

# 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 "Safety Considerations" in the instruction manual before using.



### ■ Applications

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

### ■ Ordering Information

<b>ERB</b>	<b>A</b>	-	<b>19</b>	<b>C</b>	-	<b>d<sub>1</sub>/d<sub>2</sub></b>
Item	Type	External diameter	Connection type	Bore diameters	Number/Number	Bore diameters
					S	Set screw
					C	Clamp
					Number	External diameter (mm)
					A	Double beam (normal type)
					ERB	Radial beam type coupling

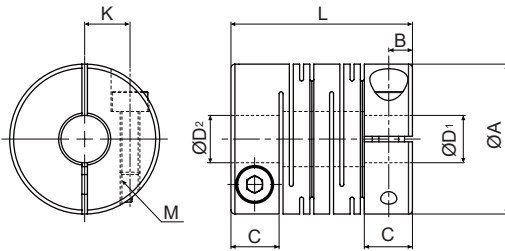
### ■ Specifications

Model	ERB-A-19C-□	ERB-A-19S-□	ERB-A-26C-□	ERB-A-26S-□
Connection type	Clamp	Set screw	Clamp	Set screw
Max. revolutions	8000rpm	20000rpm	6000rpm	15000 rpm
Max. torque	1.2N·m (12.17kgf·cm)		3.0N·m (30.42kgf·cm)	
Rated torque	0.6N·m (6.08kgf·cm)		1.5N·m (15.21kgf·cm)	
Mounting bolt (mounting torque)	M2.5 (1N·m)	M3 (0.7N·m)	M3 (0.7N·m)	M4 (1.7N·m)
Torsional stiffness	140N·m/rad		240N·m/rad	
Moment of inertia	6.4×10 <sup>-7</sup> kg·m <sup>2</sup>		3.4×10 <sup>-6</sup> kg·m <sup>2</sup>	
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			
Weight	Approx. 14.9g (approx. 14.4g)		Approx. 37.3g (approx. 36.7g)	

## ■ Dimensions

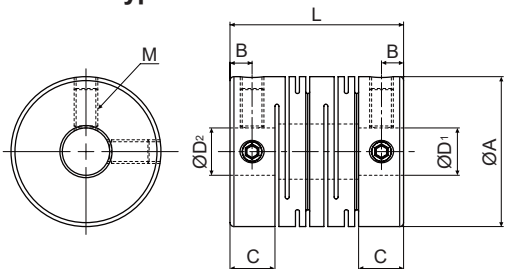
(unit: mm)

### ◎ Clamp type



Model	ØA	L	ØD <sub>1</sub>	ØD <sub>2</sub>	M	C	B	K
ERB-A-19C-04/04	19	23	4 <sup>+0.018</sup> <sub>0</sub>	4 <sup>+0.018</sup> <sub>0</sub>	M2.5	6.1	3	5.75
ERB-A-19C-04/05				5 <sup>+0.018</sup> <sub>0</sub>				
ERB-A-19C-04/06				6 <sup>+0.018</sup> <sub>0</sub>				
ERB-A-19C-05/05			5 <sup>+0.018</sup> <sub>0</sub>					
ERB-A-19C-05/06			6 <sup>+0.018</sup> <sub>0</sub>					
ERB-A-19C-06/06			6 <sup>+0.018</sup> <sub>0</sub>					
ERB-A-26C-06/06	26	31.4	6 <sup>+0.018</sup> <sub>0</sub>	6 <sup>+0.018</sup> <sub>0</sub>	M3	7.4	3.7	8.55
ERB-A-26C-06/08				8 <sup>+0.018</sup> <sub>0</sub>				
ERB-A-26C-08/08				8 <sup>+0.018</sup> <sub>0</sub>				

### ◎ Set screw type



Model	ØA	L	ØD <sub>1</sub>	ØD <sub>2</sub>	M	C	B
ERB-A-19S-04/04	19	22	4 <sup>+0.018</sup> <sub>0</sub>	4 <sup>+0.018</sup> <sub>0</sub>	M3	5.7	2.8
ERB-A-19S-04/05				5 <sup>+0.018</sup> <sub>0</sub>			
ERB-A-19S-04/06				6 <sup>+0.018</sup> <sub>0</sub>			
ERB-A-19S-05/05			5 <sup>+0.018</sup> <sub>0</sub>				
ERB-A-19S-05/06			6 <sup>+0.018</sup> <sub>0</sub>				
ERB-A-19S-06/06			6 <sup>+0.018</sup> <sub>0</sub>				
ERB-A-26S-06/06	26	30	6 <sup>+0.018</sup> <sub>0</sub>	6 <sup>+0.018</sup> <sub>0</sub>	M4	6.8	3.4
ERB-A-26S-06/08				8 <sup>+0.018</sup> <sub>0</sub>			
ERB-A-26S-08/08				8 <sup>+0.018</sup> <sub>0</sub>			

## ■ 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.

- 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.

### ◎ 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.

SENSORS

CONTROLLERS

MOTION DEVICES

SOFTWARE

(A) Photoelectric Sensors

(B) Fiber Optic Sensors

(C) LiDAR

(D) Door/Area Sensors

(E) Vision Sensors

(F) Proximity Sensors

(G) Pressure Sensors

(H) Rotary Encoders

(I) Connectors/ Connector Cables/ Sensor Distribution Boxes/ Sockets