

ZVL-ZKL single row deep groove ball bearings achieve high load ratings through the use of balls of optimum size and conformity to the geometry of deep raceways. As a result, they accommodate axial loads in both directions as well as radial loads, even at high speeds. Manufactured in a broad assortment of sizes, they are the most common type of rolling bearing.

In addition to the non-separable units without filling slots, the series also includes magneto type bearings, so designated with the prefix E. This design allows the inner ring, cage, and ball assembly and removable outer ring to be mounted separately. With bore diameters up to $d = 20$ mm, these separable bearings are suitable for lighter loads and high-speed applications.

Single Row Deep Groove Ball Bearings		
Suffix	Description	Example of Designation
RS	Seal on one side	6207RS
RSR	Seal on one side adjacent to the smooth rib of the inner ring	6006RSR
-2RS	Seals on both sides	6306-2RS
-2RSR	Seals on both sides adjacent to the smooth rib of the inner ring	6001-2RSR
Z	Shield on one side	6310Z
ZR	Shield on one side adjacent to the smooth rib of the inner ring	6305ZR
-2Z	Shields on both sides	6007-2Z
-2ZR	Shields on both sides adjacent to the smooth rib of the inner ring	608-2ZR
K	Tapered bearing bore at a 1:12 ratio	6208K
N	Snap ring groove on the outer ring	6315N
F	Machined steel cage guided on the rolling elements	6418F
M	Machined bronze cage guided on the rolling elements	6310M
MA	Machined bronze cage guided on the outer ring	6211MA
T	Textite (fabric-reinforced phenolic resin) cage guided on the rolling elements	6005T P5
TN	Polyamide or similar plastic cage guided on the rolling elements	6207TN
TNGH	Polyamide cage reinforced with glass fiber, guided on the rolling elements	6306TNGH
P6	Higher tolerance class than standard	6202 P6
P6E	Higher tolerance class for rotating electrical machines	6206 P6E
P5	Higher tolerance class than P6	6005 P5
P4	Higher tolerance class than P5	607 P4
C2	Radial clearance less than normal	6000 C2
C3	Radial clearance greater than normal	6212 C3
C4	Radial clearance greater than C3	6314 C4
C5	Radial clearance greater than C4	6412M C5
R.....	Radial clearance with a non-standard range (range in μm)	626 P5R5-15
A.....	Axial clearance with a non-standard range (range in μm)	624 P5A12-15
C6	Reduced vibration level	6206 C6
S0	Heat stabilized for an operating temperature up to 302°F (150°C)	6307M C4S0
S1	Heat stabilized for an operating temperature up to 392°F (200°C)	6307M C4S1
S2	Heat stabilized for an operating temperature up to 482°F (250°C)	6307M C4S2
S3	Heat stabilized for an operating temperature up to 572°F (300°C)	6307M C4S3
S4	Heat stabilized for an operating temperature up to 662°F (350°C)	6307M C4S4
S5	Heat stabilized for an operating temperature up to 752°F (400°C)	6307M C4S5