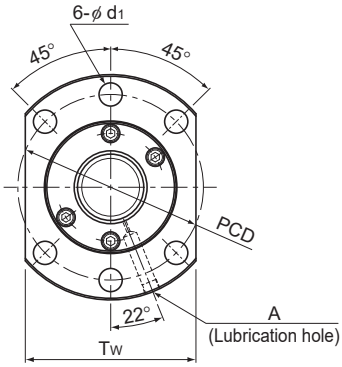
SBKN

DN value	160,000



Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows × turns	Basic load rating Ca kN	Basic load rating C_0a kN	Rigidity K N/μm
SBKN 3620-7.6	36	20	37.75	30.4	2×3.8	88.1	170.1	1,660
SBKN 4020-7.6	40	20	42	34.1	2×3.8	108.9	227.1	1,856
SBKN 4030-7.6	40	30	42	34.1	2×3.8	108.1	216.7	1,845
SBKN 5020-7.6	50	20	52	44.1	2×3.8	121.2	283.7	2,209
SBKN 5030-7.6	50	30	52	44.1	2×3.8	120.8	269.9	2,223
SBKN 5036-7.6	50	36	52	44.1	2×3.8	120.1	271.6	2,218
SBKN 5520-7.6	55	20	57	49.1	2×3.8	127.2	314.6	2,123
SBKN 5530-7.6	55	30	57	49.1	2×3.8	126.4	297.3	2,381
SBKN 5536-7.6	55	36	57	49.1	2×3.8	125.9	299	2,399

Note: With model SBKN, the raising of both ends of the thread groove is not available. When designing your system this way,contact THK.

Axial Clearance

Unit: mm

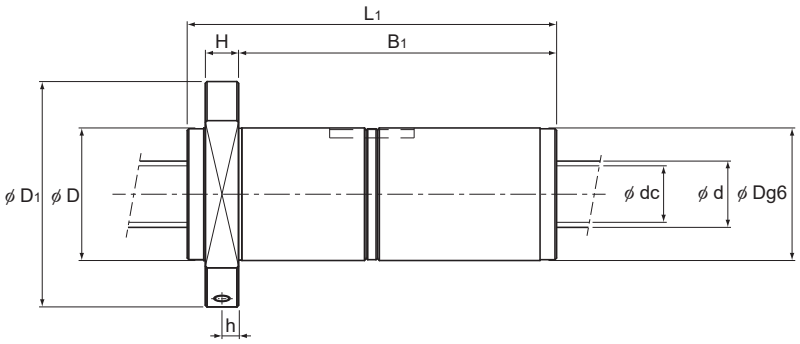
Clearance symbol	G0
Axial Clearance	0 or less

Model number coding

SBKN3620-7.6 RR G0 +1500L C5

- SBKN3620-7.6: Model Number
- RR: Seal symbol[1]
- G0: Symbol for clearance in the axial direction (G0 for all SBKN variations)
- +1500L: Overall screw shaft length (in mm)
- C5: Accuracy symbol[2]

[1] See A15-356. [2] See A15-12.



Unit: mm

Nut dimensions										Screw shaft inertial moment/mm	Nut mass	Shaft mass	Permissible rotational speed
Outer diameter	Flange diameter	Overall length							Lubrication hole				
D	D_1	L_1	H	B_1	PCD	d_1	T_W	h	A	$kg \cdot m^2/mm$	kg	kg/m	min^{-1}
73	114	210	18	181	93	11	86	9	Rc1/8 (PT1/8)	1.29×10^{-6}	4.59	5	4,230
80	136	210	20	179	112	14	103	10		1.97×10^{-6}	5.45	5.7	3,810
80	136	283	20	252	112	14	103	10		1.97×10^{-6}	7.72	7	3,810
90	146	210	22	177	122	14	110	11		4.82×10^{-6}	6.56	10.2	3,070
90	146	284	22	251	122	14	110	11		4.82×10^{-6}	8.96	11.9	3,070
90	146	334	22	301	122	14	110	11		4.82×10^{-6}	10.5	12.5	3,070
96	152	210	22	177	128	14	114	11		7.05×10^{-6}	7.15	13	2,800
96	152	284	22	251	128	14	114	11		7.05×10^{-6}	9.76	14.8	2,800
96	152	334	22	301	128	14	114	11		7.05×10^{-6}	11	15.5	2,800

The rigidity values in the table represent spring constants, each obtained from the load and the elastic deformation when providing a preload equal to 10% of the basic axial dynamic load rating (Ca) and applying an axial load three times greater than the pre-load.
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 applied preload (Fa_0) is not 10% of Ca, the rigidity value (K_N) is obtained from the following equation.

$$K_N = K \left(\frac{Fa_0}{0.1Ca} \right)^{\frac{1}{3}}$$

K: Rigidity value in the dimensional table

Options⇒A15-355