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→ P.780



NBK[®]

Special Screws



36 Taunton Drive Cheltenham VIC 3192
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www.industrialdynamics.com.au

Select a product from category	P.551	Miniature Screws	P.681
Select a product from application	P.553	Captive Screws/Full Thread Screws	P.689
Vacuum Application Screws	P.563	Functional Screws	P.701
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Special Material Screws	P.645	Plugs	P.727
Chemical Resistance Screws	P.663	Plastic Screws	P.733
Screws with Special Surface Treatment	P.671	Washers/Lock Nuts	P.780



Problems solved with NBK® special screws!

Fallen out screws can be very dangerous!



Captive Screws

Standard screws cannot fit here...

Special screws built to your needs.



Reduce weight for energy saving!



Titanium Screws

There are a lot of seizing here...



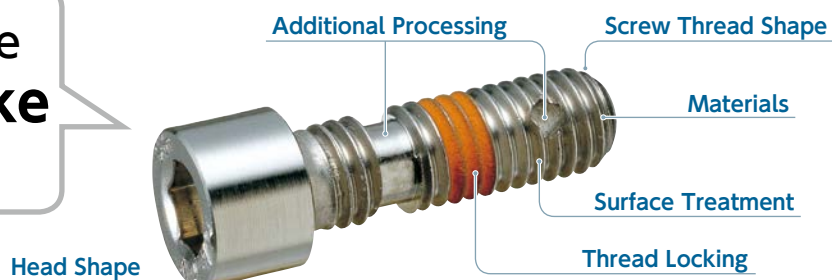
Screws with Special Surface Treatment

No dust! No oil!



Cleanroom Wash & Packaging Service

We can make a screw like this one



Additional Processing

Screw Length Adjustment Through Hole Processing Necking Screw Tip Processing Head Processing Horizontal Hollow Processing



To meet customer's desired length



To release machine gas



To prevent screws from falling out



To improve locationing



To decrease head diameter



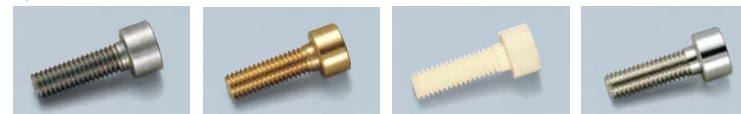
To prevent loosening

Surface Treatments



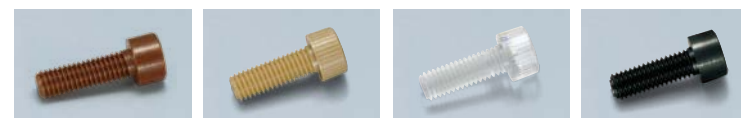
Materials

Special Materials



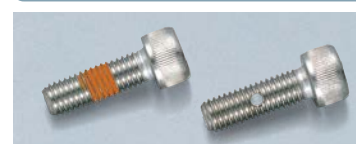
Pure Titanium Phosphor Bronze Ceramic Molybdenum
Inconel, Hastelloy, Nickel, Super Invar, SUS316L, SUS310S, Aluminum, and more.

Plastic



VESPEL® PEEK PC Conductive PEEK
Others such as conductive resins, PCTFE, POM, PI, and more.

Vibration Resistant



Nylon Deposition Nylon Lock

Screw Thread Shape • Standards



Thread Pitches: Coarse, Fine, Very Fine, Unified and Whitworth

Head Shape



Ordering Standard Products

Select a product from category

→ P.551

Select a product from application

→ P.553

Ordering Special Products

Feel free to contact us.

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

Select a product from categories

Vacuum Application Screws → P.563

Screws have gas ventilation holes for vacuum drawing of machines and have excellent corrosion resistance under vacuum environments.



Low Profile Screws Small Head Screws → P.593

Compact head screws. Suitable for reducing the size of applications.



High Performance S.S. Fasteners → P.621

High performance stainless steel screws have excellent strength, heat resistance, and corrosion resistance compared to standard stainless steel screws.



Titanium Screws → P.633

Screws made of titanium. They are lightweight, nonmagnetic, and chemically resistant.



Special Material Fasteners → P.645

Screws made of special materials such as Inconel, Molybdenum and Hastelloy to provide excellent heat, chemical, corrosion resistance.



Chemical Resistance Screws → P.663

Screws with special materials, surface treatments, and shapes for applications that require chemical resistance.



Screws with Special Surface Treatment → P.671

Screws with surface treatment for seizing prevention and reflection resistance.



Miniature Screws → P.681

Small-diameter screws lower than M2.6 size for precision instruments.



Captive Screws Full Thread Screws → P.689

Screws for falling out prevention and screws with full thread.



Inch Screws → P.708

Screws for equipment and facilities that use inch-screw specifications.



Hexalobular Socket Head Screws → P.723

Screws with strength socket heads. For repeating installations and removals.



Plastic Screws → P.733

Various types of plastic screws made from materials such as VESPEL®, PEEK, and PTFE (Teflon).



Functional Screws → P.701

Screws for fixing and locating clamping screws and ball plungers.



Tamper Resistance Screws → P.713

Screws which cannot be installed or removed easily with standard tools to prevent theft and tampering.



Plugs → P.727

Screw plugs for oil hydraulic equipment and pneumatic devices are available.



Washers and vibration resistant treatment → P.780

Washers with abundant outside diameter and thickness variations, and vibration resistant treatment parts are available.



Select a product from application → P.553 - 558

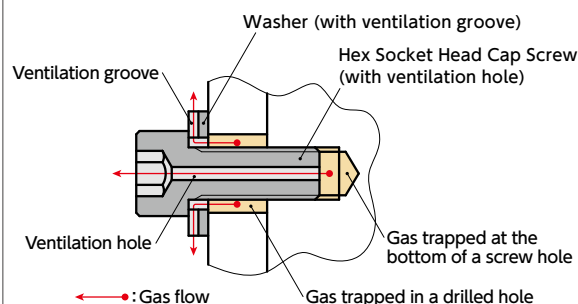


Select a product from application

Select a product
from category → P.551

Vacuum

- Bolts with ventilation holes and washers with ventilation grooves support equipment vacuuming.



- The surface of the screw head has been roughened with blasting to prevent the deposition from peeling off.



Listed page
Hex Socket Head Cap Screws with Special Low Profile - Head Shot Blast → P.590

- Aluminum alloy and ceramic cover caps prevent corrosion of bolts due to the process gas and plasma in the vacuum chamber.



Listed page
Cover Caps Socket Head Cap Screws for Cover Caps → P.591

With ventilation hole/ventilation groove	Listed page
Screws	→ P.565 - 582
Washers	→ P.583 - P.584
Hexagon Posts	→ P.585 - P.586
Clamping Set Screws	→ P.587
Clamping Cap Screws	→ P.588
Miniature Ball Plungers	→ P.589

Low Outgas

- Screws using material/surface treatment with low outgassing. Outgassing is extremely low even in vacuum environments.



Material and Surface Treatment	Listed page
Special Chemical Polish	→ P.565
Stainless Steel Black	→ P.675
Low temperature black chrome treatment	→ P.676
VESPEL®	→ P.739 - 742
PEEK	→ P.743 - 754

Cleanroom Specification

- Screws are washed and packed in cleanrooms.



Particle Measurement Results

Specimen: SUS303 $\phi 19 \times 20$

Test Method: Automatic Submerged Particle Counter Measurement

Number of particles floating in ultra-pure water Unit: pc

Particle Size	Ultrasonic Cleaning	IPA Cleaning	Unprocessed
$\geq 0.3\mu\text{m}$	220,000	7,000,000	210,000,000
$\geq 0.5\mu\text{m}$	51,000	1,900,000	37,000,000
$\geq 0.7\mu\text{m}$	15,000	640,000	9,700,000
$\geq 1.0\mu\text{m}$	3,100	160,000	1,400,000
$\geq 2.0\mu\text{m}$	280	29,000	240,000

Refer to the cleanroom washing and packaging service for more information. → P.807

Chemical Resistance

- Screws with excellent chemical resistance protect the thread and screw head from chemicals.



- PTFE (Teflon) cover cap protects the screw head from chemicals.



Listed page
Cover Caps Socket Head Cap Screws for Cover Caps → P.667

- Bolt head only has Teflon coating with excellent chemical resistance.



Listed page
Hex head screw (Teflon coating for head) → P.669

Metal's chemical resistance

Material	Chemical Resistance	Listed page
Hastelloy	High	→ P.653
Monel 400		→ P.647
Titanium		→ P.633 - 643
Inconel		→ P.648 - 649
SUS316L (HiMo)		→ P.625
SUS310S		→ P.628

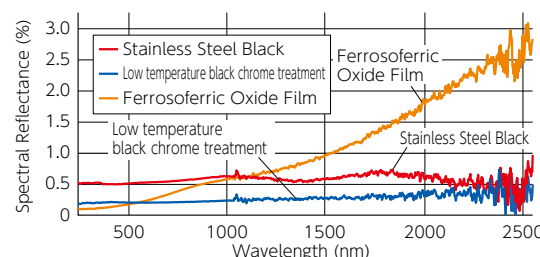
Resin's chemical resistance

Material	Chemical Resistance	Listed page
PTFE (Teflon)	High	→ P.769 - 770
PVDF		→ P.771 - 772
H-PVC		→ P.775 - 776
PP		→ P.773 - 774
PEEK		→ P.743 - 754

• Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.

Antireflection

- Low temperature black chrome treatment/stainless steel black has a very low spectral reflectance, making it ideal for optical equipment that requires antireflection.



Special Surface Treated Screw	Spectral Reflectance	Listed page
Stainless Steel Black	1.5% or less	→ P.675 - P.789
Low temperature black chrome treatment	1.5% or less	→ P.676

Heat-resistance

- These are highly heat-resistant screws even for metal/resin. Select according to the operating environment.



Material	Tensile Strength (N/mm ²)				Listed page
	200°C	500°C	800°C	1000°C	
SUS316L	560	500	250	—	→ P.627
SUS310S	580	500	200	—	→ P.628
Inconel 600	560	530	200	70	→ P.648 - 649
Molybdenum	590	450	290	210	→ P.650
Carbon Steel	450	230	40	—	—
SUS304	500	420	160	—	—

Material	Continuous operating temperature (°C)	Listed page
Ceramic	1500	→ P.659 - 661
VESPEL®	288 - 350	→ P.739 - 742
PTFE (Teflon)	260	→ P.769 - 770



Select a product from application

Select a product
from category → P.551

Seizing Prevention

- By reducing the friction coefficient of the threaded surface through plating and coating, the required axial force can be obtained even at low tightening torque. As a result, the generation of frictional heat in tightening can be suppressed, making it effective in preventing galling and seizing.

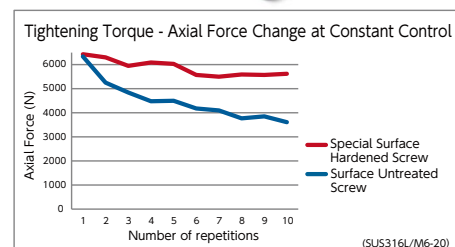


Low Temperature Black Chrome Treatment

Special Surface Treated Screw	Axial Force (kN)	Listed page
Low temperature black chrome treatment	9.2	→ P.676
Teflon coating	8.7	→ P.677
Molybdenum disulfide coating	6.7	→ P.674
Fluorine coating	5	→ P.673
Gold coating	4.3	→ P.678
No surface treatment	2.3	—

• Stainless steel/M5/tightening torque: values measured at 5N·m.

- Galling and seizing are prevented by curing the screw surface using NBK's own processing technology. There is nothing adhering to the surface, eliminating concerns about contamination due to stripping. Furthermore, it is effective in preventing galling and seizing even at high temperatures.



Surface hardening treatment → P.679

High Strength

- Screws made of high-strength titanium, stainless steel, resin and surface treatment. For applications that require strength in addition to the properties of the material and surface treatment.



Ti-6Al-4V (64 Titanium)

Functional Stainless Steel Screws	Tensile Strength (N/mm ²)	Listed page
SUS316L HiMo	800 · 1000	→ P.625

Titanium Screws	Tensile Strength (N/mm ²)	Listed page
Ti-6Al-4V (64 Titanium)	895 or Higher	→ P.635
Ti-15-3-3-3 (β Titanium)	705 - 945	→ P.637 · P.639

Plastic screw	Tensile Strength (N/mm ²)	Listed page
RENY	285	→ P.761 - 768

Tightening Hole Damage Prevention

- Hexalobular hole shape allows minimal damage from tools compared to hex hole or cross hole. It is ideal for repeated use at a high tightening torque.



Hexalobular Socket Head Cap Screws with Special Low Profile



Hexalobular Socket Pan Head Machine Screws Hexalobular Socket Flat Head Machine Screws

	Listed page
Hexalobular Socket Head Cap Screws with Low Profile	→ P.605
Hexalobular Socket Head Cap Screws with Special Low Profile	→ P.606
Hexalobular Socket Head Cap Screws with Extreme Low Profile	→ P.607
Hexalobular Socket Pan Head Machine Screws	→ P.724
Hexalobular Socket Flat Head Machine Screws	→ P.725

Non-magnetic

- Non-magnetic screws with low permeability. For FPD manufacturing equipment, semiconductor manufacturing equipment and electronic equipment requiring non-magnetic properties.



	Amplitude Permeability (μ)	Listed page
Pure Titanium	1.0001	→ P.636 · P.638 · P.640 - 643
Phosphor Bronze	1.0001	→ P.657
Ti-6Al-4V (64 Titanium)	1.0002	→ P.635
Ti-15-3-3-3 (β Titanium)	1.0002	→ P.637 · P.639
SUS316L	1.006	→ P.627
SUS316 HiMo	1.007	→ P.625

Lightweight

- For applications that require lighter weight such as automobiles, aircraft, aerospace equipment, medical equipment, robots, etc.



Metal screw	Specific Gravity	Listed page
Aluminum	2.64	→ P.658
Ti-6Al-4V (64 Titanium)	4.43	→ P.635
Pure Titanium	4.51	→ P.636 · P.638 · P.640 - 643
Ti-15-3-3-3 (β Titanium)	4.8	→ P.637 · P.639
Iron	7.8	—

Plastic screw	Specific Gravity	Listed page
PC	1.2	→ P.777 - 778
RENY	1.65	→ P.761 - 768

Electrical Insulation

- Screws with excellent electrical insulating properties. For electrical and electronic equipment and the like requiring electrical insulating properties.



	Volume Resistivity (×10 ¹⁴ Ω·m)	Listed page
PTFE (Teflon)	>100	→ P.769 - 770
PEEK	4.9	→ P.743 - 754
PC	4	→ P.777 - 778
Ceramic	>0.01	→ P.659 - 661
Iron	10×10 ⁻⁸ Ω·m	—

Simple Operation

- Screws with washers incorporated. They do not require washers to be embedded, simplifying the assembly.



	Listed page
Hex Socket Head Cap Screws with Captive Washer and Ventilation Hole	→ P.567
Socket Button Head Cap Screws with Flange	→ P.611
Hex Socket Head Cap Screws with Magnetic Captive Washer	→ P.631



Select a product from application

Select a product
from category → P.551

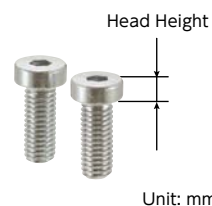
Space-saving.

- Screws with low head. Suitable for reducing the size of equipment and devices.



Hex Socket Head Cap Screws with Special Low Profile

Low Head Screws	Listed page
Hex Socket Head Cap Screws with Ventilation Hole with Low Profile	→ P.574
Hex Socket Head Cap Screws with Low Profile	→ P.595
Hex Socket Head Cap Screws with Special Low Profile	→ P.599 - 604
Hexalobular Socket Head Cap Screws with Low Profile	→ P.605 - 607
Aluminum Hexalobular Socket Head Cap Screws with Extreme Low Profile	→ P.609
Hex Head Screw / Special Low Head	→ P.610
Hex Socket Head Cap Captive Screws with Low Profile	→ P.697
Tamper Resistant Special Low Profile Cap Screws	→ P.714



Unit: mm

Comparison of low-head and standard screw head heights

	Hex Socket Head Cap Screw JIS B 1176	Hex Socket Head Cap Screws with Low Profile	Hex Socket Head Cap Screws with Special Low Profile	Hexalobular Socket Head Cap Screws with Extreme Low Profile
M2	2	1.3	1.1	0.5
M2.5	2.5	1.6	1.3	—
M2.6	2.6	—	—	0.6
M3	3	2	1.3	0.8
M4	4	2.8	1.5	0.9
M5	5	3.5	1.5	1
M6	6	4	1.5	1.2
M8	8	5	1.5	—
M10	10	6	1.5	—

- Screws with small head diameter.



Hex Socket Head Cap Screws with Small Head

Small Head Screws	Listed page
Cross Recessed Flat Head Machine Screws with Small Head	→ P.614
Hex Socket Head Cap Screws with Small Head	→ P.615
Hex Socket Head Cap Screws with Low & Small Head	→ P.617
Hex Socket Head Cap Screws with Extreme Low & Small Head	→ P.619



Unit: mm

Comparison of small-head and standard screw head diameters

	Hex Socket Head Cap Screw JIS B 1176	Hex Socket Head Cap Screws with Small Head
M2	3.8	3
M2.5	4.5	3.8
M3	5.5	4.5
M4	7	5.5
M5	8.5	7
M6	10	8.5
M8	13	11
M10	16	13.5

- Small-diameter screws of M2.6 or less.



Pan Head Machine Screws for Precision Instruments



Resin Screws
(PEEK / small countersunk screws for precision equipment)



Set Screws for Precision Instruments

	Listed page
Miniature Screw Series	→ P.681 - 688

Theft Prevention

- This prevents mounting and removing with commercial screwdrivers or wrenches. Dedicated tools are required for these screws, providing effective theft prevention.



Triwing Pan Head Machine Screws



Flat Head Bolts with Hexalobular Socket (with Pin)

	Listed page
Tamper Resistant Special Low Profile Cap Screws	→ P.714
Flat Head Bolts with Hexalobular Socket (with Pin)	→ P.717
Button Head Cap Screws (with Pin)	→ P.718 - P.719
Two Hole Pan Head Machine Screws	→ P.721
Triwing Pan Head Machine Screws	→ P.722

- Theft prevention nuts and one-sided pan-head screws can be mounted using commercially available tools. Crime can be prevented without compromising the workability of mounting.



Theft Prevention Nuts



One Side Pan Head Machine Screws

	Listed page
Theft Prevention Nuts	→ P.715
One Side Pan Head Machine Screws	→ P.720

Fixing and Positioning

- Clamping bolts, ball plungers, etc. suitable for fixing and positioning.



Clamping Screws with Eccentric Head



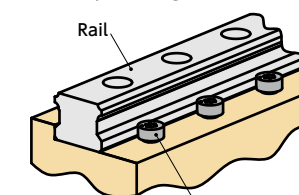
Clamping Screws

Clamping Bolts

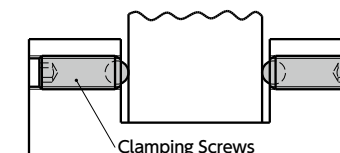


Miniature Ball Plungers

- For fixing linear guideway rails and workpieces that can be easily damaged.



Clamping Screws with Eccentric Head



Clamping Screws

	Listed page
Clamping Set Screws with Ventilation Hole	→ P.587
Clamping Cap Screws with Ventilation Hole	→ P.588
Spring Plungers with Ball with Ventilation Hole	→ P.589
Clamping Screws with Eccentric Head	→ P.702 - 706
Hex Socket Head Cap Screws - Fine Pitch Thread	→ P.707



Select a product from application

Select a product
from category → P.551

Fallout/Loss Prevention

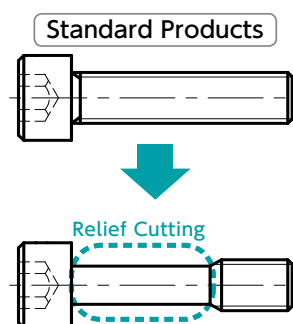
- Screws and washers suitable for screw fallout prevention. For CE Marking compatibility.



Hex Socket Head Cap Captive Screws

	Listed page
Captive screw	→ P.689 - 699

- Captive processing service is available to provide screws with relief cut and fallout prevention functions.



	Listed page
Captive Processing Service	→ P.806

- Since a flat washer is incorporated into the screw, the washer will not be lost. Furthermore, the magnetic detection type has a built-in magnetic flat washer, allowing magnetism detection.



Hex Socket Head Cap Screws with Captive Washer and Ventilation Hole



Hex Socket Head Cap Screws with Magnetic Captive Washer

	Listed page
Hex Socket Head Cap Screws with Captive Washer and Ventilation Hole	→ P.567
Hex Socket Head Cap Screws with Magnetic Captive Washer	→ P.631

Vibration Resistant

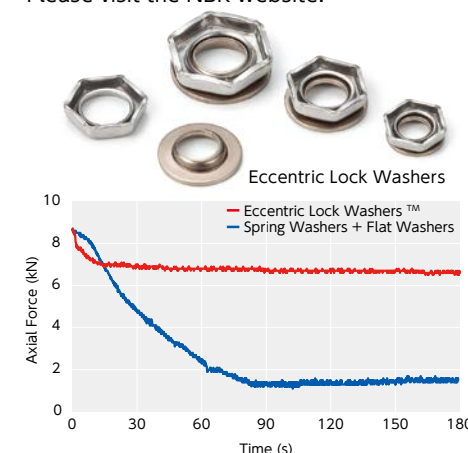
- Screw components highly effective for prevention of screw loosening due to vibration or seating surface falling.



	Listed page
Socket Button Head Cap Screws with Flange	→ P.611
Hex Lock Nuts - Titanium	→ P.642
Eccentric Lock Washers	→ P.781
Ribbed Lock Washers	→ P.791
High Intensity Flat Washers	→ P.795
Hex Lock Nuts	→ P.797

In addition to the above products, an anti-loosening service for screws is available. → P.810

- Prevents screw loosening with eccentric lock washers in combination with commercially available hex nuts. Video displays Junker and NAS vibration tests, demonstrating high loosening-prevention performance. Please visit the NBK website.



Prevention of air/liquid leakage

- Plugs and seal washers prevent leakage of gas or liquid.



	Listed page
Plugs	→ P.727 - 732
Locking and Sealing Rings	→ P.790
Seal Washers	→ P.793

Decoration

- The mounting surface has been beautifully decorated with a distinctive color and shape.



	Listed page
Stainless Steel Black	→ P.675 • P.789
Special Low Profile Cap Screws	→ P.599 - 604 • P.606
Hexalobular Socket Head Cap Screws with Extreme Low Profile	→ P.607 • P.609
Gold coating	→ P.678
Two Hole Pan Head Machine Screws	→ P.721
Plastic Screws - Cross Recessed Pan Head Machine Screws - PC	→ P.777
Bezel Washers	→ P.796

Select a product from application

Consult us any time about screws.

Please feel free to contact us.

Material


Pure Titanium


Phosphor Bronze


Molybdenum


Aluminum


VESPEL*


PEEK

Others, PC, RENY, PVDF, Ceramic, Titanium Palladium, Inconel 718 or Equivalent, Nitronic 60 or Equivalent, etc.

Surface treatment


Trivalent Chromate Treatment


Electroless Nickel Plating


Stainless Steel Black


Special Chemical Polishing


Electrolytic Polishing


Gold Coating


Gold Plating


Silver Plating


Chrome Plating

Others, Molybdenum Disulfide Coating, Teflon Coating, TiN Coating, Nickel Plating, Tuffride Treatment (Salt Bath Soft Nitriding Treatment), etc.

Additional Modification

Screw Cutting

For required screw length



Through-hole Processing

For ventilation devices



Relief Cutting

For Fallout Prevention



Screw Tip Treatment

For Positioning, etc.



Head Treatment

For Large Head Diameter



Lateral Hole Treatment

For Loosening Prevention



Selection
Navigator

CAD Data
Download

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

Special Screws

Vacuum Application

Low Profile, Small Head

High Performance SS

Titanium

Special Material

Chemical Resistance

Special Surface Treatment

Miniature

Captive/ Full Thread

Functional

Inch

Tamper Resistance

Hexalobular Socket Head

Plugs

Plastic

Washers/ Lock Nuts

561

NBK

 <https://www.nbk1560.com>

Special Screws

Vacuum Application

Low Profile, Small Head

High Performance SS

Titanium

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Captive/ Full Thread

Functional

Inch

Tamper Resistance

Hexalobular Socket Head

Plugs

Plastic

Washers/ Lock Nuts

562



• Socket Head Cap Screws (with Ventilation Hole)

	Socket Head Cap Screws					
Part Number	SVSS	SVSS-PC	SVSQS	SVSS (INCH)	SVSS-MOS	SVSS-AG
Shape						
Page	P.565	P.565	P.567	P.568	P.569	P.570
Materials	SUSXM7	SUSXM7 Chemical Polish	SUSXM7	SUSXM7	SUSXM7 MoS2 Shot	SUSXM7 Silver Plating
Characteristics	Standard	Low Outgas	Built-in Washers	Inch Screws	Seizing Prevention	Seizing Prevention
Size	M2 - M12	M3 - M12	M3 - M12	No.4-40UNC - 1/4-20UNC	M3 - M8	M3 - M8

	Socket Head Cap Screws			Socket Head Cap Screws with Low Profile	Socket Head Cap Screws with Special Low Profile	Hex Socket Countersunk Head Screws
Part Number	SVSX-88	SVSL	SVST	SVLS	SVSHS	SVFCS
Shape						
Page	P.571	P.572	P.573	P.574	P.575	P.576
Materials	SUS316L HiMo	SUS316L	TB340C (Grade 2 Titanium)	SUSXM7	SUSXM7	SUSXM7
Characteristics	High Strength (Strength Class 8.8)	Corrosion Resistance	Lightweight • Nonmagnetic • Chemical Resistance	Low Profile Small Space	Special Low Profile Small Space	Hex Socket Counter- sunk Head Screws Small Space
Size	M3 - M6	M3 - M12	M3 - M5	M3 - M10	M3 - M6	M3 - M8

• Hex Head Screws (with Ventilation Hole)

	Hex Head Screws
Part Number	SVHS
Shape	
Page	P.577
Materials	SUSXM7
Characteristics	Hex Head Screws
Size	M3 - M8

• Cross Recessed Machine Screws (with Ventilation Hole)

	Cross Recessed Flat Head Machine Screws		Phillips Cross Recessed Pan Head Machine Screws	
Part Number	SVFS	SVFT	SVPS	SVPT
Shape				
Page	P.578	P.579	P.580	P.581
Materials	SUSXM7	TW270 (Grade 1 Titanium)	SUSXM7	TW270 (Grade 1 Titanium)
Characteristics	Flat Head Machine Screws Small Space	Lightweight • Nonmagnetic • Chemical Resistance	Pan Head Machine Screw	Lightweight • Nonmagnetic • Chemical Resistance
Size	M2 - M6	M3 - M5	M3 - M8	M3 - M4

• Hex Socket Set Screws (with Ventilation Hole)

	Phillips Cross Recessed Set Screws
Part Number	SVTS
Shape	
Page	P.582
Materials	SUSXM7
Characteristics	Set Screw
Size	M3 - M8

• Washers (with Ventilation Grooves)

	Washers		
Part Number	SWAS-VF	SWAS-VF-PC	SWAT-VF
Shape			
Page	P.583	P.583	P.584
Materials	SUS304	SUS304 Chemical Polishing	TP340C (Grade 1 Titanium)
Characteristics	Standard	Low Outgas	Lightweight • Nonmagnetic
Size	Nominal 3 to 12	Nominal 3 to 12	Nominal 3 to 5

• Hex Posts (with Ventilation Hole)

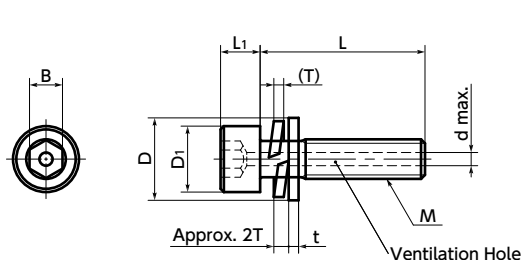
	Hex Posts	
Part Number	SHVAS	SHVBS
Shape		
Page	P.585	P.586
Materials	SUS304	SUS304
Characteristics	Single - end Female Screw Type	Double - end Female Screw Type
Size	M3 - M8	M3 - M8

• Fixing and Locating (with Ventilation Hole)

	Clamping Set Screws		Clamping Cap Screws		Spring Plunger with Ball
Part Number	SCSS-VR	SCSS-VF	SCBS-VR	SCBS-VF	PVFS
Shape					
Page	P.587	P.587	P.588	P.588	P.589
Materials	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : SUS440C	Body : Stainless Steel (A2) Ball : SUS440C
Characteristics	For Fixing • Full Ball	For Fixing • Flat Ball	For Fixing • Full Ball	For Fixing • Flat Ball	For Locating
Size	M5 - M10	M5 - M10	M5 - M10	M5 - M10	M5 - M10

• High Performance Socket Head Cap Screws

	Socket Head Cap Screws with Special Low Profile	Cover Caps		Socket Head Cap Screws for Cover Caps
Part Number	SSHs-HB	SCAP-AL	SCAP-CE	SNCPS
Shape				
Page	P.590	P.591	P.591	P.591
Materials	SUSXM7 Blasting (Head Only)	A5056	Al2O3 99.5% Alumina	SUSXM7
Characteristics	Peeling Prevention for Deposits	Low Outgas • Corrosion Resistance	Heat Resistance • Chemical Resistance • Electrical Insulation	For Cover Caps
Size	M3 - M6	M3 to M10	M3 to M10	M3 - M10



● Part number specification

SVSQS-M5-25

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

- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Flat washers and spring washers are captive, therefore prevent separation from screws.
- It is unnecessary to assemble washers. It simplifies work when wearing gloves in a clean room.
- Cleanroom wash and cleanroom packing are completed. ➔ P.807

● Application

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

● Material/Finish



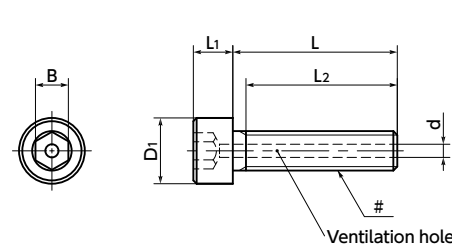
	SVSQS
Screw Body	SUSXM7 (Equivalent to SUS304)
Screw Body Tensile Strength	A2-70
Plain Washer	SUS304
Spring Washer	SUS304

Part Number 1	M	L 2												D1	D	L1	B	t	T	d	Mass (g)
		5	6	8	10	12	16	20	25	30	35	40	45								
SVSQS-M3	M3													5.5	7	3	2.5	0.5	0.7	1.2	0.9 - 1.4
SVSQS-M4	M4													7	9	4	3	0.8	1	1.5	2.1 - 4.7
SVSQS-M5	M5													8.5	10	5	4	1	1.3	1.5	3.4 - 8
SVSQS-M6	M6													10	12.5	6	5	1.6	1.5	2	6.9 - 15
SVSQS-M8	M8													13	17	8	6	1.6	2	2	15 - 29
SVSQS-M10	M10													16	21	10	8	2	2.5	3	29 - 47
SVSQS-M12	M12													18	24	12	10	2.5	3	3	51 - 66

Part Number	Qty*1 per pack
SVSQS-M3	20
SVSQS-M4	10
SVSQS-M5	10
SVSQS-M6	10
SVSQS-M8	10
SVSQS-M10	5
SVSQS-M12	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	Cleanroom washed and packed	Available / Add'l charge	Not Available	Please feel free to contact us



● Application

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

● Material/Finish



	SVSS(INCH)
Main body	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.
- Inch thread type.
- The ventilation hole is machined by a method that has less effect on metal structure. It suppress the brittle failure and generation of outgas in a vacuum environment during use.
- Cleanroom wash and cleanroom packing are completed. ➔ P.807

Part Number 1	# Nominal of Thread	L 2												D1	L1	L2 min.	B	d max. (mm)	Mass (g)
		3/16	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4						
SVSS- # 4-40	No.4-40UNC													0.183	0.112	Full Thread	3/32	1	0.51 - 1.1
SVSS- # 5-40	No.5-40UNC													0.205	0.125	Full Thread	3/32	1.2	0.78 - 1.4
SVSS- # 6-32	No.6-32UNC													0.226	0.138	Full Thread	7/64	1.2	0.98 - 1.7
SVSS- # 8-32	No.8-32UNC													0.27	0.164	0.88	7/64	1.5	1.6 - 3.2
SVSS- # 10-24	No.10-24UNC													0.312	0.19	0.88	7/32	1.5	2.3 - 4.4
SVSS- # 10-32	No.10-32UNF													0.312	0.19	0.88	7/32	1.5	2.3 - 4.6
SVSS-1/4-20	1/4-20UNC													0.375	0.25	1	3/16	2	4.3 - 13

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

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

● Part number specification

SVSS- # 4-40 - 1/4

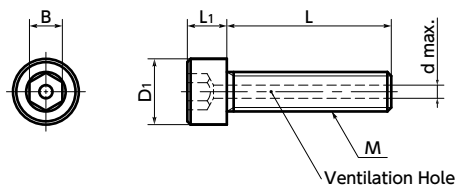
Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

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

SVSS-MOS Hex Socket Head Cap Screws with Ventilation Hole - MoS₂ Shot

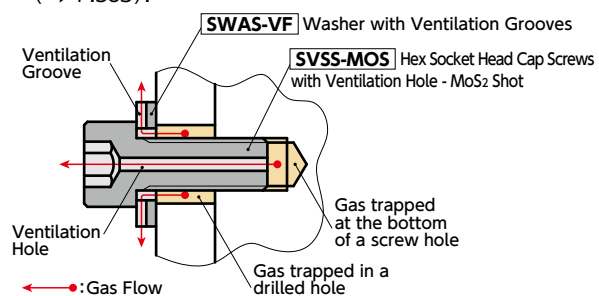
WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging Seizing Prevention SUS Stainless steel

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● Usage example

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



● Part number specification

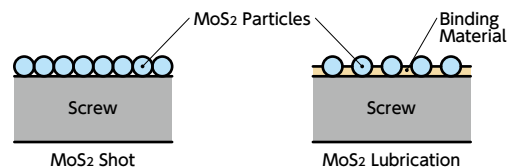
SVSS-M5-20-MOS

Product Code 1 2 Product Code

Order in number of packs.

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

- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- The MoS₂ particles shot by shot blast increase the lubrication of the screw and prevent seizing.
- Unlike a general MoS₂ lubrication, MoS₂ shot does not use a bonding agent so it is easy to identify contained materials.



