

Category List

Couplings

P.17

High-Gain Rubber Couplings → P.27



Disk Couplings → P.63



Slit Couplings → P.97



Jaw Couplings → P.125



Cross Joint Couplings → P.155



Oldham Couplings → P.161



Bellows Couplings → P.193



Serration Couplings → P.205



Rigid Couplings → P.207



Cleanroom, Vacuum, Heat Resistant → P.225



Flexus → P.249



Mechanical Parts → P.251



Machine Elements P.261

Levers → P.267



Knobs → P.293



Pulls → P.329



Mounting Systems for Display → P.345



Set Collars/ Cross Clampers → P.371



Handles/Grips → P.393



Scales → P.417



Stages → P.434



Ball Rollers → P.455



Plungers → P.477



Structure Components → P.499



Screws → P.513



Special Screws

P.547

Vacuum Application Screws → P.563



Low Profile Screws • Small Head Screws → P.593



High Performance S.S. Screws → P.621



Titanium Screws → P.633



Special Material Screws → P.645



Chemical Resistance Screws → P.663



Screws with Special Surface Treatment → P.671



Miniature Screws → P.681



Captive Screws • Full Thread Screws → P.689



Functional Screws → P.701



Inch Screws → P.708



Tamper Resistance Screws → P.713



Hexalobular Socket Head Screws → P.723



Plugs → P.727



Plastic Screws → P.733



Washers • Lock Nuts → P.780



NBK[®]

Machine Elements



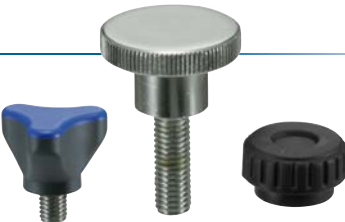
36 Taunton Drive Cheltenham VIC 3192
info@idyna.com.au +61 3 9585 2739
www.industrialdynamics.com.au

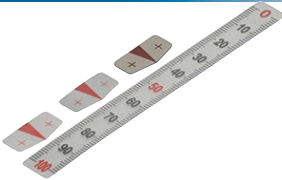
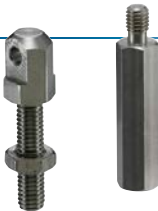
Category Index	P.263
Levers	P.267
Knobs	P.293
Pulls	P.329
Mounting Systems for Display	P.345
Set collars/Cross Clampers	P.371
Handles/Grips	P.393

Scales	P.417
Stages	P.434
Ball Rollers	P.455
Plungers	P.477
Structure Components	P.499
Screws	P.513



List of Machine Elements Categories

Levers → P.267	Knobs → P.293
	
Pulls → P.329	Mounting Systems for Display → P.345
	
Set Collars/Cross Clampers → P.371	Handles/Grips → P.393
	

Scales → P.417	Stages → P.434
	
Ball Rollers → P.455	Plungers → P.477
	
Structure Components → P.499	Screws → P.513
	

Universal Design UDEX®Series

Characteristics 1

Universal design to support human-friendly machinery development

UDEX®Series considers seven principles of universal design. The design that pursues "usability," "ease of force transmission," "ease of holding" and "ease of understanding" for as many people as possible improve the operability of machinery and also supports human-friendly machine development. Also, the sophisticated design of UDEX®Series that fits any machine will make the machine look more beautiful, more gentle.



Universal design 7 principles

Principle 1

Anyone can use it impartially.

Principle 2

There is freedom in usage.

Principle 3

Procedures to use are easy and understandable.

Principle 4

Necessary information is fairly understandable.

Principle 5

It is designed to eliminate careless mistakes or dangerous situations.

Principle 6

It can be used even with a small force in comfortable posture.

Principle 7

Enough space and size are secured for accessibility.

• The seven principles of universal design are a concept advocated by the Center for Universal Design of North Carolina State University, which is said to be the origin of universal design studies.



• NBK's new proposal
Universal Design UDEX®Series



KUDM KUDF
Plastic Miniature Knob
➔ P.303

LUDM LUDF
Plastic clamp lever
➔ P.277 - 279

UUDF
Plastic pulls
➔ P.341
KUWM KUWF
Plastic Wing Knob
➔ P.305



• This mark is only posted on products and facilities that are certified by the NPO corporation CUDO as color universal designs to help communicating visionary information to as many people as possible regardless of individual differences of color sensation.

Characteristics 2

Color variations to support color universal designs



UDEX®Series obtained Color Universal Design Certification from the Incorporated NPO Color Universal Design Organization (CUDO). It was recognized that the product is designed to be usable for as many people as possible regardless of individual differences in color sensation. UDEX®Series employs five colors of ● silver gray, ● black, ● orange, ● blue and ● yellow. They are selected in view of color balance to make it easier for as many people as possible to judge and identify each color regardless of their individual color vision differences. We support development of color universal designs among machines and devices, e.g. clarification of working procedures and indications of dangerous sections by coloration of operation parts.

What is color universal design?

Sensation of colors are not the same among people. It is said that there are a total of 5 million people in Japan who see colors differently than ordinary people due to differences of gene types and various eye disorders. For example, the vision of a person with normal color vision (Figure 1) looks like the vision in Figure 2 if seen by a person with D-type dyschromatopsia.

Gray	Red	Green
Blue	Orange	Yellow

Figure 1: Vision of a person with normal color vision

Gray	Red	Green
Blue	Orange	Yellow

Figure 2: Vision of a person with D-type dyschromatopsia

Laser engraving service

Symbols (color names) are engraved to make the color universal design more firm. With these symbols, the visionary information can be communicated to even more people.
➔ P.821



• Plastic Clamp Lever

Product Code	LEM/LEME/LEMS	LEF/LEFE/LEFS	LEM-C/LEMS-C	LEF-C/LEFS-C	LUDM/LUDMS
Page	P.271	P.275	P.273	P.276	P.277
Shape					
Lever Part Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Color Variations	BK SG OR	BK SG OR	BK SG OR	BK SG OR	BK SG OR BL YW
Nominal Diameter of Thread	M3 - M12	M3 - M12	M3 - M12	M3 - M12	M3 - M12

Product Code	LUDF/LUDFS
Page	P.279
Shape	
Lever Part Material	Stainless Steel
Color Variations	BK SG OR BL YW
Nominal Diameter of Thread	M3 - M12

• Plastic Clamp Levers - Miniature Type

Product Code	LECM/LECMS	LECF/LECFs	LECM-C/LECMS-C	LECF-C/LECFs-C
Page	P.280	P.283	P.281	P.284
Shape				
Lever Part Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Color Variations	BK SG OR YW SK	BK SG OR YW SK	BK SG OR YW SK	BK SG OR YW SK
Nominal Diameter of Thread	M3 - M6	M3 - M6	M3 - M6	M3 - M6

• Tension Lever

Product Code	LTM	LTF	LFM	LFF
Page	P.285	P.286	P.287	P.288
Shape				
Characteristics	Angled Lever	Angled Lever	Low Position • Horizontal Lever	Low Position • Horizontal Lever
Nominal Diameter of Thread	M10 - M20	M10 - M20	M8 - M16	M6 - M16

• Grip Lever

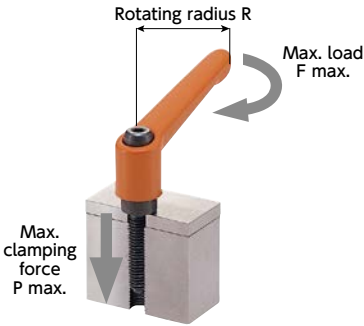
Product Code	LRG/LRGS	LCGS	LGS/LGSS
Page	P.289	P.290	P.291
Shape			
Characteristics	Stainless Steel	Stainless Steel	Stainless Steel
Nominal Diameter of Thread	GRR Use	GPC Use	In combination with a grip
	M6 - M12	M6 - M12	M6 - M12

How to Use Clamp Lever / Tension Lever

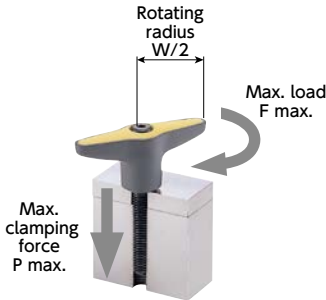
	Clamp Lever Clamp Lever - Miniature Type	Clamp Lever (Double Arm Type)	Tension Lever
① Pull up the lever. The built-in spring will be compressed, and the engaged serration will be released.			
② Next, rotate the loosened lever to your desired position.			
③ Release the lever, and the spring will pull the lever back in, the serration will be engaged again, and the lever will be locked.			

Definition of Max. Load and Max. Clamping Force

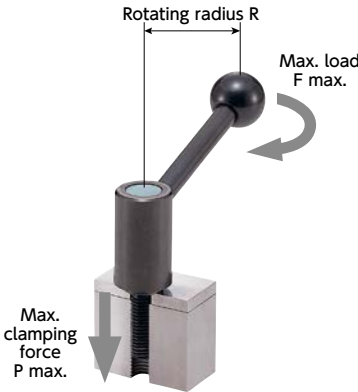
● Clamp Lever / Clamp Lever - Miniature Type



● Clamp Lever (Double Arm Type)



● Tension Lever



Selection
Navigator

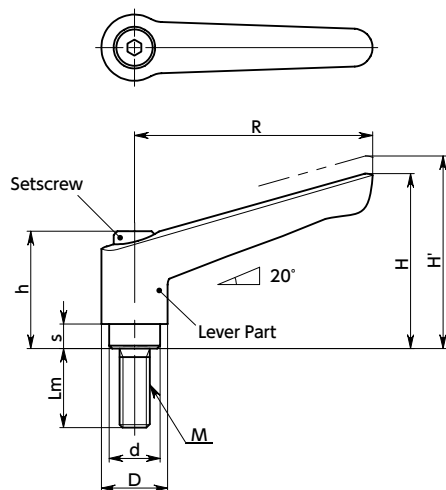


CAD Data
Download

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

LEM / LEME / LEMS Plastic Clamp Lever, Male Screw *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel



- A serration ring made of zinc die cast is inserted into the lever body made of plastic. They also realize sufficient strength for fitting with metal thread serration.
- A rich variety of thread sizes from M3 to M12 are available.
- There are three types of combinations of thread part materials / surface treatments:
 - LEM** — Made of steel / ferrosferric oxide film (black)
 - LEME** — Made of steel / electroless nickel plating
 - LEMS** — Made of stainless steel
- **LEME** has electroless nickel plating applied to its thread part made of steel to enhance its corrosion resistance.
- There are three color variations for the lever part. They can be selected by the end symbol of the part number.

End Symbol	Lever Part Color
BK	Matte black
SG	Matte silver
OR	Matte orange

Dimensions

LEM Thread part: made of steel / ferrosferric oxide film **LEME** Thread part: made of steel / electroless nickel plating**LEMS** Thread part: stainless steel

LEMS Thread part: stainless steel														Unit : mm
Part Number 1	Part Number 1	Part Number 1	M (coarse)	R	H	H'	h	s	D	d	Number of Teeth	Max.*1 load (N)	Max.*1 clamping force (kN)	Mass (g)
LEM-3		LEMS-3	M3	45	35.5	39	24.5	4.2	13	10	18	9	0.95	15
LEM-4	LEME-4	LEMS-4	M4	45	35.5	39	24.5	4.2	13	10	18	21	1.7	15 - 16
LEM-5	LEME-5	LEMS-5	M5	45	35.5	39	24.5	4.2	13	10	18	42	2.7	16 - 20
LEM-6	LEME-6	LEMS-6	M6	45	35.5	39	24.5	4.2	13	10	18	70	3.8	16 - 22
LEM-6B		LEMS-6B	M6	63	46.3	50.3	31	6.5	17.5	13.5	24	50	3.8	35 - 44
LEM-8	LEME-8	LEMS-8	M8	63	46.3	50.3	31	6.5	17.5	13.5	24	120	7	38 - 53
LEM-8B		LEMS-8B	M8	78	55.4	59.4	36	8	21	16	26	100	7	61 - 82
LEM-10A			M10	63	46.3	50.3	31	6.5	17.5	13.5	24	240	11	43 - 84
LEM-10	LEME-10	LEMS-10	M10	78	55.4	59.4	36	8	21	16	26	200	11	65 - 96
LEM-12A			M12	78	55.4	59.4	36	8	21	16	26	350	16	75 - 113
LEM-12	LEME-12	LEMS-12	M12	92	66	70	43	11	25	19	28	290	16	112 - 149

*1 : About the definition of max. load / max. clamping force → P.269

• Related Products

Female screw type **LEF** **LEFE****LEFS** with the same shape as**LEM** **LEME** **LEMS** is available.

→ P.275



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Please feel free to contact us	Not Available	Available / Add'l charge	Not Available	Available / Add'l charge



RoHS2 Compliant

• Material/Finish

	LEM	LEME	LEMS
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosferric Oxide Film (Black)	SUM22L Electroless Nickel Plating	SUS303
Setscrew	SUM22L Ferrosferric Oxide Film (Black)	SUM22L Electroless Nickel Plating	SUS303
Serration Ring (Insert)	Zinc die cast	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire	Stainless Steel Wire

LEM Thread part: made of steel / ferrosferric oxide film **LEME** Thread part: made of steel / electroless nickel plating**LEMS** Thread part: stainless steel

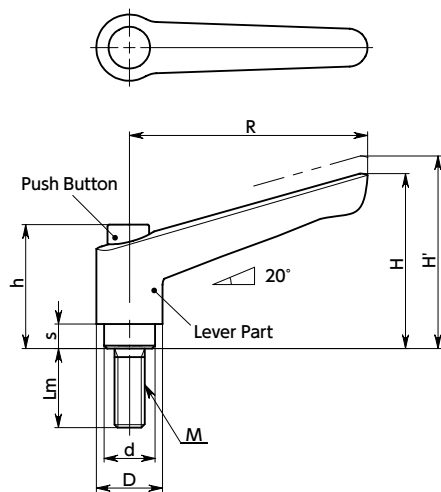
Part Number	Lm (mm)											
	6	8	10	12	16	20	25	32	40	50	63	80
LEM-3	●	●	●	●	●	●	●	●	●	●	●	●
LEM-4			●	●	●	●	●	●	●	●	●	●
LEM-5				●	●	●	●	●	●	●	●	●
LEM-6				●	●	●	●	●	●	●	●	●
LEM-6B				●	●	●	●	●	●	●	●	●
LEM-8				●	●	●	●	●	●	●	●	●
LEM-8B					●	●	●	●	●	●	●	●
LEM-10A					●	●	●	●	●	●	●	●
LEM-10					●	●	●	●	●	●	●	●
LEM-12A						●	●	●	●	●	●	●
LEM-12						●	●	●	●	●	●	●
LEME-4			●	●	●	●	●	●	●	●	●	●
LEME-5				●	●	●	●	●	●	●	●	●
LEME-6				●	●	●	●	●	●	●	●	●
LEME-8				●	●	●	●	●	●	●	●	●
LEME-10					●	●	●	●	●	●	●	●
LEME-12						●	●	●	●	●	●	●
LEMS-3	●	●	●	●	●	●	●	●	●	●	●	●
LEMS-4			●	●	●	●	●	●	●	●	●	●
LEMS-5				●	●	●	●	●	●	●	●	●
LEMS-6				●	●	●	●	●	●	●	●	●
LEMS-6B					●	●	●	●	●	●	●	●
LEMS-8					●	●	●	●	●	●	●	●
LEMS-8B						●	●	●	●	●	●	●
LEMS-10						●	●	●	●	●	●	●
LEMS-12							●	●	●	●	●	●

• Part number specification

LEM-6B-16-BKSelect a **2** thread length Lm from the dimension table.

LEM-C / LEMS-C Plastic Clamp Lever, Male Screw - with Push Button

WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish



	LEM-C	LEMS-C
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosoferric Oxide Film (Black)	SUS303
Push Button	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Setscrew	SUS303	SUS303
Serration Ring (Insert)	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire

- A plastic clamp lever with push button. Male screw type.
- When the lever part is pulled up for position adjustment, the force is easily transmitted to help the operation if a push button is available.
- A serration ring made of zinc die cast is inserted into the lever body made of plastic. They also realize sufficient strength for fitting with metal thread serration.
- A rich variety of thread sizes from M3 to M12 are available.
- There are two types of thread part materials:
 - LEM-C — Made of steel
 - LEMS-C — Made of stainless steel

- Three color variations for the lever part and three for the push button are available. Each color can be selected by the symbol of the part number.
- Color variations of the lever part

Symbol	Lever Part Color
BK	Matte black
SG	Matte silver
OR	Matte orange

- Operation Button Color Variations

Symbol	Operation Button Color
CBK	Matte black
CSG	Matte silver
COR	Matte orange

Dimensions

Unit : mm

Part Number Screw : Steel	Part Number Screw : Stainless steel	M (Coarse)	R	H	H'	h	s	D	d	Number of Teeth	Max.*1 load (N)	Max.*1 clamping force (kN)	Mass (g)
LEM-3	LEMS-3	M3	45	35.5	39	24	4.2	13	10	18	9	0.95	15
LEM-4	LEMS-4	M4	45	35.5	39	24	4.2	13	10	18	21	1.7	15 - 16
LEM-5	LEMS-5	M5	45	35.5	39	24	4.2	13	10	18	42	2.7	16 - 20
LEM-6	LEMS-6	M6	45	35.5	39	24	4.2	13	10	18	70	3.8	16 - 22
LEM-6B	LEMS-6B	M6	63	46.3	50.3	31	6.5	17.5	13.5	24	50	3.8	35 - 44
LEM-8	LEMS-8	M8	63	46.3	50.3	31	6.5	17.5	13.5	24	120	7	38 - 53
LEM-8B	LEMS-8B	M8	78	55.4	59.4	36	8	21	16	26	100	7	61 - 82
LEM-10A		M10	63	46.3	50.3	31	6.5	17.5	13.5	24	240	11	43 - 84
LEM-10	LEMS-10	M10	78	55.4	59.4	36	8	21	16	26	200	11	65 - 96
LEM-12A		M12	78	55.4	59.4	36	8	21	16	26	350	16	75 - 113

*1 : About the definition of max. load / max. clamping force → P.269

- Part number specification

LEM-8-16-SG-COR

1 2 3 4

Select a 2 thread length Lm from the dimension table.

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Available / Add'l charge	Not Available	Available / Add'l charge

Related Products

Female screw type LEF-C
LEFS-C of the same shape as
LEM-C LEMS-C is available.
→ P.276



A plastic clamp lever LEM
LEME LEMS of the same shape
as LEM-C LEMS-C with no
push button is available.
→ P.271

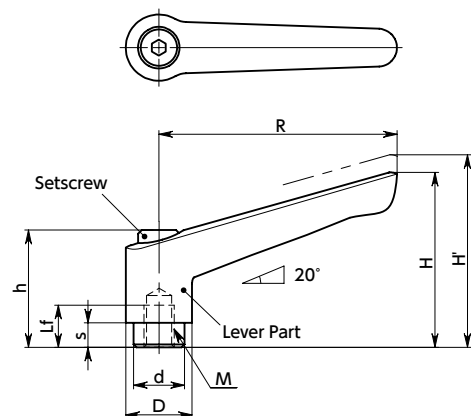


LEM-C Thread part : made of steel LEMS-C Thread part : made of stainless steel

Part Number	Lm (mm) 2											
	6	8	10	12	16	20	25	32	40	50	63	80
LEM-3	●	●	●	●	●							
LEM-4			●	●	●	●	●	●				
LEM-5				●	●	●	●	●	●	●		
LEM-6				●	●	●	●	●	●	●		
LEM-6B				●	●	●	●	●	●	●	●	
LEM-8				●	●	●	●	●	●	●	●	
LEM-8B					●	●	●	●	●	●	●	●
LEM-10A					●	●	●	●	●	●	●	●
LEM-10					●	●	●	●	●	●	●	●
LEM-12A						●	●	●	●	●	●	●
LEMS-3	●	●	●	●	●							
LEMS-4			●	●	●	●	●	●				
LEMS-5				●	●	●	●	●	●	●		
LEMS-6				●	●	●	●	●	●	●		
LEMS-6B				●	●	●	●	●	●	●	●	
LEMS-8					●	●	●	●	●	●	●	
LEMS-8B						●	●	●	●	●	●	●
LEMS-10						●	●	●	●	●	●	●

LEF / LEFE / LEFS Plastic Clamp Lever, Female Screw

WEB Selection Tool CAD Download SUS Stainless steel



- There are three color variations for the lever part. They can be selected by the end symbol of the part number.

End Symbol	Lever Part Color
BK	Matte black
SG	Matte Silver
OR	Matte orange

Material/Finish

	LEF	LEFE	LEFS
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosoferric Oxide Film (Black)	SUM22L Electroless Nickel Plating	SUS303
Setscrew	SUM22L Ferrosoferric Oxide Film (Black)	SUM22L Electroless Nickel Plating	SUS303
Serration Ring (Insert)	Zinc die cast	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire	Stainless Steel Wire

LEF Steel / ferrosoferric oxide film		LEFE Steel / electroless nickel plating		LEFS Stainless steel		Common dimensions													
Part Number	Lf min.	Part Number	Lf min.	Part Number	Lf min.	M (coarse)	R	H	H'	h	s	D	d	Number of Teeth	Max. load *1 (N)	Max. clamping force *1 (kN)	Mass (g)		
LEF-3	7			LEFS-3	7	M3	45	35.5	39	24.5	4.2	13	10	18	9	0.95	14		
LEF-4	9	LEFE-4	9	LEFS-4	8	M4	45	35.5	39	24.5	4.2	13	10	18	21	1.7	14		
LEF-5	9	LEFE-5	9	LEFS-5	8	M5	45	35.5	39	24.5	4.2	13	10	18	42	2.7	13		
LEF-6	9	LEFE-6	9	LEFS-6	8	M6	45	35.5	39	24.5	4.2	13	10	18	70	3.8	12		
LEF-6B	11			LEFS-6B	11	M6	63	46.3	50.3	31	6.5	17.5	13.5	24	50	3.8	32		
LEF-8	11	LEFE-8	11	LEFS-8	11	M8	63	46.3	50.3	31	6.5	17.5	13.5	24	120	7	30		
LEF-8B	14			LEFS-8B	14	M8	78	55.4	59.4	36	8	21	16	26	100	7	52		
LEF-10	14	LEFE-10	14	LEFS-10	14	M10	78	55.4	59.4	36	8	21	16	26	200	11	48		
LEF-12	17	LEFE-12	17	LEFS-12	17	M12	92	66	70	43	11	25	19	28	290	16	78		

*1: About the definition of max. load / max. clamping force → P.269

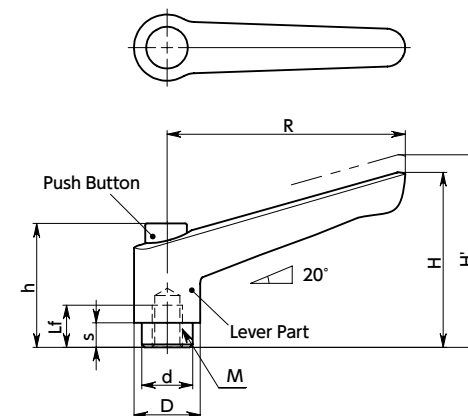
Part number specification

LEFE-12-OR

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Please feel free to contact us	Available / Add'l charge	Not Available	Not Available	Available / Add'l charge

LEF-C / LEFS-C Plastic Clamp Lever, Female Screw - with Push Button

WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	LEF-C	LEFS-C
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosoferric Oxide Film (Black)	SUS303
Push Button	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Setscrew	SUS303	SUS303
Serration Ring (Insert)	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire

Related Products

Male type **LEM-C** **LEMS-C** of the same shape as **LEF-C** **LEFS-C** is available.
→ P.273



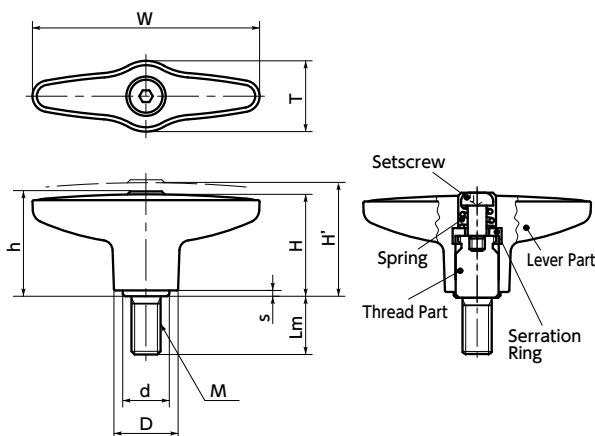
Part number specification

LEF-8-SG-COR

LEF Steel		LEFS Stainless steel		Common dimensions															
Part Number	Lf min.	Part Number	Lf min.	M (Coarse)	R	H	H'	h	s	D	d	Number of Teeth	Max. *1 load (N)	Max. *1 clamping force (kN)	Mass (g)				
LEF-3	7	LEFS-3	7	M3	45	35.5	39	24	4.2	13	10	18	9	0.95	14				
LEF-4	9	LEFS-4	8	M4	45	35.5	39	24	4.2	13	10	18	21	1.7	14				
LEF-5	9	LEFS-5	8	M5	45	35.5	39	24	4.2	13	10	18	42	2.7	13				
LEF-6	9	LEFS-6	8	M6	45	35.5	39	24	4.2	13	10	18	70	3.8	12				
LEF-6B	11	LEFS-6B	11	M6	63	46.3	50.3	31	6.5	17.5	13.5	24	50	3.8	32				
LEF-8	11	LEFS-8	11	M8	63	46.3	50.3	31	6.5	17.5	13.5	24	120	7	30				
LEF-8B	14	LEFS-8B	14	M8	78	55.4	59.4	36	8	21	16	26	100	7	52				
LEF-10	14	LEFS-10	14	M10	78	55.4	59.4	36	8	21	16	26	200	11	48				

*1: About the definition of max. load / max. clamping force → P.269

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Available / Add'l charge	Not Available	Not Available	Available / Add'l charge



● Material/Finish



	LUDM	LUDMS
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosoferric Oxide Film (Black)	SUS303
Setscrew	SUM22L Ferrosoferric Oxide Film (Black)	SUS303
Serration Ring	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire

- A double arm type clamp lever made of plastic.
- Designed in consideration of the seven principles of universal design. A shape for easy application of forces and operations.
- About Universal Design → P.265
- The rotating radius is about a half of plastic clamp levers. Space-saving.
- A serration ring made of zinc die cast is inserted into the lever body made of plastic. They also realize sufficient strength for fitting with metal thread serration.
- There are two types of thread part materials:
 - LUDM** — Made of steel
 - LUDMS** — Made of stainless steel
- A rich variety of thread sizes from M3 to M12 are available.
- Five-color variations support the color universal design of machines / devices. Two-tone color of dark gray and various colors.
- Lever part colors can be selected by the end symbol of the part number.

End Symbol	Lever Part Color
BK	Matte black
SG	Matte Silver
OR	Matte orange
BL	Matte blue
YW	Matte yellow

Dimensions

Unit : mm

Part Number Screw : Steel	Part Number Screw : Stainless steel	W	M (Coarse)	H	H'	h	s	T	D	d	Number of Teeth	Max.*1 load (N)	Max.*1 clamping force (kN)	Mass (g)
LUDM-52-3	LUDMS-52-3	52	M3	23.5	27	24.5	1.5	15.4	14	10	18	15	0.95	15 - 16
LUDM-52-4	LUDMS-52-4	52	M4	23.5	27	24.5	1.5	15.4	14	10	18	36	1.7	16 - 17
LUDM-52-5	LUDMS-52-5	52	M5	23.5	27	24.5	1.5	15.4	14	10	18	72	2.7	17 - 21
LUDM-52-6	LUDMS-52-6	52	M6	23.5	27	24.5	1.5	15.4	14	10	18	120	3.8	17 - 23
LUDM-67-6	LUDMS-67-6	67	M6	30	34	31	2	20.8	19	13.5	24	94	3.8	37 - 46
LUDM-67-8	LUDMS-67-8	67	M8	30	34	31	2	20.8	19	13.5	24	230	7	40 - 55
LUDM-67-10		67	M10	30	34	31	2	20.8	19	13.5	24	460	11	45 - 86
LUDM-78-8	LUDMS-78-8	78	M8	35	39	36	2	24.3	22	16	26	200	7	62 - 83
LUDM-78-10	LUDMS-78-10	78	M10	35	39	36	2	24.3	22	16	26	390	11	66 - 97
LUDM-78-12		78	M12	35	39	36	2	24.3	22	16	26	690	16	76 - 114
LUDM-93-12	LUDMS-93-12	93	M12	41	45	43	3	28.5	26	19	28	580	16	117 - 154

*1 : About the definition of max. load / max. clamping force → P.269

● Related Products

Female screw type **LUDF**
LUDFS with the same shape as
LUDM **LUDMS** is available.
 → P.279



● Part number specification

LUDM-93-12-80-YW

1 2 3

Select a 2 thread length Lm from the dimension table.

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Please feel free to contact us	Not Available	Available / Add'l charge	Not Available	Available / Add'l charge

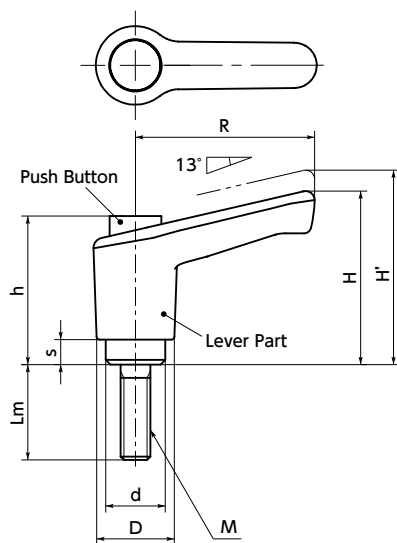


LUDM Thread part: made of steel LUDMS Thread part: made of stainless steel

Part Number	Lm (mm)	6	8	10	12	16	20	25	32	40	50	63	80
LUDM-52-3		●	●	●	●	●	●	●	●	●	●	●	●
LUDM-52-4				●	●	●	●	●	●	●	●	●	●
LUDM-52-5					●	●	●	●	●	●	●	●	●
LUDM-52-6					●	●	●	●	●	●	●	●	●
LUDM-67-6					●	●	●	●	●	●	●	●	●
LUDM-67-8					●	●	●	●	●	●	●	●	●
LUDM-67-10						●	●	●	●	●	●	●	●
LUDM-78-8						●	●	●	●	●	●	●	●
LUDM-78-10						●	●	●	●	●	●	●	●
LUDM-78-12							●	●	●	●	●	●	●
LUDM-93-12								●	●	●	●	●	●
LUDMS-52-3		●	●	●	●	●	●	●	●	●	●	●	●
LUDMS-52-4				●	●	●	●	●	●	●	●	●	●
LUDMS-52-5					●	●	●	●	●	●	●	●	●
LUDMS-52-6					●	●	●	●	●	●	●	●	●
LUDMS-67-6					●	●	●	●	●	●	●	●	●
LUDMS-67-8					●	●	●	●	●	●	●	●	●
LUDMS-78-8						●	●	●	●	●	●	●	●
LUDMS-78-10						●	●	●	●	●	●	●	●
LUDMS-93-12							●	●	●	●	●	●	●

LECM-C / LECMS-C Clamp Lever - Miniature Type, Male Screw - with Push Button

WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish



	LECM-C	LECMS-C
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosoferric Oxide Film (Black)	SUS303
Push Button	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Setscrew	SUS303	SUS303
Serration Ring (Insert)	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire

- A clamp lever - miniature type with push button. Male screw type.
- When the lever part is pulled up for position adjustment, the force is easily transmitted to help the operation if a push button is available.
- The product development was conducted with LCA, Life Cycle Assessment, in consideration for environmental load, especially for global warming.
- Greenhouse effect gas emission is reduced by 6.5 % compared to conventional products.
- A serration ring made of zinc die cast is inserted into the lever body made of plastic. They also realize sufficient strength for fitting with metal thread serration.
- There are two types of thread part materials:
 - LECM-C** — Made of steel
 - LECMS-C** — Made of stainless steel
- Five color variations for the lever part and three for the push button are available. They can be selected by the symbol of the part number.

Color variations of the lever part

Symbol	Lever Part Color
BK	Matte black
SG	Matte silver
OR	Matte orange
YW	Matte yellow
SK	Matte Transparent

Operation Button Color Variations

Symbol	Operation Button Color
CBK	Matte black
CSG	Matte silver
COR	Matte orange

Dimensions

Unit : mm

Part Number Screw : Steel	Part Number Screw : Stainless steel	M (Coarse)	R	H	H'	h	s	D	d	Number of Teeth	Max.*1 load (N)	Max.*1 clamping force (kN)	Mass (g)
LECM-3	LECMS-3	M3	30	29	32.5	24	4.2	13	10	18	13	0.95	14 - 15
LECM-4	LECMS-4	M4	30	29	32.5	24	4.2	13	10	18	31	1.7	15 - 16
LECM-5	LECMS-5	M5	30	29	32.5	24	4.2	13	10	18	62	2.7	16 - 20
LECM-6	LECMS-6	M6	30	29	32.5	24	4.2	13	10	18	110	3.8	16 - 22

*1 : About the definition of max. load / max. clamping force → P.269

Part number specification

LECM-3-16-SK-CBK

1 2 3 4

Select a 2 thread length Lm from the dimension table.

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Available / Add'l charge	Not Available	Available / Add'l charge

Related Products

Female screw type **LECF-C**
LECFS-C of the same shape as
LECM-C **LECMS-C** is available.
→ P.284

A clamp lever - miniature type
LECM **LECMS** of the same
shape as **LECM-C** **LECMS-C**
with no push button is available.
→ P.280

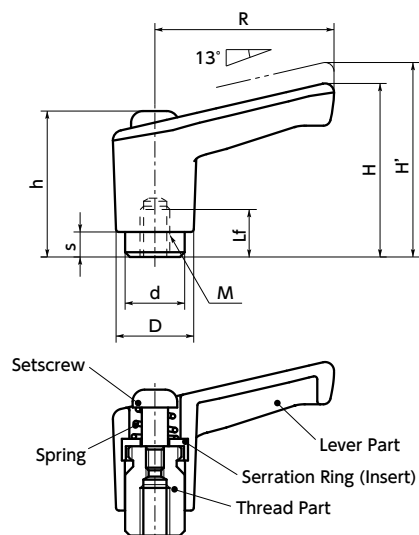


LECM-C Thread part : made of steel **LECMS-C** Thread part : made of stainless steel

Part Number	Lm (mm)									
	6	8	10	12	16	20	25	32	40	50
LECM-3	●	●	●	●	●	●	●	●	●	●
LECM-4			●	●	●	●	●	●	●	●
LECM-5				●	●	●	●	●	●	●
LECM-6				●	●	●	●	●	●	●
LECMS-3	●	●	●	●	●	●	●	●	●	●
LECMS-4			●	●	●	●	●	●	●	●
LECMS-5				●	●	●	●	●	●	●
LECMS-6				●	●	●	●	●	●	●

LECF / LECFS Plastic Clamp Lever - Miniature Type, Female Screw

WEB Selection Tool WEB CAD Download SUS Stainless steel



- A compact type clamp lever made of plastic.
- The product development was conducted with LCA, Life Cycle Assessment, in consideration for environmental load, especially for global warming.
- Greenhouse effect gas emission is reduced by 6.5 % compared to conventional products.
- A serration ring made of zinc die cast is inserted into the lever body made of plastic. They also realize sufficient strength for fitting with metal thread serration.
- There are two types of thread part materials:
 - LECF** — Made of steel
 - LECFS** — Made of stainless steel
- There are five color variations. They can be selected by the end symbol of the part number.

End Symbol	Lever Part Color
BK	Matte black
SG	Matte Silver
OR	Matte orange
YW	Matte yellow
SK	Matte Transparent

Material/Finish

RoHS2 Compliant

	LECF	LECFS
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosioferric Oxide Film (Black)	SUS303
Setscrew	SUM22L Ferrosioferric Oxide Film (Black)	SUS303
Serration Ring	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire

Unit : mm

LECF Steel		LECFS Stainless steel		Common dimensions											
Part Number	Lf min.	Part Number	Lf min.	M (Coarse)	R	H	H'	h	s	D	d	Number of Teeth	Max. load*1 (N)	Max. clamping*1 force (kN)	Mass (g)
LECF-3	7	LECFS-3	7	M3	30	29	32.5	24.5	4.2	13	10	18	13	0.95	14
LECF-4	9	LECFS-4	8	M4	30	29	32.5	24.5	4.2	13	10	18	31	1.7	13
LECF-5	9	LECFS-5	8	M5	30	29	32.5	24.5	4.2	13	10	18	62	2.7	13
LECF-6	9	LECFS-6	8	M6	30	29	32.5	24.5	4.2	13	10	18	110	3.8	12

*1 : About the definition of max. load / max. clamping force ➡ P.269

Related Products

Male screw type **LECM** **LECMS** with the same shape is available.
➡ P.280



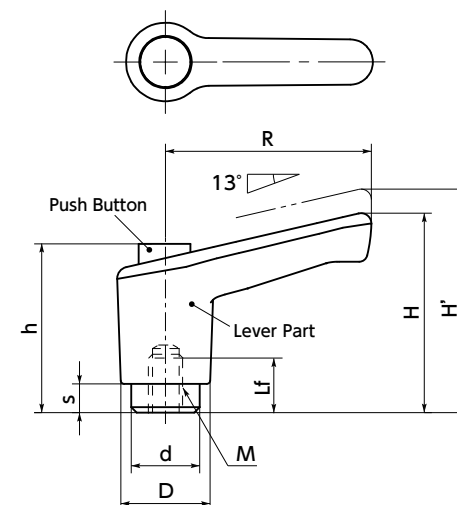
Part number specification

LECF-3-BK
1 2

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Please feel free to contact us	Available / Add'l charge	Not Available	Not Available	Available / Add'l charge

LECF-C / LECFS-C Clamp Lever - Miniature Type, Female Screw - with Push Button

WEB Selection Tool WEB CAD Download SUS Stainless steel



- Five color variations for the lever part and three for the push button are available. They can be selected by the symbol of the part number.

Color variations of the lever part

Symbol	Lever Part Color
BK	Matte black
SG	Matte silver
OR	Matte orange
YW	Matte yellow
SK	Matte Transparent

Operation Button Color Variations

Symbol	Operation Button Color
CBK	Matte black
CSG	Matte silver
COR	Matte orange

- A clamp lever - miniature type with push button. Female screw type.
- When the lever part is pulled up for position adjustment, the force is easily transmitted to help the operation if a push button is available.
- The product development was conducted with LCA, Life Cycle Assessment, in consideration for environmental load, especially for global warming.
- Greenhouse effect gas emission is reduced by 6.5 % compared to conventional products.
- A serration ring made of zinc die cast is inserted into the lever body made of plastic. They also realize sufficient strength for fitting with metal thread serration.
- There are two types of thread part materials:
 - LECF-C** — Made of steel
 - LECFS-C** — Made of stainless steel

Material/Finish

RoHS2 Compliant

	LECF-C	LECFS-C
Lever Part	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SUM22L Ferrosioferric Oxide Film (Black)	SUS303
Push Button	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Setscrew	SUS303	SUS303
Serration Ring (Insert)	Zinc die cast	Zinc die cast
Spring	SWPB	Stainless Steel Wire

Unit : mm

LECF Steel		LECFS Stainless steel		Common dimensions											
Part Number 	Lf min.	Part Number 	Lf min.	M (Coarse)	R	H	H'	h	s	D	d	Number of Teeth	Max.*1 load (N)	Max.*1 clamping force (kN)	Mass (g)
LECF-3	7	LECFS-3	7	M3	30	29	32.5	24	4.2	13	10	18	13	0.95	14
LECF-4	9	LECFS-4	8	M4	30	29	32.5	24	4.2	13	10	18	31	1.7	14
LECF-5	9	LECFS-5	8	M5	30	29	32.5	24	4.2	13	10	18	62	2.7	13
LECF-6	9	LECFS-6	8	M6	30	29	32.5	24	4.2	13	10	18	110	3.8	12

*1 : About the definition of max. load / max. clamping force ➡ P.269

Related Products

Male type **LECM-C** **LECMS-C** of the same shape as **LECF-C** is available.
➡ P.281



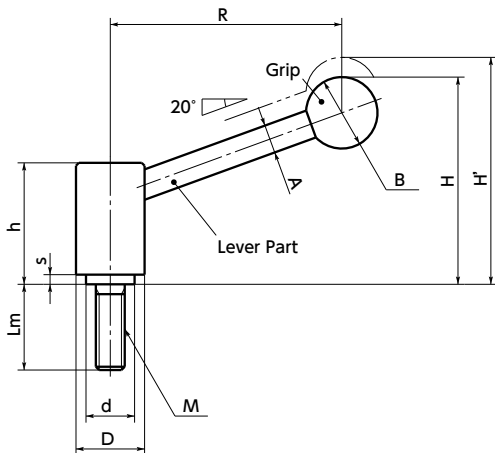
Part number specification

LECF-3-YW-CBK
1 2 3

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Not Available	Available / Add'l charge	Not Available	Not Available	Available / Add'l charge

LTM Tension Lever, Male Screw

WEB Selection Tool WEB CAD Download



- A strong type clamping lever.
- Products of special specifications such as rotating radius of the lever can also be manufactured. Please feel free to contact our customer service.

Material/Finish		LTM
Lever Part	S45C Ferrosferric Oxide Film (Black)	
Thread Part	S45C Ferrosferric Oxide Film (Black)	
Grip	Phenol Resin (Black)	

Dimensions

Unit : mm														
Part Number ①	M (Coarse)	R	H	H'	h	s	A	B	D	d	Number of Teeth	Max. load*1 (N)	Max. clamping*1 force (kN)	Mass (g)
LTM-10	M10	81	72.5	78	42.5	2.5	10	25	24	17	24	280	16	195 - 210
LTM-12	M12	99	85.5	92	49.5	3.5	11	25	28	20	26	400	23	300 - 320
LTM-16	M16	118	98.5	106	55.5	3.5	12	30	33	24	36	830	43	490 - 535
LTM-20	M20	136	114.5	123	65.5	4.5	14	35	41	30	36	1400	67	880 - 975

*1 : About the definition of max. load / max. clamping force ➡ P.269

Part Number	Lm (mm)				
	30	40	50	60	80
LTM-10	●	●	●		
LTM-12	●	●	●	●	
LTM-16	●	●	●	●	
LTM-20		●		●	●

Related Products

Female screw type tension lever
LTF is available.
➡ P.286



- Part number specification

LTM-10-40

1

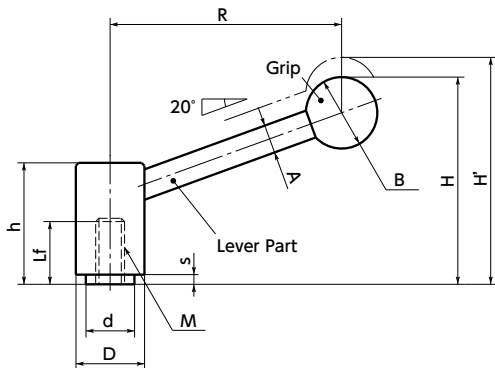
2

Select a 2 thread length Lm from the dimension table.

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Not Available	Not Available	Not Available	Not Available	Available / Add'l charge

LTF Tension Lever, Female Screw

WEB Selection Tool WEB CAD Download



- A strong type clamping lever.
- Products of special specifications such as rotating radius of the lever can also be manufactured. Please feel free to contact our customer service.

Material/Finish		LTF
Lever Part	S45C Ferrosferric Oxide Film (Black)	
Thread Part	S45C Ferrosferric Oxide Film (Black)	
Grip	Phenol Resin (Black)	

Unit : mm															
Part Number 	M (Coarse)	Lf	R	H	H'	h	s	A	B	D	d	Number of Teeth	Max. load*1 (N)	Max. clamping*1 force (kN)	Mass (g)
LTF-10	M10	23	81	72.5	78	42.5	2.5	10	25	24	17	24	280	16	170
LTF-12	M12	26	99	85.5	92	49.5	3.5	11	25	28	20	26	400	23	270
LTF-16	M16	30	118	98.5	106	55.5	3.5	12	30	33	24	36	830	43	405
LTF-20	M20	35	136	114.5	123	65.5	4.5	14	35	41	30	36	1400	67	705

*1 : About the definition of max. load / max. clamping force ➡ P.269

Related Products

Male screw type tension lever
LTM is available.
➡ P.285



- Part number specification

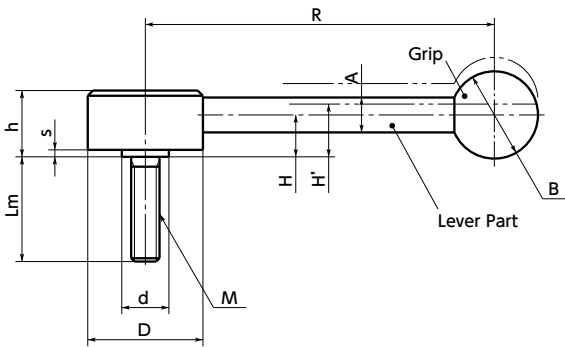
LTF-20

1

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Not Available	Not Available	Not Available	Not Available	Available / Add'l charge

LFM Flat Tension Lever, Male Screw

WEB Selection Tool WEB CAD Download



- A flat-shaped tension lever. For applications with narrow top or bottom space.
- Since the rotating radius is large, a large clamping force can be achieved by small force.

• Material/Finish

	LFM
Lever Part	S45C Ferrosioferric Oxide Film (Black)
Thread Part	S45C Ferrosioferric Oxide Film (Black)
Grip	Phenol Resin (Black)

Dimensions

Unit : mm

Part Number	M (Coarse)	R	H	H'	h	s	A	B	D	d	Number of Teeth	Max. load*1 (N)	Max. clamping*1 force (kN)	Mass (g)
LFM-8	M8	100	12	16	19	2	10	25	33	13	22	120	10	180 - 185
LFM-10	M10	130	13.5	17.5	22	2	12	30	41	19	26	180	16	320 - 340
LFM-12	M12	130	13.5	17.5	22	2	12	30	41	19	26	300	23	330 - 350
LFM-16	M16	150	17	22	28	2	14	35	45	23	36	660	43	550 - 580

*1 : About the definition of max. load / max. clamping force ➡ P.269

Part Number	Lm (mm)	30	40	50	60
LFM-8	●	●	●	●	●
LFM-10	●	●	●	●	●
LFM-12	●	●	●	●	●
LFM-16	●	●	●	●	●

• Related Products

Female screw type flat tension lever **LFF** is available.
➡ P.288



• Part number specification

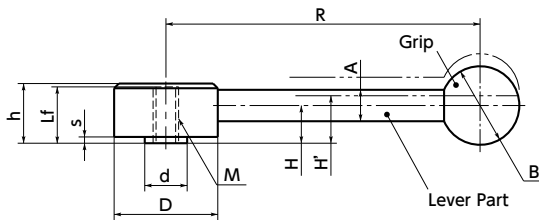
LFM-10-40



Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Not Available	Not Available	Not Available	Not Available	Available / Add'l charge

LFF Flat Tension Lever, Female Screw

WEB Selection Tool WEB CAD Download



- A flat-shaped tension lever. For applications with narrow top or bottom space.
- Since the rotating radius is large, a large clamping force can be achieved by small force.

• Material/Finish

	LFF
Lever Part	S45C Ferrosioferric Oxide Film (Black)
Thread Part	S45C Ferrosioferric Oxide Film (Black)
Grip	Phenol Resin (Black)

Unit : mm

Part Number	M (Coarse)	Lf	R	H	H'	h	s	A	B	D	d	Number of Teeth	Max. load*1 (N)	Max. clamping*1 force (kN)	Mass (g)
LFF-8	M8	18	100	12	16	19	2	10	25	33	13	22	120	10	160
LFF-10	M10	21	130	13.5	17.5	22	2	12	30	41	19	26	180	16	300
LFF-12	M12	21	130	13.5	17.5	22	2	12	30	41	19	26	300	23	300
LFF-16	M16	27	150	17	22	28	2	14	35	45	23	36	660	43	450

*1 : About the definition of max. load / max. clamping force ➡ P.269

• Related Products

Male screw type flat tension lever **LFM** is available.
➡ P.287



• Part number specification

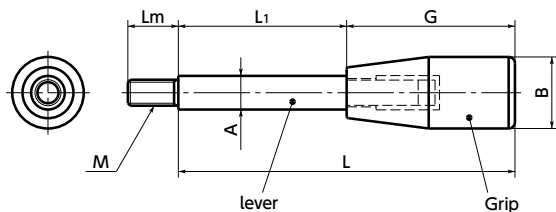
LFF-16



Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Not Available	Not Available	Not Available	Not Available	Available / Add'l charge

LRG / LRGS Plastic Grip Lever

WEB Selection Tool WEB CAD Download SUS Stainless steel



- The grip is made of phenol resin. It is highly durable.
- There are two types of the lever part material.
- LRG** — Made of steel
- LRGS** — Made of stainless steel

	LRG Made of Steel	LRGS Made of Stainless Steel
Lever Part	SS400 Matte Chrome Plating	SUS303
Grip	Phenol Resin (Black)	Phenol Resin (Black)

Part Number Lever : Steel	Part Number Lever : Stainless steel	M (coarse)	Lm	L	A	B	L1	G	Mass (g)
LRG-6-63	LRGS-6-63	M6	12	63	8	17	23	40	25
LRG-6-80	LRGS-6-80	M6	12	80	8	17	40	40	32
LRG-6-100	LRGS-6-100	M6	12	100	8	17	60	40	40
LRG-8-80	LRGS-8-80	M8	20	80	10	21	30	50	53
LRG-8-100	LRGS-8-100	M8	20	100	10	21	50	50	65
LRG-8-125	LRGS-8-125	M8	20	125	10	21	75	50	81
LRG-10-100	LRGS-10-100	M10	25	100	12	25	35	65	97
LRG-10-125	LRGS-10-125	M10	25	125	12	25	60	65	119
LRG-10-160	LRGS-10-160	M10	25	160	12	25	95	65	149
LRG-12-125	LRGS-12-125	M12	30	125	14	28	40	85	163
LRG-12-160	LRGS-12-160	M12	30	160	14	28	75	85	205
LRG-12-200	LRGS-12-200	M12	30	200	14	28	115	85	253

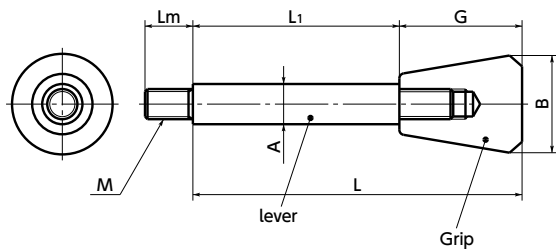
- Part number specification

LRG-6-63

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
S.S. only/ Add'l charge	Not Available	Not Available	Available / Add'l charge	Available / Add'l charge

LCGS Conical grip lever

WEB Selection Tool WEB CAD Download SUS Stainless steel



- The lever is made of stainless steel. The grip is made of phenol resin.
- It is highly durable and corrosion-resistant.

	LCGS
lever	SUS303
Grip	Phenol Resin (Black)

Part Number	M (coarse)	Lm	L	A	B	L1	G	Mass (g)
LCGS-6-63	M6	12	63	8	20	33	30	23
LCGS-6-80	M6	12	80	8	20	50	30	30
LCGS-6-100	M6	12	100	8	20	70	30	38
LCGS-8-80	M8	20	80	10	25	42	38	49
LCGS-8-100	M8	20	100	10	25	62	38	61
LCGS-8-125	M8	20	125	10	25	87	38	76
LCGS-10-100	M10	25	100	12	30	54	46	88
LCGS-10-125	M10	25	125	12	30	79	46	110
LCGS-10-160	M10	25	160	12	30	114	46	140
LCGS-12-125	M12	30	125	14	35	72	53	155
LCGS-12-160	M12	30	160	14	35	107	53	197
LCGS-12-200	M12	30	200	14	35	147	53	244

- Part number specification

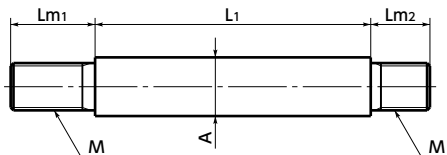
LCGS-6-63
Product Code

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Not Available	Not Available	Available / Add'l charge	Available / Add'l charge

LGS / LGSS Shaft for Grip Lever



WEB Selection Tool WEB CAD Download SUS Stainless steel



- Use it in combination with a grip.
- There are two types of materials. ◀1
 - LGS** — Made of steel
 - LGSS** — Made of stainless steel

	LGS	LGSS
Material/Finish	SS400 Matte Chrome Plating	SUS303

RoHS2 Compliant

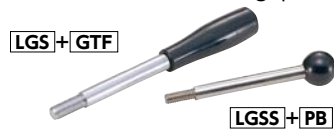
● Recommended Knobs & Grips

Part Number Made of Steel	Part Number Made of Stainless Steel	Recommended Knobs & Grips					
		PB→P.312	PC→P.312	KDC→P.310	KEC→P.311	GTF→P.413	GTFS→P.413
LGS-M6	LGSS-M6	PB-20-M6	PC-20-M6	KDC-6	KEC-6	GTF-19-M6	GTFS-19-M6
LGS-M8	LGSS-M8	PB-25-M8	PC-25-M8	KDC-8	KEC-8	GTF-24-M8	GTFS-24-M8
LGS-M10	LGSS-M10	PB-30-M10	PC-30-M10	KDC-10		GTF-24-M10	GTFS-24-M10
LGS-M12	LGSS-M12	PB-40-M12	PC-40-M12			GTF-28-M12	

Unit : mm

Part Number Steel	Part Number Stainless steel	M (coarse) ◀2	L1 ◀3	A	Lm1	Lm2	Mass (g)
LGS-M6-40	LGSS-M6-40	M6	40	8	12	9	20
LGS-M6-60	LGSS-M6-60	M6	60	8	12	9	28
LGS-M6-80	LGSS-M6-80	M6	80	8	12	9	36
LGS-M8-50	LGSS-M8-50	M8	50	10	20	11	42
LGS-M8-75	LGSS-M8-75	M8	75	10	20	11	58
LGS-M8-100	LGSS-M8-100	M8	100	10	20	11	73
LGS-M10-60	LGSS-M10-60	M10	60	12	25	14	76
LGS-M10-90	LGSS-M10-90	M10	90	12	25	14	103
LGS-M10-120	LGSS-M10-120	M10	120	12	25	14	130
LGS-M12-80	LGSS-M12-80	M12	80	14	30	14	134
LGS-M12-120	LGSS-M12-120	M12	120	14	30	14	182
LGS-M12-160	LGSS-M12-160	M12	160	14	30	14	230

- Usage example
In combination with a grip.



● Part number specification

LGSS-M6-40
◀1 ◀2 ◀3

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
S.S. only/ Add'l charge	Not Available	Not Available	Available / Add'l charge	Not Available

Selection
Navigator



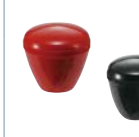
CAD Data
Download

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

• Plastic Knob

Product Code	KDM/KDF	KDMS/KDFS	KDMS-SC	KRM/KRF/KRR	KRMS/KRFS	KLM/KLMS/KLF/KLFS
Page	P.295	P.295	P.297	P.299	P.299	P.301
Shape						
Knob Material	Nylon 6	Nylon 6	Nylon 6	Nylon 6	Nylon 6	Nylon 6
Nominal Diameter of Thread	M3 - M8	M3 - M8	M4 - M8	M4 - M10	M5 - M10	M5 - M10

Product Code	KUDM/KUDF	KUDMS/KUDFS	KUWM/KUWF	KUWMS/KUWFS	SS/SK	KF/KGC
Page	P.303	P.303	P.305	P.305	P.307	P.308
Shape						
Knob Material	Nylon 6	Nylon 6	Nylon 6	Nylon 6	Nylon 66	Nylon 6
Nominal Diameter of Thread	M3 - M10	M3 - M10	M4 - M10	M4 - M10	M6 - M12	M5 - M12

Product Code	KP	KDC	KEC	PB/PC	KGB	KCF/KCFS
Page	P.309	P.310	P.311	P.312	P.313	P.314
Shape						
Knob Material	Nylon 6	Nylon 6	Nylon 6	Plastic	Rubber	Steel/Stainless Steel
Nominal Diameter of Thread/Bore Diameter	M6 - M12	M6 - M10	M6 - M8	M6 - M12	M6 - M12	5 - M12

• Metal Knob

Product Code	KNM/KNF	KNMS/KNFS	KNMS-BK	KUM/KUF	KUMS/KUFS	KUMS-BK
Page	P.315	P.315	P.319	P.317	P.317	P.320
Shape						
Knob Material	Steel	Stainless Steel	Stainless Steel	Steel	Stainless Steel	Stainless Steel
Nominal Diameter of Thread	M3 - M10	M3 - M10	M4 - M6	M3 - M10	M3 - M10	M4 - M6

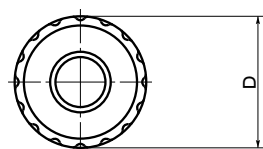
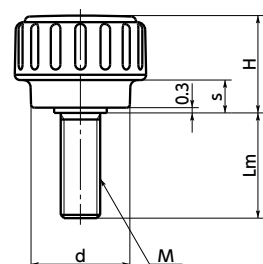
Product Code	KNM-SC	KUM-SC	CK/CKT	KK/KKT	EAT	EAC
Page	P.321	P.322	P.323	P.324	P.325	P.326
Shape						
Knob Material	Steel	Steel	Cast iron	Cast iron	Aluminum Alloy	Phenol Resin
Nominal Diameter of Thread	M3 - M10	M3 - M10	M8 - M12/φ5 (Pilot Hole)	M6 - M16/φ5 (Pilot Hole)	φ6.1	φ6.1

• Knob

Product Code	EAE	EAM
Page	P.327	P.328
Shape		
Knob Material	Phenol Resin	Phenol Resin
Bore diameter	φ3.3 - φ6.1	φ6.1

KDM / KDMS / KDF / KDFS Dimple Knob *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel

KDM
KDMS

● Material/Finish



	KDM	KDMS	KDF	KDFS
Knob	Nylon 6 (Matte Black)	Nylon 6 (Various Color)	Nylon 6 (Matte Black)	Nylon 6 (Various Color)
Thread Part	SWCH10R Trivalent Chromate Treatment	SUSXM7	S45C Trivalent Chromate Treatment	SUS303

Dimensions

KDM KDMS Male Screw

Unit : mm

Part Number Steel	Part Number Stainless steel	D	M (coarse)	H	s	d	Mass (g)
KDM-16-M3	KDMS-16-M3	16	M3	11	2	11	3 - 4
KDM-16-M4	KDMS-16-M4	16	M4	11	2	11	3 - 4
KDM-16-M5	KDMS-16-M5	16	M5	11	2	11	5 - 6
KDM-20-M5	KDMS-20-M5	20	M5	14	4	15	5 - 8
KDM-20-M6	KDMS-20-M6	20	M6	14	4	15	8 - 11
KDM-25-M5	KDMS-25-M5	25	M5	18	6	19	8 - 10
KDM-25-M6	KDMS-25-M6	25	M6	18	6	19	9 - 13
KDM-25-M8	KDMS-25-M8	25	M8	18	6	19	16 - 20
KDM-32-M6	KDMS-32-M6	32	M6	18	6	24	17 - 19
KDM-32-M8	KDMS-32-M8	32	M8	18	6	24	23 - 32

KDF KDFS Female Screw

Unit : mm

Part Number Steel	Part Number Stainless steel	D	M (coarse)	Lf	H	s	d	Mass (g)
KDF-16-M3	KDFS-16-M3	16	M3	5	11	2	11	4
KDF-16-M4	KDFS-16-M4	16	M4	5	11	2	11	4
KDF-16-M5	KDFS-16-M5	16	M5	5	11	2	11	4
KDF-20-M5	KDFS-20-M5	20	M5	6	14	4	15	7
KDF-20-M6	KDFS-20-M6	20	M6	6	14	4	15	6
	KDFS-25-M5	25	M5	9	18	6	19	11
KDF-25-M6	KDFS-25-M6	25	M6	9	18	6	19	10
KDF-32-M6	KDFS-32-M6	32	M6	8	18	6	24	18
KDF-32-M8	KDFS-32-M8	32	M8	8	18	6	24	17

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
S.S. only/ Add'l charge Female screw only/ Add'l charge Male screw only/ Add'l charge Male screw only/ Add'l charge Available / Add'l charge

- High quality. Human design.
- Dimple on the outer circumference enhances the operability.
- A rich variety of thread sizes from M3 to M8 are available.
- Types and thread part materials can be selected by a product code.

Product Code	Type	Thread Part Material
KDM	Male Screw	Made of Steel
KDMS	Male Screw	Made of Stainless Steel
KDF	Female Screw	Made of Steel
KDFS	Female Screw	Made of Stainless Steel

- **KDMS** **KDFS** (made of stainless steel) have two color variations. They can be selected by the end symbol of the part number.
End Symbol **BK** — Matte black
End Symbol **WH** — Matte white
- White is optimal for use with medical equipment.

KDM Made of Steel

Part Number Male screw	Lm (mm)					
	6	10	16	20	25	40
KDM-16-M3	●	●	●			
KDM-16-M4	●	●	●			
KDM-16-M5		●	●	●		
KDM-20-M5		●	●	●		
KDM-20-M6		●	●	●	●	
KDM-25-M5		●		●	●	
KDM-25-M6		●	●	●	●	
KDM-25-M8			●	●	●	
KDM-32-M6			●	●	●	
KDM-32-M8			●	●	●	●

KDMS Made of Stainless Steel

Part Number Male screw	Knob Color	Lm (mm)					
		6	10	16	20	25	40
KDMS-16-M3	BK	●	●	●			
KDMS-16-M4	BK	●	●	●			
KDMS-16-M5	BK		●	●	●		
KDMS-20-M5	BK		●	●	●		
KDMS-20-M6	BK		●	●	●	●	
KDMS-25-M5	BK				●	●	
KDMS-25-M6	BK			●	●	●	
KDMS-25-M8	BK			●	●	●	
KDMS-32-M6	BK			●	●	●	
KDMS-32-M8	BK			●	●	●	●
KDMS-16-M3	WH	●	●	●			
KDMS-16-M4	WH	●	●	●			
KDMS-16-M5	WH		●	●	●		
KDMS-20-M5	WH		●	●	●		
KDMS-20-M6	WH		●	●	●	●	
KDMS-25-M5	WH				●	●	
KDMS-25-M6	WH			●	●	●	
KDMS-25-M8	WH			●	●	●	
KDMS-32-M6	WH			●	●	●	
KDMS-32-M8	WH			●	●	●	●

● Part number specification

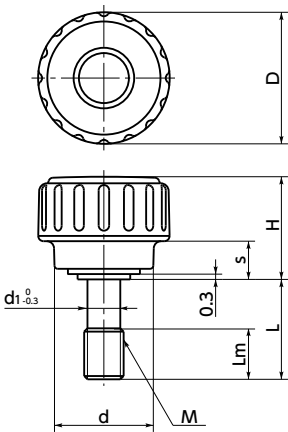
KDMS-16-M3-10-WH

For male screw type, select a thread length Lm from the dimension table.

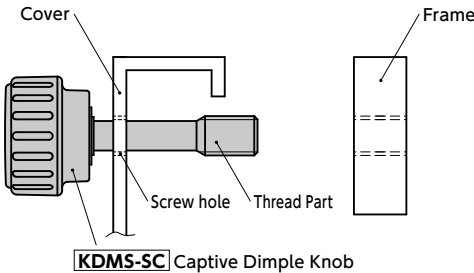
For an item made of stainless steel, select a knob color.

KDMS-SC Captive Dimple Knob

WEB Selection Tool CAD Download SUS Stainless steel



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



- Part number specification

KDMS-16-M4-10-SC-BK

Product code
Select a **1** thread length L from the dimension table.

Dimensions

Unit : mm

Part Number	D 1	M 2 (coarse)	Lm	H	s	d	d1	Mass (g)
KDMS-16-M4-SC-BK	16	M4	5	11	2	11	3	3 - 4
KDMS-20-M5-SC-BK	20	M5	6	14	4	15	3.9	6 - 7
KDMS-25-M6-SC-BK	25	M6	8	18	6	19	4.6	11 - 12
KDMS-32-M8-SC-BK	32	M8	10	18	6	24	6.3	22 - 23

Part Number	L (mm) 3			
	10	16	20	25
KDMS-16-M4-SC-BK	●	●		
KDMS-20-M5-SC-BK	●	●	●	
KDMS-25-M6-SC-BK		●	●	●
KDMS-32-M8-SC-BK			●	●

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Not Available	Not Available	Not Available	Available / Add'l charge



- Captive type dimple knob. It prevents fall-off and missing of the knob.
- For CE marking. → P.690
- High quality. Human design.
- Dimple on the outer circumference enhances the operability.

- Material/Finish RoHS2 Compliant

	KDMS-SC-BK
knob	Nylon 6 (Matte Black)
Thread Part	SUSXM7

- ⚠ Precautions for Use
- Screw hole inner diameter on the cover side shall be at least the d1 dimension.
- The cover thickness should be 0.8 mm or above.

- Related Products

Captive type knurled knobs are available.

KNM-SC → P.321
KUM-SC → P.322



Selection
Navigator

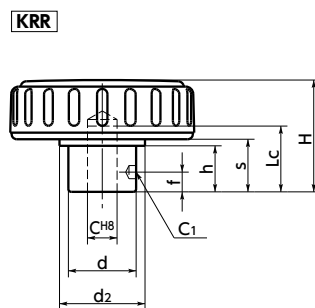
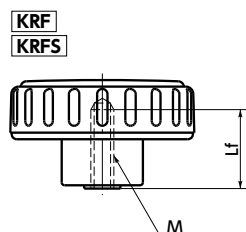
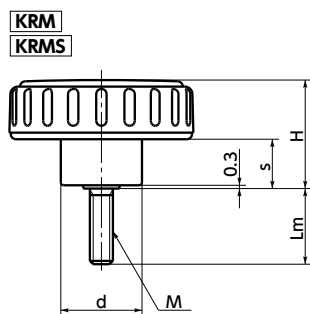
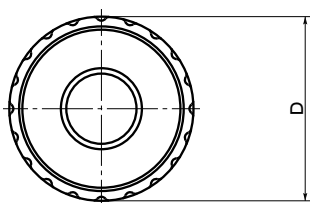


CAD Data
Download

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

KRM / KRMS / KRF / KRFS / KRR Dimple Knob *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel



KRM | KRMS Male Screw

Part Number Steel	Part Number Stainless steel	D	M (Coarse)	Lm	H	s	d	Mass (g)
KRM-25-M4-6		25	M4	6	19	8	13	6
KRM-25-M4-10		25	M4	10	19	8	13	7
KRM-25-M4-16		25	M4	16	19	8	13	7
KRM-32-M5-10	KRMS-32-M5-10	32	M5	10	22	10	15	11
KRM-32-M5-16	KRMS-32-M5-16	32	M5	16	22	10	15	12
KRM-32-M5-20	KRMS-32-M5-20	32	M5	20	22	10	15	12
KRM-32-M6-10		32	M6	10	22	10	15	12
KRM-32-M6-20		32	M6	20	22	10	15	14
KRM-32-M6-40		32	M6	40	22	10	15	19
KRM-40-M6-10	KRMS-40-M6-10	40	M6	10	25	11	17	16
KRM-40-M6-16	KRMS-40-M6-16	40	M6	16	25	11	17	18
KRM-40-M6-20	KRMS-40-M6-20	40	M6	20	25	11	17	18
KRM-40-M6-25	KRMS-40-M6-25	40	M6	25	25	11	17	19
KRM-40-M8-16		40	M8	16	25	11	17	23
KRM-40-M8-20		40	M8	20	25	11	17	25
KRM-50-M8-16	KRMS-50-M8-16	50	M8	16	30	13.5	20	29
KRM-50-M8-20	KRMS-50-M8-20	50	M8	20	30	13.5	20	31
KRM-50-M8-25	KRMS-50-M8-25	50	M8	25	30	13.5	20	33
KRM-50-M8-30	KRMS-50-M8-30	50	M8	30	30	13.5	20	35
KRM-50-M8-50		50	M8	50	30	13.5	20	43
KRM-50-M10-20		50	M10	20	30	13.5	20	40
KRM-50-M10-30		50	M10	30	30	13.5	20	46
KRM-63-M10-20		63	M10	20	35	15	23	55
KRM-63-M10-30	KRMS-63-M10-30	63	M10	30	35	15	23	61
KRM-63-M10-50	KRMS-63-M10-50	63	M10	50	35	15	23	73

Unit : mm



- Three types: Male Screw **KRM** **KRMS** / Female Screw **KRF** **KRFS** / Reamer Bore **KRR**.
- The reamer hole **KRR** hub has a guide hole for the fixing pin.
- A rich variety of thread sizes from M4 to M10 are available.
- Types and thread part materials can be selected by a product code.

Product Code	Type	Thread Part Material
KRM	Male Screw	Made of Steel
KRMS	Male Screw	Made of Stainless Steel
KRF	Female Screw	Made of Steel
KRFS	Female Screw	Made of Stainless Steel
KRR	Reamer Bore	Made of Steel

- Material/Finish

RoHS2 Compliant

	KRM	KRMS	KRF	KRFS	KRR
knob	Nylon 6 (Matte Black)	Nylon 6 (Matte Black)	Nylon 6 (Matte Black)	Nylon 6 (Matte Black)	Nylon 6 (Matte Black)
Thread Part	SWCH10R Trivalent Chromate Treatment	SUSXM7	SUM24L Trivalent chromate treatment	SUS303	
Hub					SS400 Ferrosferic Oxide Film (Black)

KRF | KRFS Female Screw

Part Number Steel	Part Number Stainless steel	D	M (Coarse)	Lf	H	s	d	Mass (g)
KRF-25-M4		25	M4	8	19	8	13	13
KRF-32-M5	KRFS-32-M5	32	M5	10	22	10	15	15
KRF-32-M6		32	M6	10	22	10	15	15
KRF-40-M6	KRFS-40-M6	40	M6	15	25	11	17	17
KRF-40-M8		40	M8	15	25	11	17	15
KRF-50-M8	KRFS-50-M8	50	M8	18	30	13.5	20	27
KRF-50-M10		50	M10	20	30	13.5	20	24
KRF-63-M10	KRFS-63-M10	63	M10	20	35	15	23	55

Unit : mm

KRR Reamer Bore

Part Number Steel	D	C	Lc	H	C1	d2	d	f	h	s	Mass (g)
KRR-40-R8	40	8	15	25	2.8	19	14	7	9	11	27
KRR-50-R10	50	10	19	32	2.8	22	17	8	13	15.5	47
KRR-63-R12	63	12	23	40	3.8	26	21	10	17	20	91

Unit : mm

- Part number specification

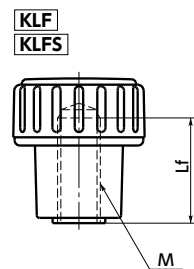
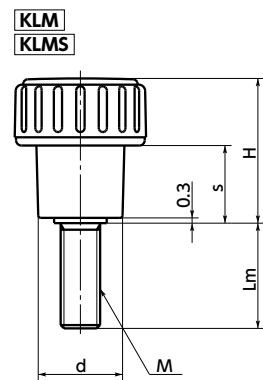
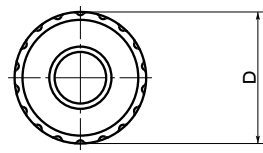
KRMS-32-M5-20

1

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
S.S. only/ Add'l charge Female screw only/ Add'l charge Male screw only/ Add'l charge Male screw only/ Add'l charge Available / Add'l charge

KLM / KLMS / KLF / KLFS Long Dimple Knobs *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel



- High quality / high-precision. Soft impression of matte black.
- Convenient long size.
- Types and thread part materials can be selected by a product code.

Product Code	Type	Thread Part Material
KLM	Male Screw	Made of Steel
KLMS	Male Screw	Made of Stainless Steel
KLF	Female Screw	Made of Steel
KLFS	Female Screw	Made of Stainless Steel

• Material/Finish



	KLM	KLMS	KLF	KLFS
knob	Nylon 6 (Matte Black)	Nylon 6 (Matte Black)	Nylon 6 (Matte Black)	Nylon 6 (Matte Black)
Thread Part	SWCH10R Trivalent Chromate Treatment	SUSXM7	SUM24L Trivalent Chromate Treatment	SUS303

Dimensions

KLM KLMS Male Screw		Unit : mm						
Part Number Steel	Part Number Stainless steel	D	M (coarse)	H	s	d	Mass (g)	
KLM-20-M5	KLMS-20-M5	20	M5	25	12	13	8 - 9	
KLM-20-M6	KLMS-20-M6	20	M6	25	12	13	9 - 13	
KLM-25-M5	KLMS-25-M5	25	M5	28	15	16	12 - 13	
KLM-25-M6	KLMS-25-M6	25	M6	28	15	16	13 - 16	
KLM-25-M8		25	M8	28	15	16	20 - 22	
KLM-32-M6	KLMS-32-M6	32	M6	32	17	20	19 - 20	
KLM-32-M8	KLMS-32-M8	32	M8	32	17	20	23 - 33	
KLM-32-M10		32	M10	32	17	20	40 - 46	

KLF KLFS Female Screw		Unit : mm						
Part Number Steel	Part Number Stainless steel	D	M (coarse)	Lf	H	s	d	Mass (g)
KLF-20-M5		20	M5	10	25	12	13	10
KLF-20-M6	KLFS-20-M6	20	M6	15	25	12	13	9
KLF-25-M5		25	M5	15	28	15	16	20
KLF-25-M6		25	M6	15	28	15	16	19
KLF-25-M8	KLFS-25-M8	25	M8	18	28	15	16	15
KLF-32-M6		32	M6	18	32	17	20	41
KLF-32-M8		32	M8	18	32	17	20	38
KLF-32-M10	KLFS-32-M10	32	M10	20	32	17	20	33

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
S.S. only/ Add'l charge Female screw only/ Add'l charge Male screw only/ Add'l charge Male screw only/ Add'l charge Available / Add'l charge

**KLM** Made of Steel **KLMS** Made of Stainless Steel

Part Number Male screw	Lm (mm)					
	10	16	20	25	30	40
KLM-20-M5	●	●	●			
KLM-20-M6	●	●	●		●	
KLM-25-M5			●	●		
KLM-25-M6		●	●	●	●	
KLM-25-M8			●	●		
KLM-32-M6			●	●		
KLM-32-M8		●	●	●	●	●
KLM-32-M10					●	●
KLMS-20-M5		●	●			
KLMS-20-M6	●	●	●			
KLMS-25-M5			●	●		
KLMS-25-M6		●	●	●		
KLMS-32-M6			●	●		
KLMS-32-M8		●	●	●		

• Related Products

Low-height dimple knob **KDM**
KDMS **KDF** **KDFS** is available.
→ P.295



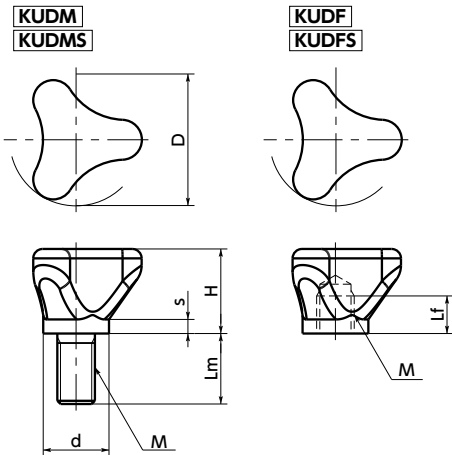
• Part number specification

KLM- 32 - M6 - 25

For male screw type, select a thread length Lm from the dimension table.

KUDM / KUDMS / KUDF / KUDFS Plastic Miniature Knob

WEB Selection Tool CAD Download SUS Stainless steel



- Designed in consideration of the seven principles of universal design. A shape for easy application of forces and operations.
- About Universal Design → P.265
- A rich variety of thread sizes from M3 to M10 are available.
- Five-color variations support the color universal design of machines / devices. Two-tone color of dark gray and various colors.
- Types and thread part materials can be selected by a product code.

Product Code	Type	Thread Part Material
KUDM	Male Screw	Made of Steel
KUDMS	Male Screw	Made of Stainless Steel
KUDF	Female Screw	Made of Steel
KUDFS	Female Screw	Made of Stainless Steel

- Knob colors can be selected by the end symbol of the part number.

End Symbol	Knob Color
BK	Matte black
SG	Matte silver
OR	Matte orange
BL	Matte blue
YW	Matte yellow

Dimensions

KUDM KUDMS Male Screw		Unit : mm						
Part Number Steel	Part Number Stainless steel	D	M (coarse)	H	s	d	Mass (g)	
KUDM-16-M3	KUDMS-16-M3	16	M3	12.5	2	9	9 - 10	
KUDM-16-M4	KUDMS-16-M4	16	M4	12.5	2	9	10 - 11	
KUDM-16-M5	KUDMS-16-M5	16	M5	12.5	2	9	11 - 13	
KUDM-20-M5	KUDMS-20-M5	20	M5	14	2.5	10	13 - 14	
KUDM-20-M6	KUDMS-20-M6	20	M6	14	2.5	10	13 - 16	
KUDM-25-M5	KUDMS-25-M5	25	M5	15.5	3	12	15 - 16	
KUDM-25-M6	KUDMS-25-M6	25	M6	15.5	3	12	16 - 17	
KUDM-32-M6	KUDMS-32-M6	32	M6	21	4	16	21 - 22	
KUDM-32-M8	KUDMS-32-M8	32	M8	21	4	16	34 - 37	
KUDM-40-M8	KUDMS-40-M8	40	M8	25	4	19.5	48 - 59	
KUDM-40-M10	KUDMS-40-M10	40	M10	25	4	19.5	67 - 82	

KUDF KUDFS Female Screw		Unit : mm						
Part Number Steel	Part Number Stainless steel	D	M (coarse)	Lf	H	s	d	Mass (g)
KUDF-16-M3	KUDFS-16-M3	16	M3	5	12.5	2	9	10
KUDF-16-M4	KUDFS-16-M4	16	M4	5	12.5	2	9	10
KUDF-16-M5	KUDFS-16-M5	16	M5	5	12.5	2	9	9
KUDF-20-M5	KUDFS-20-M5	20	M5	6	14	2.5	10	11
KUDF-20-M6	KUDFS-20-M6	20	M6	6	14	2.5	10	10
KUDF-25-M5	KUDFS-25-M5	25	M5	8	15.5	3	12	12
KUDF-25-M6	KUDFS-25-M6	25	M6	8	15.5	3	12	11
KUDF-32-M6	KUDFS-32-M6	32	M6	8	21	4	16	17
KUDF-32-M8	KUDFS-32-M8	32	M8	8	21	4	16	25
KUDF-40-M8	KUDFS-40-M8	40	M8	10	25	4	19.5	39
KUDF-40-M10	KUDFS-40-M10	40	M10	10	25	4	19.5	49

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
Not Available Female screw only/ Add'l charge Male screw only/ Add'l charge Male screw only/ Add'l charge Available / Add'l charge



RoHS2 Compliant

Material/Finish

	KUDM	KUDMS	KUDF	KUDFS
knob	Nylon 6 (Various Color)	Nylon 6 (Various Color)	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SS400 Trivalent Chromate Treatment	SUS303	S45C Trivalent Chromate Treatment	SUS303

KUDM Made of Steel KUDMS Made of Stainless Steel

Part Number Male screw	Lm (mm)							
	10	16	20	25	30	40	50	
KUDM-16-M3	●	●						
KUDM-16-M4	●	●						
KUDM-16-M5	●	●	●					
KUDM-20-M5	●	●	●					
KUDM-20-M6	●	●	●	●				
KUDM-25-M5			●	●				
KUDM-25-M6		●	●	●				
KUDM-32-M6			●	●				
KUDM-32-M8		●	●	●				
KUDM-40-M8		●	●	●	●	●	●	
KUDM-40-M10			●	●	●	●	●	
KUDMS-16-M3	●	●						
KUDMS-16-M4	●	●						
KUDMS-16-M5	●	●	●					
KUDMS-20-M5	●	●	●					
KUDMS-20-M6	●	●	●	●				
KUDMS-25-M5			●	●				
KUDMS-25-M6		●	●	●				
KUDMS-32-M6			●	●				
KUDMS-32-M8		●	●	●				
KUDMS-40-M8		●	●	●	●	●	●	
KUDMS-40-M10			●	●	●	●	●	

Related Products

Plastic wing knob of the universal design **KUWM** is available.
→ P.305



Part number specification

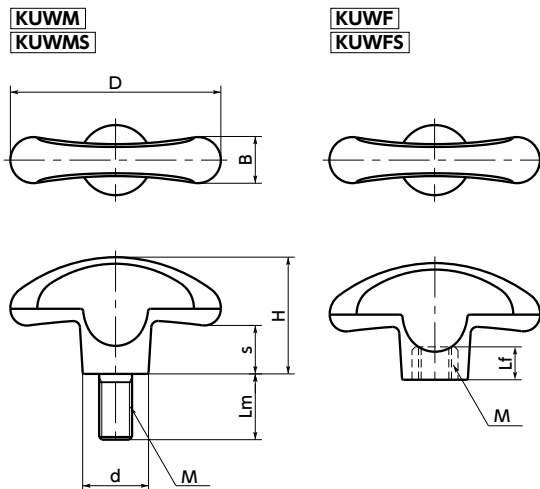
KUDMS-16-M3-10-BK

1 2 3 4 5

For male screw type, select a 4 thread length Lm from the dimension table.

KUWM / KUWMS / KUWF / KUWFS Plastic Wing Knob

WEB Selection Tool CAD Download SUS Stainless steel



- Designed in consideration of the seven principles of universal design. A shape for easy application of forces and operations.
- About Universal Design → P.265
- A rich variety of thread sizes from M4 to M10 are available.
- Five-color variations support the color universal design of machines / devices. Two-tone color of dark gray and various colors.
- Types and thread part materials can be selected by a product code.

Product Code	Type	Thread Part Material
KUWM	Male Screw	Made of Steel
KUWMS	Male Screw	Made of Stainless Steel
KUWF	Female Screw	Made of Steel
KUWFS	Female Screw	Made of Stainless Steel

- Knob colors can be selected by the end symbol of the part number.

End Symbol	Knob Color
BK	Matte black
SG	Matte silver
OR	Matte orange
BL	Matte blue
YW	Matte yellow

● Material/Finish

	KUWM	KUWMS	KUWF	KUWFS
knob	Nylon 6 (Various Color)	Nylon 6 (Various Color)	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	S5400 Trivalent Chromate Treatment	SUS303	S45C Trivalent Chromate Treatment	SUS303



Dimensions

KUWM KUWMS Male Screw									Unit : mm
Part Number Steel	Part Number Stainless steel	D	M(coarse)	H	s	B	d	Mass (g)	
KUWM-32-M4	KUWMS-32-M4	32	M4	19	8.4	7	10	10 - 11	
KUWM-32-M5	KUWMS-32-M5	32	M5	19	8.4	7	10	12 - 14	
KUWM-40-M6	KUWMS-40-M6	40	M6	23	10	8.75	13	15 - 18	
KUWM-50-M8	KUWMS-50-M8	50	M8	27.8	11.4	11	16	32 - 38	
KUWM-64-M8	KUWMS-64-M8	64	M8	35.5	14.8	14	21	43 - 49	
KUWM-64-M10	KUWMS-64-M10	64	M10	35.5	14.8	14	21	60 - 70	

KUWF KUWFS Female Screw									Unit : mm
Part Number Steel	Part Number Stainless steel	D	M(coarse)	Lf	H	s	B	d	Mass (g)
KUWF-32-M4	KUWFS-32-M4	32	M4	5	19	8.4	7	10	9
KUWF-32-M5	KUWFS-32-M5	32	M5	5	19	8.4	7	10	9
KUWF-40-M6	KUWFS-40-M6	40	M6	6	23	10	8.75	13	10
KUWF-50-M8	KUWFS-50-M8	50	M8	7	27.8	11.4	11	16	22
KUWF-64-M8	KUWFS-64-M8	64	M8	9	35.5	14.8	14	21	33
KUWF-64-M10	KUWFS-64-M10	64	M10	9	35.5	14.8	14	21	42

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Female screw only/ Add'l charge	Male screw only/ Add'l charge	Male screw only/ Add'l charge	Available / Add'l charge



KUWM Made of Steel KUWMS Stainless Steel

Part Number Male screw	Lm (mm)				
	10	16	20	30	40
KUWM-32-M4	●	●	●		
KUWM-32-M5		●	●	●	
KUWM-40-M6			●	●	●
KUWM-50-M8			●	●	●
KUWM-64-M8			●	●	●
KUWM-64-M10			●	●	●
KUWMS-32-M4	●	●	●		
KUWMS-32-M5		●	●	●	
KUWMS-40-M6			●	●	●
KUWMS-50-M8			●	●	●
KUWMS-64-M8			●	●	●
KUWMS-64-M10			●	●	●

● Related Products

Plastic miniature knob of the universal design [KUDM] is available.

