

# SLIDE WAY SLIDE TABLE MINIATURE SLIDE GONIO WAY

## SLIDE WAY

STRUCTURE AND ADVANTAGES	G-2
TYPES	G-3
ACCURACY	G-4
RATED LIFE	G-4
LOAD RATING	G-4
STROKE	G-6
LUBRICATION AND DUST PREVENTION	G-6
MOUNTING	G-6
SHAPE OF MOUNTING SURFACE	G-7
INSTALLATION PROCEDURE OF NV TYPE	G-8
INSTALLATION PROCEDURE OF SV TYPE	G-9
SPECIAL MOUNTING SCREW BT TYPE	G-10
USE AND HANDLING PRECAUTIONS	G-11
DIMENSION TABLE	G-12~

## SLIDE TABLE

STRUCTURE AND ADVANTAGES	G-28
TYPES	G-29
ACCURACY	G-29
RATED LIFE	G-30
LOAD RATING	G-30
USE AND HANDLING PRECAUTIONS	G-30
SPECIAL REQUIREMENTS	G-31
DIMENSION TABLE	G-32~

## MINIATURE SLIDE

STRUCTURE AND ADVANTAGES	G-54
ACCURACY	G-55
LOAD RATING	G-55
RATED LIFE	G-55
MOUNTING	G-56
USE AND HANDLING PRECAUTIONS	G-57
DIMENSION TABLE	G-58~

## GONIO WAY

STRUCTURE AND ADVANTAGES	G-60
ACCURACY OF RVF TYPE	G-61
ACCURACY OF RV TYPE	G-61
RATED LIFE	G-61
MOUNTING OF RVF TYPE	G-62
MOUNTING OF RV TYPE	G-64
RVF TYPE 2 AXES AND SPECIAL REQUIREMENTS	G-66
USE AND HANDLING PRECAUTIONS	G-67
DIMENSION TABLE	G-68~

SLIDE WAY

## NIPPON BEARING

## SLIDE WAY

The NB slide way is a non-recirculating linear motion bearing utilizing precision rollers. It is used primarily in optical and measurement equipment where high precision movement is required.

## STRUCTURE AND ADVANTAGES

The NB slide way NV type comprises of precisely ground rails and R-retainers with built-in STUDROLLERS and precision rollers. The rails have been optimally designed so that the STUDROLLERS move smoothly, and the STUDROLLERS and precision rollers incorporated in the R-retainers enable slip-free operation between the raceway surface and the rollers resulting in motion with minimal frictional resistance.

SV and SVW types consist of precision ground rails and precision caged-rollers. Since caged-rollers do not recirculate, there is only a minimum frictional resistance fluctuation. Also, there is a minimum difference between the static and dynamic frictional resistances.

## Non-slip! STUDROLLER System (Rivet Roller Structure)

The STUDROLLER system is based on a new concept to provide complete prevention of roller cage slippage during operation. This system permits usage in all orientations and positions.

Figure G-1 STUDROLLER System



## Suitable for Minute Motion

Because the frictional resistance is extremely small and there is only little difference between the static and dynamic frictional resistances, the NB slide way is well suited for minute motion, resulting in highly accurate linear movement.

## Low-Speed Stability

Since the frictional resistance fluctuation is small even under low-load conditions, stable motion is obtained at from low to high speeds.

## High Rigidity and High Load Capacity

Compared to the ball elements, the rollers provide a larger contact area and less elastic deformation, thus the NB slide way has high rigidity and high load capacity. With new NV rail design, the roller contact area is increased by 30 to 58% (Figure G-2). The number of effective rollers is increased by narrowing the roller pitch. Thus, the NV type has the load rating that is 1.3 to 2.5 times that of the SV type.

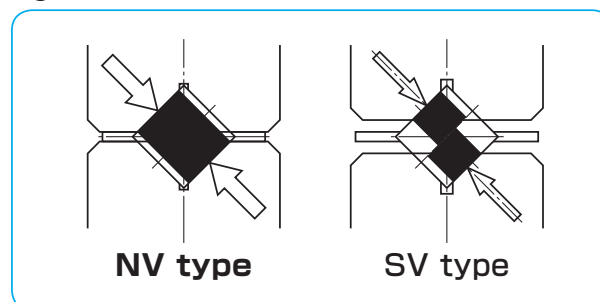
## Low Noise

The slide way never produces recirculation noise nor roller-contact noise due to a use of roller cage, resulting in quiet motion.

## All Stainless Steel Type Available

The anti-corrosion SVS/SVWS/NVS-RNS slide ways have all stainless steel components, making them ideal for use in clean room applications.

Figure G-2 Roller Contact Profile



SLIDE WAY

Figure G-3 Structure of NV type

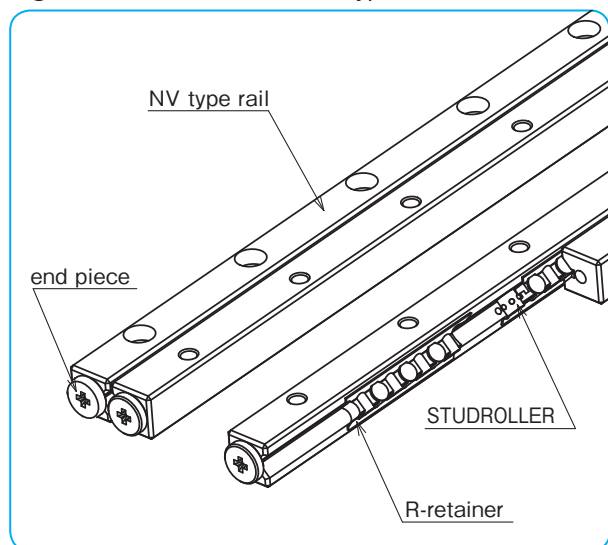
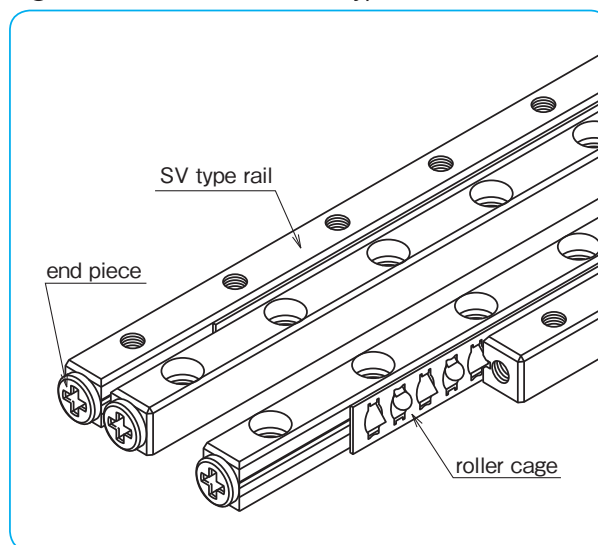


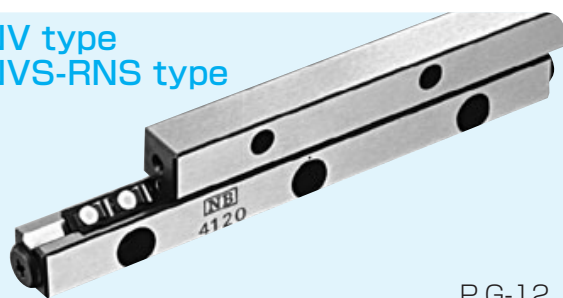
Figure G-4 Structure of SV type



※To the NV type, fastening plates are attached for the purpose of maintaining the center position of the R-retainer before assembly. Please see Installation Procedure on page G-7 and remove the fastening plates before use.

TYPES

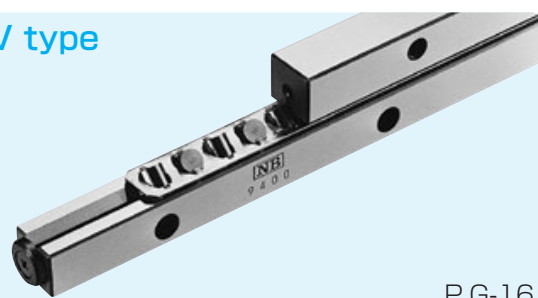
NV type  
NVS-RNS type



P.G-12

The NV slide way consists of a set of four rails, two R-retainers, and eight end pieces. It permits flexible design of the table which will best suit your application. The NVS-RNS type has all stainless steel components, which is suitable for anti-corrosion, high temperature and vacuum requirements.

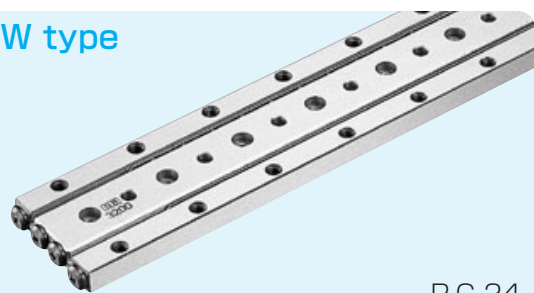
SV type



P.G-16

The SV slide way consists of a set of four rails, two R type roller cages, which have precision rollers in a cross arrangement, and eight end pieces. The all stainless steel option makes it suitable for use in corrosive environments.

SVW type



P.G-24

The SVW slide way consists of two SV-type rails, one W type rail, two R type roller cages, and eight end pieces. The use of a W-type rail serves for a compact design. The SVWS type is also available with all stainless steel components.

SLIDE WAY

## NIPPON BEARING

### ACCURACY

The accuracy of the slide way is represented as parallelism measured across the full length with a method shown in Figure G-6. It is classified as high (blank), precision (P), or ultra precision (UP). Special accuracies can also be accommodated. Please contact NB for details.

Figure G-5 Parallelism

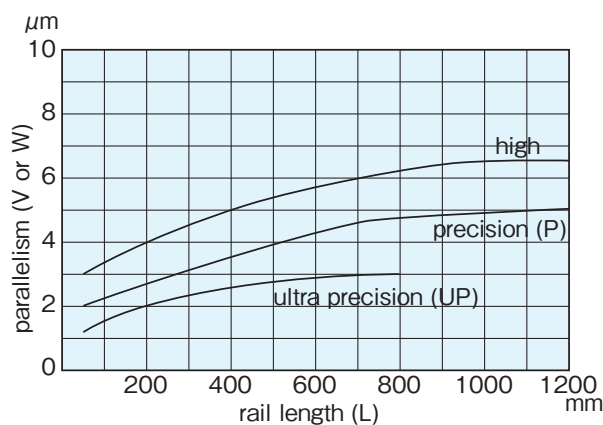
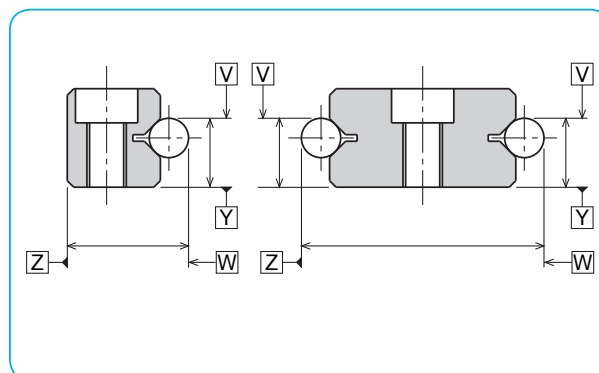


Figure G-6 Accuracy Measurement Method



Ultra precision grade is available from size 1 to size 9.

### RATED LIFE

The life of the slide way and the slide table is calculated with the following equations:

Rated Life

$$L = \left( \frac{f_T}{f_W} \cdot \frac{C}{P} \right)^{10/3} \cdot 50$$

L: rated life (km)  $f_T$ : temperature coefficient  $f_W$ : applied load coefficient  
C: basic dynamic load rating (N) P: applied load (N)  
※ Please refer to page Eng-5 for the coefficients.

Life Time

$$L_h = \frac{L \cdot 10^3}{2 \cdot \ell_s \cdot n_1 \cdot 60}$$

$L_h$ : life time (hr)  $\ell_s$ : stroke length (m)  
 $n_1$ : number of cycles per minute (cpm)

### LOAD RATING

The load rating for the slide way is obtained using the equations listed in Table G-1.

