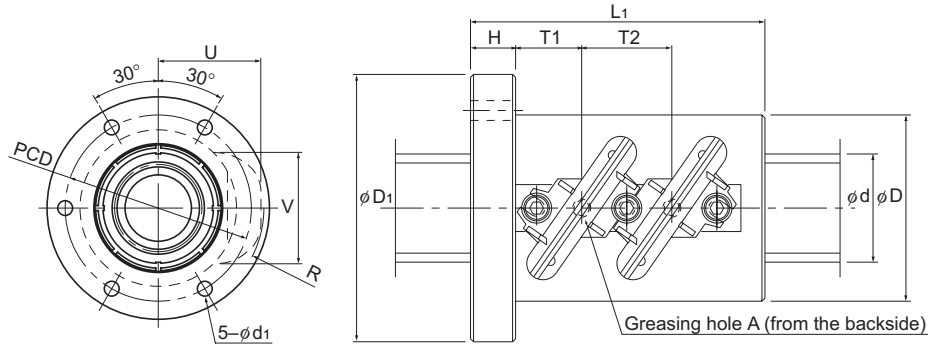
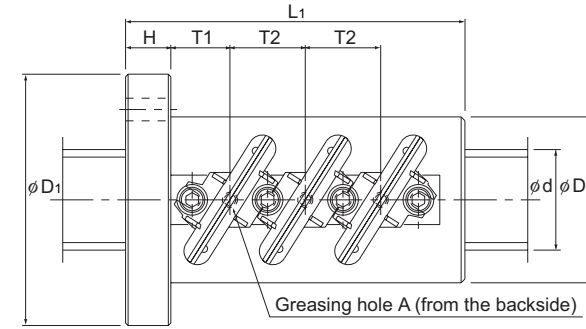


Model HBN



Models HBN3210 to 3612



Models HBN4010 to 6320

Unit: mm

Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows x turns	Basic load rating		Permissible load* F _P kN	Rigidity K N/μm	Nut dimensions											Screw shaft inertial moment/mm ³ kg·cm ² /mm	Nut mass kg	Shaft mass kg/m	
						C kN	C _{0a} kN			Outer diameter D	Flange diameter D ₁	Overall length L ₁	H	PCD	d ₁	T1	T2	U _{MAX}	V _{MAX}	R _{MAX}				Greasing hole A
HBN 3210-5	32	10	34	26	2×2.5	102.9	191.3	31.9	1077	58	85	98	15	71	6.6	22	30	43	46	43.5	M6	8.08×10 ⁻³	1.8	2.9
HBN 3610-5	36	10	38	30	2×2.5	108.2	220.4	33.5	1176	62	89	98	15	75	6.6	22	30	45	50	46	M6	1.29×10 ⁻²	1.9	4.2
HBN 3612-5	36	12	38.4	29	2×2.5	141.1	267.7	43.7	1207	66	100	116	18	82	9	26	36	49	52.5	50	M6	1.29×10 ⁻²	2.8	3.2
HBN 4010-7.5	40	10	42	34	3×2.5	162.6	336	50.4	1910	66	100	135	18	82	9	23.5	30	46.5	54	48	M6	1.97×10 ⁻²	2.9	5.7
HBN 4012-7.5	40	12	42.4	33	3×2.5	212.4	441.6	65.8	1922	70	104	152	18	86	9	26	36	51	56	52	M6	1.97×10 ⁻²	3.7	4.6
HBN 5010-7.5	50	10	52	44	3×2.5	179.1	462.7	55.5	2279	78	112	135	18	94	9	23.5	30	52	63.5	54.5	M6	4.82×10 ⁻²	3.7	10.2
HBN 5012-7.5	50	12	52.4	43	3×2.5	235.7	572.2	73.1	2345	80	114	152	18	96	9	26	36	56	66	58.5	M6	4.82×10 ⁻²	4.4	8.9
HBN 5016-7.5	50	16	53	39.6	3×2.5	379.6	820.9	117.7	2392	95	135	211	28	113	9	37.5	48	64.5	69.6	65.2	PT 1/8	4.82×10 ⁻²	10.0	5.0
HBN 6316-7.5	63	16	66	52.6	3×2.5	427.1	1043.8	132.4	2898	105	139	211	28	122	9	37.5	48	70.5	82	72.5	PT 1/8	1.21×10 ⁻¹	10.6	11.5
HBN 6316-10.5	63	16	66	52.6	3×3.5	577.1	1461.3	178.9	4029	105	139	259	28	122	9	53.5	64	70.5	82	73	PT 1/8	1.21×10 ⁻¹	17.4	11.5
HBN 6320-7.5	63	20	66.5	49.6	3×2.5	578.8	1283.1	179.4	3030	117	157	252	32	137	11	44	60	79	86.5	80	PT 1/8	1.21×10 ⁻¹	17.2	8.1

Note) The permissible load F_P* indicates the maxim axial load that the Ball Screw can receive.
 This model is capable of achieving a longer service life than the conventional Ball Screw under a high load.
 For the axial clearance, this model has clearance G2 as the standard. Other clearance is also available at your request.
 Contact THK for details.

Model number coding

HBN3210-5 RR G2 +1200L C7

Model number Seal symbol (*1) Accuracy symbol (*3)
 Overall screw shaft length (in mm)
 Symbol for clearance in the axial direction (*2)

(*1) See A-816. (*2) See A-685. (*3) See A-678.

Note) The rigidity values in the table represent the spring constants obtained from the load and the elastic deformation when providing an axial load, 30% of the basic dynamic load rating (Ca).
 These values do not include the rigidity of the components related to mounting the ball screw nut. Therefore, it is normally appropriate to regard roughly 80% of the value in the table as the actual value.
 If the axial load (Fa) is not 0.3 Ca, the rigidity value (K_N) is obtained from the following equation.

$$K_N = K \left(\frac{Fa}{0.3Ca} \right)^3$$

K: Rigidity value in the dimensional table.