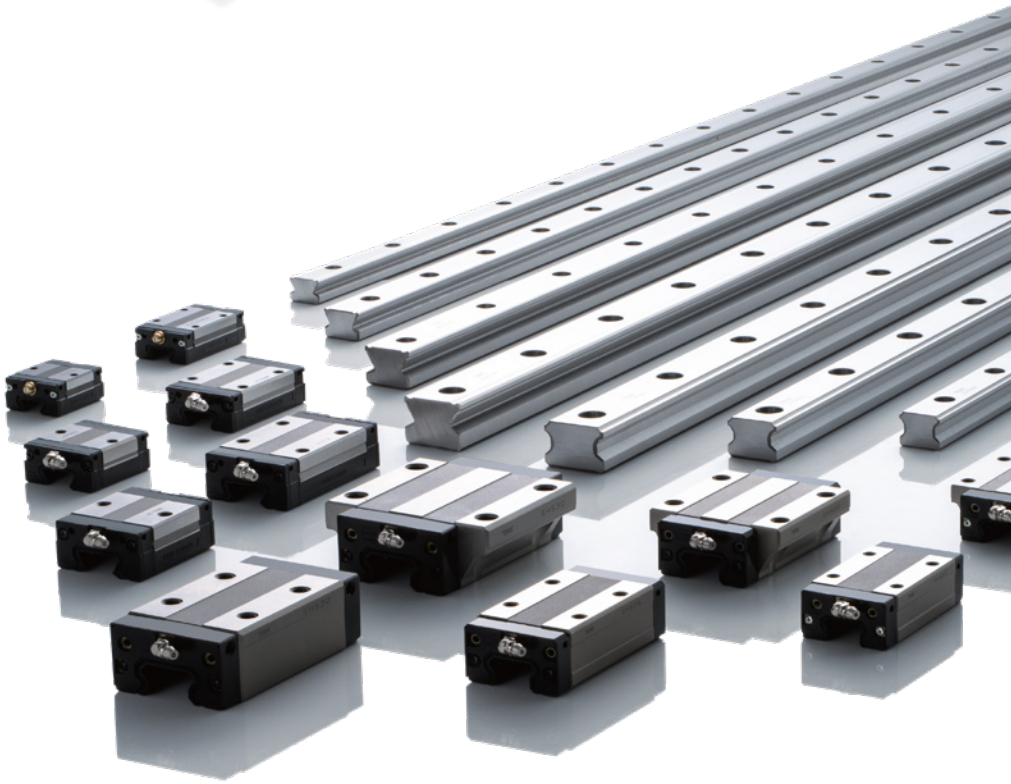
THK
The Mark of Linear Motion

Product Ordering Guide

Linear Motion Guide

SHS/SSR/SHW/SRS
HSR/SR/HRW/SRS-G





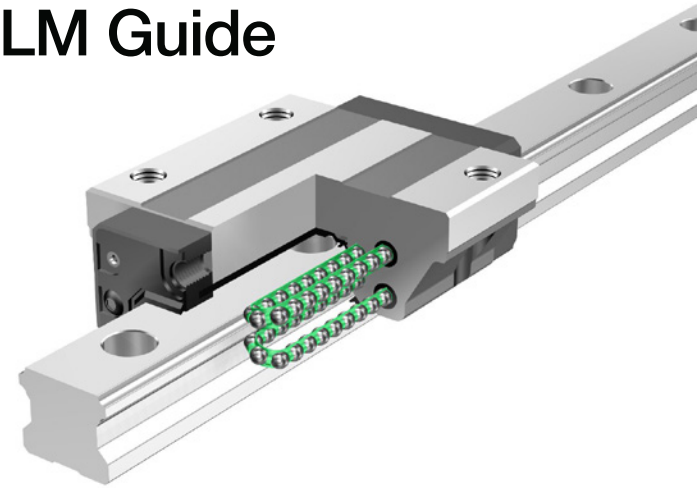
THK America, Inc.
CAT. NO. US-104-1E

Linear Motion Guide

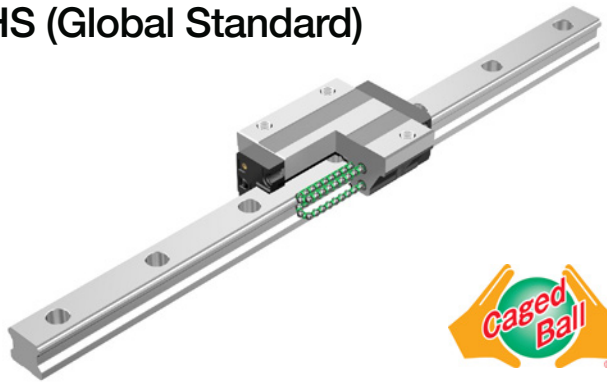
The LM Guide (Linear Motion Guide) is our main product, incorporating a part with a linear rolling motion into practical usage for the first time in the world. It realizes the development of high-precision, high-rigidity, energy-saving, high-speed machines with long service life.



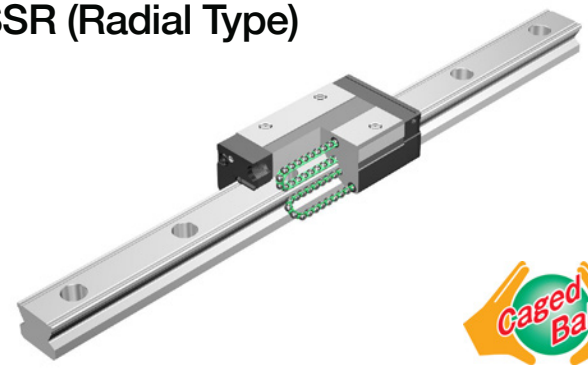
Caged-Ball LM Guide



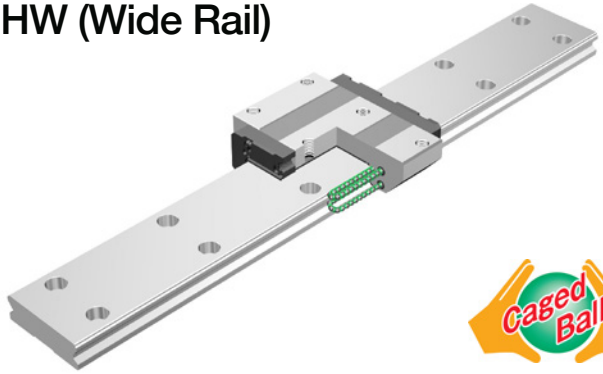
SHS (Global Standard)



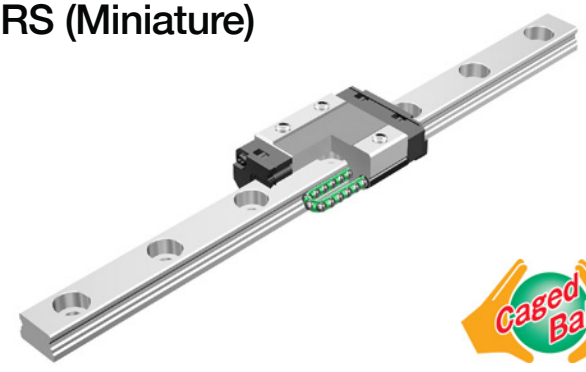
SSR (Radial Type)



SHW (Wide Rail)

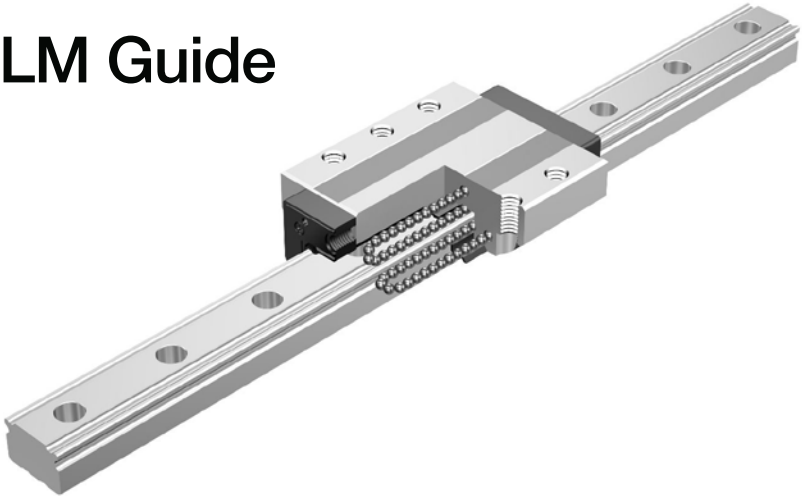


SRS (Miniature)

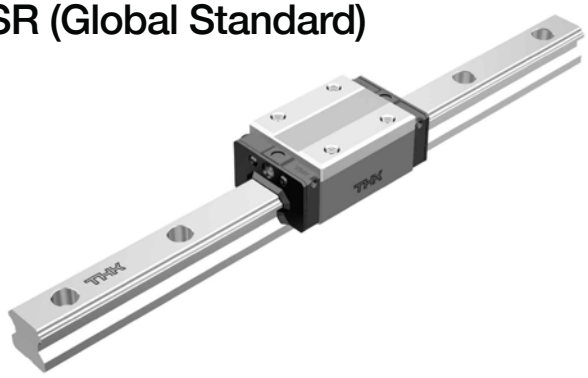




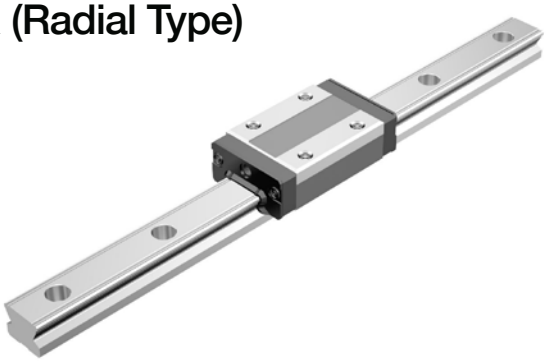
Full-Ball LM Guide



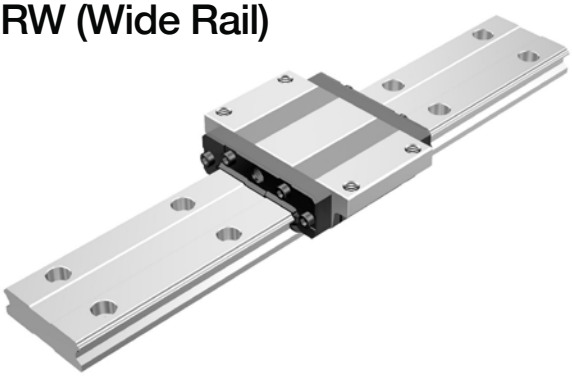
HSR (Global Standard)



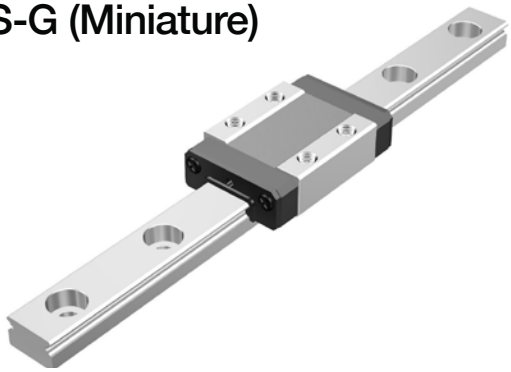
SR (Radial Type)



HRW (Wide Rail)

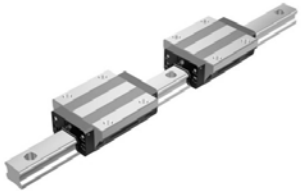


SRS-G (Miniature)



Basic Specifications - SHS

- Caged-Ball
- Global Standard
- 4-Way Equal Loading



Assembly (Block & Rail Set)

MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION (Page 71-79)	RADIAL CLEARANCE (Page 80)
SHS25	**LC**	**1**	**SS**	**C1**

SHS15	C	1 ~	UU : End Seal	No Symbol : Normal
SHS20	V		SS : End Seal + Side Seal	C1 : Light Preload
SHS25	R		DD : Double End Seal + Side Seal	C0 : Medium Preload
SHS30	LC		ZZ : End Seal + Side Seal + Metal Scraper	CS : Custom (Contact THK)
SHS35	LV		KK : Double End Seal + Side Seal + Metal Scraper	
SHS45	LR			
SHS55				
SHS65				

*C0 & CS : Not available for Block Only

*SS, DD, ZZ, KK include inner seal

Block Only



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK	SAMPLE PART NUMBER
SHS15	**R**	**1**	**KK**	**C1**	**(GK)**	**BLOCK**	**SHS15R1KKC1(GK) BLOCK**
							SHS30LV1SS(GK) BLOCK

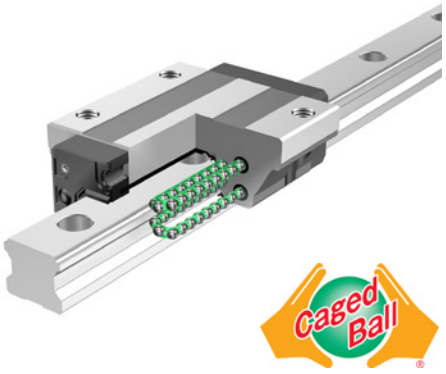
SHS15	C	1	UU	No Symbol : Normal
SHS20	V		SS	C1 : Light Preload
SHS25	R		DD	
SHS30	LC		ZZ	
SHS35	LV		KK	
SHS45	LR			
SHS55				
SHS65				

Available Block Styles for SHS

C: Flanged Tapped Holes 	**V:** Narrow Tapped Holes Low Height 	**R:** Narrow Tapped Holes 
LC: Long C Style 	**LV:** Long V Style 	**LR:** Long R Style 

⊙ = Available

Style	Size							
	15	20	25	30	35	45	55	65
C	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
V	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
R	⊙	–	⊙	⊙	⊙	⊙	⊙	–
LC	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
LV	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
LR	–	–	⊙	⊙	⊙	⊙	⊙	–



RAIL LENGTH (Std Length - Page 11)	ACCURACY GRADE (Page 81)	SAMPLE PART NUMBER
1240L	P	SHS25LC1SSC1+1240LP
Overall length in mm	No Symbol : Normal	SHS20V2ZZ+820L
	H : High	
	P : Precision	
	SP : Super Precision	
	UP : Ultra Precision	

*If other than standard length, specify G/g dimensions (Fig. 1)

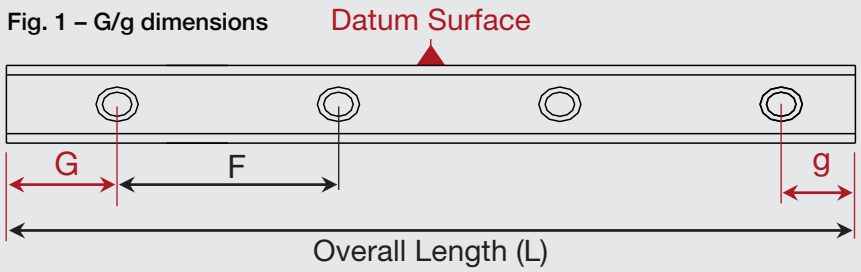
*H, P, SP, UP : Not available for Rail Only

Rail Only



MODEL NUMBER & SIZE	RAIL LENGTH	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
SHS65	1270L	(GK)	RAIL	SHS65-1270L(GK) RAIL
SHS15	Overall length in mm			SHS35-600L(GK) RAIL
SHS20				
SHS25				
SHS30				
SHS35				
SHS45				
SHS55				
SHS65				

Fig. 1 – G/g dimensions

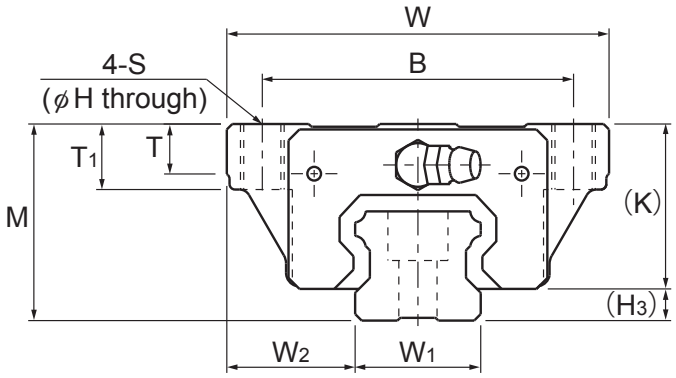


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. SHS55V2SS+2690L **(G/g=25)**, SHS30-430L(GK) RAIL **(G=20, g=10)**

*Note 1 : For more product specs, please see THK general catalog

*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - SHS

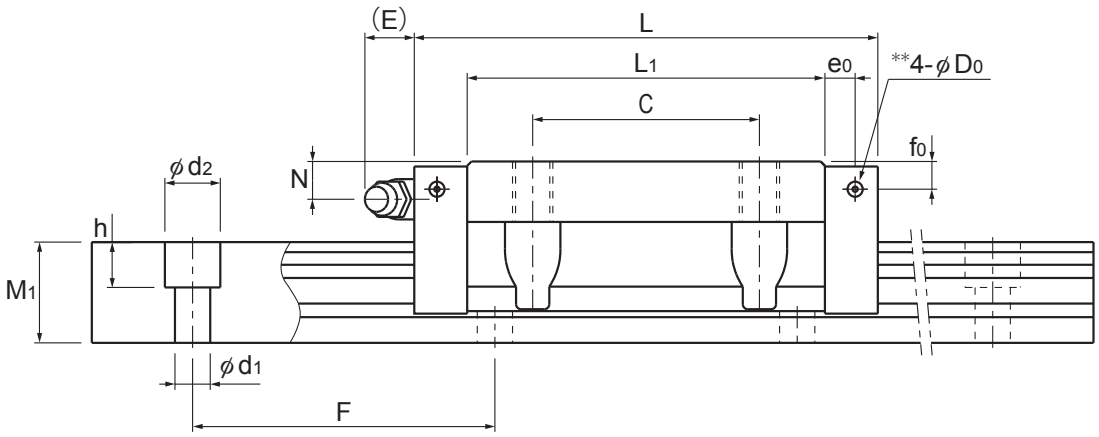


SHS-C / LC

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS										PILOT HOLE FOR SIDE NIPPLE			H3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	S	H	L_1	T	T_1	K	N	E	GREASE NIPPLE	e_0	f_0	D0		
SHS15C	24	47	64.4	38	30	M5	4.4	48	5.9	8	21	5.5	5.5	PB1021B	4	4	3	3	
SHS15LC	24	47	79.4	38	30	M5	4.4	63	5.9	8	21	5.5	5.5	PB1021B	4	4	3	3	
SHS20C	30	63	79	53	40	M6	5.4	59	7.2	10	25.4	6.5	12	B-M6F	4.3	5.3	3	4.6	
SHS20LC	30	63	98	53	40	M6	5.4	78	7.2	10	25.4	6.5	12	B-M6F	4.3	5.3	3	4.6	
SHS25C	36	70	92	57	45	M8	6.8	71	9.1	12	30.2	7.5	12	B-M6F	4.5	5.5	3	5.8	
SHS25LC	36	70	109	57	45	M8	6.8	88	9.1	12	30.2	7.5	12	B-M6F	4.5	5.5	3	5.8	
SHS30C	42	90	106	72	52	M10	8.5	80	11.5	15	35	8	12	B-M6F	5.8	6	5.2	7	
SHS30LC	42	90	131	72	52	M10	8.5	105	11.5	15	35	8	12	B-M6F	5.8	6	5.2	7	
SHS35C	48	100	122	82	62	M10	8.5	93	11.5	15	40.5	8	12	B-M6F	6.5	5.5	5.2	7.5	
SHS35LC	48	100	152	82	62	M10	8.5	123	11.5	15	40.5	8	12	B-M6F	6.5	5.5	5.2	7.5	
SHS45C	60	120	140	100	80	M12	10.5	106	14.1	18	51.1	10.5	16	B-PT1/8	8	8	5.2	8.9	
SHS45LC	60	120	174	100	80	M12	10.5	140	14.1	18	51.1	10.5	16	B-PT1/8	8	8	5.2	8.9	
SHS55C	70	140	171	116	95	M14	12.5	131	16	21	57.3	11	16	B-PT1/8	10	8	5.2	12.7	
SHS55LC	70	140	213	116	95	M14	12.5	173	16	21	57.3	11	16	B-PT1/8	10	8	5.2	12.7	
SHS65C	90	170	221	142	110	M16	14.5	175	18.8	24	71	19	16	B-PT1/8	10	12	5.2	19	
SHS65LC	90	170	272	142	110	M16	14.5	226	18.8	24	71	19	16	B-PT1/8	10	12	5.2	19	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)

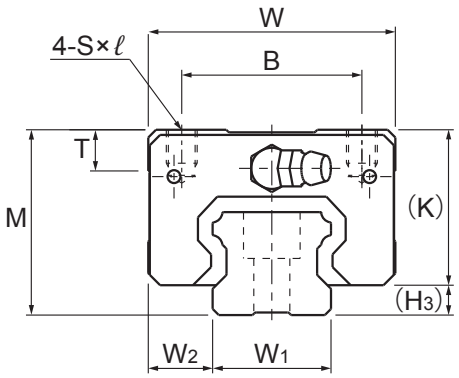


Unit = mm

	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
	WIDTH W1 0 -0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	15	16	13	60	4.5×7.5×5.3	3000	14.2	24.2	0.175	0.898	0.175	0.898	0.16	0.23	1.3
	15	16	13	60	4.5×7.5×5.3	3000	17.2	31.9	0.296	1.43	0.296	1.43	0.212	0.29	1.3
	20	21.5	16.5	60	6×9.5×8.5	3000	22.3	38.4	0.334	1.75	0.334	1.75	0.361	0.46	2.3
	20	21.5	16.5	60	6×9.5×8.5	3000	28.1	50.3	0.568	2.8	0.568	2.8	0.473	0.61	2.3
	23	23.5	20	60	7×11×9	3000	31.7	52.4	0.566	2.75	0.566	2.75	0.563	0.72	3.2
	23	23.5	20	60	7×11×9	3000	36.8	64.7	0.848	3.98	0.848	3.98	0.696	0.89	3.2
	28	31	23	80	9×14×12	3000	44.8	66.6	0.786	4.08	0.786	4.08	0.865	1.34	4.5
	28	31	23	80	9×14×12	3000	54.2	88.8	1.36	6.6	1.36	6.6	1.15	1.66	4.5
	34	33	26	80	9×14×12	3000	62.3	96.6	1.38	6.76	1.38	6.76	1.53	1.9	6.2
	34	33	26	80	9×14×12	3000	72.9	127	2.34	10.9	2.34	10.9	2.01	2.54	6.2
	45	37.5	32	105	14×20×17	3090	82.8	126	2.05	10.1	2.05	10.1	2.68	3.24	10.4
	45	37.5	32	105	14×20×18	3090	100	166	3.46	16.3	3.46	16.3	3.53	4.19	10.4
	53	43.5	38	120	16×23×20	3060	128	197	3.96	19.3	3.96	19.3	4.9	5.35	14.5
	53	43.5	38	120	16×23×20	3060	161	259	6.68	31.1	6.68	31.1	6.44	6.97	14.5
	63	53.5	53	150	18×26×22	3000	205	320	8.26	40.4	8.26	40.4	9.4	10.7	23.7
	63	53.5	53	150	18×26×22	3000	253	408	13.3	62.6	13.3	62.6	11.9	13.7	23.7

■ The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK.
When LM block is equipped with LaCS , a grease nipple is installed at a side as standard. (Refer to page 79)

Basic Specifications - SHS

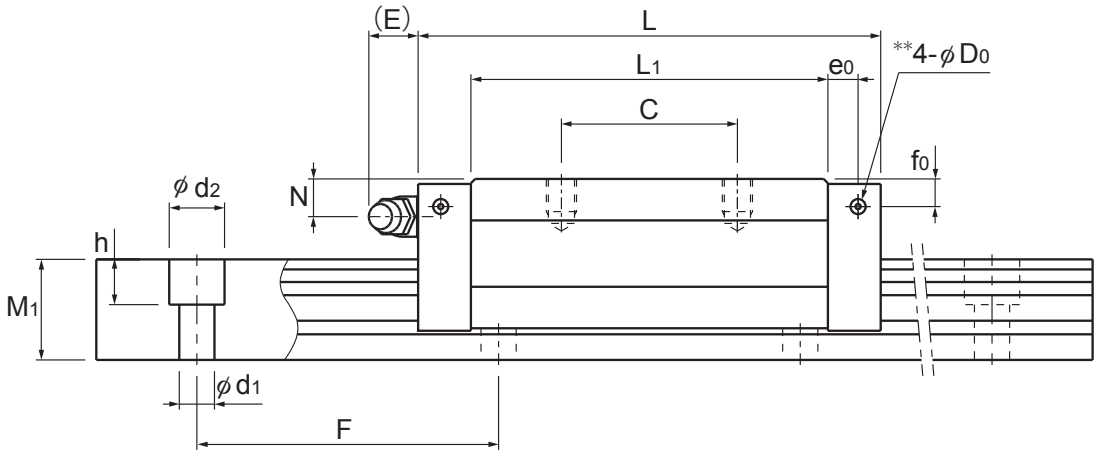


SHS-V / LV

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS									PILOT HOLE FOR SIDE NIPPLE			H3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASE NIPPLE	e_0	f_0	D0		
SHS15V	24	34	64.4	26	26	M4×4	48	5.9	21	5.5	5.5	PB1021B	4	4	3	3	
SHS15LV	24	34	79.4	26	34	M4×4	63	5.9	21	5.5	5.5	PB1021B	4	4	3	3	
SHS20V	30	44	79	32	36	M5×5	59	8	25.4	6.5	12	B-M6F	4.3	5.3	3	4.6	
SHS20LV	30	44	98	32	50	M5×5	78	8	25.4	6.5	12	B-M6F	4.3	5.3	3	4.6	
SHS25V	36	48	92	35	35	M6×6.5	71	8	30.2	7.5	12	B-M6F	4.5	5.5	3	5.8	
SHS25LV	36	48	109	35	50	M6×6.5	88	8	30.2	7.5	12	B-M6F	4.5	5.5	3	5.8	
SHS30V	42	60	106	40	40	M8×8	80	8	35	8	12	B-M6F	5.8	6	5.2	7	
SHS30LV	42	60	131	40	60	M8×8	105	8	35	8	12	B-M6F	5.8	6	5.2	7	
SHS35V	48	70	122	50	50	M8×10	93	14.7	40.5	8	12	B-M6F	6.5	5.5	5.2	7.5	
SHS35LV	48	70	152	50	72	M8×10	123	14.7	40.5	8	12	B-M6F	6.5	5.5	5.2	7.5	
SHS45V	60	86	140	60	60	M10×15	106	14.9	51.1	10.5	16	B-PT1/8	8	8	5.2	8.9	
SHS45LV	60	86	174	60	80	M10×15	140	14.9	51.1	10.5	16	B-PT1/8	8	8	5.2	8.9	
SHS55V	70	100	171	75	75	M12×15	131	19.4	57.3	11	16	B-PT1/8	10	8	5.2	12.7	
SHS55LV	70	100	213	75	95	M12×15	173	19.4	57.3	11	16	B-PT1/8	10	8	5.2	12.7	
SHS65V	90	126	221	76	70	M16×20	175	19.5	71	19	16	B-PT1/8	10	12	5.2	19	
SHS65LV	90	126	272	76	120	M16×20	226	19.5	71	19	16	B-PT1/8	10	12	5.2	19	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)

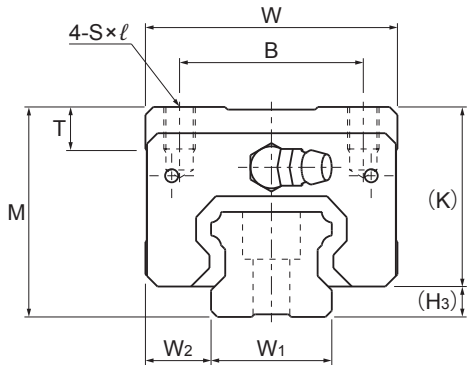


Unit = mm

	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
	WIDTH W1 0 -0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	15	9.5	13	60	4.5×7.5×5.3	3000	14.2	24.2	0.175	0.898	0.175	0.898	0.16	0.19	1.3
	15	9.5	13	60	4.5×7.5×5.3	3000	17.2	31.9	0.296	1.43	0.296	1.43	0.212	0.22	1.3
	20	12	16.5	60	6×9.5×8.5	3000	22.3	38.4	0.334	1.75	0.334	1.75	0.361	0.35	2.3
	20	12	16.5	60	6×9.5×8.5	3000	28.1	50.3	0.568	2.8	0.568	2.8	0.473	0.46	2.3
	23	12.5	20	60	7×11×9	3000	31.7	52.4	0.566	2.75	0.566	2.75	0.563	0.54	3.2
	23	12.5	20	60	7×11×9	3000	36.8	64.7	0.848	3.98	0.848	3.98	0.696	0.67	3.2
	28	16	23	80	9×14×12	3000	44.8	66.6	0.786	4.08	0.786	4.08	0.865	0.94	4.5
	28	16	23	80	9×14×12	3000	54.2	88.8	1.36	6.6	1.36	6.6	1.15	1.16	4.5
	34	18	26	80	9×14×12	3000	62.3	96.6	1.38	6.76	1.38	6.76	1.53	1.4	6.2
	34	18	26	80	9×14×12	3000	72.9	127	2.34	10.9	2.34	10.9	2.01	1.84	6.2
	45	20.5	32	105	14×20×17	3090	82.8	126	2.05	10.1	2.05	10.1	2.68	2.54	10.4
	45	20.5	32	105	14×20×17	3090	100	166	3.46	16.3	3.46	16.3	3.53	3.19	10.4
	53	23.5	38	120	16×23×20	3060	128	197	3.96	19.3	3.96	19.3	4.9	4.05	14.5
	53	23.5	38	120	16×23×20	3060	161	259	6.68	31.1	6.68	31.1	6.44	5.23	14.5
	63	31.5	53	150	18×26×22	3000	205	320	8.26	40.4	8.26	40.4	9.4	8.41	23.7
	63	31.5	53	150	18×26×22	3000	253	408	13.3	62.6	13.3	62.6	11.9	10.7	23.7

■ The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK.
When LM block is equipped with LaCS , a grease nipple is installed at a side as standard. (Refer to page 79)

Basic Specifications - SHS

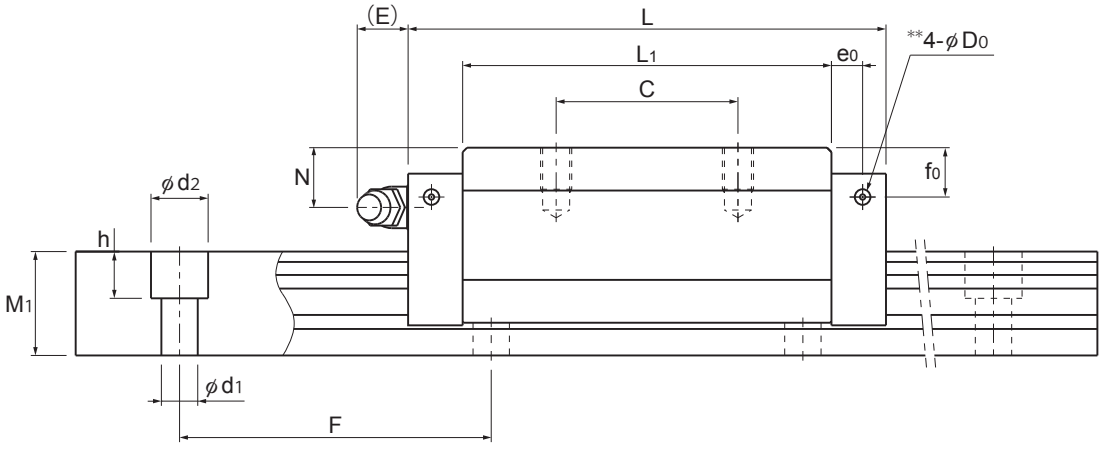


SHS-R / LR

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS									PILOT HOLE FOR SIDE NIPPLE			H3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASE NIPPLE	e_0	f_0	D0		
SHS15R	28	34	64.4	26	26	M4×5	48	5.9	25	9.5	5.5	PB1021B	4	8	3	3	
SHS25R	40	48	92	35	35	M6×8	71	8	34.2	11.5	12	B-M6F	6	9.5	3	5.8	
SHS25LR	40	48	109	35	50	M6×8	88	8	3.42	11.5	12	B-M6F	6	9.5	3	5.8	
SHS30R	45	60	106	40	40	M8×10	80	8	38	11	12	B-M6F	5.8	9	5.2	7	
SHS30LR	45	60	131	40	60	M8×10	105	8	38	11	12	B-M6F	5.8	9	5.2	7	
SHS35R	55	70	122	50	50	M8×12	93	14.7	47.5	15	12	B-M6F	6.5	12.5	5.2	7.5	
SHS35LR	55	70	152	50	72	M8×12	123	14.7	47.5	15	12	B-M6F	6.5	12.5	5.2	7.5	
SHS45R	70	86	140	60	60	M10×17	106	14.9	61.1	20.5	16	B-PT1/8	8	18	5.2	8.9	
SHS45LR	70	86	174	60	80	M10×17	140	14.9	61.1	20.5	16	B-PT1/8	8	18	5.2	8.9	
SHS55R	80	100	171	75	75	M12×18	131	19.4	67.3	21	16	B-PT1/8	10	18	5.2	12.7	
SHS55LR	80	100	213	75	95	M12×18	173	19.4	67.3	21	16	B-PT1/8	10	18	5.2	12.7	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)

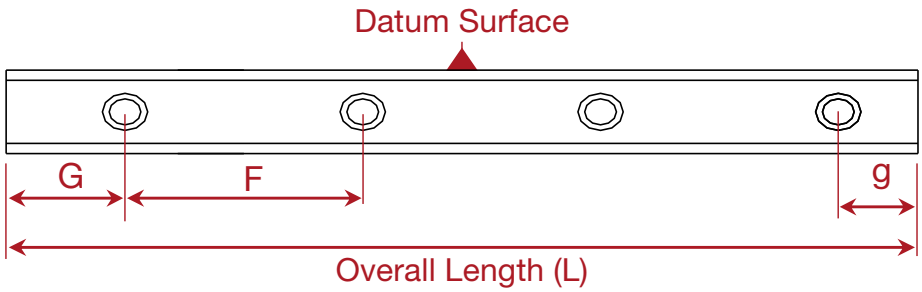


Unit = mm

	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
	WIDTH W1 0 -0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	15	9.5	13	60	4.5×7.5×5.3	3000	14.2	24.2	0.175	0.898	0.175	0.898	0.16	0.22	1.3
	23	12.5	20	60	7×11×9	3000	31.7	52.4	0.566	2.75	0.566	2.75	0.563	0.66	3.2
	23	12.5	20	60	7×11×9	3000	36.8	64.7	0.848	3.98	0.848	3.98	0.696	0.8	3.2
	28	16	23	80	9×14×12	3000	44.8	66.6	0.786	4.08	0.786	4.08	0.865	1.04	4.5
	28	16	23	80	9×14×12	3000	54.2	88.8	1.36	6.6	1.36	6.6	1.15	1.36	4.5
	34	18	26	80	9×14×12	3000	62.3	96.6	1.38	6.76	1.38	6.76	1.53	1.8	6.2
	34	18	26	80	9×14×12	3000	72.9	127	2.34	10.9	2.34	10.9	2.01	2.34	6.2
	45	20.5	32	105	14×20×17	3090	82.8	126	2.05	10.1	2.05	10.1	2.68	3.24	10.4
	45	20.5	32	105	14×20×17	3090	100	166	3.46	16.3	3.46	16.3	3.53	4.19	10.4
	53	23.5	38	120	16×23×20	3060	128	197	3.96	19.3	3.96	19.3	4.9	5.05	14.5
	53	23.5	38	120	16×23×20	3060	161	259	6.68	31.1	6.68	31.1	6.44	6.57	14.5

■ The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK.
When LM block is equipped with LaCS , a grease nipple is installed at a side as standard. (Refer to page 79)

