

SRG



Caged Roller LM Guide

B Product Specifications

Dimensional Drawing, Dimensional Table

Models SRG-A, SRG-LA, SRG-C and SRG-LC ..	B-208
Models SRG-V, SRG-LV, SRG-R and SRG-LR ..	B-210

Standard Length and Maximum Length of the LM Rail	B-212
--	-------

Options

The LM Block Dimension (Dimension L) with LaCS and Seals Attached	B-229
Incremental dimension with grease nipple (when LaCS is attached)	B-232
LM Block Dimension (Dimension L) with LiCS Attached	B-233
Incremental dimension with grease nipple (when LiCS is attached)	B-234
Dedicated Bellows JSRG for Model SRG	B-246
Cap C	B-250
LM Block Dimension (Dimension L) with QZ Attached	B-253
Greasing Hole for Model SRG	B-257

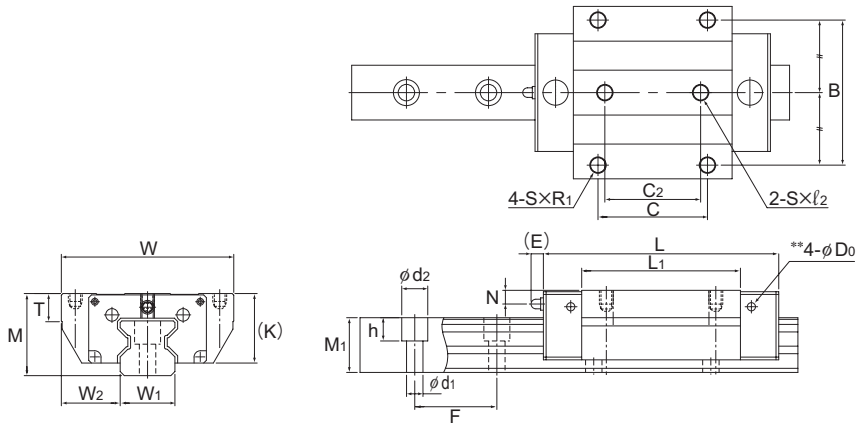
A Technical Descriptions of the Products (Separate)

Technical Descriptions

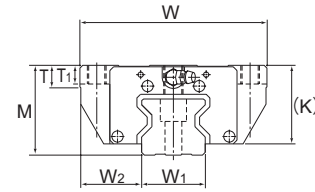
Structure and features	A-301
Types and Features	A-302
Rated Loads in All Directions	A-304
Equivalent Load	A-304
Service Life	A-100
Radial Clearance Standard	A-115
Accuracy Standards	A-119
Shoulder Height of the Mounting Base and the Corner Radius	A-329
Error Allowance of the Mounting Surface	A-305

* Please see the separate "A Technical Descriptions of the Products".