Table G-1 Load Rating

condition	double-rail parallel usage
direction of load	
basic dynamic load rating C	$C = \left\{ 2P \left( \frac{Z}{2} - 1 \right) \right\}^{1/36} \cdot \left( \frac{Z}{2} \right)^{3/4} \cdot 2^{7/8} \cdot C_1$
basic static load rating $C_0$	$C_0 = \frac{Z}{2} \cdot C_{01} \cdot 2$
allowable load F	$F = \frac{Z}{2} \cdot F_1 \cdot 2$

C: basic dynamic load rating (N)  
 $C_0$ : basic static load rating (N)  
F: allowable load (N)  
 $C_1$ : basic dynamic load rating per roller (N)  
 $C_{01}$ : basic static load rating per roller (N)  
 $F_1$ : allowable load per roller (N)  
Z: number of rollers per cage  
Z/2: number of effective rollers (round down to whole number)  
P: roller pitch (mm)

SLIDE WAY

The load rating of the NV type differs depending on the direction of the load.

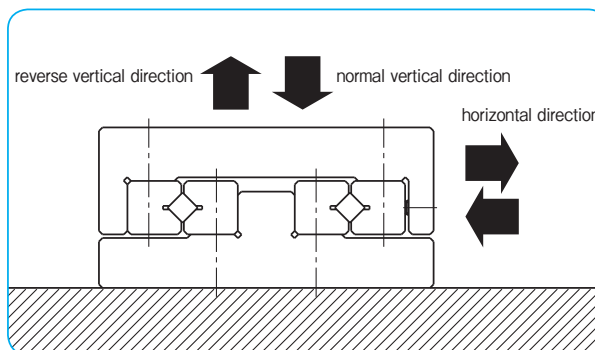
Table G-2 Change of Load Rating Corresponding to Load Direction

basic dynamic load rating	normal vertical direction	$1.0 \times C$
	horizontal direction	$0.85 \times C$
	reverse vertical direction	$0.7 \times C$
basic static load rating	normal vertical direction	$1.0 \times C_0$
	horizontal direction	$0.85 \times C_0$
	reverse vertical direction	$0.7 \times C_0$

※There may be a difference depending on the size. Please contact NB for details.

Consideration has been given to holes for STUDROLLERS in the raceway surface in calculation of load ratings.

Figure G-7 Direction of Load



## R·RS TYPE

– Standard Roller Cage –  
part number structure

example **RS 6-15Z**

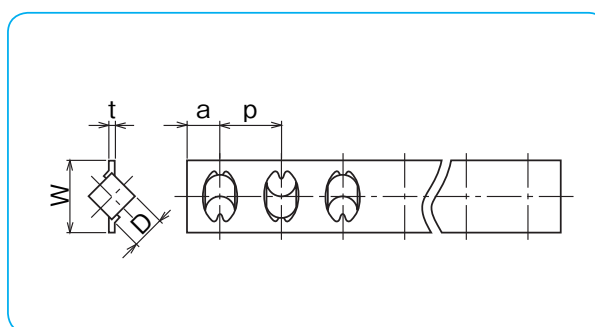
specification

R: standard roller

RS: stainless steel roller

number of rollers

size



part number		D	t	W	p	a	C <sub>1</sub>	C <sub>01</sub>	F <sub>1</sub>
standard	anti-corrosion	mm	mm	mm	mm	mm	N	N	N
R 1	RS 1	1.5	0.2	3.8	2.5	2	154	119	39.6
R 2	RS 2	2	0.3	5.6	4	2.5	360	293	97.6
R 3	RS 3	3	0.4	7.6	5	3	824	649	216
R 4	RS 4	4	0.4	10.4	7	4.5	1,660	1,320	440
R 6	RS 6	6	0.7	14	8.5	5.5	3,840	2,960	986
R 9	RS 9	9	0.7	19	14	7.5	9,330	7,070	2,350
R12	RS12	12	1.0	25	20	10	18,900	14,500	4,830

cage material: stainless steel C<sub>1</sub>: dynamic load rating per roller C<sub>01</sub>: static load rating per roller  
F<sub>1</sub>: allowable load per roller

## RA·RAS TYPE

– Aluminum Roller Cage –  
part number structure

example **RAS 6-15Z**

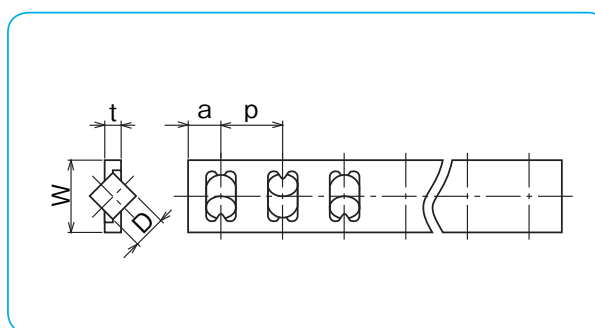
specification

RA: standard roller

RAS: stainless steel roller

number of rollers

size



part number		D	t	W	p	a	C <sub>1</sub>	C <sub>01</sub>	F <sub>1</sub>
standard	anti-corrosion	mm	mm	mm	mm	mm	N	N	N
RA3	RAS3	3	1.2	7.6	5	3	824	649	216
RA4	RAS4	4	1.4	10.4	7	4.5	1,660	1,320	440
RA6	RAS6	6	2.1	14	8.5	5.5	3,840	2,960	986
RA9	RAS9	9	3.0	20	14	7.5	9,330	7,070	2,350

cage material: aluminum alloy C<sub>1</sub>: dynamic load rating per roller C<sub>01</sub>: static load rating per roller  
F<sub>1</sub>: allowable load per roller

SLIDE WAY

## NIPPON BEARING

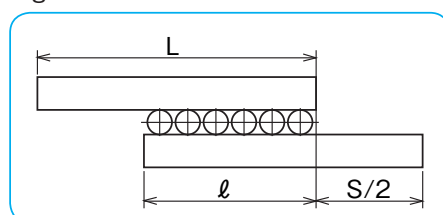
### STROKE

Please contact NB for a non-standard stroke length for the NV type. When the stroke of SV type or SVW type is changed, the stroke length must be determined and the load rating should be re-estimated as follows.

#### Stroke of SV type, SVW type

When the slide way moves along the rail, the cage moves half the distance traveled by the slide way in the same direction. Therefore, although the work may be fixed on the table, the distance between the load center and the cage center will change. To achieve stable accuracy, determine the stroke and the length of the rail as follows.

Figure G-8



Rail Length (L)

When the stroke is 400mm or over

$$S \leq L/1.5$$

When the stroke is less than 400 mm,

$$S \leq L$$

l: cage length (mm) S: stroke (mm)  
L: rail length (mm)

Cage length (l)

$$l \leq L - \frac{S}{2}$$

Number of rollers (Z)

$$Z = \frac{l - 2a}{p} + 1$$

a,p: Please refer to roller cage dimensions (page G-5)

### LUBRICATION AND DUST PREVENTION

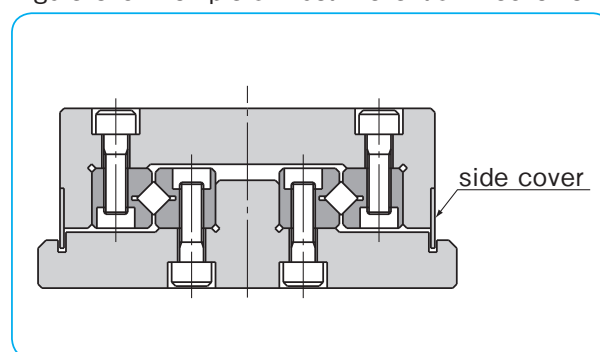
#### Lubrication

The slide way is pre-lubricated with lithium soap-based grease No.00 prior to shipment for immediate use. Make sure to relubricate with a similar type of grease periodically according to the operating conditions. NB also provides low dust generation grease. Please refer to page Eng-40 for details.

#### Dust Prevention

Foreign particles or dust in the slide way affects the motion accuracy and shortens the life time. In a harsh environment please provide side covers for dust prevention. (refer to Figure G-9)

Figure G-9 Example of Dust Prevention Mechanism



### MOUNTING

#### Example

Figure G-10 NV type, SV type

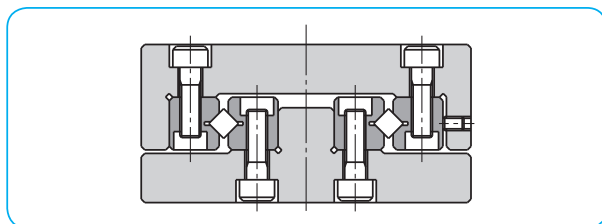
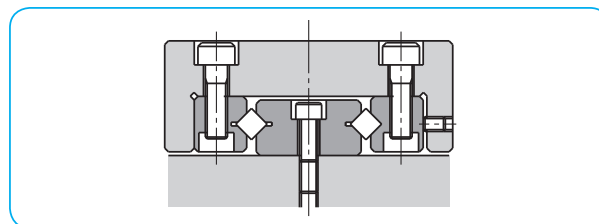


Figure G-11 SVW type

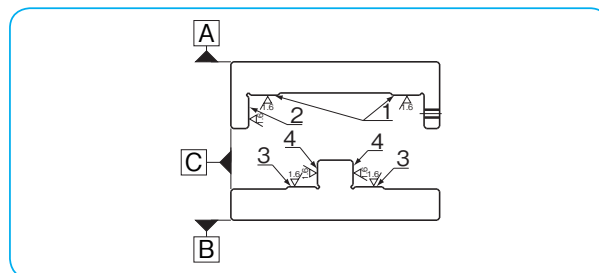


#### Accuracy of Mounting Surface

To maximize the performance of the NB slide way, it is recommended that the accuracy of the mounting surface to be equal to or greater than the degree of parallelism of the slide way.

- Parallelism of surface 1 against surface A
- Perpendicularity of surface 2 against surface A
- Parallelism of surface 3 against surface B
- Perpendicularity of surface 4 against surface B
- Parallelism of surface 2 against surface C
- Parallelism of surface 4 against surface C

Figure G-12 Accuracy of Mounting Surface



SLIDE WAY

SHAPE OF MOUNTING SURFACE

Slide way NV and SV types are generally mounted by contacting the reference surface of the rail to the shoulder provided on the mounting surface. For the shoulder shape, provide relief at the corner as shown in Figure G-13 so that it does not interfere with the reference corner of the rail.

If it is necessary to mount NV or SV types without relief, then it can be used with rounded corners as shown in Figure G-14. Table G-3 shows the corner radius of the mounting surface.

Figure G-13 Relief on the Mounting Surface

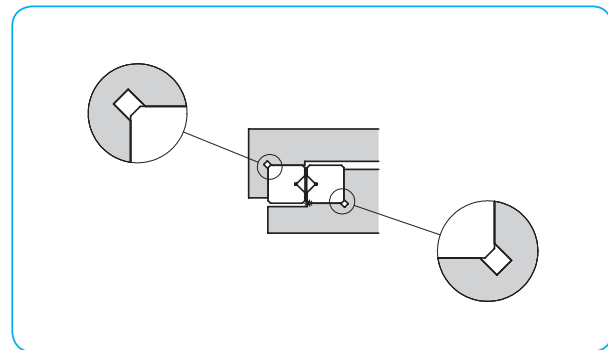


Figure G-14 Corner Radius

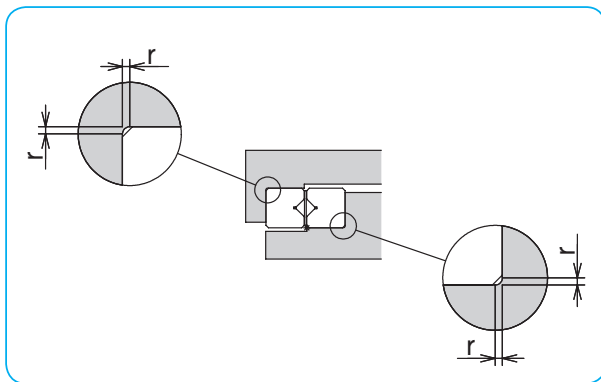


Table G-3 Maximum Corner Radius unit : mm

part number	maximum corner radius r
NV1, SV1	0.1
NV2, SV2	
NV3, SV3	0.2
NV4, SV4	0.4
NV6, SV6	0.7
NV9, SV9	0.8
NV12, SV12	1.0

