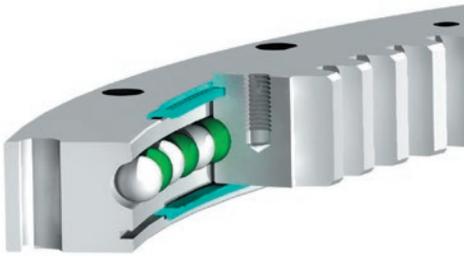


HS Series

Introduction

HS Series slewing ring bearings are similar in size to the RK Series, but have rectangular cross sections, which allows for alternate hole patterns as well as improved stiffness and more capacity. They are available in sizes from 20 – 47 inches OD (500 – 1200 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.

HS 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

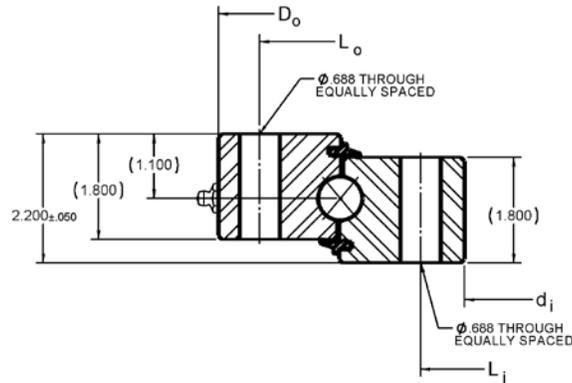
Forgings for HS Series bearings are stocked, and the finished bearings can usually be delivered promptly. Mating pinions are also generally available and can be found on [page 70](#).

Applications

HS 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

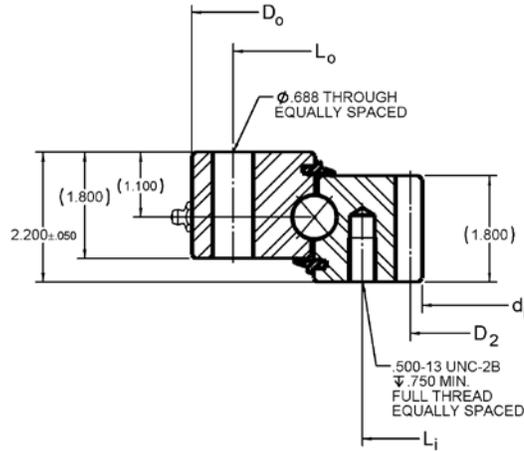
HS Series



No Gear

Kaydon P/N	OUTLINE DIMENSIONS AND WEIGHT			MOUNTING HOLES				GEAR DATA INV. STUB, $\alpha = 20^\circ$				MOMENT RATING C_{rm} (ft-lbs)
	D_o (in)	d_i (in)	G APPROX. (lbs)	OUTER RING		INNER RING		D_2 (in)	P_d	z_2	F_z (lbs)	
				L_o (in)	n_o	L_i (in)	n_i					
HS6-16P1Z	20.400	12.000	103	19.000	8	13.500	12	—	—	—	—	50,500
HS6-21P1Z	25.500	17.000	137	24.000	12	18.500	15	—	—	—	—	72,700
HS6-25P1Z	29.500	21.000	162	28.000	15	22.500	18	—	—	—	—	91,800
HS6-29P1Z	33.400	25.000	186	32.000	15	26.500	18	—	—	—	—	111,900
HS6-33P1Z	37.400	28.830	216	35.750	18	30.500	20	—	—	—	—	128,000
HS6-37P1Z	41.250	32.830	233	39.750	18	34.380	20	—	—	—	—	130,900
HS6-43P1Z	47.180	38.750	269	45.620	20	40.250	24	—	—	—	—	139,900

HS Series

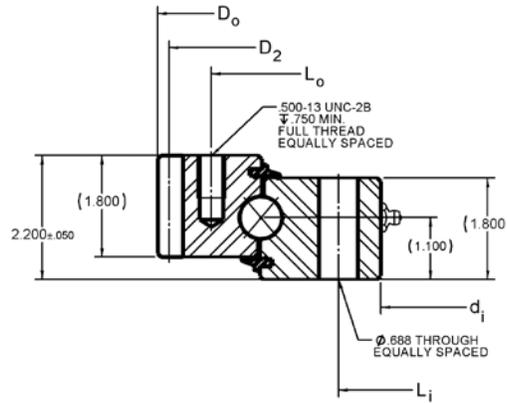


Internal Gear

Kaydon P/N	OUTLINE DIMENSIONS AND WEIGHT			MOUNTING HOLES				GEAR DATA INV. STUB, $\alpha = 20^\circ$				MOMENT RATING C_{rm} (ft-lbs)
	D_o (in)	d_i (in)	G APPROX. (lbs)	OUTER RING		INNER RING		D_2 (in)	P_d	z_2	F_z (lbs)	
				L_o (in)	n_o	L_i (in)	n_i					
HS6-16N1Z	20.400	12.850	92	19.000	8	14.880	16	13.250	4	53	6,084	50,500
HS6-21N1Z	25.500	17.600	117	24.000	12	19.630	20	18.000	4	72	5,842	72,700
HS6-25N1Z	29.500	21.600	148	28.000	15	23.630	24	22.000	4	88	5,719	91,800
HS6-29N1Z	33.400	25.600	171	32.000	15	27.630	28	26.000	4	104	5,634	111,900
HS6-33N1Z	37.400	29.130	205	35.750	18	31.500	30	29.667	3	89	7,617	128,000
HS6-37N1Z	41.250	33.133	226	39.750	18	35.500	32	33.667	3	101	7,531	130,900
HS6-43N1Z	47.180	39.130	253	45.620	20	41.500	36	39.667	3	119	7,434	139,900

Not quite what you need? Contact Kaydon to inquire about custom features such as different mounting holes, internal clearance, pilot diameters, drive arrangements, or Endurakote® plating.