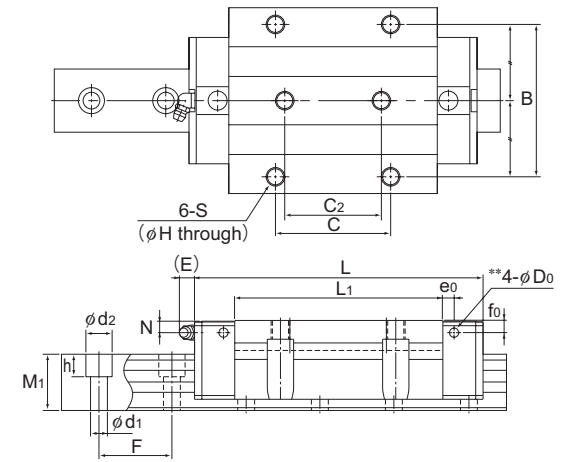
Models SRG-A, SRG-LA, SRG-C and SRG-LC



Models SRG15A and 20A/LA



Models SRG25 to 65C/LC



Unit: mm

Model No.	Outer dimensions			LM block dimensions														H ₃	LM rail dimensions					Basic load rating		Static permissible moment kN-m*			Mass					
	Height M	Width W	Length L	B	C	C ₂	S	H	L ₁	T	T ₁	K	N	E	e ₀	f ₀	D ₀		Grease nipple	Width W ₁ 0 -0.05	Height M ₁	Pitch F	Length* Max	C kN	C ₀ kN	M _a		M _b		M _c	LM block kg	LM rail kg/m		
																										1 block	Double blocks	1 block	Double blocks	1 block				
SRG 15A	24	47	69	38	30	26	M5	—	45	7	—	20	4	4.5	—	—	2.9	PB107	4	15	16	15.5	30	4.5×7.5×5.3	2500	11.3	25.8	0.21	—	0.21	—	0.24	0.20	1.58
SRG 20A SRG 20LA	30	63	86 106	53	40	35	M6	—	58 78	10	—	25.4	5	4.5	—	—	2.9	PB107	4.6	20	21.5	20	30	6×9.5×8.5	3000	21 26.7	46.9 63.8	0.48 0.88	—	0.48 0.88	—	0.58 0.79	0.42 0.57	2.58
SRG 25C SRG 25LC	36	70	95.5 115	57	45	40	M8	6.8	65.5 85.1	9.5	10	31.5	5.5	12	6	6.4	5.2	B-M6F	4.5	23	23.5	23	30	7×11×9	3000	27.9 34.2	57.5 75	0.641 1.07	3.7 5.74	0.641 1.07	3.7 5.74	0.795 1.03	0.7 0.9	3.6
SRG 30C SRG 30LC	42	90	111 135	72	52	44	M10	8.5	75 99	12	14	37	6.5	12	6	6.2	5.2	B-M6F	5	28	31	26	40	9×14×12	3000	39.3 48.3	82.5 108	1.02 1.76	6.21 9.73	1.02 1.76	6.21 9.73	1.47 1.92	1.2 1.6	4.4
SRG 35C SRG 35LC	48	100	125 155	82	62	52	M10	8.5	82.2 112.2	11.5	10	42	6.5	12	6	6.5	5.2	B-M6F	6	34	33	30	40	9×14×12	3000	59.1 76	119 165	1.66 3.13	10.1 17	1.66 3.13	10.1 17	2.39 3.31	1.9 2.4	6.9
SRG 45C SRG 45LC	60	120	155 190	100	80	60	M12	10.5	107 142	14.5	15	52	10	16	7	7	5.2	B-PT1/8	8	45	37.5	37	52.5	14×20×17	3090	91.9 115	192 256	3.49 6.13	20 32.2	3.49 6.13	20 32.2	4.98 6.64	3.7 4.5	11.6
SRG 55C SRG 55LC	70	140	185 235	116	95	70	M14	12.5	129.2 179.2	17.5	18	60	12	16	9	7.7	5.2	B-PT1/8	10	53	43.5	43	60	16×23×20	3060	131 167	266 366	5.82 10.8	33 57	5.82 10.8	33 57	8.19 11.2	5.9 7.8	15.8
SRG 65LC	90	170	303	142	110	82	M16	14.5	229.8	19.5	20	78.5	17	16	9	12.4	5.2	B-PT1/8	11.5	63	53.5	54	75	18×26×22	3000	278	599	22.7	120	22.7	120	22.1	16.4	23.7

Model number coding

SRG45 LC 2 QZ KKHH C0 +1200L P T Z - II

Model number	Type of LM block	With QZ Lubricator	Contamination protection accessory symbol (*1)	LM rail length (in mm)	With plate cover	Symbol for No. of rails used on the same plane (*4)
	No. of LM blocks used on the same rail		Radial clearance symbol (*2)	Accuracy symbol (*3)	Symbol for LM rail jointed use	
			Normal (No symbol) Light preload (C1) Medium preload (C0)	Normal grade (No Symbol)/High accuracy grade (H) Precision grade (P)/Super precision grade (SP) Ultra precision grade (UP)		

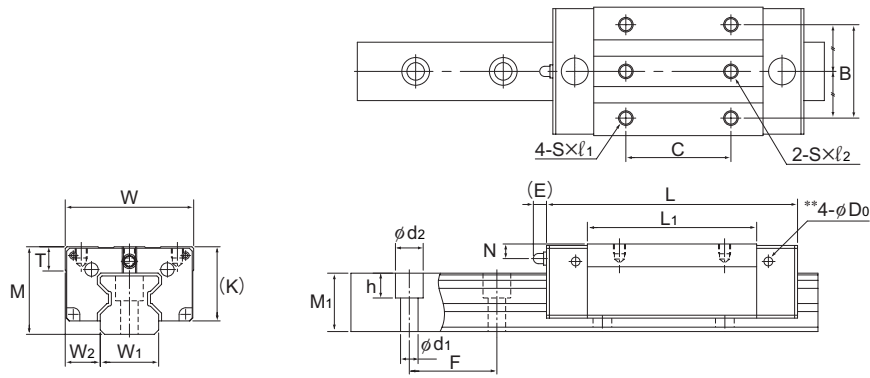
(*1) See contamination protection accessory on A-368. (*2) See A-115. (*3) See A-119. (*4) See A-59.

