

# Linear Guides for Medium/Heavy Load - Stainless Steel

## Normal Clearance

= For customers using industry standard products =

Frame-surrounded products are compliant with the industry standard specifications (Standard Block Type).  
Select the block from this spec.

■ **Features:** Linear Guides for Medium and Heavy Load excellent in corrosion resistance.



### Industry Standard



⚠ Blocks and rails are not sold as separate items. Normal Clearance Type has guaranteed radial clearances and accuracies as sets of blocks and rails.

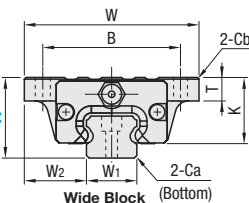
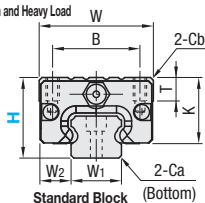
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**Lubrication Units MX**  
Provides long term maintenance-free operation.

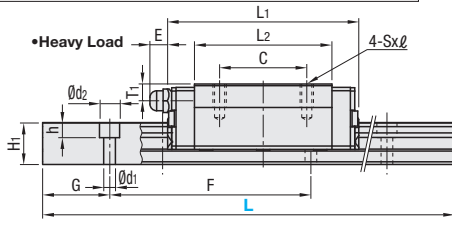
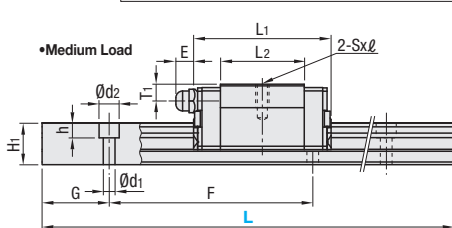
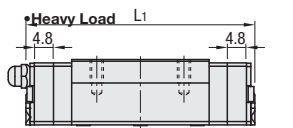
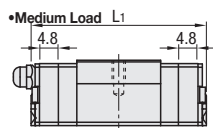
Type		MX (Lubrication Units)	L Dimension	Number of Blocks	 Material  Hardness	
Medium Load	Heavy Load					
Standard Block	SSVR	SSXR	Blank: None -MX: Provided	Selectable	1	Stainless Steel 56HRC~
	SSV2R	SSX2R		2		
	SSVRL	SSXRL		1		
	SSV2RL	SSX2RL		2		
Wide Block	SSVW	SSXW	Selectable	1		
	SSV2W	SSX2W	2			
	SSVWL	SSXWL	1			
	SSV2WL	SSX2WL	2			

Heat Resistant Temperature: -20 ~ 80°C

Medium and Heavy Load



■ Dimension Diagram of Blocks with MX (Lubrication Units)



⚠ For L Configurable, G dimensions differ from those shown in the table below. For details, see P531.

### Precautions for Use

- ⚠ Blocks are equipped with retainers to prevent balls from falling off. For how to handle the blocks, see P525.
- ⚠ Radial clearances and accuracies are not guaranteed if the blocks and rails are interchanged from the original set combinations.
- ⚠ Straight grooves are provided on datum planes. Be sure to match the datum lines when using.
- ⚠ Rails cannot be connected end to end.
- ⚠ The accuracy of Linear Guides is guaranteed after mounting the rail (after fastening screws on the rail and pushing it onto the datum plane).
- ⚠ Minor bending of the rail will be adjusted after being mounted and will not affect the performance.

### Others

- Filled with Lithium soap based grease (Alvania Grease S2 by Showa Shell Sekiyu K.K.).
- Grease Fittings: Straight Type for H24 and Angled Type for H28 and H33.
- Grease Fitting is screw-in type, and thus, can be repositioned.
- For Operating Life Calculation, see P527.
- For operating life calculations, use our free calculation software from [http://download.misumi.jp/mol/fa\\_soft.html](http://download.misumi.jp/mol/fa_soft.html).

Part Number				H	L	Block Dimension												Guide Rail Dimension									
Type		MX	W			L <sub>1</sub>		B	C	Sxℓ	L <sub>2</sub>	K	T	Cb	Grease Fitting		H <sub>1</sub>	W <sub>1</sub>	W <sub>2</sub>	Ca	Counterbored Hole	F	G				
				Standard	MX									Mounting Hole	E	T <sub>1</sub>											
Medium Load	(1 block)	(2 blocks)	Blank: None -MX: Provided	24	100~700 (160)	34 (52)	41	50.6	26 (41)	-	M4x7 (4.5)	25	20	7 (7)	0.85	M5xP0.8	6	5	12.5	15	9.5 (18.5)	0.5	3.5x6x4.5	60	20		
	SSVR	SSV2R		28	160~700 (220)	42 (59)	47	56.6	32 (49)	-	M5x8 (5.5)	27.6	22.5	7.5 (9)	1	M6xP0.75	13	6	15.5	20	11 (19.5)	0.6	6x9.5x8.5	60	20		
	SSVRL	SSV2RL		33	160~700 (220)	48 (73)	59	68.6	35 (60)	-	M6x9 (7)	37	26.5	8 (10)	1	M6xP0.75	13	6.8	18	23	12.5 (25)	0.8	7x11x9	60	20		
	SSVW	SSV2W		24	100~700 (220)	34 (52)	57	66.6	26 (41)	26	M4x7 (4.5)	41	20	7 (7)	0.5	M5xP0.8	6	5	12.5	15	9.5 (18.5)	0.5	3.5x6x4.5	60	20		
Heavy Load	(1 block)	(2 blocks)		28	160~700 (220)	42 (59)	67	76.6	32 (49)	32	M5x8 (5.5)	47.6	22.5	7.5 (9)	1	M6xP0.75	13	6	15.5	20	11 (19.5)	0.6	6x9.5x8.5	60	20		
	SSXR	SSX2R		33	160~700 (280)	48 (73)	83	92.6	35 (60)	35	M6x9 (7)	61	26.5	8 (10)	1	M6xP0.75	13	6.8	18	23	12.5 (25)	0.8	7x11x9	60	20		
	SSXRL	SSX2RL																									
	SSXW	SSX2W																									
	SSXWL	SSX2WL																									

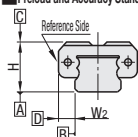
⚠ L Dimension: Dimensions in ( ) are for 2-Block Type.

