

## SJ Miniature Linear Guide Line-up



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# SJ 미니어처 리니어 가이드

## SJ Miniature Linear Guide



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SJ GLOBAL Co., Ltd.

# Greeting and History

SJ Global is one of the top companies in Korea in the production of advanced technological products called miniature linear guides. Miniature linear guides are required for semiconductor equipment, LCD/measurement/medical equipment, printing machines, and the IT industry, which is moving toward high speed, high precision, and miniaturization. Now SJ Global is greatly contributing to national industrial growth by exporting our products to about fifteen countries across the world.

Based on our accumulated competencies, we will continue to invest in R&D, design, and marketing for the purpose of acquiring outstanding technologies and systems and becoming a competitive player in the global era. Our company upholds an entrepreneurial spirit of innovation to continuously discover new driving forces and human resources. This enables us to provide the highest quality and best service for our customer's satisfaction and further contribute to the national economy.

Under our own transparent management, SJ Global will make our business lucrative sustain company growth, and contribute to society. On the merit of our own best quality and service, we will realize our customers' satisfaction, pursue our bright vision for the future and reward our employees as we fulfill our responsibilities to the community. We are also committed to growing with our customers and becoming a world-class company worthy of your respect and trust.

Thanks.

SJ Global  
CEO Lee Jin Kwan

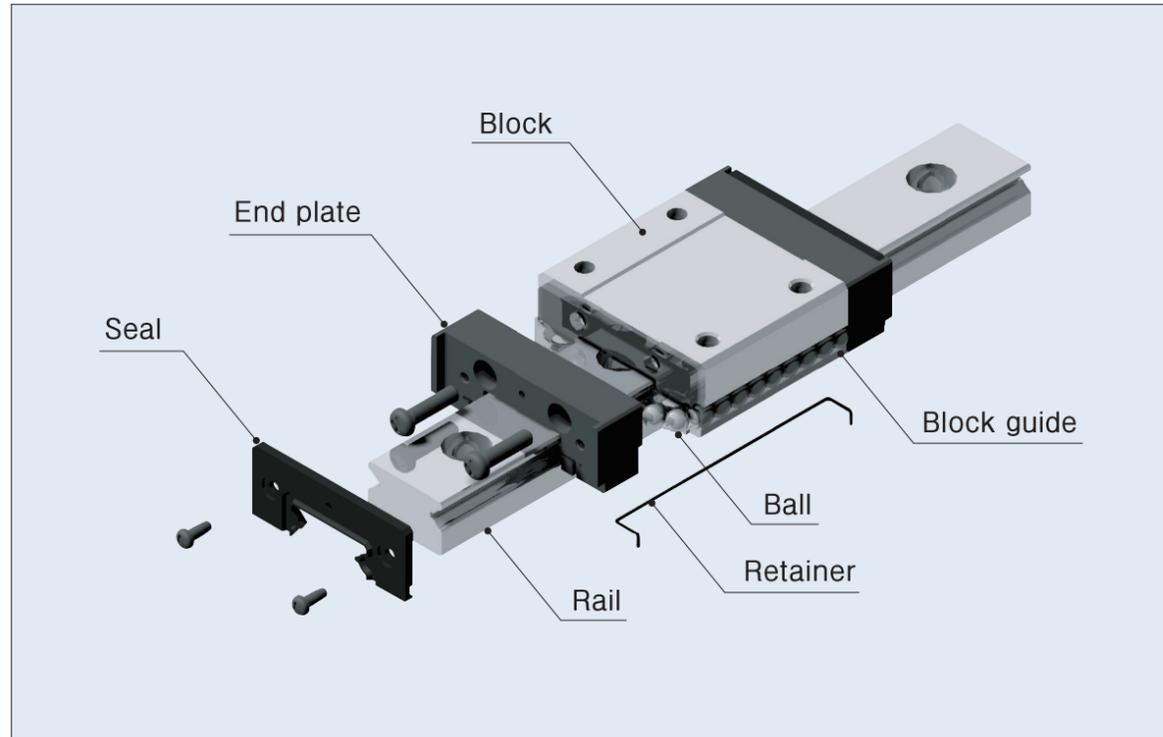
- 2006.12 – Established the company.
- 2007.03 – Moved to the Gimpo factory. 2006
- 2007.04 – Completed development of miniature linear guides. (SJ/SJL 9, 12, 15)
- 2007.08 – ISO9001; ISO2000; KSA9001; 2001 certificates acquired.
- 2007.11 – Completed development of miniature Wide linear guides. (SJW 9, 12, 15)
- 2008.02 – Certified as a venture company. (KIBO)
- 2012.01 – Clean Workplace certificates acquired
- 2012.08 – Completed development of miniature linear guide. (SJ 7)
- 2013.02 – Completed development of miniature long linear guide. (SJL 7)
- 2014.01 – Branch Establishment China,(SHENYANG AIJIE MACHINERY EQUIPMENT CO.,LTD)
- 2014.03 – Completed development of miniature Limited linear guides. (SJU/SJUL 7,9,12,15)
- 2014.05 – Completed development of miniature Wide Limited linear guides. (SJWU/SJWUL 9,12,15)
- 2014.09 – 2014.China International Bearing Industry Exhibition participation.
- 2015.01 – Completed development of miniature Wide long linear guides. (SJWL 9,12,15)
- 2015.01 – Branch Establishment India.(New Delhi)

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# Miniature Linear Guide

<Fig.1> Structure of miniature linear guide model AM



## Structure

SJ miniature linear guide AM has a structure in which the balls contacting rails at 4 points are arranged with 2 sets, thus, despite of its small size, provides a stabilized accuracy and rigidity even for use under load and combined loads where a direction and size can be twisted. There is a wide selection of forms and sizes for you to choose a suitable one according to use.

## Features

### Ball retainer

Linear ball support block attached to the ball retainer and captive rail and block the smooth replacement.

### Perfect design ensures low noise and lubrication

See complete design cycle of integrated blocks to guide the engineering of plastic materials used in the linear block noise traveling and lubricant supply.

### Development of new technologies and smooth motion

Piece returned the ball to infinite loop and block guide design consisting of integrated linear blocks are horizontal and vertical movement is possible under certain conditions to is smooth.

### Excellent corrosion resistance

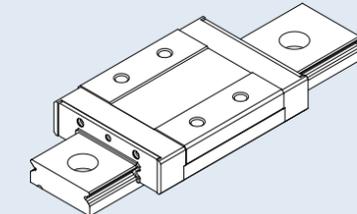
Linear rail and blocks are corrosion-resistant and acid-resistant stainless steel is used in the semiconductor equipment, medical equipment, measuring, printing, embroidery and other precision devices that are widely used in industry.

### Safety Design

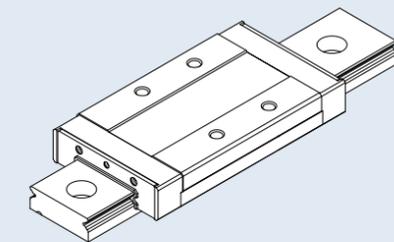
Miniature linear rail and block, using the high corrosion resistance of stainless steel and has a lot of moisture and chemical composition of the environment, it may cause corrosion, high quality black coating and a special coating to increase to the maintenance effect.

