

# SCJ Series

## Ultra-precision Cross Joint Coupling



'SI. CO' mark (Trademark : 40-2012-0061376) indicates that the authenticity is certified.  
 'SCJ' (Trademark : 40-2012-0044875) is the original trademark for SUNGIL's Cross Joint Coupling.

SUNGIL's Cross Joint type is a precise compensation coupling that absorbs parallel and angular misalignment by the unique combination of pin and dry bearing. We combined the advantages of Oldham coupling and Universal joint to prevent internal stress induced by misalignment or vibration. It is designed simply with high strength and low moment of inertia, so it has accurate response performance

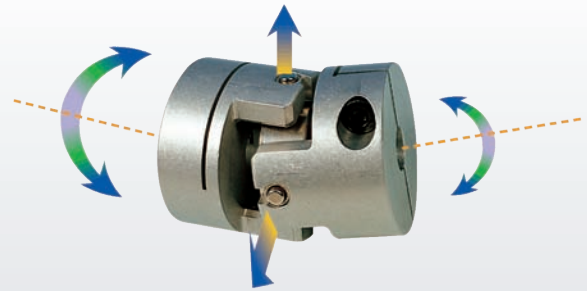


2006  
Venture Design Award



### Features

- Excellent absorbability in eccentricity and angular misalignment (bearing, center block, pin)
- Identical CW/CCW rotational performance
- Minimized backlash
- Minimized load on shaft
- Various sizes are available
- Excellent durability
- Resistance against chemical and oil



### Structure & Material

Pin : Steel

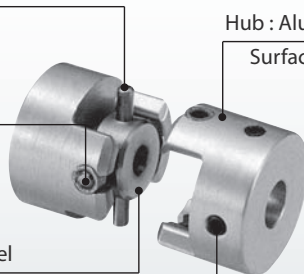
Surface Treatment :  
Electroless Nickel Coating

Bush : Dry Bearing

Center Block : Stainless Steel

Hub : Aluminum Alloy  
Surface Treatment :  
Alumite

Clamping bolt: SCM435  
(Stainless steel bolt is available)



CLAMP TYPE

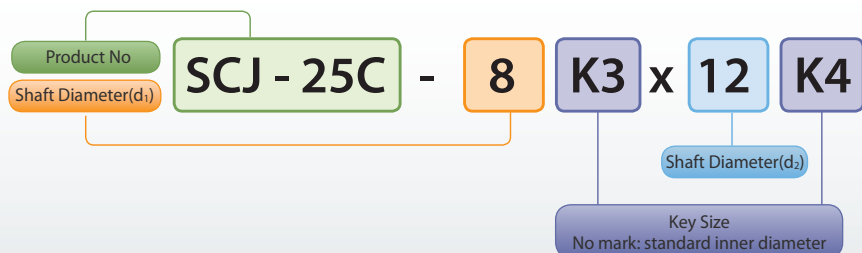


SET SCREW TYPE

### Application

- Robot, X-Y table
- Equipment related to Semiconductor and Display
- CNC, MCT, Machining tool
- Medical Instrument
- Optical instrument, Measuring tool

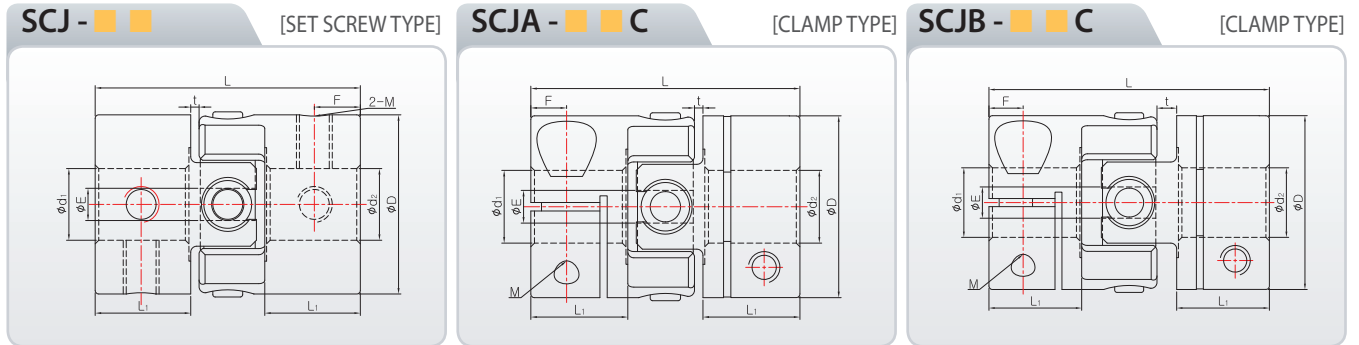
### How to order product



※ Please mark each inner diameter size.

