Harmonic Drive Bearing

SHD Micro Harmonic Reducer Bearing-SHD-20

Mass	
KG	**SHD-20**
Bearing Model	90
Dimensions(mm)	
h1	54.2
h	14
D2	9.7
D1	53
d2	56.3
d1	78
B	72.6
T	1.5
D	1
d	4
h2	25.5
Basic load rating	
Cor	17.5
Cr	0.39

The outer ring and inner ring of the SHD harmonic reducer bearing are both integral structures, and the height is lower than that of the SHG, which saves the installation space of the reducer. It is mainly used in the output part of the SHD type MINI reducer.

The harmonic reducer is mainly composed of three basic parts: Wave Generator Flexspline and Circular Spline, in addition to rigid bearing (cross roller bearing) and flexible bearing (thin-wall deep groove ball bearing). The inner hole of the flexible bearing matches with the outer ring of the elliptical cam. The outer ring is elastically deformed by the ball and matches with the inner diameter of the opening of the Flexspline. The outer periphery of the opening of the Flexspline is engraved with gears, which mesh with the teeth of the Circular Spline. The number of teeth of theCircular Spline is more than that of the Flexspline. The Flexspline and the Circular Spline mesh when the axis is long and separate when the axis is short. The bottom of the Flexspline is fixed to the output end, and the rigid bearing is installed at the output end of the reducer and connected to the outside world. Harmonic reducers are usually used in industries such as robots, machine tools, and aerospace. They have very high requirements for the accuracy, rigidity, and load-bearing capacity of harmonic reducers. Therefore, the processing and installation accuracy of each component inside the harmonic reducer are very high, and the requirements for

bearings are also very high. The most important thing for rigid bearings is the rigidity, reliability, and rotation accuracy of the bearings. Rigid bearings will be adjusted to a certain preload before leaving the factory to ensure sufficient rigidity of the bearings; the most important thing for flexible bearings is the maximum radial deformation of the bearings.

Harmonic reducer bearings include two types: crossed roller bearings and flexible bearings. Crossed roller bearings include four series, CSG (CSF) series, CSD series, SHG (SHF) series, and SHD series. The naming method same as harmonic reducers; the flexible bearing is named F-XX harmonic reducer model.

Our company has professional sales and technical engineers who are responsible for providing users with technical consultation, technical services, and product technical training on precision bearing information and installation and use. Perfect pre-sales, sales and after-sales services constitute a guarantee system for high-quality services, providing users with reliable bearing products and creating excellent user experience and rich benefits for every customer.

If you have any questions about products and services, please contact the company's service department directly.