

Angular Contact Ball Bearing

76020 Series Ball Screw Support Angular Contact Ball Bearings-7603020TVP



Bearing NO.	7603020TVP
Dimension(mm)	
d	20
D	52
B	15
R _{smin}	1.1
a	39
Assembly Dimension	
da	30.5
Da	43.5
Ra	1.1
Loading(KN)	
Ca	24.5
Coa	32
RPM(r/min)	
Lub.	11000
Oil	16000
Preload(KN)	
F _{ao}	2.9
Stiffness(N/μm)	780
Unload(KN)	
F _{am}	8.3
Friction(Nmm)	
torque	60
Grease filling(g)	
Reference quantity	1.9
Weight(kg)	
≈	0.17

Ball screw support bearings can meet the application for high precision, high load capacity, high rigidity, low friction, easy installation, maintenance-free or low maintenance screw drive . These applications require safe radial and axial support and extremely precise axial guidance of the spindle. Ball screw support bearings have contact angle of 60°, which can withstand high axial and radial forces. Common arrangement include DB, DF, DT, etc. This series also have design with two seals, which is convenient for customers to install and use. The main principles for selecting screw drive bearings are axial rigidity, load capacity, running accuracy, speed and friction torque. Other factors that need to be considered are the moment rigidity of the bearing and the ability to adapt to the deflection between the shaft and the bearing seat. Installation and seals also need to be considered.

Thrust angular contact ball bearings for screw drives can handle heavy axial

loads and occasional overloads better than conventional bearing designs. Thrust angular contact ball bearings for screw drives can only handle axial loads in one direction and are therefore matched with a second set of bearings, or mounted in sets. These bearings are standardized for universal matching and can be mounted in sets of up to four bearings to achieve different bearing configurations and the performance level of a matched bearing set. The unique heat treatment method helps the bearings maintain a constant preload throughout their operating life.

Universally matchable single-way bearings can be configured in different configurations depending on the stiffness and load requirements of the application. If misalignment between bearing positions cannot be avoided, a face-to-face bearing arrangement is recommended. It is less sensitive to misalignment than a back-to-back bearing arrangement. A combination of tandem and face-to-face or back-to-back arrangements is often used to maximize the stiffness or load carrying capacity of a bearing set in one direction. For example, when it is necessary to support an extended, preloaded vertical or cantilevered ball screw drive will appear.

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.