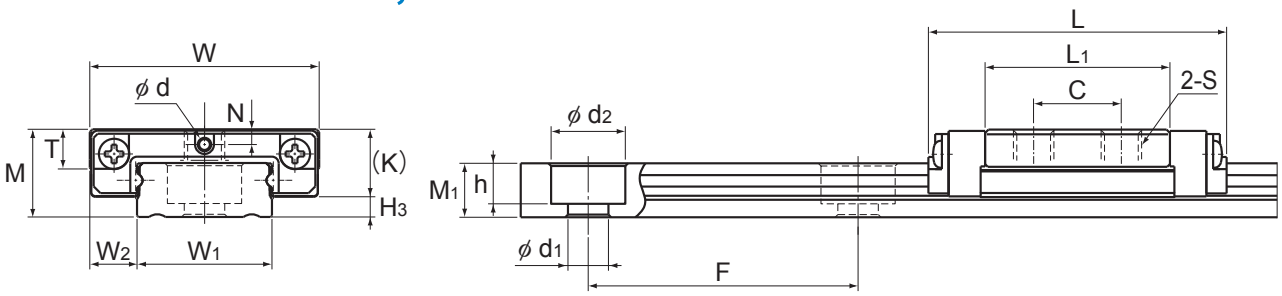
Models SRS-WS, SRS-WM and SRS-WN



Model SRS5

Model No.	Outer dimensions			LM block dimensions								
	Height	Width	Length								Greasing hole	
	M	W	L	B	C	S×ℓ	L_1	T	K	N	d	H_3
SRS 5WM SRS 5WGM	6.5	17	22.1	—	6.5	M3 through	13.7	2.7	5	1.1	0.8	1.5
SRS 5WN SRS 5WGN	6.5	17	28.1	—	11	M3 through	19.7	2.7	5	1.1	0.8	1.5
SRS 7WS SRS 7WGS	9	25	22.5	19	—	M3×2.8	11.9	3.8	7.2	1.8	1.2	1.8
SRS 7WM SRS 7WGM	9	25	31	19	10	M3×2.8	20.4	3.8	7.2	1.8	1.2	1.8
SRS 7WN SRS 7WGN	9	25	40.9	19	17	M3×2.8	30.3	3.8	7.2	1.8	1.2	1.8
SRS 9WS SRS 9WGS	12	30	26.5	21	—	M3×2.8	14.5	4.9	9.1	2.3	1.6	2.9
SRS 9WM SRS 9WGM	12	30	39	21	12	M3×2.8	27	4.9	9.1	2.3	1.6	2.9
SRS 9WN SRS 9WGN	12	30	50.7	23	24	M3×2.8	38.7	4.9	9.1	2.3	1.6	2.9
SRS 12WS SRS 12WGS	14	40	30.5	28	—	M3×3.5	16.9	5.7	11	3	2	3
SRS 12WM SRS 12WGM	14	40	44.5	28	15	M3×3.5	30.9	5.7	11	3	2	3
SRS 12WN SRS 12WGN	14	40	59.5	28	28	M3×3.5	45.9	5.7	11	3	2	3

Note) Since stainless steel is used in the LM block, LM rail and balls, these models are highly resistant to corrosion and environment.
The SRS-G is equipped with uncaged, full-complement bearings.
Using a greasing hole other than for greasing may cause damage.

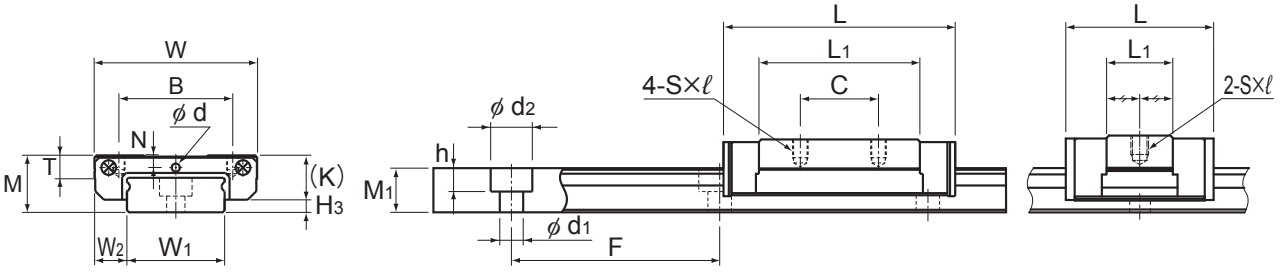
Model number coding

2 SRS12WM QZ UU C1 +470L P M -II

- 2: No. of LM blocks used on the same rail
- SRS12WM: Model No.
- QZ: With QZ Lubricator
- UU: Contamination protection accessory symbol (*1)
- C1: Radial clearance symbol (*2) Normal (No symbol)/ Light preload (C1)
- +470L: LM rail length (in mm)
- P: Accuracy symbol (*3) Normal grade (No Symbol)/High accuracy grade (H) Precision grade (P)
- M: Stainless steel LM rail
- -II: Symbol for No. of rails used on the same plane (*4)