Standard Rail Length - SHS



Unit : mm

Model No. & Size	SHS 15	SHS 20	SHS 25	SHS 30	SHS 35	SHS 45	SHS 55	SHS 65
LM rail Standard length (L)	160 220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1360 1480 1600	220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1360 1480 1600 1720 1840 1960 2080 2200	220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1300 1360 1420 1480 1540 1600 1720 1840 1960 2080 2200 2320 2440 2500	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1560 1640 1720 1800 1880 1960 2040 2200 2360 2520 2680 2840 3000	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1560 1640 1720 1800 1880 1960 2040 2200 2360 2520 2680 2840 3000	570 675 780 885 990 1095 1200 1305 1410 1515 1620 1725 1830 1935 2040 2145 2250 2355 2460 2565 2670 2775 2880 2985 3090	780 900 1020 1140 1260 1380 1500 1620 1740 1860 1980 2100 2220 2340 2460 2580 2700 2820 2940 3060	1270 1570 2020 2620
Standard pitch F	60	60	60	80	80	105	120	150
G/g	20	20	20	20	20	22.5	30	35
Standard Max Length	3000	3000	3000	3000	3000	3090	3060	3000
Custom Order Max length		7000	7000	7000	7000	7000	7000	7000

Other Options - SHS

Assembly:	SHS25	C	4	QZ	SS	HH	C1	F	M	J	E	+	5240L	P	K	Z	T	F	M	S	J	-II
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)

Block Only:	SHS25	C	1	SS	C1	M	J	E	(GK) BLOCK
	(1)	(2)	(3)	(5)	(7)	(9)	(10)	(11)	

Rail Only:	SHS25	-	5240L	K	Z	T	M	S	J	(GK) RAIL
	(1)		(12)	(14)	(15)	(16)	(18)	(19)	(20)	

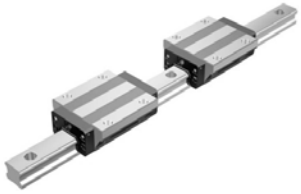
OPTIONS	SYMBOLS	REF. PAGE
(1) Model No. & Size	**SHS15, SHS20, SHS25, SHS30, SHS35, SHS45, SHS55, SHS**	3 - 10
(2) Block Style	**C, V, R, LC, LV, LR**	3 - 10
(3) Number of Blocks	Number of blocks on one rail	
(4) QZ Lubricator	**No Symbol :** None **QZ** : QZ Lubricator	73 - 78
(5) Seal Designation	**UU, SS, DD, ZZ, KK**	71 - 78
(6) Contact Scraper	**No Symbol :** None **HH :** Laminated Contact Scraper (LaCS) **GG :** Light-Resistance Contact Seal (LiCS) **PP :** Light-Resistance Contact Seal (LiCS) + Side Seal + Inner Seal *If GG or PP is selected, seal designation (5) cannot be selected (no symbol).	73 - 79
(7) Radial Clearance	**No Symbol, C1, C0, CS**	80
(8) Surface Coating for Block	**No Symbol :** None **F :** Coated Block (Specify Coating Type)	83
(9) Block Mateiral	**No Symbol :** Standard (Carbon Steel) **M :** Stainless Steel (includes Balls)	84
(10) Bellow Prep. for Block	**No Symbol :** None **J :** Additional tappled holes for block	85
(11) Non-Standard Block	**No Symbol :** None **E :** Minor modification to block (Drawing required) **S :** Special machining to block (Drawing required)	
(12) Rail Length	**Overall length in mm**	4 & 11
(13) Accuracy Grade	**No Symbol, H, P, SP, UP**	81
(14) Tapped Rail	**No Symbol :** Standard counter bored hole **K :** Tapped rail for mounting from bottom *If K is selected, Z cannot be selected for (15). *K is available for normal, high, and precision grade for (13).	86
(15) Steel Tape	**No Symbol** : None **Z :** Steel tape (machining on rail) *If Z is selected, K cannot be selected for (14).	87
(16) Jointed Rail	**No Symbol :** Single piece rail **T :** Two or more rails butted end to end (Drawing required)	88
(17) Surface Coating for Rail	**No Symbol :** None **T :** Two or more rails butted end to end (Drawing required)	83
(18) Rail Material	**No Symbol :** None **M :** Stainless Steel	84
(19) Non-Standard Rail	**No Symbol :** None **E :** Minor modification to rail (Drawing required) **S :** Special machining to rail (Drawing required)	
(20) Bellow Prep. for Rail	**No Symbol :** None **J :** Additional tappled holes for rail	85
(21) Matched Set	**No Symbol :** None **-II, -III, -IV ~ :** The number of rails used in the same level surface	89 - 90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Basic Specifications - SSR

- Caged-Ball
- Radial Type

Assembly (Block & Rail Set)



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION (Page 71-79)	RADIAL CLEARANCE (Page 80)
SSR15	**XTB**	**2**	**SS**	**C1**

SSR15	XTB	1 ~	UU : End Seal	No Symbol : Normal
SSR20	XW		SS : End Seal + Side Seal	C1 : Light Preload
SSR25	XV		DD : Double End Seal + Side Seal	CS : Custom (Contact THK)
SSR30			ZZ : End Seal + Side Seal + Metal Scraper	*CS : Not available for Block Only
SSR35			KK : Double End Seal + Side Seal + Metal Scraper	

Block Only



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK	SAMPLE PART NUMBER
SSR20	**XW**	**1**	**KK**	**C1**	**(GK)**	**BLOCK**	**SSR20XW1KKC1(GK) BLOCK**
							SSR35XV1ZZ(GK) BLOCK

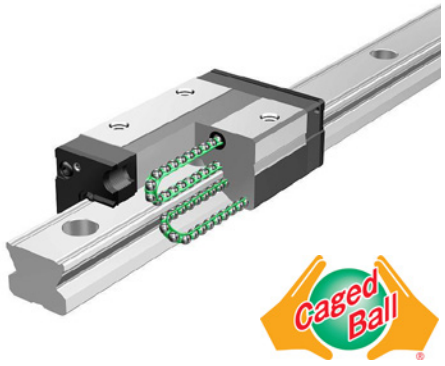
SSR15	XTB	UU	No Symbol : Normal
SSR20	XW	SS	C1 : Light Preload
SSR25	XV	DD	
SSR30		ZZ	
SSR35		KK	

Available Block Styles for SSR

⊙ = Available

XTB: Flanged Through Holes	**XW:** Narrow Tapped Holes	**XV:** Short XW Style
		

Style	Size				
	15	20	25	30	35
XTB	⊙	⊙	⊙	–	–
XW	⊙	⊙	⊙	⊙	⊙
XV	⊙	⊙	⊙	–	–



RAIL LENGTH (Std Length - Page 19)	MOUNTING HOLE SIZE	ACCURACY GRADE (Page 81)	SAMPLE PART NUMBER
1240L	Y	P	SSR15XTB2SSC1+1240LYP
Overall length in mm	Y : SSR15 & 25 (std)	No Symbol : Normal	SSR35XV3DD+2520L
*If other than standard length, specify G/g dimensions (Fig. 1)	No Symbol : SSR20,30,35 (No Y Option)	H : High	
		P : Precision	
		SP : Super Precision	
		UP : Ultra Precision	

*H, P, SP, UP : Not available for Rail Only

***SSR15 & 25**

MODEL NO. & SIZE	MOUNTING HOLE SIZE	
	Y	No Symbol
SSR15	For M4 (std)	For M3
SSR25	For M6 (std)	For M5

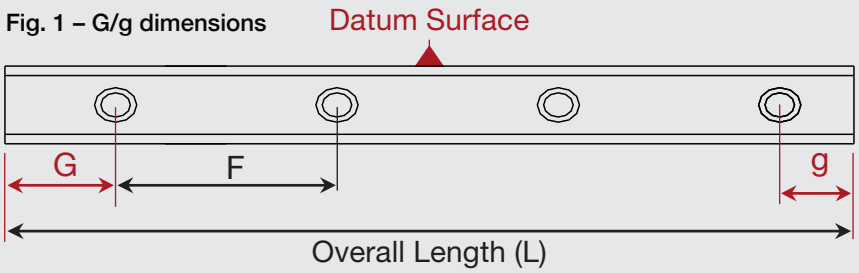
Rail Only



MODEL NUMBER & SIZE	RAIL LENGTH	MOUNTING HOLE SIZE	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
SR25	1240L	Y	(GK)	RAIL	SR25-1240LY(GK) RAIL
SR15	Overall length in mm	Y : SSR15 & 25 (std)			SR15-1600L(GK) RAIL
SR20		No Symbol : SSR20,30,35 (No Y Option)			
SR25					
SR30					
SR35					

*SSR Blocks use SR Rails
Model No. is SR for Rail Only

Fig. 1 – G/g dimensions

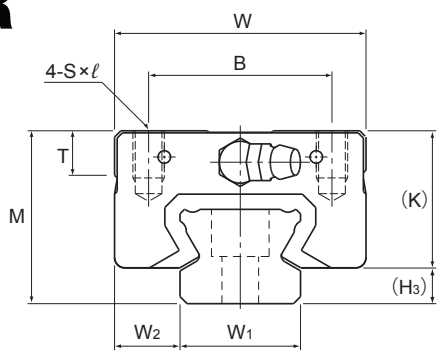


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. SSR35XW2SS+1740L **(G/g=30)**, SR30-430L(GK) RAIL **(G=20, g=10)**

*Note 1 : For more product specs, please see THK general catalog

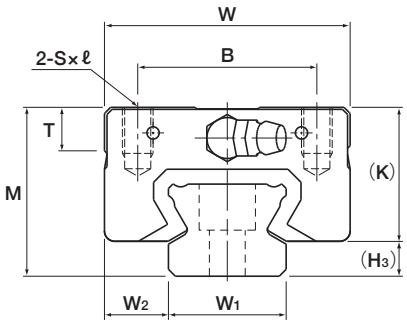
*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - SSR



SSR-XW

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS									PILOT HOLE FOR SIDE NIPPLE			
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASE NIPPLE	e_0	f_0	D_0	
SSR15XW	24	34	56.9	26	26	M4×7	39.9	6.5	19.5	4.5	5.5	PB1021B	4.5	2.7	3	
SSR20XW	28	42	66.5	32	32	M5×8	46.6	8.2	22	5.5	12	B-M6F	5.2	2.9	3	
SSR25XW	33	48	83	35	35	M6×9	59.8	8.4	26.2	6	12	B-M6F	6.8	3.3	3	
SSR30XW	42	60	97	40	40	M8×12	70.7	11.3	32.5	8	12	B-M6F	7.6	4.5	4	
SSR35XW	48	70	110.9	50	50	M8×12	80.5	13	36.5	8.5	12	B-M6F	8.8	4.7	4	

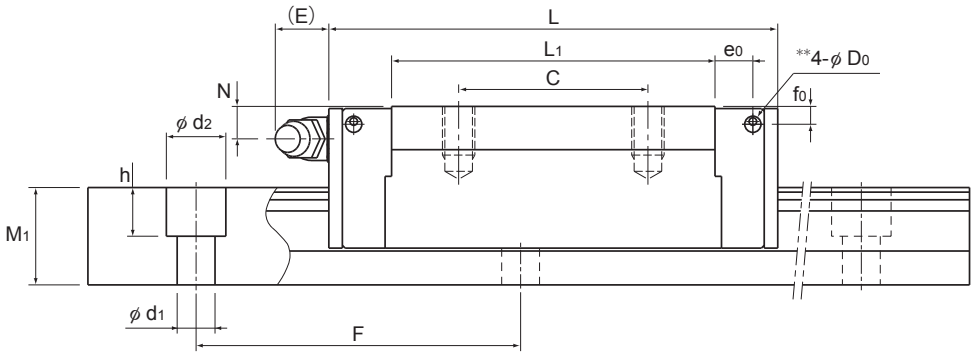


SSR-XV

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS								PILOT HOLE FOR SIDE NIPPLE			H_3	
	HEIGHT M	WIDTH W	LENGTH L	B	S X ℓ	L_1	T	K	N	E	GREASE NIPPLE	e_0	f_0	D_0		
SSR15XV	24	34	40.3	26	M4×7	23.3	6.5	19.5	4.5	5.5	PB1021B	4.5	2.7	3	4.5	
SSR20XV	28	42	47.7	32	M5×8	27.8	8.2	22	5.5	12	B-M6F	5.2	2.9	3	6	
SSR25XV	33	48	60	35	M6×8	36.8	8.4	26.2	6	12	B-M6F	6.8	3.3	3	6.8	

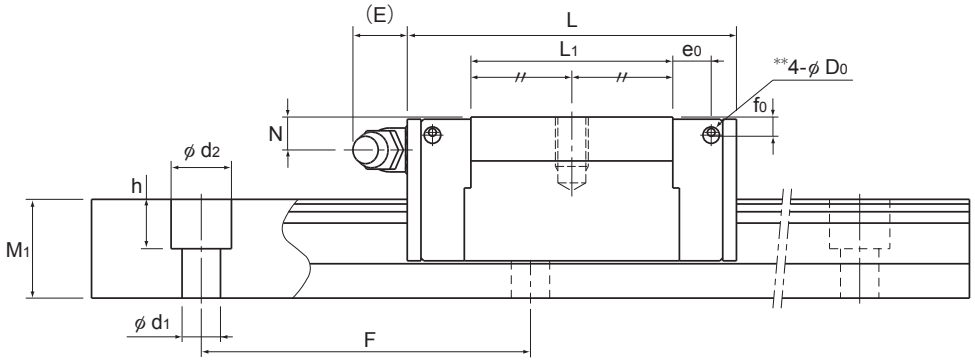
Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Unit = mm

H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M						MASS	
	WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C		LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK			
4.5	15	9.5	12.5	60	4.5×7.5×5.3	3000	14.7	16.5	0.0792	0.44	0.0486	0.274	0.0962		0.15	1.2
6	20	11	15.5	60	6×9.5×8.5	3000	19.6	23.4	0.138	0.723	0.0847	0.448	0.18		0.25	2.1
6.8	23	12.5	18	60	7×11×9	3000	31.5	36.4	0.258	1.42	0.158	0.884	0.33		0.4	2.7
9.5	28	16	23	80	7×11×9	3000	46.5	52.7	0.446	2.4	0.274	1.49	0.571		0.8	4.3
11.5	34	18	27.5	80	9×14×12	3000	64.6	71.6	0.711	3.72	0.437	2.31	0.936		1.1	6.4

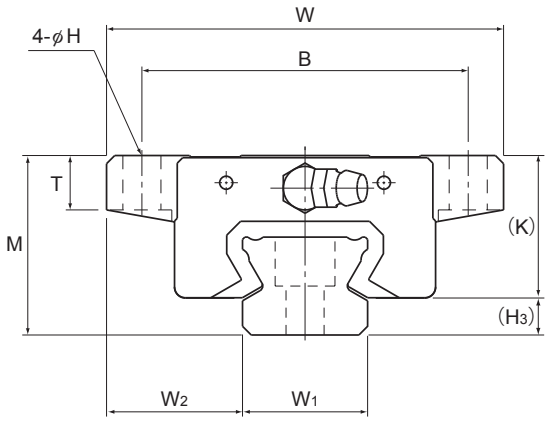


Unit = mm

LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
								1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
15	9.5	12.5	60	4.5×7.5×5.3	3000	9.1	9.7	0.0303	0.192	0.0189	0.122	0.0562	0.08	1.2
20	11	15.5	60	6×9.5×8.5	3000	13.4	14.4	0.0523	0.336	0.0326	0.213	0.111	0.14	2.1
23	12.5	18	60	7×11×9	3000	21.7	22.5	0.104	0.661	0.0652	0.419	0.204	0.23	2.7

- The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK. When LM block is equipped with LaCS , a grease nipple is installed at a side as standard. (Refer to page 79)
- For SSR15 and 25, the tables above show rail mounting hole dimensions for M4 (SSR15) and M6 (SSR25). *Symbol Y
- The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Basic Specifications - SSR

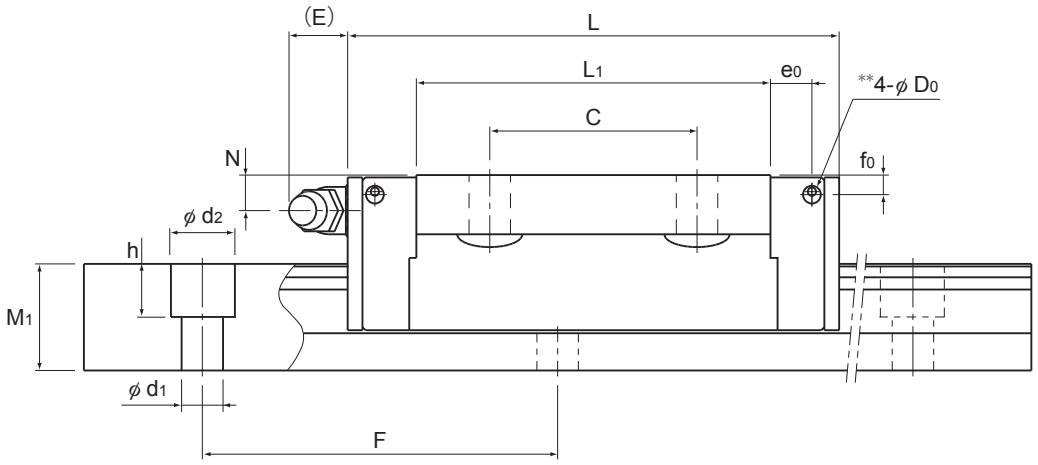


SSR-XTB

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS									PILOT HOLE FOR SIDE NIPPLE			
	HEIGHT M	WIDTH W	LENGTH L	B	C	H	L_1	T	K	N	E	GREASE NIPPLE	e_0	f_0	D_0	
SSR15XTB	24	52	56.9	41	26	4.5	39.9	7	19.5	4.5	5.5	PB1021B	4.5	2.7	3	
SSR20XTB	28	59	66.5	49	32	5.5	46.6	9	22	5.5	12	B-M6F	5.2	2.9	3	
SSR25XTB	33	73	83	60	35	7	59.8	10	26.2	6	12	B-M6F	6.8	3.3	3	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)

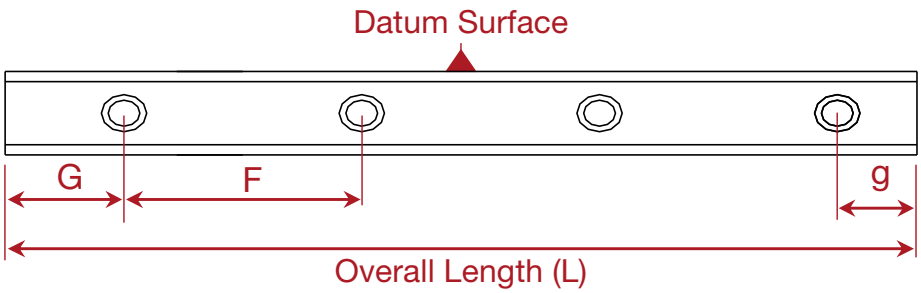


Unit = mm

	H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
		WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	4.5	15	18.5	12.5	60	4.5×7.5×5.3	3000	14.7	16.5	0.0792	0.44	0.0486	0.274	0.0962	0.19	1.2
	6	20	19.5	15.5	60	6×9.5×8.5	3000	19.6	23.4	0.138	0.723	0.0847	0.448	0.18	0.31	2.1
	6.8	23	25	18	60	7×11×9	3000	31.5	36.4	0.258	1.42	0.158	0.884	0.33	0.53	2.7

- The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK. When LM block is equipped with LaCS , a grease nipple is installed at a side as standard. (Refer to page 79)
- For SSR15 and 25, the tables above show rail mounting hole dimensions for M4 (SSR15) and M6 (SSR25). *Symbol Y
- The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Standard Rail Length - SSR



Unit : mm

Model No. & Size	SSR 15	SSR 20	SSR 25	SSR 30	SSR 35
LM rail Standard length (L)	160 220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1300 1360 1420 1480 1540 1600	220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1300 1360 1420 1480 1540 1600 1660 1720 1780 1840 1900 1960 2020 2080 2140 2200	220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1240 1300 1360 1420 1480 1540 1600 1660 1720 1780 1840 1900 1960 2020 2080 2140 2200 2260 2320 2380 2440 2500	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1640 1720 1800 1880 1960 2040 2120 2200 2280 2360 2440 2520 2600 2680 2760 2840 2920	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1640 1720 1800 1880 1960 2040 2120 2200 2280 2360 2440 2520 2600 2680 2760 2840 2920
Standard pitch F	60	60	60	80	80
G/g	20	20	20	20	20
"Standard Max Length"	3000	3000	3000	3000	3000
Custom Order Max length		7000	7000	7000	7000

Other Options - SSR

Assembly:

SSR25	XV	3	QZ	ZZ	HH	C1	F	M	J	S	+	4800L	Y	H	K	Z	T	F	M	E	J	-II
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)

Block Only:

SSR25	XV	1	ZZ	C1	J	S	(GK) BLOCK
(1)	(2)	(3)	(5)	(7)	(10)	(11)	

Rail Only:

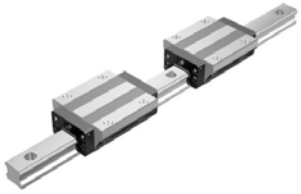
SSR25	-	4800L	Y	K	Z	T	M	E	J	(GK) RAIL
(1)		(12)	(13)	(15)	(16)	(17)	(19)	(20)	(21)	

OPTIONS	SYMBOLS	REF. PAGE
(1) Model No. & Size	**SSR15, SSR20, SSR25, SSR30, SSR35**	13 - 18
(2) Block Style	**XTB, XW, XV**	13 - 18
(3) Number of Blocks	**Number of blocks on one rail**	
(4) QZ Lubricator	**No Symbol** : None **QZ** : QZ Lubricator	73 - 78
(5) Seal Designation	**UU, SS, DD, ZZ, KK**	71 - 78
(6) Contact Scraper	**No Symbol** : None **HH** : Laminated Contact Scraper (LaCS) **GG** : Light-Resistance Contact Seal (LiCS) **PP** : Light-Resistance Contact Seal (LiCS) + Side Seal + Inner Seal *If GG or PP is selected, seal designation (5) cannot be selected (no symbol).	73 - 79
(7) Radial Clearance	N**o Symbol, C1, CS**	80
(8) Surface Coating for Block	**No Symbol** : None **F** : Coated Block (Specify Coating Type)	83
(9) Block Material	**No Symbol** : Standard (Carbon Steel) **M** : Stainless Steel (includes Balls)	84
(10) Bellow Prep. for Block	**No Symbol** : None **J** : Additional tappled holes for block	85
(11) Non-Standard Block	**No Symbol** : None **E** : Minor modification to block (Drawing required) **S** : Special machining to block (Drawing required)	
(12) Rail Length	**Overall length in mm**	14 & 19
(13) Mounting Hole Size	**Y** : Std for SSR15(for M4) and SSR25(for M6) * If Y is selected for SSR15 & 25, K cannot be selected for (15). **No Symbol** : For SSR20, 30, 35 * If no symbol for SSR15 & 25, mounting hole size is for M3(SSR15) and for M5(SSR25).	14
(14) Accuracy Grade	**No Symbol**, H, P, SP, UP	81
(15) Tapped Rail	**No Symbol** : Standard counter bored hole **K** : Tapped rail for mounting from bottom *If K is selected, Y cannot be selected for (13) and Z cannot be selected for (16). *K is available for normal, high, and precision grade for (14).	86
(16) Steel Tape	**No Symbol** : None **Z** : Steel tape (machining on rail) *If Z is selected, K cannot be selected for (15).	87
(17) Jointed Rail	**No Symbol** : Single piece rail **T** : Two or more rails butted end to end (Drawing required)	88
(18) Surface Coating for Rail	**No Symbol** : None **F** : Coated Rail (Specify Coating Type)	83
(19) Rail Material	**No Symbol** : Standard (Carbon Steel) **M** : Stainless Steel	84
(20) Non-Standard Rail	**No Symbol** : None **E** : Minor modification to rail (Drawing required) **S** : Special machining to rail (Drawing required)	
(21) Bellow Prep. for Rail	**No Symbol** : None **J** : Additional tappled holes for rail	85
(22) Matched Set	**No Symbol** : None **-II, -III, -IV ~** : The number of rails used in the same level surface	89 - 90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Basic Specifications - SHW

- Caged-Ball
- Wide & Low Gravity Center
- 4-Way Equal Loading



Assembly (Block & Rail Set)

MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION (Page 71-79)	RADIAL CLEARANCE (Page 80)	BLOCK MATERIAL (Page 84)
SHW12	**HR**	**2**	**SS**	**C1**	**M**
SHW12	CAN	1 ~	UU : End Seal	No Symbol : Normal	M : Stainless Steel Std for SHW12 to 17
SHW14	CRN		SS : End Seal + Side Seal	C1 : Light Preload	No Symbol : Carbon Steel Std for SHW21 to 50
SHW17	CA		DD : Double End Seal + Side Seal	C0 : Medium Preload	
SHW21	CR		ZZ : End Seal + Side Seal + Metal Scraper	CS : Custom (Contact THK)	
SHW27	HR		KK : Double End Seal + Side Seal + Metal Scraper		
SHW35					
SHW50					

*C0 : Only available for SHW35 & 50
*C0 & CS : Not available for Block Only

* DD, ZZ, KK : Not available for SHW12 & 14
* SS, DD, ZZ, KK include inner seal for SHW21 to 50

Block Only



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK
SHW21	**CAN**	**1**	**SS**	**C1**	**(GK)**	**BLOCK**
SHW21	CAN	1	UU	No Symbol : Normal		
SHW27	CRN		SS	C1 : Light Preload		
SHW35	CA		DD			
	CR		ZZ			
			KK			

SAMPLE PART NUMBER
SHW21CAN1SSC1(GK) BLOCK
SHW35CRN1DD(GK) BLOCK

Available Block Styles for SHW

CAN: Flanged Tapped Holes with Grease Nipple



CRN: Narrow Tapped Holes with Grease Nipple



CA: Flanged Tapped Holes



CR: Narrow Tapped Holes

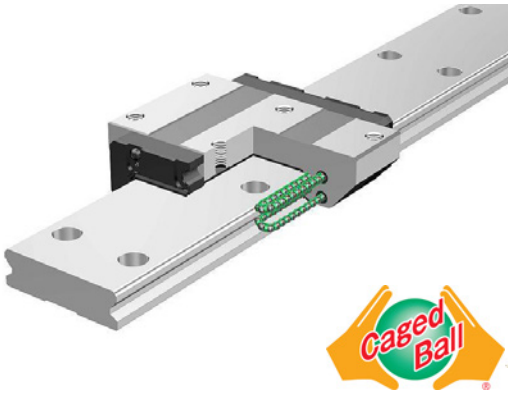


HR: Narrow Tapped Holes



⊙ = Available for Assembly or Block Only
● = Available for Assembly only

Style	Size						
	12	14	17	21	27	35	50
CAN	–	–	–	⊙	⊙	⊙	●
CRN	–	–	–	⊙	⊙	⊙	●
CA	●	●	●	⊙	⊙	⊙	●
CR	●	●	●	⊙	⊙	⊙	●
HR	●	–	–	–	–	–	–



RAIL LENGTH (Std Length - Page 27)	ACCURACY GRADE (Page 81)	RAIL MATERIAL (Page 84)	SAMPLE PART NUMBER
230L	**P**	**M**	**SHW12HR2SSC1M+230LPM**
Overall length in mm	No Symbol : Normal	M : Stainless Steel Std for SHW12 to17	**SHW35CAN3ZZ+1000L**
*If other than standard length, specify G/g dimensions (Fig. 1)	H : High	No Symbol : Carbon Steel Std for SHW21 to 50	
	P : Precision		
	SP : Super Precision		
	UP : Ultra Precision		

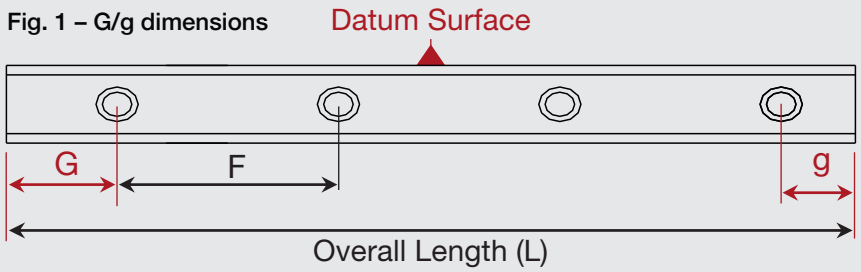
*H, P, SP, UP : Not available for Rail Only
*SP & UP : Not available for SHW12 & 14

Rail Only



MODEL NUMBER & SIZE	RAIL LENGTH	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
SHW21	**580L**	**(GK)**	**RAIL**	**SHW21-580L(GK) RAIL**
SHW21	Overall length in mm			**SHW35-1560L(GK) RAIL**
SHW27				
SHW35				

Fig. 1 – G/g dimensions

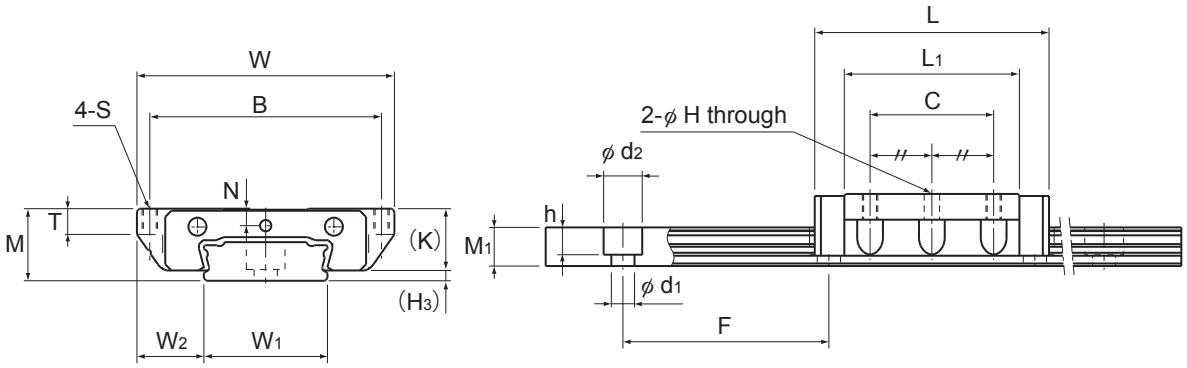


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. SHW17CA1SS+200L **(G/g=20)**, SHW35-460L(GK) RAIL **(G=20, g=40)**

*Note 1 : For more product specs, please see THK general catalog

*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - SHW



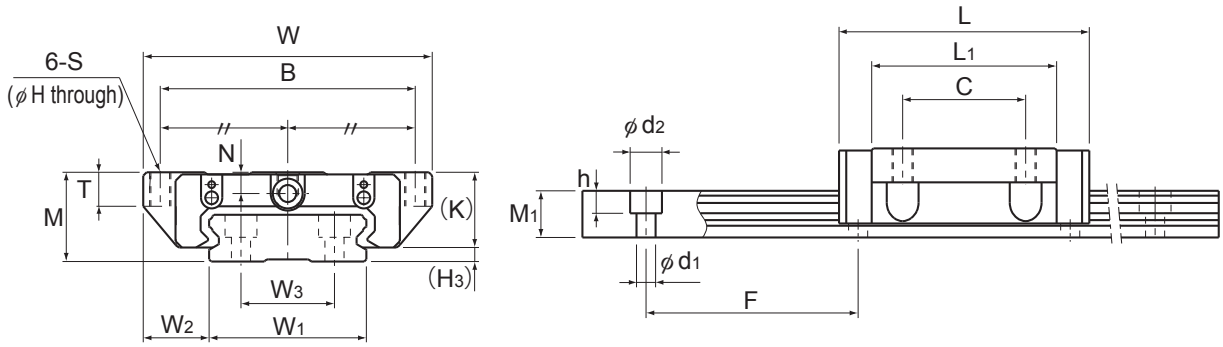
Models SHW12CA and SHW14CA

SHW-CA/CAN

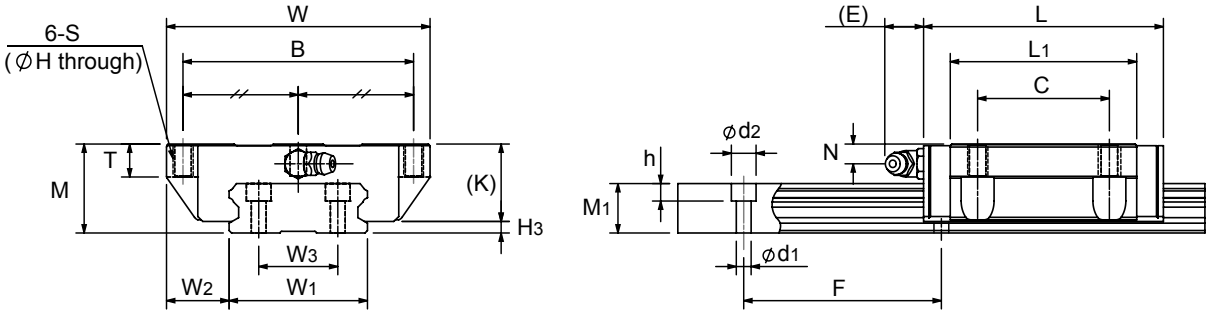
MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS										
	HEIGHT M	WIDTH W	LENGTH L	B	C	S	H	L_1	T	K	N	E	GREASE NIPPLE	
SHW12CA	12	40	37	35	18	M3	2.5	27	4	10	2.8	-	-	
SHW14CA	14	50	45.5	45	24	M3	2.5	34	5	12	3.3	-	-	
SHW17CA	17	60	51	53	26	M4	3.3	38	6	14.5	4	-	-	
SHW21CA	21	68	59	60	29	M5	4.4	43.6	8	17.7	5	-	-	
SHW21CAN	21	68	59	60	29	M5	4.4	43.6	8	17.7	5	5.5	PB1021B	
SHW27CA	27	80	72.8	70	40	M6	5.3	56.6	10	23.5	6	-	-	
SHW27CAN	27	80	72.8	70	40	M6	5.3	56.6	10	23.5	6	12	B-M6F	
SHW35CA	35	120	107	107	60	M8	6.8	83	14	31	7.6	-	-	
SHW35CAN	35	120	107	107	60	M8	6.8	83	14	31	7.6	12	B-M6F	
SHW50CA	50	162	141	144	80	M10	8.6	107	18	46	14	-	-	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Models SHW17CA and 50CA

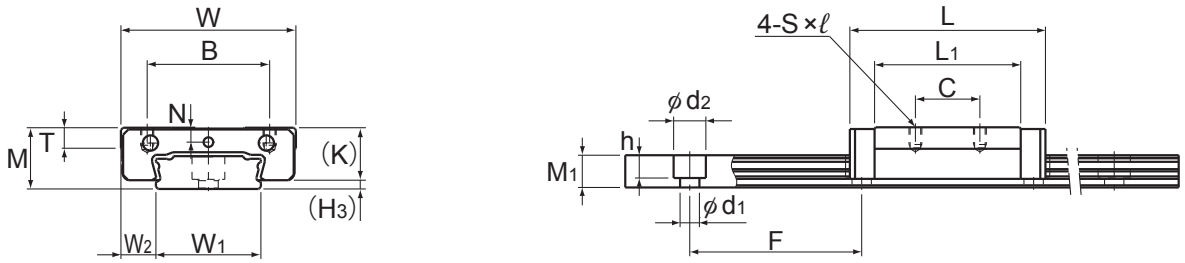


Models SHW21CAN to 35CAN

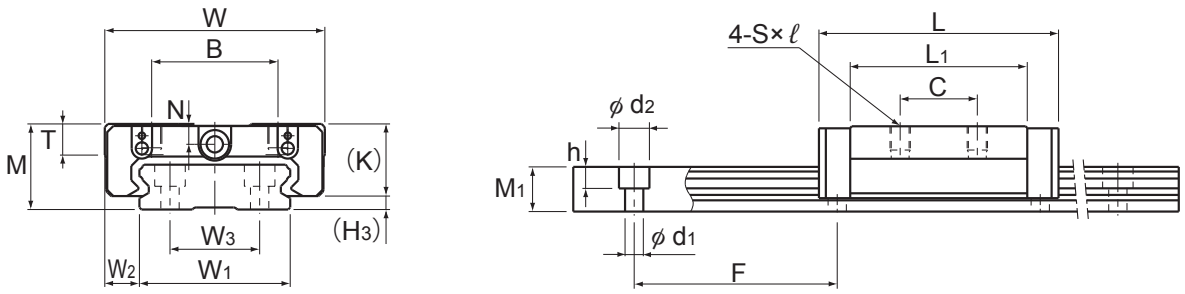
Unit = mm

	H_3	LM RAIL DIMENSIONS							BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
		WIDTH W1 0 -0.05	W_2	W_3	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
											1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	2	18	11	-	6.6	40	4.5×7.5×5.3	1230	4.31	5.66	0.0228	0.12	0.0228	0.12	0.0405	0.05	0.8
	2	24	13	-	7.5	40	4.5×7.5×5.3	1430	7.05	8.98	0.0466	0.236	0.0466	0.236	0.0904	0.1	1.23
	2.5	33	13.5	18	8.6	40	4.5×7.5×5.3	1800	7.65	10.18	0.0591	0.298	0.0591	0.298	0.164	0.15	1.9
	3.3	37	15.5	22	11	50	4.5×7.5×5.3	3000	8.24	12.8	0.0806	0.434	0.0806	0.434	0.229	0.24	2.9
	3.3	37	15.5	22	11	50	4.5×7.5×5.3	3000	8.24	12.8	0.0806	0.434	0.0806	0.434	0.229	0.24	2.9
	3.5	42	19	24	15	60	4.5×7.5×5.3	3000	16	22.7	0.187	0.949	0.187	0.949	0.455	0.47	4.5
	3.5	42	19	24	15	60	4.5×7.5×5.3	3000	16	22.7	0.187	0.949	0.187	0.949	0.455	0.47	4.5
	4	69	25.5	40	19	80	7×11×9	3000	35.5	49.2	0.603	3	0.603	3	1.63	1.4	9.6
	4	69	25.5	40	19	80	7×11×9	3000	35.5	49.2	0.603	3	0.603	3	1.63	1.4	9.6
	4	90	36	60	24	80	9×14×12	3000	70.2	91.4	1.46	7.37	1.46	7.37	3.97	3.7	15

