KT Series

Tapered Roller Bearings

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.

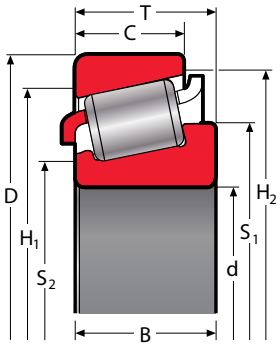
KT Series tapered roller bearings offer advantages to those designs requiring a bearing of higher capacity, which would benefit from the many unique advantages of a thin section bearing. KT tapered roller bearings are used to advantage in applications ranging from oil field equipment to machine tool 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.



KAYDON Bearing Number	Bore d (IN)	Outside Dia. D (IN)	Assem. Width T (IN)	Factor K (IN)	Rating at 500 RPM for 3000 hrs. L-10		Cone Width B (IN)	Cup Width C (IN)	Shoulder Diameters				Approx. Bearing Wt. (LB)
									Shaft		Housing		
					Radial (LB)	Thrust (LB)			S1 (IN)	S2 (IN)	H1 (IN)	H2 (IN)	
KT-070	7.000	8.500	.812	1.74	4970	2860	.812	.625	7.375	7.300	8.125	8.250	3.11
KT-091	9.125	10.250	.718	1.79	4920	2750	.722	.597	9.625	9.312	9.850	10.050	2.88
KT-098	9.875	11.500	1.062	1.85	9260	5000	1.062	.875	10.375	10.225	11.063	11.250	6.05
KT-100	10.000	11.125	.625	1.79	4020	2250	.625	.500	10.500	10.300	10.750	10.900	2.88
KT-110	11.000	12.500	.875	1.86	7620	4100	.875	.688	11.438	11.250	12.000	12.250	5.06
KT-112	11.250	12.750	.812	1.86	7150	3860	.812	.625	11.688	11.500	12.313	12.500	4.72
KT-118	11.875	13.562	.937	1.76	7250	4120	.812	1.125	12.438	12.210	13.000	13.320	6.63
KT-130	13.000	14.562	.843	1.44	5580	3880	.843	.594	13.438	13.320	14.125	14.300	5.20
KT-132	13.250	15.000	.937	1.69	6160	3650	.937	.750	13.875	13.625	14.375	14.500	6.79
KT-151	15.125	17.375	1.125	1.72	11760	6840	1.125	.812	15.750	15.625	16.750	16.875	13.57
KT-165	16.500	18.750	.875	1.78	8220	4620	.882	.812	17.250	17.000	18.125	18.500	11.14
KT-180	18.000	19.625	.812	1.69	7400	4330	.812	.687	18.438	18.375	19.188	19.300	8.19
KT-200	20.000	21.750	.812	1.80	7930	4400	.812	.687	20.625	20.375	21.125	21.250	9.78

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.