● Application

Seizing Prevention

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

● Material/Finish



	SVSS-MOS
Main Body	SUSXM7 (Equivalent to SUS304) MoS ₂ Shot
Strength Class	A2-70

Unit : mm

Part Number	M	1	L	2							D1	L1	B	d	Mass (g)
SVSS-M3-MOS	M3	6	8	10	12	16					5.5	3	2.5	1.2	0.71 - 1.2
SVSS-M4-MOS	M4	6	8	10	12	16	20	25			7	4	3	1.5	1.5 - 3.2
SVSS-M5-MOS	M5	6	8	10	12	16	20	25			8.5	5	4	1.5	2.2 - 4.8
SVSS-M6-MOS	M6		8	10	12	16	20	25	30		10	6	5	2	4.3 - 8.3
SVSS-M8-MOS	M8				12	16	20	25	30	35	13	8	6	2	11 - 19

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

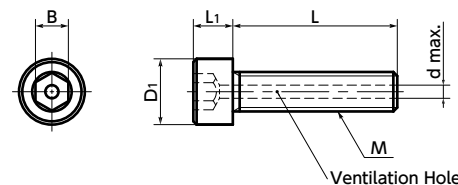
*1 : Also sold separately from 1 piece up. → P.809

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	Cleanroom washed and packed	Not Available	Not Available	Not Available

SVSS-AG Hex Socket Head Cap Screws with Ventilation Hole - Silver Plating

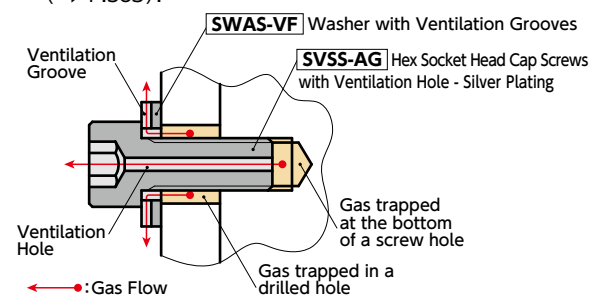
WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging Seizing Prevention Electric conducting property SUS Stainless steel

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● Usage example

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



- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Silver plating. Excellent lubrication and electroconductivity. For the prevention of screw seizing and use in conductive sections of electronic parts.
- Electric Resistance
Silver: $1.6\mu\Omega \cdot \text{cm}$ (Gold: $2.3\mu\Omega \cdot \text{cm}$)
* This is the performance of the silver material.

● Application

Seizing Prevention

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

● Material/Finish



	SVSS-AG
Main Body	SUSXM7 (S.S. grade : A2) Silver Plating
Strength Class	A2-70

● Part number specification

SVSS-M5-20-AG

Product Code 1 2 Product Code

Unit : mm

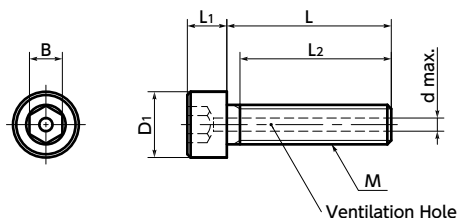
Part Number	M	1	L	2							D1	L1	B	d	Mass (g)
SVSS-M3-AG	M3	6	8	10	12	16					5.5	3	2.5	1.2	0.71 - 1.2
SVSS-M4-AG	M4	6	8	10	12	16	20	25			7	4	3	1.5	1.5 - 3.2
SVSS-M5-AG	M5	6	8	10	12	16	20	25			8.5	5	4	1.5	2.2 - 4.8
SVSS-M6-AG	M6		8	10	12	16	20	25	30		10	6	5	2	4.3 - 8.3
SVSS-M8-AG	M8				12	16	20	25	30	35	13	8	6	2	11 - 19

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

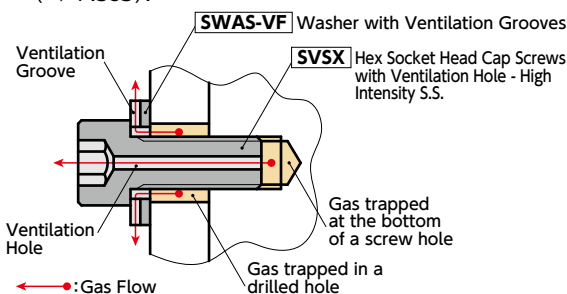
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available

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

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



- 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**SVSL**, which does not have a ventilation hole, is available. → P.625

Part Number	M	1	L	2	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 6	10	6	Full Thread	5	2	5.1 - 8.3

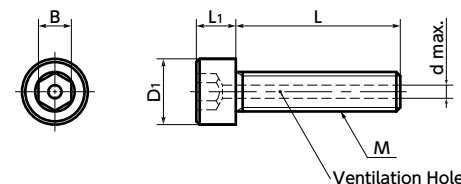
*1: If the "L" value is other than the value in parentheses, the screw is full thread.

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

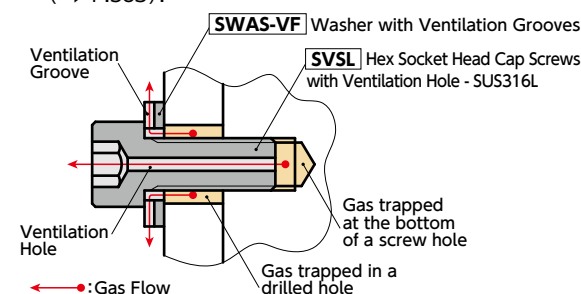
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Cleanroom washed and packed Available / Add'l charge Not Available Please feel free to contact us

SVSL Hex Socket Head Cap Screws with Ventilation Hole - SUS316L

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



- 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

- 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

Part Number	M	L	1	2	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				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

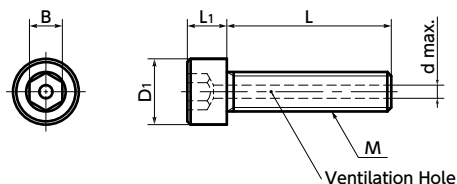
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
Available / Add'l charge Cleanroom washed and packed Available / Add'l charge Not Available Please feel free to contact us

SVST Hex Socket Head Cap Screws with Ventilation Hole - Titanium

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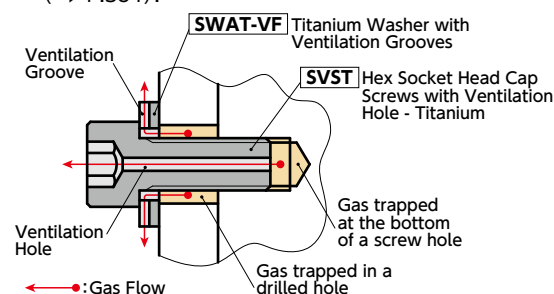


WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging Non-Magnetic



● 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



Unit : mm

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

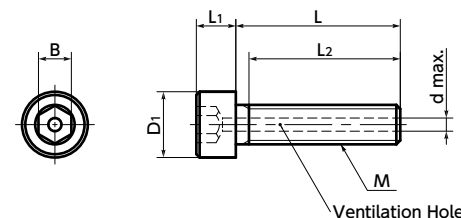
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Cleanroom washed and packed Available / Add'l charge Not Available Please feel free to contact us

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.

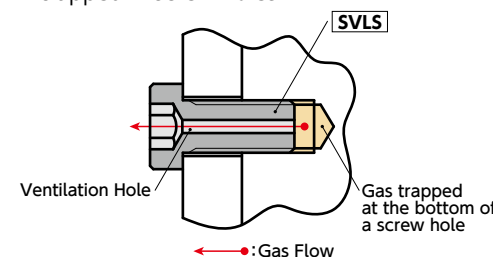
*2: The hexagonal width across flats of **SVLS-M10** has been changed from 7 mm to 6 mm.

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

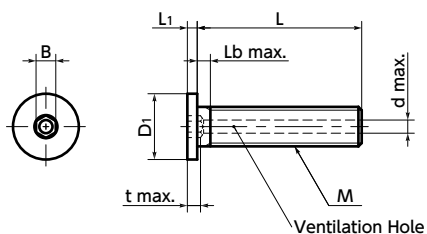
Order in number of packs.
Also sold separately from 1 piece up. → P.809

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

SVSHS Socket Head Cap Screws with Ventilation Hole with Special Low Profile

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

e-nedzi.com®



● Application

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

● Material/Finish

RoHS2 Compliant

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

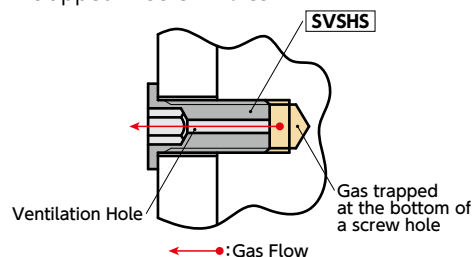
Part Number	M	L	L1	Lb	B	t	d	Mass (g)
SVSHS-M3	M3	6	8	10	1.5	2	1.2	0.53 - 0.7
SVSHS-M4	M4	6	8	10	1.6	2.5	1.5	1.1 - 1.9
SVSHS-M5	M5	6	8	10	2	3	1.5	1.5 - 3.3
SVSHS-M6	M6	6	8	10	2.5	4	2	2.7 - 5.3

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

*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.

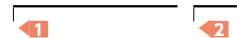


● Related Products

SSH Socket Head Cap Screws with Special Low Profile without ventilation hole is available.
➔ P.599



● Part number specification

SVSHS-M5-20

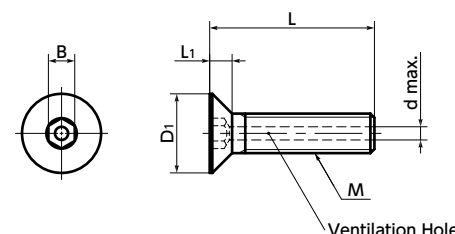
Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

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	Not Available

SVFCS Hex Socket Countersunk Head Screws with Ventilation Hole

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

e-nedzi.com®



● Application

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

● Material/Finish

RoHS2 Compliant

	SVFCS
Main Body	SUSXM7 (Equivalent to SUS304)

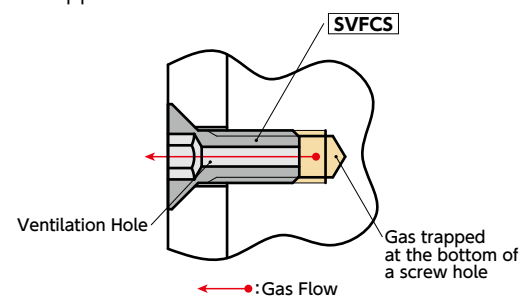
Part Number	M	L	L1	Lb	B	t	d	Mass (g)
SVFCS-M3	M3	5	6	8	10	12	1.2	0.49 - 0.77
SVFCS-M4	M4	6	8	10	12	16	1.5	1 - 1.8
SVFCS-M5	M5	8	10	12	16	20	1.5	2.2 - 3.6
SVFCS-M6	M6	10	12	16	20	25	2	3.9 - 6.5
SVFCS-M8	M8	12	16	20	25	30	2	8.9 - 15

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

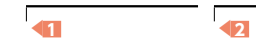
*1 : Also sold separately from 1 piece up. ➔ P.809

● Usage example

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

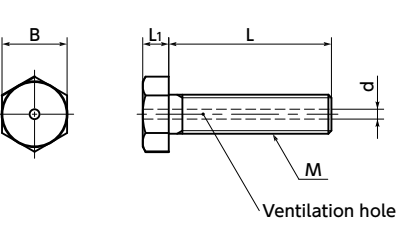


● Part number specification

SVFCS-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	Not Available



● Material/Finish

RoHS2 Compliant

	SVHS
Main body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-70



- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- The ventilation hole is machined by a method that has less effect on metal structure. It suppress the brittle failure and generation of outgas in a vacuum environment during use.
- For locations with narrow top space and hex wrench cannot be used.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

● Application

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

Unit : mm

Part Number	M	L									L1	B	d max.	Mass (g)
SVHS-M3	M3	6	8	10	12	16					2	5.5	1.2	0.67 - 1.1
SVHS-M4	M4		8	10	12	16	20				2.8	7	1.5	1.6 - 2.5
SVHS-M5	M5			10	12	16	20	25			3.5	8	1.5	2.8 - 4.7
SVHS-M6	M6				12	16	20	25	30		4	10	2	4.9 - 8.1
SVHS-M8	M8					16	20	25	30	35	5.3	13	2	11 - 18

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



SWAS-VF Washer (with Ventilation Groove)

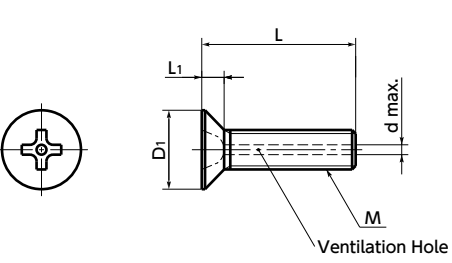
● Part number specification

SVHS-M5-25

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



● Application

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

● Material/Finish

RoHS2 Compliant

	SVFS
Main Body	SUSXM7 (Equivalent to SUS304)

- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- The flat head does not protrude after tightening.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

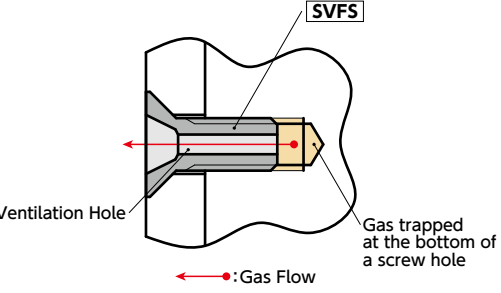
Unit : mm														
Part Number	M	L									D1	L1	d	Mass (g)
SVFS-M2	M2	3	4	5	6	8					4	1.2	0.8	0.13 - 0.21
SVFS-M2.6	M2.6		4	5	6	8	10				5.2	1.5	1	0.27 - 0.46
SVFS-M3	M3			5	6	8	10	12			6	1.75	1.2	0.49 - 0.77
SVFS-M4	M4				6	8	10	12	16		8	2.3	1.5	1 - 1.8
SVFS-M5	M5					8	10	12	16		10	2.8	1.5	2.2 - 3.1
SVFS-M6	M6						10	12	16	20	12	3.4	2	3.9 - 5.6

Part Number	Qty*1 per pack
SVFS-M2	10
SVFS-M2.6	10
SVFS-M3	20
SVFS-M4	20
SVFS-M5	10
SVFS-M6	10

*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.



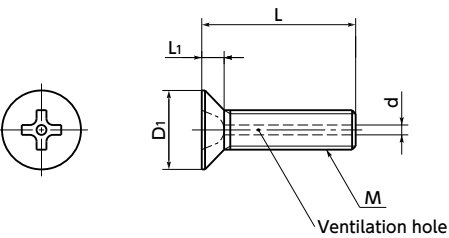
● Part number specification

SVFS-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	Not Available



- 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

● Material/Finish		RoHS2 Compliant
	SVFT	
Main body	TW270 (Type 1 titanium)	

Unit : mm									
Part Number	M	L					D1	L1	d max.
SVFT-M3	M3	6	8	10	12		6	1.75	1.2
SVFT-M4	M4	6	8	10	12		8	2.3	1.5

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



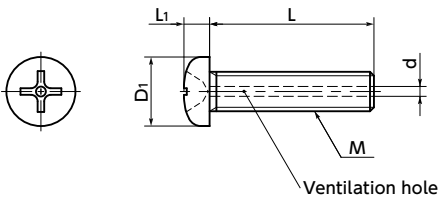
● Part number specification

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



- 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		RoHS2 Compliant
	SVPS	
Main body	SUSXM7 (Equivalent to SUS304)	

Unit : mm												
Part Number	M	L							D1	L1	d max.	Mass (g)
SVPS-M3	M3	8	10	12	16				5.5	2	1.2	0.61 - 0.94
SVPS-M4	M4		10	12	16	20			7	2.6	1.5	1.3 - 2.1
SVPS-M5	M5			12	16	20	25		9	3.3	1.5	2.7 - 4.2
SVPS-M6	M6			12	16	20	25	30	10.5	3.9	2	4.3 - 7.4
SVPS-M8	M8					20	25	30	14	5.2	2	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



SWAS-VF Washer (with Ventilation Groove)

● 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

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SVPT

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

WEB Selection Tool

WEB 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

RoHS2 Compliant

	SVPT
Main body	TW270 (Type 1 titanium)

Unit : mm

Part Number	M	L	L	L	L	L	L	L	L	D1	L1	d max.	Mass (g)
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



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

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SVTS

Hex Socket Set Screws (with Ventilation Hole)

WEB Selection Tool

WEB 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

RoHS2 Compliant

	SVTS
Main body	SUSXM7 (Equivalent to SUS304)

Unit : mm

Part Number	M	L									B	a	t max.	d max.	Mass (g)	
1		2														
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



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

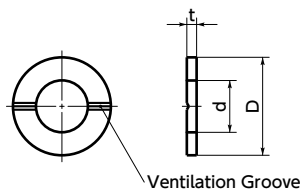
1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Modification process for captive use ➡ P.806
Available / Add'l charge	Cleanroom washed and packed	Not Available	Not Available	Not Available

SWAS-VF Washers with Ventilation Grooves

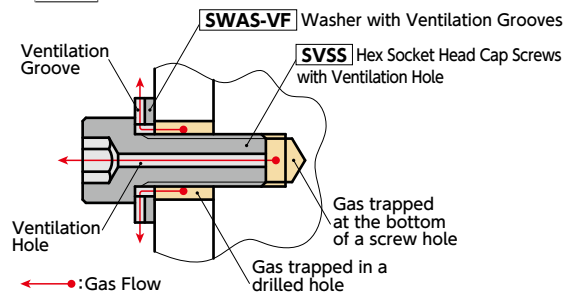
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WEB Selection Tool CAD Download Vacuum Cleanroom wash & packaging SUS Stainless steel



- 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

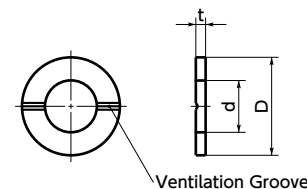
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Cleanroom washed and packed	Not Available	Not Available	Not Available

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



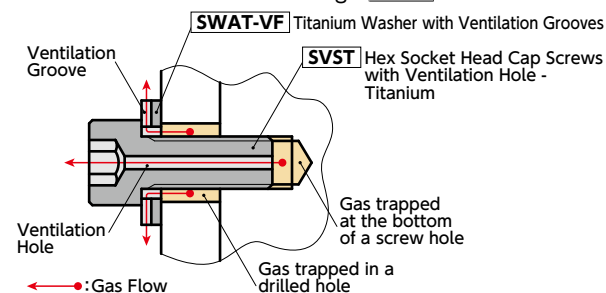
	SWAT-VF
Main Body	TP340C (Grade 2 Titanium)

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



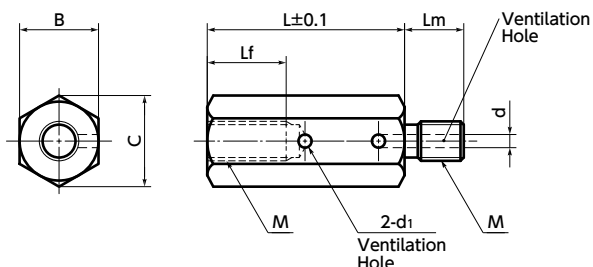
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available

SHVAS Hex Posts with Ventilation Hole

e-nedzi.com®



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



Material/Finish



	SHVAS
Main Body	SUS304

- Hexagon posts with single-end male and single-end female threads.
- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.
- Two or more hexagon posts can be connected for use.

Application

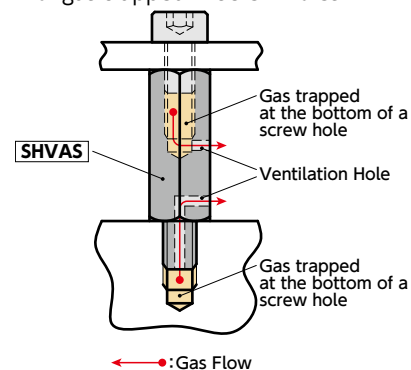
Vacuum devices, vacuum chambers, FPD production equipment, semiconductor devices, and electron microscopes

Part Number	M	L	2	B	C (Approx.)	Lm	Lf	d	d1	Mass (g)
SHVAS-M3	M3	15	20 25 30 35 40	6	6.9	4.5	6	1.2	1.5	3.6 - 9.6
SHVAS-M4	M4		20 25 30 35 40 45 50 60 70 80	7	8.1	6	8	1.5	1.5	6.5 - 26
SHVAS-M5	M5		20 25 30 35 40 45 50 60 70 80 90 100	8	9.2	7.5	10	1.5	1.5	8.3 - 43
SHVAS-M6	M6		25 30 35 40 45 50 60 70 80 90 100 120 150	10	11.5	9	12	2	1.5	16 - 100
SHVAS-M8	M8		35 40 45 50 60 70 80 90 100 120 150 13	15	12	16	2	1.5	39	- 170

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

Usage example

These screws are effective with vacuum devices and vacuum chambers that require the elimination of gas trapped in screw holes.



Part number specification

SHVAS-M4-40

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

NBK

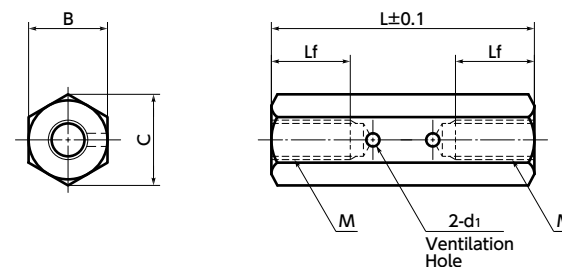
WEB ▶ <https://www.nbk1560.com>

SHVBS Hex Posts with Ventilation Hole

e-nedzi.com®



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



- Hexagon posts with double-ended female threads.
- The ventilation hole easily releases gas trapped in the screw holes of equipment and machines, and supports vacuum drawing of vacuum devices.

Application

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

Material/Finish



	SHVBS
Main Body	SUS304

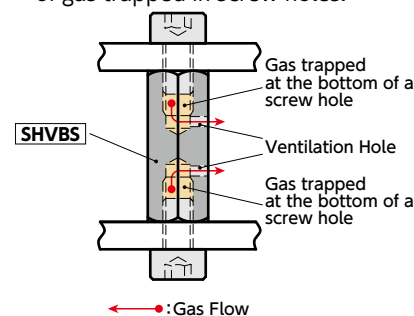
Part Number	M	L	2	B	C (Approx.)	Lf	d1*1	Mass (g)
SHVBS-M3	M3	15	20 25 30 35 40	6	6.9	6	1.5	3.1 - 9.1
SHVBS-M4	M4		20 25 30 35 40 45 50 60 70 80	7	8.1	8	1.5	5.4 - 25
SHVBS-M5	M5		20 25 30 35 40 45 50 60 70 80 90 100	8	9.2	10	1.5	6.1 - 40
SHVBS-M6	M6		25 30 35 40 45 50 60 70 80 90 100 120 150	10	11.5	12	1.5	13 - 96
SHVBS-M8	M8		35 40 45 50 60 70 80 90 100 120 150 13	15	16	1.5	30	- 161

*1: Depending on the "L" dimension, there may be only one ventilation hole.

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

Usage example

These screws are effective with vacuum devices and vacuum chambers that require the elimination of gas trapped in screw holes.



Part number specification

SHVBS-M4-40

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

NBK

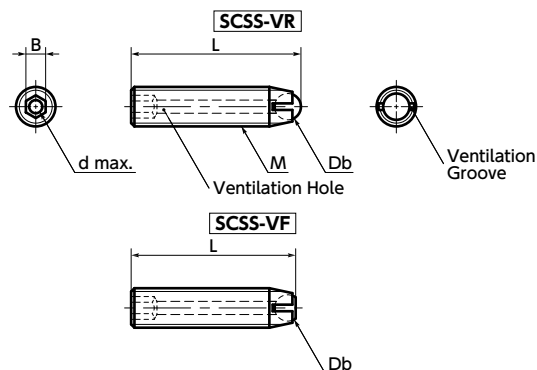
WEB ▶ <https://www.nbk1560.com>

586

SCSS Clamping Set Screws with Ventilation Hole

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

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● Application

Fixing and locating workpiece, Vacuum devices, FPD production equipment, semiconductor devices

● Material/Finish



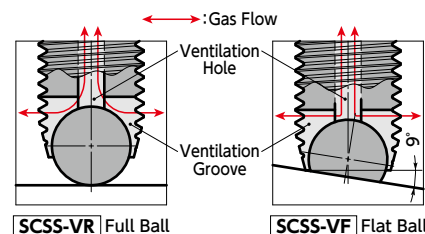
	SCSS
Main Body	SUSXM7 (Equivalent to SUS304)
Ball	SUS440C (Hardness 55 - 60HRC) Thin Fluorine Coating

● Part number specification

SCSS-M6-25-VR



- This screw is used to secure work in vacuum devices and vacuum chambers, such as FPD production equipment and semiconductor devices.
- Cleanroom wash and cleanroom packing are completed. → P.807
- The thin fluorine coating keeps the ball highly lubricated, even after cleanroom washing.
- Ventilation holes and grooves easily release gas trapped in machines.
- **SCSS-VR** has a full ball to firmly secure work at the contact point.
- The contact surface of **SCSS-VF** is a flat ball. Workpiece is not damaged. The ball rotates flexibly up to 9°. Clamps securely even the inclined surface.



SCSS-VR Full Ball

SCSS-VF Flat Ball

Unit : mm

SCSS-VR Full Ball		SCSS-VF Flat Ball		Common dimensions					Qty per pack
Part Number 	L	Part Number 	L	M	Db	B	d	Mass (g)	
SCSS-M5-8-VR	8.6	SCSS-M5-8-VF	8	M5	3	2.5	1.5	0.8	1
SCSS-M5-12-VR	12.6	SCSS-M5-12-VF	12	M5	3	2.5	1.5	1.3	1
SCSS-M5-20-VR	20.6	SCSS-M5-20-VF	20	M5	3	2.5	1.5	2.3	1
SCSS-M6-10-VR	10.8	SCSS-M6-10-VF	10	M6	4	3	2	1.5	1
SCSS-M6-16-VR	16.8	SCSS-M6-16-VF	16	M6	4	3	2	2.5	1
SCSS-M6-20-VR	20.8	SCSS-M6-20-VF	20	M6	4	3	2	3.4	1
SCSS-M6-25-VR	25.8	SCSS-M6-25-VF	25	M6	4	3	2	4	1
SCSS-M8-10-VR	11.2	SCSS-M8-10-VF	10	M8	5.5	4	2	2.5	1
SCSS-M8-12-VR	13.2	SCSS-M8-12-VF	12	M8	5.5	4	2	3.2	1
SCSS-M8-20-VR	21.2	SCSS-M8-20-VF	20	M8	5.5	4	2	5.7	1
SCSS-M8-25-VR	26.2	SCSS-M8-25-VF	25	M8	5.5	4	2	7.7	1
SCSS-M8-30-VR	31.2	SCSS-M8-30-VF	30	M8	5.5	4	2	9	1
SCSS-M10-16-VR	17.7	SCSS-M10-16-VF	16	M10	7	5	3	5	1
SCSS-M10-20-VR	21.7	SCSS-M10-20-VF	20	M10	7	5	3	7	1
SCSS-M10-25-VR	26.7	SCSS-M10-25-VF	25	M10	7	5	3	9.5	1
SCSS-M10-35-VR	36.7	SCSS-M10-35-VF	35	M10	7	5	3	11	1

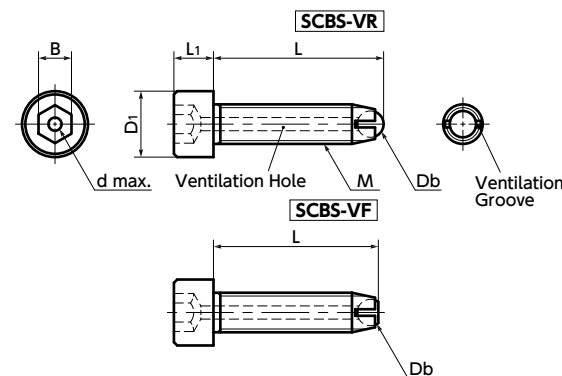
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available

SCBS Clamping Cap Screws with Ventilation Hole

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SCBS-VR

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● Application

Fixing and locating workpiece, Vacuum devices, FPD production equipment, semiconductor devices

● Material/Finish



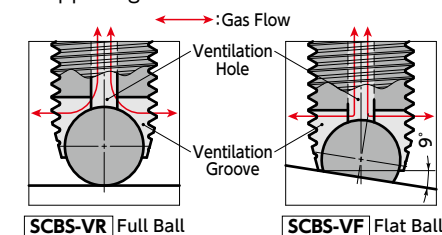
	SCBS
Main Body	SUSXM7 (Equivalent to SUS304)
Ball	SUS440C (Hardness 55 - 60HRC) Thin Fluorine Coating

● Part number specification

SCBS-M6-40-VR



- This screw is used to secure work in vacuum devices and vacuum chambers, such as FPD production equipment and semiconductor devices.
- Cleanroom wash and cleanroom packing are completed. → P.807
- The thin fluorine coating keeps the ball highly lubricated, even after cleanroom washing.
- Ventilation holes and grooves easily release gas trapped in machines.
- **SCBS-VR** has a full ball to firmly secure workpiece at the contact point.
- The contact surface of **SCBS-VF** is a flat ball. Workpiece is not damaged. The ball rotates flexibly up to 9°. It clamps securely even when the opposing surface is tilted.



SCBS-VR Full Ball

SCBS-VF Flat Ball

Unit : mm

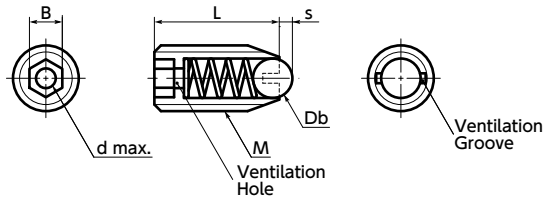
SCBS-VR Full Ball		SCBS-VF Flat Ball		Common dimensions							Qty per pack
Part Number 	L	Part Number 	L	M	D1	L1	Db	B	d	Mass (g)	
SCBS-M5-12-VR	12.6	SCBS-M5-12-VF	12	M5	8.5	5	3	4	1.5	2.9	1
SCBS-M5-16-VR	16.6	SCBS-M5-16-VF	16	M5	8.5	5	3	4	1.5	3.4	1
SCBS-M5-20-VR	20.6	SCBS-M5-20-VF	20	M5	8.5	5	3	4	1.5	3.9	1
SCBS-M5-25-VR	25.6	SCBS-M5-25-VF	25	M5	8.5	5	3	4	1.5	4.4	1
SCBS-M5-30-VR	30.6	SCBS-M5-30-VF	30	M5	8.5	5	3	4	1.5	5	1
SCBS-M6-16-VR	16.8	SCBS-M6-16-VF	16	M6	10	6	4	5	2	5.6	1
SCBS-M6-20-VR	20.8	SCBS-M6-20-VF	20	M6	10	6	4	5	2	6.5	1
SCBS-M6-25-VR	25.8	SCBS-M6-25-VF	25	M6	10	6	4	5	2	7.6	1
SCBS-M6-30-VR	30.8	SCBS-M6-30-VF	30	M6	10	6	4	5	2	8.7	1
SCBS-M6-40-VR	40.8	SCBS-M6-40-VF	40	M6	10	6	4	5	2	11	1
SCBS-M8-20-VR	21.2	SCBS-M8-20-VF	20	M8	13	8	5.5	6	2	14	1
SCBS-M8-30-VR	31.2	SCBS-M8-30-VF	30	M8	13	8	5.5	6	2	18	1
SCBS-M8-40-VR	41.2	SCBS-M8-40-VF	40	M8	13	8	5.5	6	2	22	1
SCBS-M8-50-VR	51.2	SCBS-M8-50-VF	50	M8	13	8	5.5	6	2	25	1
SCBS-M10-25-VR	26.7	SCBS-M10-25-VF	25	M10	16	10	7	8	3	26	1
SCBS-M10-30-VR	31.7	SCBS-M10-30-VF	30	M10	16	10	7	8	3	29	1
SCBS-M10-40-VR	41.7	SCBS-M10-40-VF	40	M10	16	10	7	8	3	34	1
SCBS-M10-50-VR	51.7	SCBS-M10-50-VF	50	M10	16	10	7	8	3	39	1
SCBS-M10-60-VR	61.7	SCBS-M10-60-VF	60	M10	16	10	7	8	3	47	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	Not Available	Not Available	Not Available

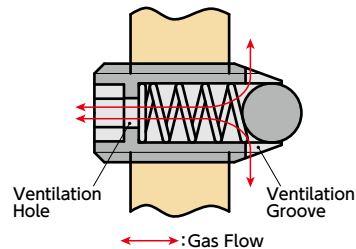
PVFS Spring Plungers with Ball with Ventilation Hole

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- For positioning in vacuum devices and vacuum chambers, such as FPD production equipment and semiconductor devices.
- Cleanroom wash and cleanroom packing are completed. → P.807
- The thin fluorine coating keeps the ball highly lubricated, even after cleanroom washing.
- Ventilation holes and grooves easily release gas trapped in machines.



Application

Fixing and locating workpiece, Vacuum devices, FPD production equipment, semiconductor devices

Material/Finish

RoHS2 Compliant

	PVFS
Main Body	Equivalent to SUS304
Ball	SUS440C (Hardness 55 - 60HRC) Thin Fluorine Coating
Spring	SUS631J1

Unit : mm

Part Number ◀1	M	s	L	Db	B	d	Load (N) min./max.	Mass (g)	Qty per pack
PVFS-5	M5	0.9	12	3	2.5	1.5	5.7 / 9.6	0.9	1
PVFS-6	M6	1	14	3.5	3	2	6.9 / 13	1.5	1
PVFS-8	M8	1.5	16	5	4	2	9.5 / 16	3.5	1
PVFS-10	M10	2	19	6	5	3	16 / 28	7	1

Part number specification

PVFS-6

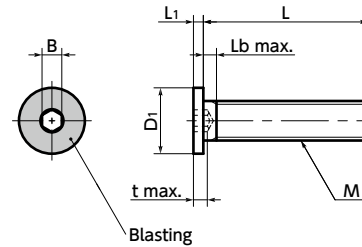
◀1

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	Not Available	Not Available	Not Available

SSHS-HB Socket Head Cap Screws with Special Low Profile - Head Shot Blast

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Material/Finish

RoHS2 Compliant

	SSHS-HB
Main Body	SUSXM7 (S.S. grade : A2) Blasted (Head Only)
Strength Class	A2-50

Part number specification

SSHS-M5-16-HB

Product Code ◀1 ◀2 Product Code

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



- Socket head cap screws with special low profile with blasted head surface.
- The surface of the screw head is coarsened by blasting.
- It prevent deposits on the screw head from peeling during vacuum deposition and other film formation equipment.

SSHS-HB**Unprocessed**

- Also, screws with blasted heads with special specifications are available, including dimensions and shape.