## NIPPON BEARING

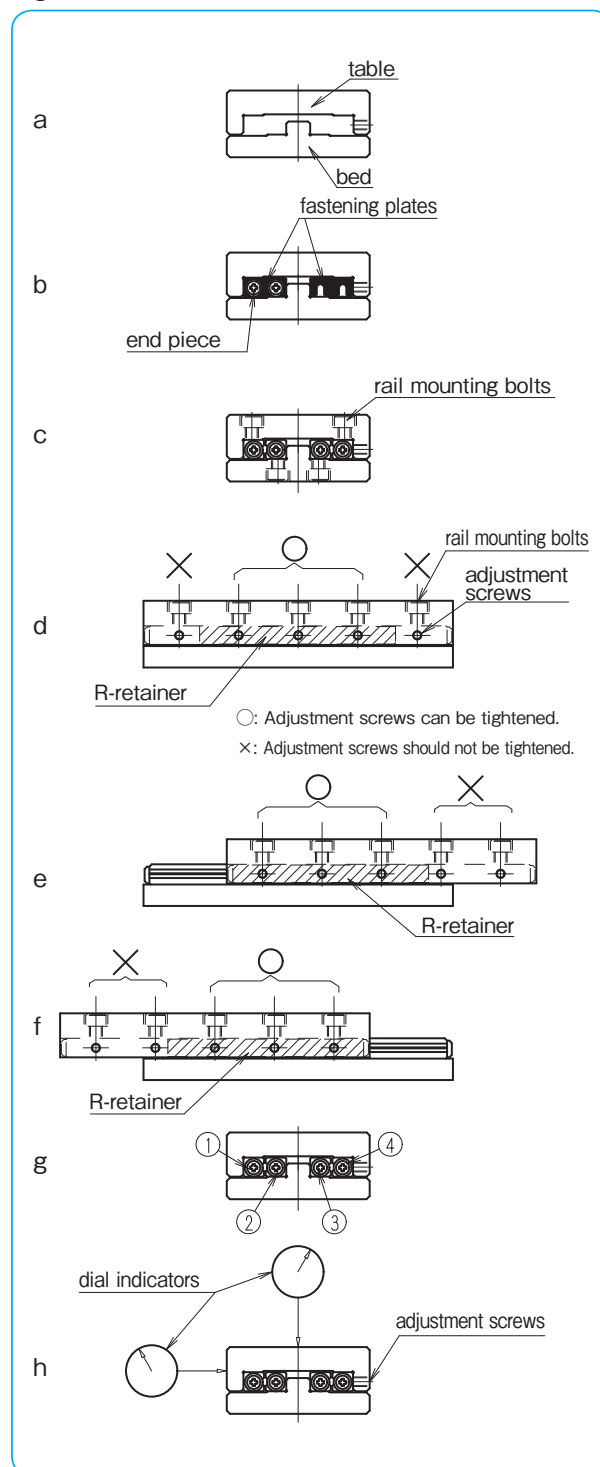
## INSTALLATION PROCEDURE OF NV TYPE

## Installation Procedure

※Please read "Use and Handling Precautions" before installation.

- ( 1 ) Remove burrs, scratches, and dust from the rail-mounting surface of the bed and the table, be careful to prevent contamination during assembly.
- ( 2 ) Apply low-viscosity oil to the contact surfaces, and align the bed and the table. (Figure G-13a)
- ( 3 ) Set the reference surface onto the mounting surface with the rails fastened. Set the table in the center position, and tighten the adjustment screws lightly so that almost no gap remains. (Figure G-13b)
- ( 4 ) Keep the table in the center, tighten the rail mounting bolts lightly, loosen the end pieces of both ends, and remove the fastening plates. Following this, lightly retighten the end pieces.
- ( 5 ) While maintaining the conditions of (4), gently move the assembly through its stroke to check if the maximum stroke is secured, and if there is no irregularity.
- ( 6 ) Move the table to the center and tighten only the adjustment screws on the R-retainer with the recommended torque shown in Table G-3. (Figure G-13c)
- ( 7 ) Gently move the table to one stroke end, and check that the table has surely come into contact with the external mechanical stopper. Following this, tighten the adjustment screws in the same manner as (6). (Figure G-13d)
- ( 8 ) Move the table to the opposite stroke end, and tighten in the same manner as (6). (Figure G-13e)
- ( 9 ) Fasten the mounting screws on rails 1, 2, and 3 by tightening with the recommended torque shown in Table G-4. (Figure G-13f)
- (10) Set the dial indicators to the center of the table and to the side (reference surface) of the table. (Figure G-13g)
- (11) Perform the final preload adjustment. While moving the table back and forth, repeat steps (6) to (8) until the dial indicators show a minimum deviation.
- (12) Fasten rail 4 securely with the recommended torque. As for the adjustment screws, successively tighten the rail mounting bolts on the R-retainer by moving the table.
- (13) Recheck the motion accuracy while moving the table.
- (14) Tighten the end pieces finally.

Figure G-15 Installation Method



As d, e, f in the Figure shows it is recommended to match the position and pitch of adjustment screws with rail mounting bolts, and also the height of them with the same as the center of raceway groove.



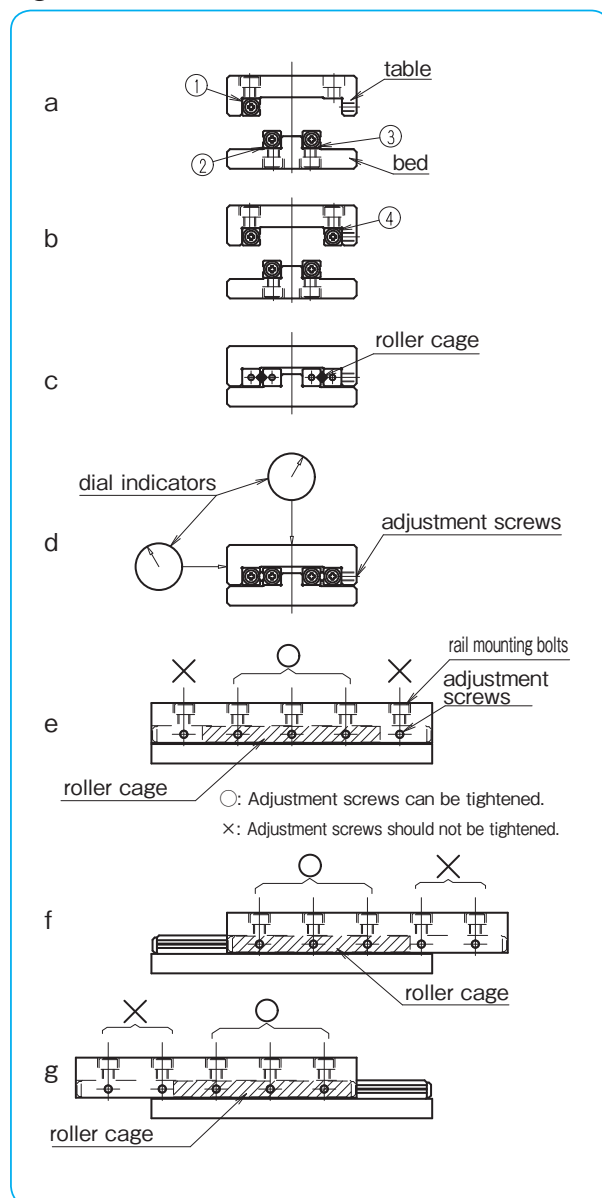
## SLIDE WAY

## INSTALLATION PROCEDURE OF SV TYPE

## Installation Procedure

- ( 1 ) Remove burrs, scratches, and dust from the rail-mounting surface of the bed and the table, be careful to prevent contamination during assembly.
- ( 2 ) Apply low-viscosity oil to contact surfaces. Attach rails ①-③ by tightening bolts with the recommended torque (Table G-4). (Figure G-14a)
- ( 3 ) Temporarily attach rail ④ on the adjustment side. (Figure G-14b)
- ( 4 ) Remove end pieces on one end. Carefully insert roller cages between rails. (Figure G-14c)
- ( 5 ) Re-attach end pieces.
- ( 6 ) Move the table slowly to each stroke end to position roller cages at the center of the rails.
- ( 7 ) Set the dial indicators to the center of the table and to the side (reference surface) of the table. (Figure G-14d)
- ( 8 ) Move the table to one stroke end. Lightly tighten adjustment screws on the roller cage. (Figure G-14e)
- ( 9 ) Move the table to the opposite stroke end. Similarly lightly tighten adjustment screws on the roller cage. (Figure G-14f)
- (10) Move table to the center and lightly tighten center adjustment screws. (Figure G-14g)
- (11) Repeat steps (8) ~ (10) until the indicators show a minimum deviation. Please do not apply an excessive preload.
- (12) Make final adjustment of preload. Repeat steps (8) ~ (10) and tighten the adjustment screws with the recommended torque listed in Table G-3.
- (13) Fasten the rail ④ securely with the recommended torque. As with the adjustment screws, successively tighten the rail mounting bolts by moving the table.

Figure G-16 Installation Method



As e, f, g in the Figure shows it is recommended to match the position and pitch of adjustment screws with rail mounting bolts, and also the height of them with the same as the center of raceway groove.

Table G-4 Recommended Torque for Adjustment Screw Unit: N · m

part number	size	torque
NV1, SV1	M2	0.008
NV2, SV2	M3	0.012
NV3, SV3	M4	0.05
NV4, SV4	M4	0.08
NV6, SV6	M5	0.20
NV9, SV9	M6	0.40
NV12, SV12	M6	0.80

Table G-5 Recommended Torque for Rail Mounting Bolt Unit: N · m

size	torque
M2	0.4
M3	1.4
M4	3.2
M5	6.6
M6	11.2
M8	27.6
M10	55.0

(for steel alloy screw)

NIPPON BEARING

SPECIAL MOUNTING SCREW BT TYPE

In case of mounting slide way by screws from the counterbore side, threaded holes become the pilot holes. Thus, pilot hole's clearance will be less than a standard clearance hole for a screw. NB offers reduced shoulder screws for mounting SlideWay from bottom when larger screw clearance is required due to preload adjustment or inaccuracy of mating threaded holes. This special mounting screw made of alloy steel is stocked, and custom stainless steel version is available as a special order. Please contact NB for details.

Figure G-17 Special Mounting Screw

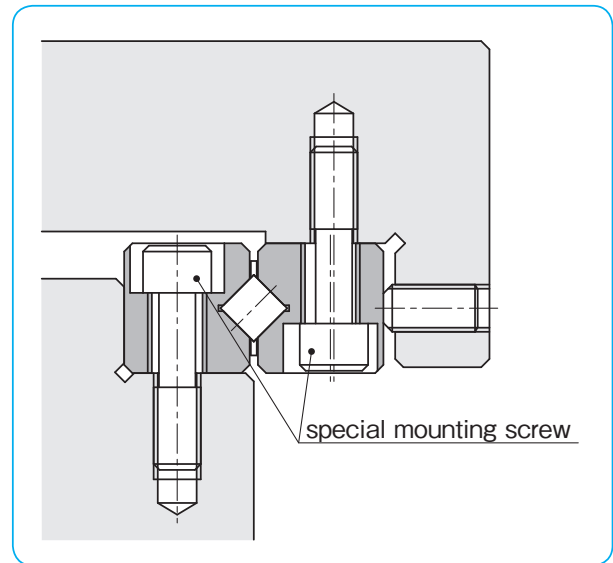
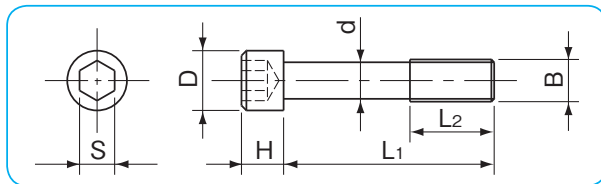


Table G-6 Special Mounting Screw

part number	B	d mm	D mm	H mm	L1 mm	L2 mm	S mm	applicable size
<b>BT 3</b>	M3	2.3	5	3	12	5	2.5	<b>NV 3, SV 3</b>
<b>BT 4</b>	M4	3.1	5.8	4	15	7	3	<b>NV 4, SV 4</b>
<b>BT 6</b>	M5	3.9	8	5	20	8	4	<b>NV 6, SV 6</b>
<b>BT 9</b>	M6	4.6	8.5	6	30	12	5	<b>NV 9, SV 9</b>
<b>BT12</b>	M8	6.25	11.3	8	40	17	6	<b>NV12, SV12</b>

## SLIDE WAY

## USE AND HANDLING PRECAUTIONS

### Careful Handling

Dropping the slide way causes the rolling elements to make dents in the raceway surface. This will prevent smooth motion and will also affect accuracy. Be sure to handle the product with care.