Basic Specifications - SHW



Models SHW12CR, SHW12HR and SHW14CR



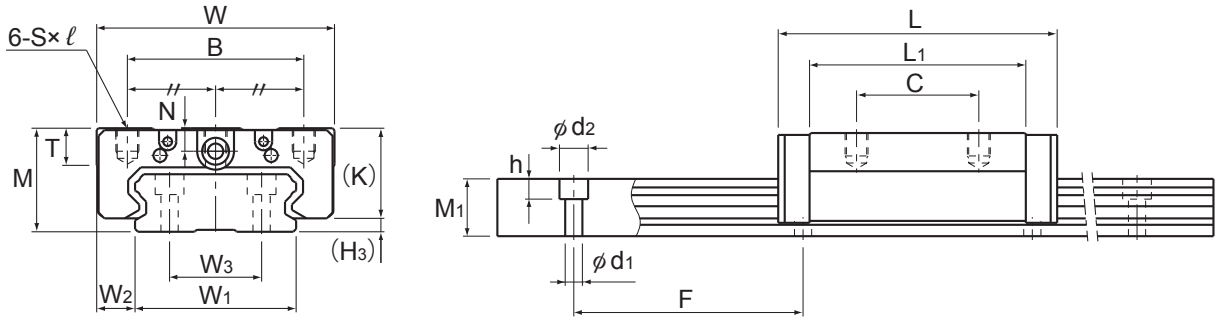
Models SHW17CR and SHW21CR

SHW-CR/CRN/HR

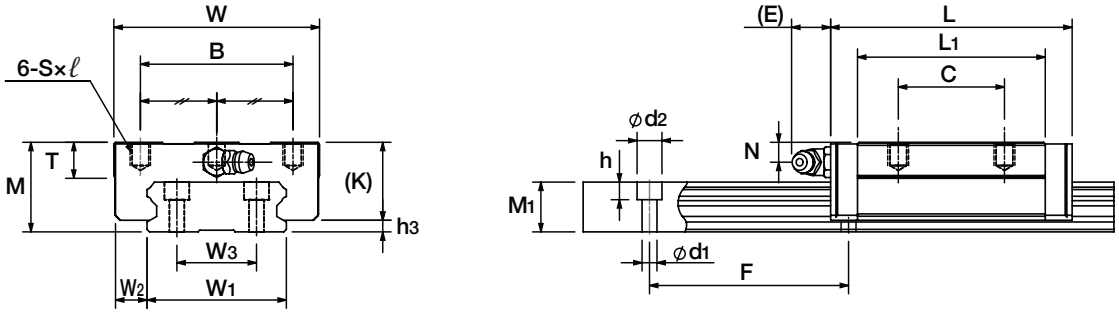
MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS									
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASE NIPPLE	
SHW12CR	12	30	37	21	12	M3×3.5	27	4	10	2.8	-	-	
SHW12HR	12	30	50.4	21	24	M3×3.5	40.4	4	10	2.8	-	-	
SHW14CR	14	40	45.5	28	15	M3×4	34	5	12	3.3	-	-	
SHW17CR	17	50	51	29	15	M4×5	38	6	14.5	4	-	-	
SHW21CR	21	54	59	31	19	M5×6	43.6	8	17.7	5	-	-	
SHW21CRN	21	54	59	31	19	M5×6	43.6	8	17.7	5	5.5	PB1021B	
SHW27CR	27	62	72.8	46	32	M6×6	56.6	10	23.5	6	-	-	
SHW27CRN	27	62	72.8	46	32	M6×6	56.6	10	23.5	6	12	B-M6F	
SHW35CR	35	100	107	76	50	M8×8	83	14	31	7.6	-	-	
SHW35CRN	35	100	107	76	50	M8×8	83	14	31	7.6	12	B-M6F	
SHW50CR	50	130	141	100	65	M10×15	107	18	46	14	-	-	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Models SHW27CR to 50CR

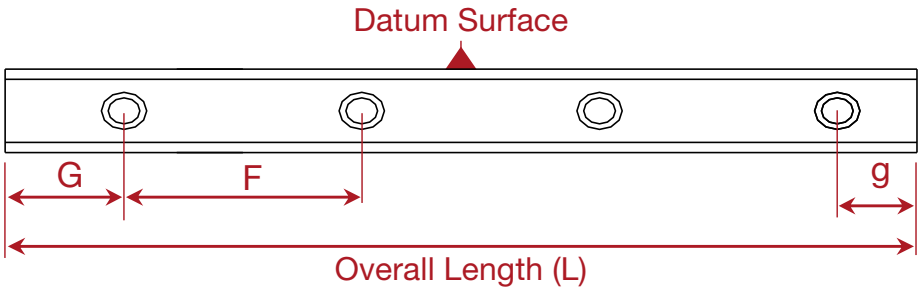


Models SHW21CRN to 35CRN

Unit = mm

H_3	LM RAIL DIMENSIONS							BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
	WIDTH W1 0 -0.05	W_2	W_3	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
2	18	6	-	6.6	40	4.5×7.5×5.3	1230	4.31	5.66	0.0228	0.12	0.0228	0.12	0.0405	0.04	0.8
2	18	6	-	6.6	40	4.5×7.5×5.3	1230	5.56	8.68	0.0511	0.246	0.0511	0.246	0.0621	0.06	0.8
2	24	8	-	7.5	40	4.5×7.5×5.3	1430	7.05	8.98	0.0466	0.236	0.0466	0.236	0.0904	0.08	1.23
2.5	33	8.5	18	8.6	40	4.5×7.5×5.3	1800	7.65	10.18	0.0591	0.298	0.0591	0.298	0.164	0.13	1.9
3.3	37	8.5	22	11	50	4.5×7.5×5.3	3000	8.24	12.8	0.0806	0.434	0.0806	0.434	0.229	0.19	2.9
3.3	37	8.5	22	11	50	4.5×7.5×5.3	3000	8.24	12.8	0.0806	0.434	0.0806	0.434	0.229	0.19	2.9
3.5	42	10	24	15	60	4.5×7.5×5.3	3000	16	22.7	0.187	0.949	0.187	0.949	0.455	0.36	4.5
3.5	42	10	24	15	60	4.5×7.5×5.3	3000	16	22.7	0.187	0.949	0.187	0.949	0.455	0.36	4.5
4	69	15.5	40	19	80	7×11×9	3000	35.5	49.2	0.603	3	0.603	3	1.63	1.2	9.6
4	69	15.5	40	19	80	7×11×9	3000	35.5	49.2	0.603	3	0.603	3	1.63	1.2	9.6
4	90	20	60	24	80	9×14×12	3000	70.2	91.4	1.46	7.37	1.46	7.37	3.97	3	15

Standard Rail Length



SHW

Unit : mm

Model No. & Size	SHW 12	SHW 14	SHW 17	SHW 21	SHW 27	SHW 35	SHW 50
LM rail Standard length (L)	70 110 150 190 230 270 310 390 470	70 110 150 190 230 270 310 390 470 550 670	110 190 310 470 550	130 230 380 480 580 780	160 280 340 460 640 820	280 440 760 1000 1240 1560	280 440 760 1000 1240 1640 2040
Standard pitch F	40	40	40	50	60	80	80
G/g	15	15	15	15	20	20	20
Standard Max Length	1230	1430	1800	3000	3000	3000	3000

Other Options - SHW

Assembly:	SHW17	CA	2	QZ	KK	HH	C1	F	M	J	E	+	3660L	SP	T	F	M	S	J	-II
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)

Block Only:	SHW21	CAN	1	SS	C1	J	E	(GK) BLOCK
	(1)	(2)	(3)	(5)	(7)	(10)	(11)	

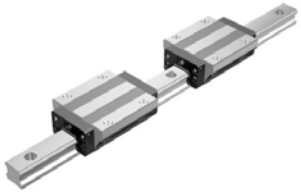
Rail Only:	SHW21	-	3660L	T	S	J	(GK) RAIL
	(1)		(12)	(14)	(17)	(18)	

OPTIONS	SYMBOLS	REF. PAGE
(1) Model No. & Size	**SHW12, SHW14, SHW17, SHW21, SHW27, SHW35, SHW50**	21 - 26
(2) Block Style	**CAN, CRN, CA, CR, HR**	21 - 26
(3) Number of Blocks	**Number of blocks on one rail**	
(4) QZ Lubricator	**No Symbol** : None **QZ** : QZ Lubricator	73 - 78
(5) Seal Designation	**UU, SS, DD, ZZ, KK**	71 - 78
(6) Contact Scraper	**No Symbol** : None **HH** : Laminated Contact Scraper (LaCS)	73-79
(7) Radial Clearance	**No Symbol, C1, C0, CS**	80
(8) Surface Coating for Block	**No Symbol** : None **F** : Coated Block (Specify Coating Type)	83
(9) Block Material	**No Symbol** : Standard (Carbon Steel) **M** : Stainless Steel (includes Balls)	84
(10) Bellow Prep. for Block	**No Symbol** : None **J** : Additional tappled holes for block	85
(11) Non-Standard Block	**No Symbol** : None **E** : Minor modification to block (Drawing required) **S** : Special machining to block (Drawing required)	
(12) Rail Length	**Overall length in mm**	22 & 27
(13) Accuracy Grade	**No Symbol, H, P, SP, UP**	81
(14) Jointed Rail	**No Symbol** : Single piece rail **T** : Two or more rails butted end to end (Drawing required)	88
(15) Surface Coating for Rail	**No Symbol** : None **F** : Coated Rail (Specify Coating Type)	83
(16) Rail Material	**No Symbol :** Standard (Carbon Steel) **M :** Stainless Steel	84
(17) Non-Standard Rail	**No Symbol** : None **E :** Minor modification to rail (Drawing required) **S** : Special machining to rail (Drawing required)	
(18) Bellow Prep. for Rail	**No Symbol** : None **J :** Additional tappled holes for rail	85
(19) Matched Set	**No Symbol** : None **-II, -III, -IV ~** : The number of rails used in the same level surface	89 - 90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Basic Specifications - SRS

- Caged-Ball
- Miniature Type
- 4-Way Equal Loading
- Stainless Steel Block & Rail



Assembly (Block & Rail Set)

NUMBER OF BLOCKS	MODEL NUMBER & SIZE	BLOCK STYLE	SEAL DESIGNATION (Page 71 - 79)	RADIAL CLEARANCE (Page 80)
2	**SRS12**	**M**	**SS**	**C1**
No Symbol: 1 block	SRS5	S	UU : End Seal	No Symbol : Normal
2 ~	SRS7	M	SS : End Seal + Side Seal	C1 : Light Preload
	SRS9X	N	*SS : Not available for SRS5 and Block Only	CS : Custom (Contact THK)
	SRS9	WS		*CS : Not available for Block Only
	SRS12	WM		
	SRS15	WN		
	SRS20	*Size 9 SRS9X is for S, M, N block style (ex. SRS9XS) SRS9 is for WS, WM, WN block style (ex. SRS9WM)		
	SRS25			

Block Only



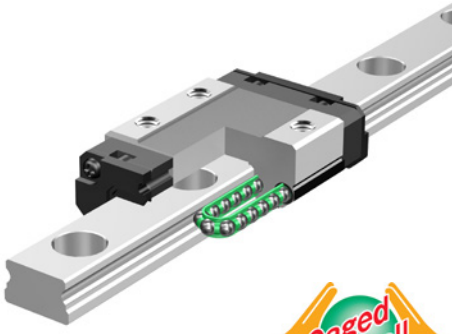
MODEL NUMBER & SIZE	BLOCK STYLE	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK	SAMPLE PART NUMBER
SRS15	**WN**	**UU**	**C1**	**(GK)**	**BLOCK**	**SRS15WNUUC1(GK)BLOCK**
SRS7	M	UU	No Symbol : Normal			**SRS9XMUU(GK)BLOCK**
SRS9X	N		C1 : Light Preload			
SRS9	WM		*C1 : Not available for SRS7 Block Only			
SRS12	WN					
SRS15						

Available Block Styles for SRS

S: Short M Type 	**M:** Narrow Tapped Holes 	**N:** Long M Type 
WS: Short WM Type 	**WM:** Wide Type 	**WN:** Long WN Type 

⊙ = Available for Assembly or Block Only
● = Available for Assembly only

Style	Size							
	5	7	9X	9	12	15	20	25
S	–	●	●	–	●	●	–	–
M	●	⊙	⊙	–	⊙	⊙	●	●
N	●	●	⊙	–	⊙	⊙	–	–
WS	–	●	–	●	●	●	–	–
WM	●	⊙	–	⊙	⊙	⊙	–	–
WN	●	●	–	⊙	⊙	⊙	–	–



	RAIL LENGTH (Std Length - Page 35)	ACCURACY GRADE (Page 82)	RAIL MATERIAL (Page 84)	SAMPLE PART NUMBER
+	270L	P	M	2SRS12MSSC1+270LPM
	Overall length in mm	No Symbol : Normal	M: Stainless Steel (std)	SRS9WMUU+260LM
		H : High		
		P : Precision		

*If other than standard length, specify G/g dimensions (Fig. 1)

*H : Not available for SRS5
*H & P : Not available for Rail Only

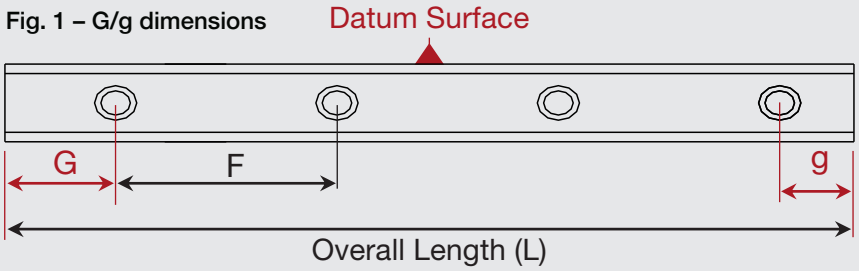
Rail Only



	MODEL NUMBER & SIZE	RAIL LENGTH	RAIL MATERIAL	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
	SRS15	870L	M	(GK)	RAIL	SRS15-870LM(GK) RAIL
	SRS7	Overall length in mm	M : Stainless (std)			SRS9W-50LM(GK) RAIL
	SRS7W					
	SRS9X					
	SRS9W					
	SRS12					
	SRS12W					
	SRS15					
	SRS15W					

*For WM & WN blocks, select SRS-W rails.

Fig. 1 – G/g dimensions

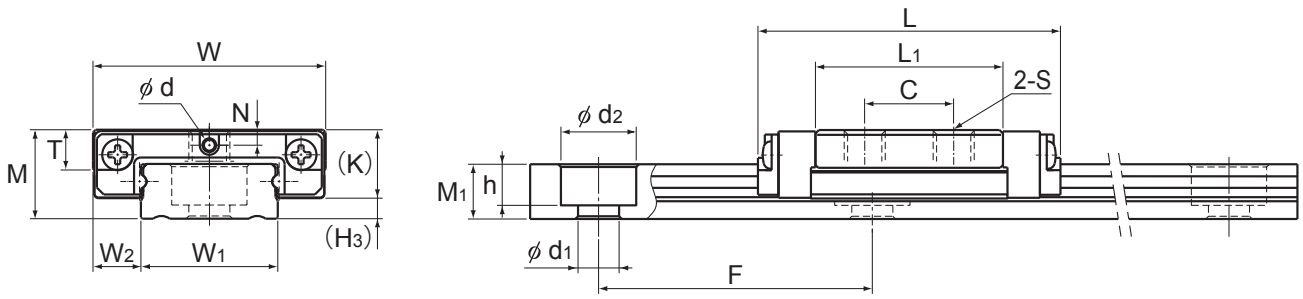


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. 2SRS9XMUU+200LM **(G/g=10)**, SRS12-466LM(GK) RAIL **(G=16, g=10)**

*Note 1 : For more product specs, please see THK general catalog

*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - SRS



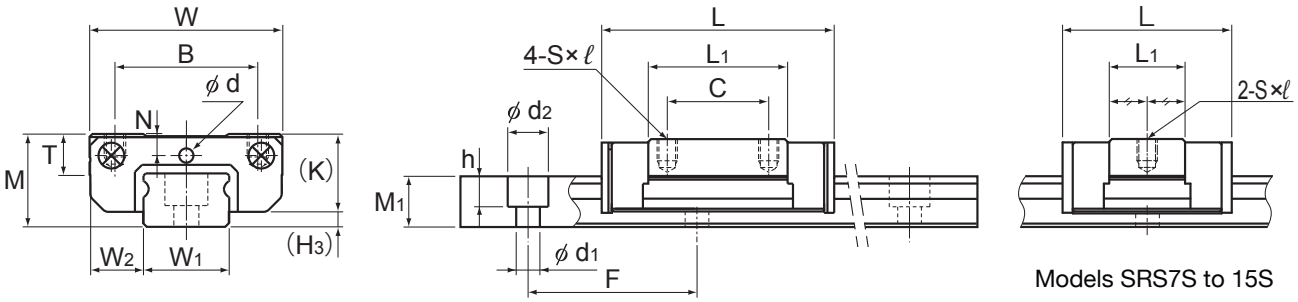
Model SRS5M/N

SRS-S/M/N

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS								
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	GREASING HOLE d	
SRS5M	6	12	16.9	8	-	M2×1.5	8.8	1.7	4.5	0.93	0.8	
SRS5N	6	12	20.1	8	-	M2×1.5	12	1.7	4.5	0.93	0.8	
SRS7S	8	17	19	12	-	M2×2.3	9	3.3	6.7	1.6	1.2	
SRS7M	8	17	23.4	12	8	M2×2.3	13.4	3.3	6.7	1.6	1.2	
SRS7N	8	17	31	12	13	M2×2.3	21	3.3	6.7	1.6	1.2	
SRS9XS	10	20	21.5	15	-	M3×2.8	10.5	4.5	8.5	2.4	1.6	
SRS9XM	10	20	30.8	15	10	M3×2.8	19.8	4.5	8.5	2.4	1.6	
SRS9XN	10	20	40.8	15	16	M3×2.8	29.8	4.5	8.5	2.4	1.6	
SRS12S	13	27	25	20	-	M3×3.2	11.2	5.7	11	3	2	
SRS12M	13	27	34.4	20	15	M3×3.2	20.6	5.7	11	3	2	
SRS12N	13	27	47.1	20	20	M3×3.2	33.3	5.7	11	3	2	
SRS15S	16	32	32	25	-	M3×3.5	14.7	6.5	13.3	3	3	
SRS15M	16	32	43	25	20	M3×3.5	25.7	6.5	13.3	3	3	
SRS15N	16	32	60.8	25	25	M3×3.5	43.5	6.5	13.3	3	3	
SRS20M	20	40	50	30	25	M4×6	34	9	16.6	4	3	
SRS25M	25	48	77	35	35	M6×7	56	11	20	5	4	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Models SRS7S to 15S

Models SRS7M/N to 25 M/N

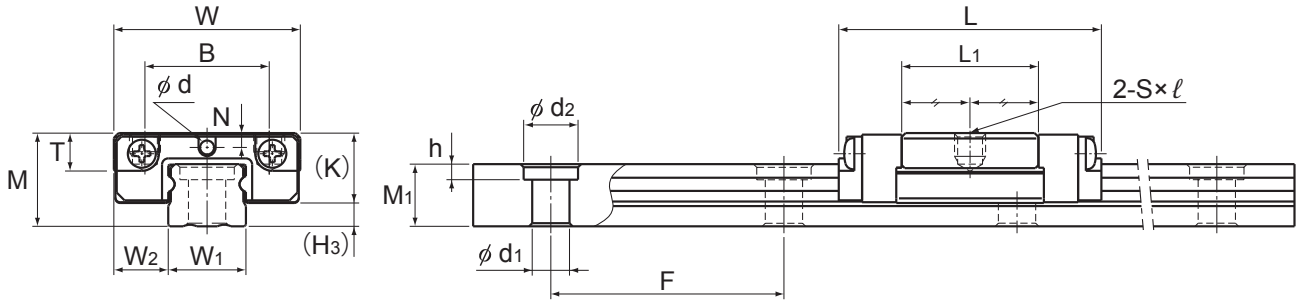
Unit = mm

H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT N • M					MASS	
	WIDTH W1	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
1.5	$5^{\ 0}_{-0.02}$	3.5	4	15	2.4×3.5×1	220	0.439	0.468	0.74	5.11	0.86	5.99	1.21	0.002	0.13
1.5	$5^{\ 0}_{-0.02}$	3.5	4	15	2.4×3.5×1	220	0.515	0.586	1.12	7.45	1.31	8.73	1.52	0.003	0.13
1.3	$7^{\ 0}_{-0.02}$	5	4.7	15	2.4×4.2×2.3	480	1.09	0.964	1.6	12.6	1.83	14.5	3.73	0.005	0.25
1.3	$7^{\ 0}_{-0.02}$	5	4.7	15	2.4×4.2×2.3	480	1.51	1.29	3.09	17.2	3.69	17.3	5.02	0.009	0.25
1.3	$7^{\ 0}_{-0.02}$	5	4.7	15	2.4×4.2×2.3	480	2.01	2.31	7.77	43.2	8.96	50	8.96	0.012	0.25
1.5	$9^{\ 0}_{-0.02}$	5.5	5.5	20	3.5×6×3.3	1240	1.78	1.53	3.15	22.2	3.61	25.6	7.04	0.009	0.36
1.5	$9^{\ 0}_{-0.02}$	5.5	5.5	20	3.5×6×3.3	1240	2.69	2.75	9.31	52.2	10.7	60.3	12.7	0.016	0.36
1.5	$9^{\ 0}_{-0.02}$	5.5	5.5	20	3.5×6×3.3	1240	3.48	3.98	18.7	96.5	21.6	112	18.3	0.024	0.36
2	$12^{\ 0}_{-0.02}$	7.5	7.5	25	3.5×6×4.5	2000	2.7	2.1	4.62	37.5	4.62	37.5	13.8	0.017	0.65
2	$12^{\ 0}_{-0.02}$	7.5	7.5	25	3.5×6×4.5	2000	4	3.53	12	78.5	12	78.5	23.1	0.027	0.65
2	$12^{\ 0}_{-0.02}$	7.5	7.5	25	3.5×6×4.5	2000	5.82	5.3	28.4	151	28.4	151	34.7	0.049	0.65
2.7	$15^{\ 0}_{-0.02}$	8.5	9.5	40	3.5×6×4.5	2000	4.5	3.39	9.54	77.5	9.54	77.5	24.1	0.033	0.96
2.7	$15^{\ 0}_{-0.02}$	8.5	9.5	40	3.5×6×4.5	2000	6.66	5.7	26.2	154	26.2	154	40.4	0.047	0.96
2.7	$15^{\ 0}_{-0.02}$	8.5	9.5	40	3.5×6×4.5	2000	9.71	8.55	59.7	312	59.7	312	60.7	0.095	0.96
3.4	$20^{\ 0}_{-0.03}$	10	11	60	6×9.5×8	1800	7.75	9.77	54.3	296	62.4	341	104	0.11	1.68
5	$23^{\ 0}_{-0.03}$	12.5	15	60	7×11×9	1800	16.5	20.2	177	932	177	932	248	0.24	2.6

■ For SRS5M and SRS5N, the balls will fall out of the LM block if it is removed from the rail

■ The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Basic Specifications - SRS



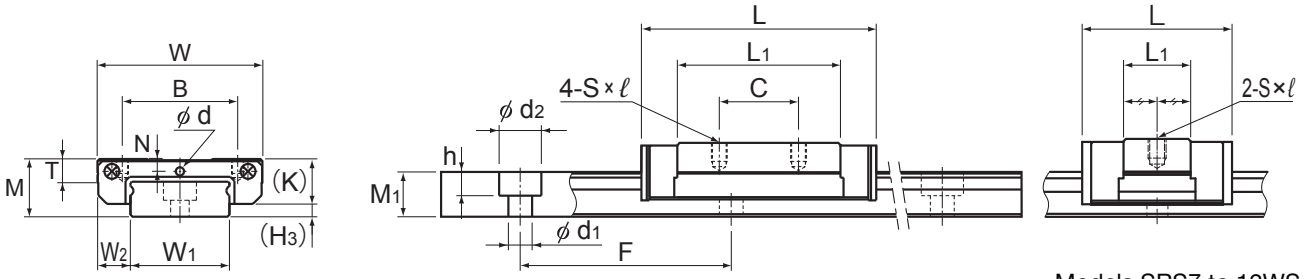
Model SRS5WM/WN

SRS-WS/WM/WN

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS								H_3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	GREASING HOLE d		
SRS5WM	6.5	17	22.1	-	6.5	M3xthru	13.7	2.7	5	1.1	0.8	1.5	
SRS5WN	6.5	17	28.1	-	11	M3xthru	19.7	2.7	5	1.1	0.8	1.5	
SRS7WS	9	25	22.5	19	-	M3×2.8	11.9	3.8	7.2	1.8	1.2	1.8	
SRS7WM	9	25	31	19	10	M3×2.8	20.4	3.8	7.2	1.8	1.2	1.8	
SRS7WN	9	25	40.9	19	17	M3×2.8	30.3	3.8	7.2	1.8	1.2	1.8	
SRS9WS	12	30	26.5	21	-	M3×2.8	14.5	4.9	9.1	2.3	1.6	2.9	
SRS9WM	12	30	39	21	12	M3×2.8	27	4.9	9.1	2.3	1.6	2.9	
SRS9WN	12	30	50.7	23	24	M3×2.8	38.7	4.9	9.1	2.3	1.6	2.9	
SRS12WS	14	40	30.5	28	-	M3×3.5	16.9	5.7	11	3	2	3	
SRS12WM	14	40	44.5	28	15	M3×3.5	30.9	5.7	11	3	2	3	
SRS12WN	14	40	59.5	28	28	M3×3.5	45.9	5.7	11	3	2	3	
SRS15WS	16	60	41.5	45	-	M4×4.5	24.9	6.5	13.3	3	3	2.7	
SRS15WM	16	60	55.5	45	20	M4×4.5	38.9	6.5	13.3	3	3	2.7	
SRS15WN	16	60	74.5	45	35	M4×4.5	57.9	6.5	13.3	3	3	2.7	

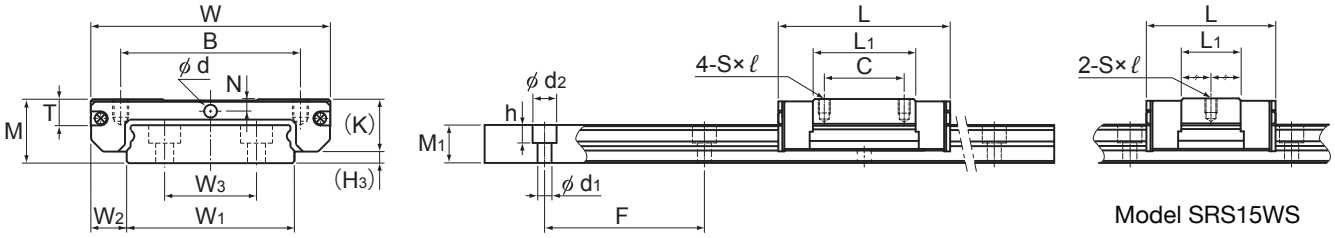
Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



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

Models SRS7 to 12WS



Model SRS15WM/WN

Model SRS15WS

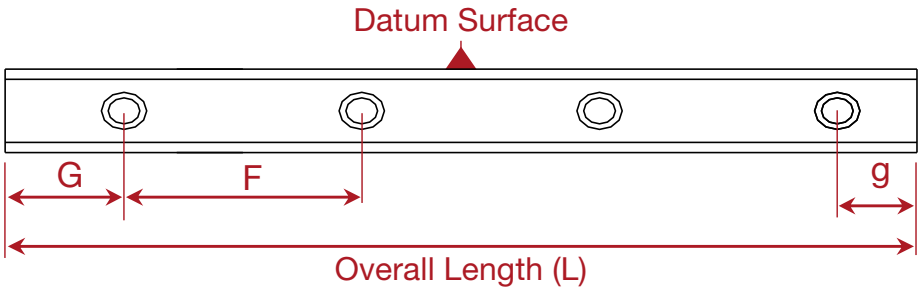
Unit = mm

	LM RAIL DIMENSIONS							BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT N • M					MASS	
	WIDTH W1	W_2	W_3	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	10 $^{0}_{-0.02}$	3.5	-	4	20	3×5.5×3	220	0.584	0.703	1.57	9.59	1.83	11.24	3.58	0.005	0.27
	10 $^{0}_{-0.02}$	3.5	-	4	20	3×5.5×3	220	0.746	0.996	3.01	16.8	3.53	19.7	5.08	0.007	0.27
	14 $^{0}_{-0.02}$	5.5	-	5.2	30	3.5×6×3.2	480	1.38	1.35	2.89	19.6	3.32	22.7	9.95	0.011	0.56
	14 $^{0}_{-0.02}$	5.5	-	5.2	30	3.5×6×3.2	480	2.01	1.94	6.47	36.4	7.71	42.3	14.33	0.018	0.56
	14 $^{0}_{-0.02}$	5.5	-	5.2	30	3.5×6×3.2	480	2.56	3.28	15	78.9	17.4	91.2	24.2	0.026	0.56
	18 $^{0}_{-0.02}$	6	-	7.5	30	3.5×6×4.5	1430	2.03	1.84	4.49	32.1	5.15	38.9	17.4	0.018	1.01
	18 $^{0}_{-0.02}$	6	-	7.5	30	3.5×6×4.5	1430	3.29	3.34	14	78.6	16.2	91	31.5	0.031	1.01
	18 $^{0}_{-0.02}$	6	-	7.5	30	3.5×6×4.5	1430	4.2	4.37	25.1	130	29.1	151	41.3	0.049	1.01
	24 $^{0}_{-0.02}$	8	-	8.5	40	4.5×8×4.5	2000	3.58	3.15	9.77	63	9.77	63	39.5	0.034	1.52
	24 $^{0}_{-0.02}$	8	-	8.5	40	4.5×8×4.5	2000	5.48	5.3	26.4	143	26.4	143	66.5	0.055	1.52
	24 $^{0}_{-0.02}$	8	-	8.5	40	4.5×8×4.5	2000	7.13	7.07	49.2	249	49.2	249	88.7	0.091	1.52
	42 $^{0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	6.64	5.94	25.4	158	25.4	158	123	0.087	2.87
	42 $^{0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	9.12	8.55	51.2	290	51.2	290	176	0.13	2.87
	42 $^{0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	12.4	12.1	106	532	106	532	250	0.201	2.87

■ For SRS5WM and SRS5WN, the balls will fall out of the LM block if it is removed from the rail

■ The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Standard Rail Length



SRS

Unit : mm

Model No. & Size	SRS 5	SRS 5W	SRS 7	SRS 7W	SRS 9X	SRS 9W	SRS 12	SRS 12W	SRS 15	SRS 15W	SRS 20	SRS 25
LM rail Standard length (L)	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/g	5	5	5	10	7.5	10	10	15	15	15	20	20
Standard Max Length	220	220	480	480	1240	1430	2000	2000	2000	2000	1800	1800

Other Options - SRS



Assembly:	2	SRS12	N	QZ	UU	HH	C1	E	+	2500L	P	T	M	S	-II
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)	(12)	(13)	(14)

Block Only:	SRS12	N	UU	C1	**(GK) BLOCK**
	(2)	(3)	(5)	(8)	

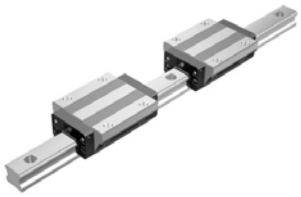
Rail Only:	SRS12	- 120L	M	**(GK) RAIL**
	(2)	(9)	(12)	

OPTIONS	SYMBOLS	REF. PAGE
(1) Number of Blocks	**Number of blocks on one rail**	29 - 34
(2) Model No. & Size	**SRS5, SRS7, SRS9X, SRS9, SRS12, SRS15, SRS20, SRS25**	29 - 34
(3) Block Style	**S, M, N, WS, WM, WN**	
(4) QZ Lubricator	**No Symbol** : None **QZ** : QZ Lubricator	73 - 78
(5) Seal Designation	**UU, SS**	71 - 78
(6) Contact Scraper	**No Symbol** : None **HH** : Laminated Contact Scraper (LaCS)	73 - 79
(7) Radial Clearance	**No Symbol, C1, CS**	80
(8) Non-Standard Block	**No Symbol** : None **E** : Minor modification to block (Drawing required) **S** : Special machining to block (Drawing required)	
(9) Rail Length	**Overall length in mm**	30 & 35
(10) Accuracy Grade	**No Symbol, H, P**	82
(11) Jointed Rail	**No Symbol** : Single piece rail **T** : Two or more rails butted end to end (Drawing required)	88
(12) Rail Material	**M :** Stainless Steel (std for all sizes)	84
(13) Non-Standard Rail	**No Symbol** : None **E** : Minor modification to rail (Drawing required) **S** : Special machining to rail (Drawing required)	
(14) Matched Set	**No Symbol** : None **-II, -III, -IV ~** : The number of rails used in the same level surface	89 - 90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Basic Specifications - HSR

- Global Standard
- 4-Way Equal Loading



Assembly (Block & Rail Set)

MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION (Page 71-79)	RADIAL CLEARANCE (Page 80)	BLOCK MATERIAL (Page 84)
HSR12	**R**	**2**	**SS**	**C1**	**M**

HSR8	C	1 ~	UU : End Seal	No Symbol : Normal	M : Stainless Steel Std for HSR8 to 12
HSR10	R		SS : End Seal + Side Seal	C1 : Light Preload	No Symbol : Carbon Steel Std for HSR15 to 65X
HSR12	LC		DD : Double End Seal + Side Seal	C0 : Medium Preload	
HSR15	LR		ZZ : End Seal + Side Seal + Metal Scraper	CS : Custom (Contact THK)	
HSR20	YR		KK : Double End Seal + Side Seal + Metal Scraper		
HSR25					
HSR30					
HSR35					
HSR45					
HSR55					
HSR65X					

*Only UU is available for HSR8 to 12

*C0 : Not available for HSR8 to 15
*C0 & CS : Not available for Block Only

Block Only



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK
HSR20	**LC**	**1**	**SS**	**C1**	**(GK)**	**BLOCK**

HSR15	C		UU	No Symbol : Normal	
HSR20	R		SS	C1 : Light Preload	
HSR25	LC		DD		
HSR30	LR		ZZ		
HSR35	YR		KK		
HSR45					
HSR55					
HSR65X					

