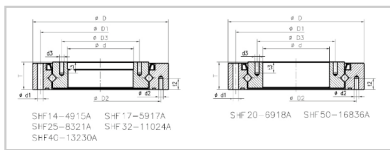
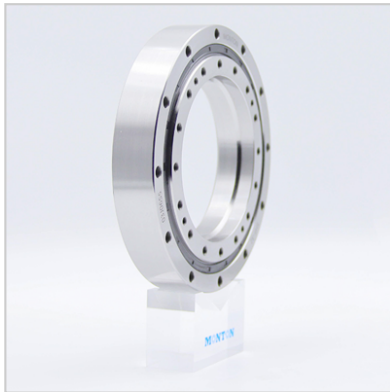


## Harmonic Drive Bearing

### SHF harmonic drive bearings-



|                        |                  |
|------------------------|------------------|
| Bearing NO.            | SHF50-12031A     |
| Dimensions (hli)       |                  |
| d                      | 135              |
| D                      | 214              |
| T                      | 36               |
| D1                     | 200              |
| D2                     | 200              |
| D21                    | ---              |
| D3                     | 154              |
| n1-d1                  | 12- $\emptyset$  |
| n2-d2                  | 6-M5             |
| n21-d21                | ---              |
| n3-d3                  | (16-M8) + (8-M5) |
| d31                    | ---              |
| rsmin                  | 0.5 x 45 °       |
| Basic Load ratings(KN) |                  |
| Cr                     | 69.8             |
| Cor                    | 122              |
| Weight                 | 5.19             |

## Product Description

Cross Roller Bearing for Harmonic Drive is cross roller structure. According to its application area there are two types( CSF/CSG Series and SHF/SHG Series ).Rolling body are cylindrical rollers which arranged orthogonality,this structure can make one bearing can bear the load from every direction e.g. radial,axial and tilting torque etc. Bearing with high rigidity,rotation accuracy and load carrying capacity. This series bearing has compact appearance,with mounting hole,customer can mount directly,suitable for every kinds of harmonic drives.

### SHF/SHG Series (Outer ring integraty,inner ring integraty)

Outer ring and inner ring are all integraty structure,mounting will have no affect on performance ,it can obtain stable running accuracy and torque.suitable for every kinds of SHF(SHG) series harmonic drives.

### Features Of SHF Series Harmonic Reducer Cross Roller Bearings

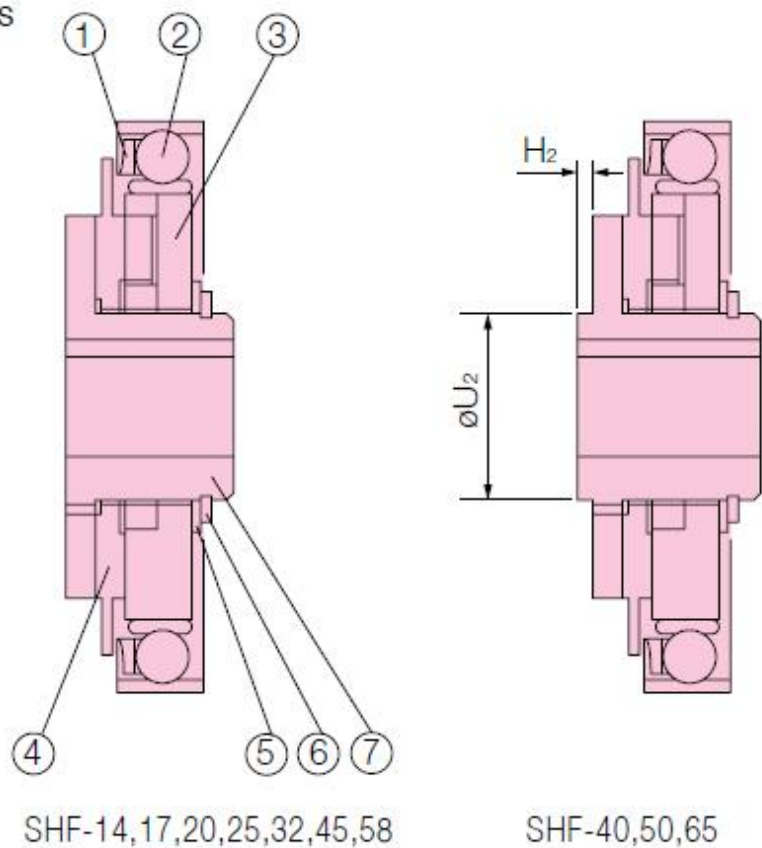
- \* High loading capacity, and can withstand radial, axial and moment loads at the same time
- \* Compact structure with high rigidity
- \* Integrated inner and outer ring, bearing performance won't be affected during mounting
- \* Dimension and running accuracy meet international standards
- \* Smooth rotation
- \* Small size and light weight
- \* Easy installation and maintenance

SHF/SHG series hollow structure crossed roller bearing can make wiring, piping, laser, etc. pass through, to achieve a simple structure of the machine and the device. Besides, SHF/SHG harmonic drive output bearings are mostly with negative clearance, which ensures the positioning accuracy of the equipment. The smoothness and accuracy of the friction torque of the harmonic reducer crossed roller bearing have a direct influence on the tooth meshing force and the stability of the harmonic reducer, and directly affect the service life of the harmonic reducer.

## Mounting

### WAVE GENERATOR COMPONENTS

- ① Ball Separator
- ② Wave Generator Bearing
- ③ Wave Generator Plug
- ④ Insert
- ⑤ Rub Washer
- ⑥ Snap Ring
- ⑦ Wave Generator Hub



- 1.Before installation, please clean bearing bracket, shaft, or other components, make sure there is no burrs or rough edge.
- 2.Install the screws to connect crossed roller bearings with circular spline, then install the screws to connect bearings with flex spline.
- 3.Install the wave generator and related components.

## Lubrication

Bearing with high quality compound lithium-based grease in factory,so under normal using condition there is no need to add grease.but for bearing running ,in the initial stage ,the frictional torque will increase temporarily, frictional torque will be stable when grease uniformly adhere to raceway and roller.

## Mounting caution

Pls clean up the parts e.g bearing seat ,axis etc,Which related to the bearing mounting. Check the burrs(make sure good fit tolerance between inner ring of bearing seat and outer ring of bearing, shaft neck and inner ring of bearing)

When tightening scrow, Retaining bolt locking should be divided to 3~4 stages from incompleton locking to completion locking,according to the “ + crossing method” again and again.

#### Note

Pls do not disassembly the bearing,for it is adjust by professional workers and to keep good preload and grease. If it runs abnormally after you receiving the bearing ,pls contact us.Besides, bearing working temperature is -20~+80 Celsius ,if not ,pls contact us.