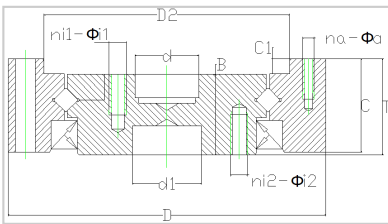


## Harmonic Drive Bearing

### CSD harmonic Drive Bearing-CSD-50



Bearing Model	CSD-50
Dimensions(mm)	
T	44
Øi2	157
D	34
ni2	138
Øi1	33
ni1	29.4
d	4.5
Øa	48
na	22
d1	6.6
C1	6
B	M10
C	10
D2	M12

## Brief introduction of Harmonic Reducer Bearing CSD Series

The harmonic reducer bearing CSD series is mainly composed of three basic parts: harmonic generator, flexible wheel and rigid wheel. In addition, there are rigid bearings (cross roller bearings) and flexible bearings (thin-walled deep groove ball bearings).

The inner hole of the flexible bearing fits with the outer ring of the oval cam, the outer ring carries out elastic deformation through the ball, and the inner diameter of the opening part of the flexible wheel fits, the outer ring carries out the elastic deformation through the ball, and the inner diameter of the opening part of the flexible wheel matches the inner diameter of the opening part of the flexible wheel. The opening part of the flexible wheel is circumscribed with gears and the teeth of the rigid wheel are meshed, the number of teeth of the rigid wheel is more than that of the flexible wheel, the flexor wheel and the rigid wheel engage when the long shaft is engaged, and when the short shaft is separated, the bottom of the flexible wheel is fixed at the output end. The rigid bearing is installed at the output end of the reducer and is connected to the outside world.

Harmonic reducer bearing is usually used in robot, machine tool,

aerospace and other industries. It requires very high precision, rigidity and bearing capacity of harmonic reducer. Therefore, the processing accuracy and installation precision of each part of harmonic reducer is very high, and the requirement of bearing is also very high.

For rigid bearings, the most important is the rigidity, reliability and rotation accuracy of the bearings, rigid bearings before the factory will adjust the bearing has a certain amount of pre-pressure, in order to ensure enough rigidity of the bearing; For flexible bearings, the most important is the maximum radial deformation of the bearings. Installation consideration

Clean the bearing seat or part of the shaft before installation, remove grease and impurities, and make sure there are no burrs or edges. (be sure to make sure that the inner diameter of the bearing seat and the outer diameter of the bearing, the matching tolerance between the journal and the inner diameter of the bearing meets the requirements.)

When the screw is fastened, the locking of the fastening bolt is divided into 4 stages from incomplete locking to complete locking, which is repeatedly locked according to the order of cross-crossing method. The tightening torque of the bolt refers to the tightening torque of the bolt in the bearing portion of the cross roller.

Bearing before the factory by professional assembly personnel to adjust the bearing pre-load, good oil injection. The bearing parts shall not be removed without authorization before installation or the bearing interior shall be cleaned. Received bearing or bearing installation after abnormal operation, please contact our after-sales personnel in time.

The operating temperature of the bearing is  $-20\text{ }^{\circ}\text{C} \sim 80\text{ }^{\circ}\text{C}$ . If the operating condition of the bearing exceeds this range, please contact our technical personnel in time.

The parts with bearing can be made of aluminum alloy or cast iron, etc.

If the bearing size you use is not found in the schedule, or is different from the size in the table, please contact our technician in time.