

SRN



Caged Roller LM Guide

B Product Specifications

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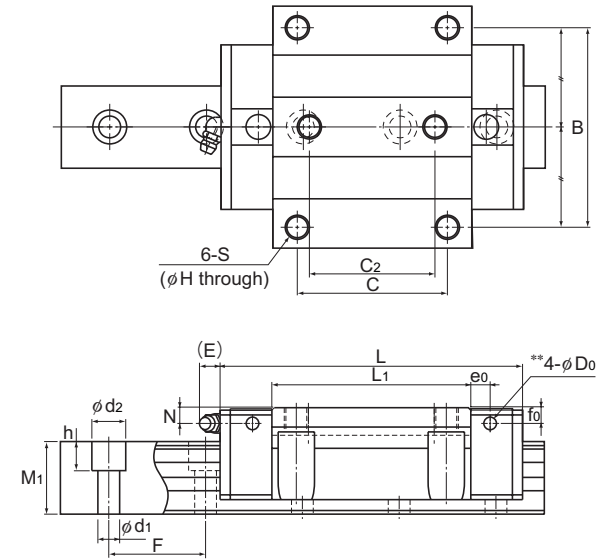
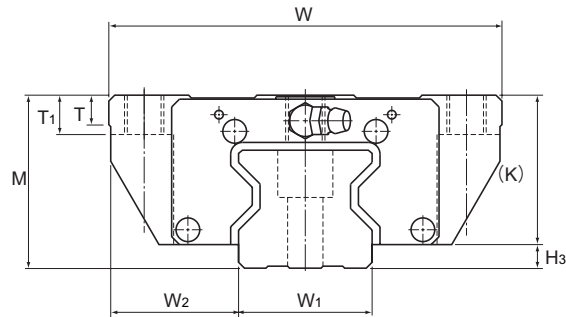
A Technical Descriptions of the Products (Separate)

Technical Descriptions

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Models SRN-C and SRN-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	Width	Length	B	C	C ₂	S	H	L ₁	T	T ₁	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 0 -0.05	W ₂	M ₁	F	d ₁ × d ₂ × h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg
SRN 35C SRN 35LC	44	100	125 155	82	62	52	M10	8.5	82.2 112.2	7.5	10	38	6.5	12	8	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	1.6 2	6.9
SRN 45C SRN 45LC	52	120	155 190	100	80	60	M12	10.5	107 142	7.5	15	45	7	12	8.5	7	5.2	B-M6F	8	45	37.5	36	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 3.6	11.3
SRN 55C SRN 55LC	63	140	185 235	116	95	70	M14	12.5	129 179.2	10.5	18	53	8	16	10	8	5.2	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	4.9 6.4	15.8
SRN 65LC	75	170	303	142	110	82	M16	14.5	229.8	19.5	20	65	14	16	9	11	5.2	PT1/8	11.5	63	53.5	49	75	18 × 26 × 22	3000	278	599	22.7	120	22.7	120	22.1	12.7	21.3

Model number coding

SRN45 C 2 KK C0 +1160L P T Z -II

Model number	Type of LM block	Contamination protection accessory symbol (*1)	LM rail length (in mm)	With plate cover	Symbol for LM rail jointed use	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)				
	Normal (No symbol)	Normal grade (No Symbol)/High accuracy grade (H)				
	Light preload (C1)	Precision grade (P)/Super precision grade (SP)				
	Medium preload (C0)	Ultra precision grade (UP)				

