



ZVL-ZKL single direction thrust ball bearings have one row of balls within a cage, running between two grooved washers. The washers have flat seating surfaces that must be completely supported so that all of the balls can be evenly loaded. This bearing design is solely for carrying axial loads in one direction.

Double direction thrust ball bearings are used for reversing axial loads. There are two grooved housing washers, two ball and retainer assemblies, and an intermediate shaft washer with a raceway groove on each face. The housing washers and ball and retainer assemblies are the same as those of the corresponding single direction ball thrust bearing.

Thrust ball bearings are used in applications where axial loads are too high to be supported by radial bearings or when rigid axial guidance is required.

Single Direction Thrust Ball Bearings

Suffix	Description	Example of Designation
A	Internal design change for enhanced limiting speed	51106A
F	Machined steel cage guided on the rolling elements	51148F
M	Machined bronze cage guided on the rolling elements	51144M
TNGN	Polyamide cage reinforced with glass fiber, guided on the rolling elements	51408ATNGN
P6	Higher tolerance class than standard	51307 P6
P5	Higher tolerance class than P6	51216 P5

