

## MLGX LINEAR GUIDE

MLGX25-1000S

MLGX Multi-Roller Type, 1000mm, 20 Holes, 430g,  
Stainless Steel, Operating Load



- Available in multiple lengths
- It can be used with a motor drive
- Can operate under 120N in vertical or horizontal directions

### PRODUCT DESCRIPTION

The Sugatsune MLGX25 Multi-Roller Linear Guide Rail is engineered for medium-load applications requiring precise and reliable linear motion. Its innovative "Dual X" structure features rollers positioned at two different angles, effectively resisting both horizontal and vertical loads. This design ensures smooth movement even under moment loads, making it suitable for various orientations. The guide rail is constructed from 304 stainless steel with a no-polish finish, offering corrosion resistance and durability. It has successfully passed a rigorous 500,000-cycle test, involving 100 mm one-way movements at 200 mm per second, demonstrating its long-term reliability in repetitive motion scenarios. Additionally, the preloaded guide block minimises backlash, ensuring precise and stable movement essential for applications demanding high accuracy.

The MLGX25's robust design and smooth operation make it suitable for a wide range of applications, including automated machinery, medical equipment, analytical instruments, and machine tools. Its roller-based mechanism eliminates ball creep, making it compatible with motor-driven systems without the risk of misalignment over time. Multiple guide blocks can be used on a single rail, allowing for customizable configurations to meet specific application needs. Available in various lengths, such as 200 mm, 300 mm, and 400 mm, the MLGX25 series offers flexibility to accommodate different requirements.

### TECHNICAL DATA

|                           |                 |
|---------------------------|-----------------|
| Guide Block Length        | 66 mm           |
| Guide Block Screw Size    | M4              |
| Horizontal Load FV        | 80 N            |
| Horizontal Load FX        | 120 N           |
| Load Moment MX            | 2.4 Nm          |
| Load Moment MY            | 1.2 Nm          |
| Load Moment MZ            | 2.4 Nm          |
| Load Type                 | Operating Load  |
| Material                  | Stainless steel |
| Number of holes           | 20              |
| Rail & Guide Block Height | 12 mm           |
| Rail & Guide Block Width  | 42 mm           |
| Rail Hole Pitch           | 50 mm           |
| Rail Length               | 1000 mm         |
| Rail Screw Size           | M4              |
| Rail Width                | 25 mm           |