Socket Head Cap Screws with Special Low Profile
SSHS-HB

Hex Socket Flat Head Machine Screws



Socket Button Head Cap Screws

Application

Film formation equipment, vacuum devices, FPD production equipment, and semiconductor devices

Part Number	M	◀1	L	◀2					D1	L1	Lb	B	t	Max. Torque (N·m)	Mass (g)
SSHS-M3-HB	M3	6	8	10	12				6	1.3	1.5	1.5	2	0.6	0.44 - 0.69
SSHS-M4-HB	M4	6	8	10	12	16			8	1.5	1.6	2	2.5	1.5	0.89 - 1.6
SSHS-M5-HB	M5		8	10	12	16	20		9	1.5	2	3	3	3.1	0.98 - 2.5
SSHS-M6-HB	M6			10	12	16	20	25	10	1.5	2.5	3	4	5.3	1.9 - 4.8

Unit : mm

Part Number	Qty*1 per pack
SSHS-M3-HB	10
SSHS-M4-HB	10
SSHS-M5-HB	10
SSHS-M6-HB	10

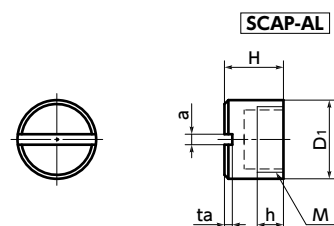
*1 : Also sold separately from 1 piece up. → P.809

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	Cleanroom washed and packed	Available / Add'l charge	Not Available	Available / Add'l charge

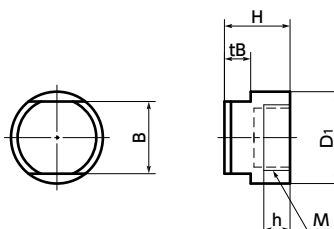


SCAP/SNCPS Cover Caps / Socket Head Cap Screws for Cover Caps

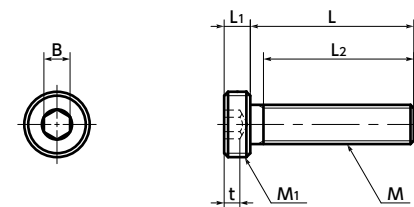
WEB Selection Tool CAD Download SUS Stainless steel Vacuum Cleanroom wash & packaging



SCAP-CE



SNCPS



Material/Finish

RoHS2 Compliant

	SCAP-AL Cover Caps	SCAP-CE Cover Caps	SNCPS Cap Screws
Main Body	A5056	Al ₂ O ₃ (99.5% Alumina)	SUSXM7 (Equivalent to SUS304)
Strength Class			A2-50

SCAP-AL Cover Caps : Aluminum Alloy (A5056)

Unit : mm

Part Number	M	H	D1	h	a	ta	Recommendation Torque (N·m)	SNCPS Part.No	Mass (g)	Qty per pack
SCAP-3-AL	M5×0.5	5	7	2	0.8	0.6	0.1	SNCPS-M3	0.4	1
SCAP-4-AL	M6×0.75	7	8	2.8	1.2	1	0.15	SNCPS-M4	0.6	1
SCAP-5-AL	M8×0.75	8	10	3.5	1.2	1	0.3	SNCPS-M5	1	1
SCAP-6-AL	M10×0.75	9	12	4	1.6	1.2	0.4	SNCPS-M6	1.5	1
SCAP-8-AL	M12×1	11	14	5	2	1.8	0.6	SNCPS-M8	2.3	1
SCAP-10-AL	M16×1	12	18	6	2.5	2	0.8	SNCPS-M10	3.7	1

SCAP-CE Cover Caps : Ceramic (Al₂O₃)

Unit : mm

Part Number	M	H	D1	h	B	tB	Recommendation Torque (N·m)	SNCPS Part.No	Mass (g)	Qty per pack
SCAP-3-CE	M5×0.5	6	9	2	7	3	0.1	SNCPS-M3	1.2	1
SCAP-4-CE	M6×0.75	8	10	2.8	8	3	0.15	SNCPS-M4	2	1
SCAP-5-CE	M8×0.75	9	12	3.5	9	3	0.3	SNCPS-M5	3	1
SCAP-6-CE	M10×0.75	10	14	4	11	4	0.4	SNCPS-M6	4.3	1
SCAP-8-CE	M12×1	11	16	5	13	4	0.6	SNCPS-M8	5.8	1
SCAP-10-CE	M16×1	12	20	6	17	4	0.8	SNCPS-M10	9.2	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 Male screw only/ Add'l charge Not Available

SCAP-CE + SNCPS

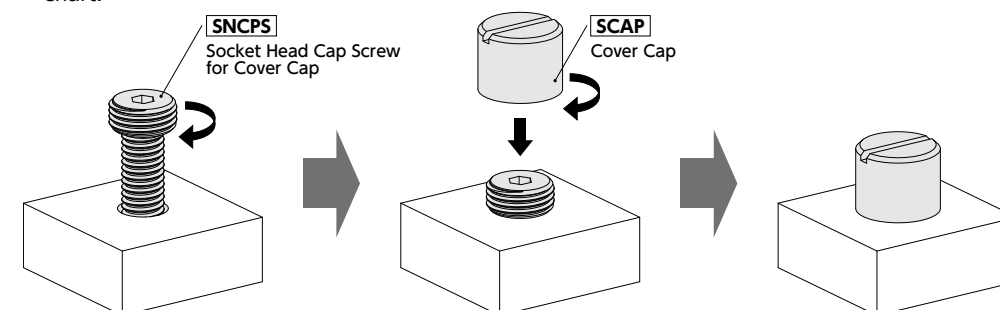


- Combine SCAP Cover Cap and SNCPS Socket Head Cap Screw for Cover Cap.
- These caps prevent the corrosion of screw heads due to vacuum chamber processing gas and plasma.
- SCAP has 2 material types as standard.
SCAP-AL Aluminum alloy
SCAP-CE Ceramic
- The screw connection section is made of stainless steel, so this product has a higher tightening strength than aluminum or ceramic screws.
- Cleanroom wash and cleanroom packing are completed. → P.807
- Other requested materials such as Inconel*1 and Hastelloy*1 can be used for Cover Caps.
*1 : Inconel is a registered trademark of Special Metals Corporation.
*1 : Hastelloy is a registered trademark of Haynes International, Inc.

Application

Film formation equipment, etching devices, FPD production equipment, and semiconductor devices

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



Precautions for Use

Corrosion resistance changes depending on use conditions. Always carry out tests under conditions same as actual conditions before use.

Related Products

SCAP-PT Cover Cap made of PTFE (Teflon), which has excellent chemical resistance, is available.
→ P.667



Part number specification

SCAP-6-AL SCAP Cover Cap

SNCPS-M6-20 SNCPS Cap Screw for Cover Cap

Order the SCAP and SNCPS individually.

SNCPS Socket Head Cap Screw for Cover Cap

Unit : mm

Part Number	M	L	M1	L1	B	t	L2*1	SCAP 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



Low Profile Screws

	Socket Head Cap Screws with Low Profile			Socket Head Cap Screws with Special Low Profile		
Part Number	SLH	SLHS	SLHL	SSH	SSHs / SSLH	SSHs-FT
Shape						
Page	P.595	P.597	P.598	P.599	P.601	P.603
Materials	SWCH45K	SUSXM7	SUS316L	SCM435	SUSXM7 SUS316L	SUS304
Characteristics	Low Profile Small Space	Low Profile Small Space	Low Profile Small Space	Special Low Profile Small Space	Special Low Profile Small Space	Full Thread • Special Low Profile Small Space
Size	M2 - M10	M2 - M10	M3 - M6	M2 - M10	M2 - M10	M3 - M10

	Socket Head Cap Screws with Special Low Profile	Hexalobular Socket Head Cap Screws with Low Profile				Key for Hexalobular Socket Head Screw
Part Number	SSHT	SSTS	SET / SETS	SETA	SLT / SLTS	SKX
Shape						
Page	P.604	P.606	P.607	P.609	P.605	P.726
Materials	TW340 (Grade 2 Titanium)	SUSXM7	SWCH SUSXM7	A5056	SAE1022 SUSMX7	Alloyed Steel
Characteristics	Lightweight • Nonmagnetic • Chemical Resistance Low Profile • Small Space	Hexalobular Socket Special Low Profile • Small Space	Hexalobular Socket Extra Low Profile • Small Space	Super Special Low Head With Hexalobular Socket Space-saving	Hexalobular Socket Low Profile • Small Space	Hexalobular Socket
Size	M3 - M6	M2 - M8	M2 - M6	M3 - M6	M2 - M6	No.4 - No.45

	Hex Head Screw / Special Low Head	Socket Head Cap Screws with Low Profile	Socket Button Head Cap Screws with Flange
Part Number	SNHS-LH	SLP	SFB / SFBS
Shape			
Page	P.610	P.613	P.611
Materials	SUS304	Equivalent to S45C	SCM435 SUSXM7
Characteristics	Low head space-saving	Pilot Recess Low Profile • Small Space	With Flange Small Space
Size	M4 - M8	M4 - M8	M3 - M8

Small Head Screws

	Socket Head Cap Screws with Small Head	Socket Head Cap Screws with Low & Small Head	Socket Head Cap Screws with Special Low & Small Head	Cross Recessed Flat Head Machine Screws with Small Head
Part Number	SNS-SD	SLH-SD	SSH-SD	SNF-SD
Shape				
Page	P.615	P.617	P.619	P.614
Materials	SCM435 SUSXM7	SWCH45K SUSXM7	SCM435 SUSXM7	SWCH SUSXM7
Characteristics	Small Head Small Space	Low Profile • Small Head Small Space	Special Low Profile • Small Head Small Space	Low Profile • Small Head Small Space
Size	M2 - M10	M3 - M10	M2 - M10	M3 - M6

Comparison of the Dimensions of Low Profile Screws and Small Head Screws

Comparison of the Head Heights of Low Profile Screws and Standard Screws

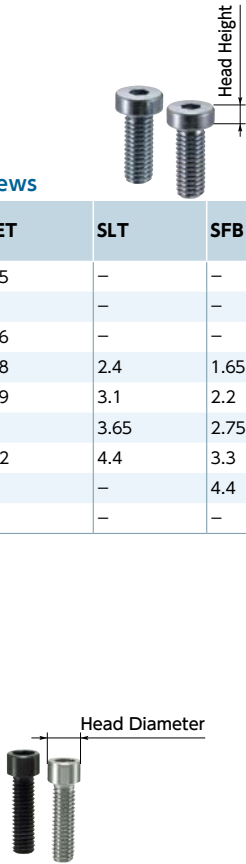
	Socket Head Cap Screws JIS B 1176	SLH	SSH	SLP	SSTS	SET	SLT	SFB
M2	2	1.3	1.1	—	1.2	0.5	—	—
M2.5	2.5	1.6	1.3	—	1.3	—	—	—
M2.6	2.6	—	—	—	—	0.6	—	—
M3	3	2	1.3	—	1.3	0.8	2.4	1.65
M4	4	2.8	1.5	2.8	1.5	0.9	3.1	2.2
M5	5	3.5	1.5	3.5	1.5	1	3.65	2.75
M6	6	4	1.5	4	1.5	1.2	4.4	3.3
M8	8	5	1.5	5	1.5	—	—	4.4
M10	10	6	1.5	—	—	—	—	—

Comparison of the Head Diameter of Small Head Screws and Standard Screws

	Socket Head Cap Screws JIS B 1176	SNS-SD	SLH-SD	SSH-SD
M3	5.5	4.5	4.5	5
M4	7	5.5	5.5	6
M5	8.5	7	7	8
M6	10	8.5	8.5	9
M8	13	11	11	11
M10	16	13.5	13.5	13.5

	Cross Recessed Flat Head Machine Screws JIS B 1111*	SNF-SD
M3	6	5
M4	8	6
M5	10	8
M6	12	10

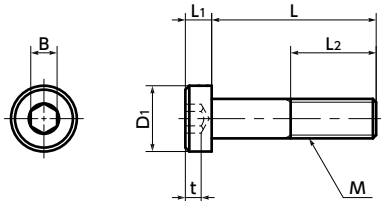
* These are values for cross recessed flat head machine screws not based on ISO 7046 prescribed in the appendix.





SLH Socket Head Cap Screws with Low Profile

WEB Selection Tool WEB CAD Download Protrusion



● Material/Finish RoHS2 Compliant

	SLH	SLH-TZB
Main Body	SWCH45K Ferrosoferric Oxide Film (Black)	SWCH45K Trivalent Chromate Treatment
Strength Class	8.8	8.8

- Socket head cap screws have low head heights.
- Intended for reducing the size of devices and applications with limited overhead space.
- Also, **[SVLS]** Socket Head Cap Screws with Low Profile with Ventilation Hole is available. ➔ P.574

● Application

Reducing the size of equipment and devices

SLH Steel - Ferrosoferric Oxide Coating

Unit : mm

Part Number	M	1	L	2	D1	L1	B	t	L2*1	Max. Torque (N·m)	Mass (g)
SLH-M2	M2	5	6	8	10	12				0.3	0.13 - 0.29
SLH-M2.5	M2.5	5	6	8	10	12				0.5	0.26 - 0.47
SLH-M3	M3		6	8	10	12	16	20		1.4	0.53 - 1.2
SLH-M4	M4		6	8	10	12	16	20	25	3.4	1.1 - 2.8
SLH-M5	M5			8	10	12	16	20	25 30 35	6	1.8 - 5.7
SLH-M6	M6			8	10	12	16	20	25 30 35 40 45	10	3.1 - 11
SLH-M8	M8				10	12	16	20	25 30 35 40 45 50	27	7.2 - 22
SLH-M10	M10					16	20	25	30 35 40 45 50	46	15 - 33

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

Part Number	Qty*1 per pack
SLH-M2	50
SLH-M2.5	50
SLH-M3	50
SLH-M4	50
SLH-M5	50
SLH-M6	20
SLH-M8	20
SLH-M10	10

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

SLH-TZB Steel - Trivalent Chromate Treatment

Unit : mm

Part Number	M	1	L	2	D1	L1	B	t	L2*1	Max. Torque (N·m)	Mass (g)
SLH-M2-TZB	M2	5	6	8	10	12				0.3	0.13 - 0.29
SLH-M2.5-TZB	M2.5	5	6	8	10	12				0.5	0.26 - 0.47
SLH-M3-TZB	M3		6	8	10	12				1.4	0.53 - 0.78
SLH-M4-TZB	M4			8	10	12	16	20	25 30	3.4	1.3 - 3.3
SLH-M5-TZB	M5			8	10	12	16	20	25 30 35	6	1.8 - 5.7
SLH-M6-TZB	M6				10	12	16	20	25 30 35	10	3.5 - 8.7
SLH-M8-TZB	M8					12	16	20	25 30 35	27	7.8 - 16
SLH-M10-TZB	M10						16	20	25 30 35	46	15 - 24

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

Part Number	Qty*1 per pack
SLH-M2-TZB	50
SLH-M2.5-TZB	50
SLH-M3-TZB	50
SLH-M4-TZB	50
SLH-M5-TZB	50
SLH-M6-TZB	20
SLH-M8-TZB	20
SLH-M10-TZB	10

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

● Part number specification

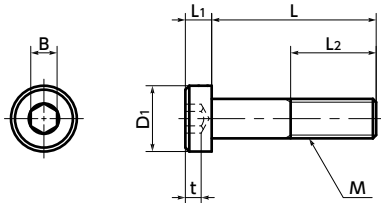
SLH - M5 - 20 - TZB

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	Available / Add'l charge	Please feel free to contact us



● Material/Finish

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

- Socket head cap screws have low head heights.
- Intended for reducing the size of devices and applications with limited overhead space.
- Also, **[SVLS]** Socket Head Cap Screws with Low Profile with Ventilation Hole is available. ➡ P.574

● Application

Reducing the size of equipment and devices

SLHS SUSXM7																Unit : mm					
Part Number	M	L												D1	L1	B*2	t	L2*1	Max. Torque (N・m)	Mass (g)	
1																					
SLHS-M2	M2	5	6	8	10	12								3.8	1.3	1.3	0.7	Full Thread	0.18	0.13 - 0.29	
SLHS-M2.5	M2.5	5	6	8	10	12								4.5	1.6	1.5	1	Full Thread	0.36	0.26 - 0.47	
SLHS-M3	M3	5	6	8	10	12	16	20						5.5	2	2	1.5	12(L=20)	0.6	0.5 - 1.2	
SLHS-M4	M4		6	8	10	12	16	20	25					7	2.8	2.5	2.3	Full Thread	1.5	1.1 - 2.8	
SLHS-M5	M5			8	10	12	16	20	25	30	35			8.5	3.5	3	2.7	16(L≥30)	3.1	1.8 - 5.7	
SLHS-M6	M6			8	10	12	16	20	25	30	35	40	45	10	4	4	3	18(L≥30)	5.3	3.1 - 11	
SLHS-M8	M8				10	12	16	20	25	30	35	40	45	50	13	5	5	3.8	22(L≥35)	12	7.2 - 22
SLHS-M10	M10						16	20	25	30	35	40	45	50	16	6	6	4.5	32(L≥45)	25	15 - 33

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

*2 : The hexagonal width across flat of **[SLHS-M10]** has been changed from 7 mm to 6 mm.

Part Number	Qty*1 per pack
SLHS-M2	50
SLHS-M2.5	50
SLHS-M3	50
SLHS-M4	50
SLHS-M5	50
SLHS-M6	20
SLHS-M8	20
SLHS-M10	10

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

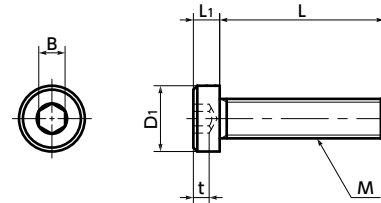
● Part number specification

SLHS-M5 - 20

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	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



- To distinguish from **[SLHS]**, following processing are made.
- [SLHL-M3]** **[SLHL-M4]** : Cup-pointed at screw tips



- [SLHL-M5]** **[SLHL-M6]** : Indicated as "A4" on the top of screw heads



- Socket head cap screws with low profile made of SUS316L.
- Intended for reducing the size of devices and applications with limited overhead space.
- Compared to SUS304, SUS316L has excellent hydrogen embrittlement resistance, fluorine and chlorine gas resistance, and heat resistance. This screw also has corrosion resistance against chemical products and seawater environments that matches or exceeds SUS304.
- SUS316L is non-magnetic.

● Application

Reducing the size of equipment and devices
FPD production equipment/Semiconductor devices/
Aquatic applications/General industrial machines

● Material/Finish

	SLHL
Main Body	SUS316L
Strength Class	A4-70

- Do not exceed the max. tightening torque.

● Part number specification

SLHL-M5 - 16

Order in number of packs.

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

SLHL SUS316L														Unit : mm	
Part Number	M	L 						D1	L1	B	t	Max. Torque (N・m)	Mass (g)		
SLHL-M3	M3	6	8	10				5.5	2	2	1.5	1.2	0.53 - 0.7		
SLHL-M4	M4	6	8	10	12			7	2.8	2.5	2.3	3.2	1.1 - 1.6		
SLHL-M5	M5		8	10	12	16		8.5	3.5	3	2.7	6.4	1.8 - 2.8		
SLHL-M6	M6			10	12	16	20	10	4	4	3	11	3.5 - 5.3		

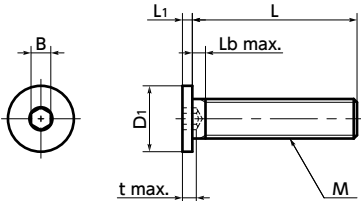
Part Number	Qty*1 per pack
SLHL-M3	20
SLHL-M4	20
SLHL-M5	10
SLHL-M6	10

*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

SSH Socket Head Cap Screws with Special Low Profile

WEB Selection Tool WEB CAD Download Protrusion



Material/Finish

RoHS2 Compliant

	SSH	SSH-EL
Main Body	SCM435 Ferrosoferric Oxide Coating (Black)	SCM435 Electroless Nickel Plating
Strength Class	Thread : 10.9 Head*1 : 5.8 (M2 - M8) 4.8 (M10)	Thread : 10.9 Head*1 : 5.8 (M2 - M8) 4.8 (M10)

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



- The head height for all screws is 1.5 mm or less.
- Intended for reducing the size of devices and applications with limited overhead space.
- Also, **SVSHS** Socket Head Cap Screws with Special Low Profile with Ventilation Hole (➡ P.575), and **SSHS-FT** Socket Head Cap Screws with Special Low Profile with long thread (➡ P.603) are available.

Application

Reducing the size of equipment and devices

SSH Made of Steel · Ferrosoferric Oxide Film

Unit : mm

Part Number	M	1	L	2								D1	L1	Lb	B	t	Max. Torque (N·m)	Mass (g)
SSH-M2	M2	4	5	6	8	10	12					4	1.1	1.2	1.3	1.2	0.3	0.11 - 0.29
SSH-M2.5	M2.5	4	5	6	8	10	12					5	1.3	1.4	1.3	1.5	0.4	0.23 - 0.47
SSH-M3	M3	4	5	6	8	10	12					6	1.3	1.5	1.5	2	0.7	0.36 - 0.69
SSH-M4	M4			6	8	10	12	16	20			8	1.5	1.6	2	2.5	1.7	0.89 - 1.9
SSH-M5	M5			6	8	10	12	16	20	25		9	1.5	2	3	3	6.2	0.73 - 3.1
SSH-M6	M6			6	8	10	12	16	20	25	30	10	1.5	2.5	3	4	6.3	1.2 - 5.5
SSH-M8	M8				8	10	12	16	20	25	30	13	1.5	3	4	5	14	3 - 10
SSH-M10	M10					10	12	16	20	25	30	16	1.5	3.5	5	6	27	4.6 - 15

SSH-EL Made of Steel · Electroless Nickel Plating

Unit : mm

Part Number	M	1	L	2								D1	L1	Lb	B	t	Max. Torque (N·m)	Mass (g)
SSH-M2-EL	M2	4	5	6	8	10	12					4	1.1	1.2	1.3	1.2	0.3	0.11 - 0.29
SSH-M2.5-EL	M2.5	4	5	6	8	10	12					5	1.3	1.4	1.3	1.5	0.4	0.23 - 0.47
SSH-M3-EL	M3	4	5	6	8	10	12					6	1.3	1.5	1.5	2	0.7	0.36 - 0.69
SSH-M4-EL	M4			6	8	10	12	16	20			8	1.5	1.6	2	2.5	1.7	0.89 - 1.9
SSH-M5-EL	M5			6	8	10	12	16	20	25		9	1.5	2	3	3	6.2	0.73 - 3.1
SSH-M6-EL	M6			6	8	10	12	16	20	25	30	10	1.5	2.5	3	4	6.3	1.2 - 5.5
SSH-M8-EL	M8				8	10	12	16	20	25	30	13	1.5	3	4	5	14	3 - 10
SSH-M10-EL	M10					10	12	16	20	25	30	16	1.5	3.5	5	6	27	4.6 - 15

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 Please feel free to contact us

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

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

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

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

Part number specification

SSH-M5-20-EL

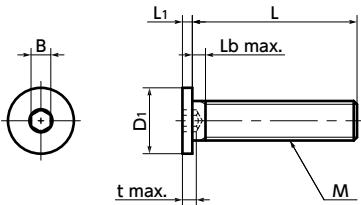
Product Code 1 2 3

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



SSHS/SSHL Socket Head Cap Screw with Special Low Profile - Stainless Steel

WEB Selection Tool CAD Download SUS Stainless steel Protusion



Material/Finish



	SSHS	SSHL
Main Body	SUSXM7 (Equivalent to SUS304)	SUS316L
Strength Class	A2-50	A4-70

Do not exceed the max. tightening torque.

To distinguish from **SSHS**, **SSHL** has a cup point tip.



- Socket head cap screws with special low profile made of stainless steel.
- The head height for all screws is 1.5 mm or less. Intended for reducing the size of devices and applications with limited overhead space.
- The following two types of stainless materials are available as standard.
 - SSHS** —SUSXM7 (S.S. grade : A2)
 - SSHL** —SUS316L
- Compared to SUS304, SUS316L has excellent hydrogen embrittlement resistance, fluorine and chlorine gas resistance, and heat resistance. This screw also has corrosion resistance against chemical products and seawater environments that matches or exceeds SUS304.
- SUS316L is non-magnetic.
- Application
 - Reducing the size of equipment and devices

SSHS SUSXM7														Unit : mm				
Part Number	M	L										D1	L1	Lb	B	t	Max. Torque (N · m)	Mass (g)
SSHS-M2	M2	4	5	6	8	10	12				4	1.1	1.2	1.3	1.2	0.18	0.11 - 0.29	
SSHS-M2.5	M2.5	4	5	6	8	10	12				5	1.3	1.4	1.3	1.5	0.36	0.23 - 0.47	
SSHS-M3	M3	4	5	6	8	10	12				6	1.3	1.5	1.5	2	0.6	0.36 - 0.69	
SSHS-M4	M4		5	6	8	10	12	16			8	1.5	1.6	2	2.5	1.5	0.83 - 1.6	
SSHS-M5	M5			6	8	10	12	16	20	25	9	1.5	2	3	3	3.1	0.73 - 3.3	
SSHS-M6	M6			6	8	10	12	16	20	30	10	1.5	2.5	3	4	5.3	1.2 - 5.5	
SSHS-M8	M8				8	10	12	16	20	30	13	1.5	3	4	5	12	3 - 10	
SSHS-M10	M10					10	12	16	20	30	16	1.5	3.5	5	6	25	4.6 - 15	

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

*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

SSHL SUS316L

Unit : mm

Part Number	M	L				D1	L1	Lb	B	t	Max. Torque (N·m)	Mass (g)
SSHL-M3	M3	6	8	10		6	1.3	1.5	1.5	2	1	0.44 - 0.61
SSHL-M4	M4	6	8	10		8	1.5	1.6	2	2.5	2	0.89 - 1.2
SSHL-M5	M5		8	10	12	9	1.5	2	3	3	5	0.98 - 1.5

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

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

Related Products

Steel special low head bolt **SSH** is available. → P.599



SVSHS Socket Head Cap Screws with Special Low Profile with Ventilation Hole. → P.575



SSHS-FT Socket Head Cap Screws with Special Low Profile with long thread. → P.603



Part number specification

SSHL-M5-12

1 2

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

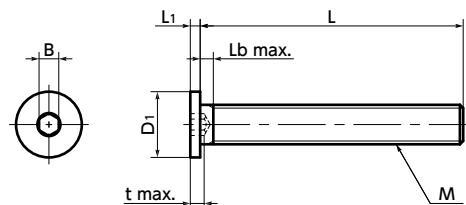
SSHS-FT

Socket Head Cap Screws with Special Low Profile - Full Thread

e-nedzi.com®



WEB Selection Tool CAD Download Protrusion Full Thread SUS Stainless steel



- Full thread socket head cap screws with special low Profile.
- The head height for all screws is 1.5 mm or less.
- Intended for reducing the size of devices and applications with limited overhead space.

● Application

Reducing the size of equipment and devices

● Material/Finish

RoHS2 Compliant

	SSHS-FT
Main Body	SUS304

Part Number	M		L								D1	L1	Lb	B	t	Max. Torque (N·m)	Mass (g)
	1	2	20	25	30	40	50	60	70	80							
SSHS-M3-FT	M3	16	20	25	30	40	50	60			6	1.3	1.5	1.5	2	1	0.89 - 2.6
SSHS-M4-FT	M4		20	25	30	40	50	60			8	1.5	1.6	2	2.5	2	2 - 5
SSHS-M5-FT	M5				30	40	50	60	70		9	1.5	2	3	3	3.5	4.1 - 10
SSHS-M6-FT	M6					40	50	60	70	10	10	1.5	2.5	3	4	5	8.2 - 15
SSHS-M8-FT	M8					40	50	60	70	13	13	1.5	3	4	5	10	14 - 26
SSHS-M10-FT	M10					40	50	60	70	16	16	1.5	3.5	5	6	18	20 - 39

Unit : mm

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

● Part number specification

SSHS-M8-60-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	Available / Add'l charge	Available / Add'l charge

NBK

WEB ▶ <https://www.nbk1560.com>

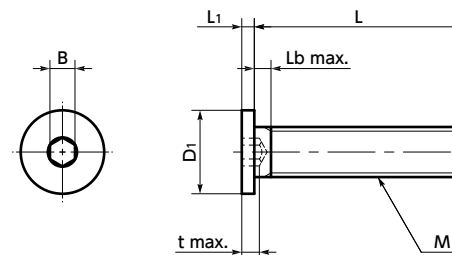
SSHT

Socket Head Cap Screws - Special Low Profile - Pure Titanium

e-nedzi.com®



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



● Material/Finish

RoHS2 Compliant

	SSHT
Main Body	TW435(Grade2 Titanium)

- Socket head cap screws with special low profile made of pure titanium.
- The head height for all screws is 1.5 mm or less.
- Specific gravity is approximately 60% of stainless steel.
- Useful for space and weight saving of devices.
- 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.

Reducing the size of equipment and devices. FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

Part Number	M	L						D1	L1	Lb	B	t	Max. Torque (N·m)	Mass (g)
		1	2	3	4	5	6							
SSHT-M3	M3	6	8	10				6	1.3	1.5	1.5	2	0.6	0.25 - 0.35
SSHT-M4	M4		8	10	12			8	1.5	1.6	2	2.5	1.2	0.59 - 0.76
SSHT-M5	M5			10	12	16		9	1.5	2	3	3	2.5	0.7 - 1.12
SSHT-M6	M6			10	12	16	10	1.5	2.5	3	4	5	1.1	1 - 1.7

Unit : mm

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

● Part number specification

SSHT-M3-10

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	Available / Add'l charge	Available / Add'l charge

NBK

WEB ▶ <https://www.nbk1560.com>

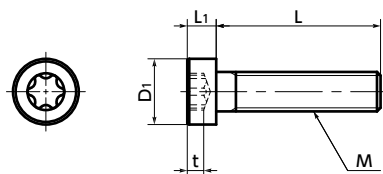
604

SLT/SLTS

Hexalobular Socket Head Cap Screws with Extreme Low Profile



WEB Selection Tool CAD Download Protrusion SUS Stainless steel



● Material/Finish



	SLT-TZB	SLTS
Main Body	SAE1022 Trivalent Chromate Treatment	SUSXM7 (Equivalent to SUS304)
Strength Class	8.8	A2-50

● Part number specification

SLT - M5 - 20 - TZB



Order in number of packs.

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

- Hexalobular*1 socket head cap screws with low profiles.

- Intended for reducing the size of devices and applications with limited overhead space.

- The hexalobular*1 shape can withstand high tightening torque. ➔ P.723

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

- Install and remove by using **SKX** Specialty Hexalobular Key. ➔ P.726

- Application

Reducing the size of equipment and devices

Unit : mm

SLT-TZB Steel - Trivalent Chromate Treatment	SLTS Stainless steel	Common dimensions																
Part Number	Part Number	M		L									D ₁	L ₁	Applicable wrench	Hexalobular Socket No.	t	Mass (g)
	SLTS-M2	M2	4	5	6	8	10						3.8	1.55	SKX-6	6	0.84	0.11 - 0.23
	SLTS-M2.5	M2.5		5	6	8	10	12					4.5	1.85	SKX-8	8	0.91	0.26 - 0.47
SLT-M3-TZB	SLTS-M3	M3			6	8	10	12	16				5.5	2.4	SKX-10	10	1.27	0.53 - 0.98
SLT-M4-TZB	SLTS-M4	M4			6	8	10	12	16	20			7	3.1	SKX-20	20	1.66	1.1 - 2.3
SLT-M5-TZB	SLTS-M5	M5				8	10	12	16	20	25		8.5	3.65	SKX-25	25	1.91	1.8 - 4.1
SLT-M6-TZB	SLTS-M6	M6				8	10	12	16	20	25	30	10	4.4	SKX-30	30	2.29	3.1 - 7.1

SLT-TZB Steel - Trivalent Chromate Treatment

Part Number	Qty*1 per pack
SLT-M3-TZB	50
SLT-M4-TZB	50
SLT-M5-TZB	50
SLT-M6-TZB	20

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

SLTS Stainless Steel

Part Number	Qty*1 per pack
SLTS-M2	50
SLTS-M2.5	50
SLTS-M3	50
SLTS-M4	50
SLTS-M5	50
SLTS-M6	20

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

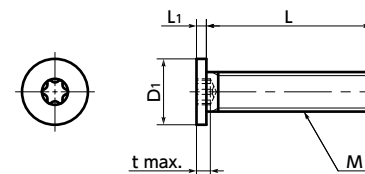
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Please feel free to contact us

SSTS

Hexalobular Socket Head Cap Screws with Special Low Profile

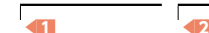


WEB Selection Tool CAD Download Protrusion SUS Stainless steel



● Part number specification

SSTS-M5 - 12



Order in number of packs.

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

- The head height for all screws is 1.5 mm or less.
- Intended for reducing the size of devices and applications with limited overhead space.

- The hexalobular*1 shape can withstand high tightening torque. ➔ P.723

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

- Install and remove by using **SKX** Specialty Hexalobular Key. ➔ P.726

- Application

Reducing the size of equipment and devices

● Material/Finish



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

Unit : mm

Part Number	M	L										D1	L1	Applicable wrench	Hexalobular Socket No.	t	Max. Torque (N·m)	Mass (g)
SSTS-M2	M2	4	5	6	8						4	1.2	SKX-5	5	0.9	0.18	0.11 - 0.19	
SSTS-M2.5	M2.5	4	5	6	8						5	1.3	SKX-6	6	1	0.36	0.23 - 0.35	
SSTS-M3	M3		5	6	8	10					6	1.3	SKX-8	8	1.1	0.65	0.4 - 0.61	
SSTS-M4	M4			6	8	10	12				8	1.5	SKX-10	10	1.5	1.5	0.89 - 1.3	
SSTS-M5	M5			6	8	10	12	16			9	1.5	SKX-15	15	1.8	3.1	0.73 - 2	
SSTS-M6	M6				8	10	12	16	20	10	1.5	SKX-20	20	2.1	5.3	1.6 - 3.8		
SSTS-M8	M8				8	10	12	16	20	13	1.5	SKX-25	25	2.4	12	3	- 6.7	

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

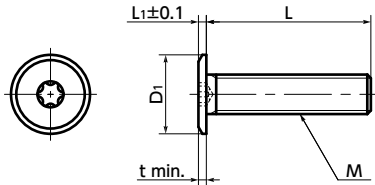
*1 : Also sold separately from 1 piece up. ➔ P.809

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

SETA Aluminum Super Special Low Head Bolt with Hexalobular Socket **NEW**

WEB Selection Tool WEB CAD Download Protrusion Lightweight

e-nedzi.com



● Application

Space-saving equipment and devices

● Material/Finish



	SETA
Main unit	A5056



- Aluminum Alloy Super Special Low Head Bolt with Hexalobular Socket
- Specific gravity is approx. 33% of that of stainless steel.
- No electrocorrosion due to contact with aluminum alloy.
- Hexalobular socket *1 bolt with extra-low profile.
- For space-saving of equipment/device and applications with a limited top space.
- Hexalobular socket *1 shape can withstand high tightening torque. ➔ P.723

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

- Use a dedicated wrench **SKX** for mounting and removing. ➔ P.726



- We also produce alumite-treated products. Please feel free to contact our customer service.

Unit : mm												
Part Number 1	M	2						D1	L1	Applicable wrench	Hexalobular Socket No.	Max. Torque (N·m)
SETA-M3	M3	6	8	10				7 _{-0.5}	0.8	SKX-6	6	0.14 - 0.19
SETA-M4	M4		8	10	12	16		8 _{-0.5}	0.9	SKX-8	8	0.25 - 0.47
SETA-M5	M5			10	12	16	20	9 _{-0.5}	1	SKX-10	10	0.51 - 0.90
SETA-M6	M6			10	12	16	20	12 _{-0.6}	1.2	SKX-20	20	0.80 - 1.41

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

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

● Part number specification

SETA-M3-8



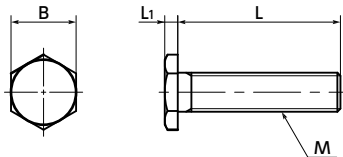
Place order by a bag.
Also sold separately from 1 piece up. ➔ P.809

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

SNHS-LH Hex Head Screw / Special Low Head **NEW**

WEB Selection Tool WEB CAD Download Protrusion SUS Stainless steel

e-nedzi.com



- Hexagon Head Bolt with low head.
- For space-saving of equipment/device and applications with a limited top space.