The NV type is packaged as a set of rails and R-retainers. Do not separate or disassemble until assembly/installation is completed. Precision is not guaranteed if disassembled.

### Fastening Plates

For the NV type, fastening plates are attached at both end faces of the rails to maintain the R-retainer center position prior to assembly. The fastening plates are not required after the NV type is mounted to a table and bed, however, when removal of the NV type is necessary such as when it will be reassembled, be sure to return the R-retainer to the proper center position, secure the fastening plates with the end pieces, and then remove the NV type.

### Specified Allowable Stroke

For the NV type, exceeding the specified stroke (over-stroke) shall cause the raceway surface of the rail to be damaged and the performance of the STUDROLLER to drastically deteriorate. Be sure to provide external mechanical stoppers.

### Adjustment

Using the product with insufficient accuracy of the mounting surface or before adjusting the preload will cause the motion accuracy of the product to drop and will have a negative influence upon product life and accuracy. Make sure to assemble, install, and adjust the product with care.

### Caution against Excess Preload

It is essential to give preload on the Slide Way products in order to assure rigidity and accuracy. However, excess preload causes damage on the raceways and roller cages/R-retainers. On installation, please follow the installation procedure and recommended torque on page G-9.

### Operating Temperature

The NV type uses resin parts. Please use the product in environments that are lower than 80°C .

### Use as a Set

The accuracy of the rails has been matched within each set. Note that the accuracy will be affected when the rails of different sets are combined.

### Allowable Load

The allowable load is a load under which the sum of elastic deformations of the rolling element and the raceway in the contact area subject to the maximum contact stress is small enough to guarantee smooth rolling movement. When very smooth and highly accurate linear motion is required, make sure to use the product within the allowable load.

### Cage Slippage

For the SV/SVW type, the cage can slip under high-speed motion, vertical application, unbalanced-loading, and vibrating conditions. It is advised that the stroke be set with sufficient margin and an excessive preload should be avoided.

It is also recommended that the rails be cycled to perform the maximum stroke several times, so that the cage returns to its center position.

### End Pieces

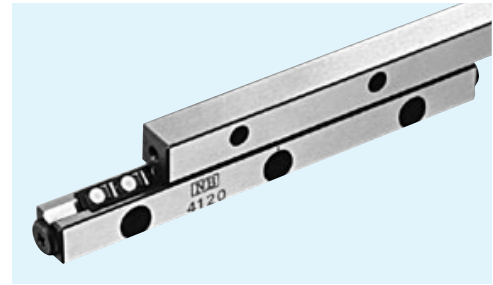
End pieces are attached to each end of the slide way to prevent removal of the cage. Do not use them as a mechanical stopper.

### Knock Pin Hole

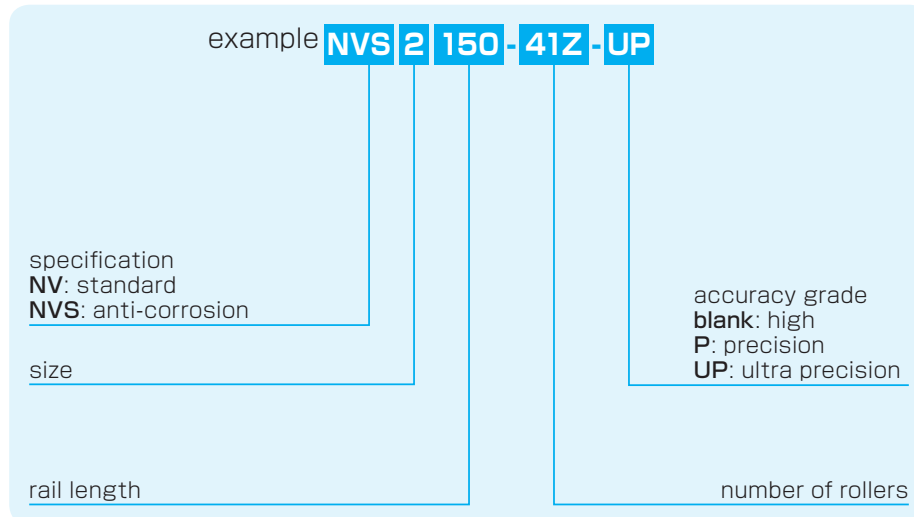
When using SVW type knock pin holes to attach a slide way, please do the hole-machining on the mounting surface after attaching the W type rail. After machining, remove the chips completely and wash as required.

NIPPON BEARING

**NV TYPE**  
-NV1/NV2/NV3-



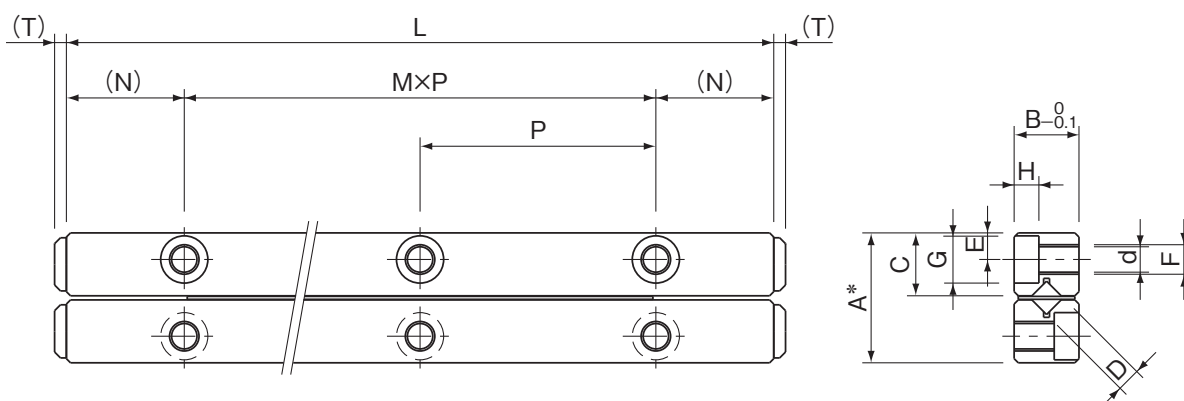
part number structure



※Stainless steel rollers are used for anti-corrosion type.

part number		stroke ST mm	roller diameter D mm	number of rollers Z	L mm	A mm	B mm	C mm
standard	anti-corrosion							
<b>NV 1020- 5Z</b>	<b>NVS 1020- 5Z</b>	12	1.5	5	20	8.5	4	4.03
<b>1030- 7Z</b>	<b>1030- 7Z</b>	23		7	30			
<b>1040- 11Z</b>	<b>1040- 11Z</b>	28		11	40			
<b>1050- 15Z</b>	<b>1050- 15Z</b>	34		15	50			
<b>1060- 19Z</b>	<b>1060- 19Z</b>	40		19	60			
<b>1070- 23Z</b>	<b>1070- 23Z</b>	45		23	70			
<b>1080- 27Z</b>	<b>1080- 27Z</b>	51		27	80			
<b>NV 2030- 5Z</b>	<b>NVS 2030- 5Z</b>	18		2	5			
<b>2045- 9Z</b>	<b>2045- 9Z</b>	25	9		45			
<b>2060- 15Z</b>	<b>2060- 15Z</b>	30	15		60			
<b>2075- 19Z</b>	<b>2075- 19Z</b>	40	19		75			
<b>2090- 23Z</b>	<b>2090- 23Z</b>	50	23		90			
<b>2105- 27Z</b>	<b>2105- 27Z</b>	65	27		105			
<b>2120- 33Z</b>	<b>2120- 33Z</b>	70	33		120			
<b>2135- 37Z</b>	<b>2135- 37Z</b>	80	37		135			
<b>2150- 41Z</b>	<b>2150- 41Z</b>	90	41		150			
<b>2165- 47Z</b>	<b>2165- 47Z</b>	95	47		165			
<b>2180- 51Z</b>	<b>2180- 51Z</b>	100	51		180			
<b>NV 3050- 9Z</b>	<b>NVS 3050- 9Z</b>	25	3	9	50	18	8	8.65
<b>3075- 13Z</b>	<b>3075- 13Z</b>	48		13	75			
<b>3100- 19Z</b>	<b>3100- 19Z</b>	60		19	100			
<b>3125- 23Z</b>	<b>3125- 23Z</b>	83		23	125			
<b>3150- 29Z</b>	<b>3150- 29Z</b>	90		29	150			
<b>3175- 35Z</b>	<b>3175- 35Z</b>	103		35	175			
<b>3200- 41Z</b>	<b>3200- 41Z</b>	113		41	200			
<b>3225- 43Z</b>	<b>3225- 43Z</b>	150		43	225			

SLIDE WAY



High grade: A-0.2 Precision grade (P): A-0.1 Ultra Precision grade (UP): A-0.0  
 One set consists of 4 rails, 2 R-retainers, and 8 end pieces.

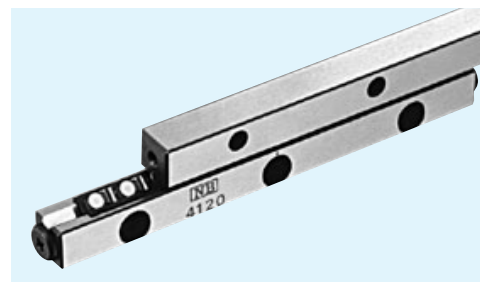
major dimensions								basic load rating		allowable	mass	size
M×P	N	E	F	d	G	H	T	dynamic	static	load	(one set)	
mm	mm	mm		mm	mm	mm	mm	C	Co	F	g	
								N	N	N		
1×10								734	849	283	9	1020
2×10								1,250	1,690	566	13	1030
3×10								1,720	2,540	849	18	1040
4×10	5	1.8	M2	1.65	3	1.4	0.8	2,160	3,390	1,130	22	1050
5×10								2,560	4,240	1,410	26	1060
6×10								2,960	5,090	1,690	31	1070
7×10								3,330	5,940	1,980	35	1080
1×15								1,360	1,520	509	33	2030
2×15								2,330	3,050	1,010	49	2045
3×15								3,990	6,110	2,030	62	2060
4×15								4,740	7,630	2,540	74	2075
5×15								5,460	9,160	3,050	91	2090
6×15	7.5	2.5	M3	2.55	4.4	2	1.2	6,160	10,600	3,560	103	2105
7×15								6,830	12,200	4,070	120	2120
8×15								7,490	13,700	4,580	132	2135
9×15								8,130	15,200	5,090	149	2150
10×15								9,370	18,300	6,110	161	2165
11×15								9,970	19,800	6,620	174	2180
1×25								6,150	8,060	2,680	97	3050
2×25								8,440	12,100	4,030	140	3075
3×25								12,500	20,100	6,720	192	3100
4×25								14,400	24,200	8,060	245	3125
5×25	12.5	3.5	M4	3.3	6	3.1	2	16,300	28,200	9,410	290	3150
6×25								19,800	36,300	12,100	337	3175
7×25								21,500	40,300	13,400	385	3200
8×25								23,200	44,300	14,700	434	3225

