

Linear Guides for Medium Load

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.

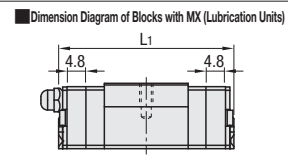
Similar Products Comparison Points | Select this product for high precision positioning, heavy load, and high frequency drive application.

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

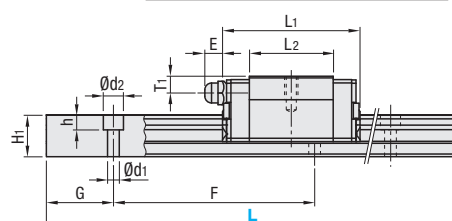
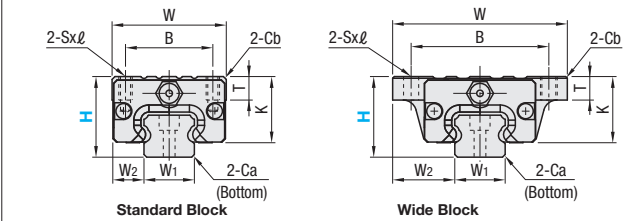


Block Type	Type				MX (Lubrication Units)	L Dimension	Material Hardness
	1 block		2 blocks				
Standard	Standard Grade	High Grade	Standard Grade	High Grade	Blank: None -MX: Provided	Selectable	Carbon Steel 58HRC~
	Through-hole	SVR SVRL	SVRJ SVRLJ	SV2R SV2RL			
Wide Block	SVW	-	SV2W	-		Selectable	
	SVWL	-	SV2WL	-		Configurable	
	SVWT	-	SV2WT	-		Selectable	
Tap/Hole	SVWTL	-	SV2WTL	-		Configurable	

Heat Resistant Temperature: -20 ~ 80°C



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



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

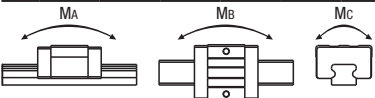
- Precautions for Use**
 - Blocks are equipped with retainers to prevent balls from falling off. For how to handle the blocks, see P525.
 - Radial clearances and accuracies are not guaranteed if the blocks and rails are interchanged from the original set combinations.
 - Straight grooves are provided 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.

Block Type	Part Number	MX	H	L	Block Dimension											Guide Rail Dimension											
					W	L1		B	Sxℓ	L2	K	T	Cb	Grease Fitting			H1	W1	W2	Ca	Counterbore Hole d1xd2xd3	F	G				
						Standard	MX							Mounting Hole	E	T1											
Standard Block	(1 block)	Blank: None -MX: Provided	24	100-1480 (160)	34	41	50.6	26	M4x7	25	20	7	0.85	M5xP0.8	6	5	12.5	15	9.5	0.5	3.5x6x4.5	60	20				
	(2 blocks)																							SVR	SV2R	SVRL	SV2RL
																								SVRJ	SV2RJ	SVRLJ	SV2RLJ
Wide Block	(1 block)	Blank: None -MX: Provided	24	100-1480 (160)	52	41	50.6	41	4.5 (M5)	25	20	7	0.5	M5xP0.8	6	5	12.5	15	18.5	0.5	3.5x6x4.5	60	20				
	(2 blocks)																							SVW	SV2W	SVWL	SV2WL
																								SVWT	SV2WT	SVWTL	SV2WTL
			28	160-1960 (220)	42	47	56.6	32	M5x8	27.6	22.5	7.5	1	M6xP0.75	13	6	15.5	20	11	0.6	6x9.5x8.5	60	20				
			33	160-1960 (220)	48	59	68.6	35	M6x9	37	26.5	8	1	M6xP0.75	13	6.8	18	23	12.5	0.8	7x11x9	60	20				
			24	100-1480 (160)	52	41	50.6	41	4.5 (M5)	25	20	7	0.5	M5xP0.8	6	5	12.5	15	18.5	0.5	3.5x6x4.5	60	20				
			28	160-1960 (220)	59	47	56.6	49	5.5 (M6)	27.6	22.5	9	1	M6xP0.75	13	6	15.5	20	19.5	0.6	6x9.5x8.5	60	20				
			33	160-1960 (220)	73	59	68.6	60	7 (M8)	37	26.5	10	1	M6xP0.75	13	6.8	18	23	25	0.8	7x11x9	60	20				