## Types

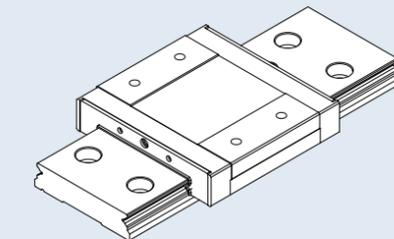
<Fig.2> Types of miniature linear guide



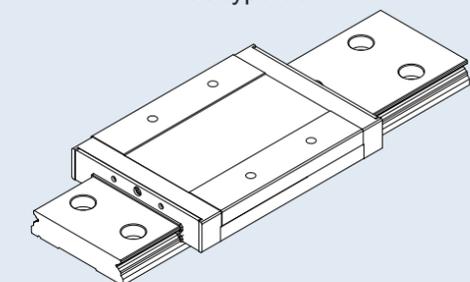
Standard type SJ



Standard long type SJL

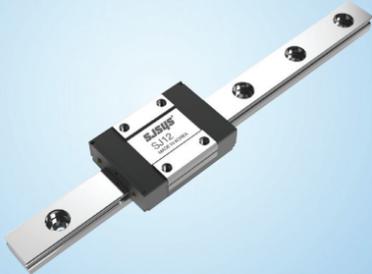
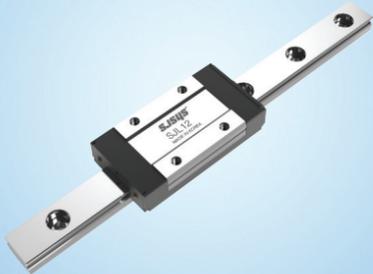
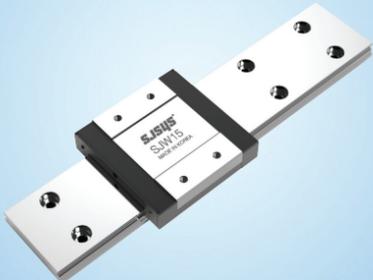
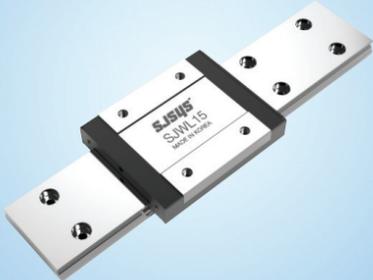


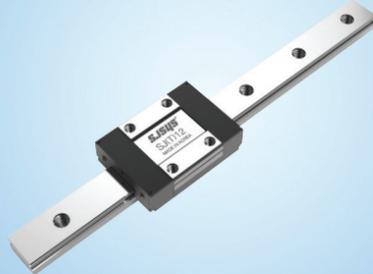
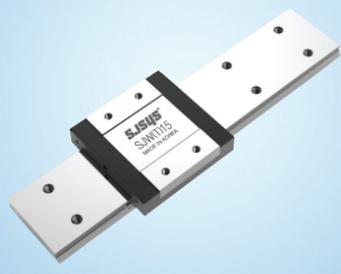
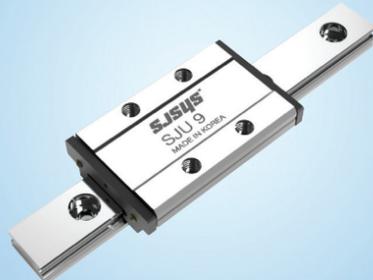
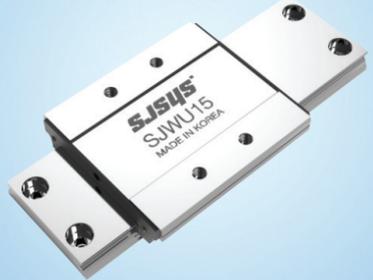
Wide type SJW



Wide long type SJWL

Miniature linear guide overview

Model	Features
<b>SJ</b>	Standard type
	<ul style="list-style-type: none"> <li>Standard model of the miniature linear guides.</li> </ul>
<b>SJL</b>	Long type
	<ul style="list-style-type: none"> <li>SJ type than the LM block length (L) and rated load and allowable moment for a long time significantly by model.</li> </ul>
<b>SJW</b>	Wide type
	<ul style="list-style-type: none"> <li>SJ type than the LM block length (L) and a long and width (W) and a greater rated load and allowable moment high rigidity model increased.</li> </ul>
<b>SJWL</b>	Wide Long type
	<ul style="list-style-type: none"> <li>Than wide type linear block length (L) and hold the increased load ratings and allowable moment model.</li> </ul>

Model	Features
<b>SJ</b>	Standard Tap type
	<ul style="list-style-type: none"> <li>Standard model. Tightening out the lower part of the rail mounting tab for the product.</li> </ul>
<b>SJW</b>	Wide Tap type
	<ul style="list-style-type: none"> <li>Wide type model. Tightening out the lower part of the rail mounting tab for the product.</li> </ul>
<b>SJU / SJUL</b>	Standard Limited type
	<ul style="list-style-type: none"> <li>High accuracy and low friction standard products having a limited stroke.</li> </ul>
<b>SJWU / SJWUL</b>	Wide Limited type
	<ul style="list-style-type: none"> <li>High accuracy and low friction wide type products having a limited stroke.</li> </ul>

### Radial clearance

Radial clearance for the blocks onto the rails in the assembled state of the rail fixed to the base block in the vertical direction to exert a light load at a center portion of the movement amount. Miniature linear guides include K1, K2 be two radial clearance.

<Table.1> Radial clearance (K1, K2) (Unit:  $\mu\text{m}$ )

Preload conditions	Normal	Light preload
Part no.	K1	K2
5	-2 ~ +2	-4 ~ 0
7	-2 ~ +2	-4 ~ 0
9	-2 ~ +2	-4 ~ 0
12	-2 ~ +2	-6 ~ 0
15	-2 ~ +2	-10 ~ 0

Note) Radial clearance AMS(L) type, AMW(L) type apply.

### Seal resistance

One block is assembled with two seals, and seal resistance figures is one miniature block as shown in the table below.

<Table.2> Seal resistance figures (Unit: N)

Part no.	SJ	SJL	SJW	SJWL
5	0.1	-	-	-
7	0.2	0.2	0.6	0.6
9	0.2	0.2	0.8	0.8
12	0.59	0.59	1.1	1.1
15	1.18	1.18	1.3	1.3

### Design of the mounting surface

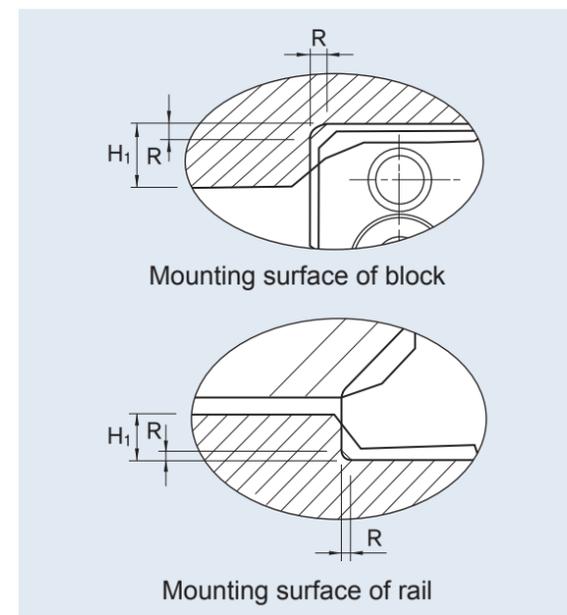
Linear block and table and bed rail installed on the mounting surface at the time of the first part of the required heighten.

Linear block and the edges of the mounting surface of the rail mounting surface to prevent interference with chamfered portion of the radius R of dimensions must be carefully processed.

