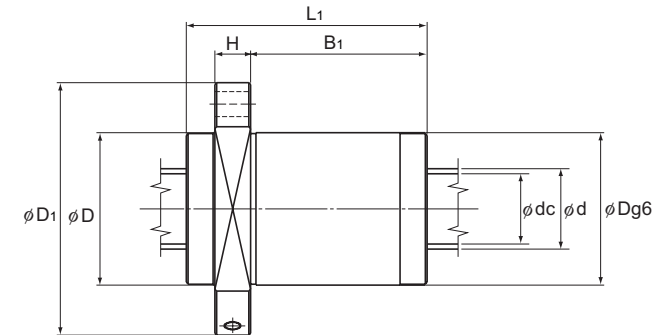
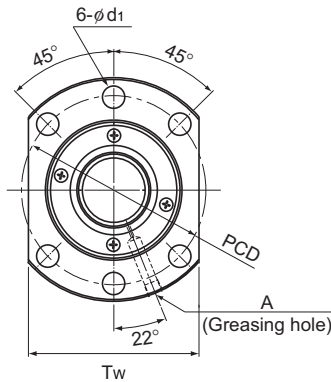


Model SBK



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		Rigidity K N/μm	Nut dimensions								Screw shaft inertial moment/mm kg·cm ² /mm	Nut mass kg	Shaft mass kg/m	
						Ca kN	C _a kN		Outer diameter D	Flange diameter D ₁	Overall length L ₁	H	B ₁	PCD	d ₁	Tw				Greasing hole A
SBK 3620-7.6	36	20	37.75	30.4	2×3.8	48.5	85	870	73	114	110	18	81	93	11	86	PT 1/8	1.29×10 ²	3.4	5.0
SBK 4020-7.6	40	20	42	34.1	2×3.8	59.7	112.7	970	80	136	110	20	79	112	14	103	PT 1/8	1.97×10 ²	4.5	5.7
SBK 4030-7.6	40	30	42	34.1	2×3.8	59.2	107.5	970	80	136	148	20	117	112	14	103	PT 1/8	1.97×10 ²	5.6	7.0
SBK 5020-7.6	50	20	52	44.1	2×3.8	66.8	141.9	1170	90	146	110	22	77	122	14	110	PT 1/8	4.82×10 ²	5.3	10.2
SBK 5030-7.6	50	30	52	44.1	2×3.8	66.5	135	1170	90	146	149	22	116	122	14	110	PT 1/8	4.82×10 ²	6.6	11.9
SBK 5036-7.6	50	36	52	44.1	2×3.8	65.9	135	1170	90	146	172	22	139	122	14	110	PT 1/8	4.82×10 ²	7.4	12.5
SBK 5520-7.6	55	20	57	49.1	2×3.8	69.8	156.4	1250	96	152	110	22	77	128	14	114	PT 1/8	7.05×10 ²	5.7	13.0
SBK 5530-7.6	55	30	57	49.1	2×3.8	69.2	147	1250	96	152	149	22	116	128	14	114	PT 1/8	7.05×10 ²	7.2	14.8
SBK 5536-7.6	55	36	57	49.1	2×3.8	69.1	148.7	1260	96	152	172	22	139	128	14	114	PT 1/8	7.05×10 ²	8.1	15.5

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

Those models marked with ○ can be attached with QZ Lubricator or the wiper ring. For dimensions of the ball screw nut with either accessory being attached, see B-778.

Model number coding

SBK3620-7.6 RR G0 +1500L C5

Model number Seal symbol (*1) Overall screw shaft length (in mm)

Symbol for clearance in the axial direction (*2) Accuracy symbol (*3)

(*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 a preload 10% of the basic dynamic load rating (Ca) and applying an axial load three times greater than the preload.

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 (Fa₀) is not 0.1 Ca, the rigidity value (K_v) is obtained from the following equation.

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

K: Rigidity value in the dimensional table.