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.

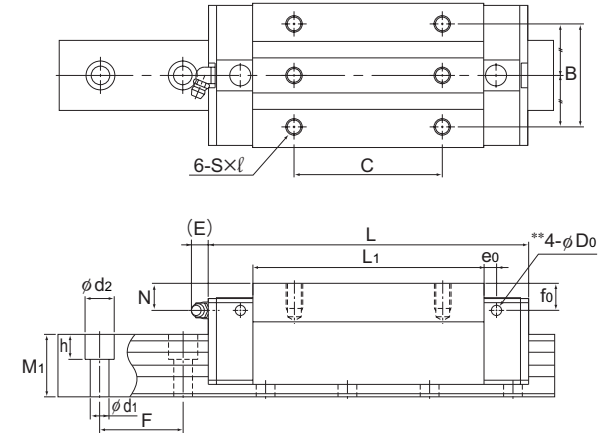
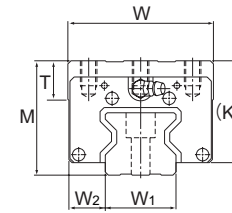
Note) The greasing hole on the top face and the pilot hole of the side nipple** are not drilled through in order to prevent foreign material from entering the block.
See B-257 for details.

The maximum length under "Length*" indicates the standard maximum length of an LM rail. (See B-212.)
Static permissible moment*: 1 block: static permissible moment value with 1 LM block
Double blocks: static permissible moment value with 2 blocks closely contacting with each other

Models SRG-V, SRG-LV, SRG-R and SRG-LR



Models SRG15V and 20V/LV

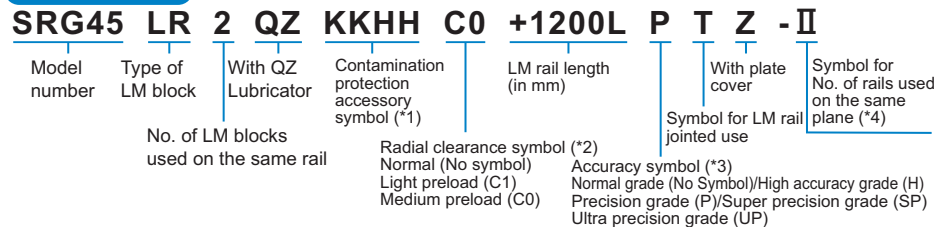


Models SRG25 to 65R/LR/LV

Unit: mm

Model No.	Outer dimensions			LM block dimensions											H ₃	LM rail dimensions					Basic load rating		Static permissible moment kN-m*			Mass					
	Height	Width	Length	B	C	S×ℓ	L ₁	T	K	N	E	e ₀	f ₀	D ₀		Grease nipple	Width	Height	Pitch	Length*	C	C ₀	M _a		M _b		M _c	LM block	LM rail		
	M	W	L														W ₁	W ₂	M ₁	F	d ₁ ×d ₂ ×h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg	kg/m
SRG 15V	24	34	69	26	26	—	45	6	20	4	4.5	—	—	2.9	PB107	4	15	9.5	15.5	30	4.5×7.5×5.3	2500	11.3	25.8	0.21	—	0.21	—	0.24	0.15	1.58
SRG 20V SRG 20LV	30	44	86 106	32	36 50	—	58 78	8	25.4	5	4.5	—	—	2.9	PB107	4.6	20	12	20	30	6×9.5×8.5	3000	21 26.7	46.9 63.8	0.48 0.88	—	0.48 0.88	—	0.58 0.79	0.28 0.38	2.58
SRG 25R SRG 25LR	40	48	95.5 115	35	35 50	M6×9	65.5 85.1	9.5	35.5	9.5	12	6	10.4	5.2	B-M6F	4.5	23	12.5	23	30	7×11×9	3000	27.9 34.2	57.5 75	0.641 1.07	3.7 5.74	0.641 1.07	3.7 5.74	0.795 1.03	0.6 0.8	3.6
SRG 30R SRG 30LR	45	60	111 135	40	40 60	M8×10	75 99	12	40	9.5	12	6	9.2	5.2	B-M6F	5	28	16	26	40	9×14×12	3000	39.3 48.3	82.5 108	1.02 1.76	6.21 9.73	1.02 1.76	6.21 9.73	1.47 1.92	0.9 1.2	4.4
SRG 35R SRG 35LR	55	70	125 155	50	50 72	M8×12	82.2 112.2	18.5	49	13.5	12	6	13.5	5.2	B-M6F	6	34	18	30	40	9×14×12	3000	59.1 76	119 165	1.66 3.13	10.1 17	1.66 3.13	10.1 17	2.39 3.31	1.6 2.1	6.9
SRG 45R SRG 45LR	70	86	155 190	60	60 80	M10×20	107 142	24.5	62	20	16	7	17	5.2	B-PT1/8	8	45	20.5	37	52.5	14×20×17	3090	91.9 115	192 256	3.49 6.13	20 32.2	3.49 6.13	20 32.2	4.98 6.64	3.2 4.1	11.6
SRG 55R SRG 55LR	80	100	185 235	75	75 95	M12×18	129.2 179.2	27.5	70	22	16	9	22	5.2	B-PT1/8	10	53	23.5	43	60	16×23×20	3060	131 167	266 366	5.82 10.8	33 57	5.82 10.8	33 57	8.19 11.2	5 6.9	15.8
SRG 65LV	90	126	303	76	120	M16×20	229.8	19.5	78.5	17	16	9	12.4	5.2	B-PT1/8	11.5	63	31.5	54	75	18×26×22	3000	278	599	22.7	120	22.7	120	22.1	12.1	23.7

