

HCS-C Type

Stainless Helical Couplings
Clamping Screw Type

The HCS Series, made from STS303 cylindrical material, features two twisted helical beams that provide smooth axial elasticity along the shaft length. These couplings offer superior corrosion resistance and transmit higher torque with significantly better responsiveness than aluminum couplings. With up to twice the torque capacity of similarly structured aluminum models, the HCS Series is ideal for high-speed, high-response applications, such as servo motors and stepping motors, requiring strong torque and precise responsiveness.



Ordering

- Please specify the series, outer diameter, and bore size when placing your order.
- If keyway machining (on the bore) is required, ensure to indicate this separately.
- For assistance in selecting the right couplings, please contact our customer service center.

HSC

series

32

Specifications
(Outer diameter)

C

Type
(Fastening method)

-

10

Bore diameter
(d1)

-

15

Bore diameter
(d2)

LK3

Keyway
(Side d1)

-

RK5

Keyway
(Side d2)

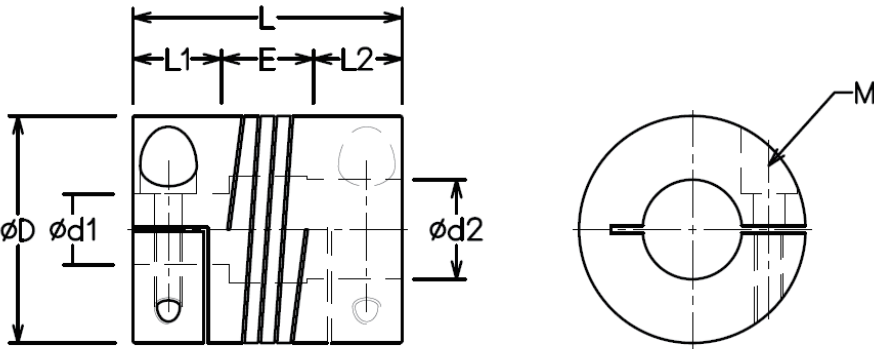
For keyway machining

Standard Bore Diameter

※ Bore machining is available within the product's minimum to maximum bore range beyond the standard bore sizes. (Refer to the figures on the right)

Standard bore diameter (d1/d2, mm)	3	4	5	6	6.35	8	10	12	13	14	15	16	18	19	20	22
HCS 16 C	•	•	•	•	•	•										
HCS 20 C		•	•	•	•	•	•									
HCS 25 C			•	•	•	•	•	•	•							
HCS 32 C				•	•	•	•	•	•	•	•	•				
HCS 42 C						•	•	•	•	•	•	•	•	•	•	•

Download detailed product information, including 2D (dwg) and 3D (step) files, from our website: www.jitcoupling.co.kr.



Dimension

Product Name	External Diameter	Length	Bore diameter range (d1/d2)		Shaft depth		Shaft Insert Distance	Bolt Size
			Min. Bore Diameter	Max. Bore Diameter	Shaft Insert Length	Shaft Insert Length		
HCS 16C	Ø16	22	3	8	7	7	8	M2.5
HCS 20 C	Ø20	25	4	10	8	8	9	M2.5
HCS 25 C	Ø25	30	5	13	10	10	10	M3
HCS 32 C	Ø32	38	6	16	13	13	12	M4
HCS 42 C	Ø42	45	8	22	16	16	13	M5

Specification

Product Name	Rated Torque (Nm)	Max Torque (Nm)	Max. Rotational Frequency (min ⁻¹)	Moment of Inertia (kg*m ²)	Static Torsional Stiffness (Nm/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass (g)
HCS 16C	1.0	2.0	24,500	1.00×10 ⁻⁶	20	0.1	3	0.2	22
HCS 20 C	1.4	2.8	20,000	1.03×10 ⁻⁶	30	0.1	3	0.2	46
HCS 25 C	1.7	3.4	16,500	3.04×10 ⁻⁶	48	0.1	3	0.25	88
HCS 32 C	3.6	7.2	13,000	1.03×10 ⁻⁵	140	0.15	3	0.3	192
HCS 42 C	8.1	16.3	10,500	3.63×10 ⁻⁵	320	0.15	3	0.3	368