1N≐0.102kgf

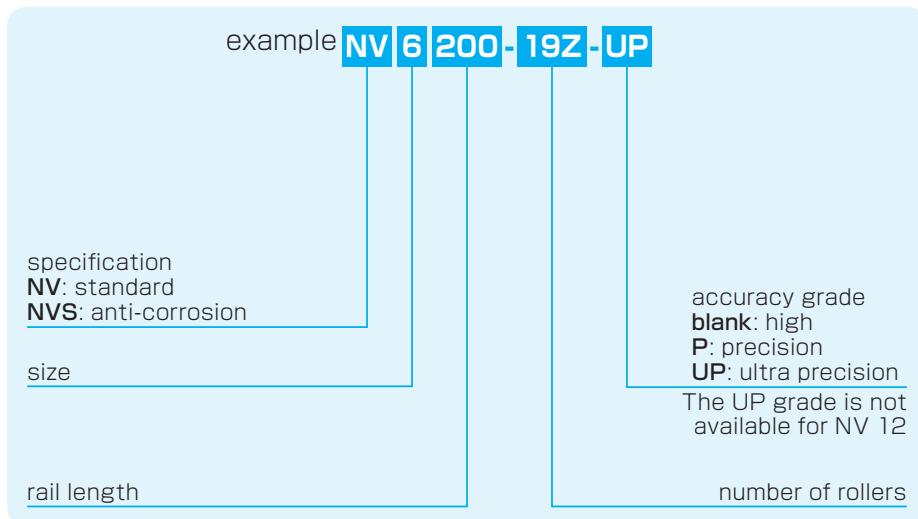
NIPPON BEARING

NV TYPE

-NV4/NV6/NV9/NV12-



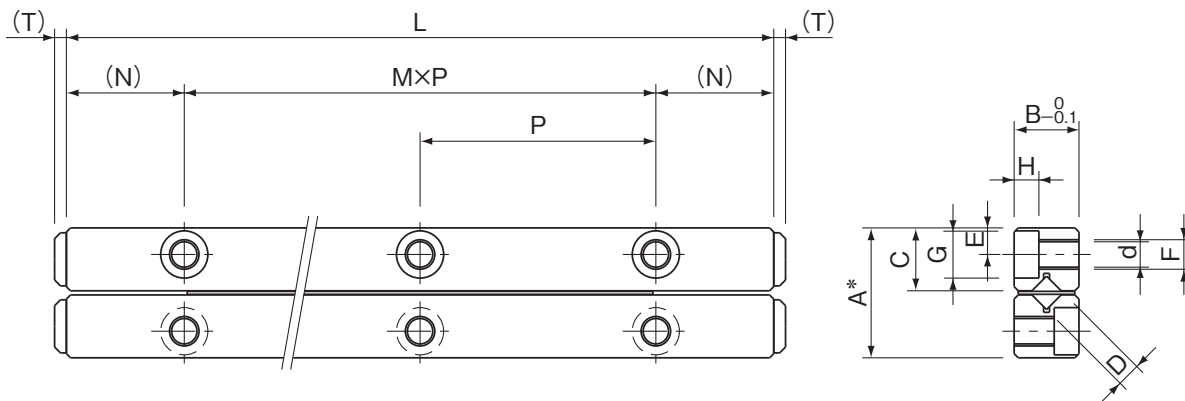
part number structure



※Stainless steel rollers are used for anti-corrosion type.

part number		stroke	roller diameter	number of rollers	L	A	B	C
standard	anti-corrosion	ST mm	D mm	Z	mm	mm	mm	mm
<b>NV4080- 9Z</b>	<b>NVS4080- 9Z</b>	60	4	9	80	22	11	10.65
<b>4120-17Z</b>	<b>4120-17Z</b>	75		17	120			
<b>4160-23Z</b>	<b>4160-23Z</b>	105		23	160			
<b>4200-29Z</b>	<b>4200-29Z</b>	130		29	200			
<b>4240-37Z</b>	<b>4240-37Z</b>	143		37	240			
<b>4280-43Z</b>	<b>4280-43Z</b>	170		43	280			
<b>NV6100- 9Z</b>	<b>NVS6100- 9Z</b>	63	6	9	100	31	15	15.15
<b>6150-15Z</b>	<b>6150-15Z</b>	85		15	150			
<b>6200-19Z</b>	<b>6200-19Z</b>	135		19	200			
<b>6250-25Z</b>	<b>6250-25Z</b>	158		25	250			
<b>6300-31Z</b>	<b>6300-31Z</b>	180		31	300			
<b>6350-35Z</b>	<b>6350-35Z</b>	230		35	350			
<b>6400-39Z</b>	<b>6400-39Z</b>	275	39	400				
<b>NV9200-13Z</b>	—	120	9	13	200	44	22	21.5
<b>9300-21Z</b>	—	170		21	300			
<b>9400-29Z</b>	—	220		29	400			
<b>9500-35Z</b>	—	300		35	500			
<b>NV12300-15Z</b>	—	180	12	15	300	58	28	28.5
<b>12400-21Z</b>	—	230		21	400			
<b>12500-27Z</b>	—	280		27	500			
<b>12600-31Z</b>	—	380		31	600			

SLIDE WAY



High grade: A-0.2 Precision grade (P): A-0.1 Ultra Precision grade (UP): A-0.0  
 One set consists of 4 rails, 2 R-retainers, and 8 end pieces.

major dimensions								basic load rating		allowable	mass	size
M x P	N	E	F	d	G	H	T	dynamic	static	load	(one set)	
mm	mm	mm		mm	mm	mm	mm	C	Co	F	g	
								N	N	N		
1 x 40	20	4.5	M5	4.3	8	4.2	2	12,100	15,700	5,250	265	<b>4080</b>
2 x 40								20,700	31,500	10,500	400	<b>4120</b>
3 x 40								28,500	47,200	15,700	530	<b>4160</b>
4 x 40								32,100	55,100	18,300	660	<b>4200</b>
5 x 40								39,000	70,900	23,600	800	<b>4240</b>
6 x 40								45,600	86,600	28,800	930	<b>4280</b>
1 x 50	25	6	M6	5.2	9.5	5.2	3	29,600	37,500	12,500	650	<b>6100</b>
2 x 50								50,900	75,100	25,000	970	<b>6150</b>
3 x 50								60,600	93,900	31,300	1,300	<b>6200</b>
4 x 50								69,800	112,000	37,500	1,620	<b>6250</b>
5 x 50								87,400	150,000	50,100	1,940	<b>6300</b>
6 x 50								95,800	169,000	56,300	2,360	<b>6350</b>
7 x 50								104,000	187,000	62,600	2,780	<b>6400</b>
1 x 100	50	9	M8	6.8	10.5	6.2	4	96,100	128,000	42,600	2,720	<b>9200</b>
2 x 100								143,000	213,000	71,100	4,080	<b>9300</b>
3 x 100								186,000	298,000	99,500	5,440	<b>9400</b>
4 x 100								226,000	384,000	128,000	6,790	<b>9500</b>
2 x 100	50	12	M10	8.5	13.5	8.2	4	228,000	317,000	105,000	6,770	<b>12300</b>
3 x 100								271,000	397,000	132,000	9,040	<b>12400</b>
4 x 100								352,000	555,000	185,000	11,300	<b>12500</b>
5 x 100								391,000	635,000	211,000	13,560	<b>12600</b>

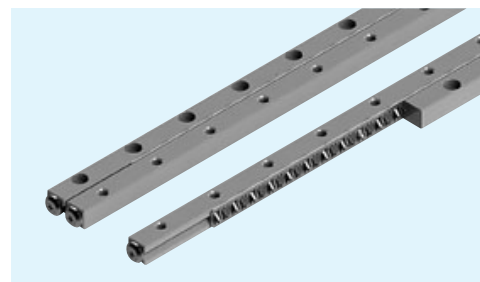
1N ≅ 0.102kgf

SLIDE WAY

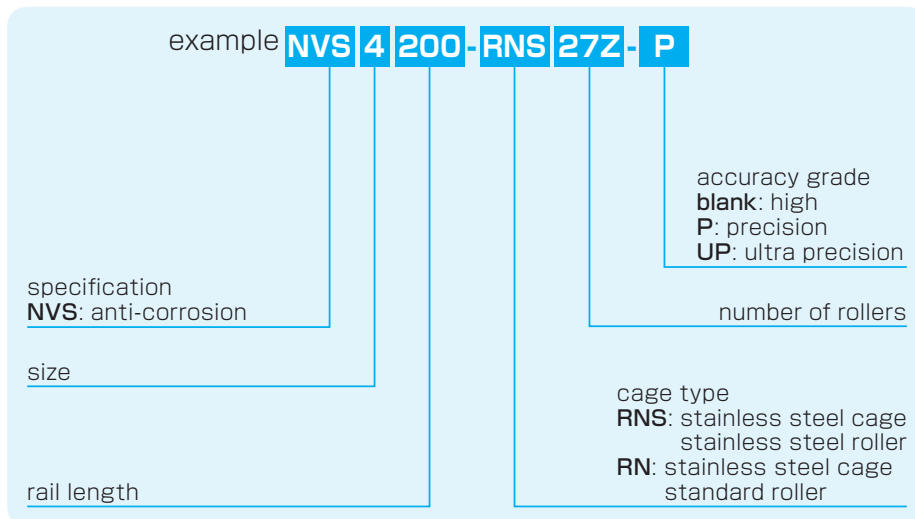
NIPPON BEARING

NVS-RNS TYPE

—Special Environments Type—



part number structure

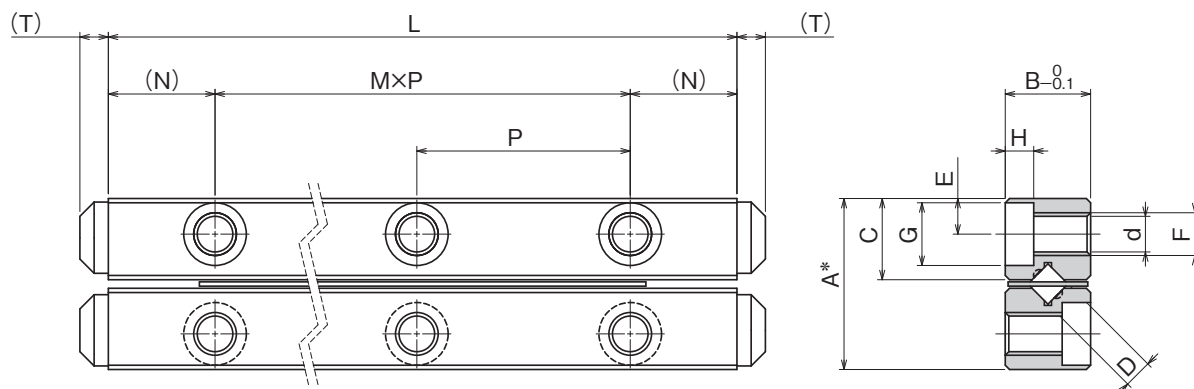


part number	stroke ST mm	roller diameter D mm	number of rollers Z	L mm	A mm	B mm	major dimensions			
							C mm	M×P mm	N mm	E mm
<b>NVS 2030-RNS 7Z</b>	15	2	7	30	12	6	5.7	1×15	7.5	2.5
<b>2045-RNS11Z</b>	20		11	45				2×15		
<b>2060-RNS13Z</b>	30		13	60				3×15		
<b>2075-RNS17Z</b>	40		17	75				4×15		
<b>2090-RNS21Z</b>	50		21	90				5×15		
<b>2105-RNS23Z</b>	65		23	105				6×15		
<b>2120-RNS27Z</b>	70		27	120				7×15		
<b>2135-RNS31Z</b>	80		31	135				8×15		
<b>2150-RNS33Z</b>	90		33	150				9×15		
<b>2165-RNS37Z</b>	95		37	165				10×15		
<b>2180-RNS43Z</b>	100		43	180				11×15		
<b>NVS 3050-RNS 9Z</b>	20		3	9				50		
<b>3075-RNS13Z</b>	38	13		75	2×25					
<b>3100-RNS17Z</b>	55	17		100	3×25					
<b>3125-RNS21Z</b>	70	21		125	4×25					
<b>3150-RNS25Z</b>	85	25		150	5×25					
<b>3175-RNS29Z</b>	103	29		175	6×25					
<b>3200-RNS33Z</b>	113	33		200	7×25					
<b>3225-RNS35Z</b>	150	35		225	8×25					
<b>NVS 4080-RNS 9Z</b>	58	4	9	80	22	11	10.65	1×40	20	4.5
<b>4120-RNS17Z</b>	60		17	120				2×40		
<b>4160-RNS21Z</b>	98		21	160				3×40		
<b>4200-RNS27Z</b>	115		27	200				4×40		
<b>4240-RNS31Z</b>	143		31	240				5×40		
<b>4280-RNS37Z</b>	170		37	280				6×40		

※Some specification values are different from those of NV standard type. Please contact NB for details.



SLIDE WAY



High: A-0.2 Precision (P): A-0.1 Ultra Precision (UP): A-0.1  
 One set consists of 4 rails, 2 cages, and 8 end pieces.