→ P.303



● Part number specification

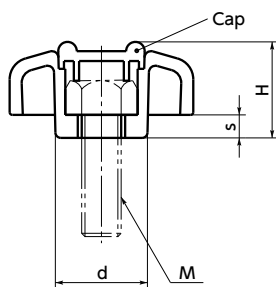
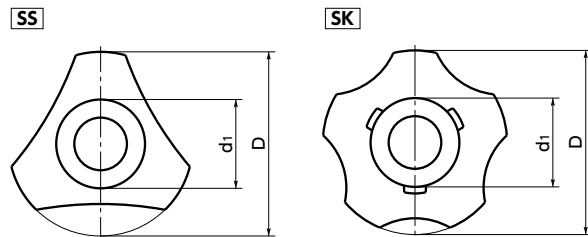
KUWMS-32-M4-10-BK

1 2 3 4 5

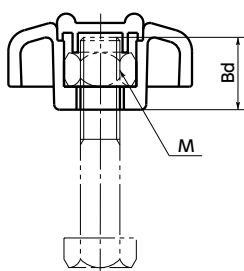
For male screw type, select a 4 thread length Lm from the dimension table.

SS / SK Super Knob

WEB Selection Tool
WEB CAD Download



Hexagon Head Bolt → Male Screw Knob



Hexagon Nut → Female Screw Knob



- Any commercially available hexagon head bolt and type-three hexagon nut can be used regardless of manufacturers and materials. You can make a knob easily by just inserting them.
- Especially for hexagon head bolts, any thread length can be selected.
- There are two types: triangular knob **SS** and pentagon knob **SK**.
- Two cap colors are white and yellow. They can be selected by the end symbol of the part number.

End Symbol	Cap color
YW	Yellow
WH	White

- Material/Finish RoHS2 Compliant

	SS	SK
knob	Nylon 66 (Black)	Nylon 66 (Black)
Cap	Nylon 66 (Various Color)	Nylon 66 (Various Color)

- Assembling method

- Securely fit a hexagon head bolt and hexagon nut into the hexagon socket of the knob main body.
- Next, fit the cap. Fit two of the three hooks in.
- Press in the remaining one by using a screwdriver or a paddle.

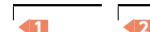
For female screw knob, pay attention to the male screw and tightening dimensions (Bd dimension of the drawing). The cap may come off.

SS Triangular Knob SK Pentagon Knob

Part Number	D	M (Coarse)	H	s	d ₁	d	Bd	Mass (g)
SS-37	38	M6	16.5	3.4	15.2	16	14	5
SS-42	42	M8	19	4.5	18.2	20	15	10
SS-47	47	M10	23.2	5.9	21.8	24	18	15
SK-34	35.2	M6	16.5	3.2	15.2	16	14	5
SK-38	39.6	M8	19	4.5	18.2	20	15	10
SK-43	45	M10	23.2	6	21.8	24	18	15
SK-53	53	M12	22.3	4	24.8	27	14	20

- Part number specification

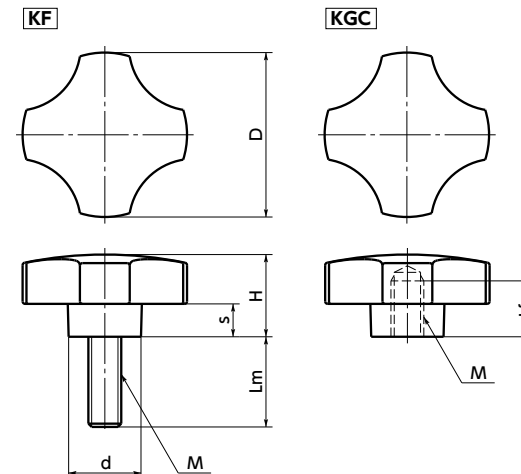
SS-37-YW



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Not Available	Not Available	Available / Add'l charge

KF / KGC Plastic Star Knob

WEB Selection Tool
WEB CAD Download



- Material/Finish RoHS2 Compliant

	KF	KGC
knob	Nylon 6 (Various Color)	Nylon 6 (Various Color)
Thread Part	SS400 Trivalent Chromate Treatment	Brass

KF Male Screw

Part Number	D	M (Coarse)	Lm	H	s	d	Mass (g)
KF-25-BK	25	M5	25	15	6	11	11
KF-25-RD	25	M5	25	15	6	11	11
KF-33-BK	33	M6	30	16.5	7	12	17
KF-33-RD	33	M6	30	16.5	7	12	17
KF-40-BK	40	M8	40	19	7.5	18	37
KF-40-RD	40	M8	40	19	7.5	18	37
KF-45-BK	45	M10	40	22	9	22	60
KF-50-BK	50	M12	40	22	9	23	80

KGC Female Screw

Part Number	D	M (Coarse)	Lf	H	s	d	Mass (g)
KGC-25-BK	25	M5	9	15	6	11	10
KGC-25-RD	25	M5	9	15	6	11	10
KGC-33-BK	33	M6	9	16.5	7	12	12
KGC-33-RD	33	M6	9	16.5	7	12	12
KGC-40-BK	40	M8	12	19	7.5	18	18
KGC-40-RD	40	M8	12	19	7.5	18	18
KGC-45-BK	45	M10	12	22	9	22	25
KGC-45-RD	45	M10	12	22	9	22	25
KGC-50-BK	50	M12	14	22	9	23	40

- Part number specification

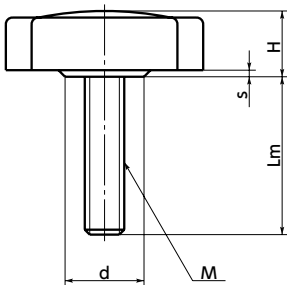
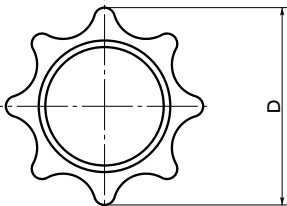
KF-25-BK



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Female screw only/ Add'l charge	Female screw only/ Add'l charge	Male screw only/ Add'l charge	Male screw only/ Add'l charge	Available / Add'l charge

KP Eight Lobe Knob

WEB Selection Tool WEB CAD Download



● Material/Finish RoHS2 Compliant

	KP
knob	Nylon 6 (Black)
Thread Part	SS400 Trivalent Chromate Treatment

Part Number	D	M (Coarse)	Lm	H	s	d	Mass (g)
KP-30A	30	M6	30	10	3	15	12
KP-30	30	M8	30	10	3	15	17
KP-50	50	M10	40	16	2	20	49
KP-65	65	M10	50	18	2	23	66
KP-65B	65	M12	50	18	2	23	83

● Part number specification

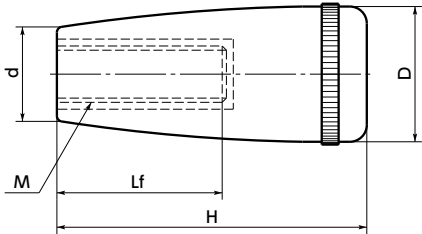
KP-50



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

KDC Pillar Grip

WEB Selection Tool WEB CAD Download



KDC-RD

KDC-BK

- There are two color variations. They can be selected by the end symbol of the part number.
End Symbol **BK** — Black
End Symbol **RD** — Red

● Material/Finish RoHS2 Compliant

	KDC
Grip	Nylon 6 (Various Color)
Thread Part	Brass

Part Number		D	M (Coarse)	Lf	d	H	Mass (g)
BK	RD						
KDC-6-BK	KDC-6-RD	19	M6	9	14	35	11
KDC-8-BK	KDC-8-RD	19	M8	10	14	35	13
KDC-8B-BK	KDC-8B-RD	20	M8	18	14	45	16
KDC-10-BK	KDC-10-RD	24	M10	18	16.5	55	26
KDC-10B-BK		26	M10	18	18	65	30

● Part number specification

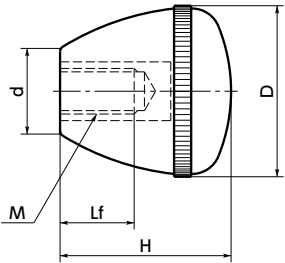
KDC-6-BK



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Please feel free to contact us	Not Available	Not Available	Available / Add'l charge

KEC Conical Grip

WEB Selection Tool WEB CAD Download



- There are two color variations. They can be selected by the end symbol of the part number.
End Symbol **BK** — Black
End Symbol **RD** — Red
- Material/Finish RoHS2 Compliant

	KEC
Grip	Nylon 6 (Various Color)
Thread Part	Brass

Part Number	D	M (Coarse)	Lf	d	H	Mass (g)
KEC-6-BK	25	M6	9	13	25	10
KEC-8-BK	30	M8	13	15	30	18
KEC-8-RD	30	M8	13	15	30	18

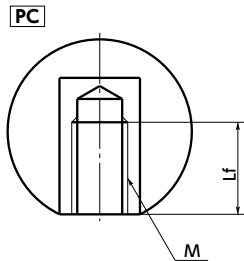
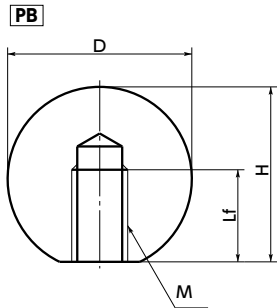
- Part number specification

KEC-6-BK
1

Cleanroom Wash & Packaging → P.807 Available / Add'l charge
Screw Combination → P.813 Please feel free to contact us
Screw Length Adjustment → P.811 Not Available
Vibration Resistant → P.810 Not Available
Laser Marking → P.821 Available / Add'l charge

PB / PC Plastic Ball Knob

WEB Selection Tool WEB CAD Download



- Thermosetting resin. It has a high durability.
- Types can be selected by a product code. 1
PB — Without insert
PC — With insert
- There are two color variations. They can be selected by the end symbol of the part number. 4
End Symbol **BK** — Black
End Symbol **RD** — Red
- Material/Finish RoHS2 Compliant

	PB	PC
Ball Part	BK : Phenol Resin (Black) RD : Melamine Resin (Red)	BK : Phenol Resin (Black) RD : Melamine Resin (Red)
Thread Part		Brass

Part Number	D	M (coarse)	Lf	H	Mass (g)
PB-20-M6	20	M6	10	18	5.6
PB-20-M8	20	M8	10	18	5.2
PB-25-M6	25	M6	10	23	11
PB-25-M8	25	M8	12	23	10
PB-30-M8	30	M8	16	28	19
PB-30-M10	30	M10	18	28	18
PB-35-M8	35	M8	16	32	31
PB-35-M10	35	M10	18	32	30
PB-40-M10	40	M10	18	37	47
PB-40-M12	40	M12	18	37	44
PC-20-M6	20	M6	10	18	7
PC-25-M6	25	M6	10	23	15
PC-25-M8	25	M8	12	23	15
PC-30-M8	30	M8	12	28	30
PC-30-M10	30	M10	15	28	30
PC-35-M8	35	M8	12	32	40
PC-35-M10	35	M10	15	32	40
PC-40-M10	40	M10	15	37	55
PC-40-M12	40	M12	15	37	50

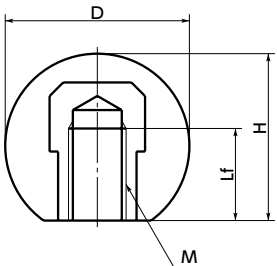
- Part number specification

PB - 25 - M6 - BK
1 2 3 4

Cleanroom Wash & Packaging → P.807 Available / Add'l charge
Screw Combination → P.813 Not Available
Screw Length Adjustment → P.811 Not Available
Vibration Resistant → P.810 Not Available
Laser Marking → P.821 **BK** only/ Add'l charge

KGB Gum Ball Knob

WEB Selection Tool WEB CAD Download



- Made of gum with soft touch.
- Material/Finish RoHS2 Compliant

	KGB
Ball Part	EPDM (Matte Black)
Thread Part	S45C Trivalent Chromate Treatment

Part Number	D 1	M(coarse) 2	Lf	H	Mass (g)
KGB-20-M6	20	M6	10	18	10
KGB-25-M8	25	M8	12.5	22.5	15
KGB-32-M10	32	M10	16	29	25
KGB-40-M12	40	M12	20	36	40

Unit : mm

- Part number specification

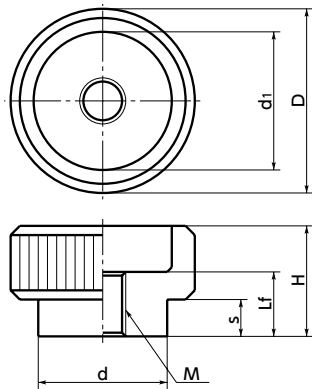
KGB - 20 - M6

Product Code 1 2

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Not Available	Not Available	Not Available

KCF / KCFS Clamp Knob

WEB Selection Tool WEB CAD Download SUS Stainless steel



- Items made of steel / items made of stainless steel are standardized.

- Material/Finish RoHS2 Compliant

	KCF-BK Made of Steel	KCFS Made of Stainless Steel
Main body	S45C Ferrosoferric Oxide Film (Black)	SUS303

Part Number Steel	Part Number Stainless steel	D 1	M(coarse) 2	Lf	H	s	d	d1	Mass (g)
KCF-20-M5-BK	KCFS-20-M5	20	M5	7	12	4	14	15	17
KCF-24-M6-BK	KCFS-24-M6	24	M6	8	14	4	16	18	30
KCF-30-M8-BK	KCFS-30-M8	30	M8	10	17	5	20	24	50
KCF-36-M10-BK	KCFS-36-M10	36	M10	12	20	6	28	30	90
KCF-40-M12-BK	KCFS-40-M12	40	M12	16	24	8	32	34	125

Unit : mm

- Part number specification

KCF - 30 - M8 - BK

Product Code 1 2 Product Code

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
S.S. only/ Add'l charge	Available / Add'l charge	Not Available	Not Available	S.S. only/ Add'l charge

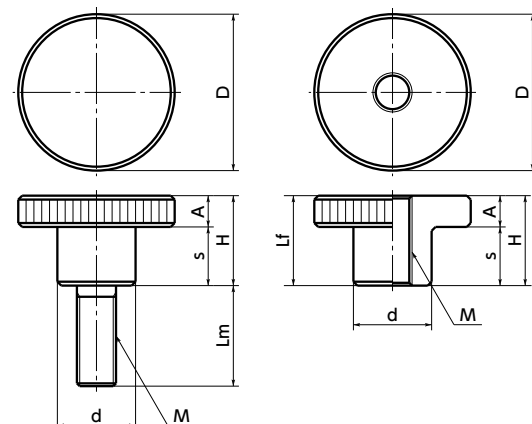
KNM/KNMS/KNF/KNFS Knurled Knobs

WEB Selection Tool CAD Download SUS Stainless steel



KNM
KNMS

KNF
KNFS



- A rich variety of thread sizes from M3 to M10 are available.
- There are two types of materials.
 - KNM KNF — Made of steel
 - KNMS KNFS — Made of Stainless Steel
- Materials and types can be selected by a product code.

Product Code	Material	Type
KNM	Made of Steel	Male Screw
KNF	Made of Steel	Female Screw
KNMS	Made of Stainless Steel	Male Screw
KNFS	Made of Stainless Steel	Female Screw

- KNM has a round-shaped thread tip to be distinguished from KNMS, KNMS-KF.

Material/Finish

RoHS2 Compliant

	KNM	KNF	KNMS / KNFS
Main Body	SWCH10R Buffing / Chrome Plating	SUM22L Buffing / Chrome Plating	SUS303*1

*1: For KNMS-36-M10, it is SUS304.

Dimensions

KNM KNMS Male Screw									Unit : mm
Part Number Steel	Part Number Stainless Steel	D	M (Coarse)	H	s	A	d	Mass (g)	
KNM-12-M3	KNMS-12-M3	12	M3	7.5	5	2.5	6	3 - 4	
KNM-16-M4	KNMS-16-M4	16	M4	9.5	6	3.5	8	9 - 10	
KNM-20-M5	KNMS-20-M5	20	M5	11.5	7.5	4	10	15 - 16	
KNM-24-M6	KNMS-24-M6	24	M6	15	10	5	12	28 - 32	
KNM-30-M8	KNMS-30-M8	30	M8	18	12	6	16	58 - 61	
KNM-36-M10	KNMS-36-M10	36	M10	23	15	8	20	108 - 120	

KNF KNFS Female Screw									Unit : mm
Part Number Steel	Part Number Stainless Steel	D	M (Coarse)	Lf	H	s	A	d	Mass (g)
KNF-12-M3	KNFS-12-M3	12	M3	7.5	7.5	5	2.5	6	3
KNF-16-M4	KNFS-16-M4	16	M4	9.5	9.5	6	3.5	8	7
KNF-20-M5	KNFS-20-M5	20	M5	11.5	11.5	7.5	4	10	13
KNF-24-M6	KNFS-24-M6	24	M6	15	15	10	5	12	23
KNF-30-M8	KNFS-30-M8	30	M8	18	18	12	6	16	45
KNF-36-M10	KNFS-36-M10	36	M10	23	23	15	8	20	86

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
S.S. only/ Add'l charge Female screw only/ Add'l charge Male screw only/ Add'l charge Male screw only/ Add'l charge S.S. only/ Add'l charge



KNM KNF Made of Steel KNMS KNFS Made of Stainless Steel

Part Number Male Screw	Lm (mm)						
	6	10	16	20	25	30	40
KNM-12-M3	●	●	●				
KNM-16-M4	●	●	●				
KNM-20-M5		●	●	●			
KNM-24-M6		●	●	●	●	●	
KNM-30-M8			●	●	●	●	
KNM-36-M10				●	●	●	●
KNMS-12-M3	●	●	●				
KNMS-16-M4	●	●	●				
KNMS-20-M5		●	●	●			
KNMS-24-M6		●	●	●	●	●	
KNMS-30-M8			●	●	●	●	
KNMS-36-M10				●	●	●	●

Related Products

Flat type knurled knobs KUM
KUF KUMS KUFS are available.
→ P.317



Captive knurled knob KNM-SC
is available.
→ P.321



Part number specification

KNM - 24 - M6 - 20
1 2 3 4

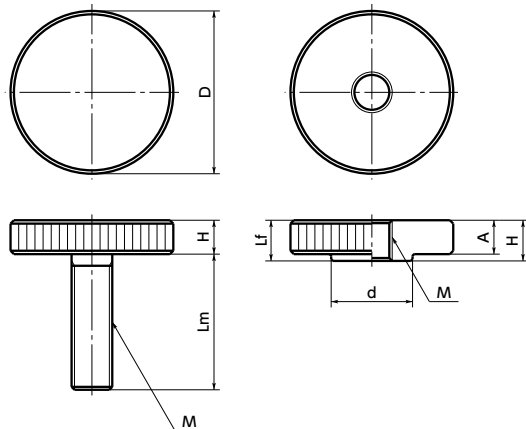
For male screw type, select a thread length Lm from the dimension table.

KUM/KUMS/KUF/KUFS

Knurled Knobs

Recommendation

WEB Selection Tool CAD Download SUS Stainless steel

KUM
KUMSKUF
KUFS

- Flat type knurled knobs.
- A rich variety of thread sizes from M3 to M10 are available.
- There are two types of materials.
 - KUM KUF** — Made of steel
 - KUMS KUFS** — Made of Stainless Steel
- Materials and types can be selected by a product code.

Product Code	Material	Type
KUM	Made of Steel	Male Screw
KUF	Made of Steel	Female Screw
KUMS	Made of Stainless Steel	Male Screw
KUFS	Made of Stainless Steel	Female Screw

- KUM** has a round-shaped thread tip to be distinguished from **KUMS KUFS-KF**.

Material/Finish



	KUM	KUF	KUMS / KUFS
Main Body	SWCH10R Buffing / Chrome Plating	SUM22L Buffing / Chrome Plating	SUS303*1

*1: For **KUMS-36-M10**, it is SUS304.

Dimensions

KUM KUMS Male Screw

Unit : mm

Part Number Steel	Part Number Stainless Steel	D 2	M (Coarse) 3	H	Mass (g)
KUM-12-M3	KUMS-12-M3	12	M3	2.5	2 - 4
KUM-16-M4	KUMS-16-M4	16	M4	3.5	5 - 7
KUM-20-M5	KUMS-20-M5	20	M5	4	12 - 13
KUM-24-M6	KUMS-24-M6	24	M6	5	20 - 25
KUM-30-M8	KUMS-30-M8	30	M8	6	40 - 46
KUM-36-M10	KUMS-36-M10	36	M10	8	78 - 90

KUF KUFS Female Screw

Unit : mm

Part Number Steel	Part Number Stainless Steel	D 2	M (Coarse) 3	Lf	A	d	H	Mass (g)
KUF-12-M3	KUFS-12-M3	12	M3	3	2.5	6	3	2
KUF-16-M4	KUFS-16-M4	16	M4	4	3.5	8	4	5
KUF-20-M5	KUFS-20-M5	20	M5	5	4	10	5	10
KUF-24-M6	KUFS-24-M6	24	M6	6	5	12	6	18
KUF-30-M8	KUFS-30-M8	30	M8	8	6	16	8	34
KUF-36-M10	KUFS-36-M10	36	M10	10	8	20	10	64

KUMS

**KUM KUF** Made of Steel **KUMS KUFS** Made of Stainless Steel

Part Number Male Screw	Lm (mm) 4	6	10	16	20	25	30	40
KUM-12-M3	●	●	●					
KUM-16-M4	●	●	●					
KUM-20-M5		●	●	●				
KUM-24-M6		●	●	●	●			
KUM-30-M8			●	●	●	●		
KUM-36-M10				●	●	●	●	
KUMS-12-M3	●	●	●					
KUMS-16-M4	●	●	●					
KUMS-20-M5		●	●	●				
KUMS-24-M6		●	●	●	●	●		
KUMS-30-M8			●	●	●	●	●	
KUMS-36-M10				●	●	●	●	●

Related Products

Standard type knurled knobs
KNM KNF KNMS KNFS are available.

➔ P.315



Flat type captive knurled knob
KUM-SC is available.

➔ P.322



Part number specification

KUM - 24 - M6 - 20

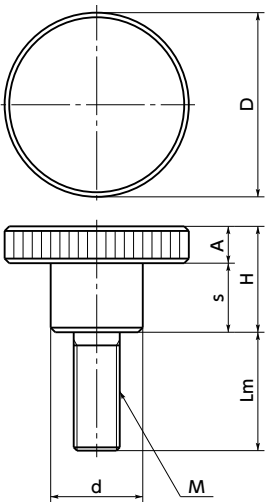
For male screw type, select a **4** thread length Lm from the dimension table.

Cleanroom Wash & Packaging ➔ P.807	Screw Combination ➔ P.813	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821
S.S. only/ Add'l charge	Not Available	Male screw only/ Add'l charge	Male screw only/ Add'l charge	S.S. only/ Add'l charge

KNMS-BK Knurled Knob (Stainless Steel Black)



WEB Selection Tool WEB CAD Download SUS Stainless steel



- Stainless steel black is surface treatment with passive film on the stainless steel surface grown 200 times more than normally to produce deep black. After the treatment, corrosion resistance and weather resistance is significantly improved.
- No impurities are contained in the film itself and only a trace amount of outgas exists in a vacuum environment.
- Spectral reflectivity of 1.5% or below. For applications such as optical equipment that requires antireflection. ➔ P.646
- Deep black. For decorated surfaces of equipment / device.

Material/Finish		RoHS2 Compliant
KNMS-BK		
Main body	SUS303 Stainless steel black	

Dimensions

Unit : mm

Part Number	D ❶	M(coarse) ❷	H	s	A	d	Mass (g)
KNMS-16-M4-BK	16	M4	9.5	6	3.5	8	9 - 10
KNMS-20-M5-BK	20	M5	11.5	7.5	4	10	15 - 16
KNMS-24-M6-BK	24	M6	15	10	5	12	28 - 32

Part Number	Lm (mm) ❸					
	6	10	16	20	25	30
KNMS-16-M4-BK	●	●	●			
KNMS-20-M5-BK		●	●	●		
KNMS-24-M6-BK		●	●	●	●	●

Related Products

A hex socket head cap screws with stainless steel black treatment **[SNSS-BK]** is available.
➔ P.675



Part number specification

KNMS - 24 - M6 - 20 - BK

Product code ❶ ❷ ❸ Stainless Steel Black

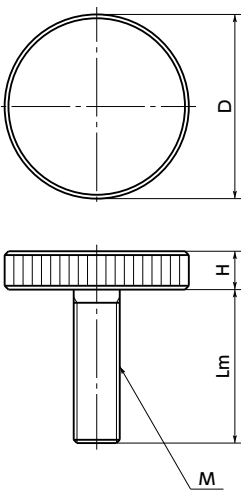
Select a ❸ thread length Lm from the dimension table.

Cleanroom Wash & Packaging ➔ P.807	Screw Combination ➔ P.813	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821
Available / Add'l charge	Not Available	Not Available	Not Available	Available / Add'l charge

KUMS-BK Knurled Knob (Stainless Steel Black)



WEB Selection Tool WEB CAD Download SUS Stainless steel



- Stainless steel black is surface treatment with passive film on the stainless steel surface grown 200 times more than normally to produce deep black. After the treatment, corrosion resistance and weather resistance is significantly improved.
- No impurities are contained in the film itself and only a trace amount of outgas exists in a vacuum environment.
- Spectral reflectivity of 1.5% or below. For applications such as optical equipment that requires antireflection. ➔ P.646
- Deep black. For decorated surfaces of equipment / device.

Material/Finish		RoHS2 Compliant
KUMS-BK		
Main body	SUS303 Stainless steel black	

Dimensions

Unit : mm

Part Number	D ❶	M(coarse) ❷	H	Mass (g)
KUMS-16-M4-BK	16	M4	3.5	5 - 7
KUMS-20-M5-BK	20	M5	4	12 - 13
KUMS-24-M6-BK	24	M6	5	20 - 25

Part Number	Lm (mm) ❸					
	6	10	16	20	25	30
KUMS-16-M4-BK	●	●	●			
KUMS-20-M5-BK		●	●	●		
KUMS-24-M6-BK		●	●	●	●	●

Related Products

A hex socket head cap screws with stainless steel black treatment **[SNSS-BK]** is available.
➔ P.675



Part number specification

KUMS - 24 - M6 - 20 - BK

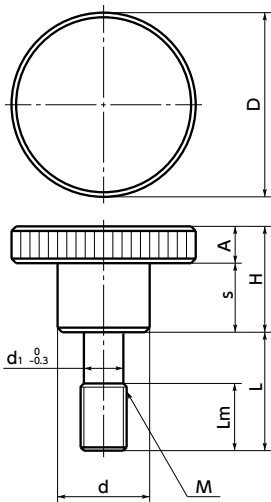
Product code ❶ ❷ ❸ Stainless Steel Black

Select a ❸ thread length Lm from the dimension table.

Cleanroom Wash & Packaging ➔ P.807	Screw Combination ➔ P.813	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821
Available / Add'l charge	Not Available	Not Available	Not Available	Available / Add'l charge

KNM-SC Captive Knurled Knob

WEB Selection Tool WEB CAD Download



- Captive type knurled knob. It prevents fall-off and missing of the knob.

● Material/Finish RoHS2 Compliant

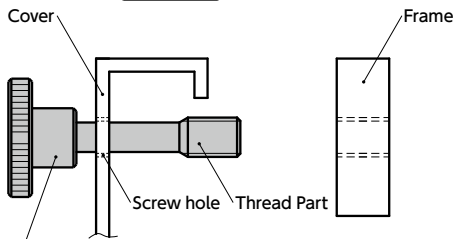
	KNM-SC
Main body	SWCH10R Buffing / Chrome Plating

- ⚠ Precautions for Use
Screw hole inner diameter on the cover side shall be at least the d1 dimension.
The cover thickness should be 0.8 mm or above.

● Part number specification

KNM-24-M6-20-SC

Product Code 1 2 3 Captive
Select a 3 thread length L from the dimension table.



KNM-SC Captive Knurled Knob

Dimensions

Unit : mm

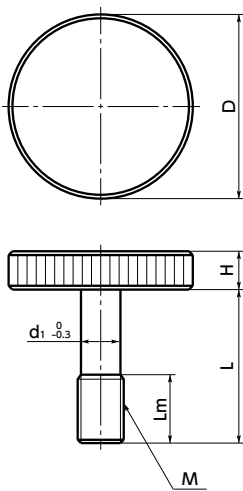
Part Number	D 1	M (coarse) 2	Lm	H	s	A	d	d1	Mass (g)
KNM-12-M3-SC	12	M3	4	7.5	5	2.5	6	2.2	3 - 4
KNM-16-M4-SC	16	M4	5	9.5	6	3.5	8	3	8 - 9
KNM-20-M5-SC	20	M5	6	11.5	7.5	4	10	3.9	15 - 16
KNM-24-M6-SC	24	M6	8	15	10	5	12	4.6	28 - 30
KNM-30-M8-SC	30	M8	10	18	12	6	16	6.3	55 - 59
KNM-36-M10-SC	36	M10	12	23	15	8	20	8	107 - 115

Part Number	L (mm) 3					
	10	16	20	25	30	40
KNM-12-M3-SC	●	●				
KNM-16-M4-SC	●	●				
KNM-20-M5-SC	●	●	●			
KNM-24-M6-SC		●	●	●	●	
KNM-30-M8-SC		●	●	●	●	
KNM-36-M10-SC			●	●	●	●

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
Not Available Not Available Not Available Available / Add'l charge Not Available

KUM-SC Captive Knurled Knob

WEB Selection Tool WEB CAD Download



- Captive type knurled knob. It prevents fall-off and missing of the knob.
- Flat type.

● Material/Finish RoHS2 Compliant

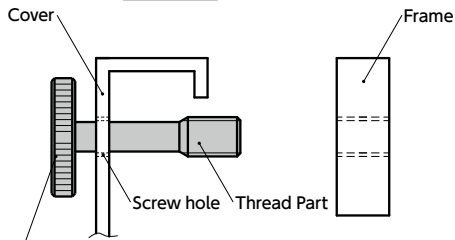
	KUM-SC
Main body	SWCH10R Buffing / Chrome Plating

- ⚠ Precautions for Use
Screw hole inner diameter on the cover side shall be at least the d1 dimension.
The cover thickness should be 0.8 mm or above.

● Part number specification

KUM-24-M6-20-SC

Product Code 1 2 3 Captive
Select a 3 thread length L from the dimension table.



KUM-SC Captive Knurled Knob

Dimensions

Unit : mm

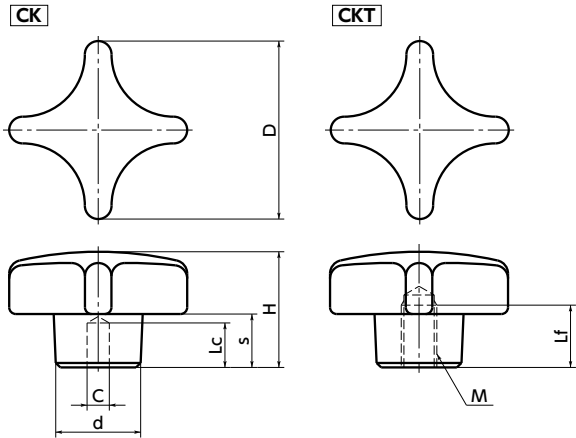
Part Number	D 1	M (coarse) 2	Lm	H	d1	Mass (g)
KUM-12-M3-SC	12	M3	4	2.5	2.2	2 - 3
KUM-16-M4-SC	16	M4	5	3.5	3	6
KUM-20-M5-SC	20	M5	6	4	3.9	11 - 12
KUM-24-M6-SC	24	M6	8	5	4.6	20 - 21
KUM-30-M8-SC	30	M8	10	6	6.3	36 - 40
KUM-36-M10-SC	36	M10	12	8	8	69 - 77

Part Number	L (mm) 3					
	10	16	20	25	30	40
KUM-12-M3-SC	●	●				
KUM-16-M4-SC	●	●				
KUM-20-M5-SC	●	●	●			
KUM-24-M6-SC		●	●	●	●	
KUM-30-M8-SC		●	●	●	●	
KUM-36-M10-SC			●	●	●	●

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
Not Available Not Available Not Available Available / Add'l charge Not Available

CK / CKT Star Knob

WEB Selection Tool WEB CAD Download



- Pilot hole / female screw can be selected by a product code. 1 2

CK Pilot Hole
CKT Female Screw

- Material/Finish

	CK / CKT
Main body	FC200 Wrinkle Baking Paint (black)

CK Pilot Hole

Part Number	D 2	C	Lc	H	s	d	Mass (g)
CK-40	40	5	10	25	13	18	75
CK-50	50	5	10	32	18	22	135
CK-63	63	5	10	40	23	26	270

CKT Female Screw

Part Number	D 2	M (Coarse)	Lf	H	s	d	Mass (g)
CKT-40	40	M8	14	25	13	18	75
CKT-50	50	M10	18	32	18	22	135
CKT-63	63	M12	22	40	23	26	270

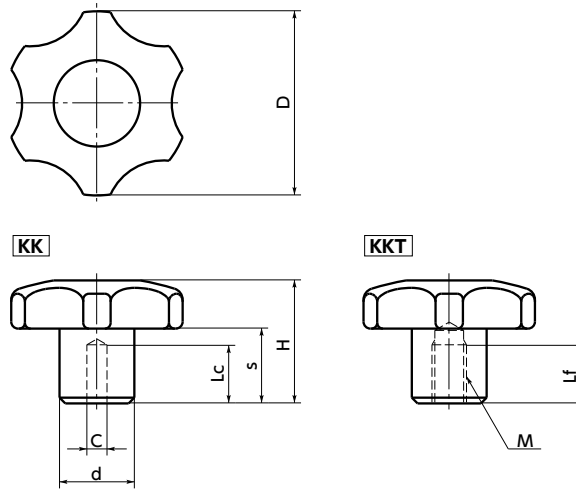
- Part number specification

CK - 40
1 2

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Female screw only/ Add'l charge	Not Available	Not Available	Not Available

KK / KKT Hexagon Knob

WEB Selection Tool WEB CAD Download



- Types can be selected by a product code. 1 2

KK Pilot Hole
KKT Female Screw

- Material/Finish

	KK / KKT
Main unit	FC200 Chrome Plating

KK Pilot Hole

Part Number	D 2	Lc	H	s	C	d	Mass (g)
KK-32	32	10	22	13	5	13	60
KK-40	40	10	25	16	5	16	100
KK-50	50	10	32	20	5	20	200
KK-63	63	10	40	25	5	25	350
KK-80	80	10	50	32	5	32	700

KKT Female Screw

Part Number	D 2	M (Coarse)	Lf	H	s	d	Mass (g)
KKT-32	32	M6	10	22	13	13	60
KKT-40	40	M8	14	25	16	16	100
KKT-50	50	M10	18	32	20	20	200
KKT-63	63	M12	22	40	25	25	350
KKT-80	80	M16	30	50	32	32	700

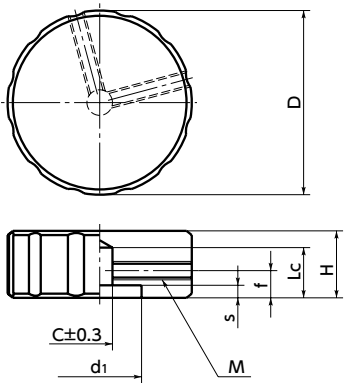
- Part number specification

KKT - 32
1 2

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Female screw only/ Add'l charge	Not Available	Not Available	Not Available

EAT Metal Knob

WEB Selection Tool WEB CAD Download



- **EAT-22** **EAT-27** **EAT-33** has symbol marks.
- Material/Finish RoHS2 Compliant

	EAT
Main body	Aluminum Alloy Alumite Treatment

Unit : mm									
Part Number	D	H	d1	s	f	M (Coarse)	Lc	C	Mass (g)
EAT-22	22	15	16	3	5	1 - M4	13	6.1	12
EAT-27	26.5	17	20	3	6	1 - M4	15	6.1	22
EAT-33	33	17	20	3	7	1 - M4	15	6.1	33
EAT-44	44	16	20	3	6	2 - M4	12	6.1	58

- Hex socket set screw is provided.

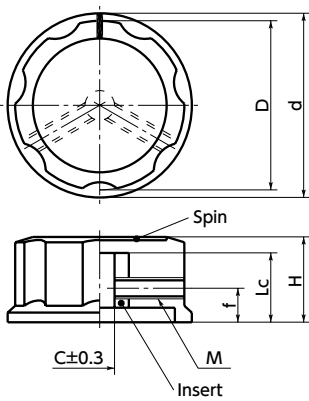
- Part number specification

EAT-22
1

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Not Available	Not Available	Not Available	Available / Add'l charge

EAC Rimmed Spin Knob

WEB Selection Tool WEB CAD Download



- Spin colors can be selected by the end symbol of the part number. 2
End Symbol **BK** — Black
End Symbol **SL** — Silver
- Material/Finish RoHS2 Compliant

	EAC
Knob	Phenol Resin (Black)
Spin	Aluminum Alloy (Various Color)
Insert	Brass

Unit : mm								
Part Number	D	d	H	f	M (Coarse)	C	Lc	Mass (g)
EAC-19	18.9	21.8	13.5	7	1 - M4	6.1	10.7	7
EAC-23	22.6	25.7	14.4	6.5	1 - M4	6.1	11.9	12
EAC-30	29.9	32.8	16.1	7.5	2 - M4	6.1	15	15

- Hex socket set screw is provided.

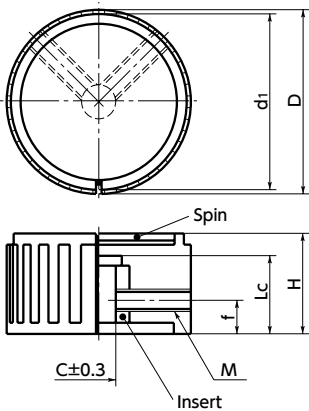
- Part number specification

EAC-19-BK
1 2

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Not Available	Not Available	Available / Add'l charge

EAE Spin Knob

WEB Selection Tool WEB CAD Download



● Material/Finish

RoHS2 Compliant

	EAE
Knob	Phenol Resin (Black)
Spin	Aluminum Alloy (Silver)
Insert	Brass

Part Number	D	d1	H	f	M (Coarse)	C	Lc	Mass (g)
EAE-11	11.1	10.7	12	5	1 - M3	3.3	11	4
EAE-22	21.8	21.5	14.1	5.5	2 - M4	6.1	11.8	10
EAE-33	32.8	31.8	18	6	2 - M4	6.1	14	20

● Hex socket set screw is provided.

● Part number specification

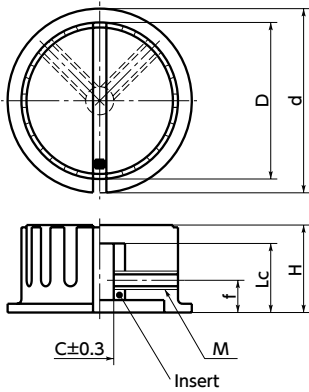
EAE-11



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Not Available	Not Available	Available / Add'l charge

EAM Rimmed Knob

WEB Selection Tool WEB CAD Download



● Material/Finish

RoHS2 Compliant

	EAM
Knob	Phenol Resin (Black)
Insert	Brass

Part Number	D	d	H	f	M (Coarse)	C	Lc	Mass (g)
EAM-12	12	15	14	5	1 - M3	6.1	11	3
EAM-16	16	20	15	6	1 - M4	6.1	13	5
EAM-21	21	24.2	16	6	1 - M4	6.1	13	12
EAM-25	25	30	17	7	2 - M4	6.1	14	13
EAM-29	29	35	18	7	2 - M4	6.1	14	17
EAM-34	34	40	19	7	2 - M4	6.1	15	20

● Hex socket set screw is provided.

● Part number specification

EAM-12

Product Code



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Not Available	Not Available	Not Available	Available / Add'l charge

Pulls

● Metal Pull

Product Code	UNFA/UNFA-W	UNF/UNF-W	UNFS/UNFS-W	UNMS-SC	TGY/TG
Page	P.331 • P.333	P.331 • P.333	P.331 • P.333	P.330	P.335
Shape					
Pull Part Material	Aluminum Alloy	Steel	Stainless Steel	Stainless Steel	Stainless Steel

● Washer for Pull

Product Code	LY	LYSC-N	LYSC-N-SSC
Page	P.336	P.337	P.339
Shape			
Characteristics	Washer	Captive Washer	Washer with Captive Screw

● Plastic Pull

Product Code	UUDF	UGF
Page	P.341	P.342
Shape		
Pull Part Material	Plastic	Rubber

● Other Pulls

Product Code	TA	TCY/TC
Page	P.343	P.344
Shape		
Pull Part Material	Plastic	Zinc die cast

Quick Reference of Material, Mounting Dimension, and Shape

● Metal

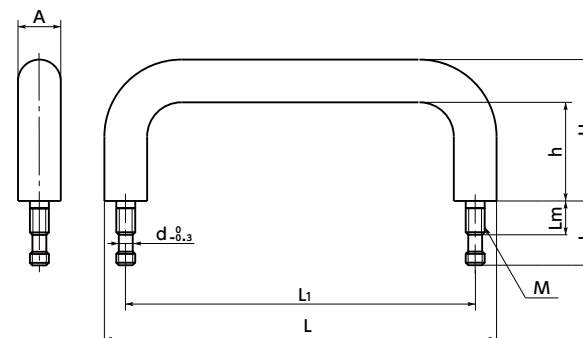
Part Number	Mounting dimension	Shape	Page
UNFA	80 mm–160 mm	Female Screw	P.331
UNFA-W	80 mm–160 mm	Female Screw	P.333
UNF	80 mm–250 mm	Female Screw	P.331
UNF-W	80 mm–250 mm	Female Screw	P.333
UNFS	80 mm–250 mm	Female Screw	P.331
UNFS-W	80 mm–250 mm	Female Screw	P.333
TC	87 mm–102 mm	Female Screw	P.344
TCY	102 mm	Male Screw	P.344
TG	20 mm–120 mm	Female Screw	P.335
TGY	80 mm–120 mm	Male Screw	P.335

● Plastic

Part Number	Mounting dimension	Pull Part Material	Shape	Page
UGF	40 mm–70 mm	Rubber	Female Screw	P.342
UUDF	100 mm–180 mm	Plastic	Female Screw	P.341

UNMS-SC Captive Pull

WEB Selection Tool WEB CAD Download SUS Stainless steel



● Material/Finish

RoHS2 Compliant

Material/Finish	UNMS-SC
Main body	SUS304 Buffing

- Pulls with captive mechanism. Male screw type.
- Accidental falling of a nut from the pull is prevented even when the mounting nut is loosened.
- SUS304 superior in corrosion resistance is used.
- For applications such as food machinery, packing machinery and chemical manufacturing devices that require countermeasures against foreign material mixture.
- For mounting, use Type 3 of commercially-available hexagon nuts (M5). Hexagon nuts are not supplied.

Part Number	L1	A	H	h	L	Lm	L3	M (Coarse)	d	Allowable load*1 (N)	Mass (g)
UNMS-100-SC	100	10	37	27	110	8	15	M5	3.8	1000	95
UNMS-125-SC	125	10	37	27	135	8	15	M5	3.8	1000	110

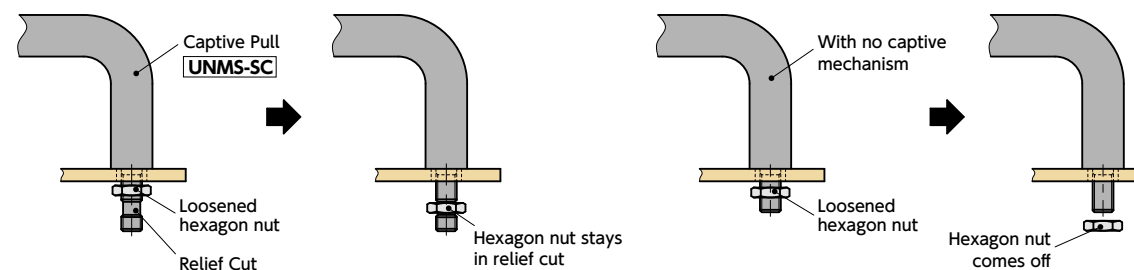
*1: Allowed load for a person.

● Usage example

Even the nut is loosened, it temporarily remains in the relief cut part and will not fall off directly.

For Captive Pull UNMS-SC

For Pull without Captive Mechanism



● Related Products

Male type pulls with no captive mechanism TGY are available.

➔ P.335



● Part number specification

UNMS-100-SC



Cleanroom Wash & Packaging ➔ P.807

Available / Add'l charge

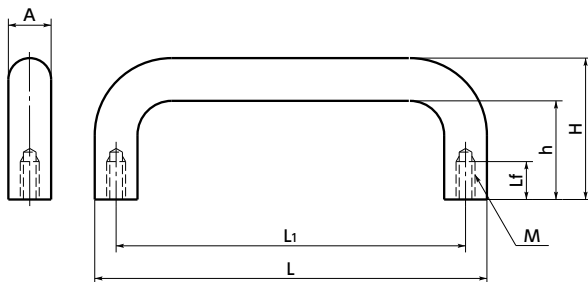
Laser Marking ➔ P.821

Available / Add'l charge

UNF/UNFS/UNFA U - shaped Pull

Recommendation

WEB Selection Tool CAD Download SUS Stainless steel



- Hex socket head cap screws for mounting (SUSXM7) are available as an option. Use the screw supply service (charged separately).

- Types, materials and surface treatment can be selected according to the product code.

Product Code	Type	Material and Surface Treatment
UNF-CR	Standard Type H=37	Made of Steel Chrome Plating
UNFS	Standard Type H=37	Made of Stainless Steel Barrel Polishing
UNFA-BF	Standard Type H=37	Made of Aluminum Buffing
UNFA-BK	Standard Type H=37	Made of Aluminum Electrostatic Coating
UNF-H-CR	High Position Type H=45	Made of Steel Chrome Plating
UNFS-H	High Position Type H=45	Made of Stainless Steel Barrel Polishing
UNF-SH-CR	SEMI Standards Compliance Type H=60	Made of Steel Chrome Plating
UNFS-SH	SEMI Standards Compliance Type H=60	Made of Stainless Steel Barrel Polishing

UNF-CR Standard Type / Made of Steel **UNFS** Standard Type / Made of Stainless Steel

Unit : mm

Part Number Steel	Part Number Stainless steel	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNF-80-CR	UNFS-80	80	10	37	27	90	10	M5	1000	76	M5×12
UNF-100-CR	UNFS-100	100	10	37	27	110	10	M5	1000	88	M5×12
UNF-110-CR	UNFS-110	110	10	37	27	120	10	M5	1000	95	M5×12
UNF-120-CR	UNFS-120	120	10	37	27	130	10	M5	1000	101	M5×12
UNF-125-CR	UNFS-125	125	10	37	27	135	10	M5	1000	103	M5×12
UNF-160-CR	UNFS-160	160	10	37	27	170	10	M5	1000	125	M5×12
UNF-200-CR	UNFS-200	200	10	37	27	210	10	M5	1000	150	M5×12
UNF-250-CR	UNFS-250	250	10	37	27	260	10	M5	1000	180	M5×12

*1 : Allowed load for a person.

UNFA-BF Standard Type / Made of Aluminum : Buffing **UNFA-BK** Standard Type / Made of Aluminum : Electrostatic Coating

Unit : mm

Part Number	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNFA-80-BF	80	10	37	27	90	10	M5	1000	27	M5×12
UNFA-100-BF	100	10	37	27	110	10	M5	1000	31	M5×12
UNFA-110-BF	110	10	37	27	120	10	M5	1000	33	M5×12
UNFA-120-BF	120	10	37	27	130	10	M5	1000	35	M5×12
UNFA-125-BF	125	10	37	27	135	10	M5	1000	36	M5×12
UNFA-160-BF	160	10	37	27	170	10	M5	1000	44	M5×12
UNFA-80-BK	80	10	37	27	90	10	M5	1000	27	M5×12
UNFA-100-BK	100	10	37	27	110	10	M5	1000	31	M5×12
UNFA-110-BK	110	10	37	27	120	10	M5	1000	33	M5×12
UNFA-120-BK	120	10	37	27	130	10	M5	1000	35	M5×12
UNFA-125-BK	125	10	37	27	135	10	M5	1000	36	M5×12
UNFA-160-BK	160	10	37	27	170	10	M5	1000	44	M5×12

*1 : Allowed load for a person.

Cleanroom Wash & Packaging → P.807

S.S. & Al only/ Add'l charge

Laser Marking → P.821

S.S. & Al only/ Add'l charge



- Material/Finish

RoHS2 Compliant

	UNF-CR	UNFS	UNFA-BF	UNFA-BK
Main body	SS330 Chrome Plating	SUS304 Barrel Polishing	Aluminum Alloy Buffing	Aluminum Alloy Electrostatic Coating (Matte Black)
Hex Socket Head Cap Screws (Screw supply service)	SUSXM7	SUSXM7	SUSXM7	SUSXM7

UNF-H-CR | **UNFS-H** High Position Type

Unit : mm

Part Number Steel	Part Number Stainless steel	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNF-80H-CR	UNFS-80H	80	10	45	35	90	10	M5	1000	86	M5×12
UNF-100H-CR	UNFS-100H	100	10	45	35	110	10	M5	1000	98	M5×12
UNF-110H-CR	UNFS-110H	110	10	45	35	120	10	M5	1000	105	M5×12
UNF-120H-CR	UNFS-120H	120	10	45	35	130	10	M5	1000	111	M5×12
UNF-125H-CR	UNFS-125H	125	10	45	35	135	10	M5	1000	113	M5×12
UNF-160H-CR	UNFS-160H	160	10	45	35	170	10	M5	1000	135	M5×12
UNF-200H-CR	UNFS-200H	200	10	45	35	210	10	M5	1000	160	M5×12
UNF-250H-CR	UNFS-250H	250	10	45	35	260	10	M5	1000	190	M5×12

*1 : Allowed load for a person.

UNF-SH-CR | **UNFS-SH** SEMI Standards Compliance Type

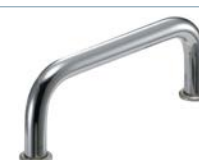
Unit : mm

Part Number Steel	Part Number Stainless steel	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNF-80SH-CR	UNFS-80SH	80	10	60	50	90	10	M5	1000	105	M5×12
UNF-100SH-CR	UNFS-100SH	100	10	60	50	110	10	M5	1000	117	M5×12
UNF-110SH-CR	UNFS-110SH	110	10	60	50	120	10	M5	1000	123	M5×12
UNF-120SH-CR	UNFS-120SH	120	10	60	50	130	10	M5	1000	129	M5×12
UNF-125SH-CR	UNFS-125SH	125	10	60	50	135	10	M5	1000	132	M5×12
UNF-160SH-CR	UNFS-160SH	160	10	60	50	170	10	M5	1000	153	M5×12
UNF-200SH-CR	UNFS-200SH	200	10	60	50	210	10	M5	1000	178	M5×12
UNF-250SH-CR	UNFS-250SH	250	10	60	50	260	10	M5	1000	208	M5×12

*1 : Allowed load for a person.

- Related Products

U - shaped Pulls with the washer
UNF-W | **UNFS-W** | **UNFA-W** is
available.
→ P.333



- Part number specification

UNF-200-SH-CR

1

UNF-200-SH-CR-P

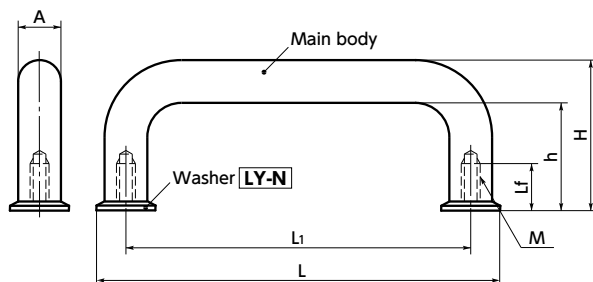
1

Screw supply service

When using the screw supply service (charged separately), add **P**
to the end of the product code.

UNF-W / UNFS-W / UNFA-W U - shaped Pull - with Washer *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel



- The type with washer **LY-N** (→ P.336). It is highly stable and decorates the mounting part beautifully.
- Hex socket head cap screws for mounting (SUSXM7) are available as an option. Use the screw supply service (charged separately).

- Materials and surface treatment of main body and types can be selected according to the product code.

Product Code	Type	Material and Surface Treatment
UNF-CR-W	Standard Type H=38.5	Made of Steel Chrome Plating
UNFS-W	Standard Type H=38.5	Made of Stainless Steel Barrel Polishing
UNFA-BF-W	Standard Type H=38.5	Made of Aluminum Buffing
UNFA-BK-W	Standard Type H=38.5	Made of Aluminum Electrostatic Coating
UNF-H-CR-W	High Position Type H=46.5	Made of Steel Chrome Plating
UNFS-H-W	High Position Type H=46.5	Made of Stainless Steel Barrel Polishing
UNF-SH-CR-W	SEMI Standards Compliance Type H=61.5	Made of Steel Chrome Plating
UNFS-SH-W	SEMI Standards Compliance Type H=61.5	Made of Stainless Steel Barrel Polishing

UNF-CR-W Standard Type / Made of Steel UNFS-W Standard Type / Made of Stainless Steel

Part Number Steel	Part Number Stainless steel	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNF-80-CR-W	UNFS-80-W	80	10	38.5	28.5	96	11.5	M5	1000	82	M5×12
UNF-100-CR-W	UNFS-100-W	100	10	38.5	28.5	116	11.5	M5	1000	94	M5×12
UNF-110-CR-W	UNFS-110-W	110	10	38.5	28.5	126	11.5	M5	1000	101	M5×12
UNF-120-CR-W	UNFS-120-W	120	10	38.5	28.5	136	11.5	M5	1000	107	M5×12
UNF-125-CR-W	UNFS-125-W	125	10	38.5	28.5	141	11.5	M5	1000	109	M5×12
UNF-160-CR-W	UNFS-160-W	160	10	38.5	28.5	176	11.5	M5	1000	131	M5×12
UNF-200-CR-W	UNFS-200-W	200	10	38.5	28.5	216	11.5	M5	1000	156	M5×12
UNF-250-CR-W	UNFS-250-W	250	10	38.5	28.5	266	11.5	M5	1000	186	M5×12

*1 : Allowed load for a person.

UNFA-BF-W Standard Type / Made of Aluminum : Buffing UNFA-BK-W Standard Type / Made of Aluminum : Electrostatic Coating

Part Number	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNFA-80-BF-W	80	10	38.5	28.5	96	11.5	M5	1000	33	M5×12
UNFA-100-BF-W	100	10	38.5	28.5	116	11.5	M5	1000	37	M5×12
UNFA-110-BF-W	110	10	38.5	28.5	126	11.5	M5	1000	39	M5×12
UNFA-120-BF-W	120	10	38.5	28.5	136	11.5	M5	1000	41	M5×12
UNFA-125-BF-W	125	10	38.5	28.5	141	11.5	M5	1000	42	M5×12
UNFA-160-BF-W	160	10	38.5	28.5	176	11.5	M5	1000	50	M5×12
UNFA-80-BK-W	80	10	38.5	28.5	96	11.5	M5	1000	33	M5×12
UNFA-100-BK-W	100	10	38.5	28.5	116	11.5	M5	1000	37	M5×12
UNFA-110-BK-W	110	10	38.5	28.5	126	11.5	M5	1000	39	M5×12
UNFA-120-BK-W	120	10	38.5	28.5	136	11.5	M5	1000	41	M5×12
UNFA-125-BK-W	125	10	38.5	28.5	141	11.5	M5	1000	42	M5×12
UNFA-160-BK-W	160	10	38.5	28.5	176	11.5	M5	1000	50	M5×12

*1 : Allowed load for a person.

Cleanroom Wash & Packaging → P.807

S.S. & Al only/ Add'l charge

Laser Marking → P.821

S.S. & Al only/ Add'l charge



- Material/Finish

	UNF-CR-W	UNFS-W	UNFA-BF-W	UNFA-BK-W
Main body	SS330 Chrome Plating	SUS304 Barrel Polishing	Aluminum Alloy Buffing	Aluminum Alloy Electrostatic Coating (Matte Black)
Washer	SUS303 Barrel Polishing	SUS303 Barrel Polishing	SUS303 Barrel Polishing	SUS303 Barrel Polishing
Hex Socket Head Cap Screws (Screw supply service)	SUSXM7	SUSXM7	SUSXM7	SUSXM7

RoHS2 Compliant

UNF-H-CR-W UNFS-H-W High Position Type

Part Number Steel	Part Number Stainless steel	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNF-80H-CR-W	UNFS-80H-W	80	10	46.5	36.5	96	11.5	M5	1000	92	M5×12
UNF-100H-CR-W	UNFS-100H-W	100	10	46.5	36.5	116	11.5	M5	1000	104	M5×12
UNF-110H-CR-W	UNFS-110H-W	110	10	46.5	36.5	126	11.5	M5	1000	111	M5×12
UNF-120H-CR-W	UNFS-120H-W	120	10	46.5	36.5	136	11.5	M5	1000	117	M5×12
UNF-125H-CR-W	UNFS-125H-W	125	10	46.5	36.5	141	11.5	M5	1000	119	M5×12
UNF-160H-CR-W	UNFS-160H-W	160	10	46.5	36.5	176	11.5	M5	1000	141	M5×12
UNF-200H-CR-W	UNFS-200H-W	200	10	46.5	36.5	216	11.5	M5	1000	166	M5×12
UNF-250H-CR-W	UNFS-250H-W	250	10	46.5	36.5	266	11.5	M5	1000	196	M5×12

*1 : Allowed load for a person.

UNF-SH-CR-W UNFS-SH-W SEMI Standards Compliance Type

Part Number Steel	Part Number Stainless steel	L1	A	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UNF-80SH-CR-W	UNFS-80SH-W	80	10	61.5	51.5	96	11.5	M5	1000	111	M5×12
UNF-100SH-CR-W	UNFS-100SH-W	100	10	61.5	51.5	116	11.5	M5	1000	123	M5×12
UNF-110SH-CR-W	UNFS-110SH-W	110	10	61.5	51.5	126	11.5	M5	1000	129	M5×12
UNF-120SH-CR-W	UNFS-120SH-W	120	10	61.5	51.5	136	11.5	M5	1000	135	M5×12
UNF-125SH-CR-W	UNFS-125SH-W	125	10	61.5	51.5	141	11.5	M5	1000	138	M5×12
UNF-160SH-CR-W	UNFS-160SH-W	160	10	61.5	51.5	176	11.5	M5	1000	159	M5×12
UNF-200SH-CR-W	UNFS-200SH-W	200	10	61.5	51.5	216	11.5	M5	1000	184	M5×12
UNF-250SH-CR-W	UNFS-250SH-W	250	10	61.5	51.5	266	11.5	M5	1000	214	M5×12

*1 : Allowed load for a person.

- Related Products

U-shaped pull with no washer
UNF **UNFS** **UNFA** is available.

→ P.331



- Part number specification

UNF-200-SH-CR-W

1

UNF-200-SH-CR-W-P

1

Screw supply service

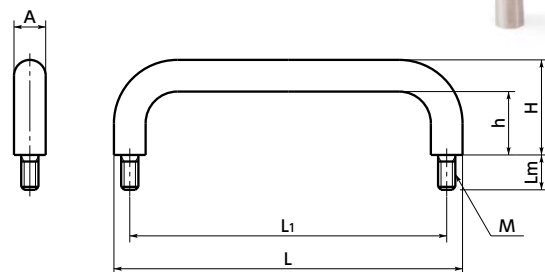
When using the screw supply service (charged separately), add **P** to the end of the product code.

TGY / TG Stainless Steel Pull



WEB Selection Tool WEB CAD Download SUS Stainless steel

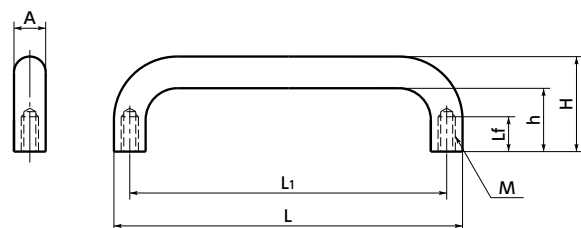
TGY Male Screw



TG

- Pull made of stainless steel.
- Use it in combination with the washer **LY-N** (→ P.336).
*Washers are not supplied.
- Male screw/female screw can be selected according to the product code.
TGY — Male screw
TG — Female screw
- For **TG**, hex socket head cap screws for mounting (SUSXM7) are available as an option. Use the screw supply service (charged separately).

TG Female Screw



TGY Male Screw

Unit : mm

Part Number	L	A	L1	H	h	Lm	M	Allowable load*1 (N)	Mass (g)	Applicable Washer
TGY-86	86	6	80	30	24	10	M4	1000	30	LY-10
TGY-108	108	8	100	35	27	10	M5	1000	62	LY-12
TGY-110	110	10	100	30	20	11	M5	1000	89	LY-16A
TGY-128	128	8	120	40	32	10	M5	1000	74	LY-12
TGY-130	130	10	120	40	30	11	M6	1000	114	LY-16

*1 : Allowed load for a person.

TG Female Screw

Unit : mm

Part Number	L	A	L1	H	h	Lf	M	Allowable load*1 (N)	Mass (g)	Applicable Washer	Screw supply service Screw size
TG-24	24	4	20	22	18	7	M2.6	1000	4.5		M2.6×8
TG-46	46	6	40	22	16	7	M4	1000	14	LY-10-N	M4×8
TG-66	66	6	60	22	16	7	M4	1000	18.5	LY-10-N	M4×8
TG-86	86	6	80	30	24	10	M4	1000	26	LY-10-N	M4×12
TG-108	108	8	100	35	27	10	M5	1000	55.5	LY-12-N	M5×12
TG-110	110	10	100	30	20	11	M5	1000	82	LY-16-N	M5×12
TG-128	128	8	120	40	32	10	M5	1000	68	LY-12-N	M5×12
TG-130	130	10	120	40	30	11	M6	1000	104	LY-16-N	M6×12

*1 : Allowed load for a person.

Material/Finish



	TGY / TG
Main body	SUS303 Buffing
Hex Socket Head Cap Screws (Screw supply service))	SUSXM7

Part number specification

TG-24



TG-24-P



Screw supply service

When using the screw supply service (charged separately), add **-P** to the end of the product code.

Cleanroom Wash & Packaging → P.807

Available / Add'l charge

Laser Marking → P.821

Available / Add'l charge

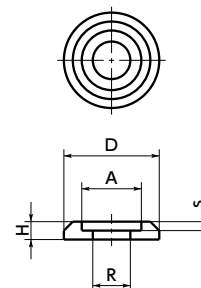
NBK

WEB ▶ <https://www.nbk1560.com>

LY Washer



WEB Selection Tool WEB CAD Download SUS Stainless steel



- Washer to be used with the pull. It decorates the mounting part of the pull beautifully.
- Pull compatible with washer
UNF UNFS UNFA (→ P.331)
TGY TG (→ P.335)
UGF (→ P.342)
- **LY** is provided with nut, plain washer and spring washer. To purchase the washer main body only, put **-N** at the end of part number.
LY — With nut, plain washer and spring washer
LY-N — Washer main body only

Material/Finish



	LY	LY-N
Washer Main Body	SUS303	SUS303
Nut	SUSXM7	
Plain Washer	SUS304	
Spring Washer	SUS304	

LY With Nut, Washer and Plain Washer

Unit : mm

Part Number	Attached nut size	D	A	R	H	s	Mass (g)
LY-10	M4	10	6.3	4.3	2.5	1	2
LY-12	M5	12	8.3	5.3	2.5	1	3
LY-16A	M5	16	10.3	6.3	3	1.5	5
LY-16	M6	16	10.3	6.3	3	1.5	6.5

LY-N Washer main body only

Unit : mm

Part Number	D	A	R	H	s	Mass (g)
LY-10-N	10	6.3	4.3	2.5	1	1
LY-12-N	12	8.3	5.3	2.5	1	1.5
LY-16-N	16	10.3	6.3	3	1.5	3

Part number specification

LY-12-N



Cleanroom Wash & Packaging → P.807

Available / Add'l charge

Laser Marking → P.821

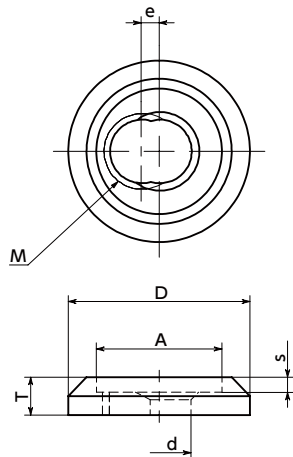
Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

LYSC-N Captive Washer for Pull Patent Pending

WEB Selection Tool WEB CAD Download SUS Stainless steel



- With a pull mounted on it, the pull mounting surface is beautifully decorated while falling of screws within the enclosure is prevented.
- No additional modification of cover or door is required to mount the pull.
- Use it in combination with a captive screw (→ P.691-P.699).
- For applications such as food machinery, packing machinery and chemical manufacturing devices that require countermeasures against parts falling.

Material/Finish		LYSC-N
Main body		SUS304 Barrel Polishing

RoHS2 Compliant

Part Number	D	M	d	e	A	T	s	Mass (g)
LYSC-12-N	12	M5	4.2	1.2	8.3	2.5	1	1.4
LYSC-16A-N	16	M5	4.2	1.5	10.3	3	1.5	3.1

Unit : mm

Related Products

There is a washer for pull with no captive mechanism **LY**.
→ P.336



The captive washer for pulls with a captive screw supplied **LYSC-N-SSC** is available.
→ P.339



Part number specification

LYSC-12-N



Cleanroom Wash & Packaging → P.807

Available / Add'l charge

Laser Marking → P.821

Not Available

Applicable Captive Screws

Use the captive washer for pull **LYSC-N** in combination with a compatible captive screw.

Part Number	Applicable Captive Screws				
	SSC → P.691	SSCLS → P.697	SSCHS → P.698	SSCPS → P.695	SSCMS → P.696
LYSC-12-N	SSC-M5	SSCLS-M5	SSCHS-M5	SSCPS-M5	SSCMS-M5
LYSC-16A-N	SSC-M5	SSCLS-M5	SSCHS-M5	SSCPS-M5	SSCMS-M5

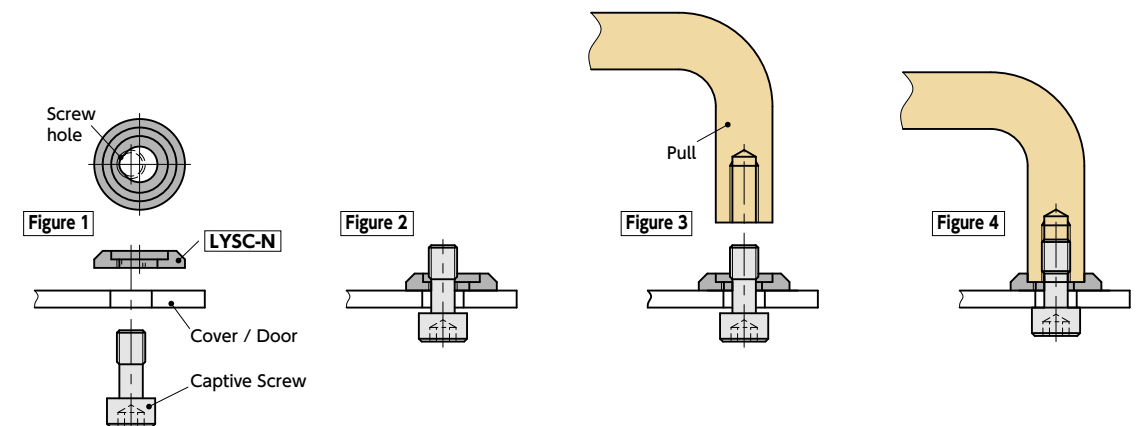
⚠ The captive washer for pull **LYSC-N** cannot be used in combination with any screw or bolt other than a captive screw.

Applicable Pulls

Part Number	Applicable Pulls		
	UNF → P.331	UNFS → P.331	UNFA → P.331
LYSC-12-N			
LYSC-16A-N	All Sizes	All Sizes	All Sizes

Mounting method

- ① Let the captive screw through the cover and door and tighten it into the screw hole located in the position eccentric from the center of the captive washer for the pull **LYSC-N** from the pull mounting surface until the cylindrical part of the captive screw is penetrated **Figure 2**.
- ② Move the captive screw to the drilled hole at the center of **LYSC-N** **Figure 3**.
- ③ In the state indicated in **Figure 3**, tighten the captive screw to mount the pull **Figure 4**.
- ④ After mounting, the pull screw hole and captive screw are retained at the center of **LYSC-N**. At this point, the drilled hole at the center of **LYSC-N** is smaller than the screw part of the captive screw, so the captive screw never comes out of the drilled hole and falling is prevented.

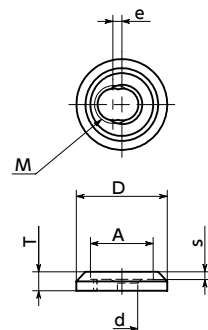


LYSC-N-SSC Captive Washer for Pull (with Captive Screw) Patent Pending

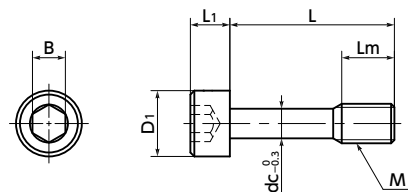
WEB Selection Tool CAD Download SUS Stainless steel



LYSC-N



SSC



LYSC-N-SSC



LYSC-N

- With a pull mounted on it, the pull mounting surface is beautifully decorated while falling of screws within the enclosure is prevented.
- No additional modification of cover or door is required to mount the pull.
- For applications such as food machinery, packing machinery and chemical manufacturing devices that require countermeasures against parts falling.
- A captive screw for mounting **SSC** is supplied.

• Material/Finish



	LYSC-N-SSC
Captive Washer for Pulls LYSC-N	SUS304 Barrel Polishing
Captive Screw SSC	SUSXM7 (Equivalent to SUS304)

Part Number	Captive Washer for Pull LYSC-N → P.337							Captive Screw SSC → P.691							Mass (g)
	D	M	d	e	A	T	s	M	L	Lm	D1	L1	B	dc	
LYSC-12-N-SSC-M5-12	12	M5	4.2	1.2	8.3	2.5	1	M5	12	6	8.5	5	4	3.9	4.4
LYSC-12-N-SSC-M5-16	12	M5	4.2	1.2	8.3	2.5	1	M5	16	6	8.5	5	4	3.9	4.9
LYSC-16A-N-SSC-M5-12	16	M5	4.2	1.5	10.3	3	1.5	M5	12	6	8.5	5	4	3.9	6.1
LYSC-16A-N-SSC-M5-16	16	M5	4.2	1.5	10.3	3	1.5	M5	16	6	8.5	5	4	3.9	6.6

Unit : mm

• Related Products

The captive washer for a pull can be purchased alone.

LYSC-N → P.337



• Part number specification

LYSC-12-N-SSC-M5-12



Cleanroom Wash & Packaging → P.807

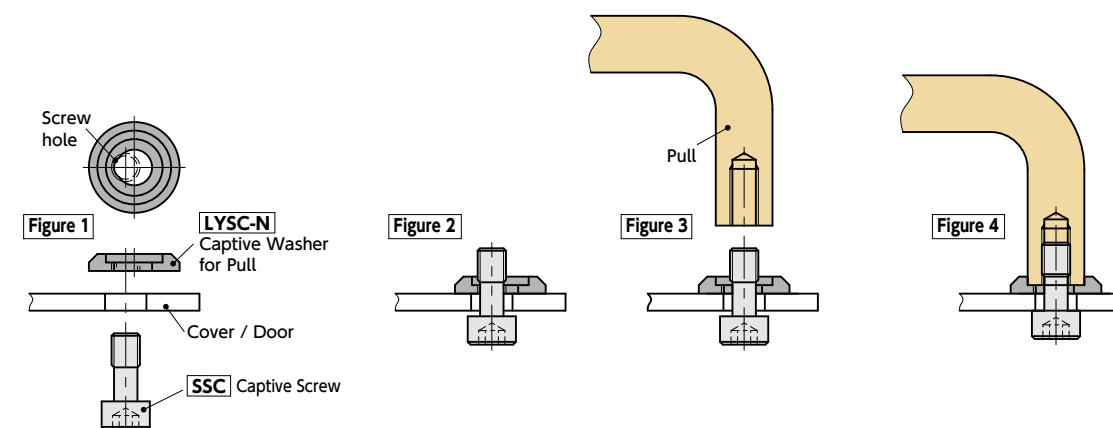
Available / Add'l charge

Laser Marking → P.821

Not Available

• Mounting method

- ① Let the supplied captive screw **SSC** through the cover and door and tighten it into the screw hole located in the position eccentric from the center of the captive washer for the pull **LYSC-N** from the pull mounting surface until the cylindrical part of **SSC** is penetrated **Figure 2**.
- ② Move **SSC** to the drilled hole at the center of **LYSC-N** **Figure 3**.
- ③ In the state indicated in **Figure 3**, tighten **SSC** to mount the pull **Figure 4**.
- ④ After mounting, the pull screw hole and **SSC** are retained at the center of **LYSC-N**. At this point, the drilled hole at the center of **LYSC-N** is smaller than the screw part of **SSC**, so **SSC** never comes out of the drilled hole and falling is prevented.

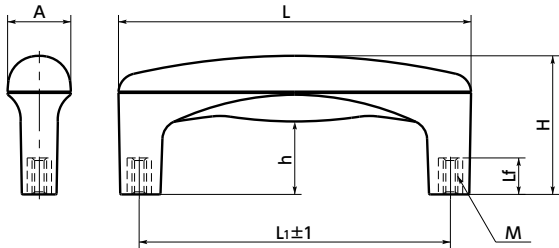


• Applicable Pulls

Part Number	Applicable Pulls			
	UNF → P.331	UNFS UNFA	UGF → P.342	TG → P.335
LYSC-12-N-SSC				TG-108 TG-128
LYSC-16A-N-SSC	All Sizes		All Sizes	TG-110 TG-130

UUDF Plastic Pull

WEB Selection Tool WEB CAD Download



Material/Finish



	UUDF
Upper Part of Pull	Nylon 6 (Various Color)
Lower Part of Pull	Nylon 6 (Dark Gray)
Thread Part	S45C Trivalent Chromate Treatment
Hex Socket Head Cap Screws (Screw supply service)	SUSXM7



- Designed in consideration of the seven principles of universal design. The shape is easy to grasp and apply forces. ➡ P.265
- Five-color variations support the color universal design of machines / devices. Two-tone color of dark gray and various colors. They can be selected by the end symbol of the part number.
- Hex socket head cap screws for mounting (SUSXM7) are available as an option. Use the screw supply service (charged separately).

End Symbol	Color
BK	Black
SG	Silver gray
BL	Blue
OR	Orange
YW	Yellow

Part Number	A	L1	H	h	L	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
UUDF-26-100	26	100	57	30	117	15	M6	500	51	M6×16
UUDF-26-112	26	112	57	30	129	15	M6	500	53	M6×16
UUDF-26-128	26	128	57	30	145	15	M6	500	56	M6×16
UUDF-26-160	26	160	57	30	177	15	M6	500	62	M6×16
UUDF-26-180	26	180	57	30	197	15	M6	500	66	M6×16

*1 : Allowed load for a person.

Part number specification

UUDF-26-100-BK

1 2

UUDF-26-100-BK - P

1 2

Screw supply service

When using the screw supply service (charged separately), add **-P** to the end of the product code.

Cleanroom Wash & Packaging ➡ P.807

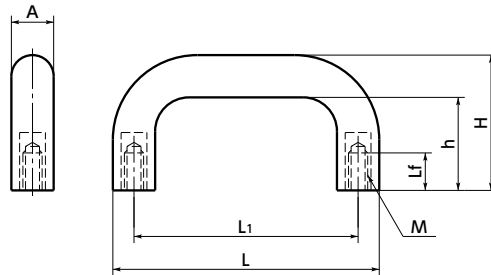
Not Available

Laser Marking ➡ P.821

Available / Add'l charge

UGF Gum Pull

WEB Selection Tool WEB CAD Download



- Use it in combination with a washer **LY-N**

(➡ P.336).

*Washers are not supplied.

- Hex socket head cap screws for mounting (SUSXM7) are available as an option. Use the screw supply service (charged separately).

Material/Finish



	UGF
Pull Part	EPDM (Matte Black)
Thread Part	S45C Trivalent Chromate Treatment
Hex Socket Head Cap Screws (Screw supply service)	SUSXM7

Part Number	L	A	L1	H	h	Lf	M	Allowable load*1 (N)	Mass (g)	Applicable Washer	Screw supply service Screw size
UGF-50	50	10	40	32	22	10	M4	200	10	LY-16-N	M4×12
UGF-63	63	10	53	32	22	10	M4	200	12	LY-16-N	M4×12
UGF-80	80	10	70	32	22	10	M4	200	15	LY-16-N	M4×12

*1 : Allowed load for a person.

Part number specification

UGF-50

1

UGF-50 - P

1

Screw supply service

When using the screw supply service (charged separately), add **-P** to the end of the product code.

Cleanroom Wash & Packaging ➡ P.807

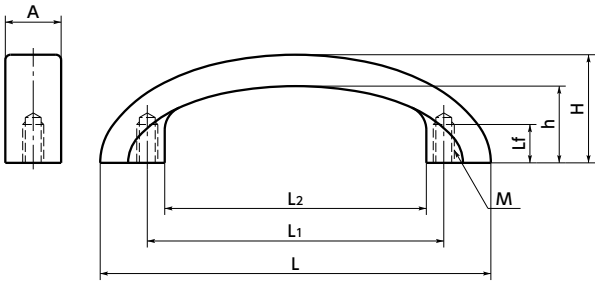
Not Available

Laser Marking ➡ P.821

Not Available

TA Plastic Pull

WEB Selection Tool WEB CAD Download



- Hex socket head cap screws for mounting (SUSXM7) are available as an option. Use the screw supply service (charged separately).

Material/Finish		RoHS2 Compliant
TA		
Main body	Phenol Resin	
Hex Socket Head Cap Screws (Screw supply service)	SUSXM7	

Part Number	L	A	H	h	L1	L2	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
TA-112	112	16	31	22	85	68	11	M6	500	22	M6×12
TA-148	148	20	36	24	125	102	11	M6	500	46	M6×12

*1 : Allowed load for a person.

- Part number specification

TA-112



TA-112-P



Screw supply service

When using the screw supply service (charged separately), add **-P** to the end of the product code.

Cleanroom Wash & Packaging ➡ P.807

Available / Add'l charge

Laser Marking ➡ P.821

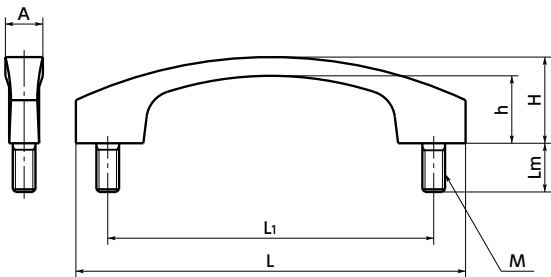
Available / Add'l charge

TCY / TC Zinc Pull

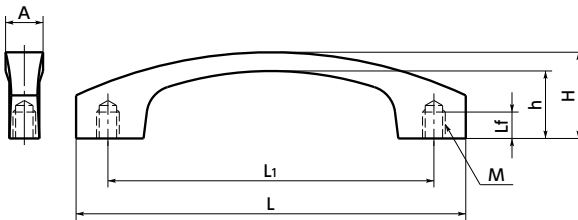
WEB Selection Tool WEB CAD Download



TCY Male Screw



TC Female Screw



- Male screw / female screw can be selected according to the product code.

TCY Male screw

TC Female screw

- For TC, hex socket head cap screws for mounting (SUSXM7) are available as an option. Use the screw supply service (charged separately).

Material/Finish		RoHS2 Compliant
TCY		
Main body	Zinc die cast Chrome Plating	Zinc die cast Chrome Plating
Hex Socket Head Cap Screws (Screw supply service)		SUSXM7

TCY Male Screw

Part Number	L	A	H	h	L1	Lm	M	Allowable load*1 (N)	Mass (g)
TCY-122	122	11	28	24	102	13	M6	1000	85

*1 : Allowed load for a person.

TC Female Screw

Part Number	L	A	H	h	L1	Lf	M	Allowable load*1 (N)	Mass (g)	Screw supply service Screw size
TC-104	104	10	23	18	87	8	M6	1000	50	M6×10
TC-122	122	11	28	24	102	10	M6	1000	80	M6×12

*1 : Allowed load for a person.

- Part number specification

TC-104



TC-104-P



Screw supply service

When using the screw supply service (charged separately), add **-P** to the end of the product code.

Cleanroom Wash & Packaging ➡ P.807

Not Available

Laser Marking ➡ P.821

Not Available

• Display equipment fixing parts

- Select a product from the items to mount and adjustment angle.

Adjustment angle	360°Rotation Type	1-Shaft Type	Fix Type
	It rotates by 360° and tilts by ±15° in all directions.	The angle can be adjusted in the single axis direction.	The item to mount is completely fixed.
Item to mount			
Tablet PC	DTT The built-in spring retains the angle → P.347 DTK The hex socket head cap screw fixes the angle → P.349	DTS The angle is fixed by the clamp lever DTSN The hexagon nut fixes the angle → P.351	DTR → P.353
Display*	DFT The built-in spring retains the angle → P.355 DFK The hex socket head cap screw fixes the angle → P.357	DFS The angle is fixed by the clamp lever DFSN The hexagon nut fixes the angle → P.359	DFR → P.361
Keyboard		DKBR The knob fixes the angle → P.363	DKB → P.365

*Compatible with 12 - 22.9 inch displays with 75 mm x 75 mm or 100 mm x 100 mm mounting holes, which are defined for the VESA standard.

• Accessories

Type	Pulls for display angle operation	Pipe Holder	Pipe
Part Number	DPU	DPH	DAP
Shape			
Page	P.368	P.369	P.370
Characteristics	Pulls for smooth angle operations of the display. Conforms to the VESA standards.	Holder for $\phi 30$ / $\phi 40$ round pipe.	Cut round pipe.

- There are four types of mounting method for Mounting System for Display.
- Icons about available mounting methods are displayed in the product description pages.

(1) Front assembly

Mounted on a flat plane such as an aluminum frame and wall surface, etc.

Aluminum frame mount



(2) Back assembly

Mounted on a flat plate such as a wall panel, cover panel and sheet metal, etc.

Wall/panel Mount



(3) Aluminum Frame End Face

Mounted on $\square 40$ aluminum frame end face.

Aluminum frame edge mount



(4) Round Pipe

Mounted on $\phi 30 - \phi 42.7$ round pipe.

Pipe



- Descriptions of other icons



This product is equipped with a counter balance spring mechanism.

As the angle after adjustment is retained by the spring force, no tool is needed. It can be securely retained even in an environment under dynamic load.

VESA75

This product is compatible with 75 mm x 75 mm mounting holes defined by the VESA standards.

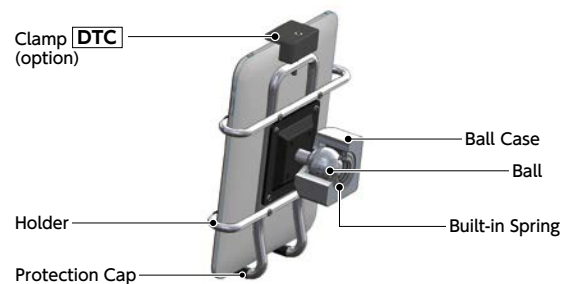
VESA100

This product is compatible with 100 mm x 100 mm mounting holes defined by the VESA standards.

DTT Tablet PC Mounting System - 360°rotation Type - Spring Retention

WEB Selection Tool WEB CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe

Structure



Material/Finish

RoHS2 Compliant

	DTT-AF	DTT-AA / DTT-PB
Holder	SS400 Chrome Plating	
Protection Cap	Flexible PVC (lead-free)	
Ball Case	A6063 Alumite Treatment	
Ball	S45C Trivalent Chromate Treatment	
Built-in Spring	Spring Steel	
Fixing Plate	SS400 Electrostatic Coating	—
Bracket	—	A6063 Alumite Treatment

Retention torque

Product code	Retention Torque	Reference Force
DTTH	20 N·m	Even in an environment subject to vibration, etc., the tablet PC can hardly deviate.
DTTM	15 N·m	Middle of low torque type and high torque type.
DTTL	10 N·m	Can move with torque equivalent to that for household / office PC displays.