● Application

Reducing the size of equipment and devices

● Material/Finish



	SNHS-LH
Main body	Equivalent to SUS304

Part Number	M 1	2							L1	B	Unit : mm	
		8	10	12	15	20	25	30			Mass (g)	
SNHS-M4-LH	M4	8	10	12	15	20	25	30	1.5	7	1.2 - 2.9	
SNHS-M5-LH	M5	8	10	12	15	20	25	30	2	8	1.9 - 4.7	
SNHS-M6-LH	M6		10	12	15	20	25	30	2	10	3.2 - 6.9	
SNHS-M8-LH	M8				15	20	25	30	2	13	7.8 - 12	

Part Number	Qty per pack
SNHS-M4-LH	10
SNHS-M5-LH	10
SNHS-M6-LH	10
SNHS-M8-LH	10

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

● Part number specification

SNHS-M5-25-LH



Place order by a bag.
Also sold separately from 1 piece up. ➔ P.809

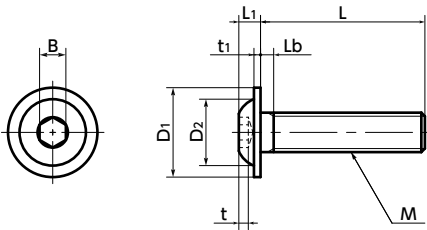
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



SFB/SFBS Socket Button Head Cap Screws with Flange

New Variation Added

WEB Selection Tool WEB CAD Download SUS Stainless steel Protrusion



- Socket button head cap screws with wide bearing surface and are resistant to looseness.
- Intended for reducing the size of devices and applications with limited overhead space.
- Compared to **SFB** (Ferrosferic Oxide Coating), **SFB-EL** (Electroless nickel plating) has excellent corrosion resistance.

● Application

Reducing the size of equipment and devices

● Material/Finish



	SFB	SFBS	SFB-EL
Main Body	SCM435AD Ferrosferic Oxide Coating (Black)	SUSXM7 (Equivalent to SUS304)	SCM435AD Electroless nickel plating
Strength Class	10.9	A2-50	10.9

SFB Steel - Ferrosferic Oxide Coating

Unit : mm

Part Number	M	L	D1	D2	L1	t1	B	t	Lb	Max. Torque (N·m)	Mass (g)
SFB-M3	M3	6 8 10 12 16 20 25	7	5.2	1.65	0.6	2	1.05	1	1	0.52 - 0.78
SFB-M4	M4	6 8 10 12 16 20 25	9.2	6.8	2.2	0.7	2.5	1.3	1.4	2	1 - 2
SFB-M5	M5	8 10 12 16 20 25	11.4	8.5	2.75	0.9	3	1.6	1.6	4	2 - 4
SFB-M6	M6	8 10 12 16 20 25	13.6	10.1	3.3	1	4	2.1	2	8	3 - 5.9
SFB-M8	M8	10 12 16 20 25	17	12.6	4.4	1.4	5	2.6	2.5	12	6.8 - 11

Part Number	Qty*1 per pack
SFB-M3	50
SFB-M4	50
SFB-M5	20
SFB-M6	20
SFB-M8	20

*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 Please feel free to contact us

SFBS Made of Stainless Steel

Unit : mm

Part Number	M	L	D1	D2	L1	t1	B	t	Lb	Max. Torque (N·m)	Mass (g)
SFBS-M3	M3	6 8 10 12 16 20 25	7	5.2	1.65	0.6	2	1.05	1	0.25	0.52 - 0.78
SFBS-M4	M4	6 8 10 12 16 20 25	9.2	6.8	2.2	0.7	2.5	1.3	1.4	0.5	1 - 2
SFBS-M5	M5	8 10 12 16 20 25	11.4	8.5	2.75	0.9	3	1.6	1.6	1	2 - 4
SFBS-M6	M6	8 10 12 16 20 25	13.6	10.1	3.3	1	4	2.1	2	2	3 - 5.2

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

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

SFB-EL Steel -Electroless nickel plating

Unit : mm

Part Number	M	L	D1	D2	L1	t1	B	t	Lb	Max. Torque (N·m)	Mass (g)
SFB-M3-EL	M3	6 8 10 12 16 20 25	7	5.2	1.65	0.6	2	1.05	1	1	0.52 - 0.78
SFB-M4-EL	M4	6 8 10 12 16 20 25	9.2	6.8	2.2	0.7	2.5	1.3	1.4	2	1 - 2
SFB-M5-EL	M5	8 10 12 16 20 25	11.4	8.5	2.75	0.9	3	1.6	1.6	4	2 - 4
SFB-M6-EL	M6	8 10 12 16 20 25	13.6	10.1	3.3	1	4	2.1	2	8	3 - 5.9
SFB-M8-EL	M8	10 12 16 20 25	17	12.6	4.4	1.4	5	2.6	2.5	12	6.8 - 11

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

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

● Part number specification

SFB-M5 - 20 - EL

1 2 1

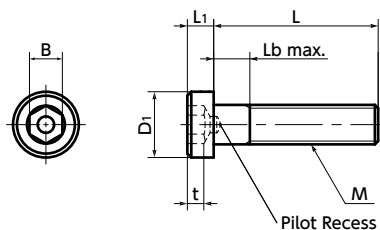
Select "L", and then Order in number of packs.
Also sold separately from 1 piece up. ➡ P.809

SLP Socket Head Cap Screws with Low Profile with Pilot Recess

e-nedzi.com®



WEB Selection Tool WEB CAD Download Protrusion



● Part number specification

SLP-M6-20



Order in number of packs.

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



- These socket head cap screws have low head heights.
- Intended for reducing the size of devices and applications with limited overhead space.
- Install and remove by using **SKP** Specialty Key. As the pilot recess guides securely, you can tighten at higher torque more safely. (Commercially available hex keys can also be used for tightening.)

● Application

Reducing the size of equipment and devices

● Material/Finish



	SLP
Main Body	Equivalent to S45C Ferrosoferric Oxide Film (Black)
Strength Class	8.8

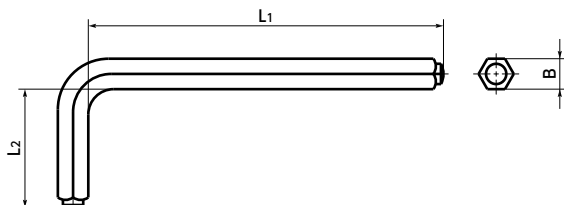
Part Number	M	L					D1	L1	B	t	Lb	Max. Torque (N・m)	Mass (g)
SLP-M4	M4	8	10				7	2.8	3	1.6	3.5	2	1.3 - 1.4
SLP-M5	M5		10	12	16	20	8.5	3.5	4	2	4.2	6	2 - 3.3
SLP-M6	M6		10	12	16	20	10	4	5	2.5	5.5	9	3.5 - 5.3
SLP-M8	M8			12	16	20	13	5	6	3	7	20	7.8 - 10

Unit : mm

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

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

● Dedicated wrench



Part Number	B Nominal of Key	L1	L2	with Screw	Mass (g)	Qty per pack
SKP-3	3	63	20	SLP-M4	5	1
SKP-4	4	71	25	SLP-M5	10	1
SKP-5	5	80	28	SLP-M6	28	1
SKP-6	6	90	32	SLP-M8	34	1

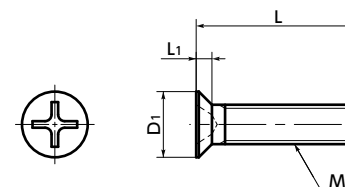
1 Individual Sales ➔ P.809 1 Cleanroom Wash & Packaging ➔ P.807 1 Screw Length Adjustment ➔ P.811 1 Vibration Resistant ➔ P.810 1 Modification process for captive use ➔ P.806
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Please feel free to contact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

SNF-SD / SNFS-SD Cross Recessed Flat Head Machine Screws with Small Head

e-nedzi.com®



WEB Selection Tool WEB CAD Download Small Head SUS Stainless steel



● Part number specification

SNF-M5-20-SD-TZB



Order in number of packs.

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



- Cross Recessed flat head machine screws with small head diameters. This makes it possible to reduce the spot facing diameters compared to standard flat head machine screws.
- Since the head height is lower than that of standard flat head screws. Suitable for connecting thin plates.

● Application

Reducing the size of equipment and devices

● Material/Finish



	SNF-SD-TZB	SNFS-SD
Main Body	SWCH Trivalent Chromate Treatment	SUSXM7 (Equivalent to SUS304)

SNF-SD-TZB	SNFS-SD	Common dimensions											Unit: mm		
Steel - Trivalent Chromate Treatment	Stainless steel														
Part Number	Part Number	M	2	L	3							D1	L1	Mass (g)	
SNF-M3-SD-TZB		M3	5	6	8	10	12					5	1.3	0.41 - 0.69	
SNF-M4-SD-TZB	SNFS-M4-SD	M4		6	8	10	12	16				6	1.3	0.73 - 1.5	
SNF-M5-SD-TZB	SNFS-M5-SD	M5			8	10	12	16	20			8	1.8	1.7 - 3.1	
SNF-M6-SD-TZB	SNFS-M6-SD	M6				10	12	16	20	25		10	2.3	3.2 - 5.8	

Unit : mm

SNF-SD-TZB Steel - Trivalent Chromate Treatment

Part Number	Qty*1 per pack
SNF-M3-SD-TZB	20
SNF-M4-SD-TZB	20
SNF-M5-SD-TZB	20
SNF-M6-SD-TZB	20

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

SNFS-SD Stainless Steel

Part Number	Qty*1 per pack
SNFS-M4-SD	20
SNFS-M5-SD	20
SNFS-M6-SD	20

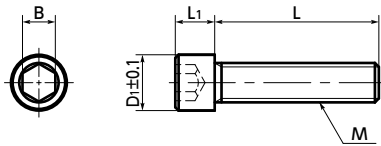
*1 : Also sold separately from 1 piece up. ➔ P.809

1 Individual Sales ➔ P.809 1 Cleanroom Wash & Packaging ➔ P.807 1 Screw Length Adjustment ➔ P.811 1 Vibration Resistant ➔ P.810 1 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



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

WEB Selection Tool CAD Download SUS Stainless steel Small Head



⚠ Precautions for Use

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

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

P: Bearing surface pressure (N/mm²)
 σ : Bolt stress (N/mm²)
 As: Screw effective sectional area (mm²)
 A: Bearing surface area (mm²)

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

D₁: Head diameter (mm)
 d: Drilled hole diameter (mm)

● Head Diameter and Screw Effective Cross-sectional Area

Part Number	Head Diameter (mm)	Screw effective cross-sectional area (mm ²)
SNS-M3-SD	4.5	5.03
SNS-M4-SD	5.5	8.78
SNS-M5-SD	7	14.2
SNS-M6-SD	8.5	20.1
SNS-M8-SD	11	36.6
SNS-M10-SD	13.5	58

SNS-SD Steel - Ferrosferic Oxide Coating

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

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

*1: Also sold separately from 1 piece up. → P.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 Please feel free to contact us



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

● Application

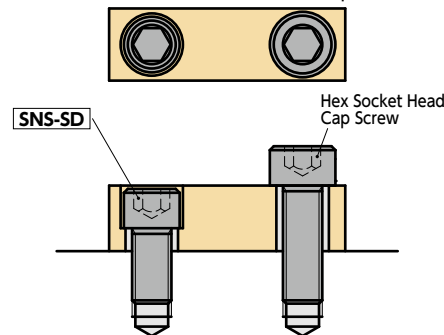
Reducing the size of equipment and devices

● Material/Finish

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

● Usage example

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



● Part number specification

SNS - M5 - 20 - SD

1 2 3 1

Order in number of packs.

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

SNS-SD-EL Steel - Electroless Nickel Plating

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

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

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

SNSS-SD Stainless Steel

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

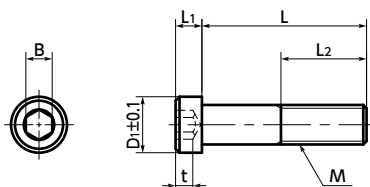
Part Number	Qty per pack*1
SNSS-M2-SD	10
SNSS-M2.5-SD	10
SNSS-M3-SD	10
SNSS-M4-SD	10
SNSS-M5-SD	10
SNSS-M6-SD	10
SNSS-M8-SD	10
SNSS-M10-SD	10

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



SLH-SD/SLHS-SD Socket Head Cap Screws with Low & Small Head

WEB Selection Tool CAD Download SUS Stainless steel Protrusion Small Head



⚠ Precautions for Use

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

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

P: Bearing surface pressure (N/mm²)
σ: Bolt stress (N/mm²)
As: Screw effective sectional area (mm²)
A: Bearing surface area (mm²)

Head diameter: D₁
Intended fastening material
Drilled hole diameter: d

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

D₁: Head diameter (mm)
d: Drilled hole diameter (mm)

● Head Diameter and Screw Effective Cross-sectional Area

Part Number	Head Diameter (mm)	Screw effective cross-sectional area (mm ²)
SLH-M3-SD	4.5	5.03
SLH-M4-SD	5.5	8.78
SLH-M5-SD	7	14.2
SLH-M6-SD	8.5	20.1
SLH-M8-SD	11	36.6
SLH-M10-SD	13.5	58

SLH-SD Steel - Ferrosferic Oxide Coating

Part Number	M	2	L	3	D ₁	L ₁	B	t	L ₂ *1	Mass (g)
SLH-M3-SD	M3	6	8	10	12	4.5	2	2	1.5	Full Thread 0.5 - 0.7
SLH-M4-SD	M4	6	8	10	12	5.5	2.8	2.5	2.3	Full Thread 0.9 - 2.4
SLH-M5-SD	M5		8	10	12	7	3	3	2.2	Full Thread 1.7 - 3.8
SLH-M6-SD	M6		8	10	12	8.5	3.5	4	2.5	18(L=30) 2.6 - 6.5
SLH-M8-SD	M8			10	12	11	4.5	5	3.3	22(L=35) 5.9 - 14
SLH-M10-SD	M10				16	13.5	5.5	6	4	Full Thread 13 - 25

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

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

*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 Please feel free to contact us



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

● Application

Reducing the size of equipment and devices

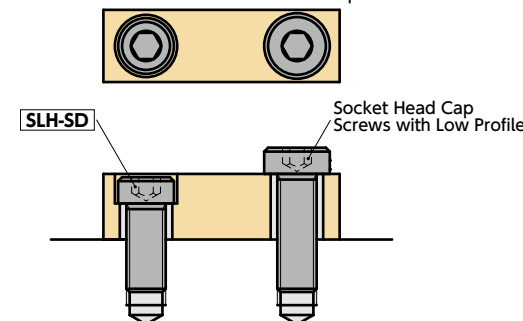
● Material/Finish

	SLH-SD	SLH-SD-EL	SLHS-SD
Main Body	SWCH45K Ferrosferic Oxide Film (Black)	SWCH45K Electroless Nickel Plating	SUSXM7 (Equivalent to SUS304)
Strength Class	8.8	8.8	A2-50

RoHS2 Compliant

● Usage example

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



● Part number specification

SLH-M5-20-SD-EL

1 2 3 4

Order in number of packs.

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

SLH-SD-EL Steel - Electroless Nickel Plating

Part Number	M	2	L	3	D ₁	L ₁	B	t	L ₂ *1	Mass (g)
SLH-M3-SD-EL	M3	6	8	10	12	4.5	2	2	1.5	Full Thread 0.5 - 0.7
SLH-M4-SD-EL	M4	6	8	10	12	5.5	2.8	2.5	2.3	Full Thread 0.9 - 2.4
SLH-M5-SD-EL	M5		8	10	12	7	3	3	2.2	Full Thread 1.7 - 3.8
SLH-M6-SD-EL	M6		8	10	12	8.5	3.5	4	2.5	18(L=30) 2.6 - 6.5
SLH-M8-SD-EL	M8			10	12	11	4.5	5	3.3	22(L=35) 5.9 - 14
SLH-M10-SD-EL	M10				16	13.5	5.5	6	4	Full Thread 13 - 25

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

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

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

SLHS-SD Stainless Steel

Part Number	M	2	L	3	D ₁	L ₁	B	t	L ₂ *1	Mass (g)
SLHS-M3-SD	M3	6	8	10	12	4.5	2	2	1.5	Full Thread 0.5 - 0.7
SLHS-M4-SD	M4	6	8	10	12	5.5	2.8	2.5	2.3	Full Thread 0.9 - 2.4
SLHS-M5-SD	M5		8	10	12	7	3	3	2.2	Full Thread 1.7 - 3.8
SLHS-M6-SD	M6		8	10	12	8.5	3.5	4	2.5	18(L=30) 2.6 - 6.5
SLHS-M8-SD	M8			10	12	11	4.5	5	3.3	22(L=35) 5.9 - 14
SLHS-M10-SD	M10				16	13.5	5.5	6	4	Full Thread 13 - 25

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

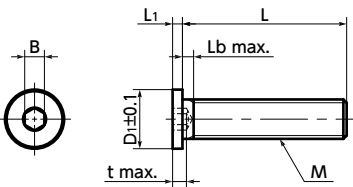
Part Number	Qty per pack*1
SLHS-M3-SD	10
SLHS-M4-SD	10
SLHS-M5-SD	10
SLHS-M6-SD	10
SLHS-M8-SD	10
SLHS-M10-SD	10

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



SSH-SD/SSHS-SD Socket Head Cap Screws with Extreme Low & Small Head

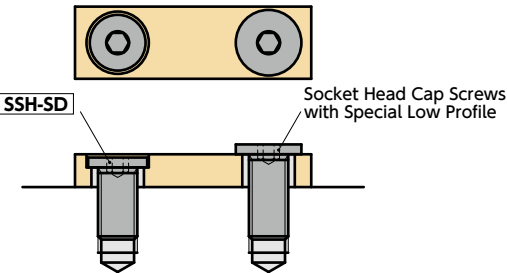
WEB Selection Tool CAD Download SUS Stainless steel Protrusion Small Head



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

- Application
Reducing the size of equipment and devices

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



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

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

P : Bearing surface pressure (N/mm²)
σ : Bolt stress (N/mm²)
As : Screw effective sectional area (mm²)
A : Bearing surface area (mm²)
$$\text{Bearing surface area } A = \pi \frac{(D_1^2 - d^2)}{4}$$

D₁ : Head diameter (mm)
d : Drilled hole diameter (mm)

• Head Diameter and Screw Effective Cross-sectional Area

Part Number	Head Diameter (mm)	Screw effective cross-sectional area (mm ²)
SSH-M3-SD	5	5.03
SSH-M4-SD	6	8.78
SSH-M5-SD	8	14.2
SSH-M6-SD	9	20.1
SSH-M8-SD	11	36.6
SSH-M10-SD	13.5	58

SSH-SD Made of Steel · Ferrosoferric Oxide Film Unit : mm

Part Number	M	2	L	3	D1	L1	Lb	B	t	Max. Torque*1 (N·m)	Mass (g)
SSH-M3-SD	M3	6	8	10 12	5	1.3	1.5	1.5	2	1	0.4 - 0.7
SSH-M4-SD	M4	6	8	10 12 16	6	1.5	1.6	2	2.5	2	0.7 - 1.5
SSH-M5-SD	M5	6	8	10 12 16 20	8	1.5	2	3	3	3.5	1.2 - 2.9
SSH-M6-SD	M6	6	8	10 12 16 20 25 30	9	1.5	2.5	3	4	5	1.6 - 5.8
SSH-M8-SD	M8		8	10 12 16 20 25 30	11	1.5	3	4	5	10	3.1 - 10
SSH-M10-SD	M10			10 12 16 20 25 30	13.5	1.5	3.5	5	6	18	5.7 - 16

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

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

*1 : Also sold separately from 1 piece up. ➡ P.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 Please feel free to contact us

- Material/Finish ◀1 RoHS2 Compliant

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

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

- Part number specification

SSH-M5-20-SD-EL
1 2 3 4

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

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

Unit : mm

Part Number	M	2	L	3	D1	L1	Lb	B	t	Max. Torque*1 (N·m)	Mass (g)
SSH-M3-SD-EL	M3	6	8	10 12	5	1.3	1.5	1.5	2	1	0.4 - 0.7
SSH-M4-SD-EL	M4	6	8	10 12 16	6	1.5	1.6	2	2.5	2	0.7 - 1.5
SSH-M5-SD-EL	M5	6	8	10 12 16 20	8	1.5	2	3	3	3.5	1.2 - 2.9
SSH-M6-SD-EL	M6	6	8	10 12 16 20 25 30	9	1.5	2.5	3	4	5	1.6 - 5.8
SSH-M8-SD-EL	M8		8	10 12 16 20 25 30	11	1.5	3	4	5	10	3.1 - 10
SSH-M10-SD-EL	M10			10 12 16 20 25 30	13.5	1.5	3.5	5	6	18	5.7 - 16

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

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

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

SSHS-SD Made of Stainless Steel

Unit : mm

Part Number	M	2	L	3	D1	L1	Lb	B	t	Max. Torque*1 (N·m)	Mass (g)
SSHS-M2-SD	M2	5	6	8	3.2	1.1	1.2	1.3	1.2	0.2	0.087 - 0.15
SSHS-M2.5-SD	M2.5	5	6	8	4	1.3	1.4	1.3	1.5	0.4	0.19 - 0.28
SSHS-M3-SD	M3		6	8 10 12	5	1.3	1.5	1.5	2	0.6	0.4 - 0.7
SSHS-M4-SD	M4		6	8 10 12 16	6	1.5	1.6	2	2.5	1.2	0.7 - 1.5
SSHS-M5-SD	M5		6	8 10 12 16 20	8	1.5	2	3	3	2.5	1.2 - 2.9
SSHS-M6-SD	M6		6	8 10 12 16 20 25 30	9	1.5	2.5	3	4	5	1.6 - 5.8
SSHS-M8-SD	M8			8 10 12 16 20 25 30	11	1.5	3	4	5	7	3.1 - 10
SSHS-M10-SD	M10			10 12 16 20 25 30	13.5	1.5	3.5	5	6	18	5.7 - 16

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

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

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



Corrosion Resistance

	Duplex Stainless Steel Hexagon Head Screw	Duplex Stainless Steel Hexagon Nuts
Part Number	SNHDS	SHNDS
Shape	 NEW	 NEW
Page	P.623	P.624
Materials	UNS S31803	UNS S31803
Characteristics	Corrosion Resistance High Strength • Magnetic	Corrosion Resistance High Strength • Magnetic
Size	M12 - M24	M12 - M24

High Strength

	Socket Head Cap Screws
Part Number	SNSX
Shape	
Page	P.625
Materials	SUS316L HiMo
Characteristics	High Strength • Heat Resistance • Corrosion Resistance Nonmagnetic
Size	M3 - M12

Heat Resistance

	Socket Head Cap Screws		Hex Nuts • Washers
Part Number	SNSL	SNSJ	SHNJ/SWAJ
Shape			
Page	P.627	P.628	P.629
Materials	SUS316L	SUS310S	SUS310S
Characteristics	Heat Resistance • Corrosion Resistance • Nonmagnetic	Heat Resistance • Chemical Resistance	Heat Resistance • Chemical Resistance
Size	M3 - M8	M3 - M10	M3 - M10

For Magnetic Detection

	Socket Head Cap Screws with Magnetic Captive Washers	Hex Nuts • Washers
Part Number	SNSQS-PM	SHNS-PM/SWAS-PM
Shape		
Page	P.631	P.632
Materials	Body : SUSXM7 Washers : NSSC-180	Hex Nuts : NSSC-550 Washers : NSSC-180
Characteristics	Magnetic • Corrosion Resistance	Magnetic • Corrosion Resistance
Size	M3 - M6	M4 - M10

Properties of High Performance Stainless Steel Screws

Mechanical Properties

Properties	SUS316L HiMo SNSX-88	SUS316L HiMo SNSX-109	SUS316L*1 SNSL	SUS310S SNSJ	UNS S31803 SNHDS	SUSXM7*2
Tensile Strength (N/mm ²)	800	1,000	700	520	620	700
0.2% Proof Stress (N/mm ²)	640	900	450	205	450	450
Elongation (mm)	0.3d	0.2d	0.4d	—	—	0.4d
Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Magnetic	Non-Magnetic

*1 Values for Strength Class A4 - 70.

*2 Values for Strength Class A2 - 70.

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

Yield load (N)

Thread	SUS316L HiMo SNSX-88	SUS316L HiMo SNSX-109	SUS316L*1 SNSL	SUS310S SNSJ	UNS S31803 SNHDS	SUSXM7*2
M3	3,200	—	2,300	1,030	2,300	2,300
M4	5,600	—	4,000	1,790	4,000	4,000
M5	9,100	—	6,400	2,910	6,400	6,400
M6	12,900	18,100	9,000	4,120	9,000	9,000
M8	23,400	32,900	16,500	7,500	16,500	16,500
M10	—	52,200	26,100	11,800	26,100	26,100
M12	—	75,800	37,900	—	37,900	37,900

*1 Values for Strength Class A4 - 70.

*2 Values for Strength Class A2 - 70.

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

Proof Stress by Temperature (N/mm²)

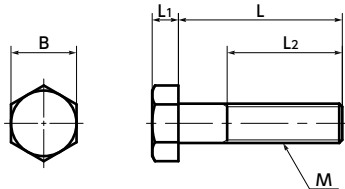
Part Number • Material	20°C	100°C	200°C	300°C	400°C	500°C	600°C
SUS316L HiMo SNSX-88	640	576	576	544	512	480	448
SUS316L HiMo SNSX-109	900	855	855	855	810	810	765
SUSXM7	450	382	360	337	315	—	—
SCM435	1,100	1,020	925	825	—	—	—

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

Non-Magnetic

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

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



- Made of duplex stainless steel, combining the best of austenitic and ferritic steel.
- Excellent strength and corrosion resistance compared to SUS316L.
- It has magnetism.
- For applications in chloride environments such as seawater.

● Application
Seawater desalination equipment / Seawater intake pump / Offshore instruments / Food machinery / Food production line

● Material/Finish

RoHS2 Compliant

	SNHDS
Main body	UNS S31803

● Mechanical property

	UNS S31803	SUS316L
Tensile strength (N/mm ²)	620 or above	480 or above
0.2% Proof Stress (N/mm ²)	450 or above	175 or above
Extension (%)	18 or above	40 or above
Hardness (HRB)	(106 or less)	90 or less

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

Unit : mm

Part Number	M	L							B	L1	L2	Mass (g)
SNHDS-M12	M12	30	40	50	60				19	8	30	42 - 68
SNHDS-M16	M16		40	50	60	70			24	10	38	96 - 143
SNHDS-M20	M20			50	60	70	80		30	13	46	185 - 258
SNHDS-M24	M24				60	70	80	90	36	15	54	314 - 420

Part Number	Qty per pack
SNHDS-M12	1
SNHDS-M16	1
SNHDS-M20	1
SNHDS-M24	1

● Part number specification

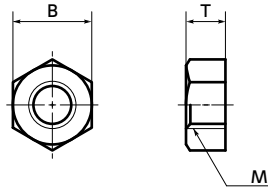
SNHDS - M20 - 60

Product Code

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	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



- Made of duplex stainless steel, combining the best of austenitic and ferritic steel.
- Excellent strength and corrosion resistance compared to SUS316L.
- It has magnetism.
- For applications in chloride environments such as seawater.

● Application
Seawater desalination equipment / Seawater intake pump / Offshore instruments / Food machinery / Food production line

● Material/Finish

RoHS2 Compliant

	SHNDS
Main body	UNS S31803

● Mechanical property

	UNS S31803	SUS316L
Tensile strength (N/mm ²)	620 or above	480 or above
0.2% Proof Stress (N/mm ²)	450 or above	175 or above
Extension (%)	18 or above	40 or above
Hardness (HRB)	(106 or less)	90 or less

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

Unit : mm

Part Number	M	B	T	Mass(g)	Qty per pack
SHNDS-M12	M12	19	10	16	1
SHNDS-M16	M16	24	13	31	1
SHNDS-M20	M20	30	16	61	1
SHNDS-M24	M24	36	19	102	1

● Part number specification

SHNDS-M20

Product Code

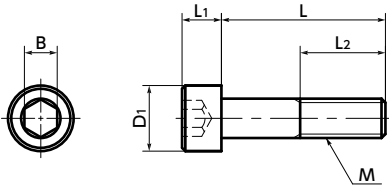
1

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



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

WEB Selection Tool 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

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

● 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.

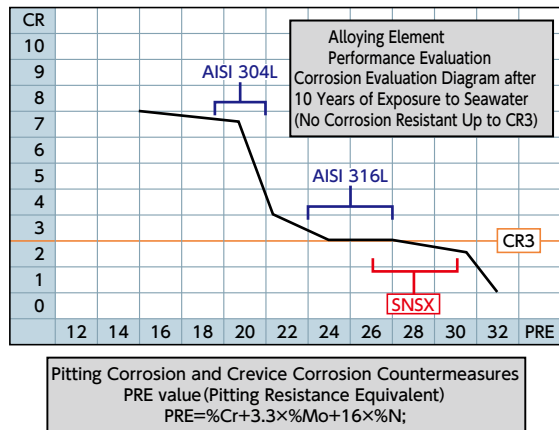
● Durability by temperature (N/mm²)

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

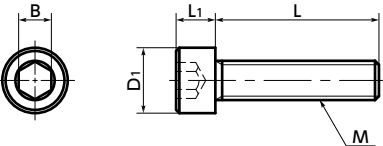
SNSX, a type with a ventilation hole is available.
→ P.571



● Part number specification

SNSX - M3 - 25 - 88

Product Code 1 2 3



● Material/Finish



	SNSL
Main Body	SUS316L
Strength Class	A4-70

- 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

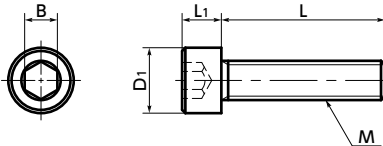
● Part number specification

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

● Part number specification

SNSJ-M5-16

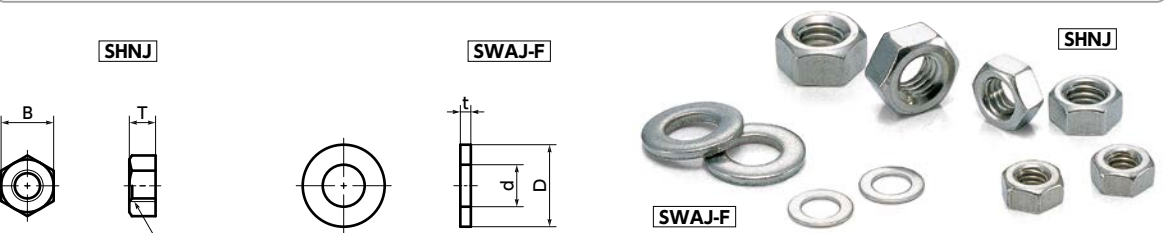


Unit : mm																
Part Number 1	M	L 2										D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
SNSJ-M3	M3	6	8	10	12	16	20					5.5	3	2.5	2610	0.71 - 1.4
SNSJ-M4	M4		8	10	12	16	20	25				7	4	3	4560	1.7 - 3.2
SNSJ-M5	M5			10	12	16	20	25				8.5	5	4	7380	2.7 - 4.8
SNSJ-M6	M6				12	16	20	25	30			10	6	5	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



● 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.
- Use in combination with **SNSJ** Socket Head Cap Screw (SUS310S) ➡ P.628
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

● Application

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

● Material/Finish

	SHNJ	SWAJ-F
Main Body	SUS310S	SUS310S

RoHS2 Compliant

● Part number specification

SHNJ-M5



SHNJ Hex Nuts

Unit : mm

Part Number	M	B	T	Mass (g)	Qty per pack
SHNJ-M3	M3	5.5	2.4	0.35	1
SHNJ-M4	M4	7	3.2	0.81	1
SHNJ-M5	M5	8	4	1.2	1
SHNJ-M6	M6	10	5	2.5	1
SHNJ-M8	M8	13	6.5	5.6	1
SHNJ-M10	M10	17	8	12	1

SWAJ-F Washers

Unit : mm

Part Number	Nominal	d	D	t	Mass (g)	Qty per pack
SWAJ-3-F	3	3.2	7	0.5	0.12	1
SWAJ-4-F	4	4.3	9	0.8	0.31	1
SWAJ-5-F	5	5.3	10	1	0.45	1
SWAJ-6-F	6	6.5	13	1	0.79	1
SWAJ-8-F	8	8.5	18	1.5	2.4	1
SWAJ-10-F	10	10.5	22	1.5	3.5	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	Cleanroom washed and packed	Not Available	Not Available	Not Available



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

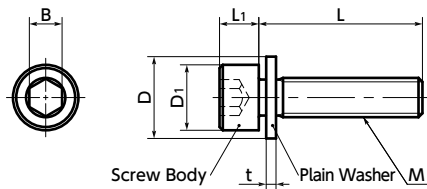
SNSQS-PM

Hex Socket Head Cap Screws with Magnetic Captive Washer

e-nedzi.com®



WEB Selection Tool WEB CAD Download iMagnetic Easy operation SUS Stainless steel



- Socket head cap screws have built-in magnetic stainless steel washers.
- They can be detected magnetically even if the screw falls out from food industry machines and get mixed in food products in factories.
- The washer is built in below the neck so it does not fall off. Attaching the washer is not required.
- Washer's corrosion resistance is as same as SUS304.

• Application

With magnetic detection
Food industry machines, food production lines,
and food packaging lines

• Material/Finish



	SNSQS-PM
Screw Body	SUSXM7 (Equivalent to SUS304)
Screw Body Tensile Strength	A2-50
Plain Washer	NSSC-180 (Equivalent to SUS430J1L)

Unit : mm													
Part Number	M 	L 						D1	D	L1	B	t	Mass (g)
SNSQS-M3-PM	M3	8	10	12	16			5.5	7	3	2.5	0.5	0.92 - 1.3
SNSQS-M4-PM	M4		10	12	16	20		7	9	4	3	0.8	2.1 - 3
SNSQS-M5-PM	M5			12	16	20	25	8.5	10	5	4	1	3.4 - 5.2
SNSQS-M6-PM	M6			12	16	20	25	10	12.5	6	5	1.5	6.2 - 8.7

Part Number	Qty per pack
SNSQS-M3-PM	1
SNSQS-M4-PM	1
SNSQS-M5-PM	1
SNSQS-M6-PM	1

• Part number specification

SNSQS - M5 - 25 - PM

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

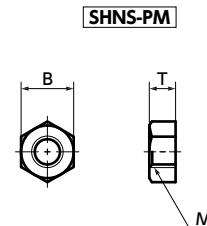
SHNS-PM / SWAS-PM

Hex Nuts/Washers - Magnetic S.S.

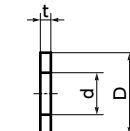
e-nedzi.com®



WEB Selection Tool WEB CAD Download iMagnetic SUS Stainless steel



SWAS-F-PM



- Made of magnetic stainless steel.
- They can be detected magnetically even if the screw falls out from food industry machines and gets mixed in food products in factories.
- Same corrosion resistance as SUS304.