<Table.3> Seal resistance figures (Unit: mm)

Part no.	Radius R	Linear block height $H_1$	Linear rail height $H_2$	E
SJ 5	0.2	3	1.2	1.5
SJ(L) 7	0.2	3	1.2	1.5
SJ(L) 9	0.3	3	1.9	2.2
SJ(L) 12	0.3	4	2.0	3.0
SJ(L) 15	0.3	5	2.5	4.0
SJW 7	0.2	3	1.7	3.5
SJW(L) 9	0.1	3	3.4	3.7
SJW(L) 12	0.3	4	3.7	4.0
SJW(L) 15	0.3	5	3.4	3.7

<Fig.3>



### Accuracy

As shown in the table.4 race degree parallelism, permissible deviation in dimensions of height, width is one of several blocks to the rails on the same plane, or if the number of rails needed by the mounting height, width, and also of rule.

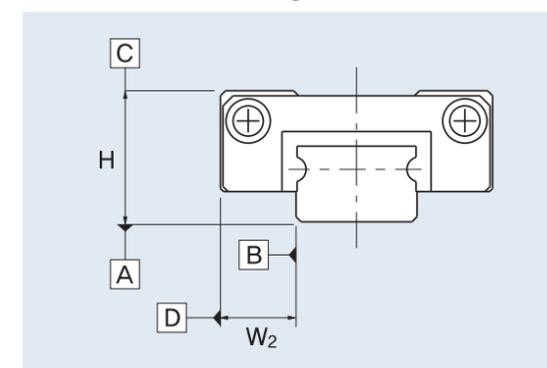
### Accuracy grade

Normal grade, high, separated by precision step 3. Combination of block size and the corresponding grade of the rail with a maximum error.

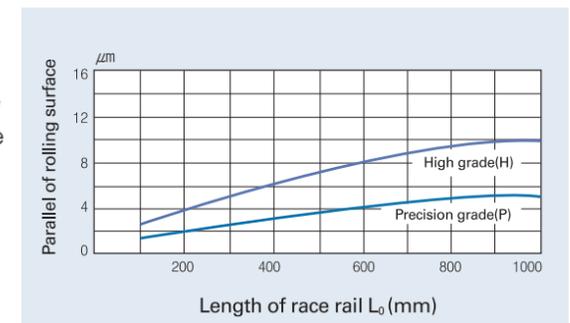
<Table.4> (Unit:  $\mu\text{m}$ )

Accuracy grade	Normal grade	High grade	Precision grade
Item	N	H	P
Permissible deviation in dimensions of height H	$\pm 40$	$\pm 20$	$\pm 10$
Permissible deviation in dimensions of width $W_2$	$\pm 40$	$\pm 25$	$\pm 15$
Pair deviation of height H	30	15	7
Pair deviation of height $W_2$	30	20	10
[A] side face of the [C] race parallelism	Refer to < Fig.4 >		
[B] side face of the [D] race parallelism			

<Fig.4>



<Fig.5>



### Use a special environment

High quality black special coating or grease according to the conditions applicable to a variety of disciplines and will help durability.

<Table.5>

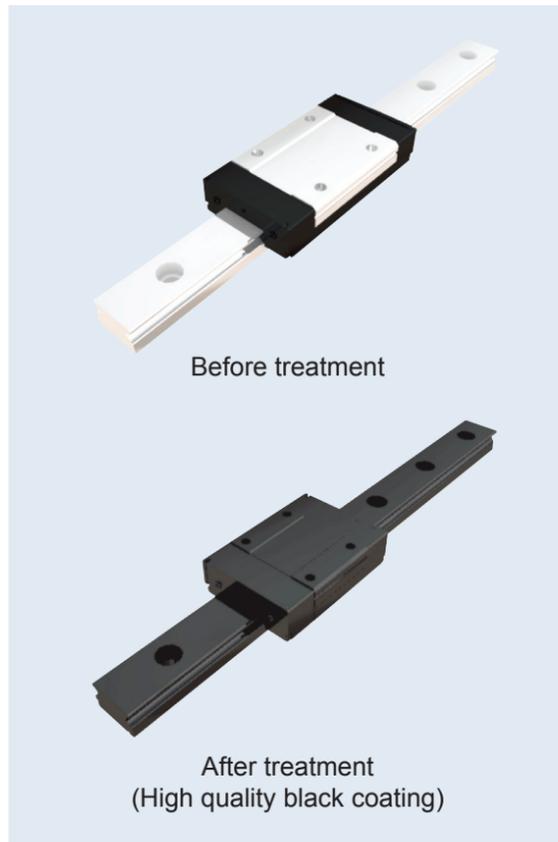
Use environment	Caution when using	Improvement	
(Clean room) Semiconductor, sensor, medical equipment	When used in a clean room in a miniature linear guide and the inhibition caused by rash or particles must be	Grease	Use low dust generation grease
(Vacuum) Semiconductor, sensor, medical equipment	Corrosion is not possible using current skills and excellent corrosion environment	Grease	Using vacuum grease
		Coating	Black special coating

**Surface treatment**

**Low temperature fluorination chrome plating**

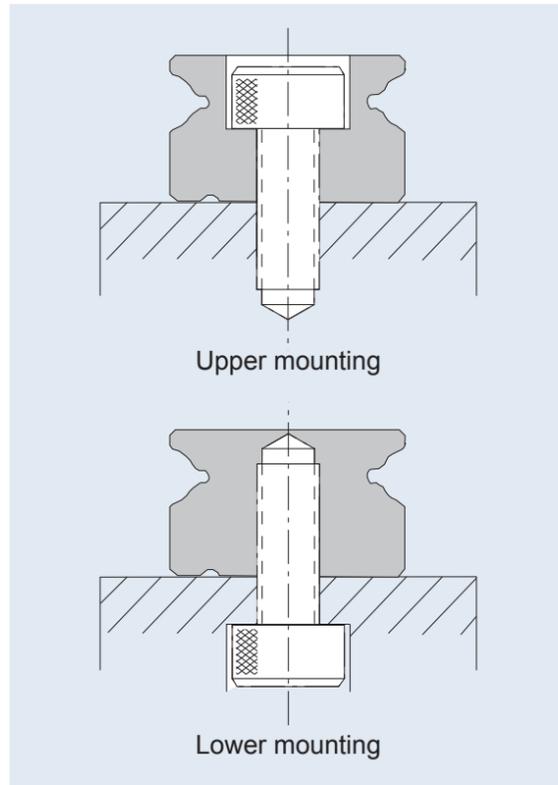
Black chrome coating on the product and where high corrosion resistance is required, such as low dust and clean rooms and the best surface treatment to improve the appearance quality are used where necessary.

<Fig.6>



**Rail mounting method**

<Fig.7>



**Bolt mounting torque**

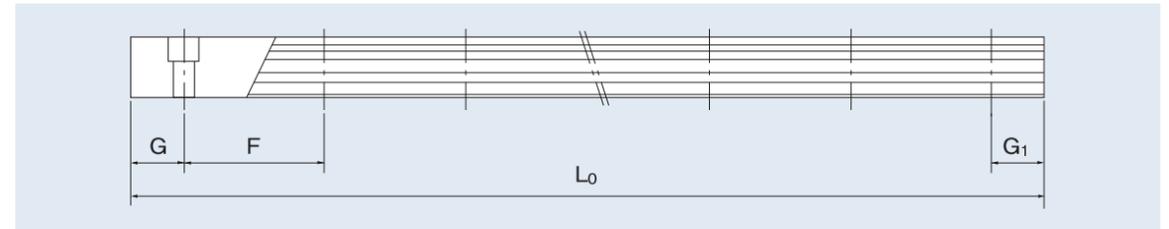
Linear guide installation meets the specifications of the mounting torque of the bolt must be Fastening. Mounting torque listed in the following table is achieved to a great accuracy.