Option

- By using the optional **DTC**, a tablet PC can be completely fixed.
- For cases where the mounting direction must be changed or bringing out the tablet PC is prohibited.

Part Number	Mass (g)
DTC	70

Material/Finish

RoHS2 Compliant

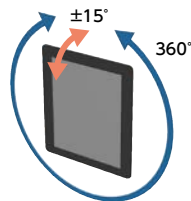
	DTC
Clamp	AC4C-F Electrostatic Coating
Clamping Screw	SUSXM7

Related Products

A tablet PC mounting system of 360° rotation type that tightens the fixing bolts to retain the angle **DTK** is available.
→ P.349



- Tablet PC fixing parts compatible with iPad*1.
*1: iPad is a trademark of Apple Inc. Compatible with iPad2 / New iPad.
- This fixes a tablet PC to a production facility or test device. Tablet PC can be mounted / unmounted easily just by inserting / removing it.
- Robust design. It has a high durability.
- The built-in spring serves to retain the angle. Tightening after adjustment is not necessary.
- For counterpart, three types of Mounting System for Display are available. **DTT-AF** For aluminum frame / For wall panel and sheet metal — **DTT-AF** For aluminum frame end mounting **DTT-AA** For round pipe — **DTT-PB**
- This is suitable for checking the tablet PC screen while both hands are in use.
- For detailed dimensions of the holder, refer to **DTR**. → P.353
- The holder can be tilted by ±15° to any direction. It can also be rotated by 360°.



- We also produce Mounting System for Display of special specifications compatible with tablet PCs of various sizes.
→ P.367



Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Part number specification

DTT M-AA-40

Product Code **1** **2** **3**

Example of part number: DTTL-AF-M8 / DTTH-PB-40

For aluminum frame / For wall panel and sheet metal

DTT-AF



Part Number	M*1 (d)	Mass (g)
DTT*-AF-**	M4 (5)	1860
	M5 (6)	
	M6 (7)	
	M8 (9)	

Unit: mm

*1: Mounting bolts are not provided.

For aluminum frame end surface mounting

DTT-AA



Part Number	B	Mass (g)
DTT*-AA-40	40	1630

Unit: mm

*1: Hex socket low head bolts (M8 x 16 mm) are provided.

For Round Pipe

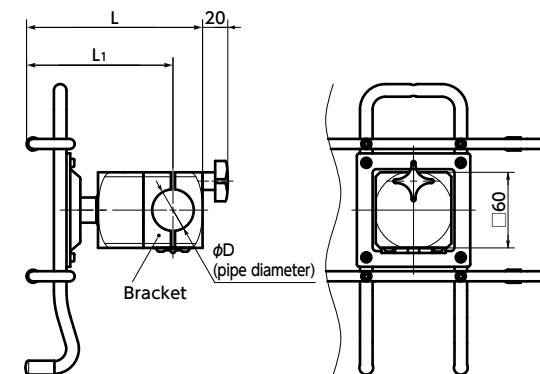
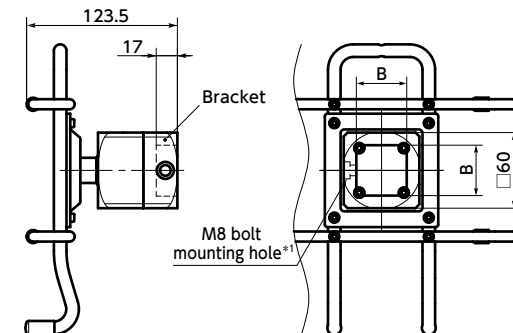
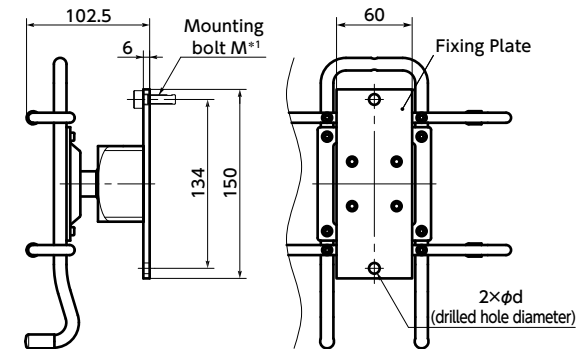
DTT-PB



Part Number	D	L1	L	Mass (g)
DTT*-PB-**	28	120.5	144.5	1780
	30		144.5	1780
	34		144.5	1770
	40	124.5	152.5	1760
	42.7		152.5	1760

Unit: mm

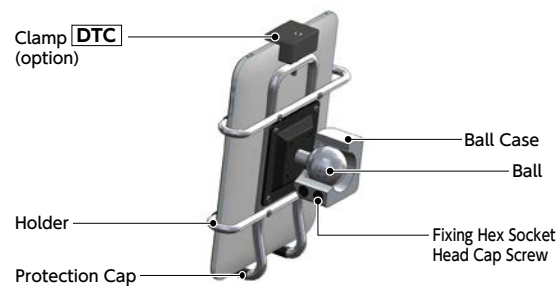
* Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ±0.5 mm.



DTK Tablet PC Mounting System - 360°rotation Type - Bolt Retention

WEB Selection Tool CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe

Structure



Material/Finish



	DTK-AF	DTK-AA / DTK-PB
Holder	SS400 Chrome Plating	
Protection Cap	Flexible PVC (lead-free)	
Ball Case	A6063 Alumite Treatment	
Ball	S45C Trivalent Chromate Treatment	
Fixing Hex Socket Head Cap Screw (M5 x 16 mm)	SCM435 Ferrosoferric Oxide Film	
Fixing Plate	SS400 Electrostatic Coating	—
Bracket	—	A6063 Alumite Treatment

Option

- By using the optional **DTC**, a tablet PC can be completely fixed.
- For cases where the mounting direction must be changed or bringing out the tablet PC is prohibited.

Part Number	Mass (g)
DTC	70

Material/Finish



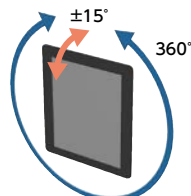
	DTC
Clamp	AC4C-F Electrostatic Coating
Clamping Screw	SUSXM7

Related Products

A tablet PC mounting system of 360° rotation type that can retain without bolt tightening **DTT** is available.
→ P.347



- Tablet PC fixing parts compatible with iPad*1.
*1: iPad is a trademark of Apple Inc. Compatible with iPad2 / New iPad.
- This fixes a tablet PC to a production facility or test device. Tablet PC can be mounted / unmounted easily just by inserting / removing it.
- Robust design. It has a high durability.
- By tightening the fixing hex socket head cap screw, securely retain the angle after adjustment.
- For counterpart, three types of Mounting System for Display are available. **DTK-AF**
For aluminum frame /
For wall panel and sheet metal — **DTK-AA**
For aluminum frame end mounting **DTK-AA**
For round pipe — **DTK-PB**
- This is suitable for checking the tablet PC screen while both hands are in use.
- For detailed dimensions of the holder, refer to **DTR**. → P.353
- The holder can be tilted by ±15° to any direction. It can also be rotated by 360°.



- We also produce Mounting System for Display of special specifications compatible with tablet PCs of various sizes.
→ P.367



Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Part number specification

DTK-AA-40

Product Code **DTK-AA-40**

Example of part number: DTK-AF-M8 / DTK-PB-40

- For aluminum frame / For wall panel and sheet metal

DTK-AF



Part Number	M*1 (d)	Mass (g)
DTK-AF-*	M4 (5) M5 (6) M6 (7) M8 (9)	1690

Unit: mm

*1: Mounting bolts are not provided.

- For aluminum frame end surface mounting

DTK-AA



Part Number	B	Mass (g)
DTK-AA-40	40	1460

Unit: mm

*1: Hex socket low head bolts (M8 x 16 mm) are provided.

- For Round Pipe

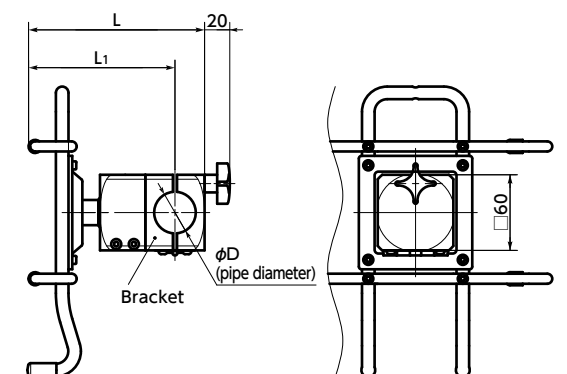
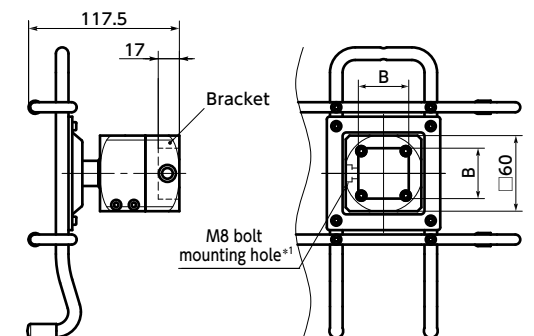
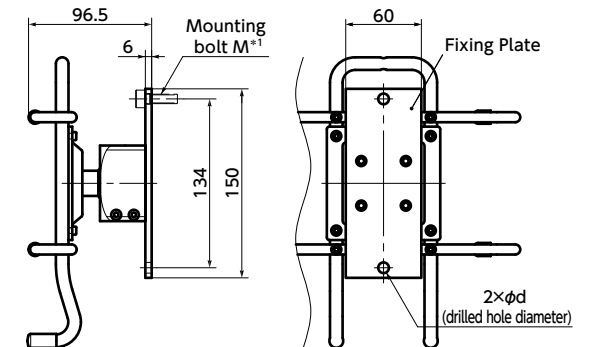
DTK-PB



Part Number	D	L1	L	Mass (g)
DTK-PB-*	28 30 34 40 42.7	114.5 118.5	138.5 146.5	1610 1610 1570 1590 1560

Unit: mm

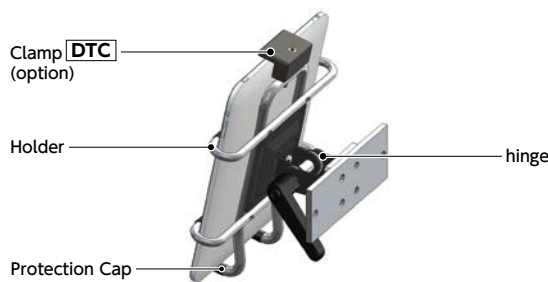
- Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ±0.5 mm.



DTS/DTSN Tablet PC Mounting System - Single Axis Type - Clamp Lever / Hexagon Nut Retention

WEB Selection Tool CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe

Structure



Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Material/Finish

RoHS2 Compliant

	DTS-AF	DTS-AA DTS-PB	DTSN-AF	DTSN-AA DTSN-PB
Holder	SS400 Chrome Plating			
Protection Cap	Flexible PVC (lead-free)			
hinge	SS400 Electrostatic Coating			
Clamp Lever	Nylon 6			
Hex Nut	-	-	SS400 Trivalent Chromate Treatment	
Fixing Plate	SS400 Electrostatic Coating		SS400 Electrostatic Coating	
Bracket	-	A6063 Alumite Treatment	-	A6063 Alumite Treatment

Option

- By using the optional **DTC**, a tablet PC can be completely fixed.
- For cases where bringing out the tablet PC is prohibited.

Part Number	Mass (g)
DTC	70

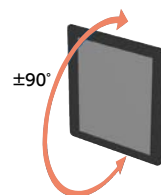
Material/Finish

RoHS2 Compliant

	DTC
Clamp	AC4C-F Electrostatic Coating
Clamping Screw	SUSXM7

- Tablet PC fixing parts compatible with iPad*1.
*1: iPad is a trademark of Apple Inc. Compatible with iPad2 / New iPad.
- This fixes a tablet PC to a production facility or test device. Tablet PC can be mounted / unmounted easily just by inserting / removing it.
- Robust design. It has a high durability.
- By tightening the clamp lever or hexagon nut, securely retain the angle after adjustment. **1**
- Clamp lever type — **DTS**
Hexagon nut type — **DTSN**
- For counterpart, three types of Mounting System for Display are available. **2**
- For aluminum frame / For wall panel and sheet metal — **DTS*-AF**
For aluminum frame end mounting **DTS*-AA**
For round pipe — **DTS*-PB**
- This is suitable for checking the tablet PC screen while both hands are in use.
- For detailed dimensions of the holder, refer to **DTR**. → P.353

- The holder can be tilted by ±90° to the single axis direction.



- We also produce Mounting System for Display of special specifications compatible with tablet PCs of various sizes.
→ P.367



- Part number specification

DTS N-AA-40

Product Code **1 2 3**

Example of part number: DTS-AF-M8 / DTSN-PB-40

- For aluminum frame / For wall panel and sheet metal

DTS-AF

DTSN-AF

Part Number	M*1 (d) 3	Mass (g)
DTS-AF-**	M4 (5)	1590
	M5 (6)	
	M6 (7)	
	M8 (9)	
DTSN-AF-**	M4 (5)	1540
	M5 (6)	
	M6 (7)	
	M8 (9)	

Unit : mm

*1: Mounting bolts are not provided.

- For aluminum frame end surface mounting

DTS-AA

DTSN-AA

Part Number	B 3	Mass (g)
DTS-AA-40	40	1360
DTSN-AA-40	40	1310

Unit : mm

*1: Hex socket low head bolts (M8 x 16 mm) are provided.

- For Round Pipe

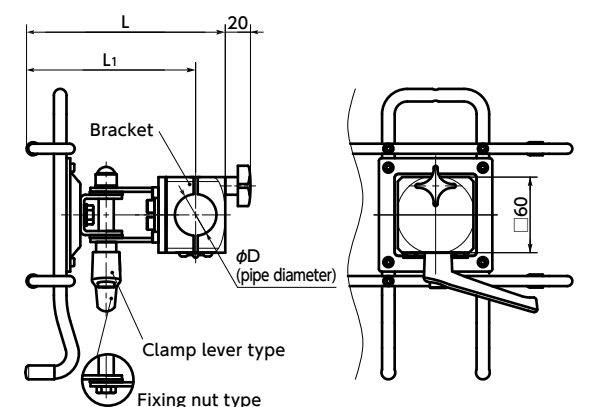
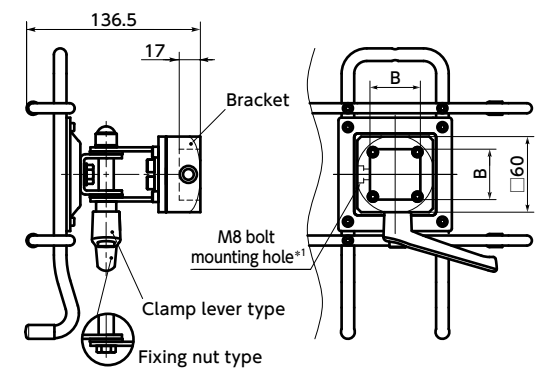
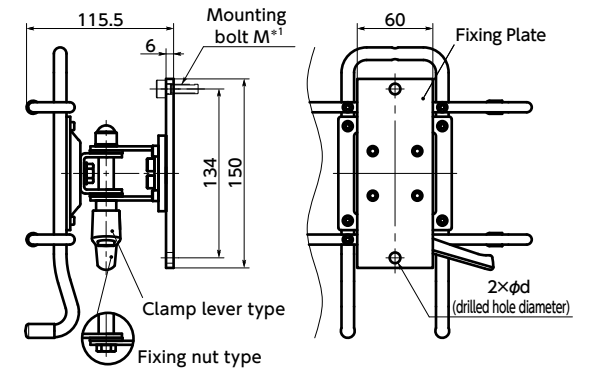
DTS-PB

DTSN-PB

Part Number	D 3	L ₁	L	Mass (g)
DTS-PB-**	28	133.5	157.5	1510
	30		157.5	1510
	34		157.5	1470
	40	137.5	165.5	1490
	42.7		165.5	1460
DTSN-PB-**	28	133.5	157.5	1460
	30		157.5	1460
	34		157.5	1420
	40	137.5	165.5	1440
	42.7		165.5	1410

Unit : mm

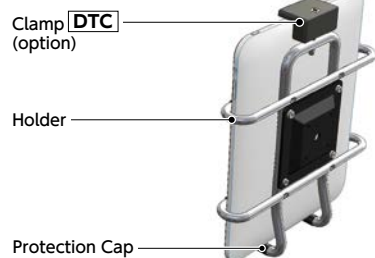
- Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ±0.5 mm.



DTR Tablet PC Mounting System - Fix Type

[WEB Selection Tool](#)
[CAD Download](#)
[Aluminum frame mount](#)
[wall/panel Mount](#)
[Aluminum frame edge mount](#)
[Pipe](#)

Structure



Material/Finish

RoHS2 Compliant

	DTR-AF	DTR-AA / DTR-PB
Holder	SS400 Chrome Plating	
Protection Cap	Flexible PVC (lead-free)	
Fixing Plate	SS400 Electrostatic Coating	—
Bracket	—	A6063 Alumite Treatment

Option

- By using the optional **DTC**, a tablet PC can be completely fixed.
- For cases where bringing out the tablet PC is prohibited.

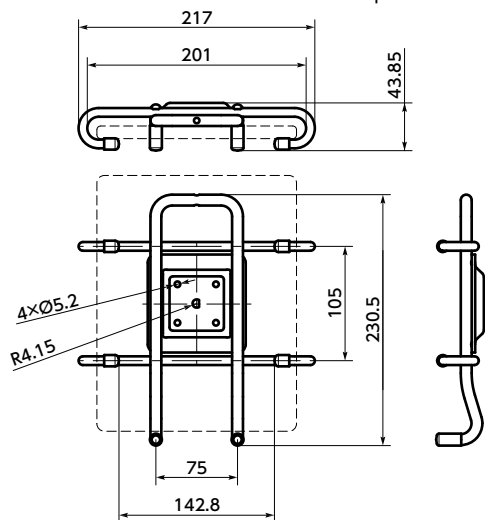
Part Number	Mass (g)
DTC	70

Material/Finish

RoHS2 Compliant

	DTC
Clamp	AC4C-F Electrostatic Coating
Clamping Screw	SUSXM7

- The holder bracket alone can be purchased.



Part Number	Mass (g)
DTR	780



- Tablet PC fixing parts compatible with iPad*1.
*1: iPad is a trademark of Apple Inc. Compatible with iPad2 / New iPad.
- This fixes a tablet PC to a production facility or test device. Tablet PC can be mounted / unmounted easily just by inserting / removing it.
- Robust design. It has a high durability.
- A type to fix the holder completely.
- For counterpart, three types of Mounting System for Display are available. **DTR-AF** For aluminum frame / For wall panel and sheet metal **DTR-AA** For aluminum frame end mounting **DTR-PB** For round pipe
- This is suitable for checking the tablet PC screen while both hands are in use.
- The holder alone can be purchased.

- We also produce Mounting System for Display of special specifications compatible with tablet PCs of various sizes.

→ P.367



Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

- Part number specification

DTR-AA-40

Product Code **DTR-AA-40**

Example of part number: DTR-AF-M8 / DTR-PB-42.7

- For aluminum frame / For wall panel and sheet metal

DTR-AF



Part Number	M*1 (d)	Mass (g)
DTR-AF-**	M4 (5) M5 (6) M6 (7) M8 (9)	1190

Unit : mm

*1: Mounting bolts are not provided.

- For aluminum frame end surface mounting

DTR-AA



Part Number	B	Mass (g)
DTR-AA-40	40	960

Unit : mm

*1: Hex socket low head bolts (M8 x 16 mm) are provided.

- For Round Pipe

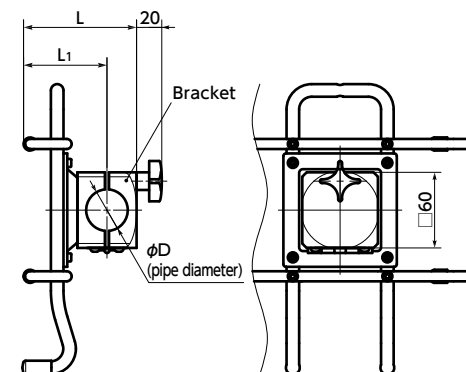
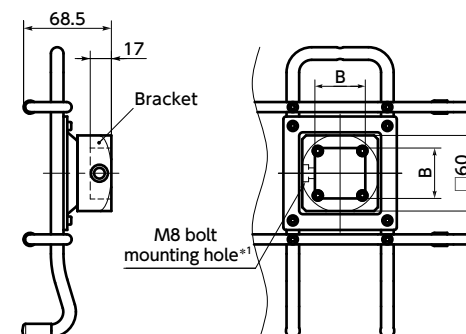
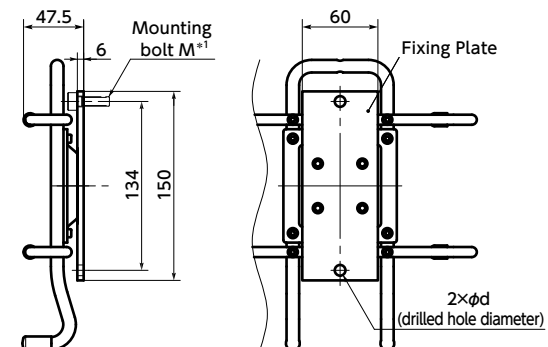
DTR-PB



Part Number	D	L1	L	Mass (g)
DTR-PB-**	28 30 34 40 42.7	65.5 69.5	89.5 97.5	1110 1110 1070 1090 1060

Unit : mm

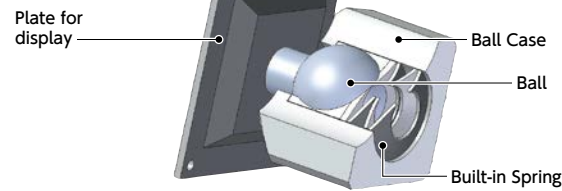
- Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ±0.5 mm.



DFT Display Mounting System - 360°rotation Type - Spring Retention

WEB Selection Tool WEB CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe Comply with VESA standard

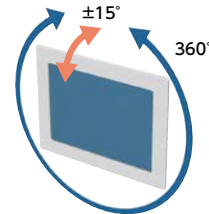
Structure



Retention torque

Product code	Retention Torque	Reference Force
DFTH	20 N·m	Even in an environment subject to vibration, etc., the display can hardly deviate.
DFTM	15 N·m	Middle to low torque type and high torque type.
DFTL	10 N·m	Can move with torque equivalent to that for household / office PC displays.

- The display can be tilted by $\pm 15^\circ$ to any direction. The display can also be rotated.



- The built-in spring serves to retain the display. Tightening after adjustment is not necessary.
- For counterpart, three types of Mounting System for Display are available.
 - For aluminum frame / For wall panel and sheet metal — **DFT-AF**
 - For aluminum frame end mounting — **DFT-AA**
 - For round pipe — **DFT-PB**

Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Material/Finish

RoHS2 Compliant

	DFT-AF	DFT-AA / DFT-PB
Plate for display	SPHC Cation Painting	
Ball Case	A6063 Alumite Treatment	
Ball	S45C Trivalent Chromate Treatment	
Built-in Spring	Spring Steel	
Fixing Plate	SS400 Electrostatic Coating	—
Bracket	—	A6063 Alumite Treatment

Related Products

Pulls to make it smooth to adjust the display angle **DPU** is available.
→ P.368



A display mounting system of 360° rotation type that tightens the fixing bolts to retain the angle **DFK** is available.
→ P.357



Part number specification

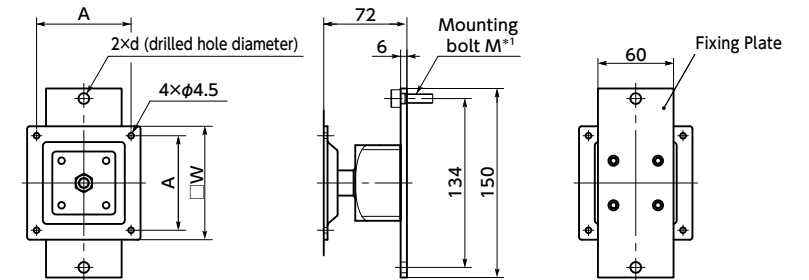
DFT M-75-AA-40

Product Code 1 2 3 4

Example of part number: DFTL-100-AF-M8 / DFTH-75-PB-40

- For aluminum frame / For wall panel and sheet metal

DFT-AF



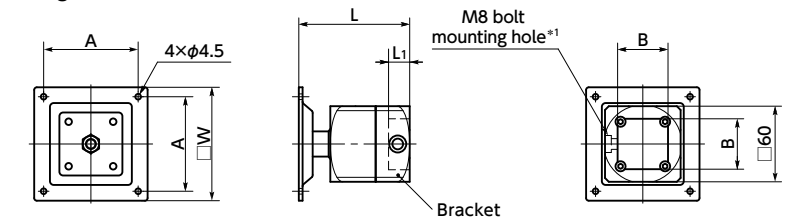
Unit : mm

Part Number	A	M*1 (d)	W	Mass (g)	Max. loading mass
DFT*-75-AF-**-	75	M4 (5) M5 (6) M6 (7) M8 (9)	90	1300	10kg
DFT*-100-AF-**-	100	M4 (5) M5 (6) M6 (7) M8 (9)	115	1400	10kg

*1: Mounting bolts are not provided.

- For aluminum frame end surface mounting

DFT-AA



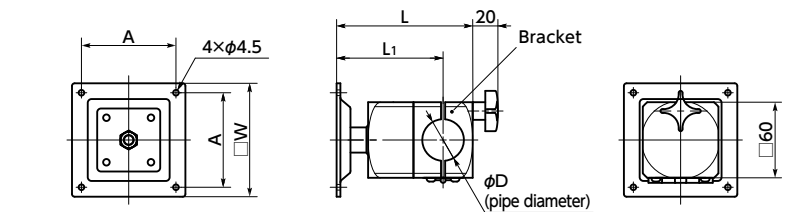
Unit : mm

Part Number	A	B	W	L1	L	Mass (g)	Max. loading mass
DFT*-75-AA-40	75	40	90	17	93	1070	10kg
DFT*-100-AA-40	100	40	115	17	93	1170	10kg

*1: Hex socket low head bolts (M8 x 16 mm) are provided.

- For Round Pipe

DFT-PB



Unit : mm

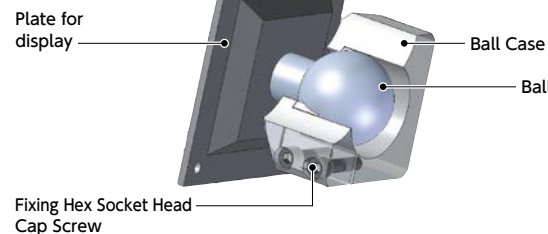
Part Number	A 	D 			W	L ₁	L	Mass (g)	Max. loading mass
DFT *-75-PB- **	75	28	30	34	90	90	114	1210 - 1220	10kg
		40	42.7		90	94	122	1200	10kg
DFT *-100-PB- **	100	28	30	34	115	90	114	1310 - 1320	10kg
		40	42.7		115	94	122	1300	10kg

* Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ± 0.5 mm.

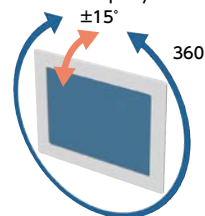
DFK Display Mounting System - 360°rotation Type - Bolt Retention

WEB Selection Tool WEB CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe Comply with VESA standard

Structure



- The display can be tilted by $\pm 15^\circ$ to any direction. The display can also be rotated.



- By tightening the fixing hex socket head cap screw, securely retain the angle after adjustment.
- For counterpart, three types of Mounting System for Display are available. 
 - For aluminum frame / For wall panel and sheet metal — **DFK-AF**
 - For aluminum frame end mounting — **DFK-AA**
 - For round pipe — **DFK-PB**

Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Material/Finish



	DFK-AF	DFK-AA / DFK-PB
Plate for display	SPHC Cation Painting	
Ball Case	A6063 Alumite Treatment	
Ball	S45C Trivalent Chromate Treatment	
Fixing Hex Socket Head Cap Screw (M5 x 16 mm)	SCM435 Ferrosoferric Oxide Film	
Fixing Plate	SS400 Electrostatic Coating	—
Bracket	—	A6063 Alumite Treatment

Related Products

Pulls to make it smooth to adjust the display angle **DPU** is available.  P.368



A display mounting system of 360° rotation type that can retain without bolt tightening **DFT** is available.  P.355



Part number specification

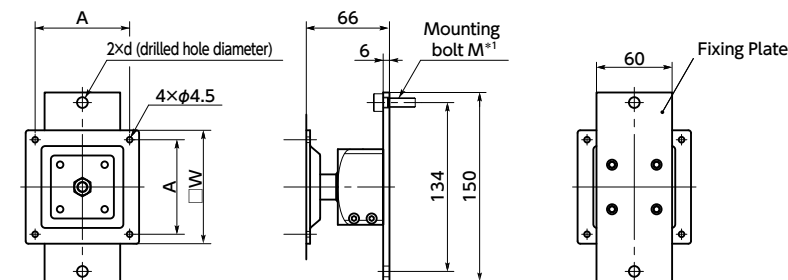
DFK - 75 - AA - 40

Product Code   

Example of part number: DFK-100-AF-M8 / DFK-75-PB-40

For aluminum frame / For wall panel and sheet metal

DFK-AF



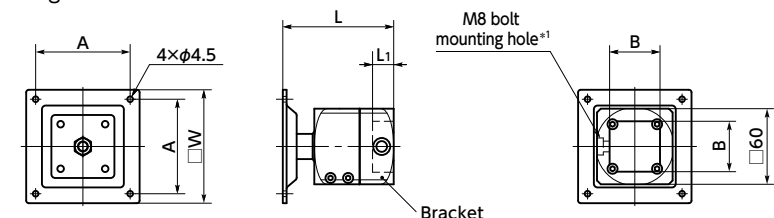
Unit : mm

Part Number	A 	M*1 (d) 	W	Mass (g)	Max. loading mass
DFK-75-AF-*	75	M4 (5) M5 (6) M6 (7) M8 (9)	90	1130	10kg
DFK-100-AF-*	100	M4 (5) M5 (6) M6 (7) M8 (9)	115	1230	10kg

*1 : Mounting bolts are not provided.

For aluminum frame end surface mounting

DFK-AA



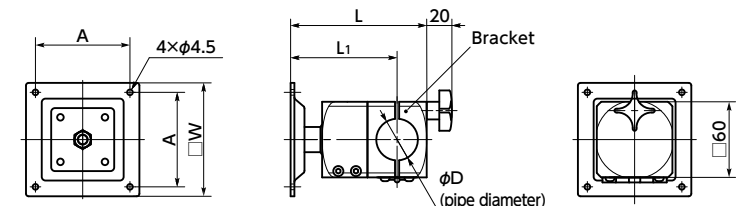
Unit : mm

Part Number	A 	B 	W	L1	L	Mass (g)	Max. loading mass
DFK-75-AA-40	75	40	90	17	87	900	10kg
DFK-100-AA-40	100	40	115	17	87	1000	10kg

*1 : Hex socket low head bolts (M8 x 16 mm) are provided.

For Round Pipe

DFK-PB



Unit : mm

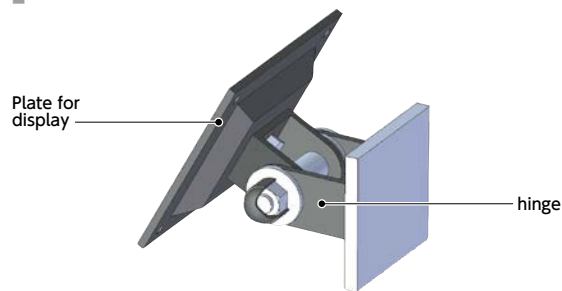
Part Number	A 	D 			W	L ₁	L	Mass (g)	Max. loading mass
DFK-75-PB-**	75	28	30	34	90	84	108	1010 - 1050	10kg
		40	42.7		90	88	116	1000 - 1030	10kg
DFK-100-PB-**	100	28	30	34	115	84	108	1110 - 1150	10kg
		40	42.7		115	88	116	1100 - 1130	10kg

Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ± 0.5 mm.

DFS/DFSN Display Mounting System - Single Axis Type

WEB Selection Tool CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe Comply with VESA standard

Structure



Material/Finish

RoHS2 Compliant

	DFS-AF	DFS-AA	DFS-PB	DFSN-AF	DFSN-AA	DFSN-PB
Display Plate	SPHC	Cation Painting				
hinge	SS400	Electrostatic Coating				
Clamp Lever	Nylon 6					
Hex Nut	-	-		SS400	Trivalent Chromate Treatment	
Fixing Plate	SS400	Electrostatic Coating		SS400	Electrostatic Coating	
Bracket	-	A6063	Alumite Treatment	-	A6063	Alumite Treatment

Max. load weight

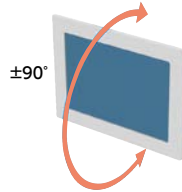
Product code	Max. load weight
DFS	6 kg
DFSN	10 kg

Related Products

Pulls to make it smooth to adjust the display angle **DPU** is available.
→ P.368



- The display can be tilted by $\pm 90^\circ$ to the single axis direction.



- By tightening the clamp lever or hex nut, securely retain the angle after adjustment. **1**

Clamp lever type — **DFS**
Hex nut type — **DFSN**

- For counterpart, three types of Mounting System for Display are available. **3**

For aluminum frame /
For wall panel and sheet metal — **DFS*-AF**
For aluminum frame end mounting **DFS*-AA**
For round pipe — **DFS*-PB**

Application

Machine tool / Medical equipment / FPD production device /
Semiconductor manufacturing device / Packing machine / Food machinery

Part number specification

DFS N-75-AA-40

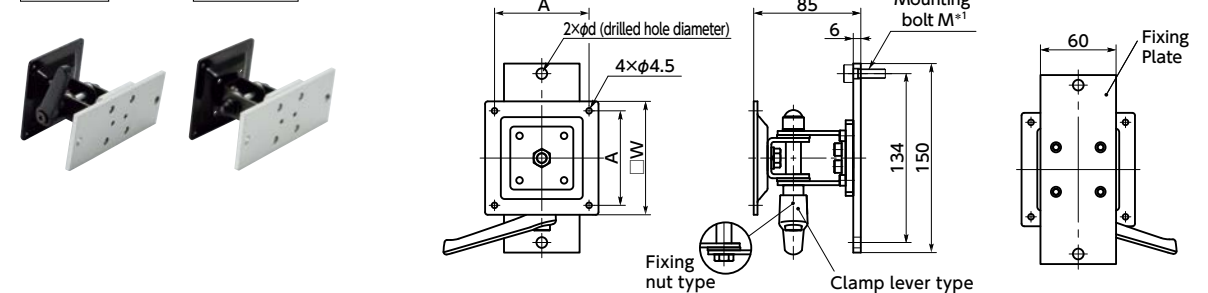
Product Code **1 2 3 4**

Example of part number: DFS-100-AF-M8 / DFSN-75-PB-40

- For aluminum frame / For wall panel and sheet metal

DFS-AF

DFSN-AF



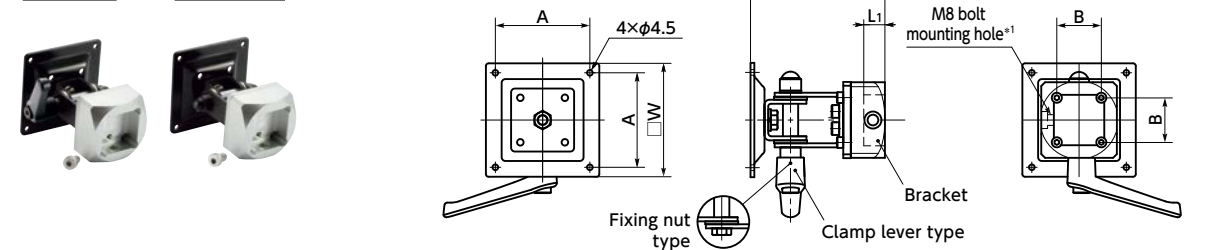
Part Number	Part Number	A 2	M*1 (d) 4	W	Mass (g)
DFS-75-A-**-	DFSN-75-AF-**-	75	M4 (5) M5 (6) M6 (7) M8 (9)	90	980 - 1030
DFS-100-AF-**-	DFSN-100-AF-**-	100	M4 (5) M5 (6) M6 (7) M8 (9)	115	1080 - 1130

*1: Mounting bolts are not provided.

- For aluminum frame end surface mounting

DFS-AA

DFSN-AA



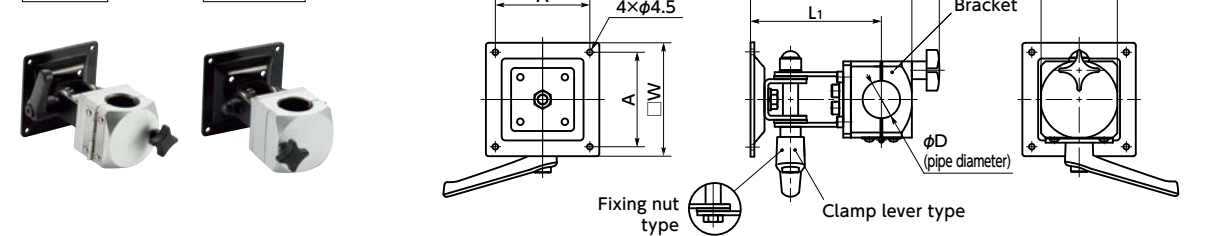
Part Number	Part Number	A 2	B 4	W	L1	L	Mass (g)
DFS-75-AA-40	DFSN-75-AA-40	75	40	90	17	106	800
DFS-100-AA-40	DFSN-100-AA-40	100	40	115	17	106	900

*1: Hex socket low head bolts (M8 x 16 mm) are provided.

- For Round Pipe

DFS-PB

DFSN-PB



Part Number	Part Number	A 2	D 4	W	L1	L	Mass (g)
DFS-75-PB-**-	DFSN-75-PB-**-	75	28 40 30 42.7 34	90 90	103 107	127 135	860 - 950 850 - 930
DFS-100-PB-**-	DFSN-100-PB-**-	100	28 40 30 42.7 34	115 115	103 107	127 135	960 - 1050 950 - 1030

- Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ± 0.5 mm.

DFR Display Mounting System - Fix Type

WEB Selection Tool CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe Comply with VESA standard

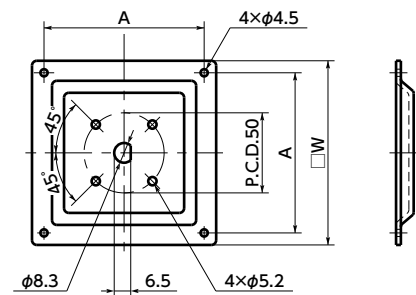
Structure

Plate for display

Material/Finish

	DFR-AF	DFR-AA / DFR-PB
Plate for display	SPHC Cation Painting	
Fixing Plate	SS400 Electrostatic Coating	—
Bracket	—	A6063 Alumite Treatment

- The plate for display alone can be purchased.
DFR



Part Number	A	W	Mass (g)	Max. loading mass
DFR-75	75	90	220	10kg
DFR-100	100	115	320	10kg

- A type to fix the display completely.
- For counterpart, three types of Mounting System for Display are available. **2**
 - For aluminum frame / For wall panel and sheet metal — **DFR-AF**
 - For aluminum frame end mounting **DFR-AA**
 - For round pipe — **DFR-PB**
- The plate for display alone can be purchased separately.

Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Part number specification

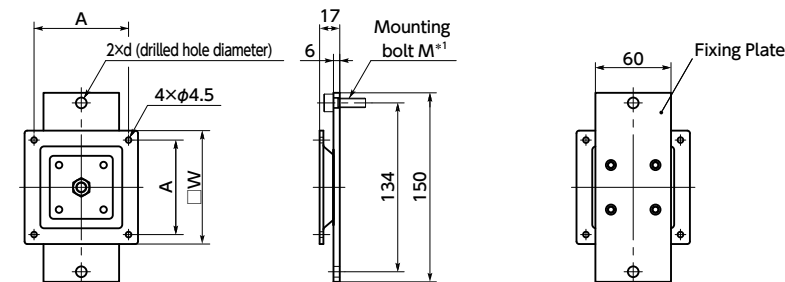
DFR 75-AA-40

Product Code **1** **2** **3**

Example of part number: DFR-100-AF-M8 / DFR-75-PB-40

For aluminum frame / For wall panel and sheet metal

DFR-AF

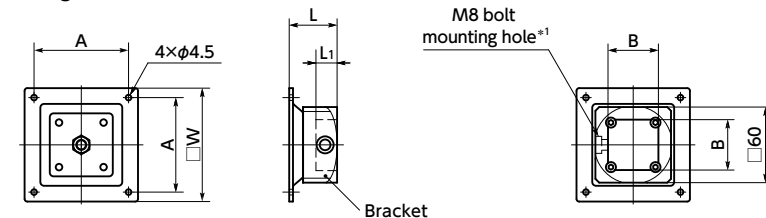


Part Number	A 1	M*1 (d) 3	W	Mass (g)	Max. loading mass
DFR-75-AF-**	75	M4 (5) M5 (6) M6 (7) M8 (9)	90	630	10kg
DFR-100-AF-**	100	M4 (5) M5 (6) M6 (7) M8 (9)	115	735	10kg

*1: Mounting bolts are not provided.

For aluminum frame end surface mounting

DFR-AA

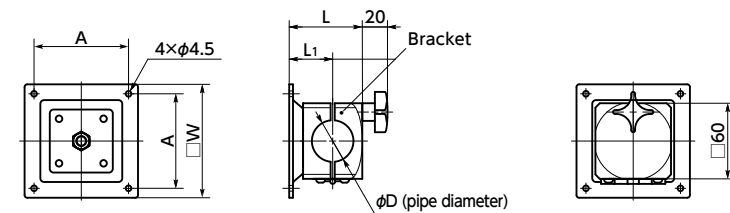


Part Number	A 1	B 3	W	L1	L	Mass (g)	Max. loading mass
DFR-75-AA-40	75	40	90	17	38	400	10kg
DFR-100-AA-40	100	40	115	17	38	505	10kg

*1: Hex socket low head bolts (M8 x 16 mm) are provided.

For Round Pipe

DFR-PB



Unit : mm

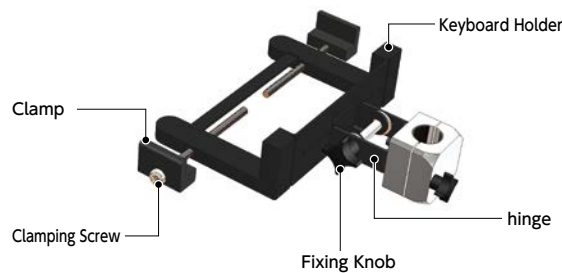
Part Number	A 	D 			W	L ₁	L	Mass (g)	Max. loading mass
DFR-75-PB-***	75	28	30	34	90	35	59	510 - 550	10kg
		40	42.7		90	39	67	500 - 530	10kg
DFR-100-PB-***	100	28	30	34	115	35	59	610 - 650	10kg
		40	42.7		115	39	67	600 - 630	10kg

• Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ±0.5 mm.

DKBR Keyboard Mounting System - Single Axis Type

WEB Selection Tool CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe

Structure

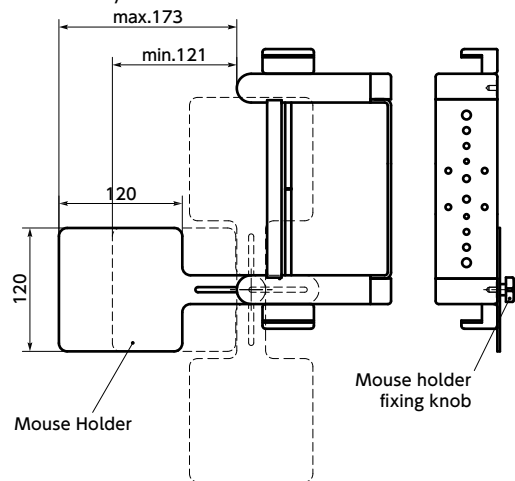


Material/Finish

	DKBR-AF	DKBR-AA / DKBR-PB
Keyboard Holder	AC4C-F Electrostatic Coating	
hinge	SPCC Electrostatic Coating	
Fixing Knob	Nylon 6	
Clamp	AC4C-F Electrostatic Coating	
Clamping Screw	SCM435 Trivalent Chromate Treatment	
Mounting Plate	SPCC Electrostatic Coating	
Bracket		A6063 Alumite Treatment

Option

- A mouse holder **DKM** is available as an option.
- This may be mounted on either side.



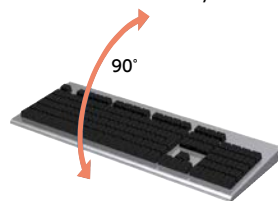
Part Number	Mass (g)
DKM	310

Material/Finish

	DKM
Mouse Holder	SPCC Cation Painting
Mouse Holder Fixing Knob	Nylon 6



- Keyboard mounting system of the single axis type.
- By tightening the clamping screw, the keyboard is securely fixed and prevent from falling.
- B5 size laptops and 500 mm wide keyboard can be loaded.
- For counterpart, three types of Mounting System for Display are available. **DKBR-AF** For aluminum frame / For wall panel and sheet metal **DKBR-AA** For aluminum frame end mounting **DKBR-PB** For round pipe
- Clamp screws of two sizes (Phillips cross recessed pan head machine screws) are supplied.
M6 x 40: Used when the keyboard width is 256 mm to 280 mm.
M6 x 140: Used when the keyboard width is 280 mm to 500 mm.
- It can be tilted by 90° in upward direction.



Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Related Products

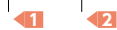
Fix type keyboard mounting system **DKB** is available.
➔ P.365



Part number specification

DKBR-500-AA-40

Product Code



Example of part number: DKBR-500-AF-M8 / DKBR-500-PB-42.7

- For aluminum frame / For wall panel and sheet metal

DKBR-AF



Part Number	M*1 (d)	Mass (g)
DKBR-500-AF-**	M4 (5) M5 (6) M6 (7) M8 (9)	1410

*1 : Mounting bolts are not provided.

- For aluminum frame end surface mounting

DKBR-AA



Part Number	B	Mass (g)
DKBR-500-AA-40	40	1180

- Hex socket low head bolts (M8 x 16 mm) are provided.

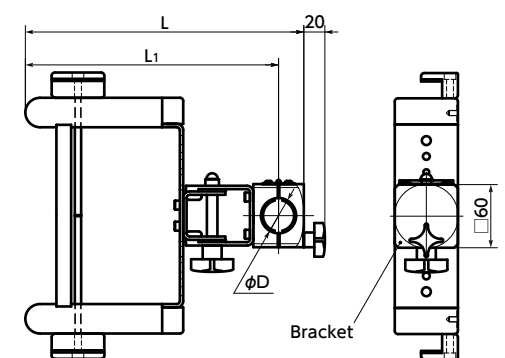
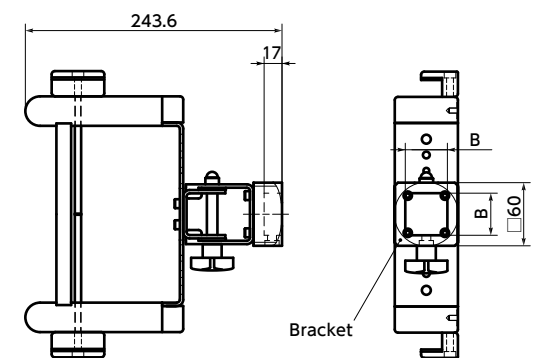
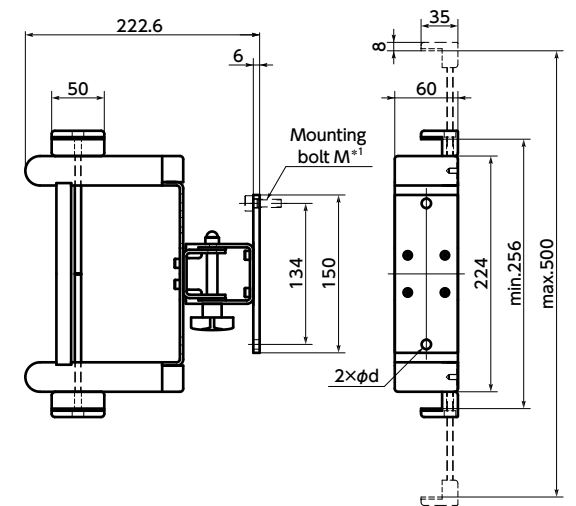
- For Round Pipe

DKBR-PB



Part Number	D	L1	L	Mass (g)
DKBR-500-PB-**	28 30 34 40 42.7	240.6 244.6	264.6 272.6	1330 1330 1320 1310 1305

- Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ±0.5 mm.

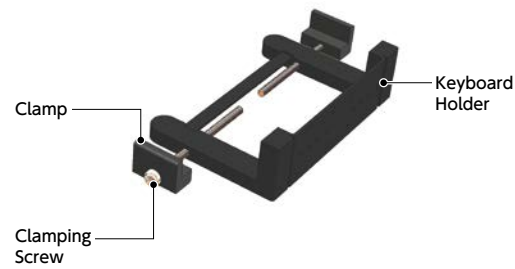




DKB Keyboard Mounting System - Fix Type

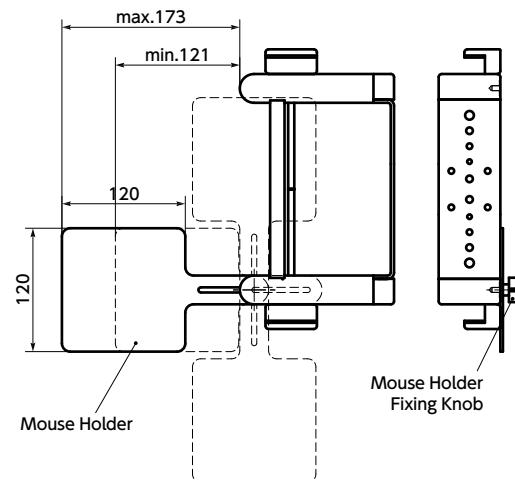
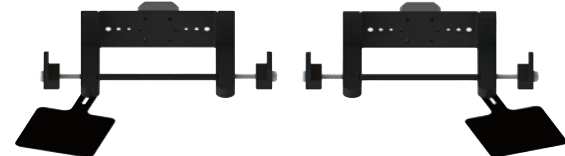
WEB Selection Tool CAD Download Aluminum frame mount wall/panel Mount Aluminum frame edge mount Pipe

Structure



	DKB	DKB-AA / DKB-PB
Keyboard Holder	AC4C-F Electrostatic Coating	
Clamp	AC4C-F Electrostatic Coating	
Clamping Screw	SCM435 Trivalent Chromate Treatment	
Bracket	—	A6063 Alumite Treatment

- **Option**
- A mouse holder **DKM** is available as an option.
- This may be mounted on either side.



Part Number	Mass (g)
DKM	310

	DKM
Mouse Holder	SPCC Cation Painting
Mouse Holder Fixing Knob	Nylon 6



- The keyboard can be completely fixed to the counterpart.
- By tightening the clamping screw, the keyboard is securely fixed and prevent from falling.
- B5 size laptops and 500 mm wide keyboard can be loaded.
- For counterpart, three types of Mounting System for Display are available. **DKB**
For aluminum frame /
For wall panel and sheet metal — **DKB**
For aluminum frame end mounting **DKB-AA**
For round pipe — **DKB-PB**
- Clamp screws of two sizes (Phillips cross recessed pan head machine screws) are supplied.
M6 x 40: Used when the keyboard width is 256 mm to 280 mm.
M6 x 140: Used when the keyboard width is 280 mm to 500 mm.

Application

Machine tool / Medical equipment / FPD production device / Semiconductor manufacturing device / Packing machine / Food machinery

Related Products

Single axis type keyboard fixing part **DKBR** is available.
→ P.363



Part number specification

DKB-500-AA-40

Product Code **1 2**

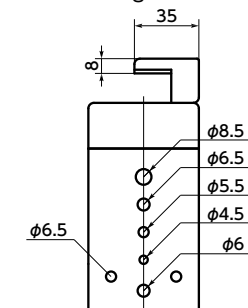
Example of part number: DKB-500 / DKB-500-PB-42.7

- For aluminum frame / For wall panel and sheet metal

DKB



Mounting hole details



Part Number	Mass (g)
DKB-500	800

- For aluminum frame end surface mounting

DKB-AA



Part Number	B 2	Mass (g)
DKB-500-AA-40	40	970

- Hex socket low head bolts (M8 x 16 mm) are provided.

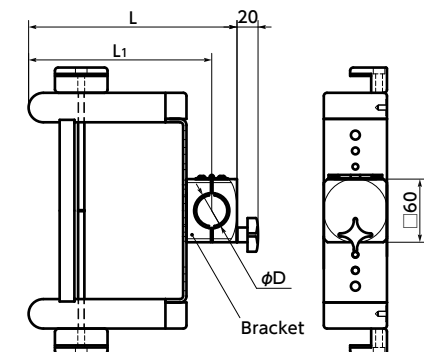
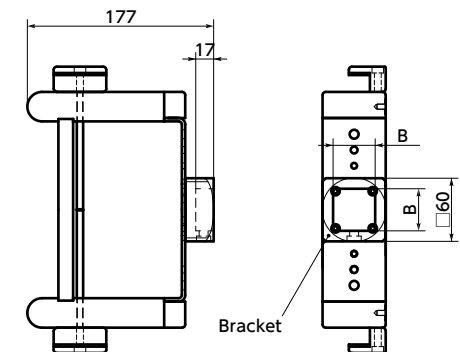
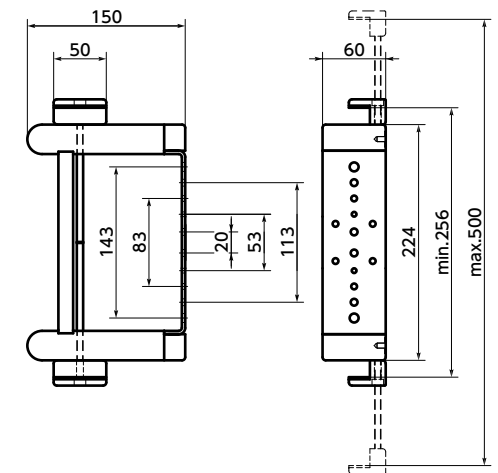
- For Round Pipe

DKB-PB



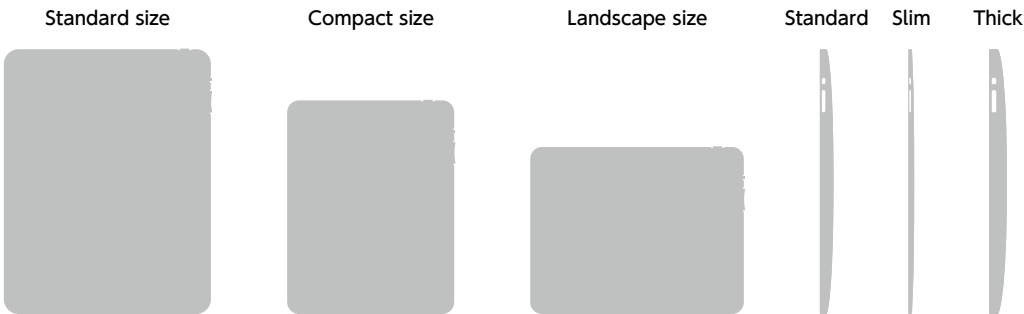
Part Number	D 2	L ₁	L	Mass (g)
DKB-500-PB-**2	28			1130
	30	174	198	1130
	34			1120
	40			1110
	42.7	178	206	1105

- Fixing rubber sheet is attached. Dimensional allowance of available round pipe is ±0.5 mm.



Special specifications

- Mounting System for Tablet PC is compatible for New iPad* and tablet PCs of various brands.
- Please contact our Customer Service with your tablet PC model number or external dimensions.



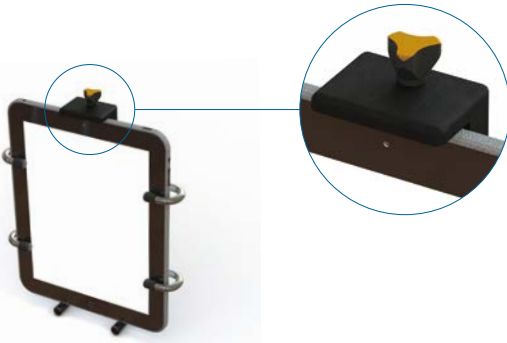
* iPad is a trademark of Apple Inc.

- We realize customer's idea.

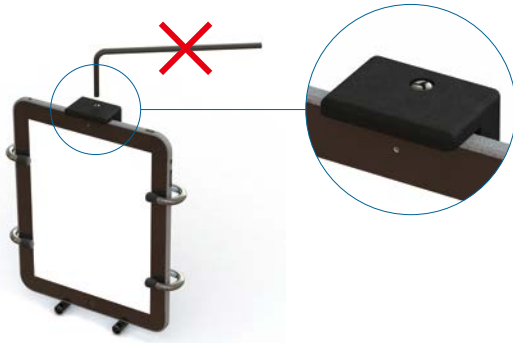
For example, the hex socket head cap screw of the clamp for tablet PC fixing part **DTT** is...



>> changed to a knob
No tool is needed.
For cases where it is mounted and removed frequently.

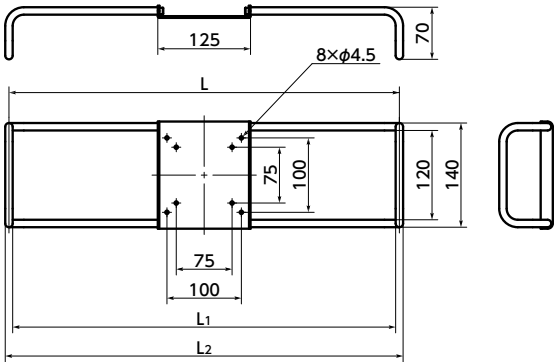


>> changed to tamper-resistance measures
It cannot be mounted or removed by normal tools.
For thorough anti-theft and secrecy measures.

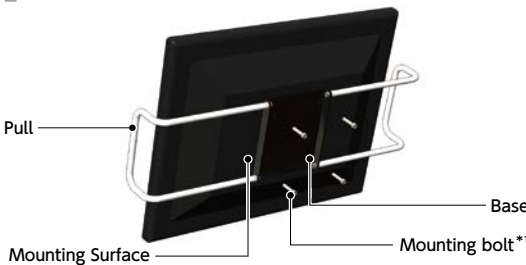


DPU Pulls for Display Angle Operations

WEB Selection Tool WEB CAD Download Comply with VESA standard



Structure



- Pulls for display angle operations.
- The display takes less moment than normally. The angle can be adjusted without worrying about display damages.
- Chrome plating for beautiful finishing.
- The mounting holes conform to VESA standards. Either of 75 mm x 75 mm and 100 mm x 100 mm can be used.



Material/Finish		RoHS2 Compliant
Pull	SS400 Chrome Plating	
Base	SPHC Cationic Electrodeposition	
Hex Socket Head Cap Screw (M5 x 10 mm)	SUSXM7	

* 1 : Mounting bolts are not supplied.

⚠ Precautions for Use
Confirm that the display mounting surface is entirely level. If it is not, the **DPU** may not be mountable.

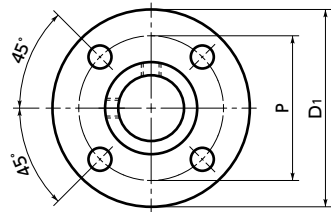
Part Number	Unit : mm				Mass (g)
	L 1	L1	L2		
DPU-525	525	515	535		1145
DPU-605	605	595	615		1245

- Part number specification

DPU-525
Product Code 1

DPH Pipe Holder

WEB Selection Tool WEB CAD Download



- For round pipe fixing.
- We also produce products of special specifications, e.g. materials, dimensions and surface treatment. Please feel free to contact our customer service.

Material/Finish		RoHS2 Compliant
DPH		
Main body	S45C Electroless Nickel Plating	

Unit : mm										
Part Number	d 1	D	D1	H	T	P	C	h	M	Mass (g)
DPH-30-R	30	38	66	38	10	52	6.6	24	M6	295
DPH-40-R	40	48	76	38	10	62	6.6	24	M6	360

- All products are provided with hex socket set screw.

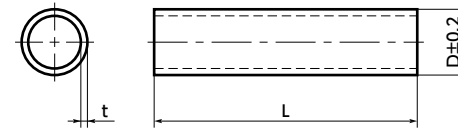
- Part number specification

DPH-30-R
Product Code 1 For Round Pipe



DAP Round Pipe - Standard Type

WEB Selection Tool WEB CAD Download



- Aluminum Alloy Round Pipe.
- Wiring for the display can be let through the pipe. This prevents the wiring from getting caught during operations.
- We also produce products of special specifications, e.g. length and surface treatment. Please feel free to contact us.

Material/Finish		RoHS2 Compliant
DAP		
Main body	A6063 Alumite Treatment	

Unit : mm				
Part Number	D 1	L 2	t	Mass (g)
DAP-30-300	30	300	2	150
DAP-30-350	30	350	2	175
DAP-30-400	30	400	2	200
DAP-30-450	30	450	2	225
DAP-30-500	30	500	2	250
DAP-40-300	40	300	3	300
DAP-40-350	40	350	3	350
DAP-40-400	40	400	3	400
DAP-40-450	40	450	3	450
DAP-40-500	40	500	3	500

- Usage example



- Part number specification

DAP-30-300
Product Code 1 2



Set Collars/Cross Clampers

• Cross Clamper

Product Code	FCCA/FCCS	FCCA-C/FCCS-C	FCFA/FCFS	FCTA-C/FCTS-C
Page	P.372	P.373	P.374	P.375
Shape	 Stainless Steel	 Stainless Steel	 Stainless Steel	 Stainless Steel
Type	Orthogonal	Orthogonal	Angle Adjustment	T-shaped
Fixing Method	Set Screw	Clamping	One-side clamping	Clamping
Applicable Shaft	Round Shaft • Square Shaft	Round Shaft • Square Shaft	Round Shaft • Square Shaft	Round Shaft • Square Shaft

• Set Collar (Standard)

Product Code	NSC	NSCS	NSCSS
Page	P.377	P.379	P.381
Shape	 Stainless Steel	 Stainless Steel	 Stainless Steel
Type	Set Screw	Clamping	Split
Bore Diameter	φ3 - φ50	φ3 - φ50	φ3 - φ50

• Set Collar (For Securing Bearings)

Product Code	NSC	NSC	NSCS	NSCS
Page	P.385	P.387	P.389	P.391
Shape	 Stainless Steel	 Stainless Steel	 Stainless Steel	 Stainless Steel
Type	Set Screw	Set Screw	Clamping	Clamping
Bore Diameter	φ3 - φ40	φ3 - φ40	φ3 - φ40	φ3 - φ40

• Cross Bracket

Product Code	FBCA-C/FBCS-C
Page	P.376
Shape	 Stainless Steel
Type	Side Mounting
Fixing method	Clamping
Applicable Shaft	Round Shaft • Square Shaft

• Set Collar (with Mounting Hole)

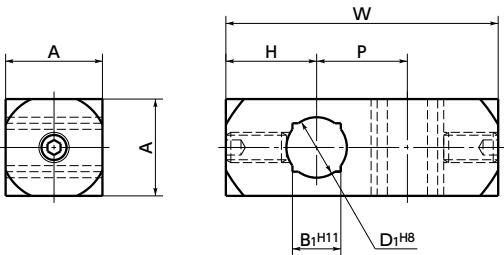
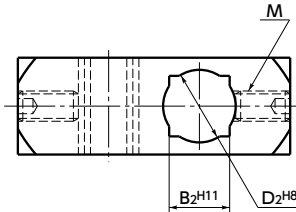
Product Code	NSC	NSCS
Page	P.383	P.384
Shape	 Stainless Steel	 Stainless Steel
Type	Set Screw	Clamping
bore diameter	φ3 - φ50	φ6 - φ50

FCCA / FCCS

Cross Clamper - Set Screw Type



WEB Selection Tool CAD Download SUS Stainless steel



• Material/Finish

	FCCA Made of Aluminum	FCCS Made of Stainless Steel
Main body	A6063 Barrel Polishing	SUS304 Barrel Polishing
Hex Socket Set Screw	SUSXM7	SUSXM7

RoHS2 Compliant

Part Number	Mass (g)	Part Number	Mass (g)	D1	D2	B1	B2	A	W	P	H	M (coarse)
FCCA-8-8	9	FCCS-8-8	27	8	8			12	32	10	11	M4
FCCA-8-10	16	FCCS-8-10	48	8	10		8	14	40	12	14	M4
FCCA-10-10	15	FCCS-10-10	45	10	10	8	8	14	40	12	14	M4
FCCA-10-12	23	FCCS-10-12	68	10	12	8	10	16	45	15	15	M5
FCCA-12-12	21	FCCS-12-12	63	12	12	10	10	16	45	15	15	M5
FCCA-10-15	41	FCCS-10-15	120	10	15	8	12	19	55	19	18	M5
FCCA-12-15	39	FCCS-12-15	115	12	15	10	12	19	55	19	18	M5
FCCA-15-15	35	FCCS-15-15	105	15	15	12	12	19	55	19	18	M5
FCCA-12-20	79	FCCS-12-20	235	12	20	10	16	25	64	24	20	M6
FCCA-15-20	75	FCCS-15-20	222	15	20	12	16	25	64	24	20	M6
FCCA-20-20	66	FCCS-20-20	194	20	20	16	16	25	64	24	20	M6

• Usage example

In combination with plastic clamp lever **LEMS** (→ P.271) and scale sticker **FSS** (→ P.429).



• Part number specification

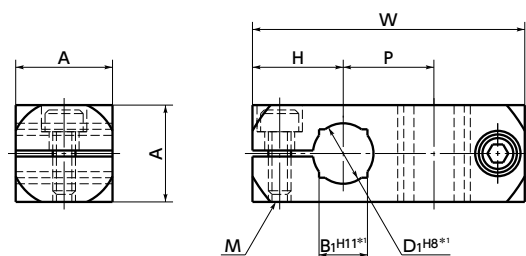
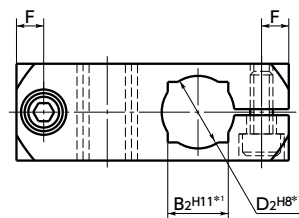
FCCA-10-15



Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Not Available	Please feel free to contact us	Available / Add'l charge

FCCA-C / FCCS-C Cross Clamper - Clamping Type *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel



*1: Dimensional allowance before slit machining.

● Material/Finish



	FCCA-C Made of Aluminum	FCCS-C Made of Stainless Steel
Main body	A6063 Barrel Polishing	SUS304 Barrel Polishing
Hex Socket Head Cap Screw	SUSXM7	SUSXM7 Molybdenum Disulfide Coating

Part Number Aluminum	Mass (g)	Part Number Stainless steel	Mass (g)	D1*1	D2*1	B1*1	B2*1	A	W	P	H	F	M (Coarse)
FCCA-8-8-C	9	FCCS-8-8-C	26	8	8			12	32	10	11	4	M3
FCCA-8-10-C	16	FCCS-8-10-C	46	8	10		8	14	40	12	14	4.5	M4
FCCA-10-10-C	15	FCCS-10-10-C	43	10	10	8	8	14	40	12	14	4.5	M4
FCCA-10-12-C	22	FCCS-10-12-C	65	10	12	8	10	16	45	15	15	4.5	M4
FCCA-12-12-C	21	FCCS-12-12-C	61	12	12	10	10	16	45	15	15	4.5	M4
FCCA-10-15-C	39	FCCS-10-15-C	116	10	15	8	12	19	55	19	18	5.5	M5
FCCA-12-15-C	38	FCCS-12-15-C	111	12	15	10	12	19	55	19	18	5.5	M5
FCCA-15-15-C	34	FCCS-15-15-C	102	15	15	12	12	19	55	19	18	5.5	M5
FCCA-12-20-C	77	FCCS-12-20-C	229	12	20	10	16	25	64	24	20	5.5	M5
FCCA-15-20-C	73	FCCS-15-20-C	217	15	20	12	16	25	64	24	20	5.5	M5
FCCA-20-20-C	64	FCCS-20-20-C	190	20	20	16	16	25	64	24	20	5.5	M5

*1: Dimensional allowance before slit machining.

● Usage example



● Part number specification

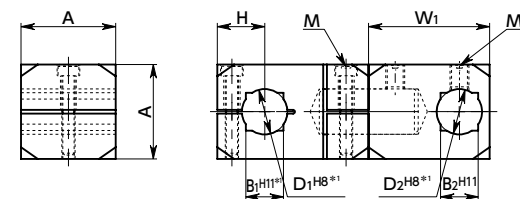
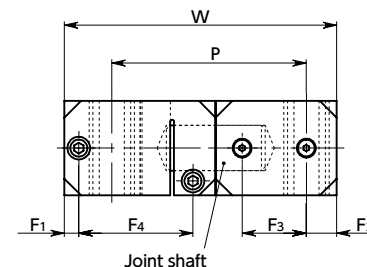
FCCS-10-15-C

Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

Available / Add'l charge Not Available Please feel free to contact us Available / Add'l charge

FCFA / FCFS Free Cross Clamper *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel



*1: Dimensional allowance before slit machining.



- A clamper that joints 2 shafts at any angle.
- Clamping type for one side. Mounting shaft, removing shaft and angle adjustment are easy. Moreover this does not scratch the shaft.
- Convenient for fixing of side guide and sensors of the conveyance line.
- Light aluminum and stainless steel with highly corrosion-resistant are standardized.
- Compatible with both round shaft and square shaft.
- All products are provided with hex socket head cap screw and hex socket set screw.

● Material/Finish



	FCFA Made of Aluminum	FCFS Made of Stainless Steel
Main body	A6063 Barrel Polishing	SUS304 Barrel Polishing
Hex Socket Head Cap Screw	SUSXM7	SUSXM7 Molybdenum Disulfide Coating
Hex Socket Set Screw	SUSXM7	SUSXM7
Joint shaft	SUS304	SUS304

Part Number Aluminum	Mass (g)	Part Number Stainless steel	Mass (g)	D1	D2	B1	B2	A	W	W1	P	H	F1	F4	F3	F2	M (coarse)	M1 (Coarse)
FCFA-8C-8	83	FCFS-8C-8	218	8	8			22	63	28	45	11	3.7	25.8	15	7	M3	M4
FCFA-10C-10	80	FCFS-10C-10	208	10	10	8	8	22	63	28	45	11	3.7	25.8	15	7	M3	M4
FCFA-12C-12	118	FCFS-12C-12	304	12	12	10	10	25	72	32	51.5	12.5	3.8	30.2	17	8	M3	M5
FCFA-15C-15	216	FCFS-15C-15	546	15	15	12	12	30	90	40	64.5	15.5	4.5	38.5	21	10	M4	M5
FCFA-20C-20	433	FCFS-20C-20	1086	20	20	16	16	38	113	50	80	20	5.5	48.5	27	13	M5	M5

- Usage example
For fixing sensor.



● Part number specification

FCFS-12C-12

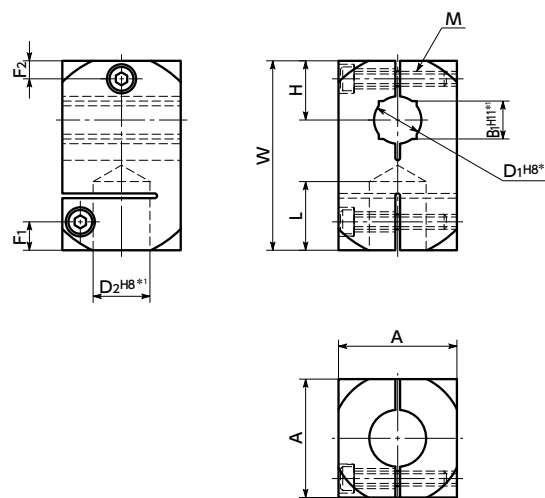
Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

Available / Add'l charge Not Available Please feel free to contact us Available / Add'l charge

FCTA-C / FCTS-C T - Cross Clamper



WEB Selection Tool CAD Download SUS Stainless steel



*1 : Dimensional allowance before slit machining.

FCTS-C



FCTA-C

- The clamper joints 2 shafts with T-shaped cross.
- Clamping Type. Mounting shaft and removing shaft are easy. Moreover this does not scratch the shaft.
- Space-saving layout is possible.
- Convenient for fixing of side guide and sensors of the conveyance line.
- Light aluminum and stainless steel with highly corrosion-resistant are standardized.
- Compatible with both round shaft and square shaft.
- All products are provided with hex socket head cap screw.

• Material/Finish

RoHS2 Compliant

	FCTA-C Made of Aluminum	FCTS-C Made of Stainless Steel
Main body	A6063 Barrel Polishing	SUS304 Barrel Polishing
Hex Socket Head Cap Screw	SUSXM7	SUSXM7 Molybdenum Disulfide Coating

Part Number 	Mass (g)	Part Number 	Mass (g)	D1	D2	B1*1	A	W	L	H	F1	F2	M (coarse)
FCTA-8-10-C	37	FCTS-8-10-C	111	8	10		22	35	12.5	11	5.5	3.7	M3
FCTA-10-10-C	36	FCTS-10-10-C	106	10	10	8	22	35	12.5	11	5.5	3.7	M3
FCTA-12-12-C	52	FCTS-12-12-C	154	12	12	10	25	40	14.5	12.5	6	3.8	M3
FCTA-15-15-C	93	FCTS-15-15-C	276	15	15	12	30	50	18	15.5	7	4.5	M4
FCTA-20-20-C	187	FCTS-20-20-C	553	20	20	16	38	63	21.5	20	9	5.5	M5

*1 : Dimensional allowance before slit machining.

• Part number specification

FCTA-15-15-C



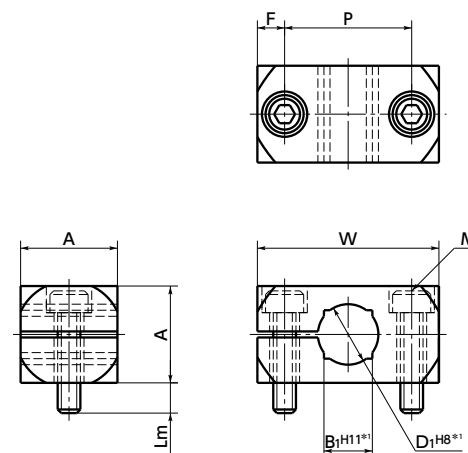
Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

Available / Add'l charge Not Available Please feel free to contact us Available / Add'l charge

FBCA-C / FBSC-C Cross Bracket



WEB Selection Tool CAD Download SUS Stainless steel



*1 : Dimensional allowance before slit machining.

• Material/Finish

RoHS2 Compliant

	FBCA-C Made of Aluminum	FBSC-C Made of Stainless Steel
Main body	A6063 Barrel Polishing	SUS304 Barrel Polishing
Hex Socket Head Cap Screw	SUSXM7	SUSXM7 Molybdenum Disulfide Coating

Part Number 	Mass (g)	Part Number 	Mass (g)	M (coarse)	D1	B1	A	W	P	F	Lm
FBCA-M4-10-C	18	FBSC-M4-10-C	55	M4	10	8	16	32	20	6	4.4
FBCA-M4-12-C	25	FBSC-M4-12-C	74	M4	12	10	19	32	20	6	5.4
FBCA-M5-10-C	19	FBSC-M5-10-C	55	M5	10	8	16	32	20	6	5.4
FBCA-M5-12-C	25	FBSC-M5-12-C	75	M5	12	10	19	32	20	6	6.4
FBCA-M6-10-C	38	FBSC-M6-10-C	111	M6	10	8	19	43	30	6.5	7.5
FBCA-M6-12-C	36	FBSC-M6-12-C	106	M6	12	10	19	43	30	6.5	7.5
FBCA-M6-15-C	45	FBSC-M6-15-C	135	M6	15	12	22	43	30	6.5	6.5
FBCA-M8-10-C	89	FBSC-M8-10-C	263	M8	10	8	25	56	40	8	8.6
FBCA-M8-12-C	87	FBSC-M8-12-C	256	M8	12	10	25	56	40	8	8.6
FBCA-M8-15-C	82	FBSC-M8-15-C	244	M8	15	12	25	56	40	8	8.6
FBCA-M8-20-C	110	FBSC-M8-20-C	327	M8	20	16	30	56	40	8	8.6

• Usage example

In combination with an aluminum frame.



• Part number specification

FBSC-M5-10-C

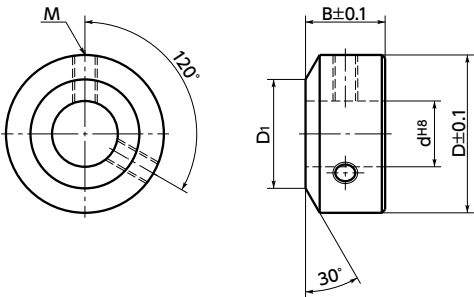


Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

Available / Add'l charge Not Available Please feel free to contact us Available / Add'l charge

NSC Set Collar - Set Screw Type

WEB Selection Tool CAD Download SUS Stainless steel



- Standard type set collar.
- It is attached to the shaft by the set screws.
- Chamfer on one side end face is larger (bore diameter 8 mm or above).
This avoids interference of the set collar with the external wheel when the bearing is fixed.

● Material/Finish RoHS2 Compliant			
	NSC-C	NSC-M	NSC-S
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Electroless Nickel Plating	SUS304
Hex Socket Set Screw	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7	SUSXM7



NSC-C Made of Steel, Ferrosoferric Oxide Film NSC-M Made of Steel, Electroless Nickel Plating
NSC-S Made of Stainless Steel

Unit : mm									
Part Number	Part Number	Part Number	d	B	D	D1	M (coarse) *1	Mass (g)	
NSC-3-6-C	NSC-3-6-M	NSC-3-6-S	3	6	7		M3	1	
NSC-3-8-C	NSC-3-8-M	NSC-3-8-S	3	8	7		M3	2	
NSC-4-6-C	NSC-4-6-M	NSC-4-6-S	4	6	12		M4	5	
NSC-4-8-C	NSC-4-8-M	NSC-4-8-S	4	8	12		M4	6	
NSC-5-6-C	NSC-5-6-M	NSC-5-6-S	5	6	14		M4	6	
NSC-5-8-C	NSC-5-8-M	NSC-5-8-S	5	8	14		M4	8	
NSC-5-10-C	NSC-5-10-M	NSC-5-10-S	5	10	14		M4	10	
NSC-6-6-C	NSC-6-6-M	NSC-6-6-S	6	6	15		M4	6	
NSC-6-8-C	NSC-6-8-M	NSC-6-8-S	6	8	15		M4	9	
NSC-6-10-C	NSC-6-10-M	NSC-6-10-S	6	10	16		M4	13	
NSC-8-6-C	NSC-8-6-M	NSC-8-6-S	8	6	16	13	M4	6	
NSC-8-8-C	NSC-8-8-M	NSC-8-8-S	8	8	16	13	M4	9	
NSC-8-10-C	NSC-8-10-M	NSC-8-10-S	8	10	18	13	M4	16	
NSC-10-6-C	NSC-10-6-M	NSC-10-6-S	10	6	18	16	M4	8	
NSC-10-8-C	NSC-10-8-M	NSC-10-8-S	10	8	18	16	M4	10	
NSC-10-10-C	NSC-10-10-M	NSC-10-10-S	10	10	20	16	M4	17	
NSC-12-8-C	NSC-12-8-M	NSC-12-8-S	12	8	22	20	M4	16	
NSC-12-10-C	NSC-12-10-M	NSC-12-10-S	12	10	26	20	M5	30	
NSC-12-12-C	NSC-12-12-M	NSC-12-12-S	12	12	26	20	M6	36	
NSC-13-8-C	NSC-13-8-M	NSC-13-8-S	13	8	22	20	M4	15	
NSC-13-10-C	NSC-13-10-M	NSC-13-10-S	13	10	26	20	M5	28	
NSC-14-12-C	NSC-14-12-M	NSC-14-12-S	14	12	26	20	M5	33	
NSC-15-8-C	NSC-15-8-M	NSC-15-8-S	15	8	25	24	M5	19	
NSC-15-10-C	NSC-15-10-M	NSC-15-10-S	15	10	25	24	M5	24	
NSC-15-12-C	NSC-15-12-M	NSC-15-12-S	15	12	28	24	M5	39	

*1 : Hex socket set screw is provided.
*1 : If d dimension is 6 or below, one point.

NSC-C Made of Steel, Ferrosoferric Oxide Film NSC-M Made of Steel, Electroless Nickel Plating
NSC-S Made of Stainless Steel

Unit : mm									
Part Number	Part Number	Part Number	d	B	D	D1	M (coarse) *1	Mass (g)	
NSC-16-10-C	NSC-16-10-M	NSC-16-10-S	16	10	28	24	M5	31	
NSC-16-12-C	NSC-16-12-M	NSC-16-12-S	16	12	28	24	M5	37	
NSC-17-10-C	NSC-17-10-M	NSC-17-10-S	17	10	30	26	M6	35	
NSC-17-12-C	NSC-17-12-M	NSC-17-12-S	17	12	32	26	M6	49	
NSC-18-15-C	NSC-18-15-M	NSC-18-15-S	18	15	32	29	M6	61	
NSC-20-7-C	NSC-20-7-M	NSC-20-7-S	20	7	30		M5	21	
NSC-20-10-C	NSC-20-10-M	NSC-20-10-S	20	10	32	29	M6	36	
NSC-20-12-C	NSC-20-12-M	NSC-20-12-S	20	12	32	29	M6	83	
NSC-20-15-C	NSC-20-15-M	NSC-20-15-S	20	15	32	29	M6	55	
NSC-22-18-C	NSC-22-18-M	NSC-22-18-S	22	18	38	34	M8	101	
NSC-25-12-C	NSC-25-12-M	NSC-25-12-S	25	12	38	37	M6	60	
NSC-25-15-C	NSC-25-15-M	NSC-25-15-S	25	15	38	37	M6	73	
NSC-25-18-C	NSC-25-18-M	NSC-25-18-S	25	18	42	38	M8	122	
NSC-28-18-C	NSC-28-18-M	NSC-28-18-S	28	18	45	40	M8	129	
NSC-30-16-C	NSC-30-16-M	NSC-30-16-S	30	16	45	42	M8	106	
NSC-30-18-C	NSC-30-18-M	NSC-30-18-S	30	18	49	42	M8	156	
NSC-30-20-C	NSC-30-20-M	NSC-30-20-S	30	20	49	42	M8	175	
NSC-32-20-C	NSC-32-20-M	NSC-32-20-S	32	20	53	44	M8	206	
NSC-35-15-C	NSC-35-15-M	NSC-35-15-S	35	15	50	47	M8	111	
NSC-35-18-C	NSC-35-18-M	NSC-35-18-S	35	18	55	47	M8	187	
NSC-35-20-C	NSC-35-20-M	NSC-35-20-S	35	20	59	47	M8	256	
NSC-38-22-C	NSC-38-22-M	NSC-38-22-S	38	22	64	50	M10	330	
NSC-40-18-C	NSC-40-18-M	NSC-40-18-S	40	18	60	55	M10	213	
NSC-40-22-C	NSC-40-22-M	NSC-40-22-S	40	22	72	55	M10	438	
NSC-45-22-C	NSC-45-22-M	NSC-45-22-S	45	22	75	60	M10	445	
NSC-50-20-C	NSC-50-20-M	NSC-50-20-S	50	20	70	65	M10	284	
NSC-50-25-C	NSC-50-25-M	NSC-50-25-S	50	25	79	65	M10	537	

*1 : Hex socket set screw is provided.

- Part number specification

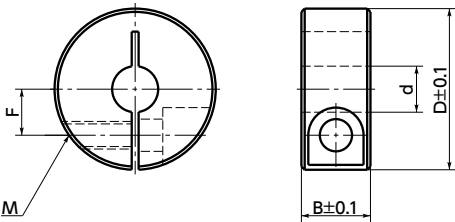
NSC-20-10-S



Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Please feel free to contact us	Not Available	Not Available	Available / Add'l charge

NSCS Set Collar - Clamping Type

WEB Selection Tool WEB CAD Download SUS Stainless steel



- Clamping type set collar.
- Installation and removing are easy. Moreover this does not scratch the shaft.
- Optimal for machines and devices that are frequently mounted/removed, e.g. slide shaft.