SAMPLE PART NUMBER
HSR20LC1SSC1(GK) BLOCK
HSR65XLR1ZZ(GK) BLOCK

Available Block Styles for HSR

C: Flanged Tapped Holes



R: Narrow Tapped Holes



LC: Long C Style



LR: Long R Style

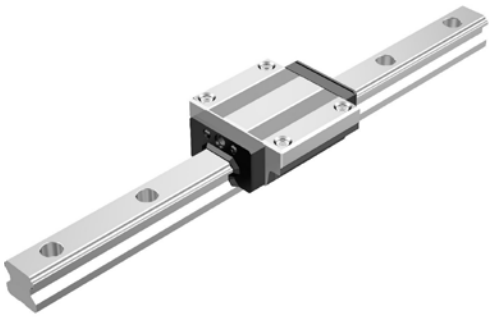


YR: Tapped Holes on Side



⊙ = Available for Assembly or Block Only
● = Available for Assembly only

Style	Size										
	8	10	12	15	20	25	30	35	45	55	65
C	–	–	–	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
R	●	●	●	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
LC	–	–	–	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
LR	–	–	–	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
YR	–	–	–	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙



RAIL LENGTH (Std Length - Page 45)	ACCURACY GRADE (Page 81)	RAIL MATERIAL (Page 84)	SAMPLE PART NUMBER
670L	**P**	**M**	**HSR12R2SSC1M+670LPM**
Overall length in mm	No Symbol : Normal	M: Stainless Steel Std for HSR8 to 12	**HSR20C2ZZCS+820L**
	H : High	No Symbol : Carbon Steel Std for HSR15 to 65X	
	P : Precision		
	SP : Super Precision		
	UP : Ultra Precision		

*If other than standard length, specify G/g dimensions (Fig. 1)

*UP : Not available for HSR8 to 12
*H, P, SP, UP : Not available for Rail Only

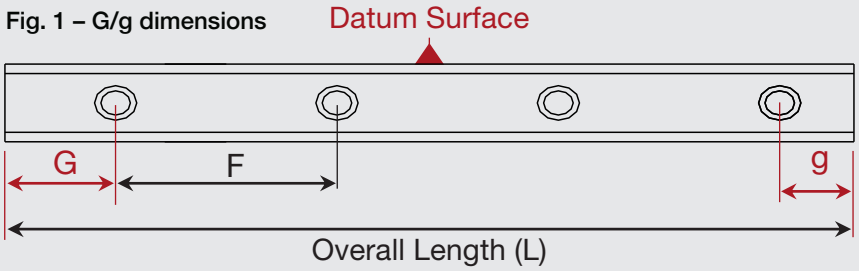
Rail Only



MODEL NUMBER & SIZE	RAIL LENGTH	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
HSR45	**1095L**	**(GK)**	**RAIL**	**HSR45-1095L(GK) RAIL**
HSR15	Overall length in mm			**HSR65-1270L(GK) RAIL**
HSR20				
HSR25				
HSR30				
HSR35				
HSR45				
HSR55				
HSR65				

*Symbol X is not required for HSR65 Rail Only

Fig. 1 – G/g dimensions

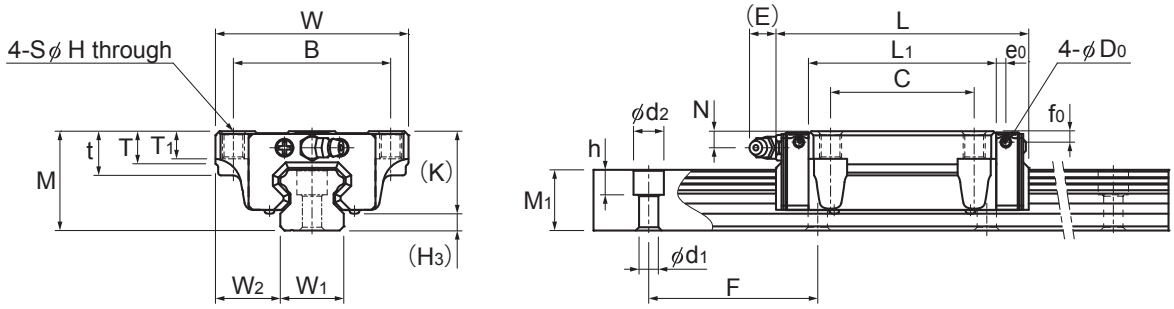


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. HSR25C2SS+540L **(G/g=30)**, HSR55-1130L(GK) RAIL **(G=30, g=20)**

*Note 1 : For more product specs, please see THK general catalog

*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - HSR



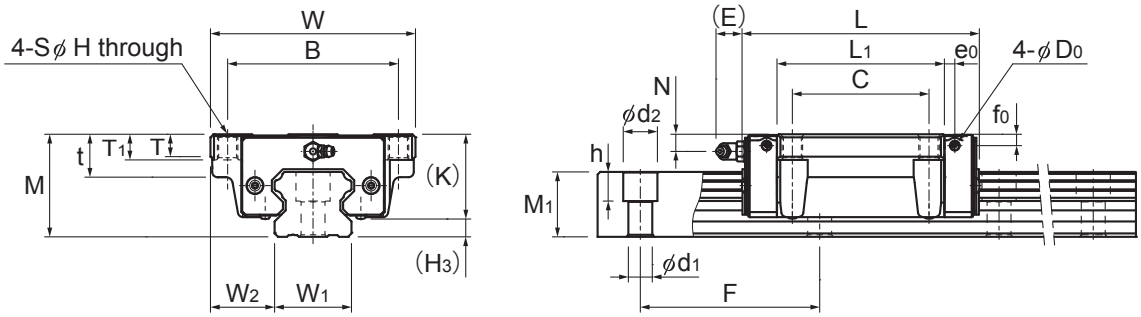
Models HSR15 to 35C/LC

HSR-C/XC/LC/XLC

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS												PILOT HOLE FOR SIDE NIPPLE			
	HEIGHT M	WIDTH W	LENGTH L	B	C	S	H	L_1	t	T	T_1	K	N	E	GREASE NIPPLE	e_0	f_0	D_0	
HSR15C	24	47	56.6	38	30	M5	4.5	38.8	11	7	7	19.3	4.3	5.5	PB1021B	3.2	3.9	3	
HSR15LC	24	47	74.6	38	30	M5	4.5	56.8	11	7	7	19.3	4.3	5.5	PB1021B	3.2	3.9	3	
HSR20C	30	63	74	53	40	M6	5.4	50.8	10	9.5	10	26	5	12	B-M6F	3.1	3.4	3	
HSR20LC	30	63	90	53	40	M6	5.4	66.8	10	9.5	10	26	5	12	B-M6F	3.1	3.4	3	
HSR25C	36	70	83.1	57	45	M8	6.8	59.5	16	11	16	30.5	6	12	B-M6F	3.5	4	3	
HSR25LC	36	70	102.2	57	45	M8	6.8	78.6	16	11	16	30.5	6	12	B-M6F	3.5	4	3	
HSR30C	42	90	98	72	52	M10	8.5	70.4	18	9	18	35	7	12	B-M6F	5.2	6.2	5.2	
HSR30LC	42	90	120.6	72	52	M10	8.5	93	18	9	18	35	7	12	B-M6F	5.2	6.2	5.2	
HSR35C	48	100	109.4	82	62	M10	8.5	80.4	21	12	21	40.5	8	12	B-M6F	5.5	5.6	5.2	
HSR35LC	48	100	134.8	82	62	M10	8.5	105.8	21	12	21	40.5	8	12	B-M6F	5.5	5.6	5.2	
HSR45C	60	120	139	100	80	M12	10.5	98	25	13	15	50	10	16	B-PT1/8	6.1	6.6	5.2	
HSR45LC	60	120	170.8	100	80	M12	10.5	129.8	25	13	15	50	10	16	B-PT1/8	6.1	6.6	5.2	
HSR55C	70	140	163	116	95	M14	12.5	118	29	13.5	17	57	11	16	B-PT1/8	5.6	7.7	5.2	
HSR55LC	70	140	201.1	116	95	M14	12.5	156.1	29	13.5	17	57	11	16	B-PT1/8	5.6	7.7	5.2	
HSR65XC	90	170	190.5	142	110	M16	14.5	138.5	37	21.5	23	76	19	16	B-PT1/8	6.8	14.6	5.2	
HSR65XLC	90	170	250	142	110	M16	14.5	198	37	21.5	23	76	19	16	B-PT1/8	6.8	14.6	5.2	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other.

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Models HSR45 to 65C/LC/XC/XLC

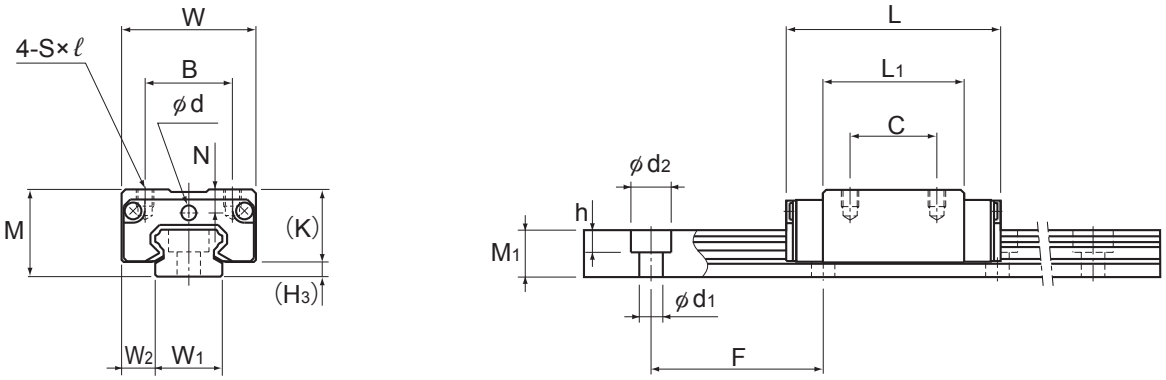
Unit = mm

	H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
		WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	4.7	15	16	15	60	4.5×7.5×5.3	3000	10.9	15.7	0.0945	0.527	0.0945	0.527	0.0998	0.2	1.5
	4.7	15	16	15	60	4.5×7.5×5.3	3000	14.2	22.9	0.194	0.984	0.194	0.984	0.145	0.29	1.5
	4	20	21.5	18	60	6×9.5×8.5	3000	19.8	27.4	0.218	1.2	0.218	1.2	0.235	0.35	2.3
	4	20	21.5	18	60	6×9.5×8.5	3000	23.9	35.8	0.363	1.87	0.363	1.87	0.307	0.47	2.3
	5.5	23	23.5	22	60	7×11×9	3000	27.6	36.4	0.324	1.8	0.324	1.8	0.366	0.59	3.3
	5.5	23	23.5	22	60	7×11×9	3000	35.2	51.6	0.627	3.04	0.627	3.04	0.518	0.75	3.3
	7	28	31	26	80	9×14×12	3000	40.5	53.7	0.599	3.1	0.599	3.1	0.652	1.1	4.8
	7	28	31	26	80	9×14×12	3000	48.9	70.2	0.995	4.89	0.995	4.89	0.852	1.3	4.8
	7.5	34	33	29	80	9×14×12	3000	53.9	70.2	0.895	4.51	0.895	4.51	1.05	1.6	6.6
	7.5	34	33	29	80	9×14×12	3000	65	91.7	1.49	7.13	1.49	7.13	1.37	2	6.6
	10	45	37.5	38	105	14×20×17	3090	82.2	101	1.5	8.37	1.5	8.37	1.94	2.8	11
	10	45	37.5	38	105	14×20×17	3090	100	135	2.59	13.4	2.59	13.4	2.6	3.3	11
	13	53	43.5	44	120	16×23×20	3060	121	146	2.6	14.1	2.6	14.1	3.43	4.5	15.1
	13	53	43.5	44	120	16×23×20	3060	148	194	4.46	22.7	4.46	22.7	4.56	5.7	15.1
	14	63	53.5	53	150	18×26×22	3000	195	228	5.08	25	5.08	25	6.2	8.5	22.5
	14	63	53.5	53	150	18×26×22	3000	249	323	9.81	45.6	9.81	45.6	8.79	10.7	22.5

■ The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK.

■ For HSR8, HSR10 and HSR12, the balls will fall out of the LM block if it is removed from the rail.

Basic Specifications - HSR



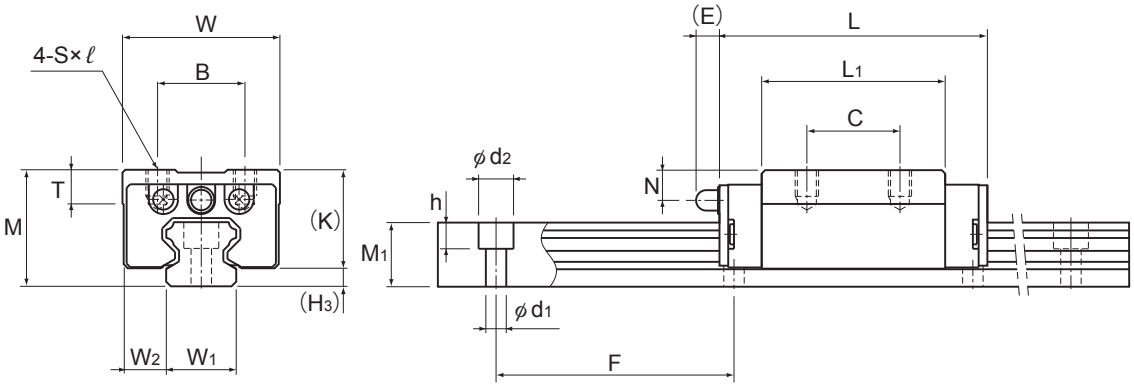
Models HSR8R and 10R

HSR-R/XR/LR/XLR

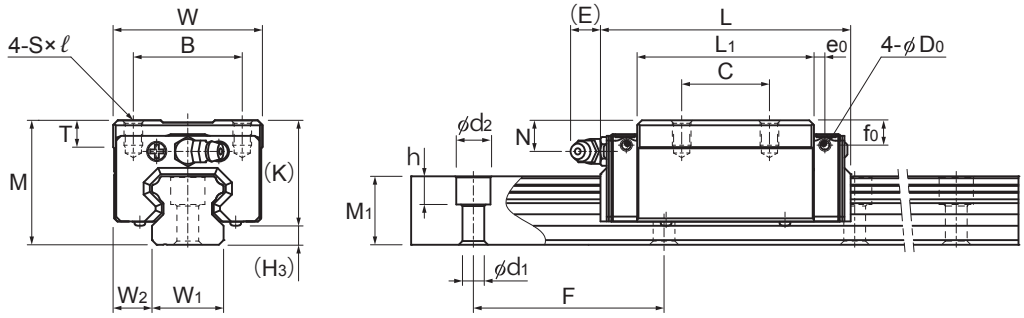
MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS										PILOT HOLE FOR SIDE NIPPLE			
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASING HOLE d	GREASE NIPPLE	e_0	f_0	D_0	
HSR8R	11	16	24	10	10	M2×2.5	15	-	8.9	2.6	-	2.2	-	-	-	-	
HSR10R	13	20	31	13	12	M2.6×2.5	20.1	-	10.8	3.5	-	2.5	-	-	-	-	
HSR12R	20	27	45	15	15	M4×4.5	30.5	6	16.9	5.2	4	-	PB107	-	-	-	
HSR15R	28	34	56.6	26	26	M4×5	38.8	6	23.3	8.3	5.5	-	PB1021B	3.2	3.9	3	
HSR15LR	28	34	74.6	26	34	M4×5	56.8	6	23.3	8.3	5.5	-	PB1021B	3.2	3.9	3	
HSR20R	30	44	74	32	36	M5×6	50.8	8	26	5	12	-	B-M6F	3.1	3.4	3	
HSR20LR	30	44	90	32	50	M5×6	66.8	8	26	5	12	-	B-M6F	3.1	3.4	3	
HSR25R	40	48	83.1	35	35	M6×8	59.5	9	34.5	10	12	-	B-M6F	3.5	8	3	
HSR25LR	40	48	102.2	35	50	M6×8	78.6	9	34.5	10	12	-	B-M6F	3.5	8	3	
HSR30R	45	60	98	40	40	M8×10	70.4	9	38	10	12	-	B-M6F	5.2	9.2	5.2	
HSR30LR	45	60	120.6	40	60	M8×10	93	9	38	10	12	-	B-M6F	5.2	9.2	5.2	
HSR35R	55	70	109.4	50	50	M8×12	80.4	11.7	47.5	15	12	-	B-M6F	5.5	12.6	5.2	
HSR35LR	55	70	134.8	50	72	M8×12	105.8	11.7	47.5	15	12	-	B-M6F	5.5	12.6	5.2	
HSR45R	70	86	139	60	60	M10×17	98	15	60	20	16	-	B-PT1/8	6.1	16.6	5.2	
HSR45LR	70	86	170.8	60	80	M10×17	129.8	15	60	20	16	-	B-PT1/8	6.1	16.6	5.2	
HSR55R	80	100	163	75	75	M12×18	118	20.5	67	21	16	-	B-PT1/8	5.6	17.7	5.2	
HSR55LR	80	100	201.1	75	95	M12×18	156.1	20.5	67	21	16	-	B-PT1/8	5.6	17.7	5.2	
HSR65XR	90	126	190.5	76	70	M16x20	138.5	23	76	19	16	-	B-PT1/8	6.8	14.6	5.2	
HSR65XLR	90	126	250	76	120	M16x20	198	23	76	19	16	-	B-PT1/8	6.8	14.6	5.2	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other.

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Model HSR12R



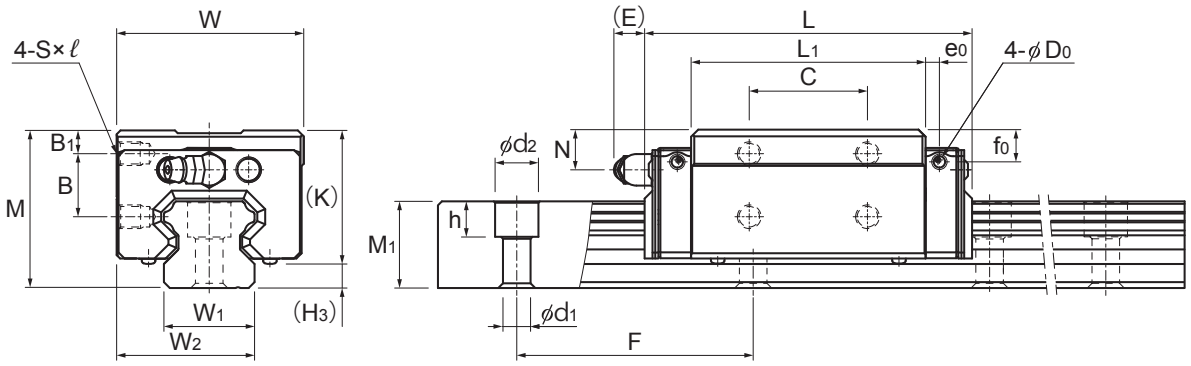
Models HSR15 to 65R/LR/XR/XLR

Unit = mm

	H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M						MASS	
		WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C		LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK			
	2.1	8	4	6	20	2.4×4.2×2.3	975	1.08	2.16	0.00492	0.0319	0.00492	0.0319	0.00727		0.012	0.3
	2.2	10	5	7	25	3.5×6×3.3	995	1.96	3.82	0.0123	0.0716	0.0123	0.0716	0.0162		0.025	0.45
	3.1	12	7.5	11	40	3.5×6×4.5	1240	4.7	8.53	0.0409	0.228	0.0409	0.228	0.0445		0.08	0.83
	4.7	15	9.5	15	60	4.5×7.5×5.3	3000	10.9	15.7	0.0945	0.527	0.0945	0.527	0.0998		0.18	1.5
	4.7	15	9.5	15	60	4.5×7.5×5.3	3000	14.2	22.9	0.194	0.984	0.194	0.984	0.145		0.26	1.5
	4	20	12	18	60	6×9.5×8.5	3000	19.8	27.4	0.218	1.2	0.218	1.2	0.235		0.25	2.3
	4	20	12	18	60	6×9.5×8.5	3000	23.9	35.8	0.363	1.87	0.363	1.87	0.307		0.35	2.3
	5.5	23	12.5	22	60	7×11×9	3000	27.6	36.4	0.324	1.8	0.324	1.8	0.366		0.54	3.3
	5.5	23	12.5	22	60	7×11×9	3000	35.2	51.6	0.627	3.04	0.627	3.04	0.518		0.67	3.3
	7	28	16	26	80	9×14×12	3000	40.5	53.7	0.599	3.1	0.599	3.1	0.652		0.9	4.8
	7	28	16	26	80	9×14×12	3000	48.9	70.2	0.995	4.89	0.995	4.89	0.852		1.1	4.8
	7.5	34	18	29	80	9×14×12	3000	53.9	70.2	0.895	4.51	0.895	4.51	1.05		1.5	6.6
	7.5	34	18	29	80	9×14×12	3000	65	91.7	1.49	7.13	1.49	7.13	1.37		2	6.6
	10	45	20.5	38	105	14×20×17	3090	82.2	101	1.5	8.37	1.5	8.37	1.94		2.6	11
	10	45	20.5	38	105	14×20×17	3090	100	135	2.59	13.4	2.59	13.4	2.6		3.1	11
	13	53	23.5	44	120	16×23×20	3060	121	146	2.6	14.1	2.6	14.1	3.43		4.3	15.1
	13	53	23.5	44	120	16×23×20	3060	148	194	4.46	22.7	4.46	22.7	4.56		5.4	15.1
	14	63	31.5	53	150	18×26×22	3000	195	228	5.08	25	5.08	25	6.2		7.3	22.5
	14	63	31.5	53	150	18×26×22	3000	249	323	9.81	45.6	9.81	45.6	8.79		9.7	22.5

■ The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK.

Basic Specifications - HSR



HSR-YR

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS												
	HEIGHT M	WIDTH W	LENGTH L	B_1	B	C	S X ℓ	L_1	K	N	E	e_0	f_0	D_0	GREASE NIPPLE	
HSR15YR	28	33.5	56.6	4.3	11.5	18	M4×5	38.8	23.3	8.3	5.5	3.2	7.9	3	PB1021B	
HSR20YR	30	43.5	74	4	11.5	25	M5×6	50.8	26	5	12	3.1	3.4	3	B-M6F	
HSR25YR	40	47.5	83.1	6	16	30	M6×6	59.5	34.5	10	12	3.5	8	3	B-M6F	
HSR30YR	45	59.5	98	8	16	40	M6×9	70.4	38	10	12	5.2	9.2	5.2	B-M6F	
HSR35YR	55	69.5	109.4	8	23	43	M8×10	80.4	47.5	15	12	5.5	12.6	5.2	B-M6F	
HSR45YR	70	85.5	139	10	30	55	M10×14	98	60	20	16	6.1	16.6	5.2	B-PT1/8	
HSR55YR	80	99.5	163	12	32	70	M12×15	118	67	21	16	5.6	17.7	5.2	B-PT1/8	
HSR65YR	90	124.5	186	12	35	85	M16×22	147	76	19	16	-	-	-	B-PT1/8	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

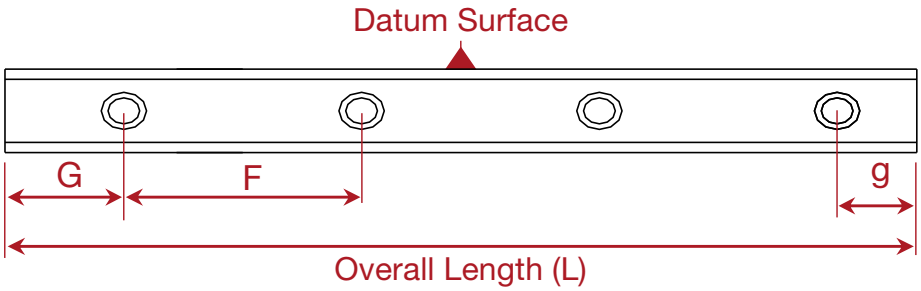
■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)

Unit = mm

	H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
		WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	4.7	15	24	15	60	4.5×7.5×5.3	3000	10.9	15.7	0.0945	0.527	0.0945	0.527	0.0998	0.18	1.5
	4	20	31.5	18	60	6×9.5×8.5	3000	19.8	27.4	0.218	1.2	0.218	1.2	0.235	0.25	2.3
	5.5	23	35	22	60	7×11×9	3000	27.6	36.4	0.324	1.8	0.324	1.8	0.366	0.54	3.3
	7	28	43.5	26	80	9×14×12	3000	40.5	53.7	0.599	3.1	0.599	3.1	0.652	0.9	4.8
	7.5	34	51.5	29	80	9×14×12	3000	53.9	70.2	0.895	4.51	0.895	4.51	1.05	1.5	6.6
	10	45	65	38	105	14×20×17	3090	82.2	101	1.5	8.37	1.5	8.37	1.94	2.6	11
	13	53	76	44	120	16×23×20	3060	121	146	2.6	14.1	2.6	14.1	3.43	4.3	15.1
	14	63	93	53	150	18×26×22	3000	195	228	5.08	25	5.08	25	6.2	7.3	22.5

■ The pilot holes at sides of LM block are not drilled through. To install a grease nipple at side, please contact THK.

Standard Rail Length - HSR



Unit : mm

Model No. & Size	HSR 8	HSR 10	HSR 12	HSR 15	HSR 20	HSR 25	HSR 30	HSR 35	HSR 45	HSR 55	HSR 65
LM rail Standard length (L)	35 55 75 95 115 135 155 175 195 215 235 255 275	45 70 95 120 145 170 195 220 245 270 295 320 345 370 395 420 445 470	70 110 150 190 230 270 310 350 390 430 470 510 550 590 630 670	160 220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1360 1480 1600	160 220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1360 1480 1600 1720 1840 1960 2080 2200	220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1300 1360 1420 1480 1540 1600 1720 1840 1960 2080 2200 2320 2440 2500	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1560 1640 1720 1800 1880 1960 2040 2200 2360 2520 2680 2840 3000	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1560 1640 1720 1800 1880 1960 2040 2200 2360 2520 2680 2840 3000	570 675 780 885 990 1095 1200 1305 1410 1515 1620 1725 1830 1935 2040 2145 2250 2355 2460 2565 2670 2775 2880 2985 3090	780 900 1020 1140 1260 1380 1500 1620 1740 1860 1980 2100 2220 2340 2460 2580 2700 2820 2940 3060	1270 1570 2020 2620
Standard pitch F	20	25	40	60	60	60	80	80	105	120	150
G/g	7.5	10	15	20	20	20	20	20	22.5	30	35
Standard Max Length	975	995	1240	3000	3000	3000	3000	3000	3090	3060	3000
Custom Order Max length					5000	5000	7000	7000	7000	7000	7000

Other Options - HSR

Assembly:	HSR25	LC	4	QZ	ZZ	HH	C1	F	M	J	E	+	5240L	P	K	Z	T	F	M	S	J	-II
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Block Only:	HSR25	LC	1	ZZ	C1	J	E	(GK) BLOCK														
	(1)	(2)	(3)	(5)	(7)	(10)	(11)															
Rail Only:	HSR25	-	5240L	K	Z	T	M	S	J	(GK) RAIL												
	(1)		(12)	(14)	(15)	(16)	(18)	(19)	(20)													

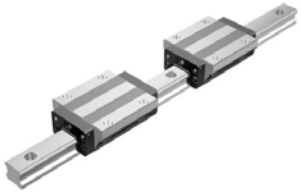
OPTIONS	SYMBOLS	REF. PAGE
(1) Model No. & Size	**HSR8, HSR10, HSR12, HSR15, HSR20, HSR25, HSR30, HSR35, HSR45, HSR55, HSR65**	37 - 44
(2) Block Style	**C, R, LC, LR, YR**	37 - 44
(3) Number of Blocks	**Number of blocks on one rail**	
(4) QZ Lubricator	**No Symbol** : None **QZ** : QZ Lubricator	73 - 78
(5) Seal Designation	**UU, SS, DD, ZZ, KK**	71 - 78
(6) Contact Scraper	**No Symbol** : None **HH** : Laminated Contact Scraper (LaCS)	73 - 79
(7) Radial Clearance	**No Symbol, C1, C0, CS**	80
(8) Surface Coating for Block	**No Symbol** : None **F** : Coated Block (Specify Coating Type)	83
(9) Block Material	**No Symbol** : Standard (Carbon Steel) **M** : Stainless Steel (includes Balls)	84
(10) Bellow Prep. for Block	**No Symbol** : None **J** : Additional tapped holes for block	85
(11) Non-Standard Block	**No Symbol** : None **E** : Minor modification to block (Drawing required) **S** : Special machining to block (Drawing required)	
(12) Rail Length	**Overall length in mm**	38 & 45
(13) Accuracy Grade	**No Symbol, H, P, SP, UP**	81
(14) Tapped Rail	**No Symbol** : Standard counter bored hole **K :** Tapped rail for mounting from bottom *If K is selected, Z cannot be selected for (15). *K is available for normal, high, and precision grade for (13).	86
(15) Steel Tape	**No Symbol** : None **Z** : Steel tape (machining on rail) *If Z is selected, K cannot be selected for (14).	87
(16) Jointed Rail	**No Symbol** : Single piece rail **T** : Two or more rails butted end to end (Drawing required)	88
(17) Surface Coating for Rail	**No Symbol** : None **F** : Coated Rail	83
(18) Rail Material	**No Symbol** : None **F** : Coated Rail (Specify Coating Type)	84
(19) Non-Standard Rail	**No Symbol** : None **E :** Minor modification to rail (Drawing required) **S** : Special machining to rail (Drawing required)	
(20) Bellow Prep. for Rail	**No Symbol** : None **J :** Additional tappled holes for rail	85
(21) Matched Set	**No Symbol** : None **-II, -III, -IV ~** : The number of rails used in the same level surface	89 - 90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Basic Specifications - SR

Radial Type

Assembly (Block & Rail Set)



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION (Page 71-79)	RADIAL CLEARANCE (Page 80)
SR25	**W**	**4**	**KK**	**C0**
SR15	W	1 ~	UU : End Seal	No Symbol : Normal
SR20	V		SS : End Seal + Side Seal	C1 : Light Preload
SR25	TB		DD : Double End Seal + Side Seal	C0 : Medium Preload
SR30	SB		ZZ : End Seal + Side Seal + Metal Scraper	CS : Custom (Contact THK)
SR35			KK : Double End Seal + Side Seal + Metal Scraper	*C0 & CS : Not available for Block Only
SR45				
SR55				

Block Only



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK
SR45	**W**	**1**	**SS**	**C1**	**(GK)**	**BLOCK**
SR15	W	1 ~	UU	No Symbol : Normal		
SR20	V		SS	C1 : Light Preload		
SR25	TB		DD			
SR30	SB		ZZ			
SR35			KK			
SR45						
SR55						

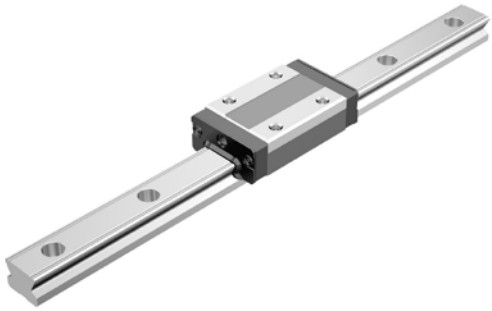
SAMPLE PART NUMBER
SR45W1SSC1(GK) BLOCK
SR20SB1DD(GK) BLOCK

Available Block Styles for SR

⊙ = Available

W: Narrow Tapped Holes 	**V:** Short W Type 
TB: Flanged Through Holes 	**SB:** Short TB Type 

Style	Size						
	15	20	25	30	35	45	55
W	⊙	⊙	⊙	⊙	⊙	⊙	⊙
V	⊙	⊙	⊙	⊙	⊙	–	–
TB	⊙	⊙	⊙	⊙	⊙	⊙	⊙
SB	⊙	⊙	⊙	⊙	⊙	–	–



RAIL LENGTH (Std Length - Page 53)	MOUNTING HOLE SIZE	ACCURACY GRADE (Page 81)	SAMPLE PART NUMBER
2520L	Y	P	SR25W4KKC0+2520LYP
Overall length in mm	Y : SR25 (Std)	No Symbol : Normal	SR35V2SSC0+600LUP
*If other than standard length, specify G/g dimensions (Fig. 1)	No Symbol : SR15 (Std) SR20,30,35, 45, 55 (No Y Option)	H : High	
		P : Precision	
		SP : Super Precision	
		UP : Ultra Precision	

***SR15 & 25**

MODEL NO. & SIZE	MOUNTING HOLE SIZE	
	Y	No Symbol
SR15	For M4	For M3 (Std)
SR25	For M6 (Std)	For M5

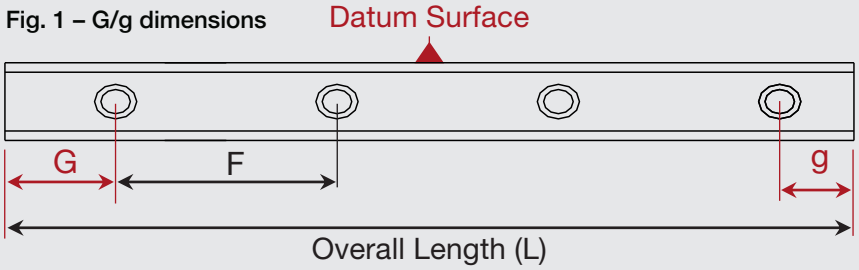
*H, P, SP, UP : Not available for Rail Only

Rail Only



MODEL NUMBER & SIZE	RAIL LENGTH	MOUNTING HOLE SIZE	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
SR25	460L	Y	(GK)	RAIL	SR25-460LY(GK) RAIL
SR15	Overall length in mm	Y : SR25 (Std)			SR15-1180L(GK) RAIL
SR20		No Symbol : SR15 (Std) SR20,30,35, 45, 55 (No Y Option)			
SR25					
SR30					
SR35					
SR45					
SR55					

Fig. 1 – G/g dimensions

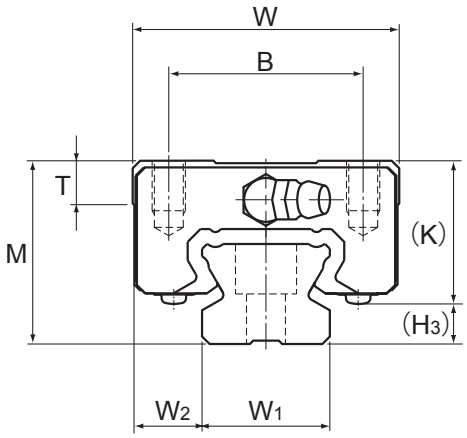


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. SR35W2SS+1740L **(G/g=30)**, SR30-430L(GK) RAIL **(G=20, g=10)**

*Note 1 : For more product specs, please see THK general catalog

*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - SR

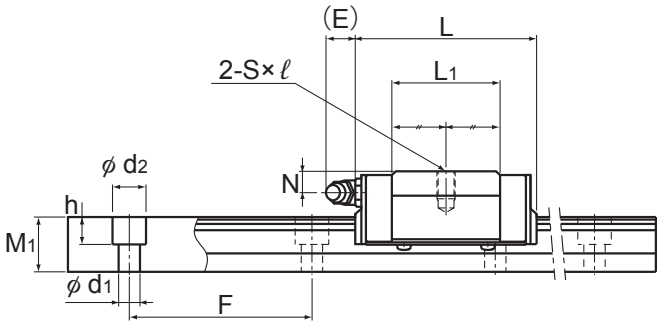


SR-W/V

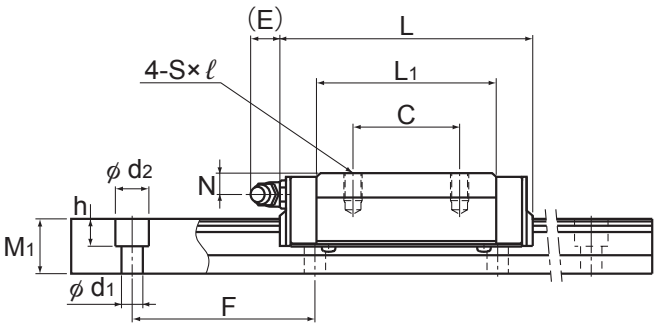
MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS									H_3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASE NIPPLE		
SR15V	24	34	40.4	26	-	M4×7	22.9	5.7	18.2	6	5.5	PB1021B	5.8	
SR15W	24	34	57	26	26	M4×7	39.5	5.7	18.2	6	5.5	PB1021B	5.8	
SR20V	28	42	47.3	32	-	M5×8	27.8	7.2	22	6	12	B-M6F	6	
SR20W	28	42	66.2	32	32	M5×8	46.7	7.2	22	6	12	B-M6F	6	
SR25V	33	48	59.2	35	-	M6×9	35.2	7.7	26	7	12	B-M6F	7	
SR25W	33	48	83	35	35	M6×9	59	7.7	26	7	12	B-M6F	7	
SR30V	42	60	67.9	40	-	M8×12	40.4	8.5	32.5	8	12	B-M6F	9.5	
SR30W	42	60	96.8	40	40	M8×12	69.3	8.5	32.5	8	12	B-M6F	9.5	
SR35V	48	70	77.6	50	-	M8×12	45.7	12.5	36.5	8.5	12	B-M6F	11.5	
SR35W	48	70	111	50	50	M8×12	79	12.5	36.5	8.5	12	B-M6F	11.5	
SR45W	60	86	126	60	60	M10×15	90.5	15	47.5	11.5	16	B-PT1/8	12.5	
SR55W	68	100	156	75	75	M12×20	117	16.7	54.5	12	16	B-PT1/8	13.5	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Model SR-V



Model SR-W

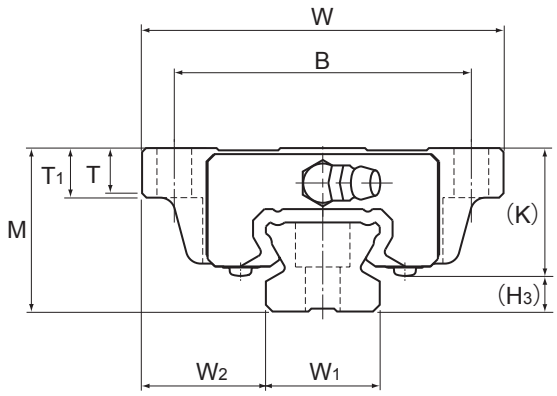
Unit = mm

	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M						MASS	
	WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C		LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK			
	15	9.5	12.5	60	3.5×6×4.5	3000	9.1	11.7	0.0344	0.234	0.0215	0.149	0.0694		0.12	1.2
	15	9.5	12.5	60	3.5×6×4.5	3000	13.8	20.5	0.0984	0.551	0.0604	0.343	0.122		0.2	1.2
	20	11	15.5	60	6×9.5×8.5	3000	13.4	17.2	0.064	0.396	0.0397	0.25	0.135		0.2	2.1
	20	11	15.5	60	6×9.5×8.5	3000	19.2	28.6	0.167	0.887	0.102	0.55	0.224		0.3	2.1
	23	12.5	18	60	7×11×9	3000	21.6	26.8	0.125	0.773	0.0774	0.488	0.245		0.3	2.7
	23	12.5	18	60	7×11×9	3000	30.9	44.7	0.326	1.74	0.2	1.08	0.408		0.4	2.7
	28	16	23	80	7×11×9	3000	29.5	34.4	0.173	1.15	0.108	0.735	0.376		0.5	4.3
	28	16	23	80	7×11×9	3000	45.6	64.4	0.564	2.92	0.346	1.8	0.703		0.8	4.3
	34	18	27.5	80	9×14×12	3000	40.9	46.7	0.275	1.79	0.171	1.14	0.615		0.8	6.4
	34	18	27.5	80	9×14×12	3000	60.4	81.8	0.785	4.27	0.482	2.65	1.08		1.2	6.4
	45	20.5	35.5	105	11×17.5×14	3000	80.4	107	1.17	6.34	0.721	3.94	1.89		2.2	11.3
	48	26	38	120	14×20×17	3000	136	179	2.61	13	1.6	8.05	3.33		3.6	12.8

■ For SR25, the table above shows rail mounting hole dimensions for M6. *Symbol Y.

