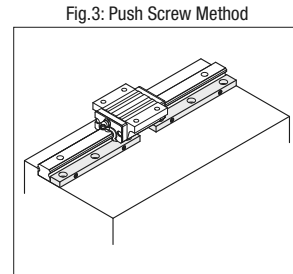
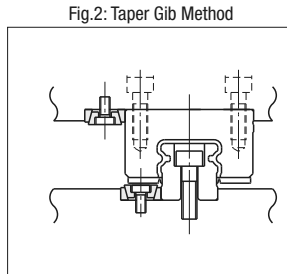
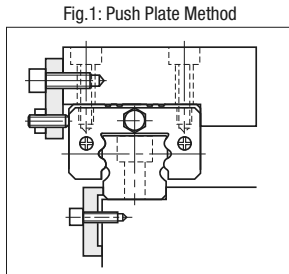


Rail Installation

•When datum is provided on installation bases

- ① Remove burrs and dusts on the mounting surfaces before installation.
- ② Place a rail on the installation side of the base gently, and tighten the screws temporarily while pushing the rail against the datum shoulder.
- ③ Installation methods Fig. 1-3 are recommended when using linear guides where shocks, vibrations and heavy loads may exist, and high precision is required.
- ④ Fully tighten the rail mounting screws to specified torque with a torque wrench. (For torque standards, see Table-1.)



•When datum is not provided on installation bases

Straight Gauge

- ① Place a rail on the installation side of the base gently, and tighten the screws temporarily.
- ② Place a straightedge parallel to the temporarily tightened rail.
- ③ Use the straightedge as a reference, snug down the screws while measuring the parallelism of the rail with a dial indicator as shown in Fig.4.
- ④ Fully tighten the rail mounting screws to specified torque with a torque wrench.
- ⑤ The secondary rail can be installed in the same straightedge method as the primary master rail, or by using the primary rail as a datum reference. In either method, use a dial indicator to measure the parallelism while the rail is being fastened down.

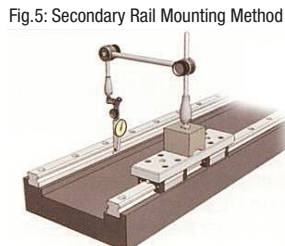
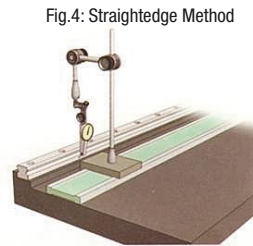


Table-1: Screw Tightening Torque (for SCM Material)

Type	Nominal of Thread	Recommended Torque (N · m)
Medium/Heavy Load Type	M3	2.0
	M5	8.8
	M6	12.7
	M8	29.4
Miniature Type	M2	0.4
	M2.5	0.6
	M3	1.0
	M4	2.5

Maintenance (Grease Application)

- Grease forms lubricating film between steel balls and rolling surface of linear guides. This reduces friction and prevents seizures. Grease loss and deterioration will cause shorter life of linear guides. Apply grease appropriately depending on your condition of use. Grease listed below is applied to MISUMI Linear Guides before shipping, and the products can be used out of box.
- Miniature Type: Filled with Lithium soap based grease (Multemp Grease PS2 by Kyodo Yushi Co., Ltd.).
- Medium/Heavy Load Type: Filled with Lithium soap based grease (Alvania Grease S2 by Showa Shell Sekiyu K.K.).
- Recommended Lubrication Intervals: Every 6 month

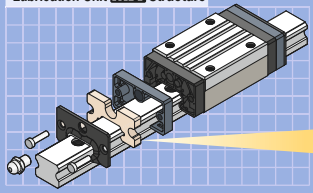
Every 3 month when travel distance is extensive, or every 1000km.

*Recommended above is the lubrication interval based on travel distance. If the grease degrades or gets contaminated faster depending on the operating environment, you will need to shorten the lubrication interval as needed.

- Lubrication Unit **MX** significantly extends lubrication intervals.

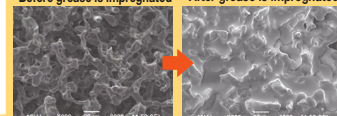
Lubrication Units Which Provide Long-term Maintenance-free Operation **MX**

Lubrication Unit **MX** Structure



Enlarged Photos of Special Polyurethane Pores

- Before grease is impregnated
- After grease is impregnated



Special polyurethane, which is formed by continuous pore evenly distributed, highly excels in water-holding capability. Thus, it is possible to impregnate a large amount of grease.

Features

1 Long Term Maintenance-free Condition

Lubrication Unit **MX** is a self-lubrication unit constructed of grease impregnated special polyurethane. Capillary action provides appropriate supply of grease to the track surface of the linear guide. Oil film is always formed between the steel ball and the rail and provides long term maintenance-free operation.

2 Cost Advantages

Since lubrication frequency can be significantly reduced, you can save maintenance cost.