	NSCS-C	NSCS-M	NSCS-S
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Electroless Nickel Plating	SUS304
Hex Socket Head Cap Screw	SS400 Ferrosoferric Oxide Film (Black)	SUSXM7	SUSXM7

RoHS2 Compliant



NSCS-C Made of Steel, Ferrosoferric Oxide Film NSCS-M Made of Steel, Electroless Nickel Plating
NSCS-S Made of Stainless Steel

Part Number	Part Number	Part Number	d	B	D	F	M (coarse) *1	Mass (g)
NSCS-3-8-C	NSCS-3-8-M	NSCS-3-8-S	3	8	15	4.5	M3	9
NSCS-4-8-C	NSCS-4-8-M	NSCS-4-8-S	4	8	15	4.5	M3	9
NSCS-5-8-C	NSCS-5-8-M	NSCS-5-8-S	5	8	20	6	M3	17
NSCS-5-10-C	NSCS-5-10-M	NSCS-5-10-S	5	10	20	6	M4	21
NSCS-6-8-C	NSCS-6-8-M	NSCS-6-8-S	6	8	20	6	M3	15
NSCS-6-10-C	NSCS-6-10-M	NSCS-6-10-S	6	10	20	6	M4	20
NSCS-8-8-C	NSCS-8-8-M	NSCS-8-8-S	8	8	25	8	M3	25
NSCS-8-10-C	NSCS-8-10-M	NSCS-8-10-S	8	10	25	8	M4	31
NSCS-8-12-C	NSCS-8-12-M	NSCS-8-12-S	8	12	28	8.5	M5	49
NSCS-8-15-C	NSCS-8-15-M	NSCS-8-15-S	8	15	30	9	M6	69
NSCS-10-10-C	NSCS-10-10-M	NSCS-10-10-S	10	10	30	9	M4	44
NSCS-10-12-C	NSCS-10-12-M	NSCS-10-12-S	10	12	30	9	M5	54
NSCS-10-15-C	NSCS-10-15-M	NSCS-10-15-S	10	15	35	10	M6	93
NSCS-12-10-C	NSCS-12-10-M	NSCS-12-10-S	12	10	30	10	M4	42
NSCS-12-12-C	NSCS-12-12-M	NSCS-12-12-S	12	12	30	10	M5	51
NSCS-12-15-C	NSCS-12-15-M	NSCS-12-15-S	12	15	35	11	M6	90

*1 : Hex socket head cap screw is provided.

NSCS-C Made of Steel, Ferrosoferric Oxide Film NSCS-M Made of Steel, Electroless Nickel Plating
NSCS-S Made of Stainless Steel

Part Number	Part Number	Part Number	d	B	D	F	M (coarse) *1	Mass (g)
NSCS-13-10-C	NSCS-13-10-M	NSCS-13-10-S	13	10	30	10	M4	41
NSCS-13-15-C	NSCS-13-15-M	NSCS-13-15-S	13	15	35	11	M6	88
NSCS-15-10-C	NSCS-15-10-M	NSCS-15-10-S	15	10	32	11	M4	46
NSCS-15-12-C	NSCS-15-12-M	NSCS-15-12-S	15	12	35	12	M5	68
NSCS-15-15-C	NSCS-15-15-M	NSCS-15-15-S	15	15	40	13	M6	118
NSCS-16-10-C	NSCS-16-10-M	NSCS-16-10-S	16	10	35	12	M4	54
NSCS-16-12-C	NSCS-16-12-M	NSCS-16-12-S	16	12	35	12	M5	66
NSCS-16-15-C	NSCS-16-15-M	NSCS-16-15-S	16	15	40	13	M6	114
NSCS-17-15-C	NSCS-17-15-M	NSCS-17-15-S	17	15	40	13	M6	106
NSCS-18-15-C	NSCS-18-15-M	NSCS-18-15-S	18	15	45	15	M6	143
NSCS-20-10-C	NSCS-20-10-M	NSCS-20-10-S	20	10	40	14	M4	68
NSCS-20-12-C	NSCS-20-12-M	NSCS-20-12-S	20	12	40	14	M5	81
NSCS-20-15-C	NSCS-20-15-M	NSCS-20-15-S	20	15	45	15	M6	139
NSCS-25-12-C	NSCS-25-12-M	NSCS-25-12-S	25	12	45	17	M5	96
NSCS-25-15-C	NSCS-25-15-M	NSCS-25-15-S	25	15	50	18	M6	162
NSCS-30-15-C	NSCS-30-15-M	NSCS-30-15-S	30	15	55	20	M6	183
NSCS-35-15-C	NSCS-35-15-M	NSCS-35-15-S	35	15	60	23	M6	205
NSCS-40-18-C	NSCS-40-18-M	NSCS-40-18-S	40	18	70	26	M8	347
NSCS-45-18-C	NSCS-45-18-M	NSCS-45-18-S	45	18	75	28	M8	372
NSCS-50-22-C	NSCS-50-22-M	NSCS-50-22-S	50	22	85	32	M10	603

*1 : Hex socket head cap screw is provided.

- Part number specification

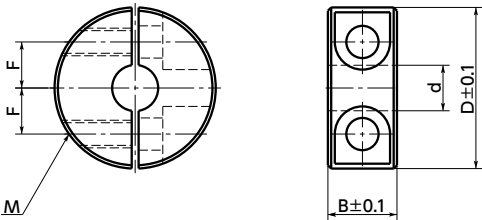
NSCS-3-8-S



Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Please feel free to contact us	Not Available	Not Available	Available / Add'l charge

NSCSS Set Collar - Split - type

WEB Selection Tool CAD Download SUS Stainless steel



- Split-type set collar.
- As the axial hole part can be completely split, so mounting and removing can be performed easily. Moreover this does not scratch the shaft.
- Optimal for use with machines and devices that are difficult to disassemble.

	NSCSS-C	NSCSS-M	NSCSS-S
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Electroless Nickel Plating	SUS304
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7	SUSXM7

RoHS2 Compliant

NSCSS-C Made of Steel, Ferrosoferric Oxide Film NSCSS-M Made of Steel, Electroless Nickel Plating
NSCSS-S Made of Stainless Steel

Unit : mm								
Part Number	Part Number	Part Number	d	B	D	F	M (coarse) *1	Mass (g)
NSCSS-3-8-C	NSCSS-3-8-M	NSCSS-3-8-S	3	8	15	4.5	M3	9
NSCSS-4-8-C	NSCSS-4-8-M	NSCSS-4-8-S	4	8	15	4.5	M3	7
NSCSS-5-8-C	NSCSS-5-8-M	NSCSS-5-8-S	5	8	20	5.5	M3	14
NSCSS-5-10-C	NSCSS-5-10-M	NSCSS-5-10-S	5	10	20	6	M4	20
NSCSS-6-8-C	NSCSS-6-8-M	NSCSS-6-8-S	6	8	20	6	M3	15
NSCSS-6-10-C	NSCSS-6-10-M	NSCSS-6-10-S	6	10	20	6	M4	19
NSCSS-8-8-C	NSCSS-8-8-M	NSCSS-8-8-S	8	8	25	8	M3	24
NSCSS-8-10-C	NSCSS-8-10-M	NSCSS-8-10-S	8	10	25	8	M4	30
NSCSS-8-12-C	NSCSS-8-12-M	NSCSS-8-12-S	8	12	28	8.5	M5	47
NSCSS-8-15-C	NSCSS-8-15-M	NSCSS-8-15-S	8	15	30	9	M6	63
NSCSS-10-10-C	NSCSS-10-10-M	NSCSS-10-10-S	10	10	30	9	M4	41
NSCSS-10-12-C	NSCSS-10-12-M	NSCSS-10-12-S	10	12	30	9	M5	51
NSCSS-10-15-C	NSCSS-10-15-M	NSCSS-10-15-S	10	15	35	10	M6	86
NSCSS-12-10-C	NSCSS-12-10-M	NSCSS-12-10-S	12	10	30	10	M4	40
NSCSS-12-12-C	NSCSS-12-12-M	NSCSS-12-12-S	12	12	30	10	M5	49
NSCSS-12-15-C	NSCSS-12-15-M	NSCSS-12-15-S	12	15	35	11	M6	84
NSCSS-13-10-C	NSCSS-13-10-M	NSCSS-13-10-S	13	10	30	10	M4	38
NSCSS-13-15-C	NSCSS-13-15-M	NSCSS-13-15-S	13	15	35	11	M6	80

*1 : Hex socket head cap screw is provided.



NSCSS-C Made of Steel, Ferrosoferric Oxide Film NSCSS-M Made of Steel, Electroless Nickel Plating
NSCSS-S Made of Stainless Steel

Unit : mm								
Part Number	Part Number	Part Number	d	B	D	F	M (coarse) *1	Mass (g)
NSCSS-15-10-C	NSCSS-15-10-M	NSCSS-15-10-S	15	10	32	11	M4	42
NSCSS-15-12-C	NSCSS-15-12-M	NSCSS-15-12-S	15	12	35	12	M5	64
NSCSS-15-15-C	NSCSS-15-15-M	NSCSS-15-15-S	15	15	40	13	M6	109
NSCSS-16-10-C	NSCSS-16-10-M	NSCSS-16-10-S	16	10	35	12	M4	51
NSCSS-16-12-C	NSCSS-16-12-M	NSCSS-16-12-S	16	12	35	12	M5	62
NSCSS-16-15-C	NSCSS-16-15-M	NSCSS-16-15-S	16	15	40	13	M6	107
NSCSS-17-15-C	NSCSS-17-15-M	NSCSS-17-15-S	17	15	40	13	M6	106
NSCSS-18-15-C	NSCSS-18-15-M	NSCSS-18-15-S	18	15	45	15	M6	136
NSCSS-20-10-C	NSCSS-20-10-M	NSCSS-20-10-S	20	10	40	14	M4	65
NSCSS-20-12-C	NSCSS-20-12-M	NSCSS-20-12-S	20	12	40	14	M5	77
NSCSS-20-15-C	NSCSS-20-15-M	NSCSS-20-15-S	20	15	45	15	M6	131
NSCSS-25-12-C	NSCSS-25-12-M	NSCSS-25-12-S	25	12	45	17	M5	92
NSCSS-25-15-C	NSCSS-25-15-M	NSCSS-25-15-S	25	15	50	18	M6	152
NSCSS-30-15-C	NSCSS-30-15-M	NSCSS-30-15-S	30	15	55	20	M6	171
NSCSS-35-15-C	NSCSS-35-15-M	NSCSS-35-15-S	35	15	60	23	M6	195
NSCSS-40-18-C	NSCSS-40-18-M	NSCSS-40-18-S	40	18	70	26	M8	334
NSCSS-45-18-C	NSCSS-45-18-M	NSCSS-45-18-S	45	18	75	28	M8	356
NSCSS-50-22-C	NSCSS-50-22-M	NSCSS-50-22-S	50	22	85	32	M10	576

*1 : Hex socket head cap screw is provided.

- Part number specification

NSCSS-10-15-C



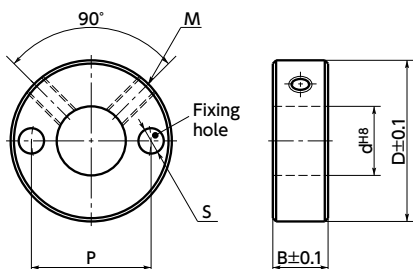
Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Please feel free to contact us	Not Available	Not Available	Available / Add'l charge

NSC Set Collar - with Installation Hole - Set Screw Type

WEB Selection Tool WEB CAD Download SUS Stainless steel



NSC-CP2



NSC-SP2



NSC-MP2

- Set collar with installation hole. It can be installed to any machine and device such as wheels, flanges and plates, by using the fixing hole.
- It is attached to the shaft by the set screws.

• Material/Finish



	NSC-CP2	NSC-MP2	NSC-SP2
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Electroless Nickel Plating	SUS304
Hex Socket Set Screw	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7	SUSXM7

• Part number specification

NSC-12-12-SP2



NSC-CP2 Made of Steel, Ferrosoferric Oxide Film NSC-MP2 Made of Steel, Electroless Nickel Plating

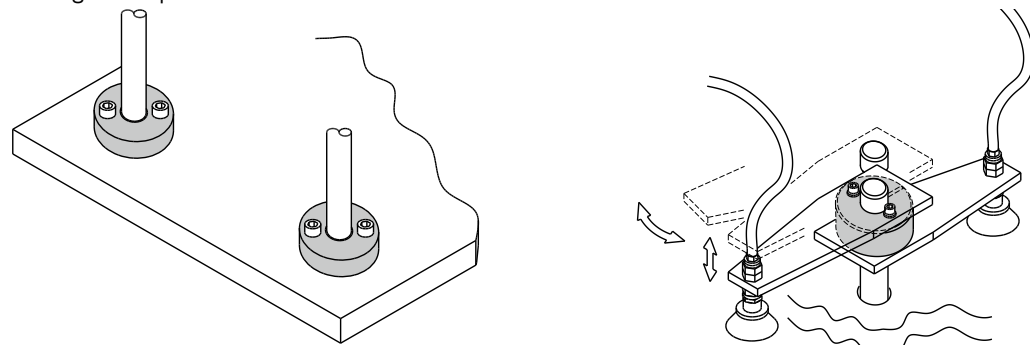
NSC-SP2 Made of Stainless Steel

Part Number	Part Number	Part Number	d	B	D	S	P	M*1 (Coarse)	Mass (g)
NSC-3-6-CP2	NSC-3-6-MP2	NSC-3-6-SP2	3	6	17	3.4	11	M3	9
NSC-4-6-CP2	NSC-4-6-MP2	NSC-4-6-SP2	4	6	18	3.4	12	M3	10
NSC-5-10-CP2	NSC-5-10-MP2	NSC-5-10-SP2	5	10	22	4.5	15	M4	25
NSC-6-10-CP2	NSC-6-10-MP2	NSC-6-10-SP2	6	10	22	4.5	15	M4	24
NSC-8-10-CP2	NSC-8-10-MP2	NSC-8-10-SP2	8	10	24	4.5	17	M4	28
NSC-10-10-CP2	NSC-10-10-MP2	NSC-10-10-SP2	10	10	26	4.5	19	M4	31
NSC-12-12-CP2	NSC-12-12-MP2	NSC-12-12-SP2	12	12	32	5.5	23	M5	57
NSC-13-12-CP2	NSC-13-12-MP2	NSC-13-12-SP2	13	12	33	5.5	24	M5	61
NSC-15-12-CP2	NSC-15-12-MP2	NSC-15-12-SP2	15	12	35	5.5	26	M5	65
NSC-16-12-CP2	NSC-16-12-MP2	NSC-16-12-SP2	16	12	40	6.6	28	M6	88
NSC-20-12-CP2	NSC-20-12-MP2	NSC-20-12-SP2	20	12	44	6.6	32	M6	102
NSC-25-15-CP2	NSC-25-15-MP2	NSC-25-15-SP2	25	15	50	6.6	37	M8	160
NSC-30-15-CP2	NSC-30-15-MP2	NSC-30-15-SP2	30	15	55	6.6	42	M8	177
NSC-35-15-CP2	NSC-35-15-MP2	NSC-35-15-SP2	35	15	60	6.6	47	M8	203
NSC-40-20-CP2	NSC-40-20-MP2	NSC-40-20-SP2	40	20	70	9	55	M10	375
NSC-50-25-CP2	NSC-50-25-MP2	NSC-50-25-SP2	50	25	86	11	68	M10	698

*1: Hex socket set screw is provided.

*1: If d dimension is 5 or below, one point.

• Usage example

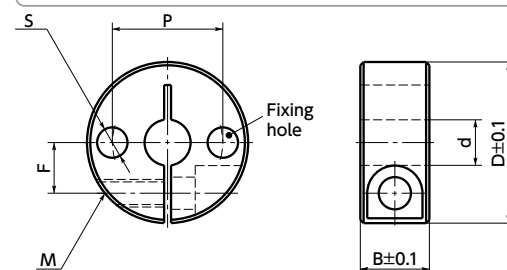


Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

Please feel free to contact us Not Available Not Available Available / Add'l charge

NSCS Set Collar - with Installation Hole - Clamping Type

WEB Selection Tool WEB CAD Download SUS Stainless steel



NSCS-CP2

NSCS-MP2

NSCS-SP2

• Material/Finish



	NSCS-CP2	NSCS-MP2	NSCS-SP2
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Electroless Nickel Plating	SUS304
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7	SUSXM7

NSCS-CP2 Made of Steel, Ferrosoferric Oxide Film NSCS-MP2 Made of Steel, Electroless Nickel Plating

NSCS-SP2 Made of Stainless Steel

Part Number	Part Number	Part Number	d	B	D	F	S	P	M*1 (Coarse)	Mass (g)
NSCS-6-8-CP2	NSCS-6-8-MP2	NSCS-6-8-SP2	6	8	20	6	3.5	13	M3	15
NSCS-6-10-CP2	NSCS-6-10-MP2	NSCS-6-10-SP2	6	10	20	6	3.5	13	M4	19
NSCS-8-8-CP2	NSCS-8-8-MP2	NSCS-8-8-SP2	8	8	25	8	4.5	16	M3	23
NSCS-8-10-CP2	NSCS-8-10-MP2	NSCS-8-10-SP2	8	10	25	8	4.5	18	M4	29
NSCS-8-12-CP2	NSCS-8-12-MP2	NSCS-8-12-SP2	8	12	28	8.5	5.5	18	M5	44
NSCS-8-15-CP2	NSCS-8-15-MP2	NSCS-8-15-SP2	8	15	30	9.5	5.5	20	M6	63
NSCS-10-10-CP2	NSCS-10-10-MP2	NSCS-10-10-SP2	10	10	30	9	5.5	20	M4	41
NSCS-10-12-CP2	NSCS-10-12-MP2	NSCS-10-12-SP2	10	12	30	9	5.5	20	M5	49
NSCS-10-15-CP2	NSCS-10-15-MP2	NSCS-10-15-SP2	10	15	35	11	6.6	24	M6	84
NSCS-12-10-CP2	NSCS-12-10-MP2	NSCS-12-10-SP2	12	10	30	10	5.5	22	M4	38
NSCS-12-12-CP2	NSCS-12-12-MP2	NSCS-12-12-SP2	12	12	30	10	5.5	22	M5	47
NSCS-12-15-CP2	NSCS-12-15-MP2	NSCS-12-15-SP2	12	15	35	11	6.6	24	M6	82
NSCS-13-10-CP2	NSCS-13-10-MP2	NSCS-13-10-SP2	13	10	30	10	4.5	22	M4	38
NSCS-13-15-CP2	NSCS-13-15-MP2	NSCS-13-15-SP2	13	15	35	11	6.6	24	M6	81
NSCS-15-10-CP2	NSCS-15-10-MP2	NSCS-15-10-SP2	15	10	32	11	4.5	24	M4	43
NSCS-15-12-CP2	NSCS-15-12-MP2	NSCS-15-12-SP2	15	12	35	12	5.5	26	M5	64
NSCS-15-15-CP2	NSCS-15-15-MP2	NSCS-15-15-SP2	15	15	40	13	6.6	28	M6	109
NSCS-16-10-CP2	NSCS-16-10-MP2	NSCS-16-10-SP2	16	10	35	12	4.5	25	M4	52
NSCS-16-12-CP2	NSCS-16-12-MP2	NSCS-16-12-SP2	16	12	35	12	5.5	26	M5	61
NSCS-16-15-CP2	NSCS-16-15-MP2	NSCS-16-15-SP2	16	15	40	13	6.6	28	M6	105
NSCS-20-10-CP2	NSCS-20-10-MP2	NSCS-20-10-SP2	20	10	40	14	5.5	30	M4	64
NSCS-20-12-CP2	NSCS-20-12-MP2	NSCS-20-12-SP2	20	12	40	14	5.5	30	M5	77
NSCS-20-15-CP2	NSCS-20-15-MP2	NSCS-20-15-SP2	20	15	45	15	6.6	34	M6	130
NSCS-25-12-CP2	NSCS-25-12-MP2	NSCS-25-12-SP2	25	12	45	17	5.5	36	M5	91
NSCS-25-15-CP2	NSCS-25-15-MP2	NSCS-25-15-SP2	25	15	50	18	6.6	38	M6	152
NSCS-30-15-CP2	NSCS-30-15-MP2	NSCS-30-15-SP2	30	15	55	20	6.6	44	M6	174
NSCS-35-15-CP2	NSCS-35-15-MP2	NSCS-35-15-SP2	35	15	60	23	6.6	48	M6	196
NSCS-40-18-CP2	NSCS-40-18-MP2	NSCS-40-18-SP2	40	18	70	26	9	56	M8	328
NSCS-50-22-CP2	NSCS-50-22-MP2	NSCS-50-22-SP2	50	22	85	32	11	68	M10	572

*1: Hex socket head cap screw is provided.

• Part number specification

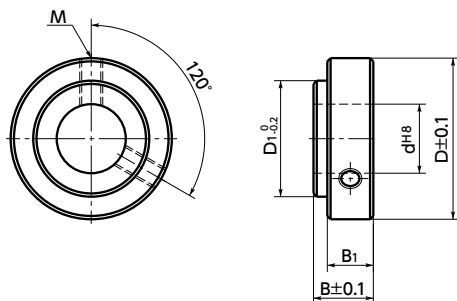
NSCS-10-10-CP2



Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

Please feel free to contact us Not Available Not Available Available / Add'l charge

NSC Set Collar - For Securing Bearing - Set Screw Type

WEB Selection
ToolWEB CAD
Download

- Set collar for securing bearing.
- It can be fixed by pressing the bearing inner wheel only on the convex of the main body.
- Optimal for securing bearing when it is difficult to fix the snap ring, etc. to the shaft.
- It is attached to the shaft by the set screws.

Unit : mm									
Part Number Ferroferric oxide film	Part Number Electroless nickel plating	d	B	B1	D	D1	M (coarse) *1	Applicable bearings	Mass (g)
NSC-3-7-CB	NSC-3-7-MB	3	7.5	5	7	5	M3	693ZZ・623ZZ	1
NSC-4-7-CB	NSC-4-7-MB	4	7.5	5	8	6	M3	694ZZ・624ZZ	2
NSC-5-7-CB	NSC-5-7-MB	5	7.5	5	11	7.2	M3	695ZZ・605ZZ・625ZZ	4
NSC-6-7-CB1	NSC-6-7-MB1	6	7.5	5	13	8.4	M3	606ZZ	4
NSC-6-7-CB2	NSC-6-7-MB2	6	7.5	5	13	9.2	M3	626ZZ	5
NSC-6-7-CB3	NSC-6-7-MB3	6	7.5	5	13	8	M3	696ZZ	6
NSC-8-9-CB1	NSC-8-9-MB1	8	9.5	7	18	11.7	M4	608ZZ	12
NSC-8-9-CB2	NSC-8-9-MB2	8	9.5	7	18	11.4	M4	628ZZ	11
NSC-8-9-CB3	NSC-8-9-MB3	8	9.5	7	18	10.4	M4	698ZZ	11
NSC-10-11-CB1	NSC-10-11-MB1	10	11	8	20	14.2	M5	6000ZZ	16
NSC-10-11-CB2	NSC-10-11-MB2	10	11	8	20	16.7	M5	6200ZZ	18
NSC-10-11-CB3	NSC-10-11-MB3	10	11	8	20	13.2	M5	6900ZZ	15
NSC-12-11-CB1	NSC-12-11-MB1	12	11	8	22	17.2	M5	6001ZZ	19
NSC-12-11-CB2	NSC-12-11-MB2	12	11	8	22	17.7	M5	6201ZZ	19
NSC-12-11-CB3	NSC-12-11-MB3	12	11	8	22	15.2	M5	6901ZZ	17
NSC-15-11-CB1	NSC-15-11-MB1	15	11	8	25	20.2	M5	6002ZZ	22
NSC-15-11-CB2	NSC-15-11-MB2	15	11	8	25	21.2	M5	6202ZZ	23
NSC-15-11-CB3	NSC-15-11-MB3	15	11	8	25	18.7	M5	6902ZZ	21

*1 : Hex socket set screw is provided.

*1 : If d dimension is 5 or below, one point.

● Material/Finish

RoHS2 Compliant

	NSC-CB	NSC-MB
Main body	S45C Ferroferric Oxide Film (Black)	S45C Electroless Nickel Plating
Hex Socket Set Screw	SCM435 Ferroferric Oxide Film (Black)	SUSXM7



Unit : mm									
Part Number Ferroferric oxide film	Part Number Electroless nickel plating	d	B	B1	D	D1	M (coarse) *1	Applicable bearings	Mass (g)
NSC-17-13-CB1	NSC-17-13-MB1	17	13	10	28	22.2	M6	6003ZZ	33
NSC-17-13-CB2	NSC-17-13-MB2	17	13	10	28	24.2	M6	6203ZZ	35
NSC-17-13-CB3	NSC-17-13-MB3	17	13	10	28	20.2	M6	6903ZZ	31
NSC-20-13-CB1	NSC-20-13-MB1	20	13	10	35	25.2	M6	6004ZZ	52
NSC-20-13-CB2	NSC-20-13-MB2	20	13	10	35	27.2	M6	6204ZZ	54
NSC-20-13-CB3	NSC-20-13-MB3	20	13	10	35	24.7	M6	6904ZZ	52
NSC-25-13-CB1	NSC-25-13-MB1	25	13.5	10	38	31.2	M6	6005ZZ	55
NSC-25-13-CB2	NSC-25-13-MB2	25	13.5	10	38	33.2	M6	6205ZZ	58
NSC-25-13-CB3	NSC-25-13-MB3	25	13.5	10	38	30.2	M6	6905ZZ	54
NSC-30-15-CB1	NSC-30-15-MB1	30	15.5	12	45	38.2	M8	6006ZZ	90
NSC-30-15-CB2	NSC-30-15-MB2	30	15.5	12	45	40.2	M8	6206ZZ	94
NSC-30-15-CB3	NSC-30-15-MB3	30	15.5	12	45	35.2	M8	6906ZZ	86
NSC-35-16-CB1	NSC-35-16-MB1	35	16.5	12	50	43.2	M8	6007ZZ	106
NSC-35-16-CB2	NSC-35-16-MB2	35	16.5	12	50	46.2	M8	6207ZZ	114
NSC-35-16-CB3	NSC-35-16-MB3	35	16.5	12	50	41.2	M8	6907ZZ	101
NSC-40-18-CB1	NSC-40-18-MB1	40	18.5	14	60	48.2	M10	6008ZZ	183
NSC-40-18-CB2	NSC-40-18-MB2	40	18.5	14	60	52.2	M10	6208ZZ	195
NSC-40-18-CB3	NSC-40-18-MB3	40	18.5	14	60	46.2	M10	6908ZZ	179

*1 : Hex socket set screw is provided.

*1 : If d dimension is 5 or below, one point.

● Related Products

Set collar for stainless steel
securing bearings **NSC** is
available.

➡ P.387



● Part number specification

NSC-4-7-CB

1

Cleanroom Wash & Packaging ➡ P.807

Screw Length Adjustment ➡ P.811

Vibration Resistant ➡ P.810

Laser Marking ➡ P.821

Please feel free to contact us

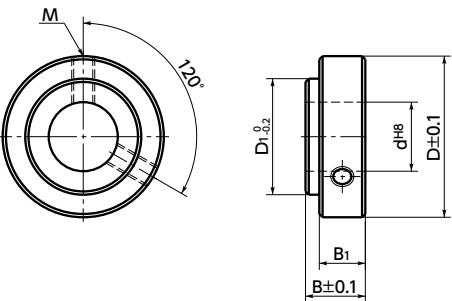
Not Available

Not Available

Available / Add'l charge

NSC Set Collar (Made of Stainless Steel) - For Securing Bearing - Set Screw Type

WEB Selection Tool WEB CAD Download SUS Stainless steel



- Set collar for securing bearing.
- It can be fixed by pressing the bearing inner wheel only on the convex of the main body.
- Optimal for securing bearing when it is difficult to fix the snap ring, etc. to the shaft.
- It is attached to the shaft by the set screws.

● Material/Finish	RoHS2 Compliant
	NSC
Main body	SUS304
Hex Socket Set Screw	SUSXM7

Unit : mm								
Part Number ◀1	d	B	B1	D	D1	M(coarse)*1	Applicable bearings	Mass (g)
NSC-3-7-SB	3	7.5	5	7	5	M3	693ZZ・623ZZ	2
NSC-4-7-SB	4	7.5	5	8	6	M3	694ZZ・624ZZ	2
NSC-5-7-SB	5	7.5	5	11	7.2	M3	695ZZ・605ZZ・625ZZ	3
NSC-6-7-SB1	6	7.5	5	13	8.4	M3	606ZZ	4
NSC-6-7-SB2	6	7.5	5	13	9.2	M3	626ZZ	5
NSC-6-7-SB3	6	7.5	5	13	8	M3	696ZZ	4
NSC-8-9-SB1	8	9.5	7	18	11.7	M4	608ZZ	12
NSC-8-9-SB2	8	9.5	7	18	11.4	M4	628ZZ	12
NSC-8-9-SB3	8	9.5	7	18	10.4	M4	698ZZ	11
NSC-10-11-SB1	10	11	8	20	14.2	M5	6000ZZ	16
NSC-10-11-SB2	10	11	8	20	16.7	M5	6200ZZ	18
NSC-10-11-SB3	10	11	8	20	13.2	M5	6900ZZ	16
NSC-12-11-SB1	12	11	8	22	17.2	M5	6001ZZ	19
NSC-12-11-SB2	12	11	8	22	17.7	M5	6201ZZ	19
NSC-12-11-SB3	12	11	8	22	15.2	M5	6901ZZ	18
NSC-15-11-SB1	15	11	8	25	20.2	M5	6002ZZ	22
NSC-15-11-SB2	15	11	8	25	21.2	M5	6202ZZ	23
NSC-15-11-SB3	15	11	8	25	18.7	M5	6902ZZ	21

*1 : Hex socket set screw is provided.
*1 : If d dimension is 5 or below, one point.



Unit : mm								
Part Number ◀1	d	B	B1	D	D1	M(coarse)*1	Applicable bearings	Mass (g)
NSC-17-13-SB1	17	13	10	28	22.2	M6	6003ZZ	33
NSC-17-13-SB2	17	13	10	28	24.2	M6	6203ZZ	35
NSC-17-13-SB3	17	13	10	28	20.2	M6	6903ZZ	32
NSC-20-13-SB1	20	13	10	35	25.2	M6	6004ZZ	54
NSC-20-13-SB2	20	13	10	35	27.2	M6	6204ZZ	55
NSC-20-13-SB3	20	13	10	35	24.7	M6	6904ZZ	53
NSC-25-13-SB1	25	13.5	10	38	31.2	M6	6005ZZ	56
NSC-25-13-SB2	25	13.5	10	38	33.2	M6	6205ZZ	59
NSC-25-13-SB3	25	13.5	10	38	30.2	M6	6905ZZ	55
NSC-30-15-SB1	30	15.5	12	45	38.2	M8	6006ZZ	92
NSC-30-15-SB2	30	15.5	12	45	40.2	M8	6206ZZ	95
NSC-30-15-SB3	30	15.5	12	45	35.2	M8	6906ZZ	87
NSC-35-16-SB1	35	16.5	12	50	43.2	M8	6007ZZ	108
NSC-35-16-SB2	35	16.5	12	50	46.2	M8	6207ZZ	116
NSC-35-16-SB3	35	16.5	12	50	41.2	M8	6907ZZ	102
NSC-40-18-SB1	40	18.5	14	60	48.2	M10	6008ZZ	185
NSC-40-18-SB2	40	18.5	14	60	52.2	M10	6208ZZ	196
NSC-40-18-SB3	40	18.5	14	60	46.2	M10	6908ZZ	180

*1 : Hex socket set screw is provided.
*1 : If d dimension is 5 or below, one point.

- Part number specification

NSC-4-7-SB

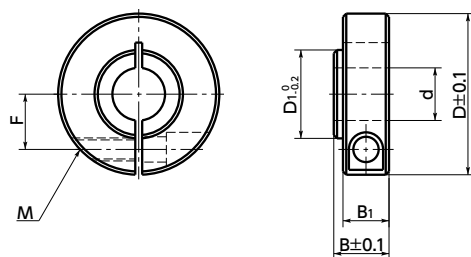


Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Available / Add'l charge	Not Available	Not Available	Available / Add'l charge

NSCS Set Collar - For Securing Bearing - Clamping Type

WEB Selection Tool

WEB CAD Download



- Set collar for securing bearings.
- It can be fixed by pressing the bearing inner wheel only on the convex of the main body.
- Optimal for securing bearing when it is difficult to fix the snap ring, etc. to the shaft.
- Clamping Type. Mounting and removing are easy. Moreover this does not scratch the shaft.

● Material/Finish



	NSCS-CB	NSCS-MB
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Electroless Nickel Plating
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7

Part Number	Part Number	d	B	B1	D	D1	F	M(coarse)*1	Applicable bearings	Mass (g)
Ferrosoferric oxide film	Electroless nickel plating									
NSCS-3-8-CB	NSCS-3-8-MB	3	8.5	7.5	15	5	4.5	M3	693ZZ・623ZZ	9
NSCS-4-8-CB	NSCS-4-8-MB	4	8.5	7.5	15	6	4.5	M3	694ZZ・624ZZ	9
NSCS-5-8-CB	NSCS-5-8-MB	5	8.5	7.5	20	7.2	6	M3	695ZZ・605ZZ・625ZZ	15
NSCS-6-8-CB1	NSCS-6-8-MB1	6	8.5	7.5	20	9.4	6.5	M3	606ZZ	15
NSCS-6-8-CB2	NSCS-6-8-MB2	6	8.5	7.5	20	9.7	6.5	M3	626ZZ	15
NSCS-6-8-CB3	NSCS-6-8-MB3	6	8.5	7.5	20	9.1	6.5	M3	696ZZ	15
NSCS-8-8-CB1	NSCS-8-8-MB1	8	8.5	7.5	20	11.7	7	M3	608ZZ	14
NSCS-8-8-CB2	NSCS-8-8-MB2	8	8.5	7.5	20	13.2	7	M3	628ZZ	15
NSCS-8-8-CB3	NSCS-8-8-MB3	8	8.5	7.5	20	11.2	7	M3	698ZZ	15
NSCS-10-11-CB1	NSCS-10-11-MB1	10	11	9	30	14.7	9	M4	6000ZZ	41
NSCS-10-11-CB2	NSCS-10-11-MB2	10	11	9	30	17.2	9	M4	6200ZZ	42
NSCS-10-11-CB3	NSCS-10-11-MB3	10	11	9	30	14.2	9	M4	6900ZZ	42
NSCS-12-11-CB1	NSCS-12-11-MB1	12	11	9	30	17.2	10	M4	6001ZZ	39
NSCS-12-11-CB2	NSCS-12-11-MB2	12	11	9	30	18.7	10	M4	6201ZZ	41
NSCS-12-11-CB3	NSCS-12-11-MB3	12	11	9	30	16.2	10	M4	6901ZZ	41
NSCS-15-12-CB1	NSCS-15-12-MB1	15	12	11	35	20.2	12	M5	6002ZZ	58
NSCS-15-12-CB2	NSCS-15-12-MB2	15	12	11	35	21.7	12	M5	6202ZZ	59
NSCS-15-12-CB3	NSCS-15-12-MB3	15	12	11	35	19.2	12	M5	6902ZZ	58

*1: Hex socket head cap screw is provided.

Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Not Available	Available / Add'l charge



Part Number	Part Number	d	B	B1	D	D1	F	M(coarse)*1	Applicable bearings	Mass (g)
Ferrosoferric oxide film	Electroless nickel plating									
NSCS-17-12-CB1	NSCS-17-12-MB1	17	12	11	35	22.2	13	M5	6003ZZ	56
NSCS-17-12-CB2	NSCS-17-12-MB2	17	12	11	35	24.2	13	M5	6203ZZ	56
NSCS-17-12-CB3	NSCS-17-12-MB3	17	12	11	35	21.2	13	M5	6903ZZ	55
NSCS-20-12-CB1	NSCS-20-12-MB1	20	12	11	40	27.2	14	M5	6004ZZ	72
NSCS-20-12-CB2	NSCS-20-12-MB2	20	12	11	40	29.2	14	M5	6204ZZ	73
NSCS-20-12-CB3	NSCS-20-12-MB3	20	12	11	40	25.2	14	M5	6904ZZ	70
NSCS-25-15-CB1	NSCS-25-15-MB1	25	15	13	45	31.7	17	M5	6005ZZ	111
NSCS-25-15-CB2	NSCS-25-15-MB2	25	15	13	45	33.2	17	M5	6205ZZ	110
NSCS-25-15-CB3	NSCS-25-15-MB3	25	15	13	45	30.2	17	M5	6905ZZ	109
NSCS-30-15-CB1	NSCS-30-15-MB1	30	15	13	55	38.2	20	M6	6006ZZ	167
NSCS-30-15-CB2	NSCS-30-15-MB2	30	15	13	55	40.2	20	M6	6206ZZ	167
NSCS-30-15-CB3	NSCS-30-15-MB3	30	15	13	55	35.2	20	M6	6906ZZ	165
NSCS-35-15-CB1	NSCS-35-15-MB1	35	15	13	60	43.2	23	M6	6007ZZ	187
NSCS-35-15-CB2	NSCS-35-15-MB2	35	15	13	60	46.2	23	M6	6207ZZ	191
NSCS-35-15-CB3	NSCS-35-15-MB3	35	15	13	60	41.2	23	M6	6907ZZ	184
NSCS-40-17-CB1	NSCS-40-17-MB1	40	17	15	70	48.2	26	M8	6008ZZ	293
NSCS-40-17-CB2	NSCS-40-17-MB2	40	17	15	70	52.2	26	M8	6208ZZ	298
NSCS-40-17-CB3	NSCS-40-17-MB3	40	17	15	70	46.2	26	M8	6908ZZ	300

*1: Hex socket head cap screw is provided.

● Related Products

Set collar for stainless steel securing bearings **NSCS** is available.

→ P.391



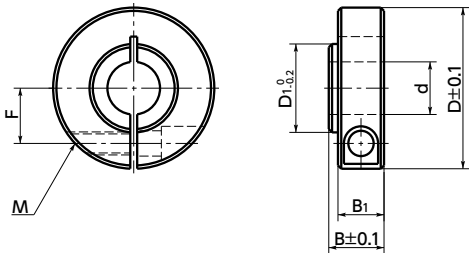
● Part number specification

NSCS-10-11-CB2



NSCS Set Collar (Made of Stainless Steel) - For Securing Bearing - Clamping Type

WEB Selection Tool CAD Download SUS Stainless steel



- Set collar for securing bearings.
- It can be fixed by pressing the bearing inner wheel only on the convex of the main body.
- Optimal for securing bearing when it is difficult to fix the snap ring, etc. to the shaft.
- Clamping Type. Mounting and removing are easy. Moreover this does not scratch the shaft.

● Material/Finish	RoHS2 Compliant
	NSCS
Main body	SUS304
Hex Socket Head Cap Screw	SUSXM7

Part Number	d	B	B ₁	D	D ₁	F	M(coarse)*1	Applicable bearings	Mass (g)
NSCS-3-8-SB	3	8.5	7.5	15	5	4.5	M3	693ZZ・623ZZ	9
NSCS-4-8-SB	4	8.5	7.5	15	6	4.5	M3	694ZZ・624ZZ	9
NSCS-5-8-SB	5	8.5	7.5	20	7.2	6	M3	695ZZ・605ZZ・625ZZ	16
NSCS-6-8-SB1	6	8.5	7.5	20	9.4	6.5	M3	606ZZ	15
NSCS-6-8-SB2	6	8.5	7.5	20	9.7	6.5	M3	626ZZ	16
NSCS-6-8-SB3	6	8.5	7.5	20	9.1	6.5	M3	696ZZ	16
NSCS-8-8-SB1	8	8.5	7.5	20	11.7	7	M3	608ZZ	14
NSCS-8-8-SB2	8	8.5	7.5	20	13.2	7	M3	628ZZ	15
NSCS-8-8-SB3	8	8.5	7.5	20	11.2	7	M3	698ZZ	15
NSCS-10-11-SB1	10	11	9	30	14.7	9	M4	6000ZZ	42
NSCS-10-11-SB2	10	11	9	30	17.2	9	M4	6200ZZ	43
NSCS-10-11-SB3	10	11	9	30	14.2	9	M4	6900ZZ	42
NSCS-12-11-SB1	12	11	9	30	17.2	10	M4	6001ZZ	40
NSCS-12-11-SB2	12	11	9	30	18.7	10	M4	6201ZZ	41
NSCS-12-11-SB3	12	11	9	30	16.2	10	M4	6901ZZ	40
NSCS-15-12-SB1	15	12	11	35	20.2	12	M5	6002ZZ	65
NSCS-15-12-SB2	15	12	11	35	21.7	12	M5	6202ZZ	65
NSCS-15-12-SB3	15	12	11	35	19.2	12	M5	6902ZZ	65

*1: Hex socket head cap screw is provided.



Part Number	d	B	B ₁	D	D ₁	F	M(coarse)*1	Applicable bearings	Mass (g)
NSCS-17-12-SB1	17	12	11	35	22.2	13	M5	6003ZZ	61
NSCS-17-12-SB2	17	12	11	35	24.2	13	M5	6203ZZ	62
NSCS-17-12-SB3	17	12	11	35	21.2	13	M5	6903ZZ	60
NSCS-20-12-SB1	20	12	11	40	27.2	14	M5	6004ZZ	78
NSCS-20-12-SB2	20	12	11	40	29.2	14	M5	6204ZZ	79
NSCS-20-12-SB3	20	12	11	40	25.2	14	M5	6904ZZ	78
NSCS-25-15-SB1	25	15	13	45	31.7	17	M5	6005ZZ	111
NSCS-25-15-SB2	25	15	13	45	33.2	17	M5	6205ZZ	112
NSCS-25-15-SB3	25	15	13	45	30.2	17	M5	6905ZZ	111
NSCS-30-15-SB1	30	15	13	55	38.2	20	M6	6006ZZ	169
NSCS-30-15-SB2	30	15	13	55	40.2	20	M6	6206ZZ	170
NSCS-30-15-SB3	30	15	13	55	35.2	20	M6	6906ZZ	165
NSCS-35-15-SB1	35	15	13	60	43.2	23	M6	6007ZZ	189
NSCS-35-15-SB2	35	15	13	60	46.2	23	M6	6207ZZ	193
NSCS-35-15-SB3	35	15	13	60	41.2	23	M6	6907ZZ	188
NSCS-40-17-SB1	40	17	15	70	48.2	26	M8	6008ZZ	298
NSCS-40-17-SB2	40	17	15	70	52.2	26	M8	6208ZZ	303
NSCS-40-17-SB3	40	17	15	70	46.2	26	M8	6908ZZ	295

*1: Hex socket head cap screw is provided.

- Part number specification

NSCS-10-11-SB2



Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821
Available / Add'l charge	Not Available	Not Available	Available / Add'l charge

• Handwheel

Product Code	HAK	PH/PHS	HDA	HSM	AV	AH
Page	P.395	P.397	P.398	P.399	P.400	P.401
Shape						
Handwheel Diameter	φ40 - φ80	φ80 - φ250	φ80 - φ200	φ80 - φ250	φ80 - φ300	φ80 - φ300
Material	Aluminum Alloy	Plastic	Aluminum Alloy	Stainless Steel	Aluminum Alloy	Aluminum Alloy

Product Code	HSN	D	F	FS
Page	P.402	P.403	P.404	P.405
Shape				
Handwheel Diameter	φ125 - φ315	φ80 - φ315	φ80 - φ315	φ40 - φ63
Material	Cast iron	Cast iron	Cast iron	Cast iron

• Revolving Grip

Product Code	GIRS	GIRA	GNTR/GNTRS	GTR	RM	GGB
Page	P.406	P.407	P.408	P.409	P.410	P.411
Shape						
Nominal Diameter of Thread	M6 - M10	M6 - M10	M5 - M10	M5 - M10	M6 - M12	M6 - M10
Grip Material	Stainless Steel	Aluminum Alloy	Nylon 6	Nylon 6	Nylon 6	Rubber

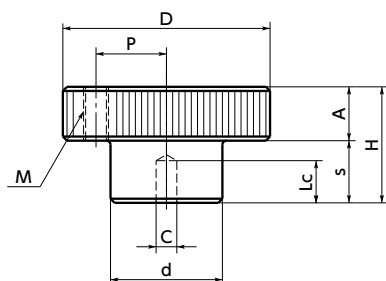
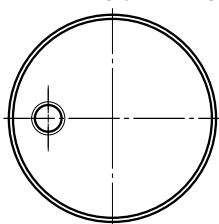
Product Code	NP
Page	P.412
Shape	
Nominal Diameter of Thread	M6 - M12
Grip Material	Nylon 6

• Fixing Grip

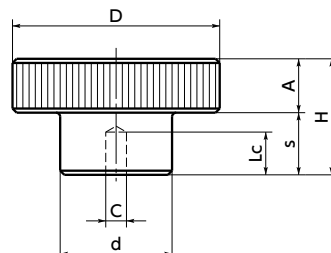
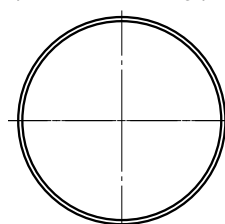
Product Code	GTM/GTF	GTMS/GTFS	SM	HS	GSS
Page	P.413	P.413	P.414	P.415	P.416
Shape					
Nominal Diameter of Thread	M5 - M12	M5 - M12	M4 - M16	M5 - M10	M5 - M12
Grip Material	Nylon 6	Nylon 6	Steel	Aluminum Alloy	Stainless Steel

HAK

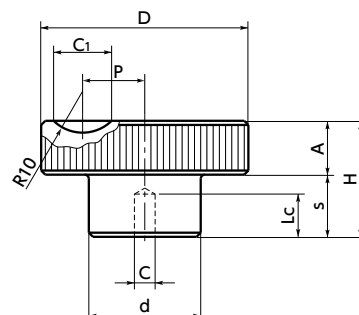
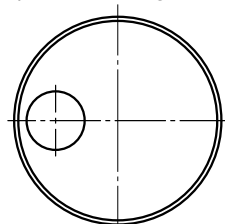
With pilot hole and grip mounting hole

**HAK-N**

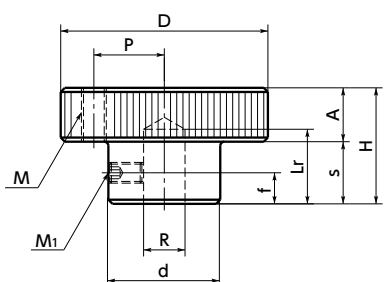
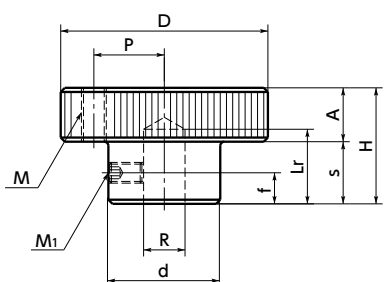
With pilot hole and without grip mounting hole

**HAK-FH**

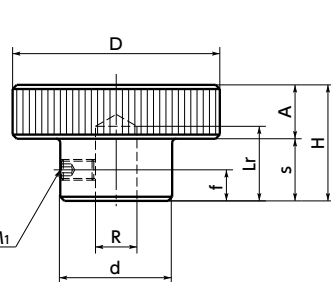
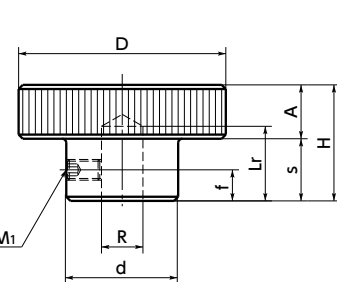
With pilot hole and finger hole

**HAK-R**

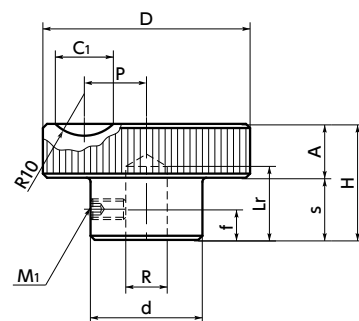
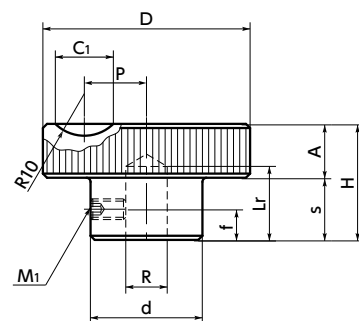
With reamer bore and grip mounting hole

**HAK-R-N**

With reamer bore and without grip mounting hole

**HAK-R-FH**

With reamer bore and finger hole

**HAK** With pilot hole and grip mounting hole**HAK-N** With pilot hole and without grip mounting hole

Unit : mm

Part Number With grip mounting holes	M	P	Part Number Without grip mounting holes	D	H	A	s	d	C	Lc	Mass (g)
HAK-40	M6	14.5	HAK-40-N	40	25	12	13	22	5	15	50
HAK-50	M6	17	HAK-50-N	50	28	13	15	27	5	15	87
HAK-63	M6	23	HAK-63-N	63	32	14	18	35	5	15	161
HAK-80	M6	30	HAK-80-N	80	40	15	25	45	5	15	299

HAK-R With reamer bore and grip mounting hole**HAK-R-N** With reamer bore and without grip mounting hole

Unit : mm

Part Number With grip mounting holes	M	P	Part Number Without grip mounting holes	D	H	A	s	d	C	Lc	Mass (g)
HAK-40	M6	14.5	HAK-40-N	40	25	12	13	22	5	15	50
HAK-50	M6	17	HAK-50-N	50	28	13	15	27	5	15	87
HAK-63	M6	23	HAK-63-N	63	32	14	18	35	5	15	161
HAK-80	M6	30	HAK-80-N	80	40	15	25	45	5	15	299

*1 : Hex socket set screw is provided.

Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821	Modification of Shaft Hole Diameter → P.815
Available / Add'l charge	Not Available	Available / Add'l charge	Please feel free to contact us

HAK-SG**HAK-FH-SG****HAK-FH****HAK**

- Mini handwheel made of aluminum alloy
- Bore type and with / without grip mounting hole and finger hole can be selected by a product code.

Product Code	Bore Type	Grip Mounting Hole	Finger Hole
HAK	Pilot Hole	Yes	No
HAK-N	Pilot Hole	No	No
HAK-FH	Pilot Hole	No	Yes
HAK-R	Reamer Bore	Yes	No
HAK-R-N	Reamer Bore	No	No
HAK-R-FH	Reamer Bore	No	Yes

- There are two color variations. They can be selected by the end symbol of the part number. ◀4
No end symbol — Black
End Symbol **SG** — Silver gray
- No grip is supplied with this product. Please separately order a grip. → P.394 List of grips

Material/Finish	HAK
Main body	A5056 Alumite Treatment (Various Color)

RoHS2 Compliant

HAK-FH With pilot hole / finger hole

Unit : mm

Part Number With finger hole	D	H	A	s	d	C	Lc	P	C1	Mass (g)
HAK-40-FH	40	25	12	13	22	5	15	10.5	14	49
HAK-50-FH	50	28	13	15	27	5	15	15	14	86
HAK-63-FH	63	32	14	18	35	5	15	21	14	159

HAK-R-FH With reamer bore / finger hole

Unit : mm

Part Number With finger hole	D	H	A	s	d	R	Lr	M1*1	f	P	C1	Mass (g)
HAK-40-R8-FH	40	25	12	13	22	8	15	M5	6.5	10.5	14	44
HAK-50-R10-FH	50	28	13	15	27	10	18	M5	7.5	15	14	76
HAK-63-R12-FH	63	32	14	18	35	12	22	M5	9	21	14	144

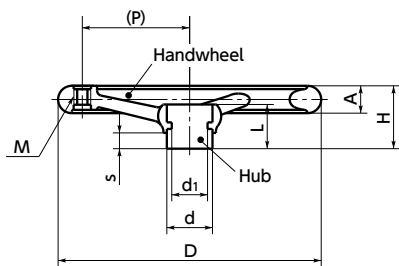
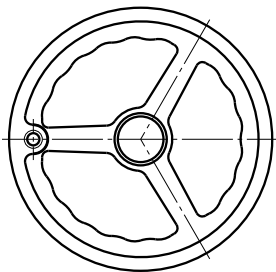
*1 : Hex socket set screw is provided.

• Part number specification

HAK - 40 - N - SG (If the bore type is for pilot hole)Product Code
1 3 4**HAK - 40 - R 8 - FH - SG** (If the bore type is for reamer bore)Product Code
1 3 2 3 4

PH / PHS Plastic Handwheel

[WEB Selection Tool](#) [WEB CAD Download](#) **SUS** Stainless steel Shaft bore process required



- Standard model with a plastic handwheel
- There are two types of hub materials.
- PH** — Cast iron hub
- PHS** — Stainless steel hub
- Grip mounting hole is available.
- No grip is supplied with this product. Please separately order a grip. P.394 List of grips

- Material/Finish

	PH Cast Iron Hub	PHS Stainless Steel Hub
Handwheel Part	Nylon 6 (Black)	Nylon 6 (Black)
Hub Part	FC200 Ferrosoferric Oxide Film (Black)	SUS303
Grip Mounting Hole Insert	SUM22L Trivalent Chromate Treatment	SUS303

Part Number Cast iron hub	Part Number Stainless steel hub	M	D	H	A	s	d	d1	L	P	Number of spokes	Mass (g)
PH-80	PHS-80	M5	80	40	14	10	24	18	26	29	3	130
PH-100	PHS-100	M5	100	44	15	10	28	22	29	40	3	200
PH-125	PHS-125	M6	125	48	16	10	32	26	30	51	3	280
PH-140	PHS-140	M6	140	54	17	10	34	26	35	58	3	400
PH-160	PHS-160	M8	160	57	18	10	36	28	36	67	3	440
PH-200	PHS-200	M10	200	64	22	12	38	30	42	84	3	670
PH-250	PHS-250	M10	250	66	26	15	44	36	42	102	5	980

- Recommended applicable grip

Part Number Cast Iron Hub	Recommended applicable grip		Part Number Stainless Steel Hub	Recommended applicable grip	
	GTR P.409	GTM P.413		GNTRS P.408	GTMS P.413
PH-80	GTR-18 - M5	GTM-18 - M5	PHS-80	GNTRS-18 - M5	GTMS-18 - M5
PH-100	GTR-18 - M5	GTM-18 - M5	PHS-100	GNTRS-18 - M5	GTMS-18 - M5
PH-125	GTR-19 - M6	GTM-19 - M6	PHS-125	GNTRS-19 - M6	GTMS-19 - M6
PH-140	GTR-19 - M6	GTM-19 - M6	PHS-140	GNTRS-19 - M6	GTMS-19 - M6
PH-160	GTR-24 - M8	GTM-24 - M8	PHS-160	GNTRS-24 - M8	GTMS-24 - M8
PH-200	GTR-28 - M10	GTM-28 - M10	PHS-200	GNTRS-28 - M10	GTMS-28 - M10
PH-250	GTR-28 - M10	GTM-28 - M10	PHS-250	GNTRS-28 - M10	GTMS-28 - M10

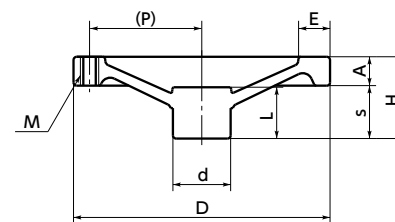
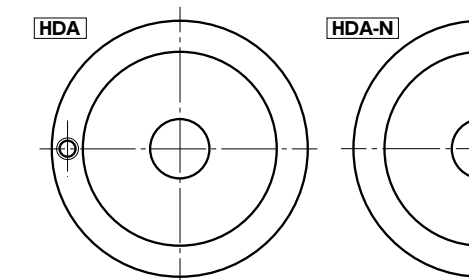
- Part number specification

PHS-80

Cleanroom Wash & Packaging P.807	Vibration Resistant P.810	Laser Marking P.821	Modification of Shaft Hole Diameter P.815
Available / Add'l charge	Not Available	Available / Add'l charge	Available / Add'l charge

HDA Aluminum Disk Handwheel

[WEB Selection Tool](#) [WEB CAD Download](#) Shaft bore process required



- Standard model with an aluminum disk handwheel
- With / without grip mounting hole can be selected by the end symbol of the part number.
- HDA** — With grip mounting hole
- HDA-N** — Without grip mounting hole
- No grip is supplied with this product. Please separately order a grip. P.394 List of grips

- Material/Finish

	HDA
Main body	AC8A Entire Shot Blast

Part Number	M	P	Part Number	D	H	A	s	d	L	Mass (g)
HDA-80	M6	33.5	HDA-80-N	82	31	13.5	17.5	26	21	125
HDA-100	M6	43	HDA-100-N	103	38	14.5	23.5	28	25	200
HDA-125	M8	55	HDA-125-N	128	43	15.5	27.5	31	28	340
HDA-160	M10	70	HDA-160-N	164	51	18.5	32.5	36	32	630
HDA-200	M10	89	HDA-200-N	204	57	20.5	36.5	42	36	980

- Recommended applicable grip

Part Number	Recommended applicable grip			
	GTR P.409	GNTR P.408	GTM P.413	HS P.415
HDA-80	GTR-19 - M6	GNTR-19 - M6	GTM-19 - M6	HS-6
HDA-100	GTR-19 - M6	GNTR-19 - M6	GTM-19 - M6	HS-6
HDA-125	GTR-24 - M8	GNTR-24 - M8	GTM-24 - M8	HS-8
HDA-160	GTR-28 - M10	GNTR-28 - M10	GTM-28 - M10	HS-10
HDA-200	GTR-28 - M10	GNTR-28 - M10	GTM-28 - M10	HS-10

- Part number specification

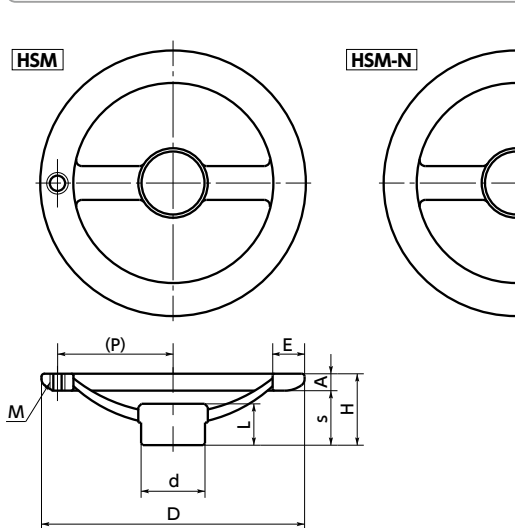
HDA-80-N
Product Code

Cleanroom Wash & Packaging P.807	Vibration Resistant P.810	Laser Marking P.821	Modification of Shaft Hole Diameter P.815
Available / Add'l charge	Not Available	Available / Add'l charge	Available / Add'l charge

HSM Stainless Steel Handwheel *Recommendation*



[WEB Selection Tool](#) [WEB CAD Download](#) [SUS](#) Stainless steel [Shaft bore process required](#)



- Standard model with a stainless steel handwheel
- With / without grip mounting hole can be selected by the end symbol of the part number. [1](#) [2](#)
HSM — With grip mounting hole
HSM-N — Without grip mounting hole
- No grip is supplied with this product. Please separately order a grip. ➔ P.394 List of grips

• Material/Finish RoHS2 Compliant	
	HSM
Main body	SCS13 (Equivalent to SUS304)

Unit : mm												
Part Number With grip mounting holes	M	P	Part Number Without grip mounting holes	D 1	H	A	s	d	L	E	Number of spokes	Mass (g)
HSM-80	M5	33	HSM-80-N	80	28	8	20	26	17	12	2	260
HSM-100	M5	43	HSM-100-N	100	30	8	22	26	18	13	2	320
HSM-125	M6	54	HSM-125-N	125	34	8	26	32	20	15	2	500
HSM-160	M8	71	HSM-160-N	160	42	10	32	36	24	18	2	900
HSM-200	M10	90	HSM-200-N	200	42	11	31	42	24	19	2	1300
HSM-250	M10	113	HSM-250-N	250	53	13	40	50	34	20	3	2400

- Recommended applicable grip

Part Number	Recommended applicable grip	
	GSS ➔ P.416	GNTRS ➔ P.408
HSM-80	GSS-5	GNTRS-18 - M5
HSM-100	GSS-5	GNTRS-18 - M5
HSM-125	GSS-6	GNTRS-19 - M6
HSM-160	GSS-8	GNTRS-24 - M8
HSM-200	GSS-10	GNTRS-28 - M10
HSM-250	GSS-10	GNTRS-28 - M10

- Part number specification

HSM-80-N

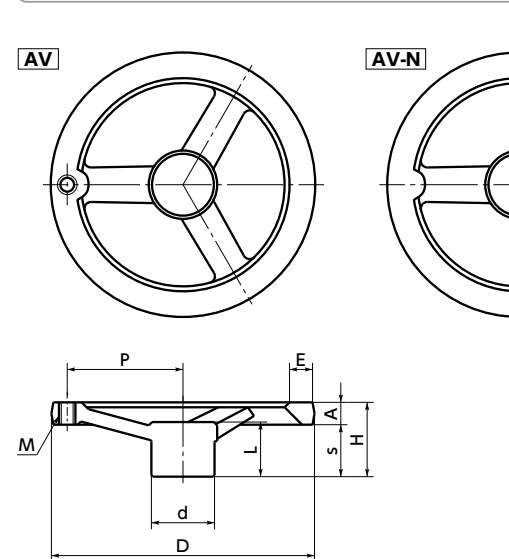
Product Code [1](#) [2](#)

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Available / Add'l charge	Not Available	Available / Add'l charge	Available / Add'l charge

AV Aluminum Offset Handwheel



[WEB Selection Tool](#) [WEB CAD Download](#) [Shaft bore process required](#)



- With / without grip mounting hole can be selected by the end symbol of the part number. [1](#) [2](#)
AV — With grip mounting hole
AV-N — Without grip mounting hole
- No grip is supplied with this product. Please separately order a grip. ➔ P.394 List of grips

• Material/Finish RoHS2 Compliant	
	AV
Main body	AC8A Buffing (Rim Part Only)

												Unit : mm
Part Number With grip mounting holes	M	P	Part Number Without grip mounting holes	D 	H	A	E	s	d	L	Number of spokes	Mass (g)
AV-80	M5	33	AV-80-N	80	32	9	14.5	23	28	25		95
AV-100	M5	42	AV-100-N	100	37	10	15.5	27	33	25		215
AV-125	M6	53	AV-125-N	125	44	15	14.5	29	35	30	2	225
AV-140	M6	61	AV-140-N	140	44	15	14	29	38	30	2	335
AV-160	M8	70	AV-160-N	160	52	15	16.5	37	40	35	2	415
AV-200	M10	88	AV-200-N	200	56	17	19	39	48	40	3	720
AV-250	M10	113	AV-250-N	250	61	20	22	41	52	40	3	1070
AV-300	M10	138	AV-300-N	300	65	20	20	45	58	45	3	1360

- Recommended applicable grip

Part Number	Recommended applicable grip			
	GNTR ➔ P.408	GTR ➔ P.409	GTM ➔ P.413	HS ➔ P.415
AV-80	GNTR-18 - M5	GTR-18 - M5	GTM-18 - M5	HS-5
AV-100	GNTR-18 - M5	GTR-18 - M5	GTM-18 - M5	HS-5
AV-125	GNTR-19 - M6	GTR-19 - M6	GTM-19 - M6	HS-6
AV-140	GNTR-19 - M6	GTR-19 - M6	GTM-19 - M6	HS-6
AV-160	GNTR-24 - M8	GTR-24 - M8	GTM-24 - M8	HS-8
AV-200	GNTR-28 - M10	GTR-28 - M10	GTM-28 - M10	HS-10
AV-250	GNTR-28 - M10	GTR-28 - M10	GTM-28 - M10	HS-10
AV-300	GNTR-28 - M10	GTR-28 - M10	GTM-28 - M10	HS-10

- Part number specification

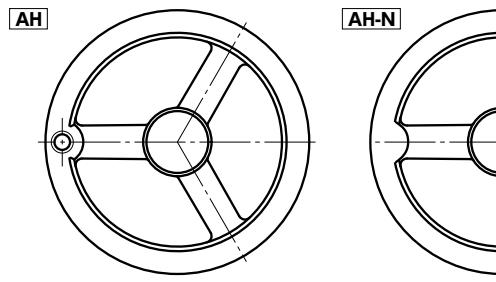
AV-80-N

Product Code [1](#) [2](#)

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Available / Add'l charge	Not Available	Available / Add'l charge	Available / Add'l charge

AH Aluminum Flat Handwheel

WEB Selection Tool WEB CAD Download Shaft bore process required



- With / without grip mounting hole can be selected by the end symbol of the part number.
- AH** — With grip mounting hole
- AH-N** — Without grip mounting hole
- No grip is supplied with this product. Please separately order a grip. → P.394 List of grips

Material/Finish		RoHS2 Compliant
AH		
Main body	AC8A Buffing (Rim Part Only)	

													Unit : mm
Part Number With grip mounting holes	M	P	Part Number Without grip mounting holes	D 	H	A	E	s	d	L	Number of spokes	Mass (g)	
AH-80	M5	33	AH-80-N	80	26	10	15	16	28	25		95	
AH-100	M5	42	AH-100-N	100	26	11	15	15	33	25		215	
AH-125	M6	53.5	AH-125-N	125	32	14	15	18	33	30	2	225	
AH-140	M6	62	AH-140-N	140	32	14	15	18	38	30	2	335	
AH-160	M8	68	AH-160-N	160	36	15	16	21	40	35	2	415	
AH-200	M10	87.5	AH-200-N	200	41	16	17	25	48	40	3	720	
AH-250	M10	112	AH-250-N	250	42	19	20	23	52	40	3	1070	
AH-300	M10	137	AH-300-N	300	47	19	22	28	57	45	3	1360	

● Recommended applicable grip

Part Number	Recommended applicable grip			
	GNTR → P.408	GTR → P.409	GTM → P.413	HS → P.415
AH-80	GNTR-18 - M5	GTR-18 - M5	GTM-18 - M5	HS-5
AH-100	GNTR-18 - M5	GTR-18 - M5	GTM-18 - M5	HS-5
AH-125	GNTR-19 - M6	GTR-19 - M6	GTM-19 - M6	HS-6
AH-140	GNTR-19 - M6	GTR-19 - M6	GTM-19 - M6	HS-6
AH-160	GNTR-24 - M8	GTR-24 - M8	GTM-24 - M8	HS-8
AH-200	GNTR-28 - M10	GTR-28 - M10	GTM-28 - M10	HS-10
AH-250	GNTR-28 - M10	GTR-28 - M10	GTM-28 - M10	HS-10
AH-300	GNTR-28 - M10	GTR-28 - M10	GTM-28 - M10	HS-10

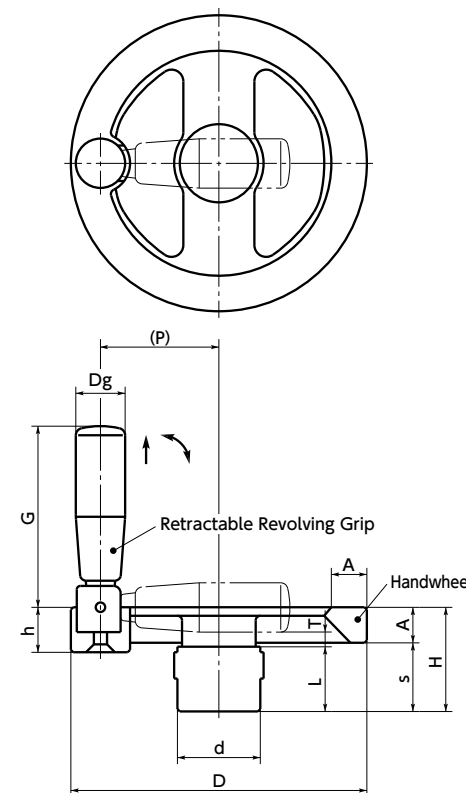
● Part number specification

AH - 80 - N
Product Code

Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821	Modification of Shaft Hole Diameter → P.815
Available / Add'l charge	Not Available	Available / Add'l charge	Available / Add'l charge

HSN Two Spoke Handwheel

WEB Selection Tool WEB CAD Download with Grip Shaft bore process required



- Two spoke handwheel with retractable revolving grip.
- The grip is to be pulled up before tilting, so it can hardly be tilted accidentally.
- The handwheel body main body is cast iron, and the grip is phenol resin. This is a strong type that can endure high torque.

Material/Finish		RoHS2 Compliant
HSN		
Retractable Revolving Grip	Phenol Resin (Black)	
Handwheel	FC200 Electrostatic Coating (Black)	

													Unit : mm
Part Number	D	H	A	s	h	d	L	T	Dg	G	P	Number of spokes	Mass (g)
HSN-125	125	44	15	29	19	35	30	2.5	23	76.5	50	2	850
HSN-160	160	52	16	36	21.5	40	35	2.5	23	74	67	2	1300
HSN-200	200	56	17	39	18.5	48	40	2.5	26	91.5	87	2	2060
HSN-250	250	62	19	43	25.5	52	40	2.5	26	85	112	2	2960
HSN-315	315	66	21	45	24.5	63	45	2.5	26	86	144	2	4770

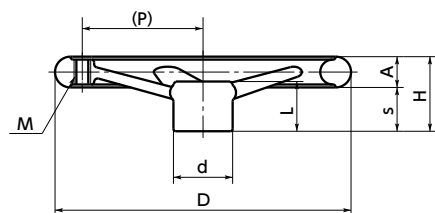
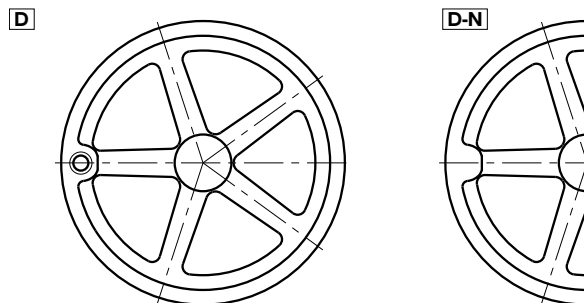
● Part number specification

HSN - 125
Product Code

Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821	Modification of Shaft Hole Diameter → P.815
Not Available	Not Available	Available / Add'l charge	Available / Add'l charge

D Offset Handwheel

[WEB Selection Tool](#) [CAD Download](#) [Shaft bore process required](#)



- With / without grip mounting hole can be selected by the end symbol of the part number. **D** — With grip mounting hole **D-N** — Without grip mounting hole
- No grip is supplied with this product. Please separately order a grip. ➔ P.394 List of grips

Material/Finish	D
Main body	FC200 Chrome Plating

Part Number	M	P	Part Number	D	H	A	s	d	L	Number of spokes	Mass (g)
With grip mounting holes			Without grip mounting holes								
D-80	M5	27	D-80-N	80	36	14	22	24	24	3	430
D-100	M5	35.5	D-100-N	100	39	15	24	30	25	3	630
D-125	M6	46.5	D-125-N	125	40	16	24	33	28	3	755
D-140	M6	53.5	D-140-N	140	44	17	27	35	30	3	1360
D-150	M8	56	D-150-N	150	46	18	28	35	32	3	1410
D-160	M8	61	D-160-N	160	46	18	28	37	32	3	1200
D-200	M10	77	D-200-N	200	60	24	36	43	41	3	2250
D-250	M10	101.5	D-250-N	250	63	25	38	50	42	5	3710
D-300	M12	122	D-300-N	300	66	26	40	56	45	5	6150
D-315	M12	128.5	D-315-N	315	72	28	44	60	49	5	6650

• Recommended applicable grip

Part Number	Recommended applicable grip
	RM ➔ P.410 SM ➔ P.414
D-80	SM-5
D-100	SM-5
D-125	RM-6 SM-6
D-140	RM-6 SM-6
D-150	RM-8 SM-8
D-160	RM-8 SM-8
D-200	RM-10 SM-10
D-250	RM-10 SM-10
D-300	RM-12 SM-12
D-315	RM-12 SM-12

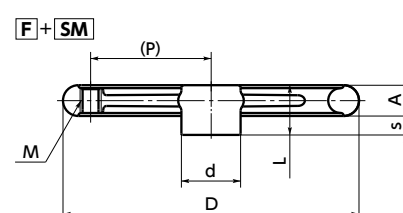
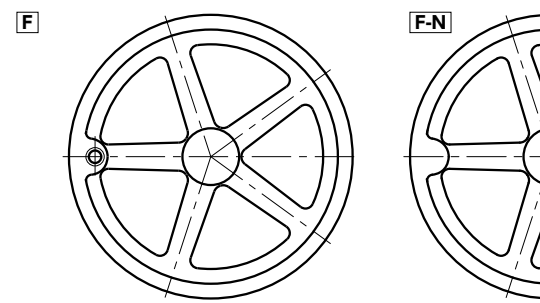
• Part number specification

D - 80-NProduct Code **D** **80** **N**

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Not Available	Not Available	Not Available	Available / Add'l charge

F Flat Handwheel

[WEB Selection Tool](#) [CAD Download](#) [Shaft bore process required](#)



- With / without grip mounting hole can be selected by the end symbol of the part number. **F** — With grip mounting hole **F-N** — Without grip mounting hole
- No grip is supplied with this product. Please separately order a grip. ➔ P.394 List of grips

Material/Finish	F
Main body	FC200 Chrome Plating

Part Number	M	P	Part Number	D	A	s	d	L	Number of spokes	Mass (g)
With grip mounting holes			Without grip mounting holes							
F-80	M5	27	F-80-N	80	14	10	24	24	3	430
F-100	M5	35.5	F-100-N	100	15	10	30	25	3	580
F-125	M6	46.5	F-125-N	125	16	12	33	28	3	810
F-140	M6	55	F-140-N	140	17	13	35	30	3	1360
F-160	M8	62	F-160-N	160	18	14	37	32	3	1410
F-200	M10	80	F-200-N	200	24	17	43	41	3	2330
F-250	M10	99	F-250-N	250	25	17	50	42	5	4030
F-315	M12	129	F-315-N	315	28	21	60	49	5	7150

• Recommended applicable grip

Part Number	Recommended applicable grip
	RM ➔ P.410 SM ➔ P.414
F-80	SM-5
F-100	SM-5
F-125	RM-6 SM-6
F-140	RM-6 SM-6
F-160	RM-8 SM-8
F-200	RM-10 SM-10
F-250	RM-10 SM-10
F-315	RM-12 SM-12

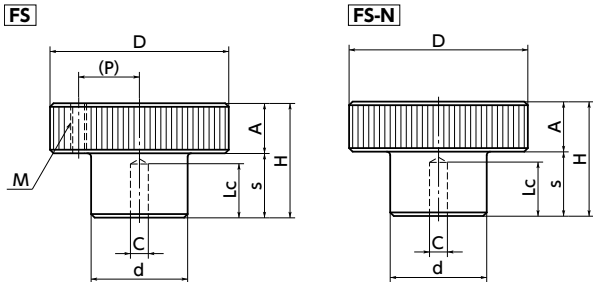
• Part number specification

F - 80-NProduct Code **F** **80** **N**

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Not Available	Not Available	Not Available	Available / Add'l charge

FS Knurled Handwheel

WEB Selection Tool WEB CAD Download



- With / without grip mounting hole can be selected by the end symbol of the part number. **FS** — With grip mounting hole **FS-N** — Without grip mounting hole
- No grip is supplied with this product. Please separately order a grip. ➔ P.394 List of grips

Material/Finish	
	FS
Main body	FC200 Chrome Plating

Unit : mm												
Part Number With grip mounting holes	M	P	Applicable recommended grip SM ➔ P.414	Part Number Without grip mounting holes	D 1	H	A	s	d	C	Lc	Mass (g)
FS-50	M4	17	SM-4	FS-40-N	40	28	13	15	22	5	14.5	250
FS-63	M5	23	SM-5	FS-50-N	50	32	14	18	27	5	15	415
				FS-63-N	63	40	15	25	35	5	15	750

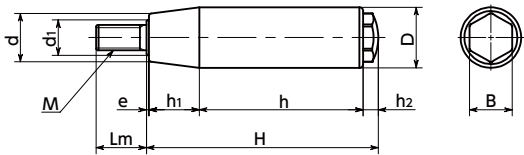
- Part number specification

FS - 50-N
Product Code **1** **2**

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Not Available	Not Available	Not Available	Please feel free to contact us

GIRS-SS Stainless Steel Revolving Grip *Recommendation*

WEB Selection Tool WEB CAD Download SUS Stainless steel



- The revolving grip made of all stainless steel.
- It is superior in corrosion resistance and strength.
- The grip and thread parts can be disassembled so the cleaning work is easy.
- For food machinery and chemical manufacturing devices that require hygiene control.

Material/Finish	
	GIRS-SS
Grip Part	SUS304
Thread Part	SUS304

Unit : mm												
Part Number 1	D	M	Lm	d	d1	e	H	h	h1	h2	B	Mass (g)
GIRS-18-M6-SS	18	M6	13	13	9	1	71	45	20	5	11	122
GIRS-20-M8-SS	20	M8	16	15	12	1	76	50	20	5	13	165
GIRS-24-M10-SS	24	M10	20	19	14	1	92	65	20	6	17	302

Related Products

There are revolving grips of the same shape with aluminum grip and steel thread part **GIRA**.
➔ P.407



Stainless steel fixed type grip
GSS.
➔ P.416



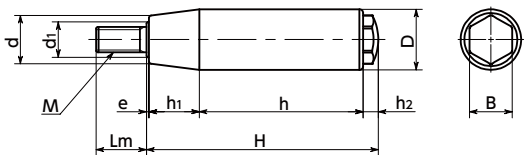
- Part number specification

GIRS-20-M8-SS
1

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available

GIRA-EL Aluminum Revolving Grip *Recommendation*

WEB Selection Tool
WEB CAD Download



- The revolving grip made of aluminum.
- The grip and thread parts can be disassembled so the cleaning work is easy.

- Material/Finish RoHS2 Compliant

	GIRA-EL
Grip Part	A2017 Alumite Treatment (Silver Gray)
Thread Part	SUM22 Electroless Nickel Plating

Part Number	D	M	Lm	d	d1	e	H	h	h1	h2	B	Mass (g)
GIRA-18-M6-EL	18	M6	13	13	9	1	71	45	20	5	11	71
GIRA-20-M8-EL	20	M8	16	15	12	1	76	50	20	5	13	107
GIRA-24-M10-EL	24	M10	20	19	14	1	92	65	20	6	17	192

Unit : mm

Related Products

All-stainless steel revolving grip of the same shape **GIRS** is available.
➔ P.406



Aluminum fixing type grip **HS**.
➔ P.415



- Part number specification

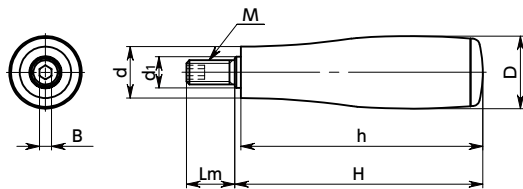
GIRA-20-M8-EL



Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available

GNTR/GNTRS Revolving Grip *Recommendation*

WEB Selection Tool
WEB CAD Download
SUS Stainless steel



- Back mounting method with hexagon socket
- The thread parts made of steel and stainless steel are standardized.

- Material/Finish RoHS2 Compliant

	GNTR Thread Part: Made of Steel	GNTRS Thread Part: Made of Stainless Steel
Grip Part	Nylon 6 (Black)	Nylon 6 (Black)
Thread Part	S5400 Trivalent Chromate Treatment	SUS303

Part Number	Part Number	D	M	Lm	d	d1	H	h	B	Mass (g)
GNTR-18-M5 Screw : Steel	GNTRS-18-M5 Screw : Stainless	18	M5	10	12	6.5	51	50	2.5	23
GNTR-19-M6	GNTRS-19-M6	19	M6	13	13	8	66	65	3	40
GNTR-24-M8	GNTRS-24-M8	24	M8	16	17	10.3	81	80	4	84
GNTR-28-M10	GNTRS-28-M10	28	M10	18	20	13	96	95	5	141

Unit : mm

- Part number specification

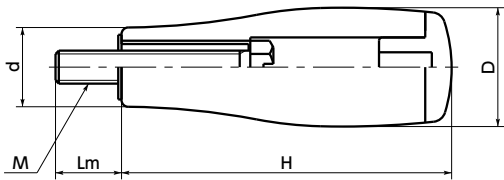
GNTRS-28-M10



Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Not Available	Available / Add'l charge	Available / Add'l charge	Not Available

GTR Revolving Grip *Recommendation*

WEB Selection Tool WEB CAD Download



- Plastic revolving grip superior in cost effectiveness

- Material/Finish

	GTR
Grip Part	Nylon 6 (Black)
Thread Part	SS400 Trivalent Chromate Treatment

Part Number	D	M	Lm	d	H	Mass (g)
GTR-18-M5	18	M5	10	12	50	15
GTR-19-M6	19	M6	13	13	65	26
GTR-24-M8	24	M8	15	17	80	50
GTR-28-M10	28	M10	20	20	95	86

Unit : mm

- Part number specification

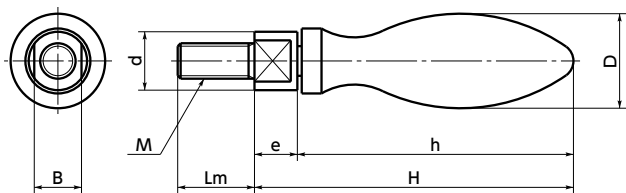
GTR-28-M10

Product Code

Cleanroom Wash & Packaging P.807	Vibration Resistant P.810	Laser Marking P.821	Modification of Shaft Hole Diameter P.815
Not Available	Not Available	Available / Add'l charge	Not Available

RM Plated Revolving Grip

WEB Selection Tool WEB CAD Download



- Material/Finish

	RM
Grip Part	SS400 Chrome Plating
Thread Part	SS400 Chrome Plating

Part Number	D	M	Lm	d	H	h	e	B	Mass (g)
RM-6	16	M6	13	10	56	48	8	8	45
RM-8	20	M8	15	13	69	60	9	10	90
RM-10	25	M10	18	16	89	77	12	14	180
RM-12	32	M12	20	20	111	98	13	17	360
RM-16	36	M16	22	22	121	107	14	19	525

Unit : mm

- Related Products

Fixing grip with the same shape is available.
 P.414



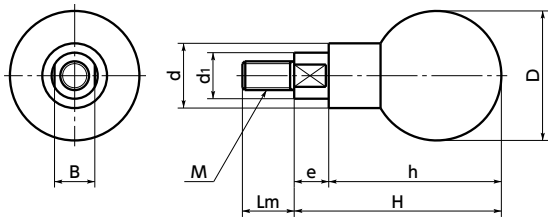
- Part number specification

RM-6

Cleanroom Wash & Packaging P.807	Vibration Resistant P.810	Laser Marking P.821	Modification of Shaft Hole Diameter P.815
Not Available	Available / Add'l charge	Not Available	Not Available

GGB Rubber Ball Revolving Grip

WEB Selection Tool CAD Download



● Material/Finish RoHS2 Compliant	
	GGB
Grip Part	EPDM (Matte Black)
Thread Part	SS400 Chrome Plating

Unit : mm										
Part Number 1	D	M	Lm	d	d1	H	e	B	h	Mass (g)
GGB-6	28	M6	13	14	10	45.5	8	8	37.5	25
GGB-8	35.5	M8	15	17.8	13	56.5	9	10	47.5	40
GGB-10	45	M10	18	22.5	16	72	12	14	60	85

● Related Products

KGB
Rubber ball-shaped knob is available.
➔ P.313



● Part number specification

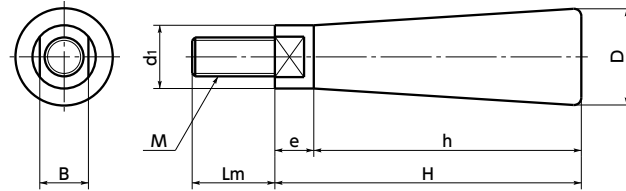
GGB-6

1

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Not Available	Available / Add'l charge	Not Available	Not Available

NP Tapered Revolving Grip

WEB Selection Tool CAD Download



● Material/Finish RoHS2 Compliant	
	NP
Grip Part	Nylon 6
Thread Part	SS400 Chrome Plating

Unit : mm									
Part Number 1	D	M	Lm	d1	H	h	e	B	Mass (g)
NP-6	16	M6	13	10	50	43	7	8	30
NP-8	20	M8	16.5	13	63.5	55.5	8	10	40
NP-10	25	M10	20	16	80	70	10	14	100
NP-12	32	M12	18	20	102	89	13	17	180

● Part number specification

NP-8

1

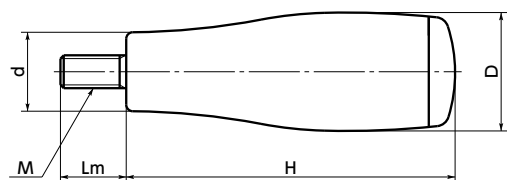
Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821	Modification of Shaft Hole Diameter ➔ P.815
Not Available	Available / Add'l charge	Available / Add'l charge	Not Available

GTM/GTMS/GTF/GTFS Fixing Grip Recommendation

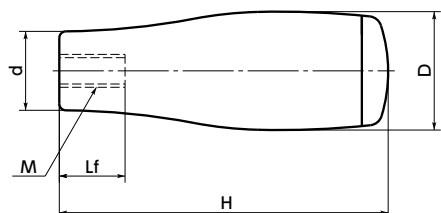


WEB Selection Tool CAD Download SUS Stainless steel

GTM GTMS Male Screw



GTF GTFS Female Screw



- The thread parts made of steel and stainless steel are standardized.
 - The grip and screw are integrally-molded by insert. This enhances the thread part durability.
 - Screw type (male / female) and thread part material can be selected by a product code. **1**
- GTM** — Male screw / made of steel
GTMS — Male screw / made of stainless steel
GTF — Female screw / made of steel
GTFS — Female screw / made of stainless steel

Material/Finish



	GTM Male Screw	GTMS Male Screw	GTF Female Screw	GTFS Female Screw
Grip Part	Nylon 6 (Black)	Nylon 6 (Black)	Nylon 6 (Black)	Nylon 6 (Black)
Thread Part	SUM22L Ferrosferric Oxide Film (Black)	SUS303	S45C Trivalent Chromate Treatment	SUS303

GTM GTMS Male Screw

Unit : mm

Part Number Steel	Part Number Stainless steel	D 2	M 3	Lm	d	H	Mass (g)
GTM-18-M5	GTMS-18-M5	18	M5	10	12	50	16
GTM-19-M6	GTMS-19-M6	19	M6	13	13	65	22
GTM-24-M8	GTMS-24-M8	24	M8	15	17	80	39
GTM-28-M10	GTMS-28-M10	28	M10	18	20	95	68
GTM-28-M12	GTMS-28-M12	28	M12	20	20	95	89

GTF GTFS Female Screw

Unit : mm

Part Number Steel	Part Number Stainless steel	D 2	M 3	Lf	d	H	Mass (g)
GTF-18-M5	GTFS-18-M5	18	M5	10	12	50	13
GTF-19-M6	GTFS-19-M6	19	M6	12	13	65	19
GTF-24-M8	GTFS-24-M8	24	M8	16	17	80	30
GTF-24-M10	GTFS-24-M10	24	M10	20	17	80	43
GTF-28-M10	GTFS-28-M10	28	M10	20	20	95	58
GTF-28-M12	GTFS-28-M12	28	M12	24	20	95	66

Part number specification

GTM-18-M5

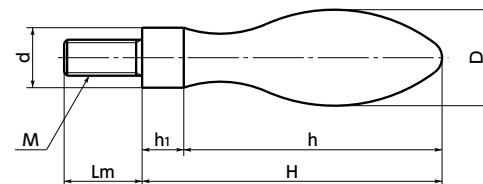
1 **2** **3**

Cleanroom Wash & Packaging ➡ P.807	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821	Modification of Shaft Hole Diameter ➡ P.815
Not Available	Male screw only/ Add'l charge	Available / Add'l charge	Not Available

SM Plated Fixing Grip



WEB Selection Tool CAD Download



Material/Finish



	SM
Main body	SS400 Chrome Plating



Part Number 1	D	M	Lm	d	H	h	h1	Mass (g)
SM-4	10	M4	9	7	32	28	4	10
SM-5	13	M5	10	8	40	35	5	25
SM-6	16	M6	13	10	50	43	7	45
SM-8	20	M8	15	13	64	56	8	90
SM-10	25	M10	18	16	80	70	10	180
SM-12	32	M12	20	20	100	87	13	350
SM-16	36	M16	22	22	112	98	14	500

Unit : mm

Related Products

Revolving grip **RM** with the same shape is available.
➡ P.410



Part number specification

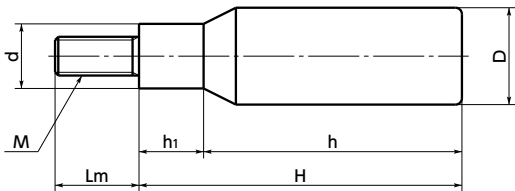
SM-4

1

Cleanroom Wash & Packaging ➡ P.807	Vibration Resistant ➡ P.810	Laser Marking ➡ P.821	Modification of Shaft Hole Diameter ➡ P.815
Not Available	Available / Add'l charge	Not Available	Not Available

HS Straight Fixing Grip

WEB Selection Tool WEB CAD Download



- Light aluminum grip.