■ The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Basic Specifications - SR

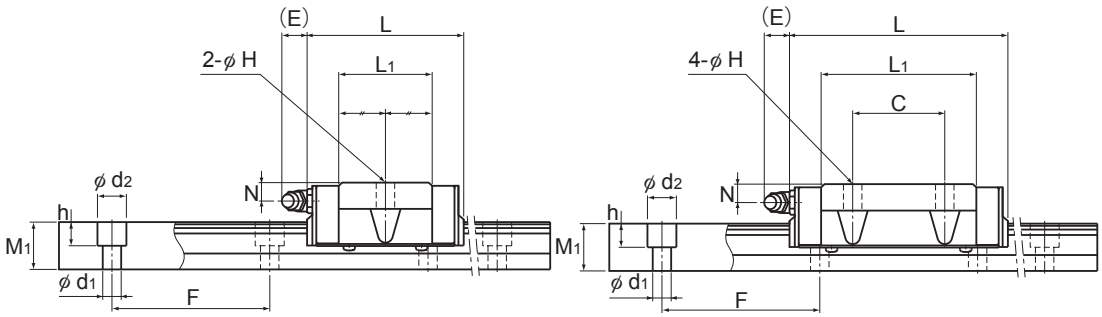


SR-SB / TB

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS										H3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	H	L_1	T	T_1	K	N	E	GREASE NIPPLE		
SR15SB	24	52	40.4	41	-	5.8	22.9	6.1	7	18.2	6	5.5	PB1021B	5.8	
SR15TB	24	52	57	41	26	4.5	39.5	6.1	7	18.2	6	5.5	PB1021B	5.8	
SR20SB	28	59	47.3	49	-	5.5	27.8	8	9	22	6	12	B-M6F	6	
SR20TB	28	59	66.2	49	32	5.5	46.7	8	9	22	6	12	B-M6F	6	
SR25SB	33	73	59.2	60	-	7	35.2	9.1	10	26	7	12	B-M6F	7	
SR25TB	33	73	83	60	35	7	59	9.1	10	26	7	12	B-M6F	7	
SR30SB	42	90	67.9	72	-	9	40.4	8.7	10	32.5	8	12	B-M6F	9.5	
SR30TB	42	90	96.8	72	40	9	69.3	8.7	10	32.5	8	12	B-M6F	9.5	
SR35SB	48	100	77.6	82	-	9	45.7	11.2	13	36.5	8.5	12	B-M6F	11.5	
SR35TB	48	100	111	82	50	9	79	11.2	13	36.5	8.5	12	B-M6F	11.5	
SR45TB	60	120	126	100	60	11	90.5	12.8	15	47.5	11.5	16	B-PT1/8	12.5	
SR55TB	68	140	156	116	75	14	117	15.3	17	54.5	12	16	B-PT1/8	13.5	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Model SR-SB

Model SR-TB

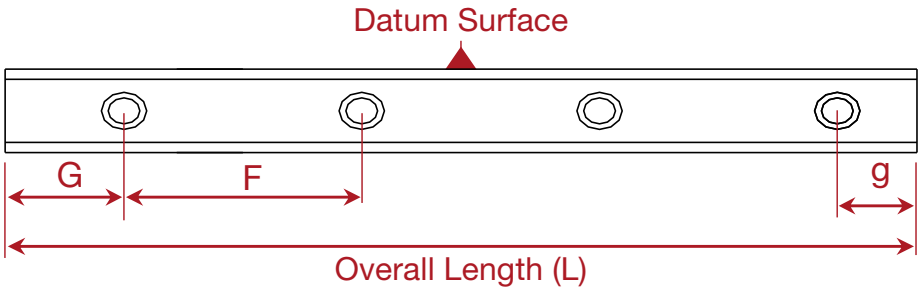
Unit = mm

	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
	WIDTH W1 ±0.05	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	15	9.5	12.5	60	3.5×6×4.5	3000	9.1	11.7	0.0344	0.234	0.0215	0.149	0.0694	0.15	1.2
	15	9.5	12.5	60	3.5×6×4.5	3000	13.8	20.5	0.0984	0.551	0.0604	0.343	0.122	0.2	1.2
	20	11	15.5	60	6×9.5×8.5	3000	13.4	17.2	0.064	0.396	0.0397	0.25	0.135	0.3	2.1
	20	11	15.5	60	6×9.5×8.5	3000	19.2	28.6	0.167	0.887	0.102	0.55	0.224	0.4	2.1
	23	12.5	18	60	7×11×9	3000	21.6	26.8	0.125	0.773	0.0774	0.488	0.245	0.4	2.7
	23	12.5	18	60	7×11×9	3000	30.9	44.7	0.326	1.74	0.2	1.08	0.408	0.6	2.7
	28	16	23	80	7×11×9	3000	29.5	34.4	0.173	1.15	0.108	0.735	0.376	0.8	4.3
	28	16	23	80	7×11×9	3000	45.6	64.4	0.564	2.92	0.346	1.8	0.703	1.1	4.3
	34	18	27.5	80	9×14×12	3000	40.9	46.7	0.275	1.79	0.171	1.14	0.615	1	6.4
	34	18	27.5	80	9×14×12	3000	60.4	81.8	0.785	4.27	0.482	2.65	1.08	1.5	6.4
	45	20.5	35.5	105	11×17.5×14	3000	80.4	107	1.17	6.34	0.721	3.94	1.89	2.5	11.3
	48	26	38	120	14×20×17	3000	136	179	2.61	13	1.6	8.05	3.33	4.2	12.8

■ For SR25, the table above shows rail mounting hole dimensions for M6. *Symbol Y

■ The basic load rating in the table above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Standard Rail Length - SR



Unit : mm

Model No. & Size	SR 15	SR 20	SR 25	SR 30	SR 35	SR 45	SR 55
LM rail Standard length (L)	160 220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1300 1360 1420 1480 1540 1600	220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1180 1240 1300 1360 1420 1480 1540 1600 1660 1720 1780 1840 1900 1960 2020 2080 2140 2200	220 280 340 400 460 520 580 640 700 760 820 940 1000 1060 1120 1240 1300 1360 1420 1480 1540 1600 1660 1720 1780 1840 1900 1960 2020 2080 2140 2200 2260 2320 2380 2440 2500	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1640 1720 1800 1880 1960 2040 2120 2200 2280 2360 2440 2520 2600 2680 2760 2840 2920	280 360 440 520 600 680 760 840 920 1000 1080 1160 1240 1320 1400 1480 1640 1720 1800 1880 1960 2040 2120 2200 2280 2360 2440 2520 2600 2680 2760 2840 2920	570 675 780 885 990 1095 1200 1305 1410 1515 1620 1725 1830 1935 2040 2145 2250 2355 2460 2565 2670 2775 2880 2985	780 900 1020 1140 1260 1380 1500 1740 1860 1980 2100 2220 2340 2460 2580 2700 2820 2940
Standard pitch F	60	60	60	80	80	105	120
G/g	20	20	20	20	20	22.5	30
Standard Max Length	3000	3000	3000	3000	3000	3000	3000
Custom Order Max length		7000	7000	7000	7000	7000	7000

Other Options - SR

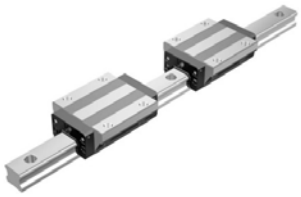
Assembly:	SR25	TB	2	QZ	SS	HH	C1	F	M	J	S	+	4800L	Y	H	K	Z	T	F	M	E	J	-II
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
Block Only:	SR25	TB	1	SS	C1	M	J	S	(GK) BLOCK														
	(1)	(2)	(3)	(5)	(7)	(9)	(10)	(11)															
Rail Only:	SR25	-	4800L	Y	K	Z	T	M	E	J	(GK) RAIL												
	(1)		(12)	(13)	(15)	(16)	(17)	(19)	(20)	(21)													

OPTIONS	SYMBOLS	REF. PAGE
(1) Model No. & Size	**SR15, SR20, SR25, SR30, SR35, SR45, SR55**	47 - 52
(2) Block Type	**W, V, TB, SB**	47 - 52
(3) Number of Blocks	**Number of blocks on one rail**	
(4) QZ Lubricator	**No Symbol** : None **QZ** : QZ Lubricator	73 - 78
(5) Seal Designation	**UU, SS, DD, ZZ, KK**	71 - 78
(6) Contact Scraper	**No Symbol** : None **HH** : Laminated Contact Scraper (LaCS)	73 - 79
(7) Radial Clearance	**No Symbol, C1,C0, CS**	80
(8) Surface Coating for Block	**No Symbol** : None **F** : Coated Block (Specify Coating Type)	83
(9) Block Material	**No Symbol** : Standard (Carbon Steel) **M :** Stainless Steel (includes Balls)	84
(10) Bellow Prep. for Block	**No Symbol** : None **J** : Additional tappled holes for block	85
(11) Non-Standard Block	**No Symbol : None** **E** : Minor modification to block (Drawing required) **S** : Special machining to block (Drawing required)	
(12) Rail Length	**Overall length in mm**	48 & 53
(13) Mounting Hole Size	**Y :** Std for SR25(for M6) * If Y is selected for SR15, mounting hole size is for M4. * If Y is selected for SR15 & 25, K cannot be selected for (15). **No Symbol :** For SR15 (M3-std), 20, 30, 35 * If no symbol for SR25, mounting hole size is for M5.	
(14) Accuracy Grade	**No Symbol, H, P, SP, UP**	81
(15) Tapped Rail	**No Symbol** : Standard counter bored hole **K** : Tapped rail for mounting from bottom *If K is selected, Y cannot be selected for (13) and Z cannot be selected for (16). *K is available for normal, high, and precision grade for (14).	86
(16) Steel Tapel	**No Symbol** : None **Z** : Steel tape (machining on rail) *If Z is selected, K cannot be selected for (15).	87
(17) Jointed Rail	**No Symbol** : Single piece rail **T** : Two or more rails butted end to end (Drawing required)	88
(18) Surface Coating for Rail	**No Symbol** : None **F** : Coated Rail (Specify Coating Type)	83
(19) Rail Material	**No Symbol** : Standard (Carbon Steel) **M** : Stainless Steel	84
(20) Non-Standard Rail	**No Symbol** : None **E** : Minor modification to rail (Drawing required) **S** : Special machining to rail (Drawing required)	
(21) Bellow Prep. for Rail	**No Symbol** : None **J** : Additional tappled holes for rail	85
(22) Matched Set	**No Symbol** : None **-II, -III, -IV ~** : The number of rails used in the same level surface	89 -90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Basic Specifications - HRW

- Wide & Low Gravity Center
- 4-Way Equal Loading



Assembly (Block & Rail Set)

MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION (Page 71-79)	RADIAL CLEARANCE (Page 80)	BLOCK MATERIAL (Page 84)
HRW14	**LR**	**2**	**UU**	**C1**	**M**

HRW12	CA	1 ~	UU : End Seal	No Symbol : Normal	M : Stainless Steel Std for HRW12 & 14
HRW14	CR		SS : End Seal + Side Seal	C1 : Light Preload	No Symbol : Carbon Steel Std for HRW17 to 60
HRW17	LR		DD : Double End Seal + Side Seal	C0 : Medium Preload	
HRW21			ZZ : End Seal + Side Seal + Metal Scraper	CS : Custom (Contact THK)	
HRW27			KK : Double End Seal + Side Seal + Metal Scraper		
HRW35					
HRW50					
HRW60					

*C0 : Only available for HRW35 to 60
*C0 & CS : Not available for Block Only

*SS : Not available for HRW17 & 21
*DD, ZZ, KK : Not Available for HRW12 & 14

Block Only



MODEL NUMBER & SIZE	BLOCK STYLE	NUMBER OF BLOCKS	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK
HRW17	**CA**	**1**	**UU**	**C1**	**(GK)**	**BLOCK**

HRW17	CA	1 ~	UU	No Symbol : Normal
HRW21	CR		SS	C1 : Light Preload
HRW27			DD	
HRW35			ZZ	
HRW50			KK	

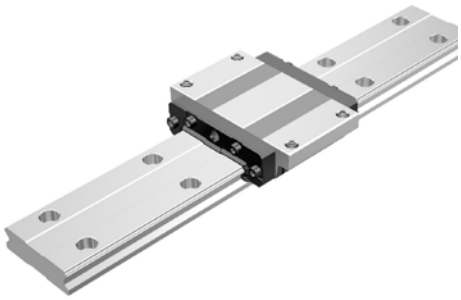
SAMPLE PART NUMBER
HRW17CA1UUC1(GK) BLOCK
HRW27CR1DD(GK) BLOCK

⊙ = Available for Assembly or Block Only
● = Available for Assembly only

Available Block Styles for HRW

CA: Flanged Tapped Holes	CR: Narrow Tapped Holes	LR: Narrow Tapped Holes
		

Style	Size							
	12	14	17	21	27	35	50	60
CA	–	–	⊙	⊙	⊙	⊙	⊙	●
CR	–	–	⊙	⊙	⊙	⊙	⊙	–
LR	●	●	–	–	–	–	–	–



RAIL LENGTH (Std Length - Page 61)	ACCURACY GRADE (Page 81)	RAIL MATERIAL (Page 84)	SAMPLE PART NUMBER
230L	**P**	**M**	**HRW14LR2UUC1M+230LPM**
Overall length in mm	No Symbol : Normal	M: Stainless Steel Std for HRW12 & 14	**HRW50CA1ZZC1+280LP**
	H : High	No Symbol : Carbon Steel Std for HRW17 to 60	
	P : Precision		
	SP : Super Precision		
	UP : Ultra Precision		

*If other than standard length, specify G/g dimensions (Fig. 1)

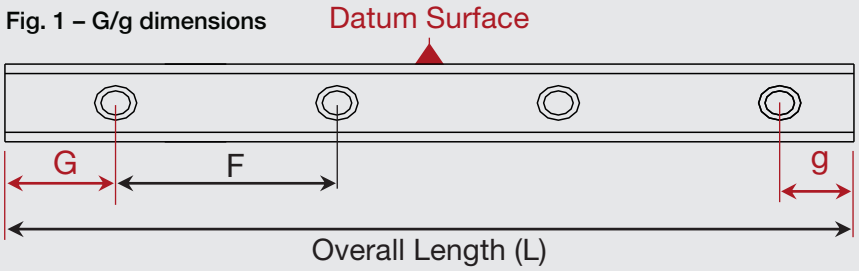
*UP : Not available for HSR8 to 12
*H, P, SP, UP : Not available for Rail Only

Rail Only



MODEL NUMBER & SIZE	RAIL LENGTH	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
HRW35	**640L**	**(GK)**	**RAIL**	**HRW35-640L(GK) RAIL**
HRW17	Overall length in mm			**HRW27-820L(GK) RAIL**
HRW21				
HRW27				
HRW35				
HRW50				

Fig. 1 – G/g dimensions

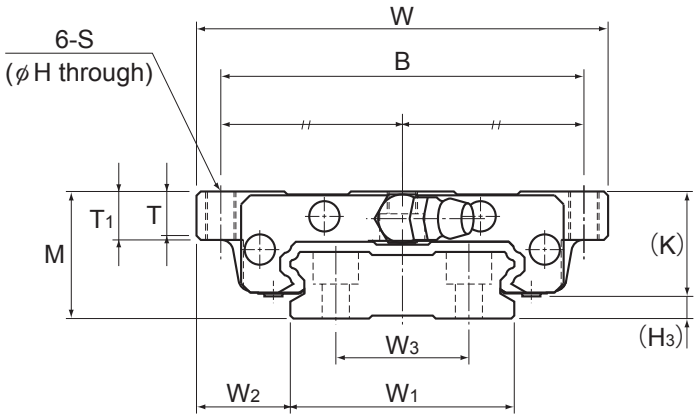


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. HRW50CA1SS+1010L **(G/g=25)**, HRW21-490L(GK) RAIL **(G=25, g=15)**

*Note 1 : For more product specs, please see THK general catalog

*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - HRW

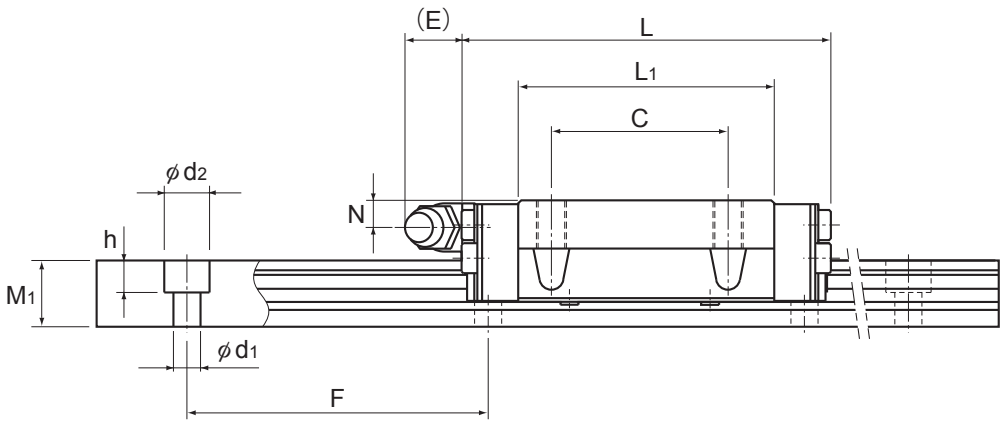


HRW-CA

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS											H3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	S	H	L_1	T	T_1	K	N	E	GREASE NIPPLE		
HRW17CA	17	60	50.8	53	26	M4	3.3	33.6	5.5	6	14.5	4	2	PB107	2.5	
HRW21CA	21	68	58.8	60	29	M5	4.4	40	7.3	8	18	4.5	12	B-M6F	3	
HRW27CA	27	80	72.8	70	40	M6	5.3	51.8	9.5	10	24	6	12	B-M6F	3	
HRW35CA	35	120	106.6	107	60	M8	6.8	77.6	13	14	31	8	12	B-M6F	4	
HRW50CA	50	162	140.5	144	80	M10	8.6	103.5	16.5	18	46.6	14	16	B-PT1/8	3.4	
HRW60CA	60	200	158.9	180	80	M12	10.5	117.5	23.5	25	53.5	15	16	B-PT1/8	6.5	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

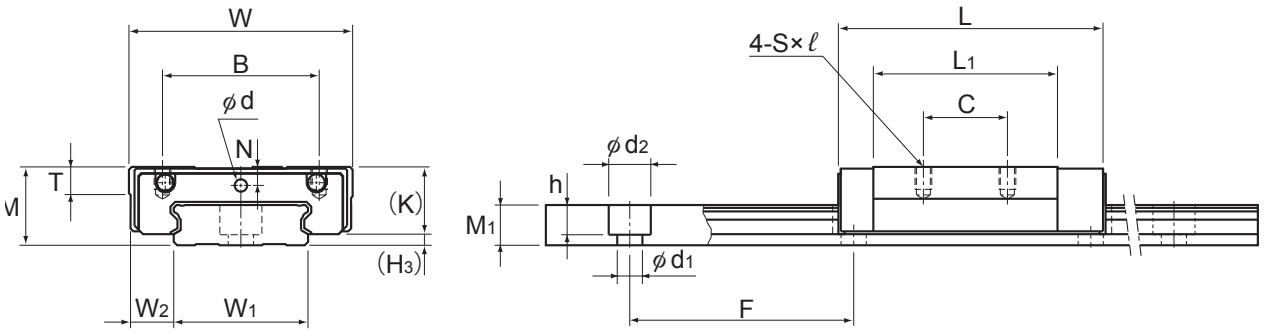
■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Unit = mm

	LM RAIL DIMENSIONS							BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
	WIDTH W1 ±0.05	W_2	W_3	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	33	13.5	18	9	40	4.5×7.5×5.3	1900	5.53	9.1	0.0464	0.272	0.0464	0.272	0.144	0.15	2.1
	37	15.5	22	11	50	4.5×7.5×5.3	3000	8.02	12.9	0.0784	0.445	0.0784	0.445	0.219	0.25	2.9
	42	19	24	15	60	4.5×7.5×5.3	3000	14.2	21.6	0.166	0.923	0.166	0.923	0.423	0.5	4.3
	69	25.5	40	19	80	7×11×9	3000	33.8	48.6	0.559	3.03	0.559	3.03	1.59	1.4	9.9
	90	36	60	24	80	9×14×12	3000	62.4	86.3	1.32	7.08	1.32	7.08	3.67	4	14.6
	120	40	80	31	105	11×17.5×14	3000	80.3	109	1.88	10.1	1.88	10.1	6.17	5.7	27.8

Basic Specifications - HRW

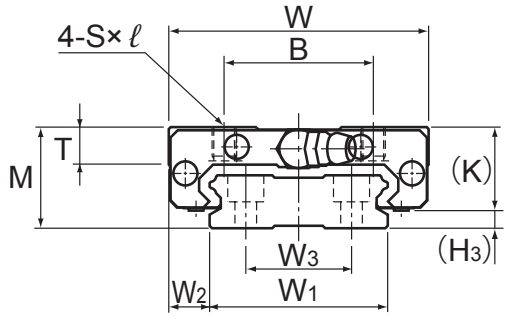


HRW-CR/LR

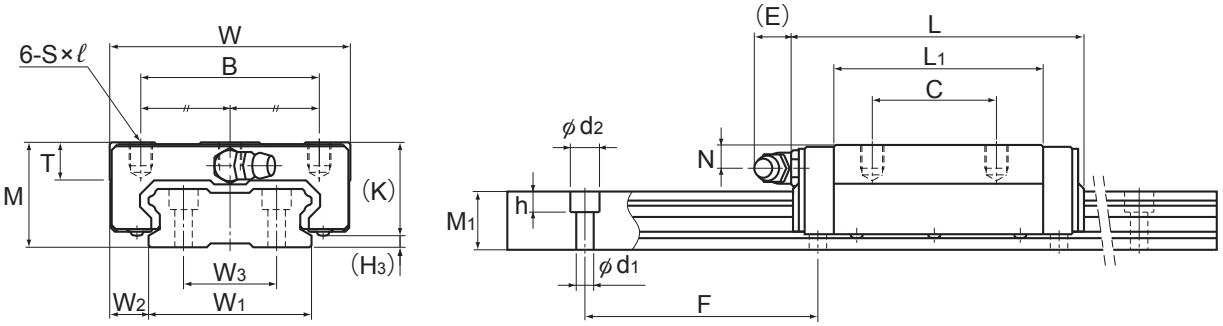
MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS										H_3	
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASE HOLE	GREASE NIPPLE		
HRW12LR	12	30	37	21	12	M3×3.5	27	4	10	2.8	-	2.2	-	2	
HRW14LR	14	40	45.5	28	15	M3×4	32.9	5	12	3.3	-	2.2	-	2	
HRW17CR	17	50	50.8	29	15	M4×5	33.6	6	14.5	4	2	-	PB107	2.5	
HRW21CR	21	54	58.8	31	19	M5×6	40	8	18	4.5	12	-	B-M6F	3	
HRW27CR	27	62	72.8	46	32	M6×6	51.8	10	24	6	12	-	B-M6F	3	
HRW35CR	35	100	106.6	76	50	M8×8	77.6	14	31	8	12	-	B-M6F	4	
HRW50CR	50	130	140.5	100	65	M10×15	103.5	18	46.6	14	16	-	B-PT1/8	3.4	

Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Model HRW17 and 21CR



Model HRW27 to 50CR

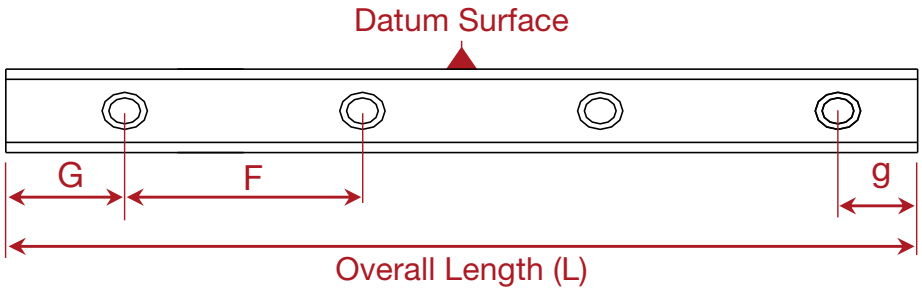
Unit = mm

	LM RAIL DIMENSIONS							BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT kN • M					MASS	
	WIDTH W1 ±0.05	W_2	W_3	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
	18	6	-	6.5	40	4.5×8×4.5	1000	3.29	7.16	0.0262	0.138	0.013	0.069	0.051	0.045	0.79
	24	8	-	7.2	40	4.5×7.5×5.3	1430	5.38	11.4	0.0499	0.273	0.025	0.137	0.112	0.08	1.2
	33	8.5	18	9	40	4.5×7.5×5.3	1900	5.53	9.1	0.0464	0.272	0.0464	0.272	0.144	0.12	2.1
	37	8.5	22	11	50	4.5×7.5×5.3	3000	8.02	12.9	0.0784	0.445	0.0784	0.445	0.219	0.19	2.9
	42	10	24	15	60	4.5×7.5×5.3	3000	14.2	21.6	0.166	0.923	0.166	0.923	0.423	0.37	4.3
	69	15.5	40	19	80	7×11×9	3000	33.8	48.6	0.559	3.03	0.559	3.03	1.59	1.2	9.9
	90	20	60	24	80	9×14×12	3000	62.4	86.3	1.32	7.08	1.32	7.08	3.67	3.2	14.6

■ For HRW12 and HRW14, the balls will fall out of the LM block if it is removed from the rail

■ The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Standard Rail Length



HRW

Unit : mm

Model No. & Size	HRW 12	HRW 14	HRW 17	HRW 21	HRW 27	HRW 35	HRW 50	HRW 60
LM rail Standard length (L)	70 110 150 190 230 270 310 390 470	70 110 150 190 270 310 390 470 550 670	110 190 310 470 550	130 230 380 480 580 780	160 280 340 460 640 820	280 440 760 1000 1240 1560	280 440 760 1000 1240 1640 2040	570 885 1200 1620 2040 2460
Standard pitch F	40	40	40	50	60	80	80	105
G/g	15	15	15	15	20	20	20	22.5
Standard Max Length	1000	1430	1900	1900	3000	3000	3000	3000

Other Options - HRW

Assembly:	HRW21	CR	2	KK	C1	F	M	J	E	+	3660L	SP	T	F	M	S	J	-II
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)

Block Only:	HRW21	CR	1	KK	C1	M	J	E	(GK) BLOCK
	(1)	(2)	(3)	(4)	(5)	(7)	(8)	(9)	

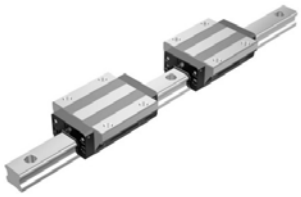
Rail Only:	HRW21	-	3660L	T	M	S	J	(GK) RAIL
	(1)		(10)	(12)	(14)	(15)	(16)	

OPTIONS	SYMBOLS	REF. PAGE
(1) Model No. & Size	**HRW12, HRW14, HRW17, HRW21, HRW27, HRW35, HRW50, HRW60**	55 - 60
(2) Block Style	**CA, CR, LR**	55 - 60
(3) Number of Blocks	**Number of blocks on one rail**	
(4) Seal Designation	**UU, SS, DD, ZZ, KK**	71 - 78
(5) Radial Clearance	**No Symbol, C1, C0, CS**	80
(6) Surface Coating for Block	**No Symbol** : None **F** : Coated Block (Specify Coating Type)	83
(7) Block Material	**No Symbol** : Standard (Carbon Steel) **M** : Stainless Steel (includes Balls)	84
(8) Bellow Prep. for Block	**No Symbol** : None **J** : Additional tapped holes for block	85
(9) Non-Standard Block	**No Symbol** : None **E** : Minor modification to block (Drawing required) **S** : Special machining to block (Drawing required)	
(10) Rail Length	**Overall length in mm**	56 & 61
(11) Accuracy Grade	**No Symbol, H, P, SP, UP**	81
(12) Jointed Rail	**No Symbol** : Standard counter bored hole **T** : Two or more rails butted end to end (Drawing required)	88
(13) Surface Coating for Rail	**No Symbol** : None **F** : Coated Rail (Specify Coating Type)	83
(14) Rail Material	**No Symbol** : Standard (Carbon Steel) **M** : Stainless Steel	84
(15) Non-Standard Rail	**No Symbol** : None **E :** Minor modification to rail (Drawing required) **S** : Special machining to rail (Drawing required)	
(16) Bellow Prep. for Rail	**No Symbol** : None **J :** Additional tappled holes for rail	85
(17) Matched Set	**No Symbo**l : None **-II, -III, -IV ~** : The number of rails used in the same level surface	89 - 90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Basic Specifications - SRS-G

- Miniature Type
- 4-Way Equal Loading
- Stainless Steel Block & Rail



Assembly (Block & Rail Set)

NUMBER OF BLOCKS	MODEL NUMBER & SIZE	BLOCK STYLE	SEAL DESIGNATION (Page 71-79)	RADIAL CLEARANCE (Page 80)
2	**SRS12**	**GM**	**SS**	**C1**
No Symbol : 1 block	SRS5	GS	UU : End Seal	No Symbol : Normal
2 ~	SRS7	GM	SS : End Seal + Side Seal	C1 : Light Preload
	SRS9X	GN	*SS : Not available, for SRS5 & Block Only	CS : Custom (Contact THK)
	SRS9	WGS		*CS : Not available for Block Only
	SRS12	WGM		
	SRS15	WGN		
	SRS20			
	SRS25			

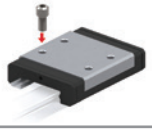
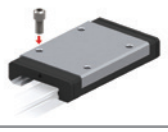
*Size 9
SRS9X is for GS, GM, GN block style (ex. SRS9XGS)
SRS9 is for WGS, WGM, WGN block style (ex. SRS9WGM)

Block Only



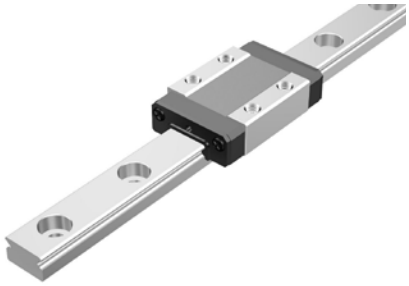
MODEL NUMBER & SIZE	BLOCK STYLE	SEAL DESIGNATION	RADIAL CLEARANCE	SYMBOL FOR INTERCHANGEABLE BLOCK & RAIL	BLOCK	SAMPLE PART NUMBER
SRS15	**WGN**	**UU**	**C1**	**(GK)**	**BLOCK**	**SRS15WGNUUC1(GK) BLOCK**
SRS9X	GM	UU	No Symbol : Normal			**SRS9XGMUU(GK) BLOCK**
SRS9	GN		C1 : Light Preload			
SRS12	WGM					
SRS15	WGN					

Available Block Styles for SRS

GS: Short GM Type 	**GM:** Narrow Tapped Holes 	**GN:** Long GM Type 
WGS: Short WGM Type 	**WGM:** Wide Type 	**WGN:** Long WGN Type 

⊙ = Available for Assembly or Block Only
● = Available for Assembly only

Style	Size							
	5	7	9X	9	12	15	20	25
GS	–	●	●	–	●	●	–	–
GM	●	●	⊙	–	⊙	⊙	●	●
GN	●	●	⊙	–	⊙	⊙	–	–
WGS	–	●	–	●	●	●	–	–
WGM	●	●	–	⊙	⊙	⊙	–	–
WGN	●	●	–	⊙	⊙	⊙	–	–



RAIL LENGTH (Std Length - Page 69)	ACCURACY GRADE (Page 82)	RAIL MATERIAL (Page 84)	SAMPLE PART NUMBER
270L	P	M	2SRS12GMSSC1+270LPM
Overall length in mm	No Symbol : Normal	M: Stainless Steel (std)	3SRS9WGNUU+260LM
*If other than standard length, specify G/g dimensions (Fig. 1)	H : High		
	P : Precision		

*H : Not available for SRS5
*H & P : Not available for Rail Only

Rail Only

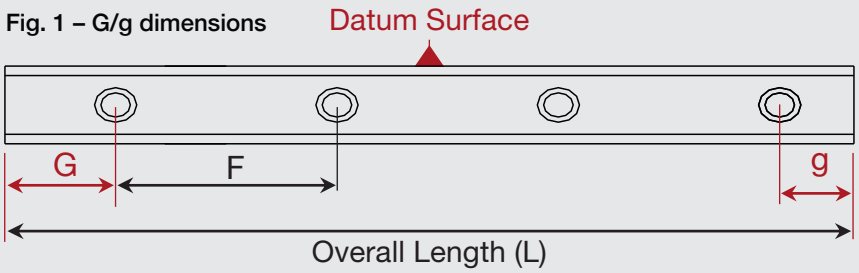


MODEL NUMBER & SIZE	RAIL LENGTH	RAIL MATERIAL	SYMBOL FOR INTERCHANGEABLE RAIL	RAIL	SAMPLE PART NUMBER
SRS15	870L	M	(GK)	RAIL	SRS15-870LM(GK) RAIL
SRS9X	Overall length in mm	M: Stainless Steel (std)			SRS12W-550LM(GK) RAIL
SRS9W					
SRS12					
SRS12W					
SRS15					
SRS15W					

*SRS-G Blocks use SRS Rails.
Symbol G is not required for Rail Only.

