	L	D1	L1	B	L2*1	Tension*2 Rupture Load (N)	Torsional*2 Torque (N·m)	Mass (g)
SNST-M3	M3	5 6 8 10 12 16 20	5.5	3	2.5	Full Thread	3210	1.5	0.38 - 0.77
SNST-M4	M4	8 10 12 16 20 25 30	7	4	3	20(L=30)	5610	3.4	0.94 - 2.1
SNST-M5	M5	10 12 16 20 25 30 35	8.5	5	4	22(L≥30)	9080	7.1	1.5 - 3.6
SNST-M6	M6	10 12 16 20 25 30 35 40 45 50	10	6	5	24(L≥35)	12800	12	2.7 - 7.5

*1 : If the "L" value is not in parentheses, the screw is full thread.

*2 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNST-M3	1
SNST-M4	1
SNST-M5	1
SNST-M6	1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



Physical property

	Ti-15-3-3-3 (β Titanium)
Specific Gravity	4.8
Longitudinal Elastic Modulus (GPa)	90
Amplitude Permeability (μ)	1.0002 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

Mechanical property

	Ti-15-3-3-3 (β Titanium)
Tensile Strength (N/mm²)	705 - 945
0.2% Proof Stress (N/mm²)	690 - 835
Elongation (%)	12 or Higher

• Values in chart are for reference only. They are not guaranteed values.

- Screws made of high strength titanium alloy.
- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- These screws are resistant to corrosion and are particularly strong against seawater.
- About the properties of titanium ➡ P.633
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.

SNPTG

Unprocessed



Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, and aquatic applications

Material/Finish

RoHS2 Compliant

	SNPTG
Main Body	Ti-15-3-3-3 (β Titanium)

Part number specification

SNPTG-M5-20

1

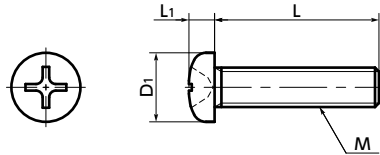
2

Part Number	M	L	D1	L1	Tension*1 Rupture Load (N)	Mass (g)
SNPTG-M3	M3	6 8 10 12 15 20	5.5	2	4170	0.33 - 0.68
SNPTG-M4	M4	6 8 10 12 15 20 25	7	2.6	7520	0.63 - 1.5
SNPTG-M5	M5	8 10 12 15 20 25	9	3.3	11900	1.4 - 2.6

*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNPTG-M3	1
SNPTG-M4	1
SNPTG-M5	1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



Physical property

	TW270 (Grade 1 Titanium)
Specific Gravity	4.51
Melting Point (°C)	1668
Longitudinal Elastic Modulus (GPa)	106
Thermal Conductivity (W/(m·K))	17.16
Linear Expansion Coefficient (K ⁻¹)	8.4×10 ⁻⁶
Electric Resistance (μΩ·m)	0.55
Amplitude Permeability (μ)	1.0001 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

Mechanical property

	TW270 (Grade 1 Titanium)
Tensile Strength (N/mm²)	270 - 410
0.2% Proof Stress (N/mm²)	165 or Higher
Elongation (%)	27 or Higher

• Values in chart are for reference only. They are not guaranteed values.

Part number specification

SNPT-M5-20

1

2

- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- Excellent chemical and seawater resistance.
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.
- About the features of titanium ➡ P.633

Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

Material/Finish

RoHS2 Compliant

	SNPT
Main Body	TW270 (Grade 1 Titanium)

Related Products

SHNT Titanium Hex Nut,
SWUT Titanium Hex Lock Nut,
and SWAT Titanium Washer
are available.
➡ P.641 - 643

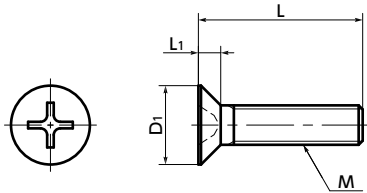


Part Number	M	L	D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SNPT-M2	M2	5 6 8 10	3.5	1.3	840	0.3	0.09 - 0.14
SNPT-M2.5	M2.5	5 6 8 10 12	4.5	1.7	1380	0.5	0.17 - 0.3
SNPT-M3	M3	6 8 10 12 16 20	5.5	2	2360	1	0.31 - 0.63
SNPT-M4	M4	6 8 10 12 16 20 25	7	2.6	4120	2.4	0.59 - 1.4
SNPT-M5	M5	8 10 12 16 20 25 30	9	3.3	6670	5.1	1.3 - 2.8

*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNPT-M2	1
SNPT-M2.5	1
SNPT-M3	1
SNPT-M4	1
SNPT-M5	1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



Physical property

	Ti-15-3-3-3 (β Titanium)
Specific Gravity	4.8
Longitudinal Elastic Modulus (GPa)	90
Amplitude Permeability (μ)	1.0002 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

Mechanical property

	Ti-15-3-3-3 (β Titanium)
Tensile Strength (N/mm²)	705 - 945
0.2% Proof Stress (N/mm²)	690 - 835
Elongation (%)	12 or Higher

• Values in chart are for reference only. They are not guaranteed values.

Part number specification

SNFTG-M5-20



- Screws made of high strength titanium alloy.
- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- These screws are resistant to corrosion and are particularly strong against seawater.
- About the properties of titanium ➡ P.633
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.



Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, and aquatic applications

Material/Finish



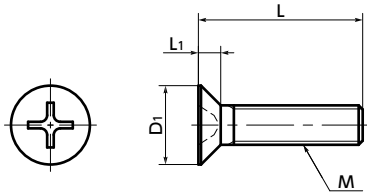
	SNFTG
Main Body	Ti-15 - 3 - 3 - 3 (β Titanium)

Unit : mm											
Part Number	M	L							D1	L1	Tension*1 Rupture Load (N)
SNFTG-M3	M3	6	8	10	12	15	20		6	1.75	4170
SNFTG-M4	M4		8	10	12	15	20	25	8	2.3	7520
SNFTG-M5	M5		8	10	12	15	20	25	10	2.8	11900

*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNFTG-M3	1
SNFTG-M4	1
SNFTG-M5	1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Not Available



Physical property

	TW270 (Grade 1 Titanium)
Specific Gravity	4.51
Melting Point (°C)	1668
Longitudinal Elastic Modulus (GPa)	106
Thermal Conductivity (W / (m · K))	17.16
Linear Expansion Coefficient (K ⁻¹)	8.4×10 ⁻⁶
Electric Resistance (μΩ · m)	0.55
Amplitude Permeability (μ)	1.0001 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

Mechanical property

	TW270 (Grade 1 Titanium)
Tensile Strength (N/mm²)	270 - 410
0.2% Proof Stress (N/mm²)	165 or Higher
Elongation (%)	27 or Higher

• Values in chart are for reference only. They are not guaranteed values.



- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- Excellent chemical and seawater resistance.
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.
- About the features of titanium ➡ P.633
- Also, titanium screws with special specifications such as ventilation holes, dimensions, shapes, cleanroom washing, and special packaging are available.Please contact our customer service.



Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

Material/Finish



	SNFT
Main Body	TW270 (Grade 1 Titanium)

Part number specification

SNFT-M4-10



Unit : mm									
Part Number	M	L				D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N · m)
SNFT-M3	M3	6	8	10		6	1.75	2360	1
SNFT-M4	M4	6	8	10	12	8	2.3	4120	2.4

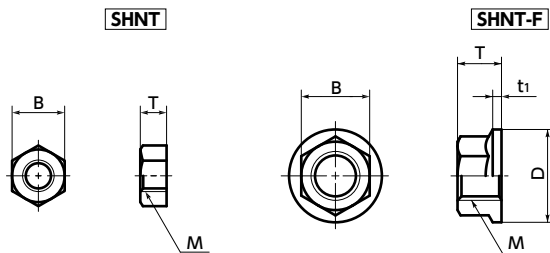
*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNFT-M3	1
SNFT-M4	1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Not Available

SHNT Hex Nuts - Titanium

[WEB Selection Tool](#) [WEB CAD Download](#) [Cleanroom wash & packaging](#) [Chemical-proof](#) [Non-Magnetic](#) [Lightweight](#)



Physical property

	TW270 (Grade 1 Titanium)	TW340 (Grade 2 Titanium)
Specific Gravity	4.51	4.51
Melting Point (°C)	1668	1668
Longitudinal Elastic Modulus (GPa)	106	106
Thermal Conductivity (W/(m·K))	17.16	17.16
Linear Expansion Coefficient (K ⁻¹)	8.4×10 ⁻⁶	8.4×10 ⁻⁶
Electric Resistance (μΩ·m)	0.55	0.55
Amplitude Permeability (μ)	1.0001 (Nonmagnetic)	1.0001 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

Mechanical property

	TW270 (Grade 1 Titanium)	TW340 (Grade 2 Titanium)
Tensile Strength (N/mm ²)	270 - 410	340 - 510
0.2% Proof Stress (N/mm ²)	165 or Higher	215 or Higher
Elongation (%)	27 or Higher	23 or Higher

• Values in chart are for reference only. They are not guaranteed values.

- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- Excellent chemical and seawater resistance.
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.

Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

Material/Finish



	SHNT	SHNT-F
Main body	TW270 (Grade 1 Titanium)	TW340 (Grade 2 Titanium)

Part number specification

SHNT-M6-F



SHNT Hex Nuts - Titanium

Unit : mm

Part Number	M	B	T	Mass (g)	Qty per pack
SHNT-M3	M3	5.5	2.4	0.2	1
SHNT-M4	M4	7	3.2	0.46	1
SHNT-M5	M5	8	4	0.69	1
SHNT-M6	M6	10	5	1.4	1
SHNT-M8	M8	13	6.5	3.1	1
SHNT-M10	M10	17	8	6.5	1

SHNT-F Hex Flange Nuts - Titanium

Unit : mm

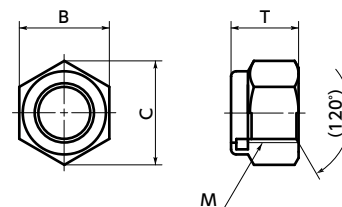
Part Number	M	B	T	t ₁	D	Mass (g)	Qty per pack
SHNT-M3-F	M3	5.5	3.7	0.8	8	0.4	1
SHNT-M4-F	M4	7	4.2	0.8	10	0.72	1
SHNT-M5-F	M5	8	5.5	1.1	12	1.3	1
SHNT-M6-F	M6	10	6	1.5	14	1.9	1
SHNT-M8-F	M8	12	7.5	1.5	17	3.3	1
SHNT-M10-F	M10	14	9	1.8	19	4.8	1

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available



SWUT Hex Lock Nuts - Titanium

[WEB Selection Tool](#) [WEB CAD Download](#) [Cleanroom wash & packaging](#) [Non-Magnetic](#) [Lightweight](#) [Vibration resistant treatment](#)



- Specific gravity is approximately 60% of stainless steel.
- These nuts are equipped with vibration resistant patch to prevent screw from loosening.
- Continuous Max. Operating Temperature : -40 to 120 deg C

Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, and loosening prevention

Material/Finish



	SWUT
Main Body	FRS-9901 (Equivalent to TW340)
Nylon Ring	Nylon 66

Unit : mm

Part Number	M	B	C (Approx.)	T	Mass (g)	Qty per pack
SWUT-M3	M3	5.5	6.4	4	0.27	1
SWUT-M4	M4	7	8.1	5	0.52	1
SWUT-M5	M5	8	9.2	6.5	0.77	1
SWUT-M6	M6	10	11.5	8	1.8	1
SWUT-M8	M8	13	15	9.8	3.5	1
SWUT-M10	M10	17	19.6	12	7.3	1

Related Products

SWUS Hexagon Lock Nut made of stainless steel is available.
→ P.797



Part number specification

SWUT-M6



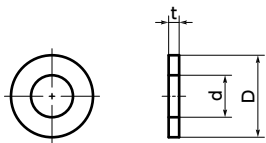
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available

SWAT Washers - Titanium

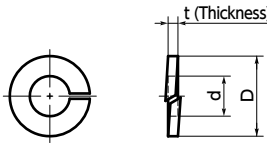
WEB Selection Tool WEB CAD Download Cleanroom wash & packaging Chemical-proof Non-Magnetic Lightweight



SWAT-F



SWAT-S



Physical property

	TP340C (Grade 2 Titanium)
Specific Gravity	4.51
Melting Point (°C)	1668
Longitudinal Elastic Modulus (GPa)	106
Thermal Conductivity (W/(m·K))	17.16
Linear Expansion Coefficient (K ⁻¹)	8.4×10 ⁻⁶
Electric Resistance (μΩ·m)	0.55
Amplitude Permeability (μ)	1.0001 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- Excellent chemical and seawater resistance.
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.

Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

Material/Finish



	SWAT
Main Body	TP340C (Grade 2 Titanium)

SWAT-F Plain Washers - Titanium

Unit : mm

Part Number	Nominal	d	D	t	Mass (g)	Qty per pack
SWAT-3-F	3	3.2	7	0.5	0.068	1
SWAT-4-F	4	4.3	9	0.8	0.18	1
SWAT-5-F	5	5.3	10	1	0.25	1
SWAT-6-F	6	6.4	12.5	1.6	0.65	1
SWAT-8-F	8	8.4	17	1.6	1.2	1
SWAT-10-F	10	10.5	21	2	2.3	1

SWAT-S Spring Washers - Titanium

Unit : mm

Part Number	Nominal	d	D	t	Mass (g)	Qty per pack
SWAT-3-S	3	3.1	5.9	0.7	0.062	1
SWAT-4-S	4	4.1	7.6	1	0.15	1
SWAT-5-S	5	5.1	9.2	1.3	0.27	1
SWAT-6-S	6	6.1	12.2	1.5	0.59	1
SWAT-8-S	8	8.2	15.4	2	1.2	1
SWAT-10-S	10	10.2	18.4	2.5	2.1	1

Related Products

SWAT-VF Titanium Washer with Ventilation Grooves is available.
➔ P.584



Part number specification

SWAT-6-F



1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
1 pc. in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available

Selection Navigator



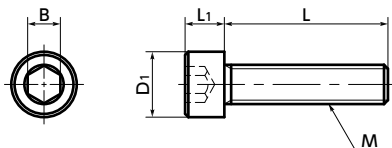
CAD Data Download

<https://www.nbk1560.com/>

SNSP Hex Socket Head Cap Screws - Phosphor Bronze

WEB Selection Tool CAD Download Cleanroom wash & packaging Non-Magnetic

e-nedzi.com®



● Mechanical property

	Phosphor Bronze (C5191)	SUS304
Tensile Strength (N/mm ²)	590 or Higher	520 or Higher
Elongation (%)	8	40 or Higher

● Values in chart are for reference only. They are not guaranteed values.

● Physical property

	Phosphor Bronze (C5191)	SUS304
Specific Gravity	8.83	7.93
Longitudinal Elastic Modulus (GPa)	105	193
Electric Resistance (μΩ · m)	0.13	0.7
Thermal Conductivity (W / (m · K))	67	17
Linear Expansion Coefficient (K ⁻¹)	18 × 10 ⁻⁶	17.3 × 10 ⁻⁶

● Values in chart are for reference only. They are not guaranteed values.

● Magnetic flux density

	Phosphor Bronze	SUSXM7 (Equivalent to SUS304)
Magnetic Flux Density (T)	0	5 × 10 ⁻⁵

Measuring device : 5080 Gauss (Tesla) Meter by F.W.BELL

Measuring conditions : DC magnetic field measuring mode

Probe and sample separation distance: 5 mm

Part Number 1	M	L 2								D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
		6	8	10	12	16	20	25	30					
SNSP-M3	M3	6	8	10	12	16	20			5.5	3	2.5	2960	0.81 - 1.6
SNSP-M4	M4		8	10	12	16	20	25		7	4	3	5180	1.9 - 3.6
SNSP-M5	M5			10	12	16	20	25		8.5	5	4	8370	3.1 - 5.4
SNSP-M6	M6				12	16	20	25	30	10	6	5	11800	5.8 - 9.5
SNSP-M8	M8					16	20	25	30	35	13	8	21500	14 - 22

*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNSP-M3	1
SNSP-M4	1
SNSP-M5	1
SNSP-M6	1
SNSP-M8	1

● Part number specification

SNSP-M5 - 16

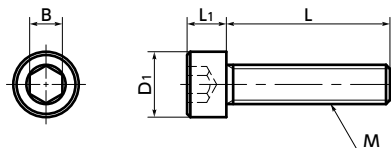


1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

SNSA Hex Socket Head Cap Screws - Aluminum

WEB Selection Tool CAD Download Cleanroom wash & packaging Lightweight

e-nedzi.com®



● Material/Finish

RoHS2 Compliant

	SNSA
Main Body	A5056

● Mechanical property

	A5056	SUS304
Tensile Strength (N/mm ²)	294	520 or Higher
0.2% Proof Stress (N/mm ²)	245	205 or Higher
Elongation (%)	12	40 or Higher
Hardness (HB)	98	187 or Less

● Values in chart are for reference only. They are not guaranteed values.

● Physical property

	A5056	SUS304
Specific Gravity	2.64	7.93
Longitudinal Elastic Modulus (GPa)	71.7	193
Specific Heat (J/kg · K)	904	500
Electric Resistance (μΩ · m)	0.064	0.7
Thermal Conductivity (W / (m · K))	112	17
Linear Expansion Coefficient (K ⁻¹)	24.1 × 10 ⁻⁶	17.3 × 10 ⁻⁶

● Values in chart are for reference only. They are not guaranteed values.

- These screws are made of aluminum alloy.
- Specific gravity is approximately 33% of stainless steel.
- No electrical corrosion is generated from contact with aluminum alloy.
- Excellent corrosion resistance, electroconductivity, and thermal conductivity.
- Cleanroom wash and cleanroom packing are completed. → P.807
- Also, anodized products are available. Please contact us for details.



● Application

Weight saving of instruments and machines
FPD production equipment and semiconductor devices

Part Number 1	M	L 2								D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
		6	8	10	12	16	20	25	30					
SNSA-M3	M3	6	8	10	12	16	20			5.5	3	2.5	1650	0.24 - 0.46
SNSA-M4	M4		8	10	12	16	20	25		7	4	3	2890	0.56 - 1.1
SNSA-M5	M5			10	12	16	20	25		8.5	5	4	4680	0.91 - 1.6
SNSA-M6	M6				12	16	20	25	30	10	6	5	6630	1.7 - 2.8
SNSA-M8	M8					16	20	25	30	35	13	8	12000	4.1 - 6.4

*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNSA-M3	1
SNSA-M4	1
SNSA-M5	1
SNSA-M6	1
SNSA-M8	1

● Part number specification

SNSA-M5 - 16



1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

SCAP-PT / SNCPS Cover Caps - PTFE (Teflon) / Socket Head Cap Screws for Cover Caps

WEB Selection Tool CAD Download SUS Stainless steel Cleanroom wash & packaging Chemical-proof



- Combine **SCAP-PT** Cover Caps and **SNCPS** Socket Head Cap Screws for Cover Caps.
- The PTFE (Teflon) cover protects the screw head from corrosion caused by chemicals.
- PTFE is a plastic with excellent chemical resistance, and most chemicals cannot penetrate it.
- Chemical Resistance of PTFE → P.665
- Since the screw portion is stainless steel, they can be used with higher tightening forces than PTFE screws.
- Tightening with the recommendation torque has a sealing effect and the bearing surface of the cover cap fits the attachment surface tightly. Airtight testing at 0.6 MPa confirmed that there is no leakage.
- Also, make cover caps from requested materials such as Hastelloy*1 and PEEK are available.
- *1: Hastelloy is a registered trademark of Haynes International, Inc.

Application
FPD production equipment, semiconductor fabrication wet processes, printed circuit board etching devices, metallic surface treatment equipment and facilities, cleaning equipment, and chemical plants

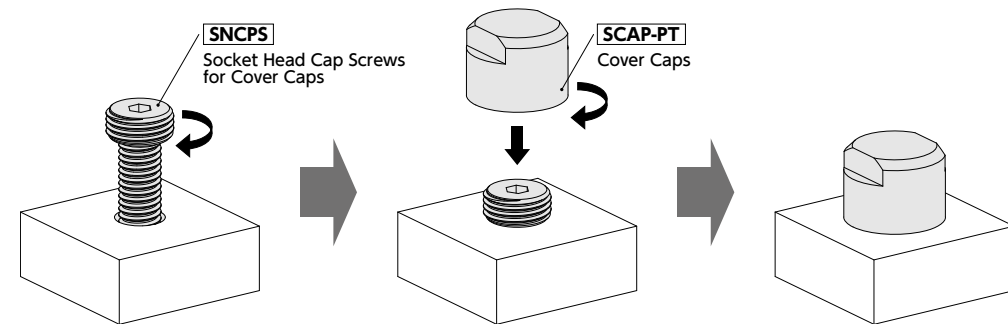
Material/Finish		RoHS2 Compliant
	SCAP-PT Cover Caps	SNCPS Socket Head Cap Screws
Main Body	PTFE (Tetrafluoroethylene : Teflon*1)	SUSXM7 (Equivalent to SUS304)
Strength Class		A2-50

*1: Teflon is a registered trademark of DuPont.

SCAP-PT Cover Caps										Unit : mm
Part Number	M	H	D1	h	B	tB	Recommendation Torque (N・m)	SNCPS Part.No	Mass (g)	Qty per pack
SCAP-3-PT	M5×0.5	6	9	2	7	3	0.04	SNCPS-M3	0.65	1
SCAP-4-PT	M6×0.75	8	10	2.8	8	3	0.08	SNCPS-M4	1.1	1
SCAP-5-PT	M8×0.75	9	12	3.5	9	3	0.2	SNCPS-M5	1.6	1
SCAP-6-PT	M10×0.75	10	14	4	11	4	0.35	SNCPS-M6	2.3	1
SCAP-8-PT	M12×1	11	16	5	13	4	0.45	SNCPS-M8	3.1	1
SCAP-10-PT	M16×1	12	20	6	17	4	0.6	SNCPS-M10	4.8	1

1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 pc. in 1 bag Cleanroom washed and packed S.S. only/ Add'l charge S.S. only/ Add'l charge Not Available

- Usage
After tightening **SNCPS** Socket Head Cap Screw for Cover Cap, attach **SCAP-PT** Cover Cap so that it covers the head of **SNCPS**.
Ensure that the tightening torque of **SCAP-PT** does not exceed the recommendation torque in the chart.



Related Products

SCAP-AL aluminum alloy for use in vacuum chambers are available.
→ P.591

SCAP-CE ceramic cover cap for use in vacuum chambers are available.
→ P.591

Part number specification

SCAP-6-PT **SCAP-PT** Cover Caps

SNCPS-M6-20 **SNCPS** Socket Head Cap Screws for Cover Caps

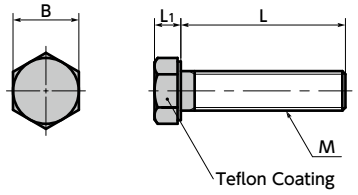
Order **SCAP-PT** and **SNCPS** individually.

SNCPS Socket Head Cap Screws for Cover Caps

Part Number	M	L	M1	L1	B	t	L2*1	SCAP-PT Part.No	Mass (g)
SNCPS-M3	M3	6 8 10 12	M5×0.5	2	2	1.5	Full Thread	SCAP-3	0.53 - 0.78
SNCPS-M4	M4	8 10 12 16	M6×0.75	2.8	2.5	2.3	Full Thread	SCAP-4	1.3 - 1.9
SNCPS-M5	M5	10 12 16 20	M8×0.75	3.5	3	2.7	Full Thread	SCAP-5	2 - 3.3
SNCPS-M6	M6	12 16 20 25	M10×0.75	4	4	3	Full Thread	SCAP-6	3.8 - 6.4
SNCPS-M8	M8	16 20 25 30 35	M12×1	5	5	3.8	22(L=35)	SCAP-8	9 - 16
SNCPS-M10	M10	20 25 30 35 40	M16×1	6	6	4.5	26(L=40)	SCAP-10	17 - 27

*1: If the "L" value is other than the value in parentheses, the screw is full thread.

Part Number	Qty per pack
SNCPS-M3	1
SNCPS-M4	1
SNCPS-M5	1
SNCPS-M6	1
SNCPS-M8	1
SNCPS-M10	1



⚠ Precautions for Use

- Friction during tightening may remove the coating. Take care not to tighten too much. Apply the recommendation torque or lower for tightening.
- For tightening, use a socket wrench with a hexagonal socket.

- Only the screw head is coated with Teflon. This increases the chemical resistance of the screw head.
- Chemical Resistance of Teflon Coating ➡ P.665
- To increase chemical resistance, the coating membrane is thickened (to approximately 50 μm). The screw thread is not coated so thread precision is not affected.
- Use with **SWS-HTF** Sealing Washer - Teflon Coating to prevent chemical liquids from moving from the bearing surface to the thread. ➡ P.670

● Application

FPD production equipment, semiconductor fabrication wet processes, printed circuit board etching devices, metallic surface treatment equipment and facilities, cleaning equipment, and chemical plants

● Material/Finish

SNHS-HTF

SUSXM7 (Equivalent to SUS304)*2
Teflon*1 Coating (Head Only)

* 1 : Teflon is a registered trademark of DuPont.

* 2 : The baking finish during coating changes the color of the screw thread.

Part Number	M 1 L 2								L1	B	Recommendation Torque (N・m)	Mass (g)
	M3	6	8	10	12	16						
SNHS-M3-HTF	M3	6	8	10	12	16			2	5.5	0.5	0.67 - 1.1
SNHS-M4-HTF	M4		8	10	12	16	20		2.8	7	1.1	1.6 - 2.5
SNHS-M5-HTF	M5			10	12	16	20	25	3.5	8	2.2	2.8 - 4.7
SNHS-M6-HTF	M6				12	16	20	25	30	4	3.8	4.9 - 8.1
SNHS-M8-HTF	M8					16	20	25	30	35	9.2	11 - 18

Part Number	Qty per pack
SNHS-M3-HT	1
SNHS-M4-HTF	1
SNHS-M5-HTF	1
SNHS-M6-HTF	1
SNHS-M8-HTF	1

● Part number specification

SNHS - M5 - 20 - HTF

Product Code 1 2 Product Code

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available

e-nedzi.com®

SWS-HTF

Seal Washers - Teflon Coating

WEB Selection Tool

WEB CAD Download

Chemical-proof

SUS Stainless steel

Revised Part number

- Part numbers for **SWS-HTF** have been changed. New and old part numbers are as follows.

Old Part Number	New Part Number
SWS-3-TF	SWS-3-HTF
SWS-4-TF	SWS-4-HTF
SWS-5-TF	SWS-5-HTF
SWS-6-TF	SWS-6-HTF
SWS-8-TF	SWS-8-HTF

⚠ Precautions for Use

- Friction with the screw bearing surface during tightening may remove the coating. Take care not to tighten too much.
- When combining with **SNHS-HTF**, use the recommendation torque of **SNHS-HTF** or less for tightening.

● Application

FPD production equipment / Semiconductor fabrication wet processes / Printed circuit board etching devices / Metallic surface treatment equipment and facilities / Cleaning equipment / Chemical plants

● Material/Finish

SWS-HTF

SUS304
Teflon*1 Coating

Rubber Packing

Fluoro-rubber

* 1 : Teflon is a registered trademark of DuPont.

Part Number 1	Nominal	d	D	h	t	t1	C	Mass (g)	Qty per pack
SWS-3-HTF	3	3.2	7	0.5	2.2	2.2	6.3	0.2	1
SWS-4-HTF	4	4.2	8	0.5	2.1	2.3	7.2	0.2	1
SWS-5-HTF	5	5.2	9.5	0.8	2.7	2.8	8.2	0.6	1
SWS-6-HTF	6	6.2	11.5	1	3	3	9.8	1	1
SWS-8-HTF	8	8.2	15.2	1	3.2	3.3	13.4	1.8	1

- Usage example
Use with **SNHS-HTF** Hex Head Screws-Teflon Coating for Head (➡ P.669) to prevent chemical liquids from moving from the bearing surface to the thread.
- Airtight test at 0.6 MPa confirmed that there is no leakage.

● Related Products

SWS Sealing Washer, which is not Teflon coated is available.

➡ P.793

● Part number specification

SWS-6-HTF

1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 pc. in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

669

NBK

WEB

▶ <https://www.nbk1560.com>

NBK

WEB

▶ <https://www.nbk1560.com>

670



• Socket Head Cap Screws

Socket Head Cap Screws						
Part Number	SNSS-FC	SNSS-MO	SNSS-BK	SNSS-RY	SNSS-TF	SNSS-AUS
Shape						
Page	P.673	P.674	P.675	P.676	P.677	P.678
Materials	SUSXM7 Fluorine Coating	SUSXM7 Molybdenum Disulfide Coating	SUSXM7 Super Black	SUSXM7 Low Temperature Black Chrome Treatment Chemical Resistance	SUSXM7 Teflon Coating	SUSXM7 Gold Coating
Characteristics	Seizing Prevention	Seizing Prevention	Reflection Resistance Corrosion Resistance	Reflection Resistance Seizing Prevention	Chemical Resistance Seizing Prevention	Seizing Prevention
Size	M3 - M10	M3 - M10	M2 - M10	M3 - M10	M3 - M10	M3 - M10

• Chemical Proof Screws

	Socket Head Cap Screws	
Part Number	SNSL-PN	SNS-EL
Shape		
Page	P.679	P.680
Materials	SUS316L Surface Hardening Treatment Seizing Prevention	SCM435 Electroless Nickel Plating
Characteristics	Peeling Prevention for Deposits	High Strength
Size	M3 - M8	M3 - M10

	Hex Head Screws	Sealing Washers
Part Number	SNHS-HTF	SWS-HTF
Shape		 <i>Revised Part number</i>
Page	P.669	P.670
Materials	SUSXM7 Teflon Coating (Head Only)	Body : SUS304 Teflon Coating Seal : Fluororubber
Characteristics	Chemical Resistance	Chemical Resistance
Size	M3 - M8	Nominal 3 to 8

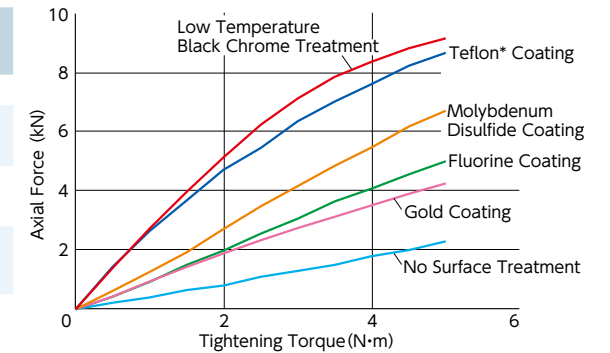
• High Performance Socket Head Cap Screws

Socket Head Cap Screws with Special Low Profile	
Part Number	SSHS-HB
Shape	
Page	P.590
Materials	SUSXM7 Blasting (Head Only)
Characteristics	Peeling Prevention for Deposits
Size	M3 - M6

Properties of Screws with Special Surface Treatment

• Comparison of Axial Force by Surface Treatment

Surface Treatment	Tightening Torque (N·m)	Stress (N/mm ²)	Axial Force (kN)
No Surface Treatment	5	146	2.3
Fluorine Coating [SNSS-FC]	5	317	5.0
Molybdenum Disulfide [SNSS-MO]	5	425	6.7
Low Temperature Black Chrome Treatment [SNSS-RY]	5	584	9.2
Teflon* Coating [SNSS-TF]	5	552	8.7
Gold Coating [SNSS-AUS]	5	273	4.3



Test piece : Stainless Steel Socket Head Cap Screw M5×25

Strength Class : A2 - 70

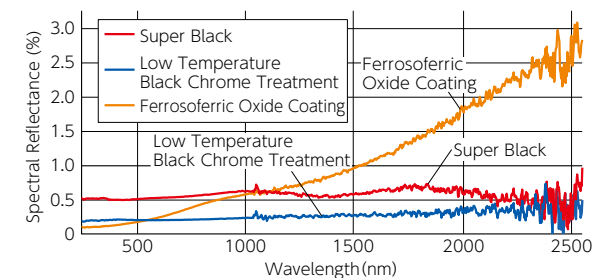
● Values in chart are for reference only. They are not guaranteed values.

● The permanent elongation 0.2% proof stress of strength class A2 - 70 is 450 N/mm². It is recommended to use at an axial force at which stress at tightening is 70% or less of the permanent elongation 0.2% proof stress.

*Teflon is a registered trademark of DuPont.

The main cause of seizing is frictional heat on the thread peak surface generated during tightening. The test results above confirmed that special surface treatment decreases the coefficient of friction of the thread peak surface and makes it possible to obtain higher axial force compared to untreated surfaces with the same tightening torque. As a result, the tightening torque and frictional heat can be reduced, preventing the risk of seizing.

• Comparison of Spectral Reflectance by Surface Treatment

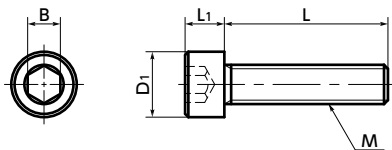


Low temperature black chrome treatment and super black result in extremely low spectral reflectance, which is optimal for optical instruments that require diffuse reflection prevention.

SNSS-FC Hex Socket Head Cap Screws - Fluorine Coating

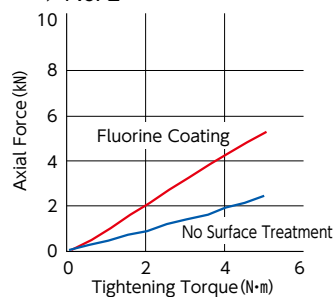
WEB Selection Tool WEB CAD Download Seizing Prevention SUS Stainless steel

e-nedzi.com®



- Tightening property (reference)
Part Number : SNSS-M5 - 25-FC

➔ P.672



- Coating with good cost performance.
- Excellent lubricating ability and suitable for seizing prevention of screws.

● Application

Seizing prevention
FPD production equipment, semiconductor devices,
and general industrial machines

● Material/Finish



	SNSS-FC
Main Body	SUSXM7 (S.S. Grade : A2) Fluorine Coating
Strength Class	A2-70

Unit: mm																
Part Number	M 	L 											D1	L1	B	Mass (g)
SNSS-M3-FC	M3	5	6	8	10	12	16	20					5.5	3	2.5	0.67 - 1.4
SNSS-M4-FC	M4		6	8	10	12	16	20	25				7	4	3	1.5 - 3.2
SNSS-M5-FC	M5			8	10	12	16	20	25				8.5	5	4	2.5 - 4.8
SNSS-M6-FC	M6				10	12	16	20	25	30			10	6	5	4.7 - 8.3
SNSS-M8-FC	M8						16	20	25	30	35		13	8	6	12 - 19
SNSS-M10-FC	M10							20	25	30	35	40	16	10	8	23 - 33

Part Number	Qty*1 per pack
SNSS-M3-FC	10
SNSS-M4-FC	10
SNSS-M5-FC	10
SNSS-M6-FC	10
SNSS-M8-FC	10
SNSS-M10-FC	10

*1 : Also sold separately from 1 piece up. ➔ P.809

● Part number specification

SNSS-M5-16-FC

Product Code 1 2 Product Code

Order in number of packs.

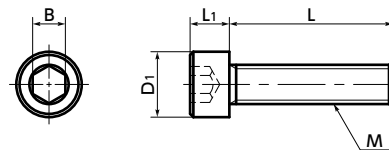
Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

SNSS-MO Hex Socket Head Cap Screws - MoS₂ Coating

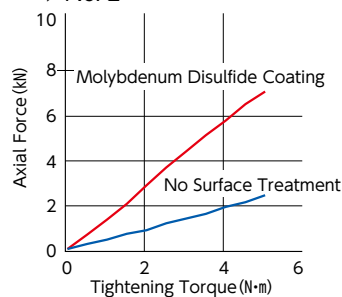
WEB Selection Tool WEB CAD Download Seizing Prevention SUS Stainless steel

e-nedzi.com®



- Tightening property (reference)
Part Number : SNSS-M5 - 25-MO

➔ P.672



- Excellent corrosion resistance and abrasion resistance.
- The coating has excellent lubricating ability and is intended to prevent seizing of screws.

● Application

Seizing prevention
FPD production equipment, semiconductor devices,
and general industrial machines

● Material/Finish



	SNSS-MO
Main Body	SUSXM7 (Equivalent to SUS304) Molybdenum Disulfide Coating
Strength Class	A2-70

Unit : mm																
Part Number	M 	L 											D1	L1	B	Mass (g)
SNSS-M3-MO	M3	5	6	8	10	12	16	20					5.5	3	2.5	0.67 - 1.4
SNSS-M4-MO	M4		6	8	10	12	16	20	25				7	4	3	1.5 - 3.2
SNSS-M5-MO	M5			8	10	12	16	20	25				8.5	5	4	2.5 - 4.8
SNSS-M6-MO	M6				10	12	16	20	25	30			10	6	5	4.7 - 8.3
SNSS-M8-MO	M8						16	20	25	30	35		13	8	6	12 - 19
SNSS-M10-MO	M10							20	25	30	35	40	16	10	8	23 - 33

Part Number	Qty*1 per pack
SNSS-M3-MO	10
SNSS-M4-MO	10
SNSS-M5-MO	10
SNSS-M6-MO	10
SNSS-M8-MO	10
SNSS-M10-MO	10

*1 : Also sold separately from 1 piece up. ➔ P.809

● Part number specification

SNSS-M5-16-MO

Product Code 1 2 Product Code

Order in number of packs.

Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

e-nedzi.com®

SNSS-BK

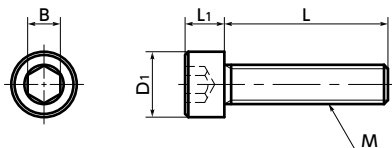
Hex Socket Head Cap Screws - Super Black

WEB Selection Tool

CAD Download

Antireflection

SUS Stainless steel



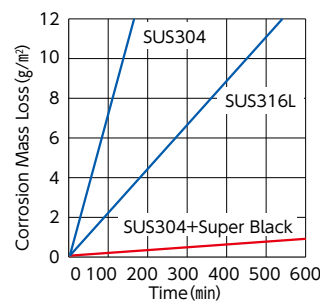
● Material/Finish

RoHS2 Compliant

	SNSS-BK
Main Body	SUSXM7 (Equivalent to SUS304) Stainless Steel Black
Strength Class	A2-70

● Corrosion-resistant comparison

Ferric Chloride Corrosion Testing (JIS G 0578)



This graph compares corrosion weight loss of a test piece in 6% ferric chloride solution over time. Comparing over the same time period, the mass loss due to corrosion of super black is much less than that of SUS304 and SUS316L, which confirms the good corrosion resistance of super black.

● Part number specification

SNSS-M5-16-BK

Product Code	1	2	Product Code
--------------	---	---	--------------

Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

Part Number	M	1	L	2											D1	L1	B	Mass (g)
SNSS-M2-BK	M2	3	4	5	6										3.8	2	1.5	0.16 - 0.22
SNSS-M3-BK	M3			5	6	8	10	12	16	20					5.5	3	2.5	0.67 - 1.4
SNSS-M4-BK	M4				6	8	10	12	16	20	25				7	4	3	1.5 - 3.2
SNSS-M5-BK	M5					8	10	12	16	20	25	30			8.5	5	4	2.5 - 4.8
SNSS-M6-BK	M6						10	12	16	20	25	30	35		10	6	5	4.7 - 8.3
SNSS-M8-BK	M8								16	20	25	30	35	40	13	8	6	12 - 19
SNSS-M10-BK	M10									20	25	30	35	40	16	10	8	23 - 33

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

*1 : Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available



- The stainless black surface treatment develops a passive membrane on the stainless steel surface up to 200 times of normal to produce a deep black finish.
- Excellent corrosion resistance. 8 times more resistant compared to SUS316L and 32 times to SUS304, respectively.
- The membrane contains no impurities and has extremely low outgas even in vacuum environments.
- Spectral reflectance is 1.5% or less. For optical instruments and other applications that require antireflection. ➔ P.672
- Deep black color decorates surfaces of equipment and devices.