• Application

With magnetic detection
Food industry machines, food production lines,
and food packaging lines

• Material/Finish



	SHNS-PM	SWAS-PM
Main Body	NSSC-550	NSSC-180 (Equivalent to SUS430J1L)

SHNS-PM Hex Nuts

Unit : mm

Part Number	M	B	T	Mass (g)	Qty*1 per pack
SHNS-M4-PM	M4	7	3.2	0.69	10
SHNS-M5-PM	M5	8	4	1.1	10
SHNS-M6-PM	M6	10	5	2.2	10
SHNS-M8-PM	M8	13	6.5	4.7	5
SHNS-M10-PM	M10	17	8	10	5

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

SWAS-F-PM Washers

Unit : mm

Part Number	Nominal	d	D	t	Mass (g)	Qty*1 per pack
SWAS-3-F-PM	3	3.2	7	0.5	0.12	10
SWAS-4-F-PM	4	4.3	9	0.8	0.31	10
SWAS-5-F-PM	5	5.3	10	1	0.45	10
SWAS-6-F-PM	6	6.4	12.5	1.5	1.1	10
SWAS-8-F-PM	8	8.4	17	1.5	2	5
SWAS-10-F-PM	10	10.5	21	2	4.1	5

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

• Part number specification

SWAS-5-F-PM

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



• Socket Head Cap Screws • Cross Recessed Machine Screws

	Socket Head Cap Screws		Cross Recessed Machine Screws			
Part Number	SNSTG	SNST	SNPTG	SNPT	SNFTG	SNFT
Shape						
Page	P.635	P.636	P.637	P.638	P.639	P.640
Materials	Ti-6Al-4V (64 Titanium)	TB340C (Grade 2 Titanium)	Ti-15-3-3-3 (β Titanium)	TW270 (Grade 1 Titanium)	Ti-15-3-3-3 (β Titanium)	TW270 (Grade 1 Titanium)
Characteristics	High Strength • Lightweight • Nonmagnetic • Corrosion Resistance	Lightweight • Nonmagnetic • Chemical Resistance	High Strength • Lightweight • Nonmagnetic • Corrosion Resistance	Lightweight • Nonmagnetic • Chemical Resistance	High Strength • Lightweight • Nonmagnetic • Corrosion Resistance	Lightweight • Nonmagnetic • Chemical Resistance
Size	M3 - M10	M3 - M6	M3 - M5	M2 - M5	M3 - M5	M3 - M4

• Nuts • Washers

	Hex Nuts	Hex Lock Nuts	Washers
Part Number	SHNT	SWUT	SWAT
Shape			
Page	P.641	P.642	P.643
Materials	TW270 (Grade 1 Titanium) TW340 (Grade 2 Titanium)	FRS-9901 (Equivalent to TW340)	TP340C (Grade 2 Titanium)
Characteristics	Lightweight • Nonmagnetic • Chemical Resistance With Flange	Lightweight • Nonmagnetic • Chemical Resistance Vibration Resistant	Lightweight • Nonmagnetic • Chemical Resistance
Size	M3 - M10	M3 - M10	Nominal 3 to 10

- Titanium screws by NBK receive chemical polishing and brightening processing to improve their surfaces. Furthermore, the screws are cleanroom washed and comply with clean specifications that require no oil or foreign matter deposits.

Titanium Screws by NBK
Chemically Polishing and
Brightening Processing

Unprocessed



Properties of Titanium

• Physical Properties

Properties	TB340C (Pure Titanium)	Ti-6Al-4V (64 Titanium)	Ti-15-3-3-3 (β Titanium)
Specific Gravity	4.51	4.43	4.8
Melting Point (°C)	1668	1540	—
Longitudinal Elastic Modulus (GPa)	106	113	90
Thermal Conductivity (W / (m · K))	17.16	7.5	—
Linear Expansion Coefficient (K ⁻¹)	8.4×10 ⁻⁶	8.8×10 ⁻⁶	—
Electric Resistance (μΩ · m)	0.55	1.7	—
Amplitude Permeability (μ)	1.0001	1.0002	1.0002

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

• Mechanical Properties

Properties	TB340C (Pure Titanium)	Ti-6Al-4V (64 Titanium)	Ti-15-3-3-3 (β Titanium)	SUSXM7*
Tensile Strength (N/mm ²)	340 - 510	895 or Higher	705 - 945	500
0.2% Proof Stress (N/mm ²)	215 or Higher	825 or Higher	690 - 835	210
Elongation (%)	23 or Higher	10 or Higher	12 or Higher	—

*Values for Strength Class A2 - 50.

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

• Tension Rupture Load (N)

Thread	TB340C (Pure Titanium)	Ti-6Al-4V (64 Titanium)	Ti-15-3-3-3 (β Titanium)	SUSXM7*
M3	3210	5240	4170	2500
M4	5610	8850	7520	4400
M5	9080	14700	11900	7100
M6	12800	20800	—	10100
M8	—	33700	—	18300
M10	—	58900	—	29000

*Values for Strength Class A2 - 50.

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

• Magnetic Flux Density

	Titanium	SUSXM7
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

• Chemical Resistance

(Partially excerpted from "World of Titanium" by Japan Titanium Society)

Chemical Name	Composition (%)	Corrosion Resistibility		
		Pure Titanium	SUS304	Hastelloy*
Hydrochloric Acid	10 30	○ ×	×	○ ○
Sulfuric Acid	10 50	△ ×	— ×	○ ○
Nitric Acid	10 50	○ ○	○ ○	— —
Nitrohydrochloric Acid (HCl : HNO ₃)	3:01	○	×	△
Chromic Acid	5	○	—	○
Hydrofluoric Acid	5	×	×	△
Phosphoric Acid (Ventilation)	50	△	○	○
Ferric Chloride	10 - 30	○	×	○
Cupric Chloride	10 - 30	○	×	○
Sodium Chloride	10 - 40	○	○	○
Calcium Chloride	50	○	○	○
Ammonium Chloride	40	○	—	○
Magnesium Chloride	40	○	○	○
Ferrous Sulfate	10 - 50	○	○	○
Ammonia	10 - 30	○	○	○
Sodium Hydroxide	50	○	○	—
Sodium Carbonate	10	○	○	○
Hydrogen Sulfide	Dry Gas Wet Gas	○ ○	△ ○	○ ○
Hydrogen Sulfide	Dry Gas Wet Gas	×	—	○ △
Sulfur Dioxide	Dry Gas Wet Gas	○ ○	—	—
Seawater	High Speed Stream	○	—	—
Formic Acid	10 - 50	○	○	○
Lactic Acid	50	○	○	○
Oxalic Acid	20	×	—	○
Citric Acid	10 - 50	○	○	○

Testing Temperature : Room Temperature

○ : <0.127 mm/year △ : 0.508 - 1.27 mm/year

○ : 0.127 - 0.508 mm/year × : >1.27 mm/year

*Hastelloy is a registered trademark of Haynes International, Inc.

Important Information about
Chemical Resistance Data

- A test piece was used to acquire the test data.
- Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.

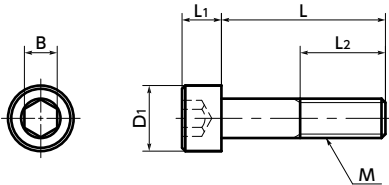
SNSTG

Hex Socket Head Cap Screws - High Intensity Titanium Alloy

e-nedzi.com®



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



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	1	M	L	2	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

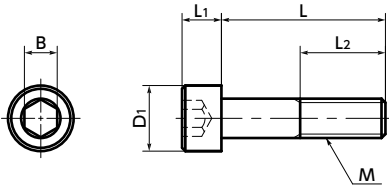
SNST

Hex Socket Head Cap Screws - Titanium

e-nedzi.com®



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	2	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

e-nedzi.com®

SNPTG Cross Recessed Pan Head Machine Screws - High Intensity Titanium Alloy

 WEB Selection Tool

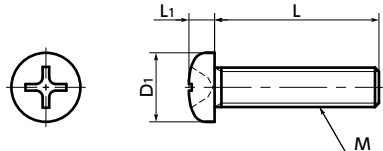
 WEB CAD Download

 Cleanroom wash & packaging

 Non-Magnetic

 High strength

 Lightweight



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

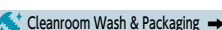
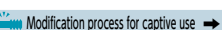
1

2

Unit : mm												
Part Number 1	M	L 2							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

SNPT Cross Recessed Pan Head Machine Screws - Titanium

 WEB Selection Tool

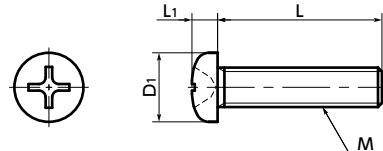
 WEB CAD Download

 Cleanroom wash & packaging

 Chemical-proof

 Non-Magnetic

 Lightweight



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

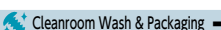
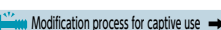
 SHNT Titanium Hex Nut,
 SWUT Titanium Hex Lock Nut,
and  SWAT Titanium Washer
are available.
➡ P.641 - 643

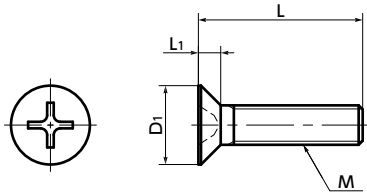


Unit : mm														
Part Number	M	L 2							D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N·m)	Mass (g)	
SNPT-M2	M2	5	6	8	10				3.5	1.3	840	0.3	0.09 - 0.14	
SNPT-M2.5	M2.5	5	6	8	10	12			4.5	1.7	1380	0.5	0.17 - 0.3	
SNPT-M3	M3		6	8	10	12	16	20	5.5	2	2360	1	0.31 - 0.63	
SNPT-M4	M4		6	8	10	12	16	20	7	2.6	4120	2.4	0.59 - 1.4	
SNPT-M5	M5			8	10	12	16	20	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/mm ²)	705 - 945
0.2% Proof Stress (N/mm ²)	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



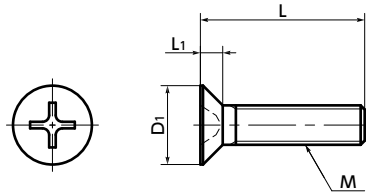
	SNFTG
Main Body	Ti-15 - 3 - 3 - 3 (β Titanium)

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/mm ²)	270 - 410
0.2% Proof Stress (N/mm ²)	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

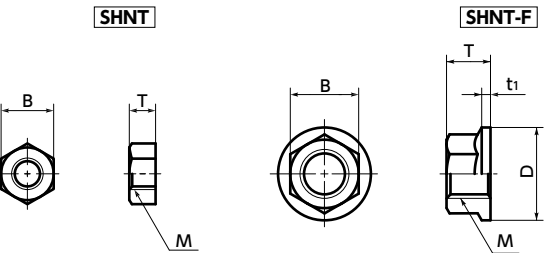


Unit : mm									
Part Number	M	L				D1	L1	Tension*1 Rupture Load (N)	Torsional*1 Torque (N · m)
SNFT-M3	M3	6	8	10		6	1.75	2360	1
SNFT-M4	M4	6	8	10	12	8	2.3	4120	2.4

*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



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.

SHNT Hex Nuts - Titanium

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

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

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



- 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

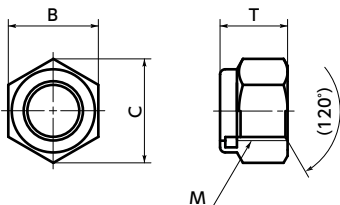
Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

Material/Finish

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

Part number specification

SHNT-M6-F



- 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

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



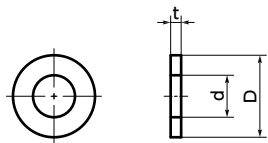
Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available



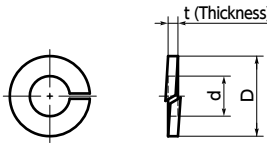
SWAT Washers - Titanium

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/>



● Monel400

	Hex Socket Head Cap Screws (Monel 400 equiv.)
Part Number	SNSMN
Shape	 NEW
Page	P.647
Materials	Monel 400 equiv.
Characteristics	Chemical-proof Heat-resistance
Size	M3 - M6

● Inconel

	Socket Head Cap Screws	Hex Nuts • Washers
Part Number	SNSI	SHNI / SWAI
Shape		
Page	P.648	P.649
Materials	NCF600	NCF600
Characteristics	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance
Size	M3 - M8	M3 - M8

● Molybdenum

	Socket Head Cap Screws	Hex Socket Countersunk Head Screw	Hex Nuts • Washers
Part Number	SNSM	SNFCM	SHNM / SWAM
Shape		 NEW	
Page	P.650	P.651	P.652
Materials	Pure Molybdenum	Pure Molybdenum	Pure Molybdenum
Characteristics	Heat Resistance	Heat Resistance	Heat Resistance
Size	M3 - M8	M2 - M4	M3 - M8

● Hastelloy

	Socket Head Cap Screws	
Part Number	SNSH-C276	SNSH-C22
Shape		
Page	P.653	P.654
Materials	NW0276	NW6022
Characteristics	Chemical Resistance	Chemical Resistance
Size	M3 - M8	M3 - M8

● Nickel

	Socket Head Cap Screws
Part Number	SNSN
Shape	
Page	P.655
Materials	NW2201 (Ni99.0%)
Characteristics	Chemical Resistance • Heat Resistance
Size	M3 - M8

● Super Invar

	Socket Head Cap Screws
Part Number	SNSIV
Shape	
Page	P.656
Materials	Super Invar
Characteristics	Low Expansion
Size	M3 - M8

● Phospor Bronze

	Socket Head Cap Screws
Part Number	SNSP
Shape	
Page	P.657
Materials	C5191
Characteristics	Nonmagnetic
Size	M3 - M8

● Aluminum

	Socket Head Cap Screws	Hexalobular Socket Head Cap Screws with Low Profile
Part Number	SNSA	SETA
Shape		 NEW
Page	P.658	P.609
Materials	A5056	A5056
Characteristics	Lightweight	Hexalobular Socket Extra Low Profile / Small Space
Size	M3 - M8	M3 - M6

● Ceramic

	Socket Head Cap Screws	Hex Head Screws	Hex Nuts
Part Number	SCX-C	SCX-H	SCX-N
Shape	 Additional Size	 Additional Size	
Page	P.659	P.659	P.661
Materials	Al ₂ O ₃ (99.5% Alumina)	Al ₂ O ₃ (99.5% Alumina)	Al ₂ O ₃ (99.5% Alumina)
Characteristics	Chemical Resistance • Heat Resistance • Electrical Insulation	Chemical Resistance • Heat Resistance • Electrical Insulation	Chemical Resistance • Heat Resistance • Electrical Insulation
Size	M3 - M10	M3 - M10	M3 - M10

Properties of Screws Made of Special Materials

● Mechanical Properties

Properties	Inconel* (NCF600) SNSI	Pure Molybdenum SNSM SNFCM	Hastelloy*C-276 (NW0276) SNSH-C276	Hastelloy*C-22 (NW6022) SNSH-C22	Monel 400 equiv. (UNS N0400) SNSMN	Nickel (NW2201) SNSN	Super Invar SNSIV	Phosphor Bronze (C5191) SNSP	Aluminum Alloy (A5056) SNSA
Tensile Strength (N/mm ²)	548 - 695	515	793	786	517 - 620	343 - 411	470	590 or Higher	294
0.2% Proof Stress (N/mm ²)	205 - 352	380	400	365	172 - 345	68 - 166	333	—	245
Elongation (%)	35 - 55	15	60	57	35 - 60	40 - 60	43	8	12
Hardness	65 - 85 (HRB)	—	—	92 (HRB)	60 - 80 (HRB)	75 - 100 (HB)	143 (HV)	—	98 (HB)

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

● Physical Properties

Properties	Inconel* (NCF600) SNSI	Pure Molybdenum SNSM SNFCM	Hastelloy*C-276 (NW0276) SNSH-C276	Hastelloy*C-22 (NW6022) SNSH-C22	Monel 400 equiv. (UNS N0400) SNSMN	Nickel (NW2201) SNSN	Super Invar SNSIV	Phosphor Bronze (C5191) SNSP	Aluminum Alloy (A5056) SNSA
Specific Gravity	8.42	10.2	8.89	8.61	8.80	8.89	8.15	8.83	2.64
Longitudinal Elastic Modulus (GPa)	207	327	205	209	179	206	132	105	71.7
Thermal Conductivity (W/(m·K))	16.7	142	—	—	22	79.5	10.47	67	112
Linear Expansion Coefficient (K ⁻¹)	13.4×10 ⁻⁶	5.1×10 ⁻⁶	11.2×10 ⁻⁶	12.4×10 ⁻⁶	14.2×10 ⁻⁶ (100°C)	13.4×10 ⁻⁶	0.69×10 ⁻⁶	18×10 ⁻⁶	24.1×10 ⁻⁶
Electric Resistance (μΩ·m)	1.0	0.058	1.3	1.2	0.5	0.085	0.77	0.13	0.064

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

● Chemical Resistance of Inconel*, Hastelloy*, and Nickel Screws

Chemical Name	Temperature	Inconel*	Hastelloy*	Nickel
Dilute Sulfuric Acid	Room Temperature Boiling Point	A D	AA A	A D
Concentrate Sulfuric Acid	Room Temperature Boiling Point	C D	AA D	C D
Dilute Hydrochloric Acid	Room Temperature Boiling Point	B D	AA D	A D
Concentrate Hydrochloric Acid	Room Temperature Boiling Point	D D	AA B	D D
Dilute Nitric Acid	Room Temperature Boiling Point	D —	AA AA	D D
Concentrate Nitric Acid	Room Temperature Boiling Point	A —	AA D	D D
Dilute Phosphoric Acid	Room Temperature Boiling Point	AA —	AA AA	AA D
Concentrate Phosphoric Acid	Room Temperature Boiling Point	AA —	AA B	AA D
Sodium Hydroxide (Diluted)	Room Temperature Boiling Point	AA C	— —	AA AA
Sodium Hydroxide (Diluted)	Room Temperature Boiling Point	AA C	— —	AA AA

AA : Excellent

A : Good

B : Useable

*Inconel is a registered trademark of Special Metals Corporation.

Hastelloy is a registered trademark of Haynes International, Inc.

C : Useable under certain conditions

D : Non Useable

● Chemical Resistance of Ceramic Screws

Chemical Name	Temperature	Hour	Effect
35% Hydrochloric Acid	Boiling	30 minutes	●
70% Nitric Acid	Boiling	30 minutes	●
98% Sulfuric Acid	Boiling	30 minutes	●
90% Phosphoric Acid	Boiling	30 minutes	○
60% Hydrofluoric Acid	20°C	24 hours	△
10% Potassium Hydroxide	80°C	7 Days	●
Potassium Hydroxide	500°C(Boiling)	24 hours	△
Sodium Hydroxide	500°C(Boiling)	24 hours	○
Sodium Carbonate	900°C(Boiling)	24 hours	○
Sodium Sulfate	1000°C(Boiling)	24 hours	●
Potassium Fluoride	90°C(Boiling)	4 hours	×

● : No Corrosion

○ : Slight Corrosion

△ : Moderate Corrosion

× : Heavy Corrosion

⚠ Important Information about Chemical Resistance Data

- A test piece was used to acquire the test data. Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.

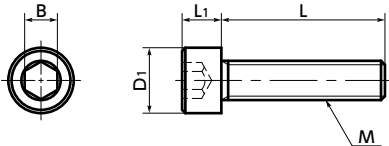
● Magnetic Flux Density of Phosphor Bronze Screws

	Phosphor Bronze	SUSXM7(S.S. grade: A2)
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



● Mechanical property

	UNS N04400 (Monel 400 equiv.)	SUS304
Tensile strength (N/mm²)	517 - 620	520 or above
0.2% Proof Stress (N/mm²)	172 - 345	205 or Higher
Extension (%)	35 - 60	40 or above
Hardness (HRB)	60 - 80	90 or less

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

● Physical property

	UNS N04400 (Monel 400 equiv.)	SUS304
Specific gravity	8.80	7.93
Longitudinal elastic modulus (GPa)	179	193
Specific heat (J/kg·K)	427	500
Electric resistivity (μΩ·m)	0.5	0.7
Heat thermal conductivity (W/(m·K))	22	17
Linear expansion coefficient (K ⁻¹)	14.2 x 10 ⁻⁶ (100°C)	17.3 x 10 ⁻⁶

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

Part Number	M	L	D1	L1	B	Tension Rupture Load*1 (N)	Mass (g)
SNSMN-M3	M3	6 8 10 12	5.5	3	2.5	2600	0.8 - 1.1
SNSMN-M4	M4	8 10 12 16 20	7	4	3	4530	1.9 - 3
SNSMN-M5	M5	10 12 16 20 25	8.5	5	4	7340	3 - 5.4
SNSMN-M6	M6	12 16 20 25 30	10	6	5	10300	5.7 - 9.4

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

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

● Part number specification

SNSMN-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



- A nickel-copper alloy with resistance to fluorine gas and hydrofluoric acid.
- Excellent strength compared to pure nickel or copper.
- Excellent stress corrosion cracking resistance due to chlorine ions.
- Cleanroom wash and cleanroom packing are completed. → P.807

● Application

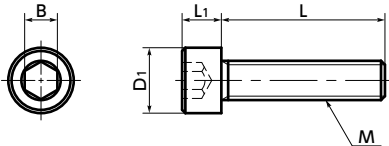
FPD production device/Semiconductor manufacturing device/ Chemical plant/Offshore instrument

● Material/Finish



	SNSMN
Main body	UNS N04400 (Monel*1 400 equiv.)

*1 : Monel is a registered trademark of Special Metals Corporation.



● Mechanical property

	Inconel (NCF600)	SUS304
Tensile Strength (N/mm²)	548 - 695	520 or Higher
0.2% Proof Stress (N/mm²)	205 - 352	205 or Higher
Elongation (%)	35 - 55	40 or Higher
Hardness (HRB)	65 - 85	90 or Less

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

● Physical property

	Inconel (NCF600)	SUS304
Specific Gravity	8.42	7.93
Longitudinal Elastic Modulus (GPa)	207	193
Specific Heat (J/kg·K)	444	500
Electric Resistance (μΩ·m)	1.0	0.7
Thermal Conductivity (W/(m·K))	16.7	17
Linear Expansion Coefficient (K ⁻¹)	13.4 x 10 ⁻⁶	17.3 x 10 ⁻⁶

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



- Screws show excellent corrosion resistance against oxidizing and reducing by inorganic and organic acids. → P.646
- Excellent resistance to stress corrosion cracking caused by hydrogen sulfide ions.
- Nearly complete corrosion resistance against ammonia.
- Excellent heat resistance and creep resistance. High strength even near 600 deg C.

● Application

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

● Material/Finish



	SNSI
Main Body	UNS N06600 (Inconel*1600 equiv.)

*1 : Inconel is a registered trademark of Special Metals Corporation.

● Part number specification

SNSI-M5-16

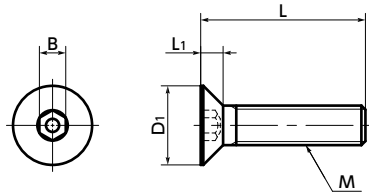


Part Number	M	L	D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
SNSI-M3	M3	6 8 10 12 16 20	5.5	3	2.5	2750	0.77 - 1.5
SNSI-M4	M4	8 10 12 16 20 25	7	4	3	4810	1.8 - 3.4
SNSI-M5	M5	10 12 16 20 25	8.5	5	4	7780	2.9 - 5.2
SNSI-M6	M6	12 16 20 25 30	10	6	5	11000	5.5 - 9
SNSI-M8	M8	16 20 25 30 35	13	8	6	20000	13 - 21

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

Part Number	Qty per pack
SNSI-M3	1
SNSI-M4	1
SNSI-M5	1
SNSI-M6	1
SNSI-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	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



● Mechanical property

	Pure molybdenum	SUS304
Tensile strength (N/mm ²)	515	520 or above
0.2% Proof Stress (N/mm ²)	380	205 or Higher
Extension (%)	15	40 or above

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

● Physical property

	Pure molybdenum	SUS304
Specific gravity	10.2	7.93
Longitudinal elastic modulus (Gpa)	327	193
Electric resistivity (μΩ · m)	0.058	0.7
Heat thermal conductivity (W/(m · K))	142	17
Linear expansion coefficient (K ⁻¹)	5.1 x 10 ⁻⁶	17.3 x 10 ⁻⁶

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

- Made of pure molybdenum.
- Melting point: 2623°C. Excellent heat resistance.
- The flat head does not protrude after tightening.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

● Application

Sputtering equipment and high temperature furnaces

● Material/Finish

	SNFCM
Main body	Pure molybdenum



Precautions for Use

Note that in an oxidizing atmosphere, sublimation will begin at 600°C or higher.

Part Number	M	L	D1	L1	B	Tension Rupture Load*1 (N)	Mass (g)
SNFCM-M2	M2	5	4	1.2	1.3	1130	0.21 - 0.33
SNFCM-M3	M3	6	6	1.75	2	2760	0.69 - 1.0
SNFCM-M4	M4	8	8	2.3	2.5	4820	1.5 - 2.4

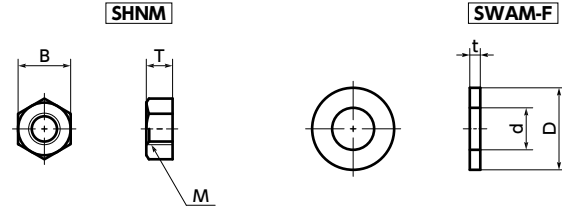
*1: Values in chart are for reference only. They are not guaranteed values.

Part Number	Qty per pack
SNFCM-M2	1
SNFCM-M3	1
SNFCM-M4	1

● Part number specification

SNFCM-M2-6

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 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Not Available



● Mechanical property

	Pure Molybdenum	SUS304
Tensile Strength (N/mm ²)	515	520 or Higher
0.2% Proof Stress (N/mm ²)	380	205 or Higher
Elongation (%)	15	40 or Higher

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

● Physical property

	Pure Molybdenum	SUS304
Specific Gravity	10.2	7.93
Longitudinal Elastic Modulus (GPa)	327	193
Electric Resistance (μΩ · m)	0.058	0.7
Thermal Conductivity (W/(m · K))	142	17
Linear Expansion Coefficient (K ⁻¹)	5.1 x 10 ⁻⁶	17.3 x 10 ⁻⁶

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

- These nuts and washers are made of pure molybdenum.
- Melting Point: 2623 deg C. Excellent heat resistance.

● Application

Sputtering equipment and high temperature furnaces

● Material/Finish

	SHNM	SWAM
Main Body	Pure Molybdenum	Pure Molybdenum



Precautions for Use

Note that in an oxidizing atmosphere, sublimation will begin at 600°C or higher.

SHNM Hex Nuts - Molybdenum

Part Number	M	B	T	Mass (g)	Qty per pack
SHNM-M3	M3	5.5	2.4	0.44	1
SHNM-M4	M4	7	3.2	1	1
SHNM-M5	M5	8	4	1.6	1
SHNM-M6	M6	10	5	3.2	1
SHNM-M8	M8	13	6.5	7.1	1

SWAM-F Plain Washers - Molybdenum

Part Number	Nominal	d	D	t	Mass (g)	Qty per pack
SWAM-3-F	3	3.2	7	0.5	0.16	1
SWAM-4-F	4	4.3	9	0.8	0.4	1
SWAM-5-F	5	5.3	10	1	0.58	1
SWAM-6-F	6	6.4	12.5	1.6	1.5	1
SWAM-8-F	8	8.4	17	1.6	2.8	1

● Part number specification

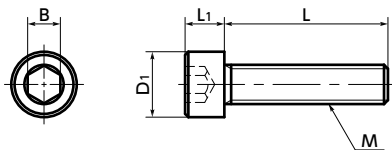
SHNM-M5

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

SNSH-C276 Socket Head Cap Screw - Hastelloy C - 276 equiv.

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

e-nedzi.com®



Mechanical property

	HastelloyC-276	SUS304
Tensile Strength (N/mm²)	793	520 or Higher
0.2% Proof Stress (N/mm²)	400	205 or Higher
Elongation (%)	60	40 or Higher

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

Physical property

	HastelloyC-276	SUS304
Specific Gravity	8.89	7.93
Longitudinal Elastic Modulus (GPa)	205	193
Specific Heat (J/kg·K)	427	500
Electric Resistance (μΩ·m)	1.3	0.7
Linear Expansion Coefficient (K ⁻¹)	11.2×10 ⁻⁶	17.3×10 ⁻⁶

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

- Hastelloy C-276 is a general type of Hastelloy.
- Excellent corrosion resistance against oxidizing and reducing salts. ➡ P.646
- Cleanroom wash and cleanroom packing are completed. ➡ P.807
- Also, **SNSH-C22** Socket Head Screw-Hastelloy (Hastelloy C-22), which is also resistant to wet chlorine gas, hypochlorite, and chlorine dioxide is available. ➡ P.654

Application

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

Material/Finish



	SNSH-C276
Main Body	UNS N10276(Hastelloy*1C-276 equiv.)

* 1 : Hastelloy is a registered trademark of Haynes International, Inc.

Part Number	M	1	L	2							D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
SNSH-M3-C276	M3	6	8	10	12	16	20				5.5	3	2.5	3980	0.81 - 1.6
SNSH-M4-C276	M4		8	10	12	16	20	25			7	4	3	6960	1.9 - 3.6
SNSH-M5-C276	M5			10	12	16	20	25			8.5	5	4	11200	3.1 - 5.4
SNSH-M6-C276	M6				12	16	20	25	30		10	6	5	15900	5.8 - 9.5
SNSH-M8-C276	M8					16	20	25	30	35	13	8	6	29000	14 - 22

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

Part Number	Qty per pack
SNSH-M3-C276	1
SNSH-M4-C276	1
SNSH-M5-C276	1
SNSH-M6-C276	1
SNSH-M8-C276	1

Part number specification

SNSH - M5 - 16 - C276

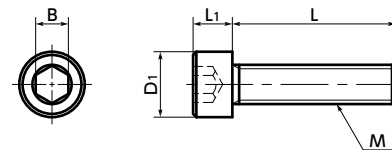
Product Code 1 2 Product Code

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	Available / Add'l charge	Available / Add'l charge

SNSH-C22 Socket Head Cap Screw - Hastelloy C - 22 equiv.

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

e-nedzi.com®



Mechanical property

	Hastelloy C-22	SUS304
Tensile Strength (N/mm²)	786	520 or Higher
0.2% Proof Stress (N/mm²)	365	205 or Higher
Elongation (%)	57	40 or Higher
Hardness (HRB)	92	90 or Less

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

Physical property

	Hastelloy C-22	SUS304
Specific Gravity	8.61	7.93
Longitudinal Elastic Modulus (GPa)	209	193
Specific Heat (J/kg·K)	381	500
Electric Resistance (μΩ·m)	1.2	0.7
Linear Expansion Coefficient (K ⁻¹)	12.4×10 ⁻⁶	17.3×10 ⁻⁶

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

- Hastelloy C-22 is one of the few metals that is resistant to wet chlorine gas, hypochlorite, and chlorine dioxide.
- Excellent corrosion resistance against oxidizing and reducing acids and salts. ➡ P.646
- For aquatic applications that use sea and salt water.
- Cleanroom wash and cleanroom packing are completed. ➡ P.807

Application

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

Material/Finish



	SNSH-C22
Main Body	UNS N06022(Hastelloy*1C-22 equiv.)

* 1 : Hastelloy is a registered trademark of Haynes International, Inc.

Unit : mm

Part Number	M	1	L	2							D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
SNSH-M3-C22	M3	6	8	10	12	16	20				5.5	3	2.5	3950	0.79 - 1.5
SNSH-M4-C22	M4		8	10	12	16	20	25			7	4	3	6900	1.8 - 3.5
SNSH-M5-C22	M5			10	12	16	20	25			8.5	5	4	11100	3 - 5.3
SNSH-M6-C22	M6				12	16	20	25	30		10	6	5	15700	5.6 - 9.2
SNSH-M8-C22	M8					16	20	25	30	35	13	8	6	28700	13 - 21

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

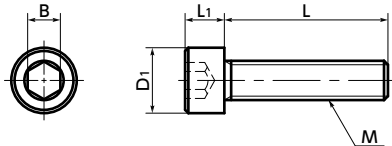
Part Number	Qty per pack
SNSH-M3-C22	1
SNSH-M4-C22	1
SNSH-M5-C22	1
SNSH-M6-C22	1
SNSH-M8-C22	1

Part number specification

SNSH - M5 - 16 - C22

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	Available / Add'l charge	Available / Add'l charge



● Mechanical property

	Nickel(NW2201)	SUS304
Tensile Strength (N/mm²)	343 - 411	520 or Higher
0.2% Proof Stress (N/mm²)	68 - 166	205 or Higher
Elongation (%)	40 - 60	40 or Higher
Hardness (HB)	75 - 100	187 or Less

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

● Physical property

	Nickel(NW2201)	SUS304
Specific Gravity	8.89	7.93
Longitudinal Elastic Modulus (GPa)	206	193
Specific Heat (J/kg・K)	456	500
Electric Resistance (μΩ・m)	0.085	0.7
Thermal Conductivity (W/(m・K))	79.5	17
Linear Expansion Coefficient (K ⁻¹)	13.4×10 ⁻⁶	17.3×10 ⁻⁶

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

- Pure nickel screws contain Ni 99.0% or more.
- Excellent corrosion resistance against alkaline liquids such as sodium hydroxide, high purity halogen gas and non-oxidizing acids.

