

ZVL-ZKL single row tapered roller bearings have one row of rollers shaped like the frustum of a cone. Due to the inclined position of the tapered rollers, the contact lines between the rollers and raceways intersect at a common point on the axis of the bearing. The contact surfaces of the raceways and tapered rollers are modified to limit edge stresses. Due to this modification and the large number of rollers, this bearing type has high load carrying capacity in the radial as well as axial directions. Since a single bearing of this type can only carry axial loads in one direction, the bearings are usually arranged in pairs.

Ideal for use in a wide range of applications primarily in the automotive and machine tool industries, these bearings are available in both inch and metric dimensions. This is a separable type of bearing. The inner ring (cone) along with the cage and rollers is one assembly unit. The outer ring (cup) is the other assembly unit. This feature allows the bearing rings to be fitted separately and so adjusted that the optimum clearance or preload for each application is achieved.

Single Row Tapered Roller Bearings		
Suffix	Description	Example of Designation
A	Internal design change for enhanced load carrying capacity	32206A
B	Contact angle $\alpha = 17^\circ$	32309B
X	Altered boundary dimensions introduced by revised ISO standards	32018X
P6	Higher tolerance class than standard	30304A P6
C6	Reduced vibration level	30205A C6
S0	Heat stabilized for an operating temperature up to 302°F(150°C)	30210A S0