

# Linear Guides for Medium Load - Dust Resistant

## With Double Seals / Metal Scrapers, Normal Clearance

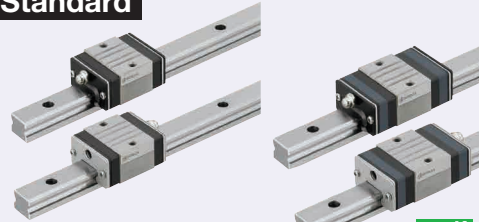
= For customers using industry standard products =

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

Features: Dust Resistant Heavy Load Linear Guide usable where dust and machining chips exist.

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

### Industry Standard



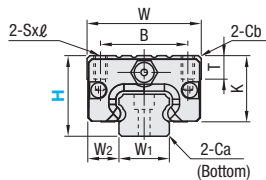
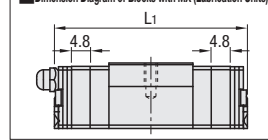
RoHS10

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

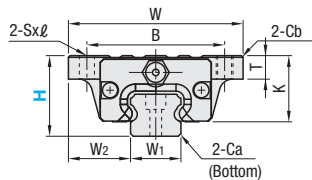
Type	Type		MX (Lubrication Units)	L Dimension	Number of Blocks	Material	Hardness
	Double-Sealed	With Metal Scrapers					
Standard Block	SVRD	SVRK	Blank: None -MX: Provided	Selectable	1	Carbon Steel	58HRC~
	SV2RD	SV2RK			2		
	SVRDL	SVRKL		1			
	SV2RDL	SV2RKL		2			
Wide Block	SVWD	SVWK		Selectable	1		
	SV2WD	SV2WK			2		
	SVWDL	SVWKL		1			
	SV2WDL	SV2WKL		2			

Heat Resistant Temperature: -20 ~ 80°C

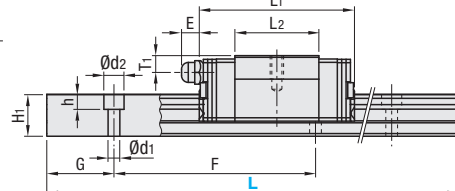
Dimension Diagram of Blocks with MX (Lubrication Units)



Standard Block



Wide Block



For L Configurable, G dimensions differ from those shown in the table below. For details, see P. 531.

### Precautions for Use

- Blocks are equipped with retainers to prevent balls from falling off. For how to handle the blocks, see P. 525.
- 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

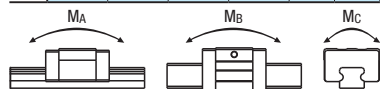
- Filled with Lithium soap based grease (Alvania Grease S2 by Showa Shell Sekiyou K.K.).
- Grease Fittings: Straight Type for H24 and Angled Type for H28 and H33.
- Grease Fitting is screw-in type, and thus, can be repositioned.
- For Operating Life Calculation, see P. 527.
- For operating life calculations, use our free calculation software from [http://download.misumi.jp/mol/fa\\_soft.html](http://download.misumi.jp/mol/fa_soft.html).

Type	MX	H	L	Block Dimension										Guide Rail Dimension										
				W	Standard	MX	B	Sxℓ	L2	K	T	Cb	Grease Fitting Mounting Hole	E	T1	H1	W1	W2	Ca	Counterbored Hole d1xd2xh	F	G		
Standard Block	(1 block) SVRD SVRK SVRDL SVRKL	(2 blocks) SV2RD SV2RK SV2RDL SV2RKL	Blank: None -MX: Provided	24	160~1480	34	46 (42.6)	55.6 (52.2)	26	M4x7	25	20	7	0.85	M5xP0.8	6	5	12.5	15	9.5	0.5	3.5x6x4.5	60	20
				28	220~1960	42	53.4 (49)	63 (58.6)	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	220~1960	48	66 (61.4)	75.6 (71)	35	M6x9	37	26.5	8	1	M6xP0.75	13	6.8	18	23	12.5	0.8	7x11x9	60	20
Wide Block	(1 block) SVWD SVWK SVWDL SVWKL	(2 blocks) SV2WD SV2WK SV2WDL SV2WKL	Blank: None -MX: Provided	24	160~1480	52	46 (42.6)	55.6 (52.2)	41	4.5	25	20	7	0.5	M5xP0.8	6	5	12.5	15	18.5	0.5	3.5x6x4.5	60	20
				28	220~1960	59	53.4 (49)	63 (58.6)	49	5.5	27.6	22.5	9	1	M6xP0.75	13	6	15.5	20	19.5	0.6	6x9.5x8.5	60	20
				33	220~1960	67	66 (61.4)	75.6 (71)	60	7	37	26.5	10	1	M6xP0.75	13	6.8	18	23	25	0.8	7x11x9	60	20

