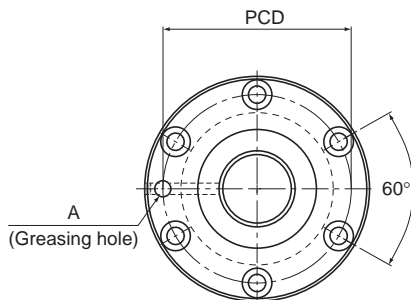


## No Preload Type of Precision Ball Screw

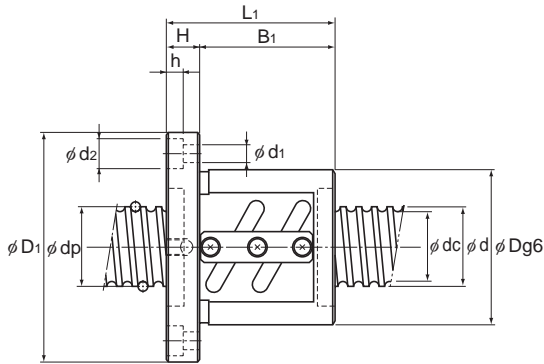
Screw shaft outer diameter	70 to 100
Lead	10 to 20



BNF

Screw shaft outer diameter d	Lead Ph	Model No.	Ball center-to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows X turns	Basic load rating		Rigidity K N/μm	Flange diameter	
						Ca	C <sub>0a</sub>		Outer diameter D	Flange diameter D <sub>1</sub>
						kN	kN			
70	10	BNF 7010-2.5	71.75	64.5	1×2.5	36.8	123.5	590	125	167
		BNF 7010-5	71.75	64.5	2×2.5	66.9	247	1140	125	167
		BNF 7010-7.5	71.75	64.5	3×2.5	94.9	371.4	1680	125	167
	12	BNF 7012-2.5	72	64.2	1×2.5	43.5	139.2	600	128	170
		BNF 7012-5	72	64.2	2×2.5	78.9	278.3	1160	128	170
		BNF 7012-7.5	72	64.2	3×2.5	111.7	417.5	1710	128	170
20	BNF 7020-5	72.7	62.9	2×2.5	153.9	514.5	1550	130	186	
80	10	BNF 8010-2.5	81.75	75.2	1×2.5	38.9	141.1	650	130	176
		BNF 8010-5	81.75	75.2	2×2.5	70.6	283.2	1270	130	176
		BNF 8010-7.5	81.75	75.2	3×2.5	100	424.3	1860	130	176
	20	BNF 8020A-2.5	82.7	72.9	1×2.5	90.1	294	890	143	204
		BNF 8020A-5	82.7	72.9	2×2.5	163.7	589	1720	143	204
		BNF 8020A-7.5	82.7	72.9	3×2.5	231.6	883.2	2520	143	204
100	20	BNF 10020A-2.5	102.7	92.9	1×2.5	99	368.5	2110	170	243
		BNF 10020A-5	102.7	92.9	2×2.5	179.3	737	4080	170	243
		BNF 10020A-7.5	102.7	92.9	3×2.5	253.8	1105.4	6010	170	243

Note) The model numbers in dimmed type indicate semi-standard types.  
If desiring them, contact THK.



BNF

Unit: mm

Nut dimensions									Screw shaft inertial moment/mm <sup>2</sup>	Nut mass	Shaft mass
Overall length	H	B <sub>1</sub>	PCD	d <sub>1</sub>	d <sub>2</sub>	h	Greasing hole	A			
L <sub>1</sub>									kg·cm <sup>2</sup> /mm	kg	kg/m
81	18	63	145	11	17.5	11	PT 1/8		$1.85 \times 10^{-1}$	5.8	27.4
111	18	93	145	11	17.5	11	PT 1/8		$1.85 \times 10^{-1}$	7.49	27.4
141	18	123	145	11	17.5	11	PT 1/8		$1.85 \times 10^{-1}$	9.19	27.4
93	18	75	148	11	17.5	11	PT 1/8		$1.85 \times 10^{-1}$	6.89	27.24
129	18	111	148	11	17.5	11	PT 1/8		$1.85 \times 10^{-1}$	9.08	27.24
165	18	147	148	11	17.5	11	PT 1/8		$1.85 \times 10^{-1}$	11.26	27.24
185	28	157	158	18	26	17.5	PT 1/8		$1.85 \times 10^{-1}$	14.5	27.0
77	22	55	152	14	20	13	PT 1/8		$3.16 \times 10^{-1}$	5.9	36.26
107	22	85	152	14	20	13	PT 1/8		$3.16 \times 10^{-1}$	7.53	36.26
137	22	115	152	14	20	13	PT 1/8		$3.16 \times 10^{-1}$	9.15	36.26
127	28	99	172	18	26	17.5	PT 1/8		$3.16 \times 10^{-1}$	12.68	35.81
187	28	159	172	18	26	17.5	PT 1/8		$3.16 \times 10^{-1}$	17.12	35.81
247	28	219	172	18	26	17.5	PT 1/8		$3.16 \times 10^{-1}$	21.56	35.81
131	32	99	205	22	32	21.5	PT 1/8		$7.71 \times 10^{-1}$	18.28	57.13
191	32	159	205	22	32	21.5	PT 1/8		$7.71 \times 10^{-1}$	24.2	57.13
251	32	219	205	22	32	21.5	PT 1/8		$7.71 \times 10^{-1}$	30.12	57.13

For model number coding, see [A15-248](#).