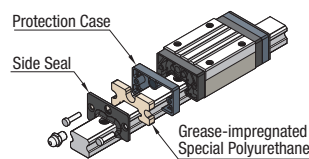
L Dimension: Dimensions in () are for 2-Block Type.
 Sxℓ Dimensions: Dimensions in () are for Wide Block Tapped Hole.

kgf=Nx0.101972

H	Basic Load Rating		Allowable Static Moment		Mass		
	C (Dynamic) kN	Co (Static) kN	Ma, Mb N · m	Mc N · m	Block kg	Standard	Wide
24	5.0	8.23	33	57	0.15	0.20	1.5
28	7.2	12.1	58	135	0.20	0.25	2.4
33	11.7	19.6	109	225	0.30	0.40	3.4

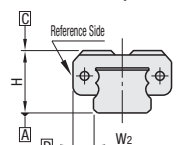


Lubrication Units **MX**



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.

Preload and Accuracy Standards



Normal Clearance Type

Radial Clearance (µm)	Dimensional Accuracy (µm)	Standard Grade	High Grade
H24	-4~+2	Height H Tolerance ±100	±40
H28	-5~+2	Pair Variation of Height H	20
H33	-6~+3	Width W2 Tolerance ±100	±20
		Pair Variation of Width W2	H24, 28: 20 H33: 30
		Running Parallelism of Plane C against Plane A	15
		Running Parallelism of Plane D against Plane B	

See P525

*High Grade Types are not available.
 Low Temperature Black Chrome Plating products are available in an L dimension of up to 1000.

H	Selectable L	Unit Price					
		1 block			2 blocks		
		SVR	SVW	SVWT	SV2R	SV2W	SV2WT
24	100						
	160						
	220						
	280						
	340						
	400						
	460						
	520						
	580						
	640						
	700						
	760						
	820						
	880						
940							
1000							
*1120							
*1240							
*1360							
*1480							
28	160						
	220						
	280						
	340						
	400						
	460						
	520						
	580						
	640						
	700						
	760						
	820						
	880						
	940						
1000							
*1120							
*1240							
*1360							
*1480							
*1600							
*1720							
*1840							
*1960							
33	160						
	220						
	280						
	340						
	400						
	460						
	520						
	580						
	640						
	700						
	760						
	820						
	880						
	940						
1000							
*1120							
*1240							
*1360							
*1480							
*1600							
*1720							
*1840							
*1960							

L Dimension Configurable Type (1mm Increment)

H	Unit Price					
	1 block			2 blocks		
	SVRL	SVWL	SVWTL	SV2RL	SV2WL	SV2WTL
24						
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



Part Number	L
SVR28	880
SVR-MX	880 (With Lubrication Units)
RVR	880 (Low Temperature Black Chrome Plating)
SVR28L	880 (L Type Greased)
SVR28G	880 (G Type Greased)

Low Temperature Black Chrome Plating and various Grease types available as alternative. (Except products with Lubrication Units) P532



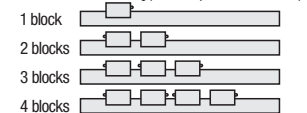
Part Number	L	(TMS, TMC-etc.)
SVR28	880	TMC

Alterations	Code	Spec.
TMS: Tapped Hole Machining + 2 Stopper Plates TMC: Tapped Hole Machining only	TMS TMC	Adds tapped holes on both rail ends to avoid block fall-off. H24 H28, 33 M3xP0.5 Depth 5 Tapped Hole For Stopper Plates Details, see P.612.
LLC RLC	Left End Cut Right End Cut	Cuts rail ends. Applicable to Selectable Type only. Overall length will be shorter by cutting. Not applicable to H dimension 24 of L dimension 100.
Parallel Use of 2 Rails	WC	For standard grade, 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: SVR24-400-B3 Not applicable to High Grade Type.
4-Block Specifications	B4	Add 3 blocks to 1-Block product to ship as 4-Block separate item. Selection Example: SVR24-400-B4 Not applicable to High Grade Type.

Additional Block Price

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	B3 (3-Block)	B4 (4-Block)
24	280	340
28	340	400
33	340	400

Options for Linear Guide

Linear Guide Clamps	Rail Height Adjusting Blocks
P608	P609, 610
Block Derailment Prevention Parts / Dust Resistant Parts	Block / Rail Fixing Parts
Stopper Bolts	Linear Guide Rail Push Plates
P612	P612
Block Stopper Plates	Linear Locks
P612	P613
Rail Mounting Hole Caps	Linear Guide Lock Units
P612	P614