

ZVL-ZKL single row angular contact ball bearings have the connecting line of their raceway-to-ball contact points positioned at an acute angle to the perpendicular line of the bearing axis, or contact angle. Since this allows them to stand up to radial loads acting simultaneously with high axial forces in one direction, they are usually arranged back-to-back in pairs to accommodate axial loading in both directions. Optimum ball size and conformity give these bearings their high load ratings.

Although they have only a single rib on the bearing rings, single row angular contact ball bearings are non-separable.

Single Row Angular Contact Ball Bearings

Prefix	Description	Example of Designation
A	Internal construction with two ribs on the outer ring	A7201AATA P5
B	Internal construction with two ribs on the inner ring	B7018CATB P4
Suffix	Description	Example of Designation
A	Contact angle $\alpha=25^\circ$	7203A
AA	Contact angle $\alpha=26^\circ$	7212AA
B	Contact angle $\alpha=40^\circ$	7214B
CA	Contact angle $\alpha=12^\circ$	B7210CATB P5
CB	Contact angle $\alpha=10^\circ$	B7200CBTB P4
MB	Machined bronze cage guided on the inner ring	B7017AAMB
TA	Textite (fabric-reinforced phenolic resin) cage guided on the outer ring	A7201AATA P5
TB	Textite (fabric-reinforced phenolic resin) cage guided on the inner ring	B7203CBTB P4
TNG	Polyamide cage reinforced with glass fiber, guided on the rolling elements	7304BTNG
P6	Higher tolerance class than standard	7204B P6
P5	Higher tolerance class than P6	B7014AATB P5
P4	Higher tolerance class than P5	B7206CBTB P4
O	Duplex mounting of bearings in a back-to-back configuration	B7024CATB P5OL
X	Duplex mounting of bearings in a face-to-face configuration	B7210CBTB P4XM
T	Duplex mounting of bearings in a tandem configuration	B7215CATB P5T
OT	Triplex mounting of bearings O+T	B7018CATB P5OTL
XT	Triplex mounting of bearings X+T	B7211CATB P4XTM
TT	Triplex mounting of bearings T+T	B7205AATB P4TT
L	With light preload	B7016AATB P5OL
M	With medium preload	B7206CBTB P4XM
S	With heavy preload	B7209CATB P4OS