● Application

Antireflection. Optical instruments, FPD production equipment, semiconductor devices, vacuum applications, and general industrial machines

e-nedzi.com®

SNSS-RY

Hex Socket Head Cap Screws - Low Temperature Black Chrome

WEB Selection Tool

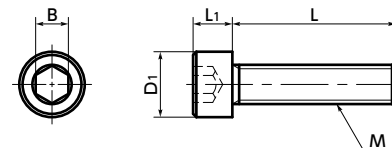
CAD Download

Seizing Prevention

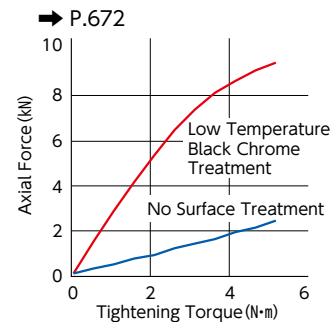
Chemical-proof

Antireflection

SUS Stainless steel



- Tightening property (reference)
- Part Number : SNSS-M5-25-RY



- Excellent corrosion resistance, chemical resistance, and abrasion resistance.
- Due to low outgas, screws can be used under vacuum environments.
- The coating has excellent lubricating ability and is suitable for prevention of seizing.
- Spectral reflectance is 1.5% or less. These screws are intended for optical instruments and other applications that require antireflection. ➔ P.672

● Application

Seizing prevention and reflection resistance, Optical instruments, FPD production equipment, and semiconductor devices

● Material/Finish

RoHS2 Compliant

	SNSS-RY
Main Body	SUSXM7 (S.S. Grade : A2) Low Temperature Black Chrome Treatment*1
Strength Class	A2-70

*1 : The surface treatment for **SNSS-RY** has been changed to low temperature black chrome treatment.

● Part number specification

SNSS-M5-16-RY

Product Code	1	2	Product Code
--------------	---	---	--------------

Part Number	M	1	L	2											D1	L1	B	Mass (g)
SNSS-M3-RY	M3	5	6	8	10	12	16	20							5.5	3	2.5	0.67 - 1.4
SNSS-M4-RY	M4		6	8	10	12	16	20	25						7	4	3	1.5 - 3.2
SNSS-M5-RY	M5			8	10	12	16	20	25						8.5	5	4	2.5 - 4.8
SNSS-M6-RY	M6				10	12	16	20	25	30					10	6	5	4.7 - 8.3
SNSS-M8-RY	M8						16	20	25	30	35				13	8	6	12 - 19
SNSS-M10-RY	M10							20	25	30	35	40			16	10	8	23 - 33

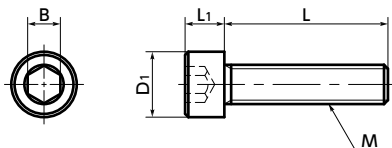
Part Number	Qty per pack
SNSS-M3-RY	1
SNSS-M4-RY	1
SNSS-M5-RY	1
SNSS-M6-RY	1
SNSS-M8-RY	1
SNSS-M10-RY	1

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

SNSS-TF Hex Socket Head Cap Screws - Teflon Coating

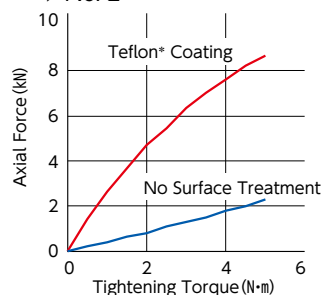
WEB Selection Tool WEB CAD Download Seizing Prevention Chemical-proof SUS Stainless steel

e-nedzi.com®



- Tightening property (reference)
Part Number : SNSS-M5 - 25-TF

➔ P.672



- Excellent chemical resistance.
- The coating has excellent lubricating ability and is suitable for prevention of seizing.

- Application

Seizing prevention. FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, and chemical plants

- Material/Finish

RoHS2 Compliant

	SNSS-TF
Main Body	SUSXM7 (S.S. Grade : A2) Teflon*1 Coating
Strength Class	A2-70

*1 : Teflon is a registered trademark of DuPont.

Part Number	M	1	L	2											D1	L1	B	Mass (g)
SNSS-M3-TF	M3	5	6	8	10	12	16	20							5.5	3	2.5	0.67 - 1.4
SNSS-M4-TF	M4		6	8	10	12	16	20	25						7	4	3	1.5 - 3.2
SNSS-M5-TF	M5			8	10	12	16	20	25						8.5	5	4	2.5 - 4.8
SNSS-M6-TF	M6				10	12	16	20	25	30					10	6	5	4.7 - 8.3
SNSS-M8-TF	M8						16	20	25	30	35				13	8	6	12 - 19
SNSS-M10-TF	M10							20	25	30	35	40			16	10	8	23 - 33

Unit : mm

Part Number	Qty per pack
SNSS-M3-TF	1
SNSS-M4-TF	1
SNSS-M5-TF	1
SNSS-M6-TF	1
SNSS-M8-TF	1
SNSS-M10-TF	1

- Part number specification

SNSS - M6 - 25 - TF

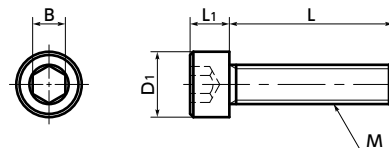
Product Code 1 2 Product Code

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

SNSS-AUS Hex Socket Head Cap Screws - Gold Coating

WEB Selection Tool WEB CAD Download Cleanroom wash & packaging Seizing Prevention SUS Stainless steel

e-nedzi.com®



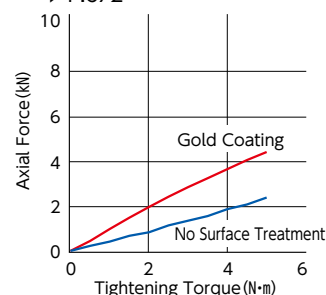
- Material/Finish

RoHS2 Compliant

	SNSS-AUS
Main Body	SUSXM7 (S.S. Grade : A2) Gold coating (gold purity : 99.99 wt%)
Strength Class	A2-70

- Tightening property (reference)
Part Number : SNSS-M5 - 25-AUS

➔ P.672



- Excellent corrosion resistance, oxidation resistance, electroconductivity, and thermal conductivity.
- The coating has excellent lubricating ability and is suitable for prevention of seizing.
- Unlike standard gold plating, there is no surface preparation, so the screws are suitable for applications in which impure elements are controlled, such as with FPD production equipment and semiconductor devices.
- Gold purity of coating : 99.99wt%
- Also, products with special specifications such as dimensions, shapes, materials, surface treatments, and cleanroom washing & special packaging are available. ➔ P.549



- Application

Seizing prevention and control of impure elements.
FPD production equipment, Semiconductor devices

Part Number	M	1	L	2											D1	L1	B	Mass (g)
SNSS-M3-AUS	M3	5	6	8	10	12	16	20							5.5	3	2.5	0.67 - 1.4
SNSS-M4-AUS	M4		6	8	10	12	16	20	25						7	4	3	1.5 - 3.2
SNSS-M5-AUS	M5			8	10	12	16	20	25						8.5	5	4	2.5 - 4.8
SNSS-M6-AUS	M6				10	12	16	20	25	30					10	6	5	4.7 - 8.3
SNSS-M8-AUS	M8						16	20	25	30	35				13	8	6	12 - 19
SNSS-M10-AUS	M10							20	25	30	35	40			16	10	8	23 - 33

Unit : mm

- Part number specification

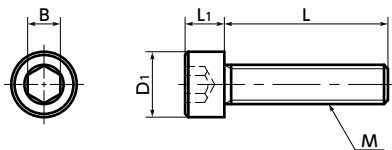
SNSS - M5 - 16 - AUS

Product Code 1 2 Product Code

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
1 unit in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available

SNSL-PN Hex Socket Head Cap Screws - SUS316L / Surface hardening treatment NEW

WEB Selection Tool WEB CAD Download Seizing Prevention



⚠ Precautions for Use

May have lower corrosion resistance than general SUS316L.

We recommend performing a test under the same usage conditions as in actual usage in advance.



- Hardening the screw surface prevents screw seizing / sticking.
- Unlike platings or coatings, there is nothing adhering to the surface, eliminating concerns about contamination due to stripping during tightening.
- Suitable for preventing seizing and sticking in environments where lubricant cannot be used.

● Application

Seizing & Sticking Prevention
FPD production devices / semiconductor production devices / food machinery / general industry machinery

● Material/Finish

RoHS2 Compliant

	SNSL-PN
Main body	SUS316L Surface hardening treatment
Strength Class	A4-70

Part Number	M	1	L	2							D1	L1	B	Mass (g)
SNSL-M3-PN	M3	6	8	10	12						5.5	3	2.5	0.71 - 0.96
SNSL-M4-PN	M4		8	10	12	16	20				7	4	3	1.7 - 2.7
SNSL-M5-PN	M5		8	10	12	16	20				8.5	5	4	2.5 - 4
SNSL-M6-PN	M6			10	12	16	20	25	30		10	6	5	4.7 - 8.3
SNSL-M8-PN	M8					16	20	25	30	35	13	8	6	12 - 19

Part Number	Qty per pack
SNSL-M3-PN	1
SNSL-M4-PN	1
SNSL-M5-PN	1
SNSL-M6-PN	1
SNSL-M8-PN	1

● Part number specification

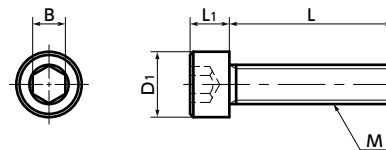
SNSL-M5-16-PN

Product Code 1 2 Product Code

1 Individual Sales → P.809 1 unit in 1 bag Available / Add'l charge
Cleanroom Wash & Packaging → P.807 Available / Add'l charge
Screw Length Adjustment → P.811 Available / Add'l charge
Vibration Resistant → P.810 Available / Add'l charge
Modification process for captive use → P.806 Please feel free to contact us

SNS-EL Hex Socket Head Cap Screws - Electroless Nickel Plating

WEB Selection Tool WEB CAD Download High strength



- Our unique processing technology enables screws to meet strength class 12.9 after surface treatment.
- For applications that require both high strength (Strength Class 12.9) and corrosion resistance.

● Application

Equipment and device structures, FPD production equipment, semiconductor devices, and general industrial machines

● Material/Finish

RoHS2 Compliant

	SNS-EL
Main Body	SCM435 Electroless Nickel Plating
Strength Class	12.9

Part Number	M	1	L	2								D1	L1	B	Mass (g)
SNS-M3-EL	M3	5	6	8	10	12	16	20				5.5	3	2.5	0.67 - 1.4
SNS-M4-EL	M4	5	6	8	10	12	16	20	25			7	4	3	1.4 - 3.2
SNS-M5-EL	M5		6	8	10	12	16	20	25			8.5	5	4	2.2 - 4.8
SNS-M6-EL	M6			8	10	12	16	20	25	30		10	6	5	4.3 - 8.3
SNS-M8-EL	M8				10	12	16	20	25	30	35	13	8	6	10 - 19
SNS-M10-EL	M10							20	25	30	35	40	16	10	23 - 33

Part Number	Qty*1 per pack
SNS-M3-EL	20
SNS-M4-EL	20
SNS-M5-EL	20
SNS-M6-EL	10
SNS-M8-EL	10
SNS-M10-EL	10

*1 : Also sold separately from 1 piece up. → P.809

● Part number specification

SNS-M5-16-EL

Product Code 1 2 Product Code

Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809 Available / Add'l charge
Cleanroom Wash & Packaging → P.807 Available / Add'l charge
Screw Length Adjustment → P.811 Not Available
Vibration Resistant → P.810 Available / Add'l charge
Modification process for captive use → P.806 Please feel free to contact us

Miniature Screws

e-nedzi.com®



• Miniature Screws

	Socket Head Cap Screws	Flat Head Machine Screws	Pan Head Machine Screws			Set Screws
Part Number	SNS / SNSS	SNZF / SNZFS	SNZS	SNZ	SSCZS	SNTS
Shape						
Page	P.682	P.683	P.684	P.685	P.699	P.686
Materials	SCM435 SUSXM7	SWCH16A SUSXM7	SUSXM7	SWCH16A	SUSXM7	SUS303 SUSXM7
Characteristics	For Precision Instruments Socket Head Cap Screws	For Precision Instruments Cross Recessed Flat Head Machine Screws	For Precision Instruments Pan Head Machine Screws	For Precision Instruments Pan Head Machine Screws	Pan Head Machine Screws for Precision Instruments	For Precision Instruments Set Screws
Size	M1 - M2.5	M1.4 - M2.6	S0.6 - M2.6	M1.4 - M2.6	M1.4 - M2.6	M1 - M2.6

	Hex Head Screws	Plastic screws			
Part Number	SHNS	SPE-MC	SPE-MF	SPA-MC	SPA-MF
Shape					
Page	P.687	P.747	P.748	P.763	P.764
Materials	SUS303 Equivalent to SUS304	PEEK	PEEK	RENY	RENY
Characteristics	For precision equipment Hexagon Nut	Heat Resistance Chemical Resistance For Precision Instruments	Chemical-proof Heat-resistant For precision equipment	High Strength For Precision Instruments	High strength For precision equipment
Size	M1 - M2.6	M1.2 - M1.6	M1.2 - M1.6	M1.2 - M1.6	M1.2 - M1.6

• Tools

	Hex Keys
Part Number	SKH
Shape	
Page	P.688
Materials	Alloyed Steel
Characteristics	For precision equipment Hexagon Wrench
Size	M1 - M2.6

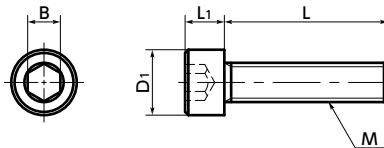
SNS / SNSS

Hex Socket Head Cap Screws for Precision Instruments

e-nedzi.com®



WEB Selection Tool CAD Download Miniature Size SUS Stainless steel



• Part number specification

SNSS-M2 - 3



Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809



- M1 - M2.5.
Miniature screws for precision instruments.

• Application

Reducing the size of equipment and devices
Compact precision instruments

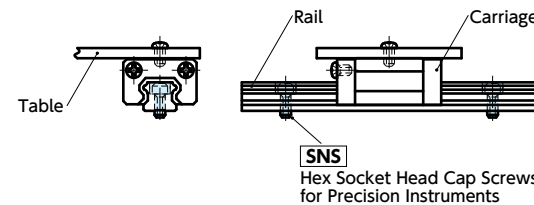
• Material/Finish

RoHS2 Compliant

	SNS	SNSS
Main Body	SCM435 Ferroferric Oxide Coating (Black)	SUSXM7 (Equivalent to SUS304)

• Usage example

For fixing miniature linear guideway rails and tables.



Unit : mm

SNS Steel - Ferrosferric Oxide Coating		SNSS Stainless steel		Common dimensions											
Part Number	Max. Torque (N · m)	Part Number	Max. Torque (N · m)	M	L							D1	L1	B	Mass (g)
		SNSS-M1	0.02	M1	2	3	4	5			2	1	0.9	0.025 - 0.039	
		SNSS-M1.4	0.07	M1.4	2	3	4	5			2.6	1.4	1.3	0.062 - 0.085	
SNS-M1.6	0.25	SNSS-M1.6	0.1	M1.6		3	4	5	6		3	1.6	1.5	0.09 - 0.12	
SNS-M2	0.53	SNSS-M2	0.22	M2		3	4	5	6		3.8	2	1.5	0.16 - 0.22	
SNS-M2.5	1.12	SNSS-M2.5	0.46	M2.5			4	5	6	8	4.5	2.5	2	0.35 - 0.47	

SNS Steel - Ferroferric Oxide Coating

Part Number	Qty per pack*1
SNS-M1.6	10
SNS-M2	10
SNS-M2.5	10

*1 : Also sold separately from 1 piece up. ➔ P.809

SNSS Made of Stainless Steel

Part Number	Qty per pack*1
SNSS-M1	10
SNSS-M1.4	10
SNSS-M1.6	10
SNSS-M2	10
SNSS-M2.5	10

*1 : Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

NBK

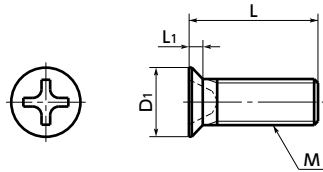
WEB ▶ <https://www.nbk1560.com>

SNZF/SNZFS

Cross Recessed Flat Head Machine Screws for Precision Instruments

Additional Size

WEB Selection Tool WEB CAD Download Miniature Size SUS Stainless steel



● Part number specification

SNZFS-M1.7-3



Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809



SNZF-TBZ

- Miniature screws for precision instruments.(JCIS 10 - 70)
- M1.4 - M2.6.
- More compact head than standard flat head machine screws.

● Application

Reducing the size of equipment and devices
Compact precision instruments

● Material/Finish

RoHS2 Compliant

	SNZF-TBZ	SNZFS
Main Body	SWCH16A Black Trivalent Chromate Treatment	SUSXM7 (Equivalent to SUS304)

Unit : mm

SNZF-TBZ Steel · Black Trivalent Chromate Treatment		SNZFS Stainless steel		Common dimensions									
Part Number	Mass (g)	Part Number	Mass (g)	M	L							D1	L1
SNZF-M1.4-TBZ	0.016 - 0.066	SNZFS-M1.4	0.016 - 0.066	M1.4	2	3	4	5	6	8		2	0.45
		SNZFS-M1.6	0.033 - 0.11	M1.6		3	4	5	6	8	10	2.3	0.5
SNZF-M1.7-TBZ	0.027 - 0.13	SNZFS-M1.7	0.04 - 0.13	M1.7	2	3	4	5	6	8	10	2.5	0.5
SNZF-M2-TBZ	0.038 - 0.18	SNZFS-M2	0.056 - 0.18	M2	2	3	4	5	6	8	10	3	0.6
SNZF-M2.6-TBZ	0.1 - 0.27	SNZFS-M2.6	0.1 - 0.27	M2.6		3	4	5	6	8		4	0.8

* 1 : SNZF-TBZ Steel · Black Trivalent Chromate Treatment only is a standard product.

SNZF-TBZ Made of Steel · Black Trivalent Chromate Treatment

Part Number	Qty per pack*1
SNZF-M1.4-TBZ	50
SNZF-M1.7-TBZ	50
SNZF-M2-TBZ	50
SNZF-M2.6-TBZ	50

* 1 : Also sold separately from 1 piece up. ➔ P.809

SNZFS Made of Stainless Steel

Part Number	Qty per pack*1
SNZFS-M1.4	50
SNZFS-M1.6	50
SNZFS-M1.7	50
SNZFS-M2	50
SNZFS-M2.6	50

* 1 : Also sold separately from 1 piece up. ➔ P.809

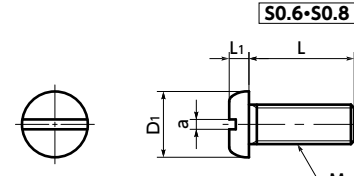
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SNZS

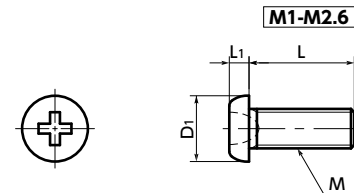
Pan Head Machine Screws for Precision Instruments

Additional Size

WEB Selection Tool WEB CAD Download Miniature Size SUS Stainless steel



S0.6-S0.8



M1-M2.6



- Miniature screws for precision instruments in sizes from S0.6 to S0.8 and M1 to M2.6.
- Pan head machine screws of low profile. For applications with limited overhead space.

● Application

Reducing the size of equipment and devices
Compact precision instruments

● Material/Finish

RoHS2 Compliant

	SNZS
Main Body	SUSXM7 (Equivalent to SUS304)

● Part number specification

SNZS-M2-3



Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

Unit : mm

Part Number	M	L											D1	L1	a	Max. Torque (N·m)	Mass (g)	
SNZS-S0.6	M0.6	1	1.5	2									1.3	0.4	0.25	0.005	0.0031 - 0.0058	
SNZS-S0.8	M0.8	1	1.5	2									1.6	0.5	0.25	0.01	0.0067 - 0.011	
SNZS-M1	M1			2		3		4	5				1.8	0.45		0.02	0.013 - 0.025	
SNZS-M1.4	M1.4			2		3		4	5	6	8	10	2	0.5		0.07	0.024 - 0.09	
SNZS-M1.6	M1.6			2		3		4	5	6	8	10	12	2.3	0.5	0.1	0.014 - 0.13	
SNZS-M1.7	M1.7			2		3		4	5	6	8	10	12	14	2.5	0.5	0.14	0.036 - 0.18
SNZS-M2	M2			2	2.5	3	3.5	4	5	6	8	10	12	14	3	0.6	0.22	0.055 - 0.26
SNZS-M2.5	M2.5					3		4	5	6	8				3.8	0.8	0.46	0.13 - 0.28
SNZS-M2.6	M2.6				2.5	3		4	5	6	8				4	0.8	0.53	0.13 - 0.3

Part Number	Qty per pack*1
SNZS-S0.6	10
SNZS-S0.8	10
SNZS-M1	50
SNZS-M1.4	50
SNZS-M1.6	50
SNZS-M1.7	50
SNZS-M2	50
SNZS-M2.5	50
SNZS-M2.6	50

* 1 : Also sold separately from 1 piece up. ➔ P.809

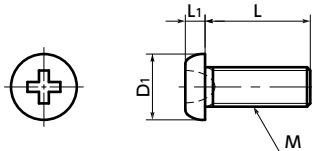
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SNZ Pan Head Machine Screws for Precision Instruments

e-nedzi.com®



WEB Selection Tool WEB CAD Download Miniature Size



- Miniature screws for precision instruments in sizes from M1.4 to M2.6.
- Pan head machine screws of low profile. For applications with limited overhead space.

• Application

Reducing the size of equipment and devices
Compact precision instruments

• Material/Finish



SNZ	
Main Body	SWCH16A Black Trivalent Chromate Treatment

Part Number		M	L									D1	L1	Max. Torque (N·m)	Mass (g)
SNZ-M1.4-TBZ		M1.4	2		3		4	5	6	8		2	0.5	0.07	0.022 - 0.073
SNZ-M1.7-TBZ		M1.7	2		3		4	5	6	8		2.5	0.5	0.14	0.036 - 0.11
SNZ-M2-TBZ		M2	2	2.5	3	3.5	4	5	6	8		3	0.6	0.22	0.054 - 0.16
SNZ-M2.6-TBZ		M2.6			3		4	5	6	8		4	0.8	0.53	0.14 - 0.3

Part Number	Qty per pack*1
SNZ-M1.4-TBZ	50
SNZ-M1.7-TBZ	50
SNZ-M2-TBZ	50
SNZ-M2.6-TBZ	50

*1: Also sold separately from 1 piece up. ➔ P.809

• Part number specification

SNZ-M2-3-TBZ

Product Code **1** **2** Black Trivalent Chromate Treatment

Order in number of packs.

Also sold separately from 1 piece up. ➔ P.809

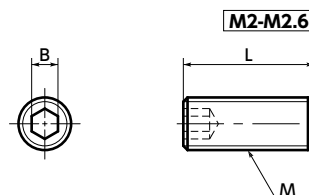
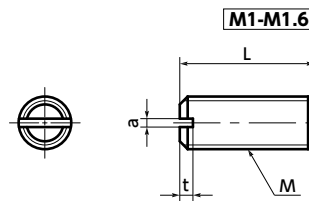
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SNTS Set Screws for Precision Instruments

e-nedzi.com®



WEB Selection Tool WEB CAD Download Miniature Size SUS Stainless steel



- Miniature screws for precision instruments in sizes from M1 to M2.6.
- Set screws with flat point.

• Application

Reducing the size of equipment and devices
Compact precision instruments

• Material/Finish



	M1-M1.6	M2-M2.6
Main Body	SUS303	SUSXM7 (Equivalent to SUS304)

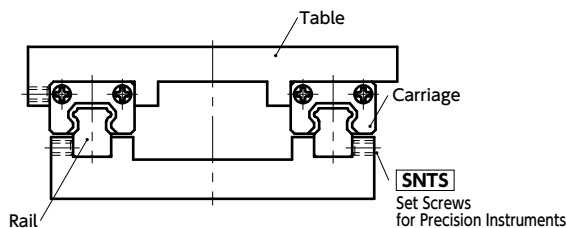
Part Number		M	L					a	t	B	Max. Torque (N·m)	Mass (g)
SNTS-M1-FP		M1	3	4	5	6		0.35	0.35		0.003	0.012 - 0.023
SNTS-M1.4-FP		M1.4	3	4	5	6		0.4	0.45		0.02	0.022 - 0.049
SNTS-M1.6-FP		M1.6	3	4	5	6		0.4	0.5		0.03	0.029 - 0.062
SNTS-M2-FP		M2	3	4	5	6				0.9	0.2	0.041 - 0.092
SNTS-M2.5-FP		M2.5		4	5	6				1.3	0.4	0.055 - 0.13
SNTS-M2.6-FP		M2.6		4	5					1.3	0.4	0.094 - 0.13

Part Number	Qty per pack*1
SNTS-M1-FP	10
SNTS-M1.4-FP	10
SNTS-M1.6-FP	10
SNTS-M2-FP	10
SNTS-M2.5-FP	10
SNTS-M2.6-FP	10

*1: Also sold separately from 1 piece up. ➔ P.809

• Usage example

To locate and fix miniature linear guideway rails and tables.



• Part number specification

SNTS-M2-3-FP

Product Code **1** **2** Product Code

Order in number of packs.

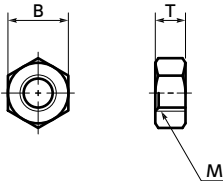
Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SHNS Hexagon Nut (For Miniature Screws)

WEB Selection Tool WEB CAD Download Miniature Size SUS Stainless steel

e-nedzi.com



- Dedicated hexagon nut for miniature screws
- Available size includes M1 to M2.6.
- Conforms to DIN 934.

• Application

Reducing the size of equipment and devices
Compact precision instruments

• Material/Finish



	M1	M1.4-M2.6
Main body	SUS303	Equivalent to SUS304

Unit : mm

Part Number 1	M	B	T	Mass (g)	Qty per pack*1
SHNS-M1	1	2.5	0.8	0.03	10
SHNS-M1.4	1.4	3	1.2	0.06	10
SHNS-M1.6	1.6	3.2	1.3	0.08	20
SHNS-M2	2	4	1.6	0.14	20
SHNS-M2.5	2.5	5	2	0.28	20
SHNS-M2.6	2.6	5	2	0.28	20

*1 : Also sold separately from 1 piece up. → P.809

• Part number specification

SHNS-M1.6



1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

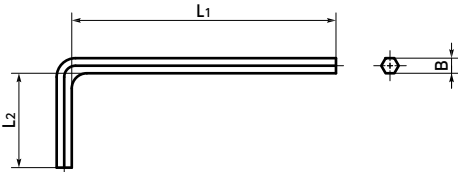
NBK

WEB ▶ https://www.nbk1560.com

SKH Hexagon Wrench (For Miniature Screws)

WEB Selection Tool WEB CAD Download Miniature Size

e-nedzi.com



- Dedicated hexagon wrenches for miniature screws
- Applicable Screw
Hex Socket Head Cap Screw SNSS SNS → P.682
Setscrew for Precision Instruments SNTS → P.686

• Application

Mounting and removing the miniature screw

• Material/Finish



	SKH
Main body	Alloy steel Ferrosoferric Oxide Film (Black)

Unit : mm

Part Number 1	B Nominal of Key	L1	L2	Applicable Screw			Mass (g)	Qty per pack
				SNS SNSS → P.682	SNTS → P.686			
SKH-0.89	0.89	31	9		SNSS-M1	SNTS-M2-FP	0.21	1
SKH-1.27	1.27	42	13.5		SNSS-M1.4	SNTS-M2.5-FP • SNTS-M2.6-FP	0.6	1
SKH-1.5	1.5	45	14	SNS-M1.6 • SNS-M2	SNSS-M1.6 • SNSS-M2		0.9	1
SKH-2	2	50	16	SNS-M2.5	SNSS-M2.5		1.8	1
SKH-2.5	2.5	56	18				3.1	1
SKH-3	3	63	20				5.1	1

• Part number specification

SKH-1.5



1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Not Available	Not Available	Not Available	Not Available

NBK

WEB ▶ https://www.nbk1560.com



Captive Screws • Captive Washers

	Socket Head Cap Captive Screws				Hex Head Captive Screws	Button Head Cap Captive Screws
Part Number	SSC	SSC (INCH)	SSCLS	SSCHS	SSC-SNHS	SSC-SRBS
Shape						
Page	P.691	P.692	P.697	P.698	P.693	P.694
Materials	SUSXM7	SUS304	SUSXM7	SUSXM7	SUSXM7	SUSXM7
Characteristics	Standard	Inch Screws	Low Profile Cap Screws	Special Low Profile Cap Screws	Hex Head Screws	Tamper-Resistance Screws
Size	M3 - M8	M3 - M8	M3 - M8	M3 - M8	M3 - M8	M3 - M8

	Cross Recessed Machine Captive Screws		Pan Head Machine Screws
Part Number	SSCPS	SSCMS	SSCZS
Shape			 NEW
Page	P.695	P.696	P.699
Materials	SUSXM7	SUSXM7	SUSXM7
Characteristics	Pan Head Machine Screws	Truss Head Screws	Pan Head Machine Screws for Precision Instruments
Size	M3 - M8	M3 - M8	M1.4 - M2.6

Full Thread Screws

	Socket Head Cap Screws	Socket Head Cap Screws with Special Low Profile	Plastic Screws
Part Number	SNSS-FT	SSHS-FT	SPE-FT
Shape			
Page	P.700	P.603	P.745
Materials	SUSXM7	SUS304	PEEK
Characteristics	Standard	Special Low Profile Cap Screws	Chemical Resistance Low Outgas
Size	M3 - M10	M3 - M10	M3 - M6

Use the NBK Captive Screw Series to comply with CE marking requirements*.

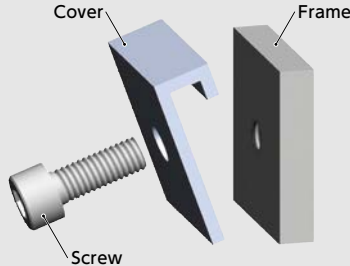
EU Machinery Directive Appendix I of the Machinery Directive (2006/42/EC) of the EC Directives requires that screws that secure protective and inspection covers on instruments and machines do not fall out from the cover when the cover is removed.

Excerpt from EU Machinery Directive Appendix I

- 1.4.2 Special requirements for guards
- 1.4.2.1 Fixed guards
- Fixed guards must be fixed by systems that can be opened or removed only with tools.
- Their fixing systems must remain attached to the guards or to the machinery when the guards are removed.
- Where possible, guards must be incapable of remaining in place without their fixings.
- 1.1.1 Definitions
- (f) 'Guard' means a part of the machinery used specifically to provide protection by means of a physical barrier;

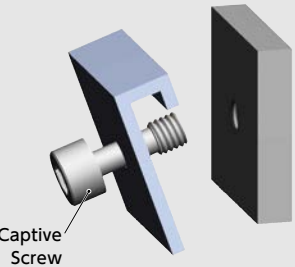
*CE marking proves that the machines, devices, and other products of manufacturers comply with EC directives. Products exported or distributed in EC member states must comply with EC directives. In order to distribute products in EU member states, products must have CE marking, which proves that they comply with EC directives.

Standard Screws



The screw falls from the cover when it is removed.

If captive screws are used



The screw does not fall out from the cover.

NBK offers a variety of products which comply with CE marking requirements.



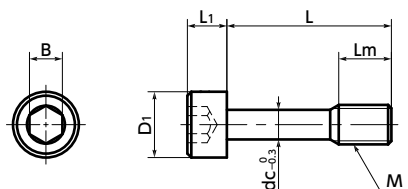
Captive Screw ➔ P.691 - 699

SSC Socket Head Cap Captive Screws

e-nedzi.com®



WEB Selection Tool CAD Download SUS Stainless steel



● Material/Finish



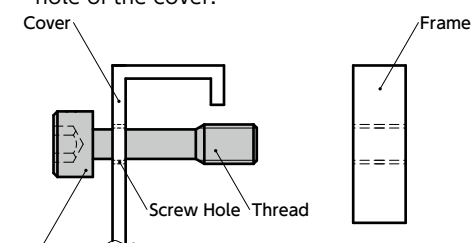
	SSC
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-70

⚠ Precautions for Use

- Screw hole inner diameter on the cover side shall be at least the dc dimension.
- The cover thickness should be 0.8 mm or above.

● Installation example

Process a screw hole in the cover, then pass **SSC** thread through it. Even when the screw is removed from the frame, **SSC** does not fall out from the cover because **SSC** thread catches on the screw hole of the cover.

**SSC** Socket Head Cap Captive Screw

- The shape of the screws prevent them from falling out and loss. For fixing protective and inspection covers that are frequently installed and removed.
- Socket head cap screw type.
- These items comply with CE marking requirements. → P.690
- Also, captive screws with special specifications for dimensions, shapes, materials, and surface treatments are available.



● Application

Securement of protective and inspection covers and compliance with CE marked products
Machine tools, food industry machines, and electrical and electronic equipment

Unit : mm																
Part Number	M	L									Lm	D1	L1	B	dc	Mass (g)
SSC-M3	M3	8	10	12	16					4	5.5	3	2.5	2.2	0.8 - 1.2	
SSC-M4	M4		10	12	16	20				5	7	4	3	3	1.8 - 2.7	
SSC-M5	M5			12	16	20	25			6	8.5	5	4	3.9	3 - 4.8	
SSC-M6	M6			12	16	20	25	30		8	10	6	5	4.5	5.1 - 8.3	
SSC-M8	M8				16	20	25	30	35	40	10	13	8	6	6.3	12 - 21

Unit : mm

Part Number	Qty per pack
SSC-M3	1
SSC-M4	1
SSC-M5	1
SSC-M6	1
SSC-M8	1

● Part number specification

SSC-M6-12

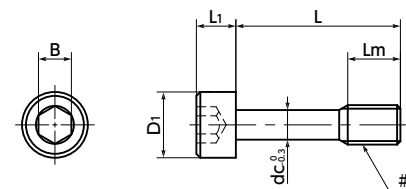
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	with Captive Processing

SSC (INCH) Socket Head Cap Captive Screws (Inch Screws)

e-nedzi.com®

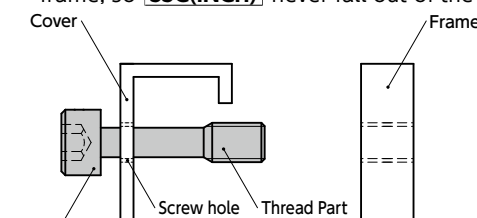


WEB Selection Tool CAD Download SUS Stainless steel

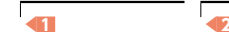


● Installation example

Machine a screw hole on the cover and let through the threaded part of **SSC(INCH)**. Threaded part of **SSC(INCH)** is still engaged with the screw hole on the cover even after the screw is removed from the frame, so **SSC(INCH)** never fall out of the cover.

**SSC(INCH)** Socket Head Cap Captive Screw (Inch Screws)

● Part number specification

SSC-#4-40-5/8

- It prevents fall-off and loss of the screw. For fixing of protection cover and cover for inspection that are frequently mounted and removed.
- Inch screw type.
- For CE marking. → P.690
- Use a dedicated wrench **SKH(INCH)** for mounting and removal. → P.712
- We also produce captive screws of special specifications, e.g. dimensions, shapes, materials and surface treatment. Please feel free to contact our customer service.



● Application

Fixing of protection cover and cover for inspection / CE marking
Machine tool / Food machinery / and Electronic device

● Material/Finish



	SSC (INCH)
Main body	Equivalent to SUS304
Strength Class	A2-50

⚠ Precautions for Use

- Screw hole inner diameter on the cover side shall be at least the dc dimension.
- The cover thickness should be 0.8 mm or above.

Unit : inch															
Part Number	# Nominal of Thread	L 								Lm(mm)	D1	L1	B	dc(mm)	Mass (g)
 SSC-#4-40	No.4-40UNC									4	0.183	0.112		1.9	0.63 - 0.94
SSC-#6-32	No.6-32UNC									5	0.226	0.138		2.4	1.2 - 1.7
SSC-#8-32	No.8-32UNC									5	0.27	0.164		3	1.8 - 2.7
SSC-#10-32	No.10-32UNF									6	0.312	0.19		3.7	2.7 - 4.2
SSC-  -20	1/4-20UNC							1	1 	9	0.375	0.25		4.6	6.2 - 9.3

Unit : inch

Part Number	Qty per pack
SSC-#4-40	1
SSC-#6-32	1
SSC-#8-32	1
SSC-#10-32	1
SSC-1/4-20	1

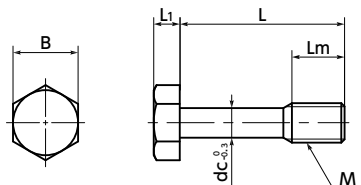
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	with Captive Processing

SSC-SNHS Hexagon Head Captive Screws

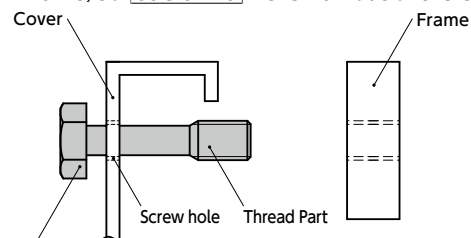
e-nedzi.com®



WEB Selection Tool CAD Download SUS Stainless steel



- Installation example
Machine a screw hole on the cover and let through the threaded part of **SSC-SNHS**. Threaded part of **SSC-SNHS** is still engaged with the screw hole on the cover even after the screw is removed from the frame, so **SSC-SNHS** never fall out of the cover.

**SSC-SNHS** Hex Head Captive Screws

- Part number specification

SSC-SNHS-M6-12

1

2

- It prevents fall-off and loss of the screw. For fixing of protection cover and cover for inspection that are frequently mounted and removed.
- Hex head bolt type.
- For CE marking. → P.690
- We also produce captive screws of special specifications, e.g. dimensions, shapes, materials and surface treatment. Please feel free to contact our customer service.



- Application

Fixing of protection cover and cover for inspection / CE marking
Machine tool / Food machinery / and Electronic device

- Material/Finish



	SSC-SNHS
Main body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

- ⚠ Precautions for Use

- Screw hole inner diameter on the cover side shall be at least the dc dimension.
- The cover thickness should be 0.8 mm or above.

Part Number	1	M	L	2	Lm	B	L1	dc	Mass (g)
SSC-SNHS-M3	M3	8	10	12	16				0.8 - 1.1
SSC-SNHS-M4	M4		10	12	16	20			1.7 - 2.5
SSC-SNHS-M5	M5			12	16	20	25		3 - 4.7
SSC-SNHS-M6	M6			12	16	20	25	30	4.9 - 8.1
SSC-SNHS-M8	M8				16	20	25	30	11 - 20

Part Number	Qty per pack
SSC-SNHS-M3	1
SSC-SNHS-M4	1
SSC-SNHS-M5	1
SSC-SNHS-M6	1
SSC-SNHS-M8	1

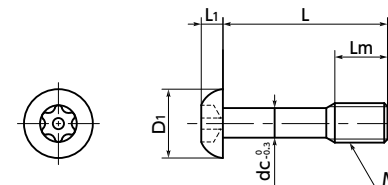
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Available / Add'l charge Not Available Not Available with Captive Processing

SSC-SRBS Captive Button Head Cap Bolts with Hexalobular Socket (with Pin)

e-nedzi.com®

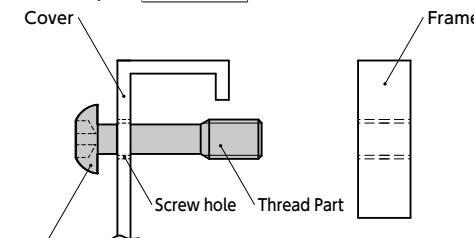


WEB Selection Tool CAD Download Tamper Resistance SUS Stainless steel



- ⚠ Precautions for Use

- Screw hole inner diameter on the cover side shall be at least the dc dimension.
- The cover thickness should be 0.8 mm or above.
- Installation example
Machine a screw hole on the cover and let through the threaded part of **SSC-SRBS**. Threaded part of **SSC-SRBS** is still engaged with the screw hole on the cover even after the screw is removed from the frame, so **SSC-SRBS** never fall out of the cover.