<Table.6> (Unit: N-cm / kgf-cm)

Part no.	Bolt	Mounting torque
SJ 5	M2x0.4Px4L	57 / (5.9)
SJ 7	M2x0.4Px6L	57 / (5.9)
SJ 9	M3x0.5Px8L	186 / (19)
SJ 12	M3x0.5Px8L	186 / (19)
SJ 15	M3x0.5Px10L	186 / (19)
SJW 7	M3x0.5Px6L	186 / (19)
SJW 9	M3x0.5Px8L	186 / (19)
SJW 12	M4x0.7Px8L	392 / (40)
SJW 15	M4x0.7Px10L	392 / (40)

**Standard & max. length of rail**

<Fig.8>



<Table.7> Standard and maximum length of the rail SJ type (Unit: mm)

Part no.	SJ 5	SJ(L) 7	SJ(L) 9	SJ(L) 12	SJ(L) 15
Standard length of rail (L <sub>0</sub> )	40	40	55	70	70
	55	55	75	95	110
	70	70	95	120	150
	85	85	115	145	190
	∟	∟	∟	∟	∟
	250	445	1135	1120	1070
	265	460	1155	1145	1110
	280	475	1175	1170	1150
295	490	1195	1195	1190	
F	15	15	20	25	40
G	5	5	7.5	10	15
Max. length	295	490	1195	1195	1190

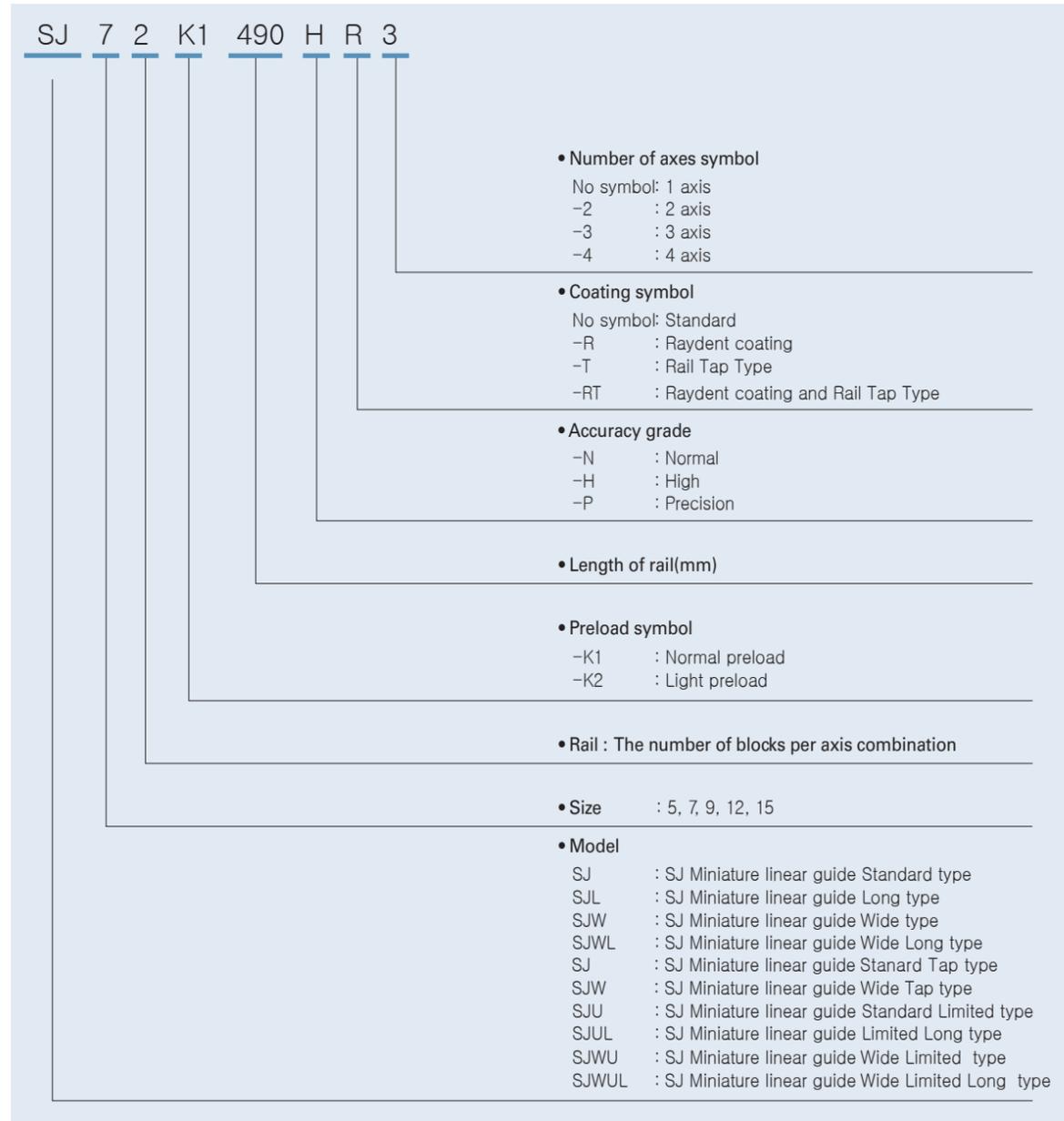
<Table.8> Standard and maximum length of the rail SJW type

Part no.	SJW 5	SJW(L) 7	SJW(L) 9	SJW(L) 12	SJW(L) 15
Standard length of rail (L <sub>0</sub> )	-	50	50	70	110
	-	80	80	110	150
	-	110	110	150	190
	-	140	140	190	230
	-	∟	∟	∟	∟
	-	1100	1100	1070	1070
	-	1130	1130	1110	1110
	-	1160	1160	1150	1150
-	1190	1190	1190	1190	
F	-	30	30	40	40
G	-	10	10	15	15
Max. length	-	1190	1190	1190	1190

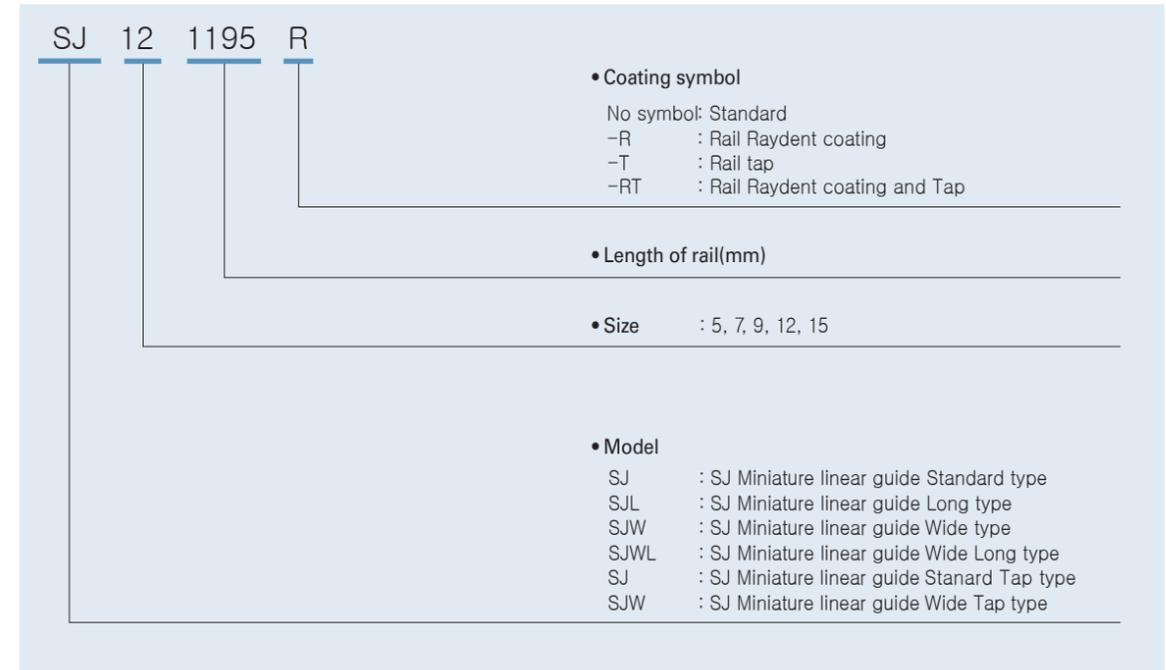
Note) SJ(L) and SJW(L) type is the same use the rail.