● Application

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

● Material/Finish

	SNSN
Main Body	NW2201 (Ni 99.0% or more)

RoHS2 Compliant

Unit : mm															
Part Number 1	M	L 2									D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
SNSN-M3	M3	6	8	10	12	16	20				5.5	3	2.5	1720	0.81 - 1.6
SNSN-M4	M4		8	10	12	16	20	25			7	4	3	3010	1.9 - 3.6
SNSN-M5	M5			10	12	16	20	25			8.5	5	4	4870	3.1 - 5.4
SNSN-M6	M6				12	16	20	25	30		10	6	5	6890	5.8 - 9.5
SNSN-M8	M8					16	20	25	30	35	13	8	6	12500	14 - 22

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

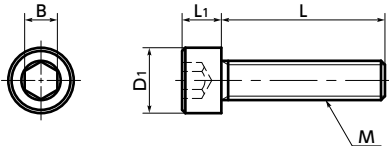
Part Number	Qty per pack
SNSN-M3	1
SNSN-M4	1
SNSN-M5	1
SNSN-M6	1
SNSN-M8	1

● Part number specification

SNSN-M5-16



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



● Mechanical property

	Super Invar	SUS304
Tensile Strength (N/mm²)	470	520 or Higher
0.2% Proof Stress (N/mm²)	333	205 or Higher
Elongation (%)	43	40 or Higher
Hardness (HV)	143	200 or Less

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

● Physical property

	Super Invar	SUS304
Specific Gravity	8.15	7.93
Longitudinal Elastic Modulus (GPa)	132	193
Electric Resistance (μΩ・m)	0.77	0.7
Thermal Conductivity (W/(m・K))	10.47	17
Linear Expansion Coefficient (K ⁻¹)	0.69×10 ⁻⁶	17.3×10 ⁻⁶

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

- Super Invar is a special alloy with an extremely low linear expansion coefficient, and its dimensions change very little due to temperature.
- For measurement and precision instruments which do not allow changes in dimensions due to thermal expansion.
- For Prevention from loosening and damage due to differences in thermal expansion.
- Linear Expansion Coefficient:
0.69×10⁻⁶ (K⁻¹) (30 deg C - 100 deg C)

● Application

Precision and measurement instruments

● Material/Finish

	SNSIV
Main Body	Super Invar

RoHS2 Compliant

Unit : mm															
Part Number 1	M	L 2									D1	L1	B	Tension*1 Rupture Load (N)	Mass (g)
SNSIV-M3	M3	6	8	10	12	16	20				5.5	3	2.5	2360	0.74 - 1.4
SNSIV-M4	M4		8	10	12	16	20	25			7	4	3	4120	1.7 - 3.3
SNSIV-M5	M5			10	12	16	20	25			8.5	5	4	6670	2.8 - 5
SNSIV-M6	M6				12	16	20	25	30		10	6	5	9440	5.3 - 8.7
SNSIV-M8	M8					16	20	25	30	35	13	8	6	17200	13 - 20

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

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

● Part number specification

SNSIV-M5-16



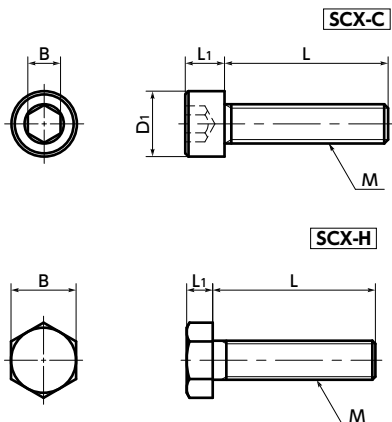
Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Cleanroom washed and packed	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge



SCX Ceramic Bolt

Additional Size

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof



- Ceramic made from 99.5% high-purity alumina.
- Usable continually at 1500°C.
- Types can be selected by the end symbol of the part number. **3**
- **SCX-C** — Socket Head Cap Screws
- **SCX-H** — Hex Head Screws
- Excellent heat resistance, chemical resistance, and electrical insulation.
- The properties of ceramic screws → P.662
- Application

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

- Material/Finish RoHS2 Compliant

	SCX-C	SCX-H
Main Body	Al ₂ O ₃ (99.5% Alumina)	Al ₂ O ₃ (99.5% Alumina)

SCX-C Hex Socket Head Cap Screws

Part Number 1	M	L 2	D1	L1	B	Mass (g)
SCX-M3-C	M3	5 6 8	5.5	3	2	0.34 - 0.4
SCX-M4-C	M4	5 6 8 10 12	7	4	2.5	0.71 - 0.98
SCX-M5-C	M5	8 10 12 16 20	8.5	5	3	1.2 - 2
SCX-M6-C	M6	10 12 16 20	10	6	4	2.4 - 3.3
SCX-M8-C	M8	12 16 20 25	13	8	5	5.5 - 7.5
SCX-M10-C	M10	12 16 20 25 30	16	10	6	9.5 - 14

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

⚠ Precautions for Use

- When tightening ceramic screws, use a torque driver or torque wrench and do not exceed the torsional torque. The recommendation torque is 50% of the torsional torque.

M	Torsional Torque (N・m)
M3	0.04
M4	0.05
M5	0.10
M6	0.15
M8	0.30
M10	0.50

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

- Ceramic screws may be damaged by impact. Take care when handling these screws.

- Also, ceramics screws with special specifications such as ventilation holes, dimensions, shapes, and cleanroom washing are available. Please contact us for details.



SCX-H Hex Head Screws

Part Number	M 1	L 2	B	L1	Mass (g)
SCX-M3-H	M3	5 6 8	5.5	2	0.31 - 0.38
SCX-M4-H	M4	5 6 8 10 12	7	2.8	0.66 - 0.94
SCX-M5-H	M5	8 10 12 16 20	8	3.5	1.3 - 2
SCX-M6-H	M6	10 12 16 20	10	4	2.2 - 3.1
SCX-M8-H	M8	12 16 20 25	13	5.3	5.1 - 7.2
SCX-M10-H	M10	12 16 20 25 30	16	6.4	9.9 - 14

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

- Part number specification

SCX-M5-16-C

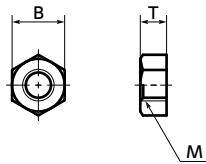
Product Code **1 2 3**

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	Available / Add'l charge	Not Available	Not Available	Not Available

SCX-N Hex Nuts - Ceramic

WEB Selection Tool WEB CAD Download Heat-resistance Chemical-proof

e-nedzi.com



- Ceramic made from 99.5% high-purity alumina.
- Usable continually at 1500°C.
- They have excellent heat resistance, chemical resistance, and electrical insulation.
- The properties of ceramic screws ➔ P.662

• Application

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

• Material/Finish



	SCX-N
Main Body	Al ₂ O ₃ (99.5% Alumina)

SCX-N Hex Nuts

Unit : mm

Part Number	M	B	T	Mass (g)	Qty per pack
SCX-M3-N	M3	5.5	2.3	0.16	1
SCX-M4-N	M4	7	3.1	0.38	1
SCX-M5-N	M5	8	4.6	0.68	1
SCX-M6-N	M6	10	5	1.2	1
SCX-M8-N	M8	13	6.7	2.8	1
SCX-M10-N	M10	16	8.2	5.1	1

• Part number specification

SCX-M5-N



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

e-nedzi.com

The Properties of Ceramic Screws

• Physical Properties

	Al ₂ O ₃ (99.5% Alumina)
Specific Gravity	3.9 - 3.939
Flexural Strength (N/mm ²)	360
Volume Resistivity (Ω · m)	> 10 ¹²
Thermal Conductivity (W / (m · K))	32 (20°C)
Linear Expansion Coefficient (K ⁻¹)	7.2 × 10 ⁻⁶ (40 - 400°C)
Vickers Hardness (GPa)	15.5
Maximum Duty Temperature (°C)	1500

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

• Chemical Resistance

Chemical Name	Temperature	Hour	Effect
35% Hydrochloric Acid	Boiling	30 minutes	○
70% Nitric Acid	Boiling	30 minutes	○
98% Sulfuric Acid	Boiling	30 minutes	○
90% Phosphoric Acid	Boiling	30 minutes	○
60% Hydrofluoric Acid	20°C	24 hours	△
10% Potassium Hydroxide	80°C	7 Days	○
Potassium Hydroxide	500°C (Boiling)	24 hours	△
Sodium Hydroxide	500°C (Boiling)	24 hours	○
Sodium Carbonate	900°C (Boiling)	24 hours	○
Sodium Sulfate	1000°C (Boiling)	24 hours	○
Potassium Fluoride	90°C (Boiling)	4 hours	×

◎ : No Corrosion △ : Moderate Corrosion
○ : Slight Corrosion × : Heavy Corrosion

⚠ Precautions for Ceramic Screws

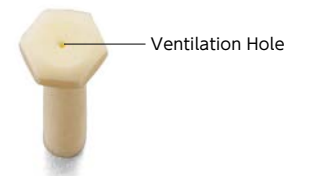
- When tightening ceramic screws, use a torque driver or torque wrench and do not exceed the torsional torque. The recommended torque is 50% of the torsional torque.

M	Torsional Torque (N · m)
M3	0.04
M4	0.05
M5	0.10
M6	0.15
M8	0.30
M10	0.50

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

- Heat resistance and chemical resistance change with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.
- Ceramic screws may be damaged by impact. Take care when handling these screws.

- Also, ceramics screws with special specifications such as ventilation holes, dimensions, shapes, and cleanroom washing are available. Please contact us for details.





• Cover Caps • Socket Head Cap Screws for Cover Caps

	Cover Caps	Socket Head Cap Screws for Cover Caps
Part Number	SCAP-PT	SNCPS
Shape		
Page	P.667	P.667
Materials	PTFE (Teflon)	SUSXM7
Characteristics	Chemical Resistance	For Cover Caps
Size	M3 to M10	M3 - M10

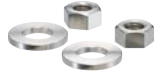
• Coating

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

• Titanium

	Socket Head Cap Screws	Cross Recessed Pan Head Machine Screws	Cross Recessed Flat Head Machine Screws	Hex Nuts	Hex Lock Nuts	Washers
Part Number	SNST	SNPT	SNFT	SHNT	SWUT	SWAT
Shape						
Page	P.636	P.638	P.640	P.641	P.642	P.643
Materials	TB340C (Grade 2 Titanium)	TW270 (Grade 1 Titanium)	TW270 (Grade 1 Titanium)	TW270 (Grade 1 Titanium) TW340 (Grade 2 Titanium)	FRS-9901 (Equivalent to TW340)	TP340C (Grade 2 Titanium)
Characteristics	Chemical Resistance • Lightweight • Nonmagnetic	Chemical Resistance • Lightweight • Nonmagnetic	Chemical Resistance • Lightweight • Nonmagnetic	Chemical Resistance • Lightweight • Nonmagnetic With Flange	Chemical Resistance • Lightweight • Nonmagnetic Vibration Resistant	Chemical Resistance • Lightweight • Nonmagnetic
Size	M3 - M6	M3 - M5	M3 - M4	M3 - M10	M3 - M10	Nominal 3 to 10

• Inconel

	Socket Head Cap Screws	Hex Nuts • Washers
Part Number	SNSI	SHNI / SWAI
Shape		
Page	P.648	P.649
Materials	NCF600	NCF600
Characteristics	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance
Size	M3 - M8	M3 - M8

• Hastelloy

	Socket Head Cap Screws
Part Number	SNSH-C276 SNSH-C22
Shape	
Page	P.653 P.654
Materials	NW0276 NW6022
Characteristics	Chemical Resistance • Heat Resistance Chemical Resistance • Heat Resistance
Size	M3 - M8 M3 - M8

• Nickel

	Socket Head Cap Screws
Part Number	SNSN
Shape	
Page	P.655
Materials	NW2201 (Ni99.0%)
Characteristics	Chemical Resistance • Heat Resistance
Size	M3 - M8

• Ceramic

	Socket Head Cap Screws	Hex Head Screws	Hex Nuts
Part Number	SCX-C	SCX-H	SCX-N
Shape			
Page	P.659	P.659	P.661
Materials	Al ₂ O ₃ (99.5% Alumina)	Al ₂ O ₃ (99.5% Alumina)	Al ₂ O ₃ (99.5% Alumina)
Characteristics	Chemical Resistance • Heat Resistance • Electrical Insulation	Chemical Resistance • Heat Resistance • Electrical Insulation	Chemical Resistance • Heat Resistance • Electrical Insulation
Size	M3 - M10	M3 - M10	M3 - M10

• PEEK (Polyetheretherketone)

	Socket Head Cap Screws	Socket Head Cap Screws	Low Head Bolt with Hexagon Socket	Micro Screws	Cross Recessed Pan Head Machine Screws	Cross Recessed Flat Head Machine Screws
Part Number	SPE-C	SPE-FT	SPE-LC	SPE-MC	SPE-P	SPE-F
Shape						
Page	P.744	P.745	P.746	P.747	P.749	P.750
Materials	PEEK	PEEK	PEEK	PEEK	PEEK	PEEK
Characteristics	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance • Full Thread	Small Space Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance
Size	M3 - M8	M3 - M6	M3 - M6	M1.2 - M1.6	M1.7 - M8	M2 - M8

	Hex Socket Set Screws	Hex Head Screws	Hex Nuts • Washers	Screw Plugs
Part Number	SPE-T	SPE-H	SPE-N/SPE-W	SPE-R
Shape				
Page	P.751	P.752	P.753	P.754
Materials	PEEK	PEEK	PEEK	PEEK
Characteristics	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance	Chemical Resistance • Heat Resistance
Size	M3 - M8	M4 - M10	M2 - M10	R ¹ / ₈ - R ³ / ₈

• 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



Chemical Resistance of Chemical Resistance Screws

Chemical Resistance of Teflon® Coating

Chemical Name	Temperature (°C)	Teflon® Coating (For SNHS-HTF and SWS-HTF)
10% Hydrochloric Acid	25	○
	50	○
	75	○
10% Nitric Acid	25	○
	70	○
30% Sulfuric Acid	25	○
	70	○
10% Sodium Hydroxide	25	○
	70	○
10% Ammonium Hydroxide	25	○
	70	○
Acetone	25	○
	50	○
Carbon Tetrachloride	25	○
	50	○
95% Ethyl Alcohol	25	○
	50	○
Ethyl Acetate	25	○
	50	○
Toluene	25	○
	50	○
Benzene	78	○

○ : No Corrosion ○ : Slight Corrosion
*Teflon is a registered trademark of DuPont.

Chemical Resistance of Inconel®, Hastelloy®, and Nickel

Chemical Name	Temperature	Inconel®	Hastelloy®	Nickel
Dilute Sulfuric Acid	Room Temperature	A	AA	A
	Boiling Point	D	A	D
Concentrate Sulfuric Acid	Room Temperature	C	AA	C
	Boiling Point	D	D	D
Dilute Hydrochloric Acid	Room Temperature	B	AA	A
	Boiling Point	D	D	D
Concentrate Hydrochloric Acid	Room Temperature	D	AA	D
	Boiling Point	D	B	D
Dilute Nitric Acid	Room Temperature	D	AA	D
	Boiling Point	—	AA	D
Concentrate Nitric Acid	Room Temperature	A	AA	D
	Boiling Point	—	D	D
Dilute Phosphoric Acid	Room Temperature	AA	AA	AA
	Boiling Point	—	AA	D
Concentrate Phosphoric Acid	Room Temperature	AA	AA	AA
	Boiling Point	—	B	D
Sodium Hydroxide (Diluted)	Room Temperature	AA	—	AA
	Boiling Point	C	—	AA
Sodium Hydroxide (Concentrated)	Room Temperature	AA	—	AA
	Boiling Point	C	—	AA

AA : Excellent C : Useable under certain conditions
A : Good D : Non Useable
B : Useable

*Inconel is a registered trademark of Special Metals Corporation.
Hastelloy is a registered trademark of Haynes International, Inc.

Chemical Resistance of Titanium

Chemical Name	Composition (%)	Corrosion Resistance	
		Pure Titanium	SUS304
Hydrochloric Acid	10	○	×
	30	×	×
Sulfuric Acid	10	△	—
	50	×	×
Nitric Acid	10	○	○
	50	○	○
Nitrohydrochloric Acid (HCl : HNO ₃)	3:1	○	×
	—	—	—
Chromic Acid	5	○	—
Hydrofluoric Acid	5	×	×
	—	—	—
Phosphoric Acid	50 (Ventilation)	△	○
	—	—	—
Ferric Chloride	10 - 30	○	×
Cupric Chloride	10 - 30	○	×
Sodium Chloride	10 - 40	○	○
	—	—	—
Calcium Chloride	50	○	○
Ammonium Chloride	40	○	—
Magnesium Chloride	40	○	○
Ferrous Sulfate	10 - 50	○	○
	—	—	—
Ammonia	10 - 30	○	○
	—	—	—
Sodium Hydroxide	50	○	○
	—	—	—
Sodium Carbonate	10	○	○
	—	—	—
Hydrogen Sulfide	Dry Gas	○	△
	Wet Gas	○	○
Hydrogen Sulfide	Dry Gas	×	—
	Wet Gas	○	—
Sulfur Dioxide	Dry Gas	○	—
	Wet Gas	○	—
Seawater	High Speed Stream	○	—
	—	—	—
Formic Acid	10 - 50	○	○
Lactic Acid	50	○	○
Oxalic Acid	20	×	—
Citric Acid	10 - 50	○	○
	—	—	—

Testing Temperature : Room Temperature
○ : <0.127 mm/year △ : 0.508 - 1.27 mm/year
○ : 0.127 - 0.508 mm/year × : >1.27 mm/year

Important Information about Chemical Resistance Data

- A test piece was used to acquire the test data.
- Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.

Chemical Resistance of Ceramic

Chemical Name	Temperature	Hour	Effect
35% Hydrochloric Acid	Boiling	30 minutes	○
70% Nitric Acid	Boiling	30 minutes	○
98% Sulfuric Acid	Boiling	30 minutes	○
90% Phosphoric Acid	Boiling	30 minutes	○
60% Hydrofluoric Acid	20°C	24 hours	△
10% Potassium Hydroxide	80°C	7 Days	○
Potassium Hydroxide	500°C (Boiling)	24 hours	△
Sodium Hydroxide	500°C (Boiling)	24 hours	○
Sodium Carbonate	900°C (Boiling)	24 hours	○
Sodium Sulfate	1000°C (Boiling)	24 hours	○
Potassium Fluoride	90°C (Boiling)	4 hours	×

○ : No Corrosion △ : Moderate Corrosion
○ : Slight Corrosion × : Heavy Corrosion

Chemical Resistance of Plastics

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

○ : Usable △ : Usable under certain conditions × : Non-usable
• A test piece was used to acquire the test data at room temperature (23 °C).

Important Information about Chemical Resistance Data

- A test piece was used to acquire the test data.
- Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.



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

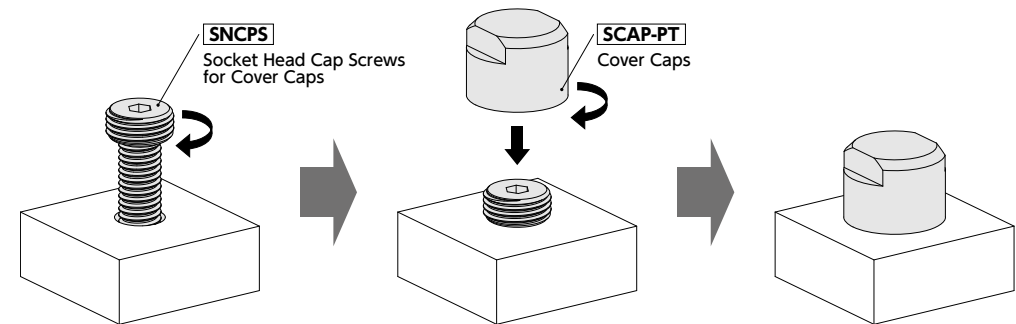
Material/Finish		RoHS2 Compliant
	SCAP-PT Cover Caps	SNCPS Socket Head Cap Screws
Main Body	PTFE (Tetrafluoroethylene : Teflon*1)	SUSXM7 (Equivalent to SUS304)
Strength Class		A2-50

*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

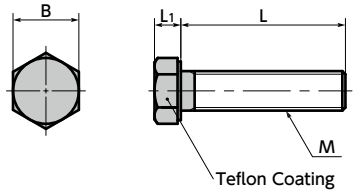
Order **SCAP-PT** and **SNCPS** individually.

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.

Unit : mm

Part Number	M	L								L1	B	Recommendation Torque (N・m)	Mass (g)
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	10	3.8	4.9 - 8.1
SNHS-M8-HTF	M8					16	20	25	30	5.3	13	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

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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.

● Sealing washers with a built-in rubber seal.

● Sealing washers prevent the leakage of gas and liquid from the bearing surface of the screw head.

● The washer body is coated with Teflon. The rubber seal is made of fluororubber, which has excellent chemical resistance.

● Chemical Resistance of Teflon Coating ➡ P.665

● 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

Main Body

SUS304
Teflon*1 Coating

Rubber Packing

Fluoro-rubber

* 1 : Teflon is a registered trademark of DuPont.

Unit : mm

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

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670

669



• 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

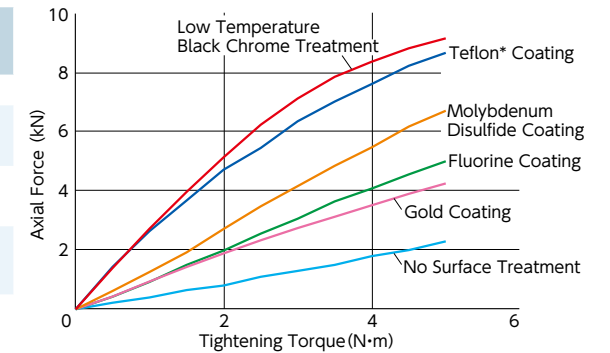
• High Performance Socket Head Cap Screws

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



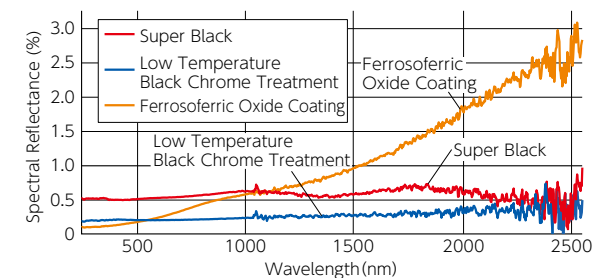
Test piece : Stainless Steel Socket Head Cap Screw M5×25

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

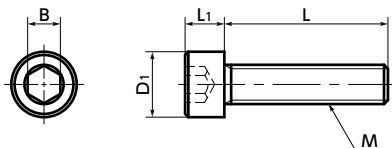


Low temperature black chrome treatment and super black result in extremely low spectral reflectance, which is optimal for optical instruments that require diffuse reflection prevention.

SNSS-FC Hex Socket Head Cap Screws - Fluorine Coating

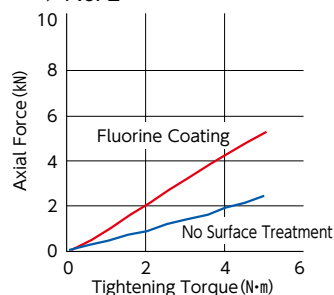
WEB Selection Tool WEB CAD Download Seizing Prevention SUS Stainless steel

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- 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.

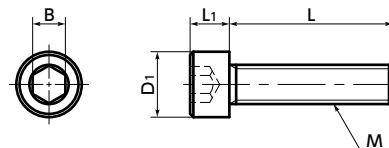
Also sold separately from 1 piece up. ➔ P.809

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

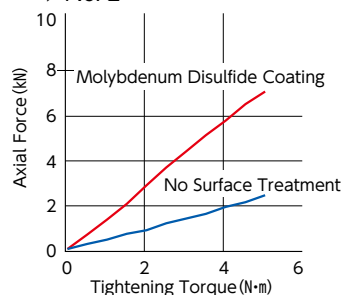
WEB Selection Tool WEB CAD Download Seizing Prevention SUS Stainless steel

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- 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

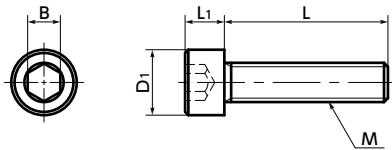
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

SNSS-BK

Hex Socket Head Cap Screws - Super Black



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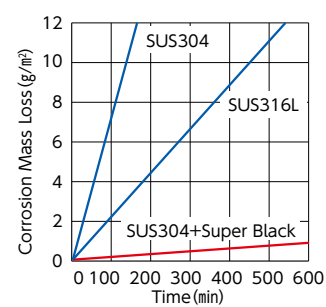
Material/Finish

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

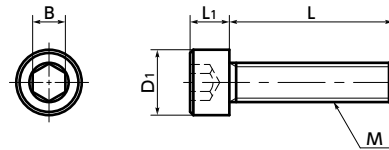
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SNSS-RY

Hex Socket Head Cap Screws - Low Temperature Black Chrome



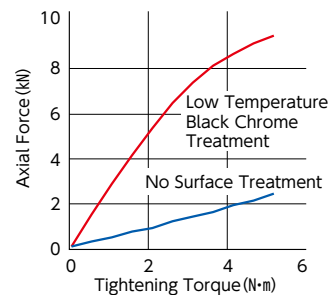
WEB Selection Tool CAD Download Seizing Prevention Chemical-proof Antireflection SUS Stainless steel



Tightening property (reference)

Part Number : SNSS-M5-25-RY

➔ P.672



- 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

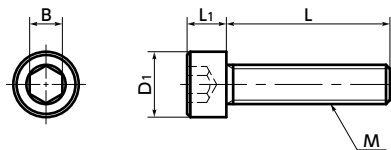
SNSS-TF

Hex Socket Head Cap Screws - Teflon Coating

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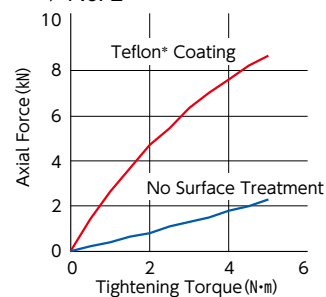


WEB Selection Tool CAD Download Seizing Prevention Chemical-proof SUS Stainless steel



- 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

NBK

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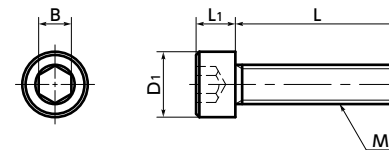
SNSS-AUS

Hex Socket Head Cap Screws - Gold Coating

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



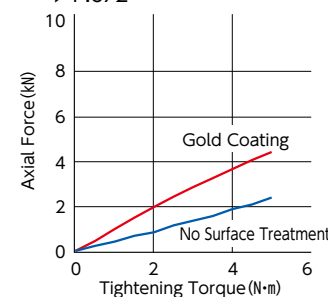
- Material/Finish

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

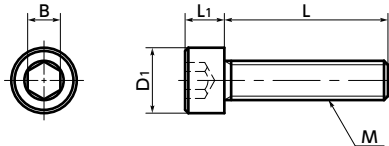
SNSS - M5 - 16 - AUS

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

NBK

WEB ▶ <https://www.nbk1560.com>



⚠ 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

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

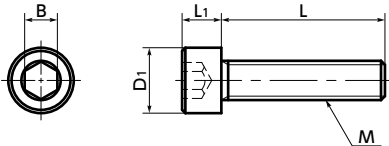
Part Number	M	1	L	2							D1	L1	B	Mass (g)
SNSL-M3-PN	M3	6	8	10	12						5.5	3	2.5	0.71 - 0.96
SNSL-M4-PN	M4		8	10	12	16	20				7	4	3	1.7 - 2.7
SNSL-M5-PN	M5		8	10	12	16	20				8.5	5	4	2.5 - 4
SNSL-M6-PN	M6			10	12	16	20	25	30		10	6	5	4.7 - 8.3
SNSL-M8-PN	M8					16	20	25	30	35	13	8	6	12 - 19

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	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	Please feel free to contact us



- 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

	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	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	Available / Add'l charge	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

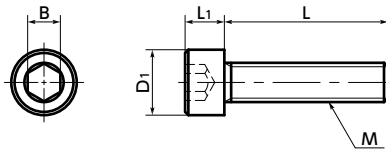
SNS / SNSS

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

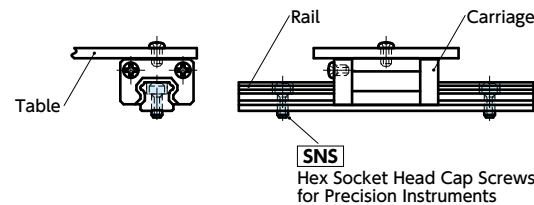
• Material/Finish

RoHS2 Compliant

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

• Usage example

For fixing miniature linear guideway rails and tables.



SNS Steel - Ferrosoferric Oxide Coating		SNSS Stainless steel		Common dimensions										Unit : mm	
Part Number	1	Max. Torque (N · m)	Part Number	1	Max. Torque (N · m)	M	L	2	D1	L1	B	Mass (g)			
			SNSS-M1		0.02	M1	2	3	4	5		0.025 - 0.039			
			SNSS-M1.4		0.07	M1.4	2	3	4	5		0.062 - 0.085			
SNS-M1.6		0.25	SNSS-M1.6		0.1	M1.6		3	4	5	6	0.09 - 0.12			
SNS-M2		0.53	SNSS-M2		0.22	M2		3	4	5	6	0.16 - 0.22			
SNS-M2.5		1.12	SNSS-M2.5		0.46	M2.5		4	5	6	8	0.35 - 0.47			

SNS Steel - Ferrosoferric 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

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NBK

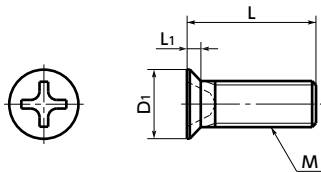
WEB ▶ <https://www.nbk1560.com>

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

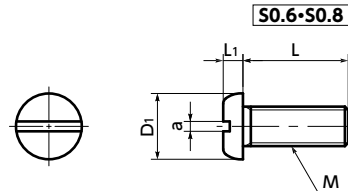
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

SNZS

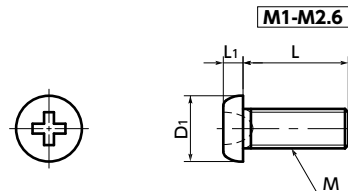
Pan Head Machine Screws for Precision Instruments

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

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		0.036 - 0.18
SNZS-M2	M2			2	2.5	3	3.5	4	5	6	8	10	12	14	3	0.6		0.055 - 0.26
SNZS-M2.5	M2.5					3		4	5	6	8			3.8	0.8		0.22	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

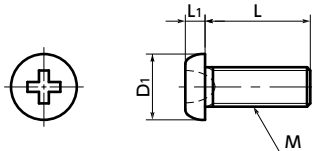
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

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

Unit : mm													
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

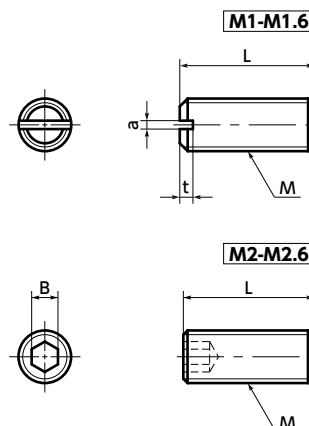
1 Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

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)

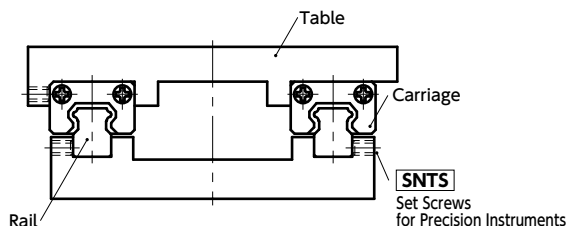
Part Number		M	L						a	t	B	Max. Torque (N·m)	Mass (g)
SNTS-M1-FP	M1	3	4	5	6				0.35	0.35		0.003	0.012 - 0.023
SNTS-M1.4-FP	M1.4	3	4	5	6				0.4	0.45		0.02	0.022 - 0.049
SNTS-M1.6-FP	M1.6	3	4	5	6				0.4	0.5		0.03	0.029 - 0.062
SNTS-M2-FP	M2	3	4	5	6						0.9	0.2	0.041 - 0.092
SNTS-M2.5-FP	M2.5		4	5	6	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

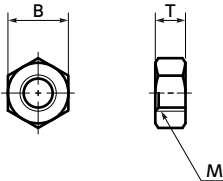
Order in number of packs.
Also sold separately from 1 piece up. ➔ P.809

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

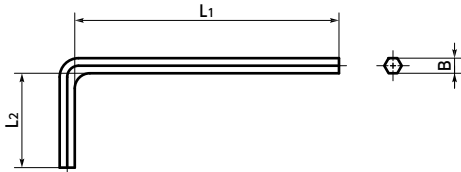


1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

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 SNS 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 SNS → 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



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*.

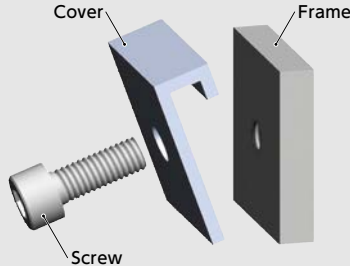
EU Machinery Directive Appendix I of the Machinery Directive (2006/42/EC) of the EC Directives requires that screws that secure protective and inspection covers on instruments and machines do not fall out from the cover when the cover is removed.

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;

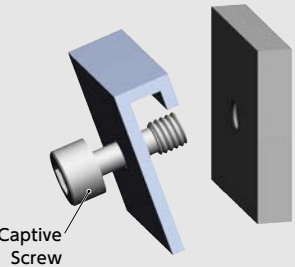
*CE marking proves that the machines, devices, and other products of manufacturers comply with EC directives. Products exported or distributed in EC member states must comply with EC directives. In order to distribute products in EU member states, products must have CE marking, which proves that they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



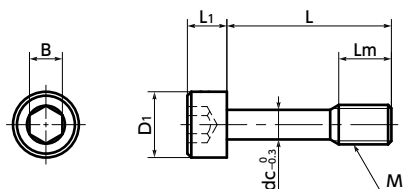
Captive Screw ➔ P.691 - 699

SSC Socket Head Cap Captive Screws

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WEB Selection Tool CAD Download SUS Stainless steel



● Material/Finish



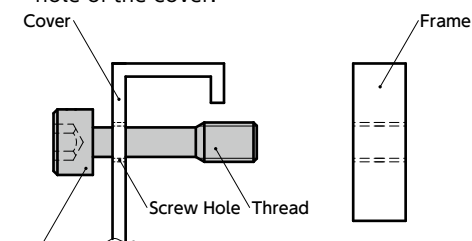
	SSC
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-70

⚠ 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

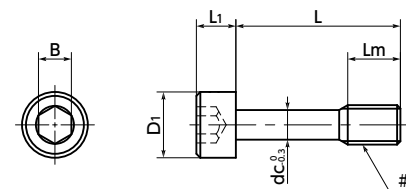
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	with Captive Processing

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

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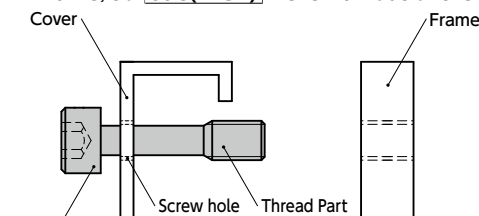


WEB Selection Tool CAD Download SUS Stainless steel

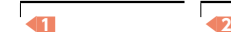


● Installation example

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	5/16	3/8	1/2	3/8				4	0.183	0.112	3/32	1.9	0.63 - 0.94	
SSC-#6-32	No.6-32UNC		3/8	1/2	3/8	3/4			5	0.226	0.138	7/64	2.4	1.2 - 1.7	
SSC-#8-32	No.8-32UNC		3/8	1/2	3/8	3/4			5	0.27	0.164	7/64	3	1.8 - 2.7	
SSC-#10-32	No.10-32UNF		3/8	1/2	3/8	3/4	7/8		6	0.312	0.19	3/32	3.7	2.7 - 4.2	
SSC-1/4-20	1/4-20UNC				3/8	3/4	7/8	1	1 1/4	9	0.375	0.25	3/16	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

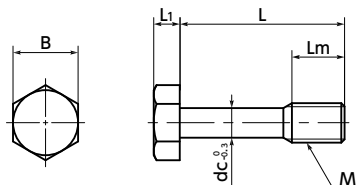
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	with Captive Processing

SSC-SNHS Hexagon Head Captive Screws

e-nedzi.com®

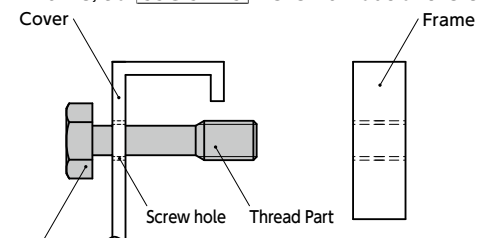


WEB Selection Tool CAD Download SUS Stainless steel



● 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					4	5.5	2	2.2	0.8 - 1.1
SSC-SNHS-M4		M4		10	12	16	20				5	7	2.8	3	1.7 - 2.5
SSC-SNHS-M5		M5			12	16	20	25			6	8	3.5	3.9	3 - 4.7
SSC-SNHS-M6		M6			12	16	20	25	30		8	10	4	4.5	4.9 - 8.1
SSC-SNHS-M8		M8				16	20	25	30	35	40	10	13	5.5	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

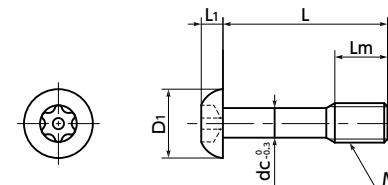
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Available / Add'l charge Not Available Not Available with Captive Processing

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

e-nedzi.com®

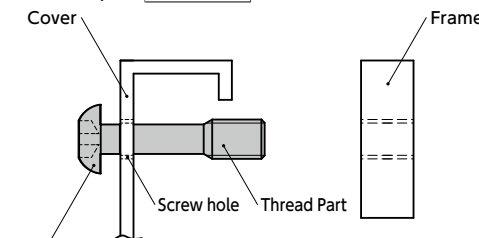


WEB Selection Tool CAD Download Tamper Resistance SUS Stainless steel



⚠ 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					4	5.7	1.65	2.2	SRX-10	10	0.57 - 0.93
SSC-SRBS-M4		M4		10	12	16	20				5	7.6	2.2	3	SRX-20	20	1.4 - 2.2
SSC-SRBS-M5		M5			12	16	20	25			6	9.5	2.75	3.9	SRX-25	25	2.3 - 4.1
SSC-SRBS-M6		M6			12	16	20	25	30		8	10.5	3.3	4.5	SRX-30	30	3.6 - 6.9
SSC-SRBS-M8		M8				16	20	25	30	40	10	14	4.4	6.3	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

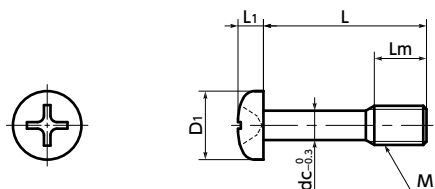
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
1 unit in 1 bag Available / Add'l charge Not Available Not Available with Captive Processing

SSCPS Cross Recessed Pan Head Captive Machine Screws

e-nedzi.com®

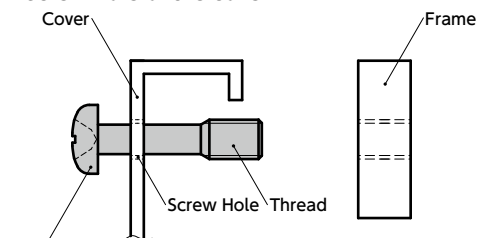


WEB Selection Tool CAD Download SUS Stainless steel



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.

