

SCJ SERIES



Cross Joint Coupling



Structure and Material



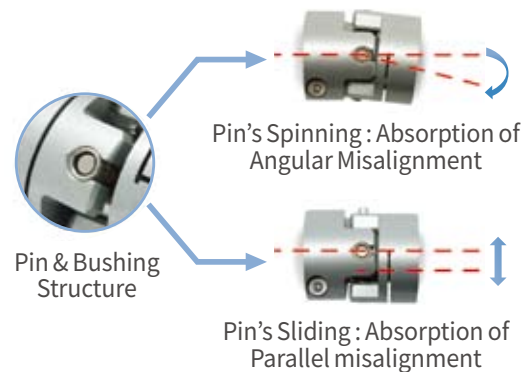
Structure	Material	Surface Treatment
Hub	High Strength Aluminum Alloy	Anodizing
Center Block	Stainless Steel	Electroless Nickel Plating
Pin	SUJ2	Electroless Nickel Plating
Bushing	DU Bearing	-
Screw	SCM435	Black Oxide

Product Features & Application

- SCJ series is excellent for absorbing both angular/parallel misalignment through middle pin/bushing structure and minimizes reaction force on the shaft. (This coupling combines strong features of SOH series coupling and universal joint.)
- This series structurally doesn't absorb end-play.

High Torque (Durability)		△
Torsional Stiffness		○
Vibration Absorption		△
Misalignment Absorption		☆
Minimized Reaction Force		☆
Applicable Motors	Servo	○
	Stepping	○
	Encoder	○
	General	-

Application : Cartesian Robot, UVW Stage, Machine tools, Index Table



Clamping Methods

Set-screw (No mark)	General	○
	With Keyway	○
Side-clamp (C)	General	○
	Hub Split	X
	With Keyway	○
Taper-ring (T)		X

How to Order

SCJA - 32 C - 10 K3 x 14 K4

Model OD(D) size Clamping Methods ID(d) size(d1) Keyway (K) ID(d) size(d2) Keyway (K)

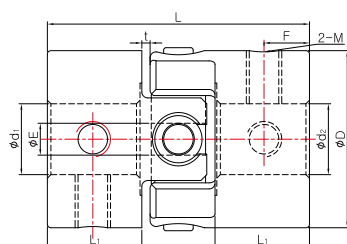
1 Clamping Methods
 No mark Set-screw
 C General Side-clamp

2 Keyway
 No mark No Keyway
 K(b size) Keyway processed according to the indicated b size.

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Cross Joint Coupling

Set-screw



Dimensions / Performance

Model	Size ($\pm 0.3\text{mm}$)						Screw Size	Fastening Torque (N·m)	Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment	
	D	L	L ₁	E	t	F									Angular (°)	Parallel (mm)
SCJ-15	15	22.2	8	2.7	0.7	3.9	M3	0.7	0.25	0.5	21,000	2.9×10^{-7}	200	9	1.5	0.3
SCJ-20	20	23.4	7.9	4.2	0.8	3.8	M3	0.7	0.5	1	16,000	1.0×10^{-6}	450	20	1.5	0.5
SCJ-25	25	30.4	10.4	5.2	1.3	5	M4	1.7	1	2	12,000	3.1×10^{-6}	800	35	1.5	0.5
SCJ-32	32	39	13.5	8.2	1.6	6.6	M4	4	2	4	9,000	1.1×10^{-5}	1,200	75	1.5	0.5
SCJ-40	40	45.6	16	10	1.8	7.8	M5	4	5	10	7,000	3.1×10^{-5}	1,900	145	1.5	0.5

- The Moment of Inertia and Mass values are based on products with max. Inner diameter.
- Max. torque/rated torque is the value regarding to a coupling's self-durability and is not related to slip-torque between the coupling bore and the shaft. (Set-screw type is usually less durable than other clamping method, thus please consider it has a complementary option e.g. keyway along with.)

Standard Inner Diameter (ID)

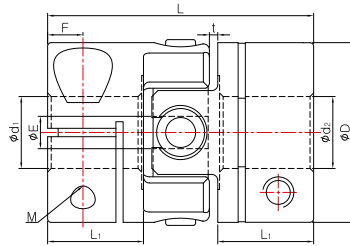
Model	Standard Inner Diameter (d_1, d_2) (mm)											
	3	4	5	6	6.35	8	10	11	12	14	15	
SCJ-15	●	●	●									
SCJ-20		●	●	●	●	●						
SCJ-25			●	●	●	●	●					
SCJ-32				●	●	●	●	●	●	●		
SCJ-40						●	●	●	●	●	●	

- The recommended shaft tolerance is h7.
- Custom process (e.g. non-standard Inner diameter, special tolerance etc.) is also available upon a special request in prior to order placement.
- Keyway is available. (Optional)

SCJ SERIES

Cross Joint Coupling

Side-clamp



Dimensions / Performance

Model	Size ($\pm 0.3\text{mm}$)						Screw Size	Fastening Torque (N·m)	Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment	
	D	L	L ₁	E	t	F									Angular (°)	Parallel (mm)
SCJA-15C	15	22.2	8	2.7	0.7	3	M2.6	1	0.25	0.5	21,000	3.3×10^{-7}	220	9	1.5	0.3
SCJB-15C	15	24.2	8	2.7	1.7	3	M2.6	1	0.25	0.5	18,000	3.5×10^{-7}	200	10	2	0.3
SCJA-20C	20	23.4	7.9	4.2	0.8	2.8	M2.6	1	0.5	1	16,000	1.2×10^{-6}	350	19	1.5	0.5
SCJB-20C	20	26.4	7.9	4.2	2.3	2.8	M2.6	1	0.5	1	12,000	1.3×10^{-6}	300	20	2	0.5
SCJA-25C	25	30.4	10.4	5.2	1.3	3.6	M3	1.7	1	2	12,000	3.3×10^{-6}	800	34	1.5	0.5
SCJB-25C	25	33.4	10.4	5.2	2.8	3.6	M3	1.7	1	2	9,000	3.4×10^{-6}	700	35	2	0.5
SCJA-32C	32	39	13.5	8.2	1.6	4.4	M4	3.5	2	4	9,000	1.1×10^{-5}	1,200	72	1.5	0.5
SCJB-32C	32	43	13.5	8.2	3.6	4.4	M4	3.5	2	4	7,000	1.2×10^{-5}	1,000	75	2	0.5
SCJA-40C	40	45.6	16	10	1.8	5.9	M5	8	5	10	7,000	3.2×10^{-5}	1,900	140	1.5	0.5
SCJB-40C	40	51	16	10	4.5	5.9	M5	8	5	10	5,000	3.3×10^{-5}	1,800	145	2	0.5

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- Max. torque/rated torque is the value regarding to a coupling's self-durability and is not related to slip-torque between the coupling bore and the shaft.

Standard Inner Diameter (ID)

Model	Standard Inner Diameter (d_1, d_2) (mm)										
	3	4	5	6	6.35	8	10	11	12	14	15
SCJ□-15C	●	●	●								
SCJ□-20C		●	●	●	●	●					
SCJ□-25C			●	●	●	●	●				
SCJ□-32C				●	●	●	●	●	●	●	
SCJ□-40C						●	●	●	●	●	●

- The recommended shaft tolerance is h7.
- Custom process (e.g. non-standard Inner diameter, special tolerance etc.) is also available upon a special request in prior to order placement.
- Keyway is available. (Optional)