- Material/Finish



	HS
Main body	A2017 Alumite Treatment (Silver Gray)

Part Number	D	M	Lm	d	H	h	h1	Mass (g)
HS-5	12	M5	10	8	40	32	8	10
HS-6	15	M6	13	10	50	40	10	25
HS-8	18	M8	15	13	65	52	13	45
HS-10	20	M10	18	16	80	64	16	90

Unit : mm

- Part number specification

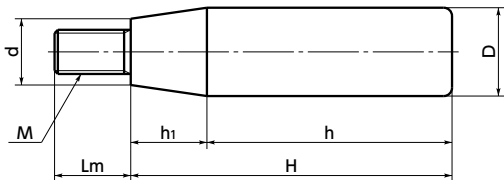
HS-5



Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821	Modification of Shaft Hole Diameter → P.815
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available

GSS Stainless Steel Fixing Grip

WEB Selection Tool WEB CAD Download SUS Stainless steel



- All stainless steel grip superior in corrosion resistance and strength

- Material/Finish



	GSS
Main body	SUS304

Part Number	D	M	Lm	d	H	h	h1	Mass (g)
GSS-5	10	M5	6	8	40	30	10	25
GSS-6	13	M6	7	10	50	37	13	50
GSS-8	16	M8	8	12	64	49	15	100
GSS-10	20	M10	10	15	70	50	20	150
GSS-12	25	M12	13	18	100	70	30	370

Unit : mm

- Usage example
In combination with a stainless steel handwheel
HSM (→ P.399).



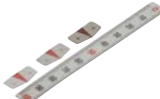
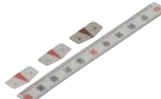
- Part number specification

GSS-5



Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821	Modification of Shaft Hole Diameter → P.815
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Not Available

● Scaling point

Product Code	FLE	FPP	FPS/FPT
Page	P.418	P.419	P.420
Shape			
Characteristics	Scale Marks Can be Enlarged	Stainless Steel Scale Indication · Plate Type Made of SUS304	Scale Indication · Plate Type Made of Polyester

● Scale

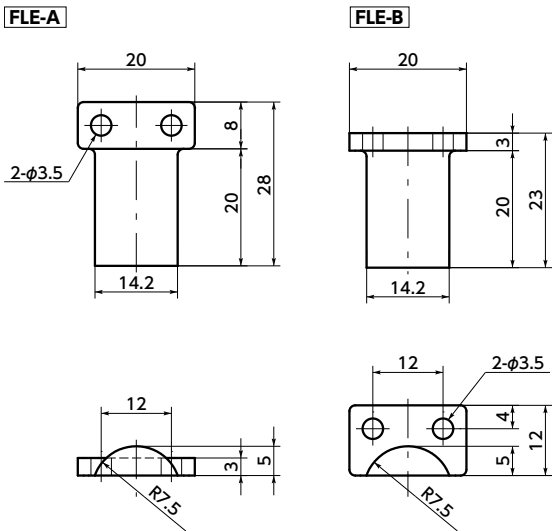
Product Code	FSP	FSP-HSR	FSP-V	FSP-V-HSR	FSS/FST	FSS-V/FST-V
Page	P.421	P.423	P.425	P.427	P.429	P.430
Shape	 <i>Recommendation</i>	 <i>NEW</i>		 <i>NEW</i>	 <i>Recommendation</i>	
Characteristics	Stainless Steel Horizontal Type · Plate Type Made of SUS304	Stainless Steel Horizontal Type · Half scale · Plate Type Made of SUS304	Stainless Steel Vertical Type · Plate Type Made of SUS304	Stainless Steel Vertical Type · Half scale · Plate Type Made of SUS304	Horizontal Type · Sticker Type Made of Polyester	Vertical Type · Sticker Type Made of Polyester
Scale Length	50 mm–200 mm	100mm - 150mm	50 mm – 200 mm	100mm - 150mm	100 mm–500 mm	100 mm – 500 mm

● Measuring Indicator

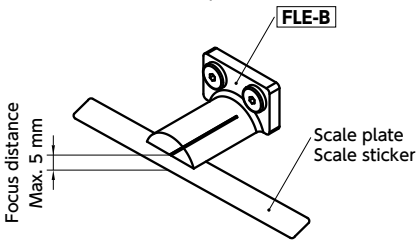
Product Code	RNCL
Page	P.431
Shape	
Characteristics	Display Counter Integrated

FLE Point Lenses

WEB Selection Tool WEB CAD Download



- Dedicated lens for the Scale Plate **FSP** (➔ P.421) and the Scale Sticker **FSS** **FST** (➔ P.429). It will make a scale reading easier.
- You can choose the Point Lens from the following two types of mounting methods according to your application.
FLE-A — Front mounting
FLE-B — Side mounting
- It is useful for displaying the home position of the actuator.
- Socket Head Cap Screw/Special Low Head made of stainless steel **SSH5-M3-10** (➔ P.601) for mounting is provided.
- Focus distance: Up to 5 mm



- Material/Finish ● RoHS2 Compliant

	FLE
Main body	Acrylic (transparent)
Thread	SUSXM7 (Equivalent to SUS304)

FSS **FST** ➔ P.429



- Part number specification

FLE-28-20-A

1

Part Number	Mass (g)
FLE-28-20-A	1.7
FLE-23-20-B	1.5

- Usage example
Use the Point Lens in combination with the Scale Plate **FSP** or the Scale Sticker **FSS** **FST**.
FSP ➔ P.421



Scale Plate / Scale sticker Length Adjustment ➔ P.812

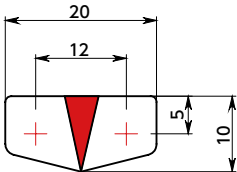
Not Available

FPP Point Plates

WEB Selection Tool WEB CAD Download SUS Stainless steel

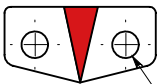


FPP



Thickness: 0.55 mm

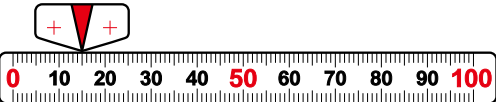
FPP-K



Thickness: 0.55 mm

Part Number	Mass (g)
FPP	0.8
FPP-K	0.7

- Usage example
In combination with the Scale Plate **FSP** (→ P.421).



● Related Products

Special low head bolt **SSHS** whose height of the head is low is available as a mounting bolt.
→ P.601



Scale Plate / Scale sticker Length Adjustutment → P.812
Not Available

- Use the Point Plate in combination with the Scale Plate **FSP** (→ P.421) or the Scale Sticker **FSS** **FST** (→ P.429).
- It is useful to use it as the home position indication plate for the actuator.
- **FPP** — Without mounting holes. With adhesive tape. Simply stick the Point Plate on machines/devices.
- **FPP-K** — With mounting holes. Tighten the Point Plate with screws.

Material/Finish	FPP
Main body	SUS304

RoHS2 Compliant

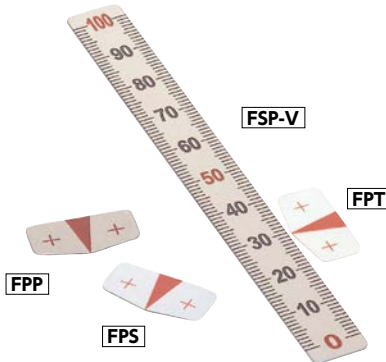
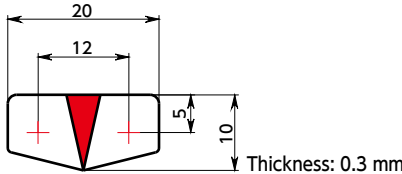
- Part number specification

FPP-K

1

FPS / FPT Point Stickers

WEB Selection Tool WEB CAD Download



- Use the Point Sticker in combination with the Scale Plate **FSP** (→ P.421) or the Scale Sticker **FSS** **FST** (→ P.429).
- Sticker type that can simply stick on machines / devices.
- It is useful to use it as the home position indication plate for the actuator.
- **FPS** — Aluminum evaporation coating
- **FPT** — Transparent

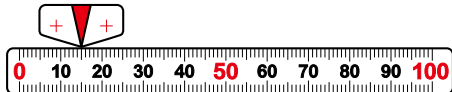
Material/Finish	FPS	FPT
Main body	Polyester Aluminum evaporation coating	Polyester (transparent)

RoHS2 Compliant

FPS Aluminum evaporation coating **FPT** Transparent

Part Number	Mass (g)
FPS	0.1
FPT	0.1

- Usage example
In combination with the Scale Sticker **FSS** **FST** (→ P.429).



Scale Plate / Scale sticker Length Adjustutment → P.812
Not Available

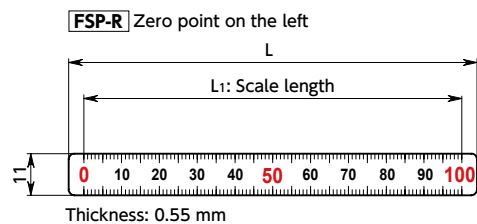
- Part number specification

FPS

1

FSP Scale Plates (Horizontal Type) *Recommendation*

WEB Selection Tool WEB CAD Download SUS Stainless steel



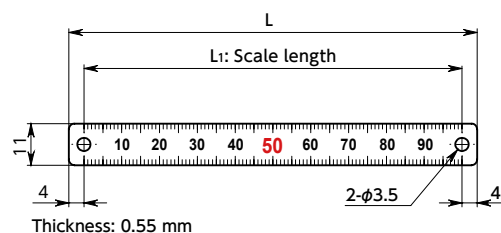
FSP-L Zero point on the right



FSP-C Center distribution



FSP-R-K Zero point on the left



FSP-L-K Zero point on the right



FSP-C-K Center distribution



* 0, 50, 100, 150 and 200 are red.

- Horizontal type scale plate. As the adhesive tape is provided, you can simply stick it on machines / devices to use.
- It is useful to align the adjustment shaft for a conveyance line and a slide table.
- Scale lengths of 50 / 100 / 150 / 200 mm are standardized.
- Made of stainless steel. It is highly corrosion-resistant.
- Corners are rounded. It is hard to remove.
- **FSP-K** has mounting holes. After sticking, it can be secured more firmly with screws.
- Adhesive tape is not provided with **FSP-50-*-K**. Tighten the Scale Plate with screws.
- **FSP** — Without mounting holes
FSP-K — With mounting holes
- Select the scale type from three types, and with or without mounting holes by the end symbol of the part number.

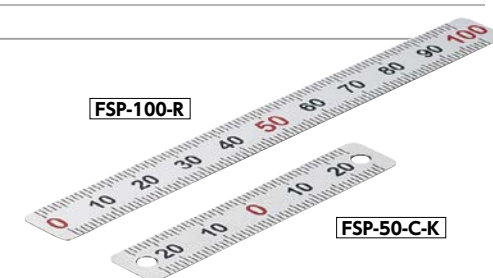
End Symbol	Scale	Mounting hole
R	Zero point on the left	No
R-K	Zero point on the left	Yes
L	Zero point on the right	No
L-K	Zero point on the right	Yes
C	Center distribution	No
C-K	Center distribution	Yes

- Material/Finish RoHS2 Compliant

	FSP
Main body	SUS304

⚠ Precautions for Use

- **FSP** Use the scale of the Scale Plate as a general guideline.
- Thoroughly remove oil and dust on the sticking surface before sticking.



Part Number	L1	L	Mass (g)
FSP-50-R	50	58	2.6
FSP-100-R	100	108	4.8
FSP-150-R	150	158	7
FSP-200-R	200	208	9.2
FSP-50-L	50	58	2.6
FSP-100-L	100	108	4.8
FSP-150-L	150	158	7
FSP-200-L	200	208	9.2
FSP-50-C	50	58	2.6
FSP-100-C	100	108	4.8
FSP-150-C	150	158	7
FSP-200-C	200	208	9.2
FSP-50-R-K	50	58	2.5
FSP-100-R-K	100	108	4.7
FSP-150-R-K	150	158	6.9
FSP-200-R-K	200	208	9.1
FSP-50-L-K	50	58	2.5
FSP-100-L-K	100	108	4.7
FSP-150-L-K	150	158	6.9
FSP-200-L-K	200	208	9.1
FSP-50-C-K	50	58	2.5
FSP-100-C-K	100	108	4.7
FSP-150-C-K	150	158	6.9
FSP-200-C-K	200	208	9.1

● Related Products

Special low head bolt **SSHS** whose height of the head is low is available as a mounting bolt.
➔ P.601



- Part number specification

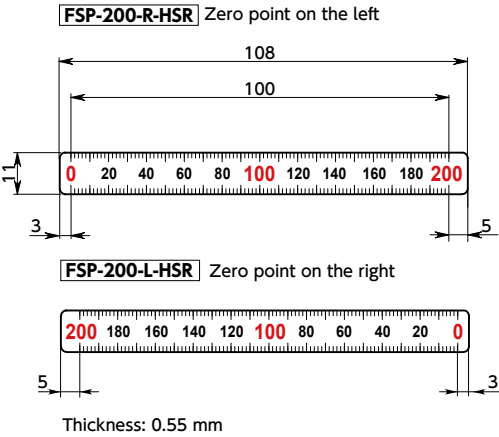
FSP-200-R-K
Product Code

Scale Plate / Scale sticker Length Adjustment ➔ P.812

Please feel free to contact us

FSP-HSR Scale Plate (Horizontal Type) - Half scale **NEW**

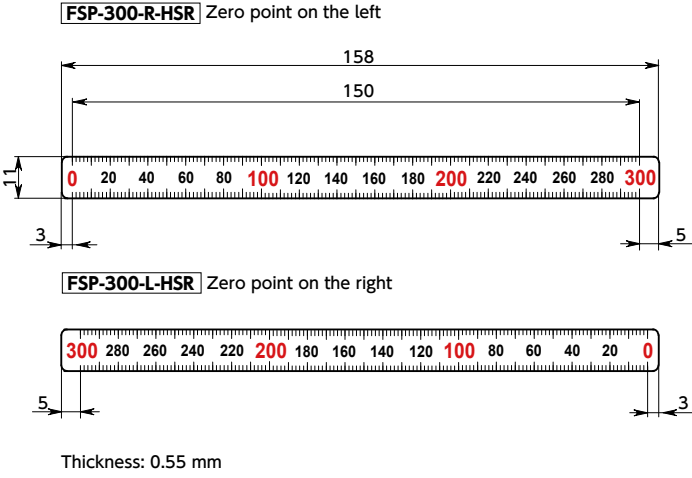
WEB Selection Tool WEB CAD Download SUS Stainless steel



- Horizontal type scale plate scaled down by half.
- Values of 20/40/60... are displayed on a 10 mm/20 mm/30 mm... scale.
- By using it in a feed mechanism using double-ended screws to move in both directions, you can read the actual travel distance.
- As the adhesive tape is provided, you can simply stick it on machines / devices to use.
- Made of stainless steel. They have excellent corrosion resistance.
- Corners are rounded. It is hard to remove.
- Material/Finish

RoHS2 Compliant

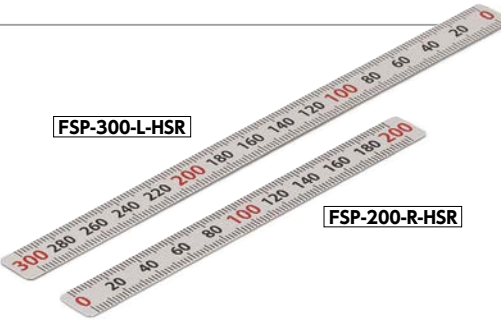
	FSP-HSR
Main body	SUS304



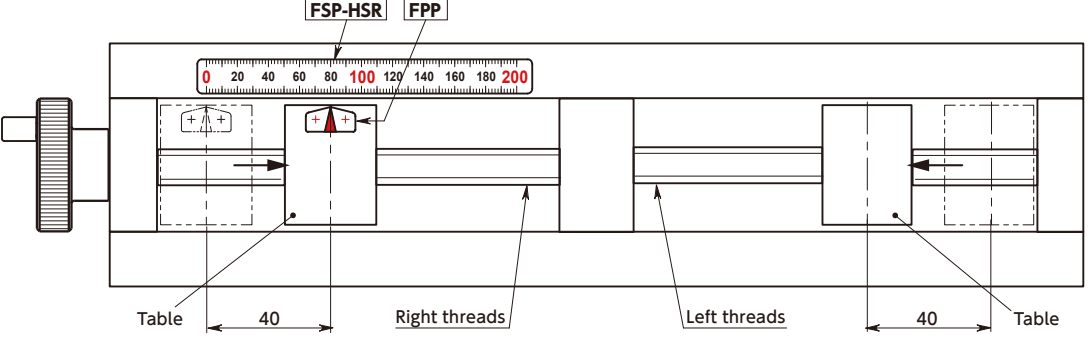
Part Number	Mass (g)	Unit : mm
FSP-200-R-HSR	4.8	
FSP-200-L-HSR	4.8	
FSP-300-R-HSR	7	
FSP-300-L-HSR	7	

Scale Plate / Scale sticker Length Adjustment → P.812
Available / Add'l charge

- ⚠ Precautions for Use
- **FSP-HSR** Use the scale of the Scale Plate as a general guideline.
- Thoroughly remove oil and dust on the sticking surface before sticking.
- Mounting hole processing is available upon request.



- Usage example
For reading actual travel distance in feed mechanisms using double-ended screws to move in both directions. When the left-side table travels 40 mm, the right-side table also travels 40 mm, for a total of 80 mm travel. Using **FSP-HSR** enables confirmation of this total travel distance.



• Related Products

Half-scale vertical type scale plate **FSP-V-HSR** is available.
→ P.427



Actual-scale horizontal type scale plate **FSP** is available.
→ P.421



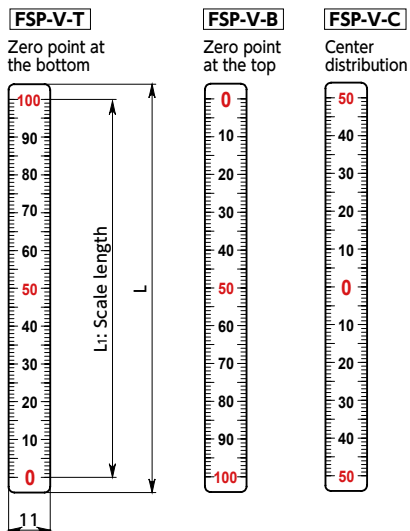
- Part number specification

FSP-200-R-HSR

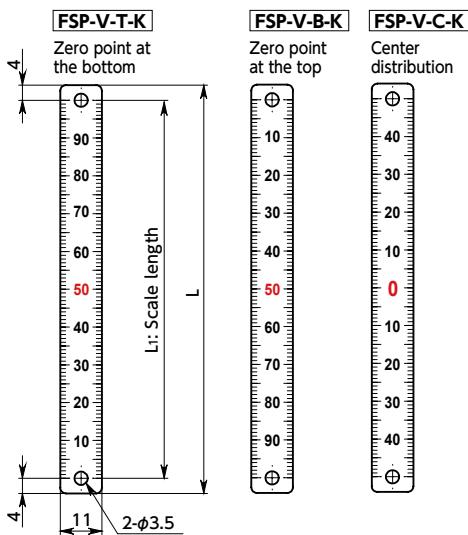


FSP-V Scale Plates (Vertical Type)

WEB Selection Tool WEB CAD Download SUS Stainless steel



Thickness: 0.55 mm



Thickness: 0.55 mm

* 0, 50, 100, 150 and 200 are red.

- Vertical type scale plate. As the adhesive tape is provided, you can simply stick it on machines / devices to use.
- It is useful to align the adjustment shaft for a conveyance line and a slide table.
- Scale lengths of 50 / 100 / 150 / 200 mm are standardized.
- Made of stainless steel. It is highly corrosion-resistant.
- Corners are rounded. It is hard to remove.
- FSP-V-K** has mounting holes. After sticking, it can be secured more firmly with screws.
- Adhesive tape is not provided with **FSP-50V-*K**. Tighten the Scale Plate with screws.
- FSP-V** ————— Without mounting holes
FSP-V-K ————— With mounting holes
- Select the scale type from three types, and with or without mounting holes by the end symbol of the part number.

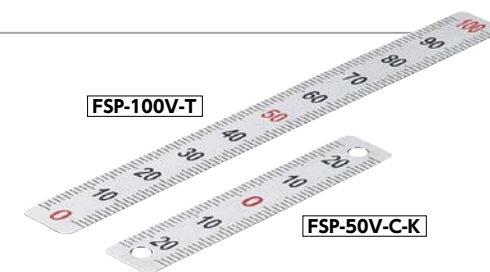
End Symbol	Scale	Mounting hole
T	Zero point at the bottom	No
T-K	Zero point at the bottom	Yes
B	Zero point at the top	No
B-K	Zero point at the top	Yes
C	Center distribution	No
C-K	Center distribution	Yes

- Material/Finish RoHS2 Compliant

	FSP-V
Main body	SUS304

⚠ Precautions for Use

- FSP-V** Use the scale of the Scale Plate as a general guideline.
- Thoroughly remove oil and dust on the sticking surface before sticking.



Part Number	L1	L	Mass (g)
FSP-50V-T	50	58	2.6
FSP-100V-T	100	108	4.8
FSP-150V-T	150	158	7
FSP-200V-T	200	208	9.2
FSP-50V-B	50	58	2.6
FSP-100V-B	100	108	4.8
FSP-150V-B	150	158	7
FSP-200V-B	200	208	9.2
FSP-50V-C	50	58	2.6
FSP-100V-C	100	108	4.8
FSP-150V-C	150	158	7
FSP-200V-C	200	208	9.2
FSP-50V-T-K	50	58	2.5
FSP-100V-T-K	100	108	4.7
FSP-150V-T-K	150	158	6.9
FSP-200V-T-K	200	208	9.1
FSP-50V-B-K	50	58	2.5
FSP-100V-B-K	100	108	4.7
FSP-150V-B-K	150	158	6.9
FSP-200V-B-K	200	208	9.1
FSP-50V-C-K	50	58	2.5
FSP-100V-C-K	100	108	4.7
FSP-150V-C-K	150	158	6.9
FSP-200V-C-K	200	208	9.1

• Related Products

Point Lens **FLE**, which is useful to read the scale, is available.
➔ P.418



Special low head bolt **SSHS** whose height of the head is low is available as a mounting bolt.
➔ P.601



• Part number specification

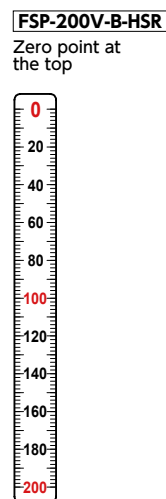
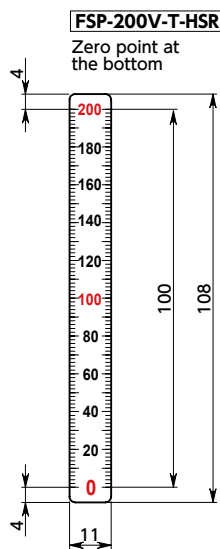
FSP-200 V - T-K
Product Code **1** Product Code **2**

Scale Plate / Scale sticker Length Adjustment ➔ P.812

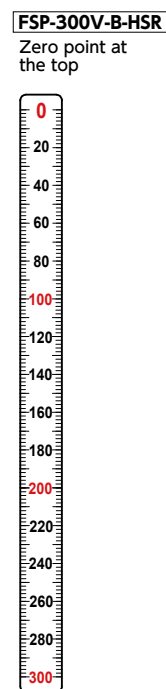
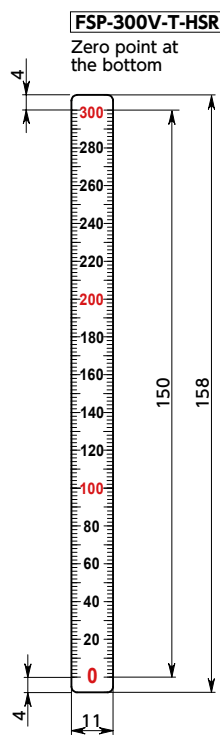
Please feel free to contact us

FSP-V-HSR Scale Plate (Vertical Type) - Half scale NEW

WEB Selection Tool WEB CAD Download SUS Stainless steel



Thickness: 0.55 mm



Thickness: 0.55 mm

- Vertical type scale plate scaled down by half.
- Values of 20/40/60... are displayed on a 10 mm/20 mm/30 mm... scale.
- By using it in a feed mechanism using double-ended screws to move in both directions, you can read the actual travel distance.
- As the adhesive tape is provided, you can simply stick it on machines / devices to use.
- Made of stainless steel. They have excellent corrosion resistance.
- Corners are rounded. It is hard to remove.
- Material/Finish



	FSP-V-HSR
Main body	SUS304

⚠ Precautions for Use

- **FSP-V-HSR** Use the scale of the Scale Plate as a general guideline.
- Thoroughly remove oil and dust on the sticking surface before sticking.

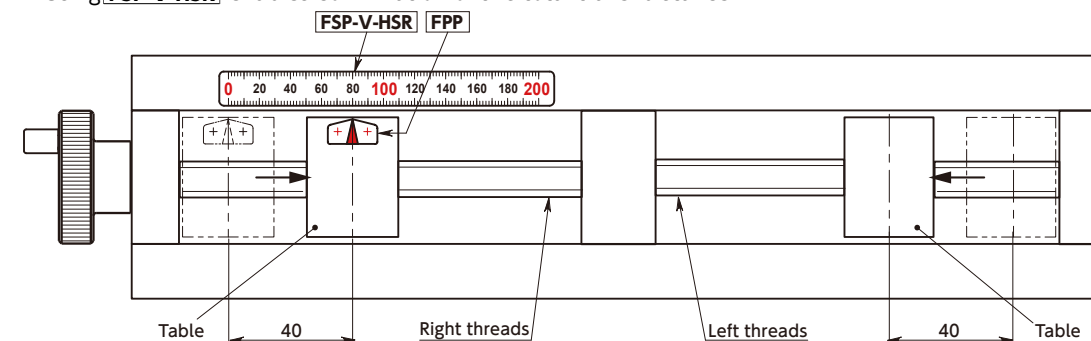
Part Number	Mass (g)	Unit : mm
FSP-200V-T-HSR	4.8	
FSP-200V-B-HSR	4.8	
FSP-300V-T-HSR	7	
FSP-300V-B-HSR	7	

- Mounting hole processing is available upon request.



- Usage example

For reading actual travel distance in feed mechanisms using double-ended screws to move in both directions. When the left-side table travels 10 mm, the right-side table also travels 10 mm, for a total of 20 mm travel. Using **FSP-V-HSR** enables confirmation of this total travel distance.



• Related Products

Half-scale horizontal type scale plate **FSP-HSR** is available.
➡ P.423



Actual-scale vertical type scale plate **FSP-V** is available.
➡ P.425



- Part number specification

FSP-200V-T-HSR

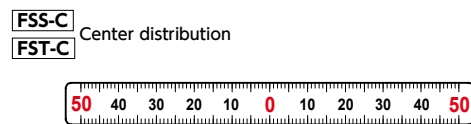
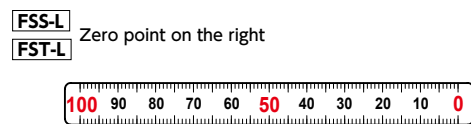
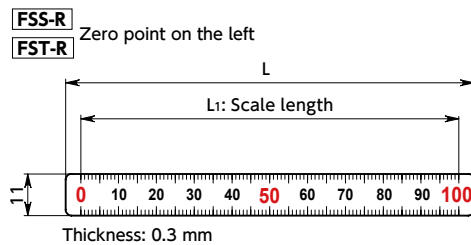


Scale Plate / Scale sticker Length Adjustment ➡ P.812

Available / Add'l charge

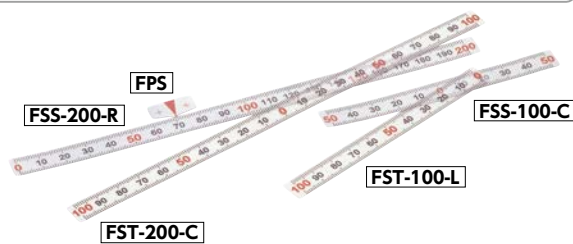
FSS / FST Scale Stickers (Horizontal Type) *Recommendation*

WEB Selection Tool
WEB CAD Download



* Multiples of 0 and 50 are red.

FSS Aluminum evaporation coating		FST Transparent		Unit : mm
Part Number	L1	L	Mass (g)	
FSS-100-R	100	108	0.5	
FSS-200-R	200	208	1	
FSS-300-R	300	308	1.5	
FSS-500-R	500	508	2.5	
FSS-100-L	100	108	0.5	
FSS-200-L	200	208	1	
FSS-300-L	300	308	1.5	
FSS-500-L	500	508	2.5	
FSS-100-C	100	108	0.5	
FSS-200-C	200	208	1	
FSS-300-C	300	308	1.5	
FSS-500-C	500	508	2.5	
FST-100-R	100	108	0.5	
FST-200-R	200	208	1	
FST-300-R	300	308	1.5	
FST-100-L	100	108	0.5	
FST-200-L	200	208	1	
FST-300-L	300	308	1.5	
FST-100-C	100	108	0.5	
FST-200-C	200	208	1	
FST-300-C	300	308	1.5	



- Horizontal scale of the sticker type. Simply stick it on machines / devices.
- Scale lengths of 100 / 200 / 300 / 500 mm are standardized for **FSS**.
Scale length of 100 / 200 / 300 mm are standardized for **FST**.
- **FSS** ——— Aluminum evaporation coating
FST ——— Transparent
- Made of polyester which is flexible. You can stick it on a curved surface like a post / a shaft, and cut it into a custom size to use it.
- Corners are rounded. It is hard to remove.

- Select the scale type from three types by the end symbol of the part number.

End Symbol	Scale
R	Zero point on the left
L	Zero point on the right
C	Center distribution

- Material/Finish RoHS2 Compliant

	FSS	FST
Main body	Polyester Aluminum evaporation coating	Polyester (transparent)

⚠ Precautions for Use

- **FSS** **FST** Use the scale of the Scale Sticker as a general guideline.
- Thoroughly remove oil and dust on the sticking surface before sticking.

- Part number specification



Scale Plate / Scale sticker Length Adjustutment → P.812

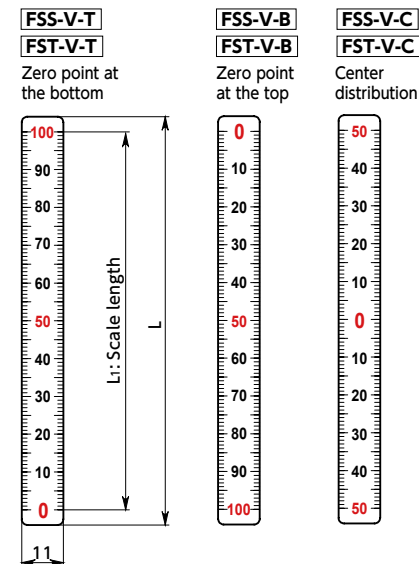
Available / Add'l charge

FSS-V / FST-V Scale Stickers (Vertical Type)

FST-200V-T



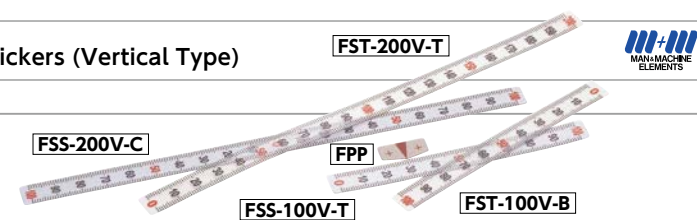
WEB Selection Tool
WEB CAD Download



Thickness: 0.3 mm

* Multiples of 0 and 50 are red.

FSS Aluminum evaporation coating		FST Transparent		Unit : mm
Part Number	L1	L	Mass (g)	
FSS-100V-T	100	108	0.5	
FSS-200V-T	200	208	1	
FSS-300V-T	300	308	1.5	
FSS-500V-T	500	508	2.5	
FSS-100V-B	100	108	0.5	
FSS-200V-B	200	208	1	
FSS-300V-B	300	308	1.5	
FSS-500V-B	500	508	2.5	
FSS-100V-C	100	108	0.5	
FSS-200V-C	200	208	1	
FSS-300V-C	300	308	1.5	
FSS-500V-C	500	508	2.5	
FST-100V-T	100	108	0.5	
FST-200V-T	200	208	1	
FST-300V-T	300	308	1.5	
FST-100V-B	100	108	0.5	
FST-200V-B	200	208	1	
FST-300V-B	300	308	1.5	
FST-100V-C	100	108	0.5	
FST-200V-C	200	208	1	
FST-300V-C	300	308	1.5	



- Vertical scale of the sticker type. Simply stick it on machines / devices.
- Scale lengths of 100 / 200 / 300 / 500 mm are standardized for **FSS-V**.
Scale lengths of 100 / 200 / 300 mm are standardized for **FST-V**.
- **FSS-V** ——— Aluminum evaporation coating
FST-V ——— Transparent
- Made of polyester which is flexible. You can stick it on a curved surface like a post / a shaft, and cut it into a custom size to use it.
- Corners are rounded. It is hard to remove.
- Select the scale type from three types by the end symbol of the part number.

End Symbol	Scale
T	Zero point at the bottom
B	Zero point at the top
C	Center distribution

- Material/Finish RoHS2 Compliant

	FSS	FST
Main body	Polyester Aluminum evaporation coating	Polyester (transparent)

⚠ Precautions for Use

- **FSS-V** **FST-V** Use the scale of the Scale Sticker as a general guideline.
- Thoroughly remove oil and dust on the sticking surface before sticking.
- Usage example
In combination with the Cross Clamper **FCCA-C** **FCCS-C** (→ P.373) and the Clamp Lever.



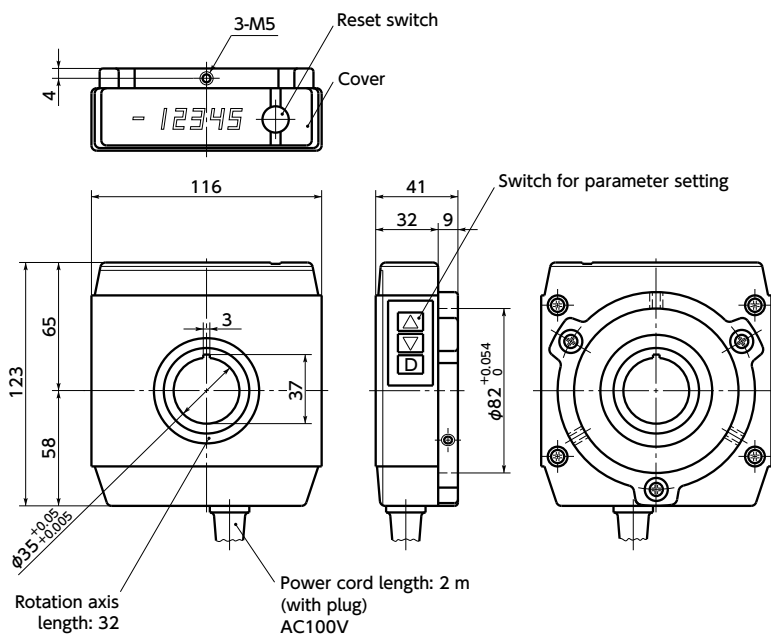
- Part number specification



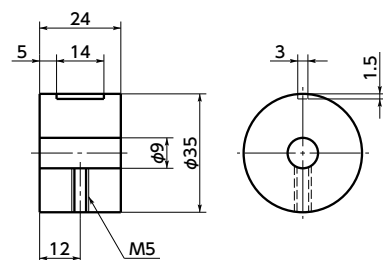
Scale Plate / Scale sticker Length Adjustutment → P.812

Available / Add'l charge

Main body



Collar



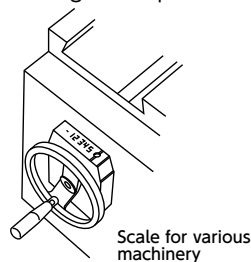
● Performance

Max. Number of Display Digits	Six digits / Red seven segment LED
Range of Count	Length measurement: 999999 ~ -99999 Angle $\pm 360.00^\circ$ Length measurement: Decimal, binary Angle in sexagesimal: 1 / 5 / 10 minute(s) Angle in decimal: 0.01 / 0.1 / 1° for reading
Count Mode	Custom setting by parameter
Position of Decimal Point	Custom setting by parameter
Lead Value	Custom setting by parameter
Memory	Nonvolatile memory, backup for 10 years
Max. Allowable Speed	700 min ⁻¹
Power Source	100 V AC $\pm 10\%$ (50 / 60 Hz)
Power Code	With 2 m plug
Power Consumption	2.2 W
Vibration-resistance	49 G for 30 minutes
Shock-resistance	Durability 294 G, three times each for X / Y and Z direction
Range of Allowable Operating Temperature	0°C to 45°C
Range of Storage Temperature	-20°C to 80°C

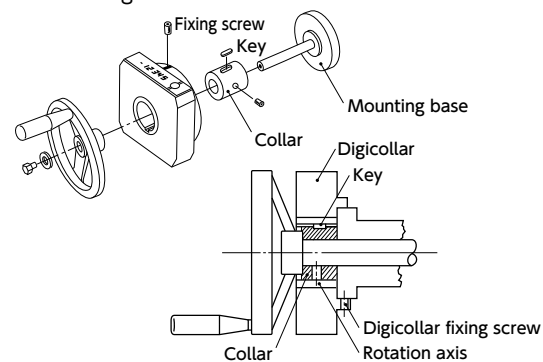
Part Number 1	Mass (g)
RNCL-300	900

- Collar (hex socket set screw with key) is provided.

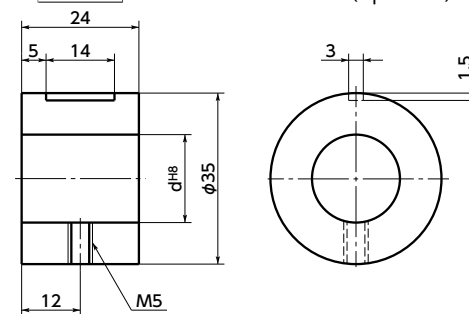
● Usage example



● Mounting



- ① Process the mounting base in accordance with the mounting-pilot section of the main body ($\phi 820$ to $+0.054$) (Recommended dimension: $\phi 82f7$).
- ② Process the collar to match the shaft diameter. Bore diameter collar **RNCL-R** (optional) is available.
- ③ After mounting the shaft to the collar, set-in the main body to the mounting base, and then secure it with fixing screws.

● **RNCL-R** Bore diameter collar (optional)

● Material/Finish



	RNCL-R
Main body	SUM22L Ferroferric Oxide Film (Black)

● Dimensions

Unit : mm

Part Number 2	d	Mass (g)
RNCL-R18	18	136
RNCL-R20	20	125
RNCL-R22	22	112
RNCL-R24	24	98
RNCL-R25	25	90
RNCL-R26	26	83

- With hex socket set screw without key.
- Use the key provided with the main body of the Digicollar.



● Measuring unit

Correct digital display of the feed rate is possible by just setting it to the feed rotation axis.

- Preset function to set the current value to the home position is provided.
- The custom decimal point position can be set (range from 1 to 0.0001 mm).
- It can be applied to any lead value by setting the parameter. It can be converted to millimeter or inch.
- A nonvolatile memory stores the count value / the parameter setting values for 10 years.
- 100 V AC (50 / 60 Hz) supported.
- Dust-proof structure is provided, however, it is not protected from water / oil.
Front: IP62
Back: IP50
- Bore diameter of the attached collar is $\phi 9$ mm. Shaft hole processing can be performed upon the order. Please feel free to contact our customer service.
- Bore diameter collar whose shaft hole is already processed **RNCL-R** (optional) is available.

● Part number specification

RNCL-300

1 Main body of Digicollar

RNCL-R18

2 Bore diameter collar (optional)

• Rack-and-pinion Stage

Product Code	TAR-X	TAR-XY	TAR-Z	TAR	TAR
Page	P.435	P.436	P.437	P.438	P.439
Shape					
Moving Axis	X-axis	X-axis/Y-axis	Z-axis	X-axis	X-axis
Stage Face (mm)	25×50	25×50	25×50	34×60・34×80	25×30
Travel Distance	±10 mm	±10 mm	±10 mm	±15 mm・±25 mm	±25 mm~±65 mm

• Precision Stage

Product Code	TAR-D	TKSP / TAKS
Page	P.441	P.442
Shape		
Moving Axis	X-axis	Rotation
Stage Face (mm)	38×60・38×80	φ60・φ98
Travel Distance	±15 mm・±25 mm	360°

• Screw Stage

Product Code	TAS	TAS-XY
Page	P.443	P.444
Shape		
Moving Axis	X-axis	X-axis/Y-axis
Stage Face (mm)	24×30・20×60	24×30・20×60
Travel Distance	±4 mm・±7.5 mm	±4 mm・±7.5 mm

• Block Stage

Product Code	TAS	TAS
Page	P.445	P.446
Shape		
Moving Axis	X-axis	X-axis/Y-axis
Stage Face (mm)	25×25・40×40	25×25・40×40
Travel Distance	±3 mm・±7 mm	±3 mm・±7 mm

• Cross Stage

Product Code	TAM-S	TAM-SXY
Page	P.447	P.449
Shape		
Moving Axis	X-axis	X-axis/Y-axis
Stage Face (mm)	40×40~120×120	40×40~120×120
Travel Distance	±6.5 mm・±12.5 mm	±6.5 mm・±12.5 mm

• Tilting Stage

Product Code	TGOH
Page	P.451
Shape	
Moving Axis	X-axis
Stage Face (mm)	25×25~60×60
Travel Distance	±20°

• Jackscrew

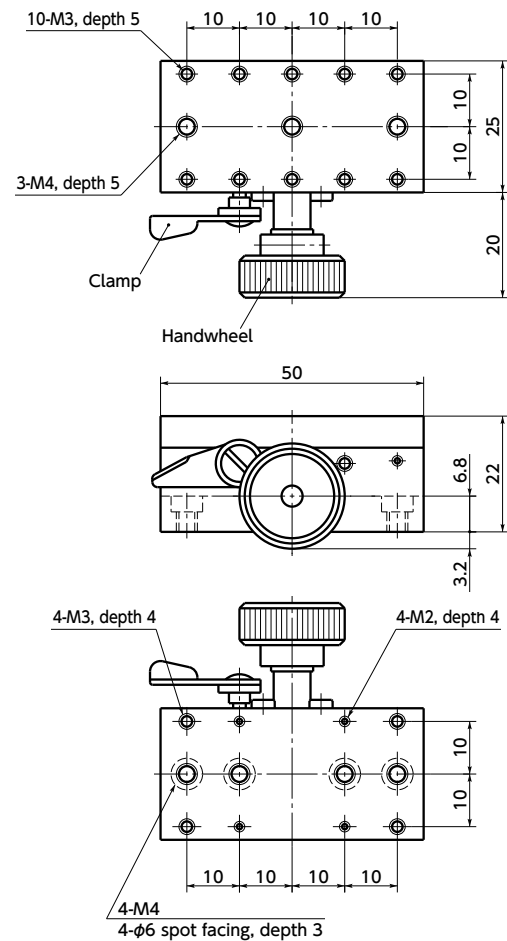
Product Code	TLJK
Page	P.453
Shape	
Moving Axis	Z-axis
Stage Face (mm)	80×132~160×220
Travel Distance	22 mm~70 mm



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

TAR-X Miniature X - axis Rack - and - Pinion Stages

WEB Selection Tool CAD Download



- Rack-and-pinion method allows for quicker feeding.
- Dovetail groove method is adopted for the travel guide. A rattle correction function is provided.
- As the main body is directly mounted without a mounting spacer, the main body is thin and compact.

Material/Finish		RoHS2 Compliant
Stage	TAR-X	
	Brass	
	Black chrome plating	
Main body	Brass	
	Coating (Silver)	

⚠ Precautions for Use
As the feeding handwheel is beyond the main body bottom surface, it cannot be directly mounted to a flat plane. Relief by a spacer, etc. is necessary.

Part Number	Stage Face	Travel Guide	Travel distance	Stroke (mm/Rotation)	Mass (g)
TAR-2550X	25×50	Dovetail Groove Method	±10	20	220

Part Number	Straightness	Parallelism	Display Resolution	Position Resolution	Withstand load (N)
TAR-2550X	0.02	0.05	0.1	0.1	78.5

- Pan head machine screws for mounting (M3 x 8) are provided.
- Mounting
Spot facing is performed on the screw hole for mounting. Therefore, fixing from vertical directions is possible.
- Fixing from above (both ends only)——M3
- Fixing from beneath——M2/M3/M4

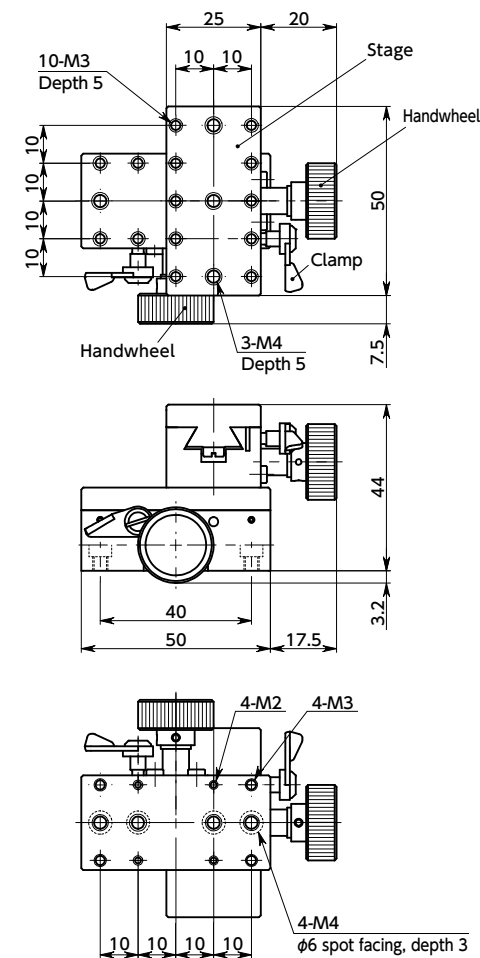
- Part number specification

TAR-2550X



TAR-XY Miniature X / Y - axis Rack - and - Pinion Stages

WEB Selection Tool CAD Download



- Two axes (X and Y axes) can be moved.
- Rack-and-pinion method allows for quicker feeding.
- Dovetail groove method is adopted for the travel guide. A rattle correction function is provided.
- As the main body is directly mounted without a mounting spacer, the main body is thin and compact.

Material/Finish		RoHS2 Compliant
Stage	TAR-XY	
	Brass	
	Black chrome plating	
Main body	Brass	
	Coating (Silver)	

⚠ Precautions for Use
As the X-axis feeding handwheel is beyond the main body bottom surface, it cannot be directly mounted to a flat plane. Relief by a spacer, etc. is necessary.

Part Number	Stage Face	Travel Guide	Travel distance	Stroke (mm/Rotation)	Mass (g)
TAR-2550XY	25×50	Dovetail Groove Method	±10	20	440

Part Number	Straightness	Parallelism	Display Resolution	Position Resolution	Withstand load (N)
TAR-2550XY	0.02	0.1	0.1	0.1	78.5

- Pan head machine screws for mounting (M3 x 8) are provided.
- Mounting
Spot facing is performed on the screw hole for mounting. Therefore, fixing from vertical directions is possible.
- Fixing from above (both ends only)——M3
- Fixing from beneath——M4

- Part number specification

TAR-2550XY

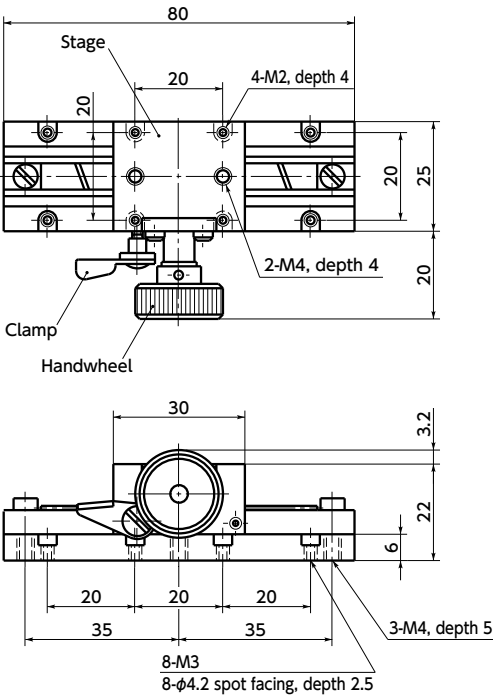


TAR Miniature X - axis Rack - and - Pinion Stages

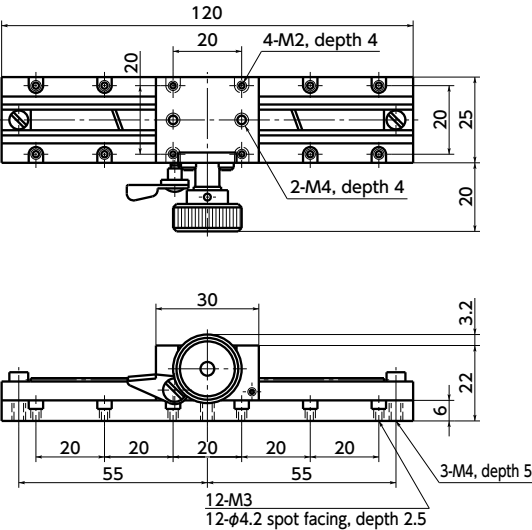
WEB Selection Tool WEB CAD Download



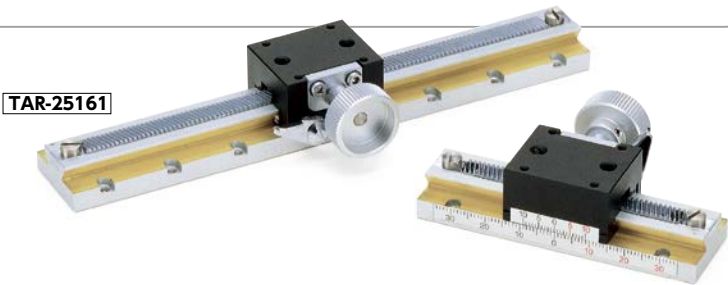
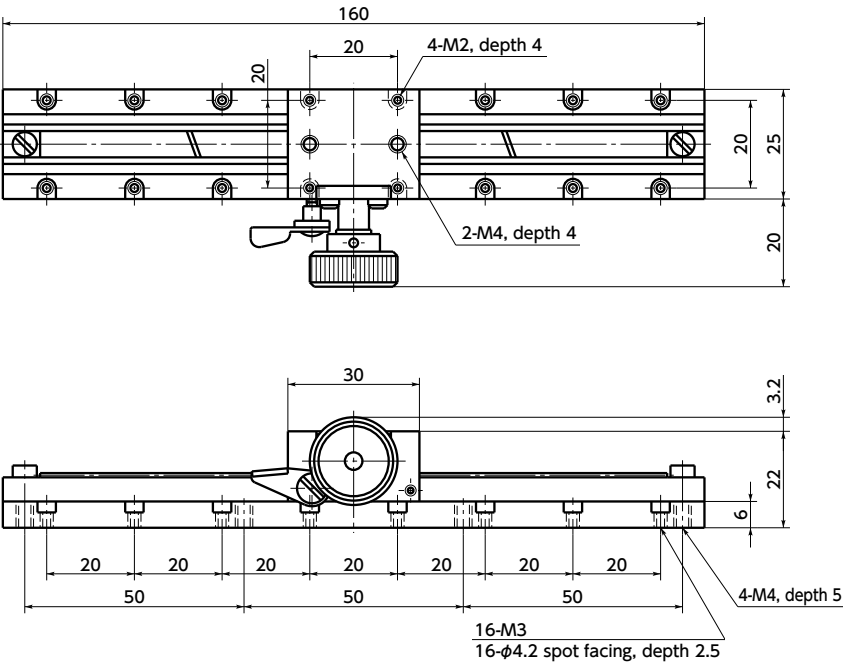
TAR-2581



TAR-25121



TAR-25161



TAR-2581

- Rack-and-pinion method allows for quicker feeding.
- Even when the entire stage surface is moved by stroke, the stage surface does not run off the main body. The feeding handwheel travel area and main body area are the necessary installation area.
- Dovetail groove method is adopted for the travel guide. A rattle correction function is provided.
- Mounting holes and fixing holes are machined on both upper and lower surfaces. It is possible to turn over the stage and use the lower surface as a stage surface.

Material/Finish		RoHS2 Compliant
Stage		Brass Black chrome plating
Lower surface spacer		Brass Chrome Plating

Unit : mm					
Part Number	Stage Face	Travel Guide	Travel distance	Stroke (mm/Rotation)	Mass (g)
TAR-2581	25×30	Dovetail Groove Method	±25	20	220
TAR-25121	25×30	Dovetail Groove Method	±45	20	300
TAR-25161	25×30	Dovetail Groove Method	±65	20	360

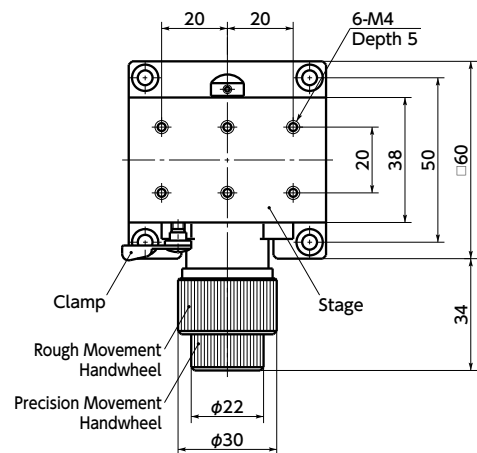
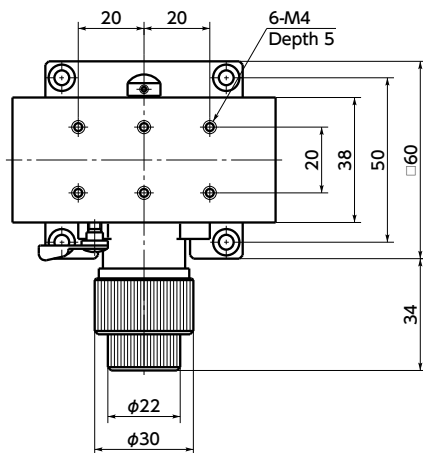
Unit : mm					
Part Number	Straightness	Parallelism	Display Resolution	Position Resolution	Withstand load (N)
TAR-2581	0.03	0.05	0.1	0.1	49
TAR-25121	0.04	0.08	0.1	0.1	49
TAR-25161	0.05	0.08	0.1	0.1	49

- Pan head machine screws for mounting (M2 x 6) are provided.
- Mounting
Spot facing is performed on the screw hole for mounting. Therefore, fixing from vertical directions is possible.
- Fixing from above——M2
- Fixing from beneath——M3/M4

- Part number specification

TAR-2581



TAR Precision X - axis Rack - and - Pinion StagesWEB Selection
ToolWEB CAD
Download**TAR-80D****TAR-60D****TAR-80D**

- Part number specification

TAR-60D

- X-axis stage for rough and precision movement.
- Rough and precision adjustment can be made by using the coaxial handwheel.
- Dovetail groove method is adopted for the travel guide. A rattle correction function is provided.

- Material/Finish



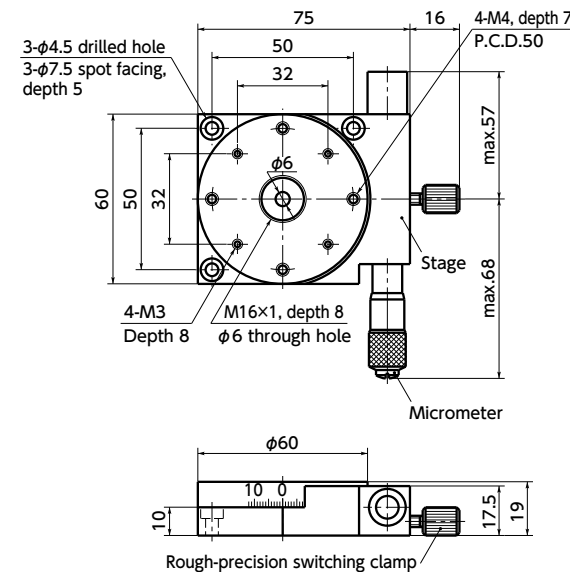
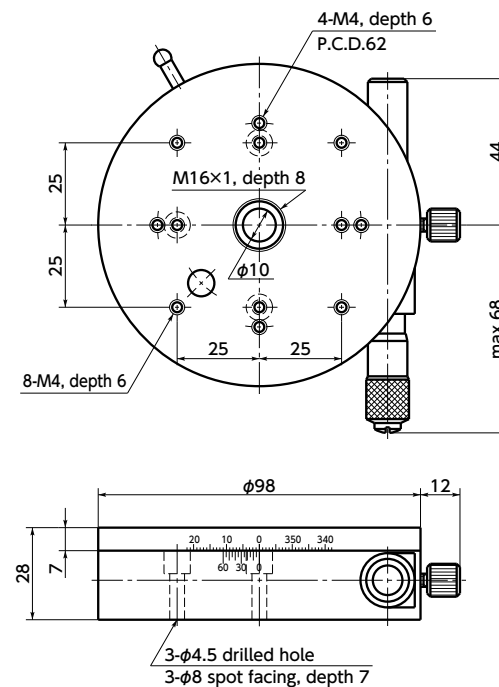
	TAR-D
Stage	Brass Black chrome plating
Lower surface spacer	Aluminum Alloy Alumite Treatment (Black)

Part Number	Stage Face	Travel Guide	Travel distance		Stroke (mm/Rotation)		Mass (g)
			Rough Movement Range	Precision Movement Range	Rough Movement Range	Precision Movement Range	
TAR-60D	38×60	Dovetail Groove Method	±15	±15	20	2.5	500
TAR-80D	38×80	Dovetail Groove Method	±25	±25	20	2.5	800

Unit : mm

Part Number	Straightness	Parallelism	Display Resolution	Position Resolution	Withstand load (N)
TAR-60D	0.02	0.06	0.1	0.02	147
TAR-80D	0.03	0.06	0.1	0.02	196

- Pan hex socket head cap screws for mounting (M4 x 8) are provided.

TKSP / TAKS Precision Rotary StagesWEB Selection
ToolWEB CAD
Download**TKSP-60****TAKS-100**

Part Number	Stage Face	Travel Guide	Range of Rotation		Mass (g)
			Rough Movement Range	Precision Movement Range	
TKSP-60	φ60	Lapping Method	360°	±5°	600
TAKS-100	φ98	Lapping Method	360°	±5°	700

Unit : mm

Part Number	Concentricity	Face Deflection	Parallelism	Display Resolution	Position Resolution	Withstand load (N)
TKSP-60	0.02	0.02	0.05	1°	1'	68.6
TAKS-100	0.02	0.02	0.05	5'	1'	68.6

Unit : mm

- Pan hex socket head cap screws for mounting (M4 x 10 **TKSP-60** and M4 x 20 **TAKS-100**) are provided.

**TAKS-100**

- Rotary stage for rough and precision movement.
- Rough rotation when the precision switch clamp is loosened and precision rotation by micrometer when it is tightened to activated.

- Material/Finish



	TKSP-60	TAKS-100
Stage	Brass Black chrome plating	Aluminum Alloy Alumite Treatment (Black)
Main body	Brass Black chrome plating	Aluminum Alloy Alumite Treatment (Black)

- Mounting

TAKS-100 has holes for mounting on the stage surface. Turn the stage surface, align the position with the mounting holes and insert screws.

- Part number specification

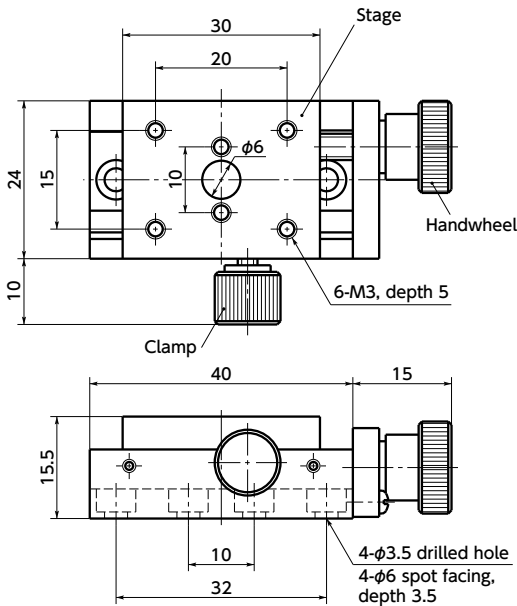
TKSP-60

TAS X - axis Screw Stages

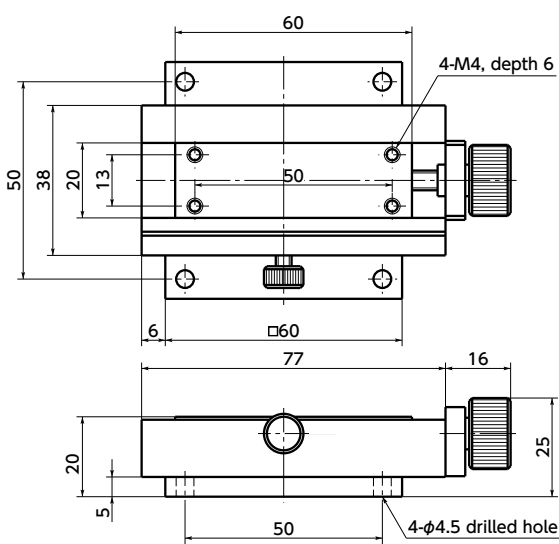
WEB Selection Tool WEB CAD Download



TAS-30



TAS-60



Part Number	Stage Face	Travel Guide	Travel distance	Screw Pitch	Mass (g)
TAS-30	24×30	Dovetail Groove Method	±4	0.5	200
TAS-60	18×60	Dovetail Groove Method	±7.5	0.5	500

Part Number	Straightness	Parallelism	Position Resolution	Withstand load (N)
TAS-30	0.02	0.05	0.01	68.7
TAS-60	0.02	0.05	0.01	147

● Pan head machine screws for mounting (M3 x 5 TAS-30) and hex socket head cap screw (M4 x 10 TAS-60) are provided.

TAS-60



TAS-30



- Screws are used for micromotion feed.
- Dovetail groove method is adopted for the travel guide. A rattle correction function is provided.

● Material/Finish



	TAS-30	TAS-60
Stage	Brass Black chrome plating	Brass Black chrome plating
Main body	Brass Coating (Silver)	Brass Coating (Black)
Lower surface spacer	Aluminum Alloy Alumite Treatment (Black)	Aluminum Alloy Alumite Treatment (Black)



Precautions for Use

TAS-60 has the feeding handwheel above the stage surface. There may be interference depending on the shape of work fixed on the stage.

● Part number specification

TAS-30



TAS-XY XY - axis Screw Stages

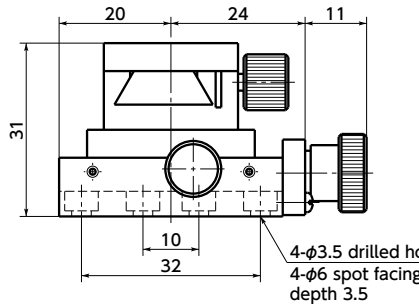
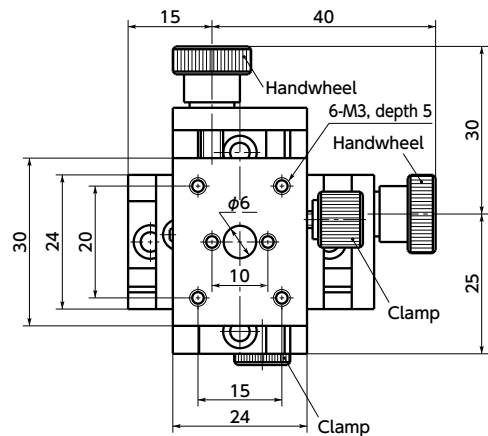
WEB Selection Tool WEB CAD Download



TAS-60XY



TAS-30XY



Precautions for Use

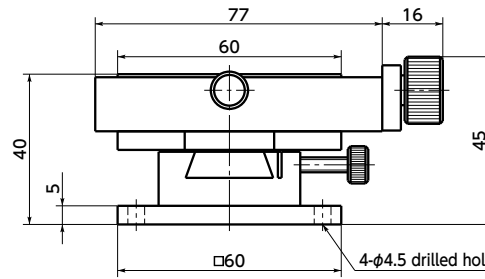
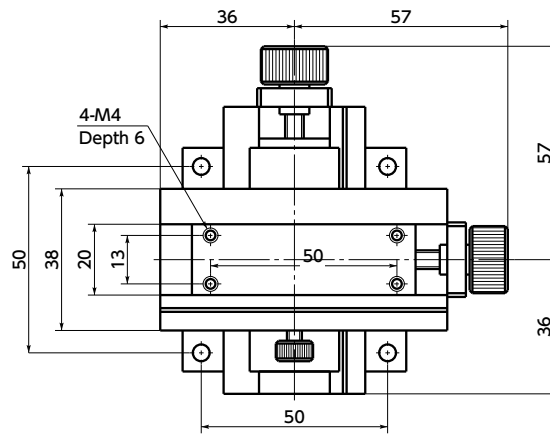
TAS-60XY has the feeding handwheel above the stage surface. There may be interference depending on the shape of work fixed on the stage.

● Part number specification

TAS-30XY



TAS-60XY



- Two axes (X and Y axes) can be moved.
- Screws are used for micromotion feed.
- Dovetail groove method is adopted for the travel guide. A rattle correction function is provided.

● Material/Finish



	TAS-30XY	TAS-60XY
Stage	Brass Black chrome plating	Brass Black chrome plating
Main body	Brass Coating (Silver)	Brass Coating (Black)
Lower surface spacer	Aluminum Alloy Alumite Treatment (Black)	Aluminum Alloy Alumite Treatment (Black)

Part Number	Stage Face	Travel Guide	Travel distance	Screw Pitch	Mass (g)
TAS-30XY	24×30	Dovetail Groove Method	±4	0.5	400
TAS-60XY	18×60	Dovetail Groove Method	±7.5	0.5	900

Part Number	Straightness	Parallelism	Position Resolution	Withstand load (N)
TAS-30XY	0.02	0.1	0.01	68.7
TAS-60XY	0.02	0.1	0.01	147

● Pan head machine screws for mounting (M3 x 5 TAS-30XY) and hex socket head cap screw (M4 x 10 TAS-60XY) are provided.

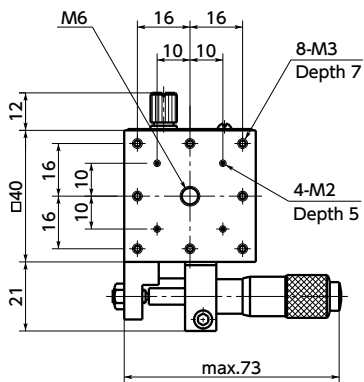
TAM X - axis Aluminum Cross Roller Stages

WEB Selection Tool

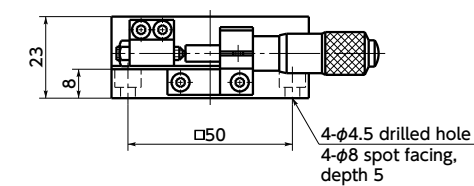
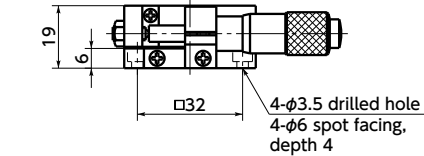
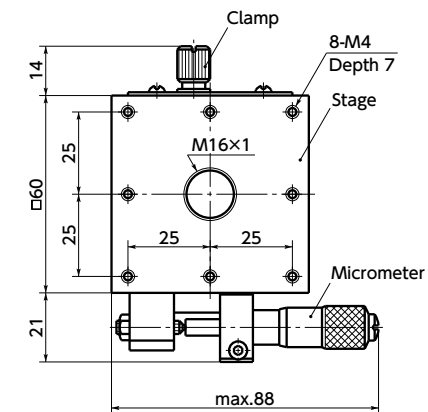
CAD Download



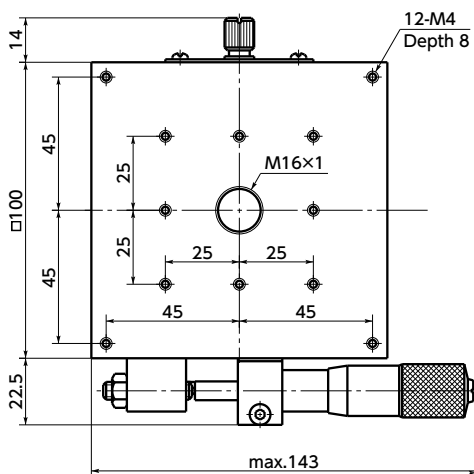
TAM-40S



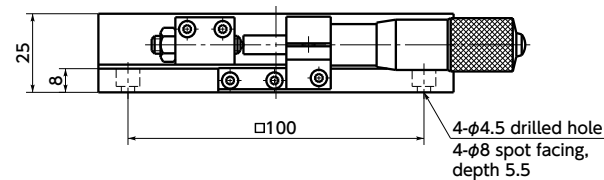
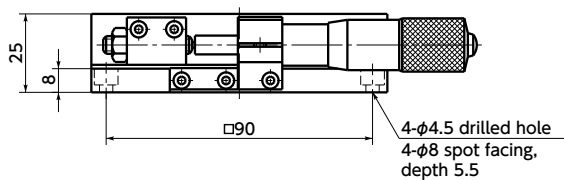
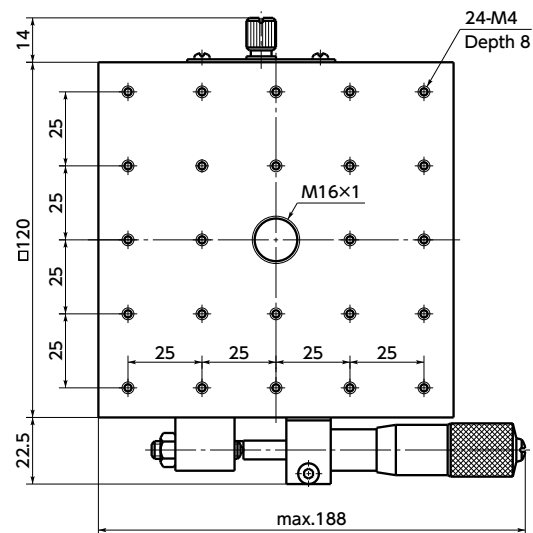
TAM-60S



TAM-100S



TAM-120S



- 4 stage size types.
- Made of Aluminum. Light weight.
- For travel guide, V-groove rail and cross roller system are adopted. It is high-precision.
- Feed system by micrometer. Feeding display resolution is 0.01 mm.

Material/Finish

RoHS2 Compliant

	TAM-S
Stage	Aluminum Alloy Alumite Treatment (Black)
Main body	Aluminum Alloy Alumite Treatment (Black)

- Mounting parts are supplied with each product.

Part Number	Supplied Items
TAM-40S	Pan Head Machine Screw (M3 x 6) and Spring Washer
TAM-60S	Hex Socket Head Cap Screw (M4 x 8)
TAM-100S	Hex Socket Head Cap Screw (M4 x 8) and Spring Washer
TAM-120S	Hex Socket Head Cap Screw (M4 x 8) and Spring Washer

Part Number	Stage Face	Travel Guide	Travel distance	Mass (g)
TAM-40S	40×40	V-groove rail and Cross roller system	±6.5	200
TAM-60S	60×60	V-groove rail and Cross roller system	±6.5	300
TAM-100S	100×100	V-groove rail and Cross roller system	±12.5	900
TAM-120S	120×120	V-groove rail and Cross roller system	±20	1300

Unit : mm

Part Number	Straightness	Pitch	Yaw	Parallelism	Moving parallelism	Display Resolution	Position Resolution	Withstand load (N)
TAM-40S	0.002	40"	25"	0.03	0.01	0.01	0.003	49
TAM-60S	0.002	25"	15"	0.03	0.01	0.01	0.003	196
TAM-100S	0.002	25"	15"	0.05	0.015	0.01	0.003	490
TAM-120S	0.002	40"	25"	0.05	0.015	0.01	0.003	588

Unit : mm

Mounting

- ① Turn the micrometer right to feed the stage to the end.
- ② Then two mounting holes appear. Temporarily fix it with the supplied screws.
- ③ Turn the micrometer right to return the stage back.
- ④ Then two mounting holes appear. Temporarily fix it with the supplied screws.
- ⑤ Check the position and then fix it.

- Part number specification

TAM-60S



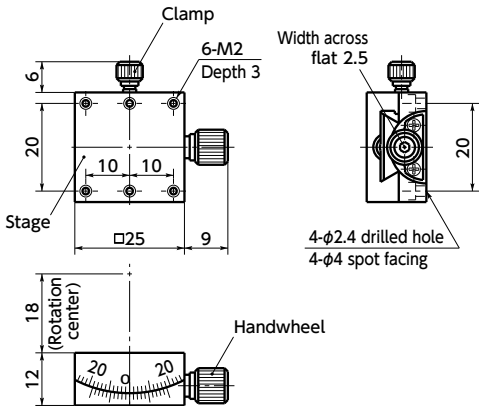
TAM-100S

TGOH X-axis Tilting Stages

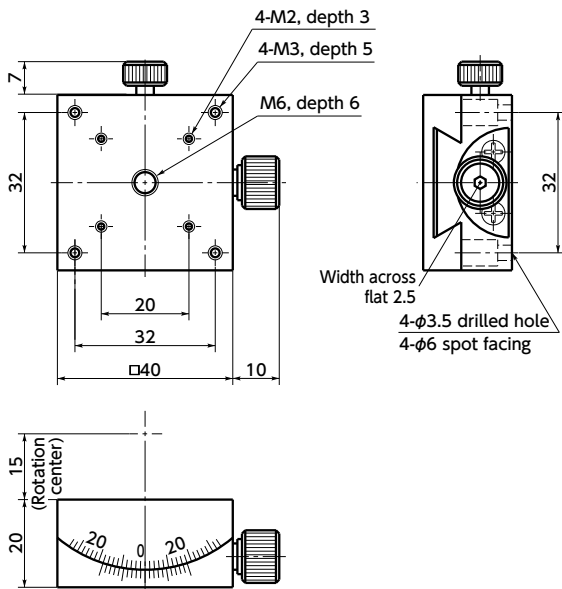
WEB Selection Tool WEB CAD Download



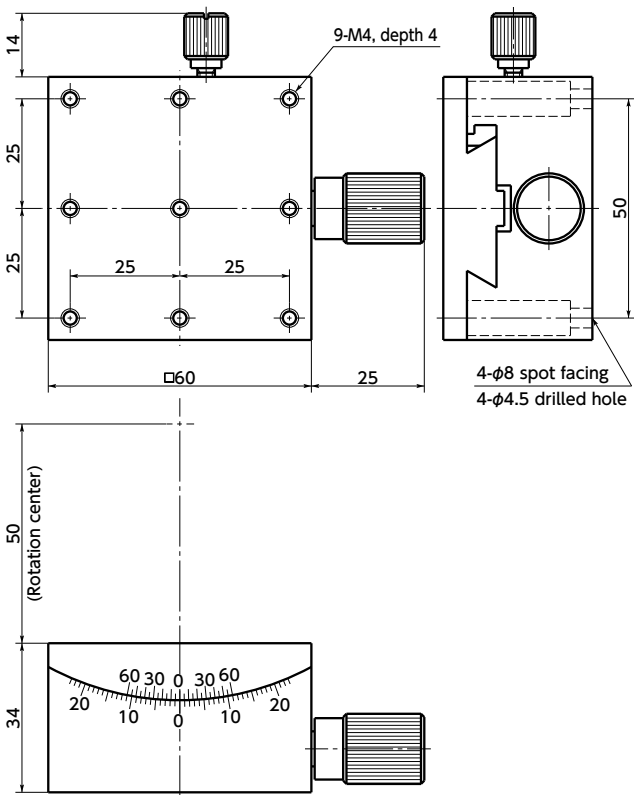
TGOH-251



TGOH-6



TGOHN-3



- Goniometer stages used for tilted rotation.
- Compact state with minimum projection.
Effective when there are space constraints or for assembly.
- Dovetail groove method is adopted for the travel guide. A rattle correction function is provided.

Material/Finish		RoHS2 Compliant
TGOH		
Stage	Brass Black chrome plating	
Main body	Brass Black chrome plating	

Unit : mm					
Part Number	Stage Face	Travel Guide	Travel distance	Stroke (°/Rotation)	Mass (g)
TGOH-251	25×25	Dovetail Groove Method	±20°	3.1	70
TGOH-6	40×40	Dovetail Groove Method	±20°	2.83	250
TGOHN-3	60×60	Dovetail Groove Method	±20°	1.03	1000

Unit : mm					
Part Number	Rotation position displacement	Parallelism	Display Resolution	Position Resolution	Withstand load (N)
TGOH-251	0.1	0.05	6'	3'	19.6
TGOH-6	0.1	0.05	6'	2'	68.7
TGOHN-3	0.1	0.05	5'	2'	98

- Pan head machine screws for mounting (M2 x 4 TGOH-251 and M3 x 6 TGOH-6) and hex socket head cap screw (M4 x 8 TGOHN-3) are provided.
- Mounting
 - ①Turn the handwheel right to feed the stage to the end.
 - ②Then two mounting holes appear. Temporarily fix it with the supplied screws.
 - ③Turn the handwheel right to return the stage back.
 - ④Then two mounting holes appear. Temporarily fix it with the supplied screws.
 - ⑤Check the position and then fix the stage by tightening all screws.

