Introduction

HT Series slewing ring bearings are larger versions of the HS Series, with increased ball diameter and cross-sectional area providing substantially more capacity. They range in size from 36-66 inches OD (900-1700 mm) with a standard cross section.



Design Features

The internal configuration consists of deep groove gothic arch raceways and maximum ball complement. This results in a four-point contact design which provides exceptional moment, thrust, and radial load capacities. Integral seals are provided to assist in the exclusion of contaminants.

Geared rings have tapped holes, while non-geared rings have through holes.

HT Series bearings are available in internal geared, external geared, and non-geared configurations. The gears are Involute Stub designs with 20° pressure angles, manufactured to AGMA Class Q5 and .015 to .025 inches allowance for backlash.

All models feature two fittings for lubrication, spaced 180 degrees apart. On non-geared and internal geared models, the fittings are located on the outer diameter (D_o). On the external-geared models, the fittings are located on the inner diameter (d_i).

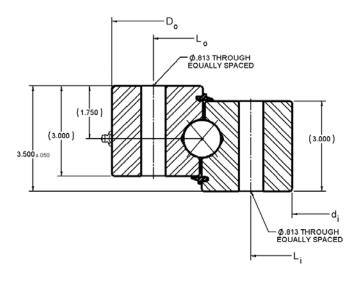
Availability

HT Series bearings are made to order and can require a longer lead time as forgings are not stocked.

Applications

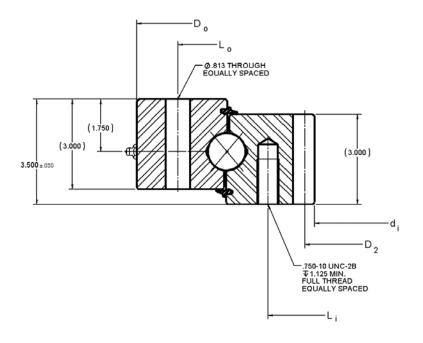
HT Series bearings have been used successfully in a variety of medium to heavy duty applications including:

- Cranes
- Aerial lifts
- Digger derricks
- Chute swivels
- Lift truck rotators
- Industrial turntable



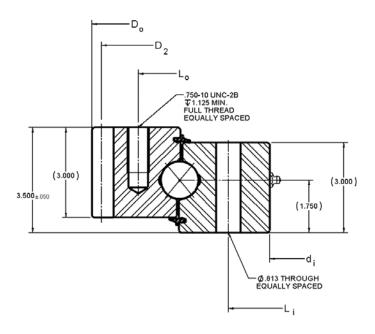
No Gear

	OUTLINE DIMENSIONS AND WEIGHT			MOUNTING HOLES					GEAR	MOMENT RATING		
Kaydon P/N				OUTER RING		INNER RING		INV. STUB, α = 20°				
	D _o	d _i	G APPROX.	L _o	n _o	L _i	n _i	D ₂	P _d	z ₂	F _z	C _{rm}
	(in)	(in)	(lbs)	(in)		(in)		(in)			(lbs)	(ft-lbs)
HT10-30P1Z	36.000	24.000	447	33.250	24	26.750	30	_	_	_	_	340,000
HT10-36P1Z	42.000	30.000	521	39.250	28	32.750	32	_	_	_	_	395,700
HT10-42P1Z	48.000	36.000	628	45.250	32	38.750	36	_	_	_	_	457,000
HT10-48P1Z	54.000	42.000	719	51.250	36	44.750	40	_	_	_	_	517,900
HT10-54P1Z	60.000	48.000	809	57.250	40	50.750	44	_	_	_	_	578,400
HT10-60P1Z	66.000	54.000	865	63.250	44	56.750	48	_	_	_	_	638,800



Internal Gear

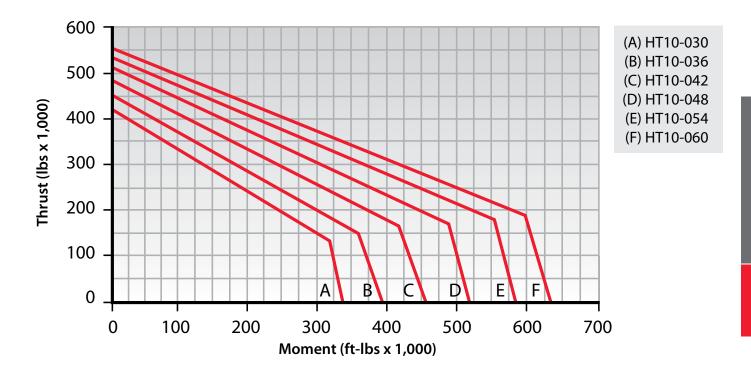
Kaydon P/N	OUTLINE DIMENSIONS AND WEIGHT			MOUNTING HOLES					GEAR	MOMENT RATING		
				OUTER RING		INNER RING		١ ١				
	D _o	d _i	G APPROX.	L _o	n _o	L	n _i	D ₂	P _d	z ₂	F _z	C _{rm}
	(in)	(in)	(lbs)	(in)		(in)		(in)			(lbs)	(ft-lbs)
HT10-30N1Z	36.000	24.160	411	33.250	24	27.250	30	24.800	2.5	62	21,783	340,000
HT10-36N1Z	42.000	30.160	517	39.250	28	33.250	32	30.800	2.5	77	21,195	395,700
HT10-42N1Z	48.000	36.160	580	45.250	32	39.250	36	36.800	2.5	92	20,819	457,000
HT10-48N1Z	54.000	42.160	689	51.250	36	45.250	40	42.800	2.5	107	20,548	517,900
HT10-54N1Z	60.000	48.160	775	57.250	40	51.250	44	48.800	2.5	122	20,344	578,400
HT10-60N1Z	66.000	54.160	842	63.250	44	57.250	48	54.800	2.5	137	20,185	638,800



External Gear

Kaydon P/N	OUTLINE DIMENSIONS AND WEIGHT			MOUNTING HOLES OUTER RING INNER RING				"	GEAR NV. STU	MOMENT RATING		
	D _o	d _i	G APPROX.	L _o	n _o	L _i	n _i	D ₂	P _d	z ₂	F _z	C _{rm}
	(in)	(in)	(lbs)	(in)		(in)		(in)			(lbs)	(ft-lbs)
HT10-30E1Z	35.840	24.000	398	32.750	24	26.750	30	35.200	2.5	88	18,393	340,000
HT10-36E1Z	41.840	30.000	481	38.750	28	32.750	32	41.200	2.5	103	18,608	395,700
HT10-42E1Z	47.840	36.000	562	44.750	32	38.750	36	47.200	2.5	118	18,772	457,000
HT10-48E1Z	53.840	42.000	660	50.750	36	44.750	40	53.200	2.5	133	18,901	517,900
HT10-54E1Z	59.840	48.000	742	56.750	40	50.750	44	59.200	2.5	148	19,005	578,400
HT10-60E1Z	65.840	54.000	800	62.750	44	56.750	48	65.200	2.5	163	19,090	638,800

HT Series Load Chart





Rating Charts are only applicable for operating conditions defined as NORMAL OPERATION in Section 2 and when installed and maintained as defined in Section 3 of this catalog. Bearing diameter increase does not necessarily ensure bearing rating increase due to variations in rolling elements, ring section, and fastener complements. For information concerning the basis for development of Rating Charts refer to the LOAD RATING paragraph in Section 2.