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Please, download CAD DATA from [www.sungilfa.com](http://www.sungilfa.com)



## Dimensions & Performance

Product Number	Fastening Bolt M	Fastening Torque (N · m)	Max. RPM (min <sup>-1</sup> )	Max Torque (N · m)	Rated Torque (N · m)	Torsional Stiffness (N · m/rad)	Moment of Inertia (kg · m <sup>2</sup> )	Mass (g)	Permissible Misalignment		
									Angle (°)	Parallel (mm)	End-Play (mm)
SCJA-15C	M2,6	1	21,000	0,5	0,25	220	3,3 × 10 <sup>-7</sup>	9	1,5	0,3	0
SCJA-20C	M2,6	1	16,000	1	0,5	350	1,2 × 10 <sup>-6</sup>	19	1,5	0,5	0
SCJA-25C	M3	1,7	12,000	2	1	800	3,3 × 10 <sup>-6</sup>	34	1,5	0,5	0
SCJA-32C	M4	3,5	9,000	4	2	1,200	1,1 × 10 <sup>-5</sup>	72	1,5	0,5	0
SCJA-40C	M5	8	7,000	10	5	1,900	3,2 × 10 <sup>-5</sup>	140	1,5	0,5	0
SCJB-15C	M2,6	1	18,000	0,5	0,25	200	3,5 × 10 <sup>-7</sup>	10	2	0,3	0
SCJB-20C	M2,6	1	12,000	1	0,5	300	1,3 × 10 <sup>-6</sup>	20	2	0,5	0
SCJB-25C	M3	1,7	9,000	2	1	700	3,4 × 10 <sup>-6</sup>	35	2	0,5	0
SCJB-32C	M4	3,5	7,000	4	2	1,000	1,2 × 10 <sup>-5</sup>	75	2	0,5	0
SCJB-40C	M5	8	5,000	10	5	1,800	3,3 × 10 <sup>-5</sup>	145	2	0,5	0
SCJ-15	M3	0,7	21,000	0,5	0,25	200	2,9 × 10 <sup>-7</sup>	9	1,5	0,3	0
SCJ-20	M3	0,7	16,000	1	0,5	450	1,0 × 10 <sup>-6</sup>	20	1,5	0,5	0
SCJ-25	M4	1,7	12,000	2	1	800	3,1 × 10 <sup>-6</sup>	35	1,5	0,5	0
SCJ-32	M4	4	9,000	4	2	1,200	1,1 × 10 <sup>-5</sup>	75	1,5	0,5	0
SCJ-40	M5	4	7,000	10	5	1,900	3,1 × 10 <sup>-5</sup>	145	1,5	0,5	0

\* Mass and mass moment of inertia are measured with max. bore size

## Dimensions and Standard Inner Diameter

Product Number	Dimension						Dimensions and Standard Inner Diameter(d <sub>1</sub> , d <sub>2</sub> , unit:mm)										
	D	L	L <sub>1</sub>	E	t	F	3	4	5	6	6,35	8	10	11	12	14	15
SCJA-15C	15	22,2	8	2,7	0,7	2,95	●	●	●	●							
SCJA-20C	20	23,4	7,9	4,2	0,8	2,75		●	●	●	●	●					
SCJA-25C	25	30,4	10,4	5,2	1,3	3,55			●	●	●	●	●				
SCJA-32C	32	39	13,5	8,2	1,6	4,4				●	●	●	●	●	●	●	
SCJA-40C	40	45,6	16	10	1,8	5,9						●	●	●	●	●	●
SCJB-15C	15	24,2	8	2,7	1,7	2,95	●	●	●	●	●						
SCJB-20C	20	26,4	7,9	4,2	2,3	2,75		●	●	●	●	●					
SCJB-25C	25	33,4	10,4	5,2	2,8	3,55			●	●	●	●	●				
SCJB-32C	32	43	13,5	8,2	3,6	4,4				●	●	●	●	●	●	●	
SCJB-40C	40	51	16	10	4,5	5,9						●	●	●	●	●	●
SCJ-15	15	22,2	8	2,7	0,7	3,85	●	●	●	●	●						
SCJ-20	20	23,4	7,9	4,2	0,8	3,75		●	●	●	●	●					
SCJ-25	25	30,4	10,4	5,2	1,3	4,95			●	●	●	●	●				
SCJ-32	32	39	13,5	8,2	1,6	6,55				●	●	●	●	●	●	●	
SCJ-40	40	45,6	16	10	1,8	7,8						●	●	●	●	●	●

- For the inner diameter, INCH type is available
- Nonstandard inner diameter is also available
- Keyway is available
- The recommendation for shaft tolerance is h7.