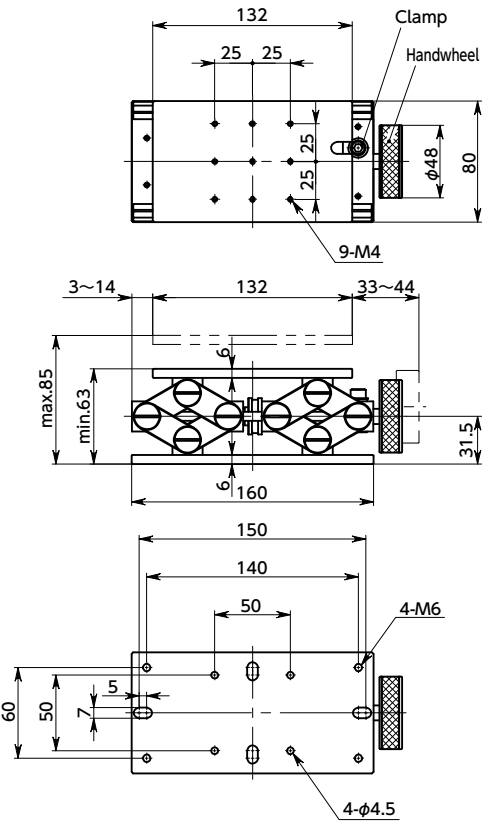
- Part number specification

TGOH-251

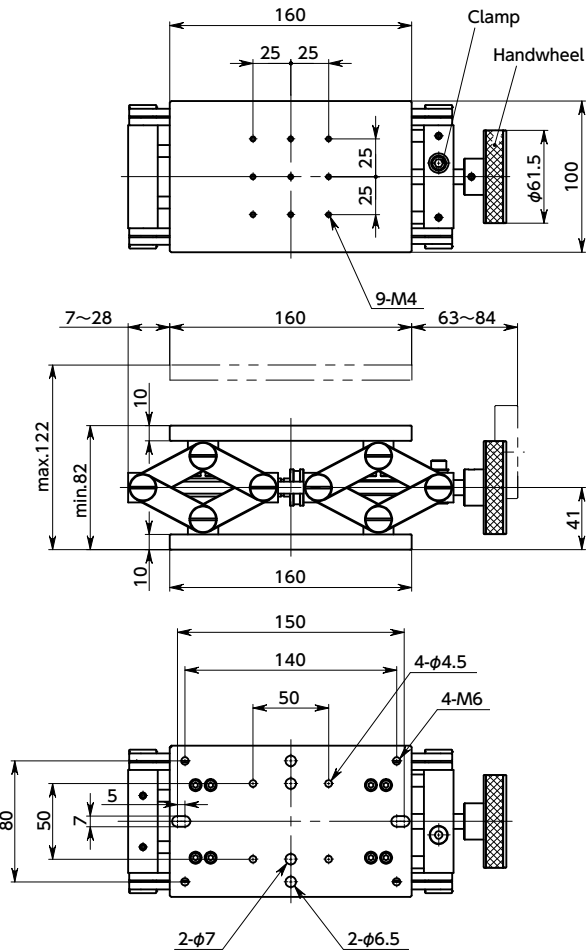
1



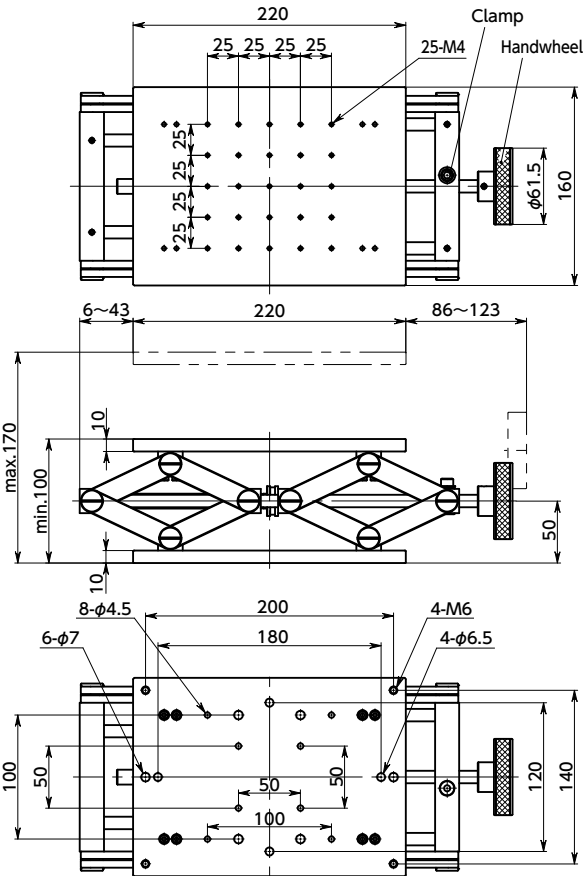
TLJK-1



TLJK-2



TLJK-3



- For vertical micromotion of heavy object.
- Turn the handwheel to make smooth and parallel up / down movement.
- The stage position can be fixed by clamping the handwheel axis.
- Made of Aluminum.Light weight.

		RoHS2 Compliant	
		TLJK	
Stage		Aluminum Alloy Alumite Treatment (Black)	
Lower surface spacer		Aluminum Alloy Alumite Treatment (Black)	

Unit : mm							
Part Number	Stage Face	Travel Guide	Travel distance	Parallelism	Position Resolution	Withstand load (N)	Mass (g)
TLJK-1	80×132	Pantograph Mechanism	22	0.1	0.1	196	2300
TLJK-2	100×160	Pantograph Mechanism	40	0.1	0.1	245	3400
TLJK-3	160×220	Pantograph Mechanism	70	0.1	0.1	294	5900

● Hexagon wrench for mounting and hex socket head cap screws (M6 x 12 TLJK-1 and M6 x 16 TLJK-2 TLJK-3) are provided.

- Part number specification

TLJK-1

• Ball Rollers

	Set Screw Type					Hex Head Screw Type
Part Number	BRUSS-S	BRUSS-N	BRUSS-P	BRUSN-N	BRUSP-P	BRUHS-S
Shape						
Page	P.459	P.459	P.459	P.459	P.459	P.461
Materials	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : Polyacetal	Body : SUSXM7 Ball : PEEK	Body : Polyacetal Ball : Polyacetal	Body : PEEK Ball : PEEK	Body : SUS304 Ball : SUS440C
Characteristics	Compact All Stainless Steel	Compact Plastic Ball	Compact PEEK Ball	Compact Plastic With Drain Hole	Compact PEEK With Drain Hole	All Stainless Steel
Size	M8 - M20	M8 - M20	M8 - M16	M8 - M20	M8 - M16	M5 - M20

	Hex Head Screw Type			Press Fit Type		
Part Number	BRUHS-N	BRUHN-N	BRUHP-P	BRUPS-S	BRUPS-N	BRUPN-N
Shape						
Page	P.461	P.461	P.461	P.463	P.463	P.463
Materials	Body : SUS304 Ball : Polyacetal	Body : Polyacetal Ball : Polyacetal	Body : PEEK Ball : PEEK	Body : SUS304 Ball : SUS440C	Body : SUS304 Ball : Polyacetal	Body : Polyacetal Ball : Polyacetal
Characteristics	Plastic Ball	Plastic With Drain Hole	PEEK With Drain Hole	All Stainless Steel	Plastic Ball	Plastic With Drain Hole
Size	M5 - M20	M4 - M10	M5 - M10	φ7.5 - φ30	φ7.5 - φ30	φ5 - φ10

	Insert Type		Cap Screw Type		Round Type	
Part Number	BRUIN-N	BRUIP-P	BRUCS-S	BRUCS-N	BRURS-S	BRURS-N
Shape						
Page	P.464	P.464	P.465	P.465	P.466	P.466
Materials	Body : Polyacetal Ball : Polyacetal	Body : PEEK Ball : PEEK	Body : SUS304 Ball : SUS440C	Body : SUS304 Ball : Polyacetal	Body : SUS304 Ball : SUS440C	Body : SUS304 Ball : Polyacetal
Characteristics	Plastic With Drain Hole	PEEK With Drain Hole	All Stainless Steel	Plastic Ball	All Stainless Steel	Plastic Ball
Size	φ5 - φ24	φ7 - φ13	M10 - M20	M10 - M20	φ22 - φ42	φ22 - φ42

• Ball Roller Units

	Hex Head Screw Type		Press Fit Type	
Part Number	BRAHS-S	BRAHS-N	BRAPS-S	BRAPS-N
Shape				
Page	P.467	P.467	P.468	P.468
Materials	Body : SUS304 Ball : SUS440C	Body : SUS304 Ball : Polyacetal	Body : SUS304 Ball : SUS440C	Body : SUS304 Ball : Polyacetal
Characteristics	Used with BRUHS-S	Used with BRUHS-N	Used with BRUPS-S	Used with BRUPS-N
Size	200mm - 600mm	200mm - 600mm	200mm - 600mm	200mm - 600mm

• Ball Rollers with Plunger Function

	Set Screw Type		Press Fit Type	Insert Type	Flange Type
Part Number	BRPSS-S	BRPSS-N	BRPPS-S	BRPIN-N	BRPMS-S
Shape					
Page	P.469	P.469	P.470	P.471	P.472
Materials	Body : SUSXM7 Ball : SUS440C	Body : SUSXM7 Ball : Polyacetal	Body : SUS304 Ball : SUS440C	Body : Polyacetal Ball : Polyacetal	Body : SUS304 Ball : SUS440C
Characteristics	With Plunger Function All Stainless Steel	With Plunger Function Plastic Ball	With Plunger Function All Stainless Steel	With Plunger Function Plastic With Drain Hole	With Plunger Function All Stainless Steel
Size	M6 - M16	M6 - M16	φ14 - φ22	φ7 - φ24	M16 - M24

• Downward Ball Rollers

	Flange Type		Hex Head Screw Type	Tap-Hole Type	Flanged Head
Part Number	BRDRF	BRDSF	BRDH	BRDT	BRDB
Shape					
Page	P.473	P.473	P.474	P.475	P.476
Materials	Body : S45C Ball : SUJ2	Body : S45C Ball : SUJ2	Body : S45C Ball : SUJ2	Body : S45C Ball : SUJ2	Body : S45C Ball : SUJ2
Characteristics	Downward Ball Roller Round Flange Type	Downward Ball Roller Square Flange Type	Downward Ball Roller	Downward Ball Roller Tap - Hole Attachment	Downward Ball Roller
Size	φ40 - φ60	φ40 - φ60	M12 - M20	φ24 - φ38	φ24 - φ38

• Tools

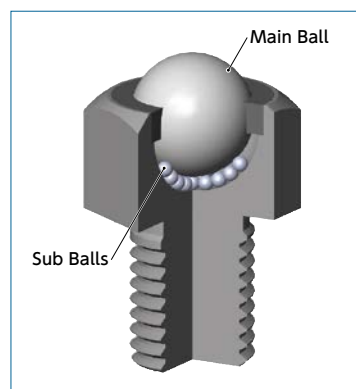
	Special Wrenches
Part Number	BRW
Shape	
Page	P.465 • P.472
Materials	S45C
Characteristics	Wrench for BRUCS • BRPMS



Smooth Conveyance of Heavy Objects

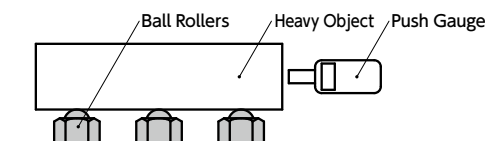
NBK Ball Rollers

The main ball is surrounded by several sub balls to ensure the ball rolls smoothly. The coefficient of friction is low so workpiece can be moved with a small force. Smooth 360 degrees rolling makes the change of conveyance direction easy.



Starting Coefficient of Friction

- A heavy object (SS400, surface polished) is placed in 3 ball rollers and then pushed using a push gauge to calculate the starting coefficient of friction μ .



• Upward Type

Part Number	μ
BRU*S-S (Body and Main Ball: Stainless Steel)	0.03
BRU*S-N (Body: Stainless Steel/ Main Ball: Polyacetal)	0.04
BRU*N-N (Body and Main Ball: Polyacetal)	0.08
BRU*P-P (Body and Main Ball: PEEK)	0.08

• Plunger Type

Part Number	μ
BRPSS-S (Body and Main Ball: Stainless Steel)	0.15
BRPSS-N (Body: Stainless Steel/ Main Ball: Polyacetal)	0.1
BRPPS-S (Body and Main Ball: Stainless Steel)	0.03
BRPIN-N (Body and Main Ball: Polyacetal)	0.15
BRPMS-S (Body and Main Ball: Stainless Steel)	0.03

• Downward Type

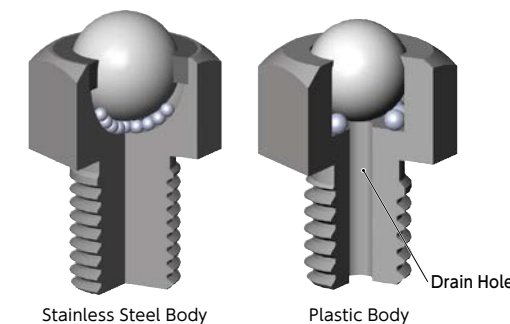
Part Number	μ
BRD* (Body and Main Ball: Steel)	0.03

- Values in chart are from actual measurements in testing. They are not guaranteed values.

A Full Lineup of Ball Rollers

• Upward Types

This is the standard type of ball rollers. We offer various types of ball rollers, including set screws, hexagon head screws, and cap screws. In addition to our all-stainless steel types with excellent corrosion resistibility, we offer plastic ball types to prevent damage to workpiece, as well as PEEK plastic types for clean environments. Types with a plastic body has a drain hole. These ball rollers are intended for food production lines and other applications that require cleaning. Our lineup includes a wide variety of sizes from M5 to M20. These ball rollers cover conveyance from small workpiece to heavy objects.



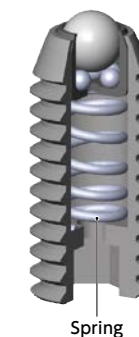
Types with a stainless steel body cannot be used in downward or sideward facing applications due to the alignment of the sub-ball. Types with a plastic body can be used in both downward and sideward facing applications.

• Plunger Type

This type of ball roller is equipped with a spring plunger function. Their internal springs receive loads evenly even when the load is unbalanced. This roller can also be used as a general ball plunger for fixing and locating workpiece. The smooth rotation of the ball reduces friction between the main ball and receiving side.

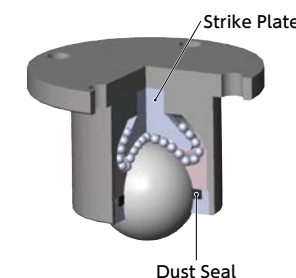
• Plunger Type Loads

Initial Load (min.)	Load when the main ball starts to sink completely
Maximum Load (max.)	Load when the main ball has sunk



• Downward Type

This ball roller can be used in a downward and sideward facing position. The internal strike plate maintains the appropriate contact status of the main and sub-balls no matter the direction. The dustproof seal prevents the ingress of dirt and dust. The body, main ball, and sub balls are made of steel. These rollers have excellent durability. These rollers can be used in applications such as casters of push carts for transport.



Special Support

- Also, ball rollers with special specifications such as dimensions, shapes, materials, surface treatments, and cleanroom washing are available.

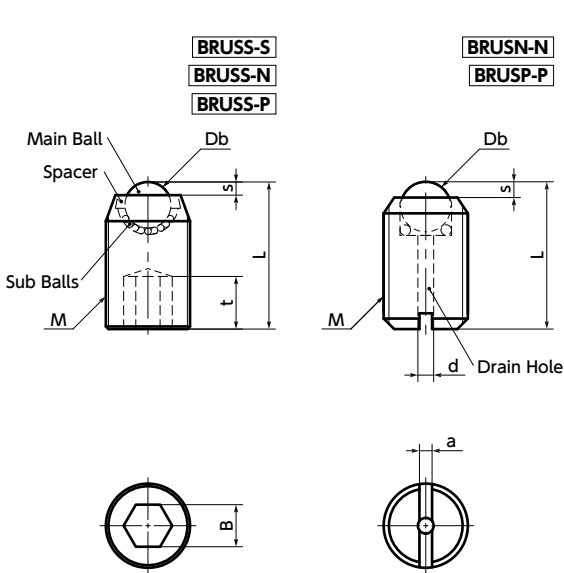


Cleanroom Wash and Packaging



BRUSS/BRUSN/BRUSP Ball Rollers - Set Screw Type

WEB Selection Tool CAD Download SUS Stainless steel



- Set screw type ball rollers for upward applications.
- We offer a full lineup of this type of ball roller. You can select from the following main body and main ball combinations: stainless steel, polyacetal, and PEEK.
- **BRUSS** has a small coefficient of friction and can move workpiece with less force. ➡ P.457
- **BRUSP-P** is intended for applications that require cleanliness, heat resistance, or chemical resistance, such as FPD production equipment and semiconductor devices.
- **BRUSN-N** and **BRUSP-P** have drain holes and are intended for food production lines and other applications that require cleaning.
- Application
FPD production equipment, semiconductor devices, food production lines, and packaging lines

- ⚠ Precautions for Use**
- **BRUSS** is for upward applications only. If it is used for downward and sideward applications, the product may be damaged or the ball may malfunction.
 - **BRUSN-N** and **BRUSP-P** can be used in upward, downward, and sideward applications.

● Material/Finish RoHS2 Compliant

	BRUSS-S	BRUSN-N	BRUSP-P
Main Body	SUSXM7 (Equivalent to SUS304)	SUSXM7 (Equivalent to SUS304)	SUSXM7 (Equivalent to SUS304)
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White	PEEK/Light Brown
Sub-ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)
Spacer	SUS304	SUS304	

BRUSS-S **BRUSN-N** Main Body: Made of Stainless Steel Unit : mm

BRUSS-S Main Ball : Stainless Steel		BRUSN-N Main Ball : Polyacetal		Common dimensions							Qty per pack
Part Number	Withstand load (N)	Part Number	Withstand load (N)	M	L	s	Db	B	t	Mass (g)	
BRUSS-8-S	5	BRUSS-8-N	1	M8	14	1.3	4.76	4	5	3.1	1
BRUSS-10-S	14	BRUSS-10-N	7	M10	16	1.2	4.76	5	6	5.8	1
BRUSS-12-S	41	BRUSS-12-N	27	M12	20	1.5	5.56	6	8	10	1
BRUSS-16-S	55	BRUSS-16-N	34	M16	25	2.5	8.73	8	10	22	1
BRUSS-20-S	62	BRUSS-20-N	55	M20	30	3.5	10.32	10	12	43	1

BRUSP-P Main Body: Made of Stainless Steel / Main Ball: PEEK Unit : mm

Part Number	M	L	s	Db	B	t	Withstand load (N)	Mass (g)	Qty per pack
BRUSS-8-P	M8	14	1.3	4.76	4	5	1	2.6	1
BRUSS-10-P	M10	16	1.8	6.35	5	6	8	4.4	1
BRUSS-12-P	M12	20	2.3	7.94	6	8	15	7.7	1
BRUSS-16-P	M16	25	2.7	9.53	8	10	25	18	1

1 Individual Sales ➡ P.809	Cleanroom Wash & Packaging ➡ P.807	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

● Material/Finish RoHS2 Compliant

	BRUSN-N	BRUSP-P
Main Body	Polyacetal/White	PEEK/Light Brown
Main Ball	Polyacetal/White	PEEK/Light Brown
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)

BRUSN-N Main Body and Main Ball : Polyacetal Unit : mm

Part Number	M	L	s	Db	a	d	Withstand load (N)	Mass (g)	Qty per pack
BRUSN-8-N	M8	14	1.5	4.76	1.2	1.5	2	0.73	1
BRUSN-10-N	M10	16	1.7	5.56	1.5	2.5	4	1.2	1
BRUSN-16-N	M16	25	2.8	8.73	2	3	7	5.1	1
BRUSN-20-N	M20	30	3.5	10.32	3	3.5	11	9.5	1

BRUSP-P Main Body and Main Ball : PEEK Unit : mm

Part Number	M	L	s	Db	a	d	Withstand load (N)	Mass (g)	Qty per pack
BRUSP-8-P	M8	14	1.5	4.76	1.5	1.2	2	0.68	1
BRUSP-10-P	M10	16	2	6.35	1.5	2.5	5	1.5	1
BRUSP-12-P	M12	20	2.5	7.94	2	3	6	2	1
BRUSP-16-P	M16	25	3	9.53	2	3.5	8	4.8	1

- Part number specification

BRUSS-12-N

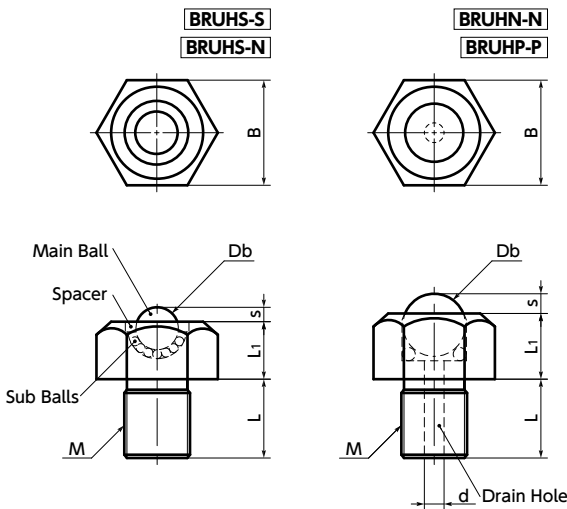
Product Code M Main Ball : "S" or "N" or "P"

Select the part number.



BRUHS/BRUHN/BRUHP Ball Rollers - Hex Head Screw Type

WEB Selection Tool CAD Download SUS Stainless steel



⚠ Precautions for Use

- **BRUHS** is for upward applications only. If it used for downward or sideward applications, the product may be damaged or the ball may malfunction.
- **BRUHN-N** and **BRUHP-P** can be used in upward, downward, and sideward facing applications.



- Hexagon head screw type ball rollers for upward applications. They can be installed or removed by using a open-ended spanner or ring spanner.
- You can select from the following main body and main ball combinations : stainless steel, polyacetal, and PEEK.
- **BRUHP-P** is intended for applications that require cleanliness, heat resistance, or chemical resistance, such as FPD production equipment and semiconductor devices.
- **BRUHN-N** and **BRUHP-P** have drain holes and are intended for food production lines and other applications that require cleaning.
- **BRUHS** has a small coefficient of friction and can move workpiece with less force.

● Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

● Material/Finish



	BRUHS-S	BRUHS-N	BRUHN-N	BRUHP-P
Main Body	SUS304	SUS304	Polyacetal/White	PEEK/Light Brown
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White	Polyacetal/White	PEEK/Light Brown
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)
Spacer	SUS304	SUS304		

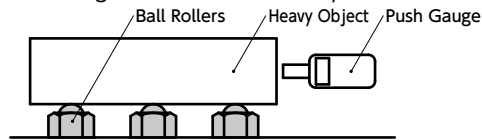
BRUHS-S BRUHS-N Main Body: Made of Stainless Steel

Unit : mm

BRUHS-S Main Ball : Stainless Steel		BRUHS-N Main Ball : Polyacetal		Common dimensions							Qty per pack
Part Number	Withstand load (N)	Part Number	Withstand load (N)	M	L	L1	s	Db	B	Mass (g)	
BRUHS-5-S	12	BRUHS-5-N	6	M5	6	5	1.1	4	8	2.6	1
BRUHS-6-S	14	BRUHS-6-N	7	M6	8	6	1.2	4.76	10	4.8	1
BRUHS-8-S	41	BRUHS-8-N	27	M8	10	7	1.5	5.56	13	10	1
BRUHS-10-S	55	BRUHS-10-N	34	M10	12	10	2.5	8.73	17	24	1
BRUHS-12-S	62	BRUHS-12-N	55	M12	15	11	3.5	10.32	19	35	1
BRUHS-16-S	343	BRUHS-16-N	69	M16	20	15	5.3	15.87	24	83	1
BRUHS-20-S	412	BRUHS-20-N	82	M20	25	18	6.3	19.05	30	158	1

● Starting coefficient of friction measurement

A heavy object of the max withstand load is loaded on 3 ball rollers. The force to move the heavy object was measured with a push gauge, and the starting coefficient of friction μ was calculated.



Part Number	Starting Coefficient of Friction μ
BRUHS-S (Main Body and Main Ball : Stainless Steel)	0.03
BRUHS-N (Main Body : Stainless Steel/ Main Ball : Polyacetal)	0.04
BRUHN-N (Main Body and Main Ball : Polyacetal)	0.08
BRUHP-P (Main Body and Main Ball : PEEK)	0.08

- Values in chart are from actual measurements in testing.They are not guaranteed values.

BRUHN-N Main Body and Main Ball : Polyacetal

Unit : mm

Part Number	M	L	L1	s	Db	B	d	Withstand load (N)	Mass (g)	Qty per pack
BRUHN-4-N	M4	5	4	1	3.18	7	0.8	1	0.33	1
BRUHN-5-N	M5	6	5	1.5	4.76	8	1.5	2	0.48	1
BRUHN-6-N	M6	8	6	1.7	5.56	10	2.5	4	0.91	1
BRUHN-8-N	M8	10	8	2.8	8.73	13	3	7	2.2	1
BRUHN-10-N	M10	12	10	3.5	10.32	17	3.5	11	4.5	1

BRUHP-P Main Body and Main Ball : PEEK

Unit : mm

Part Number	M	L	L1	s	Db	B	d	Withstand load (N)	Mass (g)	Qty per pack
BRUHP-5-P	M5	6	5	1.5	4.76	8	1.5	2	0.48	1
BRUHP-6-P	M6	8	6	2	6.35	10	2.5	5	0.91	1
BRUHP-8-P	M8	10	8	2.5	7.94	13	3	6	2	1
BRUHP-10-P	M10	12	10	3	9.53	17	3.5	8	4.1	1

● Part number specification

BRUHS-12-N

Product Code M Main Ball : "S" or "N" or "P"

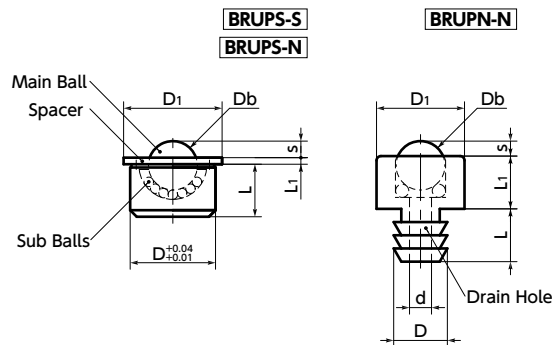
Select the part number.

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

BRUPS/BRUPN Ball Rollers - Press Fit Type

WEB Selection Tool CAD Download SUS Stainless steel

e-nedzi.com®



- ⚠ Precautions for Use**
- BRUPS** is for upward applications only. If it is used for downward or sideward applications, the product may be damaged or the ball may malfunction.
 - BRUPN-N** can be used in upward, downward, and sideward applications.

Part number specification

BRUPS-15-N

Product Code D Main Ball : "N" or "S"

Select the part number.

Material/Finish

	BRUPS-S	BRUPS-N	BRUPN-N
Main Body	SUS304	SUS304	Polyacetal/White
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White	Polyacetal/White
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)
Spacer	SUS304	SUS304	

RoHS2 Compliant

BRUPS-S BRUPS-N Main Body: Made of Stainless Steel

Unit : mm

BRUPS-S Main Ball : Stainless Steel		BRUPS-N Main Ball : Polyacetal		Common dimensions							Qty per pack
Part Number	Withstand load (N)	Part Number	Withstand load (N)	D	D1	L	L1	s	Db	Mass (g)	
BRUPS-7.5-S	12	BRUPS-7.5-N	6	7.5	9	4	1	1.1	4	1.7	1
BRUPS-9-S	14	BRUPS-9-N	7	9	11	5	1	1.2	4.76	3.2	1
BRUPS-11-S	41	BRUPS-11-N	27	11	13	6	1	1.5	5.56	5.3	1
BRUPS-15-S	55	BRUPS-15-N	34	15	17	9	1	2.5	8.73	13	1
BRUPS-18-S	62	BRUPS-18-N	55	18	20	10	1	3.5	10.32	21	1
BRUPS-24-S	343	BRUPS-24-N	69	24	26	14	1.5	5.3	15.87	55	1
BRUPS-30-S	412	BRUPS-30-N	82	30	32	17	2	6.3	19.05	106	1

BRUPN Main Body and Main Ball : Polyacetal

Unit : mm

Part Number	D	D1	L	L1	s	Db	d	Withstand load (N)	Mass (g)	Qty per pack
BRUPN-5-N	5.1	8	5	5	1.5	4.76	1.5	2	0.42	1
BRUPN-6-N	6.1	10	6	6	1.7	5.56	2.5	4	0.83	1
BRUPN-8-N	8.1	13	8	8	2.8	8.73	3	7	2	1
BRUPN-10-N	10.1	17	10	10	3.5	10.32	3.5	11	4.1	1

1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

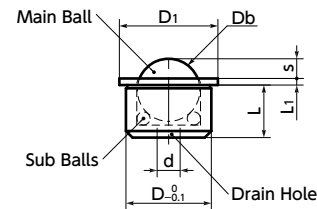
NBK

WEB ▶ <https://www.nbk1560.com>

BRUIN/BRUIP Ball Rollers - Insert Type

WEB Selection Tool CAD Download

e-nedzi.com®



- ⚠ Precautions for Use**
- Insert type ball roller. Do not press fit. Use a clearance fit when fitting with the attachment hole. If a tight fit is used, the product may be damaged or the ball may malfunction.

Part number specification

BRUIN-15-N

Product Code D Main Ball : "N" or "P"

Select the part number.

Material/Finish

	BRUIN-N	BRUIP-P
Main Body	Polyacetal/White	PEEK/Light brown
Main Ball	Polyacetal/White	PEEK/Light brown
Sub-Ball	SUS440C (Hardness 55HRC or higher)	SUS440C (Hardness 55HRC or higher)

RoHS2 Compliant

BRUIN-N Main Body and Main Ball : Polyacetal

Unit : mm

Part Number	D	D1	L	L1	s	Db	d	Withstand load (N)	Mass (g)	Qty per pack
BRUIN-5-N	5	7	3	0.8	1	3.18	0.8	1	0.12	1
BRUIN-7-N	7	9	4	1	1.5	4.76	1.5	2	0.37	1
BRUIN-9-N	9	11	5	1	1.7	5.56	2.5	4	0.68	1
BRUIN-13-N	13	15	7	1	2.8	8.73	3	7	1.8	1
BRUIN-15-N	15	17	8	1	3.5	10.32	3.5	11	2.6	1
BRUIN-20-N	20	22	11.5	1.5	5.2	15.87	5.3	14	6.7	1
BRUIN-24-N	24	26	15	1.5	6.6	19.05	6.4	21	12	1

BRUIP-P Main Body and Main Ball : PEEK

Unit : mm

Part Number	D	D1	L	L1	s	Db	d	Withstand load (N)	Mass (g)	Qty per pack
BRUIP-7-P	7	9	4	1	1.5	4.76	1.5	2	0.34	1
BRUIP-9-P	9	11	5	1	2	6.35	2.5	5	0.63	1
BRUIP-11-P	11	13	7	1	2.5	7.94	3	6	1.1	1
BRUIP-13-P	13	15	8	1	3	9.53	3.5	8	1.8	1

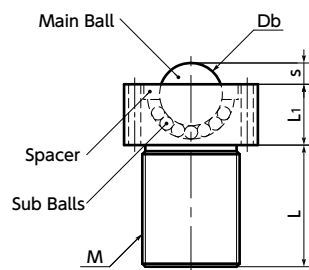
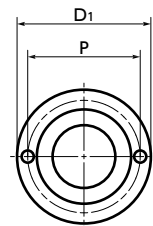
1 Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

BRUCS Ball Rollers - Cap Screw Type

WEB Selection Tool CAD Download SUS Stainless steel



BRUCS-N

- These are cap screw type ball rollers with stainless steel bodies for upward applications.
- Install and remove by using **BRW** Specialty Wrench.
- Because a wrench spacer is not required, they can be attached in proximity.
- Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

Material/Finish

RoHS2 Compliant

	BRUCS-S	BRUCS-N
Main Body	SUS304	SUS304
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)
Spacer	SUS304	SUS304



Precautions for Use

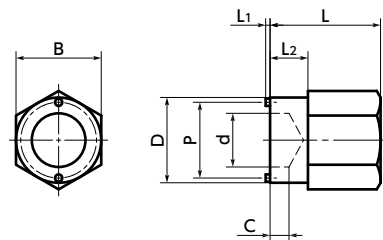
These ball rollers are for upward applications only. If it is used for downward and sideward applications, the product may be damaged or the ball may malfunction.

BRUCS-S | BRUCS-N

BRUCS-S Main Ball: Stainless Steel		BRUCS-N Main Ball: Polyacetal		Common dimensions								Unit: mm	
Part Number	Withstand load (N)	Part Number	Withstand load (N)	M	L	L1	s	D1	Db	P	Applicable wrench	Mass (g)	Qty per pack
BRUCS-10-S	55	BRUCS-10-N	34	M10	12	10	2.5	18.5	8.73	15	BRW-10	26	1
BRUCS-12-S	62	BRUCS-12-N	55	M12	15	11	3.5	22	10.32	18.5	BRW-12	42	1
BRUCS-16-S	343	BRUCS-16-N	69	M16	20	15	5.3	27	15.88	23	BRW-16	92	1
BRUCS-20-S	412	BRUCS-20-N	82	M20	25	18	6.3	33	19.05	29	BRW-20	170	1

Dedicated wrench

Part Number	L	L1	L2	B	C	D	d	P	Mass (g)	Qty per pack
BRW-10	25	1.4	8	19	3	18.5	10	15	55	1
BRW-12	30	1.4	10	24	4	22	12	18.5	102	1
BRW-16	35	1.4	12	27	6	27	17	23	153	1
BRW-20	40	1.4	14	30	7	33	20	29	220	1



Part number specification

BRUCS-12-N

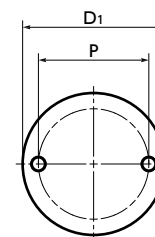
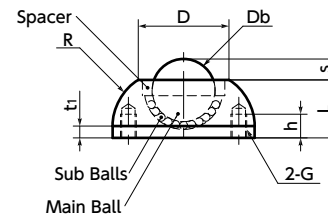
Product Code M Main Ball: "S" or "N"

Select the part number.

Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

BRURS Ball Rollers - Round Type

WEB Selection Tool CAD Download SUS Stainless steel



BRURS-N

- These are round type ball rollers with stainless steel bodies for upward applications.
- Because of their half-circle shape, there are no angled portions. This shape makes it less likely for workpiece to be damaged, even when it is in contact with the ball roller body.

Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

Material/Finish

RoHS2 Compliant

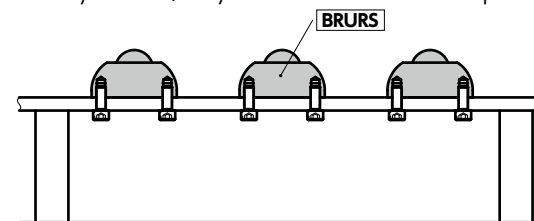
	BRURS-S	BRURS-N
Main body	SUS304	SUS304
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)
Spacer	SUS304	SUS304



Precautions for Use

These ball rollers are for upward applications only. If it is used for downward and sideward applications, the product may be damaged or the ball may malfunction.

- Because they are fixed using screw holes in the body section, they can be attached to thin plates.



BRURS-S Main Ball: Made of Stainless Steel

Part Number	D1	D	L	s	t1	Db	R	G	h	P	Withstand load (N)	Mass (g)	Qty per pack
BRURS-22-S	22	14	9.5	2.5	2	8.73	10	M3	4.5	16	55	22	1
BRURS-28-S	28	17.5	11.5	3.5	2.5	10.32	10.5	M3	4.5	22	62	34	1
BRURS-36-S	36	23	14.7	5.3	3	15.88	14	M4	6	28	343	98	1
BRURS-42-S	42	28	18.7	6.3	4	19.05	20	M4	6	34	412	215	1

BRURS-N Main Ball: Polyacetal

Part Number	D1	D	L	s	t1	Db	R	G	h	P	Withstand load (N)	Mass (g)	Qty per pack
BRURS-22-N	22	14	9.5	2.5	2	8.73	10	M3	4.5	16	34	20	1
BRURS-28-N	28	17.5	11.5	3.5	2.5	10.32	10.5	M3	4.5	22	55	42	1
BRURS-36-N	36	23	14.7	5.3	3	15.88	14	M4	6	28	69	85	1
BRURS-42-N	42	28	18.7	6.3	4	19.05	20	M4	6	34	82	192	1

Part number specification

BRURS-22-N

Product Code D1 Main Ball: "S" or "N"

Select the part number.

Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

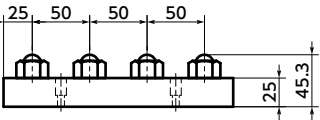
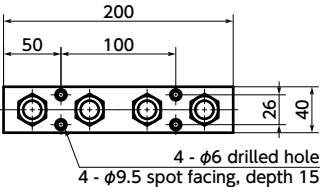
BRAHS Ball Roller Units - Press Fit Type

WEB Selection Tool WEB CAD Download

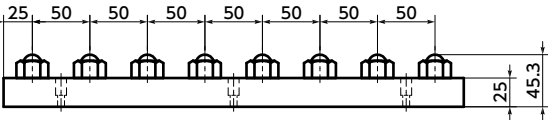
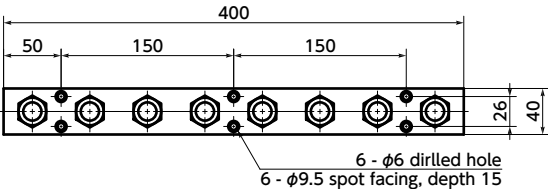
e-nedzi.com®



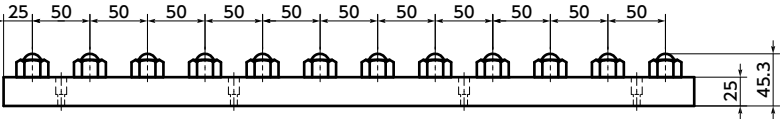
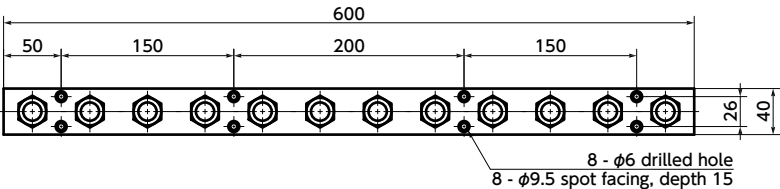
BRAHS-200



BRAHS-400



BRAHS-600



BRAHS-S | BRAHS-N

BRAHS-S Main Ball : Stainless Steel			BRAHS-N Main Ball : Polyacetal				Unit : mm	
Part Number	Ball Roller Pack Part No.	Withstand Load of One Ball Roller (N)	Part Number	Ball Roller Pack Part No.	Withstand Load of One Ball Roller (N)	Mass (g)	Qty per pack	
BRAHS-200-S	BRUHS-16-S	343	BRAHS-200-N	BRUHS-16-N	69	801	1	
BRAHS-400-S	BRUHS-16-S	343	BRAHS-400-N	BRUHS-16-N	69	1605	1	
BRAHS-600-S	BRUHS-16-S	343	BRAHS-600-N	BRUHS-16-N	69	2408	1	

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

- This unit product combines **BRUHS** (Hex head screw type) with an aluminum frame. The ball rollers can be aligned simply by attaching the frame.
- BRAHS-S** uses **BRUHS-S** ball rollers, which are all stainless steel.
- The main ball of **BRAHS-N** is made of polyacetal. Workpiece is not damaged.

Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

Material/Finish



	BRAHS-S	BRAHS-N
Frame	A6063 Anodized	A6063 Anodized
Ball Roller Body	SUS304	SUS304
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)

Part number specification

BRAHS - 400 - N

Product Code Frame Length Main Ball : "S" or "N"

Select the part number.

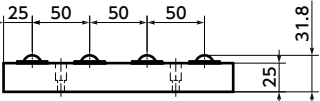
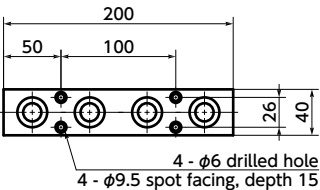
BRAPS Ball Roller Units - Press Fit Type

WEB Selection Tool WEB CAD Download

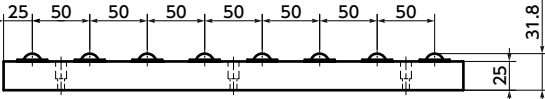
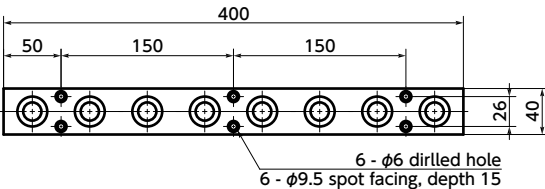
e-nedzi.com®



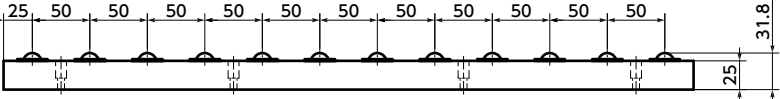
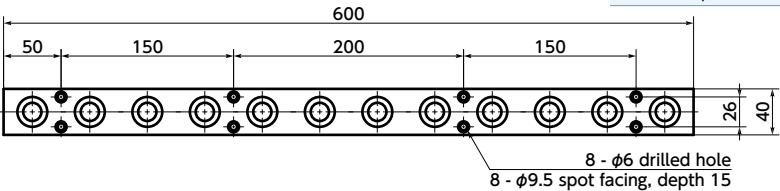
BRAPS-200



BRAPS-400



BRAPS-600



BRAPS-S | BRAPS-N

BRAPS-S Main Ball : Stainless Steel			BRAPS-N Main Ball : Polyacetal				Unit : mm	
Part Number	Ball Roller Pack Part No.	Withstand Load of One Ball Roller (N)	Part Number	Ball Roller Pack Part No.	Withstand Load of One Ball Roller (N)	Mass (g)	Qty per pack	
BRAPS-200-S	BRUPS-24-S	343	BRAPS-200-N	BRUPS-24-N	69	618	1	
BRAPS-400-S	BRUPS-24-S	343	BRAPS-400-N	BRUPS-24-N	69	1243	1	
BRAPS-600-S	BRUPS-24-S	343	BRAPS-600-N	BRUPS-24-N	69	1873	1	

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

- This unit product combines **BRUPS** (Press fit type) with an aluminum frame. The ball rollers can be aligned simply by attaching the frame.
- The bodies of the ball rollers are pressed in the frame, so the height can be reduced.
- BRAPS-S** uses **BRUPS-S** ball rollers, which are all stainless steel.
- The main ball of **BRAPS-N** is made of polyacetal. Workpiece is not damaged.

Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

Material/Finish



	BRAPS-S	BRAPS-N
Frame	A6063 Anodized	A6063 Anodized
Ball Roller Body	SUS304	SUS304
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)

Part number specification

BRAPS - 400 - N

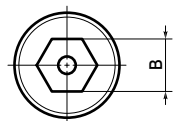
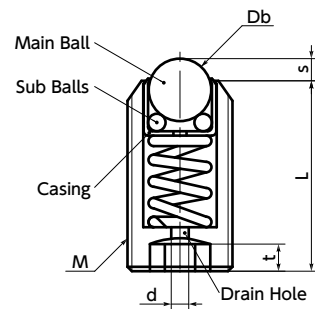
Product Code Frame Length Main Ball : "S" or "N"

Select the part number.

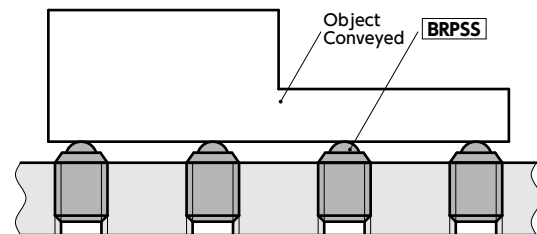
BRPSS Ball Rollers with Spring Plunger Function - Set Screw Type

WEB Selection Tool CAD Download SUS Stainless steel

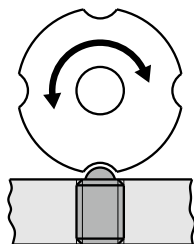
e-nedzi.com®



- Usage example
When there is unbalanced weight.



- For indexing, etc.
Use as a spring plunger.



- These are set screw type ball rollers with spring plunger function.
- Their internal springs receive loads evenly even when the load is unbalanced.
- These rollers can also be used as a general spring plunger with ball for fixing and locating workpiece. The smooth rotation of the ball reduces friction between the main ball and receiving side.
- BRPSS-S — All Stainless Steel
- BRPSS-N — Main Ball : Polyacetal
- These ball rollers have drain holes and are intended for food production lines and other applications that require cleaning.

Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

Material/Finish

RoHS2 Compliant

	BRPSS-S	BRPSS-N
Main Body	SUSXM7 (S.S. Grade : A2)	SUSXM7 (S.S. Grade : A2)
Main Ball	SUS440C (Hardness 55HRC or Higher)	Polyacetal/White
Sub Ball	SUS440C (Hardness 55HRC or Higher)	SUS440C (Hardness 55HRC or Higher)
Casing	SUS304	SUS304
Spring	SUS631J1	SUS631J1

Part number specification

BRPSS-12-N

Product Code M Main Ball : "S" or "N"

Select the part number.

BRPSS-S BRPSS-N												Unit : mm
BRPSS-S	BRPSS-N	Common dimensions									Qty per pack	
Main Ball : Stainless Steel	Main Ball : Polyacetal											
Part Number	Part Number	M	L	s	Db	B	t	d	Load (N) min./max.	Mass (g)		
BRPSS-5-S	BRPSS-5-N	M5	12	0.7	2.38	2.5	2	1.2	4.4 / 19.6	0.94	1	
BRPSS-6-S	BRPSS-6-N	M6	13	0.8	3	3	2.5	1.5	8.1 / 29.6	1.4	1	
BRPSS-8-S	BRPSS-8-N	M8	15	1.3	4	4	2.5	2	12.6 / 39.8	3.1	1	
BRPSS-10-S	BRPSS-10-N	M10	16	1.6	5	5	3	2.5	13.5 / 44.4	5.3	1	
BRPSS-12-S	BRPSS-12-N	M12	20	2.3	7.14	6	3	3	16.1 / 46.9	9.3	1	
BRPSS-16-S	BRPSS-16-N	M16	25	3.1	9.53	8	3	4	26.1 / 88.2	22	1	

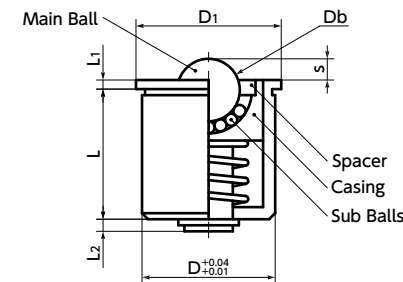
Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

Unit : mm

BRPPS Ball Rollers with Spring Plunger Function - Press Fit Type

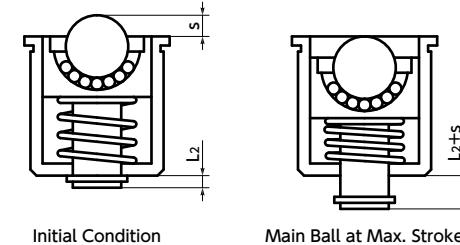
WEB Selection Tool CAD Download SUS Stainless steel

e-nedzi.com®



Precautions for Use

- These ball rollers are for upward applications only. If it is used for downward and sideward applications, the product may be damaged or the ball may malfunction.
- The bottom section moves the stroke distance of the main ball. Take care with the depth of the attachment hole.



- These are press fit type ball rollers with spring plunger function.
- Because the body section is press fitted, the height can be reduced.
- Their internal springs receive loads evenly even when the load is unbalanced.
- These rollers can also be used as a general spring plunger with ball for fixing and locating workpiece. The smooth rotation of the ball reduces friction between the main ball and receiving side.
- Recommended dimensional allowance of attachment hole is H7.

Application

Conveyance, fixing and locating work, torque limiting, and indexing

Material/Finish

RoHS2 Compliant

	BRPPS-S
Main Body	SUS304
Main Ball	SUS440C (Hardness 55HRC or Higher)
Sub Ball	SUS440C (Hardness 55HRC or Higher)
Spacer	SUS304
Casing	SUS304
Spring	SUS631J1

Part Number	D	D ₁	L	s	L ₁	L ₂	D _b	Load (N) min./max.	Mass (g)	Qty per pack
BRPPS-14-S	14	16	14	1.5	1.5	1.5	5.56	23 / 30	16	1
BRPPS-18-S	18	20	17	2.5	1.5	2	8.73	24 / 38	31	1
BRPPS-22-S	22	24	21.5	3.5	1.5	2	10.32	24 / 55	55	1

Unit : mm

Part number specification

BRPPS-14-S

Product Code D Stainless Steel Main Ball

Select the part number.

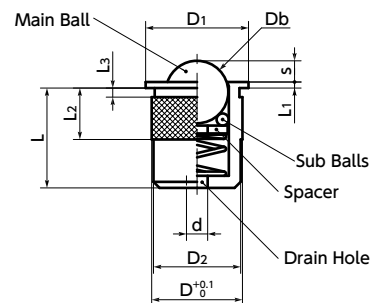
Individual Sales → P.809	Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810
1 pc. in 1 bag	Please feel free to contact us	Not Available	Not Available

BRPIN Ball Rollers with Spring Plunger Function - Insert Type

WEB Selection Tool

WEB CAD Download

e-nedzi.com®



Material/Finish

RoHS2 Compliant

	BRPIN-N
Main Body	Polyacetal/White
Main Ball	Polyacetal/White
Sub Ball	SUS440C (Hardness 55HRC or Higher)
Spacer	Polyacetal/White
Spring	SUS631J1

- These are insert type ball rollers with spring plunger function.
- Because the body section is inserted, the height can be reduced.
- Use an adhesive to secure these rollers.
- Their internal springs receive loads evenly even when the load is unbalanced.
- These rollers can also be used as a general spring plunger with ball for fixing and locating workpiece. The smooth rotation of the ball reduces friction between the main ball and receiving side.
- Both the body and main ball are polyacetal. Workpiece is not damaged.
- These ball rollers have drain holes and are intended for food production lines and other applications that require cleaning.

Application

Conveyance, fixing and locating work, torque limiting, and indexing

⚠ Precautions for Use

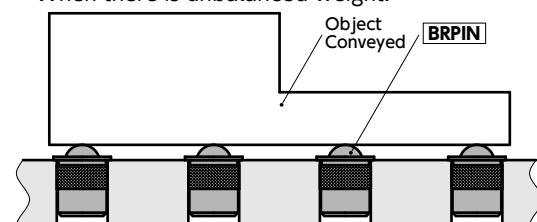
These are insert type ball rollers. Use a clearance fit when fitting with the attachment hole.

Unit : mm

Part Number	D	D1	D2	L	s	L1	L2	L3	Db	d	Load (N) min./max.	Mass (g)	Qty per pack
BRPIN-7-N	7	9	7	7.5	1.5	1	7.5	1	4.76	1.5	0.1 / 2	0.49	1
BRPIN-9-N	9	11	8.4	10	1.7	1	7	1	5.56	2.5	0.2 / 4	0.92	1
BRPIN-13-N	13	15	12.4	15	2.8	1	7	1.2	8.73	3	0.3 / 7	2.7	1
BRPIN-15-N	15	17	14.7	16.5	3.5	1	8.5	1.5	10.32	3.5	0.3 / 11	3.9	1
BRPIN-20-N	20	22	19.4	22.5	5.2	1.5	10.5	1.5	15.88	5.3	0.3 / 14	9.3	1
BRPIN-24-N	24	26	23.4	29	6.6	1.5	13.5	1.5	19.05	6.4	0.3 / 21	17	1

Usage example

When there is unbalanced weight.



Part number specification

BRPIN-13-N

Product Code D Polyacetal Main Ball

Select the part number.

1 Individual Sales → P.809

Cleanroom Wash & Packaging → P.807

Screw Length Adjustment → P.811

Vibration Resistant → P.810

1 pc. in 1 bag

Please feel free to contact us

Not Available

Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

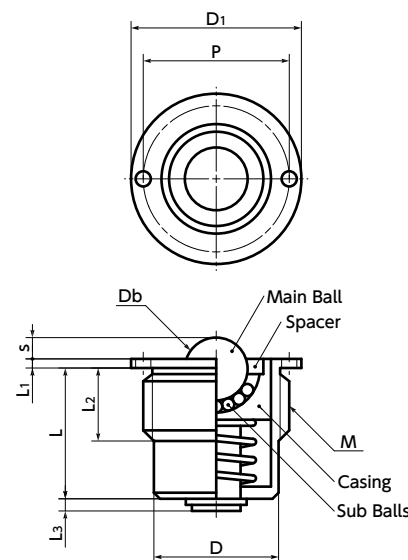
BRPMS Ball Roller with Spring Plunger Function - Flange Type

WEB Selection Tool

WEB CAD Download

SUS Stainless steel

e-nedzi.com®



Application

Conveyance, fixing and locating work, torque limiting, and indexing

Material/Finish

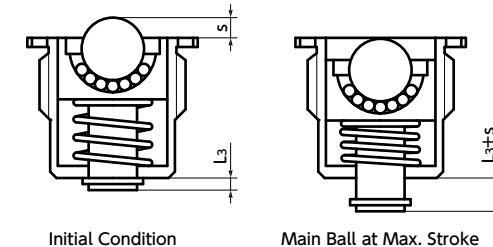
RoHS2 Compliant

	BRPMS-S
Main Body	SUS304
Main Ball	SUS440C (Hardness 55HRC or Higher)
Sub Ball	SUS440C (Hardness 55HRC or Higher)
Spacer	SUS304
Casing	SUS304
Spring	SUS631J1

- These are flange type ball rollers with spring plunger function.
- The attachment height can be easily determined.
- Install and remove by using **BRW** Specialty Wrench.
- Their internal springs receive loads evenly even when the load is unbalanced.
- These rollers can also be used as a general spring plunger with ball for fixing and locating workpiece. The smooth rotation of the ball reduces friction between the main ball and receiving side.

⚠ Precautions for Use

- These ball rollers are for upward applications only. If it is used for downward and sideward applications, the product may be damaged or the ball may malfunction.
- The bottom section moves the stroke distance of the main ball. Take care with the depth of the attachment hole.



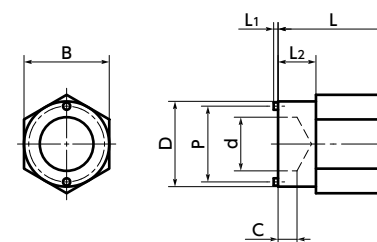
Unit : mm

Part Number	M (fine)	L	s	L1	L2	L3	D1	D	Db	P	Applicable wrench	Load (N) min./max.	Mass (g)	Qty per pack
BRPMS-16-S	M16×1.5	14	1.5	1.5	9	1.5	19	13.5	5.56	15	BRW-10	23 / 30	18	1
BRPMS-20-S	M20×1.5	17	2.5	1.5	10	2	24	16.5	8.73	18.5	BRW-12	24 / 38	30	1
BRPMS-24-S	M24×1.5	21.5	3.5	1.5	12	2	28	20.5	10.32	23	BRW-16	24 / 55	54	1

Dedicated wrench

Unit : mm

Part Number	L	L1	L2	B	C	D	d	P	Mass (g)	Qty per pack
BRW-10	25	1.4	8	19	3	18.5	10	15	55	1
BRW-12	30	1.4	10	24	4	22	12	18.5	102	1
BRW-16	35	1.4	12	27	6	27	17	23	153	1
BRW-20	40	1.4	14	30	7	33	20	29	220	1



Part number specification

BRPMS-20-S

Product Code M Stainless Steel Main Ball

Select the part number.

1 Individual Sales → P.809

Cleanroom Wash & Packaging → P.807

Screw Length Adjustment → P.811

Vibration Resistant → P.810

1 pc. in 1 bag

Please feel free to contact us

Not Available

Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

BRDRF/BRDSF

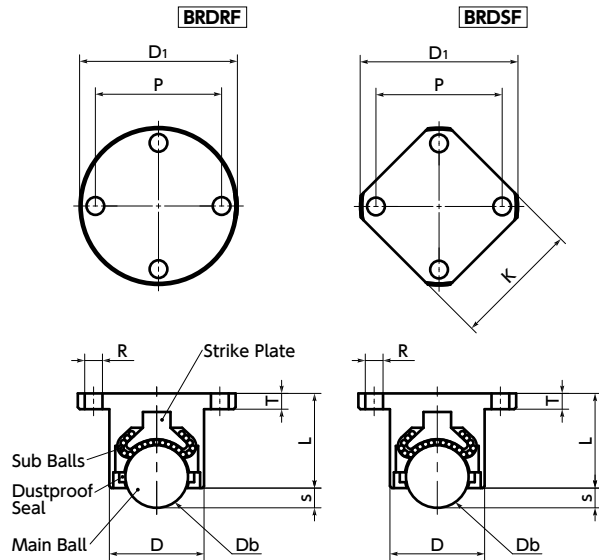
Downward Ball Rollers - Flange Type (Round/Square)

e-nedzi.com®



WEB Selection Tool

WEB CAD Download



- These ball rollers can be used in downward and sideward applications such as with casters of push carts for transport.
- The dustproof seal prevents the ingress of dirt and dust.
- The body, main ball, and sub-balls are made of steel. These rollers have excellent durability.

• Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

• Material/Finish



	BRDRF	BRDSF
Main Body	S45C Electroless Nickel Plating	S45C Electroless Nickel Plating
Main Ball	SUJ2 (Hardness 55HRC or Higher)	SUJ2 (Hardness 55HRC or Higher)
Sub Ball	SUJ2 (Hardness 55HRC or Higher)	SUJ2 (Hardness 55HRC or Higher)
Strike Plate	SCM415 (Hardness 50 HRC or Higher)	SCM415 (Hardness 50 HRC or Higher)
Dustproof Seal	Felt	Felt

BRDRF Round Flange Type

Unit : mm

Part Number	D1	D	L	s	T	Db	P	R	Withstand load (N)	Mass (g)	Qty per pack
BRDRF-40	40	24	24	5	4	15.88	32	4.5	900	104	1
BRDRF-50	50	30	28	6	5	19.05	40	5.5	1100	191	1
BRDRF-60	60	38	37	8	6	25.4	49	6.5	1200	386	1

BRDSF Square Flange Type

Unit : mm

Part Number	D1	D	K	L	s	T	Db	P	R	Withstand load (N)	Mass (g)	Qty per pack
BRDSF-40	40	24	32	24	5	4	15.88	32	4.5	900	96	1
BRDSF-50	50	30	40	28	6	5	19.05	40	5.5	1100	174	1
BRDSF-60	60	38	48	37	8	6	25.4	49	6.5	1200	358	1

• Part number specification

BRDRF-50

Product Code D1

Select the part number.

1 Individual Sales → P.809

Cleanroom Wash & Packaging → P.807

Screw Length Adjustment → P.811

Vibration Resistant → P.810

1 pc. in 1 bag

Not Available

Not Available

Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

BRDH

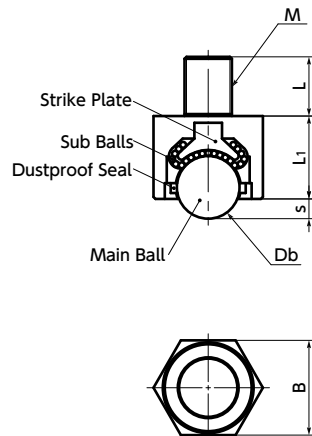
Downward Ball Rollers - Hex Head Screw Type

e-nedzi.com®



WEB Selection Tool

WEB CAD Download



- These ball rollers can be used in downward and sideward applications such as with casters of push carts for transport.
- The dustproof seal prevents the ingress of dirt and dust.
- The body, main ball, and sub-balls are made of steel. These rollers have excellent durability.

• Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

• Material/Finish



	BRDH
Main Body	S45C Electroless Nickel Plating
Main Ball	SUJ2 (Hardness 55HRC or Higher)
Sub Ball	SUJ2 (Hardness 55HRC or Higher)
Strike Plate	SCM415 (Hardness 50 HRC or Higher)
Dustproof Seal	Felt

Unit : mm

Part Number	M	L	L1	s	Db	B	Withstand load (N)	Mass (g)	Qty per pack
BRDH-12	M12	20	21	5	15.88	24	900	92	1
BRDH-16	M16	25	25	6	19.05	30	1100	175	1
BRDH-20	M20	30	34	8	25.4	38	1200	375	1

• Related Products

Upward Ball Rollers

→ P.459 - 466



Ball Rollers with Spring Plunger

Function

→ P.469 - 472



• Part number specification

BRDH-12

Product Code M

Select the part number.

1 Individual Sales → P.809

Cleanroom Wash & Packaging → P.807

Screw Length Adjustment → P.811

Vibration Resistant → P.810

1 pc. in 1 bag

Not Available

Not Available

Not Available

NBK

WEB ▶ <https://www.nbk1560.com>

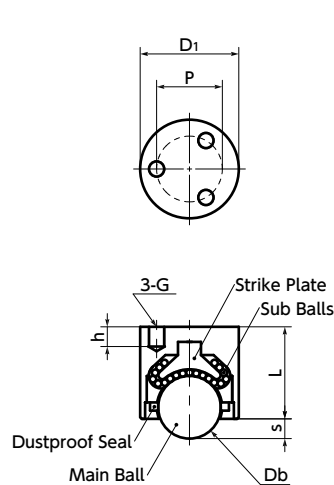
BRDT

Downward Ball Rollers - Tap Hole Type

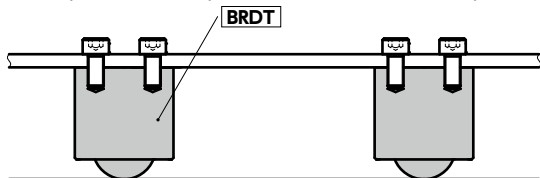
e-nedzi.com

WEB Selection Tool

WEB CAD Download



- These ball rollers can be used in downward and sideward applications such as with casters of push carts for transport.
- The dustproof seal prevents the ingress of dirt and dust.
- The body, main ball, and sub-balls are made of steel. These rollers have excellent durability.
- Because they are fixed using screw holes in the body section, they can be attached to thin plates.



• Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

• Material/Finish

 RoHS2 Compliant

	BRDT
Main Body	S45C Electroless Nickel Plating
Main Ball	SUJ2 (Hardness 55HRC or Higher)
Sub Ball	SUJ2 (Hardness 55HRC or Higher)
Strike Plate	SCM415 (Hardness 50 HRC or Higher)
Dustproof Seal	Felt

Part Number	D ₁	L	s	Db	G	h	P	Withstand load (N)	Mass (g)	Qty per pack
BRDT-24	24	24	5	15.88	M4	6	16	900	78	1
BRDT-30	30	28	6	19.05	M5	6	20	1100	142	1
BRDT-38	38	37	8	25.4	M6	8	26	1200	305	1

Unit : mm

• Part number specification

BRDT-30

Product Code D₁

Select the part number.

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

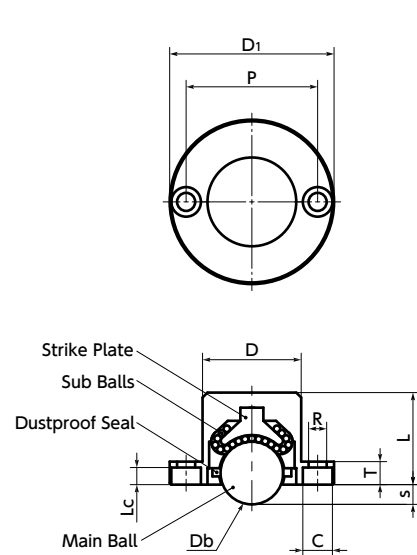
BRDB

Downward Ball Rollers - Flange Type

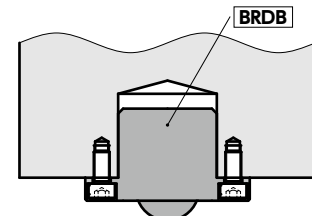
e-nedzi.com

WEB Selection Tool

WEB CAD Download



- These ball rollers can be used in downward and sideward applications such as with casters of push carts for transport.
- The dustproof seal prevents the ingress of dirt and dust.
- The body, main ball, and sub-balls are made of steel. These rollers have excellent durability.
- When these ball rollers are attached, the body sticks out only a small amount, which conserves space.



• Application

FPD production equipment, semiconductor devices, food production lines, and packaging lines

• Material/Finish

 RoHS2 Compliant

	BRDB
Main Body	S45C Electroless Nickel Plating
Main Ball	SUJ2 (Hardness 55HRC or Higher)
Sub Ball	SUJ2 (Hardness 55HRC or Higher)
Strike Plate	SCM415 (Hardness 50 HRC or Higher)
Dustproof Seal	Felt

Part Number	D	D ₁	L	s	T	Db	P	R	C	L _c	Withstand load (N)	Mass (g)	Qty per pack
BRDB-24	24	40	24	5	6	15.88	32	4.5	7.5	4.2	900	115	1
BRDB-30	30	50	28	6	7	19.05	40	5.5	9	5.2	1100	207	1
BRDB-38	38	60	37	8	8	25.4	49	6.5	10.5	6.2	1200	407	1

Unit : mm

• Part number specification

BRDB-30

Product Code D

Select the part number.

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

● Ball Plunger

Product Code	PAF/PAFS	FP/MP	MPS
Page	P.479 / P.481	P.483	P.484
Shape	 <i>Recommendation</i>		
Characteristics	Stainless Steel	Stainless Steel	Stainless Steel
Thread Size	M3 - M16	M2 - M16	M2 - M16

● Pin Plunger

Product Code	PSS/PSSS	PSP	PSPS	PLP
Page	P.485	P.487	P.489	P.490
Shape	 <i>Recommendation</i>		 <i>Recommendation</i>	
Characteristics	Stainless Steel	Stainless Steel	Stainless Steel	
Thread Size	M4 - M16	M3 - M12	M4 - M12	M12 - M30

● Accessory for Spring Stop/Plunger

Product Code	PST/PSTS/PST-N	PPW	PHL	BB
Page	P.491	P.492	P.493	P.494
Shape			 <i>Stainless Steel</i>	
Product name	Stainless Steel	Wrenches for Pin Plunger	Plunger Holders	Ball Buttons

● Locating Pin

Product Code	PJP	PJA	PJB
Page	P.495	P.496	P.497
Shape			
Product name	Stepped Locating Pins	Bushing for Locating Pin	Bushing for Locating Pin

We design and produce plungers for you with the optimum specifications (shape, dimensions, load, material, etc.) according to your operating conditions.

Please specify the following conditions when you contact us.

- Type...Ball type or pin type (for the ball type, let us know if you add a spacer or not)
- Shape/Dimensions...Nominal diameter of thread, screw pitch, thread length, ball or pin diameter, stroke, and overall length
- Load...Min. load (initial load)/Max. load
- Material/Finish...Main unit, ball or pin, spring
- Vibration Resistant Treatment...Required/Not required
- Operating Conditions...Temperature, atmosphere, service life, etc.

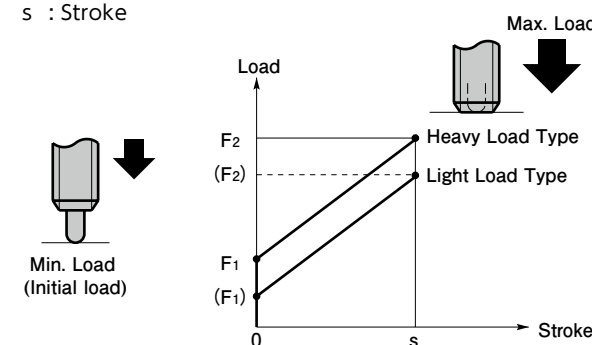


Plunger Load

- Min. load (initial load):
It is the load that the plunger ball or pin starts sinking.
- Max. load:
It is the load that the plunger ball or pin has sunk completely.
- The plunger load changes in a linear manner between the min. and the max. The plunger spring constant K can be computed in the following formula:

$$K = \frac{F_2 - F_1}{s}$$

K : Spring constant
F₁ : Min. load (initial load)
F₂ : Max. load
s : Stroke

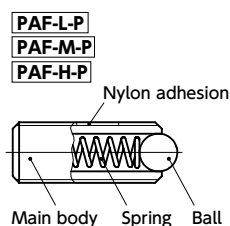
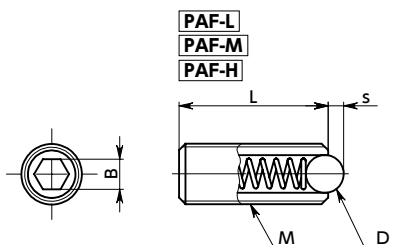


⚠ Precautions for Use

In general, the heavy load type has shorter service life than the light load type.
We recommend using the light load type for frequent use.

PAF Miniature Ball Plunger

WEB Selection Tool
CAD Download



- Cost-effective ball plunger.
- Light load, heavy load and super heavy load types with and without vibration resistant treatment are available.
- We also produce products of special specifications, e.g. dimensions, load and materials. → P.478
- Load types and with / without vibration resistant treatment can be selected by a product code.

Product Code	Load Type	Vibration resistant treatment
PAF-L	Light Load	No
PAF-L-P	Light Load	Yes
PAF-M	Heavy load	No
PAF-M-P	Heavy load	Yes
PAF-H	Super heavy load	No
PAF-H-P	Super heavy load	Yes

PAF-L	PAF-L-P	Light Load	PAF-M	PAF-M-P	Heavy Load	Unit : mm				
Part Number	M (Coarse)	s	L	D	B	Applicable ball button BB → P.494	Load (N) min./max.	Mass (g)	Loosening stopper	
PAF-3-L	M3	0.5	6	1.5	1.5		1 / 2	0.4	—	
PAF-4-L	M4	0.8	8	2.5	2	BB-5	2 / 4.9	0.4	—	
PAF-5-L	M5	0.8	11	3	2.5	BB-5	2.9 / 9.8	0.9	—	
PAF-6-L	M6	0.8	12	3	3	BB-6	4.9 / 15	1.5	—	
PAF-8-L	M8	1	14	4	4	BB-6	6.9 / 20	3.2	—	
PAF-10-L	M10	1.2	15	5	5	BB-8	8.8 / 25	5.4	—	
PAF-12-L	M12	1.8	19	7.1	6	BB-10	9.8 / 29	10	—	
PAF-16-L	M16	2.5	24	9.5	8	BB-12	16 / 49	24	—	
PAF-3-L-P	M3	0.5	6	1.5	1.5		1 / 2	0.4	O	
PAF-4-L-P	M4	0.8	8	2.5	2	BB-5	2 / 4.9	0.4	O	
PAF-5-L-P	M5	0.8	11	3	2.5	BB-5	2.9 / 9.8	0.9	O	
PAF-6-L-P	M6	0.8	12	3	3	BB-6	4.9 / 15	1.5	O	
PAF-8-L-P	M8	1	14	4	4	BB-6	6.9 / 20	3.2	O	
PAF-10-L-P	M10	1.2	15	5	5	BB-8	8.8 / 25	5.4	O	
PAF-12-L-P	M12	1.8	19	7.1	6	BB-10	9.8 / 29	10	O	
PAF-16-L-P	M16	2.5	24	9.5	8	BB-12	16 / 49	24	O	
PAF-3-M	M3	0.5	6	1.5	1.5		1.5 / 2.9	0.4	—	
PAF-4-M	M4	0.8	8	2.5	2	BB-5	3.9 / 9.8	0.4	—	
PAF-5-M	M5	0.8	11	3	2.5	BB-5	4.9 / 20	0.9	—	
PAF-6-M	M6	0.8	12	3	3	BB-6	9.8 / 29	1.5	—	
PAF-8-M	M8	1	14	4	4	BB-6	13 / 39	3.2	—	
PAF-10-M	M10	1.2	15	5	5	BB-8	19 / 49	5.4	—	
PAF-12-M	M12	1.8	19	7.1	6	BB-10	20 / 59	10	—	
PAF-16-M	M16	2.5	24	9.5	8	BB-12	29 / 98	24	—	
PAF-3-M-P	M3	0.5	6	1.5	1.5		1.5 / 2.9	0.4	O	
PAF-4-M-P	M4	0.8	8	2.5	2	BB-5	3.9 / 9.8	0.4	O	
PAF-5-M-P	M5	0.8	11	3	2.5	BB-5	4.9 / 20	0.9	O	
PAF-6-M-P	M6	0.8	12	3	3	BB-6	9.8 / 29	1.5	O	
PAF-8-M-P	M8	1	14	4	4	BB-6	13 / 39	3.2	O	
PAF-10-M-P	M10	1.2	15	5	5	BB-8	19 / 49	5.4	O	
PAF-12-M-P	M12	1.8	19	7.1	6	BB-10	20 / 59	10	O	
PAF-16-M-P	M16	2.5	24	9.5	8	BB-12	29 / 98	24	O	

Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Available / Add'l charge	Not Available



RoHS2 Compliant

● Material/Finish

	PAF-L	PAF-L-P	PAF-M	PAF-M-P	PAF-H	PAF-H-P
Main body	SCM435 Ferrosoferric Oxide Film (Black)	SCM435 Ferrosoferric Oxide Film (Black)	SCM435 Ferrosoferric Oxide Film (Black)	SCM435 Ferrosoferric Oxide Film (Black)	SCM435*1 Trivalent Chromate Treatment	SCM435*1 Trivalent Chromate Treatment
Ball	SUJ2 (hardness: 55 - 60 HRC)	SUJ2 (hardness: 55 - 60 HRC)	SUJ2*1 (hardness: 55 - 60 HRC) Ferrosoferric Oxide Film	SUJ2*1 (hardness: 55 - 60 HRC) Ferrosoferric Oxide Film	SUJ2 (hardness: 55 - 60 HRC)	SUJ2 (hardness: 55 - 60 HRC)
Spring	SWPB	SWPB	SWPB	SWPB	SWPB	SWPB
Vibration resistant treatment		Nylon adhesion (Nylon 11)		Nylon adhesion (Nylon 11)		Nylon adhesion (Nylon 11)

*1 : Load types can be selected by the surface treatment of the main body and ball.

PAF-H | PAF-H-P Super Heavy Load

Part Number	M (Coarse)	s	L	D	B	Applicable ball button BB → P.494	Load (N) min./max.	Mass (g)	Loosening stopper	
PAF-3-H	M3	0.5	6	1.5	1.5		2.2 / 5	0.4	—	
PAF-4-H	M4	0.8	8	2.5	2	BB-5	2.5 / 12.5	0.4	—	
PAF-5-H	M5	0.8	11	3	2.5	BB-5	11.2 / 24.1	0.9	—	
PAF-6-H	M6	0.8	12	3	3	BB-6	17.7 / 33.4	1.5	—	
PAF-8-H	M8	1	14	4	4	BB-6	21.4 / 45.3	3.2	—	
PAF-10-H	M10	1.2	15	5	5	BB-8	23.5 / 60	5.4	—	
PAF-12-H	M12	1.8	19	7.1	6	BB-10	24.1 / 63.7	10	—	
PAF-16-H	M16	2.5	24	9.5	8	BB-12	43.6 / 116.3	24	—	
PAF-3-H-P	M3	0.5	6	1.5	1.5		2.2 / 5	0.4	O	
PAF-4-H-P	M4	0.8	8	2.5	2	BB-5	2.5 / 12.5	0.4	O	
PAF-5-H-P	M5	0.8	11	3	2.5	BB-5	11.2 / 24.1	0.9	O	
PAF-6-H-P	M6	0.8	12	3	3	BB-6	17.7 / 33.4	1.5	O	
PAF-8-H-P	M8	1	14	4	4	BB-6	21.4 / 45.3	3.2	O	
PAF-10-H-P	M10	1.2	15	5	5	BB-8	23.5 / 60	5.4	O	
PAF-12-H-P	M12	1.8	19	7.1	6	BB-10	24.1 / 63.7	10	O	
PAF-16-H-P	M16	2.5	24	9.5	8	BB-12	43.6 / 116.3	24	O	

● Related Products

Stainless steel mini ball plunger
PAFS with the same shape is
available.
→ P.481



Use a ball button BB with
excellent abrasion resistance on
the recipient.
→ P.494



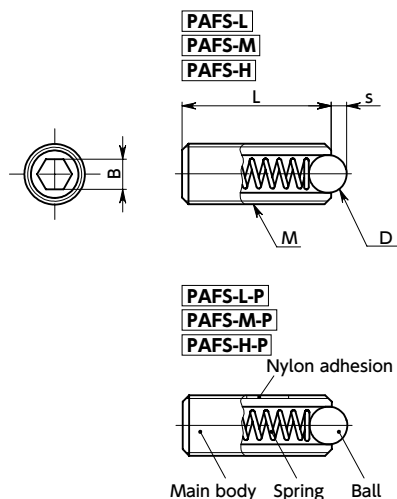
● Part number specification

PAF-4-H-P



PAFS Miniature Ball Plunger (Made of Stainless Steel) *Recommendation*

WEB Selection Tool CAD Download SUS Stainless steel



- Cost-effective ball plunger.
- Light load, heavy load and super heavy load types with and without vibration resistant treatment are available.
- The main body, ball and spring are made of stainless steel.
- We also produce products of special specifications, e.g. dimensions, load and materials. → P.478
- Load types and with / without vibration resistant treatment can be selected by a product code.

Product Code	Load Type	Vibration resistant treatment
PAFS-L	Light Load	No
PAFS-L-P	Light Load	Yes
PAFS-M	Heavy load	No
PAFS-M-P	Heavy load	Yes
PAFS-H	Super heavy load	No
PAFS-H-P	Super heavy load	Yes

PAFS-L	PAFS-L-P	Light Load	PAFS-M	PAFS-M-P	Heavy Load	Unit : mm				
Part Number	M (Coarse)	s	L	D	B	Applicable ball button BB → P.494	Load (N) min./max.	Mass (g)	Loosening stopper	
PAFS-3-L	M3	0.5	6	1.5	1.5		1 / 2	0.4	—	
PAFS-4-L	M4	0.8	8	2.5	2	BB-5	2 / 4.9	0.4	—	
PAFS-5-L	M5	0.8	11	3	2.5	BB-5	2.9 / 9.8	0.9	—	
PAFS-6-L	M6	0.8	12	3	3	BB-6	4.9 / 15	1.5	—	
PAFS-8-L	M8	1	14	4	4	BB-6	6.9 / 20	3.2	—	
PAFS-10-L	M10	1.2	15	5	5	BB-8	8.8 / 25	5.4	—	
PAFS-12-L	M12	1.8	19	7.1	6	BB-10	9.8 / 29	10	—	
PAFS-16-L	M16	2.5	24	9.5	8	BB-12	16 / 49	24	—	
PAFS-3-L-P	M3	0.5	6	1.5	1.5		1 / 2	0.4	○	
PAFS-4-L-P	M4	0.8	8	2.5	2	BB-5	2 / 4.9	0.4	○	
PAFS-5-L-P	M5	0.8	11	3	2.5	BB-5	2.9 / 9.8	0.9	○	
PAFS-6-L-P	M6	0.8	12	3	3	BB-6	4.9 / 15	1.5	○	
PAFS-8-L-P	M8	1	14	4	4	BB-6	6.9 / 20	3.2	○	
PAFS-10-L-P	M10	1.2	15	5	5	BB-8	8.8 / 25	5.4	○	
PAFS-12-L-P	M12	1.8	19	7.1	6	BB-10	9.8 / 29	10	○	
PAFS-16-L-P	M16	2.5	24	9.5	8	BB-12	16 / 49	24	○	
PAFS-3-M	M3	0.5	6	1.5	1.5		1.5 / 2.9	0.4	—	
PAFS-4-M	M4	0.8	8	2.5	2	BB-5	3.9 / 9.8	0.4	—	
PAFS-5-M	M5	0.8	11	3	2.5	BB-5	4.9 / 20	0.9	—	
PAFS-6-M	M6	0.8	12	3	3	BB-6	9.8 / 29	1.5	—	
PAFS-8-M	M8	1	14	4	4	BB-6	13 / 39	3.2	—	
PAFS-10-M	M10	1.2	15	5	5	BB-8	19 / 49	5.4	—	
PAFS-12-M	M12	1.8	19	7.1	6	BB-10	20 / 59	10	—	
PAFS-16-M	M16	2.5	24	9.5	8	BB-12	29 / 98	24	—	
PAFS-3-M-P	M3	0.5	6	1.5	1.5		1.5 / 2.9	0.4	○	
PAFS-4-M-P	M4	0.8	8	2.5	2	BB-5	3.9 / 9.8	0.4	○	
PAFS-5-M-P	M5	0.8	11	3	2.5	BB-5	4.9 / 20	0.9	○	
PAFS-6-M-P	M6	0.8	12	3	3	BB-6	9.8 / 29	1.5	○	
PAFS-8-M-P	M8	1	14	4	4	BB-6	13 / 39	3.2	○	
PAFS-10-M-P	M10	1.2	15	5	5	BB-8	19 / 49	5.4	○	
PAFS-12-M-P	M12	1.8	19	7.1	6	BB-10	20 / 59	10	○	
PAFS-16-M-P	M16	2.5	24	9.5	8	BB-12	29 / 98	24	○	

Cleanroom Wash & Packaging → P.807

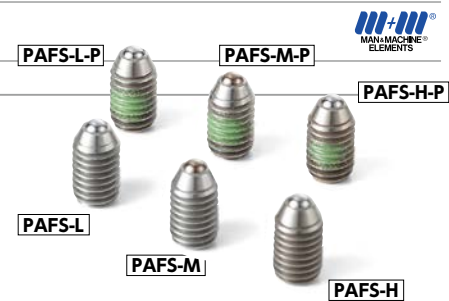
Vibration Resistant → P.810

Laser Marking → P.821

Please feel free to contact us

Available / Add'l charge

Not Available



RoHS2 Compliant

● Material/Finish

	PAFS-L	PAFS-L-P	PAFS-M	PAFS-M-P	PAFS-H	PAFS-H-P
Main body	SUSXM7	SUSXM7	SUSXM7	SUSXM7	SUSXM7*1 Temper Color (Brown)	SUSXM7*1 Temper Color (Brown)
Ball	SUS440C (hardness: 55 - 60 HRC)	SUS440C (hardness: 55 - 60 HRC)	SUS440C*2 (hardness: 55 - 60 HRC) Temper Color (Brown)	SUS440C*2 (hardness: 55 - 60 HRC) Temper Color (Brown)	SUS440C (hardness: 55 - 60 HRC)	SUS440C (hardness: 55 - 60 HRC)
Spring	SUS631J1	SUS631J1	SUS631J1	SUS631J1	SUS631J1	SUS631J1
Vibration resistant treatment		Nylon adhesion (Nylon 11)		Nylon adhesion (Nylon 11)		Nylon adhesion (Nylon 11)

*1 : Load types can be selected by the surface treatment of the main body and ball.

*2 : The ball surface treatment was changed for identification of load types.

PAFS-H PAFS-H-P Super Heavy Load

Part Number	M (Coarse)	s	L	D	B	Applicable ball button BB → P.494	Load (N) min./max.	Mass (g)	Loosening stopper	
PAFS-3-H	M3	0.5	6	1.5	1.5		2.2 / 5	0.4	—	
PAFS-4-H	M4	0.8	8	2.5	2	BB-5	2.5 / 12.5	0.4	—	
PAFS-5-H	M5	0.8	11	3	2.5	BB-5	11.2 / 24.1	0.9	—	
PAFS-6-H	M6	0.8	12	3	3	BB-6	17.7 / 33.4	1.5	—	
PAFS-8-H	M8	1	14	4	4	BB-6	21.4 / 45.3	3.2	—	
PAFS-10-H	M10	1.2	15	5	5	BB-8	23.5 / 60	5.4	—	
PAFS-12-H	M12	1.8	19	7.1	6	BB-10	24.1 / 63.7	10	—	
PAFS-16-H	M16	2.5	24	9.5	8	BB-12	43.6 / 116.3	24	—	
PAFS-3-H-P	M3	0.5	6	1.5	1.5		2.2 / 5	0.4	○	
PAFS-4-H-P	M4	0.8	8	2.5	2	BB-5	2.5 / 12.5	0.4	○	
PAFS-5-H-P	M5	0.8	11	3	2.5	BB-5	11.2 / 24.1	0.9	○	
PAFS-6-H-P	M6	0.8	12	3	3	BB-6	17.7 / 33.4	1.5	○	
PAFS-8-H-P	M8	1	14	4	4	BB-6	21.4 / 45.3	3.2	○	
PAFS-10-H-P	M10	1.2	15	5	5	BB-8	23.5 / 60	5.4	○	
PAFS-12-H-P	M12	1.8	19	7.1	6	BB-10	24.1 / 63.7	10	○	
PAFS-16-H-P	M16	2.5	24	9.5	8	BB-12	43.6 / 116.3	24	○	

● Related Products

Steel ball plunger [PAF] with the same shape is available.

→ P.479



Use a ball button [BB] with excellent abrasion resistance on the recipient.

→ P.494



● Part number specification

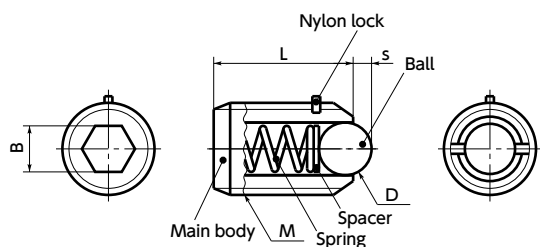
PAFS-4-H-P

1

FP / MP Miniature Ball Plunger - with Nylon Lock



WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	FP	MP
Main body	S45C Ferroferric Oxide Film (Black)	Equivalent to SUS304
Ball	SUJ2 (hardness: 55 - 60 HRC)	SUJ2 (hardness: 55 - 60 HRC)
Spacer	SUS304	SUS304
Spring	SWPB	SWPB
Vibration resistant treatment	Nylon Lock	Nylon Lock

- Insert a spacer between the ball and spring (Except for M2 / M3). The ball rotates.
- With nylon lock for vibration resistant treatment (Except for M2/ M3 / M4).
- We also produce products of special specifications, e.g. dimensions, load and materials. ➔ P.478
- Main body materials and load types can be selected according to the product code.

