

# Roller Slide Rails

Load Rating: 80N, 150N/pc

# High-Precision Simplified Slide Rails - Preloaded

Load Rating: 80N/pc

Stainless Steel, With Ball Bearing, With Lock

■ **Features:** No.25 is maintenance-free and low-noise. No.40 enables relatively smooth sliding with little clearance.

Set	Type	Part Name	Material	Surface Treatment
RSR25 (Slider 1 pc.)	RSRR25	① Rail	Aluminum Alloy	Clear Anodize
		② Slider Plate	SUS304	-
		③ Roller	Polyacetal	-
RSR40 (Slider 1 pc.)	RSRR40 RSRT40 (Connector Rail)	① Rail	SPCC	Trivalent Chromate
		② Slider Plate	SPCC	Trivalent Chromate
		③ Roller	SMF5040	-

**Set RSR25 (Slider 1 pc.)**  
**Rail only RSRR25**

**Set RSR40 (Slider 1 pc.)**  
**Rail only RSRR40**

**Connector Rail RSRT40**

⚠ With connecting brackets and screws  
 ⚠ The stopper is screw mounted and can be removed.

Part Number	L Selection	Effective Stroke Slider 1 pc.	Number of Mounting Holes M	ℓ	Rail Mass (g)	Unit Price	
						RSR25	RSRR25
160	74	2	40	32			
240	154	3	40	48			
320	234	4	40	64			
400	314	5	40	80			
480	394	6	40	96			
560	474	7	40	112			
640	554	8	40	128			
720	634	9	40	144			
800	714	10	40	160			
880	794	11	40	176			
960	874	12	40	192			
1040	954	13	40	208			
1200	1114	15	40	240			

\* Effective stroke is the dimension value with a margin of approx. 3mm set from contacts of sliders and stoppers to avoid conflict between them.

Part Number - L  
 RSR25 - 640  
 RSRR40 - 800

Alteration Part Number - L - (S)  
 RSR25 - 640 - S5

Alterations	Code	Spec.						
Additional Slider	S	Sliders are added. Please specify additional slider quantity after S. <b>Selection Example</b> <table border="1"> <tr> <th>Additional Slider Qty.</th> <th>Ordering Code</th> <th>Slider Total Qty.</th> </tr> <tr> <td>5</td> <td>RSR25-640-S5</td> <td>6</td> </tr> </table>	Additional Slider Qty.	Ordering Code	Slider Total Qty.	5	RSR25-640-S5	6
Additional Slider Qty.	Ordering Code	Slider Total Qty.						
5	RSR25-640-S5	6						

⚠ Added sliders are the same size as that of the original part number model.  
 ⚠ When ordering 50 or more identical sliders at a time, please request a quotation.  
 ⚠ Not applicable when ordering rails only.

Part Number	L Selection	Effective Stroke Slider 1 pc.	Number of Mounting Holes M	ℓ	Rail Mass (g)	Unit Price	
						RSR40	RSRR40
300	194	3	50	400			
350	244	4	25	440			
400	294	4	50	480			
450	344	5	25	520			
500	394	5	50	560			
550	444	6	25	590			
600	494	6	50	630			
650	544	7	25	670			
700	594	7	50	700			
750	644	8	25	740			
800	694	8	50	770			
900	794	9	50	850			
1000	894	10	50	920			
1200	1094	12	50	1070			
1500	1394	15	50	1280			
1800	1694	18	50	1490			

Part Number	L	Number of Mounting Holes M	ℓ	Rail Mass (g)	Unit Price
Connector Rail RSRT40	800	8	50	600	

■ **Features**

Newly adopted Roller Bearings (grease filled) allow low-noise motion. Load-induced elastic deformation of Ball Bearings may increase the clearance.

■ **Load Rating**

Type No.	25				40			
Load Direction	Pa	Pb	Pc	Pd	Pa	Pb	Pc	Pd
Static Load Rating	120N	240N	100N		250N	500N	165N	
Dynamic Load Rating	40N	80N	30N		75N	150N	50N	
Clearance (mm)	0.1 or less		0.15 or less		0			

<Cautions>When using in wall mounting arrangements, please properly place workpiece so that no moment load is applied on the slides that may cause damages.

■ **Features:** Corrosion resistant since made of stainless steel. Applied preload stops gap between rails and bearings, and enables smooth driving without vibration.

Type Set	Part Name	Material	Surface Treatment
PLRH (Slider 1 pc.) PLR2H (Slider 2 pcs.)	① Rail	SUS430	-
	② Slider Plate	SECC	Electroless Nickel Plating
	③ Bearing	SUS40C Equivalent	-
PLRC (Slider 1 pc.) PLR2C (Slider 2 pcs.)	④ M3x6 Hex Socket Head Cap Screw	SUSXM7	-
	⑤ Fall-Off Prevention Stopper	Polyacetal	-
	⑥ Lock (Tip: Polyacetal)	SUS303	-

⚠ Preload is adjusted with a rail and a slider in a set.  
 ⚠ Rails and sliders are non-interchangeable. ⚠ Slider and rail are not sold separately; sold as a pair only.

Allowable Temperature: -10 - 60°C

Part Number	L Selection	Number of Mounting Holes N	Effective Stroke*	Unit Price				
				PLRH25	PLRC25	PLR2H25	PLR2C25	PLR2HC25
Slider Standard Type PLRH (Slider 1 pc.) PLR2H (Slider 2 pcs.)	160	2	88					
	240	3	168					
	320	4	248					
	400	5	328					
	480	6	408					
	560	7	488					
Slider with Lock Type PLRC (Slider 1 pc.) PLR2C (Slider 2 pcs.)	640	8	568					
	720	9	648					
	800	10	728					
	880	11	808					
Standard Slider 1 pc. + With Lock 1 pc. PLR2HC (Slider 2 pcs.)	960	12	888					
	1040	13	968					
	1200	15	1128					

\* Effective stroke is the dimension value with a margin of approx. 3mm set from contacts of sliders and stoppers to avoid conflict between them.  
 ⚠ Selecting Slider 2 pcs. Type reduces the effective stroke by the slider length.

Ordering Example Part Number - L  
 PLRH25 - 640  
 PLRC25 - 640

■ **Load Rating**

No.	25			
Load Direction	Pa	Pb	Pc	Pd
Static Load Rating	200N	100N	100N	50N
Dynamic Load Rating	80N	30N	20N	10N
Clearance (mm)	0			

\* Values above are for one slider.  
 \* Allowable Moment Load (N · cm) = Load Rating x 30% (Reference Value)  
 \* Clearance values are at the time of shipping.  
 \* Load-induced elastic deformation of Ball Bearings may increase preload to 0 or more. For load and displacement information, please access our web site.

■ **Slider with Lock** Sliders can be secured to desired position by tightening Clamp Screws. Retaining Force (Reference Value): 1.8kg. Tightening Torque: 0.2N · m  
 \* Note in the event that tightening torque exceeds 0.2N · m, resin screw tip can deform.

■ **Cautions**

- Please properly place workpiece so that no moment load is applied on the slides used in wall-hanging that may cause damages.
- To use linear rails in vertical or inclined states, provide them with external structures to prevent blocks from falling off.
- Maintenance: Rails are greased before shipment. Please lubricate them with urea-based grease meeting usage conditions, as needed.
- When at a low speed and for low precision applications, this can be used with no grease applied.

■ **Structure**

<Cross Section View>  
 <Front View>  
 High-Precision Miniature Ball Bearing