How to order

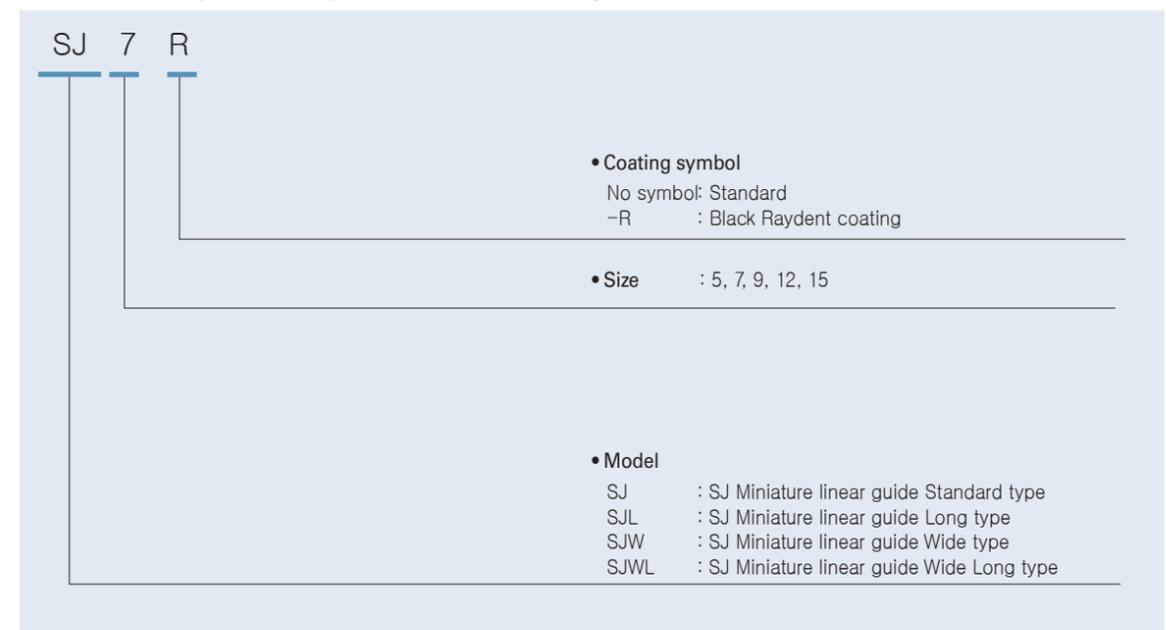
■ Non-interchangeable types (•Example: SJ 7-2-K1-490-H-R-3)



■ Interchangeable types(Rail) (•Example: SJ 12-1195L-R)



■ Interchangeable types(Block) (•Example: SJ 7-R)



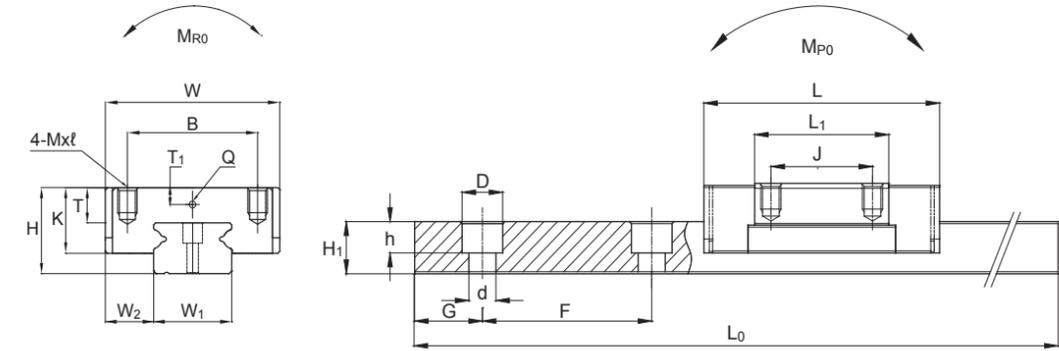
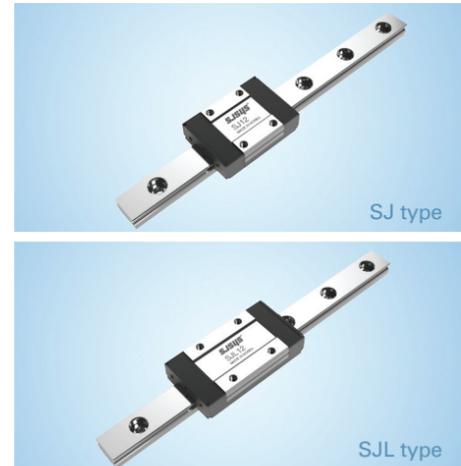
# SJ type / SJL type

## Standard(Long) type

• Examples of model number formation

SJ(L)	7	2	K1	490	H	R	3
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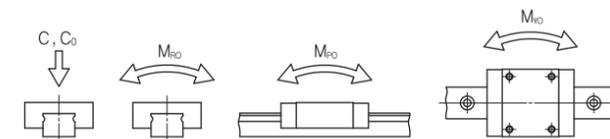
- Model
- Size (5, 7, 9, 12, 15)
- Rail (The number of blocks per axis combination)
- Preload K1 : Normal  
K2 : Light preload
- Length of rail (mm)
- No. of axes
- Coating symbol  
No symbol: Standard  
R: Raydent coating
- Accuracy grade  
N: Normal  
H: High  
P: Precision



Part no.	Assembly dimensions			Dimensions of block								
	H	E	W <sub>2</sub>	W	L	B×J	M×ℓ	L <sub>1</sub>	T	K	T <sub>1</sub>	Q
SJ 5	6	1.5	3.5	12	16.9	8X-	M2X1.5	8.8	-	4.5	0.8	-
SJ 7	8	1.5	5	17	22.9	12×8	M2×2.5	13.5	3.3	6.5	1.6	∅1
SJL 7					32.4	12×13		23				
SJ 9	10	2.2	5.5	20	30.4	15×10	M3×3	17.8	4.5	7.8	2.3	∅1
SJL 9					40.8	15×16		28.2				
SJ 12	13	3	7.5	27	35	20×15	M3×3.5	19.8	5.5	10	2.7	∅1
SJL 12					47.6	20×20		32.4				
SJ 15	16	4	8.5	32	43	25×20	M3×4	25.4	6.5	12	3.1	∅1
SJL 15					58.8	25×25		41.2				

(Unit: mm)