Unit : mm

Part Number	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	5.2	6.3	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

NBK

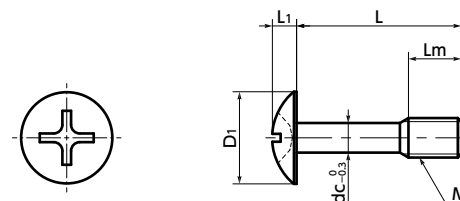
WEB ▶ <https://www.nbk1560.com>

SSCMS Cross Recessed Truss Head Captive Screws

e-nedzi.com®

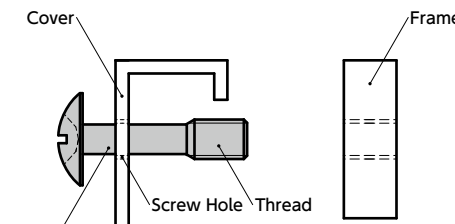


WEB Selection Tool CAD Download SUS Stainless steel



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.

Unit : mm

Part Number	1	M	L	2							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	6.3	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

NBK

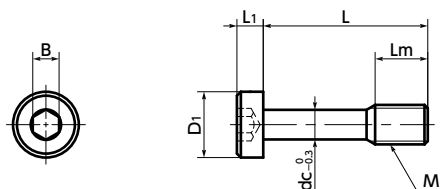
WEB ▶ <https://www.nbk1560.com>

SSCLS Socket Head Cap Captive Screws with Low Profile

e-nedzi.com®

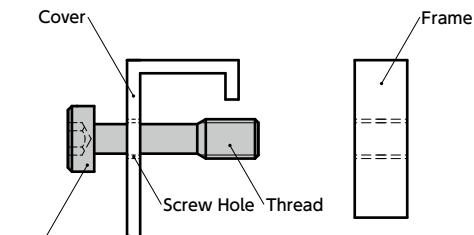


WEB Selection Tool CAD Download Protrusion SUS Stainless steel



⚠ 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

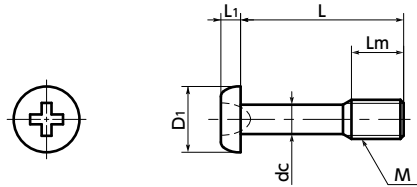
• Material/Finish

RoHS2 Compliant

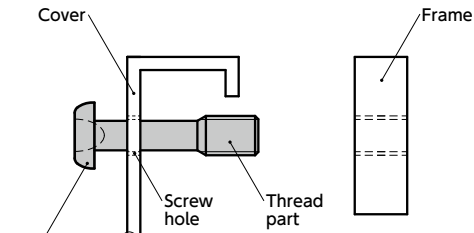
	SSCLS
Main Body	SUSXM7 (Equivalent to SUS304)
Strength Class	A2-50

Unit : mm

Part Number	M	L 										Lm	D1	L1	B	dc	Mass (g)
 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.

- For locations within precision instruments requiring frequent mounting and removal.
- M1.4 - M2.6. Pan Head Machine Screws for Precision Instruments.
- For CE Marking compatibility. ➔ P.690

● Application

Fixing of protective covers/inspection jigs within precision instruments / CE marking compatible compact precision instruments and electric/electronic devices

● Material/Finish

	SSCZS	RoHS2 Compliant
Main Body	SUSXM7(Equivalent to SUS304)	

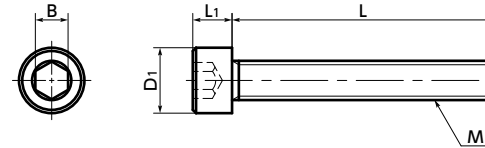
Part Number	M	L	Lm	D1	L1	dc	Max. Torque(N・m)	Mass (g)
SSCZS-M1.4	M1.4	4 5 6 8	2	2	0.5	1.0 ⁰ _{-0.1}	0.03	0.04 - 0.06
SSCZS-M1.6	M1.6	4 5 6 8	2	2.3	0.5	1.1 ⁰ _{-0.1}	0.04	0.05 - 0.08
SSCZS-M1.7	M1.7	4 5 6 8	2	2.5	0.5	1.2 ⁰ _{-0.1}	0.04	0.06 - 0.08
SSCZS-M2	M2	4 5 6 8	2.5	3	0.6	1.4 ⁰ _{-0.15}	0.09	0.09 - 0.13
SSCZS-M2.5	M2.5	6 8 10	3	3.8	0.8	1.8 ⁰ _{-0.15}	0.15	0.21 - 0.25
SSCZS-M2.6	M2.6	6 8 10	3	4	0.8	1.8 ⁰ _{-0.15}	0.16	0.22 - 0.26

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

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

Part Number	M	L	D1	L1	B	Mass (g)
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

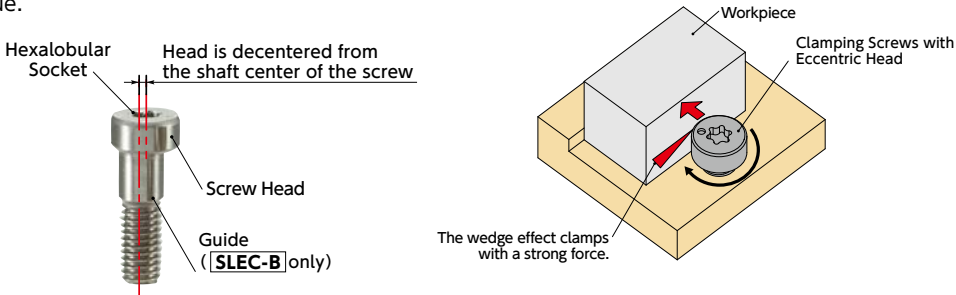
• Spring Plunger with Ball (with Ventilation Hole)

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

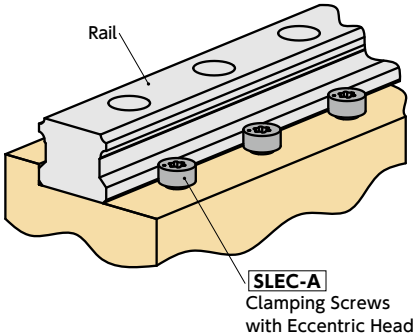
The precision-processed guide provides increased durability when clamping. For fixing heavier workpieces and jigs.



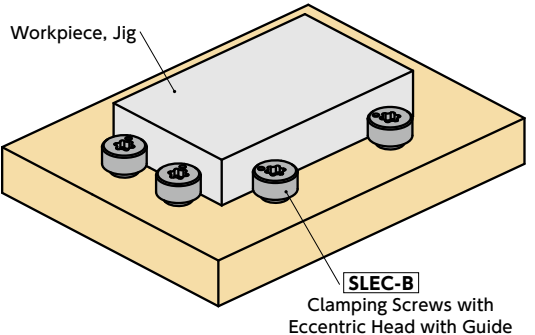
SLEC-B Clamping Screws with Eccentric Head with Guide

Usage Examples

- Fixing Linear Guideway Rails



- Fixing Workpieces and Jigs

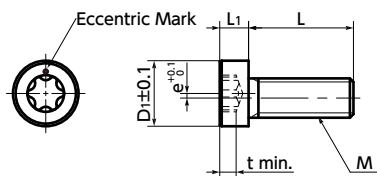




SLEC-A Clamping Screws with Eccentric Head

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

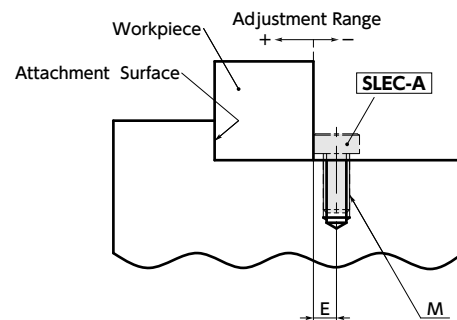
Fixing linear guideway rails, workpieces, and tools

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

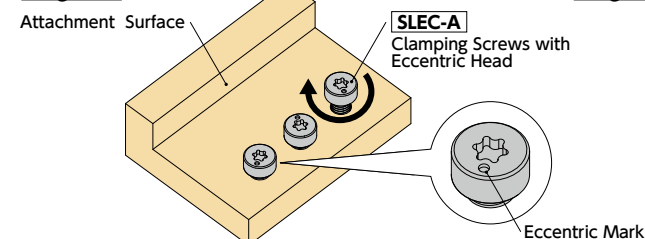
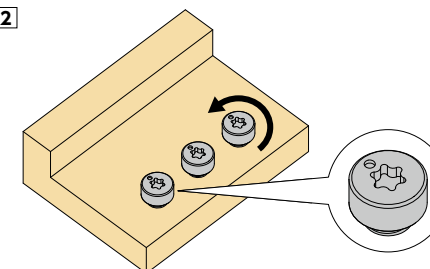
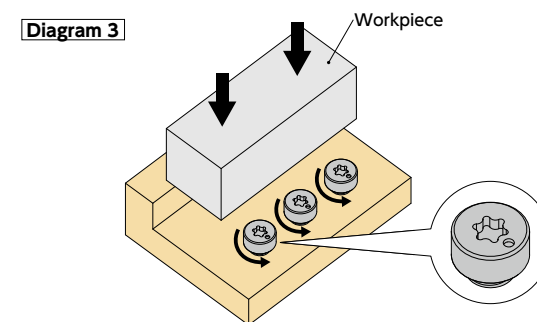
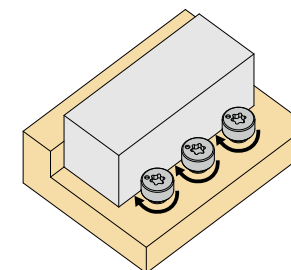
Unit : mm

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



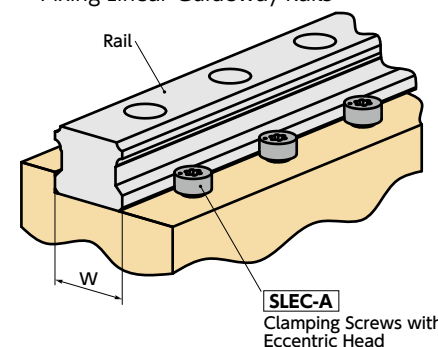
Installation Method

- 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

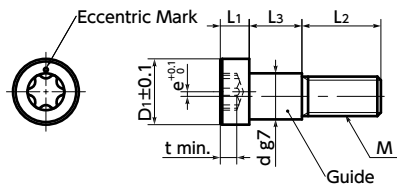
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 unit in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available



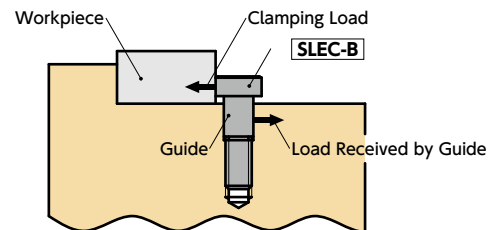
SLEC-B Clamping Screws with Eccentric Head

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

RoHS2 Compliant

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

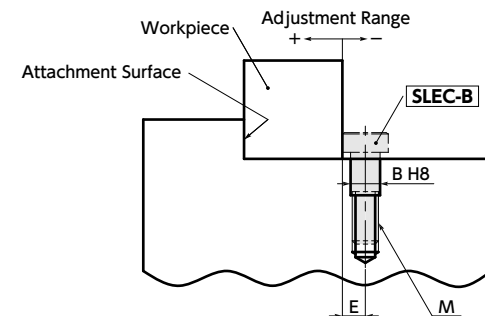
*1: The hexalobular shape is prescribed by JIS B 1015 : 2008 (ISO 10664 : 2005) "Hexalobular internal driving feature for bolts and screws".

SLEC-B	SLEC-B-EL	Common dimensions											Qty per pack
Ferroferric oxide film	Electroless nickel plating												
Part Number	Part Number	M	D ₁	L ₁	L ₂	d	L ₃	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



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

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

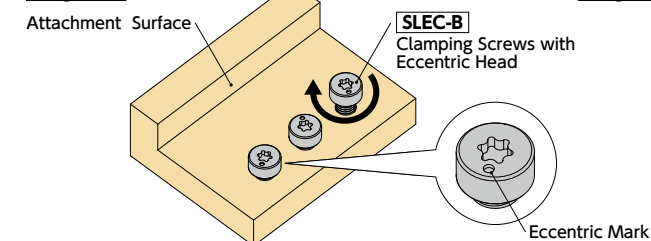


Diagram 2

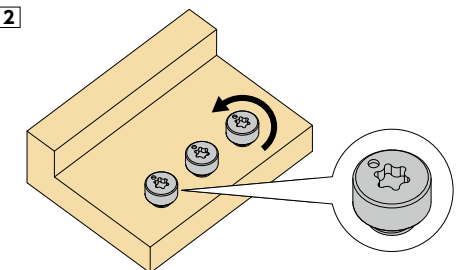


Diagram 3

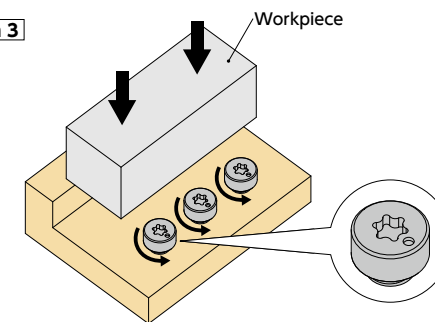
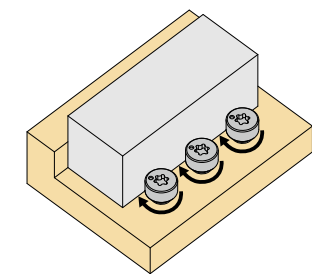
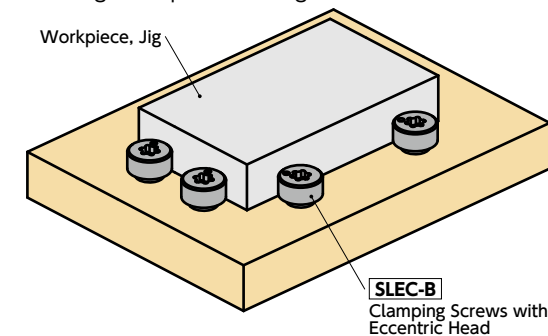


Diagram 4



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

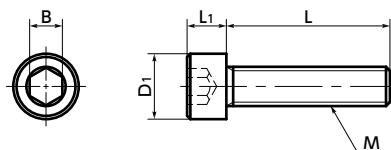


SNSS Hex Socket Head Cap Screws - Fine Pitch Thread

e-nedzi.com®



WEB Selection Tool CAD Download SUS Stainless steel



● Material/Finish

RoHS2 Compliant

	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
SNSS-M4-P0.5	M4×0.5	8	10	12	15	20	25					7	4	3
SNSS-M5-P0.5	M5×0.5		10	12	15	20	25	30				8.5	5	4
SNSS-M6-P0.75	M6×0.75	8	10	12	15	20	25	30				10	6	5
SNSS-M8-P1	M8×1			12	15	20	25	30	35	40	45	50	13	8
SNSS-M10-P1	M10×1				15	20	25	30	35	40	45	50	16	10
SNSS-M12-P1	M12×1					20	25	30	35	40	45	50	18	12

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

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	Available / Add'l charge

NBK

WEB ▶ <https://www.nbk1560.com>

Inch Screws

e-nedzi.com®



● 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

NBK

WEB ▶ <https://www.nbk1560.com>

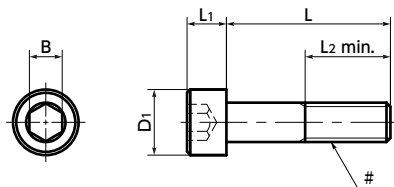
708

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 	# Nominal of thread	L 												D1	L1	L2	B	Mass (g)		
SNSS- # 4-40	No.4-40UNC	3/16	1/4	5/16	3/8	1/2	5/8	3/4							0.183	0.112	0.75	3/32	0.51 - 1.1	
SNSS- # 5-40	No.5-40UNC		1/4	5/16	3/8	1/2	5/8	3/4							0.205	0.125	0.75	3/32	0.78 - 1.4	
SNSS- # 6-32	No.6-32UNC		1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	0.226	0.138	0.75	7/64	0.98 - 3.6	
SNSS- # 8-32	No.8-32UNC		1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	0.27	0.164	0.88	9/64	1.6 - 5.4	
SNSS- # 10-24	No.10-24UNC		1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	0.312	0.19	0.88	5/32	2.3 - 7.2	
SNSS- # 10-32	No.10-32UNF	3/16	1/4		5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	0.312	0.19	0.88	5/32	2.2 - 7.6
SNSS- # 12-24	No.12-24UNC				3/8	1/2	5/8	3/4		1	1 1/4	1 1/2			0.343	0.216	1	3/32	3.4 - 7.6	
SNSS-1/4-20	1/4-20UNC		1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	0.375	0.25	1	3/16	4.3 - 13	
SNSS-1/4-28	1/4-28UNF				3/8	1/2	5/8	3/4		1	1 1/4				0.375	0.25	1	3/16	5.1 - 9.8	
SNSS-5/16-18	5/16-18UNC				3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	0.469	0.312	1.12	1/4	8.8 - 22	
SNSS-3/8-16	3/8-16UNC					1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	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	2 Cleanroom Wash & Packaging ➔ P.807	3 Screw Length Adjustment ➔ P.811	4 Vibration Resistant ➔ P.810	5 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

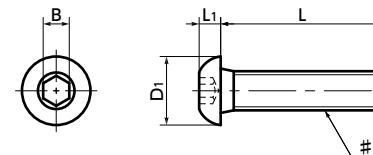
WEB ▶ <https://www.nbk1560.com>

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 1	# Nominal of Thread	L 2											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	2 Cleanroom Wash & Packaging ➔ P.807	3 Screw Length Adjustment ➔ P.811	4 Vibration Resistant ➔ P.810	5 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>

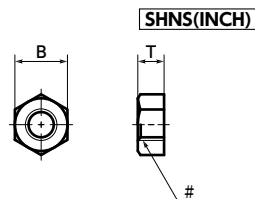
SHNS(INCH) / SWAS(INCH)

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

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 1/64	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

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

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

NBK

WEB ▶ <https://www.nbk1560.com>

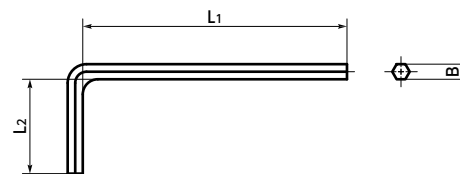
SKH(INCH)

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

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	5/16 - 18		30	1
SKH-5 / 16	5/16	3.75	1.25	3/8 - 16		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

NBK

WEB ▶ <https://www.nbk1560.com>

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

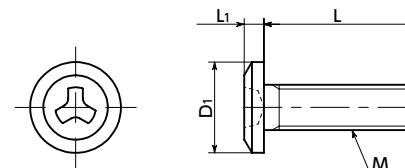
WEB CAD Download

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

Unit : mm

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)

Unit : mm

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

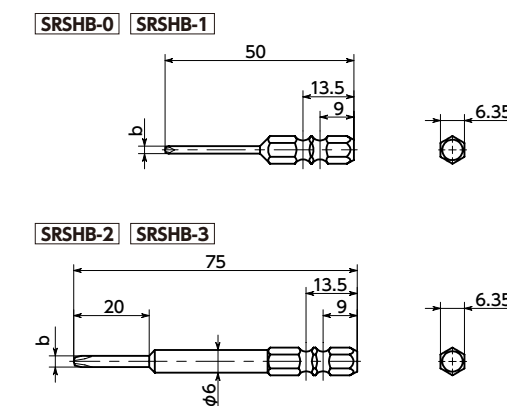
SRSHB-2 Dedicated Bits

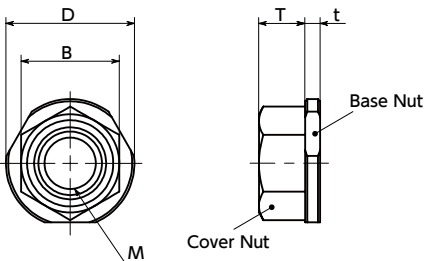
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Place order by a bag.

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.

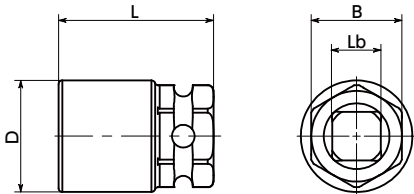
Part Number	M	B	D	T	t	Removal Tool Part No.	Mass (g)	Qty per pack
SHNRS-M8	M8	13	17	6.1	2	SKW-8	7	1
SHNRS-M10	M10	17	21.6	8.4	2.2	SKW-10	15.3	1
SHNRS-M12	M12	19	24	9	2.5	SKW-12	20	1

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

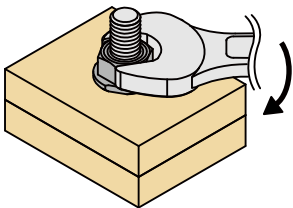
● Dedicated removal tools

Part Number	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

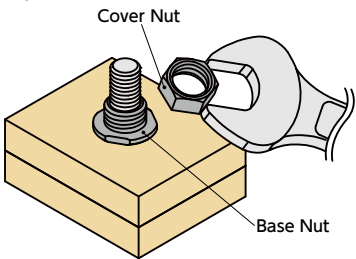
Unit : mm



- 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

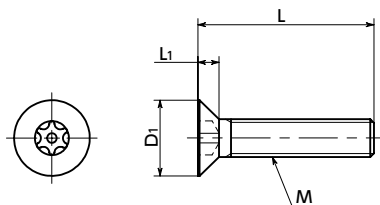
2

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-M5-16Product Code **1** **2**

Place order by a bag.

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

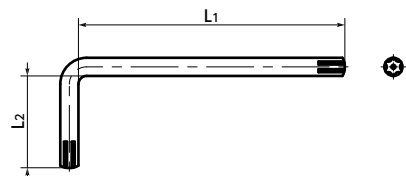
Unit : mm														
Part Number	M 	L 								D ₁	L ₁	Applicable wrench	Hexalobular Socket No.	Mass (g)
SRFXS-M3	M3	6	8	10	12					6	1.75	SRX-10	10	0.48 - 0.72
SRFXS-M4	M4		8	10	12	16	20			8	2.3	SRX-20	20	1.0 - 1.9
SRFXS-M5	M5			10	12	16	20	25		10	2.8	SRX-25	25	2.1 - 3.9
SRFXS-M6	M6			10	12	16	20	25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



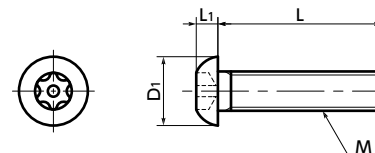
1 Individual Sales → P.809 Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Modification process for captive use → P.806
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Not Available

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										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	50	10.5	3.3	SRX-30	30	3.3 - 12
SRBS-M8	M8			10	12	16	20	25	30	40	50	14	4.4	SRX-40	40	7.3 - 22

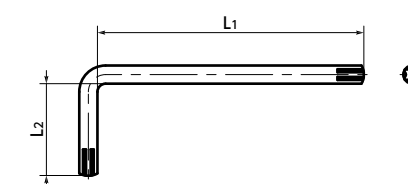
Part Number	Qty*1 per pack
SRBS-M3	20
SRBS-M4	20
SRBS-M5	20
SRBS-M6	10
SRBS-M8	10

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

● Dedicated wrench

Unit : mm

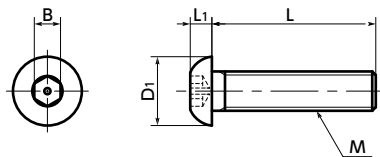
Part Number	L1	L2	Mass (g)	Qty per pack
SRX-10	60	20	3.7	1
SRX-20	67	23	8.2	1
SRX-25	70	25	11	1
SRX-30	81	28	20	1
SRX-40	88	31	32	1



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

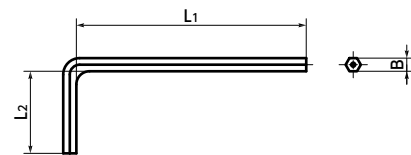
Part Number	Qty*1 per pack
SRHS-M3	20
SRHS-M4	20
SRHS-M5	20
SRHS-M6	10

*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

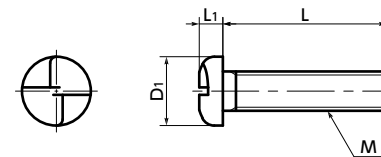


[1 Individual Sales ➔ P.809](#) [Cleanroom Wash & Packaging ➔ P.807](#) [Screw Length Adjustment ➔ P.811](#) [Vibration Resistant ➔ P.810](#) [Modification process for captive use ➔ P.806](#)
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / 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			5.5	2	SROT-410	0.49 - 0.94
SROS-M4	M4		6	8	10	12	16	20	25	7	2.6	SROT-410	1 - 2.5
SROS-M5	M5			8	10	12				9	3.3	SROT-510	2.2 - 2.7

Unit : mm

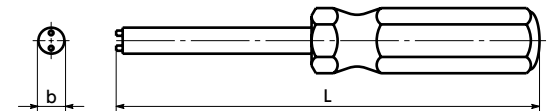
Part Number	Qty*1 per pack
SROS-M3	20
SROS-M4	20
SROS-M5	20

*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

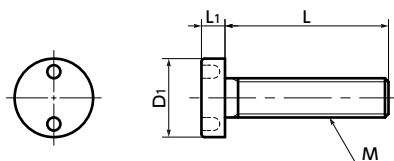
<https://www.nbk1560.com>

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			
SRTS-M4	M4			10	12	16	
SRTS-M5	M5				12	16	20

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

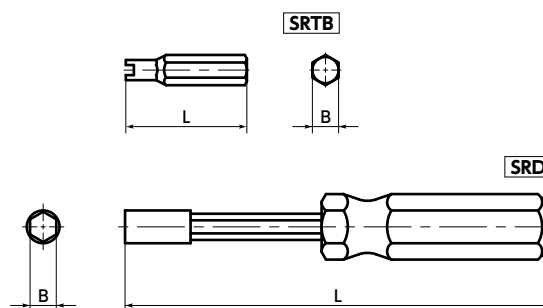
Unit : mm

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

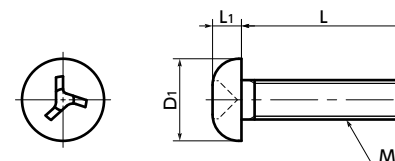
WEB ▶ <https://www.nbk1560.com>

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			
SRWS-M4	M4		8	10	12		
SRWS-M5	M5			10	12	16	

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

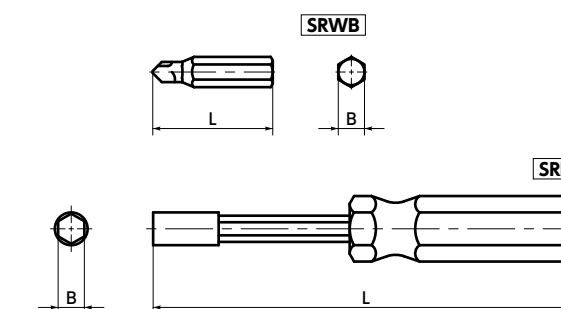
Unit : mm

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.

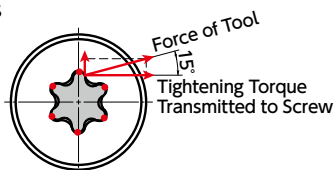


Diagram 1 Hexalobular Socket

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.

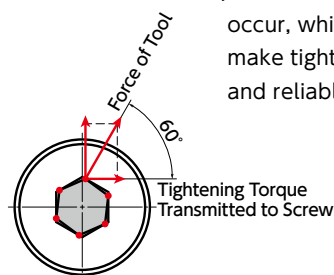


Diagram 2 Hexagonal Socket

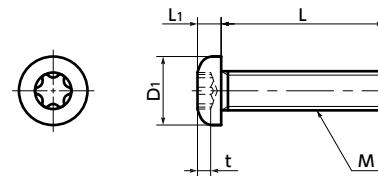
*The hexalobular shape is prescribed by JIS B 1015: 2008 (ISO 10664:2005) "Hexalobular internal driving feature for bolts and screws".

SNPXS Hexalobular Socket Pan Head Machine Screws

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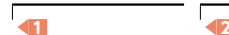


WEB Selection Tool CAD Download SUS Stainless steel



● 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

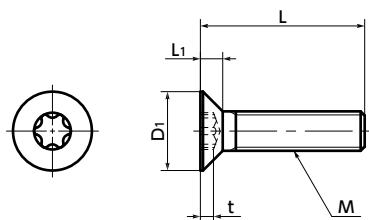
*1: Also sold separately from 1 piece up. → P.809

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

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

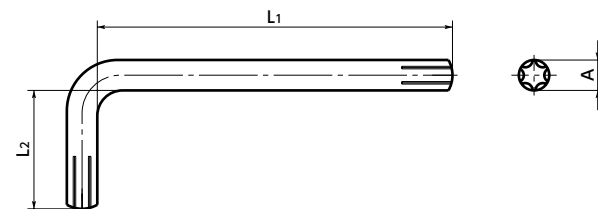
*1 : Also sold separately from 1 piece up. → P.809

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

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● 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

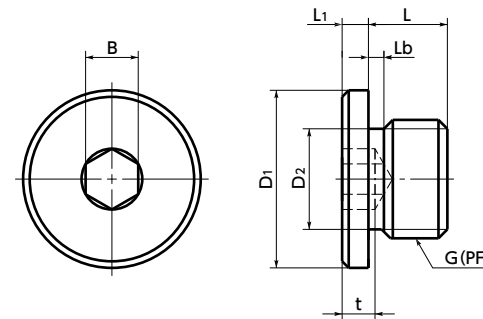
SFF/SFFS

Hex Socket Flange Head Screw Plugs - Steel

e-nedzi.com®



WEB Selection Tool 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

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

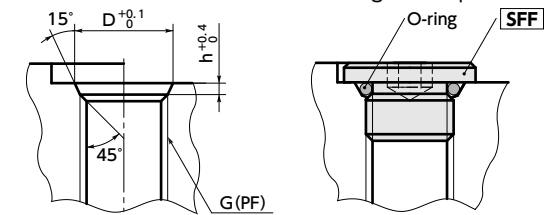
Part Number	G (PF) Nominal of Thread	L	D1	L1	D2	B	t	Lb	O-ring No.	Recommendation Torque (N・m)	Mass (g)	Qty per pack
SFFS-1	G 1/8	10	16	4	8.2	5	3	2	P8	7.4	9	1
SFFS-2	G 1/4	12	21	4	11.2	6	4	2.5	P11	14.7	17	1
SFFS-3	G 3/8	12	24	4	14.2	8	5	2.5	P14	24.5	27	1
SFFS-4	G 1/2	16	30	4	18.2	10	6	2.5	P18	39.3	54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

NBK

WEB ▶ <https://www.nbk1560.com>

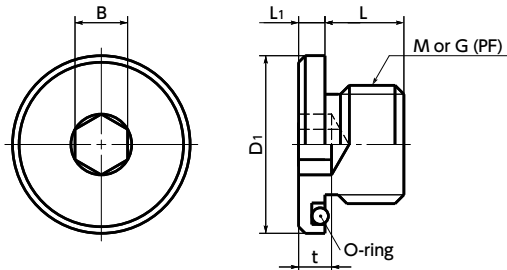
NBK

WEB ▶ <https://www.nbk1560.com>



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

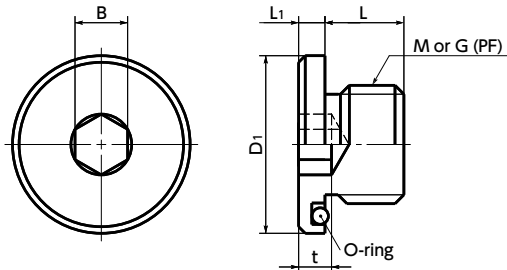
Part Number	G (PF) Nominal of Thread	L	D1	L1	B	t	O-ring No.	Recommendation Torque (N·m)	Mass (g)	Qty per pack
SFMS-1	G ⅜	8	19.5	4	5	4	P12.5	13.3	10	1
SFMS-2	G ¼	12	23	4	6	5	P16	25.7	19	1
SFMS-3	G ⅝	12	27	4	8	6	P20	50.8	28	1
SFMS-4	G ½	14	35	5	10	6.5	P25	91.5	56	1

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



- 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

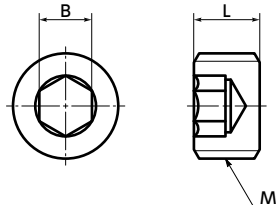
Part Number	G (PF) Nominal of Thread	L	D1	L1	B	t	O-ring No.	Recommendation Torque (N·m)	Mass (g)	Qty per pack
SFMS-1	G ⅜	8	19.5	4	5	4	P12.5	13.3	10	1
SFMS-2	G ¼	12	23	4	6	5	P16	25.7	19	1
SFMS-3	G ⅝	12	27	4	8	6	P20	50.8	28	1
SFMS-4	G ½	14	35	5	10	6.5	P25	91.5	56	1

Part number specification

SFMS-M10



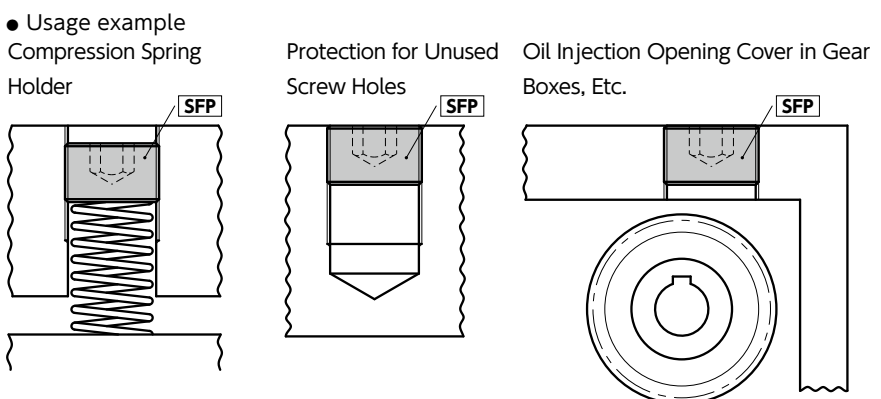
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Not Available	Not Available	Not Available	Not Available



- 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

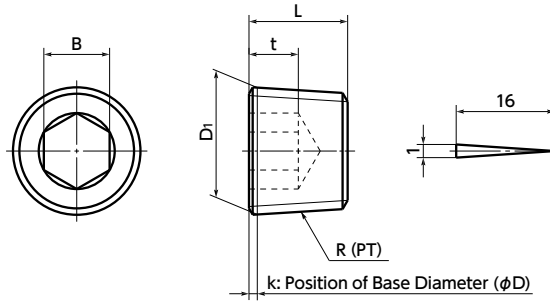
*1 : Also sold separately from 1 piece up. ➡ P.809



- Part number specification
SFP-M16

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	Not Available	Not Available	Please feel free to contact us	Not Available



- **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									
Part Number	SFT-PS Part Number	Common dimensions							Qty*1 per pack
		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									
Part Number	SFTS-PS Part Number	Common dimensions							Qty per pack
		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

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



• 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	△	△

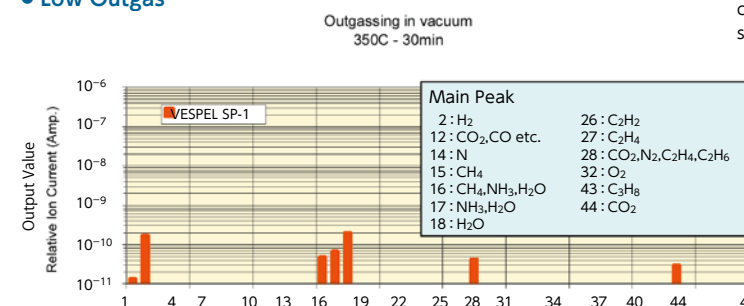
○ Usable

△ 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.

