



# Miniature Bearings Australia

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## Bearing Retainers (Cages)

The purpose of a bearing's cage is to hold and separate the rolling elements (balls or rollers) of the bearing.

The most common types of cage used for miniature ball bearings are the two piece steel ribbon and the one piece steel crown types. These cages are usually made out of a variety of grades of steel depending upon the manufacturer. Cages may be made from brass, SAE52100 chrome steel or stainless steels AISI302, AISI410 or AISI430.



Larger bearings (over 10mm bore size) usually utilise a two piece steel riveted cage allowing for higher loads, and more vibrational and acceleration stresses to be placed on the bearings.

High speed applications require bearings with a crown type retainer manufactured from various types of synthetic materials including



**NYLON - DELRIN® ACETAL RESINS - PHENOLIC LAMINATES - PEEK® - GLASS RE-INFORCED POLYAMIDE - TORLON®**

MBA carry a wide range of bearings with high speed cages and increased internal clearance. Please note however that *high speed* is only a relative term. *High speed* for a 10mm bearing is not the same as *high speed* for a 4mm bearing. *High speed* for a skating application is not the same as *high speed* for a dental handpiece.

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