MINI GUIDE RAIL MRS-30



- No grease or oil application required, thanks to the use of special polyethylene resin with excellent sliding properties.
- Special polyethylene resin with excellent chemical resistance.
- Uses flame retardant material rated UL94HB.
- Preload type carriage with minimal is also available.

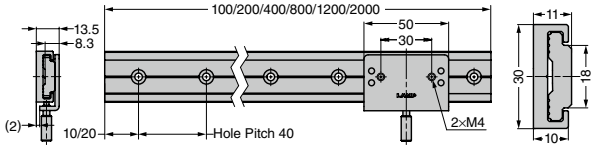
[Recommended Mounting Bolts]

- (Rail) M4 hexagon socket button head screws

[Remarks]

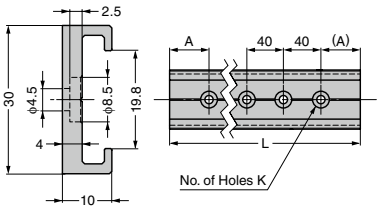
- When combined with a clamp, use under moment load is not possible.
- The rail mounting holes and ends are plain.
- The preload type carriage does not fix the slider. Do not use the MINI GUIDE RAIL in a vertical or diagonal position, as it will lead to danger when the slider falls.

Combination Dimensions for Guide Rail, Carriage, & Clamp



[MINI GUIDE RAIL MRS-30]





RoHS	CAD	Item Code	Item Name	L	A	No. of Holes K	Material	Finish	Weight (g)
G	3D	190-112-860	MRS30-100	100	10	3	Aluminium Alloy	Silver Anodised	39
G	3D	190-112-861	MRS30-200	200	20	5			79
G	3D	190-112-862	MRS30-400	400		10			159
G	3D	190-112-863	MRS30-800	800		20			312
G	3D	190-046-492	MRS30-1200	1200		30			468
G	3D	190-112-864	MRS30-2000	2000		50			790

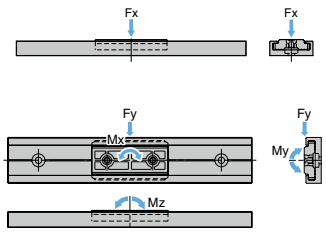
[Operating Dynamic Load Guidelines]

- Max. Static Load=Static Rated Load x Static Safety Coefficient
- Operating Dynamic Load=max. Static Load x Dynamic Safety Coefficient
- Max. Moment Load = Static Rated Moment Load x Static Safety Coefficient
- Operating Moment Load = Max. Moment Load x Dynamic Safety Coefficient

Usage Conditions	Static Safety Coefficient	Dynamic Safety Coefficient
Low travel frequency and loose travel conditions	0.4 ~ 0.5	0.9 ~ 1.0
High travel frequency and demand for smooth running performance	0.3 ~ 0.4	0.6 ~ 0.8
High travel frequency with vibration/impact	0.2 ~ 0.3	0.3 ~ 0.5

Item Name	Horizontal static rated load Fx		Vertical static rated load Fy	
	N	kgf	N	kgf
MR-15CS	100	10.2	30	3.0
MR-20CS	300	30.6	175	17.8
MR-30CS	520	53.0	305	31.1
MR-40CS	700	71.4	490	50.0

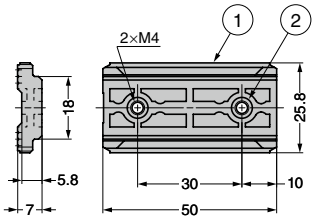
Item Name	Vertical static rated moment load Mx		Horizontal static rated moment load My		Horizontal static rated moment load Mz	
	N·m	kgf·cm	N·m	kgf·cm	N·m	kgf·cm
MR-15CS	-	-	-	-	-	-
MR-20CS	3	30.6	1.5	15.3	1.5	15.3
MR-30CS	5	51.0	2.5	25.5	2.5	25.5
MR-40CS	7	71.4	3.5	35.7	3.5	35.7



The above formulae are guidelines.
Confirm with the actual product for use.
Use MR-15CS so that moment load is not applied.

[MINI GUIDE BLOCK MR-30CS]





- A guide block without preload.

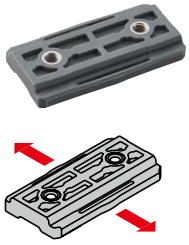
[Specifications]
- Operating temperature: 0˚ C ~ 40˚ C

[Remarks]
- The carriage unit working force changes depending on the operating temperature.

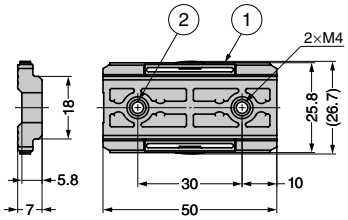
RoHS	CAD	Item Code	Item Name	Weight (g)
G'	3D	190-111-489	MR-30CS	7

No.	Material	Finish/Colour
①	Special Polyethylene	High Sliding Grade/Grey
②	Stainless Steel (SUS304)	Plain

[MINI GUIDE BLOCK MR-30CNB Preloaded Type]



Pre-load direction



- Preloaded to reduce the rattling between the guide block and rail.

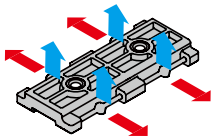
[Specifications]
- Operating temperature: 0˚ C ~ 40˚ C

RoHS	CAD	Item Code	Item Name	Weight (g)
G'	3D	190-037-639	MR-30CNB	7

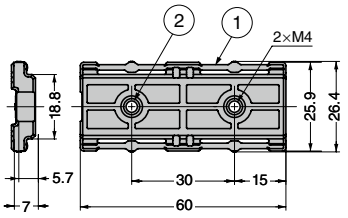
No.	Material	Finish/Colour
①	Special Polyethylene	High Sliding Grade/Grey
②	Stainless Steel (SUS304)	Plain

[MINI GUIDE BLOCK MR-30CB Bidirectional Preloaded Type]





Pre-load direction



- Preloaded in two directions to significantly reduce the rattling between the guide block and rail.

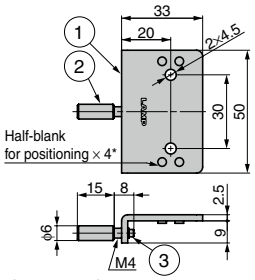
[Specifications]
- Operating temperature: 0 °C to 40 °C

RoHS	CAD	Item Code	Item Name	Weight (g)
●	●	190-048-938	MR-30CB	7

No.	Material	Finish/Colour
①	Special Polyethylene	High Sliding Grade/Grey
②	Stainless Steel (SUS304)	Plain

[MINI GUIDE CLAMP MR-30CLP]





*Only MR-30CLP is half-blanked for positioning.

- Tighten the knob to the rail for simple fixing.
- Mount to the carriage with screws.

[Remarks]
- If external force exceeding the retaining force (reference value) is applied, the retaining position may deviate.
- If the knob tightening torque is exceeded, the knob tip may be damaged.
- Mounting screws are to be supplied by the customer.

No.	Part Name	Material	Finish/Colour
①	Plate	Stainless Steel (SUS304)	Barrel Polished
②	Knob Body	Stainless Steel (SUS303)	Plain
③	Knob Tip	Polyacetal (POM)	Black

RoHS	CAD	Item Code	Item Name	Retaining Force N (reference value)	Knob Tightening Torque N·m	Weight (g)
G'	3D	190-035-312	MR-30CLP	14 or below	0.1 or below	40.8