*For WGM & WGN blocks, select SRS-W rails.

Fig. 1 – G/g dimensions

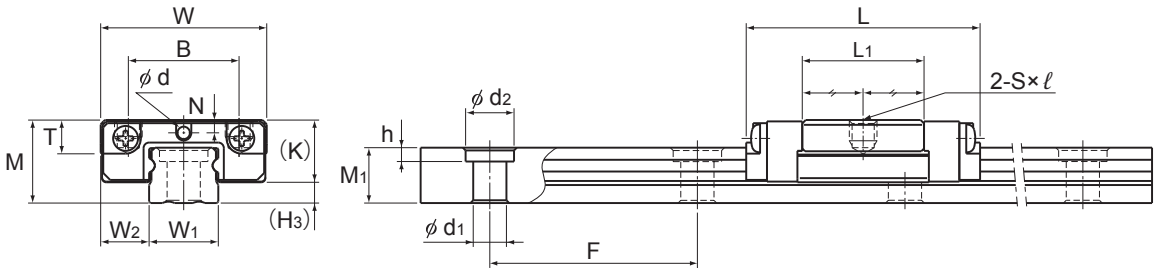


If non-standard rail length, please specify overall length with G/g dimensions.
Ex. 2SRS9XGMUU+200LM **(G/g=10)**, SRS12-466LM(GK) RAIL **(G=10, g=16)**

*Note 1 : For more product specs, please see THK general catalog

*Note 2 : Letters or sequence of letters in part numbers may vary. Please refer to an official THK quotation for final part number.

Basic Specifications - SRG-G



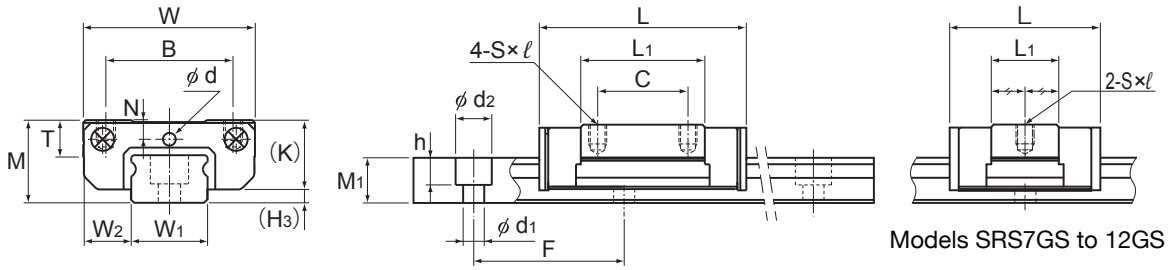
Model SRS5GM/GN

SRS-GS/GM/GN

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS										
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASING HOLE d	GREASE NIPPLE	
SRS5GM	6	12	16.9	8	-	M2×1.5	8.8	1.7	4.5	0.93	-	0.8	-	
SRS5GN	6	12	20.1	8	-	M2×1.5	12	1.7	4.5	0.93	-	0.8	-	
SRS7GS	8	17	19	12	-	M2×2.3	9	3.3	6.7	1.6	-	1.2	-	
SRS7GM	8	17	23.4	12	8	M2×2.3	13.4	3.3	6.7	1.6	-	1.2	-	
SRS7GN	8	17	31	12	13	M2×2.3	21	3.3	6.7	1.6	-	1.2	-	
SRS9XGS	10	20	21.5	15	-	M3×2.8	10.5	4.5	8.5	2.4	-	1.6	-	
SRS9XGM	10	20	30.8	15	10	M3×2.8	19.8	4.5	8.5	2.4	-	1.6	-	
SRS9XGN	10	20	40.8	15	16	M3×2.8	29.8	4.5	8.5	2.4	-	1.6	-	
SRS12GS	13	27	25	20	-	M3×3.2	11.2	5.7	11	3	-	2	-	
SRS12GM	13	27	34.4	20	15	M3×3.2	20.6	5.7	11	3	-	2	-	
SRS12GN	13	27	47.1	20	20	M3×3.2	33.3	5.7	11	3	-	2	-	
SRS15GS	16	32	32	25	-	M3×3.5	14.7	6.5	13.3	3	4	-	PB107	
SRS15GM	16	32	43	25	20	M3×3.5	25.7	6.5	13.3	3	4	-	PB107	
SRS15GN	16	32	60.8	25	25	M3×3.5	43.5	6.5	13.3	3	4	-	PB107	
SRS20GM	20	40	50	30	25	M4×6	34	9	16.6	4	3.5	-	PB107	
SRS25GM	25	48	77	35	35	M6×7	56	11	20	5	4	-	PB1021	

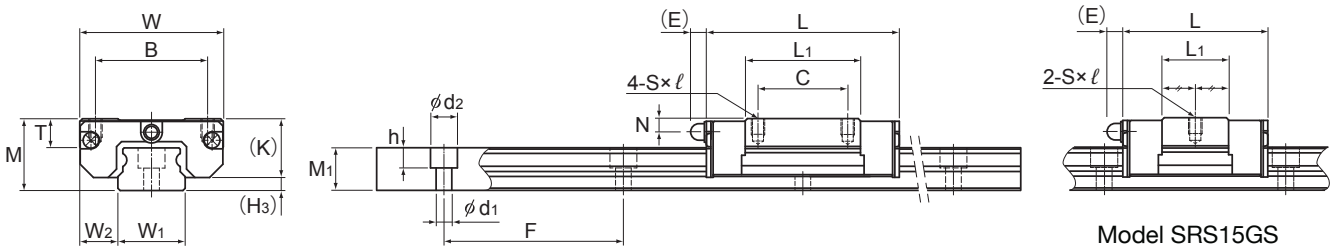
Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Models SRS7GM/GN to 12GM/GN

Models SRS7GS to 12GS



Models SRS15GM/GN, 20GM, 25GM

Model SRS15GS

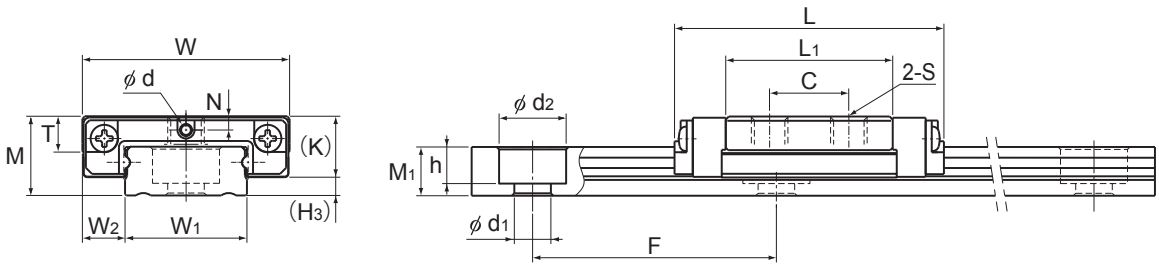
Unit = mm

H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT N • M					MASS	
	WIDTH W1	W_2	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
									1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
1.5	$5^{\ 0}_{-0.02}$	3.5	4	15	2.4×3.5×1	220	0.439	0.468	0.79	5.76	0.94	6.91	1.37	0.002	0.13
1.5	$5^{\ 0}_{-0.02}$	3.5	4	15	2.4×3.5×1	220	0.448	0.703	1.34	8.82	1.57	10.3	1.83	0.003	0.13
1.3	$7^{\ 0}_{-0.02}$	5	4.7	15	2.4×4.2×2.3	480	0.946	1.16	1.96	14.7	2.25	16.9	4.49	0.005	0.25
1.3	$7^{\ 0}_{-0.02}$	5	4.7	15	2.4×4.2×2.3	480	1.16	1.54	3.61	25.5	4.14	29.4	6.57	0.009	0.25
1.3	$7^{\ 0}_{-0.02}$	5	4.7	15	2.4×4.2×2.3	480	1.63	2.51	8.08	46.9	9.32	54.2	9.72	0.012	0.25
1.5	$9^{\ 0}_{-0.02}$	5.5	5.5	20	3.5×6×3.3	1240	1.37	1.53	2.85	22.6	3.27	26	7.04	0.009	0.36
1.5	$9^{\ 0}_{-0.02}$	5.5	5.5	20	3.5×6×3.3	1240	2.22	3.06	9.87	57.9	11.4	66.9	14.1	0.016	0.36
1.5	$9^{\ 0}_{-0.02}$	5.5	5.5	20	3.5×6×3.3	1240	2.94	4.59	21.1	111	24.4	128	21.1	0.024	0.36
2	$12^{\ 0}_{-0.02}$	7.5	7.5	25	3.5×6×4.5	2000	2.07	2.1	4.17	38.1	4.17	38.1	13.8	0.017	0.65
2	$12^{\ 0}_{-0.02}$	7.5	7.5	25	3.5×6×4.5	2000	3.36	3.55	12.1	79	12.1	79	23.2	0.027	0.65
2	$12^{\ 0}_{-0.02}$	7.5	7.5	25	3.5×6×4.5	2000	4.72	6.83	34.8	195	34.8	195	44.7	0.049	0.65
2.7	$15^{\ 0}_{-0.02}$	8.5	9.5	40	3.5×6×4.5	2000	4.01	4.24	12.6	92.7	12.6	92.7	30.1	0.033	0.96
2.7	$15^{\ 0}_{-0.02}$	8.5	9.5	40	3.5×6×4.5	2000	5.59	5.72	24.8	158	24.8	158	40.6	0.047	0.96
2.7	$15^{\ 0}_{-0.02}$	8.5	9.5	40	3.5×6×4.5	2000	8.27	11.9	82.3	433	82.3	433	84.5	0.095	0.96
3.4	$20^{\ 0}_{-0.03}$	10	11	60	6×9.5×8	1800	5.95	9.4	44.7	242	53.3	289	91.4	0.11	1.68
5	$23^{\ 0}_{-0.03}$	12.5	15	60	7×11×9	1800	13.3	22.3	181	962	181	962	255	0.24	2.6

■ The balls will fall out of the LM block if it is removed from the rail.

■ The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Basic Specifications - SRG-G



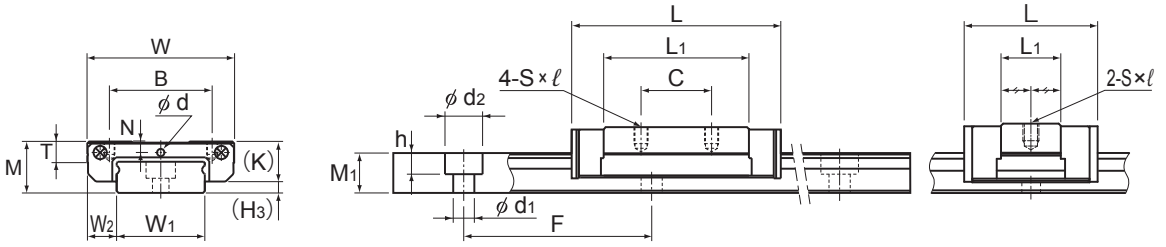
Model SRS5WGM/WGN

SRS-WGS/WGM/WGN

MODEL NO.	OUTER DIMENSIONS			LM BLOCK DIMENSIONS										
	HEIGHT M	WIDTH W	LENGTH L	B	C	S X ℓ	L_1	T	K	N	E	GREASING HOLE d	GREASE NIPPLE	
SRS5WGM	6.5	17	22.1	-	6.5	M3xthru	13.7	2.7	5	1.1	-	0.8	-	
SRS5WGN	6.5	17	28.1	-	11	M3xthru	19.7	2.7	5	1.1	-	0.8	-	
SRS7WGS	9	25	22.5	19	-	M3×2.8	11.9	3.8	7.2	1.8	-	1.2	-	
SRS7WGM	9	25	31	19	10	M3×2.8	20.4	3.8	7.2	1.8	-	1.2	-	
SRS7WGN	9	25	40.9	19	17	M3×2.8	30.3	3.8	7.2	1.8	-	1.2	-	
SRS9WGS	12	30	26.5	21	-	M3×2.8	14.5	4.9	9.1	2.3	-	1.6	-	
SRS9WGM	12	30	39	21	12	M3×2.8	27	4.9	9.1	2.3	-	1.6	-	
SRS9WGN	12	30	50.7	23	24	M3×2.8	38.7	4.9	9.1	2.3	-	1.6	-	
SRS12WGS	14	40	30.5	28	-	M3×3.5	16.9	5.7	11	3	-	2	-	
SRS12WGM	14	40	44.5	28	15	M3×3.5	30.9	5.7	11	3	-	2	-	
SRS12WGN	14	40	59.5	28	28	M3×3.5	45.9	5.7	11	3	-	2	-	
SRS15WGS	16	60	41.5	45	-	M4×4.5	24.9	6.5	13.3	3	4	-	PB107	
SRS15WGM	16	60	55.5	45	20	M4×4.5	38.9	6.5	13.3	3	4	-	PB107	
SRS15WGN	16	60	74.5	45	35	M4×4.5	57.9	6.5	13.3	3	4	-	PB107	

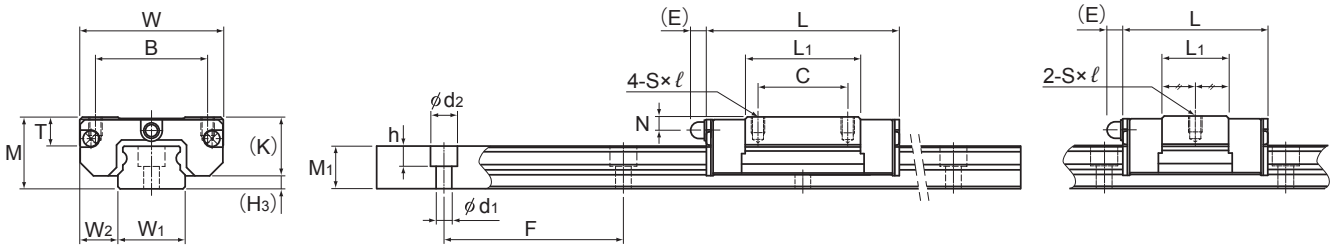
Note) ■ Static permissible moment: 1 block - Static permissible moment with one LM block
Double blocks - Static permissible moment when two LM blocks are in close contact with each other

■ LM block length L: The block length L shown in the tables above is the length with UU or SS for seal designation.
If other seal designation or with lubricant components, the block length will be increased (Refer to page 75 – 78)



Models SRS7WGM/WGN to 12WGM/WGN

Models SRS7WGS to 12WGS



Model SRS15WGM/WGN

Model SRS15WGS

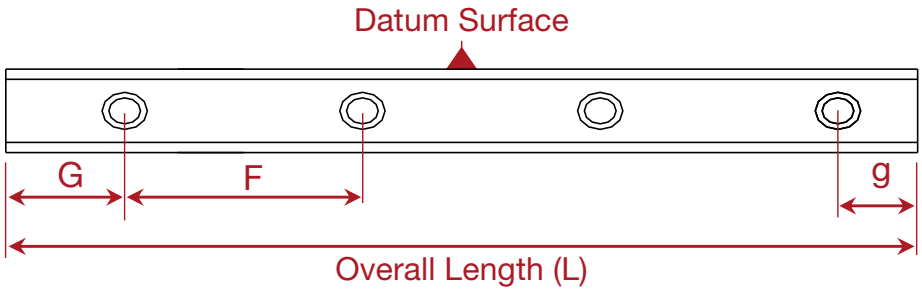
Unit = mm

H_3	LM RAIL DIMENSIONS						BASIC LOAD RATING		STATIC PERMISSIBLE MOMENT N • M					MASS	
	WIDTH W1	W_2	W_3	HEIGHT M_1	PITCH F	d1×d2×h	STANDARD MAX LENGTH	C kN	C0 kN	M_A		M_B		M_C	LM BLOCK kg	LM RAIL kg/m
										1 BLOCK	DOUBLE BLOCKS	1 BLOCK	DOUBLE BLOCKS	1 BLOCK		
1.5	$10^{\ 0}_{-0.02}$	3.5	-	4	20	3×5.5×3	220	0.498	0.82	1.79	11.1	2.15	13.3	4.18	0.005	0.27
1.5	$10^{\ 0}_{-0.02}$	3.5	-	4	20	3×5.5×3	220	0.64	1.17	3.54	19.6	4.15	23	5.97	0.007	0.27
1.8	$14^{\ 0}_{-0.02}$	5.5	-	5.2	30	3.5×6×3.2	480	1.06	1.35	2.58	20	2.96	23.1	9.95	0.011	0.56
1.8	$14^{\ 0}_{-0.02}$	5.5	-	5.2	30	3.5×6×3.2	480	1.63	2.51	8.87	51.5	10.2	59.5	20.3	0.018	0.56
1.8	$14^{\ 0}_{-0.02}$	5.5	-	5.2	30	3.5×6×3.2	480	2.12	3.66	16.6	87.7	19.2	101	27	0.026	0.56
2.9	$18^{\ 0}_{-0.02}$	6	-	7.5	30	3.5×6×4.5	1430	1.73	2.14	5.15	36.9	5.92	42.6	20.2	0.018	1.01
2.9	$18^{\ 0}_{-0.02}$	6	-	7.5	30	3.5×6×4.5	1430	2.67	3.35	13.9	69.7	16.6	96.7	31.7	0.031	1.01
2.9	$18^{\ 0}_{-0.02}$	6	-	7.5	30	3.5×6×4.5	1430	3.48	5.81	33.2	172	40	208	54.9	0.049	1.01
3	$24^{\ 0}_{-0.02}$	8	-	8.5	40	4.5×8×4.5	2000	3.05	3.68	11.1	72.6	11.1	72.6	46.2	0.034	1.52
3	$24^{\ 0}_{-0.02}$	8	-	8.5	40	4.5×8×4.5	2000	4.46	5.32	25.7	146	25.7	146	66.8	0.055	1.52
3	$24^{\ 0}_{-0.02}$	8	-	8.5	40	4.5×8×4.5	2000	5.93	9.46	64.7	332	64.7	332	119	0.091	1.52
2.7	$42^{\ 0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	5.59	6.78	29	178	29	178	140	0.087	2.87
2.7	$42^{\ 0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	7.43	8.59	52.7	293	52.7	293	178	0.13	2.87
2.7	$42^{\ 0}_{-0.02}$	9	23	9.5	40	4.5×8×4.5	2000	9.87	15.3	13.3	671	133	671	317	0.201	2.87

■ The balls will fall out of the LM block if it is removed from the rail.

■ The basic load rating in the tables above is for a load in the radial direction. Refer to page 91 to calculate the load rating for loads in the reverse radial or lateral direction.

Standard Rail Length



SRS-G

Unit : mm

Model No. & Size	SRS 5G	SRS 5WG	SRS 7G	SRS 7WG	SRS 9XG	SRS 9WG	SRS 12G	SRS 12WG	SRS 15G	SRS 15WG	SRS 20G	SRS 25G
LM rail Standard length (L)	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/g	5	5	5	10	7.5	10	10	15	15	15	20	20
Standard Max Length	220	220	480	480	1240	1430	2000	2000	2000	2000	1800	1800

Other Options - SRS-G

Assembly:	**2**	**SRS12**	**GN**	**QZ**	**UU**	**HH**	**C1**	**E**	**+**	**2500L**	**P**	**T**	**M**	**S**	**-II**
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)	(12)	(13)	(14)

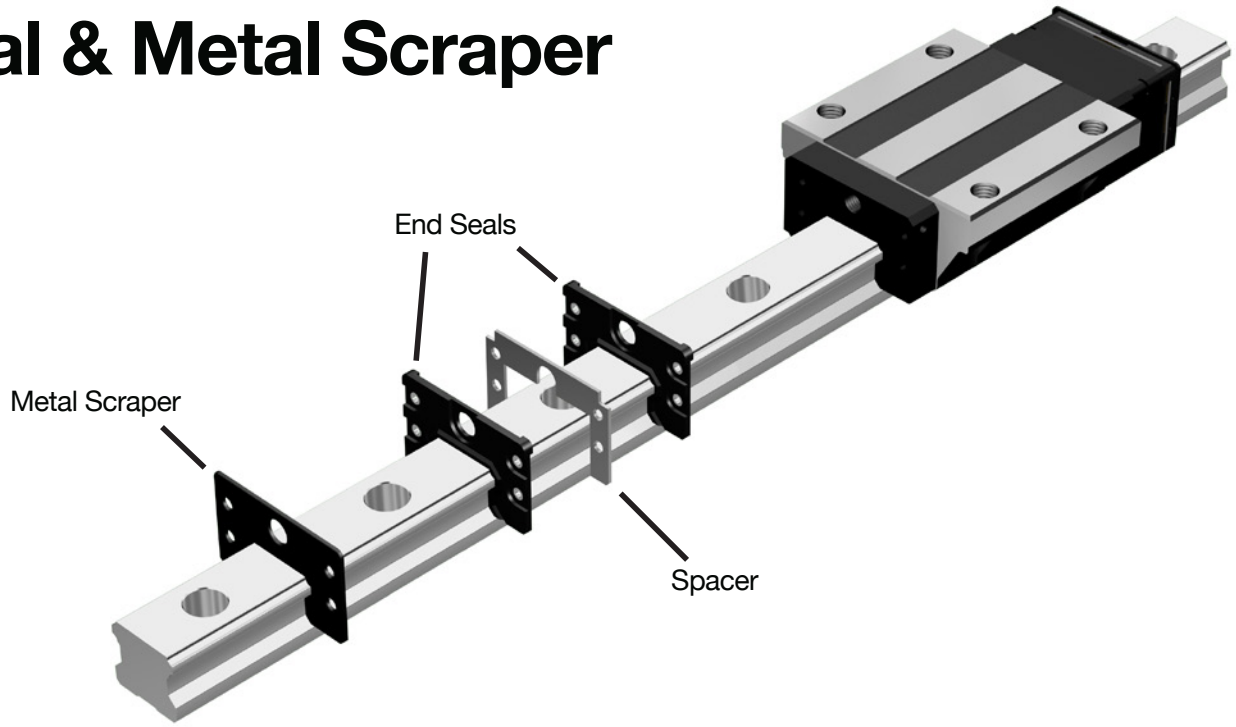
Block Only:	**SRS12**	**GN**	**UU**	**C1**	**(GK) BLOCK**
	(2)	(3)	(5)	(7)	

Rail Only:	**SRS12**	**-**	**120L**	**M**	**(GK) RAIL**
	(2)		(9)	(12)	

OPTIONS	SYMBOLS	REF. PAGE
(1) Number of Blocks	**Number of blocks on one rail**	63 - 68
(2) Model No. & Size	**SRS5, SRS7, SRS9X, SRS9, SRS12, SRS15, SRS20, SRS25**	63 - 68
(3) Block Style	**GS, GM, GN, WGS, WGM, WGN**	
(4) QZ Lubricator	**No Symbol** : None **QZ** : QZ Lubricator	73 - 78
(5) Seal Designation	**UU, SS**	71 - 78
(6) Contact Scraper	**No Symbol** : None **HH** : Laminated Contact Scraper (LaCS)	73 - 79
(7) Radial Clearance	**No Symbol, C1, CS**	80
(8) Non-Standard Block	**No Symbol : None** **E** : Minor modification to block (Drawing required) **S** : Special machining to block (Drawing required)	
(9) Rail Length	**Overall length in mm**	64 & 69
(10) Accuracy Grade	**No Symbol, H, P**	82
(11) Jointed Rail	**No Symbol** : Single piece rail **T** : Two or more rails butted end to end (Drawing required)	88
(12) Rail Material	**M** : Stainless Steel (Std for all sizes)	84
(13) Non-Standard Rail	**No Symbol** : None **E** : Minor modification to rail (Drawing required) **S** : Special machining to rail (Drawing required)	
(14) Matched Set	**No Symbol** : None **-II, -III, -IV ~** : The number of rails used in the same level surface	89 - 90

*Note : Letters or sequence of letters in part no. may vary. Please refer to an official THK quotation for final part no. Please contact THK for more options.

Seal & Metal Scraper



Seal & Metal Scraper Availability

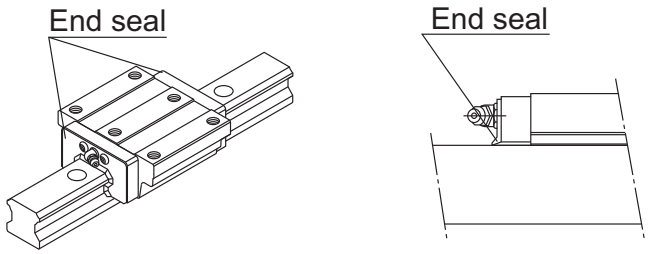
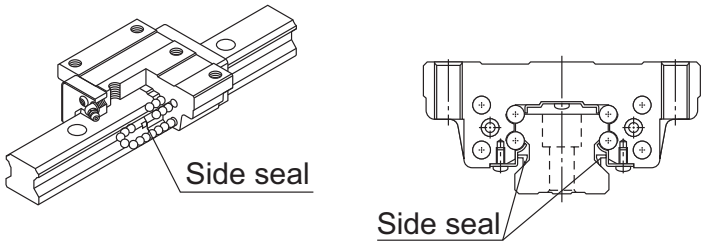
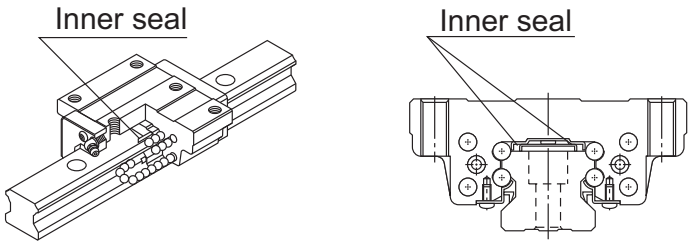
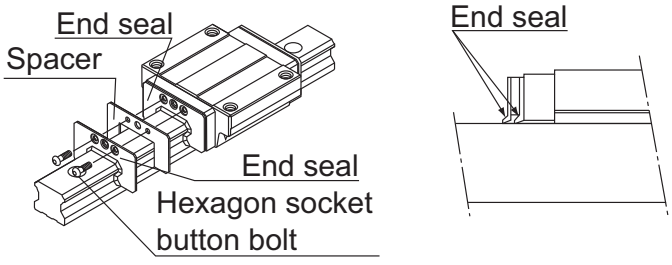
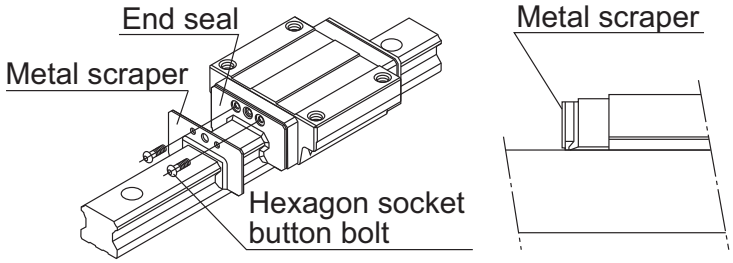
⊙ = Available
● = Available (see note below)

Model Number & Size			End seal	Side seal	Inner seal	End seal + Side seal (+i Inner seal)	Double seals + Side seal (+ Inner seal)	End seal + Side seal (+ Inner seal) + Metal scraper	Double seals + Side seals + Metal scraper
			UU	—	—	SS	DD	ZZ	KK
Caged Ball	SHS	15 to 65	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	SSR	15 to 35	⊙	⊙	—	⊙	⊙	⊙	⊙
	SHW	12,14	⊙	⊙	—	⊙	—	—	—
		17	⊙	⊙	—	⊙	⊙	⊙	⊙
		21 to 50	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	SRS	5	⊙	—	—	—	—	—	—
		7 to 25	⊙	⊙	—	⊙	—	—	—
Full-Ball	HSR	8,10,12	⊙	—	—	—	—	—	—
		15 to 65	⊙	⊙	●*1	⊙	⊙	● *2	● *2
	SR	15 to 55	⊙	⊙	—	⊙	⊙	● *3	● *3
	HRW	12,14	⊙	⊙	—	⊙	—	—	—
		17 to 60	⊙	—	—	—	●*4	⊙	● *4
	SRS-G	5	⊙	—	—	—	—	—	—
		7 to 25	⊙	⊙	—	⊙	—	—	—

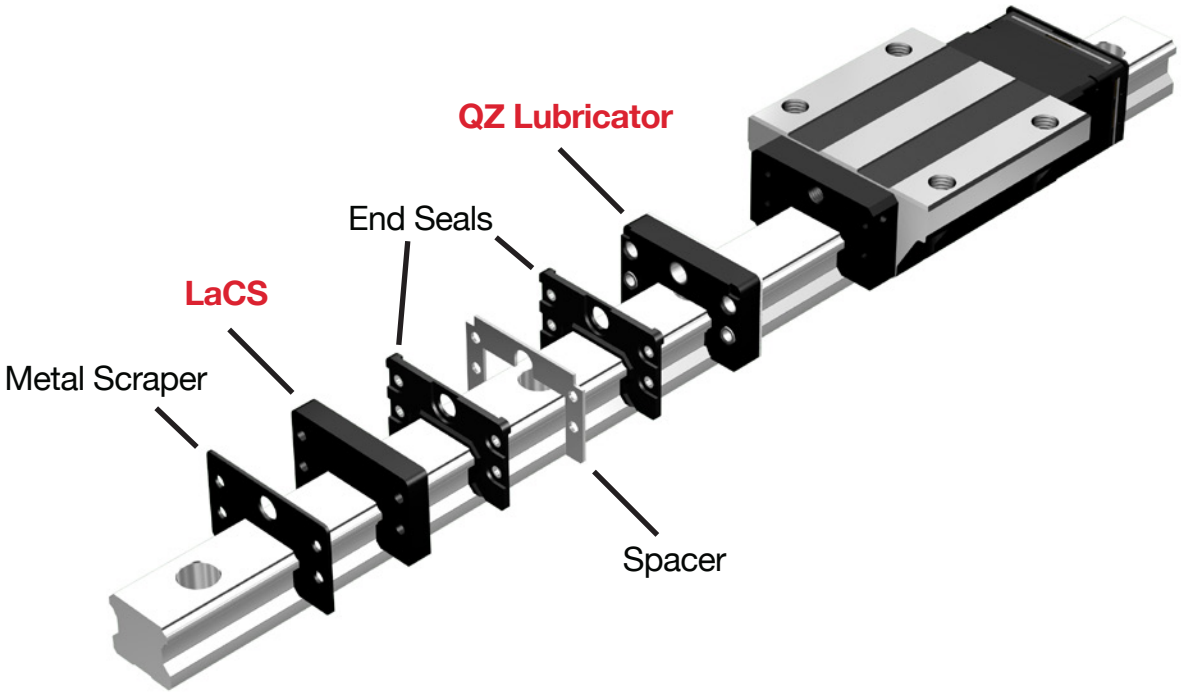
Note
*1 Inner Seal for HSR : Available for HSR30 ~ 65. It is installed upon request.
*2 HSR15 : Grease nipple cannot be installed for ZZ & KK
*3 SR15, 20 : Grease nipple cannot be installed for ZZ & KK
*4 HRW17, 21 : Grease nipple cannot be installed for DD & KK

SYMBOL	CONTAMINATION PROTECTION ACCESSORIES
UU	With end seal
SS	With end seal + side seal + inner seal *
DD	With double seals + side seal + inner seal *
ZZ	With end seal + side seal + inner seal * + metal scraper
KK	With double seals + side seal + inner seal * + metal scraper

*Inner Seal is not available for some models.

ITEM NAME	SCHEMATIC DIAGRAM / MOUNTING LOCATION	PURPOSE / LOCATON OF USE
End Seal		Used in locations exposed to dust
Side Seal		Used in locations where dust may enter the LM block from the side or bottom surface, such as vertical, horizontal and inverted mounts
Inner Seal		Used in locations severely exposed to dust or cutting chips
Double Seals		Used in locations exposed to much dust or many cutting chips
Metal Scraper (Non-contact)		Used in locations where welding spatter may adhere to the LM rail

QZ Lubricator, LaCS & LiCS



Model No.	Size	QZ Lubricator	LaCS	LiCS
SHS	15 to 65	⊙	⊙	⊙
SSR	15 to 35	⊙	⊙	⊙
SHW	12 to 50	⊙	⊙	–
SRS	5	–	–	–
	7	⊙	–	–
	9 to 25	⊙	⊙	–
HSR	8,10,12	–	–	–
	15 to 65	⊙	⊙	–
SR	15 to 55	–	–	–
HRW	12 to 60	–	–	–
SRS-G	5	–	–	–
	7	⊙	–	–
	9 to 25	⊙	⊙	–

PART NUMBER EXAMPLES	
With QZ	SHS20C1QZDD+280L
With LaCS	SHS20C1DDHHC1+280L
With QZ + LaCS	SHS20C1QZDDHHC1+280L
With LiCS	SHS20C1GG+280L

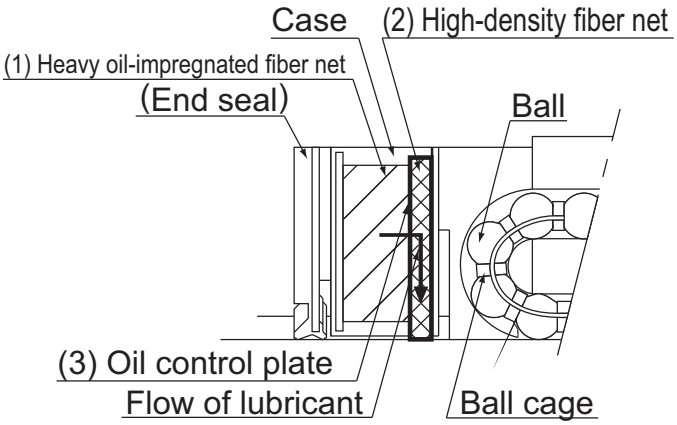
GG = LiCS Only
PP = LiCS + Side Seal + Inner Seal*

***Inner Seal : Included for SHS**
Not included for SSR

QZ



QZ Lubricator feeds the right amount of lubricant to the raceway on the LM rail. This allows an oil film to continuously be formed between the rolling element and the raceway, and drastically extends the lubrication and maintenance intervals.
*Grease nipple not included on LM Guides with QZ lubiricator

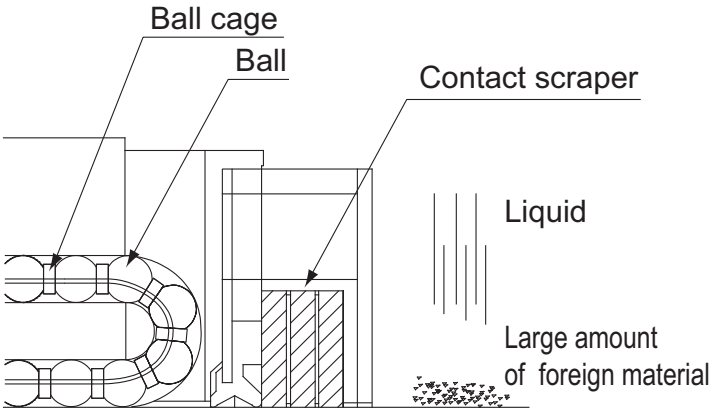


Structural Drawing

LaCS

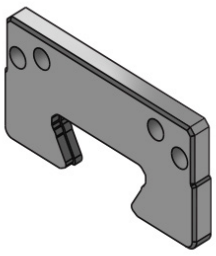


For locations with adverse environment, **Laminated Contact Scraper** LaCS is available. LaCS removes minute foreign material adhering to the LM rail in multiple stages and prevents it from entering the LM block with laminated contact structure (3-layer scraper).