**SSC-SRBS** Captive Button Head Cap Bolt with Hexalobular Socket (with Pin)

- Part number specification

SSC-SRBS-M6-12

1

2

- It prevents fall-off and loss of the screw. For fixing of protection cover and cover for inspection that are frequently mounted and removed.
- Tamper-resistance screw type.
- For CE marking. → P.690
- Use a dedicated tool **SRX** → P.718 for mounting and removal.
- We also produce captive screws of special specifications, e.g. dimensions, shapes, materials and surface treatment. Please feel free to contact our customer service.



- Application

Fixing of protection cover and cover for inspection / CE marking
Machine tool / Food machinery / and Electronic device

- Material/Finish



	SSC-SRBS
Main body	SUS304
Strength Class	Equivalent to A2-50

Part Number	1	M	L	2	Lm	D1	L1	dc	Applicable wrench	Hexalobular Socket No.	Mass (g)
SSC-SRBS-M3	M3	8	10	12	16				SRX-10	10	0.57 - 0.93
SSC-SRBS-M4	M4		10	12	16	20			SRX-20	20	1.4 - 2.2
SSC-SRBS-M5	M5			12	16	20	25		SRX-25	25	2.3 - 4.1
SSC-SRBS-M6	M6			12	16	20	25	30	SRX-30	30	3.6 - 6.9
SSC-SRBS-M8	M8				16	20	25	30	SRX-40	40	9.1 - 18

Part Number	Qty per pack
SSC-SRBS-M3	1
SSC-SRBS-M4	1
SSC-SRBS-M5	1
SSC-SRBS-M6	1
SSC-SRBS-M8	1

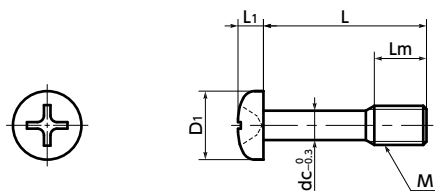
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Available / Add'l charge Not Available Not Available with Captive Processing

SSCPS Cross Recessed Pan Head Captive Machine Screws

e-nedzi.com®

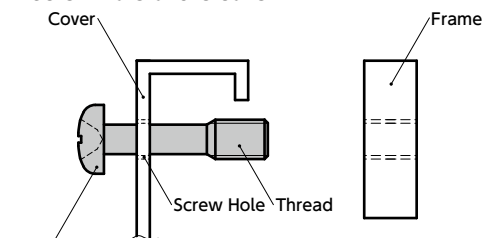


WEB Selection Tool CAD Download SUS Stainless steel



● Installation example

Make a screw hole in the cover, then pass **SSCPS** thread through it. Even when the screw is removed from the frame, **SSCPS** does not fall out from the cover because **SSCPS** thread catches on the screw hole of the cover.

**SSCPS** Cross Recessed Pan Head Captive Machine Screw

- The shape of the screws prevent them from falling out and loss. They are intended to fix protective and inspection covers that are frequently installed and removed.
- Cross Recessed pan head machine screws.
- These items comply with CE marking requirements. → P.690

● Application

Securement of protective and inspection covers and compliance with CE marked products.
Machine tools, food industry machines, and electrical and electronic equipment

● Material/Finish



	SSCPS
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

⚠ Precautions for Use

- The inner diameter of the screw hole of the cover must be equal or larger than dimension dc.
- The thickness of the cover must be 0.8 mm or more.

Part Number	1	M	L							Lm	D1	L1	dc	Mass (g)
SSCPS-M3		M3	8	10	12	16				4	5.5	2	2.2	0.61 - 0.94
SSCPS-M4		M4		10	12	16	20			5	7	2.6	3	1.3 - 2.1
SSCPS-M5		M5			12	16	20	25		6	9	3.3	3.9	2.7 - 4.2
SSCPS-M6		M6			12	16	20	25	30	8	10.5	3.9	4.6	4.3 - 7.4
SSCPS-M8		M8				16	20	25	30	35	40	10	14	10 - 18

Part Number	Qty per pack
SSCPS-M3	1
SSCPS-M4	1
SSCPS-M5	1
SSCPS-M6	1
SSCPS-M8	1

● Part number specification

SSCPS-M6-12

1

2

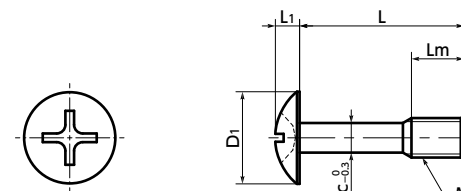
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	with Captive Processing

SSCMS Cross Recessed Truss Head Captive Screws

e-nedzi.com®

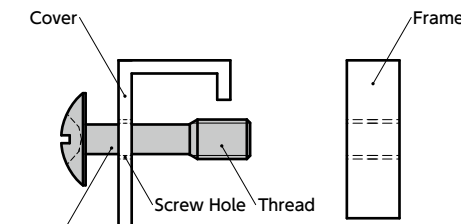


WEB Selection Tool CAD Download SUS Stainless steel



● Installation example

Make a screw hole in the cover, then pass **SSCMS** thread through it. Even when the screw is removed from the frame, **SSCMS** does not fall out from the cover because **SSCMS** thread catches on the screw hole of the cover.

**SSCMS** Cross Recessed Truss Head Captive Screw

- The shape of the screws prevent them from falling out and loss. They are intended to fix protective and inspection covers that are frequently installed and removed.
- These screws have large heads that decorate attachment surfaces beautifully.
- These items comply with CE marking requirements. → P.690

● Application

Securement of protective and inspection covers and compliance with CE marked products
Machine tools, food industry machines, and electrical and electronic equipment

● Material/Finish



	SSCMS
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

⚠ Precautions for Use

- The inner diameter of the screw hole of the cover must be equal or larger than dimension dc.
- The thickness of the cover must be 0.8 mm or more.

Part Number	1	M	L							Lm	D1	L1	dc	Mass (g)
SSCMS-M3		M3	8	10	12	16				4	6.9	1.9	2.2	0.61 - 0.94
SSCMS-M4		M4		10	12	16	20			5	9.4	2.5	3	1.4 - 2.2
SSCMS-M5		M5			12	16	20	25		6	11.8	3.1	3.9	3.1 - 4.7
SSCMS-M6		M6			12	16	20	25	30	8	14	3.7	4.6	4.4 - 7.5
SSCMS-M8		M8				16	20	25	30	40	10	17.8	4.8	10 - 18

Part Number	Qty per pack
SSCMS-M3	1
SSCMS-M4	1
SSCMS-M5	1
SSCMS-M6	1
SSCMS-M8	1

● Part number specification

SSCMS-M6-12

1

2

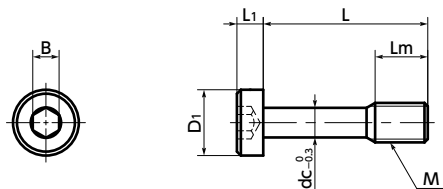
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	with Captive Processing

SSCLS Socket Head Cap Captive Screws with Low Profile

e-nedzi.com®

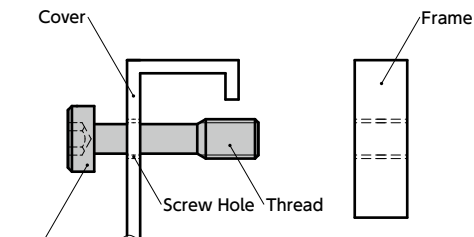


WEB Selection Tool CAD Download Protrusion SUS Stainless steel



⚠ Precautions for Use

- The inner diameter of the screw hole of the cover must be equal or larger than dimension dc.
- The thickness of the cover must be 0.8 mm or more.
- Installation example
Make a screw hole in the cover, then pass **SSCLS** thread through it. Even when the screw is removed from the frame, **SSCLS** does not fall out from the cover because **SSCLS** thread catches on the screw hole of the cover.



SSCLS Socket Head Cap Captive Screw with Low Profile



- The shape of the screws prevent them from falling out and loss. They are intended to fix protective and inspection covers that are frequently installed and removed.
- These screws are intended for the reduction of the size of machinery and device and applications with limited overhead space.
- These items comply with CE marking requirements. ➔ P.690

• Application

Securement of protective and inspection covers and compliance with CE marked products
Machine tools, food industry machines, and electrical and electronic equipment

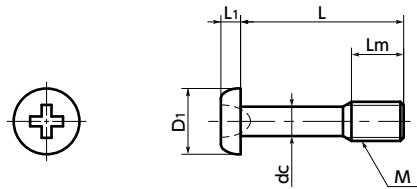
• Material/Finish

RoHS2 Compliant

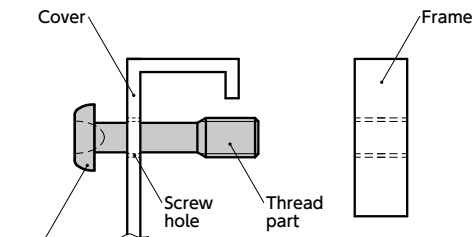
	SSCLS
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

Unit : mm

Part Number	M	L									Lm	D1	L1	B	dc	Mass (g)
 1		 2														
SSCLS-M3	M3	8	10	12	16					4	5.5	2	2	2.2	0.62 - 0.98	
SSCLS-M4	M4		10	12	16	20				5	7	2.8	2.5	3	1.4 - 2.3	
SSCLS-M5	M5			12	16	20	25			6	8.5	3.5	3	3.9	2.3 - 4.1	
SSCLS-M6	M6			12	16	20	25	30		8	10	4	4	4.5	3.8 - 7.1	
SSCLS-M8	M8				16	20	25	30	35	40	10	13	5	5	6.3	9 - 18



- Installation example
Make a screw hole in the cover, then pass **SSCZS** thread through it. Even when the screw is removed from the frame, **SSCZS** does not fall out from the cover because **SSCZS** thread catches on the screw hole of the cover.



SSCZS Pan head captive machine screws for precision instruments

⚠ Precautions for Use

- Screw hole inner diameter on the cover side shall be at least the dc dimension.
- The cover thickness should be 0.3 mm or above.

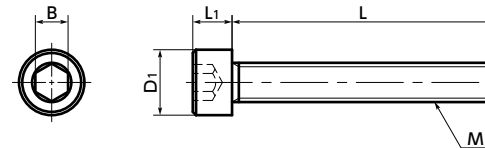
Unit : mm											
Part Number	M	L					Lm	D1	L1	dc	Max. Torque(N・m)
SSCZS-M1.4	M1.4	4	5	6	8		2	2	0.5	1.0 ⁰ _{-0.1}	0.03
SSCZS-M1.6	M1.6	4	5	6	8		2	2.3	0.5	1.1 ⁰ _{-0.1}	0.04
SSCZS-M1.7	M1.7	4	5	6	8		2	2.5	0.5	1.2 ⁰ _{-0.1}	0.04
SSCZS-M2	M2	4	5	6	8		2.5	3	0.6	1.4 ⁰ _{-0.15}	0.09
SSCZS-M2.5	M2.5			6	8	10	3	3.8	0.8	1.8 ⁰ _{-0.15}	0.15
SSCZS-M2.6	M2.6			6	8	10	3	4	0.8	1.8 ⁰ _{-0.15}	0.16

Part Number	Qty per pack
SSCZS-M1.4	1
SSCZS-M1.6	1
SSCZS-M1.7	1
SSCZS-M2	1
SSCZS-M2.5	1
SSCZS-M2.6	1

- Part number specification

SSCZS-M1.4-4

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	with Captive Processing



- Full thread socket head cap screws.
- Application
Equipment and devices that require long screws

Material/Finish		RoHS2 Compliant
SNSS-FT		
Main Body	SUSXM7 (Equivalent to SUS304)	
Strength Class	A2-50	

Unit : mm																						
Part Number	M	L																D ₁	L ₁	B	Mass (g)	
	1	2																				
SNSS-M3-FT	M3	25	30	35	40	45	50											5.5	3	2.5	1.6 - 2.9	
SNSS-M4-FT	M4		30	35	40	45	50	55	60	65	70	75	80	85	90	100		7	4	3	3.7 - 11	
SNSS-M5-FT	M5		30	35	40	45	50	55	60	65	70	75	80	85	90	100		8.5	5	4	5.6 - 16	
SNSS-M6-FT	M6			35	40	45	50	55	60	65	70	75	80	85	90	100		10	6	5	9.9 - 24	
SNSS-M8-FT	M8				40	45	50	55	60	65	70	75	80	85	90	100		13	8	6	21 - 45	
SNSS-M10-FT	M10					45	50	55	60	65	70	75	80	85	90	100	110	120	16	10	8	36 - 84

Part Number	Qty per pack
SNSS-M3-FT	1
SNSS-M4-FT	1
SNSS-M5-FT	1
SNSS-M6-FT	1
SNSS-M8-FT	1
SNSS-M10-FT	1

- Related Products

SSH5-FT Low Profile Screws (Hex Socket Head Cap Screws with Low Profile Full Thread)
→ P.603



SPE-FT Plastic Screw (PEEK / Hex Socket Head Cap Screws - Full Thread)
→ P.745



- Part number specification

SNSS-M3-25-FT

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available



● Clamping Cap Screws with Eccentric Head

Clamping Cap Screws with Eccentric Head				
Part Number	SLEC-A	SLEC-A-EL	SLEC-B	SLEC-B-EL
Shape				
Page	P.703	P.703	P.705	P.705
Materials	SCM435 Ferrosoferric Oxide Coating	SCM435 Electroless Nickel Plating	SCM435 Ferrosoferric Oxide Coating	SCM435 Electroless Nickel Plating
Characteristics	Standard Type • High-Strength Fixing	Standard Type • High-Strength Fixing	Guidance • High-Strength Fixing	Guidance • High-Strength Fixing
Size	M3 - M12	M3 - M12	M3 - M8	M3 - M8

● Fine Pitch Thread

Socket Head Cap Screws	
Part Number	SNSS
Shape	
Page	P.707
Materials	SUSXM7
Characteristics	Locating • Looseness Countermeasure
Size	M4 - M12

● Clamping Set Screws • Clamping Cap Screws (with Ventilation Hole)

	Clamping Set Screws		Clamping Cap Screws	
Part Number	SCSS-VR	SCSS-VF	SCBS-VR	SCBS-VF
Shape				
Page	P.587	P.587	P.588	P.588
Materials	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : SUS440C
Characteristics	Full Ball With Ventilation Hole	Flat Ball With Ventilation Hole	Full Ball With Ventilation Hole	Flat Ball With Ventilation Hole
Size	M5 - M10	M5 - M10	M5 - M10	M5 - M10

● Spring Plunger with Ball (with Ventilation Hole)

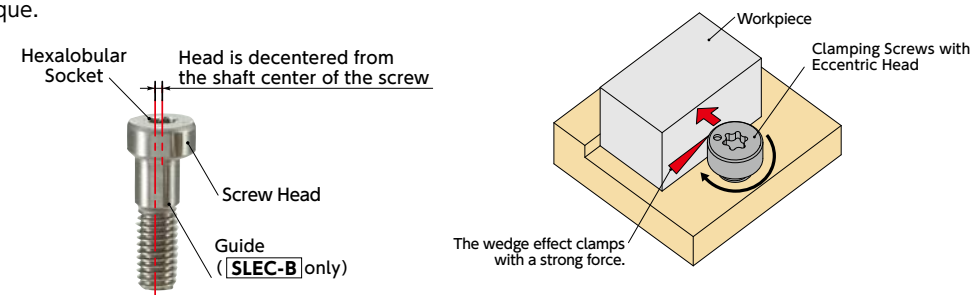
Spring Plunger with Ball	
Part Number	PVFS
Shape	
Page	P.589
Materials	Body : Stainless Steel(A2) Ball : SUS440C
Characteristics	With Ventilation Hole
Size	M5 - M10

Secure Workpiece Easily and Reliably
Clamping Screws with Eccentric Head

Characteristics

● The wedge effect achieves a large clamping force

When the screw is tightened, the workpiece is strongly clamped by the head, which is decentered from the shaft center of the screw. The wedge effect creates a large clamping force with low tightening torque.



● The screw has a hexalobular socket that can withstand high tightening torque.

● Two surface treatments are available as standard: ferrosoferric oxide coating or electroless nickel plating.

Types of Clamping Screws with Eccentric Head

● Two types of clamping screws with eccentric head are available as standard.

Standard Type

For fixing linear guideway rails and workpieces and tools.



SLEC-A Clamping Screws with Eccentric Head

Guide Type

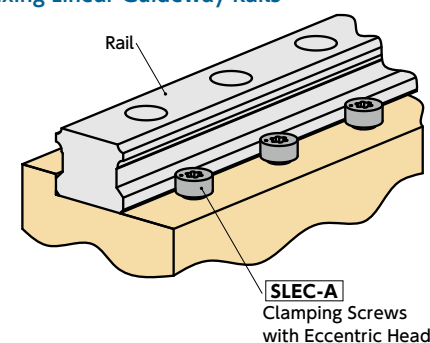
The precision-processed guide provides increased durability when clamping. For fixing heavier workpieces and jigs.



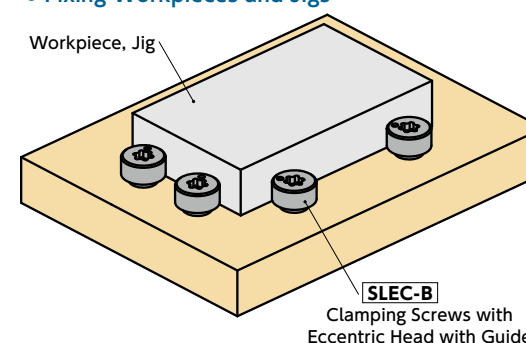
SLEC-B Clamping Screws with Eccentric Head with Guide

Usage Examples

● Fixing Linear Guideway Rails



● Fixing Workpieces and Jigs

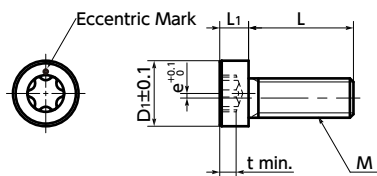




SLEC-A Clamping Screws with Eccentric Head

WEB Selection Tool

CAD Download



Material/Finish



	SLEC-A	SLEC-A-EL
Main Body	SCM435 Ferroferric Oxide Coating	SCM435 Electroless Nickel Plating
Strength Class	10.9	10.9

*1: The hexalobular shape is prescribed by JIS B 1015 : 2008 (ISO 10664 : 2005) "Hexalobular internal driving feature for bolts and screws".

SLEC-A



SLEC-A-EL

- When the screw is tightened, the workpiece is strongly clamped by the head, which is decentered from the shaft center of the screw. The wedging effect creates a large clamping force with a low tightening torque.
- The screws has a hexalobular socket*1 that can withstand a high tightening torque. → P.723
- Install and remove by using **SKX** Special Key. → P.726
- For fixing linear guideway rails.
- SLEC-A-EL** is an electroless nickel (EN) plating type.
For applications that require corrosion resistance.
- Also, **SLEC-B** Clamping Screw with Eccentric Head, which has a guide section below the neck is available. → P.705
- Application

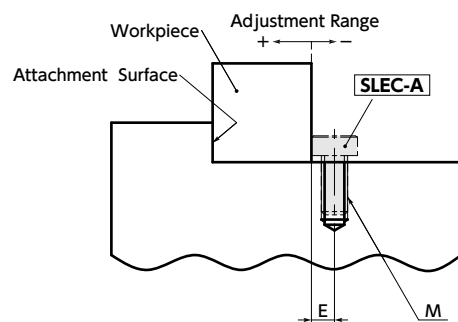
Fixing linear guideway rails, workpieces, and tools

Unit : mm										
SLEC-A Ferroferric oxide film	SLEC-A-EL Electroless nickel plating	Common dimensions								
Part Number	Part Number	M	L	D1	L1	e	Applicable wrench	Hexalobular Socket No.	t	Mass (g)
SLEC-M3-A	SLEC-M3-A-EL	M3	6	6.8	2.5	0.4	SKX-10	10	1	0.7
SLEC-M4-A	SLEC-M4-A-EL	M4	8	7	3	0.4	SKX-15	15	1.2	1.6
SLEC-M5-A	SLEC-M5-A-EL	M5	10	8.5	4	0.4	SKX-20	20	1.5	2.6
SLEC-M6-A	SLEC-M6-A-EL	M6	12	10	4	0.5	SKX-25	25	2	5.1
SLEC-M8-A	SLEC-M8-A-EL	M8	16	13	5	0.8	SKX-30	30	2.5	11
SLEC-M10-A	SLEC-M10-A-EL	M10	20	16	7	1	SKX-40	40	3	22
SLEC-M12-A	SLEC-M12-A-EL	M12	24	18	8	1	SKX-45	45	3.5	32

Installation Dimensions

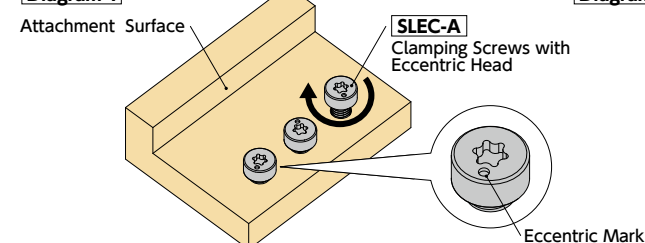
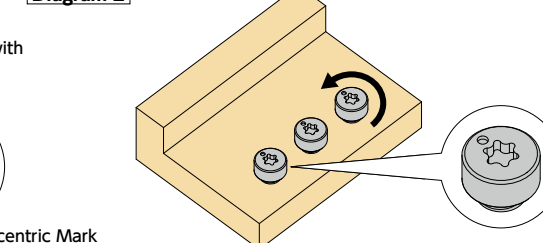
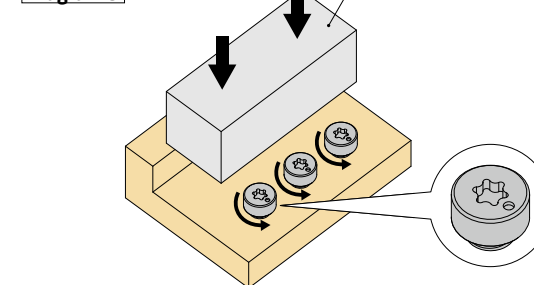
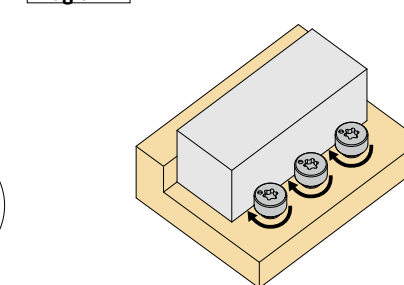
Unit : mm

Part Number	Part Number	E	M	Adjustment Range min. / max.
SLEC-M3-A	SLEC-M3-A-EL	3.1 ^{+0.3} ₀	M3	-0.1 / 0.7
SLEC-M4-A	SLEC-M4-A-EL	3.15 ^{+0.3} ₀	M4	-0.05 / 0.75
SLEC-M5-A	SLEC-M5-A-EL	3.9 ^{+0.3} ₀	M5	-0.05 / 0.75
SLEC-M6-A	SLEC-M6-A-EL	4.65 ^{+0.3} ₀	M6	-0.15 / 0.85
SLEC-M8-A	SLEC-M8-A-EL	6.05 ^{+0.5} ₀	M8	-0.35 / 1.25
SLEC-M10-A	SLEC-M10-A-EL	7.5 ^{+0.5} ₀	M10	-0.5 / 1.5
SLEC-M12-A	SLEC-M12-A-EL	8.5 ^{+0.5} ₀	M12	-0.5 / 1.5



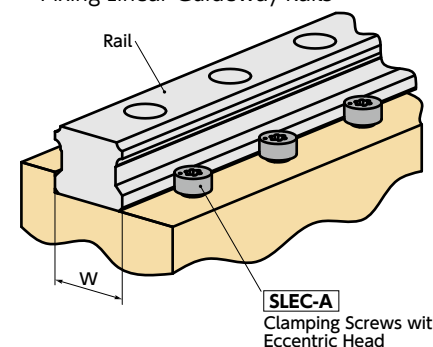
Installation Method

- Screw the clamping screws with eccentric head into the screw holes until the head bearing surface lightly touches the surface **Diagram 1**. At this time, the positions of the eccentric marks do not have to be aligned.
- Loosen the clamping screws with eccentric head so that the eccentric marks reach the position in **Diagram 2**.
- Loosen the clamping screws with eccentric head further so that the eccentric marks reach the position in **Diagram 3**.

Diagram 1**Diagram 2****Diagram 3****Diagram 4**

Usage example

Fixing Linear Guideway Rails



Recommended size of linear guideway rail

Unit : mm

Nominal of Rail	Rail Width W	with Clamping Screws with Eccentric Head	
#9	9	SLEC-M3-A	SLEC-M4-A
#12	12	SLEC-M3-A	SLEC-M4-A
#15	15	SLEC-M3-A	SLEC-M4-A
#20	20	SLEC-M4-A	SLEC-M5-A
#25	23	SLEC-M5-A	SLEC-M6-A
#30	28	SLEC-M6-A	SLEC-M8-A
#35	34	SLEC-M8-A	SLEC-M10-A
#45	45	SLEC-M10-A	SLEC-M12-A
#55	53	SLEC-M12-A	

Part number specification

SLEC-M6-A-EL

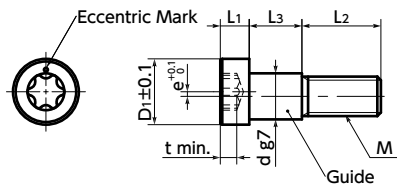
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available



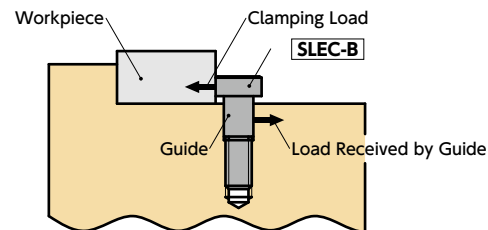
SLEC-B Clamping Screws with Eccentric Head

WEB Selection Tool

WEB CAD Download



- Since the precision-processed guide receives the clamping load, durability during clamping is increased.



- When the screw is tightened, the workpiece is strongly clamped by the head, which is decentered from the shaft center of the screw. The wedge effect creates a large clamping force with low tightening torque.
- The screw has a hexalobular socket*1 that can withstand high tightening torque. → P.723
- Install and remove by using **SKX** Special Key. → P.726
- SLEC-B-EL** is electroless nickel (EN) plating type. It is intended for applications that require corrosion resistance.

Application

Fixing workpieces and jigs and fine positional adjustment of heavy objects

Material/Finish



	SLEC-B	SLEC-B-EL
Main Body	SCM435 Ferrosferic Oxide Coating	SCM435 Electroless Nickel Plating
Strength Class	10.9	10.9

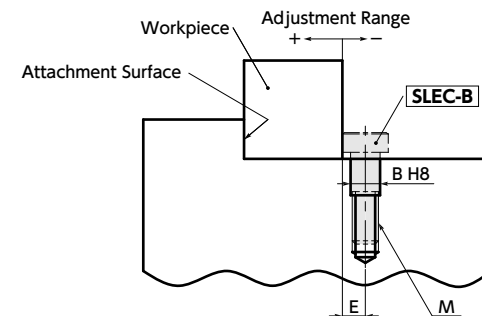
*1: The hexalobular shape is prescribed by JIS B 1015 : 2008 (ISO 10664 : 2005) "Hexalobular internal driving feature for bolts and screws".

SLEC-B	SLEC-B-EL	Common dimensions											Qty per pack
Ferrosferic oxide film	Electroless nickel plating												
Part Number 	Part Number 	M	D1	L1	L2	d	L3	e	Applicable wrench	Hexalobular Socket No.	t	Mass (g)	
SLEC-M3-B	SLEC-M3-B-EL	M3	6.8	2.5	6	3.35	4	0.4	SKX-10	10	1	0.82	1
SLEC-M4-B	SLEC-M4-B-EL	M4	7	3	7	4.5	5	0.4	SKX-15	15	1.2	1.9	1
SLEC-M5-B	SLEC-M5-B-EL	M5	8.5	4	10	5.5	6	0.4	SKX-20	20	1.5	3.3	1
SLEC-M6-B	SLEC-M6-B-EL	M6	10	4	12	6.5	8	0.5	SKX-25	25	2	6	1
SLEC-M8-B	SLEC-M8-B-EL	M8	13	5	16	8.5	9	0.8	SKX-30	30	2.5	14.3	1

Installation Dimensions

Unit : mm

Part Number	Part Number	E	M	B H8	Adjustment Range min. / max.
SLEC-M3-B	SLEC-M3-B-EL	3.1 ^{+0.3} ₀	M3	3.35	-0.1 / 0.7
SLEC-M4-B	SLEC-M4-B-EL	3.15 ^{+0.3} ₀	M4	4.5	-0.05 / 0.75
SLEC-M5-B	SLEC-M5-B-EL	3.9 ^{+0.3} ₀	M5	5.5	-0.05 / 0.75
SLEC-M6-B	SLEC-M6-B-EL	4.65 ^{+0.3} ₀	M6	6.5	-0.15 / 0.85
SLEC-M8-B	SLEC-M8-B-EL	6.05 ^{+0.5} ₀	M8	8.5	-0.35 / 1.25



Installation Method

- Screw the clamping screws with eccentric head into the screw holes until the head bearing surface lightly touches the surface **Diagram 1**. At this time, the positions of the eccentric marks do not have to be aligned.
- Loosen the clamping screws with eccentric head so that the eccentric marks reach the position in **Diagram 2**.
- Loosen the clamping screws with eccentric head further so that the eccentric marks reach the position in **Diagram 3**.

Diagram 1

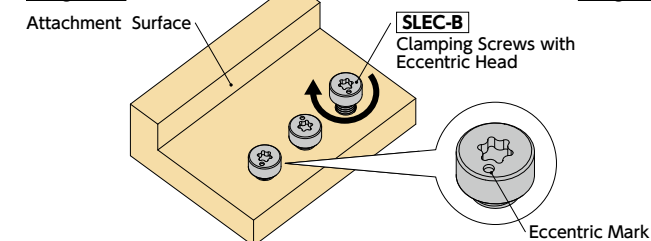


Diagram 2

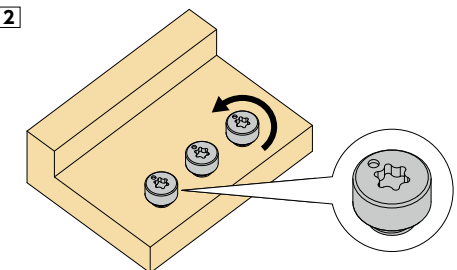


Diagram 3

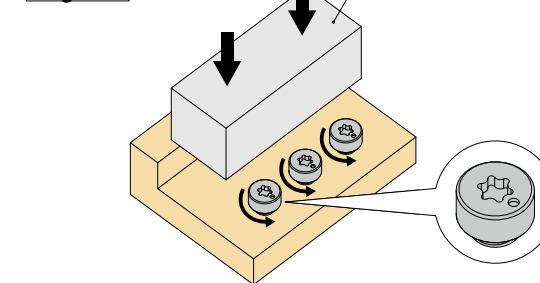
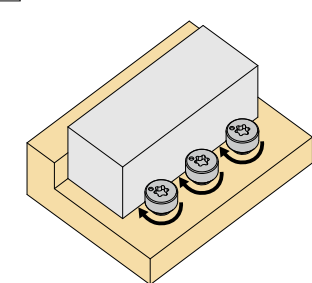
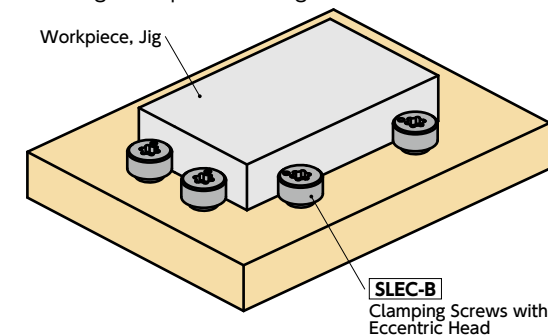


Diagram 4



Usage example

Fixing Workpiece and Jigs



Related Products

SLEC-A Clamping Screw with Eccentric Head, which does not have a guide section below the head is available.

→ P.703

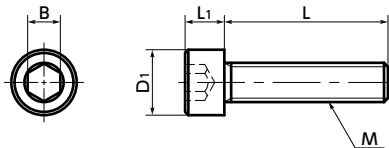


Part number specification

SLEC-M6-B-EL

1

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available



● Material/Finish 

	SNSS
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50 (M4 - M6) A2-70 (M8 - M12)



- Socket head cap screws with fine pitch thread.
- The effective diameter is larger and fatigue strength is better than coarse threads.
- The thread pitch is small and the number of thread peaks is more than coarse threads. For securing thin plates and similar items for which coarse thread screws lack sufficient thread peaks.
- Since the lead angle of the thread peak is smaller than that of coarse threads, there is little slippage of the thread peak surface, which prevents screws from loosening.
- Application
Loosening prevention / Securement of thin plates, etc.

Unit : mm

Part Number	M	L											D1	L1	B	Mass (g)
SNSS-M4-P0.5	M4×0.5	8	10	12	15	20	25					7	4	3	1.7 - 3.2	
SNSS-M5-P0.5	M5×0.5		10	12	15	20	25	30				8.5	5	4	2.7 - 5.6	
SNSS-M6-P0.75	M6×0.75	8	10	12	15	20	25	30				10	6	5	4.3 - 8.3	
SNSS-M8-P1	M8×1			12	15	20	25	30	35	40	45	50	13	8	6	11 - 25
SNSS-M10-P1	M10×1				15	20	25	30	35	40	45	50	16	10	8	21 - 39
SNSS-M12-P1	M12×1					20	25	30	35	40	45	50	18	12	10	32 - 55

Part Number	Qty per pack
SNSS-M4-P0.5	1
SNSS-M5-P0.5	1
SNSS-M6-P0.75	1
SNSS-M8-P1	1
SNSS-M10-P1	1
SNSS-M12-P1	1

- Part number specification

SNSS-M5-P0.5-20

1 2

 Individual Sales → P.809	 Cleanroom Wash & Packaging → P.807	 Screw Length Adjustment → P.811	 Vibration Resistant → P.810	 Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

● Socket Head Cap Screws

	Socket Head Cap Screws	Button Head Cap Screws
Part Number	SNSS (INCH)	SNBS (INCH)
Shape		
Page	P.709	P.710
Materials	SUS304	SUS304
Characteristics	Inch Thread	Inch Thread Button Head Cap Screws
Size	No.4-40UNC - 3/8-16UNC	No.4-40UNC - 1/4-20UNC

● Tools

	Hex Wrench
Part Number	SKH (INCH)
Shape	
Page	P.712
Materials	Alloyed Steel
Characteristics	For Inch Screws
Size	1/16 - 5/16

● Socket Head Cap Screws (with Ventilation Hole)

	Socket Head Cap Captive Screw
Part Number	SVSS (INCH)
Shape	
Page	P.568
Materials	SUS304
Characteristics	With Ventilation Hole
Size	No.4-40UNC - 1/4-20UNC

● Hex Nut • Washers

	Hex Nuts • Washers
Part Number	SHNS / SWAS
Shape	
Page	P.711
Materials	SUS304
Characteristics	Inch Thread
Size	No.4-40UNC - 3/8-16UNC

● Captive Screws

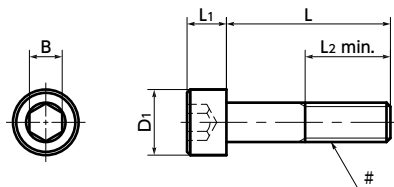
	Socket Head Cap Captive Screws
Part Number	SSC (INCH)
Shape	
Page	P.692
Materials	SUS304
Characteristics	Captive
Size	No.4-40UNC - 3/8-16UNC

SNSS(INCH) Hex Socket Head Cap Screws - Inch Thread

e-nedzi.com®



WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	SNSS(INCH)
Main Body	Stainless Steel (Grade : A2)
Strength Class	A2-50

Part number specification

SNSS- # 4-40 - 1/4

1 2

Order in number of packs.

Also sold separately from 1 piece up. ➔ P.809



- Socket head cap screws with inch thread.
- ANSI B18.3 compliance.
- Install and remove by using **SKH(INCH)** Specialty Key. ➔ P.712

Application

Equipment and devices using inch screw specifications

Unit : inch																	
Part Number	#	L											D1	L1	L2	B	Mass (g)
	Nominal of thread	1/16	1/8	3/16	1/4	5/16	3/8	7/8	1	1 1/4	1 1/2	1 3/4	2				
SNSS- # 4-40	No.4-40UNC												0.183	0.112	0.75	3/32	0.51 - 1.1
SNSS- # 5-40	No.5-40UNC												0.205	0.125	0.75	3/32	0.78 - 1.4
SNSS- # 6-32	No.6-32UNC												0.226	0.138	0.75	7/64	0.98 - 3.6
SNSS- # 8-32	No.8-32UNC												0.27	0.164	0.88	7/64	1.6 - 5.4
SNSS- # 10-24	No.10-24UNC												0.312	0.19	0.88	5/32	2.3 - 7.2
SNSS- # 10-32	No.10-32UNF												0.312	0.19	0.88	5/32	2.2 - 7.6
SNSS- # 12-24	No.12-24UNC												0.343	0.216	1	5/32	3.4 - 7.6
SNSS-1/4-20	1/4-20UNC												0.375	0.25	1	1/16	4.3 - 13
SNSS-1/4-28	1/4-28UNF												0.375	0.25	1	1/16	5.1 - 9.8
SNSS-5/16-18	5/16-18UNC												0.469	0.312	1.12	1/4	8.8 - 22
SNSS-3/8-16	3/8-16UNC												0.562	0.375	1.25	5/16	16 - 33

• All dimensions are in inches.

Part Number	Qty*1 per pack
SNSS- # 4-40	10
SNSS- # 5-40	10
SNSS- # 6-32	10
SNSS- # 8-32	10
SNSS- # 10-24	10
SNSS- # 10-32	10
SNSS- # 12-24	10
SNSS-1/4-20	10
SNSS-1/4-28	10
SNSS-5/16-18	10
SNSS-3/8-16	10

*1 : Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

NBK

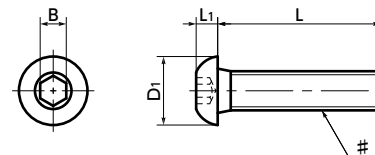
WEB ▶ <https://www.nbk1560.com>

SNBS(INCH) Socket Button Head Cap Screws - Inch Thread

e-nedzi.com®



WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	SNBS(INCH)
Main Body	Stainless Steel (Grade : A2)
Strength Class	A2-50

Part number specification

SNBS- # 4-40 - 1/4

1 2

Order in number of packs.

Also sold separately from 1 piece up. ➔ P.809



- Socket button head cap screws with inch thread.
- ANSI B18.3 compliance.
- Install and remove by using **SKH(INCH)** Specialty Key. ➔ P.712
- Also, products with special specifications such as dimensions, shapes, materials, surface treatments, cleanroom washing and special packaging are available. ➔ P.549



Application

Equipment and devices using inch screw specifications

														Unit : inch			
Part Number 	# Nominal of Thread	L 										D1	L1	B	Mass (g)		
SNBS- # 4-40	No.4-40UNC	3/16	1/4	5/16	3/8	1/2						0.213	0.059	1/16	0.35 - 0.65		
SNBS- # 5-40	No.5-40UNC		1/4		3/8	1/2						0.238	0.066	5/64	0.53 - 0.85		
SNBS- # 6-32	No.6-32UNC		1/4	5/16	3/8	1/2	5/8	3/4				0.262	0.073	5/64	0.67 - 1.4		
SNBS- # 8-32	No.8-32UNC		1/4		3/8	1/2	5/8	3/4				0.312	0.087	3/32	1.1 - 2.2		
SNBS- # 10-24	No.10-24UNC		1/4		3/8	1/2	5/8	3/4	7/8	1		0.361	0.101	1/8	1.5 - 3.6		
SNBS- # 10-32	No.10-32UNF		1/4		3/8	1/2	5/8	3/4	7/8	1		0.361	0.101	1/8	1.5 - 3.8		
SNBS-1/4-20	1/4-20UNC				3/8	1/2	5/8	3/4	7/8	1		0.437	0.132	5/32	3.3 - 6.4		

• All dimensions are in inches.