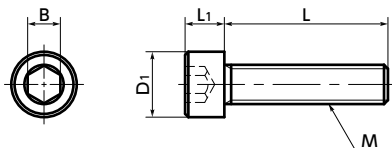


VESPEL is a registered trademark of DuPont.

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

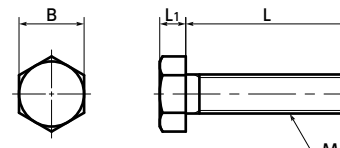
Product Code 1 2 Product Code

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

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

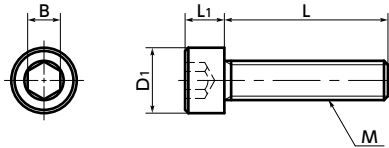
WEB Selection Tool

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

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

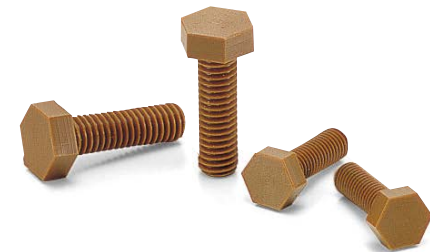
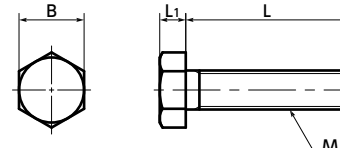
WEB Selection Tool

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**

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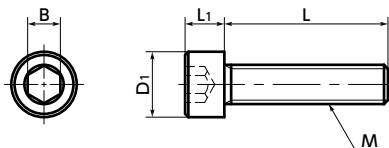


WEB Selection Tool

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

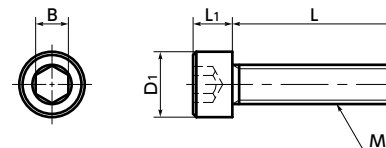
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WEB Selection Tool

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>

Selection Tool

CAD Download

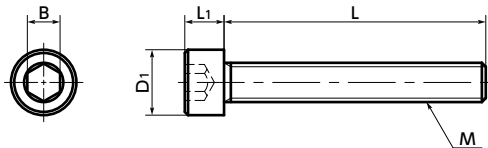
Chemical-proof

Full Thread

SPE-FT

Plastic Screw - Hex Socket Head Cap Screws - Full Thread - PEEK

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● Material/Finish



	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 	L 								D ₁	L ₁	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

Selection Tool

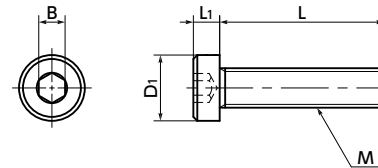
CAD Download

Chemical-proof

SPE-LC

Plastic screw - Hex Socket Low Head Bolt - PEEK

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● 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



	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	L								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		

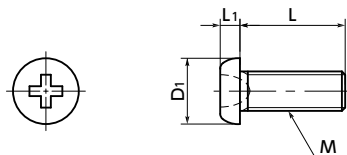
Order in number of packs.
Also sold separately from 1 piece up. → P.809

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

SPE-MC Plastic screw - Fine Thread - PEEK Additional Size

WEB Selection Tool WEB CAD Download Chemical-proof Miniature Size

e-nedzi.com®



● 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.

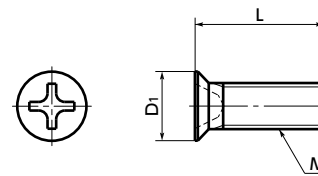
Also sold separately from 1 piece up. → P.809

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

WEB Selection Tool WEB CAD Download Chemical-proof Miniature Size

e-nedzi.com®



● 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.

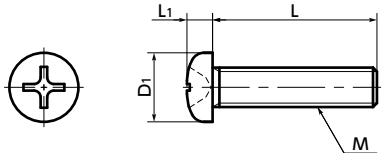
Also sold separately from 1 piece up. → P.809

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

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● 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.

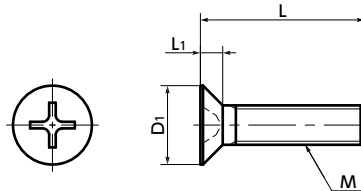
Also sold separately from 1 piece up. ➡ P.809

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

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● 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.

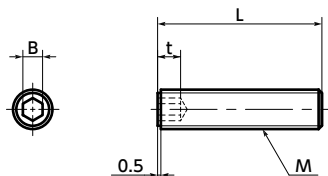
Also sold separately from 1 piece up. ➡ P.809

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

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Material/Finish

RoHS2 Compliant

	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	3.5	0.13 - 0.68	
SPE-M8-T	M8					10	12	15	20	25	30	4	0.42 - 1.5	

*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-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 2 Product Code

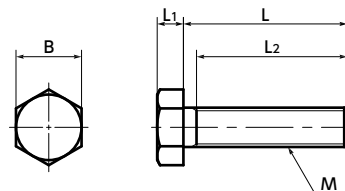
Order in number of packs.
Also sold separately from 1 piece up. → P.809

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-H Plastic Screw - Hex Head Screws - PEEK

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Material/Finish

RoHS2 Compliant

	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 1	L 2										B	L ₁	L ₂ *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	0.75 - 1.6
SPE-M8-H	M8		10		15	20	25	30		40		13	5.5	Full Thread	3090	5.98	1.6 - 4.1
SPE-M8-H	M8										50	13	5.5	27	3090	5.98	1.6 - 4.1
SPE-M10-H	M10					20	25	30				17	7	Full Thread	4900	10.8	4 - 4.8

*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 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

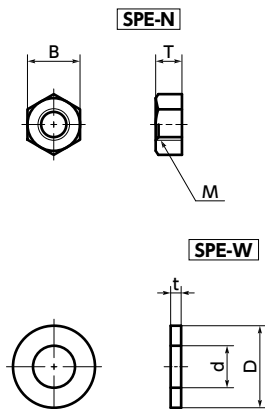
SPE-N/SPE-W

Plastic Screw - Hex Nuts / Washers - PEEK

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● 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

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>

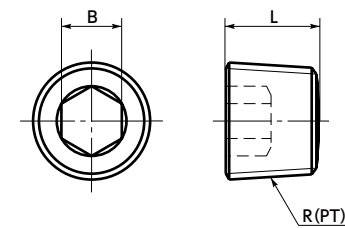
SPE-R

Plastic Screw - Socket Head Cap Screw Plugs - PEEK

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- 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

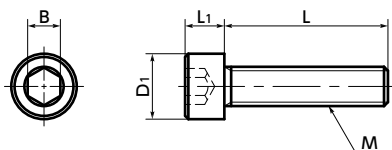
Individual Sales ➔ P.809	Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Modification process for captive use ➔ P.806
Available / Add'l charge	Available / Add'l charge	Not Available	Not Available	Not Available

NBK

<https://www.nbk1560.com>

SPS-C Plastic Screw - Hex Socket Head Cap Screws - PPS

WEB Selection Tool CAD Download Heat-resistance Chemical-proof



● 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 25 30	7	4	3	980	0.71	0.32 - 0.56
SPS-M5-C	M5	8 10 12 15 20 25 30 40	8.5	5	4	1570	1.42	0.52 - 1.2
SPS-M6-C	M6	10 12 15 20 25 30 40	10	6	5	2250	2.11	1 - 2.3
SPS-M8-C	M8	10 12 15 20 25 30 40	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

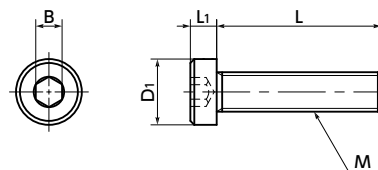
Order in number of packs.

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

SPS-LC Plastic screw - Hex Socket Low Head Bolt - PPS

WEB Selection Tool 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 40	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.

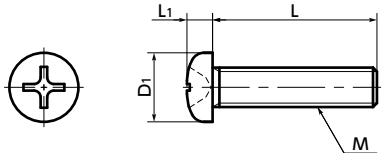
Also sold separately from 1 piece up. ➔ P.809

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.

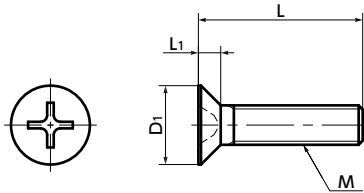
Also sold separately from 1 piece up. ➡ P.809

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.

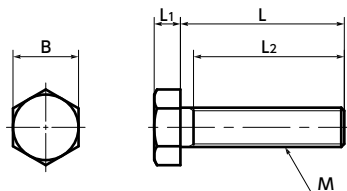
Also sold separately from 1 piece up. ➡ P.809

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.

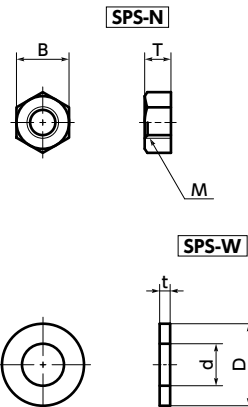
Also sold separately from 1 piece up. ➔ P.809

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®

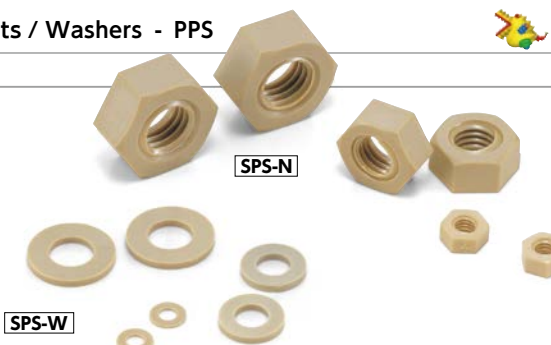


● Material/Finish

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

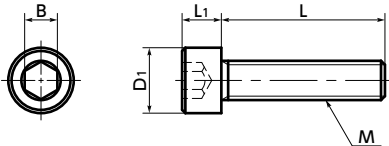
Plastic Screw - Hex Socket Head Cap Screws - RENY

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	1	L	2								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

SPA-LC

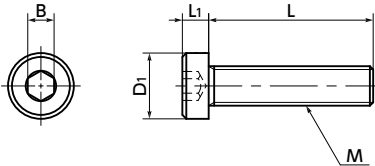
Plastic screw - Hex Socket Low Head Bolt - RENY

WEB Selection Tool

WEB CAD Download

High strength

e-nedzi.com



● 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.

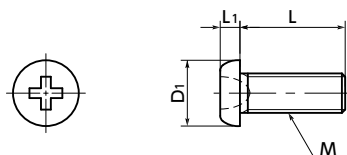
Also sold separately from 1 piece up. ➡ P.809

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

SPA-MC Plastic screw - Fine Thread - RENY Additional Size

WEB Selection Tool WEB CAD Download High strength Miniature Size

e-nedzi.com



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.

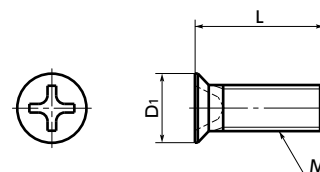
Also sold separately from 1 piece up. → P.809

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

SPA-MF Plastic Screw (RENY/Machine Screw for Precision Instruments) NEW

WEB Selection Tool WEB CAD Download High strength Miniature Size

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- 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.

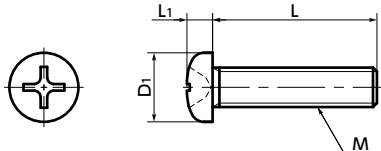
Also sold separately from 1 piece up. → P.809

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

WEB Selection Tool WEB CAD Download High strength

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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.

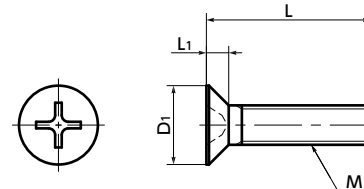
Also sold separately from 1 piece up. ➡ P.809

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

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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.

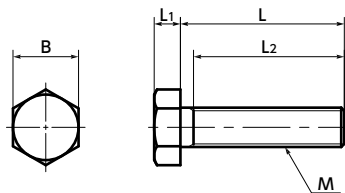
Also sold separately from 1 piece up. ➡ P.809

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

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● 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.

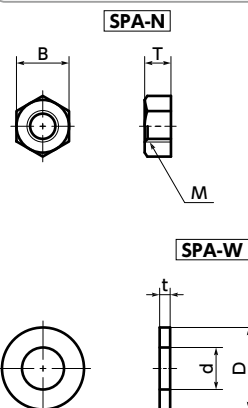
Also sold separately from 1 piece up. ➡ P.809

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

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● 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

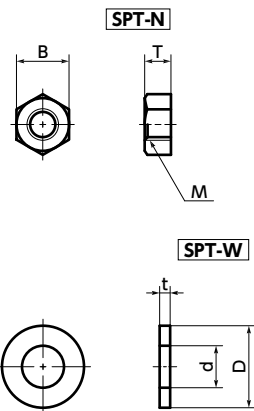
Order in number of packs.

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

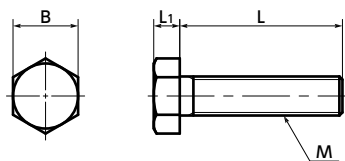
SPT-M8-N

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	L1	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

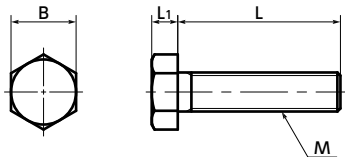
Product Code

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

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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.

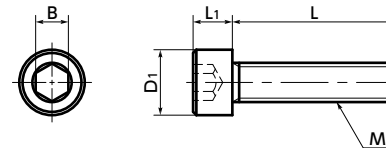
Also sold separately from 1 piece up. → P.809

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

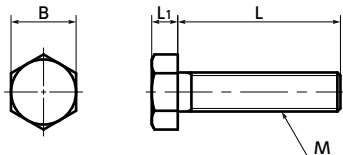
Order in number of packs.

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 CAD Download Chemical-proof



● 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 2 Product Code

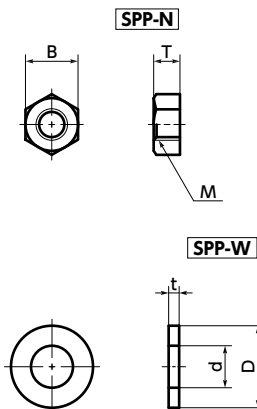
Order in number of packs.

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-N / SPP-W Plastic Screw - Hex Nuts / Washers - PP

WEB Selection Tool CAD Download Chemical-proof



● 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.

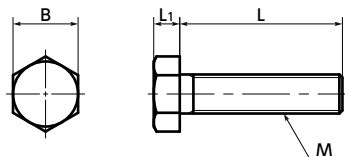
Also sold separately from 1 piece up. → P.809

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	L1	Tension*1 Rupture Load (N)
SPVC-M4-H	M4	10	12	16	20	25	30	35			7	2.8	200
SPVC-M5-H	M5	10	12	16	20	25	30	35	40		8	3.5	400
SPVC-M6-H	M6	10	12	16	20	25	30	35	40	50	10	4	670

*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

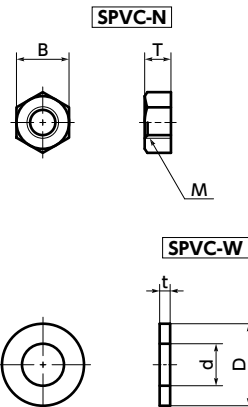
SPVC-M5-30-H-IVProduct Code   Product Code 

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

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- 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 

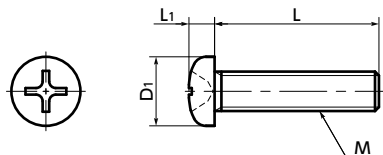
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
1 pc. in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

SPC-P Plastic Screw - Cross Recessed Pan Head Machine Screws - PC

WEB Selection Tool

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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

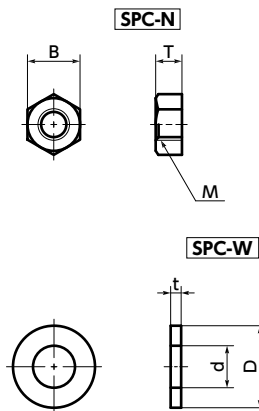
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available	Not Available

SPC-N / SPC-W Plastic Screw - Hex Nuts / Washers - PC

WEB Selection Tool

WEB CAD Download

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- 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

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™

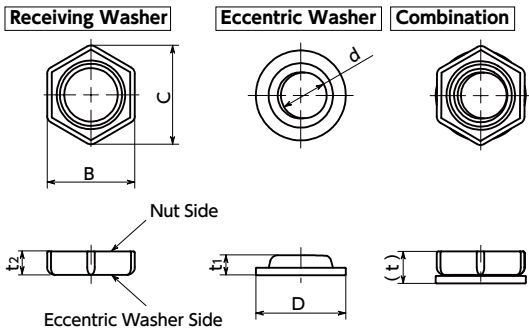
NEW

WEB Selection Tool

CAD Download

SUS Stainless steel

Vibration resistant treatment



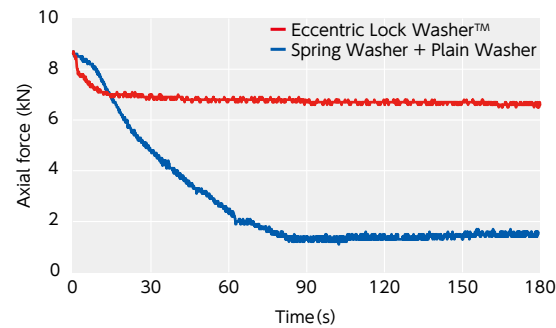
⚠ Precautions for Use

- 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

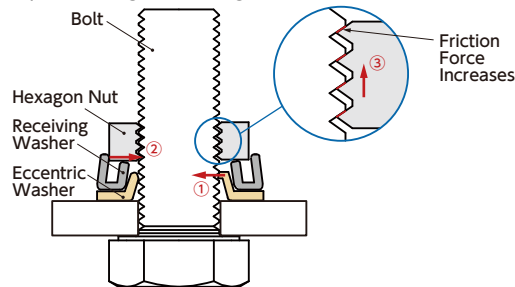
Part Number	Nominal	D	d	B	C	t ₁	t ₂	t	Reference tightening torque (N·m)	Mass (g)	Qty per pack
SWAS-6-EW	6	12	6.05	11.6	13.3	2.65	2.9	3.9	10	1.5	100
SWAS-8-EW	8	17	8.1	15	17.3	3.3	3.9	5.1	28	3.5	100
SWAS-10-EW	10	21	10.2	19.8	22.8	4.05	4.8	6.2	55	7.2	100
SWAS-12-EW	12	24	12.2	22	25.4	4.5	6	7.5	90	11	100

- 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

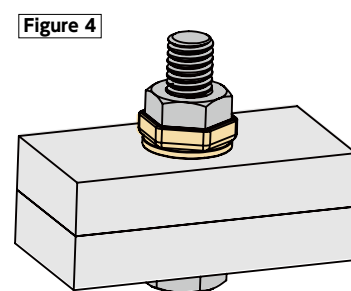
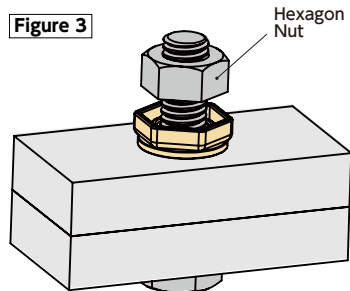
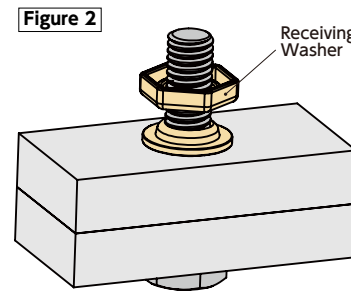
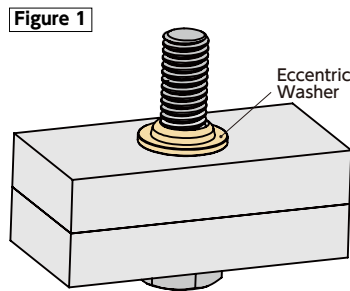
• Structure

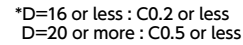
- ① Tightening hexagon nuts causes eccentric washers to bite into bolts.
- ② Receiving washers press hexagon nuts into bolts.
- ③ Receiving washers then press hexagon nuts upward, increasing friction between hexagon nuts and bolts and preventing loosening.



• 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**





-

Main body

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
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

Unit : mm

Product Code 1 2 3 Product Code

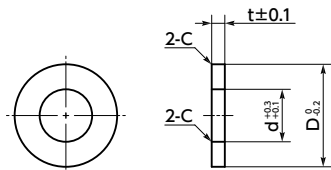
Select the t dimension from the dimension list.



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

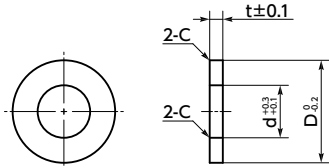
Select the t dimension from the dimension list.

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



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



- 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
	SWAS-AW
Main body	SUS304

Unit : mm									
Part Number	d	D	t	1	1.5	2	3	5	Mass (g)
SWAS-2-8-AW	2	8	●			●			0.38 - 0.75
SWAS-3-8-AW	3	8	●			●			0.35 - 0.69
SWAS-4-8-AW	4	8	●	●		●			0.3 - 0.6
SWAS-4-10-AW	4	10	●			●	●		0.53 - 1.6
SWAS-4-12-AW	4	12	●			●	●		0.8 - 2.4
SWAS-4-15-AW	4	15				●	●		2.6 - 3.9
SWAS-5-8-AW	5	8	●	●		●			0.25 - 0.49
SWAS-5-10-AW	5	10	●			●	●		0.47 - 1.4
SWAS-5-12-AW	5	12	●			●	●		0.74 - 2.2
SWAS-5-15-AW	5	15				●	●		2.5 - 3.7
SWAS-5-16-AW	5	16				●	●		2.9 - 4.3
SWAS-5-20-AW	5	20	●			●			2.3 - 4.7
SWAS-6-10-AW	6	10	●			●	●		0.4 - 1.2
SWAS-6-12-AW	6	12	●			●	●		0.68 - 2
SWAS-6-15-AW	6	15				●	●		2.4 - 3.5
SWAS-6-16-AW	6	16				●	●	●	2.7 - 6.8
SWAS-6-20-AW	6	20	●			●	●	●	2.3 - 11
SWAS-6-25-AW	6	25				●	●	●	7.3 - 18

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

Unit : mm									
Part Number	d	D	t	1	1.5	2	3	5	Mass (g)
SWAS-8-12-AW	8	12				●	●	●	1 - 2.5
SWAS-8-16-AW	8	16				●	●	●	2.4 - 6
SWAS-8-20-AW	8	20				●	●	●	4.2 - 10
SWAS-8-25-AW	8	25				●	●	●	7 - 17
SWAS-8-30-AW	8	30				●	●	●	10 - 26
SWAS-10-12-AW	10	12				●	●	●	0.55 - 1.4
SWAS-10-16-AW	10	16					●	●	2.9 - 4.8
SWAS-10-20-AW	10	20				●	●	●	3.7 - 9.3
SWAS-10-25-AW	10	25					●	●	9.8 - 16
SWAS-10-30-AW	10	30					●	●	15 - 25
SWAS-12-16-AW	12	16					●	●	2.1 - 3.5
SWAS-12-20-AW	12	20				●	●	●	3.2 - 8
SWAS-12-25-AW	12	25					●	●	9 - 15
SWAS-12-30-AW	12	30					●	●	14 - 23
SWAS-16-20-AW	16	20				●	●	●	1.8 - 4.5
SWAS-16-25-AW	16	25					●	●	6.9 - 11
SWAS-16-30-AW	16	30					●	●	12 - 20

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

• Part number specification

SWAS-2-8-1-AW

Product Code 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	Available / Add'l charge	Not Available	Not Available	Not Available

SWAS-AWBK Adjust Washer - Stainless Steel Black

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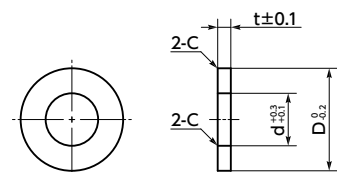


WEB Selection Tool CAD Download Antireflection SUS Stainless steel

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-AWBK

Product 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

RoHS2 Compliant

	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

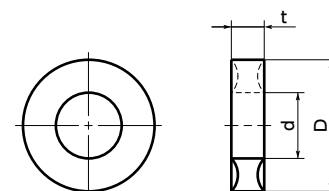
SWH/SWC Locking and Sealing Rings

e-nedzi.com®

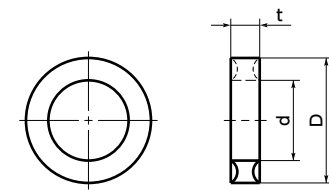


WEB Selection Tool CAD Download

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

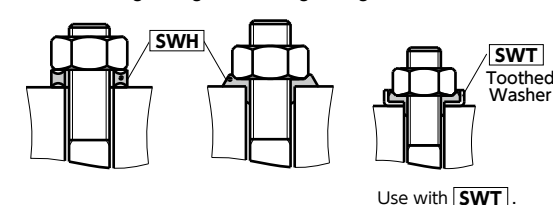
Material/Finish

RoHS2 Compliant

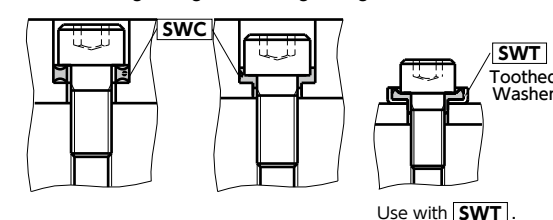
	SWH	SWC
Main Body	Polyamide (White)	Polyamide (White)

Installation Method

- Before Tightening
- After Tightening



- Before Tightening
- After Tightening



Part number specification

SWC-10

1

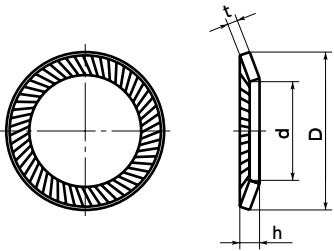
Order in number of packs.
Also sold separately from 1 piece up. → P.809

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



SWR / SWRS Ribbed Lock Washers Additional Size

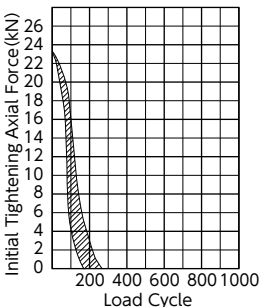
WEB Selection Tool WEB CAD Download SUS Stainless steel Vibration resistant treatment



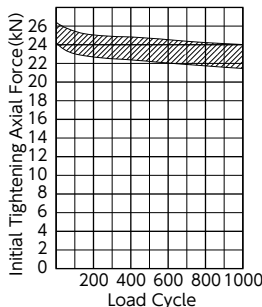
● Vibration test comparison

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.

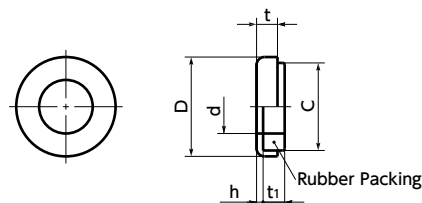
Also sold separately from 1 piece up. ➡ P.809

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

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● Material/Finish

RoHS2 Compliant

	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

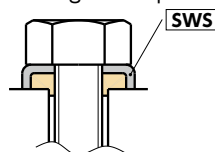
● Application

Seal ring
Oil hydraulic equipment / Pneumatic deviceSWS 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

1

Place order by a bag.
Also sold separately from 1 piece up. → P.809

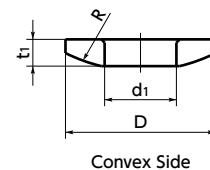
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Modification process for captive use → P.806
Available / Add'l charge	Not Available	Not Available	Not Available	Not Available

NBK

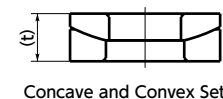
WEB ▶ <https://www.nbk1560.com>**SQW/SQWS Spherical Washers** *Additional Size*

WEB Selection Tool WEB CAD Download SUS Stainless steel

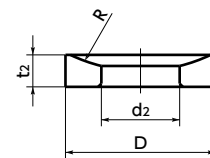
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Convex Side



Concave and Convex Set



Concave Side



- 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

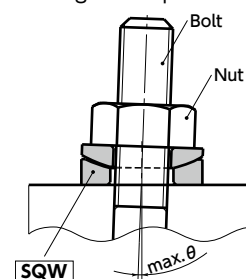
Part Number	Nominal	D	d ₁	d ₂	t ₁	t ₂	t	R	θ (°)	Mass (g)	Qty per pack
SQW-3	3	7.3	3.5	3.8	1.3	1.6	2.3	8	2	0.2	1
SQW-4	4	9.4	4.5	4.9	1.7	2	3	10.2	2	0.3	1
SQW-5	5	11.5	5.5	6	2.1	2.5	3.7	12.5	2	0.5	1
SQW-6	6	13	6.6	7.2	2.3	2.8	4.2	15	2	3	1
SQW-8	8	17	9	9.6	3.1	3.7	5.6	20	2	7	1
SQW-10	10	22	10.5	12	4	3.5	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

RoHS2 Compliant

	SQW	SQWS
Main Body	S45C (Hardness: 25 - 30 HRC) Ferrosoferric Oxide Film (Black)	SUS304

● Part number specification

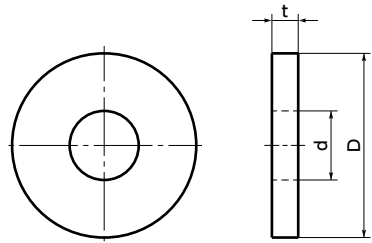
SQWS-10

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
1 pc. in 1 bag	Available / Add'l charge	Not Available	Not Available	Not Available

NBK

WEB ▶ <https://www.nbk1560.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

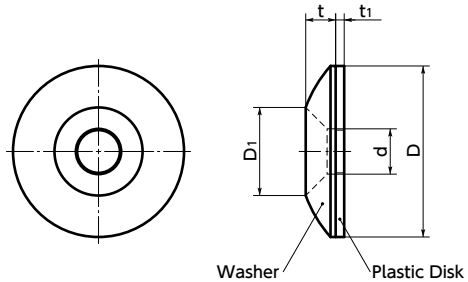
Material/Finish		RoHS2 Compliant
SWF		
Main Body	SCM435 (Hardness 350 - 430 HV) Ferrosoferric Oxide Coating (Black)	

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

● 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



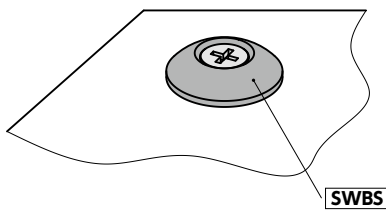
- Washers are for flat screws. They decorate attachment surfaces beautifully.
- Their smooth slanted shape prevents catching of screw heads.
- The plastic disk prevents damage to the attachment surface.

● 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

● Usage example
For Decoration



● Part number specification

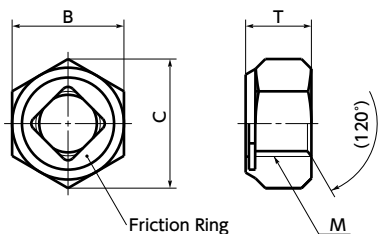
SWBS-6

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

SWUS Hex Lock Nuts

WEB Selection Tool CAD Download Vibration resistant treatment SUS Stainless steel

e-nedzi.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	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



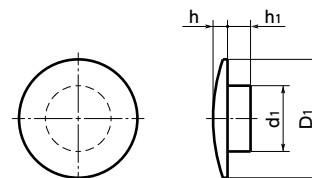
Order in number of packs.
Also sold separately from 1 piece up. → P.809

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	Available / Add'l charge	Not Available	Not Available	Not Available

SCC Cover Caps for Hex Socket Head Cap Screws

WEB Selection Tool CAD Download

e-nedzi.com®



- 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

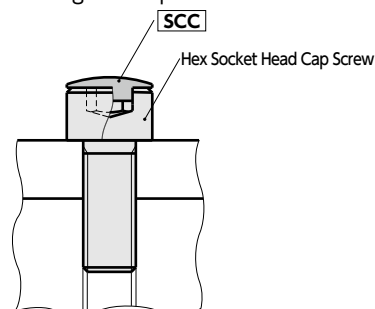
	SCC
Main Body	Polyethylene (Gray)

Part Number	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



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	Not Available	Not Available	Not Available	Not Available

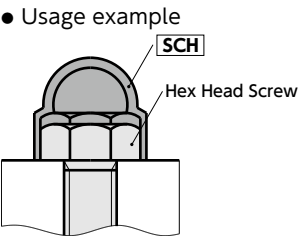


- Cover caps cover heads of hex head screws and hex nuts to increase the safety of machines and instruments.
- Application
 - Protection of screw heads and dust countermeasure
- Material/Finish
 - RoHS2 Compliant
 - | | |
|-----------|----------------------|
| | SCH |
| Main Body | Polyethylene (Black) |

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

*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.



- Part number specification
- SCH-10**
-
- 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	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.



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