(*1) See contamination protection accessory on A1-496. (*2) See A1-70. (*3) See A1-82. (*4) See A1-13.

Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.)
Those models equipped with QZ Lubricator cannot have a grease nipple. When desiring a grease nipple for a model attached with QZ, contact THK.



Models SRS7WM/WN,9WM/WN,12WM/WN

Models SRS7 to 12WS

Unit: mm

	LM rail dimensions							Basic load rating		Static permissible moment N-m*					Mass	
	Width			Height	Pitch		Length*	C	C_0	M_A		M_B		M_C	LM block	LM rail
	W_1	W_2	W_3	M_1	F	$d_1 \times d_2 \times h$	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg	kg/m
	10 $^{0}_{-0.02}$	3.5	—	4	20	3×5.5×3	220	0.584 0.498	0.703 0.82	1.57 1.79	9.59 11.1	1.83 2.15	11.24 13.3	3.58 4.18	0.005	0.27
	10 $^{0}_{-0.02}$	3.5	—	4	20	3×5.5×3	220	0.746 0.64	0.996 1.17	3.01 3.54	16.8 19.6	3.53 4.15	19.7 23	5.08 5.97	0.007	0.27
	14 $^{0}_{-0.02}$	5.5	—	5.2	30	3.5×6×3.2	480	1.38 1.06	1.35 1.35	2.89 2.58	19.6 20.0	3.32 2.96	22.7 23.1	9.95 9.95	0.011	0.56
	14 $^{0}_{-0.02}$	5.5	—	5.2	30	3.5×6×3.2	480	2.01 1.63	1.94 2.51	6.47 8.87	36.4 51.5	7.71 10.2	42.3 59.5	14.33 20.3	0.018	0.56
	14 $^{0}_{-0.02}$	5.5	—	5.2	30	3.5×6×3.2	480	2.56 2.12	3.28 3.66	15.0 16.6	78.9 87.7	17.4 19.2	91.2 101	24.2 27	0.026	0.56
	18 $^{0}_{-0.02}$	6	—	7.5	30	3.5×6×4.5	1430	2.03 1.73	1.84 2.14	4.49 5.15	32.1 36.9	5.15 5.92	38.9 42.6	17.4 20.2	0.018	1.01
	18 $^{0}_{-0.02}$	6	—	7.5	30	3.5×6×4.5	1430	3.29 2.67	3.34 3.35	14.0 13.9	78.6 69.7	16.2 16.6	91.0 96.7	31.5 31.7	0.031	1.01
	18 $^{0}_{-0.02}$	6	—	7.5	30	3.5×6×4.5	1430	4.20 3.48	4.37 5.81	25.1 33.2	130 172	29.1 40	151 208	41.3 54.9	0.049	1.01
	24 $^{0}_{-0.02}$	8	—	8.5	40	4.5×8×4.5	2000	3.58 3.05	3.15 3.68	9.77 11.1	63 72.6	9.77 11.1	63 72.6	39.5 46.2	0.034	1.52
	24 $^{0}_{-0.02}$	8	—	8.5	40	4.5×8×4.5	2000	5.48 4.46	5.3 5.32	26.4 25.7	143 146	26.4 25.7	143 146	66.5 66.8	0.055	1.52
	24 $^{0}_{-0.02}$	8	—	8.5	40	4.5×8×4.5	2000	7.13 5.93	7.07 9.46	49.2 64.7	249 332	49.2 64.7	249 332	88.7 119	0.091	1.52

Note1) The maximum length under "Length * " indicates the standard maximum length of an LM rail. (See **A1-160**.)
Static permissible moment* 1 block: the static permissible moment with one LM block
Double blocks: static permissible moment when two LM blocks are in close contact with each other
Total block length L : The total block length L shown in the table is the length with the dust proof parts, code UU or SS. If other contamination protection accessories or lubricant equipment are installed, the total block length will increase. (See **A1-472** or **A1-492**)
For the SRS5WM and SRS5WN, the balls will fall out of the block if it is removed from the rail.