Dimensions of rail								Basic load rating		Allowable static moment			Mass	
W <sub>1</sub>	H <sub>1</sub>	F	D	d	h	G	Max. length	Dynamic (C) N	Staic (C <sub>0</sub> ) N	M <sub>RO</sub> N·m	M <sub>PO</sub> N·m	M <sub>VO</sub> N·m	Block kg	Rail kg/m
5	4	15	∅3.5	∅2.4	1	5	295	320	590	0.15	0.22	0.22	0.003	0.14
7	4.7	15	∅4.2	∅2.4	2.3	5	490	880	1370	0.3	0.3	0.5	0.010	0.23
								1590	2500	0.8	0.8	0.9	0.015	
9	5.5	20	∅6	∅3.5	3.3	7.5	1195	1420	2900	1.06	0.52	0.52	0.013	0.32
								2597	3920	1.87	1.79	1.79	0.023	
12	7.5	25	∅6	∅3.5	4.5	10	1195	2460	3626	1.5	0.82	0.89	0.029	0.59
								4214	6566	2.72	2.45	2.66	0.043	
15	9.5	40	∅6	∅3.5	4.5	15	1190	4018	5978	3.80	1.68	1.83	0.052	0.99
								7154	10682	5.41	5.03	5.46	0.079	



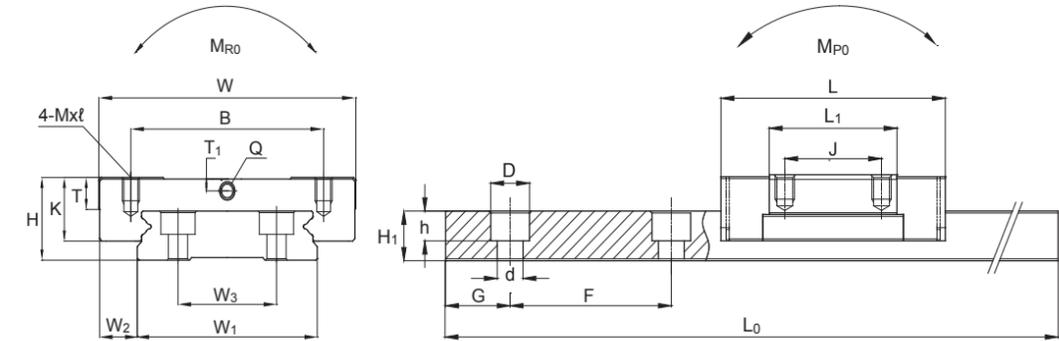
# SJW type / SJWL type

## Wide(Long) type

• Examples of model number formation

SJW(L)	7	2	K1	500	H	R	3
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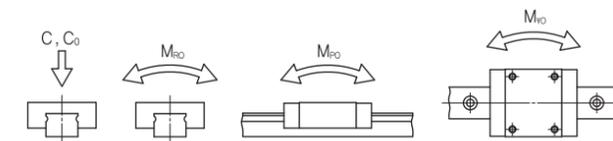
- Model
- Size (7, 9, 12, 15)
- Rail (The number of blocks per axis combination)
- Preload K1 : Normal  
K2 : Light preload
- Length of rail (mm)
- No. of axes
- Coating symbol  
No symbol: Standard  
R: Raydnt coating
- Accuracy grade  
N: Normal  
H: High  
P: Precision



Part no.	Assembly dimensions			Dimensions of block								
	H	E	W <sub>2</sub>	W	L	B×J	M×ℓ	L <sub>1</sub>	T	K	T <sub>1</sub>	Q
SJW 7	9	1.9	5.5	25	31.2	19×10	M3×3	21	3.8	7.1	1.85	∅1
SJWL 7					41	19×19		30.8				
SJW 9	12	3.7	6	30	42.3	21×21	M3×3	27	4.5	8.3	3.1	∅1
SJWL 9					50.3	23×24		35				
SJW 12	14	4	8	40	48.4	28×15	M3×3.5	30.9	5.5	10	2.4	∅1
SJWL 12					59.5	28×28		42				
SJW 15	16	3.7	9	60	57.5	45×20	M4×4.5	38.9	6.5	12.3	2.6	∅2.7
SJWL 15					73.4	45×35		54.8				

(Unit: mm)

Dimensions of rail									Basic load rating		Allowable static moment			Mass	
W <sub>1</sub>	H <sub>1</sub>	W <sub>3</sub>	F	D	d	h	G	Max. length	Dynamic (C) N	Staic (C <sub>0</sub> ) N	M <sub>RO</sub> N·m	M <sub>PO</sub> N·m	M <sub>VO</sub> N·m	Block kg	Rail kg/m
14	5.2	-	30	∅6	∅3.5	3.2	10	1190	1400	2100	1.6	0.73	0.73	0.02	0.51
									1800	3200	2.39	1.58	1.58	0.03	
18	5.5	-	30	∅6	∅3.5	4.5	10	1190	2450	3920	3.67	1.66	1.66	0.03	0.99
									3520	5370	4.94	3.10	3.10	0.05	
24	8.5	-	40	∅8	∅4.8	4.5	15	1190	4020	6080	4.86	1.75	1.9	0.05	1.42
									5960	9210	9.1	4.73	5.39	0.10	
42	9.5	23	40	∅8	∅4.8	4.5	15	1190	6660	9800	13.97	3.6	3.9	0.12	2.93
									9910	14900	25.5	9.73	11.0	0.21	



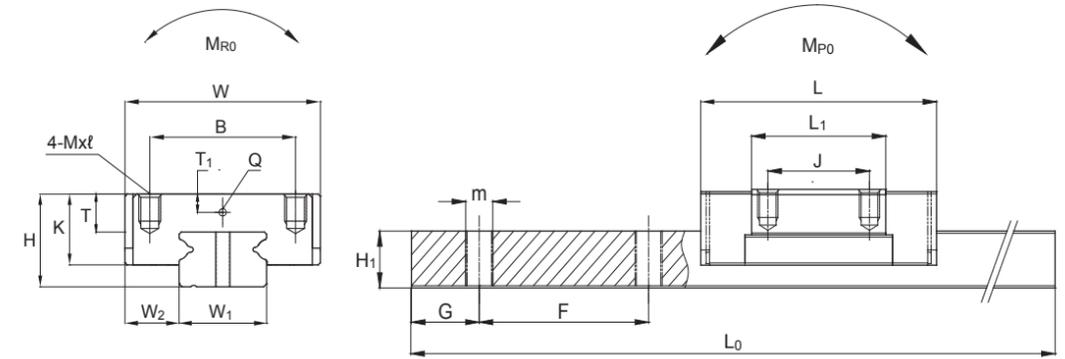
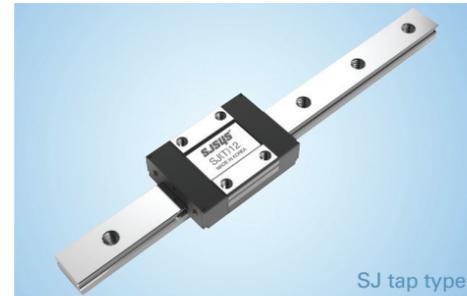
# SJ / SJL Tap type

## Standard(Long)-Tap type

• Examples of model number formation

SJ(L)	7	2	K1	490	H	R	T	3
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- Model
- Size (5, 7, 9, 12, 15)
- Rail (The number of blocks per axis combination)
- Preload K1 : Normal  
K2 : Light preload
- Length of rail (mm)
- No. of axes
- Rail type  
No symbol: Standard  
T: Tap type
- Coating symbol  
No symbol: Standard  
R: Raydent coating
- Accuracy grade  
N: Normal  
H: High  
P: Precision

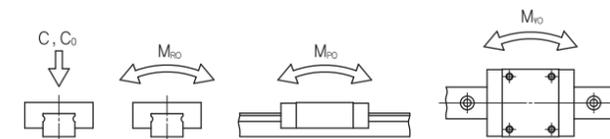


Part no.	Assembly dimensions			Dimensions of block								
	H	E	W <sub>2</sub>	W	L	B×J	M×ℓ	L <sub>1</sub>	T	K	T <sub>1</sub>	Q
SJ 5	6	1.5	3.5	12	16.9	8×-	M2×1.5	8.8	-	4.5	0.8	-
SJ 7	8	1.5	5	17	22.9	12×8	M2×2.5	13.5	3.3	6.5	1.6	∅1
SJL 7					32.4	12×13		23				
SJ 9	10	2.2	5.5	20	30.4	15×10	M3×3	17.8	4.5	7.8	2.3	∅1
SJL 9					40.8	15×16		28.2				
SJ 12	13	3	7.5	27	35	20×15	M3×3.5	19.8	6	10	2.7	∅1
SJL 12					47.6	20×20		32.4				
SJ 15	16	4	8.5	32	43	25×20	M3×4	25.4	6.5	12	3.1	∅1
SJL 15					58.8	25×25		41.2				

Note Rail tightening type of rail mounting the lower parts according to customer's request can be made tap type.