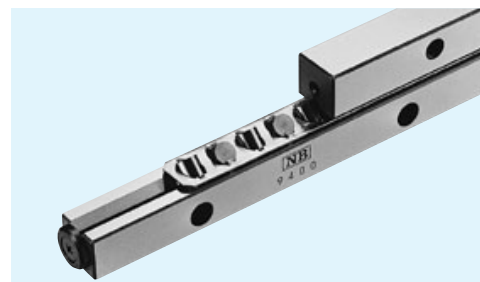
F	d mm	G mm	H mm	T mm	basic load rating		allowable load F N	mass (one set) g	size
					dynamic C N	static Co N			
M3	2.55	4.4	2	1.2	2,320	3,050	1,010	30	<b>2030</b>
					3,190	4,580	1,520	44	<b>2045</b>
					3,190	4,580	1,520	58	<b>2060</b>
					4,000	6,110	2,030	73	<b>2075</b>
					4,760	7,630	2,540	87	<b>2090</b>
					5,490	9,160	3,050	101	<b>2105</b>
					6,190	10,600	3,560	115	<b>2120</b>
					6,870	12,200	4,070	130	<b>2135</b>
					6,870	12,200	4,070	144	<b>2150</b>
					7,530	13,700	4,580	158	<b>2165</b>
M4	3.3	6	3.1	2	8,800	16,800	5,600	173	<b>2180</b>
					6,150	8,060	2,680	102	<b>3050</b>
					8,460	12,100	4,030	151	<b>3075</b>
					10,600	16,100	5,370	200	<b>3100</b>
					12,600	20,100	6,720	249	<b>3125</b>
					14,500	24,200	8,060	297	<b>3150</b>
					16,400	28,200	9,410	346	<b>3175</b>
					18,200	32,200	10,700	395	<b>3200</b>
M5	4.3	8	4.2	2	12,100	15,700	5,250	269	<b>4080</b>
					20,800	31,500	10,500	405	<b>4120</b>
					24,800	39,300	13,100	536	<b>4160</b>
					32,200	55,100	18,300	670	<b>4200</b>
					35,800	63,000	21,000	801	<b>4240</b>
					39,200	70,900	23,600	935	<b>4280</b>

1N ≅ 0.102kgf

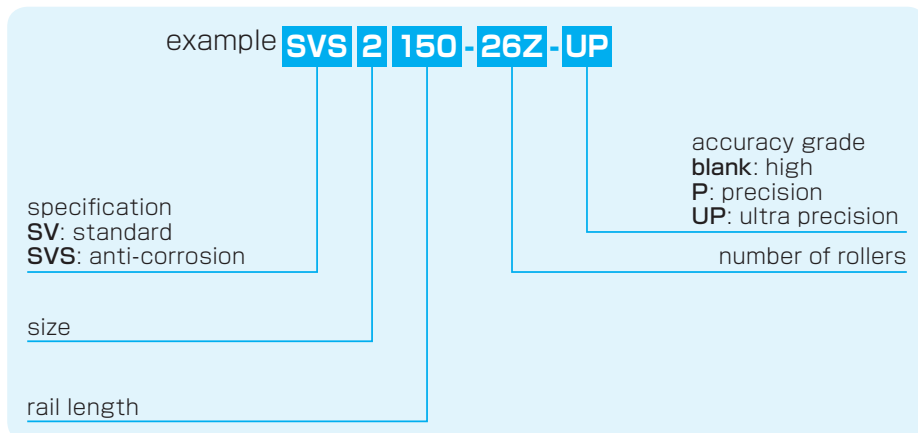
NIPPON BEARING

SV TYPE

-SV1/SV2-



part number structure



※Stainless steel rollers are used for anti-corrosion type. (refer to page G-5)

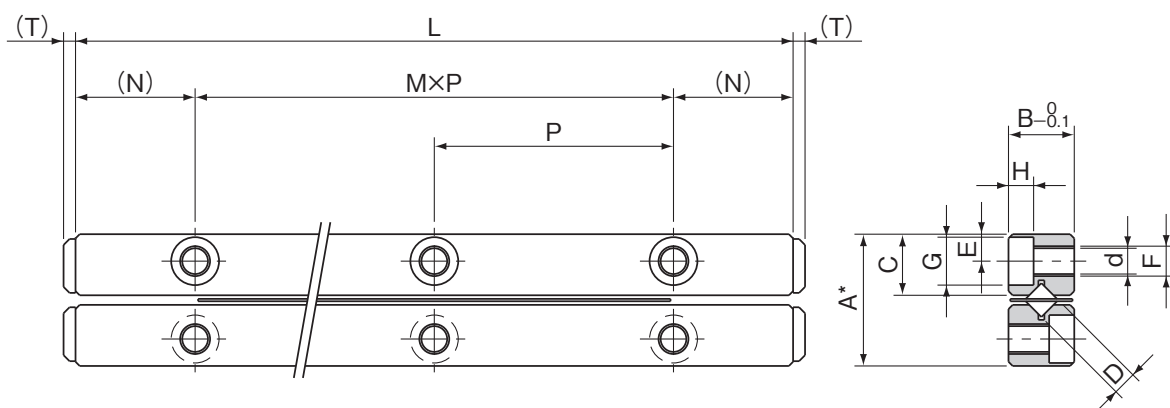
part number		stroke	roller diameter	number of rollers	L	A	B	C
standard	anti-corrosion	ST mm	D mm	Z	mm	mm	mm	mm
<b>SV 1020-5Z</b>	<b>SVS 1020-5Z</b>	12	1.5	5	20	8.5	4	3.8
<b>1030-7Z</b>	<b>1030-7Z</b>	20		7	30			
<b>1040-10Z</b>	<b>1040-10Z</b>	27		10	40			
<b>1050-13Z</b>	<b>1050-13Z</b>	32		13	50			
<b>1060-16Z</b>	<b>1060-16Z</b>	37		16	60			
<b>1070-19Z</b>	<b>1070-19Z</b>	42		19	70			
<b>1080-21Z</b>	<b>1080-21Z</b>	50		21	80			
<b>SV 2030-5Z</b>	<b>SVS 2030-5Z</b>	18	2	5	30	12	6	5.5
<b>2045-8Z</b>	<b>2045-8Z</b>	24		8	45			
<b>2060-11Z</b>	<b>2060-11Z</b>	30		11	60			
<b>2075-13Z</b>	<b>2075-13Z</b>	44		13	75			
<b>2090-16Z</b>	<b>2090-16Z</b>	50		16	90			
<b>2105-18Z</b>	<b>2105-18Z</b>	64		18	105			
<b>2120-21Z</b>	<b>2120-21Z</b>	70		21	120			
<b>2135-23Z</b>	<b>2135-23Z</b>	84		23	135			
<b>2150-26Z</b>	<b>2150-26Z</b>	90		26	150			
<b>2165-29Z</b>	<b>2165-29Z</b>	95		29	165			
<b>2180-32Z</b>	<b>2180-32Z</b>	100		32	180			

※Maximum Rail Length (standard type only)

part number	Max. length
SV1	200mm
SV2	450mm

※Please contact NB for details.

SLIDE WAY



High grade: A-0.2 Precision grade (P): A-0.1 Ultra Precision grade (UP): A-0.0  
 One set consists of 4 rails, 2 roller cages, and 8 end pieces.

major dimensions								basic load rating		allowable	mass	size
M x P	N	E	F	d	G	H	T	dynamic C N	static Co N	load F N	(one set) g	
1 x 10	5	1.8	M2	1.65	3	1.4	0.8	464	476	158	11	1020
2 x 10								641	714	237	14	1030
3 x 10								959	1,190	396	18	1040
4 x 10								1,100	1,420	475	22	1050
5 x 10								1,380	1,900	633	26	1060
6 x 10								1,510	2,140	712	30	1070
7 x 10								1,650	2,380	792	34	1080
1 x 15	7.5	2.5	M3	2.55	4.4	2	1.2	1,090	1,170	390	28	2030
2 x 15								1,900	2,340	780	42	2045
3 x 15								2,270	2,930	976	55	2060
4 x 15								2,620	3,510	1,170	69	2075
5 x 15								3,280	4,680	1,560	83	2090
6 x 15								3,590	5,270	1,750	96	2105
7 x 15								3,900	5,860	1,950	110	2120
8 x 15								4,210	6,440	2,140	123	2135
9 x 15								4,790	7,610	2,530	137	2150
10 x 15								5,080	8,200	2,730	151	2165
11 x 15								5,640	9,370	3,120	165	2180

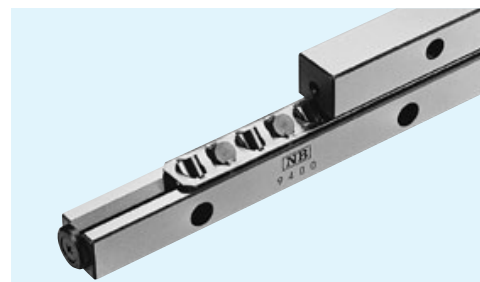
1N ≅ 0.102kgf

SLIDE WAY

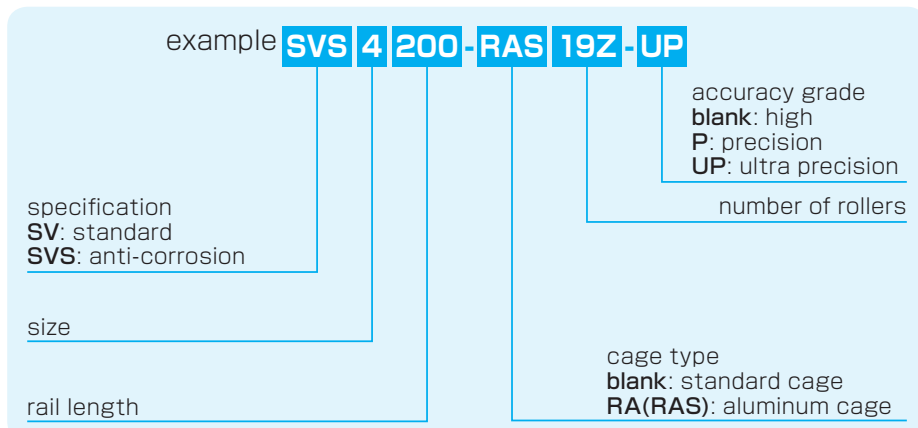
NIPPON BEARING

SV TYPE

-SV3/SV4-



part number structure



※Stainless steel rollers are used for anti-corrosion type. (refer to page G-5)

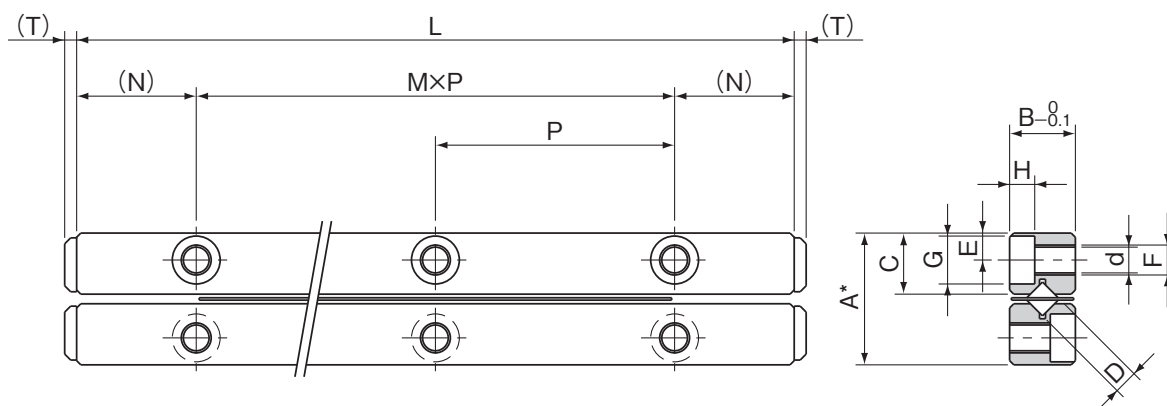
part number		stroke	roller diameter	number of rollers	L	A	B	C				
standard	anti-corrosion	ST mm	D mm	Z	mm	mm	mm	mm				
<b>SV 3050-7Z</b>	<b>SVS 3050-7Z</b>	28	3	7	50	18	8	8.3				
<b>3075-10Z</b>	<b>3075-10Z</b>	48		10	75							
<b>3100-14Z</b>	<b>3100-14Z</b>	58		14	100							
<b>3125-17Z</b>	<b>3125-17Z</b>	78		17	125							
<b>3150-21Z</b>	<b>3150-21Z</b>	88		21	150							
<b>3175-24Z</b>	<b>3175-24Z</b>	105		24	175							
<b>3200-28Z</b>	<b>3200-28Z</b>	115		28	200							
<b>3225-31Z</b>	<b>3225-31Z</b>	135		31	225							
<b>3250-35Z</b>	<b>3250-35Z</b>	145		35	250							
<b>3275-38Z</b>	<b>3275-38Z</b>	165		38	275							
<b>3300-42Z</b>	<b>3300-42Z</b>	175		42	300							
<b>3325-45Z</b>	<b>3325-45Z</b>	195		45	325							
<b>3350-49Z</b>	<b>3350-49Z</b>	205		49	350							
<b>SV 4080-7Z</b>	<b>SVS 4080-7Z</b>	58		4	7				80	22	11	10.2
<b>4120-11Z</b>	<b>4120-11Z</b>	82			11				120			
<b>4160-15Z</b>	<b>4160-15Z</b>	105	15		160							
<b>4200-19Z</b>	<b>4200-19Z</b>	130	19		200							
<b>4240-23Z</b>	<b>4240-23Z</b>	150	23		240							
<b>4280-27Z</b>	<b>4280-27Z</b>	175	27		280							
<b>4320-31Z</b>	<b>4320-31Z</b>	200	31		320							
<b>4360-35Z</b>	<b>4360-35Z</b>	225	35		360							
<b>4400-39Z</b>	<b>4400-39Z</b>	250	39		400							
<b>4440-43Z</b>	<b>4440-43Z</b>	270	43		440							
<b>4480-47Z</b>	<b>4480-47Z</b>	295	47		480							

※Maximum Rail Length (standard type only)

part number	Max. length
SV3	700mm
SV4	700mm

※Please contact NB for details.