Note2) The basic load rating in the dimension table is for a load in the radial direction. Use Table7 on **A1-58** to calculate the load rating for loads in the reverse radial direction or lateral direction.

- Reference bolt tightening torque when mounting an LM block for model SRS 5 and 7W are shown in the table below.

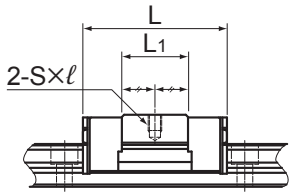
Reference tightening torque

Model No.	Model No. of screw	Screw depth (mm)	Reference tightening torque(N-m)*
SRS 5W	M3	2.3	0.4
SRS 7W	M3	2.8	0.4

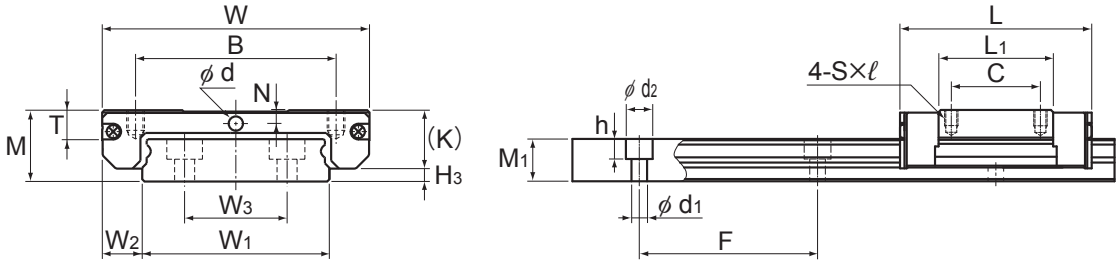
*Tightening above the tightening torque affects accuracy.
Be sure to tighten at or below the defi ned tightening torque.

Options⇒A1-459

Models SRS-WS, SRS-WM and SRS-WN



Model SRS15WS



Model SRS15WM/WN

Model No.	Outer dimensions			LM block dimensions										H3
	Height M	Width W	Length L	B	C	S×ℓ	L1	T	K	N	E	Greasing hole d	Grease nipple	
SRS 15WS SRS 15WGS	16	60	41.5	45	—	M4×4.5	24.9	6.5	13.3	3	— 4	3 —	— PB107	2.7
SRS 15WM SRS 15WGM	16	60	55.5	45	20	M4×4.5	38.9	6.5	13.3	3	— 4	3 —	— PB107	2.7
SRS 15WN SRS 15WGN	16	60	74.5	45	35	M4×4.5	57.9	6.5	13.3	3	— 4	3 —	— PB107	2.7

Note) Since stainless steel is used in the LM block, LM rail and balls, these models are highly resistant to corrosion and environment.
The SRS-G is equipped with uncaged, full-complement bearings.
For the SRS15WS/WM/WN, if a grease nipple is required, please specify upon ordering.
Using a greasing hole other than for greasing may cause damage.

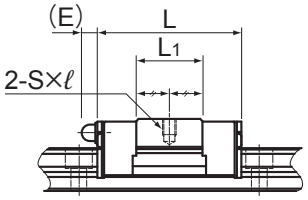
Model number coding

2 SRS15WM QZ UU C1 +550L P M -II

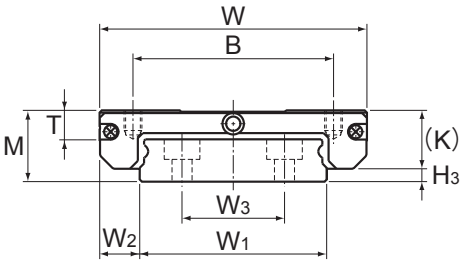
- **2**: No. of LM blocks used on the same rail
- **SRS15WM**: Model No.
- **QZ**: With QZ Lubricator
- **UU**: Contamination protection accessory symbol (*1)
- **C1**: Radial clearance symbol (*2) Normal (No symbol)/ Light preload (C1)
- **+550L**: LM rail length (in mm)
- **P**: Accuracy symbol (*3) Normal grade (No Symbol)/High accuracy grade (H) Precision grade (P)
- **M**: Stainless steel LM rail
- **-II**: Symbol for No. of rails used on the same plane (*4)

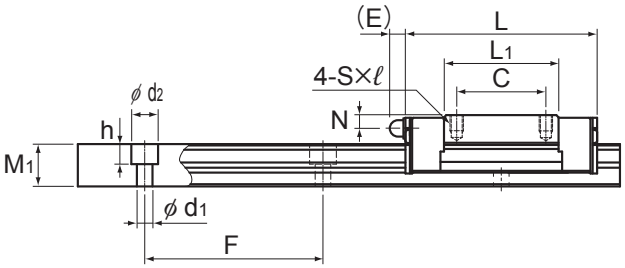
(*1) See contamination protection accessory on A1-496. (*2) See A1-70. (*3) See A1-82. (*4) See A1-13.

Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.)
Those models equipped with QZ Lubricator cannot have a grease nipple. When desiring a grease nipple for a model attached with QZ, contact THK.



Model SRS15WGS





Model SRS15WGM/WGN

Unit: mm

	LM rail dimensions							Basic load rating		Static permissible moment N-m*					Mass	
	Width			Height	Pitch		Length*	C	C_0	M_A		M_B		M_C	LM block	LM rail
	W_1	W_2	W_3	M_1	F	$d_1 \times d_2 \times h$	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg	kg/m
	42 $^{0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	6.64 5.59	5.94 6.78	25.4 29	158 178	25.4 29	158 178	123 140	0.087	2.87
	42 $^{0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	9.12 7.43	8.55 8.59	51.2 52.7	290 293	51.2 52.7	290 293	176 178	0.13	2.87
	42 $^{0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	12.4 9.87	12.1 15.3	106 133	532 671	106 133	532 671	250 317	0.201	2.87

Note) The maximum length under "Length * " indicates the standard maximum length of an LM rail. (See **A1-160**.)
Static permissible moment* 1 block: the static permissible moment with one LM block
Double blocks: static permissible moment when two LM blocks are in close contact with each other
Total block length L : The total block length L shown in the table is the length with the dust proof parts, code UU or SS. If other contamination protection accessories or lubricant equipment are installed, the total block length will increase.
(See **A1-472** or **A1-492**)

Options⇒A1-459

Standard Length and Maximum Length of the LM Rail

Table2 shows the standard lengths and the maximum lengths of model SRS variations. If the maximum length of the desired LM rail exceeds them, jointed rails will be used. Contact THK for details. For the G dimension when a special length is required, we recommend selecting the corresponding G value from the table. The longer the G dimension is, the less stable the G area may become after installation, thus causing an adverse impact to accuracy.

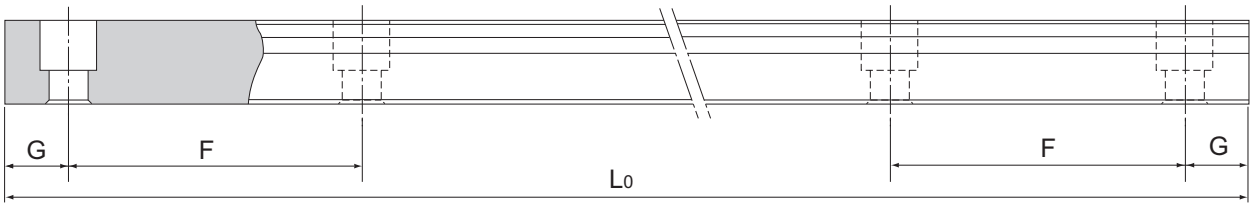


Table2 Standard Length and Maximum Length of the LM Rail for Model SRS

Unit: mm

Model No.	SRS 5	SRS 5W	SRS 7	SRS 7W	SRS 9	SRS 9W	SRS 12	SRS 12W	SRS 15	SRS 15W	SRS 20	SRS 25
LM rail standard length (L_O)	40 55 70 100 130 160	50 70 90 110 130 150 170	40 55 70 85 100 115 130	50 80 110 140 170 200 260 290	55 75 95 115 135 155 175 195 275 375	50 80 110 140 170 200 260 290 320	70 95 120 145 170 195 220 245 270 320 370 470 570	70 110 150 190 230 270 310 390 470 550	70 110 150 190 230 270 310 350 390 430 470 550 670 870	110 150 190 230 270 310 430 550 670 790	220 280 340 460 640 880 1000	220 280 340 460 640 880 1000
Standard pitch F	15	20	15	30	20	30	25	40	40	40	60	60
G	5	5	5	10	7.5	10	10	15	15	15	20	20
Max length	220	220	480	480	1240	1430	2000	2000	2000	2000	1800	1800

Note1) The maximum length varies with accuracy grades. Contact THK for details.
Note2) If jointed rails are not allowed and a greater length than the maximum values above is required, contact THK.