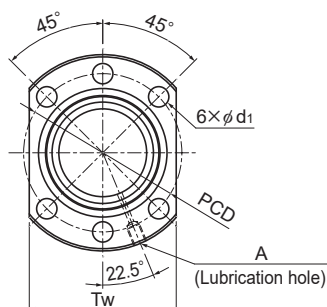


EPB-V With Preload

DN value	130,000
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Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	Loaded circuits Rows x turns	Basic load rating		Rigidity K N/μm
						Ca kN	Ca kN	
EPB 1605V-6	16	5	16.75	13.49	3×1	9.3	13.1	315
EPB 2004V-8	20	4	20.5	18.06	4×1	8.2	15.5	503
EPB 2005V-6	20	5	20.75	17.49	3×1	10.6	17.3	396
EPB 2006V-6	20	6	21	16.93	3×1	13.8	20.4	388
EPB 2008V-6	20	8	21	16.93	3×1	13.7	20.4	388
EPB 2010V-6	20	10	21.25	16.36	3×1	17.3	24.5	398
EPB 2504V-8	25	4	25.5	23.06	4×1	9.1	19.5	602
EPB 2505V-6	25	5	25.75	22.49	3×1	12.1	22.6	491
EPB 2506V-6	25	6	26	21.93	3×1	16.0	27.1	488
EPB 2508V-6	25	8	26	21.93	3×1	15.9	27.1	487
EPB 2510V-4	25	10	26	21.93	2×1	11.3	18.0	331
EPB 2512V-4	25	12	26.25	21.36	2×1	14.0	21.2	332
EPB 2806V-6	28	6	29	24.93	3×1	17.5	32.0	560
EPB 3204V-10	32	4	32.5	30.06	5×1	12.3	31.9	921
EPB 3205V-6	32	5	32.75	29.49	3×1	13.9	30.2	616
EPB 3205V-8	32	5	32.75	29.49	4×1	17.8	40.3	811
EPB 3206V-8	32	6	33	28.93	4×1	23.9	49.5	826
EPB 3208V-8	32	8	33.25	28.36	4×1	29.2	55.2	797
EPB 3210V-6	32	10	33.75	27.24	3×1	32.1	52.2	602
EPB 3212V-6	32	12	33.75	27.24	3×1	32	52.2	602
EPB 3604V-6	36	4	36.5	34.04	3×1	8.4	22.2	636
EPB 3606V-8	36	6	37	32.93	4×1	25.2	56.2	914
EPB 3608V-8	36	8	37.25	32.36	4×1	31.6	64.8	908

Note: When the QZ Lubricator and W wiper ring are attached, the overall length of the nut dimensions will increase. Contact THK for details.

Model number coding

EPB3205V-6 RR G0 +650L C3

Model No.

Clearance symbol

Accuracy symbol

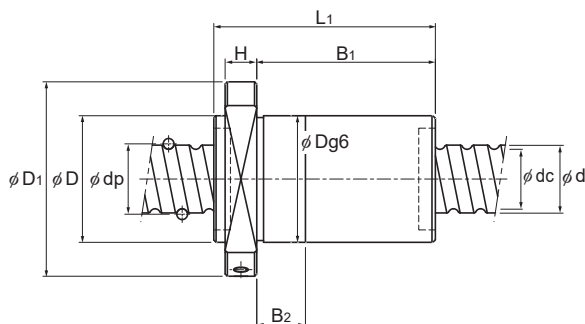
Ball screw shaft length (mm)

Seal symbol (RR : Labyrinth seal, WW : Wiper ring.)

A15-94 THK

Download data from
the THK Online Services website.

