McGuide®
Unlimited stroke linear motion guide for ultra precision and high rigidity by needle and polygonal shaft structure.

High rigidity / high precision / long service life / minimum rotational resistance
McGuide®: High-precision rigid polygon type guide for your equipment

High-precision guide with recirculating needle retainer structure provides unlimited stroke, high accuracy, high rigidity, low noise and long service life

**Structure**

- **Retainer**: Needle recirculating retainer provides high speed, high load capacity, high accuracy
- **Outer Sleeve**: Patented Guide Master® Machining technology
- **Polygonal Shaft**: Ultra-precision machined polygonal shaft

**Features**

1) **High rigidity**
   Wide contact area provides higher rigidity than point contact

2) **Zero torque loss**
   No differential slip of the rolling element maintains high rigidity with low preload, minimizing impact resistance

3) **Longer service life**
   Higher basic load rating means longer service life

4) **High precision**
   Needle and polygonal shaft structure maintains accuracy, low preload, repeatability and straightness (zero pitching, yawing, and rolling)
Improvements over existing products

- Unlimited stroke (Needle recirculating retainer structure)

- Higher-performance alignment for compact machine designs

- Low preload, high rigidity, high torque transmission

- Reduced production costs
  - Quality control, defect reduction
  - Energy efficiency
  - Less maintenance
  - Reduced downtime, higher productivity
Type and main dimensions

- Type of product (Example)

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McG - F - P - 050 - F - 100 - S
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Type of outer sleeves
- Standard : S
- Round Flange : F
- Square Flange : K
- Oval Flange : H

Shaft diameter
- Outer Sleeve Flange Position
  - End Flange : Blank
  - Pilot Flange : P

- Dimension : McG - 00 - 00 - S - 000

- Classification of flange position

- Classification of flange shape

<table>
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<th>Shaft diameter (ΦD)</th>
<th>ℓ max</th>
<th>Lmax</th>
<th>L1</th>
<th>P1</th>
<th>ΦD1</th>
<th>F1</th>
<th>ΦPF</th>
<th>φCP</th>
<th>ΦDD</th>
<th>C0 (kN)</th>
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- **Classification of flange position**

- **Classification of flange shape**

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Uses

1) Ultra-precision transfer guide
2) Z-axis guide for ultra-precision measuring device
3) Precision cutter guide
4) High-rigidity press guide

Special order product

McG - 00 - 00 - 0 - 000 - S

Application example #1

Application example #2

Application example #3

※ Designed and manufactured by SAMICK. Customized designs available for your convenience.