



To Use This Product Safely

Be sure to read this before use. For general cylinder information, see Intro 41, and for cylinder switches, see P. 1512.

Individual Precautions: Brake unit JSB3 Series

Design / Selection

Warning

- Use a rod with a surface roughness between 1.2 to 1.6 μmRz . Using a non-standard rod will cause abnormal wear of the brake metal or a decrease in holding force.
- Use a rod treated with industrial chromium plating (coating thickness of 15 μm or more).
- Do not use multiple synchronized Brake Units. If synchronization is lost, the load will concentrate on the brake unit that braked first, which may lead to a decrease in service life or damage.
- Never disassemble the brake section, as this is dangerous.
- Note that stopping accuracy is adversely affected if the brake unit air supply pipe is too long.

CAUTION

- The stopping accuracy is susceptible to fluctuations in rod speed and load. The stopping position accuracy is ± 1.0 mm (reference value) at a rod speed of 300 mm/s, piping of 1 m or less, and no load.
- Connect with spherical bearings (floating joints) to prevent damage to the screw at the Rod End, to prevent wear or seizure in the brake unit, and to prevent twisting of the rod and brake unit at any position during travel.
- Sliding resistance is generated in this product even with brake released. We recommend using it with a thrust greater than or equal to the following.

| Rod Diameter Code | 16 | 20 | 20 A | 25 | 30 | 35 | 35A | 40 | 45 |
|-------------------------------|----|----|------|-----|-----|-----|-----|-----|------|
| Estimated Required Thrust [N] | 53 | 82 | 140 | 227 | 357 | 565 | 722 | 942 | 1193 |

- As shown in Fig.1, the Brake Units is fixed to the table, so keep it parallel to the direction of table travel.

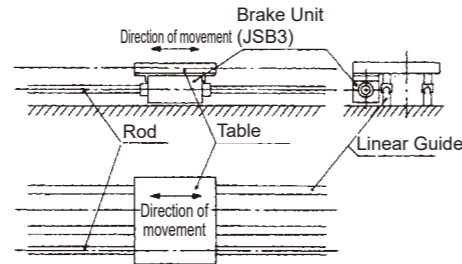


Fig. 1

- Do not use for rotating rod braking.
- Do not apply lateral load moment to brake units when using in a horizontal state.
- Check that load is applied axially on the rod.
- Make sure that water and oil do not contact the brake unit and rod section.
If water splashes on it, there is a risk of malfunction due to corrosion. If oil splashes on it, it may affect holding force and stopping accuracy.

For maintenance parts, please visit the CKD Equipment Product Site (<https://www.ckd.co.jp/kiki/en/>) → "model No." → Maintenance Parts.

Lock Unit

UB

JSB3

LMB

LML

Lock Unit

UB

JSB3

LMB

LML

Cylinders Switch

Ending

Cylinders Switch

Ending