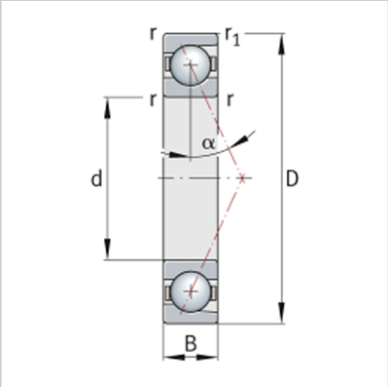
Angular Contact Ball Bearing

DLR Design Super precision angular contact ball bearings -HC71911-EDLR-T-P4S



Designation	**HC71911-EDLR-T-P4S**
Main dimensions	
d	55
D	80
B	13
Basic load ratings	
Dyn. Cr(KN)	12.3
Stat. Cor(kN)	7.7
Fatigue limit load	
Cur N	590
Limiting speeds	
nG grease min	28000
nG oil min	43000
Dimensions	
r min.	**1**
r1 min.	**1**
BN	2.8
SN	7.2
SB	1.4
Contact angle	
a °	25
Mounting dimensions	
da h12	60
Da H12	75.5
ra max.	0.6
ra1 max.	0.3
Preload force FV	
L N	51
M N	152
H N	304
Lift-off force KaE	
L N	145
M N	442
H N	897
Axial rigidity ca	
L N/µm	92.7
M N/µm	137
H N/µm	177
Mass	
m = kg	0.166

MONTON double direction thrust angular contact ball bearings consist of two single row thrust angular contact ball bearings with back-to-back arrangement and contact angle of 60°. This configuration plus the multi-ball design allows the bearing to withstand high axial loads in both directions and provide high system rigidity. The two bearings are separated. When the shaft rings are pressed together, a preload within a preset range can be obtained, so it is often used in the

bidirectional positioning of machine tool spindles.

MONTON double direction thrust angular contact ball bearing combined with NN30K series or N10K series cylindrical roller bearings and installed in the same bearing seat hole. This bearing combination simplifies the processing of the bearing seat hole. The nominal inner diameter and outer diameter of MONTON double direction thrust angular contact ball bearings are the same as those of the corresponding cylindrical roller bearings. The outer diameter tolerance of the seat ring is combined with the bearing seat bore diameter and form and position tolerances recommended for super precision cylindrical roller bearings to give the bearing seat hole an appropriate radial clearance. If the outer ring is not axially pressed in the bearing seat, the clearance is sufficient to prevent the thrust bearing from bearing radial loads. The 234 series double direction thrust angular contact ball bearings are 60° contact angle structures, consisting of a seat ring with a lubricating oil groove and oil hole, two shaft rings, a spacer and two cage assemblies with many steel balls; the width of the spacer can ensure that the bearings are preloaded. Double direction angular contact ball bearings can withstand bidirectional axial loads and do not withstand radial loads.

They have high precision, good rigidity, good lubrication, low temperature rise, high speed and easy loading and unloading. This type of bearing is widely used in the spindles of grinders, lathes, boring machines, milling machines, drilling machines, etc., and is particularly suitable for use in precision machine tool spindles when combined with double-row cylindrical roller bearings.

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 data and installation and use. Perfect pre-sales, in-sales and after-sales services constitute a guarantee system for high-quality services, providing users with reliable quality 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.