ERB Series INSTRUCTION MANUAL

TCD220009AA

Autonics

Thank you for choosing our Autonics product.

Read and understand the instruction manual and manual thoroughly before using the product.

For your safety, read and follow the below safety considerations before using. For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

Keep this instruction manual in a place where you can find easily.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice. Follow Autonics website for the latest information.

Cautions during Use

- 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.

Ordering Information

This is only for reference.

For selecting the specified model, follow the Autonics website.

ERB A - **1** 2 - 3

Diameter

Bore diameters Number / Number: Bore diameters

(unit: mm)

Ocnnection type

Number: External diameter (unit: mm)

C: Clamp

S: Set screw

Cautions during Installation

- 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.

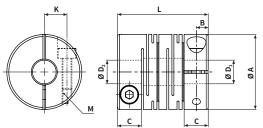
Specifications

Model	ERB-A-19C-		ERB-A-26C-	ERB-A-26S-		
Connection type	Clamp	Set screw	Clamp	Set screw		
Max. revolution	8,000 rpm 20,000 rpm		6,000 rpm	15,000 rpm		
Max. torque	1.2 N m		3.0 N m			
Rated torque	0.6 N m		1.5 N m			
Mounting bolt (mounting torque)	M2.5 (1 N m)	M3 (0.7 N m)	M3 (0.7 N m)	M4 (1.7 N m)		
Torsional stiffness	140 N m / rad		240 N m / rad			
Inertia moment	6.4 × 10 ⁻⁷ kg·m	2	$3.4 imes10^{-6}~{ m kg}{ m m}^2$			
Max. allowable misalignment	Angular misalign Parallel misalign End-play: ≤ ± 0	ment: \leq 0.15 mm	Angular misalignment: $\leq 2.5^{\circ}$ Parallel misalignment: ≤ 0.2 mm End-play: $\leq \pm 0.4$ mm			
Standard bore diameter (tolerance h7)	Ø 4, Ø 5, Ø 6 m	m	Ø 6, Ø 8 mm			
Max. allowable diameter	Ø 4 to 8 mm		Ø 5 to 12 mm			
Material	Aluminum (AL 7075-T6), Alumite surface					
Unit weight (packaged)	\approx 14.4 g (\approx 14	.9 g)	≈ 36.7 g (≈ 37.3 g)			

Dimensions

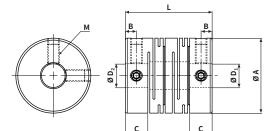
• Unit: mm, For the detailed drawings, follow the Autonics website.





Model	ØA	L	Ø D ₁	ØD ₂	М	С	В	К
ERB-A-19C-04/04				4 +0.018				
ERB-A-19C-04/05	19	23	4 ^{+0.018}	5 ^{+0.018}	- M2.5	6.1	3	5.75
ERB-A-19C-04/06				6 ^{+0.018}				
ERB-A-19C-05/05	19	23	5 ^{+0.018}	5 ^{+0.018}				
ERB-A-19C-05/06	19			6 ^{+0.018}				
ERB-A-19C-06/06	19	23	6 ^{+0.018}	6 ^{+0.018}				
ERB-A-26C-06/06	26	31.4	6 ^{+0.018}	6 ^{+0.018}	М3	7.4	3.7	8.55
ERB-A-26C-06/08	20			8 ^{+0.018}				
ERB-A-26C-08/08	26	31.4	8 ^{+0.018}	8 ^{+0.018}				

Set screw type



Model	ØA	L	Ø D1	Ø D ₂	М	С	В
ERB-A-19S-04/04				4 +0.018			
ERB-A-19S-04/05	19	22	4 ^{+0.018}	5 ^{+0.018}	M3	5.7	2.8
ERB-A-19S-04/06				6 ^{+0.018}			
ERB-A-19S-05/05	10	22	5 ^{+0.018}	5 ^{+0.018}			
ERB-A-19S-05/06	19			6 ^{+0.018}			
ERB-A-19S-06/06	10	22	6 ^{+0.018}	6 ^{+0.018}			
ERB-A-19S-06/08	19			8 ^{+0.018}			
ERB-A-26S-06/06		30	6 ^{+0.018}	6 ^{+0.018}	M4	6.8	3.4
ERB-A-26S-06/08				8 ^{+0.018}			
ERB-A-26S-06/10	26			10 +0.018			
ERB-A-26S-06/12				12 +0.018			
ERB-A-26S-08/08	26	30	8 ^{+0.018}	8 ^{+0.018}			