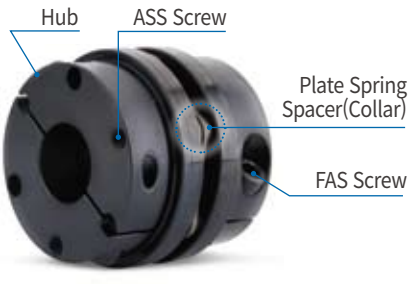
SCD SERIES (SCDS)

Concentricity Disk Coupling



Structure and Material

Structure	Material	Surface Treatment
Hub	Steel	Black Oxide
Plate Spring	Stainless Steel	-
Spacer(Collar)	Steel	Black Oxide
Assembly Screw	SCM435	Black Oxide
Fastening Screw	SCM435	Black Oxide

Product Features & Application

Backlash free (Precision)	☆
High Torque (Durability)	☆
Torsional Stiffness	☆
Vibration Absorption	-
Misalignment Absorption	△

Application : Machine tools, Chip mounters, Cartesian Robot, Solar energy equipment

Clamping Methods

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

How to Order

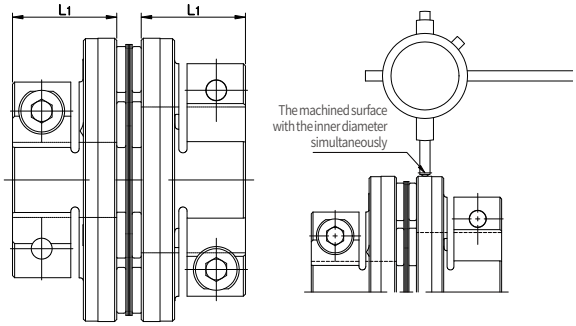
SCDS - 68C - 20 x 22

- SCDS: Model
- 68C: OD(D) size
- 20: $ID_{(d1)}$ size
- 22: $ID_{(d2)}$ size

※ To verify the precise appearance of the product, please refer to the standard product drawing files provided on the top of our website's specification table or in the technical data section.

How to Install

1. Remove dust or oil substances from the surface of both the coupling and the shaft.
2. Insert the shaft up to L_1. Make sure the plate spring doesn't get pressed by excessive force.
3. After the shaft is inserted, pre-tighten two fastening screws alternately with limited torque, in order not to make it too loose.
4. Place a dial gauge right on the surface which is machined with the inner diameter simultaneously (see figure), and fasten the screws alternately observing the gauge variation (run-out) is less than 0.02.
5. Lastly, fasten the screws with full of fastening torque by using a torque wrench.
6. Insert the opposite shaft while paying attention to the excessive force on the plate spring and fasten screws according to the above instruction.



※ We recommend you only use the provided screws which are lubricated.

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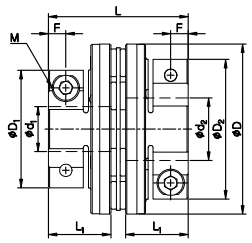
Side-clamp



Dimensions / Performance

Model	d_1, d_2	Size (±0.3mm)					Screw		Permissible Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($kg·m^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
		D	D_1, D_2	L	L_1	F	Size	Fastening Torque (N·m)						Angular (°)	Parallel (mm)	End-play (mm)
SCDS-68C	18~25	68	47	55.9	25	7	M6	14	90 / 100	18,000	0.42×10^{-3}	9.7×10^{4}	660	1	0.02	±0.5
	28~35		56													
SCDS-78C	22~26	78	53	67.7	30	8.5	M8	34	200	17,000	1.23×10^{-3}	2.1×10^{5}	1,400	1	0.02	±0.5
	28~35		70													
	38		74													
SCDS-88C	25~32	88	66	68.3	30	8.5	M8	34	250 / 300	15,000	1.6×10^{-3}	2.3×10^{5}	1,550	1	0.02	±0.5
	35~42		74													

- The Moment of Inertia and Mass values are based on products with max. Inner diameter.
- The permissible torque is determined by its inner diameter size. Please refer to the bottom of the page for more details.

Standard Inner Diameter (ID)

Model	Permissible Torque (N·m)	Standard Inner Diameter (d_1, d_2) (mm)													
		18	19	20	22	24	25	26	28	30	32	35	38	40	42
SCDS-68C	90	●	●												
	100			●	●	●	●	●	●	●	●	●			
SCDS-78C	200				●	●	●	●	●	●	●	●	●		
SCDS-88C	250						●	●	●						
	300									●	●	●	●	●	●

- 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.
- The permissible torque of a complete SCD coupling should be considered according to the smaller inner diameter's value.
- Keyway is NOT available for all sized SCD series.