

Linear Guides for Medium Load

Normal Clearance

= For customers using industry standard products =
 frame-surrounded products (Standard Block Type) are compliant with the industry standard specifications. Select the block from this spec.

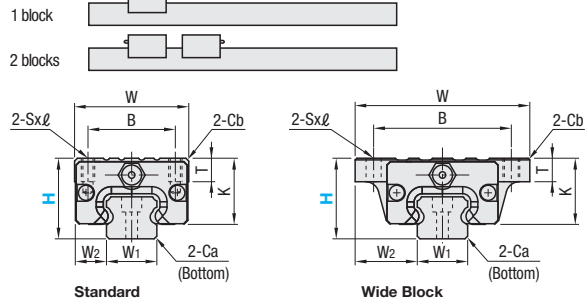
Industry Standard



RoHS

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

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



For L Dimension Configurable Type, G dimensions differ from those shown in the table below. For details, see P.475.

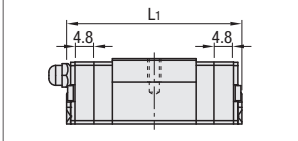
Lubrication Units MX

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
	Wide Block	SVR	SVRJ	SV2R			
Through Hole	SVRL	SVRLJ	SV2RL	SV2RLJ			
Taper Hole	SVW	-	SV2W	-	Configurable	Selectable	
	SVWL	-	SV2WL	-			
SVWT	-	SV2WT	-	Configurable	Selectable		
SVWTL	-	SV2WTL	-				

Heat Resistant Temperature: -20~80°C

Dimension Diagram of Blocks with MX (Lubrication Units)



Precautions for Use

- Blocks are equipped with retainers (wire) to prevent balls from derailing. For blocks P.469
- 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.
- Running parallelism is the value measured after the rail is mounted (it is not the value measured before the rails are fastened with screws.).

Others

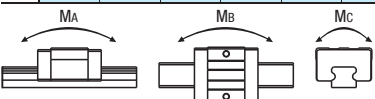
- Filled with Lithium soap based grease (Alvania Grease S2 by Showa Shell Sekiyu K.K).
- Grease Fittings: Straight Type for H24 and Angled Type for H28 and H33.
- Grease Fitting is screw-in type, and thus, can be repositioned.
- For Operating Life Calculation P.471

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	Counterbored Hole d1xd2xh	F	G		
						Mounting Hole	E							T1											
Standard	(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)			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		
				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		
				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		
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)			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		
				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		
				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		

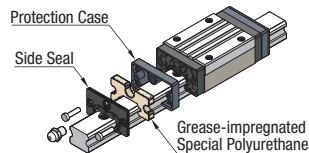
L Dimension: Dimensions in () are for 2-Block Type.
 Sxℓ Dimensions: Dimensions in () are for Wide Block Type Tapped Hole.

kgf=Nx0.101972

H	Basic Load Rating		Allowable Static Moment			Mass		
	C (Dynamic) kN	Co (Static) kN	MA, N-m	MB, N-m	MC, N-m	Block kg	Wide kg	Guide Rail kg/m
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	

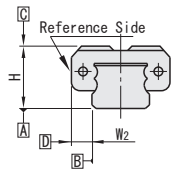


Lubrication Units MX



Blocks with Lubrication Units MX provide long term maintenance-free operation. Reduces maintenance cost. Most suitable where the design does not allow lubrication. For details see P.466

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	
		Running Parallelism of Plane D against Plane B	

See P.469

Price Configure Online

* marked sizes are not available for High Grade Type.

H	L	Unit Price					
		1 block			2 blocks		
24	100	SVR	SVW	SVWT	SV2R	SV2W	SV2WT
	160						
	220						
	280						
	340						
	400						
	460						
	520						
	580						
	640						
	700						
	760						
	820						
	880						
	940						
	1000						
28	*1120						
	*1240						
	*1360						
	*1480						
	160						
	220						
	280						
	340						
	400						
	460						
	520						
	580						
	640						
	700						
	760						
	820						
33	880						
	940						
	1000						
	1120						
	1240						
	*1360						
	*1480						
	*1600						
	*1720						
	*1840						
	*1960						
	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	L	Unit Price					
		1 block			2 blocks		
24		SVRL	SVWL	SVWTL	SV2RL	SV2WL	SV2WTL
28							
33							

MX (Lubrication Unit) Unit Price

H	Unit Price	
	1 block	2 blocks
24		
28		
33		

Ordering Example: Part Number - L
 SVR28 - 880 (With Lubrication Units)
 SVR-MX28 - 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 Blocks with Lubrication Units). For Days to Ship, Price and Performance see P.475

Days to Ship Configure Online

Alterations: Part Number - L - (TMS, TMC --- etc.)
 SVR28 - 880 - TMC
 Configure Online

Alterations	Code	Spec.	Price Adder
TMS: Tapped Hole Machining+2 Stopper Plates	TMS TMC	Adds tapped holes on both rail ends to avoid block fall-off.	TMS H 24 28 33
TMC: Tapped Hole Machining only		H24 H28, 33	TMC H 24 28 33
Block Stopper Plate	LLC	M3xP0.5 Depth 5 Tapped Hole For Stopper Plates Details, see P.542.	
Rail End Cut	RLC	Cuts rail ends.	
Left End Cut	LLC	Ordering Code: LLC	H L Cut N 24 10 10 28 10 10 33 10 10
Right End Cut	RLC	Rail is cut with the product ID facing out (datum on other side).	
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 (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	
4-Block Specifications	B4	Add 3 blocks to 1-block product to ship as 4-block separate item. Selection Example: SVR24-400-B4	

H	B3: Price Adder				B4: Price Adder			
	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		
	H	B3 (3-block)	B4 (4-block)
3 blocks	24	280	340
4 blocks	28	340	400
	33	340	400

Options for Linear Guide

Linear Guide Clamps	Rail Height Adjusting Blocks
P538	P539, 540
Block Derailment Prevention Parts / Cover Caps	Block / Rail Fixing Parts
<ul style="list-style-type: none"> Stopper Bolts P542 Block Stopper Plates P542 Rail Mounting Hole Caps P542 	<ul style="list-style-type: none"> Rail Push Plates P542 Linear Locks P543 Linear Guide Lock Units P544