

## HOUSING DESIGN CONSIDERATIONS

### Recommended Housing/Bearing Fits

An interference fit between the bearing and housing is not recommended as high bearing pre-loads may occur. Following are the recommended housing bore sizes and tolerances.

<u>Bearing O.D.</u>	<u>Recommended Housing Bore Size/Tolerance</u>	
Up to and including 1"	Max. Bearing O.D. +.0005	+ .0005 - .0000
Up to and including 2"	Max. Bearing O.D. +.0007	+ .0007 - .0000
Up to and including 3"	Max. Bearing O.D. +.0010	+ .0010 - .0000

Recommended bore roundness should be within bore tolerance.

The above recommendations can be applied to both steel and aluminum. However, due to different expansion rates, when bearing and housing materials are dissimilar, extra care in both fit-up and staking is needed.

### Recommended Housing Characteristics

To achieve maximum bearing performance and to facilitate bearing installation, certain housing characteristics must be considered. It is recommended that the housing width be identical in size and tolerance to the bearing outer race width. Housing widths up to .010" narrower can also be accommodated by Rexnord's Shafer staking tool.

### Recommended Housing Chamfer

For Type "X" Groove - .025/.020 x 45°

For Type "Y" Groove - .035/.030 x 45°

For Type "Z" Groove - .055/.050 x 45°

Chamfers should be concentric to the bore within .010" TIR.

