The Kaydon concept of standard bearings with lightweight, thin sections and large bore diameters includes tapered and radial roller bearings as well as ball bearings. KT Series tapered roller bearings offer advantages to those designs requiring a bearing of higher capacity, which would benefit from the many unique advantages of a thin section bearing. KT tapered roller bearings are used to advantage in applications ranging from oil field equipment to machine tool tables where space and weight considerations are meaningful. KT Series standard tapered roller bearings have races and rollers of through-hardened AISI 52100 steel with a one-piece stamped steel cage. When specified, they can be furnished in pairs, match ground for use with or without spacers.

The tapered roller bearings in this catalog are of the single-row radial type, designed primarily for application of radial load. While of separable construction, the rolling elements are retained in the separator.

Since this bearing assumes a contact angle of approximately 12° under an axial force, it does have a reasonable amount of thrust capacity. This capacity is unidirectional and is realized when the axial force is applied to the wide faces of the races.

As in the case of the angular contact ball bearing, the single row tapered roller bearing is commonly mounted in opposition to another bearing (usually of similar construction) to provide an axial force for establishing and maintaining the angle of contact. Two bearings of this type maybe mounted with the lines of contact converging outside of the bearings (back-to-back) or inside (face-to-face) with the former preferred for stability in the presence of overturning load.

<table>
<thead>
<tr>
<th>KAYDON Bearing Number</th>
<th>Bore d (IN)</th>
<th>Outside Dia. D (IN)</th>
<th>Assem. Width T (IN)</th>
<th>Factor K (IN)</th>
<th>Rating at 500 RPM for 3000 hrs. L-10</th>
<th>Cone Width B (IN)</th>
<th>Cup Width C (IN)</th>
<th>Shoulder Diameters</th>
<th>Approx Bearing Wt. (LB)</th>
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<td>7.000</td>
<td>8.500</td>
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<td>.718</td>
<td>1.79</td>
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<td>5000</td>
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</table>

Tolerances are:  
Bore: +.001” – .000” up to KT-110, +.002” – .000” for KT-110 to KT-200  
Outside Diameter: Same as for bore  
Width: ±.010” up to KT-112, ±.015” for KT-112 to KT-200  
Cup Radial Runout: .0015” Max. F.I.M., Cone Radial Runout: .0020” Max. F.I.M.