Part Number	Qty*1 per pack
SNBS- # 4-40	10
SNBS- # 5-40	10
SNBS- # 6-32	10
SNBS- # 8-32	10
SNBS- # 10-24	10
SNBS- # 10-32	10
SNBS-1/4-20	10

*1 : Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

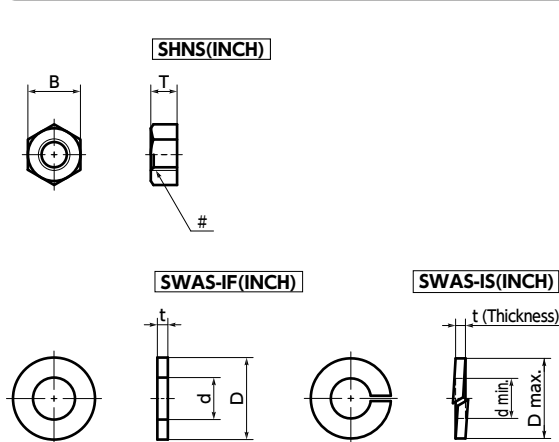
SHNS(INCH) / SWAS(INCH)

Hex Nuts / Washers - Inch Thread

e-nedzi.com®



WEB Selection Tool CAD Download SUS Stainless steel



- Part number specification

SHNS- # 4-40



Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

SHNS(INCH) Hex Nuts

Unit : inch						
Part Number	#	Nominal of Thread	B	T	Mass (g)	Qty*1 per pack
SHNS-#4-40	No.4	40UNC	1/4	0.098	0.58	10
SHNS-#6-32	No.6	32UNC	5/16	0.114	1.1	10
SHNS-#8-32	No.8	32UNC	1 1/32	0.13	1.4	10
SHNS-#10-24	No.10	24UNC	3/8	0.13	1.7	10
SHNS-#10-32	No.10	32UNF	3/8	0.13	1.6	10
SHNS-1 / 4-20	1/4	20UNC	7/16	7/32	3.1	10
SHNS-5 / 16-18	5/16	18UNC	1/2	1 7/64	5.4	10
SHNS-3 / 8-16	3/8	16UNC	5/8	2 1/64	7.8	10

*1 : Also sold separately from 1 piece up. ➔ P.809

- All dimensions are in inches.

SWAS-IF(INCH) Washers

Unit : inch						
Part Number	Nominal	d	D	t	Mass (g)	Qty*1 per pack
SWAS-#4-IF	No.4	0.125	0.312	0.025	0.21	10
SWAS-#6-IF	No.6	0.156	0.375	0.036	0.43	10
SWAS-#8-IF	No.8	0.187	0.375	0.036	0.39	10
SWAS-#10-IF	No.10	0.218	0.437	0.036	0.53	10
SWAS-1 / 4-IF	1/4	0.281	0.625	0.051	1.6	10
SWAS-5 / 16-IF	5/16	0.343	0.687	0.051	1.8	10
SWAS-3 / 8-IF	3/8	0.406	0.812	0.051	2.6	10

*1 : Also sold separately from 1 piece up. ➔ P.809

- All dimensions are in inches.



- Inch-thread hexagon nuts and washers.
- SHNS-#4 - SHNS-#10—ANSI B18.6.3 compliance
- SHNS-1/4 - SHNS-3/8—ANSI B18.2.2 compliance
- SWAS-IF(INCH)—MS15795 compliance
- SWAS-IS(INCH)—ASME B18.21.1 compliance
- Use in combination with
- SNSS(INCH) Socket Head Cap Screw (➔ P.709)
- or SNBS(INCH) Socket Bottom Head Screw (➔ P.710).

- Application

Equipment and devices using inch screw specifications

- Material/Finish



	SHNS(INCH)	SWAS(INCH)
Main body	Equivalent to SUS304	Equivalent to SUS304

SWAS-IS(INCH) Spring Washers

Unit : inch						
Part Number	Nominal	d	D	t	Mass (g)	Qty*1 per pack
SWAS-#4-IS	No.4	0.114	0.209	0.025	0.078	10
SWAS-#6-IS	No.6	0.141	0.25	0.031	0.13	10
SWAS-#8-IS	No.8	0.167	0.293	0.04	0.24	10
SWAS-#10-IS	No.10	0.193	0.334	0.047	0.36	10
SWAS-1 / 4-IS	1/4	0.252	0.487	0.062	1.1	10
SWAS-5 / 16-IS	5/16	0.314	0.583	0.078	1.9	10
SWAS-3 / 8-IS	3/8	0.377	0.68	0.094	3.1	10

*1 : Also sold separately from 1 piece up. ➔ P.809

- All dimensions are in inches.

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

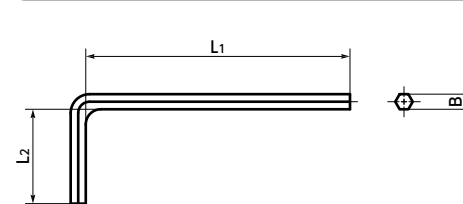
SKH(INCH)

Hex Keys for Inch Screws

e-nedzi.com®



WEB Selection Tool CAD Download



- Hexagon Keys for Inch Screws only.

- Application

Installing and removing inch screws

- Material/Finish



	SKH(INCH)
Main Body	Alloyed Steel (Hardness 50 HRC or higher) Ferrosoferric Oxide Coating

Unit : inch							
Part Number	B Nominal of Key	L1	L2	Inch Screw Size		Mass (g)	Qty per pack
				SNSS(INCH) (➔ P.709)	SNBS(INCH) (➔ P.710)		
SKH-1 / 16	1/16	1.75	0.562		#4 - 40	1	1
SKH-5 / 64	5/64	1.875	0.609		#5 - 40 • #6 - 32	1.7	1
SKH-3 / 32	3/32	2	0.656	#4 - 40 • #5 - 40	#8 - 32	2.6	1
SKH-7 / 64	7/64	2.125	0.703	#6 - 32		3.7	1
SKH-1 / 8	1/8	2.25	0.75		#10 - 24 • #10 - 32	5.2	1
SKH-9 / 64	9/64	2.375	0.796	#8 - 32		6.9	1
SKH-5 / 32	5/32	2.5	0.844	#10 - 24 • #10 - 32 • #12 - 24	1/4 - 20	9	1
SKH-3 / 16	3/16	2.75	0.938	1/4 - 20 • 1/4 - 28		14	1
SKH-1 / 4	1/4	3.25	1.125	3/8 - 16		30	1
SKH-5 / 16	5/16	3.75	1.25			54	1

- All dimensions are in inches.

- Related Products

SNSS(INCH) Hex Socket Head Cap Screws - Inch Thread

➔ P.709



Socket Button Head Cap Screws

- Inch Thread SNBS(INCH)

➔ P.710



- Part number specification

SKH-3/32



1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
1 pc. in 1 bag	Not Available	Not Available	Not Available	Not Available

Tamper Resistance Screws

• Tamper Resistance Screws

	Tamper-resistant Special Low Head Bolt	Anti-theft Nut	Flat Head Screws with Pins	Button Head Cap Screws with Pins		One Side Pan Head Machine Screws
Part Number	SRSHS	SHNRS	SRFXS	SRBS	SRHS	SROS
Shape						
Page	P.714	P.715	P.717	P.718	P.719	P.720
Materials	SUSXM7	SUS304	SUS304	SUS304	SUS304	SUS304
Characteristics	Tamper-resistant bolt with special low head height	Anti-theft Nut	Hexalobular Socket With Pin	Hexalobular Socket With Pin	Hex Socket With Pin	Tightened with Philips Screwdriver
Size	M2 - M4	M8 - M12	M3 - M6	M3 - M8	M3 - M6	M3 - M5

	Two Hole Pan Head Machine Screws	Triwing Pan Head Machine Screws
Part Number	SRTS	SRWS
Shape		
Page	P.721	P.722
Materials	SUS304	SUS304
Characteristics	2 Holes	Triwing Socket
Size	M3 - M5	M3 - M5

• Tools

	Special Bits for Tamper Resistance Screws	Special Socket for Security Nut	Keys		Screwdrivers	Magnetic Screwdrivers
Part Number	SRSHB	SKW	SRX	SRH	SROT	SRD
Shape						
Page	P.714	P.715	P.717-718	P.719	P.720	P.721-722
Characteristics	Dedicated Bits for [SRSHS]	Dedicated Tools for [SHNRS]	Dedicated Wrench for [SRFXS] [SRBS]	Dedicated Wrench for [SRHS]	Dedicated Screwdriver for [SROS]	Dedicated Magnetic Screwdriver for [SRTS] [SRWS]

	Bits	
Part Number	SRTB	SRWB
Shape		
Page	P.721	P.722
Characteristics	Dedicated Bits for SRTS	Dedicated Bits for SRWS

SRSHS Tamper - resistant Special Low Head Bolt **NEW**

WEB Selection Tool

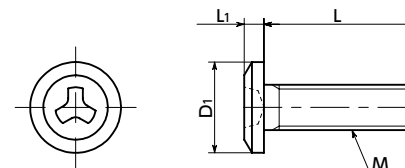
WEB CAD Download

Protrusion

Tamper Resistance

SUS Stainless steel

e-nedzi.com®



• Application

Dismantling equipment/device, tamper-resistance/anti-theft measures for outdoor facility/ security measures/safety measures

• Material/Finish

RoHS2 Compliant

	SRSHS
Main unit	SUSXM7

- Tamper-Resistance screws, all with head height of 1.5 mm or less.
- It cannot be mounted or removed by normal tools. As well, because the head height is low, it is difficult to remove by grasping the head directly, leading to excellent anti-theft properties.
- The protrusion after mounting is minimal, leaving the external appearance unblemished.
- Use a dedicated bit [SRSHB] for mounting and removing.

Part Number	M	L	D1	L1	Bit Part No.	Mass(g)
SRSHS-M2	M2	4 5 6 8	3	0.6	SRSHB-0	0.089 - 0.16
SRSHS-M2.5	M2.5	4 5 6 8	3.8	0.8	SRSHB-1	0.15 - 0.28
SRSHS-M3	M3	6 8 10 12	6	1.3	SRSHB-2	0.44 - 0.69
SRSHS-M4	M4	8 10 12 16	8	1.5	SRSHB-3	1.0 - 1.6

Part Number	Qty per pack*1
SRSHS-M2	10
SRSHS-M2.5	10
SRSHS-M3	20
SRSHS-M4	20

*1 : Also sold separately from 1 piece up.
→ P.809

• Dedicated bit (Supports V6.3/U6.3 insert shapes)

Part Number	Applicable bolt	b	Qty per pack	Mass (g)
SRSHB-0	SRSHS-M2	2	1	6.4
SRSHB-1	SRSHS-M2.5	2	1	6.4
SRSHB-2	SRSHS-M3	3	1	13.8
SRSHB-3	SRSHS-M4	4	1	14.7

• Part number specification

SRSHS-M3 - 10 Tamper-resistant Special Low Head Bolts

1 2

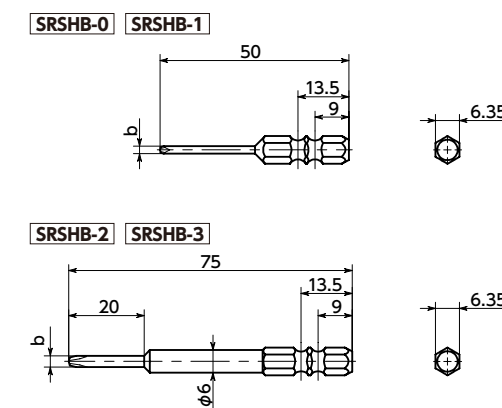
SRSHB-2 Dedicated Bits

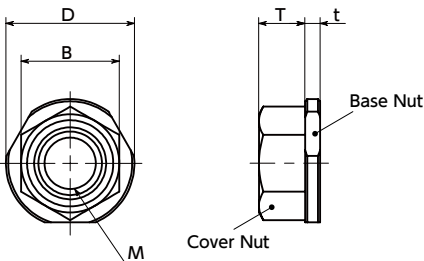
3

Place order by a bag.

Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge





- Anti-theft nut that can be mounted with commercially available tools.
- For removal, the dedicated tool **SKW** is required.
- Because there is no need to switch tools, the mounting process work-hours can be reduced.
- We can also produce customer-original anti-theft nuts with new base nut shapes.

● Application

Anti-theft measures for outdoor facility / Dismantling- and tamper-resistance for equipment/ devices / Security measures / Safety measures

● Material/Finish



	SHNRS
Main unit	SUS304



Precautions for Use

For removal, confirm that the dedicated removal tool **SKW** is entirely fitted with the base nut.

Part Number 1	M	B	D	T	t	Removal Tool Part No.	Mass (g)	Qty per pack
SHNRS-M8	M8	13	17	6.1	2	SKW-8	7	1
SHNRS-M10	M10	17	21.6	8.4	2.2	SKW-10	15.3	1
SHNRS-M12	M12	19	24	9	2.5	SKW-12	20	1

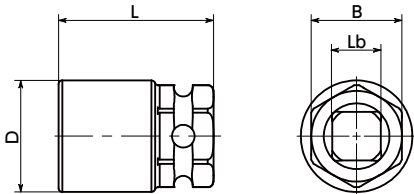
Unit : mm

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Not Available	Not Available	Not Available	Not Available

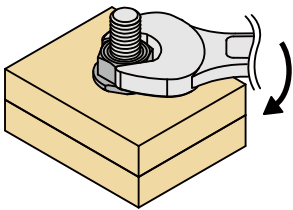
● Dedicated removal tools

Part Number 2	D	L	B	Lb	Mass (g)	Qty per pack
SKW-8	22	32	19	9.5	53	1
SKW-10	27	39	24	12.7	93	1
SKW-12	29.5	41	24	12.7	106	1

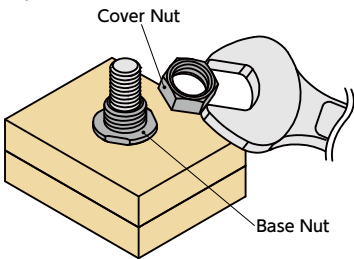
Unit : mm



- Includes O-ring and pin for impact wrench.
- Usage example
Mounting is possible with commercially available tools.



Of commercially available nuts, only cover nuts can be removed.
The remaining base nuts are shaped so as to be extremely difficult to remove with a wrench or pliers.



● Part number specification

SHNRS-M8 Anti-theft Nuts

1

SKW-8 Dedicated Removal Tools

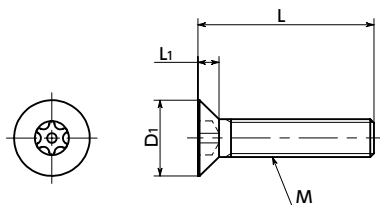
2

SRFXS Flat Head Bolt with Hexalobular Socket (with Pin) **NEW**

e-nedzi.com®



WEB Selection Tool CAD Download Tamper Resistance SUS Stainless steel



- Flat Head Bolt with a Pin at the center of Hexalobular Socket*1.
- It cannot be mounted or removed by normal tools.
- Use a dedicated wrench **SRX** for mounting and removing.

*1: The shape of hexalobular socket is defined in JIS B 1015: 2008 (ISO 10664: 2005) "Hexalobular Socket for Male Screw Parts."

● Application

Machinery / Tools / Equipment / Devices disassembly prevention · tampering prevention / Theft prevention for outdoor facilities / Security measures / Safety measures

● Material/Finish

RoHS2 Compliant

	SRFXS
Main body	SUS304
Strength Class	Equivalent to A2-50

● Part number specification

SRFXS-M5-16

Product Code



Place order by a bag.

Also sold separately from 1 piece up. → P.809

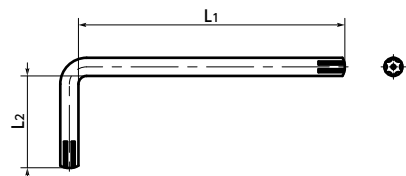
Unit : mm														
Part Number	M 	L 								D ₁	L ₁	Applicable wrench	Hexalobular Socket No.	Mass (g)
SRFXS-M3	M3	6	8	10	12					6	1.75	SRX-10	10	0.48 - 0.72
SRFXS-M4	M4		8	10	12	16	20			8	2.3	SRX-20	20	1.0 - 1.9
SRFXS-M5	M5			10	12	16	20	25		10	2.8	SRX-25	25	2.1 - 3.9
SRFXS-M6	M6			10	12	16	20	25	30	12	3.4	SRX-30	30	3.3 - 7.0

Part Number	Qty per pack
SRFXS-M3	10
SRFXS-M4	10
SRFXS-M5	10
SRFXS-M6	10

● Dedicated wrench

Unit : mm

Part Number	L1	L2	Mass (g)	Qty per pack
SRX-10	60	20	3.7	1
SRX-20	67	23	8.2	1
SRX-25	70	25	11	1
SRX-30	81	28	20	1
SRX-40	88	31	32	1



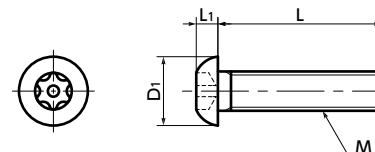
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Not Available

SRBS Hexalobular Button Head Cap Screws with Pin

e-nedzi.com®



WEB Selection Tool CAD Download Tamper Resistance SUS Stainless steel



● Part number specification

SRBS-M5-16

Order in number of packs.

Also sold separately from 1 piece up. → P.809

- Button head cap screws with pin at the center of their hexalobular*1 socket.

- Screws cannot be installed or removed by using standard tools.

- Install and remove by using **SRX** Specialty Hexalobular Key.

*1: The hexalobular shape is prescribed by JIS B 1015: 2008 (ISO 10664: 2005) "Hexalobular internal driving feature for bolts and screws".

● Application

Machinery, tools, equipment, and devices disassembly prevention · tampering prevention, theft prevention for outdoor facilities, security measures, and safety measures

● Material/Finish

RoHS2 Compliant

	SRBS
Main Body	SUS304
Strength Class	Equivalent to A2-50

Unit : mm															
Part Number	M	L	1	2							D1	L1	Applicable wrench	Hexalobular Socket No.	Mass (g)
SRBS-M3	M3	6	8	10	12	16	20	25			5.7	1.65	SRX-10	10	0.48 - 1.4
SRBS-M4	M4		8	10	12	16	20	25	30		7.6	2.2	SRX-20	20	1.2 - 3.2
SRBS-M5	M5			10	12	16	20	25	30	40	9.5	2.75	SRX-25	25	2 - 6.4
SRBS-M6	M6			10	12	16	20	25	30	40	10.5	3.3	SRX-30	30	3.3 - 12
SRBS-M8	M8			10	12	16	20	25	30	40	14	4.4	SRX-40	40	7.3 - 22

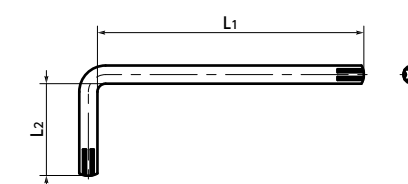
Part Number	Qty*1 per pack
SRBS-M3	20
SRBS-M4	20
SRBS-M5	20
SRBS-M6	10
SRBS-M8	10

*1: Also sold separately from 1 piece up. → P.809

● Dedicated wrench

Unit : mm

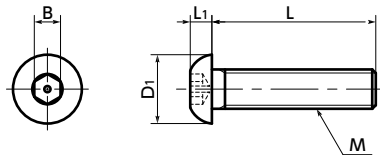
Part Number	L1	L2	Mass (g)	Qty per pack
SRX-10	60	20	3.7	1
SRX-20	67	23	8.2	1
SRX-25	70	25	11	1
SRX-30	81	28	20	1
SRX-40	88	31	32	1



1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge

SRHS Socket Button Head Cap Screws with Pin[WEB Selection Tool](#) [WEB CAD Download](#) [Tamper Resistance](#) [SUS](#) Stainless steel

e-nedzi.com®



- Part number specification

SRHS-M5-16

Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

- Button head cap screws with pin at the center of their socket.
- They cannot be installed or removed by using standard tools.
- Install and remove by using **SRH** Specialty Key.

- Application

Machinery, tools, equipment, and devices disassembly prevention • tampering prevention, theft prevention for outdoor facilities, security measures, and safety measures

- Material/Finish



	SRHS
Main Body	SUS304
Strength Class	Equivalent to A2-50

Part Number	M	L							D1	L1	B	Applicable wrench	Mass (g)
SRHS-M3	M3	6	8	10	12	16			5.7	1.65	2	SRH-2	0.48 - 0.93
SRHS-M4	M4	6	8	10	12	16	20		7.6	2.2	2.5	SRH-2.5	1.1 - 2.2
SRHS-M5	M5			10	12	16	20		9.5	2.75	3	SRH-3	2 - 3.3
SRHS-M6	M6			10	12	16	20	25	10.5	3.3	4	SRH-4	3.3 - 6.1

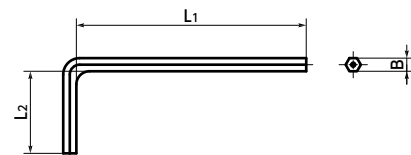
Part Number	Qty*1 per pack
SRHS-M3	20
SRHS-M4	20
SRHS-M5	20
SRHS-M6	10

*1 : Also sold separately from 1 piece up. ➔ P.809

- Dedicated wrench

Unit : mm

Part Number	B	L1	L2	Mass (g)	Qty per pack
SRH-2	2	50	16	1.8	1
SRH-2.5	2.5	56	18	3.1	1
SRH-3	3	63	20	5	1
SRH-4	4	70	25	10	1

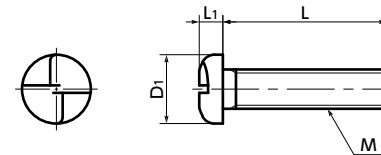


[1 Individual Sales ➔ P.809](#) [Cleanroom Wash & Packaging ➔ P.807](#) [Screw Length Adjustment ➔ P.811](#) [Vibration Resistant ➔ P.810](#) [Modification process for captive use ➔ P.806](#)
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge

NBK

<https://www.nbk1560.com>**SROS** One Side Pan Head Machine Screws[WEB Selection Tool](#) [WEB CAD Download](#) [Tamper Resistance](#) [SUS](#) Stainless steel

e-nedzi.com®



- Part number specification

SROS-M4-16

Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

- The screws can be installed, but not removed, using commercially available slotted screwdrivers.
- Remove the screws by using **SROT** Specialty Removal Tool.

- Application

Machinery, tools, equipment, and devices disassembly prevention • tampering prevention, theft prevention for outdoor facilities, security measures, and safety measures

- Material/Finish



	SROS
Main Body	SUS304
Strength Class	Equivalent to A2-50

Part Number	M	L								D1	L1	Removal Tool Part No.	Mass (g)
SROS-M3	M3	5	6	8	10	12	16	20	25	5.5	2	SROT-410	0.49 - 0.94
SROS-M4	M4		6	8	10	12	16			7	2.6	SROT-410	1 - 2.5
SROS-M5	M5			8	10	12				9	3.3	SROT-510	2.2 - 2.7

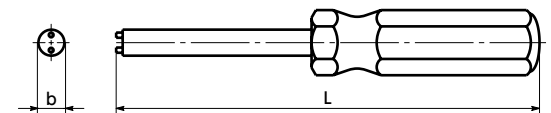
Part Number	Qty*1 per pack
SROS-M3	20
SROS-M4	20
SROS-M5	20

*1 : Also sold separately from 1 piece up. ➔ P.809

- Dedicated driver

Unit : mm

Part Number	L	b	Mass (g)	Qty per pack
SROT-410	180	8	94	1
SROT-510	185	10	127	1



[1 Individual Sales ➔ P.809](#) [Cleanroom Wash & Packaging ➔ P.807](#) [Screw Length Adjustment ➔ P.811](#) [Vibration Resistant ➔ P.810](#) [Modification process for captive use ➔ P.806](#)
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge

NBK

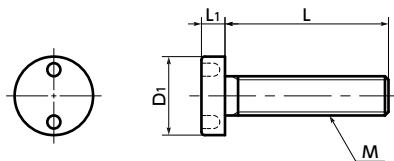
<https://www.nbk1560.com>

SRTS Two Hole Pan Head Machine Screws

e-nedzi.com®



WEB Selection Tool CAD Download Tamper Resistance SUS Stainless steel



- Part number specification

SRTS-M5-16



Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809



- They cannot be installed or removed by using standard tools.
- Install and remove by **SRTB** Specialty Bits and **SRD** Specialty Magnetic Screwdriver together.
- The simple head design is suitable for decoration.

- Application

Machinery, tools, equipment, and devices disassembly prevention • tampering prevention, theft prevention for outdoor facilities, security measures, and safety measures

- Material/Finish



	SRTS
Main Body	SUS304
Strength Class	Equivalent to A2-50

Part Number	M	L	D1	L1	Bit Part No.	Screwdriver Part No.	Mass (g)
SRTS-M3	M3	6 8 10	6	1.8	SRTB-4	SRD-6.35	0.66 - 0.82
SRTS-M4	M4	10 12 16	8	2.4	SRTB-8	SRD-6.35	1.7 - 2.2
SRTS-M5	M5	12 16 20	10	3	SRTB-10	SRD-6.35	3.4 - 4.3

Part Number	Qty*1 per pack
SRTS-M3	20
SRTS-M4	20
SRTS-M5	20

*1: Also sold separately from 1 piece up. ➔ P.809

- SRTB** Dedicated bit

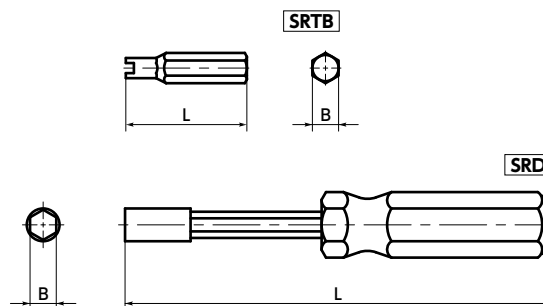
Unit : mm

Part Number	L	B	Mass (g)	Qty per pack
SRTB-4	25.4	6.35	5	1
SRTB-8	25.4	6.35	5	1
SRTB-10	25.4	6.35	5.2	1

- SRD** Dedicated magnet screwdriver

Unit : mm

Part Number	L	B	Mass (g)	Qty per pack
SRD-6.35	210	6.35	98	1



1 Individual Sales ➔ P.809 Cleanroom Wash & Packaging ➔ P.807 Screw Length Adjustment ➔ P.811 Vibration Resistant ➔ P.810 Modification process for captive use ➔ P.806
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge

NBK

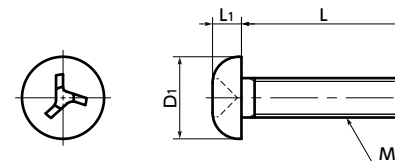
WEB ▶ <https://www.nbk1560.com>

SRWS Triwing Pan Head Machine Screws

e-nedzi.com®



WEB Selection Tool CAD Download Tamper Resistance SUS Stainless steel



- Part number specification

SRWS-M5-16



Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809



- They cannot be installed or removed by using standard tools.
- Install and remove by **SRWB** Specialty Bits and **SRD** Specialty Magnetic Screwdriver together.

- Application

Machinery, tools, equipment, and devices disassembly prevention • tampering prevention, theft prevention for outdoor facilities, security measures, and safety measures

- Material/Finish



	SRWS
Main Body	SUS304
Strength Class	Equivalent to A2-50

Part Number	M	L	D1	L1	Bit Part No.	Screwdriver Part No.	Mass (g)
SRWS-M3	M3	6 8 10	5.6	1.8	SRWB-2	SRD-6.35	0.54 - 0.7
SRWS-M4	M4	8 10 12	8.2	2.9	SRWB-4	SRD-6.35	1.5 - 1.9
SRWS-M5	M5	10 12 16	9.5	3.4	SRWB-5	SRD-6.35	2.8 - 3.5

Part Number	Qty*1 per pack
SRWS-M3	20
SRWS-M4	20
SRWS-M5	20

*1: Also sold separately from 1 piece up. ➔ P.809

- SRWB** Dedicated bit

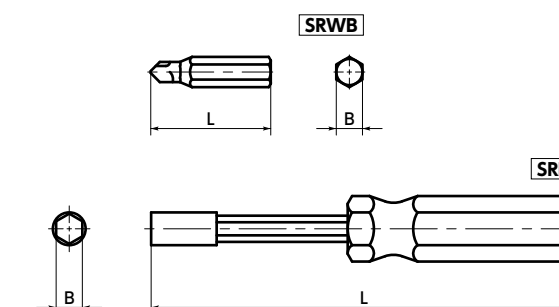
Unit : mm

Part Number	L	B	Mass (g)	Qty per pack
SRWB-2	25.4	6.35	4.2	1
SRWB-4	25.4	6.35	5.2	1
SRWB-5	25.4	6.35	5.6	1

- SRD** Dedicated magnet screwdriver

Unit : mm

Part Number	L	B	Mass (g)	Qty per pack
SRD-6.35	210	6.35	98	1



1 Individual Sales ➔ P.809 Cleanroom Wash & Packaging ➔ P.807 Screw Length Adjustment ➔ P.811 Vibration Resistant ➔ P.810 Modification process for captive use ➔ P.806
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge

NBK

WEB ▶ <https://www.nbk1560.com>

Hexalobular Socket Head Screws

• Pan Head Machine Screws

	Pan Head
Part Number	SNPXS
Shape	
Page	P.724
Materials	SUSXM7
Characteristics	High Tightening Torque
Size	M2 - M6

• Flat Head Machine Screws

	Flat Head
Part Number	SNFXS
Shape	
Page	P.725
Materials	SUSXM7
Characteristics	High Tightening Torque Space Optimization
Size	M2 - M6

• Tools

	Hexalobular Keys
Part Number	SKX
Shape	
Page	P.726
Materials	Alloyed Steel
Characteristics	For Hexalobular Socket Head Screws
Size	No.4 - No.45

• Low Profile Screws

	Special Low Profile	Extreme Low Profile	Low Profile
Part Number	SSTS	SET / SETS	SLT / SLTS
Shape			
Page	P.606	P.607	P.605
Materials	SUSXM7	SWCH SUSXM7	SAE1022 SUSXM7
Characteristics	High Tightening Torque Space Optimization	High Tightening Torque Space Optimization	High Tightening Torque Space Optimization
Size	M2 - M8	M2 - M6	M2 - M6

Properties of the Hexalobular Socket*

• Excellent Transmission Efficiency of Tightening Torque

Since the hexalobular socket transmits the force of the tool at 15 degrees, the tightening torque is transmitted more efficiently. **Diagram1**

Since a hexagonal socket transmits the force of the tool at 60 degrees, the force of the tightening torque is spread outward, which generates loss. **Diagram 2**

• Reducing the Risk of Breakage of Tools and Screw Heads

With hexalobular sockets, the surface of the tool makes contact. This means the stress is not concentrated, which reduces the risk of breakage of tools and screw heads.

With hexagonal sockets, the angled portion of the tool only makes contact, which increases the tightening torque.

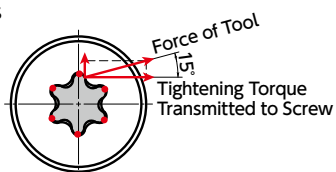


Diagram 1 Hexalobular Socket

This concentrates the stress on the angle portion of the tool and may break the tool or the hexagonal socket of the screw head.

• No Cam Out

With cross recessed screws, the tool such as a screwdriver may rise up unless it press down the screw when tightening. This phenomenon is called as cam out. If cam out occurs, the engagement of the cross recess and tool is reduced, which causes damage to tools and screw heads.

With hexalobular sockets, cam outs do not occur, which can make tightening safe and reliable.

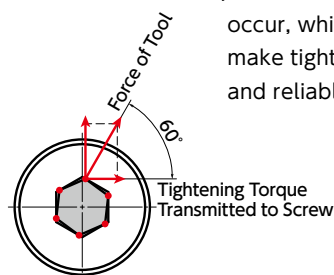


Diagram 2 Hexagonal Socket

*The hexalobular shape is prescribed by JIS B 1015: 2008 (ISO 10664:2005) "Hexalobular internal driving feature for bolts and screws".

SNPXS

Hexalobular Socket Pan Head Machine Screws

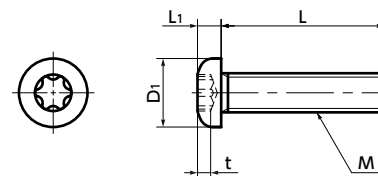
e-nedzi.com®



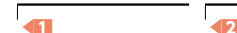
WEB Selection Tool

WEB CAD Download

SUS Stainless steel



• Part number specification

SNPXS-M5 - 20

Order in number of packs.

Also sold separately from 1 piece up. → P.809



- The shape of hexalobular sockets*1 makes them more resistant to high tightening torques than cross recesses. → P.723
- Less likely to damage the head caused by tightening. Therefore, able to make tightening safe and reliable.
- Screws cannot be installed or removed by using standard tools such as a hex key or screwdriver. For prevention of disassembly, theft, and tampering of equipment and facilities.*2
- Install and remove by using **SKX** Specialty Hexalobular Key. → P.726
- *1: The hexalobular shape is prescribed by JIS B 1015 : 2008 (ISO 10664 : 2005) "Hexalobular internal driving feature for bolts and screws".
- *2: Tools for hexalobular sockets are commercially available. For tamper resistance, consider to select tamper resistance screws. → P.713

• Application

Prevention of damage to screw heads and reliable tightening

• Material/Finish

RoHS2 Compliant

	SNPXS
Material	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

																				Unit : mm	
Part Number	M	L 										D1	L1	Applicable wrench	Hexalobular Socket No.	t	Mass (g)				
SNPXS-M2	M2	4	5	6	8	10	12					4	1.6	SKX-6	6	0.77	0.14 - 0.29				
SNPXS-M2.5	M2.5	4	5	6	8	10	12	16				5	2.1	SKX-8	8	1.04	0.27 - 0.65				
SNPXS-M3	M3		5	6	8	10	12	16	20			5.6	2.4	SKX-10	10	1.27	0.49 - 1.1				
SNPXS-M4	M4			6	8	10	12	16	20	25		8	3.1	SKX-20	20	1.66	1 - 2.5				
SNPXS-M5	M5				8	10	12	16	20	25	30	9.5	3.7	SKX-25	25	1.91	2.2 - 4.8				
SNPXS-M6	M6					10	12	16	20	25	30	12	4.6	SKX-30	30	2.42	3.9 - 7.4				

Part Number	Qty*1 per pack
SNPXS-M2	20
SNPXS-M2.5	20
SNPXS-M3	20
SNPXS-M4	20
SNPXS-M5	20
SNPXS-M6	20

*1: Also sold separately from 1 piece up. → P.809

Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

NBK

WEB ▶ <https://www.nbk1560.com>

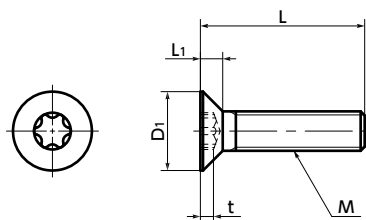
NBK

WEB ▶ [https://www](https://www.nbk1560.com)

SNFXS Hexalobular Socket Flat Head Machine Screws

WEB Selection Tool CAD Download SUS Stainless steel

e-nedzi.com®



● Part number specification

SNFXS-M5 - 20



Order in number of packs.
Also sold separately from 1 piece up. → P.809



- The shape of hexalobular sockets*1 makes them more resistant to high tightening torques than cross recesses. → P.723
 - This makes head damage caused by tightening less likely and can make tightening safe and reliable.
 - Screws cannot be installed or removed by using standard tools such as a hex key or screwdriver. For prevention of disassembly, theft, and tampering of equipment and facilities.*2
 - Install and remove by using **SKX** Specialty Hexalobular Key. → P.726
- *1 : The hexalobular shape is prescribed by JIS B 1015 : 2008 (ISO 10664 : 2005) "Hexalobular internal driving feature for bolts and screws".
- *2 : Tools for hexalobular sockets are commercially available. For tamper resistance, consider to select tamper resistance screws. → P.713

● Application

Prevention of damage to screw heads and reliable tightening

● Material/Finish



	SNFXS
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

Unit : mm																	
Part Number	M	L 										D1	L1	Applicable wrench	Hexalobular Socket No.	t	Mass (g)
SNFXS-M2	M2	4	5	6	8	10	12					3.8	1.2	SKX-6	6	0.64	0.14 - 0.29
SNFXS-M2.5	M2.5	4	5	6	8	10	12	16				4.7	1.5	SKX-8	8	0.79	0.27 - 0.65
SNFXS-M3	M3		5	6	8	10	12	16	20			5.5	1.65	SKX-10	10	0.83	0.49 - 1.1
SNFXS-M4	M4			6	8	10	12	16	20	25		8.4	2.7	SKX-20	20	1.53	1 - 2.5
SNFXS-M5	M5				8	10	12	16	20	25	30	9.3	2.7	SKX-25	25	1.51	2.2 - 4.8
SNFXS-M6	M6					10	12	16	20	25	30	11.3	3.3	SKX-30	30	1.78	3.9 - 7.4

Part Number	Qty*1 per pack
SNFXS-M2	20
SNFXS-M2.5	20
SNFXS-M3	20
SNFXS-M4	20
SNFXS-M5	20
SNFXS-M6	20

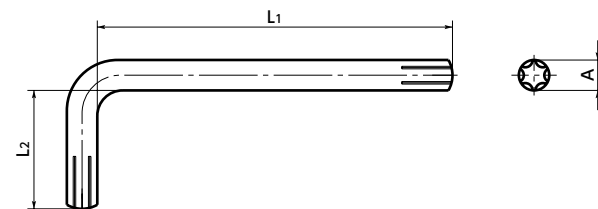
*1 : Also sold separately from 1 piece up. → P.809

Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available

SKX Hexalobular Keys

WEB Selection Tool CAD Download

e-nedzi.com®



● Material/Finish



	SKX
Main Body	Alloyed Steel (Hardness 50 HRC or higher) Ferrosoferric Oxide Coating



- Special keys for hexalobular socket head screws allow you to tighten at higher torques more safely. → P.723

*The hexalobular shape is prescribed by JIS B 1015 : 2008 (ISO 10664 : 2005) "Hexalobular internal driving feature for bolts and screws".

● Application

Installing and removing hexalobular socket head screws

Part Number	Hexalobular Socket No.	A	L1	L2	Mass (g)	Qty per pack
SKX-4	4	1.26	45	13	0.56	1
SKX-5	5	1.42	47	14	0.75	1
SKX-6	6	1.66	42	16	0.98	1
SKX-8	8	2.32	48	16	2.1	1
SKX-10	10	2.74	51	16	3.1	1
SKX-15	15	3.28	54	18	4.8	1
SKX-20	20	3.86	57	19	6.9	1
SKX-25	25	4.43	63	20	10	1
SKX-30	30	5.52	70	25	18	1
SKX-40	40	6.65	76	26	28	1
SKX-45	45	7.82	89	32	45	1

● For Use Hexalobular Socket Head Screws

Hexalobular Keys	Applicable Hexalobular Socket Head Screws								
	SSTS (⇒ P.606)	SET • SETS (⇒ P.607)		SLT • SLTS (⇒ P.605)		SLEC (⇒ P.703)		SNPXS (⇒ P.724)	SNFXS (⇒ P.725)
SKX-4			SETS-M2						
SKX-5	SSTS-M2		SETS-M2.6						
SKX-6	SSTS-M2.5	SET-M3	SETS-M3		SLTS-M2			SNPXS-M2	SNFXS-M2
SKX-8	SSTS-M3	SET-M4	SETS-M4		SLTS-M2.5			SNPXS-M2.5	SNFXS-M2.5
SKX-10	SSTS-M4	SET-M5	SETS-M5	SLT-M3-TZB	SLTS-M3	SLEC-M3-A	SLEC-M3-B	SNPXS-M3	SNFXS-M3
SKX-15	SSTS-M5					SLEC-M4-A	SLEC-M4-B		
SKX-20	SSTS-M6		SETS-M6	SLT-M4-TZB	SLTS-M4	SLEC-M5-A	SLEC-M5-B	SNPXS-M4	SNFXS-M4
SKX-25	SSTS-M8			SLT-M5-TZB	SLTS-M5	SLEC-M6-A	SLEC-M6-B	SNPXS-M5	SNFXS-M5
SKX-30				SLT-M6-TZB	SLTS-M6	SLEC-M8-A	SLEC-M8-B	SNPXS-M6	SNFXS-M6
SKX-40						SLEC-M10-A			
SKX-45						SLEC-M12-A			

● Part number specification

SKX-25



Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Not Available	Not Available	Not Available	Not Available

Plugs

e-nedzi.com®



● Plugs

	Hex Socket Flange Head Screw Plugs		Parallel Screw Plugs	Hexagon Socket Pipe Plugs
Part Number	SFF / SFFS	SFM / SFMS	SFP	SFT / SFTS
Shape				
Page	P.728	P.729	P.731	P.732
Materials	SCM435 SUS304	SCM435 SUS304	S45C	S45C SUSXM7
Characteristics	Parallel Pipe Thread	Metric Fine Screw Thread Parallel Pipe Thread	Metric Fine Screw Thread	Sunk Head Plug With Hex Socket
Size	G1/8 - G1	M8 - M27, G1/8 - G1/2	M12 - M36	R1/16 - R1/2

SFF/SFFS

Hex Socket Flange Head Screw Plugs - Steel

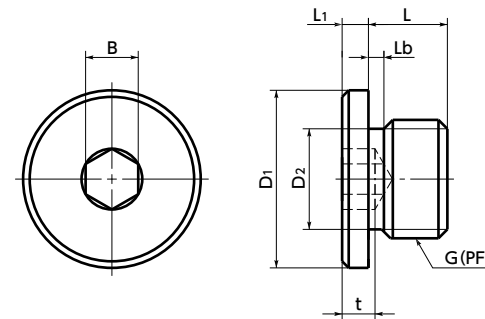
e-nedzi.com®



WEB Selection Tool

WEB CAD Download

SUS Stainless steel



- Screw plugs for high-power hydraulic applications.
- **SFF** is made of steel and can be used in highpressure applications up to 49 MPa.

