

ZVL-ZKL spherical roller thrust bearings contain a large number of asymmetrical barrel shaped rollers, inclined so steeply that the bearing accommodates high axial loads in addition to considerable radial loads at relatively high rotational speeds. The spherical shaped raceway of the housing washer accommodates misalignment between the shaft and housing. Spherical roller thrust bearings are separable, which allows the shaft washer, cage, and roller assembly to be mounted separately from the housing washer. Due to their internal design these bearings need to be lubricated with oil, except under extremely low speeds where grease lubrication is adequate. Applications for this bearing type include column bearings for cranes, heavy worm gears, and screw pumps.

ZVL-ZKL has started adding the E design spherical roller thrust bearings to our production schedule. This design change uses larger rollers and makes better utilization of the internal space, which results in an average increase of the basic dynamic load rating by 35% and an average increase of the static load rating by 20% when compared to bearings of the original design.

Spherical Roller Thrust Bearings		
Suffix	Description	Example of Designation
E	Internal design change for enhanced load carrying capacity	29416EJ
J	Pressed steel cage guided on the rolling elements	29340J
M	Machined bronze cage guided on the rolling elements	29412M