SLIDE WAY



High grade: A-0.2 Precision grade (P): A-0.1 Ultra Precision grade (UP): A-0.0  
 One set consists of 4 rails, 2 roller cages, and 8 end pieces.

major dimensions								basic load rating dynamic C N	static Co N	allowable load F N	mass (one set) g	size
M x P mm	N mm	E mm	F	d mm	G mm	H mm	T mm					
1 x 25	12.5	3.5	M4	3.3	6	3.1	2	3,490	3,890	1,290	94	3050
2 x 25								5,230	6,490	2,160	135	3075
3 x 25								6,810	9,080	3,020	187	3100
4 x 25								7,560	10,300	3,450	234	3125
5 x 25								9,000	12,900	4,320	281	3150
6 x 25								10,300	15,500	5,180	327	3175
7 x 25								11,700	18,100	6,040	374	3200
8 x 25								12,300	19,400	6,480	421	3225
9 x 25								13,600	22,000	7,340	468	3250
10 x 25								14,800	24,600	8,200	514	3275
11 x 25								16,000	27,200	9,070	561	3300
12 x 25								16,600	28,500	9,500	608	3325
13 x 25								17,800	31,100	10,300	655	3350
1 x 40	20	4.5	M5	4.3	8	4.2	2	7,110	7,920	2,640	255	4080
2 x 40								10,600	13,200	4,400	385	4120
3 x 40								13,800	18,400	6,160	510	4160
4 x 40								16,800	23,700	7,920	635	4200
5 x 40								19,700	29,000	9,680	770	4240
6 x 40								22,400	34,300	11,400	905	4280
7 x 40								25,100	39,600	13,200	1,020	4320
8 x 40								27,600	44,800	14,900	1,160	4360
9 x 40								30,200	50,100	16,700	1,280	4400
10 x 40								32,600	55,400	18,400	1,410	4440
11 x 40								35,000	60,700	20,200	1,540	4480

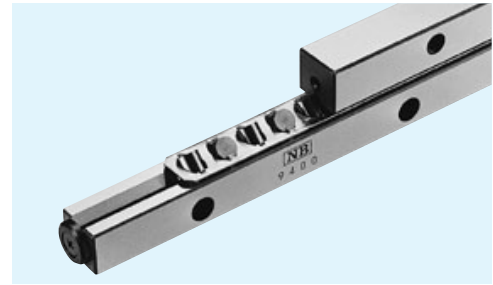
1N ≅ 0.102kgf

SLIDE WAY

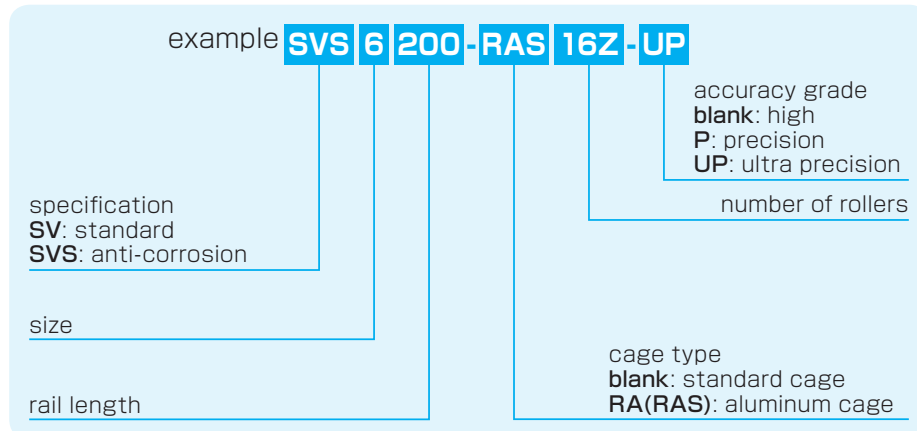
NIPPON BEARING

SV TYPE

-SV6/SV9-



part number structure



※Stainless steel rollers are used for anti-corrosion type. (refer to page G-5)

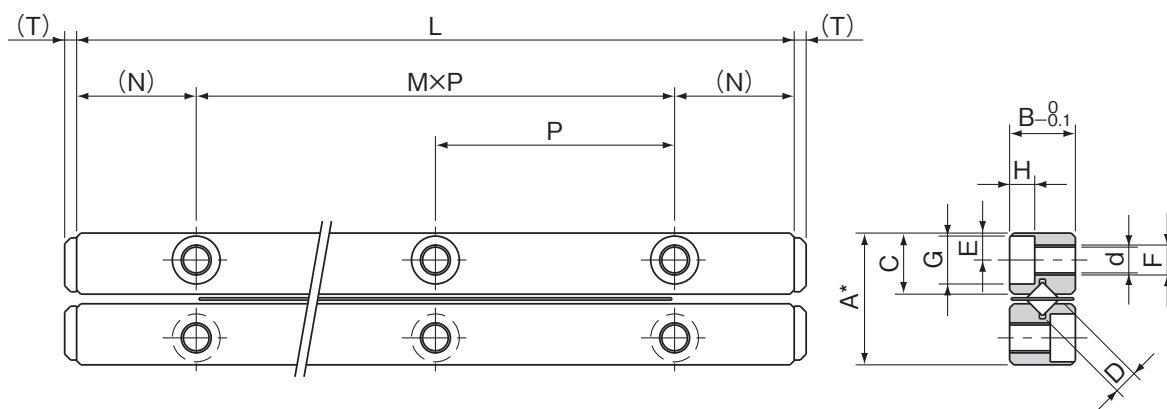
part number		stroke ST mm	roller diameter D mm	number of rollers Z	L mm	A mm	B mm	C mm
standard	anti-corrosion							
<b>SV 6100-8Z</b>	<b>SVS 6100-8Z</b>	55	6	8	100	31	15	14.2
<b>6150-12Z</b>	<b>6150-12Z</b>	85		12	150			
<b>6200-16Z</b>	<b>6200-16Z</b>	120		16	200			
<b>6250-20Z</b>	<b>6250-20Z</b>	150		20	250			
<b>6300-24Z</b>	<b>6300-24Z</b>	185		24	300			
<b>6350-28Z</b>	<b>6350-28Z</b>	215		28	350			
<b>6400-32Z</b>	<b>6400-32Z</b>	245		32	400			
<b>6450-36Z</b>	<b>6450-36Z</b>	280		36	450			
<b>6500-40Z</b>	<b>6500-40Z</b>	310		40	500			
<b>6600-49Z</b>	<b>6600-49Z</b>	360		49	600			
<b>SV 9200-10Z</b>	<b>SVS 9200-10Z</b>	115		9	10			
<b>9300-15Z</b>	<b>9300-15Z</b>	175	15		300			
<b>9400-20Z</b>	<b>9400-20Z</b>	235	20		400			
<b>9500-25Z</b>	<b>9500-25Z</b>	295	25		500			
<b>9600-30Z</b>	<b>9600-30Z</b>	355	30		600			
<b>9700-35Z</b>	<b>9700-35Z</b>	415	35		700			
<b>9800-40Z</b>	<b>9800-40Z</b>	475	40		800			
<b>9900-45Z</b>	<b>9900-45Z</b>	535	45		900			
<b>91000-50Z</b>	<b>91000-50Z</b>	595	50		1,000			

※Maximum Rail Length (standard type only)

part number	Max. length
SV6	700mm

※Please contact NB for details.

SLIDE WAY



High grade: A-0.2 Precision grade (P): A-0.1 Ultra Precision grade (UP): A-0.0  
 One set consists of 4 rails, 2 roller cages, and 8 end pieces.

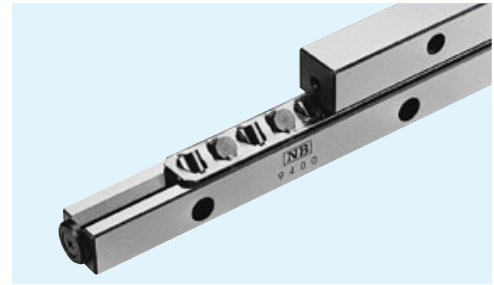
major dimensions								basic load rating		allowable	mass	size
M x P	N	E	F	d	G	H	T	dynamic C N	static Co N	load F N	(one set) g	
mm	mm	mm		mm	mm	mm	mm					
1 x 50	25	6	M6	5.2	9.5	5.2	3	20,700	23,600	7,880	628	6100
2 x 50								28,500	35,500	11,800	942	6150
3 x 50								35,700	47,300	15,700	1,260	6200
4 x 50								42,500	59,200	19,700	1,570	6250
5 x 50								49,000	71,000	23,600	1,880	6300
6 x 50								55,300	82,800	27,600	2,200	6350
7 x 50								61,400	94,700	31,500	2,510	6400
8 x 50								67,300	106,000	35,400	2,830	6450
9 x 50								73,100	118,000	39,400	3,140	6500
11 x 50								84,200	142,000	47,300	3,770	6600
1 x 100								50	9	M8	6.8	10.5
2 x 100	79,300	98,900	32,900	4,030	9300							
3 x 100	104,000	141,000	47,000	5,380	9400							
4 x 100	120,000	169,000	56,400	6,700	9500							
5 x 100	143,000	212,000	70,500	8,050	9600							
6 x 100	158,000	240,000	79,900	9,230	9700							
7 x 100	180,000	282,000	94,000	10,500	9800							
8 x 100	193,000	311,000	103,000	11,900	9900							
9 x 100	214,000	353,000	117,000	13,000	91000							

1N ≅ 0.102kgf

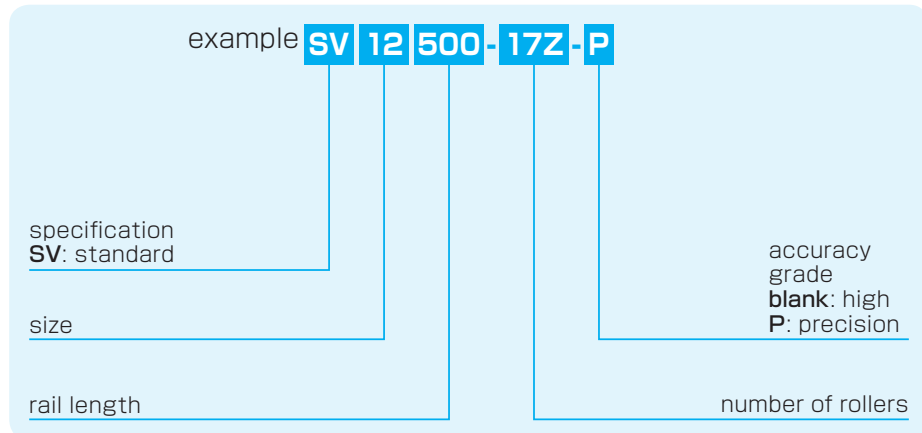
SLIDE WAY

NIPPON BEARING

SV TYPE  
-SV12-



part number structure

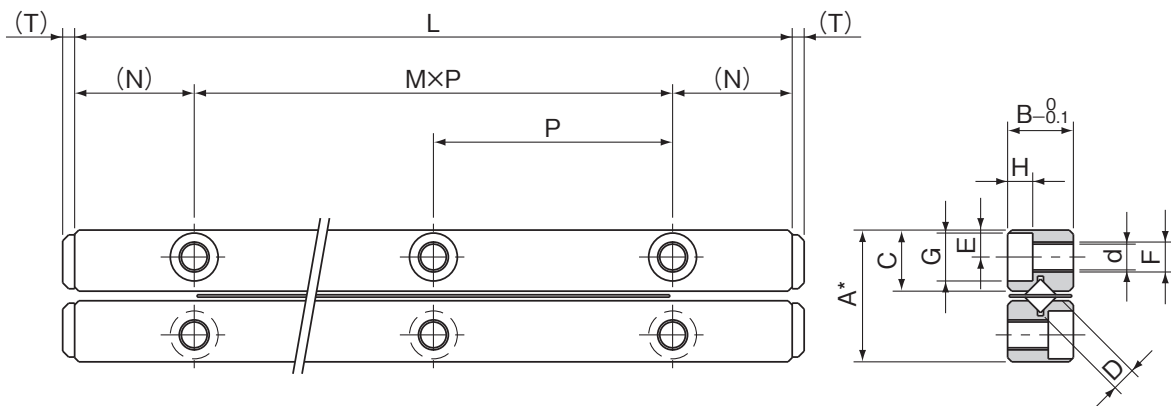


\*Stainless steel rollers are used for anti-corrosion type. (refer to page G-5)