Product Code	Material	Load Type
FP	Steel	Light Load
MP	Stainless Steel	Heavy load

FP	Made of Steel / Light Load	MP	Made of Stainless Steel / Heavy Load					Unit : mm	
Part Number	M(coarse) 2	s	L	D	B	Applicable ball button BB → P.494	Load(N) min./max.	Mass (g)	Loosening stopper
FP-2	M2	0.2	5	1	0.9		0.7 / 1.4	0.1	—
FP-3	M3	0.5	7	1.5	1.5		1 / 2	0.4	—
FP-4	M4	0.8	9	2.5	2	BB-5	2 / 4.9	0.5	—
FP-5	M5	0.8	12	3	2.5	BB-5	2.9 / 9.8	1	○
FP-6	M6	0.8	13	3	3	BB-6	4.9 / 15	1.7	○
FP-8	M8	1	15	4	4	BB-6	6.9 / 20	3.5	○
FP-10	M10	1.2	16	5	5	BB-8	8.8 / 25	6	○
FP-12	M12	1.8	20	7	6	BB-10	9.8 / 29	11	○
FP-16	M16	2.5	25	9.5	8	BB-12	16 / 49	25	○
MP-2	M2	0.2	5	1	0.9		1.2 / 2	0.1	—
MP-3	M3	0.5	7	1.5	1.5		1.5 / 2.9	0.4	—
MP-4	M4	0.8	9	2.5	2	BB-5	3.9 / 9.8	0.5	—
MP-5	M5	0.8	12	3	2.5	BB-5	4.9 / 20	1	○
MP-6	M6	0.8	13	3	3	BB-6	9.8 / 29	1.7	○
MP-8	M8	1	15	4	4	BB-6	13 / 39	3.5	○
MP-10	M10	1.2	16	5	5	BB-8	19 / 49	6	○
MP-12	M12	1.8	20	7	6	BB-10	20 / 59	11	○
MP-16	M16	2.5	25	9.5	8	BB-12	29 / 98	25	○

Related Products

A plunger type ball roller whose ball rotates smoothly is available.

➔ P.469 - 472



Part number specification

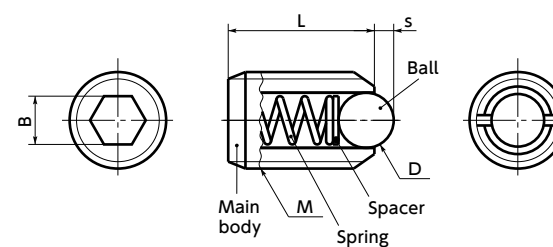
FP-2
1 2

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821
Please feel free to contact us	with Vibration Resistant Treatment	Not Available

MPS Miniature Ball Plunger (Made of Stainless Steel)



WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	MPS
Main body*1	Equivalent to SUS304
Ball	SUS440C (hardness: 55 - 60 HRC)
Spacer	SUS304
Spring	SUS631J1

*1 : Hexagon socket part is colored for identification. MPS Red / MPS-Z Blue

- There is a spacer between the ball and spring (Except for M2 / M3). The ball rotates.
- Made of all stainless steel. It is highly corrosion-resistant and heat-resistant.
- We also produce products of special specifications, e.g. dimensions, load and materials. ➔ P.478
- Load type can be selected according to the end symbol of the part number. 2
No end symbol — Heavy load
End symbol Z — Super heavy load

MPS Heavy Load MPS-Z Super Heavy Load

Unit : mm

Part Number	M (coarse)	s	L	D	B	Applicable ball button BB ➔ P.494	Load (N) min./max.	Mass (g)
MPS-2	M2	0.2	5	1	0.9		1.2 / 2	0.1
MPS-3	M3	0.5	7	1.5	1.5		1.5 / 2.9	0.4
MPS-4	M4	0.8	9	2.5	2	BB-5	3.9 / 9.8	0.5
MPS-5	M5	0.8	12	3	2.5	BB-5	4.9 / 20	1
MPS-6	M6	0.8	13	3	3	BB-6	9.8 / 29	1.7
MPS-8	M8	1	15	4	4	BB-6	13 / 39	3.5
MPS-10	M10	1.2	16	5	5	BB-8	19 / 49	6
MPS-12	M12	1.8	20	7	6	BB-10	20 / 59	11
MPS-16	M16	2.5	25	9.5	8	BB-12	29 / 98	25
MPS-3-Z	M3	0.5	7	1.5	1.5		2.2 / 5	0.4
MPS-4-Z	M4	0.8	9	2.5	2	BB-5	2.5 / 12.5	0.5
MPS-5-Z	M5	0.8	12	3	2.5	BB-5	11.2 / 24.1	1
MPS-6-Z	M6	0.8	13	3	3	BB-6	17.7 / 33.4	1.7
MPS-8-Z	M8	1	15	4	4	BB-6	21.4 / 45.3	3.5
MPS-10-Z	M10	1.2	16	5	5	BB-8	23.5 / 60	6
MPS-12-Z	M12	1.8	20	7	6	BB-10	24.1 / 63.7	11
MPS-16-Z	M16	2.5	25	9.5	8	BB-12	43.6 / 116.3	25

Related Products

Use a ball button BB with excellent abrasion resistance on the recipient.

➔ P.494



A plunger type ball roller whose ball rotates smoothly is available.

➔ P.469 - 472



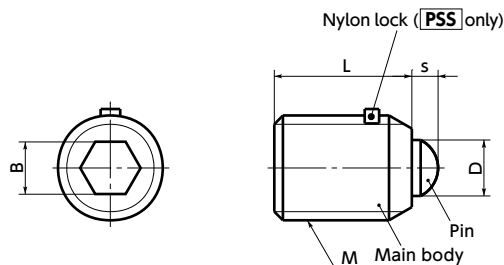
Part number specification

MPS-8-Z
Product Code 1 2

Cleanroom Wash & Packaging ➔ P.807	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821
Please feel free to contact us	Available / Add'l charge	Not Available

PSS / PSSS Small Plunger

WEB Selection Tool CAD Download SUS Stainless steel



- **PSSS-1** **PSSS-3** is all made of stainless steel. It is highly corrosion-resistant.
- **PSS-2** **PSS-1** has a nylon lock for vibration resistant treatment (Except for M4).
- We also produce products of special specifications, e.g. dimensions, load and materials. ➔ P.478
- Materials and load types can be selected by a product code.

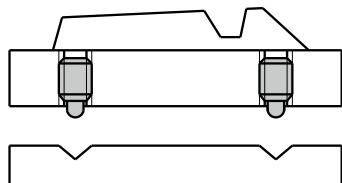
Product Code	Material	Load Type
PSS-2	Steel	Light Load
PSS-1	Steel	Heavy load
PSSS-1	Stainless Steel	Heavy load
PSSS-3	Stainless Steel	Super heavy load

PSS-2 Light Load PSS-1 Heavy Load

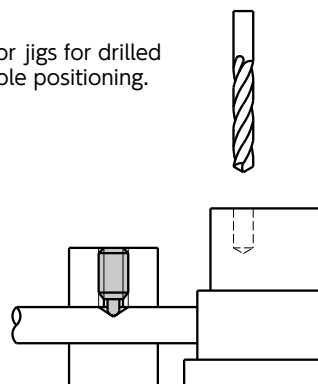
Part Number Made of Steel	M (coarse)	s	L	D	B	Applicable ball button BB ➔ P.494	Load (N) min./max.	Mass (g)	Loosening stopper
PSS-4-2	M4	1.2	9	2.1	2	BB-4	1.6 / 5	0.6	—
PSS-5-2	M5	1.5	12	2.65	2.5	BB-5	2 / 7.8	1	○
PSS-6-2	M6	1.5	13	3.2	3	BB-8	2.9 / 9.8	1.5	○
PSS-8-2	M8	2	15	4	4	BB-8	2.9 / 9.8	3	○
PSS-10-2	M10	2.5	16	5	5	BB-10	4.9 / 15	5.5	○
PSS-12-2	M12	3.5	20	6	6	BB-12	4.9 / 15	10	○
PSS-16-2	M16	4.5	22	8	8	BB-12	9.8 / 29	20	○
PSS-4-1	M4	1.2	9	2.1	2	BB-4	2 / 9	0.6	—
PSS-5-1	M5	1.5	12	2.65	2.5	BB-5	4.9 / 15	1	○
PSS-6-1	M6	1.5	13	3.2	3	BB-8	5.9 / 20	1.5	○
PSS-8-1	M8	2	15	4	4	BB-8	5.9 / 20	3	○
PSS-10-1	M10	2.5	16	5	5	BB-10	9.8 / 29	5.5	○
PSS-12-1	M12	3.5	20	6	6	BB-12	9.8 / 29	10	○
PSS-16-1	M16	4.5	22	8	8	BB-12	20 / 59	20	○

● Usage example

For die positioning.



For jigs for drilled hole positioning.



Cleanroom Wash & Packaging ➔ P.807

Please feel free to contact us

Vibration Resistant ➔ P.810

Available / Add'l charge

Laser Marking ➔ P.821

Not Available

● Material/Finish

RoHS2 Compliant

	PSS-2 *1	PSS-1 *1	PSSS-1 / PSSS-3 *2
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Ferrosoferric Oxide Film (Black)	Equivalent to SUS304
Pin	S45C (hardness: 56 - 60 HRC) Trivalent Chromate Treatment	S45C (hardness: 56 - 60 HRC) Ferrosoferric Oxide Film (Black)	SUS440C (hardness: 55 - 60 HRC)
Spring	SWPB	SWPB	SUS631J1
Vibration Resistant Treatment	Nylon Lock	Nylon Lock	

*1 : To distinguish between **PSS-1** and **PSS-2**, pin surface treatment is different.

*2 : To distinguish between **PSSS-3** and **PSSS-1**, a red mark is prepared on the hexagon socket.

PSSS-1 Heavy Load PSSS-3 Super Heavy Load

Part Number Made of Stainless Steel	M (coarse)	s	L	D	B	Applicable ball button BB ➔ P.494	Load (N) min./max.	Mass (g)
PSSS-4-1	M4	1.2	9	2.1	2	BB-4	2 / 9	0.6
PSSS-5-1	M5	1.5	12	2.65	2.5	BB-5	4.9 / 15	1
PSSS-6-1	M6	1.5	13	3.2	3	BB-8	5.9 / 20	1.5
PSSS-8-1	M8	2	15	4	4	BB-8	5.9 / 20	3
PSSS-10-1	M10	2.5	16	5	5	BB-10	9.8 / 29	5.5
PSSS-12-1	M12	3.5	20	6	6	BB-12	9.8 / 29	10
PSSS-16-1	M16	4.5	22	8	8	BB-12	20 / 59	20
PSSS-4-3	M4	1.2	9	2.1	2	BB-4	4 / 11.5	0.6
PSSS-5-3	M5	1.5	12	2.65	2.5	BB-5	6 / 24.2	1
PSSS-6-3	M6	1.5	13	3.2	3	BB-8	9.4 / 29.5	1.5
PSSS-8-3	M8	2	15	4	4	BB-8	13.5 / 43.7	3
PSSS-10-3	M10	2.5	16	5	5	BB-10	19.1 / 53.3	5.5
PSSS-12-3	M12	3.5	20	6	6	BB-12	24.5 / 58.8	10
PSSS-16-3	M16	4.5	22	8	8	BB-12	26.6 / 78.7	20

● Related Products

Use a ball button **BB** with excellent abrasion resistance on the recipient.
➔ P.494



● Part number specification

PSSS-5-1

PSP Short Stroke Plunger

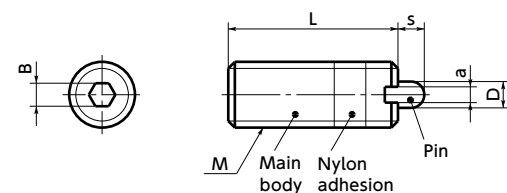
WEB Selection Tool CAD Download



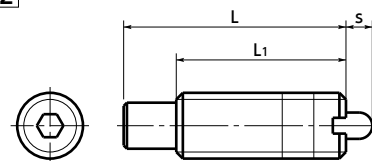
PSP

PSP-N

PSP-S



PSP-Z



PSP Light Load	PSP-S Heavy Load	PSP-Z Super Heavy Load	Unit : mm									
Part Number Steel Pin	M (Coarse)	s	L	L1	D	a	B	Applicable ball button BB → P.494	Key Part No. PPW → P.492	Load (N) min./max.	Mass (g)	Loosening stopper
PSP-3-1.5	M3	1.5	10		1.1	0.4	0.9	BB-4		0.49 / 1	0.3	—
PSP-3-3	M3	3	15		1.1	0.4	0.9	BB-4		0.29 / 1	0.6	—
PSP-4-2	M4	2	15		1.6	0.6	1.3	BB-4		1 / 2	0.7	—
PSP-4-4	M4	4	24		1.6	0.6	1.3	BB-4		0.59 / 2	1.6	—
PSP-5B-3	M5	3	13		2	1.2	1.5	BB-5	PPW-5	1 / 7.8	1.2	○
PSP-5-3	M5	3	20		2	1.2	1.5	BB-5	PPW-5	2 / 9.8	2	○
PSP-5-5	M5	5	27		2	1.2	1.5	BB-5	PPW-5	2 / 9.8	3	○
PSP-6-3	M6	3	25		2.5	1.3	2	BB-6	PPW-6	2.9 / 9.8	3	○
PSP-6-5	M6	5	30		2.5	1.3	2	BB-6	PPW-6	2 / 9.8	4	○
PSP-8-3	M8	3	25		3.1	1.5	2.5	BB-8	PPW-8	5.9 / 9.8	6	○
PSP-8-4	M8	4	25		3.1	1.5	2.5	BB-8	PPW-8	2.9 / 9.8	6	○
PSP-8-5	M8	5	27		3.1	1.5	2.5	BB-8	PPW-8	2 / 9.8	9	○
PSP-10-5	M10	5	30		3.8	1.5	3	BB-8	PPW-10	2.9 / 15	11	○
PSP-12-5	M12	5	30		5.5	2.7	4	BB-10	PPW-12	2 / 9.8	15	○
PSP-3-1.5-S	M3	1.5	10		1.1	0.4	0.9	BB-4		0.49 / 2.9	0.3	—
PSP-3-3-S	M3	3	15		1.1	0.4	0.9	BB-4		0.78 / 2.9	0.6	—
PSP-4B-2-S	M4	2	12		1.6	0.6	0.9	BB-4		2 / 9.8	0.7	—
PSP-4-2-S	M4	2	15		1.6	0.6	1.3	BB-4		2.9 / 8.8	0.7	—
PSP-4-4-S	M4	4	24		1.6	0.6	1.3	BB-4		2 / 8.8	1.6	—
PSP-5-3-S	M5	3	20		2	1.2	1.5	BB-5	PPW-5	3.9 / 20	2	○
PSP-5-5-S	M5	5	27		2	1.2	1.5	BB-5	PPW-5	2.9 / 19.6	3	○
PSP-6-3-S	M6	3	25		2.5	1.3	2	BB-6	PPW-6	7.8 / 25	3	○
PSP-6-5-S	M6	5	30		2.5	1.3	2	BB-6	PPW-6	4.9 / 29.4	4	○
PSP-8-3-S	M8	3	25		3.1	1.5	2.5	BB-8	PPW-8	14.7 / 29.4	6	○
PSP-8-4-S	M8	4	25		3.1	1.5	2.5	BB-8	PPW-8	7.8 / 29	6	○
PSP-8-5-S	M8	5	27		3.1	1.5	2.5	BB-8	PPW-8	7.8 / 29.4	9	○
PSP-10-5-S	M10	5	30		3.8	1.5	3	BB-8	PPW-10	9.8 / 49	11	○
PSP-12-5-S	M12	5	30		5.5	2.7	4	BB-10	PPW-12	9.8 / 49	15	○
PSP-8-3-Z	M8	3	27	27	3.1	1.5	2.5	BB-8	PPW-8	35.3 / 41.2	7	○
PSP-8-5-Z	M8	5	35	30	3.1	1.5	2.5	BB-8	PPW-8	14.7 / 41.2	10	○
PSP-10-5-Z	M10	5	35	30	3.8	1.5	3	BB-8	PPW-10	15.7 / 62.8	11	○
PSP-12-5-Z	M12	5	43	35	5.5	2.7	4	BB-10	PPW-12	37.2 / 98.1	21	○

Cleanroom Wash & Packaging → P.807

Vibration Resistant → P.810

Laser Marking → P.821

Please feel free to contact us

with Vibration Resistant Treatment

Not Available

- With nylon adhesion for vibration resistant treatment (Except for M3 / M4).
- Pins of **PSP-N** are made of plastic. This does not scratch the work.
- We also produce products of special specifications, e.g. dimensions, load and materials. → P.478
- Pin materials and load types can be selected by a product code.

Product Code	Pin Material	Load Type
PSP	Steel	Light Load
PSP-N	Plastic	Light Load
PSP-S	Steel	Heavy load
PSP-Z	Steel	Super heavy load

Material/Finish

RoHS2 Compliant

	PSP	PSP-N	PSP-S	PSP-Z
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Ferrosoferric Oxide Film (Black)	S45C Ferrosoferric Oxide Film (Black)	S45C Electroless Nickel Plating
Pin	S45C (hardness: 56 - 60 HRC) Trivalent Chromate Treatment	Polyacetal (White)	S45C (hardness: 56 - 60 HRC) Ferrosoferric Oxide Film (Black)	S45C (hardness: 56 - 60 HRC) Ferrosoferric Oxide Film (Black)
Spring	SWPB	SWPB	SWPB	SWPB
Vibration resistant treatment	Nylon adhesion	Nylon adhesion	Nylon adhesion	Nylon adhesion

PSP-N Light Load

Unit : mm

Part Number Plastic Pin	M (Coarse)	s	L	D	a	B	Applicable ball button BB → P.494	Key Part No. PPW → P.492	Load (N) min./max.	Mass (g)	Loosening stopper
PSP-5-3-N	M5	3	20	2	1.2	1.5	BB-5	PPW-5	2 / 9.8	2	○
PSP-5-5-N	M5	5	27	2	1.2	1.5	BB-5	PPW-5	2 / 9.8	3	○
PSP-6-3-N	M6	3	25	2.5	1.3	2	BB-6	PPW-6	5.9 / 9.8	3	○
PSP-6-5-N	M6	5	30	2.5	1.3	2	BB-6	PPW-6	2 / 9.8	4	○
PSP-8-3-N	M8	3	25	3.1	1.5	2.5	BB-8	PPW-8	5.9 / 9.8	6	○
PSP-8-5-N	M8	5	27	3.1	1.5	2.5	BB-8	PPW-8	2.9 / 9.8	9	○
PSP-10-5-N	M10	5	30	3.8	1.5	3	BB-8	PPW-10	5.9 / 14.7	11	○
PSP-12-5-N	M12	5	30	5.5	2.7	4	BB-10	PPW-12	5.9 / 14.7	15	○

Related Products

Short stroke plunger made of stainless steel **PSPS** is available.
→ P.489



A dedicated plunger wrench **PPW** for mounting or removal from the pin side is available.
→ P.492



- Part number specification

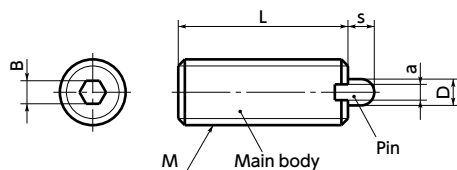
PSP-5-5-S

1

PSPS Short Stroke Plunger - Stainless Steel



WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish



	PSPS-S / PSPS-Z	PSPS-NS / PSPS-NZ
Main body	Equivalent to SUS304	Equivalent to SUS304
Pin	SUS440C (hardness: 55 - 60 HRC)	Polyacetal (White)
Spring	SUS631J1	SUS631J1

● Hexagon socket part is colored for identification. **PSPS-S**

PSPS-NS Red / **PSPS-Z** **PSPS-NZ** Blue



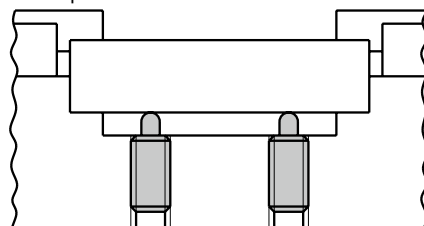
- Short stroke plunger made of stainless steel. It is highly corrosion-resistant.
- Pins of **PSPS-NS** **PSPS-NZ** are made of plastic. This does not scratch the work.
- We also produce products of special specifications, e.g. dimensions, load and materials. ➔ P.478
- Pin materials and load types can be selected by the end symbol of the part number.

End Symbol of the Part Number	Pin Material	Load Type
S	Stainless Steel	Heavy load
Z	Stainless Steel	Super heavy load
NS	Plastic	Heavy load
NZ	Plastic	Super heavy load

PSPS		PSPS-NS		Heavy Load		PSPS-Z		PSPS-NZ		Super Heavy Load				Unit : mm	
Part Number	Stainless steel pin	Part Number	Plastic pin	M	1	s	2	L	D	a	B	Applicable ball button	Key Part No.	Load (N)	Mass (g)
				M (Coarse)								BB	PPW	min./max.	
PSPS-4-2-S		PSPS-4-2-NS		M4		2		15	1.6	0.6	1.3	BB-4		2 / 8.8	0.7
PSPS-5-3-S		PSPS-5-3-NS		M5		3		20	2	1.2	1.5	BB-5	PPW-5	2.7 / 16.3	2
PSPS-6-3-S		PSPS-6-3-NS		M6		3		25	2.5	1.3	2	BB-6	PPW-6	8 / 26.4	3
PSPS-8-3-S		PSPS-8-3-NS		M8		3		25	3.1	1.5	2.5	BB-8	PPW-8	14.7 / 27	6
PSPS-10-5-S		PSPS-10-5-NS		M10		5		30	3.8	1.5	3	BB-8	PPW-10	8.2 / 45.7	11
PSPS-12-5-S		PSPS-12-5-NS		M12		5		30	5.5	2.7	4	BB-10	PPW-12	18.2 / 49	15
PSPS-4-2-Z		PSPS-4-2-NZ		M4		2		15	1.6	0.6	1.3	BB-4		6.1 / 13.8	0.7
PSPS-5-3-Z		PSPS-5-3-NZ		M5		3		20	2	1.2	1.5	BB-5	PPW-5	6.8 / 22	2
PSPS-6-3-Z		PSPS-6-3-NZ		M6		3		25	2.5	1.3	2	BB-6	PPW-6	15.8 / 35.6	3
PSPS-8-3-Z		PSPS-8-3-NZ		M8		3		25	3.1	1.5	2.5	BB-8	PPW-8	21.9 / 36.3	6
PSPS-10-5-Z		PSPS-10-5-NZ		M10		5		30	3.8	1.5	3	BB-8	PPW-10	24.5 / 58.6	11
PSPS-12-5-Z		PSPS-12-5-NZ		M12		5		30	5.5	2.7	4	BB-10	PPW-12	34.9 / 63.6	15

Usage example

For product extrusion.



Part number specification

PSPS-6-3-NS

Product Code 1 2 3

Cleanroom Wash & Packaging ➔ P.807

Vibration Resistant ➔ P.810

Laser Marking ➔ P.821

Please feel free to contact us

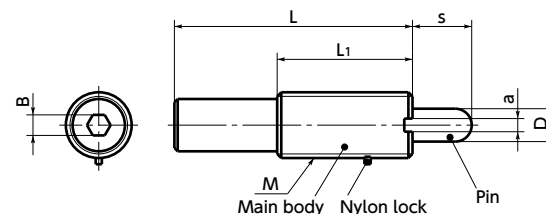
Available / Add'l charge

Not Available

PLP Long Stroke Plunger

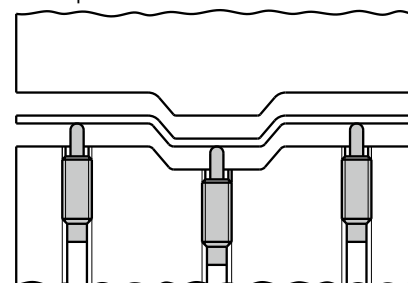


WEB Selection Tool CAD Download



Usage example

For prevention of adhesion.



- For usage of oil breaker, knock out and positioner, etc.
- With nylon lock for vibration resistant treatment.
- **PLP-S** Light load
- **PLP-SS** Heavy load
- We also produce products of special specifications, e.g. dimensions, load and materials. ➔ P.478

Material/Finish



	PLP-S	PLP-SS
Main body	S45C Ferrosoferric Oxide Film (Black)	S45C Ferrosoferric Oxide Film (Black)
Pin	S45C (hardness: 56 - 60 HRC) Trivalent Chromate Treatment	S45C Ferrosoferric Oxide Film (Black)
Spring	SWPB	SWPB
Vibration resistant treatment	Nylon Lock	Nylon Lock

PLP-S Light Load PLP-SS Heavy Load

Part Number	M (Coarse)	s	L1	L	D	a	B	Applicable ball button	Key Part No.	Load (N)	Mass (g)	Loosening stopper
								BB	PPW	min./max.		
								BB ➔ P.494	PPW ➔ P.492			
PLP-16B-10-S	M16	10	35	50	8	3.2	5	BB-12	PPW-16	9.8 / 49	45	O
PLP-16-10-S	M16	10	35	60	8	3.2	5	BB-12	PPW-16	13 / 39	52	O
PLP-16-15-S	M16	15	35	60	8	3.2	5	BB-12	PPW-16	9.8 / 39	52	O
PLP-16-20-S	M16	20	35	60	8	3.2	5	BB-12	PPW-16	13 / 39	52	O
PLP-16-30-S	M16	30	35	125	8	3.2	5	BB-12	PPW-16	18 / 39	100	O
PLP-24-15-S	M24	15	45	60	10	3.5	8	BB-16	PPW-24	20 / 98	105	O
PLP-30-20-S	M30	20	45	70	15	3.5	14	BB-16	PPW-30	29 / 150	185	O
PLP-12-10-SS	M12	10	35	43	5.5	2.7	4	BB-10	PPW-12	6.9 / 39	21	O
PLP-16B-10-SS	M16	10	35	50	8	3.2	5	BB-12	PPW-16	20 / 98	45	O
PLP-16-10-SS	M16	10	35	60	8	3.2	5	BB-12	PPW-16	26 / 78	52	O
PLP-16-15-SS	M16	15	35	60	8	3.2	5	BB-12	PPW-16	15 / 78	52	O
PLP-16-20-SS	M16	20	35	85	8	3.2	5	BB-12	PPW-16	17 / 78	70	O
PLP-16-30-SS	M16	30	35	125	8	3.2	5	BB-12	PPW-16	20 / 78	100	O
PLP-24-15-SS	M24	15	45	60	10	3.5	8	BB-16	PPW-24	39 / 200	105	O
PLP-30-20-SS	M30	20	45	70	15	3.5	14	BB-16	PPW-30	49 / 290	185	O

Related Products

A dedicated plunger wrench **PPW** for mounting or removal from the pin side is available. ➔ P.492



Part number specification

PLP-16-20-S

1

Cleanroom Wash & Packaging ➔ P.807

Vibration Resistant ➔ P.810

Laser Marking ➔ P.821

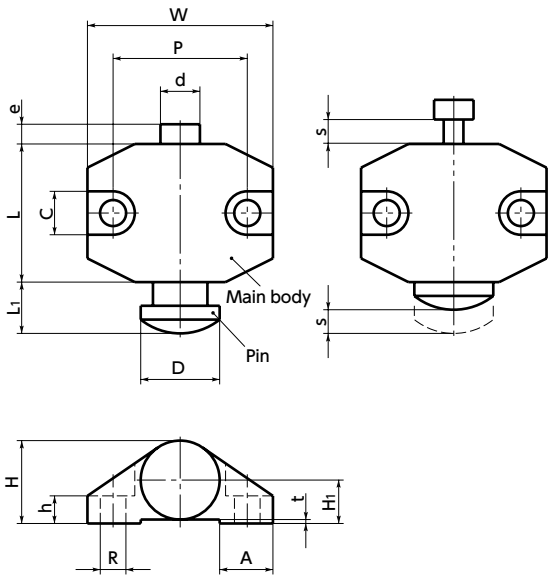
Not Available

with Vibration Resistant Treatment

Not Available

PST / PSTS Spring Stop

WEB Selection Tool WEB CAD Download SUS Stainless steel



- For locating work.
- Pin materials can be selected by a product code.
- PST** — Steel pin
- PSTS** — Stainless steel pin
- PST-N** — Plastic pin

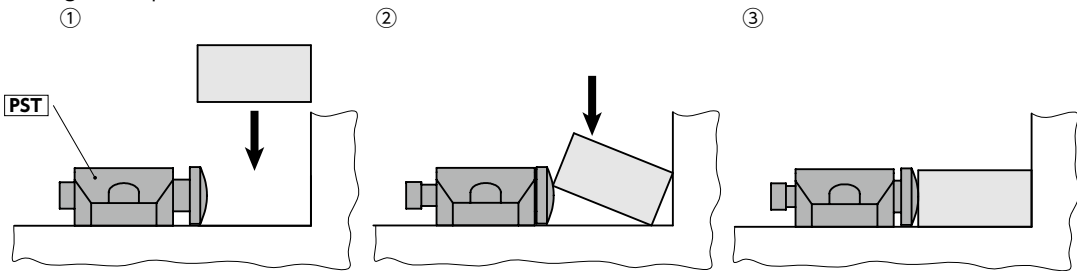
Material/Finish

RoHS2 Compliant

	PST	PSTS	PST-N
Main body	Equivalent to SUS303	Equivalent to SUS303	Equivalent to SUS303
Pin	S45C (hardness: 40 - 45 HRC) Ferrosoferric Oxide Film (Black)	SUS440C (hardness: 55 - 60 HRC)	Polyacetal (hardness: 94 HRM)
Spring	SUS631J1	SUS631J1	SUS631J1

PST	Steel Pin	PSTS	Stainless Steel Pin	PST-N	Plastic Pin													Unit : mm	
Part Number	D 	s	L	L ₁	d	H	H ₁	h	W	e	A	t	P	C	R	Load (N) min./max.	Mass (g)		
PST-10	10	3	20	6	5.5	10.5	5.5	4.8	23	3	6.5	0.5	17	6	3.4	21 / 43	60		
PST-15	15	4.5	26	9	7	15.5	8	6	34	4	11	1	25	8	4.5	39 / 84	70		
PST-20	20	6	35	13	8.5	21	11	7	47	5	13.5	1	34	11	6.6	32 / 161	180		
PST-10-N	10	3	20	6	5.5	10.5	5.5	4.8	23	3	6.5	0.5	17	6	3.4	21 / 43	60		
PST-15-N	15	4.5	26	9	7	15.5	8	6	34	4	11	1	25	8	4.5	39 / 84	70		
PST-20-N	20	6	35	13	8.5	21	11	7	47	5	13.5	1	34	11	6.6	32 / 161	180		
PSTS-10	10	3	20	6	5.5	10.5	5.5	4.8	23	3	6.5	0.5	17	6	3.4	21 / 43	60		
PSTS-15	15	4.5	26	9	7	15.5	8	6	34	4	11	1	25	8	4.5	39 / 84	70		
PSTS-20	20	6	35	13	8.5	21	11	7	47	5	13.5	1	34	11	6.6	32 / 161	180		

Usage example



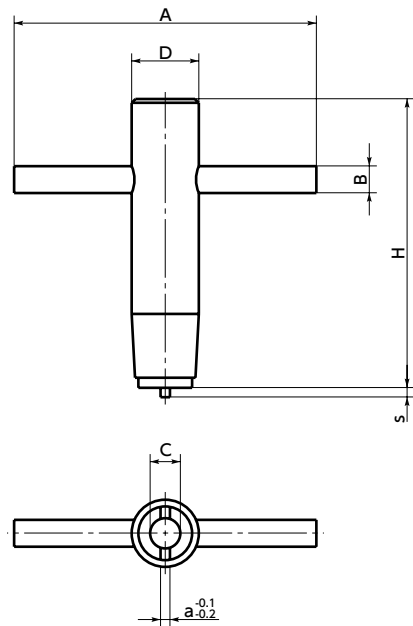
Part number specification

PST-10-N

Cleanroom Wash & Packaging → P.807 Vibration Resistant → P.810 Laser Marking → P.821
Please feel free to contact us Not Available Not Available

PPW Wrench for Pin Plunger

WEB Selection Tool WEB CAD Download



- Short stroke plunger **PSP** (→ P.487) **PSPS** (→ P.489)
- Long stroke plunger **PLP** (→ P.490)
- Dedicated wrench for mounting and removal of above plungers.
- For applicable wrench part number, please refer to each product page of the above plungers.
- This unit allows you to be mounted/removed from the pin side.

Material/Finish

RoHS2 Compliant

	PPW
Main body	S45C Ferrosoferric Oxide Film (Black)

Part Number	A	B	D	H	s	a	C	Mass (g)
PPW-5	40	3	6	38.5	1.1	1	2.6	10
PPW-6	40	3	6	38.5	1.4	1.3	3.3	10
PPW-8	45	4	8	43	1.4	1.5	3.5	20
PPW-10	45	4	10	43	1.4	1.5	4.5	30
PPW-12	50	5	12	48	2	2	6.5	40
PPW-16	70	8	16	50	2	2	8.5	85
PPW-24	80	12	24	60	2.9	3	13	230
PPW-30	100	15	30	70	2.4	3.5	16.5	400

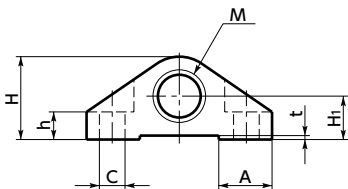
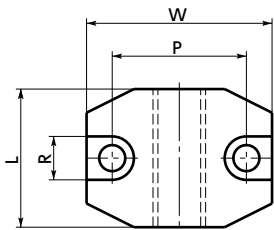
Part number specification

PPW-5

Cleanroom Wash & Packaging → P.807 Vibration Resistant → P.810 Laser Marking → P.821
Not Available Not Available Not Available

PHL Plunger Holder

WEB Selection Tool WEB CAD Download SUS Stainless steel



- Holder for mounting plunger.

- Material/Finish

RoHS2 Compliant

	PHL
Main body	Equivalent to SUS303

Unit : mm												
Part Number	M (coarse)	L	H	H ₁	h	W	A	t	P	R	C	Mass (g)
PHL-M5-A	M5	20	10.5	5.5	4.8	23	6.5	0.5	17	6	3.4	21
PHL-M6-A	M6	20	10.5	5.5	4.8	23	6.5	0.5	17	6	3.4	20
PHL-M8-A	M8	26	15.5	8	6	34	11	1	25	8	4.5	54
PHL-M10-A	M10	26	15.5	8	6	34	11	1	25	8	4.5	52
PHL-M12-A	M12	35	21	11	7	47	13.5	1	34	11	6.6	135
PHL-M16-A	M16	35	21	11	7	47	13.5	1	34	11	6.6	130

- Part number specification

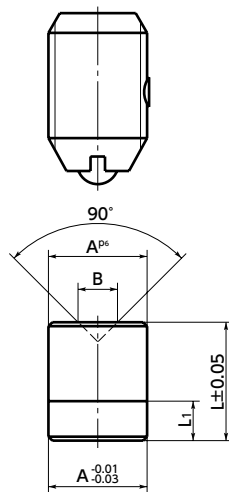
PHL - M6 - A

Product Code Product Code

Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Not Available	Not Available

BB Ball Button

WEB Selection Tool WEB CAD Download



- Use this for the recipient that requires abrasion resistance and accurate locating.
- Especially effective for plungers for heavy load.
- It can be used for pin type plungers, as well as ball type plungers.
- For applicable ball button, please refer to each product page of the plungers.
- Heat treatment and polishing applied. It is easy to press fit or press.
- Machine the holes for ball button **BB** mounting so that they are transition fit or stationary fit.

- Material/Finish

RoHS2 Compliant

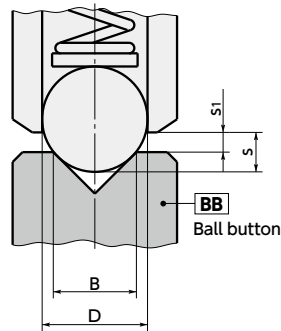
	BB
Main body	SK4 (hardness: 60 - 62 HRC) - Polishing

Unit : mm					
Part Number	A	L	L ₁	B	Mass (g)
BB-4	4	5	2	1.5	0.5
BB-5	5	6	2	2	1
BB-6	6	8	2	2	2
BB-8	8	10	2	3	4
BB-10	10	12	3	4	6.5
BB-12	12	14	3	6	12
BB-16	16	18	3	8	26

- Effective stroke s_1 formula

- If $D \leq \sqrt{2} B$
$$s_1 = s - \left(\frac{D+B}{2} - \frac{\sqrt{2}}{2} D \right)$$
- If $D > \sqrt{2} B$
$$s_1 = s - \frac{D - \sqrt{D^2 - B^2}}{2}$$

s_1 : Effective stroke
 s : Total stroke of the plunger
 D : Diameter of plunger ball or pin
 B : Diameter of recipient hole of the ball button **BB**

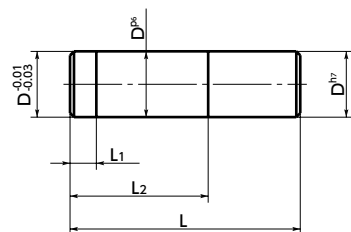


- Part number specification

BB - 4

Product Code Product Code

Cleanroom Wash & Packaging → P.807	Vibration Resistant → P.810	Laser Marking → P.821
Not Available	Not Available	Not Available

PJP Locating PinWEB Selection
ToolWEB CAD
Download

- Parallel pin for locating.
- Stepped type with different dimensional allowance at both ends.
- Bushing for locating pin **PJA** (⇒ P.496)
Use it in combination with **PJB** (⇒ P.497).

- Material/Finish RoHS2 Compliant

	PJP
Main body	SUJ2 (hardness: 58 HRC or above) - Polishing

Unit : mm

Part Number	D			L	L1	L2	Mass (g)
		p6	h7				
PJP-3-10	3	+0.012 +0.006	0 -0.010	10	1	7	0.6
PJP-3-15	3	+0.012 +0.006	0 -0.010	15	1	10	0.8
PJP-3-20	3	+0.012 +0.006	0 -0.010	20	1	13	1.1
PJP-4-10	4	+0.020 +0.012	0 -0.012	10	1.5	7	1
PJP-4-15	4	+0.020 +0.012	0 -0.012	15	1.5	10	1.5
PJP-4-20	4	+0.020 +0.012	0 -0.012	20	1.5	13	2
PJP-5-10	5	+0.020 +0.012	0 -0.012	10	1.5	7	1.6
PJP-5-15	5	+0.020 +0.012	0 -0.012	15	1.5	10	2.4
PJP-5-18	5	+0.020 +0.012	0 -0.012	18	1.5	12	2.8
PJP-5-20	5	+0.020 +0.012	0 -0.012	20	1.5	13	3.1
PJP-6-10	6	+0.020 +0.012	0 -0.012	10	1.5	7	2.3
PJP-6-15	6	+0.020 +0.012	0 -0.012	15	1.5	10	3.4
PJP-6-18	6	+0.020 +0.012	0 -0.012	18	1.5	12	4.1
PJP-6-20	6	+0.020 +0.012	0 -0.012	20	1.5	13	4.5
PJP-8-20	8	+0.024 +0.015	0 -0.015	20	2	13	8
PJP-8-25	8	+0.024 +0.015	0 -0.015	25	2	16	10
PJP-8-30	8	+0.024 +0.015	0 -0.015	30	2	19	12
PJP-10-25	10	+0.024 +0.015	0 -0.015	25	2	16	16
PJP-10-30	10	+0.024 +0.015	0 -0.015	30	2	19	19
PJP-12-40	12	+0.029 +0.018	0 -0.018	40	2	25	36

- Part number specification

PJP-5-15

Product Code

Cleanroom Wash & Packaging ⇒ P.807

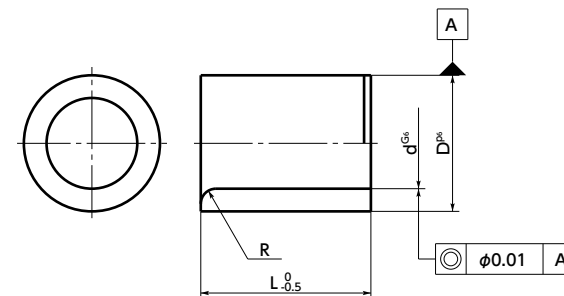
Not Available

Vibration Resistant ⇒ P.810

Not Available

Laser Marking ⇒ P.821

Not Available

PJA Bushing for Locating Pin - Straight TypeWEB Selection
ToolWEB CAD
Download

- Use it in combination with stepped locating pin **PJP** (⇒ P.495).

- Material/Finish RoHS2 Compliant

	PJA
Main body	SK5 (hardness: 60 HRC or above)

Unit : mm

Part Number	d		L						D	R	Applicable positioning pin PJP ⇒ P.495	Mass (g)
PJA-3	3		6	8	10	12			7	0.8	PJP-3-**	1.5 - 3
PJA-4	4			8	10	12	16		8	1	PJP-4-**	2.5 - 4.8
PJA-5	5			8	10	12	16		10	1	PJP-5-**	3.8 - 7.5
PJA-6	6			8	10	12	16		10	1	PJP-6-**	3.2 - 6.4
PJA-8	8				10	12	16	20	12	2	PJP-8-**	5 - 10
PJA-10	10				10	12	16	20	15	2	PJP-10-**	7.8 - 16
PJA-12	12						16	20	18	2	PJP-12-**	19 - 28

- Part number specification

PJA-5-12

Product Code

Cleanroom Wash & Packaging ⇒ P.807

Not Available

Vibration Resistant ⇒ P.810

Not Available

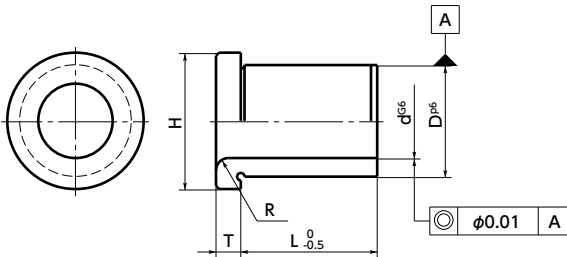
Laser Marking ⇒ P.821

Not Available

PJB Bushing for Locating Pin - Flange Type

WEB Selection Tool

WEB CAD Download



- Use it in combination with stepped locating pin **PJP** (⇒ P.495).
- Material/Finish RoHS2 Compliant

	PJB
Main body	SK5 (hardness: 60 HRC or above)

Unit : mm													
Part Number	d 1	L 2						D	R	H	T	Applicable positioning pin PJP ⇒ P.495	Mass (g)
PJB-3	3	6	8	10	12			7	0.8	11	2.5	PJP-3-**	3.3 - 4.8
PJB-4	4		8	10	12	16		8	1	12	3	PJP-4-**	4.8 - 7.2
PJB-5	5		8	10	12	16		10	1	14	3	PJP-5-**	7 - 11
PJB-6	6		8	10	12	16		10	1	14	3	PJP-6-**	6.2 - 9.5
PJB-8	8			10	12	16	20	12	2	16	4	PJP-8-**	9.9 - 15
PJB-10	10			10	12	16	20	15	2	19	4	PJP-10-**	14 - 22
PJB-12	12					16	20	18	2	22	4	PJP-12-**	27 - 37

- Part number specification
PJB - 6 - 16

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

Cleanroom Wash & Packaging ⇒ P.807	Vibration Resistant ⇒ P.810	Laser Marking ⇒ P.821
Not Available	Not Available	Not Available



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

Structure Components

● Plate for fixing DIN Rail

Product Code	EDP
Page	P.500
Shape	
Characteristics	Bracket for DIN Rail

● Stud Bolt/ Joint Nut

Product Code	SHS	SJN/SJNS
Page	P.505	P.506
Shape		 Stainless Steel
Nominal Diameter of Thread	M4 - M16	M2.5 - M20
Applicable Roller Chain Nominal Number	—	—

● Hexagon Post/Spring Post

Product Code	SHA-EL/SHAS	SHB-EL/SHBS	SPOS
Page	P.509	P.510	P.511
Shape		 Stainless Steel	 Stainless Steel
Characteristics	One-side Male Screw One-side Female Screw	Both-side Female Screw	For Tensile Coil Spring
Nominal Diameter of Thread	M3 - M8	M3 - M8	M3 - M12

● Roller Chain Bolt/Roller Chain Nut

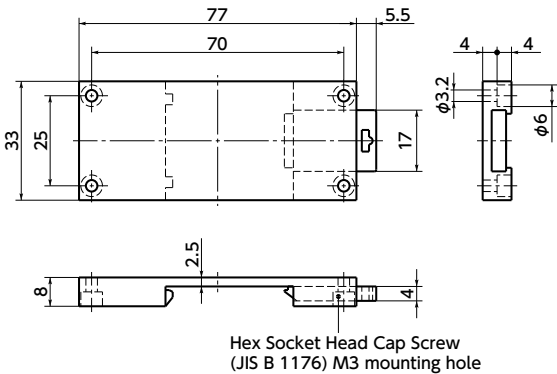
Product Code	SRC	SRCS	SRF/SRFS
Page	P.501	P.503	P.504
Shape		 Stainless Steel	 Stainless Steel
Nominal Diameter of Thread	M2.5 - M20	M2.5 - M20	M6 - M20
Applicable Roller Chain Nominal Number	No. 11 - No. 100	No. 11 - No. 100	No. 35 - No. 100

● Turn Buckle

Product Code	STR/STRS	STB
Page	P.507	P.508
Shape		 Stainless Steel
Nominal Diameter of Thread	—	M4 - M16
Applicable Roller Chain Nominal Number	No. 11 - No. 100	—

EDP Plate for fixing DIN Rail

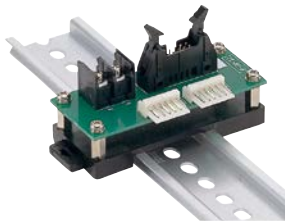
WEB Selection Tool WEB CAD Download



Hex Socket Head Cap Screw (JIS B 1176) M3 mounting hole

Part Number	EDP-70
Mass (g)	15

● Usage example



- The bracket to be assembled to DIN rail.
- Printed board, etc. can be mounted to the DIN rail by one-touch operation.
- It can be mounted by just pressing the DIN rail front face.
- To remove it, pull up the lever or slide it over the rail.
- Use the hex socket head cap screws (JIS B 1176): M3 to mount the work.

Material/Finish	EDP
Main body	Polyacetal (Black)
Spring	SUS631J1

RoHS2 Compliant

● Part number specification

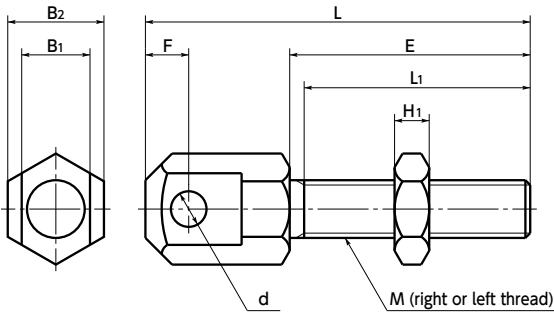
EDP-70



Cleanroom Wash & Packaging → P.807	Screw Length Adjustment → P.811	Vibration Resistant → P.810	Laser Marking → P.821
Available / Add'l charge	Not Available	Not Available	Please feel free to contact us

SRC Roller Chain Bolt

WEB Selection Tool
WEB CAD Download



- Wide variations from roller chain nominal diameter No. 11 through 100.
- Right thread or left thread can be selected according to the end symbol of the part number. **3**
- **SRC-R** — Right thread
- **SRC-L** — Left thread
- All products are provided with hexagon nuts (3 types).
- For linkage with a roller chain, a roller chain joint link or offset link is required.

	SRC	RoHS2 Compliant
Main body	S45C (hardness: 35 - 40 HRC) Ferrosoferric Oxide Film (Black)	
Nut	SS400 Ferrosoferric Oxide Film (Black)	

- ⚠ **Precautions for Use**
- If a roller chain bolt is used for a suspension device, implement safety measures to keep people off from beneath the device.
- Roller chain bolts are consumables. Regular inspection and replacement are necessary.
- The max. loads indicated in the dimension table are tensile values.

Related Products

A nut type roller chain nut **SRF** is available.
➔ P.504



Use a turn buckle **STR** **STB** for chain tension adjustment.
STR ➔ P.507 **STB** ➔ P.508



Part number specification

SRC- 25 - 18 - L

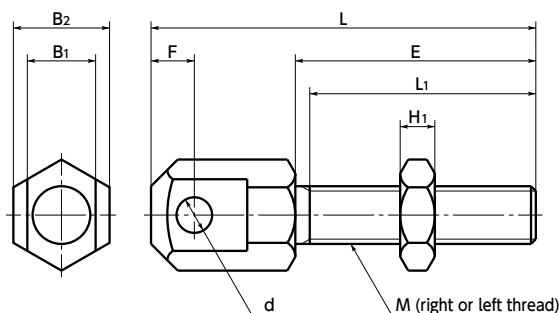
Product Code **1** **2** **3**

SRC-R Right thread		SRC-L Left thread												Unit : mm
Part Number	Applicable Roller Chain Nominal Number 1	E 2	M (coarse)	L1	L	F	d	B1	B2	H1	Max. load (N)	Mass (g)		
SRC-11-10-R	11	10	M2.5	9.1	17.2	1.8	1.7	2.4	5	1.6	300	1.8		
SRC-11-15-R	11	15	M2.5	14.1	22.2	1.8	1.7	2.4	5	1.6	300	2		
SRC-11-20-R	11	20	M2.5	19.1	27.2	1.8	1.7	2.4	5	1.6	300	2.2		
SRC-15-12-R	15	12	M3	10	20.6	2.2	1.7	3.4	6	1.8	440	2.8		
SRC-15-18-R	15	18	M3	16	26.6	2.2	1.7	3.4	6	1.8	440	3.1		
SRC-15-25-R	15	25	M3	23	33.6	2.2	1.7	3.4	6	1.8	440	3.5		
SRC-25-18-R	25	18	M4	16.5	28.2	3	2.4	4.8	7	2.4	780	5		
SRC-25-25-R	25	25	M4	23.5	35.2	3	2.4	4.8	7	2.4	780	6		
SRC-25-40-R	25	40	M4	38.5	50.2	3	2.4	4.8	7	2.4	780	7		
SRC-35-25-R	35	25	M6	23.5	40	4.5	3.7	7.4	10	3.6	1960	12		
SRC-35-32-R	35	32	M6	30.5	47	4.5	3.7	7.4	10	3.6	1960	14		
SRC-35-55-R	35	55	M6	53.5	70	4.5	3.7	7.4	10	3.6	1960	18		
SRC-40-33-R	40	33	M8	31	52.5	6	4	11.2	13	5	3530	30		
SRC-40-40-R	40	40	M8	38	59.5	6	4	11.2	13	5	3530	33		
SRC-40-70-R	40	70	M8	68	89.5	6	4	11.2	13	5	3530	44		
SRC-50-41-R	50	41	M10	39	65	7.5	5.2	13.8	17	6	5680	60		
SRC-50-50-R	50	50	M10	48	74	7.5	5.2	13.8	17	6	5680	66		
SRC-50-75-R	50	75	M10	73	99	7.5	5.2	13.8	17	6	5680	80		
SRC-60-49-R	60	49	M12	47	78	9	6	17.8	19	7	8230	100		
SRC-60-63-R	60	63	M12	61	92	9	6	17.8	19	7	8230	120		
SRC-60-100-R	60	100	M12	98	129	9	6	17.8	19	7	8230	150		
SRC-80-60-R	80	60	M16	57	98	12	8	22.6	24	10	15400	210		
SRC-80-80-R	80	80	M16	77	118	12	8	22.6	24	10	15400	240		
SRC-80-115-R	80	115	M16	112	153	12	8	22.6	24	10	15400	300		
SRC-100-70-R	100	70	M20	65	117	15	9.6	27.5	30	12	23900	440		
SRC-100-100-R	100	100	M20	95	147	15	9.6	27.5	30	12	23900	520		
SRC-100-145-R	100	145	M20	140	192	15	9.6	27.5	30	12	23900	630		
SRC-11-10-L	11	10	M2.5	9.1	17.2	1.8	1.7	2.4	5	1.6	300	1.8		
SRC-15-12-L	15	12	M3	10	20.6	2.2	1.7	3.4	6	1.8	440	2.8		
SRC-25-18-L	25	18	M4	16.5	28.2	3	2.4	4.8	7	2.4	780	5		
SRC-35-25-L	35	25	M6	23.5	40	4.5	3.7	7.4	10	3.6	1960	12		
SRC-40-33-L	40	33	M8	31	52.5	6	4	11.2	13	5	3530	30		
SRC-50-41-L	50	41	M10	39	65	7.5	5.2	13.8	17	6	5680	60		
SRC-60-49-L	60	49	M12	47	78	9	6	17.8	19	7	8230	100		
SRC-80-60-L	80	60	M16	57	98	12	8	22.6	24	10	15400	210		
SRC-100-70-L	100	70	M20	65	117	15	9.6	27.5	30	12	23900	440		

Cleanroom Wash & Packaging ➔ P.807	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810	Laser Marking ➔ P.821
Not Available	Available / Add'l charge	Available / Add'l charge	Not Available

SRCS Roller Chain Bolt

WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

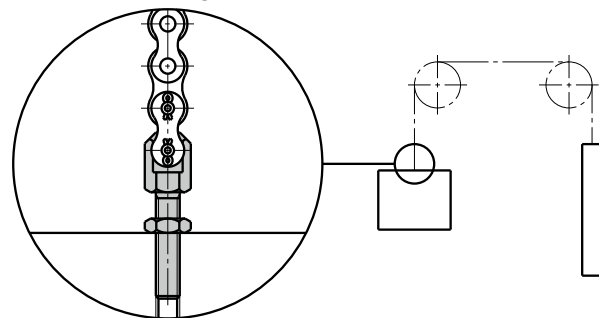
	SRCS
Main body	SUS303
Nut	SUS303

SRCS-R Right thread SRCS-L Left thread

Part Number	Applicable Roller Chain Nominal Number	E	M (coarse)	L1	L	F	d	B1	B2	H1	Max. load (N)	Mass (g)
SRCS-11-10-R	11	10	M2.5	9.1	17.2	1.8	1.7	2.4	5	1.6	240	1.8
SRCS-25-18-R	25	18	M4	16.5	28.2	3	2.4	4.8	7	2.4	680	5
SRCS-35-25-R	35	25	M6	23.5	40	4.5	3.7	7.4	10	3.6	1570	12
SRCS-40-33-R	40	33	M8	31	52.5	6	4	11.2	13	5	2840	30
SRCS-50-41-R	50	41	M10	39	65	7.5	5.2	13.8	17	6	4510	60
SRCS-60-49-R	60	49	M12	47	78	9	6	17.8	19	7	6570	100
SRCS-80-60-R	80	60	M16	57	98	12	8	22.6	24	10	12300	210
SRCS-100-70-R	100	70	M20	65	117	15	9.6	27.5	30	12	19200	440
SRCS-11-10-L	11	10	M2.5	9.1	17.2	1.8	1.7	2.4	5	1.6	240	1.8
SRCS-25-18-L	25	18	M4	16.5	28.2	3	2.4	4.8	7	2.4	680	5
SRCS-35-25-L	35	25	M6	23.5	40	4.5	3.7	7.4	10	3.6	1570	12
SRCS-40-33-L	40	33	M8	31	52.5	6	4	11.2	13	5	2840	30
SRCS-50-41-L	50	41	M10	39	65	7.5	5.2	13.8	17	6	4510	60
SRCS-60-49-L	60	49	M12	47	78	9	6	17.8	19	7	6570	100
SRCS-80-60-L	80	60	M16	57	98	12	8	22.6	24	10	12300	210
SRCS-100-70-L	100	70	M20	65	117	15	9.6	27.5	30	12	19200	440

Usage example

For balance weight connection.



Precautions for Use

- If a roller chain bolt is used for a suspension device, implement safety measures to keep people off from beneath the device.
- Roller chain bolts are consumables. Regular inspection and replacement are necessary.
- The max. loads indicated in the dimension table are tensile values.

Part number specification

SRCS-40-33-R

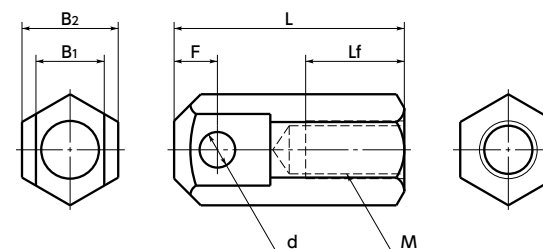
Product Code

Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

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

SRF / SRFS Roller Chain Nut

WEB Selection Tool CAD Download SUS Stainless steel



- Please use it for linkage of the roller chain with a machine or device.
- For linkage with a roller chain, a roller chain joint link or offset link is required.

Material/Finish

RoHS2 Compliant

	SRF Made of Steel	SRFS Made of Stainless Steel
Main body	S45C (hardness: 35 - 45 HRC) Ferroferric Oxide Film (Black)	SUS303

Precautions for Use

- If a roller chain nut is used for a suspension device, implement safety measures to keep people off from beneath the device.
- Roller chain nuts are consumables. Regular inspection and replacement are necessary.
- The max. loads indicated in the dimension table are tensile values.

Part Number	Max. load (N)	Part Number	Max. load (N)	Applicable Roller Chain Nominal Number	M (Coarse)	Lf	L	F	d	B1	B2	Mass (g)
SRF-35	1960	SRFS-35	1570	35	M6	10	24	4.5	3.7	7.4	10	12
SRF-40	3530	SRFS-40	2840	40	M8	14	30	6	4	11.2	13	25
SRF-50	5680	SRFS-50	4510	50	M10	15	38	7.5	5.2	13.8	17	54
SRF-60	8230	SRFS-60	6570	60	M12	18	42	9	6	17.8	19	75
SRF-80	15400	SRFS-80	12300	80	M16	20	52	12	8	22.6	24	148
SRF-100	23900			100	M20	25	65	15	9.6	27.5	30	292

Part number specification

SRFS-35

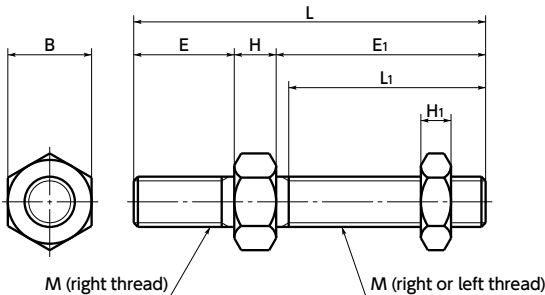
Product Code

Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

S.S. only/ Add'l charge Not Available Not Available Not Available

SHS Hexagon Stud Bolt

WEB Selection Tool CAD Download



- For rod end shaft bearing height adjustment, etc.
- Right thread or left thread can be selected according to the end symbol of the part number.

SHS-R — Right thread

SHS-L — Left thread

- All products are provided with hexagon nuts (3 types).

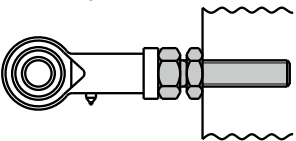
- Material/Finish

	SHS
Main body	S45C (hardness: 35 - 40 HRC) Ferrosoferric Oxide Film (Black)
Nut	SS400 Ferrosoferric Oxide Film (Black)

SHS-R Right thread **SHS-L** Left thread

Part Number	M (coarse)	L ₁	E ₁	E	H	H ₁	L	B	Mass (g)
SHS-M4-R	M4	16.5	18	8	3.2	2.4	29.2	7	4
SHS-M6-R	M6	23.5	25	12	5	3.6	42	10	10
SHS-M8-R	M8	31	33	16	6.5	5	55.5	13	25
SHS-M10-R	M10	39	41	20	8	6	69	17	45
SHS-M12-R	M12	47	49	24	10	7	83	19	80
SHS-M16-R	M16	57	60	32	13	10	105	24	170
SHS-M4-L	M4	16.5	18	8	3.2	2.4	29.2	7	4
SHS-M6-L	M6	23.5	25	12	5	3.6	42	10	10
SHS-M8-L	M8	31	33	16	6.5	5	55.5	13	25
SHS-M10-L	M10	39	41	20	8	6	69	17	45
SHS-M12-L	M12	47	49	24	10	7	83	19	80
SHS-M16-L	M16	57	60	32	13	10	105	24	170

- Usage example
For adjustment of rod end shaft bearing.



- Part number specification

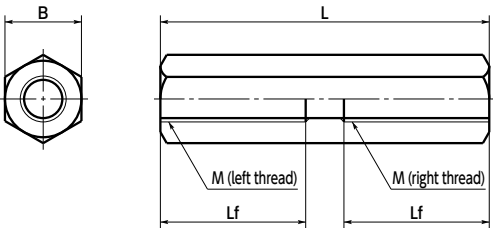
SHS-M10-R

Product Code

Cleanroom Wash & Packaging P.807	Screw Length Adjustment P.811	Vibration Resistant P.810	Laser Marking P.821
Not Available	Available / Add'l charge	Available / Add'l charge	Not Available

SJN / SJNS Joint Nut

WEB Selection Tool CAD Download SUS Stainless steel



- Material/Finish

	SJN Made of Steel	SJNS Made of Stainless Steel
Main body	SUM22L Ferrosoferric Oxide Film (Black)	SUS303

Part Number	Part Number	M (Coarse)	L	Lf	B	Mass (g)
SJN-M2.5	SJNS-M2.5	M2.5	20	8	5	3
SJN-M3		M3	22	9	6	4
SJN-M4	SJNS-M4	M4	33	14	7	8
SJN-M6	SJNS-M6	M6	43	19	10	20
SJN-M8	SJNS-M8	M8	55	25	13	45
SJN-M10	SJNS-M10	M10	67	31	17	95
SJN-M12	SJNS-M12	M12	81	38	19	130
SJN-M16	SJNS-M16	M16	95	45	24	260
SJN-M20	SJNS-M20	M20	105	50	30	390

- Part number specification

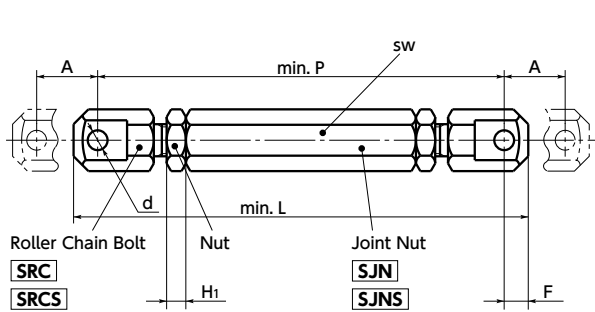
SJN-M12

Cleanroom Wash & Packaging P.807	Screw Length Adjustment P.811	Vibration Resistant P.810	Laser Marking P.821
S.S. only/ Add'l charge	Not Available	Not Available	Please feel free to contact us

STR / STRS Turn Buckle - Dedicated to Roller Chain



WEB Selection Tool WEB CAD Download SUS Stainless steel



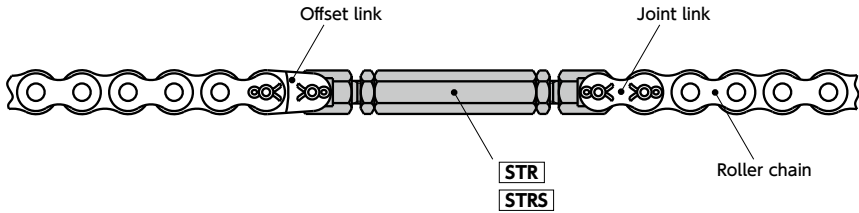
- For chain tension adjustment.
- Use the same thread fitting length for both-side roller chain bolt **SRC** **SRCs**.
- For linkage with a roller chain, a roller chain joint link or offset link is required.
- Material/Finish RoHS2 Compliant

	STR	STRS
	Made of Steel	Made of Stainless Steel
Joint Nut SJN SJNS	SUM22L Ferrosoferric Oxide Film (Black)	SUS303
Roller Chain Bolt SRC SRCs	S45C (hardness: 35 - 45 HRC) Ferrosoferric Oxide Film (Black)	SUS303
Nut	SS400 Ferrosoferric Oxide Film (Black)	SUS303

Part Number Steel	Part Number Stainless steel	Applicable Roller Chain Nominal Number	min.L	min.P	A	sw	d	H ₁	F	Mass (g)
STR-11	STRS-11	11	40	36.4	4	5	1.4	2.4	1.8	6.6
STR-15		15	46	41.6	5	6	1.6	2.4	2.2	9.6
STR-25	STRS-25	25	62	56	7.5	7	2.4	2.4	3	18
STR-35	STRS-35	35	85	76	10	10	3.7	3.6	4.5	44
STR-40	STRS-40	40	110	98	13	13	4.1	5	6	105
STR-50	STRS-50	50	135	120	16	17	5.2	6	7.5	215
STR-60	STRS-60	60	161	143	20	19	6.1	7	9	330
STR-80	STRS-80	80	201	177	21	24	8.1	10	12	680
STR-100	STRS-100	100	239	209	20	30	9.7	12	15	1270

• For detailed dimensions, refer to roller chain bolt **SRC** (⇒ P.501) **SRCs** (⇒ P.503) and joint nut **SJN** **SJNS** (⇒ P.506).

- Usage example



- Part number specification

STR-25

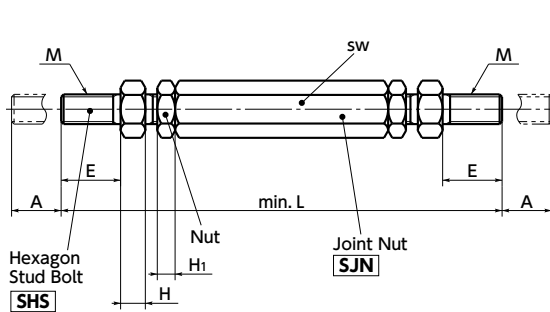


Cleanroom Wash & Packaging ⇒ P.807	Screw Length Adjustment ⇒ P.811	Vibration Resistant ⇒ P.810	Laser Marking ⇒ P.821
S.S. only/ Add'l charge	Not Available	Not Available	Please feel free to contact us

STB Turn Buckle - General Purpose Male Screw Type



WEB Selection Tool WEB CAD Download



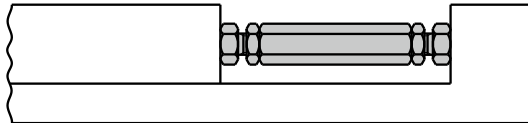
- For slide position adjustment, etc.
- Use the same thread fitting length for both-side hexagon stud bolt **SHS**.
- Material/Finish RoHS2 Compliant

	STB
Joint Nut SJN	SUM22L Ferrosoferric Oxide Film (Black)
Hex Stud Bolts SHS	S45C (hardness: 35 - 45 HRC) Ferrosoferric Oxide Film (Black)
Nut	SS400 Ferrosoferric Oxide Film (Black)

Part Number	M (Coarse)	min.L	E	A	sw	H	H ₁	Mass (g)
STB-M4	M4	64	8	7.5	7	3.2	2.4	16
STB-M6	M6	89	12	10	10	5	3.6	40
STB-M8	M8	116	16	13	13	6.5	5	115
STB-M10	M10	143	20	16	17	8	6	185
STB-M12	M12	171	24	20	19	10	7	290
STB-M16	M16	217	32	21	24	13	10	600

• For detailed dimensions, refer to hexagon stud bolt **SHS** (⇒ P.505) and joint nut **SJN** (⇒ P.506).

- Usage example



- Part number specification

STB-M6

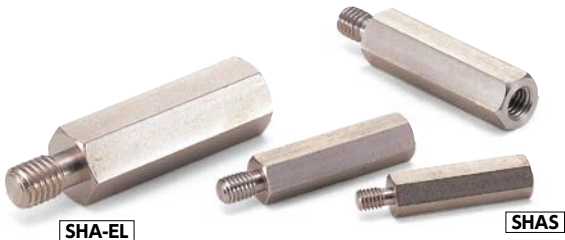
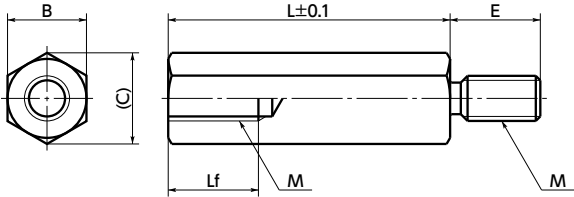


Cleanroom Wash & Packaging ⇒ P.807	Screw Length Adjustment ⇒ P.811	Vibration Resistant ⇒ P.810	Laser Marking ⇒ P.821
Not Available	Available / Add'l charge	Available / Add'l charge	Please feel free to contact us

SHA-EL / SHAS Hexagon Post



WEB Selection Tool WEB CAD Download SUS Stainless steel



- Hexagon post for one side is male screw and the other side is female screw.
- Two or more hexagon posts can be used in combination.
- Material/Finish  

	SHA-EL Made of Steel	SHAS Made of Stainless Steel
Main body	SUM22L Electroless Nickel Plating	SUS304

Dimensions

Unit : mm

Part Number Steel	Part Number Stainless steel	M  (coarse thread)	B	C	E	Lf	Mass (g)
SHA-M3-EL	SHAS-M3	M3	6	6.9	4.5	6	3.5 - 9.6
SHA-M4-EL	SHAS-M4	M4	7	8.1	6	8	6.4 - 26
SHA-M5-EL	SHAS-M5	M5	8	9.2	7.5	10	8.2 - 42
SHA-M6-EL	SHAS-M6	M6	10	11.5	9	12	16 - 100
SHA-M8-EL	SHAS-M8	M8	13	15	12	16	38 - 170

SHA-EL Made of Steel SHAS Made of Stainless Steel

Part Number	L (mm) 														
	15	20	25	30	35	40	45	50	60	70	80	90	100	120	150
SHA-M3-EL	●	●	●	●	●	●									
SHA-M4-EL		●	●	●	●	●	●	●	●	●	●				
SHA-M5-EL		●	●	●	●	●	●	●	●	●	●	●	●		
SHA-M6-EL			●	●	●	●	●	●	●	●	●	●	●	●	●
SHA-M8-EL					●	●	●	●	●	●	●	●	●	●	●
SHAS-M3	●	●	●	●	●	●									
SHAS-M4		●	●	●	●	●	●	●	●	●	●				
SHAS-M5		●	●	●	●	●	●	●	●	●	●	●	●		
SHAS-M6			●	●	●	●	●	●	●	●	●	●	●	●	●
SHAS-M8					●	●	●	●	●	●	●	●	●	●	●

- Part number specification

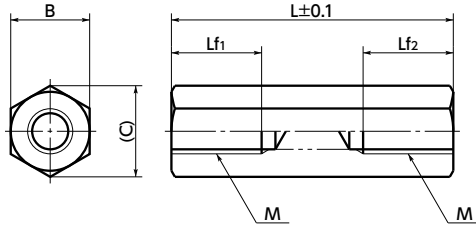
SHA-M5-80-EL
   

Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
Available / Add'l charge Available / Add'l charge Available / Add'l charge Available / Add'l charge

SHB-EL / SHBS Hexagon Post



WEB Selection Tool WEB CAD Download SUS Stainless steel



- Hexagon post for both-side female screw.
- Material/Finish  

	SHB-EL Made of Steel	SHBS Made of Stainless Steel
Main body	SUM22L Electroless Nickel Plating	SUS304

Dimensions

Unit : mm

Part Number Steel	Part Number Stainless steel	M  (coarse thread)	B	C	Lf1	Lf2	Mass (g)
SHB-M3-EL	SHBS-M3	M3	6	6.9	6	6	2.9 - 9
SHB-M4-EL	SHBS-M4	M4	7	8.1	8	8	5 - 25
SHB-M5-EL	SHBS-M5	M5	8	9.2	10	10	5.5 - 40
SHB-M6-EL	SHBS-M6	M6	10	11.5	12	12	11 - 98
SHB-M8-EL	SHBS-M8	M8	13	15	16	16	27 - 168

SHB-EL Made of Steel SHBS Made of Stainless Steel

Part Number	L (mm) 														
	15	20	25	30	35	40	45	50	60	70	80	90	100	120	150
SHB-M3-EL	●	●	●	●	●	●									
SHB-M4-EL		●	●	●	●	●	●	●	●	●	●				
SHB-M5-EL		●	●	●	●	●	●	●	●	●	●	●	●		
SHB-M6-EL			●	●	●	●	●	●	●	●	●	●	●	●	●
SHB-M8-EL				●	●	●	●	●	●	●	●	●	●	●	●
SHBS-M3	●	●	●	●	●	●									
SHBS-M4		●	●	●	●	●	●	●	●	●	●				
SHBS-M5		●	●	●	●	●	●	●	●	●	●	●	●		
SHBS-M6			●	●	●	●	●	●	●	●	●	●	●	●	●
SHBS-M8				●	●	●	●	●	●	●	●	●	●	●	●

- Part number specification

SHB-M4-40-EL
   

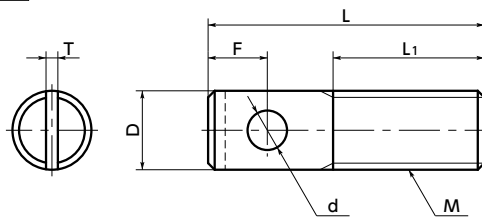
Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821
Available / Add'l charge Not Available Not Available Available / Add'l charge

SPOS Spring Post

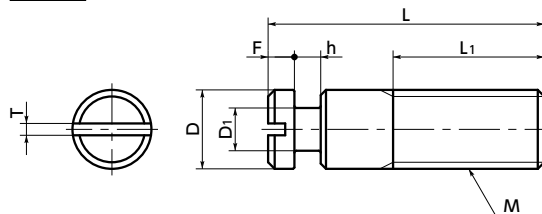
WEB Selection Tool WEB CAD Download SUS Stainless steel



SPOS-A



SPOS-B



SPOS-A

SPOS-B

- Post for tensile coil spring.
 - There are bore type and groove type. 3
- SPOS-A Bore type
SPOS-B Groove type

- Material/Finish

	SPOS
Main body	SUS303

SPOS-A Bore type

Part Number	M (coarse) 1	L 2	L1	D	F	d	T	Mass (g)
SPOS-M3-10-A	M3	10	5	3	3	1.5	1.2	0.6
SPOS-M3-15-A	M3	15	10	3	3	1.5	1.2	0.9
SPOS-M4-15-A	M4	15	10	4	3	2	1.2	1.5
SPOS-M4-20-A	M4	20	10	4	3	2	1.2	2
SPOS-M4-25-A	M4	25	10	4	3	2	1.2	2.5
SPOS-M5-20-A	M5	20	10	5	5	2	1.2	3.5
SPOS-M5-25-A	M5	25	10	5	5	2	1.2	4
SPOS-M5-30-A	M5	30	10	5	5	2	1.2	4.5
SPOS-M6-25-A	M6	25	16	6	5	2	1.2	6.8
SPOS-M6-30-A	M6	30	16	6	5	2	1.2	7.4
SPOS-M6-40-A	M6	40	16	6	5	2	1.2	8

SPOS-B Groove type

Part Number	M (coarse) 1	L 2	L1	D	D1	F	h	T	Mass (g)
SPOS-M3-15-B	M3	15	10	3	1.8	3	1	1.2	0.8
SPOS-M3-20-B	M3	20	10	3	1.8	3	1	1.2	1.1
SPOS-M3-25-B	M3	25	10	3	1.8	3	1	1.2	1.4
SPOS-M3-30-B	M3	30	10	3	1.8	3	1	1.2	1.6
SPOS-M3-35-B	M3	35	10	3	1.8	3	1	1.2	1.9
SPOS-M4-15-B	M4	15	10	4	2	3	1.2	1.2	1.5
SPOS-M4-20-B	M4	20	10	4	2	3	1.2	1.2	1.8
SPOS-M4-25-B	M4	25	10	4	2	3	1.2	1.2	2.1
SPOS-M4-30-B	M4	30	10	4	2	3	1.2	1.2	2.4
SPOS-M4-35-B	M4	35	10	4	2	3	1.2	1.2	2.7
SPOS-M4-40-B	M4	40	10	4	2	3	1.2	1.2	3
SPOS-M5-15-B	M5	15	8	5	3	4	2	1.2	3
SPOS-M5-20-B	M5	20	10	5	3	4	2	1.2	3.5
SPOS-M5-25-B	M5	25	10	5	3	4	2	1.2	3.8
SPOS-M5-30-B	M5	30	10	5	3	4	2	1.2	4
SPOS-M5-35-B	M5	35	10	5	3	4	2	1.2	4.3
SPOS-M5-40-B	M5	40	10	5	3	4	2	1.2	4.5
SPOS-M6-15-B	M6	15	7	6	3.6	4	3	1.2	3.2
SPOS-M6-20-B	M6	20	12	6	3.6	4	3	1.2	5
SPOS-M6-25-B	M6	25	16	6	3.6	4	3	1.2	6.8
SPOS-M6-30-B	M6	30	16	6	3.6	4	3	1.2	7
SPOS-M6-35-B	M6	35	16	6	3.6	4	3	1.2	7.1
SPOS-M6-40-B	M6	40	16	6	3.6	4	3	1.2	7.3
SPOS-M6-45-B	M6	45	16	6	3.6	4	3	1.2	7.5
SPOS-M6-50-B	M6	50	16	6	3.6	4	3	1.2	7.7
SPOS-M6-60-B	M6	60	16	6	3.6	4	3	1.2	8
SPOS-M8-20-B	M8	20	11	8	5	4	3	1.2	13
SPOS-M8-25-B	M8	25	16	8	5	4	3	1.2	14
SPOS-M8-30-B	M8	30	20	8	5	4	3	1.2	15
SPOS-M8-35-B	M8	35	20	8	5	4	3	1.2	15.7
SPOS-M8-40-B	M8	40	20	8	5	4	3	1.2	16.3
SPOS-M8-45-B	M8	45	20	8	5	4	3	1.2	17
SPOS-M8-50-B	M8	50	20	8	5	4	3	1.2	17.7
SPOS-M8-60-B	M8	60	20	8	5	4	3	1.2	19
SPOS-M10-35-B	M10	35	22	10	6	4	3	1.2	23
SPOS-M10-40-B	M10	40	25	10	6	4	3	1.2	24
SPOS-M10-45-B	M10	45	25	10	6	4	3	1.2	26.8
SPOS-M10-50-B	M10	50	25	10	6	4	3	1.2	29.5
SPOS-M10-60-B	M10	60	25	10	6	4	3	1.2	35
SPOS-M12-50-B	M12	50	30	12	6.5	4	4	1.8	42
SPOS-M12-60-B	M12	60	30	12	6.5	4	4	1.8	50.5
SPOS-M12-70-B	M12	70	30	12	6.5	4	4	1.8	59

- Part number specification

SPOS-M6-30-A

Product Code 1 2 3

Cleanroom Wash & Packaging → P.807 Screw Length Adjustment → P.811 Vibration Resistant → P.810 Laser Marking → P.821

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

● Clamping Screw/Clamping Bolt

Product Code	SCS-R/SCSS-R	SCS-R(INCH)/SCSS-R(INCH)	SCS-N/SCS-BR/SCSS-CE	SCS-F-R	SCS-F-F	SCS-F/SCSS-F
Page	P.515	P.516	P.517	P.519	P.520	P.521
Shape	 <i>Recommendation</i> Stainless Steel	 <i>Recommendation</i> Stainless Steel NEW	 <i>Special Material Balls</i> Stainless Steel	 <i>Fine Screw Threads Recommendation</i> Stainless Steel	 <i>Fine Screw Threads Recommendation</i> Stainless Steel	 <i>Recommendation</i> Stainless Steel
Ball Shape	Full Ball	Full Ball	Full Ball	Full Ball	Flat Ball	Flat Ball
Thread Size	M3 - M16	M3 - M16	M3 - M12	M6 - M12	M6 - M12	M4 - M16

Product Code	SCS-F(INCH)/SCSS-F(INCH)	SCS-FB/SCSS-FB	SCS-GB/SCSS-GB	SCB-R/SCBS-R	SCB-R(INCH)/SCBS-R(INCH)	SCBS-CE
Page	P.522	P.523	P.524	P.525	P.526	P.527
Shape	 <i>Recommendation</i> Stainless Steel NEW	 <i>Recommendation</i> Stainless Steel <i>Additional Size</i>	 <i>Recommendation</i> Stainless Steel <i>Additional Size</i>	 <i>Recommendation</i> Stainless Steel	 <i>Recommendation</i> Stainless Steel NEW	 <i>Special Material Balls</i> Stainless Steel
Ball Shape	Flat Ball	Flat Ball • Reversal Protection	Indented Ball • Reversal Protection	Full Ball	Full Ball	Full Ball
Thread Size	M4 - M16	M6 - M16	M6 - M16	M4 - M16	M4 - M16	M4 - M12

Product Code	SCB-F/SCBS-F	SCB-F(INCH)/SCBS-F(INCH)	SCB-FB/SCBS-FB	SCB-GB/SCBS-GB
Page	P.529	P.530	P.531	P.532
Shape	 <i>Recommendation</i> Stainless Steel	 <i>Recommendation</i> Stainless Steel NEW	 <i>Recommendation</i> Stainless Steel <i>Additional Size</i>	 <i>Recommendation</i> Stainless Steel <i>Additional Size</i>
Ball Shape	Flat Ball	Flat Ball	Flat Ball • Reversal Protection	Indented Ball • Reversal Protection
Thread Size	M4 - M16	M4 - M16	M6 - M16	M6 - M16

● Ball Shape of Clamping Screw/Clamping Bolt



Full Ball



Flat Ball

Flat Ball/with Reversal
Protection MechanismIndented Ball/with Reversal
Protection Mechanism

● Stopper Bolt/Stopper Screw

Product Code	SSB-A	SSB-B/SSBS-B	SUB	SUS	SAN-B/SANS-B
Page	P.537	P.538	P.539	P.540	P.541
Shape	 <i>Recommendation</i>	 <i>Recommendation</i> Stainless Steel			 <i>Fine Screw Threads</i> Stainless Steel
Characteristics	Screw Tip Quenching	Hexagon Head Quenching	With Urethane Pad	With Urethane Pad	Screw Tip Quenching
Thread Size	M4 - M16	M3 - M16	M4 - M10	M4 - M10	M4 - M16

● Accessory for Stopper Bolt/Stopper Screw

Product Code	SBN	SPM
Page	P.542	P.543
Shape		
Product name	Locating Blocks	Stop Pins
Usage	For Securing the Stopper Bolt	Recipient of SSB SAN
Thread Size	—	M3 - M12

● Positioning

Product Code	SAT	SAK-A/SAK-B
Page	P.544	P.545
Shape		
Product name	Adjust Bolt	Blocks for Adjust Bolts
Usage	Positioning • Centering	For Fixing SAT
Thread Size	M6 - M12	—

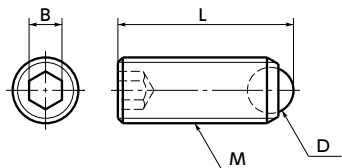
● Screw Adaptor

Product Code	SADS-LC	SADS-RF	SADS-SD	SAD-FT/SADS-FT
Page	P.533	P.534	P.535	P.536
Shape	 <i>Recommendation</i> Stainless Steel	 <i>Recommendation</i> Stainless Steel	 <i>Recommendation</i> Stainless Steel	 <i>Recommendation</i> Stainless Steel
Conversion Type	Left threads	Fine Screw Threads	Threads with Different Diameters	Long threads
Thread Size	M4 - M10	M4 - M10	M4 - M12	M4 - M10

SCS-R / SCSS-R Clamping Screw - Full Ball



WEB Selection Tool WEB CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	SCS-R Made of Steel	SCSS-R Made of Stainless Steel
Thread	SCM435	SUSXM7
Part	Ferrosoferric Oxide Film (Black)	
Ball	SUJ2 (hardness: 55 - 60 HRC)	SUS440C (hardness: 55 - 60 HRC)

Part number specification

SCS-M6-25-R



- Point contact by full ball securely fixes a work.
- For tool holder set screw, pressure piece and stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

Unit : mm

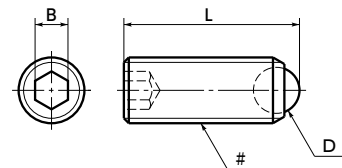
Part Number Steel	Allowable load (N)	Part Number Stainless steel	Allowable load (N)	M (Coarse)	L	D	B	Mass (g)
SCS-M3-5-R	2700	SCSS-M3-5-R	1620	M3	5.2	1.5	1.5	0.3
SCS-M3-10-R	2700	SCSS-M3-10-R	1620	M3	10.2	1.5	1.5	0.6
SCS-M4-6-R	3500	SCSS-M4-6-R	2040	M4	6.5	2.5	2	0.4
SCS-M4-10-R	3500	SCSS-M4-10-R	2040	M4	10.5	2.5	2	0.7
SCS-M4-16-R	3500	SCSS-M4-16-R	2040	M4	16.5	2.5	2	1
SCS-M5-8-R	5000	SCSS-M5-8-R	3000	M5	8.6	3	2.5	0.8
SCS-M5-12-R	5000	SCSS-M5-12-R	3000	M5	12.6	3	2.5	1.3
SCS-M5-20-R	5000	SCSS-M5-20-R	3000	M5	20.6	3	2.5	2.3
SCS-M6-10-R	9000	SCSS-M6-10-R	4500	M6	10.8	4	3	1.5
SCS-M6-16-R	9000	SCSS-M6-16-R	4500	M6	16.8	4	3	2.5
SCS-M6-20-R	9000	SCSS-M6-20-R	4500	M6	20.8	4	3	3.4
SCS-M6-25-R	9000	SCSS-M6-25-R	4500	M6	25.8	4	3	4
SCS-M8-10-R	15000	SCSS-M8-10-R	9000	M8	11.2	5.5	4	2.5
SCS-M8-12-R	15000	SCSS-M8-12-R	9000	M8	13.2	5.5	4	3.2
SCS-M8-20-R	15000	SCSS-M8-20-R	9000	M8	21.2	5.5	4	5.7
SCS-M8-25-R	15000	SCSS-M8-25-R	9000	M8	26.2	5.5	4	7.7
SCS-M8-30-R	15000	SCSS-M8-30-R	9000	M8	31.2	5.5	4	9
SCS-M10-12-R	24000	SCSS-M10-12-R	14400	M10	13.7	7	5	5
SCS-M10-16-R	24000	SCSS-M10-16-R	14400	M10	17.7	7	5	7
SCS-M10-20-R	24000	SCSS-M10-20-R	14400	M10	21.7	7	5	9.5
SCS-M10-25-R	24000	SCSS-M10-25-R	14400	M10	26.7	7	5	11
SCS-M10-35-R	24000	SCSS-M10-35-R	14400	M10	36.7	7	5	16
SCS-M12-16-R	30000	SCSS-M12-16-R	18000	M12	18	8.5	6	10
SCS-M12-20-R	30000	SCSS-M12-20-R	18000	M12	22	8.5	6	12.5
SCS-M12-30-R	30000	SCSS-M12-30-R	18000	M12	32	8.5	6	20
SCS-M12-40-R	30000	SCSS-M12-40-R	18000	M12	42	8.5	6	28
SCS-M16-20-R	73000	SCSS-M16-20-R	43800	M16	23.3	12	8	22
SCS-M16-25-R	73000	SCSS-M16-25-R	43800	M16	28.3	12	8	28
SCS-M16-35-R	73000	SCSS-M16-35-R	43800	M16	38.3	12	8	41
SCS-M16-50-R	73000	SCSS-M16-50-R	43800	M16	53.3	12	8	48

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
Please feel free to contact us	Available / Add'l charge	Not Available	Available / Add'l charge

SCS-R(INCH) / SCSS-R(INCH) Clamping Screws - Full Ball (Inch Thread)



WEB Selection Tool WEB CAD Download



- Point contact by the full ball securely fixes the workpiece.
- For tool holder set screws, pressure pieces and stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please contact our customer service.