HS Series

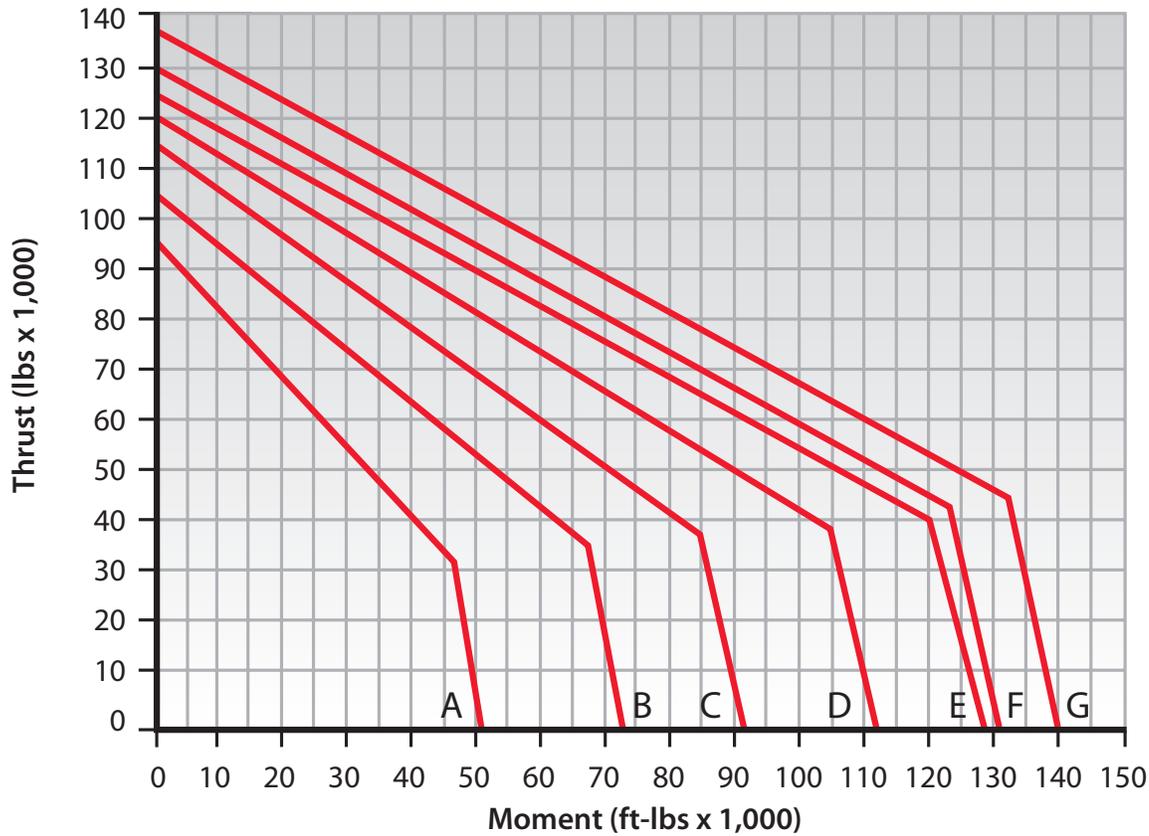


External Gear

Kaydon P/N	OUTLINE DIMENSIONS AND WEIGHT			MOUNTING HOLES				GEAR DATA INV. STUB, $\alpha = 20^\circ$				MOMENT RATING C_{rm} (ft-lbs)
	D_o (in)	d_i (in)	G APPROX. (lbs)	OUTER RING		INNER RING		D_2 (in)	P_d	z_2	F_z (lbs)	
				L_o (in)	n_o	L_i (in)	n_i					
HS6-16E1Z	19.900	12.000	85	18.000	14	13.500	12	19.500	4	78	4,981	50,500
HS6-21E1Z	25.150	17.000	108	23.250	18	18.500	15	24.750	4	99	5,076	72,700
HS6-25E1Z	29.150	21.000	137	27.250	20	22.500	18	28.750	4	115	5,127	91,800
HS6-29E1Z	32.900	25.000	158	31.000	24	26.500	18	32.500	4	130	5,164	111,900
HS6-33E1Z	37.200	28.830	188	35.000	28	30.500	20	36.667	3	110	6,817	128,000
HS6-37E1Z	41.200	32.830	207	38.880	28	34.380	20	40.667	3	122	6,860	130,900
HS6-43E1Z	46.870	38.750	237	44.630	32	40.250	24	46.333	3	139	6,910	139,900

Not quite what you need? Contact Kaydon to inquire about custom features such as different mounting holes, internal clearance, pilot diameters, drive arrangements, or Endurakote® plating.

HS Series Load Chart



- (A) HS6-016
- (B) HS6-021
- (C) HS6-025
- (D) HS6-029
- (E) HS6-033
- (F) HS6-037
- (G) HS6-043



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](#).

Not quite what you need? Contact Kaydon to inquire about custom features such as different mounting holes, internal clearance, pilot diameters, drive arrangements, or Endurakote® plating.