part number		stroke	roller diameter	number of rollers	L	A	B	C
standard	anti-corrosion	ST mm	D mm	Z	mm	mm	mm	mm
<b>SV12300-10Z</b>	<b>SVS12300-10Z</b>	200	12	10	300	58	28	27
<b>12400-14Z</b>	<b>12400-14Z</b>	240		14	400			
<b>12500-17Z</b>	<b>12500-17Z</b>	320		17	500			
<b>12600-21Z</b>	<b>12600-21Z</b>	360		21	600			
<b>12700-24Z</b>	<b>12700-24Z</b>	440		24	700			
<b>12800-28Z</b>	<b>12800-28Z</b>	480		28	800			
<b>12900-31Z</b>	<b>12900-31Z</b>	560		31	900			
<b>121000-34Z</b>	<b>121000-34Z</b>	640		34	1,000			
<b>121100-38Z</b>	—	680		38	1,100			
<b>121200-42Z</b>	—	720		42	1,200			



SLIDE WAY



High grade: A-0.2 Precision grade (P): A-0.1  
 One set consists of 4 rails, 2 roller cages, and 8 end pieces.

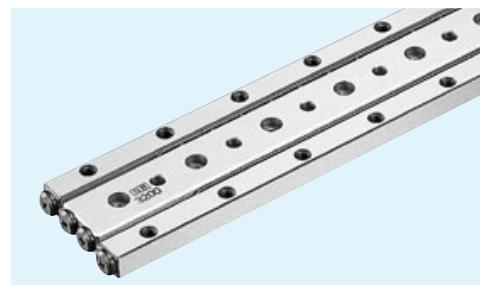
major dimensions								basic load rating dynamic C N	static Co N	allowable load F N	mass (one set) g	size
M x P mm	N mm	E mm	F	d mm	G mm	H mm	T mm					
2 x 100	50	12	M10	8.5	13.5	8.2	4	124,000	145,000	48,300	6,880	12300
3 x 100								162,000	203,000	67,600	9,090	12400
4 x 100								180,000	232,000	77,200	11,400	12500
5 x 100								214,000	290,000	96,600	13,700	12600
6 x 100								247,000	348,000	115,000	15,800	12700
7 x 100								279,000	406,000	135,000	18,200	12800
8 x 100								294,000	435,000	144,000	20,500	12900
9 x 100								324,000	493,000	164,000	22,800	121000
10 x 100								354,000	551,000	183,000	25,000	121100
11 x 100								382,000	609,000	202,000	27,300	121200

1N ≅ 0.102kgf

SLIDE WAY

NIPPON BEARING

SVW TYPE



part number structure

example **SVWS 4 200 -RAS 19Z -UP**

specification  
**SVW**: standard  
**SVWS**: anti-corrosion

size

rail length

accuracy grade  
**blank**: high  
**P**: precision  
**UP**: ultra precision

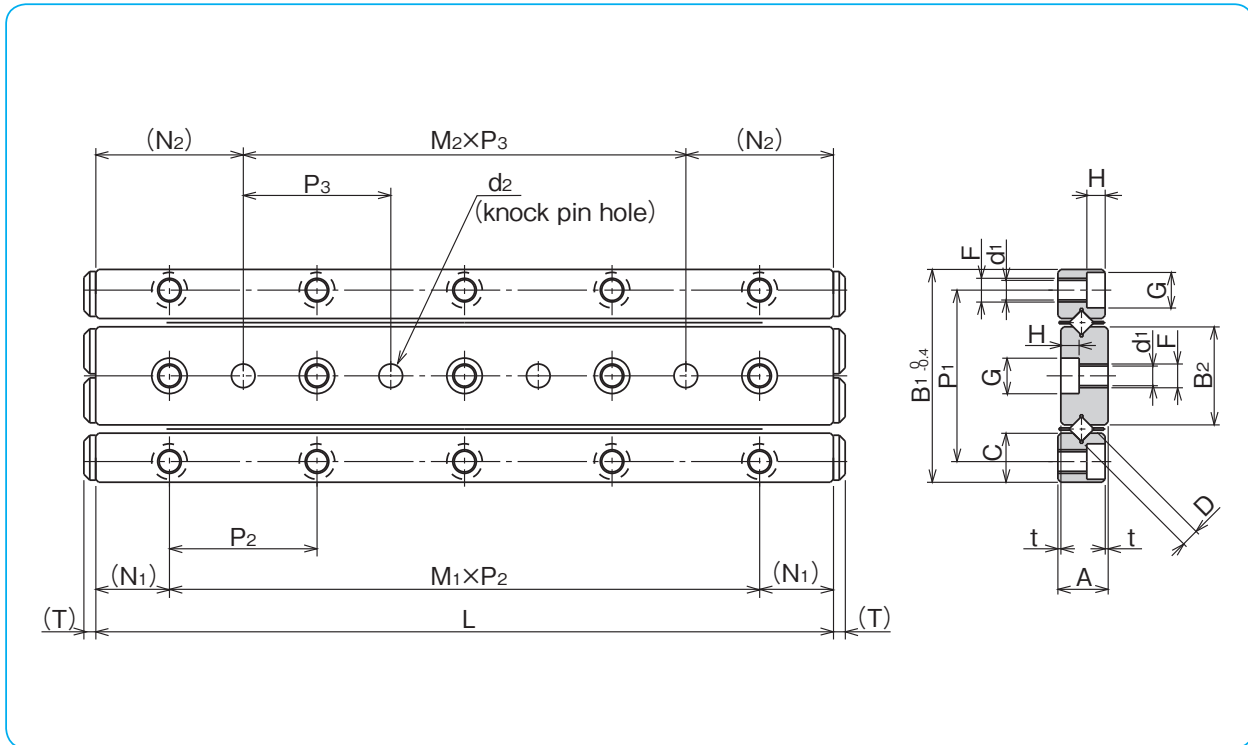
number of rollers

cage type  
**blank**: standard cage  
**RA**: aluminum cage  
**standard**: standard roller  
**RAS**: aluminum cage  
**stainless steel**: stainless steel roller

\* Refer to page G-5 for information on cage types.  
 \*\* Aluminum cage is not available for size 1 and 2.

part number		stroke	roller diameter	number of rollers	L	A	t	B <sub>1</sub>	B <sub>2</sub>	C	P <sub>1</sub>	M <sub>1</sub> × P <sub>2</sub>
standard	anti-corrosion	ST mm	D mm	Z	mm	mm	mm	mm	mm	mm	mm	mm
<b>SVW 1020- 5Z</b>	<b>SVWS 1020- 5Z</b>	12	1.5	5	20	4.5	0.5	17	7.6	3.8	13.4	1 × 10
<b>1030- 7Z</b>	<b>1030- 7Z</b>	20		7	30							2 × 10
<b>1040-10Z</b>	<b>1040-10Z</b>	27		10	40							3 × 10
<b>1050-13Z</b>	<b>1050-13Z</b>	32		13	50							4 × 10
<b>1060-16Z</b>	<b>1060-16Z</b>	37		16	60							5 × 10
<b>1070-19Z</b>	<b>1070-19Z</b>	42		19	70							6 × 10
<b>1080-21Z</b>	<b>1080-21Z</b>	50		21	80							7 × 10
<b>SVW 2030- 5Z</b>	<b>SVWS 2030- 5Z</b>	18		2	5							30
<b>2045- 8Z</b>	<b>2045- 8Z</b>	24	8		45	2 × 15						
<b>2060-11Z</b>	<b>2060-11Z</b>	30	11		60	3 × 15						
<b>2075-13Z</b>	<b>2075-13Z</b>	44	13		75	4 × 15						
<b>2090-16Z</b>	<b>2090-16Z</b>	50	16		90	5 × 15						
<b>2105-18Z</b>	<b>2105-18Z</b>	64	18		105	6 × 15						
<b>2120-21Z</b>	<b>2120-21Z</b>	70	21		120	7 × 15						
<b>SVW 3050- 7Z</b>	<b>SVWS 3050- 7Z</b>	28	3		7	50	8.5	0.5	36	16.6	8.3	29
<b>3075-10Z</b>	<b>3075-10Z</b>	48		10	75	2 × 25						
<b>3100-14Z</b>	<b>3100-14Z</b>	58		14	100	3 × 25						
<b>3125-17Z</b>	<b>3125-17Z</b>	78		17	125	4 × 25						
<b>3150-21Z</b>	<b>3150-21Z</b>	88		21	150	5 × 25						
<b>3175-24Z</b>	<b>3175-24Z</b>	105		24	175	6 × 25						
<b>3200-28Z</b>	<b>3200-28Z</b>	115		28	200	7 × 25						
<b>SVW 4080- 7Z</b>	<b>SVWS 4080- 7Z</b>	58		4	7	80						
<b>4120-11Z</b>	<b>4120-11Z</b>	82	11		120	2 × 40						
<b>4160-15Z</b>	<b>4160-15Z</b>	105	15		160	3 × 40						
<b>4200-19Z</b>	<b>4200-19Z</b>	130	19		200	4 × 40						
<b>4240-23Z</b>	<b>4240-23Z</b>	150	23		240	5 × 40						
<b>4280-27Z</b>	<b>4280-27Z</b>	175	27		280	6 × 40						

SLIDE WAY



major dimensions									basic load rating		allowable	mass	size
N <sub>1</sub>	F	d <sub>1</sub>	G	H	M <sub>2</sub> ×P <sub>3</sub>	N <sub>2</sub>	d <sub>2</sub>	T	dynamic C N	static C <sub>0</sub> N	load F N	(one set) g	
mm		mm	mm	mm	mm	mm	mm	mm					
5	M2	1.65	3	1.4	—	10	2 <sup>+0.010</sup> <sub>0</sub>	0.8	464	476	158	11	1020
					1×10				641	714	237	14	1030
					2×10				959	1,190	396	18	1040
					3×10				1,100	1,420	475	22	1050
					4×10				1,380	1,900	633	26	1060
					5×10				1,510	2,140	712	30	1070
					6×10				1,650	2,380	792	34	1080
7.5	M3	2.55	4.4	2	—	15	3 <sup>+0.010</sup> <sub>0</sub>	1.2	1,090	1,170	390	28	2030
					1×15				1,900	2,340	780	42	2045
					2×15				2,270	2,930	976	55	2060
					3×15				2,620	3,510	1,170	69	2075
					4×15				3,280	4,680	1,560	83	2090
					5×15				3,590	5,270	1,750	96	2105
					6×15				3,900	5,860	1,950	110	2120
12.5	M4	3.3	6	3.1	—	25	4 <sup>+0.012</sup> <sub>0</sub>	2	3,490	3,890	1,290	94	3050
					1×25				5,230	6,490	2,160	135	3075
					2×25				6,810	9,080	3,020	187	3100
					3×25				7,560	10,300	3,450	234	3125
					4×25				9,000	12,900	4,320	281	3150
					5×25				10,300	15,500	5,180	327	3175
					6×25				11,700	18,100	6,040	374	3200
20	M5	4.3	8	4.2	—	40	5 <sup>+0.012</sup> <sub>0</sub>	2	7,110	7,920	2,640	255	4080
					1×40				10,600	13,200	4,400	385	4120
					2×40				13,800	18,400	6,160	510	4160
					3×40				16,800	23,700	7,920	635	4200
					4×40				19,700	29,000	9,680	770	4240
					5×40				22,400	34,300	11,400	905	4280

1N≅0.102kgf