Material/Finish

RoHS2 Compliant

	SCS-R(INCH) Made of Steel	SCSS-R(INCH) Made of Stainless Steel
Thread	Alloy steel	
Part	Ferrosoferric Oxide Film (Black)	Equivalent to SUS304
Ball	SUJ2 (Hardness: 55 - 60 HRC)	SUS440C (Hardness: 55 - 60 HRC)

Unit : Inch

Part Number Steel	Part Number Stainless Steel	# Nominal of Thread	L	D	B	Mass (g)
SCS-#6-32-1 / 4-R	SCSS-#6-32-1 / 4-R	No.6-32UNC	0.260	0.059	1 / 16	0.4
SCS-#8-32-3 / 8-R	SCSS-#8-32-3 / 8-R	No.8-32UNC	0.394	0.098	5 / 64	0.8
SCS-#10-24-1 / 2-R	SCSS-#10-24-1 / 2-R	No.10-24UNC	0.528	0.118	3 / 32	1.4
SCS-#10-24-5 / 8-R	SCSS-#10-24-5 / 8-R	No.10-24UNC	0.654	0.118	3 / 32	1.8
SCS-#10-32-1 / 2-R	SCSS-#10-32-1 / 2-R	No.10-32UNF	0.528	0.118	3 / 32	1.6
SCS-#10-32-5 / 8-R	SCSS-#10-32-5 / 8-R	No.10-32UNF	0.654	0.118	3 / 32	1.9
SCS-1 / 4-20-1 / 2-R	SCSS-1 / 4-20-1 / 2-R	1/4-20UNC	0.531	0.157	1 / 8	2.6
SCS-1 / 4-20-5 / 8-R	SCSS-1 / 4-20-5 / 8-R	1/4-20UNC	0.657	0.157	1 / 8	3.2
SCS-5 / 16-18-1 / 2-R	SCSS-5 / 16-18-1 / 2-R	5/16-18UNC	0.543	0.219	5 / 32	4.4
SCS-5 / 16-18-3 / 4-R	SCSS-5 / 16-18-3 / 4-R	5/16-18UNC	0.795	0.219	5 / 32	6.3
SCS-5 / 16-18-7 / 8-R	SCSS-5 / 16-18-7 / 8-R	5/16-18UNC	0.917	0.219	5 / 32	7.3
SCS-3 / 8-16-5 / 8-R	SCSS-3 / 8-16-5 / 8-R	3/8-16UNC	0.689	0.281	3 / 16	8.0
SCS-3 / 8-16-3 / 4-R	SCSS-3 / 8-16-3 / 4-R	3/8-16UNC	0.815	0.281	3 / 16	9.4
SCS-1 / 2-13-3 / 4-R	SCSS-1 / 2-13-3 / 4-R	1/2-13UNC	0.827	0.313	1 / 4	17.5
SCS-1 / 2-13-1 1 / 2-R	SCSS-1 / 2-13-1 1 / 2-R	1/2-13UNC	1.575	0.313	1 / 4	32.7

● All dimensions are in inches.

Part number specification

SCS-#6-32-1/4-R

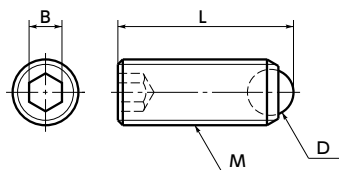


SCS-R(INCH) and SCSS-R(INCH) are sold only for North America.

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
Not Available	Available / Add'l charge	Not Available	Available / Add'l charge

SCS-N / SCS-BR / SCSS-CE Clamping Screw - Special Material Full Ball

WEB Selection Tool WEB CAD Download SUS Stainless steel



- Clamping screw with an integral special ball (full ball type).
- Point contact by full ball securely fixes a work.
- For tool holder set screw, pressure piece and stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

● Material/Finish



	SCS-N Plastic Ball	SCS-BR Brass Ball	SCSS-CE Ceramic Ball
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7
Ball	Polyacetal (hardness: 94 HRM)	Brass (hardness: 75 - 125 HV)	Alumina (purity 99 % or above, hardness 1100 HV)

SCS-N Plastic Ball	SCS-BR Brass Ball					Unit : mm
Part Number	M (Coarse)	L	D	B	Mass (g)	
SCS-M3-5-N	M3	5.2	1.5	1.5	0.1	
SCS-M3-10-N	M3	10.2	1.5	1.5	0.3	
SCS-M4-6-N	M4	6.5	2.5	2	0.4	
SCS-M4-10-N	M4	10.5	2.5	2	0.7	
SCS-M4-16-N	M4	16.5	2.5	2	1	
SCS-M5-8-N	M5	8.6	3	2.5	0.8	
SCS-M5-12-N	M5	12.6	3	2.5	1.3	
SCS-M5-20-N	M5	20.6	3	2.5	2.3	
SCS-M6-10-N	M6	10.8	4	3	1.5	
SCS-M6-16-N	M6	16.8	4	3	2.5	
SCS-M6-20-N	M6	20.8	4	3	3.4	
SCS-M6-25-N	M6	25.8	4	3	4	
SCS-M4-6-BR	M4	6.5	2.5	2	0.4	
SCS-M4-10-BR	M4	10.5	2.5	2	0.7	
SCS-M4-16-BR	M4	16.5	2.5	2	1	
SCS-M5-8-BR	M5	8.6	3	2.5	0.8	
SCS-M5-12-BR	M5	12.6	3	2.5	1.3	
SCS-M5-20-BR	M5	20.6	3	2.5	2.3	
SCS-M6-10-BR	M6	10.8	4	3	1.5	
SCS-M6-16-BR	M6	16.8	4	3	2.5	
SCS-M6-20-BR	M6	20.8	4	3	3.4	
SCS-M6-25-BR	M6	25.8	4	3	4	

SCSS-CE Ceramic Ball					Unit : mm
Part Number	M (Coarse)	L	D	B	Mass (g)
SCSS-M4-6-CE	M4	6.5	2.5	2	0.4
SCSS-M4-10-CE	M4	10.5	2.5	2	0.7
SCSS-M4-16-CE	M4	16.5	2.5	2	1
SCSS-M5-8-CE	M5	8.6	3	2.5	0.8
SCSS-M5-12-CE	M5	12.6	3	2.5	1.3
SCSS-M5-20-CE	M5	20.6	3	2.5	2.3
SCSS-M6-10-CE	M6	10.8	4	3	1.5
SCSS-M6-16-CE	M6	16.8	4	3	2.5
SCSS-M6-25-CE	M6	25.8	4	3	4
SCSS-M8-12-CE	M8	13.2	5.5	4	3.2
SCSS-M8-20-CE	M8	21.2	5.5	4	5.7
SCSS-M8-30-CE	M8	31.2	5.5	4	9
SCSS-M10-16-CE	M10	17.7	7	5	7
SCSS-M10-25-CE	M10	26.7	7	5	11
SCSS-M10-35-CE	M10	36.7	7	5	16
SCSS-M12-20-CE	M12	22	8.5	6	12.5
SCSS-M12-30-CE	M12	32	8.5	6	20
SCSS-M12-40-CE	M12	42	8.5	6	28

● Related Products

Clamping screw have variations such as coarse and fine screw threads, flat ball, indented ball, brass ball and plastic ball, etc.
➔ P.515 - 524



● Part number specification

SCSS-M4-16-CE

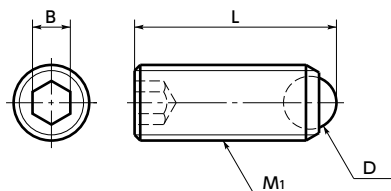


Cleanroom Wash & Packaging ➔ P.807	Screw Combination ➔ P.813	Screw Length Adjustment ➔ P.811	Vibration Resistant ➔ P.810
Please feel free to contact us	Available / Add'l charge	Not Available	Available / Add'l charge

SCS-F-R Clamping Screw (Fine Screw Thread) - Full Ball

WEB Selection Tool
WEB CAD Download

Recommendation



Material/Finish

RoHS2 Compliant

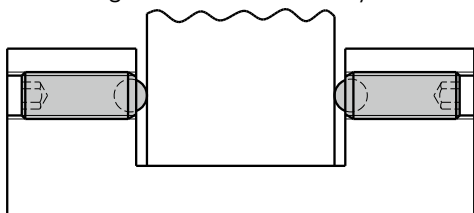
	SCS-F-R
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)
Ball	SUJ2 (hardness: 55 - 60 HRC)

- Clamping screw of the fine screw threaded type for easy fine adjustment of threading amount.
- Point contact by full ball securely fixes a work.
- For tool holder set screw, pressure piece and stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

Part Number	M1 (fine)	L	D	B	Allowable load (N)	Mass (g)
SCS-M6F-10-R	M6×0.75	10.8	4	3	9000	1.5
SCS-M6F-16-R	M6×0.75	16.8	4	3	9000	2.5
SCS-M6F-20-R	M6×0.75	20.8	4	3	9000	3.4
SCS-M6F-25-R	M6×0.75	25.8	4	3	9000	4
SCS-M8F-12-R	M8×1.0	13.2	5.5	4	15000	3.2
SCS-M8F-20-R	M8×1.0	21.2	5.5	4	15000	5.7
SCS-M8F-25-R	M8×1.0	26.2	5.5	4	15000	7.7
SCS-M8F-30-R	M8×1.0	31.2	5.5	4	15000	9
SCS-M10F-16-R	M10×1.0	17.7	7	5	24000	7
SCS-M10F-20-R	M10×1.0	21.7	7	5	24000	9.5
SCS-M10F-25-R	M10×1.0	26.7	7	5	24000	11
SCS-M10F-35-R	M10×1.0	36.7	7	5	24000	16
SCS-M12F-20-R	M12×1.5	22	8.5	6	30000	12.5
SCS-M12F-30-R	M12×1.5	32	8.5	6	30000	20
SCS-M12F-40-R	M12×1.5	42	8.5	6	30000	28

Usage example

For fixing of works that are easily scratched.



Related Products

Clamping screw have variations such as coarse and fine screw threads, flat ball, indented ball, brass ball and plastic ball, etc.
➡ P.515 - 524



Part number specification

SCS-M6F-25-R

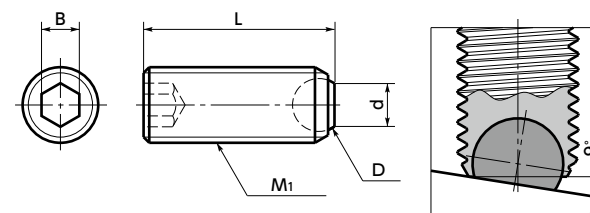


Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
Not Available	Not Available	Not Available	Available / Add'l charge

SCS-F-F Clamping Screw (Fine Screw Thread) - Flat Ball

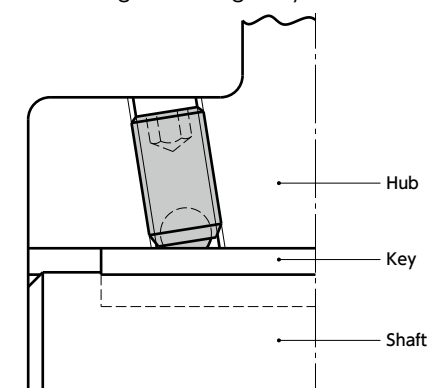
WEB Selection Tool
WEB CAD Download

Recommendation



Usage example

For fixing of rotating body hub and shaft.



Part number specification

SCS-M6F-25-F



- Clamping screw of the fine screw threaded type for easy fine adjustment of threading amount.
- Surface contact by a flat ball. This does not scratch the work.
- The ball rotates flexibly by up to 9°. It securely clamps even when the mating part is tilted.
- For tool holder set screw, pressure piece and stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

Material/Finish

RoHS2 Compliant

	SCS-F-F
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)
Ball	SUJ2 (hardness: 55 - 60 HRC)

Related Products

Clamping screw have variations such as coarse and fine screw threads, flat ball, indented ball, brass ball and plastic ball, etc.
➡ P.515 - 524

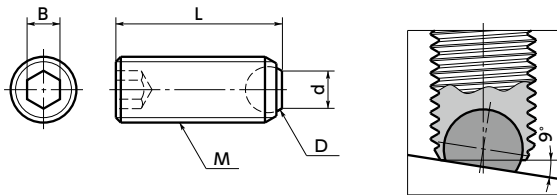


Part Number	M1 (fine)	L	D	d	B	Allowable load (N)	Mass (g)
SCS-M6F-10-F	M6×0.75	10	4	3.2	3	9000	1.5
SCS-M6F-16-F	M6×0.75	16	4	3.2	3	9000	2.5
SCS-M6F-20-F	M6×0.75	20	4	3.2	3	9000	3.4
SCS-M6F-25-F	M6×0.75	25	4	3.2	3	9000	4
SCS-M8F-12-F	M8×1.0	12	5.5	4.5	4	15000	3.2
SCS-M8F-20-F	M8×1.0	20	5.5	4.5	4	15000	5.7
SCS-M8F-25-F	M8×1.0	25	5.5	4.5	4	15000	7.7
SCS-M8F-30-F	M8×1.0	30	5.5	4.5	4	15000	9
SCS-M10F-16-F	M10×1.0	16	7	6	5	24000	7
SCS-M10F-20-F	M10×1.0	20	7	6	5	24000	9.5
SCS-M10F-25-F	M10×1.0	25	7	6	5	24000	11
SCS-M10F-35-F	M10×1.0	35	7	6	5	24000	16
SCS-M12F-20-F	M12×1.5	20	8.5	7.2	6	30000	12.5
SCS-M12F-30-F	M12×1.5	30	8.5	7.2	6	30000	20
SCS-M12F-40-F	M12×1.5	40	8.5	7.2	6	30000	28

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
Not Available	Not Available	Not Available	Available / Add'l charge

SCS-F / SCSS-F Clamping Screw - Flat Ball

WEB Selection Tool WEB CAD Download SUS Stainless steel



● Material/Finish

RoHS2 Compliant

	SCS-F Made of Steel	SCSS-F Made of Stainless Steel
Thread	SCM435	SUSXM7
Part	Ferrosoferric Oxide Film (Black)	
Ball	SUJ2 (hardness: 55 - 60 HRC)	SUS440C (hardness: 55 - 60 HRC)

- Surface contact by a flat ball. This does not scratch the work.
- The ball rotates flexibly by up to 9°. It securely clamps even when the mating part is tilted.
- For tool holder set screw, pressure piece and stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

Unit : mm

Part Number Steel	Allowable load (N)	Part Number Stainless steel	Allowable load (N)	M (Coarse)	L	D	d	B	Mass (g)
SCS-M4-6-F	3500	SCSS-M4-6-F	2040	M4	6	2.5	2	2	0.4
SCS-M4-10-F	3500	SCSS-M4-10-F	2040	M4	10	2.5	2	2	0.7
SCS-M4-16-F	3500	SCSS-M4-16-F	2040	M4	16	2.5	2	2	1
SCS-M5-8-F	5000	SCSS-M5-8-F	3000	M5	8	3	2.5	2.5	0.8
SCS-M5-12-F	5000	SCSS-M5-12-F	3000	M5	12	3	2.5	2.5	1.3
SCS-M5-20-F	5000	SCSS-M5-20-F	3000	M5	20	3	2.5	2.5	2.3
SCS-M6-10-F	9000	SCSS-M6-10-F	4500	M6	10	4	3.2	3	1.5
SCS-M6-16-F	9000	SCSS-M6-16-F	4500	M6	16	4	3.2	3	2.5
SCS-M6-20-F	9000	SCSS-M6-20-F	4500	M6	20	4	3.2	3	3.4
SCS-M6-25-F	9000	SCSS-M6-25-F	4500	M6	25	4	3.2	3	4
SCS-M8-10-F	15000	SCSS-M8-10-F	9000	M8	10	5.5	4.5	4	2.5
SCS-M8-12-F	15000	SCSS-M8-12-F	9000	M8	12	5.5	4.5	4	3.2
SCS-M8-20-F	15000	SCSS-M8-20-F	9000	M8	20	5.5	4.5	4	5.7
SCS-M8-25-F	15000	SCSS-M8-25-F	9000	M8	25	5.5	4.5	4	7.7
SCS-M8-30-F	15000	SCSS-M8-30-F	9000	M8	30	5.5	4.5	4	9
SCS-M10-12-F	24000	SCSS-M10-12-F	14400	M10	12	7	6	5	5
SCS-M10-16-F	24000	SCSS-M10-16-F	14400	M10	16	7	6	5	7
SCS-M10-20-F	24000	SCSS-M10-20-F	14400	M10	20	7	6	5	9.5
SCS-M10-25-F	24000	SCSS-M10-25-F	14400	M10	25	7	6	5	11
SCS-M10-35-F	24000	SCSS-M10-35-F	14400	M10	35	7	6	5	16
SCS-M12-16-F	30000	SCSS-M12-16-F	18000	M12	16	8.5	7.2	6	10
SCS-M12-20-F	30000	SCSS-M12-20-F	18000	M12	20	8.5	7.2	6	12.5
SCS-M12-30-F	30000	SCSS-M12-30-F	18000	M12	30	8.5	7.2	6	20
SCS-M12-40-F	30000	SCSS-M12-40-F	18000	M12	40	8.5	7.2	6	28
SCS-M16-20-F	73000	SCSS-M16-20-F	43800	M16	20	12	10.7	8	22
SCS-M16-25-F	73000	SCSS-M16-25-F	43800	M16	25	12	10.7	8	28
SCS-M16-35-F	73000	SCSS-M16-35-F	43800	M16	35	12	10.7	8	41
SCS-M16-50-F	73000	SCSS-M16-50-F	43800	M16	50	12	10.7	8	48

● Part number specification

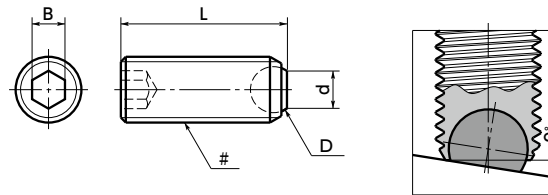
SCSS-M6-25-F



Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Please feel free to contact us	Available / Add'l charge	Not Available	Available / Add'l charge

SCS-F(INCH) / SCSS-F(INCH) Clamping Screws - Flat Ball (Inch Thread)

WEB Selection Tool WEB CAD Download



SCS-F

SCSS-F

- Contact surface is a flat ball. Workpiece is not damaged.
- The ball rotates flexibly up to 9°. It securely clamps even when the mating part is tilted.
- For tool holder set screw and pressure piece stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please contact our customer service.

● Material/Finish

RoHS2 Compliant

	SCS-F(INCH) Made of Steel	SCSS-F(INCH) Made of Stainless Steel
Thread	Alloy steel	Equivalent to SUS304
Part	Ferrosoferric Oxide Film (Black)	
Ball	SUJ2 (Hardness: 55 - 60 HRC)	SUS440C (Hardness: 55 - 60 HRC)

Unit : Inch

Part Number Steel	Part Number Stainless Steel	# Nominal of Thread	L	D	d	B	Mass (g)
SCS-#8-32-3 / 8-F	SCSS-#8-32-3 / 8-F	No.8-32UNC	3/8	0.098	0.079	5 / 64	0.8
SCS-#10-24-1 / 2-F	SCSS-#10-24-1 / 2-F	No.10-24UNC	1/2	0.118	0.098	3 / 32	1.4
SCS-#10-24-5 / 8-F	SCSS-#10-24-5 / 8-F	No.10-24UNC	5/8	0.118	0.098	3 / 32	1.8
SCS-#10-32-1 / 2-F	SCSS-#10-32-1 / 2-F	No.10-32UNF	1/2	0.118	0.098	3 / 32	1.6
SCS-#10-32-5 / 8-F	SCSS-#10-32-5 / 8-F	No.10-32UNF	5/8	0.118	0.098	3 / 32	1.9
SCS-1 / 4-20-1 / 2-F	SCSS-1 / 4-20-1 / 2-F	1/4-20UNC	1/2	0.157	0.126	1 / 8	2.6
SCS-1 / 4-20-5 / 8-F	SCSS-1 / 4-20-5 / 8-F	1/4-20UNC	5/8	0.157	0.126	1 / 8	3.2
SCS-5 / 16-18-1 / 2-F	SCSS-5 / 16-18-1 / 2-F	5/16-18UNC	1/2	0.219	0.177	5 / 32	4.4
SCS-5 / 16-18-3 / 4-F	SCSS-5 / 16-18-3 / 4-F	5/16-18UNC	3/4	0.219	0.177	5 / 32	6.3
SCS-5 / 16-18-7 / 8-F	SCSS-5 / 16-18-7 / 8-F	5/16-18UNC	7/8	0.219	0.177	5 / 32	7.3
SCS-3 / 8-16-5 / 8-F	SCSS-3 / 8-16-5 / 8-F	3/8-16UNC	5/8	0.281	0.236	3 / 16	8.0
SCS-3 / 8-16-3 / 4-F	SCSS-3 / 8-16-3 / 4-F	3/8-16UNC	3/4	0.281	0.236	3 / 16	9.4
SCS-1 / 2-13-3 / 4-F	SCSS-1 / 2-13-3 / 4-F	1/2-13UNC	3/4	0.313	0.276	1 / 4	17.5
SCS-1 / 2-13-1 1 / 2-F	SCSS-1 / 2-13-1 1 / 2-F	1/2-13UNC	1 1/2	0.313	0.276	1 / 4	32.7

- All dimensions are in inches.

● Part number specification

SCS-#8-32-3/8-F



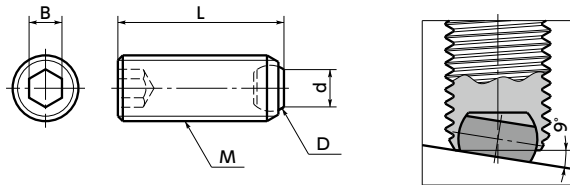
SCS-F(INCH) and SCSS-F(INCH) are sold only for North America.

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Not Available	Available / Add'l charge	Not Available	Available / Add'l charge

SCS-FB / SCSS-FB Clamping Screw - Flat Ball - with Reversal Protection Mechanism Additional Size



WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish



	SCS-FB Made of Steel	SCSS-FB Made of Stainless Steel
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7
Ball	SUJ2 (hardness: 55 - 60 HRC) Ferrosoferric Oxide Film (Black)	SUS440C (hardness: 55 - 60 HRC) Temper Color (Brown)

Part number specification

SCS-M6-25-FB



Part Number Steel	Part Number Stainless steel	M (Coarse)	L	D	d	B	Mass (g)
SCS-M4-6-FB	SCSS-M4-6-FB	M4	6	2.5	2	2	0.4
SCS-M4-10-FB	SCSS-M4-10-FB	M4	10	2.5	2	2	0.7
SCS-M4-16-FB	SCSS-M4-16-FB	M4	16	2.5	2	2	1
SCS-M5-8-FB	SCSS-M5-8-FB	M5	8	3	2.5	2.5	0.8
SCS-M5-12-FB	SCSS-M5-12-FB	M5	12	3	2.5	2.5	1.3
SCS-M5-20-FB	SCSS-M5-20-FB	M5	20	3	2.5	2.5	2.3
SCS-M6-10-FB	SCSS-M6-10-FB	M6	10	4	3.2	3	1.5
SCS-M6-16-FB	SCSS-M6-16-FB	M6	16	4	3.2	3	2.5
SCS-M6-20-FB	SCSS-M6-20-FB	M6	20	4	3.2	3	3.4
SCS-M6-25-FB	SCSS-M6-25-FB	M6	25	4	3.2	3	4
SCS-M8-10-FB	SCSS-M8-10-FB	M8	10	5.5	4.5	4	2.5
SCS-M8-12-FB	SCSS-M8-12-FB	M8	12	5.5	4.5	4	3.2
SCS-M8-20-FB	SCSS-M8-20-FB	M8	20	5.5	4.5	4	5.7
SCS-M8-25-FB	SCSS-M8-25-FB	M8	25	5.5	4.5	4	7.7
SCS-M8-30-FB	SCSS-M8-30-FB	M8	30	5.5	4.5	4	9
SCS-M10-12-FB	SCSS-M10-12-FB	M10	12	7	6	5	5
SCS-M10-16-FB	SCSS-M10-16-FB	M10	16	7	6	5	7
SCS-M10-20-FB	SCSS-M10-20-FB	M10	20	7	6	5	9.5
SCS-M10-25-FB	SCSS-M10-25-FB	M10	25	7	6	5	11
SCS-M10-35-FB	SCSS-M10-35-FB	M10	35	7	6	5	16
SCS-M12-16-FB	SCSS-M12-16-FB	M12	16	8.5	7.2	6	10
SCS-M12-20-FB	SCSS-M12-20-FB	M12	20	8.5	7.2	6	12.5
SCS-M12-30-FB	SCSS-M12-30-FB	M12	30	8.5	7.2	6	20
SCS-M12-40-FB	SCSS-M12-40-FB	M12	40	8.5	7.2	6	28
SCS-M16-20-FB	SCSS-M16-20-FB	M16	20	12	10.7	8	22
SCS-M16-25-FB	SCSS-M16-25-FB	M16	25	12	10.7	8	28
SCS-M16-35-FB	SCSS-M16-35-FB	M16	35	12	10.7	8	41
SCS-M16-50-FB	SCSS-M16-50-FB	M16	50	12	10.7	8	48

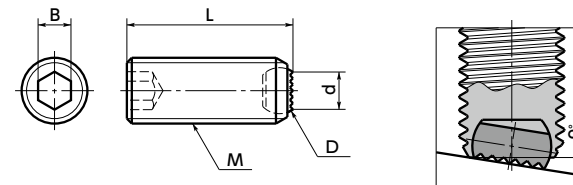
Unit : mm

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810
Please feel free to contact us Available / Add'l charge Not Available Available / Add'l charge

SCS-GB / SCSS-GB Clamping Screw - Indented Ball - with Reversal Protection Mechanism Additional Size



WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish



	SCS-GB Made of Steel	SCSS-GB Made of Stainless Steel
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7
Ball	SUJ2 (hardness: 55 - 60 HRC)	SUS440C (hardness: 55 - 60 HRC)

Part number specification

SCS-M6-25-GB



Part Number Steel	Part Number Stainless steel	M (Coarse)	L	D	d	B	Mass (g)
SCS-M4-6-GB	SCSS-M4-6-GB	M4	6	2.5	2	2	0.4
SCS-M4-10-GB	SCSS-M4-10-GB	M4	10	2.5	2	2	0.7
SCS-M4-16-GB	SCSS-M4-16-GB	M4	16	2.5	2	2	1
SCS-M5-8-GB	SCSS-M5-8-GB	M5	8	3	2.5	2.5	0.8
SCS-M5-12-GB	SCSS-M5-12-GB	M5	12	3	2.5	2.5	1.3
SCS-M5-20-GB	SCSS-M5-20-GB	M5	20	3	2.5	2.5	2.3
SCS-M6-10-GB	SCSS-M6-10-GB	M6	10	4	3.2	3	1.5
SCS-M6-16-GB	SCSS-M6-16-GB	M6	16	4	3.2	3	2.5
SCS-M6-20-GB	SCSS-M6-20-GB	M6	20	4	3.2	3	3.4
SCS-M6-25-GB	SCSS-M6-25-GB	M6	25	4	3.2	3	4
SCS-M8-10-GB	SCSS-M8-10-GB	M8	10	5.5	4.5	4	2.5
SCS-M8-12-GB	SCSS-M8-12-GB	M8	12	5.5	4.5	4	3.2
SCS-M8-20-GB	SCSS-M8-20-GB	M8	20	5.5	4.5	4	5.7
SCS-M8-25-GB	SCSS-M8-25-GB	M8	25	5.5	4.5	4	7.7
SCS-M8-30-GB	SCSS-M8-30-GB	M8	30	5.5	4.5	4	9
SCS-M10-12-GB	SCSS-M10-12-GB	M10	12	7	6	5	5
SCS-M10-16-GB	SCSS-M10-16-GB	M10	16	7	6	5	7
SCS-M10-20-GB	SCSS-M10-20-GB	M10	20	7	6	5	9.5
SCS-M10-25-GB	SCSS-M10-25-GB	M10	25	7	6	5	11
SCS-M10-35-GB	SCSS-M10-35-GB	M10	35	7	6	5	16
SCS-M12-16-GB	SCSS-M12-16-GB	M12	16	8.5	7.2	6	10
SCS-M12-20-GB	SCSS-M12-20-GB	M12	20	8.5	7.2	6	12.5
SCS-M12-30-GB	SCSS-M12-30-GB	M12	30	8.5	7.2	6	20
SCS-M12-40-GB	SCSS-M12-40-GB	M12	40	8.5	7.2	6	28
SCS-M16-20-GB	SCSS-M16-20-GB	M16	20	12	10.7	8	22
SCS-M16-25-GB	SCSS-M16-25-GB	M16	25	12	10.7	8	28
SCS-M16-35-GB	SCSS-M16-35-GB	M16	35	12	10.7	8	41
SCS-M16-50-GB	SCSS-M16-50-GB	M16	50	12	10.7	8	48

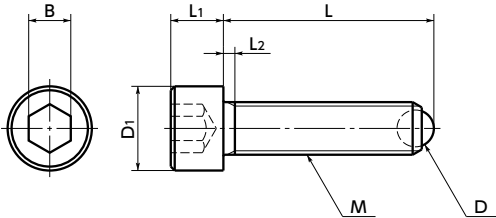
Unit : mm

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810
Please feel free to contact us Available / Add'l charge Not Available Available / Add'l charge

SCBS-CE Clamping Bolt - Ceramic Ball



WEB Selection Tool WEB CAD Download SUS Stainless steel



● Material/Finish	RoHS2 Compliant
	SCBS-CE
Thread Part	SUSXM7
Ball	Alumina (purity 99 % or above, hardness 1100 HV)

- Clamping bolt with an integral ceramic ball.
- Point contact by full ball securely fixes a work.
- For tool holder set screw, pressure piece and stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

Part Number	M (Coarse)	L	D1	D	L1	L2	B	Mass (g)
SCBS-M4-10-CE	M4	10.5	7	2.5	4	2.1	3	1.5
SCBS-M4-16-CE	M4	16.5	7	2.5	4	2.1	3	1.9
SCBS-M4-25-CE	M4	25.5	7	2.5	4	2.1	3	2.5
SCBS-M5-12-CE	M5	12.6	8.5	3	5	2.4	4	2.9
SCBS-M5-20-CE	M5	20.6	8.5	3	5	2.4	4	3.9
SCBS-M5-30-CE	M5	30.6	8.5	3	5	2.4	4	5
SCBS-M6-16-CE	M6	16.8	10	4	6	3	5	5.6
SCBS-M6-25-CE	M6	25.8	10	4	6	3	5	7.6
SCBS-M6-40-CE	M6	40.8	10	4	6	3	5	11
SCBS-M8-20-CE	M8	21.2	13	5.5	8	3.5	6	13.5
SCBS-M8-35-CE	M8	36.2	13	5.5	8	3.5	6	19
SCBS-M8-50-CE	M8	51.2	13	5.5	8	3.5	6	25
SCBS-M10-25-CE	M10	26.7	16	7	10	4.5	8	26
SCBS-M10-40-CE	M10	41.7	16	7	10	4.5	8	34
SCBS-M10-60-CE	M10	61.7	16	7	10	4.5	8	47
SCBS-M12-30-CE	M12	32	18	8.5	12	5	10	40
SCBS-M12-50-CE	M12	52	18	8.5	12	5	10	56
SCBS-M12-80-CE	M12	82	18	8.5	12	5	10	83

● Related Products

Clamping bolt have variations such as coarse and fine screw threads, flat ball, indented ball, brass ball and plastic ball, etc.
➡ P.525 - 532



● Part number specification

SCBS-M6-25-CE



Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
Please feel free to contact us	Not Available	Not Available	Available / Add'l charge

Selection Navigator



CAD Data Download

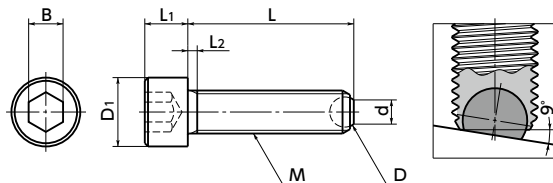
<https://www.nbk1560.com/>

SCB-F / SCBS-F Clamping Bolt - Flat Ball

Recommendation



WEB Selection Tool CAD Download SUS Stainless steel



● Material/Finish

RoHS2 Compliant

	SCB-F Made of Steel	SCBS-F Made of Stainless Steel
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7
Ball	SUJ2 (hardness: 55 - 60 HRC)	SUS440C (hardness: 55 - 60 HRC)

● Part number specification

SCBS-M6-20-F

Part Number Steel	Allowable load (N)	Part Number Stainless steel	Allowable load (N)	M (coarse)	L	D1	D	d	L1	L2	B	Mass (g)
SCB-M4-10-F	3500	SCBS-M4-10-F	2040	M4	10	7	2.5	2	4	2.1	3	1.5
SCB-M4-12-F	3500	SCBS-M4-12-F	2040	M4	12	7	2.5	2	4	2.1	3	1.7
SCB-M4-16-F	3500	SCBS-M4-16-F	2040	M4	16	7	2.5	2	4	2.1	3	1.9
SCB-M4-20-F	3500	SCBS-M4-20-F	2040	M4	20	7	2.5	2	4	2.1	3	2.2
SCB-M4-25-F	3500	SCBS-M4-25-F	2040	M4	25	7	2.5	2	4	2.1	3	2.5
SCB-M5-12-F	5000	SCBS-M5-12-F	3000	M5	12	8.5	3	2.5	5	2.4	4	2.9
SCB-M5-16-F	5000	SCBS-M5-16-F	3000	M5	16	8.5	3	2.5	5	2.4	4	3.4
SCB-M5-20-F	5000	SCBS-M5-20-F	3000	M5	20	8.5	3	2.5	5	2.4	4	3.9
SCB-M5-25-F	5000	SCBS-M5-25-F	3000	M5	25	8.5	3	2.5	5	2.4	4	4.4
SCB-M5-30-F	5000	SCBS-M5-30-F	3000	M5	30	8.5	3	2.5	5	2.4	4	5
SCB-M6-16-F	9000	SCBS-M6-16-F	4500	M6	16	10	4	3.2	6	3	5	5.6
SCB-M6-20-F	9000	SCBS-M6-20-F	4500	M6	20	10	4	3.2	6	3	5	6.5
SCB-M6-25-F	9000	SCBS-M6-25-F	4500	M6	25	10	4	3.2	6	3	5	7.6
SCB-M6-30-F	9000	SCBS-M6-30-F	4500	M6	30	10	4	3.2	6	3	5	8.7
SCB-M6-40-F	9000	SCBS-M6-40-F	4500	M6	40	10	4	3.2	6	3	5	11
SCB-M8-20-F	15000	SCBS-M8-20-F	9000	M8	20	13	5.5	4.5	8	3.5	6	13.5
SCB-M8-30-F	15000	SCBS-M8-30-F	9000	M8	30	13	5.5	4.5	8	3.5	6	17.5
SCB-M8-35-F	15000	SCBS-M8-35-F	9000	M8	35	13	5.5	4.5	8	3.5	6	19
SCB-M8-40-F	15000	SCBS-M8-40-F	9000	M8	40	13	5.5	4.5	8	3.5	6	21.5
SCB-M8-50-F	15000	SCBS-M8-50-F	9000	M8	50	13	5.5	4.5	8	3.5	6	25
SCB-M10-25-F	24000	SCBS-M10-25-F	14400	M10	25	16	7	6	10	4.5	8	26
SCB-M10-30-F	24000	SCBS-M10-30-F	14400	M10	30	16	7	6	10	4.5	8	29
SCB-M10-40-F	24000	SCBS-M10-40-F	14400	M10	40	16	7	6	10	4.5	8	34
SCB-M10-50-F	24000	SCBS-M10-50-F	14400	M10	50	16	7	6	10	4.5	8	39
SCB-M10-60-F	24000	SCBS-M10-60-F	14400	M10	60	16	7	6	10	4.5	8	47
SCB-M12-30-F	30000	SCBS-M12-30-F	18000	M12	30	18	8.5	7.2	12	5	10	40
SCB-M12-50-F	30000	SCBS-M12-50-F	18000	M12	50	18	8.5	7.2	12	5	10	56
SCB-M12-80-F	30000	SCBS-M12-80-F	18000	M12	80	18	8.5	7.2	12	5	10	83
SCB-M16-40-F	73000	SCBS-M16-40-F	43800	M16	40	24	12	10.7	16	6	14	91
SCB-M16-60-F	73000	SCBS-M16-60-F	43800	M16	60	24	12	10.7	16	6	14	122
SCB-M16-80-F	73000	SCBS-M16-80-F	43800	M16	80	24	12	10.7	16	6	14	154

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810
Please feel free to contact us Not Available Not Available Available / Add'l charge

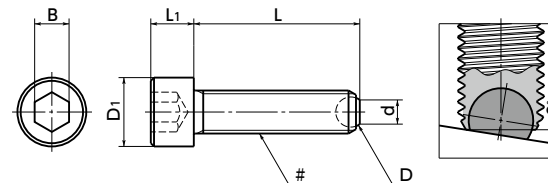
NBK

WEB ▶ <https://www.nbk1560.com>**SCB-F(INCH)/SCBS-F(INCH)** Clamping Bolts - Flat Ball (Inch Thread)

NEW



WEB Selection Tool CAD Download



- Contact surface is a flat ball. Workpiece is not damaged.
- The ball rotates flexibly up to 9°. It securely clamps even when the mating part is tilted.
- For tool holder set screw and pressure piece stopper.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please contact our customer service.

● Material/Finish

RoHS2 Compliant

	SCB-F(INCH) Made of Steel	SCBS-F(INCH) Made of Stainless Steel
Thread Part	Alloy steel Ferrosoferric Oxide Film (Black)	Equivalent to SUS304
Ball	SUJ2 (Hardness: 55 - 60 HRC)	SUS440C (Hardness: 55 - 60 HRC)

Part Number Steel	Part Number Stainless Steel	# Nominal of Thread	L	D1	D	d	L1	B	Mass (g)
SCB-#8-32-1 / 2-F	SCBS-#8-32-1 / 2-F	No.8-32UNC	1/2	0.270	0.098	0.079	0.164	9 / 64	2.3
SCB-#10-24-1 / 2-F	SCBS-#10-24-1 / 2-F	No.10-24UNC	1/2	0.312	0.118	0.098	0.190	5 / 32	3.3
SCB-#10-24-5 / 8-F	SCBS-#10-24-5 / 8-F	No.10-24UNC	5/8	0.312	0.118	0.098	0.190	5 / 32	3.6
SCB-#10-32-1 / 2-F	SCBS-#10-32-1 / 2-F	No.10-32UNF	1/2	0.312	0.118	0.098	0.190	5 / 32	3.4
SCB-#10-32-5 / 8-F	SCBS-#10-32-5 / 8-F	No.10-32UNF	5/8	0.312	0.118	0.098	0.190	5 / 32	3.7
SCB-1 / 4-20-5 / 8-F	SCBS-1 / 4-20-5 / 8-F	1/4-20UNC	5/8	0.375	0.157	0.126	0.250	3 / 16	6.7
SCB-1 / 4-20-3 / 4-F	SCBS-1 / 4-20-3 / 4-F	1/4-20UNC	3/4	0.375	0.157	0.126	0.250	3 / 16	7.2
SCB-1 / 4-20-1 1 / 4-F	SCBS-1 / 4-20-1 1 / 4-F	1/4-20UNC	1 1/4	0.375	0.157	0.126	0.250	3 / 16	9.6
SCB-5 / 16-18-7 / 8-F	SCBS-5 / 16-18-7 / 8-F	5/16-18UNC	7/8	0.469	0.219	0.177	0.312	1 / 4	13.9
SCB-5 / 16-18-1 1 / 4-F	SCBS-5 / 16-18-1 1 / 4-F	5/16-18UNC	1 1/4	0.469	0.219	0.177	0.312	1 / 4	16.8
SCB-5 / 16-18-1 1 / 2-F	SCBS-5 / 16-18-1 1 / 2-F	5/16-18UNC	1 1/2	0.469	0.219	0.177	0.312	1 / 4	18.7
SCB-3 / 8-16-1-F	SCBS-3 / 8-16-1-F	3/8-16UNC	1	0.562	0.281	0.236	0.375	5 / 16	23.8
SCB-3 / 8-16-1 1 / 2-F	SCBS-3 / 8-16-1 1 / 2-F	3/8-16UNC	1 1/2	0.562	0.281	0.236	0.375	5 / 16	29.4
SCB-1 / 2-13-2-F	SCBS-1 / 2-13-2-F	1/2-13UNC	2	0.750	0.313	0.276	0.500	3 / 8	70.4

● All dimensions are in inches.

● Part number specification

SCB-#8-32-1/2-F

SCB-F(INCH) and SCBS-F(INCH) are sold only for North America.

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810
Not Available Not Available Not Available Available / Add'l charge

NBK

WEB ▶ <https://www.nbk1560.com>

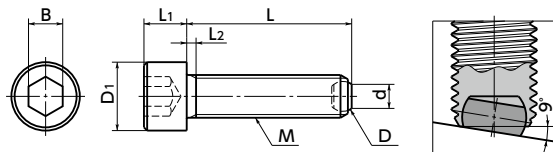
530

529

SCB-FB / SCBS-FB

Clamping Bolt - Flat Ball - with Reversal Prevention Mechanism *Additional Size*

WEB Selection Tool WEB CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	SCB-FB Made of Steel	SCBS-FB Made of Stainless Steel
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7
Ball	SUJ2 (hardness: 55 - 60 HRC) Ferrosoferric Oxide Film (Black)	SUS440C (hardness: 55 - 60 HRC) Temper Color (Brown)

Part number specification

SCB-M6-20-FB



SCBS-FB SCB-FB

- All sizes are standardized with full thread.
- The ball rotates flexibly by up to 9°. The reversal prevention mechanism always ensures secure clamping on the flat plane on the ball.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

Unit : mm

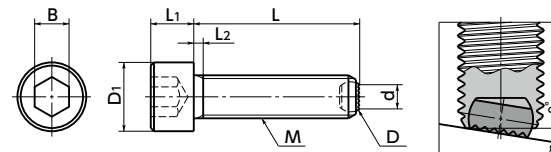
Part Number Steel	Part Number Stainless steel	M (Coarse)	L	D1	D	d	L1	L2	B	Mass (g)
SCB-M4-10-FB	SCBS-M4-10-FB	M4	10	7	2.5	2	4	2.1	3	1.5
SCB-M4-12-FB	SCBS-M4-12-FB	M4	12	7	2.5	2	4	2.1	3	1.7
SCB-M4-16-FB	SCBS-M4-16-FB	M4	16	7	2.5	2	4	2.1	3	1.9
SCB-M4-20-FB	SCBS-M4-20-FB	M4	20	7	2.5	2	4	2.1	3	2.2
SCB-M4-25-FB	SCBS-M4-25-FB	M4	25	7	2.5	2	4	2.1	3	2.5
SCB-M5-12-FB	SCBS-M5-12-FB	M5	12	8.5	3	2.5	5	2.4	4	2.9
SCB-M5-16-FB	SCBS-M5-16-FB	M5	16	8.5	3	2.5	5	2.4	4	3.4
SCB-M5-20-FB	SCBS-M5-20-FB	M5	20	8.5	3	2.5	5	2.4	4	3.9
SCB-M5-25-FB	SCBS-M5-25-FB	M5	25	8.5	3	2.5	5	2.4	4	4.4
SCB-M5-30-FB	SCBS-M5-30-FB	M5	30	8.5	3	2.5	5	2.4	4	5
SCB-M6-16-FB	SCBS-M6-16-FB	M6	16	10	4	3.2	6	3	5	5.6
SCB-M6-20-FB	SCBS-M6-20-FB	M6	20	10	4	3.2	6	3	5	6.5
SCB-M6-25-FB	SCBS-M6-25-FB	M6	25	10	4	3.2	6	3	5	7.6
SCB-M6-30-FB	SCBS-M6-30-FB	M6	30	10	4	3.2	6	3	5	8.7
SCB-M6-40-FB	SCBS-M6-40-FB	M6	40	10	4	3.2	6	3	5	11
SCB-M8-20-FB	SCBS-M8-20-FB	M8	20	13	5.5	4.5	8	3.5	6	13.5
SCB-M8-30-FB	SCBS-M8-30-FB	M8	30	13	5.5	4.5	8	3.5	6	17.5
SCB-M8-35-FB	SCBS-M8-35-FB	M8	35	13	5.5	4.5	8	3.5	6	19
SCB-M8-40-FB	SCBS-M8-40-FB	M8	40	13	5.5	4.5	8	3.5	6	21.5
SCB-M8-50-FB	SCBS-M8-50-FB	M8	50	13	5.5	4.5	8	3.5	6	25
SCB-M10-25-FB	SCBS-M10-25-FB	M10	25	16	7	6	10	4.5	8	26
SCB-M10-30-FB	SCBS-M10-30-FB	M10	30	16	7	6	10	4.5	8	29
SCB-M10-40-FB	SCBS-M10-40-FB	M10	40	16	7	6	10	4.5	8	34
SCB-M10-50-FB	SCBS-M10-50-FB	M10	50	16	7	6	10	4.5	8	39
SCB-M10-60-FB	SCBS-M10-60-FB	M10	60	16	7	6	10	4.5	8	47
SCB-M12-30-FB	SCBS-M12-30-FB	M12	30	18	8.5	7.2	12	5	10	40
SCB-M12-50-FB	SCBS-M12-50-FB	M12	50	18	8.5	7.2	12	5	10	56
SCB-M12-80-FB	SCBS-M12-80-FB	M12	80	18	8.5	7.2	12	5	10	83
SCB-M16-40-FB	SCBS-M16-40-FB	M16	40	24	12	10.7	16	6	14	91
SCB-M16-60-FB	SCBS-M16-60-FB	M16	60	24	12	10.7	16	6	14	122
SCB-M16-80-FB	SCBS-M16-80-FB	M16	80	24	12	10.7	16	6	14	154

Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
Please feel free to contact us	Not Available	Not Available	Available / Add'l charge

SCB-GB / SCBS-GB

Clamping Bolt - Knurled Ball - with Reversal Prevention Mechanism *Additional Size*

WEB Selection Tool WEB CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	SCB-GB Made of Steel	SCBS-GB Made of Stainless Steel
Thread Part	SCM435 Ferrosoferric Oxide Film (Black)	SUSXM7
Ball	SUJ2 (hardness: 55 - 60 HRC)	SUS440C (hardness: 55 - 60 HRC)

Part number specification

SCBS-M6-20-GB



- The ball rotates flexibly by up to 9°. The reversal prevention mechanism ensures secure clamping.
- Even coarse surface such as casting surface can be securely clamped by the knurled ball.
- We also produce products of special specifications, e.g. nominal diameter of thread, length and surface treatment. Please feel free to contact our customer service.

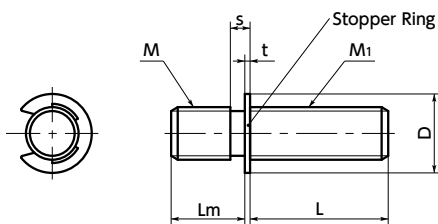
Unit : mm

Part Number Steel	Part Number Stainless steel	M (Coarse)	L	D1	D	d	L1	L2	B	Mass (g)
SCB-M4-10-GB	SCBS-M4-10-GB	M4	10	7	2.5	2	4	2.1	3	1.5
SCB-M4-12-GB	SCBS-M4-12-GB	M4	12	7	2.5	2	4	2.1	3	1.7
SCB-M4-16-GB	SCBS-M4-16-GB	M4	16	7	2.5	2	4	2.1	3	1.9
SCB-M4-20-GB	SCBS-M4-20-GB	M4	20	7	2.5	2	4	2.1	3	2.2
SCB-M4-25-GB	SCBS-M4-25-GB	M4	25	7	2.5	2	4	2.1	3	2.5
SCB-M5-12-GB	SCBS-M5-12-GB	M5	12	8.5	3	2.5	5	2.4	4	2.9
SCB-M5-16-GB	SCBS-M5-16-GB	M5	16	8.5	3	2.5	5	2.4	4	3.4
SCB-M5-20-GB	SCBS-M5-20-GB	M5	20	8.5	3	2.5	5	2.4	4	3.9
SCB-M5-25-GB	SCBS-M5-25-GB	M5	25	8.5	3	2.5	5	2.4	4	4.4
SCB-M5-30-GB	SCBS-M5-30-GB	M5	30	8.5	3	2.5	5	2.4	4	5
SCB-M6-16-GB	SCBS-M6-16-GB	M6	16	10	4	3.2	6	3	5	5.6
SCB-M6-20-GB	SCBS-M6-20-GB	M6	20	10	4	3.2	6	3	5	6.5
SCB-M6-25-GB	SCBS-M6-25-GB	M6	25	10	4	3.2	6	3	5	7.6
SCB-M6-30-GB	SCBS-M6-30-GB	M6	30	10	4	3.2	6	3	5	8.7
SCB-M6-40-GB	SCBS-M6-40-GB	M6	40	10	4	3.2	6	3	5	11
SCB-M8-20-GB	SCBS-M8-20-GB	M8	20	13	5.5	4.5	8	3.5	6	13.5
SCB-M8-30-GB	SCBS-M8-30-GB	M8	30	13	5.5	4.5	8	3.5	6	17.5
SCB-M8-35-GB	SCBS-M8-35-GB	M8	35	13	5.5	4.5	8	3.5	6	19
SCB-M8-40-GB	SCBS-M8-40-GB	M8	40	13	5.5	4.5	8	3.5	6	21.5
SCB-M8-50-GB	SCBS-M8-50-GB	M8	50	13	5.5	4.5	8	3.5	6	25
SCB-M10-25-GB	SCBS-M10-25-GB	M10	25	16	7	6	10	4.5	8	26
SCB-M10-30-GB	SCBS-M10-30-GB	M10	30	16	7	6	10	4.5	8	29
SCB-M10-40-GB	SCBS-M10-40-GB	M10	40	16	7	6	10	4.5	8	34
SCB-M10-50-GB	SCBS-M10-50-GB	M10	50	16	7	6	10	4.5	8	39
SCB-M10-60-GB	SCBS-M10-60-GB	M10	60	16	7	6	10	4.5	8	47
SCB-M12-30-GB	SCBS-M12-30-GB	M12	30	18	8.5	7.2	12	5	10	40
SCB-M12-50-GB	SCBS-M12-50-GB	M12	50	18	8.5	7.2	12	5	10	56
SCB-M12-80-GB	SCBS-M12-80-GB	M12	80	18	8.5	7.2	12	5	10	83
SCB-M16-40-GB	SCBS-M16-40-GB	M16	40	24	12	10.7	16	6	14	91
SCB-M16-60-GB	SCBS-M16-60-GB	M16	60	24	12	10.7	16	6	14	122
SCB-M16-80-GB	SCBS-M16-80-GB	M16	80	24	12	10.7	16	6	14	154

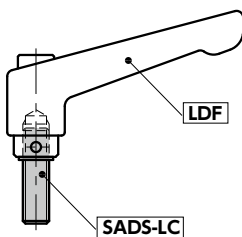
Cleanroom Wash & Packaging ➡ P.807	Screw Combination ➡ P.813	Screw Length Adjustment ➡ P.811	Vibration Resistant ➡ P.810
Please feel free to contact us	Not Available	Not Available	Available / Add'l charge

SADS-LC Screw Adaptor - Left-handed Threaded Type

WEB Selection Tool CAD Download SUS Stainless steel



- Usage example
In combination with a clamp lever.



- By combining with female screw products such as a lever and knob, this may be used as a left-handed screw lever or knob.
- For screw fixing, use a pin stopper or anaerobic adhesive agent. If it is repeatedly tightened, a pin stopper is recommended.
- Use a stopper ring to accurately determine the threaded length.

- Material/Finish



	SADS-LC
Thread Part	SUS303
Stopper Ring	Equivalent to SUS304

Dimensions

Unit : mm

Part Number	M (Right-hand screw)	M1 (Left-hand screw)	Lm	s	t	D	Mass (g)
SADS-M4-LC	M4	M4	4.5	1.4	0.6	7	0.9 - 2.5
SADS-M5-LC	M5	M5	4.5	1.6	0.6	9	1.5 - 6.3
SADS-M6-LC	M6	M6	5.5	2	0.6	9	2.2 - 11
SADS-M8-LC	M8	M8	6.5	2.5	0.8	12	3.9 - 26
SADS-M10-LC	M10	M10	8.5	3	0.8	16	8.2 - 41

SADS-LC Made of Stainless Steel

Part Number	L (mm)	12	16	20	25	32	40	50	63	80
SADS-M4-LC	●	●	●	●	●	●	●	●	●	●
SADS-M5-LC	●	●	●	●	●	●	●	●	●	●
SADS-M6-LC	●	●	●	●	●	●	●	●	●	●
SADS-M8-LC	●	●	●	●	●	●	●	●	●	●
SADS-M10-LC	●	●	●	●	●	●	●	●	●	●

Related Products

Screw adaptor with variable screw diameter **SADS-SD** are available.
→ P.535



- Part number specification

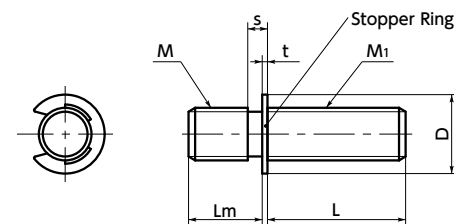
SADS-M5-32-LC

Product Code 1 2 Left Threaded Type

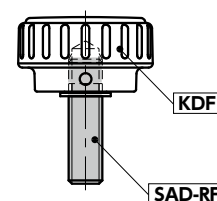
Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

SADS-RF Screw Adaptor - Fine Threaded Type

WEB Selection Tool CAD Download SUS Stainless steel



- Usage example
In combination with a dimple knob.



- By combining with female screw products such as a lever and knob, this may be used as a fine threaded screw lever or knob.
- For screw fixing, use a pin stopper or anaerobic adhesive agent. If it is repeatedly tightened, a pin stopper is recommended.
- Use a stopper ring to accurately determine the thread length.

- Material/Finish



	SADS-RF
Thread Part	SUS303
Stopper Ring	Equivalent to SUS304

Dimensions

Unit : mm

Part Number	M (coarse)	M1 (fine)	Lm	s	t	D	Mass (g)
SADS-M4-RF	M4	M4×0.5	4.5	1.4	0.6	7	0.9 - 2.5
SADS-M5-RF	M5	M5×0.5	4.5	1.6	0.6	9	1.5 - 6.3
SADS-M6-RF	M6	M6×0.75	5.5	2	0.6	9	2.2 - 11
SADS-M8-RF	M8	M8×1	6.5	2.5	0.8	12	3.9 - 26
SADS-M10-RF	M10	M10×1.25	8.5	3	0.8	16	8.2 - 41

SADS-RF Made of Stainless Steel

Part Number	L (mm)	12	16	20	25	32	40	50	63	80
SADS-M4-RF	●	●	●	●	●	●	●	●	●	●
SADS-M5-RF	●	●	●	●	●	●	●	●	●	●
SADS-M6-RF	●	●	●	●	●	●	●	●	●	●
SADS-M8-RF	●	●	●	●	●	●	●	●	●	●
SADS-M10-RF	●	●	●	●	●	●	●	●	●	●

Related Products

Long-threaded type screw adaptor **SADS-FT** are available.
→ P.536



- Part number specification

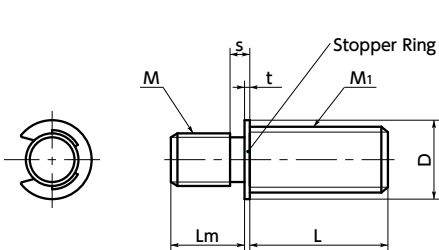
SADS-M5-32-RF

Product Code 1 2 Fine Screw Threaded Type

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

SADS-SD Screw Adaptor - Thread Size Conversion Type

WEB Selection Tool CAD Download SUS Stainless steel



Material/Finish

RoHS2 Compliant

	SADS-SD
Thread Part	SUS303
Stopper Ring	Equivalent to SUS304

- By combining with female screw products such as a lever and knob, this may be used as a lever or knob of any non-standard screw diameter.
- For screw fixing, use a pin stopper or anaerobic adhesive agent.
- If it is repeatedly tightened in combination with a lever or knob, a pin stopper is recommended.
- Use a stopper ring to accurately determine the threaded length.

Dimensions

Unit : mm

Part Number	M (coarse) 1	M1 (coarse) 2	Lm	s	t	D	Mass (g)
SADS-M4-M5-SD	M4	M5	4.5	1.4	0.6	7	1.9 - 6.7
SADS-M5-M4-SD	M5	M4	4.5	1.6	0.6	7	1.5 - 3.1
SADS-M5-M6-SD	M5	M6	4.5	1.6	0.6	9	2.7 - 12
SADS-M6-M5-SD	M6	M5	5.5	1.6	0.6	9	2.5 - 7.3
SADS-M6-M8-SD	M6	M8	5.5	2	0.6	9	4.9 - 27
SADS-M8-M6-SD	M8	M6	6.5	2	0.6	9	4.3 - 13
SADS-M8-M10-SD	M8	M10	6.5	2.5	0.8	12	10 - 43
SADS-M10-M8-SD	M10	M8	8.5	2.5	0.8	12	8.2 - 30
SADS-M10-M12-SD	M10	M12	8.5	3	0.8	16	16 - 64

SADS-SD Made of Stainless Steel

Part Number	L (mm) 3	12	16	20	25	32	40	50	63	80
SADS-M4-M5-SD	●	●	●	●	●	●	●	●		
SADS-M5-M4-SD	●	●	●	●	●	●	●	●		
SADS-M5-M6-SD	●	●	●	●	●	●	●	●	●	
SADS-M6-M5-SD	●	●	●	●	●	●	●	●		
SADS-M6-M8-SD	●	●	●	●	●	●	●	●	●	●
SADS-M8-M6-SD	●	●	●	●	●	●	●	●	●	
SADS-M8-M10-SD		●	●	●	●	●	●	●	●	●
SADS-M10-M8-SD	●	●	●	●	●	●	●	●	●	●
SADS-M10-M12-SD		●	●	●	●	●	●	●	●	●

Part number specification

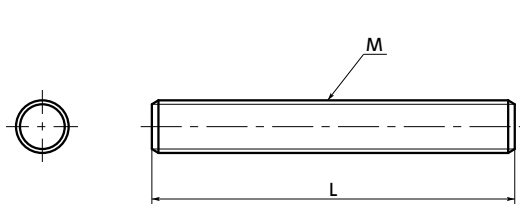
SADS-M10-M12-80-SD

Product Code 1 2 3 Thread Size Conversion Type

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

SAD-FT / SADS-FT Screw Adaptor - Long Threaded Type

WEB Selection Tool CAD Download SUS Stainless steel



- By combining with female screw products such as a lever and knob, this may be used as a long screw lever or knob.
- For screw fixing, use a pin stopper or anaerobic adhesive agent.
- If it is repeatedly tightened in combination with a lever or knob, a pin stopper is recommended.

Material/Finish

RoHS2 Compliant

	SAD-FT Made of Steel	SADS-FT Made of Stainless Steel
Thread Part	SWRM6K Trivalent Chromate Treatment	SUS304

Dimensions

Unit : mm

Part Number	Part Number Stainless steel	M (coarse) 2	Mass (g)
SAD-M4-FT	SADS-M4-FT	M4	4 - 10
SAD-M5-FT	SADS-M5-FT	M5	6.2 - 16
SAD-M6-FT	SADS-M6-FT	M6	11 - 22
SAD-M8-FT	SADS-M8-FT	M8	20 - 40
SAD-M10-FT	SADS-M10-FT	M10	36 - 72

SAD-FT Made of Steel SADS-FT Made of Stainless Steel

Part Number	L (mm) 3	40	50	60	80	100	120
SAD-M4-FT	●	●	●	●	●		
SAD-M5-FT	●	●	●	●	●		
SAD-M6-FT		●	●	●	●	●	
SAD-M8-FT		●	●	●	●	●	
SAD-M10-FT			●	●	●	●	●
SADS-M4-FT	●	●	●	●	●	●	
SADS-M5-FT	●	●	●	●	●	●	
SADS-M6-FT		●	●	●	●	●	
SADS-M8-FT		●	●	●	●	●	
SADS-M10-FT			●	●	●	●	●

Related Products

There are variations of screw adaptor.
→ P.533 - 536



Part number specification

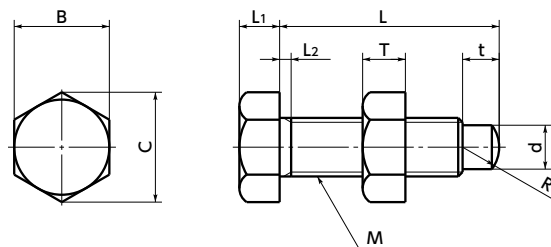
SAD-M5-100-FT

1 2 3 Long Threaded Type

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
S.S. only/ Add'l charge	Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

SSB-A Stopper Bolt - Tip Sphere Type *Recommendation*

WEB Selection Tool
WEB CAD Download



● Material/Finish



SSB-A	
Thread Part	S45C, sphere part quenching (hardness: 45 HRC or above) Ferrosoferric Oxide Film (Black)
Nut	SS400 Trivalent Chromate Treatment

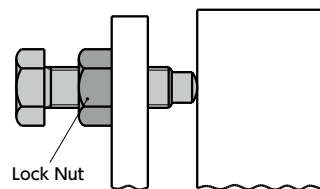
Dimensions

Part Number	M (coarse)	t	L2	T	d	R	L1	B	C	Mass (g)
SSB-M4-A	M4	3	2.1	3.2	2	3	2.8	7	8.1	2.6 - 5.2
SSB-M5-A	M5	3	2.4	4	3	3	3.5	8	9.2	4.5 - 9.7
SSB-M6-A	M6	3.5	3	5	4.5	4	4	10	11.5	7.2 - 15
SSB-M8-A	M8	5	3.7	6.5	6	5	5.5	13	15	15 - 40
SSB-M10-A	M10	5.5	4.5	8	7	5	7	17	19.6	38 - 63
SSB-M12-A	M12	7	5.2	10	9	8	8	19	21.9	54 - 99
SSB-M16-A	M16	9	6	13	12	10	10	24	27.7	111 - 158

Part Number	L (mm)										
	10	15	20	25	30	35	40	50	60	70	80
SSB-M4-A	●	●	●	●	●	●	●				
SSB-M5-A	●	●	●	●	●	●	●	●			
SSB-M6-A		●	●	●	●	●	●	●			
SSB-M8-A		●	●	●	●	●	●	●	●	●	●
SSB-M10-A					●	●	●	●	●	●	●
SSB-M12-A					●	●	●	●	●	●	●
SSB-M16-A							●	●	●	●	●

● Usage example

Use the lock nut on an opposite side of the side that receives the force.



● Related Products

A locating block **[SBN]** is available for stopper bolt mounting.
→ P.542



● Part number specification

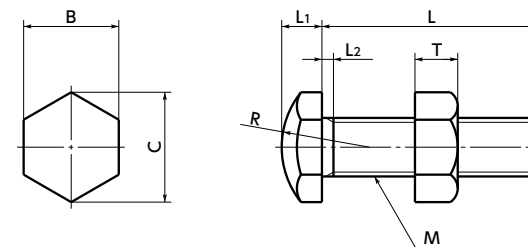
SSB-M8-40-A

Product Code Tip Sphere Type

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Not Available	Not Available	Not Available	Available / Add'l charge

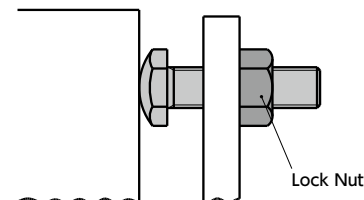
SSB-B / SSBS-B Stopper Bolt - Head Sphere Type *Recommendation*

WEB Selection Tool
WEB CAD Download
SUS Stainless steel



● Usage example

Use the lock nut on an opposite side of the side that receives the force.



● Hexagon head is round.

● Round part has already been quenched. It is highly abrasion-resistant.

● All products are provided with lock nut.

● Material/Finish



	SSB-B Made of Steel	SSBS-B Made of Stainless Steel
Thread Part	S45C Sphere part quenching (hardness: 45 HRC or above) Ferrosoferric Oxide Film (Black)	SUS410 Sphere part quenching (hardness: 40 HRC or above)
Nut	SS400 Trivalent Chromate Treatment	SUS304

Dimensions

Part Number Steel	Part Number Stainless steel	M (coarse)	L2	T	R	L1	B	C	Mass (g)
SSB-M3-B		M3	1.5	2.4	6	2	5.5	6.4	1 - 2
SSB-M4-B		M4	2.1	3.2	8	2.8	7	8.1	2.3 - 5.2
SSB-M5-B		M5	2.4	4	8	3.5	8	9.2	3.7 - 9.7
SSB-M6-B	SSBS-M6-B	M6	3	5	10	4	10	11.5	7.2 - 15
SSB-M8-B	SSBS-M8-B	M8	3.7	6.5	12	5.5	13	15	15 - 40
SSB-M10-B		M10	4.5	8	16	7	17	19.6	38 - 63
SSB-M12-B		M12	5.2	10	20	8	19	21.9	54 - 99
SSB-M16-B		M16	6	13	25	10	24	27.7	108 - 155

SSB-B Made of Steel SSBS-B Made of Stainless Steel

Part Number	L (mm)										
	10	15	20	25	30	35	40	50	60	70	80
SSB-M3-B	●	●	●	●	●						
SSB-M4-B	●	●	●	●	●	●	●				
SSB-M5-B	●	●	●	●	●	●	●	●			
SSB-M6-B		●	●	●	●	●	●	●			
SSB-M8-B		●	●	●	●	●	●	●	●	●	●
SSB-M10-B					●	●	●	●	●	●	●
SSB-M12-B					●	●	●	●	●	●	●
SSB-M16-B							●	●	●	●	●
SSBS-M6-B					●		●	●			
SSBS-M8-B					●		●	●			

● Related Products

The stop pin with excellent abrasion resistance **[SPM]** is available for the stopper bolt recipient.
→ P.543

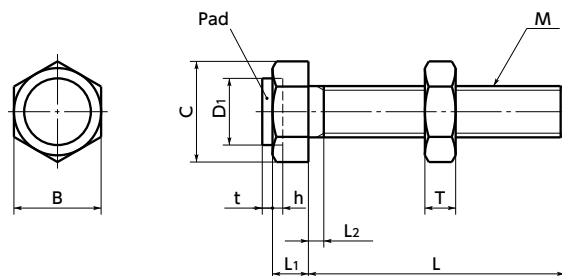


● Part number specification

SSB-M10-30-B

Product Code Head Sphere Type

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Please feel free to contact us	Not Available	Available / Add'l charge	Available / Add'l charge

SUB Stopper Bolt with Urethane PadWEB Selection Tool
WEB CAD Download

- For work locating and stopping.
- Urethane pad is adhered.
- Impact is absorbed by the urethane pad.
- All products are provided with lock nut.

• Material/Finish



	SUB
Thread Part	SS400 Nickel Plating
Pad	Polyurethane (hardness: 90 HDA)
Lock Nut	SS400 Trivalent Chromate Treatment

Dimensions

Unit : mm

Part Number	M (coarse)	L2	L1	D1	t	h	B	C	T	Mass (g)
SUB-M4	M4	3	2.8	5	1.5	1.5	7	8.1	2.4	2.1 - 4.1
SUB-M5	M5	3	3.5	6	1.5	1.5	8	9.2	3.2	3.3 - 6.6
SUB-M6	M6	3	4	8	2	2	10	11.5	3.6	6.3 - 11.7
SUB-M8	M8	3	5.5	10	2	2	13	15	5	12.7 - 23
SUB-M10	M10	3	7	13	2	2	17	19.6	6	24 - 39

Part Number	L (mm)							
	15	20	25	30	35	40	45	50
SUB-M4	●	●	●	●	●	●		
SUB-M5	●	●	●	●	●	●		
SUB-M6		●	●	●	●	●	●	●
SUB-M8		●	●	●	●	●	●	●
SUB-M10		●	●	●	●	●	●	●

• Part number specification

SUB-M4-35

Product Code 1 2

Cleanroom Wash & Packaging → P.807

Screw Combination → P.813

Screw Length Adjustment → P.811

Vibration Resistant → P.810

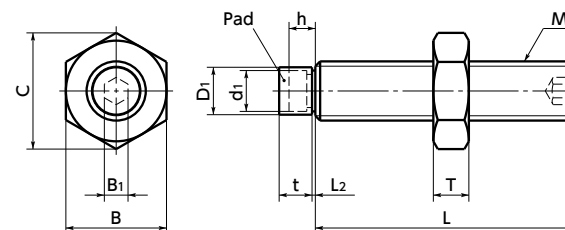
Not Available

Not Available

Available / Add'l charge

Please feel free to contact us

NBK

WEB ▶ <https://www.nbk1560.com>**SUS** Stopper Screw with Urethane PadWEB Selection Tool
WEB CAD Download

- For work locating and stopping.
- Urethane pad is adhered.
- Impact is absorbed by the urethane pad.
- All products are provided with lock nut.

• Material/Finish



	SUS
Thread Part	SCM435 Nickel Plating
Pad	Polyurethane (hardness: 90 HDA)
Lock Nut	SS400 Trivalent Chromate Treatment

Dimensions

Unit : mm

Part Number	M (coarse)	t	L2	D1	B	C	B1	T	h	d1	Mass (g)
SUS-M4	M4	4.5	0.5	3.1	7	8.1	2	2.4	3	1.6	1.6 - 3.1
SUS-M5	M5	4.5	0.5	4	8	9.2	2.5	3.2	3	2.2	3 - 6.1
SUS-M6	M6	4.5	0.5	4.8	10	11.5	3	3.6	3	2.6	5.6 - 11
SUS-M8	M8	5.5	0.5	6.5	13	15	4	5	4	5.1	13 - 20
SUS-M10	M10	5.5	0.5	8.3	17	19.6	5	6	4	6.9	21 - 31

Part Number	L (mm)									
	10	15	20	25	30	35	40	45	50	60
SUS-M4	●	●	●	●	●	●				
SUS-M5	●	●	●	●	●	●	●			
SUS-M6		●	●	●	●	●	●		●	
SUS-M8				●	●	●	●	●	●	
SUS-M10					●	●	●	●	●	●

• Related Products

A stopper bolt with bolt-type urethane pad **SUB** is available.
→ P.539



• Part number specification

SUS-M5-40

Product Code 1 2

Cleanroom Wash & Packaging → P.807

Screw Combination → P.813

Screw Length Adjustment → P.811

Vibration Resistant → P.810

Not Available

Available / Add'l charge

Not Available

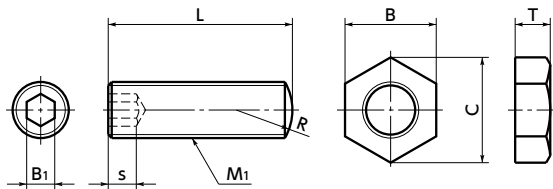
Please feel free to contact us

NBK

WEB ▶ <https://www.nbk1560.com>

SAN-B / SANS-B Stopper Screw

WEB Selection Tool CAD Download SUS Stainless steel



● Part number specification

SAN-M5-20-B

Product Code 1 2 Type with Hex Socket



- Fine threaded type stopper screw. Fine adjustment is easy.
- For work locating and stopping.
- Round area has already been quenched. It is highly abrasion-resistant.
- All products are provided with lock nut.

● Material/Finish



	SAN-B Made of Steel	SANS-B Made of Stainless Steel
Thread	S45C	SUS420J2
Part	Sphere part quenching (hardness: 45 - 50 HRC) Trivalent Chromate Treatment	Sphere part quenching (hardness: 40 - 50 HRC)
Nut	SS400 Trivalent Chromate Treatment	SUS304

Dimensions

Unit : mm

Part Number Steel	Part Number Stainless steel	M1 (fine) 1	s	B1	R	B	C	T	Mass (g)
SAN-M4-B	SANS-M4-B	M4×0.5	4	2	4	7	8.1	4	2.3 - 3.2
SAN-M5-B	SANS-M5-B	M5×0.5	4	2.5	5	8	9.2	4	3.1 - 4.6
SAN-M6-B	SANS-M6-B	M6×0.75	5	3	6	10	11.5	4	4.5 - 13
SAN-M8-B	SANS-M8-B	M8×0.75	6	4	8	13	15	5	9.7 - 23
SAN-M10-B	SANS-M10-B	M10×1	8	5	10	17	19.6	6	23 - 35
SAN-M12-B	SANS-M12-B	M12×1	10	6	12	19	21.9	6	37 - 68
SAN-M16-B	SANS-M16-B	M16×1.5	14	8	16	24	27.7	8	90 - 150

SAN-B Made of Steel **SANS-B** Made of Stainless Steel

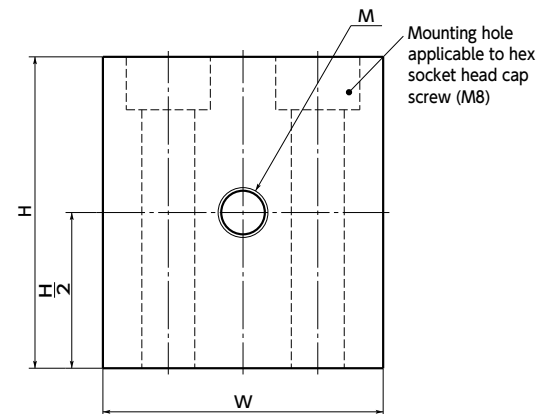
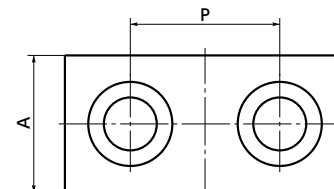
Part Number	L (mm) 2									
	20	25	30	35	40	50	60	80	100	
SAN-M4-B	●		●							
SAN-M5-B	●		●							
SAN-M6-B	●		●	●		●	●			
SAN-M8-B		●	●		●	●	●			
SAN-M10-B					●	●	●			
SAN-M12-B							●	●		
SAN-M16-B							●	●	●	
SANS-M4-B	●		●							
SANS-M5-B	●		●							
SANS-M6-B	●		●	●		●	●			
SANS-M8-B		●	●		●	●	●			
SANS-M10-B					●	●	●			
SANS-M12-B					●		●	●		
SANS-M16-B							●	●	●	

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810

Please feel free to contact us Not Available Not Available Available / Add'l charge

SBN Locating Block

WEB Selection Tool CAD Download



- Please combine with Stopper Bolt **SSB-A** (→ P.537) **SSB-B** **SSBS-B** (→ P.538) used for locating.

● Material/Finish



	SBN
Main body	SS400 Nickel Plating

Part Number	M (coarse) 1	H 2	W	P	A	Mass (g)
SBN-6-30-A	M6	30	45	24	22	192
SBN-8-30-A	M8	30	45	24	22	172
SBN-10-30-A	M10	30	50	28	22	167
SBN-12-30-A	M12	30	50	28	22	134

Unit : mm

● Part number specification

SBN-10-30-A

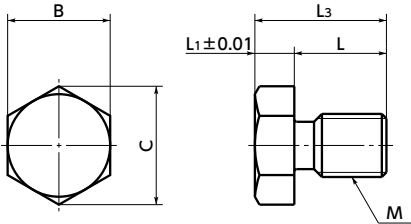
Product Code 1 2 Coarse Thread Type

Cleanroom Wash & Packaging → P.807 Screw Combination → P.813 Screw Length Adjustment → P.811 Vibration Resistant → P.810

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

SPM Stop Pin

WEB Selection Tool WEB CAD Download



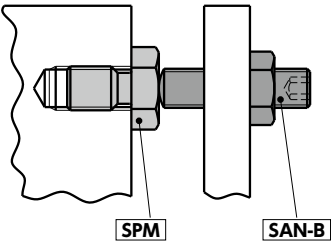
- Use this as a recipient of the stopper bolt **SSB-A** (→ P.537) **SSB-B** (→ P.538) and stopper screw **SAN-B** (→ P.541).
- The hexagon head end face has already been quenched. It is highly abrasion-resistant.

- Material/Finish RoHS2 Compliant

	SPM
Main body	S45C end face quenching (hardness: 35 HRC or above) - Polishing Trivalent Chromate Treatment

Unit : mm							
Part Number	M (coarse)	L3	L1	L	B	C	Mass (g)
SPM-M3	M3	7	2	5	6	6.9	0.6
SPM-M4	M4	8.8	2.8	6	7	8.1	1.3
SPM-M5	M5	10.5	3.5	7	8	9.2	2.4
SPM-M6	M6	12	4	8	10	11.5	4.5
SPM-M8	M8	15	5	10	13	15	9.5
SPM-M10	M10	20	6	14	17	19.6	20
SPM-M12	M12	23	7	16	19	21.9	31

- Usage example
In combination with a stopper screw **SAN-B**.



- Part number specification

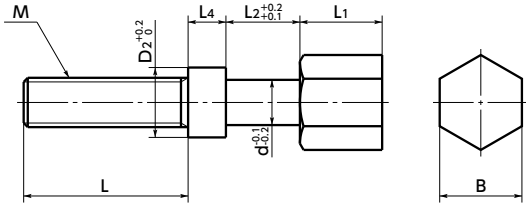
SPM - M10

Product Code

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Not Available	Not Available	Not Available	Available / Add'l charge

SAT Adjust Bolt

WEB Selection Tool WEB CAD Download



- For work and jig locating and centering, etc.
- Please combine with the block **SAK-A** **SAK-B**.
→ P.545
- Adjust bolt **SAT** and block **SAK-A** **SAK-B** combination

Part Number	Blocks for applicable adjust bolt	
SAT-M6	SAK-6-A	SAK-6-B
SAT-M8	SAK-8-A	SAK-8-B
SAT-M10	SAK-10-A	SAK-10-B
SAT-M12	SAK-12-A	SAK-12-B

- Material/Finish RoHS2 Compliant

	SAT
Main body	S45C Nickel Plating

Unit : mm													
Part Number	M (coarse)	L					L4	L1	D2	B	d	L2	Mass (g)
SAT-M6	M6	20	30	35	40	50	4.6	10	8.5	10	5.5	9	14 - 20.5
SAT-M8	M8		30		40	50	6	15	11.5	13	7.5	12	36 - 48
SAT-M10	M10		30		40	50	7	15	15.5	17	9.5	16	64 - 82
SAT-M12	M12		30		40	50	7	20	17.5	19	11.5	19	100 - 125

- Part number specification

SAT - M8 - 40

Product Code

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Not Available	Not Available	Available / Add'l charge	Available / Add'l charge

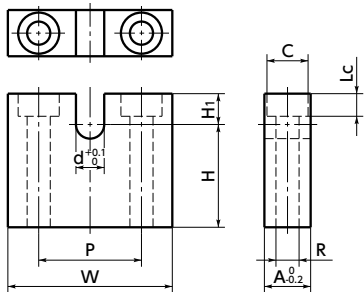
SAK-A / SAK-B Block for Adjust Bolt



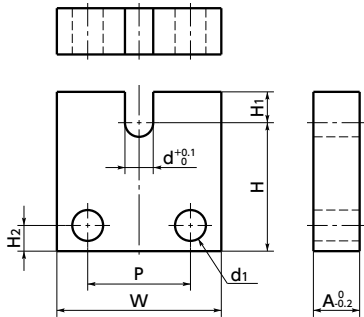
WEB Selection Tool

WEB CAD Download

SAK-A



SAK-B



- Block for fixing Adjust bolt **SAT**.
- You can choose it from the following two types according to your application. **3**
 - SAK-A** — Mounting from above
 - SAK-B** — Mounting from front
- Please combine with the adjust bolt **SAT**.
→ P.544

Material/Finish		RoHS2 Compliant
SAK-A / SAK-B		
Main body	SS400 Nickel Plating	

SAK-A Mounting from above

Part Number	Nominal	1	H	2		A	H ₁	P	W	d	R	C	Lc	Mass (g)	
SAK-6-A	6		10		20	30	9	6	20	32	5.5	4.5	8	4.4	28 - 60
SAK-8-A	8		10		20	30	12	8	26	38	7.5	5.5	9.5	5.4	49 - 113
SAK-10-A	10			15		30	16	10	32	50	9.5	9	14	8.6	117 - 200
SAK-12-A	12			15		30	19	11	40	65	11.5	9	14	8.6	197 - 329

SAK-B Mounting from front

Part Number	Nominal	1	H	A	H1	H2	P	W	d	d1	Mass (g)
SAK-6-B	6		25	9	6	5	20	32	5.5	6	62
SAK-8-B	8		25	12	8	6	26	38	7.5	7	102
SAK-10-B	10		35	16	10	9	32	50	9.5	9.5	186
SAK-12-B	12		40	19	11	12	40	65	11.5	11.5	293

- Part number specification

SAK-10-30-A (For **SAK-A**)

Product Code **1 2 3**

SAK-8-B (For **SAK-B**)

Product Code **1 3**

Cleanroom Wash & Packaging → P.807	Screw Combination → P.813	Screw Length Adjustment → P.811	Vibration Resistant → P.810
Not Available	Not Available	Not Available	Not Available

Safety Precautions (Machine Elements)

In order to use our products safely, please read these "safety precautions", and "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 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.