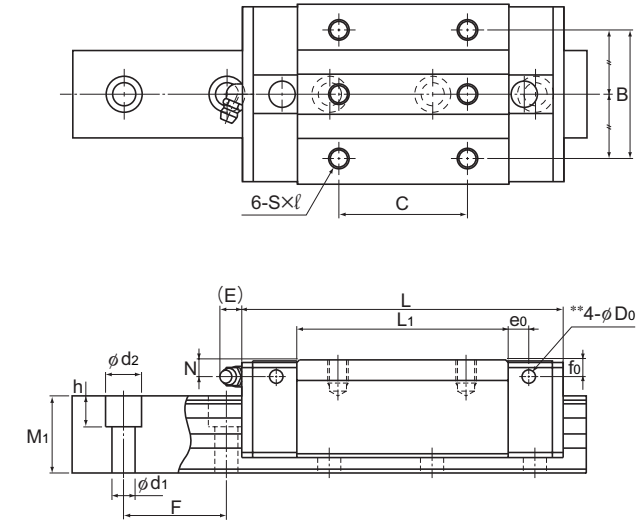
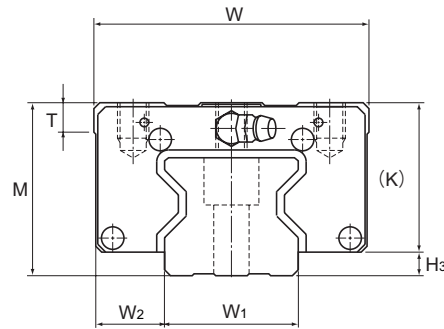
(*1) See contamination protection accessory on A-368. (*2) See A-115. (*3) See A-119. (*4) See A-59.

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.)

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-258 for details.

The maximum length under "Length*" indicates the standard maximum length of an LM rail. (See B-218.)
 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 SRN-R and SRN-LR



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																				1 block	Double blocks	1 block	Double blocks	1 block			kg	kg/m
SRN 35R SRN 35LR	44	70	125 155	50	50 72	M8×9	82.2 112.2	7.5	38	6.5	12	8	6.5	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	1.1 1.4	6.9
SRN 45R SRN 45LR	52	86	155 190	60	60 80	M10×11	107 142	7.5	45	7	12	8.5	7	5.2	B-M6F	8	45	20.5	36	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	1.9 2.5	11.3
SRN 55R SRN 55LR	63	100	185 235	75	75 95	M12×13	129 179.2	10.5	53	8	16	10	8	5.2	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	3.2 4.5	15.8
SRN 65LR	75	126	303	76	120	M16×16	229.8	19.5	65	14	16	9	11	5.2	PT1/8	11.5	63	31.5	49	75	18×26×22	3000	278	599	22.7	120	22.7	120	22.1	9.4	21.3

Model number coding

SRN45 LR 2 KK C0 +1200L P T Z -II

Model number	Type of LM block	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)	Normal (No symbol) Light preload (C1) Medium preload (C0)	Accuracy symbol (*3) Normal grade (No Symbol)/High accuracy grade (H) Precision grade (P)/Super precision grade (SP) Ultra precision grade (UP)	Symbol for LM rail jointed use	

(*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.)

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-258 for details.

The maximum length under "Length*" indicates the standard maximum length of an LM rail. (See B-218.)
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 SRN 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.

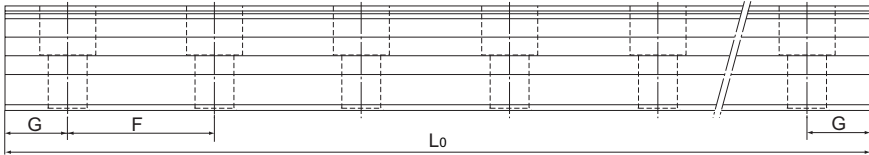


Table1 Standard Length and Maximum Length of the LM Rail for Model SRN

Unit: mm

Model No.	SRN 35	SRN 45	SRN 55	SRN 65
LM rail standard length (L ₀)	280	570	780	1270
	360	675	900	1570
	440	780	1020	2020
	520	885	1140	2620
	600	990	1260	
	680	1095	1380	
	760	1200	1500	
	840	1305	1620	
	920	1410	1740	
	1000	1515	1860	
	1080	1620	1980	
	1160	1725	2100	
	1240	1830	2220	
	1320	1935	2340	
	1400	2040	2460	
	1480	2145	2580	
	1560	2250	2700	
	1640	2355	2820	
	1720	2460	2940	
	1800	2565	3060	
	1880	2670		
	1960	2775		
	2040	2880		
	2200	2985		
	2360	3090		
2520				
2680				
2840				
3000				
Standard pitch F	40	52.5	60	75
G	20	22.5	30	35
Max length	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.