ERB Series

Flexible coupling

■ Features
- Zero (0) Backlash
- High torsional stiffness by high strength aluminum alloy AL 7075-T6
- High corrosion resistance with alumite treated surface
- Two connection types (Clamp type, Set screw type)

⚠ Please read “Caution for your safety” in operation manual before using.

■ Applications
- Stepper motor, Servo motor, Precision motor, high-precision encoder, dynamometer driver, high speed/precision position control system

■ Ordering Information

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Bore diameters
Connection type
External diameter
Type
Item

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<tr>
<td>Clamp</td>
<td>Set screw</td>
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Max. revolutions 8000rpm 20000rpm 6000rpm 15000 rpm
Max. torque 1.2 N·m (12.17 kgf·cm) 3.0 N·m (30.42 kgf·cm)
Rated torque 0.6 N·m (6.08 kgf·cm) 1.5 N·m (15.21 kgf·cm)
Mounting bolt (Mounting torque) M2.5 (1N-m) M3 (0.7N-m) M3 (0.7N-m) M4 (1.7N-m)
Torsional stiffness 140 N·m/rad 240 N·m/rad
Moment of inertia 6.4×10⁻⁷ kg·m² 3.4×10⁻⁶ kg·m²
Max. allowable misalignment
Angular misalignment 2.5°
Parallel misalignment 0.15mm 0.2mm
End-play ±0.3mm ±0.4mm
Standard bore diameter (tolerance h7) Ø4, Ø5, Ø6mm Ø6, Ø8mm
Min. allowable bore diameter Ø4mm Ø5mm
Max. allowable bore diameter Ø8mm Ø12mm
Material Aluminum (AL 7075-T6), Alumite surface
Unit weight Approx. 12g Approx. 33g

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### Proper Usage

The flexible coupling is available in the places where vibration or misalignment occurs. It must be used within the rated allowable misalignment range. When using the flexible coupling over the rated misalignment range, it may cause vibration or shorten the life cycle. When there are more than two misalignments, each allowable value is 50%. It is recommended to use the flexible coupling below 1/3 of the allowable misalignment value to extend the life of the coupling and the applied equipment.

### Caution for using

- Couplings are for transferring rotation angle and power between shafts. Before using this, make sure to check the purpose and appropriacy.
- This product uses high-strength aluminum alloy and has spring power as Radial beam type. However, if the coupling is dropped, hit or applied excessive power, it may be damaged or transformed.
- If the coupling is applied over the rated misalignment, or the tolerance of the shaft is over the allowable value, it may cause plastic deformation, damage of the product or shorten the life cycle.
- When it occurs abnormal sound during operating the equipment with this coupling, stop the operation and remove the cause such as misalignment, unscrewing, or rotation hazard.
- If this coupling is applied to the equipment which has big fluctuation of load, shaft may be loose by unscrewing. Tighten the screw securely and prevent from unscrewing.
- This product is for transferring rotation power. If there is a risk of human contact, attach the caution label or install a safety cover in a prominent position.
- Rated torque is available to transfer the power continuously. Check the rated capacity before using this product.
- Max. torque is available to transfer the power in a moment. Check the rated capacity before using this product.