● Application

Hydraulic equipment, pneumatic machinery and equipment, and general industrial machines

● Material/Finish

RoHS2 Compliant

	SFF	SFFS
Main Body	SCM435 (Hardness 32 - 42 HRC) Ferrosoferric Oxide Coating (Black)	SUS304

● Part number specification

SFF-3



SFF Steel • Ferrosoferric Oxide Coating

Unit : mm

Part Number	G (PF) Nominal of Thread	L	D1	L1	D2	B	t	Lb	O-ring No.	Recommendation Torque (N・m)	Mass (g)	Qty per pack
SFF-1	G 1/8	10	16	4	8.2	5	3	2	P8	14.7	9	1
SFF-2	G 1/4	12	21	4	11.2	6	4	2.5	P11	29.4	17	1
SFF-3	G 3/8	12	24	4	14.2	8	5	2.5	P14	49	27	1
SFF-4	G 1/2	16	30	4	18.2	10	6	2.5	P18	78.5	54	1
SFF-6	G 3/4	16	40	5	23.7	12	7	3.5	P24	147	90	1
SFF-8	G1	21	45	5	29.2	17	10	3.5	P29	245	177	1

SFFS Stainless Steel

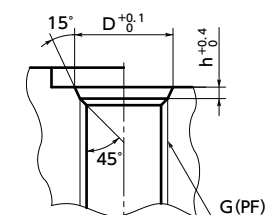
Unit : mm

Part Number	G (PF) Nominal of Thread	L	D1	L1	D2	B	t	Lb	O-ring No.	Recommendation Torque (N・m)	Mass (g)	Qty per pack
SFFS-1	G 1/8	10	16	4	8.2	5	3	2	P8	7.4	9	1
SFFS-2	G 1/4	12	21	4	11.2	6	4	2.5	P11	14.7	17	1
SFFS-3	G 3/8	12	24	4	14.2	8	5	2.5	P14	24.5	27	1
SFFS-4	G 1/2	16	30	4	18.2	10	6	2.5	P18	39.3	54	1
SFFS-6	G 3/4	16	40	5	23.7	12	7	3.5	P24	73.5	90	1
SFFS-8	G1	21	45	5	29.2	17	10	3.5	P29	122.5	177	1

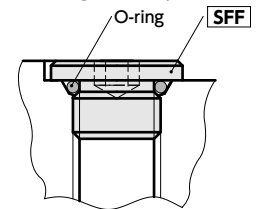
● Installation Dimensions

Unit : mm

G (PF)	D	h
G1/8	11.6	2
G1/4	15.6	2.5
G3/8	18.6	2.5
G1/2	22.6	2.5
G3/4	29.8	3.5
G1	35.8	3.5



● Usage example



1 Individual Sales → P.809

Cleanroom Wash & Packaging → P.807

Screw Length Adjustment → P.811

Vibration Resistant → P.810

Modification process for captive use → P.806

1 pc. in 1 bag

Available / Add'l charge

Not Available

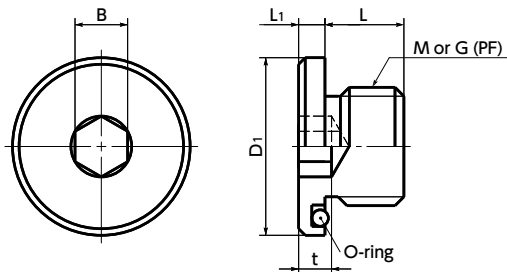
Not Available

Not Available



SFM / SFMS Hexagon Socket Flange Head Screw Plugs

WEB Selection Tool CAD Download SUS Stainless steel



- Because O-ring is provided, grooving is not required on the female screw side part material.
- Because this is a parallel thread, strain on the female screw side part material like tightened a taper thread does not occur. It is suitable for oil hydraulic equipment / pneumatic device that are often mounted and removed.
- For stainless steel **SFMS**, metric fine screw threads and parallel pipe threads are standardized.

Application

Oil hydraulic equipment / Pneumatic device / General industry machinery

Material/Finish



	SFM	SFMS
Main body	SCM435 (hardness: 32 - 42 HRC) Ferrosoferric Oxide Film (Black)	SUS304
O-ring	Nitrile rubber (Type 1 B of JIS B 2401)	Fluoro-rubber (Type 4 D of JIS B 2401)

SFM Main body : Made of steel / O-ring : Nitrile rubber

Unit : mm

Part Number	M	L	D1	L1	B	t	O-ring No.	Recommendation Torque (N·m)	Mass (g)	Qty per pack
SFM-M8	M8×1	7	16	4	5	3.5	P10	15.7	4	1
SFM-M10	M10×1	8	19.5	4	5	4	P12.5	19.6	7	1
SFM-M12	M12×1.5	12	21	4	6	5	P14	27.5	14	1
SFM-M14	M14×1.5	12	23	4	6	5	P16	39.2	19	1
SFM-M16	M16×1.5	12	25	4	8	6	P18	63.7	25	1
SFM-M18	M18×1.5	12	27	4	8	6	P20	78.5	32	1
SFM-M20	M20×1.5	14	32.5	5	10	6.5	P22.4	113	47	1
SFM-M22	M22×1.5	14	35	5	10	6.5	P25	137	57	1
SFM-M24	M24×1.5	14	38	5	12	7.5	P28	201	68	1
SFM-M27	M27×2	16	40	5	12	7.5	P30	245	94	1

SFMS Main body : Made of stainless steel / O-ring : Fluoro-rubber and metric fine screw threads

Unit : mm

Part Number	M	L	D1	L1	B	t	O-ring No.	Recommendation Torque (N·m)	Mass (g)	Qty per pack
SFMS-M8	M8×1	7	16	4	5	3.5	P10	10.9	4	1
SFMS-M10	M10×1	8	19.5	4	5	4	P12.5	13.7	7	1
SFMS-M12	M12×1.5	12	21	4	6	5	P14	19.2	14	1
SFMS-M14	M14×1.5	12	23	4	6	5	P16	27.4	19	1
SFMS-M16	M16×1.5	12	25	4	8	6	P18	44.5	25	1
SFMS-M18	M18×1.5	12	27	4	8	6	P20	54.9	32	1
SFMS-M20	M20×1.5	14	32.5	5	10	6.5	P22.4	78.9	47	1
SFMS-M22	M22×1.5	14	35	5	10	6.5	P25	96.1	57	1
SFMS-M24	M24×1.5	14	38	5	12	7.5	P28	141	68	1
SFMS-M27	M27×2	16	40	5	12	7.5	P30	172	94	1

SFMS Main body: Made of stainless steel / O-ring: Fluoro-rubber and parallel pipe threads

Unit : mm

Part Number	G (PF) Nominal of Thread	L	D1	L1	B	t	O-ring No.	Recommendation Torque (N·m)	Mass (g)	Qty per pack
SFMS-1	G ⅜	8	19.5	4	5	4	P12.5	13.3	10	1
SFMS-2	G ¼	12	23	4	6	5	P16	25.7	19	1
SFMS-3	G ⅝	12	27	4	8	6	P20	50.8	28	1
SFMS-4	G ½	14	35	5	10	6.5	P25	91.5	56	1

Part number specification

SFMS-M10

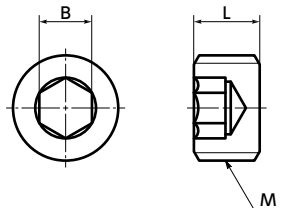


1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Not Available	Not Available	Not Available	Not Available

SFP Hex Socket Head Parallel Screw Plugs

WEB Selection Tool WEB CAD Download

e-nedzi.com®



- For applications such as compression spring holders and oil injection opening covers.

Application

Spring holders and load adjusters, Hydraulic equipment, pneumatic machinery and equipment, and general industrial machines

Material/Finish

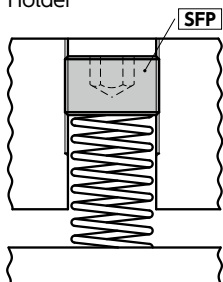
	SFP
Main Body	S45C (Hardness: 34 - 43 HRC) Ferrosoferric Oxide Film (Black)

Unit : mm

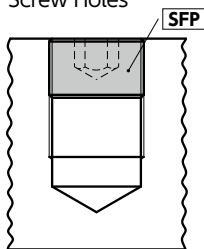
Part Number	M	L	B	Mass (g)	Qty per pack*1
SFP-M12	M12×1.5	10	6	5	10
SFP-M14	M14×1.5	10	6	8	10
SFP-M16	M16×1.5	10	8	10	10
SFP-M18	M18×1.5	10	10	12	5
SFP-M20	M20×1.5	12	10	20	5
SFP-M22	M22×1.5	12	12	23	5
SFP-M24	M24×1.5	12	14	27	5
SFP-M27	M27×1.5	12	14	37	5
SFP-M30	M30×1.5	12	17	44	5
SFP-M33	M33×1.5	12	17	55	5
SFP-M36	M36×1.5	18	17	107	1

*1 : Also sold separately from 1 piece up. → P.809

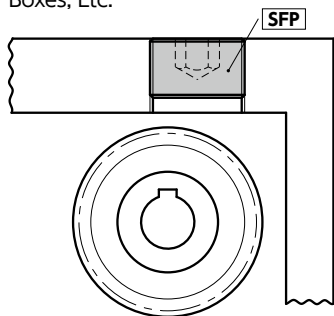
- Usage example
Compression Spring Holder



- Protection for Unused Screw Holes



- Oil Injection Opening Cover in Gear Boxes, Etc.

**Part number specification****SFP-M16**

Order in number of packs.
Also sold separately from 1 piece up. → P.809

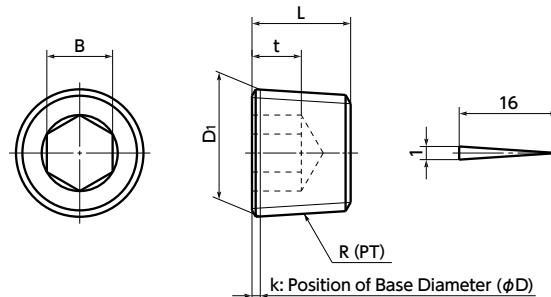
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Not Available	Not Available	Please feel free to contact us	Not Available

NBK

WEB ▶ <https://www.nbk1560.com>**SFT/SFTS** Hex Socket Pipe Plugs

WEB Selection Tool WEB CAD Download SUS Stainless steel

e-nedzi.com®



- SFT-PS** and **SFTS-PS** are pre-coated types that do not require sealing tape or sealing agent.
- Excellent oil, gasoline, water, and heat resistance and strong sealing effect.

Application

Hydraulic equipment, pneumatic machinery and equipment, and general industrial machines

Material/Finish

	SFT	SFT-PS	SFTS	SFTS-PS
Main Body	S45C (Hardness: 32 - 42 HRC) Ferrosoferric Oxide Film (Black)	S45C (Hardness: 32 - 42 HRC) Ferrosoferric Oxide Film (Black)	SUSXM7 (Equivalent to SUS304)	SUSXM7 (Equivalent to SUS304)

SFT SFT-PS Steel • Ferrosoferric Oxide Coating

Unit : mm

SFT No Seal	SFT-PS Pre-coat Seal	Common dimensions							Qty*1 per pack
Part Number	Part Number	R (PT) Nominal of Thread	D1	k	L	B	t	Mass (g)	
SFT-0.5	SFT-0.5-PS	R 1/16	7.723	0.45	6	4	3	2	10
SFT-1	SFT-1-PS	R 1/8	9.728	0.45	7	5	3.5	3	10
SFT-2	SFT-2-PS	R 1/4	13.157	0.7	8.9	6	4.5	6	10
SFT-3	SFT-3-PS	R 3/8	16.662	0.7	10	8	5	11	10
SFT-4	SFT-4-PS	R 1/2	20.955	0.9	12	10	6	21	5

*1 : Also sold separately from 1 piece up. → P.809

SFTS SFTS-PS Stainless Steel

Unit : mm

SFTS No Seal	SFTS-PS Pre-coat Seal	Common dimensions							Qty per pack
Part Number	Part Number	R (PT) Nominal of Thread	D1	k	L	B	t	Mass (g)	
SFTS-0.5	SFTS-0.5-PS	R 1/16	7.723	0.45	6	4	3	2	1
SFTS-1	SFTS-1-PS	R 1/8	9.728	0.45	7	5	3.5	3	1
SFTS-2	SFTS-2-PS	R 1/4	13.157	0.7	8.9	6	4.5	6	1
SFTS-3	SFTS-3-PS	R 3/8	16.662	0.7	10	8	5	11	1
SFTS-4	SFTS-4-PS	R 1/2	20.955	0.9	12	10	6	21	1

Part number specification**SFT-3-PS**

Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

NBK

WEB ▶ <https://www.nbk1560.com>



• VESPEL (Non-thermoplastic Polyimide Resin)

	Socket Head Cap Screws	Hex Head Screws	Socket Head Cap Screws	Hex Head Screws
Part Number	SPD-C	SPD-H	SPDC-C	SPDC-H
Shape				
Page	P.739	P.740	P.741	P.742
Materials	VESPEL SP-1	VESPEL SP-1	VESPEL SCP-5000	VESPEL SCP-5000
Characteristics	Heat Resistance • Chemical Resistance • Low Outgas	Heat Resistance • Chemical Resistance • Low Outgas	Heat Resistance • Chemical Resistance • Low Outgas	Heat Resistance • Chemical Resistance • Low Outgas
Size	M3 - M8	M3 - M8	M3 - M8	M3 - M8

• Conductive PEEK

	Socket Head Cap Screws
Part Number	SPEC-C
Shape	
Page	P.743
Materials	Conductive PEEK
Characteristics	Conductivity • Chemical Resistance • Heat Resistance
Size	M4 - M6

• PEEK (Polyetheretherketone)

	Socket Head Cap Screws	Socket Head Cap Screws	Socket Hex Head Screws with Low Profile	Micro Screws		Cross Recessed Pan Head Machine Screws
Part Number	SPE-C	SPE-FT	SPE-LC	SPE-MC	SPE-MF	SPE-P
Shape						
Page	P.744	P.745	P.746	P.747	P.748	P.749
Materials	PEEK	PEEK	PEEK	PEEK	PEEK	PEEK
Characteristics	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance • Full Thread	Chemical Resistance • Small Space • Heat Resistance	Chemical Resistance • Heat Resistance For precision equipment	Chemical Resistance • Heat Resistance For precision equipment	Chemical Resistance • Heat Resistance
Size	M3 - M8	M3 - M6	M3 - M6	M1.2 - M1.6	M1.2 - M1.6	M1.7 - M8

	Cross Recessed Flat Head Machine Screws	Hex Socket Set Screws	Hex Head Screws	Hex Nuts • Washers	Screw Plugs
Part Number	SPE-F	SPE-T	SPE-H	SPE-N/SPE-W	SPE-R
Shape					
Page	P.750	P.751	P.752	P.753	P.754
Materials	PEEK	PEEK	PEEK	PEEK	PEEK
Characteristics	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance
Size	M2 - M8	M3 - M8	M4 - M10	M2 - M10	R1/8 - R3/8

• PPS (Polyphenylene Sulfide)

	Socket Head Cap Screws	Socket Hex Head Screws with Low Profile	Cross Recessed Pan Head Machine Screws	Cross Recessed Flat Head Machine Screws	Hex Head Screws	Hex Nuts • Washers
Part Number	SPS-C	SPS-LC	SPS-P	SPS-F	SPS-H	SPS-N/SPS-W
Shape						
Page	P.755	P.756	P.757	P.758	P.759	P.760
Materials	PPS	PPS	PPS	PPS	PPS	PPS
Characteristics	Heat Resistance • Chemical Resistance	Small Space • Chemical Resistance • Heat Resistance	Heat Resistance • Chemical Resistance	Heat Resistance • Chemical Resistance	Heat Resistance • Chemical Resistance	Heat Resistance • Chemical Resistance
Size	M3 - M8	M3 - M6	M2 - M6	M3 - M6	M4 - M12	M2 - M12

• RENY (50% Glass Fiber Reinforced Polyamide MXD6)

	Socket Head Cap Screws	Socket Hex Head Screws with Low Profile	Micro Screws		Cross Recessed Pan Head Machine Screws	Cross Recessed Flat Head Machine Screws
Part Number	SPA-C	SPA-LC	SPA-MC	SPA-MF	SPA-P	SPA-F
Shape						
Page	P.761	P.762	P.763	P.764	P.765	P.766
Materials	RENY	RENY	RENY	RENY	RENY	RENY
Characteristics	High Strength	Small Space • High Strength	High Strength For precision equipment	High Strength For precision equipment	High Strength	High Strength
Size	M3 - M8	M3 - M6	M1.2 - M1.6	M1.2 - M1.6	M1.7 - M6	M2 - M8

	Hex Head Screws	Hex Nuts • Washers
Part Number	SPA-H	SPA-N/SPA-W
Shape		
Page	P.767	P.768
Materials	RENY	RENY
Characteristics	High Strength	High Strength
Size	M5 - M10	M2 - M16

• PTFE (Tetrafluoroethylene: Teflon)

	Hex Head Screws	Hex Nuts • Washers
Part Number	SPT-H	SPT-N/SPT-W
Shape		
Page	P.769	P.770
Materials	PTFE (Teflon)	PTFE (Teflon)
Characteristics	Chemical Resistance • Heat Resistance • Electrical Insulation	Chemical Resistance • Heat Resistance • Electrical Insulation
Size	M3 - M12	M3 - M12

• PVDF (Polyvinylidene Fluoride)

	Hex Head Screws	Socket Head Cap Screws
Part Number	SPV-H	SPV-C
Shape		
Page	P.771	P.772
Materials	PVDF	PVDF
Characteristics	Chemical Resistance	Chemical Resistance
Size	M5 - M8	M5 - M6

• PP (Polypropylene)

	Hex Head Screws	Hex Nuts • Washers
Part Number	SPP-H	SPP-N/SPP-W
Shape		
Page	P.773	P.774
Materials	PP	PP
Characteristics	Chemical Resistance	Chemical Resistance
Size	M4 - M10	M4 - M10

• H-PVC (Hard Polyvinyl Chloride)

	Hex Head Screws	Hex Nuts • Washers
Part Number	SPVC-H	SPVC-N/SPVC-W
Shape		
Page	P.775	P.776
Materials	H-PVC	H-PVC
Characteristics	Chemical Resistance	Chemical Resistance
Size	M4 - M6	M4 - M6

• PC (Polycarbonate)

	Cross Recessed Pan Head Machine Screws	Hex Nuts • Washers
Part Number	SPC-P	SPC-N/SPC-W
Shape		
Page	P.777	P.778
Materials	PC	PC
Characteristics	Shock Resistance • Weather Resistance	Shock Resistance • Weather Resistance
Size	M1.7 - M6	M2 - M6



Properties of Plastic Screws

The Abbreviations, Names, and Heat Resistance Temperature of Plastics

Abbreviation	Name	Heat Resistance Temperature
VESPEL*	SP-1	288°C
	SCP-5000	350°C
PEEK	Polyetheretherketone	180°C
PTFE	Tetrafluoroethylene	260°C
PPS	Polyphenylene Sulfide	200°C
H-PVC	Hard Polyvinyl Chloride	35°C
RENY*	RENY	105°C
PC	Polycarbonate	115°C
PP	Polypropylene	65°C
PVDF	Polyvinylidene Fluoride	150°C

•The heat resistance temperatures in the chart are for the plastic material. The max. operating temperature of the product changes with performance conditions such as tightening torque.

*VESPEL is a registered trademark of DuPont.

RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.

Selection Criteria for Plastic Screws

Strength	RENY>PPS>VESPEL (SCP-5000)>PEEK>VESPEL (SP-1)>PC>PVDF>PP>H-PVC>PTFE	From tensile strength data
Heat Resistance	VESPEL (SCP-5000)>VESPEL (SP-1)>PTFE>PPS>PEEK>PVDF>PC>RENY>PP>H-PVC	From heat resistance temperature
Chemical Resistance	PTFE>PVDF>H-PVC • PP>PEEK>PPS>PC>VESPEL (SCP-5000)>VESPEL (SP-1)>RENY	From chemical resistance data

Physical Properties

Properties	Test Method	Unit	VESPEL SP-1	VESPEL SCP-5000	PEEK	PTFE	PPS	RENY	PC	PP	PVDF
Tensile Strength	D638	N/mm ²	86	160	97	24	185	285	62	36	57
Tensile Elongation	D638	%	7.5	7	65	200 - 400	1.9	2.1	110	500	70 - 80
Flexural Strength	D790	N/mm ²	110	247	156	—	255	380	88.2	—	75
Flexural Modulus	D790	GPa	3.1	5.7	4.1	0.56	13.2	17.4	2.3	1.5	1.99
Izot Impact (with Notch)	D256	J/m	42.7	—	94	160	100	110	880	30	160 - 375
Rockwell Hardness	D785	R and M Scales	M90	M100	M99	—	M100	M111	R120	R100	R93 - 116
Deflection Temp. under Load (1.82 MPa)	D648	°C	360	350	152	—	260	234	135	120	80
Flame Class	UL94	—	V-0	V-0	V-0	V-0	V-0	HB	V-2	HB	V-0
Dielectric Constant (10 ⁶ Hz)	D150	—	3.6	3.3	3.3	<2.1	4.6	4.0	2.9	—	10
Dielectric Loss Tangent (10 ⁶ Hz)	D150	—	0.0034	0.001	0.003	<0.0002	0.002	0.009	0.009	—	0.015
Volume Resistivity (×10 ¹⁴)	D257	Ω·m	1 - 10	1	4.9	>100	1.0	1.3	4.0	1.0	0.1 - 1
Dielectric Breakdown Strength	D149	MV/m	22	—	17	19	12	32	16	31	300
Arc Resistance	D495	sec	—	—	23	>300	120	129	120	—	—
Specific Gravity	D792	—	1.43	1.43	1.30	2.14 - 2.2	1.66	1.65	1.20	0.91	1.79
Water Absorption (in 23 °C Water for 24 h)	D570	%	0.240	0.080	0.500	0.010	0.015	0.140	0.150	0.010	0.030
Glass Fiber Content	—	%	—	—	—	—	40	50	—	—	—

•Values in chart are for reference only. They are not guaranteed values.

Physical Properties (H-PVC)

Properties	Test Method (JIS)	Unit	H-PVC
Tensile Strength	JISK7162	Test Speed : 10mm/min	N/mm ² 38.8
Tensile Elongation	JISK7162	Test Speed : 10mm/min	% 188
Hardness	JISK7215	10 seconds later (2 mm thickness 3 sheets overlaid)	Hs 97
Specific Gravity	JISK7112	Method A	— 1.32

•Values in chart are for reference only. They are not guaranteed values.



Precautions for Plastic Screws

- While these plastics screws comply with JIS and ISO standards, there are some areas irrelevant to these screws as their manufacturing methods differ from that of metal screws.
- The values in the mechanical properties chart are reference values.
- Use a torque driver or torque wrench when tightening.
- Always carry out tests under performance conditions similar to actual conditions in advance.
- The color of machine screws, bolts, nuts, and washers may differ by lot.

Chemical Resistance

Chemical Name	VESPEL SP-1	VESPEL SCP-5000	PEEK	PTFE	PPS	H-PVC	RENY	PC	PP	PVDF
10% Hydrochloric Acid	O	O	O	O	O	O	×	O	O	O
10% Sulfuric Acid	O	O	O	O	O	O	×	O	O	O
50% Sulfuric Acid	×	△	×	O	×	O	×	△	—	O
10% Nitric Acid	△	△	O	O	O	O	×	O	O	O
50% Nitric Acid	×	×	×	O	×	△	×	△	—	O
10% Hydrofluoric Acid	△	△	—	O	△	△	×	O	O	O
50% Hydrofluoric Acid	×	×	×	O	×	△	×	△	△	△
Phosphoric Acid	—	—	O	O	△	O	×	O	O	O
Formic Acid	△	△	△	O	O	△	×	O	O	O
Phosphoric Acid	O	O	O	O	O	O	×	O	O	O
Citric Acid	O	O	O	O	O	O	△	O	O	O
Chromic Acid	—	—	O	O	△	O	×	O	O	O
Boric Acid	O	O	O	O	O	O	△	O	O	O
Methyl Alcohol	△	△	O	O	O	O	—	△	—	O
Glycol	O	O	O	O	O	—	—	O	—	—
Ammonia	×	△	O	O	O	O	O	×	O	O
10% Sodium Hydroxide	×	△	O	O	O	O	O	—	O	O
10% Potassium Hydroxide	×	△	O	O	△	O	O	×	O	O
Calcium Hydroxide	—	—	O	O	△	O	×	O	O	O
Water	O	O	O	O	O	O	△	O	O	O
Hydrogen Sulfide (Gas)	—	—	O	O	O	—	O	O	O	O
Sulfur Dioxide	—	—	O	O	△	—	O	O	O	—
Ammonium Nitrate	—	—	O	O	O	—	O	O	O	O
Sodium Nitrate	—	—	O	O	O	—	O	×	O	O
Calcium Carbonate	—	—	O	O	O	—	O	×	O	O
Calcium Chloride	—	—	O	O	O	O	O	O	O	O
Magnesium Chloride	—	—	O	O	O	O	O	O	O	O
Magnesium Sulfate	—	—	O	O	O	—	O	O	O	O
Zinc Sulfate	—	—	O	O	O	—	O	O	O	O
Hydrogen peroxide	△	△	O	O	△	O	△	O	O	O

OUsable

△Usable under certain conditions

×Non-usable

•A test piece was used to acquire the test data at room temperature (23°C). Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.

Torsional Torque of Plastic Screws (N·m)

	VESPEL SP-1	VESPEL SCP-5000	PEEK	PTFE	PPS	H-PVC	RENY	PC	PP	PVDF
M1.7	—	—	0.02	—	—	—	0.03	0.02	—	—
M2	—	—	0.06	—	0.08	—	0.1	0.05	—	—
M2.6	—	—	0.16	—	—	—	0.24	—	—	—
M3	0.12	0.21	0.3	0.02	0.36	—	0.39	0.22	—	—
M4	0.27	0.47	0.64	0.03	0.71	0.18	0.79	0.54	0.23	—
M5	0.54	0.98	1.28	0.08	1.42	0.41	1.77	1.03	0.51	0.64
M6	0.95	1.65	2.26	0.14	2.11	0.65	2.94	1.37	0.8	0.88
M8	2.26	4.04	5.98	0.24	5.29	—	7.85	—	2.2	2.65
M10	—	—	—	0.69	11.8	—	12.75	—	3.4	—
M12	—	—	—	1.54	20.6	—	—	—	—	—

•Values in chart are for reference only. They are not guaranteed values. The recommended torque is 50% of the value in the chart. The value differs depending on the head shape of the screw. See the product page for details.



DuPont™ VESPEL Screws for Extreme Heat Resistance and Cleanliness

VESPEL is non-thermoplastic super-engineering plastic formed from powder of wholly aromatic polyimide resin developed by DuPont using advanced technology.

Among super-engineering plastics, it has top-level heat resistance. It is used in wide range of applications, starting with machine and electrical machine parts.

Characteristics

• Extreme Heat Resistance

Continuous Max. Operating Temperature:
288 °C (SP-1), 350 °C (SCP-5000)
VESPEL is formed from a polyimide that has excellent heat resistance. VESPEL can be used continually under high temperatures without reaching a softening point, such as its melting point or glass transition point.

• Low outgas

Outgas quantity is extremely low under high temperatures.
No bubbles blend in thanks to the powder compression molding method.

VESPEL Screw Types

• Standard grade SP-1 and high grade SCP-5000 screws are available as standard.

SP-1

This material has excellent heat resistance and electrical and thermal insulation properties. It is used widely in industrial fields. Due to its excellent plasma resistance and low outgas characteristics, it is widely used for peripheral parts for FPD production equipment and semiconductor devices.



[SPDC-C] VESPEL Socket Head Cap Screws
(Grade: SP-1) → P.739



[SPDC-H] High-grade VESPEL Hex Head Screws
(Grade: SP-1) → P.740



• Chemical Resistance

VESPEL is resistant to various chemicals.

• Plasma Resistance

• Radiation Hardness

• Abrasion Resistance

SCP-5000

This material has better strength characteristics, heat resistance, chemical resistance, and dimensional stability than SP-1. In addition to FPD production equipment and semiconductor devices, this material is also used in the fields of air and spacecraft.



[SPDC-C] High-grade VESPEL Socket Head Cap Screws
(Grade: SCP-5000) → P.741



[SPDC-H] High-grade VESPEL Hex Head Screws
(Grade: SCP-5000) → P.742

Properties of VESPEL by DuPont™

• Physical Properties

Properties	Test Method	Unit	VESPEL SP-1	VESPEL SCP-5000
Tensile Strength	D1708	N/mm ²	86	160
Tensile Elongation	D1708	%	7.5	7
Flexural Strength	D790	N/mm ²	110	247
Flexural Modulus	D790	GPa	3.1	5.7
Izot Impact (with Notch)	D256	J/m	42.7	—
Rockwell Hardness	D785	R and M Scales	M90	M100
Deflection Temp. under Load (1.82 MPa)	D648	°C	360	350
Flame Class	UL94	—	V-0	V-0
Dielectric Constant (10 ⁶ Hz)	D150	—	3.6	3.3
Dielectric Loss Tangent (10 ⁶ Hz)	D150	—	0.0034	0.001
Volume Resistivity (× 10 ¹⁴)	D257	Ω·m	1 - 10	1
Dielectric Breakdown Strength	D149	MV/m	22	—
Specific Gravity	D792	—	1.43	1.43
Water Absorption (in 23 °C Water for 24 h)	D570	%	0.24	0.08
Glass Fiber Content	—	%	—	—

• Values in chart are for reference only. They are not guaranteed values.

• Chemical Resistance

Chemical Name	VESPEL SP-1	VESPEL SCP-5000
10% Hydrochloric Acid	○	○
10% Sulfuric Acid	○	○
50% Sulfuric Acid	×	△
10% Nitric Acid	△	△
50% Nitric Acid	×	×
10% Hydrofluoric Acid	△	△
50% Hydrofluoric Acid	×	×
Formic Acid	△	△
Phosphoric Acid	○	○
Citric Acid	○	○
Boric Acid	○	○
Methyl Alcohol	△	△
Glycol	○	○
Ammonia	×	△
10% Sodium Hydroxide	×	△
10% Potassium Hydroxide	×	△
Water	○	○
Hydrogen Peroxide	△	△

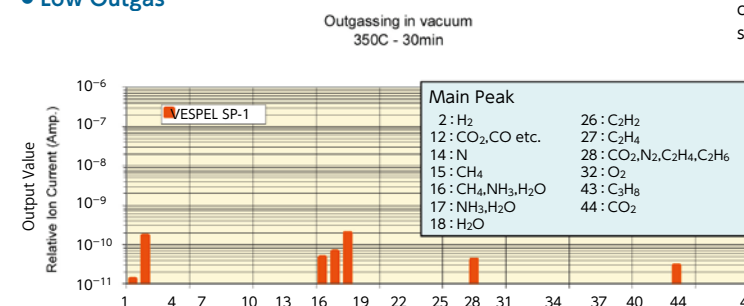
○ Usable

△ Usable under certain conditions

× Non-usable

• A test piece was used to acquire the test data at room temperature (23 °C). Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.

• Low Outgas



Instrument : Quadrupole Mass Spectrometer (QMS)

Heating temperature : 350 °C

Heating time : 30 minutes

• Values in graph are for reference only. They are not guaranteed values.

Also, screws with special sizes including nominal and length are available.

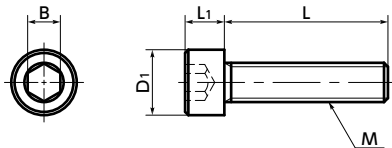


VESPEL is a registered trademark of DuPont.

SPD-C Plastic Screw - Socket Head Cap Screws - VESPEL (Grade : SP - 1)

WEB Selection Tool WEB CAD Download Cleanroom wash & packaging Heat-resistance Chemical-proof

e-nedzi.com



● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

● Material/Finish



	SPD-C
Main body	VESPEL SP-1 (Non-thermoplastic Polyimide Resin)
Heat Resistance Temperature*1	288°C

● VESPEL is a registered trademark of DuPont.

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- VESPEL SP-1 is a non-thermoplastic super-engineering plastic with excellent physical and chemical properties.
- Properties of VESPEL SP-1 ➡ P.738
- It does not reach a softening point, such as its melting point or glass transition point, even under high temperatures and can be used continually at 288°C.
- The screws have excellent chemical resistance, plasma resistance, radiation hardness, and abrasion resistance.
- Thanks to the powder compression molding method, no bubbles blend in and outgas quantity is extremely low. ➡ P.738
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

Unit : mm

Part Number	M	1	L	2						D1	L1	B	Torsional*1 Torque (N·m)	Mass (g)
SPD-M3-C	M3	6	8	10	12	16				5.5	3	2.5	0.12	0.13 - 0.21
SPD-M4-C	M4	6	8	10	12	16	20	25		7	4	3	0.27	0.28 - 0.58
SPD-M5-C	M5		8	10	12	16	20	25	30	8.5	5	4	0.54	0.45 - 1
SPD-M6-C	M6			10	12	16	20	25	30	10	6	5	0.95	0.86 - 2
SPD-M8-C	M8			10	12	16	20	25	30	13	8	6	2.26	1.9 - 3.8

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack
SPD-M3-C	1
SPD-M4-C	1
SPD-M5-C	1
SPD-M6-C	1
SPD-M8-C	1

● Related Products

[SPDC] VESPEL SCP-5000 Hex socket head screw, which has a continuous duty temperature of 350 °C is available.
➡ P.741



● Part number specification

SPD - M5 - 20 - C

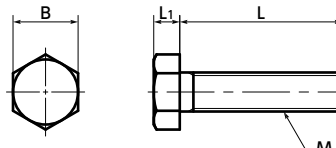
Product Code 1 2 Product Code

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us

SPD-H Plastic Screw - Hex Head Screws - VESPEL (Grade : SP - 1)

WEB Selection Tool WEB CAD Download Cleanroom wash & packaging Heat-resistance Chemical-proof

e-nedzi.com



● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

● Material/Finish



	SPD-H
Main Body	VESPEL SP-1 (Non-thermoplastic Polyimide Resin)
Heat Resistance Temperature*1	288°C

● VESPEL is a registered trademark of DuPont.

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- VESPEL SP-1 is a non-thermoplastic super-engineering plastic with excellent physical and chemical properties.
- Properties of VESPEL SP-1 ➡ P.738
- It does not reach a softening point, such as its melting point or glass transition point, even under high temperatures and can be used continually at 288°C.
- The screws have excellent chemical resistance, plasma resistance, radiation hardness, and abrasion resistance.
- Thanks to the powder compression molding method, no bubbles blend in and outgas quantity is extremely low. ➡ P.738
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

Unit : mm

Part Number	M	1	L	2						B	L1	Torsional*1 Torque (N·m)	Mass (g)
SPD-M3-H	M3	6	8	10	12	16				5.5	2	0.12	0.12 - 0.21
SPD-M4-H	M4	6	8	10	12	16	20	25		7	2.8	0.27	0.25 - 0.53
SPD-M5-H	M5		8	10	12	16	20	25	30	8	3.5	0.54	0.46 - 0.97
SPD-M6-H	M6			10	12	16	20	25	30	10	4	0.95	0.82 - 1.8
SPD-M8-H	M8			10	12	16	20	25	30	13	5.3	2.26	1.7 - 3.5

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack
SPD-M3-H	1
SPD-M4-H	1
SPD-M5-H	1
SPD-M6-H	1
SPD-M8-H	1

● Related Products

[SPDC] VESPEL SCP-5000 Hex head screw, which has a continuous duty temperature of 350 °C is available.
➡ P.742



● Part number specification

SPD - M5 - 20 - H

Product Code 1 2 Product Code

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us

e-nedzi.com®

SPDC-C Plastic Screw - Socket Head Cap Screws - VESPEL (Grade : SCP - 5000)

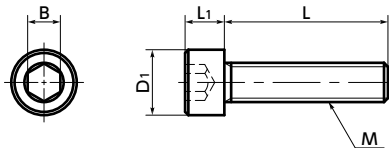
 WEB Selection Tool

 WEB CAD Download

 Cleanroom wash & packaging

 Heat-resistance

 Chemical-proof



● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

● Material/Finish

 RoHS2 Compliant

	SPDC-C
Main body	VESPEL SCP-5000 (Non-thermoplastic Polyimide Resin)
Heat Resistance Temperature*1	350°C

● VESPEL is a registered trademark of DuPont.

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- VESPEL SP-1 is a non-thermoplastic super-engineering plastic with excellent physical and chemical properties.
- Properties of VESPEL SP-1 ➡ P.738
- This material maintains high strength and flexibility even under high temperatures and does not soften up to 350°C. Due to its stable and long-term heat resistance, it has a continuous duty temperature of 350°C.
- The screws have excellent chemical resistance, plasma resistance, radiation hardness, and abrasion resistance.
- Thanks to the powder compression molding method, no bubbles blend in and outgas quantity is extremely low. ➡ P.738
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

Unit : mm															
Part Number	M 	L 									D ₁	L ₁	B	Torsional*1 Torque (N·m)	Mass (g)
SPDC-M3-C	M3	6	8	10	12	16					5.5	3	2.5	0.21	0.13 - 0.21
SPDC-M4-C	M4	6	8	10	12	16	20	25			7	4	3	0.47	0.28 - 0.58
SPDC-M5-C	M5		8	10	12	16	20	25	30		8.5	5	4	0.98	0.45 - 1
SPDC-M6-C	M6			10	12	16	20	25	30	40	10	6	5	1.65	0.86 - 2
SPDC-M8-C	M8			10	12	16	20	25	30	40	13	8	6	4.04	1.9 - 3.8

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack
SPDC-M3-C	1
SPDC-M4-C	1
SPDC-M5-C	1
SPDC-M6-C	1
SPDC-M8-C	1

● Related Products

SPD-C VESPEL (Grade : SP-1)
Socket Head Cap Screw, which has a heat resistance temperature of 280 deg C is available.
➡ P.739



● Part number specification

SPDC - M5 - 20 - C
Product Code 1 2 Product Code

1 Individual Sales ➡ P.809	 Cleanroom Wash & Packaging ➡ P.807	 Screw Length Adjustment ➡ P.811	 Vibration Resistant ➡ P.810	 Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us

e-nedzi.com®

SPDC-H Plastic Screw - Hex Head Screws - VESPEL (Grade : SCP - 5000)

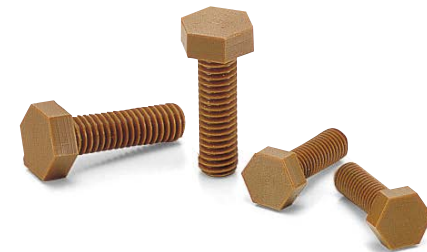
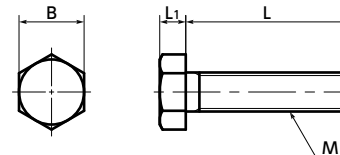
 WEB Selection Tool

 WEB CAD Download

 Cleanroom wash & packaging

 Heat-resistance

 Chemical-proof



● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

● Material/Finish

 RoHS2 Compliant

	SPDC-H
Main body	VESPEL SCP-5000 (Non-thermoplastic Polyimide Resin)
Heat Resistance Temperature*1	350°C

● VESPEL is a registered trademark of DuPont.