(Unit: mm)

Dimensions of rail						Basic load rating		Allowable static moment			Mass	
W <sub>1</sub>	H <sub>1</sub>	F	m	G	Max. length	Dynamic (C) N	Staic (C <sub>0</sub> ) N	M <sub>RO</sub> N·m	M <sub>PO</sub> N·m	M <sub>VO</sub> N·m	Block kg	Rail kg/m
5	4	15	2	5	295	320	590	0.15	0.22	0.22	0.003	0.14
7	4.7	15	3	5	490	880	1370	0.3	0.3	0.5	0.010	0.23
						1590	2500	0.8	0.8	0.9	0.015	
9	5.5	20	4	7.5	1195	1420	2900	1.06	0.52	0.52	0.013	0.32
						2597	3920	1.87	1.79	1.79	0.023	
12	7.5	25	4	10	1195	2460	3626	1.5	0.82	0.89	0.029	0.59
						4214	6566	2.72	2.45	2.66	0.043	
15	9.5	40	4	15	1190	4018	5978	3.80	1.68	1.83	0.052	0.99
						7154	10682	5.41	5.03	5.46	0.079	



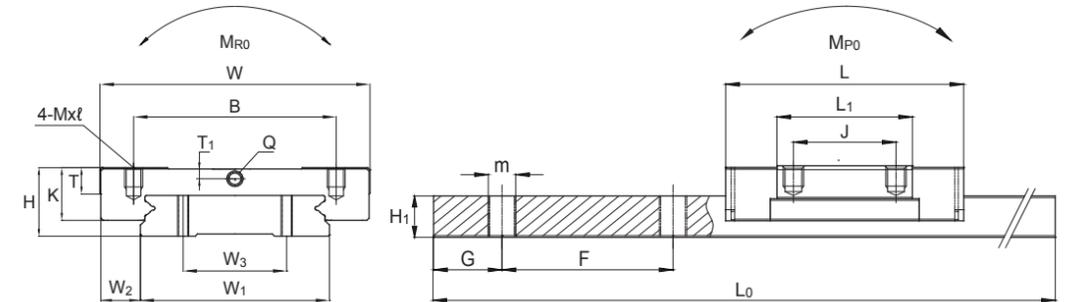
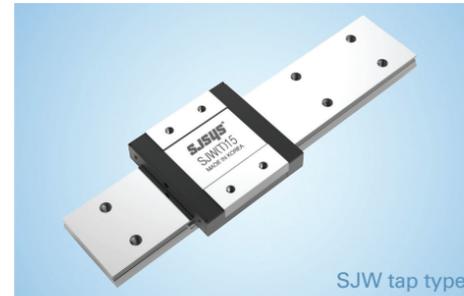
# SJW / SJWL tap type

## Wide(Long) Tap type

• Examples of model number formation

**SJW(L) 7 2 K1 500 H R T 3**

- Model
- Size (7, 9, 12, 15)
- Rail (The number of blocks per axis combination)
- Preload K1 : Normal  
K2 : Light preload
- Length of rail (mm)
- No. of axes
- Rail type  
No symbol: Standard  
T: Tap type
- Coating symbol  
No symbol: Standard  
R: Raydent coating
- Accuracy grade  
N: Normal  
H: High  
P: Precision

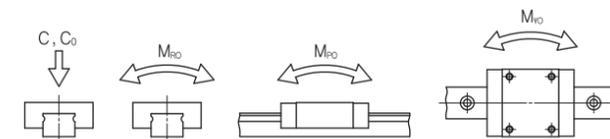


Part no.	Assembly dimensions			Dimensions of block								
	H	E	W <sub>2</sub>	W	L	B×J	M×ℓ	L <sub>1</sub>	T	K	T <sub>1</sub>	Q
SJW 7	9	1.9	5.5	25	31.2	19×10	M3×3	21	3.8	7.1	1.85	∅1
SJWL 7					41	19×19		30.8				
SJW 9	12	3.7	6	30	42.3	21×21	M3×3	27	4.5	8.3	3.1	∅1
SJWL 9					50.3	23×24		35				
SJW 12	14	4	8	40	48.4	28×15	M3×3.5	30.9	5.5	10	2.4	∅1
SJWL 12					59.5	28×28		42				
SJW 15	16	3.7	9	60	57.5	45×20	M4×4.5	38.9	6.5	12.3	2.6	∅2.7
SJWL 15					73.4	45×35		54.8				

Note Rail tightening type of rail mounting the lower parts according to customer's request can be made tap type.

(Unit: mm)

Dimensions of rail							Basic load rating		Allowable static moment			Mass	
W <sub>1</sub>	H <sub>1</sub>	W <sub>3</sub>	F	m	G	Max. length	Dynamic (C) N	Staic (C <sub>0</sub> ) N	M <sub>R0</sub> N·m	M <sub>P0</sub> N·m	M <sub>V0</sub> N·m	Block kg	Rail kg/m
14	5.2	-	30	4	10	1190	1400	2100	1.6	0.73	0.73	0.02	0.51
							1800	3200	2.39	1.58	1.58	0.03	
18	7.2	-	30	4	10	1190	2450	3920	3.67	1.66	1.66	0.03	0.99
							3520	5370	4.94	3.10	3.10	0.05	
24	8.5	-	40	5	15	1190	4020	6080	4.86	1.75	1.9	0.05	1.42
							5960	9210	9.1	4.73	5.39	0.10	
42	9.5	23	40	5	15	1200	6660	9800	13.97	3.6	3.9	0.12	2.93
							VV9910	14900	25.5	9.73	11.0	0.21	



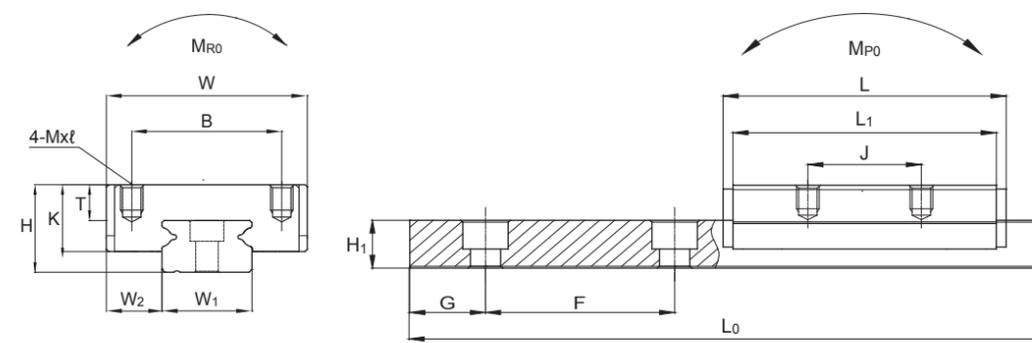
# SJU type / SJUL type

## Standard Limited (Long)type

• Examples of model number formation

SJU(L)	7	2	K1	490	H	R	3
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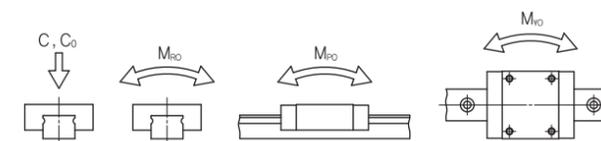
- Model
- Size (5, 7, 9, 12, 15)
- Rail (The number of blocks per axis combination)
- Preload K1 : Normal  
K2 : Light preload
- Length of rail (mm)
- No. of axes
- Coating symbol  
No symbol: Standard  
R: Raydent coating
- Accuracy grade  
N: Normal  
H: High  
P: Precision



