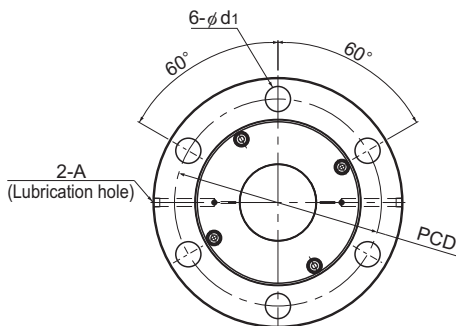


SBKH No Preload

DN value	130,000
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Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Screw shaft Thread minor diameter dc	No. of loaded circuits Rows X turns	Basic load rating		Permissible load ¹ F _P kN	Rigidity K N/μm
						Ca kN	C _{0a} kN		
SBKH 6332-3.8	63	32	66.5	49.8	1×3.8	304	631	88	1,435
SBKH 6340-7.6	63	40	66.0	52.6	2×3.8	413	967	135	2,723
SBKH 8050-7.6	80	50	84.0	63.6	2×3.8	777	1,788	250	3,402
SBKH 8060-7.6	80	60	84.0	63.6	2×3.8	780	1,824	255	3,452
SBKH 10050-7.6	100	50	104.0	83.6	2×3.8	876	2,401	336	4,098
SBKH 10060-7.6	100	60	104.0	83.6	2×3.8	880	2,294	321	4,149
SBKH 12060-7.6	120	60	124.0	103.6	2×3.8	962	2,941	411	4,809

¹ The permissible load F_P indicates the maximum axial load that the ball screw can receive.

Notes: If desiring both ends of the screw shaft to be larger than the screw shaft diameter, contact THK.

Certain precautions are necessary regarding the assembly method. (See [A15-244](#).)

For high-load ball screws, the standard maximum length of the screw shaft is 3,000 mm. For lengths greater than this, please contact THK.

Axial Clearance

Unit: mm

Clearance symbol	G1	G2	G3
Axial clearance	0 to 0.01	0 to 0.02	0 to 0.05

Model number coding

SBKH8050-7.6 RR G2 +1200L C7

Model Number

Accuracy symbol²

Overall screw shaft length (in mm)

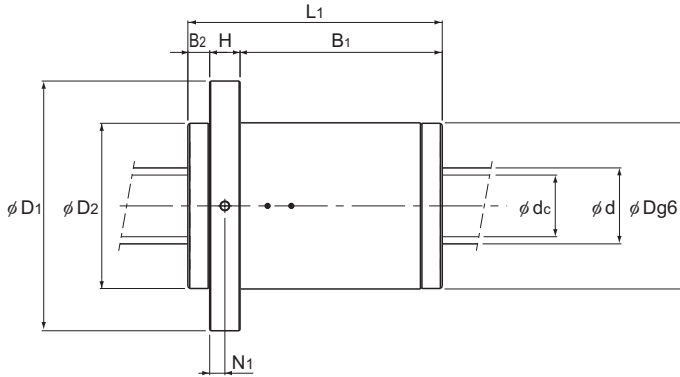
Axial clearance symbol
(clearance in the axial direction must be: G1, G2 or G3.
Clearance G0 and GT are not supported.)

Seal symbol¹

(RR: labyrinth seal on both sides)

¹ See [A15-356](#). ² See [A15-12](#).

High-Thrust Ball Screw



Unit: mm

	Nut dimensions											Screw shaft inertial moment/mm ² kg·m ² /mm	Nut mass kg	Shaft mass kg/m	Permissible rotational speed min ⁻¹
	Outer diameter D	Flange diameter D ₁	Cap diameter D ₂	Overall length L ₁	H	B ₁	B ₂	PCD	d ₁	N ₁	Lubrication hole A				
	140	205	(140)	190	28	143	(19)	173	22	14	Rc1/8 (PT1/8)	1.21 × 10 ⁻⁵	17.2	21	1,950
	127	191	(127)	209	30	163	(16)	159	22	15		1.21 × 10 ⁻⁵	15.5	21	1,960
	175	253	(175)	268	32	213	(23)	214	26	16		3.16 × 10 ⁻⁵	36.9	31.3	1,540
	175	253	(175)	306	40	243	(23)	214	26	20		3.16 × 10 ⁻⁵	43.5	32.5	1,540
	195	273	(195)	269	40	206	(23)	234	26	20		7.71 × 10 ⁻⁵	44.5	51.3	1,250
	195	273	(195)	307	40	244	(23)	234	26	20		7.71 × 10 ⁻⁵	50.5	52.9	1,250
	210	288	(210)	308	45	240	(23)	249	26	22.5		1.60 × 10 ⁻⁴	53.7	78.1	1,040

The rigidity values (K) in the table represent spring constants, each obtained from the load and the elastic deformation under an axial load equal to 30% of the basic axial 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 rigidity value (K) in the table as the actual value.

If the axial load (Fa) is not 30% of Ca, the rigidity value (K_N) is obtained from the following equation.

$$K_N = K \left(\frac{F_a}{0.3C_a} \right)^{\frac{1}{3}}$$

K: Rigidity value in the dimensional table