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- VESPEL SP-1 is a non-thermoplastic super-engineering plastic with excellent physical and chemical properties.
- Properties of VESPEL SP-1 ➡ P.738
- This material maintains high strength and flexibility even under high temperatures and does not soften up to 350°C. Due to its stable and long-term heat resistance, it has a continuous duty temperature of 350°C.
- The screws have excellent chemical resistance, plasma resistance, radiation hardness, and abrasion resistance.
- Thanks to the powder compression molding method, no bubbles blend in and outgas quantity is extremely low. ➡ P.738
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

Unit : mm													
Part Number	M	1	L							B	L1	Torsional*1 Torque (N・m)	Mass (g)
SPDC-M3-H	M3	6	8	10	12	16				5.5	2	0.21	0.12 - 0.21
SPDC-M4-H	M4	6	8	10	12	16	20	25		7	2.8	0.47	0.25 - 0.53
SPDC-M5-H	M5		8	10	12	16	20	25	30	8	3.5	0.98	0.46 - 0.97
SPDC-M6-H	M6			10	12	16	20	25	30	10	4	1.65	0.82 - 1.8
SPDC-M8-H	M8			10	12	16	20	25	30	13	5.3	4.04	1.7 - 3.5

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack
SPDC-M3-H	1
SPDC-M4-H	1
SPDC-M5-H	1
SPDC-M6-H	1
SPDC-M8-H	1

● Related Products

SPD-H VESPEL (Grade : SP-1)
Socket Head Cap Screw, which has a heat resistance temperature of 280 deg C is available.
➡ P.740



● Part number specification

SPDC - M5 - 20 - H
Product Code 1 2 Product Code

1 Individual Sales ➡ P.809	 Cleanroom Wash & Packaging ➡ P.807	 Screw Length Adjustment ➡ P.811	 Vibration Resistant ➡ P.810	 Modification process for captive use ➡ P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us

SPEC-C

Plastic Screw Conductive PEEK / Hex Socket Head Cap Screws **NEW**

e-nedzi.com®

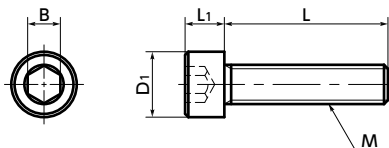


WEB Selection Tool

WEB CAD Download

Electric conducting property

Chemical-proof



● Material/Finish

RoHS2 Compliant

	SPEC-C
Main body	PEEK (Polyether ether ketone, carbon combined) (Black)
Heat resistance temperature*1	180°C

*1 : A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.



- Conductive PEEK hex socket head cap screw.
- For applications of preventing electrostatic charge due to contact and friction.
- Mechanical property, chemical resistance, heat resistance, waterproof, friction resistance, shock resistance and fatigue resistance equivalent to those of PEEK material.
- Plastic screw properties and precautions for use → P.735

● Application

FPD production device / Semiconductor manufacturing device / Print board etching equipment / Metal surface treatment facility / Chemical plant / Transformer / Electric and electronic device

⚠ Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

Part Number	M	L	D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPEC-M4-C	M4	10 12 15	7	4	3	600	0.35	0.31 - 0.39
SPEC-M5-C	M5	10 12 15 20	8.5	5	4	1160	0.96	0.46 - 0.69
SPEC-M6-C	M6	15 20 25	10	6	5	1590	1.62	0.99 - 1.3

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack
SPEC-M4-C	1
SPEC-M5-C	1
SPEC-M6-C	1

● Part number specification

SPEC-M5-30-C

Product Code 1 2 Product Code

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

NBK

WEB ▶ <https://www.nbk1560.com>

SPE-C

Plastic Screw - Hex Socket Head Cap Screws - PEEK

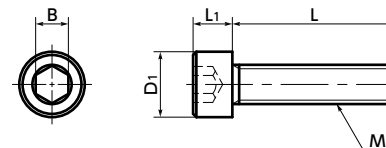
e-nedzi.com®



WEB Selection Tool

WEB CAD Download

Chemical-proof



● Material/Finish

RoHS2 Compliant

	SPE-C
Main body	PEEK/Light brown
Heat Resistance Temperature*1	180°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

⚠ Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.



- PEEK is a thermoplastic super - engineering plastic with excellent physical and chemical properties.
- These screws have excellent chemical resistance. They are mostly unaffected by chemicals excluding concentrate sulfuric acid, concentrate nitric acid, and concentrate hydrofluoric acid.
- These screws have excellent heat resistance, water resistance, and high heat resistance strength.
- These screws have excellent abrasion, shock, and fatigue resistance.
- They have high incombustibility that meets V - 0 of UL 94.
- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Part Number	M	L	D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPE-M3-C	M3	6 8 10 12 15 20 25	5.5	3	2.5	430	0.3	0.12 - 0.27
SPE-M4-C	M4	6 8 10 12 15 20 25 30	7	4	3	765	0.64	0.25 - 0.61
SPE-M5-C	M5	6 8 10 12 15 20 25 30	8.5	5	4	1230	1.28	0.37 - 0.93
SPE-M6-C	M6	10 12 15 20 25 30 40	10	6	5	1670	2.26	0.78 - 1.8
SPE-M8-C	M8	15 20 25 30 40	13	8	6	3090	5.98	2 - 3.5

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPE-M3-C	20
SPE-M4-C	20
SPE-M5-C	10
SPE-M6-C	10
SPE-M8-C	5

*1 : Also sold separately from 1 piece up. → P.809

● Related Products

SPE-N Plastic Hexagon Nut (PEEK) is available.
→ P.753



● Part number specification

SPE-M5-20-C

Product Code 1 2 Product Code

Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

NBK

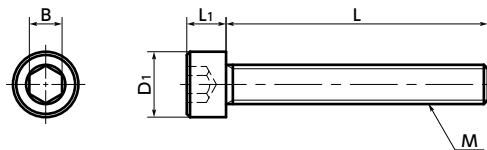
WEB ▶ <https://www.nbk1560.com>

SPE-FT Plastic Screw - Hex Socket Head Cap Screws - Full Thread - PEEK

e-nedzi.com®



WEB Selection Tool CAD Download Chemical-proof Full Thread



● Material/Finish

RoHS2 Compliant

	SPE
Main Body	PEEK/Light brown
Heat Resistance Temperature*1	180°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

⚠ Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

- PEEK is a thermoplastic super-engineering plastic with excellent physical and chemical properties.
- These screws have excellent chemical resistance. They are mostly unaffected by chemicals excluding concentrate sulfuric acid, concentrate nitric acid, and concentrate hydrofluoric acid.
- These screws have excellent heat resistance, water resistance, and high heat resistance strength.
- These screws have excellent abrasion, shock, and fatigue resistance.
- They have high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Unit : mm

Part Number	M	1	2							D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPE-M3-C-FT	M3	30	40	50						5.5	3	2.5	430	0.3	0.31 - 0.48
SPE-M4-C-FT	M4		40	50	60	70	80	90	100	7	4	3	765	0.64	0.78 - 1.8
SPE-M5-C-FT	M5		40	50	60	70	80	90	100	8.5	5	4	1230	1.28	1.2 - 2.7
SPE-M6-C-FT	M6			50	60	70	80	90	100	10	6	5	1670	2.26	2.2 - 4

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack
SPE-M3-C-FT	1
SPE-M4-C-FT	1
SPE-M5-C-FT	1
SPE-M6-C-FT	1

● Related Products

SPE-N Plastic Hexagon Nut (PEEK) is available.
→ P.753



● Part number specification

SPE-M6-50-C-FT

Product Code 1 2 Product Code

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

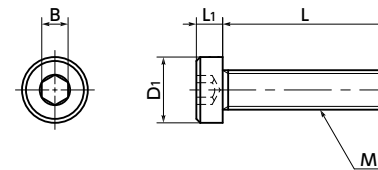
NBK

WEB ▶ <https://www.nbk1560.com>**SPE-LC** Plastic screw - Hex Socket Low Head Bolt - PEEK

e-nedzi.com®



WEB Selection Tool CAD Download Chemical-proof



● Application

FPD production device / Semiconductor manufacturing device / Print board etching equipment / Metal surface treatment facility / Chemical plant / Transformer / Electric and electronic device / Hydrothermal pump / Chemical pump

● Material/Finish

RoHS2 Compliant

	SPE-LC
Main body	PEEK / Light Brown
Heat resistance temperature*1	180°C

*1: A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.

⚠ Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

- Hex socket head cap screw with low head.
- For space-saving of equipment/device and applications with a limited top space.
- PEEK is thermoplastic super engineering plastic superior in physical and chemical properties.
- Excellent chemical resistance. It resists almost all chemicals other than concentrated sulfuric acid, concentrated nitric acid and concentrated hydrofluoric acid.
- It is highly heat-resistant and water-proofed and high temperature strength is retained.
- Features outstanding friction, shock, and fatigue resistance.
- It is highly frame-resistant satisfying V-0 of the UL standard 94.
- Plastic screw properties and precautions for use → P.735

Unit : mm

Part Number	M	1	2								D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPE-M3-LC	M3	6	8	10	12	16	20				5.5	2	2	370	0.15	0.09 - 0.20
SPE-M4-LC	M4	6	8	10	12	16	20	25			7	2.8	2.5	730	0.54	0.19 - 0.46
SPE-M5-LC	M5	6	8	10	12	16	20	25	30		8.5	3.5	3	1170	1.11	0.26 - 0.81
SPE-M6-LC	M6			10	12	16	20	25	30	40	10	4	4	1666	1.72	0.58 - 1.6

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPE-M3-LC	10
SPE-M4-LC	10
SPE-M5-LC	10
SPE-M6-LC	5

*1: Also sold separately from 1 piece up. → P.809

● Related Products

PEEK hexagon nuts **SPE-N** are available.
→ P.753



● Part number specification

SPE-M5-30-LC

Product Code 1 2 Product Code

Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

NBK

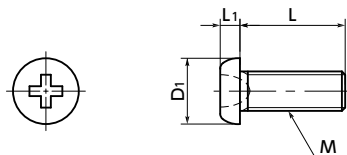
WEB ▶ <https://www.nbk1560.com>

SPE-MC Plastic screw - Fine Thread - PEEK *Additional Size*

e-nedzi.com®



WEB Selection Tool WEB CAD Download Chemical-proof Miniature Size



● Material/Finish

RoHS2 Compliant

	SPE-MC
Main body	PEEK / Light Brown
Heat resistance temperature*1	180°C

*1 : A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.

- Fine screws for precision devices.
- PEEK is thermoplastic super engineering plastic superior in physical and chemical properties.
- Excellent chemical resistance. It resists almost all chemicals other than concentrated sulfuric acid, concentrated nitric acid and concentrated hydrofluoric acid.
- It is highly heat-resistant and water-proofed and high temperature strength is retained.
- Features outstanding friction, shock, and fatigue resistance.
- It is highly frame-resistant satisfying V-0 of the UL standard 94.
- Plastic screw properties and precautions for use → P.735

● Application

FPD production device / Semiconductor manufacturing device / Print board etching equipment / Metal surface treatment facility / Chemical plant / Transformer / Electric and electronic device / Hydrothermal pump / Chemical pump

Unit : mm

Part Number	M	1	L	2			D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPE-M1.2-MC	M1.2	2	2.5	3	4		1.8	0.5	46.7	0.012	0.015 - 0.016
SPE-M1.4-MC	M1.4	2	2.5	3	4		2	0.5	46.9	0.014	0.016 - 0.017
SPE-M1.6-MC	M1.6		2.5	3	4	6	2.3	0.5	52	0.02	0.017 - 0.02

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPE-M1.2-MC	10
SPE-M1.4-MC	10
SPE-M1.6-MC	10

*1 : Also sold separately from 1 piece up. → P.809

● Part number specification

SPE-M1.6-4-MC

Product Code 1 Product Code 2

Order in number of packs.

Also sold separately from 1 piece up. → P.809

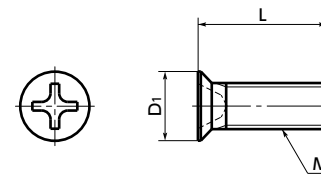
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPE-MF Plastic Screw (PEEK/Machine Screw for Precision Instruments) *NEW*

e-nedzi.com®



WEB Selection Tool WEB CAD Download Chemical-proof Miniature Size



● Material/Finish

RoHS2 Compliant

	SPE-MF
Main unit	PEEK (Polyether ether ketone) (Light brown)
Heat resistance temperature*1	180°C

*1 : A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.

- Fine screws for precision devices.
- PEEK is thermoplastic super engineering plastic superior in physical and chemical properties.
- Excellent chemical resistance. It resists almost all chemicals other than concentrated sulfuric acid, concentrated nitric acid and concentrated hydrofluoric acid.
- It is highly heat-resistant and water-proofed and high temperature strength is retained.
- Features outstanding friction, shock, and fatigue resistance.
- It is highly frame-resistant satisfying V-0 of the UL standard 94.
- Plastic screw properties and precautions for use → P.735

● Application

FPD production device / Semiconductor manufacturing device / Print board etching equipment / Metal surface treatment facility / Chemical plant / Transformer / Electric and electronic device / Hydrothermal pump / Chemical pump

Unit : mm

Part Number	M	1	L	2	D1	Tension Rupture Load*1 (N)	Torsional Torque*1 (N·m)	Mass(g)
SPE-M1.2-MF	M1.2	2.5	4		2.3	53.7	0.019	0.004 - 0.006
SPE-M1.4-MF	M1.4	2.5	4		2.5	73.9	0.03	0.005 - 0.006
SPE-M1.6-MF	M1.6	2.5	4		2.8	84.3	0.042	0.006 - 0.008

*1 : Values in chart are for reference only. They are not guaranteed values. The recommended torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPE-M1.2-MF	10
SPE-M1.4-MF	10
SPE-M1.6-MF	10

*1 : Also sold separately from 1 piece up.

→ P.809

● Part number specification

SPE-M1.6-4-MF

Product Code 1 Product Code 2

Place order by a bag.

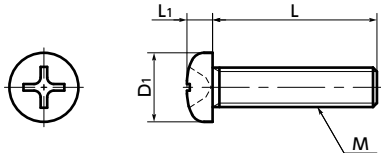
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPE-P Plastic Screws - Cross Recessed Pan Head Machine Screws - PEEK

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

● Material/Finish



	SPE-P
Main body	PEEK/Light brown
Heat Resistance Temperature*1	180°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PEEK is a thermoplastic super-engineering plastic with excellent physical and chemical properties.
- These screws have excellent chemical resistance. They are mostly unaffected by chemicals excluding concentrate sulfuric acid, concentrate nitric acid, and concentrate hydrofluoric acid.
- These screws have excellent heat resistance, water resistance, and high heat resistance strength.
- These screws have excellent abrasion, shock, and fatigue resistance.
- They have high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws ➡ P.735

Part Number	M	L													D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPE-M1.7-P	M1.7	4													2.5	0.5	59	0.02	0.0088
SPE-M2-P	M2	4	5	6	8	10	12								3.5	1.3	160	0.06	0.023 - 0.048
SPE-M2.6-P	M2.6			6	8	10	12								4.5	1.7	312	0.16	0.055 - 0.087
SPE-M3-P	M3		5	6	8	10	12	15	16	20	25				5.5	2	430	0.3	0.082 - 0.22
SPE-M4-P	M4			6	8	10	12	15	16	20	25	30			7	2.6	765	0.64	0.17 - 0.48
SPE-M5-P	M5			6	8	10	12	15	16	20	25	30			9	3.3	1230	1.28	0.33 - 0.8
SPE-M6-P	M6					10	12	15		20	25	30			10.5	3.9	1670	2.26	0.65 - 1.2
SPE-M8-P	M8							15		20	25				14	5.2	3090	5.98	1.6 - 2.2

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPE-M1.7-P	20
SPE-M2-P	20
SPE-M2.6-P	20
SPE-M3-P	20
SPE-M4-P	20
SPE-M5-P	10
SPE-M6-P	10
SPE-M8-P	5

*1 : Also sold separately from 1 piece up. ➡ P.809

● Related Products

[SPE-N] Plastic Hexagon Nut (PEEK) is available. ➡ P.753



Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

● Part number specification

SPE - M5 - 20 - P

Product Code 1 2 Product Code

Order in number of packs.

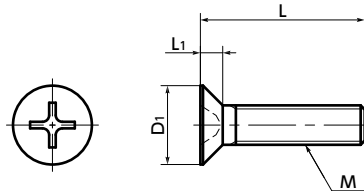
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

SPE-F Plastic Screw - Cross Recessed Flat Head Machine Screws - PEEK

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



● Material/Finish



	SPE-F
Main body	PEEK/Light brown
Heat Resistance Temperature*1	180°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.



Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

- PEEK is a thermoplastic super-engineering plastic with excellent physical and chemical properties.
- These screws have excellent chemical resistance. They are mostly unaffected by chemicals excluding concentrate sulfuric acid, concentrate nitric acid, and concentrate hydrofluoric acid.
- These screws have excellent heat resistance, water resistance, and high heat resistance strength.
- These screws have excellent abrasion, shock, and fatigue resistance.
- They have high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws ➡ P.735
- Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Part Number	M	L													D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPE-M2-F	M2		6	8											4	1.2	160	0.06	0.03 - 0.035
SPE-M2.6-F	M2.6	4	6												5.2	1.5	312	0.16	0.045 - 0.055
SPE-M3-F	M3		6	8	10	12	15	16	20	25					6	1.75	430	0.3	0.088 - 0.22
SPE-M4-F	M4		6	8	10	12	15	16	20	25					8	2.3	765	0.64	0.17 - 0.42
SPE-M5-F	M5			8	10	12	15		20	25	30				10	2.8	1230	1.28	0.37 - 0.8
SPE-M6-F	M6				10		15		20		30				12	3.4	1670	2.26	0.65 - 1.2
SPE-M8-F	M8								20	25	30				16	4.4	3090	5.98	1.9 - 2.4

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPE-M2-F	20
SPE-M2.6-F	20
SPE-M3-F	20
SPE-M4-F	20
SPE-M5-F	10
SPE-M6-F	10
SPE-M8-F	5

*1 : Also sold separately from 1 piece up. ➡ P.809

● Related Products

[SPE-N] Plastic Hexagon Nut (PEEK) is available. ➡ P.753



● Part number specification

SPE - M5 - 20 - F

Product Code 1 2 Product Code

Order in number of packs.

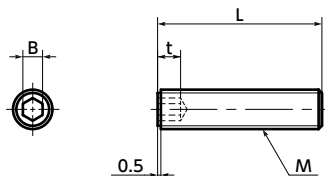
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

SPE-T Plastic Screw - Hex Socket Set Screws - PEEK

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



● Material/Finish



	SPE-T
Main body	PEEK/Light brown
Heat Resistance Temperature*1	180°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

⚠ Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

- PEEK is a thermoplastic super-engineering plastic with excellent physical and chemical properties.
- These screws have excellent chemical resistance. They are mostly unaffected by chemicals excluding concentrate sulfuric acid, concentrate nitric acid, and concentrate hydrofluoric acid.
- These screws have excellent heat resistance, water resistance, and high heat resistance strength.
- These screws have excellent abrasion, shock, and fatigue resistance.
- They have high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Unit : mm														
Part Number	M	L								B	t	Torsional*1 (N·m)	Mass (g)	
SPE-M3-T	M3	4	5	6	8	10	12	15		1.5	2	0.3	0.023 - 0.1	
SPE-M4-T	M4		5	6	8	10	12	15	20	2	2.5	0.64	0.05 - 0.25	
SPE-M5-T	M5		5	6	8	10	12	15	20	2.5	3	1.28	0.05 - 0.37	
SPE-M6-T	M6			6	8	10	12	15	20	25	3	2.26	0.13 - 0.68	
SPE-M8-T	M8					10	12	15	20	25	30	4	5.98	

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPE-M3-T	10
SPE-M4-T	10
SPE-M5-T	10
SPE-M6-T	5
SPE-M8-T	5

*1: Also sold separately from 1 piece up. → P.809

● Related Products

SPE-N Plastic Hexagon Nut (PEEK) is available.
→ P.753



● Part number specification

SPE - M5 - 20 - T

Product Code **1** Product Code **2**

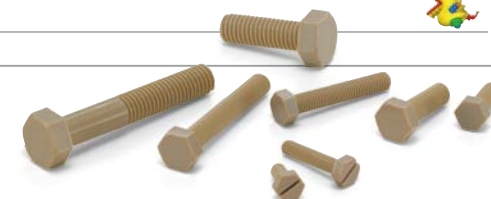
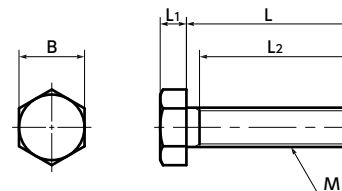
Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

SPE-H Plastic Screw - Hex Head Screws - PEEK

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



● Material/Finish



	SPE-H
Main body	PEEK/Light brown
Heat Resistance Temperature*1	180°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

⚠ Precautions for Use

Because a cumulative pitch difference is created when PEEK screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

- PEEK is a thermoplastic super-engineering plastic with excellent physical and chemical properties.
- These screws have excellent chemical resistance. They are mostly unaffected by chemicals excluding concentrate sulfuric acid, concentrate nitric acid, and concentrate hydrofluoric acid.
- These screws have excellent heat resistance, water resistance, and high heat resistance strength.
- These screws have excellent abrasion, shock, and fatigue resistance.
- They have high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Unit : mm																
Part Number	M	L								B	L1	L2*1	Tension*2 Rupture Load (N)	Torsional*2 Torque (N·m)	Mass (g)	
SPE-M4-H	M4	8	10		15	20	25			7	2.8	Full Thread	765	0.64	0.26 - 0.48	
SPE-M5-H	M5		10		15	20	25	30		8	3.5	Full Thread	1230	1.28	0.46 - 0.88	
SPE-M6-H	M6		10	12	15	20	25	30	35	40	10	4	Full Thread	1670	2.26	
SPE-M8-H	M8		10		15	20	25	30		40	13	5.5	Full Thread	3090	5.98	
SPE-M8-H	M8									50	13	5.5	27	3090	5.98	
SPE-M10-H	M10					20	25	30			17	7	Full Thread	4900	10.8	

*1: If the "L" value is other than the value in parentheses, the screw is full thread.

*2: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

● The M4 has a slot in its head.

Part Number	Qty per pack*1
SPE-M4-H	10
SPE-M5-H	10
SPE-M6-H	10
SPE-M8-H	5
SPE-M10-H	1

*1: Also sold separately from 1 piece up. → P.809

● Related Products

SPE-N Plastic Hexagon Nut (PEEK) is available.
→ P.753



● Part number specification

SPE - M5 - 20 - H

Product Code **1** Product Code **2**

Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

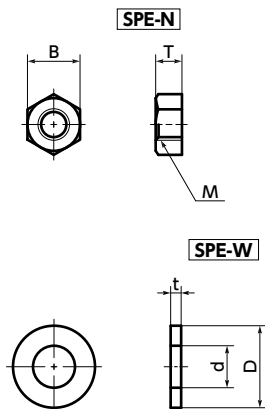
SPE-N/SPE-W

Plastic Screw - Hex Nuts / Washers - PEEK

e-nedzi.com®



WEB Selection Tool WEB CAD Download Chemical-proof



● Material/Finish

RoHS2 Compliant

	SPE-N / SPE-W
Main body	PEEK/Light Brown
Heat Resistance Temperature*1	180°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

● Part number specification

SPE-M5-N



Order in number of packs.

Also sold separately from 1 piece up. ➔ P.809

SPE-N Hex Nuts

Unit : mm

Part Number	M	B	T	Mass (g)	Qty per pack*1
SPE-M2-N	M2	4	1.6	0.02	20
SPE-M2.6-N	M2.6	5	2	0.038	20
SPE-M3-N	M3	5.5	2.4	0.057	20
SPE-M4-N	M4	7	3.2	0.13	20
SPE-M5-N	M5	8	4	0.2	20
SPE-M6-N	M6	10	5	0.4	10
SPE-M8-N	M8	13	6.5	0.91	5
SPE-M10-N	M10	17	8	1.9	5

*1 : Also sold separately from 1 piece up. ➔ P.809

SPE-W Washers

Unit : mm

Part Number	d	D	t	Nominal	Mass (g)	Qty per pack*1
SPE-2-W	2.1	4	0.5	2	0.0059	20
SPE-2.6-W	2.7	6	0.5	2.6	0.015	20
SPE-3-W	3.2	7	0.5	3	0.02	20
SPE-4-W	4.3	9	0.8	4	0.051	20
SPE-5-W	5.3	10	1	5	0.073	20
SPE-6-W	6.4	12.5	1.6	6	0.19	10
SPE-8-W	8.4	17	1.6	8	0.36	5
SPE-10-W	10.5	21	2	10	0.68	5

*1 : Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

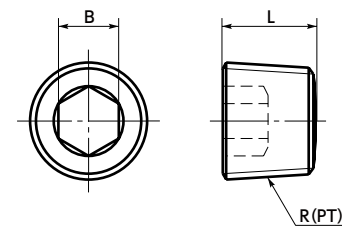
SPE-R

Plastic Screw - Socket Head Cap Screw Plugs - PEEK

e-nedzi.com®



WEB Selection Tool WEB CAD Download Chemical-proof



- PEEK is a thermoplastic super-engineering plastic with excellent physical and chemical properties.
- These screws have excellent chemical resistance. They are mostly unaffected by chemicals excluding concentrate sulfuric acid, concentrate nitric acid, and concentrate hydrofluoric acid.
- These screws have excellent heat resistance, water resistance, and high heat resistance strength.
- These screws have excellent abrasion, shock, and fatigue resistance.
- They have high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws ➔ P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

● Material/Finish

RoHS2 Compliant

	SPE-R
Main body	PEEK/Light Brown
Heat Resistance Temperature*1	180°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

Part Number	R (PT) Nominal of Thread	L	B	Mass (g)	Qty per pack*1
SPE-1-R	R 1/8	8	5	0.45	5
SPE-2-R	R 1/4	11	6	1.1	5
SPE-3-R	R 3/8	12	8	2.1	5

*1 : Also sold separately from 1 piece up. ➔ P.809

● Part number specification

SPE-2-R



Order in number of packs.

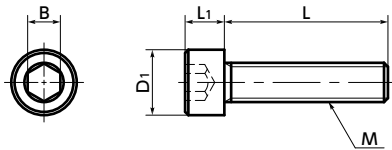
Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPS-C Plastic Screw - Hex Socket Head Cap Screws - PPS

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof

e-nedzi.com



Material/Finish

RoHS2 Compliant

	SPS-C
Main body	PPS (Polyphenylene Sulfide) /Bright Light Brown Glass Fiber 40%
Heat Resistance Temperature*1	200°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PPS has excellent heat resistance and chemical resistance and continuous duty temperature of 200°C. Under 200°C, no oils, fats, or organic solvents dissolve PPS.
- It has high strength, high rigidity, and high heat resistance strength.
- It has high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws → P.735

Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Unit : mm															
Part Number	M	L								D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPS-M3-C	M3	6	8	10	12	15	20			5.5	3	2.5	570	0.36	0.15 - 0.29
SPS-M4-C	M4	6	8	10	12	15	20			7	4	3	980	0.71	0.32 - 0.56
SPS-M5-C	M5		8	10	12	15	20	25	30	8.5	5	4	1570	1.42	0.52 - 1.2
SPS-M6-C	M6			10	12	15	20	25	30	10	6	5	2250	2.11	1 - 2.3
SPS-M8-C	M8			10	12	15	20	25	30	13	8	6	3720	5.29	2.2 - 4.4

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPS-M3-C	20
SPS-M4-C	20
SPS-M5-C	10
SPS-M6-C	10
SPS-M8-C	5

*1: Also sold separately from 1 piece up. → P.809

Part number specification

SPS-M5-20-C

Product Code 1 2 Product Code

Order in number of packs.

Also sold separately from 1 piece up. → P.809

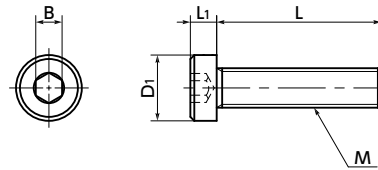
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

e-nedzi.com



SPS-LC Plastic screw - Hex Socket Low Head Bolt - PPS

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof



Material/Finish

RoHS2 Compliant

	SPS-LC
Main body	PPS (Poly Phenylene Sulfide) (Bright Light Brown) (Glass fiber 40%)
Heat resistance temperature*1	200°C

*1: A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.

- Hex socket head cap screw with low head.
- For space-saving of equipment/device and applications with a limited top space.
- PPS is excellent in heat resistance and chemical resistance and continuously used at 200°C. No fat or organic solvent cannot dissolve PPS at 200°C or below.
- High strength, high rigidity and high temperature strength is retained.
- It is highly frame-resistant satisfying V-0 of the UL standard 94.
- Plastic screw properties and precautions for use → P.735

Application

FPD production device / Semiconductor manufacturing device / Print board etching equipment / Metal surface treatment facility / Chemical plant / Transformer / Electric and electronic device / Hydrothermal pump / Chemical pump

Unit : mm															
Part Number	M	L								D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPS-M3-LC	M3	6	8	10	12	16	20			5.5	2	2	492	0.25	0.11 - 0.25
SPS-M4-LC	M4	6	8	10	12	16	20	25		7	2.8	2.5	789	0.46	0.24 - 0.59
SPS-M5-LC	M5		8	10	12	16	20	25	30	8.5	3.5	3	1190	1.04	0.38 - 1.0
SPS-M6-LC	M6			10	12	16	20	25	30	10	4	4	1811	1.70	0.74 - 2.1

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPS-M3-LC	10
SPS-M4-LC	10
SPS-M5-LC	10
SPS-M6-LC	5

*1: Also sold separately from 1 piece up. → P.809

Part number specification

SPS-M5-30-LC

Product Code 1 2 Product Code

Order in number of packs.

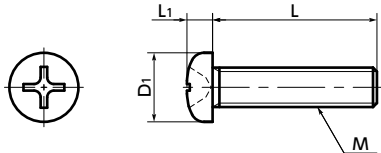
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

SPS-P Plastic Screw - Cross Recessed Pan Head Machine Screws - PPS

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof

e-nedzi.com



Material/Finish

RoHS2 Compliant

	SPS-P
Main body	PPS (Polyphenylene Sulfide) /Bright Light Brown Glass Fiber 40%
Heat Resistance Temperature*1	200°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PPS has excellent heat resistance and chemical resistance and continuous duty temperature of 200°C. Under 200°C, no oils, fats, or organic solvents dissolve PPS.
- It has high strength, high rigidity, and high heat resistance strength.
- It has high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws ➡ P.735

Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Unit : mm

Part Number	M	L	D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPS-M2-P	M2	4 5 6 8 10 12	3.5	1.3	236	0.08	0.03 - 0.062
SPS-M3-P	M3	5 6 8 10 12 15 20 25 30	5.5	2	570	0.36	0.1 - 0.32
SPS-M4-P	M4	6 8 10 12 15 20 25 30	7	2.6	980	0.71	0.22 - 0.61
SPS-M5-P	M5	8 10 12 15 20 25 30	9	3.3	1570	1.42	0.47 - 1
SPS-M6-P	M6	10 12 15 20	10.5	3.9	2250	2.11	0.83 - 1.2

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPS-M2-P	20
SPS-M3-P	20
SPS-M4-P	20
SPS-M5-P	10
SPS-M6-P	10

*1 : Also sold separately from 1 piece up. ➡ P.809

Part number specification

SPS - M5 - 20 - P

Product Code 1 2 Product Code

Order in number of packs.

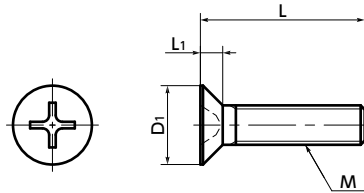
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

SPS-F Plastic Screw PPS / Phillips Cross Recessed Flat Head Machine Screws

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof

e-nedzi.com



Material/Finish

RoHS2 Compliant

	SPS-F
Main body	PPS (Polyphenylene Sulfide) /Bright Light Brown Glass Fiber 40%
Heat Resistance Temperature*1	200°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PPS has excellent heat resistance and chemical resistance and continuous duty temperature of 200°C. Under 200°C, no oils, fats, or organic solvents dissolve PPS.
- It has high strength, high rigidity, and high heat resistance strength.
- It has high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws ➡ P.735

Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Unit : mm

Part Number	M	L	D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPS-M3-F	M3	6 8 10 12 15	6	1.75	570	0.36	0.11 - 0.19
SPS-M4-F	M4	8 10 12 15 20	8	2.3	980	0.71	0.25 - 0.37
SPS-M5-F	M5	10 12 15 20	10	2.8	1570	1.42	0.52 - 0.77
SPS-M6-F	M6	10 12 15 20	12	3.4	2250	2.11	0.83 - 1.2

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPS-M3-F	20
SPS-M4-F	20
SPS-M5-F	10
SPS-M6-F	10

*1 : Also sold separately from 1 piece up. ➡ P.809

Part number specification

SPS - M5 - 20 - F

Product Code 1 2 Product Code

Order in number of packs.

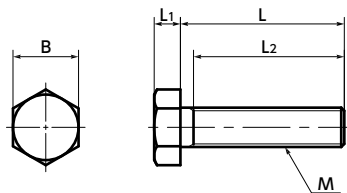
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

SPS-H Plastic Screw - Hex Head Screws - PPS

WEB Selection Tool CAD Download Heat-resistance Chemical-proof

e-nedzi.com®



● Material/Finish

RoHS2 Compliant

	SPS-H
Main body	PPS (Polyphenylene Sulfide) / Bright Light Brown Glass Fiber 40%
Heat Resistance Temperature*1	200°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.



- PPS has excellent heat resistance and chemical resistance and continuous duty temperature of 200°C. Under 200°C, no oils, fats, or organic solvents dissolve PPS.
- It has high strength, high rigidity, and high heat resistance strength.
- It has high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

Unit : mm

Part Number	M	L	B	L1	L2*1	Tension*2 Rupture Load (N)	Torsional*2 Torque (N·m)	Mass (g)
SPS-M4-H	M4	8 10 12 15 20 25 30 40 50	7	2.8	Full Thread	980	0.71	0.33 - 0.62
SPS-M5-H	M5	8 10 12 15 20 25 30 40 50	8	3.5	Full Thread	1570	1.42	0.54 - 1.1
SPS-M6-H	M6	10 12 15 20 25 30 40 50	10	4	Full Thread	2250	2.11	0.96 - 2.1
SPS-M8-H	M8	15 20 25 30 40 50	13	5.5	27(L=50)	3720	5.29	2.4 - 4.8
SPS-M10-H	M10	20 25 30 40 50	17	7	27(L=50)	5890	11.8	5.1 - 8.3
SPS-M12-H	M12	20 25 30 40 50	19	8	Full Thread	7850	20.6	7.3 - 8

*1: If the "L" value is other than the value in parentheses, the screw is full thread.

*2: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPS-M4-H	10
SPS-M5-H	10
SPS-M6-H	10
SPS-M8-H	5
SPS-M10-H	1
SPS-M12-H	1

*1: Also sold separately from 1 piece up. → P.809

● Part number specification

SPS-M5-20-H

Product Code 1 2 Product Code

Order in number of packs.

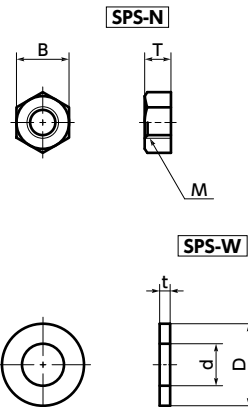
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

SPS-N/SPS-W Plastic Screw - Hex Nuts / Washers - PPS

WEB Selection Tool CAD Download Heat-resistance Chemical-proof

e-nedzi.com®

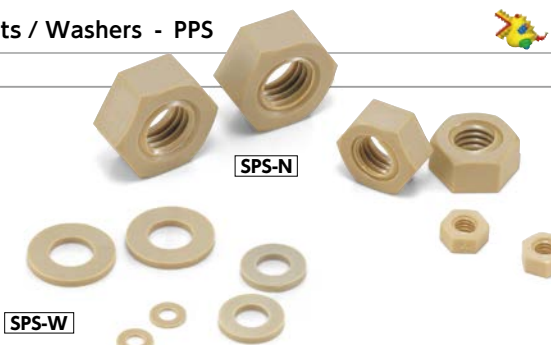


● Material/Finish

RoHS2 Compliant

	SPS-N / SPS-W
Main body	PPS (Polyphenylene Sulfide) / Bright Light Brown Glass Fiber 40%
Heat Resistance Temperature*1	200°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.



- PPS has excellent heat resistance and chemical resistance and continuous duty temperature of 200°C. Under 200°C, no oils, fats, or organic solvents dissolve PPS.
- It has high strength, high rigidity, and high heat resistance strength.
- It has high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, transformers, electrical and electronic equipment, hot water pumps, and chemical pumps

SPS-N Hex Nuts

Unit : mm

Part Number	M	B	T	Mass (g)	Qty per pack*1
SPS-M2-N	M2	4	1.6	0.026	20
SPS-M2.6-N	M2.6	5	2	0.05	20
SPS-M3-N	M3	5.5	2.4	0.07	20
SPS-M4-N	M4	7	3.2	0.17	20
SPS-M5-N	M5	8	4	0.25	20
SPS-M6-N	M6	10	5	0.52	10
SPS-M8-N	M8	13	6.5	1.2	10
SPS-M10-N	M10	17	8	2.4	5
SPS-M12-N	M12	19	10	3.5	5

*1: Also sold separately from 1 piece up. → P.809

SPS-W Washers

Unit : mm

Part Number	d	D	t	Nominal	Mass (g)	Qty per pack*1
SPS-3-W	3.2	7	0.5	3	0.025	20
SPS-4-W	4.3	9	0.8	4	0.065	20
SPS-5-W	5.3	10	1	5	0.094	20
SPS-6-W	6.4	12.5	1.6	6	0.24	10
SPS-8-W	8.4	17	1.6	8	0.46	10
SPS-10-W	10.5	21	2	10	0.86	5
SPS-12-W	13	24	2.5	12	1.3	5

*1: Also sold separately from 1 piece up. → P.809

● Part number specification

SPS-M5-N

Product Code 1

Order in number of packs.

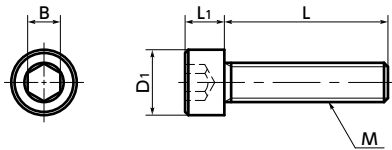
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPA-C Plastic Screw - Hex Socket Head Cap Screws - RENY

WEB Selection Tool WEB CAD Download High strength

e-nedzi.com



Material/Finish



	SPA-C
Main body	RENY*1 (50% Glass Fiber Reinforced Polyamide MXD6) /Black
Heat Resistance Temperature*2	105°C

- *1: RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.
- *2: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- RENY is a thermoplastic super-engineering plastic with excellent tensile and flexural strength.
- Screws have excellent fatigue resistance, cleanliness, and thermal insulation.
- It has a hardness level near that of metal but its mass is 1/5th that of iron.
- The properties and precautions of plastic screws → P.735

Application

Electrical and electronic equipment, insulation and dew condensation prevention for refrigerators and freezers, aquatic applications, electrochemical plating, lightweight applications in automobiles, aircrafts, and spacecrafts

Unit : mm

Part Number	M 	L 										D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPA-M3-C	M3	6	8	10	12	15	20					5.5	3	2.5	635	0.39	0.15 - 0.29
SPA-M4-C	M4	6	8	10	12	15	20					7	4	3	1470	0.79	0.32 - 0.56
SPA-M5-C	M5			10	12	15	20	25	30	35		8.5	5	4	2450	1.77	0.57 - 1.3
SPA-M6-C	M6					15	20	25	30	35	40	10	6	5	3140	2.94	1.2 - 2.3
SPA-M8-C	M8					15	20	25	30	35	40	13	8	6	5100	7.85	2.5 - 4.4

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPA-M3-C	20
SPA-M4-C	20
SPA-M5-C	20
SPA-M6-C	10
SPA-M8-C	10

*1: Also sold separately from 1 piece up. → P.809

Part number specification

SPA - M5 - 30 - C

Product Code 1 2 Product Code

Order in number of packs.