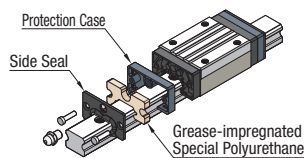
Dimensions in ( ) are for Metal Scraper Type.

kgf=Nx0.101972

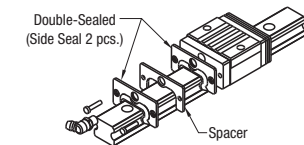
H	Basic Load Rating		Allowable Static Moment				Mass			
	C (Dynamic) kN	Co (Static) kN	MA, N	MB, N	MC, N	Double-Sealed Standard	With Metal Scrapers Standard	With Metal Scrapers Wide	Guide Rail kg/m	
24	5.0	8.23	33	57	225	0.16	0.21	0.16	0.21	1.5
28	7.2	12.1	58	135	225	0.22	0.27	0.22	0.27	2.4
33	11.7	19.6	109	225	225	0.33	0.43	0.34	0.44	3.4



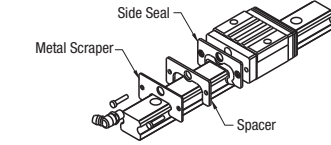
### Lubrication Units MX



### Double-Sealed



### With Metal Scrapers



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 P. 530.

The double seal scheme with two layers of side seals enhances the sealing effect and prevents intrusion of foreign substances into the block. Can be used where dust and machining chips exist. Sliding resistance of Double-Sealed Type is higher than that of Standard Type.

Larger foreign substances adhered to the rail can be removed by attaching metal scrapers on the external side of the side seals. Can be used in areas with high temperature dusts such as weld spatter.

H	Selectable L	Unit Price							
		1 block		2 blocks					
		SVRD	SVRK	SVWD	SVWK	SV2RD	SV2RK	SV2WD	SV2WK
160	220								
280	340								
400	460								
520	580								
640	700								
760	820								
880	940								
1000	1120								
1240	1360								
1480	1600								
220	280								
340	400								
460	520								
580	640								
700	760								
820	880								
940	1000								
1120	1240								
1360	1480								
1600	1720								
1840	1960								
220	280								
340	400								
460	520								
580	640								
700	760								
820	880								
940	1000								
1120	1240								
1360	1480								
1600	1720								
1840	1960								



Ordering Example: Part Number - L -  
 SVRD28 - 880 (With Lubrication Units)  
 SVRD-MX28 - 880 (L Type Greased)  
 SVRD28L - 880 (L Type Greased)  
 SVRD28G - 880 (G Type Greased)  
 Alternative grease types available (Except Blocks with Lubrication Units)  
 P. 532



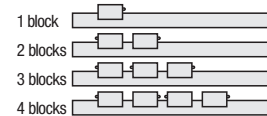
Alterations: Part Number - L - (TMS, TMC, RLC, LLC...etc.)  
 SVRD28 - 880 - TMC

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.621.
Rail End Cut	Left End Cut LLC Right End Cut RLC	Cuts rail ends. Ordering Code LLC H L Cut N 24 10 10 28 10 10 33 10 10 Applicable to Selectable Type only. Overall length will be shorter by cutting.
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: SVRD24-400-B3
4-Block Specifications	B4	Add 3 blocks to 1-Block product to ship as 4-Block separate item. Selection Example: SVRD24-400-B4

### Additional Block Price

H	B3: 1Code		B4: 1Code	
	Double-Sealed Standard	With Metal Scrapers Wide	Double-Sealed Standard	With Metal Scrapers Wide
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

### 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

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

H	Unit Price							
	1 block		2 blocks					
	SVRDL	SVRKL	SVWDL	SVWKL	SV2RDL	SV2RKL	SV2WDL	SV2WKL
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.