Model number coding



(*1) See contamination protection accessory on A-368. (*2) See A-115. (*3) See A-119. (*4) See A-59.

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.

Note) The greasing hole on the top face and the pilot hole of the side nipple** are not drilled through in order to prevent foreign material from entering the block.
See B-257 for details.

The maximum length under "Length*" indicates the standard maximum length of an LM rail. (See B-212.)
Static permissible moment*: 1 block: static permissible moment value with 1 LM block
Double blocks: static permissible moment value with 2 blocks closely contacting with each other

Standard Length and Maximum Length of the LM Rail

Table1 shows the standard lengths and the maximum lengths of model SRG 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.

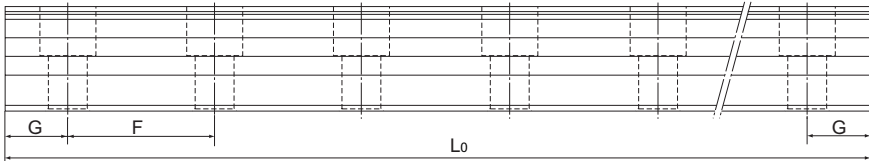


Table1 Standard Length and Maximum Length of the LM Rail for Model SRG

Unit: mm

Model No.	SRG 15	SRG 20	SRG 25	SRG 30	SRG 35	SRG 45	SRG 55	SRG 65
LM rail standard length (L ₀)	160	220	220	280	280	570	780	1270
	220	280	280	360	360	675	900	1570
	280	340	340	440	440	780	1020	2020
	340	400	400	520	520	885	1140	2620
	400	460	460	600	600	990	1260	
	460	520	520	680	680	1095	1380	
	520	580	580	760	760	1200	1500	
	580	640	640	840	840	1305	1620	
	640	700	700	920	920	1410	1740	
	700	760	760	1000	1000	1515	1860	
	760	820	820	1080	1080	1620	1980	
	820	940	940	1160	1160	1725	2100	
	940	1000	1000	1240	1240	1830	2220	
	1000	1060	1060	1320	1320	1935	2340	
	1060	1120	1120	1400	1400	2040	2460	
	1120	1180	1180	1480	1480	2145	2580	
	1180	1240	1240	1560	1560	2250	2700	
	1240	1360	1300	1640	1640	2355	2820	
	1360	1480	1360	1720	1720	2460	2940	
	1480	1600	1420	1800	1800	2565	3060	
1600	1720	1480	1880	1880	2670			
	1840	1540	1960	1960	2775			
	1960	1600	2040	2040	2880			
	2080	1720	2200	2200	2985			
	2200	1840	2360	2360	3090			
		1960	2520	2520				
		2080	2680	2680				
		2200	2840	2840				
		2320	3000	3000				
		2440						
Standard pitch F	30	30	30	40	40	52.5	60	75
G	20	20	20	20	20	22.5	30	35
Max length	2500	3000	3000	3000	3000	3090	3060	3000

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.