Also sold separately from 1 piece up. → P.809

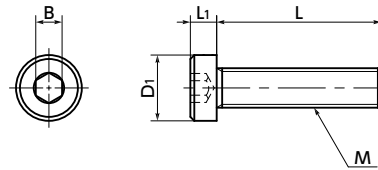
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

e-nedzi.com



SPA-LC Plastic screw - Hex Socket Low Head Bolt - RENY

WEB Selection Tool WEB CAD Download High strength



Material/Finish



	SPA-LC
Main body	RENY*1 (Glass Fiber 50% Reinforced Polyamide MXD6) (Black)
Heat resistance temperature*2	105°C

- *1: RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.
- *2: A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.

- Hex socket head cap screw with low head.
- For space-saving of equipment/device and applications with a limited top space.
- RENY is thermoplastic engineering plastics with excellent tensile strength and bending strength.
- It is highly fatigue-resistant and has excellent creeping and heat insulation properties.
- While it is nearly as strong as metal, its weight is approximately 1/5 of iron.
- Plastic screw properties and precautions for use → P.735

Application

Heat insulation and dew condensation prevention of electric and electronic devices / refrigerating and freezing facilities / Weight saving of offshore instruments, plating facility and automobile, aircraft and space equipment, etc.

Unit : mm

Part Number	M	1	L	2							D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPA-M3-LC	M3	6	8	10	12	16	20				5.5	2	2	740	0.31	0.11 - 0.25
SPA-M4-LC	M4	6	8	10	12	16	20				7	2.8	2.5	1325	0.62	0.24 - 0.48
SPA-M5-LC	M5			10	12	16	20	25	30		8.5	3.5	3	2050	1.20	0.43 - 1.0
SPA-M6-LC	M6					16	20	25	30	40	10	4	4	2798	2.15	0.96 - 2.1

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPA-M3-LC	20
SPA-M4-LC	20
SPA-M5-LC	20
SPA-M6-LC	20

*1: Also sold separately from 1 piece up. → P.809

Part number specification

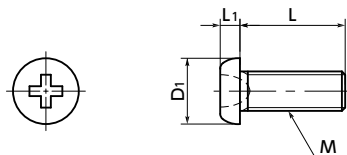
SPA - M5 - 30 - LC

Product Code 1 2 Product Code

Order in number of packs.

Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available



● Material/Finish RoHS2 Compliant

	SPA-MC
Main body	RENY*1 (Glass Fiber 50% Reinforced Polyamide MXD6) (Ivory)
Heat resistance temperature*2	105°C

- *1: RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.
- *2: A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.

- Fine screws for precision devices.
- RENY is thermoplastic engineering plastics with excellent tensile strength and bending strength.
- It is highly fatigue-resistant and has excellent creeping and heat insulation properties.
- While it is nearly as strong as metal, its weight is approximately 1/5 of iron.
- Plastic screw properties and precautions for use
➡ P.735

● Application

Heat insulation and dew condensation prevention of electric and electronic devices / refrigerating and freezing facilities / Weight saving of offshore instruments, plating facility and automobile, aircraft and space equipment, etc.

Unit : mm

Part Number	M	L	D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPA-M1.2-MC	M1.2	2 2.5 3 4	1.8	0.5	80.9	0.018	0.015 - 0.018
SPA-M1.4-MC	M1.4	2 2.5 3 4	2	0.5	61.4	0.018	0.016 - 0.019
SPA-M1.6-MC	M1.6	2.5 3 4 6	2.3	0.5	54.1	0.023	0.019 - 0.026

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPA-M1.2-MC	10
SPA-M1.4-MC	10
SPA-M1.6-MC	10

*1: Also sold separately from 1 piece up. ➡ P.809

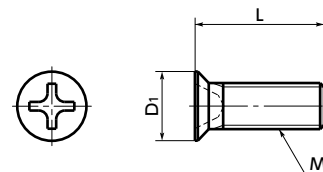
● Part number specification

SPA - M1.6 - 4 - MC

Product Code 1 Product Code 2

Order in number of packs.
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available



- Fine screws for precision devices.
- RENY is thermoplastic engineering plastics with excellent tensile strength and bending strength.
- It is highly fatigue-resistant and has excellent creeping and heat insulation properties.
- While it is nearly as strong as metal, its mass is about 1/5 of iron.
- Plastic screw properties and precautions for use
➡ P.735

● Application

Heat insulation and dew condensation prevention of electric and electronic devices / refrigerating and freezing facilities / Weight saving of offshore instruments, plating facility and automobile, aircraft and space equipment, etc.

● Material/Finish RoHS2 Compliant

	SPA-MF
Main unit	RENY*1 (Glass Fiber 50% Reinforced Polyamide MXD6) (Ivory)
Heat resistance temperature*2	105°C

- *1: RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.
- *2: A value of plastic materials. The allowable operating temperature of the product varies depending on use conditions such as tightening torque.

Unit : mm

Part Number	M	L	D1	Tension Rupture Load*1 (N)	Torsional Torque*1 (N·m)	Mass(g)
SPA-M1.2-MF	M1.2	2.5 4	2.3	98.5	0.022	0.005 - 0.007
SPA-M1.4-MF	M1.4	2.5 4	2.5	127.7	0.039	0.006 - 0.008
SPA-M1.6-MF	M1.6	2.5 4	2.8	127.7	0.056	0.008 - 0.011

*1: Values in chart are for reference only. They are not guaranteed values. The recommended torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPA-M1.2-MF	10
SPA-M1.4-MF	10
SPA-M1.6-MF	10

*1: Also sold separately from 1 piece up.
➡ P.809

● Part number specification

SPA - M1.6 - 4 - MF

Product Code 1 Product Code 2

Place order by a bag.
Also sold separately from 1 piece up. ➡ P.809

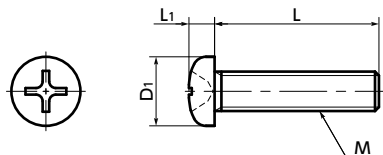
1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPA-P Plastic Screw - Cross Recessed Pan Head Machine Screws - RENY

e-nedzi.com®



WEB Selection Tool WEB CAD Download High strength



● Application

Electrical and electronic equipment, insulation and dew condensation prevention for refrigerators and freezers, aquatic applications, electrochemical plating, lightweight applications in automobiles, aircrafts, and spacecrafts

● Material/Finish



	SPA-P
Main body	RENY*1 (50% Glass Fiber Reinforced Polyamide MXD6) /Ivory
Heat Resistance Temperature*2	105°C

*1: RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.

*2: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- RENY is a thermoplastic super-engineering plastic with excellent tensile and flexural strength.
- Screws have excellent fatigue resistance, cleanliness, and thermal insulation.
- It has a hardness level near that of metal but its mass is 1/5th that of iron.
- The properties and precautions of plastic screws ➔ P.735



Unit : mm																
Part Number	M 	L 									D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N・m)	Mass (g)	
SPA-M1.7-P	M1.7		4								2.5	0.5	80	0.03	0.011	
SPA-M2-P	M2	3	4	5	6	8	10	12			3.5	1.3	303	0.1	0.028 - 0.061	
SPA-M2.6-P	M2.6				6	8	10	12			4.5	1.7	588	0.24	0.07 - 0.11	
SPA-M3-P	M3		4	5	6	8	10	12	15		5.5	2	635	0.39	0.093 - 0.19	
SPA-M4-P	M4			5	6	8	10	12	15		7	2.6	1470	0.79	0.2 - 0.36	
SPA-M5-P	M5					8	10	12	15	20	9	3.3	2450	1.77	0.47 - 0.76	
SPA-M6-P	M6						10	12	15	20	25	10.5	3.9	3140	2.94	0.83 - 1.4

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPA-M1.7-P	50
SPA-M2-P	50
SPA-M2.6-P	50
SPA-M3-P	50
SPA-M4-P	50
SPA-M5-P	20
SPA-M6-P	20

*1: Also sold separately from 1 piece up. ➔ P.809

● Part number specification

SPA - M5 - 20 - P

Product Code 1 2 Product Code

Order in number of packs.

Also sold separately from 1 piece up. ➔ P.809

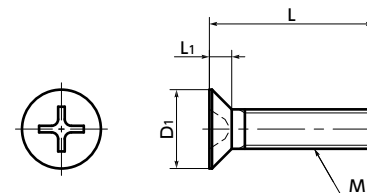
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPA-F Plastic Screw RENY / Phillips Cross Recessed Flat Head Machine Screws

e-nedzi.com®



WEB Selection Tool WEB CAD Download High strength



● Material/Finish



	SPA-F
Main body	RENY*1 (50% Glass Fiber Reinforced Polyamide MXD6) /Ivory
Heat Resistance Temperature*2	105°C

*1: RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.

*2: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.



- RENY is a thermoplastic super-engineering plastic with excellent tensile and flexural strength.
- Screws have excellent fatigue resistance, cleanliness, and thermal insulation.
- It has a hardness level near that of metal but its mass is 1/5th that of iron.
- The properties and precautions of plastic screws ➔ P.735

● Application

Electrical and electronic equipment, insulation and dew condensation prevention for refrigerators and freezers, aquatic applications, electrochemical plating, lightweight applications in automobiles, aircrafts, and spacecrafts

Unit : mm															
Part Number	M 1	L 2									D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N・m)	Mass (g)
SPA-M2-F	M2		6	8	10						4	1.2	303	0.1	0.038 - 0.053
SPA-M3-F	M3	5	6	8	10	12	15				6	1.75	635	0.39	0.1 - 0.19
SPA-M4-F	M4		6	8	10	12	15	20			8	2.3	1470	0.79	0.22 - 0.45
SPA-M5-F	M5				10	12	15	20			10	2.8	2450	1.77	0.52 - 0.76
SPA-M6-F	M6				10	12	15	20			12	3.4	3140	2.94	0.83 - 1.2
SPA-M8-F	M8						15	20	25	30	16	4.4	5100	7.85	2.1 - 3.1

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPA-M2-F	50
SPA-M3-F	50
SPA-M4-F	50
SPA-M5-F	20
SPA-M6-F	20
SPA-M8-F	10

*1: Also sold separately from 1 piece up. ➔ P.809

● Part number specification

SPA - M5 - 20 - F

Product Code 1 2 Product Code

Order in number of packs.

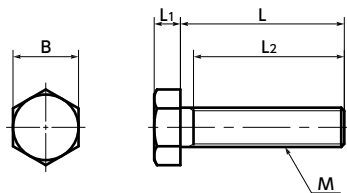
Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPA-H Plastic Screw - Hex Head Screws - RENY

WEB Selection Tool WEB CAD Download High strength

e-nedzi.com®



● Material/Finish

RoHS2 Compliant

	SPA-H
Main body	RENY*1 (50% Glass Fiber Reinforced Polyamide MXD6) /Ivory
Heat Resistance Temperature*2	105°C

*1 : RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.

*2 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- RENY is a thermoplastic super-engineering plastic with excellent tensile and flexural strength.
- Screws have excellent fatigue resistance, cleanliness, and thermal insulation.
- It has a hardness level near that of metal but its mass is 1/5th that of iron.
- The properties and precautions of plastic screws ➡ P.735

● Application

Electrical and electronic equipment, insulation and dew condensation prevention for refrigerators and freezers, aquatic applications, electrochemical plating, lightweight applications in automobiles, aircrafts, and spacecrafts

															Unit : mm	
Part Number	M	L									B	L ₁	L ₂ *1	Tension*2 Rupture Load (N)	Torsional*2 Torque (N·m)	Mass (g)
SPA-M5-H	M5			15	20	25	30				8	3.5	Full Thread	2450	1.77	0.72 - 1.1
SPA-M6-H	M6	10	12	15	20	25	30	35	40		10	4	Full Thread	3140	2.94	0.95 - 2.1
SPA-M8-H	M8			15	20	25	30	35	40	50	13	5.5	27(L=50)	5100	7.85	2.3 - 4.8
SPA-M10-H	M10					25	30	35	40	50	17	7	27(L=50)	6900	12.75	5.6 - 8.3

*1 : If the "L" value is other than the value in parentheses, the screw is full thread.

*2 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPA-M5-H	20
SPA-M6-H	10
SPA-M8-H	10
SPA-M10-H	5

*1 : Also sold separately from 1 piece up. ➡ P.809

● Part number specification

SPA - M5 - 30 - H

Product Code 1 2 Product Code

Order in number of packs.

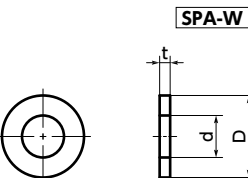
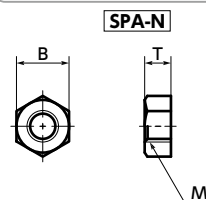
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPA-N/SPA-W Plastic Screw - Hex Nuts / Washers - RENY

WEB Selection Tool WEB CAD Download High strength

e-nedzi.com®



● Material/Finish

RoHS2 Compliant

	SPA-N / SPA-W
Main body	RENY*1 (50% Glass Fiber Reinforced Polyamide MXD6) /Ivory
Heat Resistance Temperature*2	105°C

*1 : RENY is a registered trademark of Mitsubishi Engineering-Plastics Corporation.

*2 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

SPA-N Hex Nuts

Unit : mm

Part Number	M	B	T	Mass (g)	Qty per pack*1
SPA-M2-N	M2	4	1.6	0.027	50
SPA-M2.6-N	M2.6	5	2	0.05	50
SPA-M3-N	M3	5.5	2.4	0.072	50
SPA-M4-N	M4	7	3.2	0.17	50
SPA-M5-N	M5	8	4	0.25	20
SPA-M6-N	M6	10	5	0.51	20
SPA-M8-N	M8	13	6.5	1.1	20
SPA-M10-N	M10	17	8	2.4	10
SPA-M12-N	M12	19	10	3.5	10
SPA-M16-N	M16	24	18	8.9	5

*1 : Also sold separately from 1 piece up. ➡ P.809

SPA-W Washers

Unit : mm

Part Number	d	D	t	Nominal	Mass (g)	Qty per pack*1
SPA-3-W	3.2	7	0.5	3	0.025	50
SPA-4-W	4.3	9	0.8	4	0.065	50
SPA-5-W	5.3	10	1	5	0.093	50
SPA-6-W	6.4	12.5	1.6	6	0.24	20
SPA-8-W	8.4	17	1.6	8	0.45	20
SPA-10-W	10.5	21	2	10	0.86	20
SPA-12-W	13	24	2.5	12	1.3	20
SPA-16-W	17	30	3	16	2.4	10

*1 : Also sold separately from 1 piece up. ➡ P.809

● Part number specification

SPA-M5-N

1

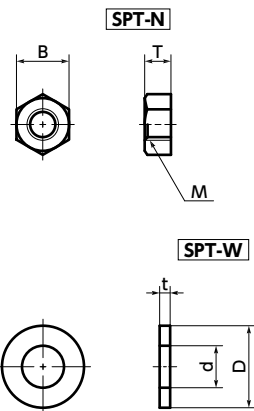
Order in number of packs.

Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPT-N / SPT-W Plastic Screw - Hex Nuts / Washers - PTFE : Teflon

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof



Material/Finish RoHS2 Compliant

	SPT-N / SPT-W
Main body	PTFE (Tetrafluoroethylene : Teflon*1) /White
Heat Resistance Temperature*2	260°C

*1 : Teflon is a registered trademark of DuPont.
*2 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.



- PTFE (Teflon) is a plastic with excellent heat resistance, electrical properties, chemical resistance, and abrasion resistance. Most chemicals cannot penetrate it.
- It has high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws ➡ P.735

Application
FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, and chemical plants

SPT-N Hex Nuts Unit : mm					
Part Number	M	B	T	Mass (g)	Qty per pack
SPT-M3-N	M3	5.5	2.4	0.09	1
SPT-M4-N	M4	7	3.2	0.21	1
SPT-M5-N	M5	8	4	0.37	1
SPT-M6-N	M6	10	5	0.67	1
SPT-M8-N	M8	13	6.5	1.5	1
SPT-M10-N	M10	17	9	2.8	1
SPT-M12-N	M12	19	10	4.2	1

SPT-W Washers						Unit : mm
Part Number 	d	D	t	Nominal	Mass (g)	Qty per pack
SPT-3-W	3.2	7	0.5	3	0.032	1
SPT-4-W	4.3	9	0.8	4	0.082	1
SPT-5-W	5.3	10	1	5	0.12	1
SPT-6-W	6.4	12.5	1.6	6	0.3	1
SPT-8-W	8.4	17	1.6	8	0.57	1
SPT-10-W	10.5	21	2	10	1.1	1
SPT-12-W	13	24	2.5	12	1.7	1

Part number specification

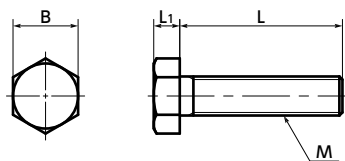
SPT-M8-N

1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 pc. in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

SPT-H Plastic Screw - Hex Head Screws - PTFE : Teflon

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof



Material/Finish RoHS2 Compliant

	SPT-H
Main body	PTFE (Tetrafluoroethylene : Teflon*1) /White
Heat Resistance Temperature*2	260°C

*1 : Teflon is a registered trademark of DuPont.
*2 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PTFE (Teflon) is a plastic with excellent heat resistance, electrical properties, chemical resistance, and abrasion resistance. Most chemicals cannot penetrate it.
- It has high incombustibility that meets V-0 of UL 94.
- The properties and precautions of plastic screws ➡ P.735

Application
FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, and chemical plants

Unit : mm															
Part Number	M 	L 										B	L ₁	Tension* ¹ Rupture Load (N)	Mass (g)
SPT-M3-H	M3	6	8	10	12	16	20					5.5	2	45	0.18 - 0.35
SPT-M4-H	M4		8	10	12	16	20	25				7	2.8	79	0.41 - 0.77
SPT-M5-H	M5			10	12	16	20	25	30			8	3.5	128	0.74 - 1.4
SPT-M6-H	M6			10	12	16	20	25	30	40		10	4	181	1.2 - 2.6
SPT-M8-H	M8					16	20	25	30	40	50	13	5.5	329	3 - 6
SPT-M10-H	M10						20	25	30	40		17	7	522	6.3 - 9
SPT-M12-H	M12							25	30	40	50 60	19	8	759	10 - 17

*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SPT-M3-H	1
SPT-M4-H	1
SPT-M5-H	1
SPT-M6-H	1
SPT-M8-H	1
SPT-M10-H	1
SPT-M12-H	1

Part number specification

SPT-M8-40-H

Product Code

1

2

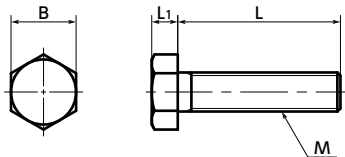
Product Code

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
1 unit in 1 bag	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

SPV-H Plastic Screw PVDF / Hex Head Screws

WEB Selection Tool CAD Download Chemical-proof

e-nedzi.com



Material/Finish

RoHS2 Compliant

	SPV-H
Main body	PVDF (Polyvinylidene Fluoride) (Milky White)
Heat resistance temperature*1	150°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PVDF has excellent corrosion resistance against strong acids and organic solvents as well as halogen compounds such as hydrogen sulfide and bromine.
- It can be used in atmospheres in which metal and PVC (polyvinyl chloride) cannot be used.
- Max. Operating Temperature*1 (min./max.): 40/150 deg C
- Its tensile strength equals or exceeds PVC, and its impact strength is 3 times that of PVC.
- These screws comply with food hygiene laws. It is proven to be nontoxic and odorless.
- It is self-extinguishing and has excellent incombustibility.
- The properties and precautions of plastic screws → P.735

Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, and food industry machines

Unit : mm										
Part Number	M 	L 				B	L ₁	Tension* ¹ Rupture Load (N)	Torsional* ¹ Torque (N·m)	Mass (g)
SPV-M5-H	M5	10	15	20	25	8	3.5	640	0.64	0.64 - 1.1
SPV-M6-H	M6	10	15	20		10	4	940	0.88	1 - 1.4
SPV-M8-H	M8		15	20	25	13	5.5	1810	2.65	2.5 - 3.3

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPV-M5-H	20
SPV-M6-H	10
SPV-M8-H	10

*1 : Also sold separately from 1 piece up. → P.809

Part number specification

SPV - M5 - 15 - H

Product Code 1 2 Product Code

Order in number of packs.

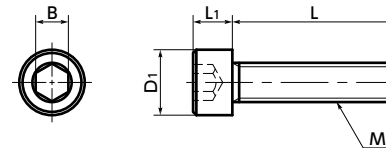
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

SPV-C Plastic Screw - Hex Socket Head Cap Screws - PVDF

WEB Selection Tool CAD Download Chemical-proof

e-nedzi.com



Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, chemical plants, and food industry machines

Material/Finish

RoHS2 Compliant

	SPV-C
Main body	PVDF (Polyvinylidene Fluoride) (Milky White)
Heat resistance temperature*1	150°C

*1 : This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PVDF has excellent chemical resistance against strong acids and organic solvents as well as halogen compounds such as hydrogen sulfide and bromine.
- It can be used in atmospheres in which metal and PVC (polyvinyl chloride) cannot be used.
- Max. Operating Temperature*1 (min./max.): -40/150 deg C
- Its tensile strength equals or exceeds that of PVC, and its impact strength is 3 times that of PVC.
- These screws comply with food hygiene laws. It is proven to be nontoxic and odorless.
- It is self-extinguishing and has excellent incombustibility.
- The properties and precautions of plastic screws → P.735

Unit : mm												
Part Number	M 	L 					D1	L1	B	Tension*1 Rupture Load (N)	Torsional*1 Torque (N・m)	Mass (g)
SPV-M5-C	M5	10	15	20	25	30	8.5	5	4	640	0.64	0.62 - 1.3
SPV-M6-C	M6	10	15	20	25		10	6	5	940	0.88	1.1 - 1.7

*1 : Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPV-M5-C	20
SPV-M6-C	10

*1 : Also sold separately from 1 piece up. → P.809

Part number specification

SPV - M5 - 15 - C

Product Code 1 2 Product Code

Order in number of packs.

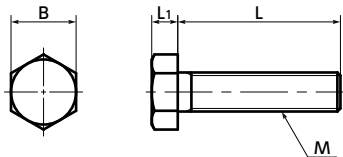
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

SPP-H Plastic Screw - Hex Head Screws - PP

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



Material/Finish

RoHS2 Compliant

	SPP-H
Main body	PP (Polypropylene) / Milky White
Heat Resistance Temperature*1	65°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

⚠ Precautions for Use

Because a cumulative pitch difference is created when PP screws are manufactured, use these screws with nuts. If a nut is not used, use a 20 mm or less fit with female thread.

- PP plastic has excellent resistance to chemicals such as strong acids and organic solvents.
- It is used as a replacement for vinyl chloride type plastic screws.
- The properties and precautions of plastic screws → P.735

Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, and chemical plants

Unit : mm

Part Number	M	L	B	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPP-M4-H	M4	10 12 15 20 25	7	2.8	270	0.23	0.2 - 0.34
SPP-M5-H	M5	10 12 15 20 25 30	8	3.5	440	0.51	0.32 - 0.62
SPP-M6-H	M6	10 12 15 20 25 30	10	4	620	0.8	0.52 - 0.94
SPP-M8-H	M8	10 12 15 20 25 30 40	13	5.5	1100	2.2	1.1 - 2.2
SPP-M10-H	M10	20 25 30 40	17	7	1800	3.4	2.8 - 4

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

Part Number	Qty per pack*1
SPP-M4-H	20
SPP-M5-H	20
SPP-M6-H	10
SPP-M8-H	10
SPP-M10-H	10

*1: Also sold separately from 1 piece up. → P.809

Related Products

SPP-N Plastic Hexagon Nut (PP) is available.
→ P.774



Part number specification

SPP-M4-25-H

Product Code **1** Product Code **2**

Order in number of packs.

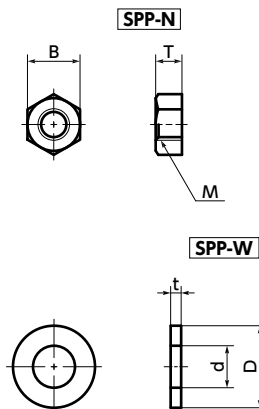
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

SPP-N/SPP-W Plastic Screw - Hex Nuts / Washers - PP

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



Material/Finish

RoHS2 Compliant

	SPP-N / SPP-W
Main body	PP (Polypropylene) / Milky White
Heat Resistance Temperature*1	65°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- PP plastic has excellent resistance to chemicals such as strong acids and organic solvents.
- It is used as a replacement for vinyl chloride type plastic screws.
- The properties and precautions of plastic screws → P.735

Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, and chemical plants

SPP-N Hex Nuts

Unit : mm

Part Number	M	B	T	Mass (g)	Qty per pack*1
SPP-M4-N	M4	7	3.2	0.092	20
SPP-M5-N	M5	8	4	0.14	20
SPP-M6-N	M6	10	5	0.28	10
SPP-M8-N	M8	13	6.5	0.63	10
SPP-M10-N	M10	17	8	1.3	10

*1: Also sold separately from 1 piece up. → P.809

SPP-W Washers

Unit : mm

Part Number	d	D	t	Nominal	Mass (g)	Qty per pack*1
SPP-4-W	4.3	9	0.8	4	0.036	20
SPP-5-W	5.3	10	1	5	0.051	20
SPP-6-W	6.4	12.5	1.6	6	0.13	10
SPP-8-W	8.4	17	1.6	8	0.25	10
SPP-10-W	10.5	21	2	10	0.47	10

*1: Also sold separately from 1 piece up. → P.809

Part number specification

SPP-M4-N**1**

Order in number of packs.

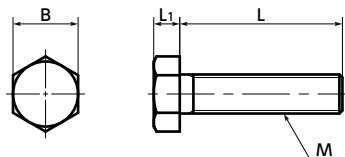
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SPVC-H Plastic Screw - Hex Head Screws - H - PVC

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



● Material/Finish

	SPVC-H
Main body	H-PVC(Hard Polyvinyl Chloride)*1
Heat Resistance Temperature*2	35°C

*1 : Does not comply with the RoHS Directive. These products contain lead.

*2 : This is the value for the plastic material.The maximum operating temperature of the product changes with performance conditions such as tightening torque.

- These products have excellent chemical resistance against strong acids and organic solvents as well as halogen compounds such as hydrogen sulfide and bromine.

- They can be used in atmospheres in which metal and PVC (polyvinyl chloride) cannot be used.

- Max. Operating Temperature*2 (min./max.): -10/35 deg C

- Two colors, ivory and gray, are available. 

IV ————— Ivory

GR ————— Gray

- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, and chemical plants

Unit : mm														
Part Number	M 	L 									B	L ₁	Tension* ¹ Rupture Load (N)	Mass (g)
SPVC-M4-H	M4	10	12	16	20	25	30	35			7	2.8	200	0.3 - 0.65
SPVC-M5-H	M5	10	12	16	20	25	30	35	40		8	3.5	400	0.48 - 1.1
SPVC-M6-H	M6	10	12	16	20	25	30	35	40	50	10	4	670	0.78 - 2

*1 : Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SPVC-M4-H	1
SPVC-M5-H	1
SPVC-M6-H	1

● Part number specification

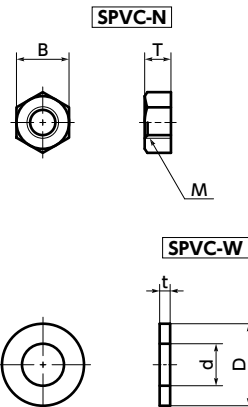
SPVC-M5-30-H-IVProduct Code   Product Code 

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Available / Add'l charge	Not Available	Please feel free to contact us

SPVC-N/SPVC-W Plastic Screw - Cross Recessed Pan Head Machine Screws - PPS

WEB Selection Tool WEB CAD Download Chemical-proof

e-nedzi.com®



- These products have excellent chemical resistance against strong acids and organic solvents as well as halogen compounds such as hydrogen sulfide and bromine.

- They can be used in atmospheres in which metal and PVC (polyvinyl chloride) cannot be used.

- Max. Operating Temperature*2 (min./max.): -10/35 deg C

- Two colors, ivory and gray, are available. 

IV ————— Ivory

GR ————— Gray

- The properties and precautions of plastic screws → P.735

● Application

FPD production equipment, semiconductor devices, printed circuit board etching devices, metallic surface treatment equipment and facilities, and chemical plants

● Material/Finish

	SPVC-N / SPVC-W
Main body	H-PVC(Hard Polyvinyl Chloride)*1
Heat Resistance Temperature*2	35°C

*1 : Does not comply with the RoHS Directive. These products contain lead.

*2 : This is the value for the plastic material.The maximum operating temperature of the product changes with performance conditions such as tightening torque.

Unit : mm						
Part Number 	M	B	T	Mass (g)	Qty per pack	
SPVC-M4-N	M4	7	3.2	0.14	1	
SPVC-M5-N	M5	8	4.7	0.24	1	
SPVC-M6-N	M6	10	5.2	0.44	1	

Unit : mm						
Part Number	d	D	t	Nominal	Mass (g)	Qty per pack
SPVC-4-W	4.3	9	0.8	4	0.053	1
SPVC-5-W	5.3	10	1	5	0.077	1
SPVC-6-W	6.4	12.5	1.6	6	0.2	1

● Part number specification

SPVC-M5-N-IV 

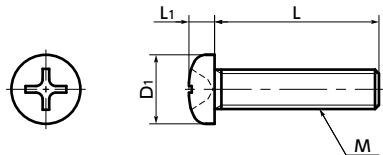
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

SPC-P Plastic Screw - Cross Recessed Pan Head Machine Screws - PC

WEB Selection Tool

CAD Download

e-nedzi.com®



● Material/Finish

RoHS2 Compliant

	SPC-P
Main body	PC (Polycarbonate) (Transparent)*1
Heat Resistance Temperature*2	115°C

*1: SPC-M1.7-3-P SPC-M1.7-4-P are black.

*2: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.



- PC (polycarbonate) has the highest shock resistance of engineering plastics.
- Max. Operating Temperature*2 (min./max.): -40/115 deg C
- PC has low water absorbency and excellent weather resistance.
- The properties and precautions of plastic screws → P.735

● Application

Electrical and electronic equipment and automobiles

Unit : mm

Part Number	M	1	L	2											D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)
SPC-M1.7-P	M1.7	3	4												2.5	0.5	47	0.02	0.0066 - 0.0085
SPC-M2-P	M2	3	4	5	6										3.5	1.3	112	0.05	0.02 - 0.028
SPC-M3-P	M3			5	6	8	10	12	15						5.5	2	300	0.22	0.075 - 0.14
SPC-M4-P	M4				6	8	10	12	15	20					7	2.6	515	0.54	0.16 - 0.27
SPC-M5-P	M5						10	12	15	20	25				9	3.3	750	1.03	0.38 - 0.56
SPC-M6-P	M6						10	12	15	20	25				10.5	3.9	1080	1.37	0.6 - 1

*1: Values in chart are for reference only. They are not guaranteed values. The recommendation torque is 50% of the torsional torque.

● M1.7 is black.

Part Number	Qty per pack*1
SPC-M1.7-P	50
SPC-M2-P	50
SPC-M3-P	50
SPC-M4-P	50
SPC-M5-P	50
SPC-M6-P	20

*1: Also sold separately from 1 piece up. → P.809

● Part number specification

SPC-M5-20-P

Product Code 1 2 Product Code

Order in number of packs.

Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

NBK

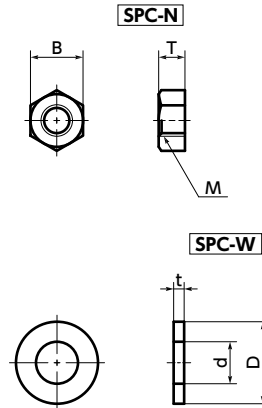
https://www.nbk1560.com

SPC-N / SPC-W Plastic Screw - Hex Nuts / Washers - PC

WEB Selection Tool

CAD Download

e-nedzi.com®



- PC (polycarbonate) has the highest shock resistance of engineering plastics.
- Max. Operating Temperature*1 (min./max.): -40/115 deg C
- PC has low water absorbency and excellent weather resistance.
- The properties and precautions of plastic screws → P.735

● Application

Electrical and electronic equipment and automobiles

● Material/Finish

RoHS2 Compliant

	SPC-N / SPC-W
Main body	PC (Polycarbonate) (Transparent)
Heat Resistance Temperature*1	115°C

*1: This is the value for the plastic material. The maximum operating temperature of the product changes with performance conditions such as tightening torque.

SPC-N Hex Nuts

Unit : mm

Part Number	1	M	B	T	Mass (g)	Qty per pack*1
SPC-M2-N		M2	4	1.6	0.019	50
SPC-M3-N		M3	5.5	2.4	0.052	50
SPC-M4-N		M4	7	3.2	0.12	50
SPC-M5-N		M5	8	4	0.18	50
SPC-M6-N		M6	10	5	0.37	20

*1: Also sold separately from 1 piece up. → P.809

SPC-W Washers

Unit : mm

Part Number	d	D	t	Nominal	Mass (g)	Qty per pack*1
SPC-2-W	2.1	4	0.5	2	0.0055	100
SPC-3-W	3.3	8	0.8	3	0.04	100
SPC-4-W	4.5	10	0.8	4	0.06	100
SPC-5-W	5.5	12	0.8	5	0.086	100
SPC-6-W	6.5	13	1	6	0.12	50

*1: Also sold separately from 1 piece up. → P.809

● Part number specification

SPC-M4-N

1

Order in number of packs.

Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

NBK

https://www.nbk1560.com

Selection Navigator



CAD Data Download

<https://www.nbk1560.com/>



Washers

	Eccentric Lock Washer™	Adjustment Washer				Locking and Sealing Rings
Part Number	SWAS-EW	SWA-AW	SWA-AWEL	SWAS-AW	SWAS-AWBK	SWH / SWC
Shape						
Page	P.781	P.783	P.785	P.787	P.789	P.790
Materials	SUS304	S45C Ferrosoferric Oxide Film	S45C Electroless nickel plating	SUS304	SUS304 Stainless Steel Black	Polyamide (White)
Characteristics	Vibration resistant treatment with commercial hexagon nut	A variety of outside diameters and thickness to choose from	A variety of outside diameters and thickness to choose from	A variety of outside diameters and thickness to choose from	Antireflection Corrosion-resistant	For Hex Head Screws For Socket Head Cap Screws
Size	Nominal diameter 6 to 12	Nominal diameter 2 to 16	Nominal diameter 2 to 16	Nominal diameter 2 to 16	Nominal diameter 3 to 16	Nominal diameter 3 to 12

	Ribbed Lock Washers	Sealing Washers	Spherical Washers	High Intensity Flat Washers	Bezel Washers
Part Number	SWR	SWS	SQW / SQWS	SWF	SWBS
Shape					
Page	P.791	P.793	P.794	P.795	P.796
Materials	Equivalent to S70CM SUS304	SUS304	S45C SUS304	SCM435	SUS303
Characteristics	Vibration Resistant	Air and Liquid Leak Prevention	Support Surface Tilt to 2°	Vibration Resistant High strength	For Flat Screws
Size	Nominal diameter 2 to 20	Nominal diameter 3 to 16	Nominal diameter 3 to 12	Nominal diameter 6 to 16	Nominal diameter 4 to 8

Hex Lock Nuts • Cover Caps

	Hex Lock Nuts	Cover Caps	
Part Number	SWUS	SCC	SCH
Shape			
Page	P.797	P.798	P.799
Materials	SUS304	Polypropylene	Polyethylene
Characteristics	Vibration Resistant	For Socket Head Cap Screws	For Hex Head
Size	M6 - M12	For M5 - M20	For M5 - M16

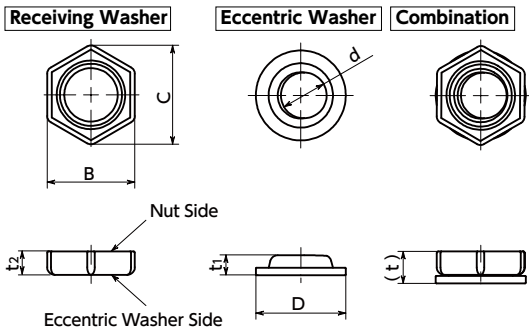
SWAS-EW Eccentric Lock Washer™ NEW

WEB Selection Tool

CAD Download

SUS Stainless steel

Vibration resistant treatment



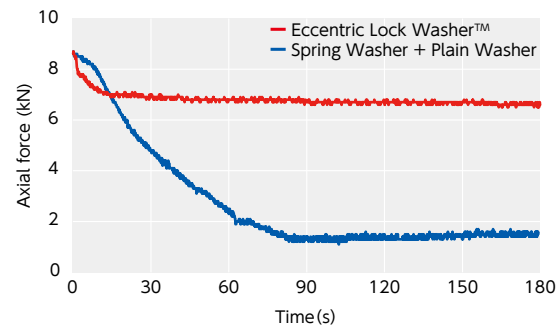
⚠ Precautions for Use

- Dedicated for hexagon nuts. Do not use on head side of hexagon head bolts.
- After tightening, use bolts with length sufficient to ensure screw thread pitches of 3 or more extending beyond the hexagon nuts.
- Do not use with other washers such as plain washers.
- When using half-thread bolts, confirm that the eccentric washer is in the screw thread part.
- Bolt damage may ensue due to product properties.
- Part number specification

SWAS-10-EW



- Vibration resistant treatment effect can be achieved simply by using commercially available hexagon nuts.
- Hexagon nuts can be tightened by hand until tightening force applies, for simple mounting.
- Use the receiving washer and eccentric washer as a set.
- Passes NAS-type vibration tests (NAS3350).
- Vibration resistant treatment effect has also been confirmed with the Junker test.



• Test conditions

Bolt size: M10 - 40
 Distance between washer surfaces: 24mm
 Amplitude: $\pm 0.43\text{mm}$
 Vibration: 3.3Hz
 Test time: 180 sec

• Application

Vibration resistant treatment

• Material/Finish



	SWAS-EW
Receiving Washer	SUS304
Eccentric Washer	SUS304

Unit : mm

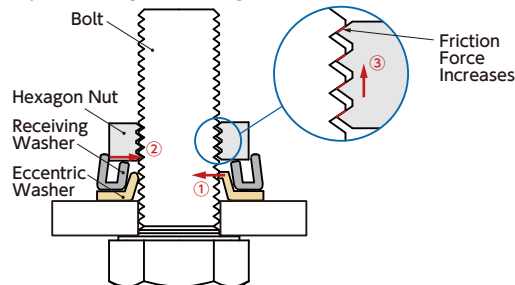
Part Number	Nominal	D	d	B	C	t ₁	t ₂	t	Reference tightening torque (N·m)	Mass (g)	Qty per pack
SWAS-6-EW	6	12	6.05	11.6	13.3	2.65	2.9	3.9	10	1.5	100
SWAS-8-EW	8	17	8.1	15	17.3	3.3	3.9	5.1	28	3.5	100
SWAS-10-EW	10	21	10.2	19.8	22.8	4.05	4.8	6.2	55	7.2	100
SWAS-12-EW	12	24	12.2	22	25.4	4.5	6	7.5	90	11	100

- The minimum order quantity is 1 set. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

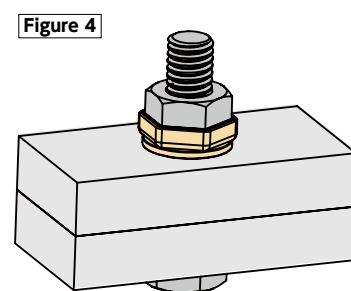
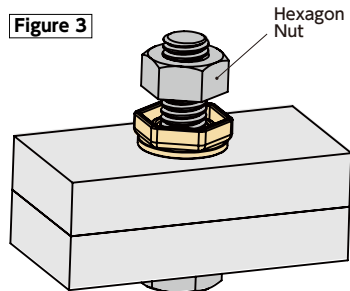
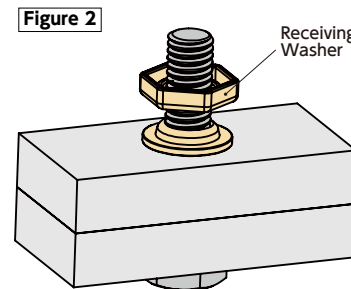
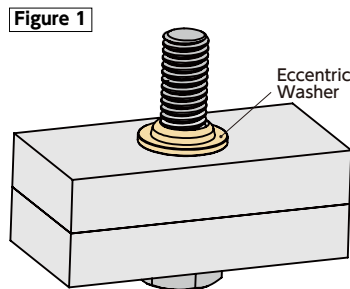
• Structure

- ① Tightening hexagon nuts causes eccentric washers to bite into bolts.
- ② Receiving washers press hexagon nuts into bolts.
- ③ Receiving washers then press hexagon nuts upward, increasing friction between hexagon nuts and bolts and preventing loosening.