⚠ Sxℓ Dimensions: Dimensions in ( ) are for Wide Block Type.

kgf=Nx0.101972

Block	H	Basic Load Rating/Allowable Static Moment				Mass	
		C (Dynamic) kN	Co (Static) kN	MA, Mb N · m	Mc N · m	Block kg	Guide Rail kg/m
Medium Load	24	5.0	8.23	33	57	0.15	1.5
	28	7.2	12.1	58	135	0.20	2.4
	33	11.7	19.6	109	225	0.30	3.4
	24	8.6	14.2	69	98	0.20	1.5
Heavy Load	28	12.5	21.3	155	232	0.30	2.4
	33	20.2	34.5	275	393	0.45	3.4

### Preload and Accuracy Standards

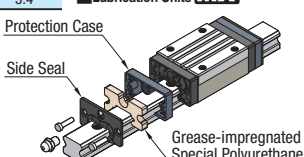


### Normal Clearance Type

Radial Clearance (μm)
H24 -4~+2
H28 -5~+2
H33 -6~+3

Dimensional Accuracy (μm)		Standard Grade
Height H Tolerance		
H24, H28	±100	
Pair Variation of Height H	20	
Width W2 Tolerance		±100
H24, H28	20	
H33	30	
Pair Variation of Width W2		
Running Parallelism of Plane C against Plane A	See P525	
Running Parallelism of Plane D against Plane B		

### Lubrication Units MX



• Advantages of Lubrication Unit MX: Provides long term maintenance-free operation. Reduces maintenance cost. Most suitable where the design does not allow lubrication. For details, see P530.



Ordering Example

Part Number - L

SSXR28 - 575  
SSXR-MX28 - 575  
SSXR28 - 575  
SSXR28L - 575  
SSXR28G - 575

(With Lubrication Units)  
(LTBC Plating)  
(L Type Greased)  
(G Type Greased)

LTBC Plating and various Grease types available as alternative (Except Blocks with Lubrication Units) P532



Alterations

Part Number - L - (RLC, LLC...etc.)

SSXR33 - 520 - RLC

Alterations	Code	Spec.
Rail End Cut LLC Rail is cut with the product ID facing out (datum on other side).	Left End Cut LLC	Cuts rail ends. Ordering Code LLC H L Cut N 24 10 10 28 33
		⚠ Applicable to Selectable Type only. ⚠ Overall length will be shorter by cutting. ⚠ Not applicable to Heavy Load Type with H dimension 24 of L dimension 100.
	Right End Cut RLC	
Parallel Use of 2 Rails	WC	Pair variation of Height H between 2 rails is set within 20μm. Two rails are shipped as a pair. ⚠ Specify the actual rail quantity (even number) to order, not "pairs". ⚠ Not applicable to High Grade Type. ⚠ Not applicable to low temperature chrome plated products.
3-Block Specifications	B3	Add 2 blocks to 1-Block product to ship as 3-Block separate item. Selection Example: SSVR24-400-B3
4-Block Specifications	B4	Add 3 blocks to 1-Block product to ship as 4-Block separate item. Selection Example: SSVR24-400-B4

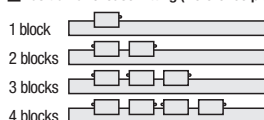
### Medium Load

H	B3:1Code				B4:1Code			
	Standard	Wide	Standard MX	Wide MX	Standard	Wide	Standard MX	Wide MX
24								
28								
33								

### Heavy Load

H	B3:1Code				B4:1Code			
	Standard	Wide	Standard MX	Wide MX	Standard	Wide	Standard MX	Wide MX
24								
28								
33								

### Position of Grease Fitting (Reference plane on the front side)



### Selectable Shortest Rail Length for B3/B4

H	Medium Load		Heavy Load	
	B3 (3-Block)	B4 (4-Block)	B3 (3-Block)	B4 (4-Block)
24	280	340	340	400
28	340	400	400	460
33	340	400	400	520

### L Dimension Configurable Type (1mm Increment)

H	Unit Price							
	Medium Load				Heavy Load			
	1 block	2 blocks	1 block	2 blocks	1 block	2 blocks	1 block	2 blocks
24	SSVRL	SSVWL	SSV2RL	SSV2WL	SSXR	SSXW	SSX2R	SSX2WL
28								
33								

⚠ For calculation of L Dimension Configurable Type (1mm Increment), add the above amount to the unit price of the Selectable Type longer than, and closest to this L Dimension Configurable Type.

### MX (Lubrication Unit) Unit Price

H	Unit Price	
	1 block	2 blocks
24		
28		
33		

⚠ Price of Guide Rails with MX (Lubrication Unit) = Linear Guide Unit Price + MX Unit Price