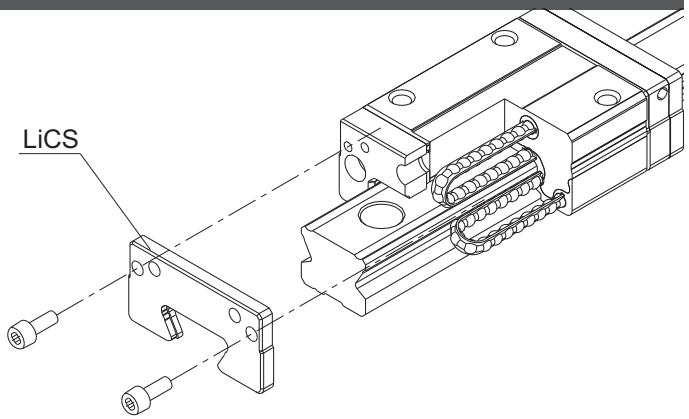


Structural Drawing

LiCS

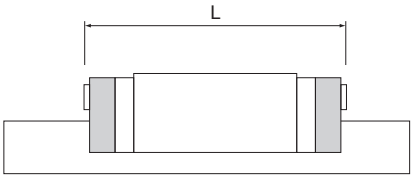


LiCS is a **light resistant contact scraper**. It is effective to remove dust on the raceways with low drag force and smooth motion.



LM Block Length
for Each Seal, Scraper, and Lubricator Option

Model No.	UU	SS	DD	ZZ	KK	GG	PP	SSHH	DDHH
SHS15C/R/V	64.4	64.4	69.8	66.8	72.2	64.4	64.4	78.6	84
SHS15LC/LV	79.4	79.4	84.8	81.8	87.2	79.4	79.4	93.6	99
SHS20C/V	79	79	85.4	83	89.4	79	79	93.6	100
SHS20LC/LV	98	98	104.4	102	108.4	98	98	112.6	119
SHS25C/R/V	92	92	101.6	100.4	107.6	94.6	94.6	112	119.2
SHS25LC/LR/LV	109	109	118.6	117.4	124.6	111.6	111.6	129	136.2
SHS30C/R/V	106	106	116	113.8	122.4	106	106	129.4	138
SHS30LC/LR/LV	131	131	141	138.8	147.4	131	131	154.4	163
SHS35C/R/V	122	122	134.8	132.4	142.2	132.2	132.2	148	157.8
SHS35LC/LR/LV	152	152	164.8	162.4	172.2	162.2	162.2	178	187.8
SHS45C/R/V	140	140	152.8	151.2	161	151.2	151.2	169	178.8
SHS45LC/LR/LV	174	174	186.8	185.2	195	185.2	185.2	203	212.8
SHS55C/R/V	171	171	186.6	184.2	195.4	182.8	182.8	202	213.2
SHS55LC/LR/LV	213	213	228.6	226.2	237.4	224.8	224.8	244	255.2
SHS65C/V	221	221	238.6	236.2	248.6	235.6	235.6	258	270.4
SHS65LC/LV	272	272	289.6	287.2	299.6	286.6	286.6	309	321.4
SSR15XV	40.3	40.3	47.3	44.9	50.7	48.7	48.7	59.5	65.3
SSR15XW/XTB	56.9	56.9	63.9	61.5	67.3	65.7	65.7	76.1	81.9
SSR20XV	47.7	47.7	54.6	53.4	60.3	55.8	55.8	67.7	74.6
SSR20XW/XTB	66.5	66.5	73.4	72.2	79.1	74.6	74.6	86.5	93.4
SSR25XV	60	60	67.4	65.7	73.1	67.6	67.6	80	87.4
SSR25XW/XTB	83	83	90.4	88.7	96.1	90.6	90.6	103	110.4
SSR30XW	97	97	105.1	102.7	110.8	106.7	106.7	121	129.1
SSR35XW	110.9	110.9	119.9	117.7	126.7	121.7	121.7	136.9	145.9
SHW12CA/CR	37	37	-	-	-	-	-	48	-
SHW12HR	50.4	50.4	-	-	-	-	-	61.4	-
SHW14CA/CR	45.5	45.5	-	-	-	-	-	60.7	-
SHW17CA/CR	51	51	54	53.4	56.4	-	-	66.2	69.2
SHW21CA/CR/CAN/CRN	59	59	64	63.2	68.2	-	-	75.6	80.6
SHW27CA/CR/CAN/CRN	72.8	72.8	78.6	77.8	83.6	-	-	89.4	95.2
SHW35CA/CR/CAN/CRN	107	107	114.4	112	119.4	-	-	129	136.4
SHW50CA/CR	141	141	149.2	147.4	155.6	-	-	166	174.2
SRS5M/GM	16.9	-	-	-	-	-	-	-	-
SRS5N/GN	20.1	-	-	-	-	-	-	-	-
SRS5WM/WGM	22.1	-	-	-	-	-	-	-	-
SRS5WN/WGN	28.1	-	-	-	-	-	-	-	-
SRS7S/GS	19	19	-	-	-	-	-	-	-
SRS7M/GM	23.4	23.4	-	-	-	-	-	-	-
SRS7N/GN	31	31	-	-	-	-	-	-	-
SRS7WS/WGS	22.5	22.5	-	-	-	-	-	-	-
SRS7WM/WGM	31	31	-	-	-	-	-	-	-
SRS7WN/WGN	40.9	40.9	-	-	-	-	-	-	-
SRS9XS/XGS	21.5	21.5	-	-	-	-	-	33.1	-
SRS9XM/XGM	30.8	30.8	-	-	-	-	-	42.4	-
SRS9XN/XGN	40.8	40.8	-	-	-	-	-	52.4	-
SRS9WS/WGS	26.5	26.5				-	-	38.1	
SRS9WM/WGM	39	39	-	-	-	-	-	50.6	-
SRS9WN/WGN	50.7	50.7	-	-	-	-	-	62.3	-
SRS12S/GS	25	25	-	-	-	-	-	36.6	-
SRS12M/GM	34.4	34.4	-	-	-	-	-	46	-



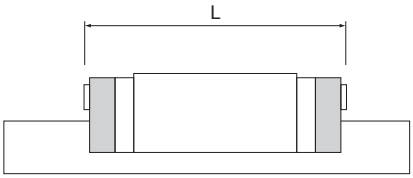
Unit = mm

ZZHH	KKHH	QZUU	QZSS	QZDD	QZZZ	QZKK	QZSSHH	QZDDHH	QZZZHH	QZKKHH
79.8	85.2	84.4	84.4	89.8	86.8	92.2	100	105.4	101.2	106.6
94.8	100.2	99.4	99.4	104.8	101.8	107.2	115	120.4	116.2	121.6
96	102.4	99	99	105.4	103	109.4	115.4	121.8	117.8	124.2
115	121.4	118	118	124.4	122	128.4	134.4	140.8	136.8	143.2
114.4	121.6	114.4	114.4	121.6	120.4	127.6	132	139.2	134.4	141.6
131.4	138.6	131.4	131.4	138.6	137.4	144.6	149	156.2	151.4	158.6
131.8	140.4	127.4	127.4	136	133.8	142.4	149.4	158	151.8	160.4
156.8	165.4	152.4	152.4	161	158.8	167.4	174.4	183	176.8	185.4
150.4	160.2	145	145	154.8	152.4	162.2	168	177.8	170.4	180.2
180.4	190.2	175	175	184.8	182.4	192.2	198	207.8	200.4	210.2
172.2	182	173	173	182.8	181.2	191	199	208.8	202.2	212
206.2	216	207	207	216.8	215.2	225	233	242.8	236.2	246
205.2	216.4	205.4	205.4	216.6	214.2	225.4	232	243.2	235.2	246.4
247.2	258.4	247.4	247.4	258.6	256.2	267.4	274	285.2	277.2	288.4
261.2	273.6	256.2	256.2	268.6	266.2	278.6	288	300.4	291.2	303.6
312.2	324.6	307.2	307.2	319.6	317.2	329.6	339	351.4	342.2	354.6
60.7	66.5	59.3	59.3	65.1	62.7	68.5	75.5	81.3	76.7	82.5
77.3	83.1	75.9	75.9	81.7	79.3	85.1	92.1	97.9	93.3	99.1
70.1	77	66.2	66.2	73.1	72.1	79	83.7	90.6	86.1	93
88.9	95.8	85	85	91.9	90.9	97.8	102.5	109.4	104.9	111.8
82.4	89.8	82.6	82.6	90	88.4	95.8	100	107.4	102.4	109.8
105.4	112.8	105.6	105.6	113	111.4	118.8	123	130.4	125.4	132.8
123.4	131.5	119.7	119.7	127.8	125.4	133.5	141	149.1	143.4	151.5
139.3	148.3	134.3	134.3	143.3	141.3	150.3	156.9	165.9	159.3	168.3
-	-	47	47	-	-	-	58	-	-	-
-	-	60.4	60.4	-	-	-	71.4	-	-	-
-	-	55.5	55.5	-	-	-	70.7	-	-	-
67.4	70.4	63	63	66	65.4	68.4	78.2	81.2	79.4	82.4
77.2	82.2	75	75	80	78.6	83.6	91.6	96.6	93.2	98.2
91.8	97.6	92.8	92.8	98.6	97.2	103	109.4	115.2	111.8	117.6
131.4	138.8	127	127	134.4	132	139.4	149	156.4	151.4	158.8
168.4	176.6	161	161	169.2	167.4	175.6	186	194.2	188.4	196.6
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	29	29	-	-	-	-	-	-	-
-	-	33.4	33.4	-	-	-	-	-	-	-
-	-	41	41	-	-	-	-	-	-	-
-	-	32.5	32.5	-	-	-	-	-	-	-
-	-	41	41	-	-	-	-	-	-	-
-	-	50.9	50.9	-	-	-	-	-	-	-
-	-	31.5	31.5	-	-	-	43.1	-	-	-
-	-	40.8	40.8	-	-	-	52.4	-	-	-
-	-	50.8	50.8	-	-	-	62.4	-	-	-
		36.5	36.5				48.1			
-	-	49	49	-	-	-	60.6	-	-	-
-	-	60.7	60.7	-	-	-	72.3	-	-	-
-	-	35	35	-	-	-	46.6	-	-	-
-	-	44.4	44.4	-	-	-	56	-	-	-

* Grease Nipple cannot be installed
** Grease Nipple not included on LM Guides with QZ Lubricator

LM Block Length
for Each Seal, Scraper, and Lubricator Option

Model No.	UU	SS	DD	ZZ	KK	GG	PP	SSHH	DDHH
SRS12N/GN	47.1	47.1	-	-	-	-	-	58.7	-
SRS12WS/WGS	30.5	30.5	-	-	-	-	-	42.1	-
SRS12WM/WGM	44.5	44.5	-	-	-	-	-	56.1	-
SRS12WN/WGN	59.5	59.5	-	-	-	-	-	71.1	-
SRS15S/GS	32	32				-	-	46.2	
SRS15M/GM	43	43	-	-	-	-	-	57.2	-
SRS15N/GN	60.8	60.8	-	-	-	-	-	75	-
SRS15WS/WGS	41.5	41.5	-	-	-	-	-	55.7	-
SRS15WM/WGM	55.5	55.5	-	-	-	-	-	69.7	-
SRS15WN/WGN	74.5	74.5	-	-	-	-	-	88.7	-
SRS20M/GM	50	50	-	-	-	-	-	65.2	-
SRS25M/GM	77	77	-	-	-	-	-	92.6	-
HSR8R	24	-	-	-	-	-	-	-	-
HSR10R	31	-	-	-	-	-	-	-	-
HSR12R	45	-	-	-	-	-	-	-	-
HSR15C/R/YR	56.6	56.6	61.8	58.2*	63.4*	-	-	76	81.2
HSR15LC/LR	74.6	74.6	79.8	76.2	81.4	-	-	94	99.2
HSR20C/R/YR	74	74	80.6	76.6	83.2	-	-	92	98.6
HSR20LC/LR	90	90	96.6	92.6	99.2	-	-	108	114.6
HSR25C/R/YR	83.1	83.1	90.7	86.7	94.3	-	-	101	108.6
HSR25LC/LR	102.2	102.2	109.8	105.8	113.4	-	-	120.1	127.7
HSR30C/R/YR	98	98	105.6	101.6	109.2	-	-	119.9	127.5
HSR30LC/LR	120.6	120.6	128.2	124.2	131.8	-	-	142.5	150.1
HSR35C/R/YR	109.4	109.4	117	113	120.6	-	-	132.4	140
HSR35LC/LR	134.8	134.8	142.4	138.4	146	-	-	157.8	165.4
HSR45C/R/YR	139	139	146.2	144.2	151.4	-	-	168	175.2
HSR45LC/LR	170.8	170.8	178	176	183.2	-	-	199.8	207
HSR55C/R/YR	163	163	170.2	168.2	175.4	-	-	192.6	199.8
HSR55LC/LR	201.1	201.1	208.3	206.3	213.5	-	-	230.7	237.9
HSR65XC/XR	190.5	190.5	197.7	195.3	202.5	-	-	224.3	231.5
HSR65XLC/XLR	250	250	257.2	254.8	262	-	-	283.8	291
HSR65YR	186	186	193.2	191.2	198.4	-	-	223	229
SR15W/TB	57	57	62.2	58.4*	63.6*	-	-	-	-
SR15V/SB/SB	40.4	40.4	45.6	41.8*	47*	-	-	-	-
SR20W/TB	66.2	66.2	72.8	70.6*	77.2*	-	-	-	-
SR20V/SB	47.3	47.3	53.9	51.7*	58.3*	-	-	-	-
SR25W/TB	83	83	90.6	87.4	95	-	-	-	-
SR25V/SB	59.2	59.2	66.8	63.6	71.2	-	-	-	-
SR30W/TB	96.8	96.8	104.4	99.4	107	-	-	-	-
SR30V/SB	67.9	67.9	75.5	70.5	78.1	-	-	-	-
SR35W/TB	111	111	118.6	113.6	121.2	-	-	-	-
SR35V/SB	77.6	77.6	85.2	80.2	87.8	-	-	-	-
SR45W/TB	126	126	134.6	129.4	138	-	-	-	-
SR55W/TB	156	156	164.6	159.4	168	-	-	-	-
HRW12LR	37	37	-	-	-	-	-	-	-
HRW14LR	45.5	45.5	-	-	-	-	-	-	-
HRW17CA/CR	50.8	-	54	53.6	58.6	-	-	-	-
HRW21CA/CR	58.8	-	64.2	62.8	69	-	-	-	-
HRW27CA/CR	72.8	72.8	79	75.6	81.8	-	-	-	-
HRW35CA/CR	106.6	106.6	113.8	112	119.2	-	-	-	-
HRW50CA/CR	140.5	140.5	147.7	143.3	150.5	-	-	-	-
HRW60CA	158.9	158.9	169.7	165.1	175.9	-	-	-	-



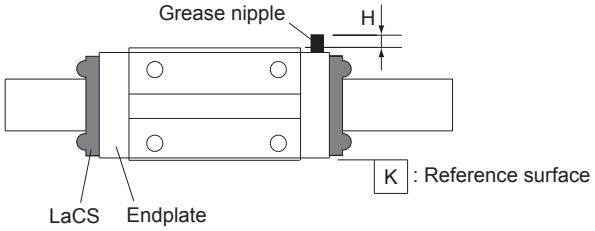
Unit = mm

ZZHH	KKHH	QZUU	QZSS	QZDD	QZZZ	QZKK	QZSSHH	QZDDHH	QZZZHH	QZKKHH
-	-	57.1	57.1	-	-	-	69.1	-	-	-
-	-	40.5	40.5	-	-	-	52.1	-	-	-
-	-	54.5	54.5	-	-	-	66.1	-	-	-
-	-	69.5	69.5	-	-	-	81.1	-	-	-
		44	44				58.2			
-	-	55	55	-	-	-	69.2	-	-	-
-	-	72.8	72.8	-	-	-	87	-	-	-
-	-	53.5	53.5	-	-	-	67.7	-	-	-
-	-	67.5	67.5	-	-	-	81.7	-	-	-
-	-	86.5	86.5	-	-	-	100.9	-	-	-
-	-	66	66	-	-	-	81.2	-	-	-
-	-	97	97	-	-	-	112.6	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
77.2	82.4	76.6	76.6	84.6	81.2	89.2	95.8	103.8	97	105
95.2	100.4	94.6	94.6	102.6	99.2	107.2	113.8	121.8	115	123
95.2	101.8	93	93	101.2	98.8	107	110.4	118.6	112.8	121
111.2	117.8	109	109	117.2	114.8	123	126.4	134.6	128.8	137
105.3	112.9	100.9	100.9	108.9	106.6	114.6	118.2	126.2	120.6	128.6
124.4	132	120	120	128	125.7	133.7	137.3	145.3	139.5	147.7
124.2	131.8	115.8	115.8	123.8	121.5	129.5	137.1	145.1	139.5	147.5
146.8	154.4	138.4	138.4	146.4	144.1	152.1	159.7	167.7	162.1	170.1
135.6	143.2	129	129	138.8	135.8	145.6	151.4	161.2	153.8	163.6
161	168.6	154.4	154.4	164.2	161.2	171	176.8	186.6	179.2	189
171.2	178.4	168.6	168.6	178.4	176.8	186.6	197.4	207.2	200.6	210.4
203	210.2	200.4	200.4	210.2	208.6	218.4	229.2	239	232.4	242.2
195.8	203	193.4	193.4	204.6	202.2	213.4	223.4	234.6	226.6	237.8
233.9	241.1	231.5	231.5	242.7	240.3	251.5	261.5	272.7	264.7	275.9
227.5	234.7	223.9	223.9	236.3	233.7	246.1	259.5	271.9	262.7	275.1
287	294.2	283.4	283.4	295.8	293.2	305.6	319	331.4	322.2	334.6
225	232.2	221.4	221.4	233.8	226.6	239	257	269.4	260.2	272.6
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

* Grease Nipple cannot be installed

** Grease Nipple not included on LM Guides with QZ Lubricator

Grease Nipple Specification
for LM Block with LaCS



Grease nipple mounting location for models SHS, SSR, HSR

LaCS

Unit = mm

Model No.	H	"Grease Nipple Type"
SHS15C/LC	-	PB107
SHS15R/V/LV	4.7	PB107
SHS20C/LC	-	PB107
SHS20V/LV	4.5	PB107
SHS25C/LC	-	PB107
SHS25R/LR/V/LV	4.7	PB107
SHS30C/LC	-	A-M6F
SHS30R/LR/V/LV	7.4	A-M6F
SHS35C/LC	-	A-M6F
SHS35R/LR/V/LV	7.4	A-M6F
SHS45C/LC	-	A-M6F
SHS45R/LR/V/LV	7.7	A-M6F
SHS55C/LC	-	A-M6F
SHS55R/LR/V/LV	7.4	A-M6F
SHS65C/LC	-	A-M6F
SHS65V/LV	6.9	A-M6F

Unit = mm

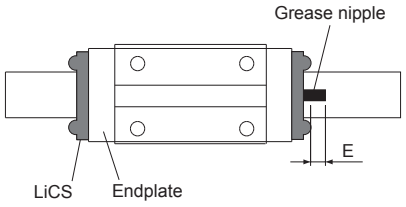
Model No.	H	"Grease Nipple Type"
SSR15XV/XW	4.4	PB107
SSR15XTB	-	PB107
SSR20XV/XW	4.6	PB107
SSR20XTB	-	PB107
SSR25XV/XW	4.5	PB107
SSR25XTB	-	PB107
SSR30XW	5	PB1021B
SSR35XW	5	PB1021B

Unit = mm

Model No.	H	"Grease Nipple Type"
HSR15C/LC	-	PB107
HSR15R/LR	4	PB107
HSR20C/LC	-	PB107
HSR20R/LR	4	PB107
HSR25C/LC	-	PB107
HSR25R/LR	4	PB107
HSR30C/LC	-	A-M6F
HSR30R/LR	7.3	A-M6F
HSR35C/LC	-	A-M6F
HSR35R/LR	7.5	A-M6F
HSR45C/LC	-	A-M6F
HSR45R/LR	7.5	A-M6F
HSR55C/LC	-	A-M6F
HSR55R/LR	7.5	A-M6F
HSR65XC/XLC	-	A-M6F
HSR65XR/XLR	6.5	A-M6F

* Grease Nipple will not be installed for SHW/SRS when LaCS is installed.
** Refer to page 92 for grease nipple type
*** H measures the dimension of the grease nipple outside the overall block shape.
– in H indicates that the grease nipple does not protrude from the overall block.

*For HSR-YR, please contact THK



Models SHS & SSR

LiCS

Unit = mm

Model No.	E	"Grease Nipple Type"
SHS15C/R/V/LC/LV	7.6	PB1021B
SHS20C/V/LC/LV	12	B-M6F
SHS25C/R/V/LC/LR/LV	12	B-M6F
SHS30C/R/V/LC/LR/LV	12	B-M6F

Unit = mm

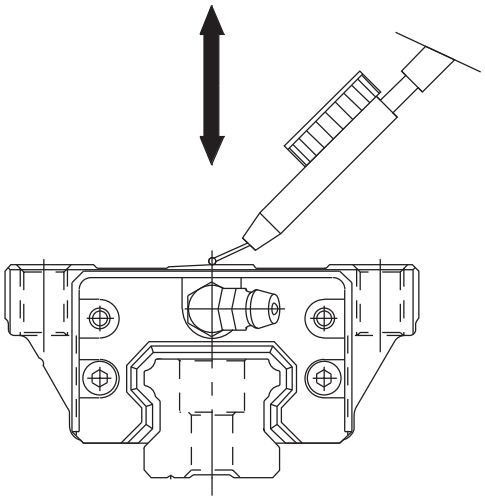
Model No.	E	"Grease Nipple Type"
SHS35C/R/V/LC/LR/LV	8	B-M6F
SHS45C/R/V/LC/LR/LV	20	B-PT1/8
SHS55C/R/V/LC/LR/LV	19	B-PT1/8
SHS65C/V/LC/LV	17	B-PT1/8

Unit = mm

Model No.	E	"Grease Nipple Type"
SSR15XW/XV/XTB	2.9	PB1021B
SSR20XW/XV/XTB	9	PB1021B
SSR25XW/XV/XTB	9	B-M6F
SSR30XW	9	B-M6F
SSR35XW	8	B-M6F

Radial Clearance Standard

Radial clearance



*Please contact THK for higher preload type.

Model SHS Unit: µm

Size	Normal	Light Preload	Medium Preload
	No Symbol	C1	C0
15	-5 to 0	-12 to -5	—
20	-6 to 0	-12 to -6	-18 to -12
25	-8 to 0	-14 to -8	-20 to -14
30	-9 to 0	-17 to -9	-27 to -17
35	-11 to 0	-19 to -11	-29 to -19
45	-12 to 0	-22 to -12	-32 to -22
55	-15 to 0	-28 to -16	-38 to -28
65	-18 to 0	-34 to -22	-45 to -34

Model SSR Unit: µm

Model No.	Normal	Light Preload
	No Symbol	C1
15	-4 to +2	-10 to -4
20	-5 to +2	-12 to -5
25	-6 to +3	-15 to -6
30	-7 to +4	-18 to -7
35	-8 to +4	-20 to -8

Model SHW Unit: µm

Size	Normal	Light Preload	Medium Preload
	No Symbol	C1	C0
12	-1.5 to 0	-4 to -1	—
14	-2 to 0	-5 to -1	—
17	-3 to 0	-7 to -3	—
21	-4 to +2	-8 to -4	—
27	-5 to +2	-11 to -5	—
35	-8 to +4	-18 to -8	-28 to -18
50	-10 to +5	-24 to -10	-38 to -24

Model SRS Unit: µm

Model No.	Normal	Light Preload
	No Symbol	C1
5	0 to +1.5	-1 to 0
7	-2 to +2	-3 to 0
9	-2 to +2	-4 to 0
12	-3 to +3	-6 to 0
15	-5 to +5	-10 to 0
20	-5 to +5	-10 to 0
25	-7 to +7	-14 to 0

Model HSR Unit: µm

Size	Normal	Light Preload	Medium Preload
	No Symbol	C1	C0
8	-1 to +1	-4 to -1	—
10	-2 to +2	-5 to -1	—
12	-3 to +3	-6 to -2	—
15	-4 to +2	-12 to -4	—
20	-5 to +2	-14 to -5	-23 to -14
25	-6 to +3	-16 to -6	-26 to -16
30	-7 to +4	-19 to -7	-31 to -19
35	-8 to +4	-22 to -8	-35 to -22
45	-10 to +5	-25 to -10	-40 to -25
55	-12 to +5	-29 to -12	-46 to -29
65	-14 to +7	-32 to -14	-50 to -32

Model SR Unit: µm

Size	Normal	Light Preload	Medium Preload
	No Symbol	C1	C0
15	-4 to +2	-10 to -4	—
20	-5 to +2	-12 to -5	-17 to - 12
25	-6 to +3	-15 to -6	-21 to -15
30	-7 to +4	-18 to -7	-26 to -18
35	-8 to +4	-20 to -8	-31 to -20
45	-10 to +5	-24 to -10	-36 to -24
55	-12 to +5	-28 to -12	-45 to -28

Model HRW Unit: µm

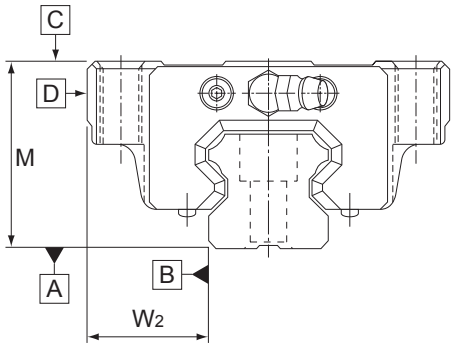
Size	Normal	Light Preload	Medium Preload
	No Symbol	C1	C0
12	-1.5 to +1.5	-4 to -1	—
14	-2 to +2	-5 to -1	—
17	-3 to +2	-7 to -3	—
21	-4 to +2	-8 to -4	—
27	-5 to +2	-11 to -5	—
35	-8 to +4	-18 to -8	-28 to -18
50	-10 to +5	-24 to -10	-38 to -24
60	-12 to +5	-27 to -12	-42 to -27

Model SRS-G Unit: µm

Model No.	Normal	Light Preload
	No Symbol	C1
5	0 to +1.5	-1 to 0
7	-2 to +2	-3 to 0
9	-2 to +2	-4 to 0
12	-3 to +3	-6 to 0
15	-5 to +5	-10 to 0
20	-5 to +5	-10 to 0
25	-7 to +7	-14 to 0

Accuracy Standard

SHS, SSR, SHW, HSR, SR, HRW



RUNNING PARALLELISM — Unit: μm

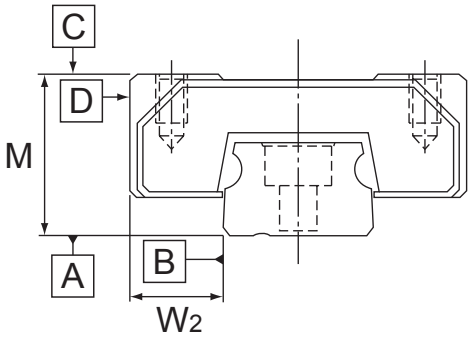
LM rail length (mm)		Running Parallelism Values				
Above	Or less	Normal grade	High-accuracy grade	Precision grade	Super precision grade	Ultra precision grade
—	50	5	3	2	1.5	1
50	80	5	3	2	1.5	1
80	125	5	3	2	1.5	1
125	200	5	3.5	2	1.5	1
200	250	6	4	2 .5	1.5	1
250	315	7	4.5	3	1.5	1
315	400	8	5	3 .5	2	1.5
400	500	9	6	4 .5	2.5	1.5
500	630	11	7	5	3	2
630	800	12	8.5	6	3.5	2
800	1000	13	9	6 .5	4	2.5
1000	1250	15	11	7.5	4.5	3
1250	1600	16	12	8	5	4
1600	2000	18	13	8.5	5 .5	4.5
2000	2500	20	14	9.5	6	5
2500	3090	21	16	11	6 .5	5.5

ACCURACY STANDARDS — Unit: mm

Size	Accuracy standards	Normal grade	High accuracy grade	Precision grade	Super precision grade	Ultra precision grade
	Item	No Symbol	H	P	SP	UP
8 10 12 14	Dimensional tolerance in height M	±0.07	± 0.03	±0.015	±0.007	—
	Dimensional tolerance in width W_2	± 0.04	± 0.02	± 0.01	± 0.007	—
	Running parallelism of surface C against surface A	△C (as shown in Running Parallelism Chart above)				
	Running parallelism of surface D against surface B	△D (as shown in Running Parallelism Chart above)				
15 17 20 21	Dimensional tolerance in height M	±0.07	± 0.03	0 –0.03	0 –0.015	0 –0.008
	Dimensional tolerance in width W_2	± 0.06	± 0.03	0 –0.02	0 –0.015	0 –0.008
	Running parallelism of surface C against surface A	△C (as shown in Running Parallelism Chart above)				
	Running parallelism of surface D against surface B	△D (as shown in Running Parallelism Chart above)				
25 27 30 35	Dimensional tolerance in height M	±0.08	± 0.04	0 –0.04	0 –0.02	0 –0.01
	Dimensional tolerance in width W_2	± 0.07	± 0.03	0 –0.03	0 –0.015	0 –0.01
	Running parallelism of surface C against surface A	△C (as shown in Running Parallelism Chart above)				
	Running parallelism of surface D against surface B	△D (as shown in Running Parallelism Chart above)				
45 50 55 60	Dimensional tolerance in height M	±0.08	± 0.04	0 –0.05	0 –0.03	0 –0.015
	Dimensional tolerance in width W_2	± 0.07	±0.04	0 –0.04	0 –0.025	0 –0.015
	Running parallelism of surface C against surface A	△C (as shown in Running Parallelism Chart above)				
	Running parallelism of surface D against surface B	△D (as shown in Running Parallelism Chart above)				

Accuracy Standard

SRS, SRS-G



RUNNING PARALLELISM for SRS7 to 25				Unit: μm
LM rail length (mm)		Running Parallelism Values		
Above	Or less	Normal grade	High-accuracy grade	Precision grade
—	40	8	4	1
40	70	10	4	1
70	100	11	4	2
100	130	12	5	2
130	160	13	6	2
160	190	14	7	2
190	220	15	7	3
220	250	16	8	3
250	280	17	8	3
280	310	17	9	3
310	340	18	9	3
340	370	18	10	3
370	400	19	10	3
400	430	20	11	4
430	460	20	12	4
460	520	21	12	4
520	550	22	12	4
550	640	22	13	4
640	670	23	13	4
670	700	23	13	5
700	820	23	14	5
820	850	24	14	5
850	970	24	15	5
970	1030	25	16	5
1030	1150	25	16	6
1150	1330	26	17	6
1330	1420	27	18	6
1420	1510	27	18	7
1510	1830	28	19	7
1830	2000	28	19	8

RUNNING PARALLELISM for SRS5, SRS5G, SRS5WG			Unit: μm
LM rail length (mm)		Running Parallelism Values	
Above	Or less	Normal grade	Precision grade
—	25	2.5	1.5
25	50	3.5	2
50	100	5.5	3
100	150	7	4
150	200	8.4	5

ACCURACY STANDARDS				Unit: mm
Size	Accuracy standards	Normal grade	High accuracy grade	Precision grade
	Item	No Symbol	H	P
5	Dimensional tolerance in height M	± 0.03	—	± 0.015
	Dimensional tolerance in width W_2	± 0.03	—	± 0.015
	Running parallelism of surface C against surface A	△C (as shown in Running Parallelism Chart above)		
	Running parallelism of surface D against surface B	△D (as shown in Running Parallelism Chart above)		
7 9 12 15 20 25	Dimensional tolerance in height M	± 0.04	± 0.02	± 0.01
	Dimensional tolerance in width W_2	± 0.04	± 0.025	± 0.015
	Running parallelism of surface C against surface A	△C (as shown in Running Parallelism Chart above)		
	Running parallelism of surface D against surface B	△D (as shown in Running Parallelism Chart above)		

Surface Coating (Symbol F)

Surface coating is available for blocks and rails for anti-corrosive or aesthetic purposes.
THK offers the following 5 types for LM Guide.

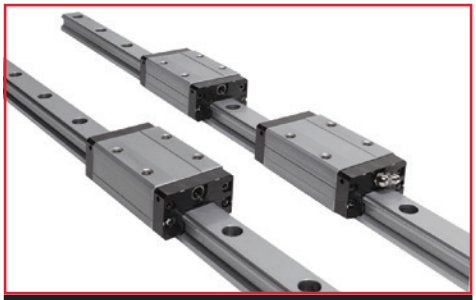
PART NUMBER EXAMPLE FOR BLACK CHROME (AP-C)	
Coating for Block & Rail	SHS35LC2SSHHC1**FM**+2500LP**F** **(F=AP-C)**
Coating for Block only	SHS35LC2SSHHC1**FM**+2500LP **(F=AP-C)**
Coating for Rail only	SHS35LC2SSHHC1+2500LP**F** **(F=AP-C)**

* Specify what type of coating like SHS25C1QZSSFM+220LF **(F=AP-C)**
* Balls will be stainless as default for surface coating option (Symbol M)

USA

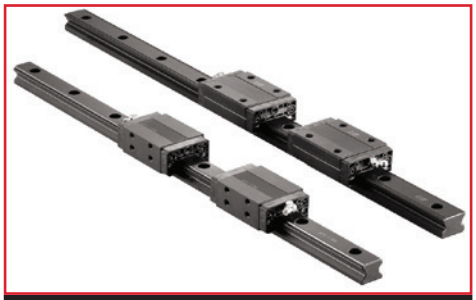


R-BC

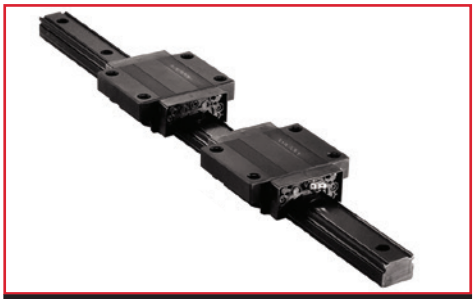


ARMOLOY

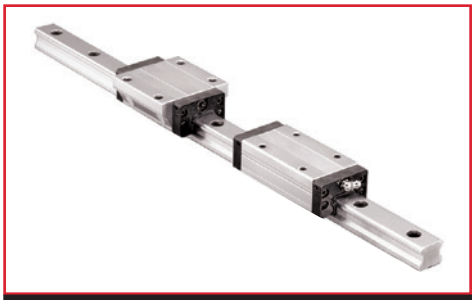
JAPAN



AP-CF



AP-C



AP-HC

SURFACE COATING COMPARISON CHART

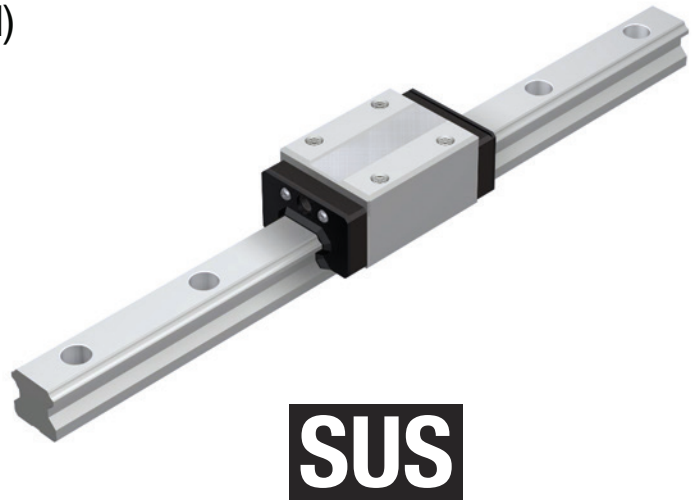
Coating Location	USA		Japan		
Name	R-BC	Armoloy	AP-C	AP-CF	AP-HC
Color	Black	Matte Gray	Black	Gloss Black	Silver
Type	Black Chrome	Thin Dense Chrome	Black Chrome	Black Chrome + Florine Resin	Hard Chrome
Corrosion Resistance	★★★	★★	★★★	★★★	★
Wear Resistance	★	★★★	★	★★	★★★

AVAILABILITY CHART

Model No.	F
SHS	⊙
SSR	⊙
SHW	⊙
SRS	–
HSR	⊙
SR	⊙
HRW	⊙
SRS-G	–

Stainless Steel (Symbol M)

For use in environments where corrosion resistance is required, some LM system models can use stainless steel.