• Installation Method

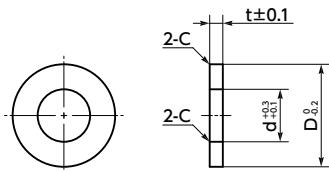
- ① Mount eccentric washers with convex side upward. **Figure 1**
- ② Mount receiving washers with concave side upward. **Figure 2**
- ③ Screw in hexagon nuts until they lightly contact receiving washers. **Figure 3**
- ④ Check that receiving washers and hexagon nuts are mated, and tighten. **Figure 4**





SWA-AW Adjust Washer - Steel - Ferrosoferric Oxide Film

WEB Selection Tool WEB CAD Download



*D=16 or less : C0.2 or less
D=20 or more : C0.5 or less

SWA-AW



SWA-AWEL

- There is a variety of outside diameters and thickness relative to normal plain washers.
- For securing seating surface on the long hole position and engagement of materials with low marginal seating surface pressure such as aluminum and resin.
- For adjustment of cumulative error in assembly.
- Application
Height adjustment / Seating surface fall prevention

• Material/Finish	RoHS2 Compliant
	SWA-AW
Main body	S45C Ferrosoferric Oxide Film (Black)

Part Number	d 1	D 2	t 3					Mass (g)	Qty*1 per pack
			1	1.5	2	3	5		
SWA-2-8-AW	2	8	●		●			0.38 - 0.75	10
SWA-3-8-AW	3	8	●		●			0.35 - 0.69	10
SWA-4-8-AW	4	8	●	●	●			0.3 - 0.6	10
SWA-4-10-AW	4	10	●		●	●		0.53 - 1.6	10
SWA-4-12-AW	4	12	●		●	●		0.8 - 2.4	10
SWA-4-15-AW	4	15			●	●		2.6 - 3.9	10
SWA-5-8-AW	5	8	●	●	●			0.25 - 0.49	10
SWA-5-10-AW	5	10	●		●	●		0.47 - 1.4	10
SWA-5-12-AW	5	12	●		●	●		0.74 - 2.2	10
SWA-5-15-AW	5	15			●	●		2.5 - 3.7	10
SWA-5-16-AW	5	16			●	●		2.9 - 4.3	10
SWA-5-20-AW	5	20	●		●			2.3 - 4.7	10
SWA-6-10-AW	6	10	●		●	●		0.4 - 1.2	10
SWA-6-12-AW	6	12	●		●	●		0.68 - 2	10
SWA-6-15-AW	6	15			●	●		2.4 - 3.5	10
SWA-6-16-AW	6	16			●	●	●	2.7 - 6.8	10
SWA-6-20-AW	6	20	●		●	●	●	2.3 - 11	10
SWA-6-25-AW	6	25			●	●	●	7.3 - 18	10

*1 : Also sold separately from 1 piece up. ➡ P.809

Part Number	d 1	D 2	t 3					Mass (g)	Qty*1 per pack
			1	1.5	2	3	5		
SWA-8-12-AW	8	12			●	●	●	1 - 2.5	10
SWA-8-16-AW	8	16			●	●	●	2.4 - 6	10
SWA-8-20-AW	8	20			●	●	●	4.2 - 10	10
SWA-8-25-AW	8	25			●	●	●	7 - 17	10
SWA-8-30-AW	8	30			●	●	●	10 - 26	10
SWA-10-12-AW	10	12			●	●	●	0.55 - 1.4	10
SWA-10-16-AW	10	16				●	●	2.9 - 4.8	10
SWA-10-20-AW	10	20			●	●	●	3.7 - 9.3	10
SWA-10-25-AW	10	25				●	●	9.8 - 16	10
SWA-10-30-AW	10	30				●	●	15 - 25	10
SWA-12-16-AW	12	16				●	●	2.1 - 3.5	10
SWA-12-20-AW	12	20			●	●	●	3.2 - 8	10
SWA-12-25-AW	12	25				●	●	9 - 15	10
SWA-12-30-AW	12	30				●	●	14 - 23	10
SWA-16-20-AW	16	20			●	●	●	1.8 - 4.5	10
SWA-16-25-AW	16	25				●	●	6.9 - 11	10
SWA-16-30-AW	16	30				●	●	12 - 20	10

*1 : Also sold separately from 1 piece up. ➡ P.809

• Part number specification

SWA-2-8-1-AW

Product Code 1 2 3 Product Code

Select the t dimension from the dimension list.

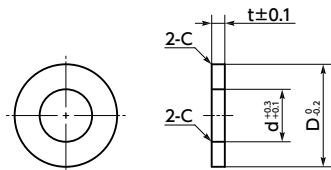
1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available



SWA-AWEL Adjust Washer - Steel - Electroless Nickel Plating

WEB Selection Tool

WEB CAD Download



*D=16 or less : C0.2 or less
D=20 or more : C0.5 or less



- There is a variety of outside diameters and thickness relative to normal plain washers.
- For securing seating surface on the long hole position and engagement of materials with low marginal seating surface pressure such as aluminum and resin.
- For adjustment of cumulative error in assembly.
- Application
Height adjustment / Seating surface fall prevention
- Material/Finish
S45C
Electroless Nickel Plating



Part Number	d 1	D 2	t 3					Mass (g)	Qty*1 per pack
			1	1.5	2	3	5		
SWA-2-8-AWEL	2	8	●		●			0.38 - 0.75	10
SWA-3-8-AWEL	3	8	●		●			0.35 - 0.69	10
SWA-4-8-AWEL	4	8	●	●	●			0.3 - 0.6	10
SWA-4-10-AWEL	4	10	●		●	●		0.53 - 1.6	10
SWA-4-12-AWEL	4	12	●		●	●		0.8 - 2.4	10
SWA-4-15-AWEL	4	15			●	●		2.6 - 3.9	10
SWA-5-8-AWEL	5	8	●	●	●			0.25 - 0.49	10
SWA-5-10-AWEL	5	10	●		●	●		0.47 - 1.4	10
SWA-5-12-AWEL	5	12	●		●	●		0.74 - 2.2	10
SWA-5-15-AWEL	5	15			●	●		2.5 - 3.7	10
SWA-5-16-AWEL	5	16			●	●		2.9 - 4.3	10
SWA-5-20-AWEL	5	20	●		●			2.3 - 4.7	10
SWA-6-10-AWEL	6	10	●		●	●		0.4 - 1.2	10
SWA-6-12-AWEL	6	12	●		●	●		0.68 - 2	10
SWA-6-15-AWEL	6	15			●	●		2.4 - 3.5	10
SWA-6-16-AWEL	6	16			●	●	●	2.7 - 6.8	10
SWA-6-20-AWEL	6	20	●		●	●	●	2.3 - 11	10
SWA-6-25-AWEL	6	25			●	●	●	7.3 - 18	10

*1 : Also sold separately from 1 piece up. ➔ P.809

Part Number	d 1	D 2	t 3					Mass (g)	Qty*1 per pack
			1	1.5	2	3	5		
SWA-8-12-AWEL	8	12			●	●	●	1 - 2.5	10
SWA-8-16-AWEL	8	16			●	●	●	2.4 - 6	10
SWA-8-20-AWEL	8	20			●	●	●	4.2 - 10	10
SWA-8-25-AWEL	8	25			●	●	●	7 - 17	10
SWA-8-30-AWEL	8	30			●	●	●	10 - 26	10
SWA-10-12-AWEL	10	12			●	●	●	0.55 - 1.4	10
SWA-10-16-AWEL	10	16				●	●	2.9 - 4.8	10
SWA-10-20-AWEL	10	20			●	●	●	3.7 - 9.3	10
SWA-10-25-AWEL	10	25				●	●	9.8 - 16	10
SWA-10-30-AWEL	10	30				●	●	15 - 25	10
SWA-12-16-AWEL	12	16				●	●	2.1 - 3.5	10
SWA-12-20-AWEL	12	20			●	●	●	3.2 - 8	10
SWA-12-25-AWEL	12	25				●	●	9 - 15	10
SWA-12-30-AWEL	12	30				●	●	14 - 23	10
SWA-16-20-AWEL	16	20			●	●	●	1.8 - 4.5	10
SWA-16-25-AWEL	16	25				●	●	6.9 - 11	10
SWA-16-30-AWEL	16	30				●	●	12 - 20	10

*1 : Also sold separately from 1 piece up. ➔ P.809

- Part number specification

SWA-2-8-1-AWEL

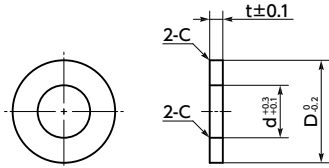
Product Code 1 2 3 Product Code

Select the t dimension from the dimension list.

Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

SWAS-AW Adjust Washer - Stainless Steel

WEB Selection Tool WEB CAD Download SUS Stainless steel



*D=16 or less : C0.2 or less
D=20 or more : C0.5 or less

SWAS-AWBK



SWAS-AW

- There is a variety of outside diameters and thickness relative to normal plain washers.
- For securing seating surface on the long hole position and engagement of materials with low marginal seating surface pressure such as aluminum and resin.
- For adjustment of cumulative error in assembly.

• Application

Height adjustment / Seating surface fall prevention

• Material/Finish



	SWAS-AW
Main body	SUS304

Unit : mm

Part Number	d 1	D 2	t 3					Mass (g)	Qty per pack*1
			1	1.5	2	3	5		
SWAS-2-8-AW	2	8	●		●			0.38 - 0.75	10
SWAS-3-8-AW	3	8	●		●			0.35 - 0.69	10
SWAS-4-8-AW	4	8	●	●	●			0.3 - 0.6	10
SWAS-4-10-AW	4	10	●		●	●		0.53 - 1.6	10
SWAS-4-12-AW	4	12	●		●	●		0.8 - 2.4	10
SWAS-4-15-AW	4	15			●	●		2.6 - 3.9	10
SWAS-5-8-AW	5	8	●	●	●			0.25 - 0.49	10
SWAS-5-10-AW	5	10	●		●	●		0.47 - 1.4	10
SWAS-5-12-AW	5	12	●		●	●		0.74 - 2.2	10
SWAS-5-15-AW	5	15			●	●		2.5 - 3.7	10
SWAS-5-16-AW	5	16			●	●		2.9 - 4.3	10
SWAS-5-20-AW	5	20	●		●			2.3 - 4.7	10
SWAS-6-10-AW	6	10	●		●	●		0.4 - 1.2	10
SWAS-6-12-AW	6	12	●		●	●		0.68 - 2	10
SWAS-6-15-AW	6	15			●	●		2.4 - 3.5	10
SWAS-6-16-AW	6	16			●	●	●	2.7 - 6.8	10
SWAS-6-20-AW	6	20	●		●	●	●	2.3 - 11	10
SWAS-6-25-AW	6	25			●	●	●	7.3 - 18	10

*1 : Also sold separately from 1 piece up. → P.809

Part Number	d 1	D 2	t 3					Mass (g)	Qty per pack*1
			1	1.5	2	3	5		
SWAS-8-12-AW	8	12			●	●	●	1 - 2.5	10
SWAS-8-16-AW	8	16			●	●	●	2.4 - 6	10
SWAS-8-20-AW	8	20			●	●	●	4.2 - 10	10
SWAS-8-25-AW	8	25			●	●	●	7 - 17	10
SWAS-8-30-AW	8	30			●	●	●	10 - 26	10
SWAS-10-12-AW	10	12			●	●	●	0.55 - 1.4	10
SWAS-10-16-AW	10	16				●	●	2.9 - 4.8	10
SWAS-10-20-AW	10	20			●	●	●	3.7 - 9.3	10
SWAS-10-25-AW	10	25				●	●	9.8 - 16	10
SWAS-10-30-AW	10	30				●	●	15 - 25	10
SWAS-12-16-AW	12	16				●	●	2.1 - 3.5	10
SWAS-12-20-AW	12	20			●	●	●	3.2 - 8	10
SWAS-12-25-AW	12	25				●	●	9 - 15	10
SWAS-12-30-AW	12	30				●	●	14 - 23	10
SWAS-16-20-AW	16	20			●	●	●	1.8 - 4.5	10
SWAS-16-25-AW	16	25				●	●	6.9 - 11	10
SWAS-16-30-AW	16	30				●	●	12 - 20	10

*1 : Also sold separately from 1 piece up. → P.809

• Part number specification

SWAS-2-8-1-AW

Product Code 1 2 3 Product Code

Select the t dimension from the dimension list.

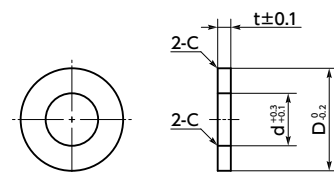
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SWAS-AWBK Adjust Washer - Stainless Steel Black

e-nedzi.com®



WEB Selection Tool CAD Download Antireflection SUS Stainless steel

SWAS-AWBK**SWAS-AW***D=16 or less : C0.2 or less
D=20 or more : C0.5 or less

● Part number specification

SWAS-5-10-3-AWBKProduct Code 1 2 3 Product Code
Select the t dimension from the dimension list.

- There is a variety of outside diameters and thickness relative to normal plain washers.
- For securing seating surface on the long hole position and engagement of materials with low marginal seating surface pressure such as aluminum and resin.
- For adjustment of cumulative error in assembly.

● Application

Height adjustment / Seating surface fall prevention

● Material/Finish



	SWAS-AWBK
Main body	SUS304 Stainless Steel Black

Unit : mm

Part Number	d 1	D 2	t 3					Mass (g)	Qty per pack
			1	1.5	2	3	5		
SWAS-3-8-AWBK	3	8	●		●			0.35 - 0.69	1
SWAS-4-8-AWBK	4	8	●	●	●			0.3 - 0.6	1
SWAS-4-10-AWBK	4	10	●		●	●		0.53 - 1.6	1
SWAS-4-12-AWBK	4	12	●		●	●		0.8 - 2.4	1
SWAS-5-8-AWBK	5	8	●	●	●			0.25 - 0.49	1
SWAS-5-10-AWBK	5	10	●		●	●		0.47 - 1.4	1
SWAS-5-12-AWBK	5	12	●		●	●		0.74 - 2.2	1
SWAS-5-16-AWBK	5	16			●	●		2.9 - 4.3	1
SWAS-5-20-AWBK	5	20	●		●			2.3 - 4.7	1
SWAS-6-10-AWBK	6	10	●		●	●		0.4 - 1.2	1
SWAS-6-12-AWBK	6	12	●		●	●		0.68 - 2	1
SWAS-6-16-AWBK	6	16			●	●	●	2.7 - 6.8	1
SWAS-6-20-AWBK	6	20	●		●	●	●	2.3 - 11	1
SWAS-6-25-AWBK	6	25			●	●	●	7.3 - 18	1
SWAS-8-12-AWBK	8	12			●	●	●	1 - 2.5	1
SWAS-8-16-AWBK	8	16			●	●	●	2.4 - 6	1
SWAS-8-20-AWBK	8	20			●	●	●	4.2 - 10	1
SWAS-8-25-AWBK	8	25			●	●	●	7 - 17	1
SWAS-10-12-AWBK	10	12			●	●	●	0.55 - 1.4	1
SWAS-10-16-AWBK	10	16				●	●	2.9 - 4.8	1
SWAS-10-20-AWBK	10	20			●	●	●	3.7 - 9.3	1
SWAS-10-25-AWBK	10	25				●	●	9.8 - 16	1
SWAS-12-16-AWBK	12	16				●	●	2.1 - 3.5	1
SWAS-12-20-AWBK	12	20			●	●	●	3.2 - 8	1
SWAS-12-25-AWBK	12	25				●	●	9 - 15	1
SWAS-16-25-AWBK	16	25				●	●	6.9 - 11	1

1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 pc. in 1 bag Available / Add'l charge Not Available Not Available Not Available

NBK

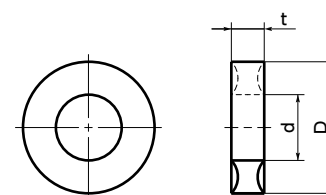
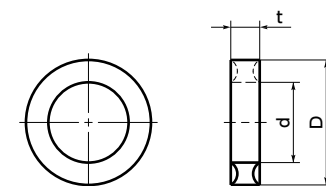
https://www.nbk1560.com

SWH/SWC Locking and Sealing Rings

e-nedzi.com®



WEB Selection Tool CAD Download

SWH**SWC****SWH****SWC**

- For sealing of the bolt tightening section.
- SWH** — For hex head screws and hex nuts
- SWC** — For socket head cap screws
- Max. Operating Temperature : -60 to 80 deg C
- Also, **SWT** Toothed Washer for locking and sealing rings is available.



● Application

Thread Locking and Thread Sealing

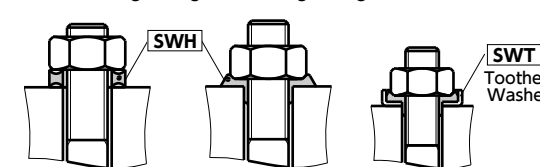
● Material/Finish



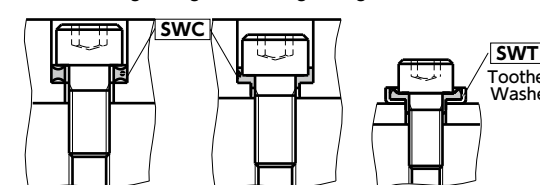
	SWH	SWC
Main Body	Polyamide (White)	Polyamide (White)

● Installation Method

- Before Tightening
- After Tightening

Use with **SWT**.

- Before Tightening
- After Tightening

Use with **SWT**.

● Part number specification

SWC-10

1

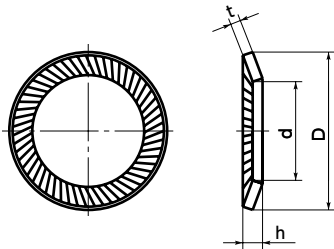
Order in number of packs.
Also sold separately from 1 piece up. → P.8091 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
Available / Add'l charge Not Available Not Available Not Available Not Available

NBK

https://www.nbk1560.com

SWR / SWRS Ribbed Lock Washers Additional Size

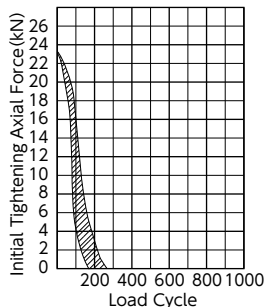
WEB Selection Tool WEB CAD Download SUS Stainless steel Vibration resistant treatment



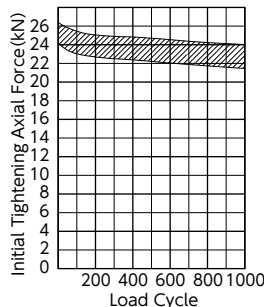
● Vibration test comparison

Test Hexagon Screws : DIN933 - 8.8-M10 - 35、Vibration : 15Hz、Amplitude : 0.5mm

■ Spring Washer (DIN127)



■ Ribbed Lock Washer (SWR)



- Ribs on both sides of the washer hook onto the bolt bearing surface and intended attachment section to prevent looseness due to vibration.
- Washers for loosing prevention. For connecting locations that cannot use other means such as adhesives.
- More effective for loosing prevention than standard spring washers.

● Application

Vibration Resistant

● Material/Finish

RoHS2 Compliant

	SWR	SWRS
Main Body	SCM435(Hardness: 425 - 495 HV) Ferrosoferric Oxide Film (Black)	SUS304



Precautions for Use

Ribs may not hook into some connecting locations, depending on their material. Confirm in advance that the ribs will hook.

SWR Made of Steel · Ferrosoferric Oxide Film

Unit : mm

Part Number	Nominal	d	D	t	h	Mass (g)	Qty per pack*1
SWR-2	2	2.2 ^{+0.3} ₀	4 ⁻⁰ _{-0.3}	0.35	0.6	0.02	10
SWR-2.5	2.5	2.7 ^{+0.3} ₀	4.8 ⁻⁰ _{-0.3}	0.45	0.9	0.04	10
SWR-3	3	3.2 ^{+0.3} ₀	5.5 ⁻⁰ _{-0.3}	0.45	0.9	0.05	20
SWR-4	4	4.3 ^{+0.3} ₀	7 ⁻⁰ _{-0.36}	0.5	1	0.08	20
SWR-5	5	5.3 ^{+0.3} ₀	9 ⁻⁰ _{-0.36}	0.6	1.1	0.14	20
SWR-6	6	6.4 ^{+0.36} ₀	10 ⁻⁰ _{-0.36}	0.7	1.2	0.23	20
SWR-8	8	8.4 ^{+0.36} ₀	13 ⁻⁰ _{-0.43}	0.8	1.4	0.43	10
SWR-10	10	10.5 ^{+0.43} ₀	16 ⁻⁰ _{-0.43}	1	1.6	0.82	10
SWR-12	12	13 ^{+0.43} ₀	18 ⁻⁰ _{-0.43}	1.1	1.7	0.89	10
SWR-16	16	17 ^{+0.43} ₀	24 ⁻⁰ _{-0.52}	1.3	2.1	2	10
SWR-20	20	21 ^{+0.52} ₀	30 ⁻⁰ _{-0.62}	1.5	2.4	3.4	5

*1 : Also sold separately from 1 piece up. ➡ P.809

SWRS Made of Stainless Steel

Unit : mm

Part Number	Nominal	d	D	t	h	Mass (g)	Qty per pack*1
SWRS-1.6	1.6	1.7 ^{+0.3} ₀	3.2 ⁻⁰ _{-0.3}	0.5	0.75	0.02	10
SWRS-2	2	2.2 ^{+0.3} ₀	4 ⁻⁰ _{-0.3}	0.5	0.75	0.03	20
SWRS-2.5	2.5	2.7 ^{+0.3} ₀	4.8 ⁻⁰ _{-0.3}	0.5	0.95	0.04	20
SWRS-3	3	3.2 ^{+0.3} ₀	5.5 ⁻⁰ _{-0.3}	0.5	0.95	0.05	20
SWRS-4	4	4.3 ^{+0.3} ₀	7 ⁻⁰ _{-0.36}	0.7	1.2	0.08	20
SWRS-5	5	5.3 ^{+0.3} ₀	9 ⁻⁰ _{-0.36}	0.7	1.2	0.14	10
SWRS-6	6	6.4 ^{+0.36} ₀	10 ⁻⁰ _{-0.36}	0.7	1.2	0.23	10
SWRS-8	8	8.4 ^{+0.36} ₀	13 ⁻⁰ _{-0.43}	1	1.6	0.43	10
SWRS-10	10	10.5 ^{+0.43} ₀	16 ⁻⁰ _{-0.43}	1	1.6	0.82	5
SWRS-12	12	13 ^{+0.43} ₀	18 ⁻⁰ _{-0.43}	1.25	1.85	0.89	5
SWRS-16	16	17 ^{+0.43} ₀	24 ⁻⁰ _{-0.52}	1.5	2.3	2	5
SWRS-20	20	21 ^{+0.52} ₀	30 ⁻⁰ _{-0.62}	1.8	2.8	3.4	5

*1 : Also sold separately from 1 piece up. ➡ P.809

● Part number specification

SWR-10



Order in number of packs.

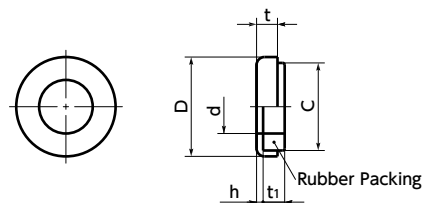
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SWS Seal washer *New Variation Added*

WEB Selection Tool WEB CAD Download SUS Stainless steel

e-nedzi.com®



● Material/Finish



	SWS	SWS-F	SWS-E	SWS-S
Main Body	SUS304	SUS304	SUS304	SUS304
Rubber Packing	NBR	Fluoro-rubber	EPDM	Silicone rubber



- Seal washer incorporating rubber packing in a stainless steel washer.
- Prevents air/liquid leakage from the seating surface of the screw head. Test results for JIS C 0920 protection degree IPX7 are available on the NBK website.
- During screw tightening, the rubber bonds with the screw thread to make the seal rather than slipping out of place.
- Four types of material are used in the rubber packing. They can be selected by the end symbol of the part number.

End Symbol	Rubber Packing Material	Characteristics	Allowable Operating Temperature
No	NBR	Standard	120°C
F	Fluoro-rubber	Chemical-proof/heat-resistance/ozone resistance	200°C
E	EPDM	Weather resistance/water resistance/ozone resistance	120°C
S	Silicone rubber	Heat-resistance/cold-resistance/electrical insulation	180°C

● Application

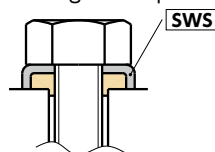
Seal ring
Oil hydraulic equipment / Pneumatic device

SWS Rubber packing: NBR SWS-F Rubber packing: Fluoro-rubber
SWS-E Rubber packing: EPDM SWS-S Rubber packing: Silicone rubber

Part Number	Part Number	Part Number	Part Number	Nominal	d	D	h	t	t ₁	C	Mass (g)	Qty per pack
SWS-3	SWS-3-F	SWS-3-E	SWS-3-S	3	3.2	7	0.5	2.2	2.2	6.3	0.2	10
SWS-4	SWS-4-F	SWS-4-E	SWS-4-S	4	4.2	8	0.5	2.1	2.3	7.2	0.2	10
SWS-5	SWS-5-F	SWS-5-E	SWS-5-S	5	5.2	9.5	0.8	2.7	2.8	8.2	0.6	10
SWS-6	SWS-6-F	SWS-6-E	SWS-6-S	6	6.2	11.5	1	3	3	9.8	1	10
SWS-8	SWS-8-F	SWS-8-E	SWS-8-S	8	8.2	15.2	1	3.2	3.3	13.4	1.8	5
SWS-10	SWS-10-F	SWS-10-E	SWS-10-S	10	10.2	18	1.5	4	3.8	15.1	3.2	5
SWS-12	SWS-12-F	SWS-12-E	SWS-12-S	12	14.2	24	1.5	4.8	4.6	21.1	6.6	5
SWS-16	SWS-16-F	SWS-16-E	SWS-16-S	16	18.8	30	2	5.3	4.8	26.2	11	5

● Also sold separately from 1 piece up. → P.809

● Usage example



● Part number specification

SWS-10-F

Place order by a bag.
Also sold separately from 1 piece up. → P.809

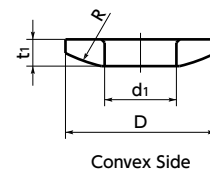
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

NBK

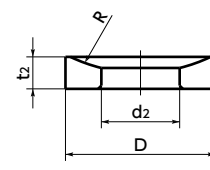
WEB ▶ <https://www.nbk1560.com>**SQW/SQWS Spherical Washers** *Additional Size*

WEB Selection Tool WEB CAD Download SUS Stainless steel

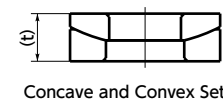
e-nedzi.com®



Convex Side



Concave Side



Concave and Convex Set



- Use a concave and convex set.
- Washers can absorb a tilt of the bolt and bearing surface to a maximum of 2°.

● Application

Absorption of misalignment of bolt and bearing surface

SQW Made of Steel · Ferrosoferric Oxide Film

Unit : mm

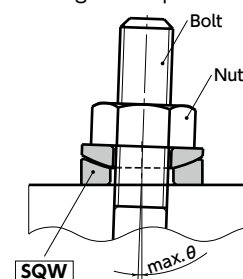
Part Number	Nominal	D	d ₁	d ₂	t ₁	t ₂	t	R	θ (°)	Mass (g)	Qty per pack
SQW-3	3	7.3	3.5	3.8	1.3	1.6	2.3	8	2	0.2	1
SQW-4	4	9.4	4.5	4.9	1.7	2	3	10.2	2	0.3	1
SQW-5	5	11.5	5.5	6	2.1	2.5	3.7	12.5	2	0.5	1
SQW-6	6	13	6.6	7.2	2.3	2.8	4.2	15	2	3	1
SQW-8	8	17	9	9.6	3.1	3.7	5.6	20	2	7	1
SQW-10	10	22	10.5	12	4	3.5	6	25	2	13	1
SQW-12	12	26	13.5	15	5	4	7.5	30	2	22	1

SQWS Made of Stainless Steel

Unit : mm

Part Number	Nominal	D	d ₁	d ₂	t ₁	t ₂	t	R	θ (°)	Mass (g)	Qty per pack
SQWS-3	3	7.3	3.5	3.8	1.3	1.6	2.3	8	2	0.2	1
SQWS-4	4	9.4	4.5	4.9	1.7	2	3	10.2	2	0.3	1
SQWS-5	5	11.5	5.5	6	2.1	2.5	3.7	12.5	2	0.5	1
SQWS-6	6	13	6.6	7.2	2.3	2.8	4.2	15	2	3	1
SQWS-8	8	17	9	9.6	3.1	3.7	5.6	20	2	7	1
SQWS-10	10	23	11	12	4.1	4.9	7	25	2	17	1
SQWS-12	12	25	14	15	4.5	5.6	8.4	30	2	21	1
SQWS-16	16	32	17	19.9	6	5	8.8	35	3	38	1
SQWS-20	20	40	21	25	7.5	7	11.4	40	3	76	1
SQWS-24	24	48	25	30	9	8	13.4	50	3	130	1

● Usage example



● Material/Finish



	SQW	SQWS
Main Body	S45C (Hardness: 25 - 30 HRC) Ferrosoferric Oxide Film (Black)	SUS304

● Part number specification

SQWS-10

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

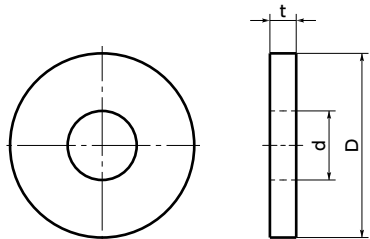
NBK

WEB ▶ <https://www.nbk1560.com>

SWF High Intensity Flat Washers

WEB Selection Tool WEB CAD Download Vibration resistant treatment

e-nedzi.com



- Flat washers for high intensity screws.
- The surface area is twice or more of that of standard washers. Washers eliminate bolt looseness by preventing the sinking of the bearing surface.
- For the connection of materials with low limits for bearing surface pressure such as aluminum and plastic.

● Application

Prevention of bearing surface sinking and loosening

● Material/Finish

RoHS2 Compliant

	SWF
Main Body	SCM435 (Hardness 350 - 430 HV) Ferrosoferric Oxide Coating (Black)

Part Number	Nominal	d	D	t	Mass (g)	Qty per pack
SWF-6	6	6.4 ^{+0.3} ₀	17 ⁰ _{-0.43}	3	5	1
SWF-8	8	8.4 ^{+0.3} ₀	23 ⁰ _{-0.52}	4	11	1
SWF-10	10	10.5 ^{+0.3} ₀	28 ⁰ _{-0.52}	4	17	1
SWF-12	12	13 ^{+0.4} ₀	35 ⁰ _{-0.52}	5	33	1
SWF-16	16	17 ^{+0.4} ₀	45 ⁰ _{-0.62}	6	64	1

Unit : mm

● Part number specification

SWF-8



1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Not Available	Not Available	Not Available	Not Available

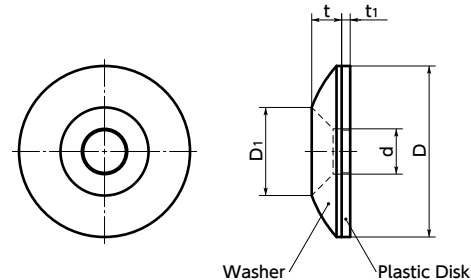
NBK

WEB ▶ <https://www.nbk1560.com>

SWBS Bezel Washers

WEB Selection Tool WEB CAD Download SUS Stainless steel

e-nedzi.com



- Washers are for flat screws. They decorate attachment surfaces beautifully.
- Their smooth slanted shape prevents catching of screw heads.
- The plastic disk prevents damage to the attachment surface.

● Application

Decoration, prevention of catching the screw head, prevention of damage to the intended fastening material

● Material/Finish

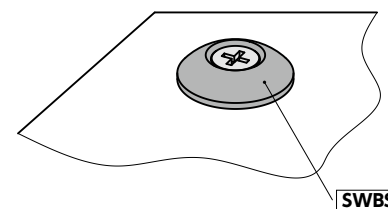
RoHS2 Compliant

	SWBS
Main Body	SUS303
Plastic Disk	Nylon 6 (White)

Part Number	Nominal	D	d	D1	t	t1	Mass (g)	Qty per pack
SWBS-4	4	18	4.3	8.5	3	0.8	3.6	1
SWBS-5	5	20	5.3	10.3	3.5	1	5	1
SWBS-6	6	22	6.4	12.3	4	1	7.2	1
SWBS-8	8	26	8.4	16.4	5	1	11	1

Unit : mm

- Usage example
For Decoration



● Part number specification

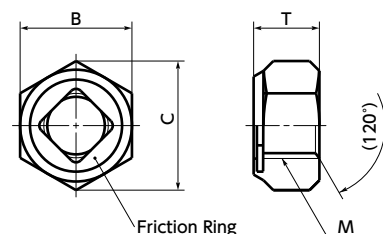
SWBS-6



1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

NBK

WEB ▶ <https://www.nbk1560.com>



- Nuts equipped with a high-performance mechanism of loosening prevention. For loosening caused by vibration.
- Friction ring with very good restoration elasticity and heat resistance tighten the thread peak of the male thread from four sides. Effective for loosening prevention. The male thread is not damaged.
- Glass fiber reinforced polyamide is used for the friction ring. Rings with heat resistance effectively prevent loosening under conditions up to 110 deg C. In addition, they are not affected by gasoline, alcohol, and oil.
- The friction ring retains most of its effects even after repeated use.

● Application

Loosening Prevention

● Material/Finish

RoHS2 Compliant

	SWUS
Main Body	SUS304
Friction Ring	Glass Fiber Reinforced Polyamide

Part Number ◀1	M	B	C (Approx.)	T	Mass (g)	Qty*1 per pack
SWUS-M6	M6	10	11.5	6	2	50
SWUS-M8	M8	13	15	8	4.6	20
SWUS-M10	M10	17	19.6	10	11	10
SWUS-M12	M12	19	21.9	12	16	10

*1 : Also sold separately from 1 piece up. ➡ P.809

● Related Products

SWUT Hexagon Lock Nut made of titanium is available. ➡ P.642



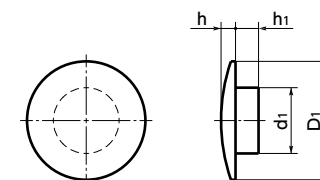
● Part number specification

SWUS-M8

◀1

Order in number of packs.
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available



- Caps protect the hex socket of socket head cap screws from being clogged with foreign matter.

● Application

Protection of screw heads and dust countermeasure

● Material/Finish

RoHS2 Compliant

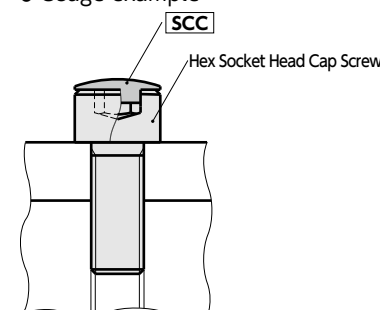
	SCC
Main Body	Polyethylene (Gray)

Part Number ◀1	Nominal of*2 Hex Socket Head Cap Screws	d1	D1	h	h1	Mass (g)	Qty*1 per pack
SCC-4	M5	4.2	9	1.3	2.5	0.1	20
SCC-5	M6	5.2	10	1.4	3.1	0.1	20
SCC-6	M8	6.2	13	1.5	4	0.3	20
SCC-8	M10	8.2	16	1.6	5	0.4	20
SCC-10	M12	10.3	18	1.8	6.4	0.6	10
SCC-14	M16	14.4	24	2.2	7	0.9	10
SCC-17	M20	17.4	30	2.5	9	1.2	10

*1 : Also sold separately from 1 piece up. ➡ P.809

*2 : For use with socket head cap screws listed in JIS B 1176 : 2006 (ISO 4762 : 1997) "Hexagon Socket Head Cap Screws".

● Usage example



● Part number specification

SCC-10

◀1

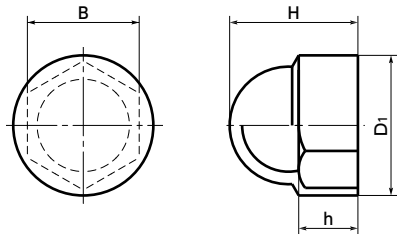
Order in number of packs.
Also sold separately from 1 piece up. ➡ P.809

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

SCH Cover Caps for Hex Head Screw

WEB Selection Tool WEB CAD Download

e-nedzi.com®



- Cover caps cover heads of hex head screws and hex nuts to increase the safety of machines and instruments.

● Application

Protection of screw heads and dust countermeasure

● Material/Finish

RoHS2 Compliant

	SCH
Main Body	Polyethylene (Black)

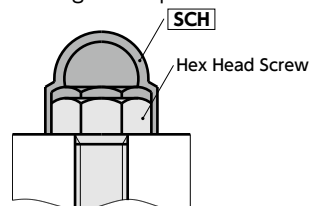
Part Number	Nominal of*2 Hex Socket Head Cap Screws	B	H	h	D1	Mass (g)	Qty*1 per pack
SCH-5	M5	8	9.5	5	10.9	0.3	20
SCH-6	M6	10	13	6	12.9	0.6	20
SCH-8	M8	13	15	9	16.8	1	20
SCH-10	M10	17	19.5	9	21.3	1.9	10
SCH-12	M12	19	21.5	11	23.6	2.4	10
SCH-16	M16	24	27	14	29.8	3.2	10

Unit : mm

*1 : Also sold separately from 1 piece up. → P.809

*2 : Confirm the width across flat dimensions of the hex head screws and hex nuts. [SCH-10] and [SCH-12] use the old JIS dimensions.

● Usage example



● Part number specification

SCH-10



Order in number of packs.
Also sold separately from 1 piece up. → P.809

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

Safety Precautions - Special Screws

In order to use our products safely, please read these safety precautions and the precautions and handling methods on each product page before use. After reading the precautions and methods, store this catalog so that it can be reviewed when necessary.

⚠ Warning

If handled incorrectly, personal injury or physical damage may occur.

- Make sure to switch off the power of machines before attaching and removing products. Hands and fingers may touch the machine and cause injury if it is operated suddenly.
- Our products are manufactured for use with general purpose instruments and machines. When using these products with instruments and machines that require safety, use a prototype to confirm usability.
- To prevent danger, check for looseness of screws and perform other maintenance on a regular basis.
- Do not disassemble or modify products.

⚠ Precautions

If handled incorrectly, death or serious injury may occur.

- Do not use products in environments that may negatively affect them.
- Take care when handling products. If products are dropped, they may become damaged or deformed. In addition, take care when performing work to avoid back pain when moving objects or dropping items on feet.
- The mechanical properties, physical properties, chemical resistance, heat resistance temperature, and other data listed on the product pages in this catalog are reference values. These values may change due to performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.
- To prevent a negative impact on the environment, have a professional disposal company dispose of these products.
- Take care to avoid burns when handling products. Heat transferred from the surrounding machines may cause products to reach high temperatures immediately after operation stops.