Part no.	Assembly dimensions				Dimensions of block						
	H	E	W <sub>2</sub>	Max. stroke	W	L	B×J	M×ℓ	L <sub>1</sub>	T	K
SJU 7	8	1.5	5	8	17	27.6	12×8	M2×2.5	25	3.3	6.5
SJUL 7				13		37.6	12×13		35		
SJU 9	10	2.2	5.5	12	20	37.6	15×10	M3×3	35	4.5	7.8
SJUL 9				18		47.6	15×16		45		
SJU 12	13	3	7.5	15	27	37.6	20×15	M3×3.5	35	5.5	10
SJUL 12				20		52.6	20×20		50		
SJU 15	16	4	8.5	20	32	47.6	25×20	M3×4	45	6.5	12
SJUL 15				25		67.6	25×25		65		

(Unit: mm)

Dimensions of rail								Basic load rating		Allowable static moment			Mass	
W <sub>1</sub>	H <sub>1</sub>	F	D	d	h	G	Max. length	Dynamic (C) N	Staic (C <sub>0</sub> ) N	M <sub>R0</sub> N·m	M <sub>P0</sub> N·m	M <sub>V0</sub> N·m	Block kg	Rail kg/m
7	4.7	15	∅4.2	∅2.4	2.3	5	490	880	1370	0.3	0.3	0.5	0.010	0.23
								1590	2500	0.8	0.8	0.9	0.015	
9	5.5	20	∅6	∅3.5	3.3	7.5	1195	1420	2900	1.06	0.52	0.52	0.013	0.32
								2597	3920	1.87	1.79	1.79	0.023	
12	7.5	25	∅6	∅3.5	4.5	10	1195	2460	3626	1.5	0.82	0.89	0.029	0.59
								4214	6566	2.72	2.45	2.66	0.043	
15	9.5	40	∅6	∅3.5	4.5	15	1190	4018	5978	3.80	1.68	1.83	0.052	0.99
								7154	10682	5.41	5.03	5.46	0.079	



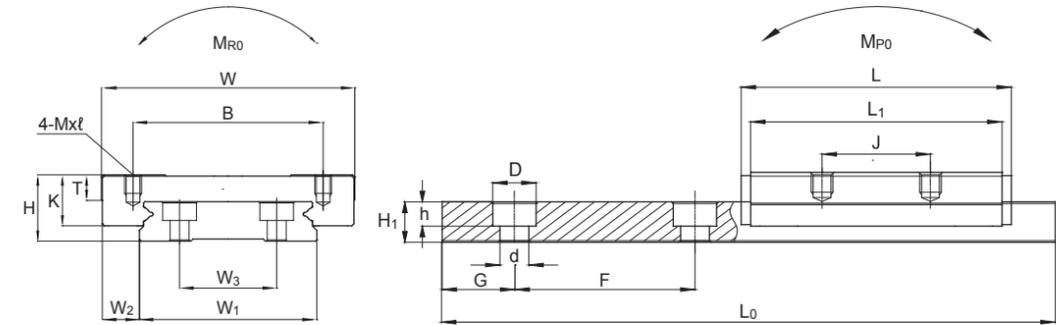
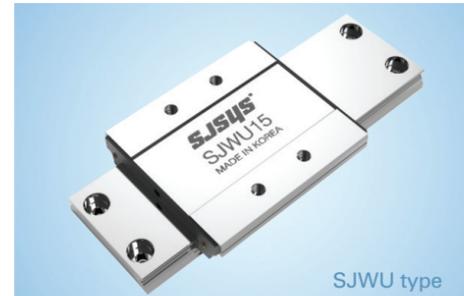
# SJWU type / SJWUL type

## Wide Limited (Long) type

• Examples of model number formation

**SJWU(L) 9 2 K1 500 H R 3**

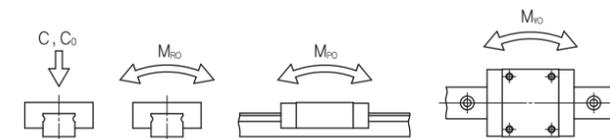
- Model
- Size (9, 12, 15)
- Rail (The number of blocks per axis combination)
- Preload K1 : Normal  
K2 : Light preload
- Length of rail (mm)
- No. of axes
- Coating symbol  
No symbol: Standard  
R: Raydnt coating
- Accuracy grade  
N: Normal  
H: High  
P: Precision



Part no.	Assembly dimensions				Dimensions of block						
	H	E	$W_2$	Max. stroke	W	L	B×J	$M \times l$	$L_1$	T	K
SJWU 9	12	3.7	6	17	30	42.6	21×12	M3×3	40	4.5	8.3
SJWUL 9				27					60		
SJWU 12	14	4	8	22	40	52.6	28×15	M3×3.5	50	5.5	10
SJWUL 12				32					70		
SJWU 15	16	3.7	9	27	60	62.6	45×20	M4×4.5	60	6.5	12.3
SJWUL 15				37					80		

(Unit: mm)

Dimensions of rail									Basic load rating		Allowable static moment			Mass	
$W_1$	$H_1$	$W_3$	F	D	d	h	G	Max. length	Dynamic (C) N	Staic ( $C_0$ ) N	$M_{R0}$ N·m	$M_{P0}$ N·m	$M_{V0}$ N·m	Block kg	Rail kg/m
18	5.5	-	30	$\phi 6$	$\phi 3.5$	4.5	10	1190	2450	3920	3.67	1.66	1.66	0.03	0.99
24	8.5	-	40	$\phi 8$	$\phi 4.8$	4.5	15	1190	4020	6080	4.86	1.75	1.9	0.05	
42	9.5	23	40	$\phi 8$	$\phi 4.8$	4.5	15	1190	6660	9800	13.97	3.6	3.9	0.12	2.93
									9910	14900	25.5	9.73	11.0	0.21	



## Actual use

SJ Global is one of the top companies in Korea in the production of advanced technological products called miniature linear guides. Miniature linear guides are required for semiconductor equipment, LCD/measurement/medical equipment, printing machines, and the IT industry, which is moving toward high speed, high precision, and miniaturization.

## Measuring equipment

Use various super-precision equipment, SJSYS is produce HI quality product.



pressure tester



Vision tester



Three dimension coordinate measuring machine

## Miniature Linear Guide

### Major Partners World (주)에스제이글로벌



OVERSEAS: JAPAN, USA, CHINA, TAIWAN, GERMANY, SPAIN, RUSIA, TUBKEY, NEW ZEALAND, SWEDEN, INDIA, ITALY, CANADA, DENMARK, VIETNAM, ISRAEL, PORTUGAL, FRANCE, BRAZIL, AUSTRALIA