PART NUMBER EXAMPLES	
Stainless for Block & Rail	SR20TB2SSM+820LHM
Stainless for Block only	SR20TB2SSC1M+820LH
Stainless for Rail only	SR20TB2SSC1+820LHM
Stainless + Coating	SR20TB2SSC1FM+820LHFM

*Balls will be stainless as default for stainless option
*Rail maximum length is shorter than standard material (see details below)

⊙ = Stainless Standard
• = Available as an Option
△ = Available only for XV & XW Blocks

STAINLESS STEEL AVAILIBILITY CHART

Model No.	Size	M
SHS	15 to 25	•
	30 to 65	–
SSR	15 to 30	△
	35	–
SHW	12,14,17	⊙
	21 to 50	–
SRS	5 to 25	⊙

Model No.	Size	M
HSR	8,10,12	⊙
	15 to 35	•
	45 to 65	–
SR	15 to 35	•
	45, 55	–
HRW	12, 14	⊙
	17 to 35	•
	50 to 60	–
SRS-G	5 to 25	⊙

STAINLESS STEEL MAXIMUM RAIL LENGTH (UNIT : MM)

Model No.	Length
SHS15	1240
SHS20	1480
SHS25	2020
SSR15	1240
SSR20	1480
SSR25	2020
SSR30	2520
SHW12	1230
SHW14	1430
SHW17	1800

Model No.	Length
SRS5/5W	220
SRS7/7W	480
SRS9X	1240
SRS9W	1430
SRS12/12W	2000
SRS15/15W	2000
SRS20	1800
SRS25	1800

Model No.	Length
HSR8	975
HSR10	995
HSR12	1240
HSR15	1240
HSR20	1480
HSR25	2020
HSR30	2520
HSR35	2520

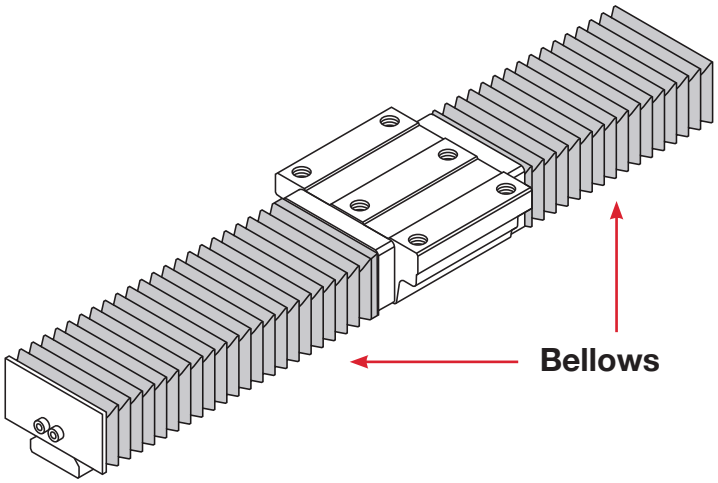
Model No.	Length
SR15	1240
SR20	1480
SR25	2020
SR30	2520
SR35	2520
HRW12	1000
HRW14	1430
HRW17	800
HRW21	1000
HRW27	1200
HRW35	2120

Model No.	Length
SRS5G/5WG	220
SRS7G/7WG	480
SRS9XG	1240
SRS9WG	1430
SRS12G/12WG	2000
SRS15G/15WG	2000
SRS20G	1800
SRS25G	1800

Tapped Holes for Bellows (Symbol J)

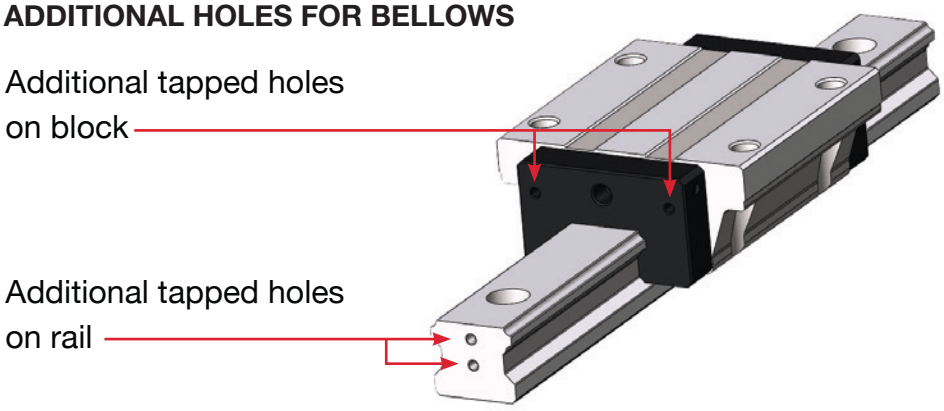
For applications exposed to dust or cutting chips, bellows can be used as contamination protection. LM Block and LM Rail will have additional tapped holes to install bellows.

*Bellows are not included and need to be purchased separately.



PART NUMBER EXAMPLE	
Assembly	SHW27CRN2SSC1J+430LJ
Block Only	SHW27CRN1SSC1J(GK) BLOCK
Rail Only	SHW27-430LJ(GK) RAIL

ADDITIONAL HOLES FOR BELLOWS



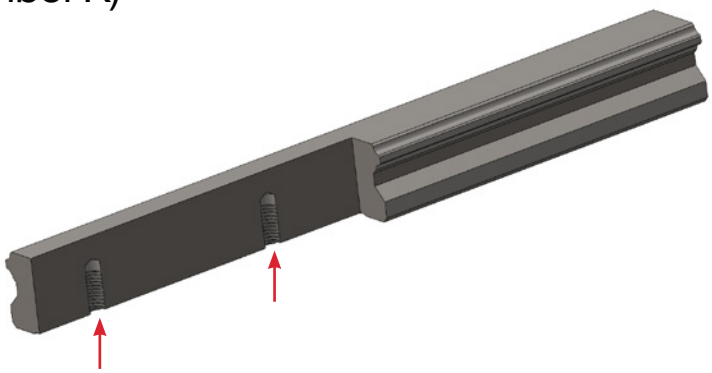
TAPPED HOLES FOR BELLOWS AVAILABLITY CHART

Model No.	Size	J
SHS	15 to 65	⊙
SSR	15 to 35	⊙
SHW	12,14	–
	17 to 50	⊙
SRS	5 to 25	–

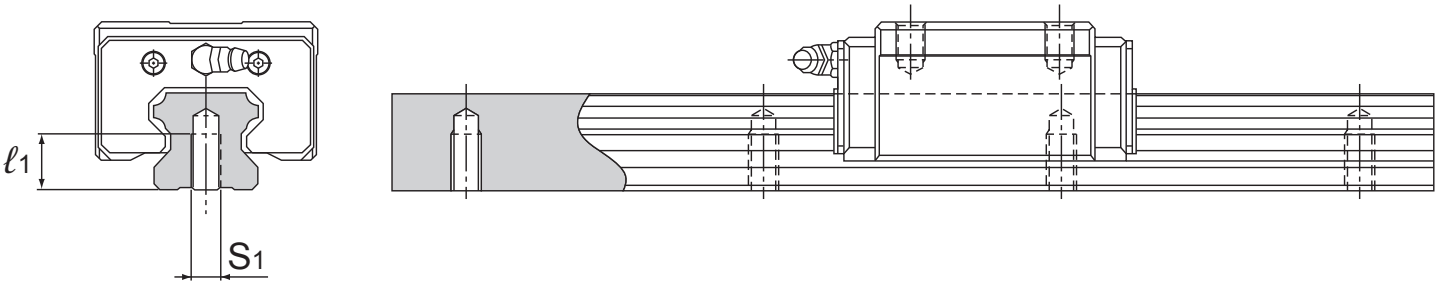
Model No.	Size	J
HSR	8, 10, 12	–
	15 to 35	⊙
SR	15 to 55	⊙
HRW	12,14	–
	17 to 50	⊙
	60	–
SRS -G	5 to 25	–

Tapped Hole Rail (Symbol K)

Bottom tapped rails are available on SHS, SSR, HSR, & SR for normal, high, and precision accuracy grade (page 29). This style is useful for mounting from bottom of base and for contamination protection.



PART NUMBER EXAMPLES	
Assembly	HSR35LC2DD+640LK
Rail Only	HSR35-640LK(GK) RAIL



TAPPED HOLE RAIL **Unit: mm**

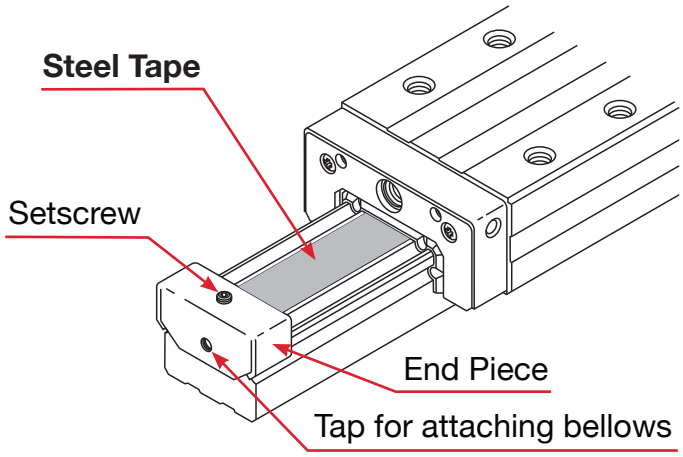
Model No.	Size	S_1	Depth ℓ_1
SHS	15	M5	8
	20	M6	10
	25	M6	12
	30	M8	15
	35	M8	17
	45	M12	20
	55	M14	24
	65	M20	30
SSR	15	M5	7
	20	M6	9
	25	M6	10
	30	M8	14
	35	M8	16

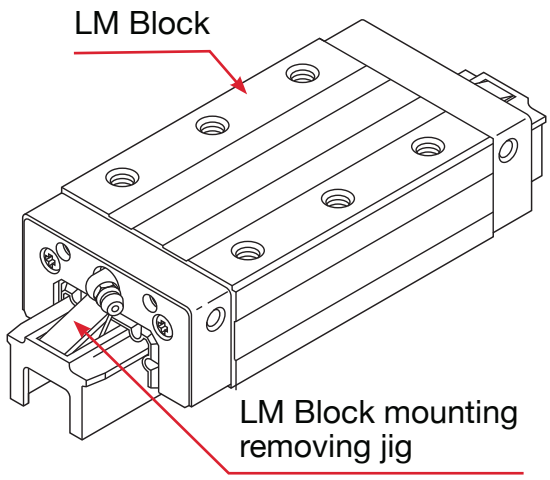
Model No.	Size	S_1	Depth ℓ_1
HSR	15	M5	8
	20	M6	10
	25	M6	12
	30	M8	15
	35	M8	17
	45	M12	24
	55	M14	24
	65	M20	30
SR	15	M5	7
	20	M6	9
	25	M6	10
	30	M8	14
	35	M8	16
	45	M12	20
	55	M14	22

Steel Tape (Symbol Z)

Steel tape is available for contamination protection. Rail top surface has additional machined groove for steel tape installation.

PART NUMBER EXAMPLE
SHS25V2DD+1240LZ





By covering, LM rail mounting holes with an ultra-thin stainless steel (SUS304) plate, it increases sealability to prevent penetration of a coolant or cutting chips from the top surface of LM rail.

When mounting the steel tape, End Piece EP is used as a means to secure the steep tape.

STEEL TAPE AVAILABLITY CHART

Model No.	Size	Z
SHS	15 to 65	⊙
SSR	15 to 35	⊙
SHW	12 to 50	–
SRS	5 to 25	–

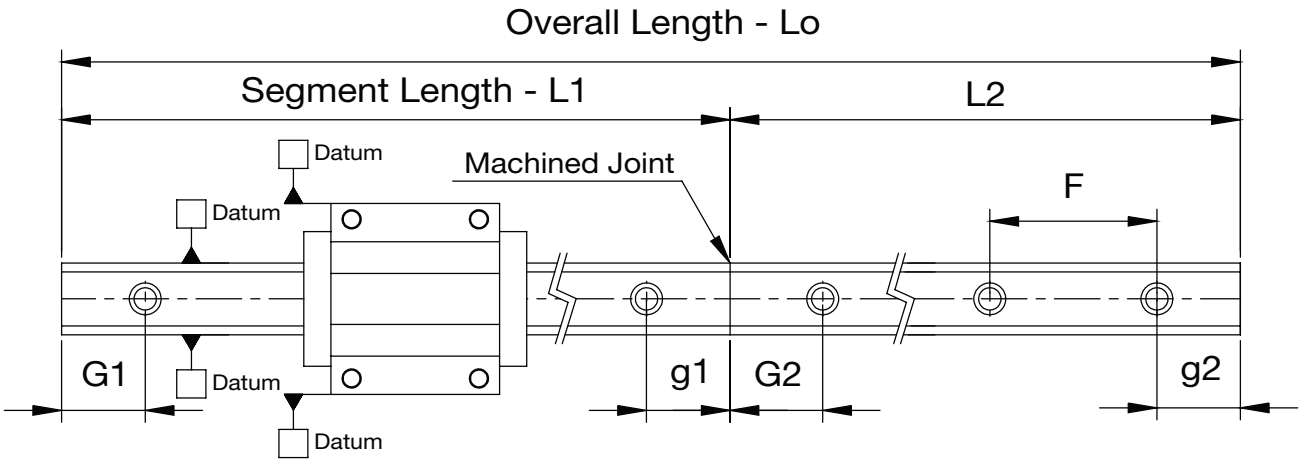
Model No.	Size	Z
HSR	8, 10, 12	–
	15 to 65	⊙
SR	15 to 55	⊙
HRW	12 to 60	–
SRS -G	5 to 25	–

Joint Rail (Symbol T)

In situations where a length that is longer than standard lengths is required, jointed rails (two or more rails butted end to end) are prepared.
If needed, please let us know overall length with drawing as below.

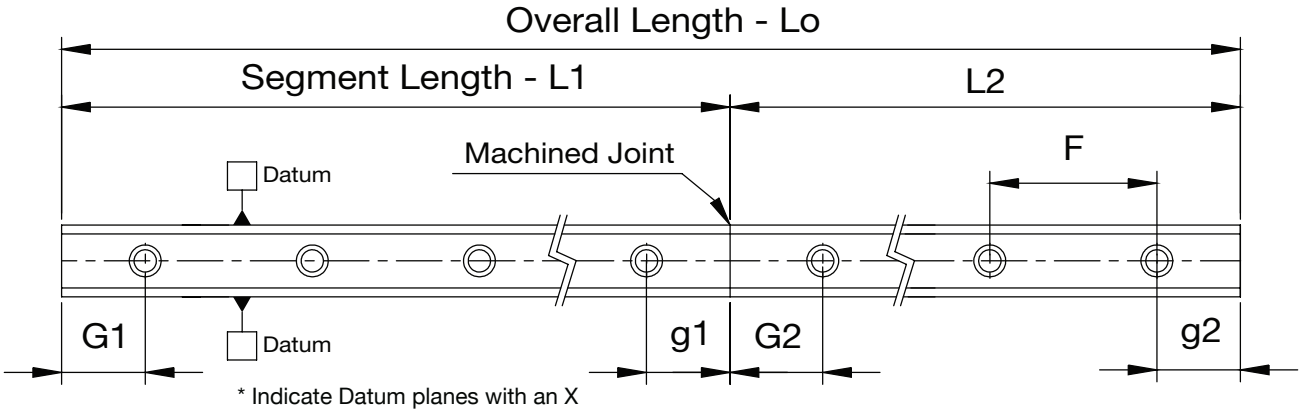
PART NUMBER EXAMPLES	
Assembly	SHS35C2KKC1+4200LT
Rail Only	SHS35-4200LT(GK) RAIL

Assembly



* Indicate Datum planes with an X

Rail Only



* Indicate Datum planes with an X

Lo	mm	F	mm
L1	mm	L2	mm
G1	mm	G2	mm
g1	mm	g2	mm

* F (Mounting Hole Pitch) is fixed for each model

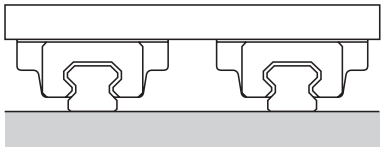
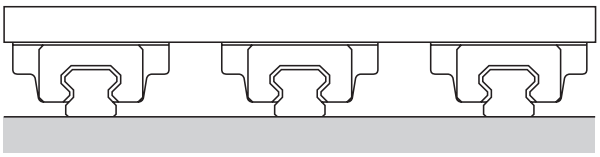
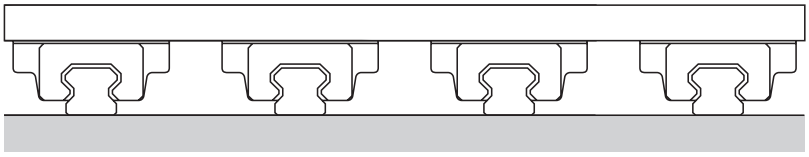
Part Number	

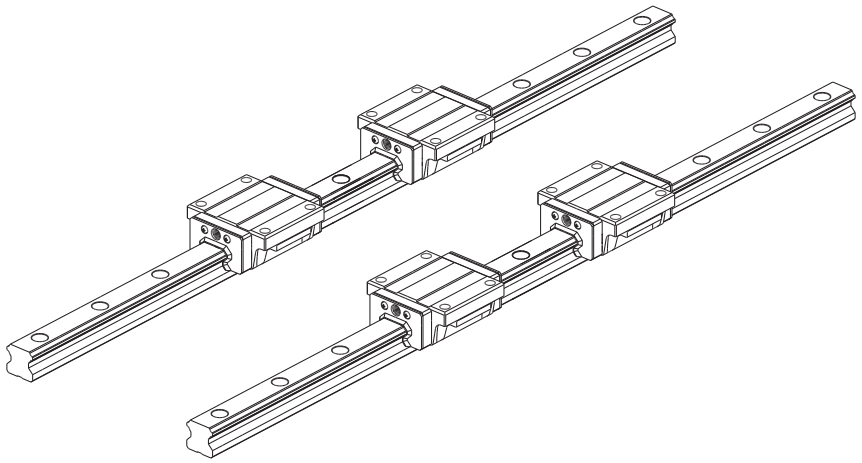
Matched Sets (Symbols -II, -III, -IV...)

Matched Sets hold the tolerance deviation/ difference of height (M) over multiple rails. Matched Sets are normally used where down to the micron is essential.

Matched Sets are created together at the time of manufacturing to achieve precision accuracy. Many applications may not require the accuracy that comes from a matched set and will perform well with multiple block and rail combinations.

Please see chart on the opposite page for accuracy comparisons.

PART NUMBER EXAMPLES	
2 rails on the same level surface 	**HSR35LR2DDHHC1+3560LP-II**
3 rails on the same level surface 	**HSR35LR2DDHHC1+3560LPT-III**
4 rails on the same level surface 	**HSR35LR2DDHHC1+3560LPT-IV**

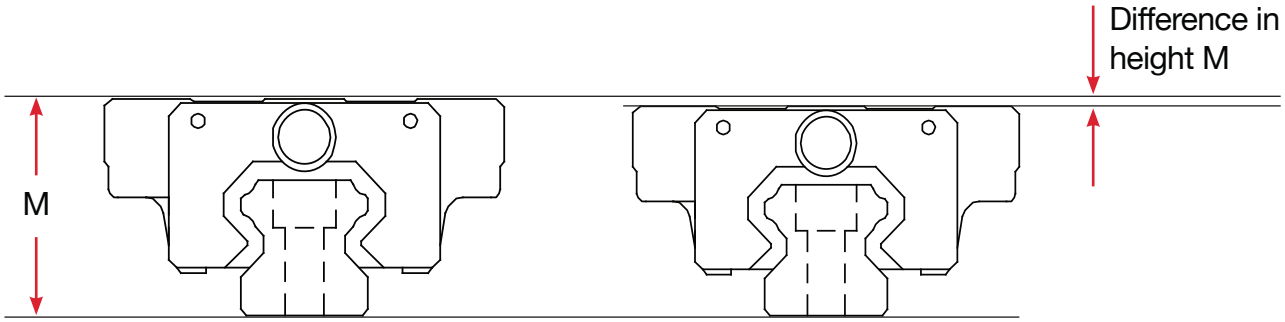


PART NUMBER	QTY
SHS25C2SSC1+640L-II	2

Order quantity needs to be multiples of the number of rails.

Height Difference Comparison

Between Matched Set & Random Matching



SHS, SSR, SHW, HSR, SR, HRW — Unit: mm

Size	Accuracy standards	Normal grade	High-accuracy grade	Precision grade	Super-precision grade	Ultra-precision grade
	Item	No Symbol	H	P	SP	UP
8 10 12	Difference in height M **Matched Set**	0.015	0.007	0.005	0 .003	—
	Difference in height M Random Match	0.14	0.06	0.03	0.014	—
15 17 20 21	Difference in height M **Matched Set**	0.02	0.01	0.006	0.004	0.003
	Difference in height M Random Match	0.14	0.06	0.03	0.015	0.008
25 27 30 35	Difference in height M **Matched Set**	0.02	0 .015	0.007	0.005	0.003
	Difference in height M Random Match	0.16	0.08	0.04	0.02	0.01
45 50 55 60	Difference in height M **Matched Set**	0.025	0.015	0.007	0.005	0.003
	Difference in height M Random Match	0.16	0.08	0.05	0.03	0.015

SRS, SRS-G — Unit: mm

Size	Accuracy standards	Normal grade	High-accuracy grade	Precision grade
	Item	No Symbol	H	P
5	Difference in height M **Matched Set**	0.015	—	0.005
	Difference in height M Random Match	0.06	—	0.03
7 9 12 15 20 25	Difference in height M **Matched Set**	0.03	0.015	0.007
	Difference in height M Random Match	0.08	0.04	0.02

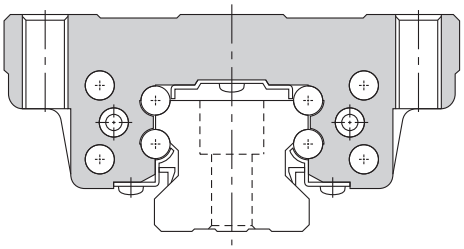
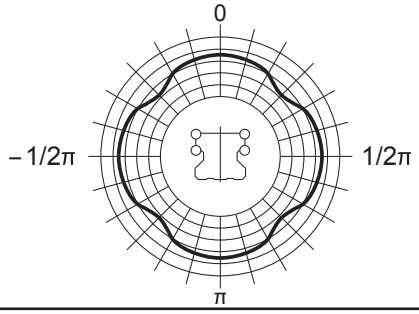
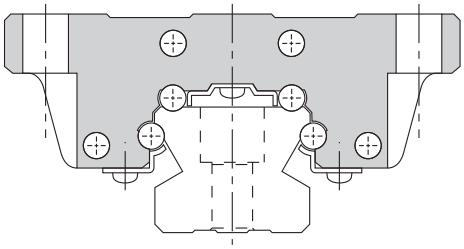
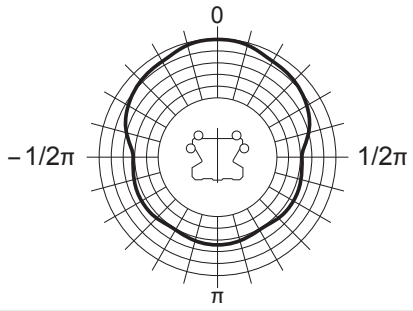
Rated Load

Calculating the Equivalent Load

Rated Load of an LM Guide in Each Direction

The LM Guide is categorized into roughly two types: the 4-way equal load type, which has the same rated load in the radial, reverse radial and lateral directions, and the radial type, which has a large rated load in the radial direction. With the radial type LM Guide, the rated load in the radial direction is different from that in the reverse radial and lateral directions. The basic load rating in the radial direction is indicated in the specification table. The values in the reverse-radial and lateral directions are obtained from the chart below.

Rated Loads in ALL directions

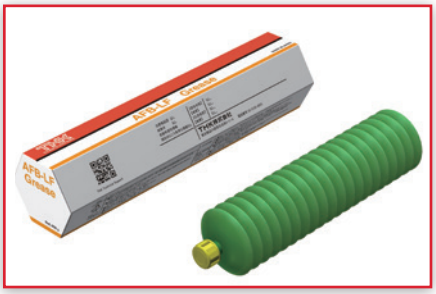
Type	Load Distribution Curve
4-way Equal Load Type 	
Radial Type 	

Classification	Model No.		Reverse radial direction		Lateral direction	
	Type	Size	Dynamic load rating C_L	Static load rating C_{0L}	Dynamic load rating C_T	Dynamic load rating C_{0T}
4-way Equal Load	SHS		C	C_0	C	C_0
	SHW		C	C_0	C	C_0
	SRS	12, 15, 25	C	C_0	C	C_0
	HSR		C	C_0	C	C_0
	HRW	17, 21, 27, 35, 50, 60	C	C_0	C	C_0
Radial	SSR		0.50C	$0.50C_0$	0.53C	$0.43C_0$
	SR	15, 20, 25, 30, 35, 45, 55	0.62C	$0.50C_0$	0.56C	$0.43C_0$
	HRW	12, 14	0.78C	$0.71C_0$	0.48C	$0.35C_0$
Other	SRS	5, 7, 9, 20	C	C_0	1.19C	$1.19C_0$

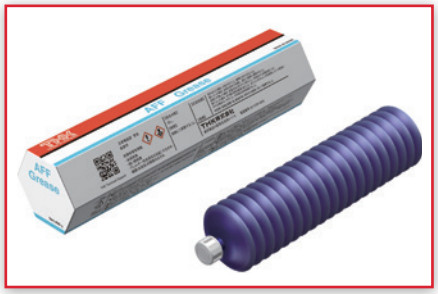
(T): Tensile lateral direction; (C): Compressive lateral direction

Note) C and C_0 in the table each represent the basic load rating indicated in the specification table of the respective model. F_0 represents the permissible load. For types with no size indication in the table, the same factor is applied to all sizes. Models HR, GSR and GSR-R cannot be used in single-axis applications.

GREASE:



AFB-LF: Contained for SHS/SSR/SHW(21-50)/HSR (15-65)/SR/HRW/SRS(20-25)/SRS-G(20-25)



AFF: Contained for SHW(12-17)/SRS(5-15) /SRS-G(5-15)

ITEM		REPRESENTATIVE VALUE	TEST METHOD
Consistency enhancer		Lithium-based	
Base oil		Refined mineral oil	
Base oil kinematic viscosity: mm²/s (40°C)		170	JIS K 2220 23
Worked penetration (25°C, 60W)		275	JIS K 2220 7
Mixing stability (100,000 W)		345	JIS K 2220 15
Dropping point °C		193	JIS K 2220 8
Evaporation amount: mass% (99°C, 22h)		0.4	JIS K 2220 10
Oil separation rate: mass% (100°C, 24h)		0.6	JIS K 2220 11
Copper plate corrosion (B method, 100°C, 24h)		Accepted	JIS K 2220 9
Low temp. torque: N-m (-20°C)	Start	130	JIS K 2220 18
	(revolutions)	51	
4-ball testing (burn-in load): N		3089	ASTM D2596
Service Temperature Range °C		-15 to 100	
Color		Yellowish brown	

ITEM		REPRESENTATIVE VALUE	TEST METHOD
Consistency enhancer		Lithium-based	
Base oil		High-grade synthetic oil	
Base oil kinematic viscosity: mm²/s (40°C)		100	JIS K 2220 23
Worked penetration (25°C, 60W)		315	JIS K 2220 7
Mixing stability (100,000 W)		345	JIS K 2220 15
Dropping point °C		220	JIS K 2220 8
Evaporation amount: mass% (99°C, 22h)		0.7	JIS K 2220 10
Oil separation rate: mass% (100°C, 24h)		2.6	JIS K 2220 11
Copper plate corrosion (B method, 100°C, 24h)		Accepted	JIS K 2220 9
Low temp. torque: N-m (-20°C)	Start	220	JIS K 2220 18
	(revolutions)	60	
4-ball testing (burn-in load): N		1236	ASTM D2596
Service Temperature Range °C		-40 to 120	
Color		Reddish Brown	

GREASE NIPPLE:

B-M6F, B-PT1: 45 Degree



A-M6F: Straight



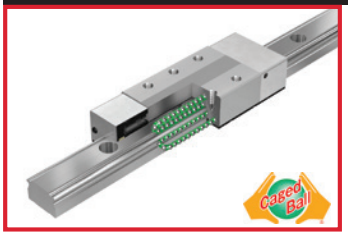
PB1021B, PB107: Driven-in Nipple



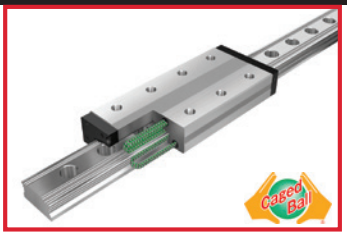
For other grease & grease nipple options, please contact THK or check general catalog.

More Linear Motion Guides:

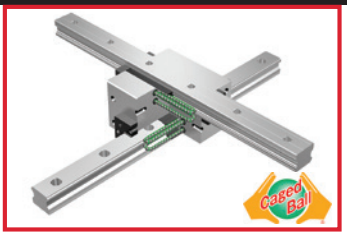
Caged-Ball Linear Motion Guides:



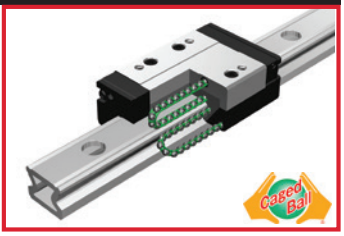
SVR/SVS: Ultra Heavy Load



SPR/SPS: Low Waiving

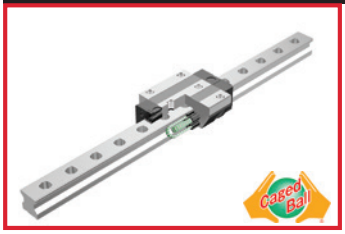


SCR: Cross

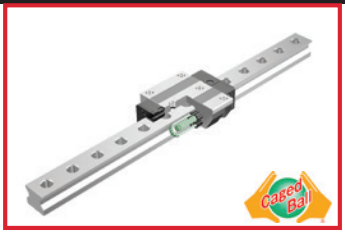


LM Guide-Light: Hollow Rail

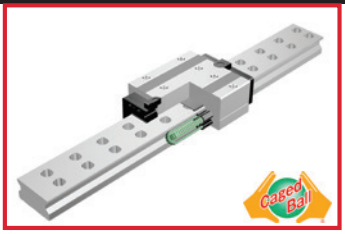
Caged-Roller Linear Motion Guides:



SRG: Roller

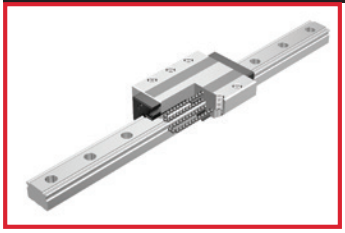


SRN: Roller-Low Center of Gravity



SRW: Roller-Ultra High Rigidity

Full-Ball Linear Motion Guides:



NR-X/NRS-X: Ultra Heavy Load



JR: Structural Member



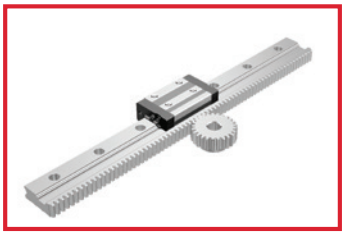
HCR: Curved Rail



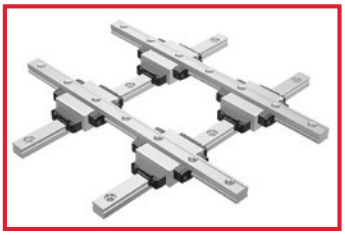
HMG: Straight + Curved



HR: Separate



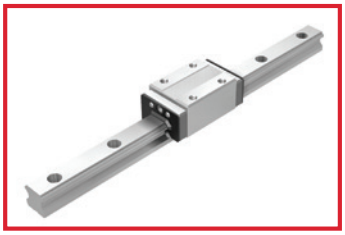
GSR-R: With Rack-Pinion



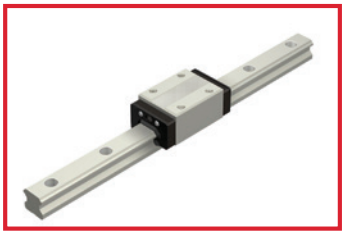
MX: Miniature-Cross



RSR: Micro LM Guide



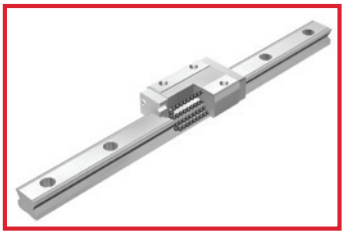
High Temperature



High Corrosion



Mid to Low Vacuum



Oil-Free

Support Tools

Technical Support Site - tech.thk.com

01 Optimal Product Selection Tool

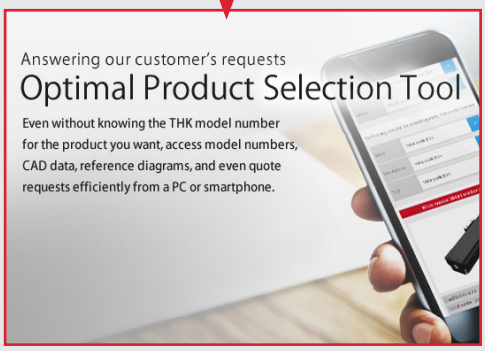
Input usage conditions to easily narrow down the selection of products and help you make the right choice.

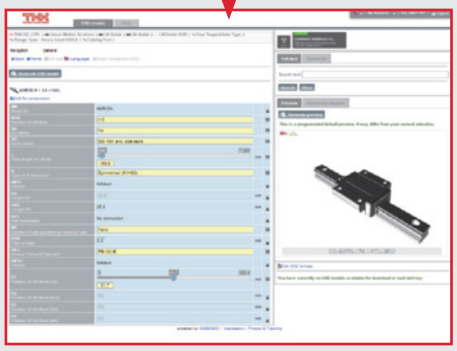
02 CAD/Drawing Data Aquisition

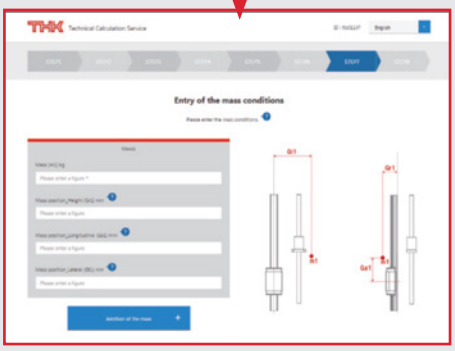
From each product page, important information such as catalog data, CAD data and reference diagrams can be easily accessed.

03 Life Calculator

Easily calculate a product's expected service life by selecting a tool and entering its conditions, as shown in the steps.







Online Shopping - www.thkstore.com

Large Inventory
Contributes to quick delivery

Major Credit Cards Accepted
Visa, Mastercard, and American Express

2D/3D CAD & Product Configurator
2D/3D models and product configurator available for download in most file formats

Collect Shipping Available
Shipping via customer's carrier account

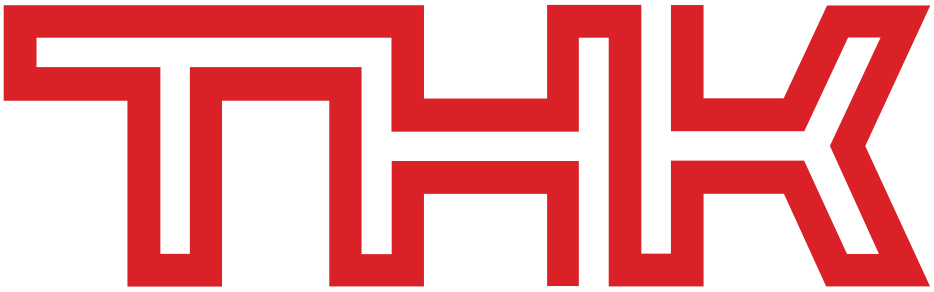
Easy Access
Clear lead times and prices are listed in the store (no RFQ required)

Grease MSDS
Grease MSDS (Material Safety Data Sheets) can be downloaded

Available for USA/Canada/ Mexico Customers
We ship to the USA (mainland), Canada, and Mexico

Quotation File
Cart contents can be downloaded as quotation





The Mark of Linear Motion

THK America, Inc.

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