<https://www.thk.com/>



Unit: mm

	Nut dimensions										Nut mass kg	Shaft mass kg/m	Permissible rotational speed min ⁻¹
	Outer diameter D	Flange diameter D ₁	Overall length L ₁	H	B ₁	B ₂	PCD	d ₁	T _w	Lubrication hole A			
	28	48	65	10	50	12	38	5.5	40	M6	0.23	1.35	5,000
	36	58	69	10	54	12	47	6.6	44	M6	0.31	2.26	5,000
	36	58	65	10	50	12	47	6.6	44	M6	0.37	2.17	5,000
	36	58	73	10	58	12	47	6.6	44	M6	0.40	2.11	5,000
	36	58	87	10	72	15	47	6.6	44	M6	0.47	2.20	5,000
	36	58	102	10	87	15	47	6.6	44	M6	0.52	2.14	5,000
	40	62	70	10	55	12	51	6.6	48	M6	0.34	3.58	5,000
	40	62	66	10	51	12	51	6.6	48	M6	0.40	3.48	5,000
	40	62	74	10	59	12	51	6.6	48	M6	0.42	3.40	5,000
	40	62	88	10	73	15	51	6.6	48	M6	0.50	3.51	5,000
	40	62	81	10	66	18	51	6.6	48	M6	0.48	3.57	5,000
	40	62	91	10	76	18	51	6.6	48	M6	0.49	3.50	4,950
	42	71	72	12	60	15	57	6.6	55	M6	0.51	4.32	4,480
	50	80	81	12	64	15	65	9	62	M6	0.81	5.95	4,000
	50	80	67	12	50	12	65	9	62	M6	0.67	5.82	3,960
	50	80	78	12	61	12	65	9	62	M6	0.75	5.82	3,960
	50	80	95	12	78	15	65	9	62	M6	0.88	5.71	3,930
	50	80	117	12	100	18	65	9	62	M6	1.00	5.63	3,900
	50	80	108	12	91	18	65	9	62	M6	0.86	5.45	3,850
	56	118	104	14	104	20	71	9	65	M6	1.52	5.68	3,850
	56	86	58	14	44	15	70	9	65	M6	0.96	7.58	3,560
	56	86	92	14	78	15	70	9	65	M6	1.09	7.31	3,510
	56	86	112	14	98	20	70	9	65	M6	1.22	7.21	3,480

The rigidity values in the table represent spring constants each obtained from the load and the elastic deformation when providing a preload 8% 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 nut. Therefore, it is normally appropriate to regard roughly 80% of the value in the table as the actual value.

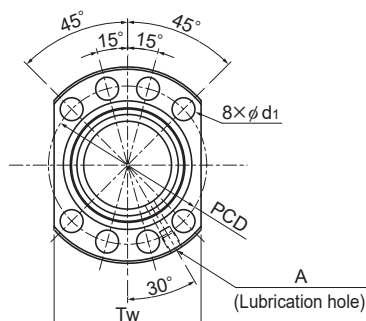
If the applied preload (Fa0) is not 10% of Ca, the rigidity value (K_N) is obtained from the following equation.

$$K_N = K \left(\frac{Fa0}{0.1Ca} \right)^{\frac{1}{3}}$$

K: Rigidity value in the dimensional table

EPB-V With Preload

DN value	130,000
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Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	Loaded circuits Rows x turns	Basic load rating		Rigidity K N/μm
						Ca kN	C _{0a} kN	
EPB 4004V-6	40	4	40.5	38.06	3 × 1	8.8	24.7	692
EPB 4005V-6	40	5	40.75	37.49	3 × 1	15.4	38.8	751
EPB 4006V-12	40	6	41	36.93	6 × 1	37.5	94.4	1,470
EPB 4008V-8	40	8	41.25	36.36	4 × 1	33.8	74.5	1,014
EPB 4010V-6	40	10	41.75	35.24	3 × 1	37.3	69.3	756
EPB 4010V-8	40	10	41.75	35.24	4 × 1	47.6	92.4	995
EPB 4012V-8	40	12	41.75	35.2	4 × 1	47.6	92.4	995
EPB 5005V-12	50	5	50.75	47.49	6 × 1	30.9	99.1	1,764
EPB 5008V-8	50	8	51.25	46.36	4 × 1	37.2	93.9	1,216
EPB 5010V-8	50	10	51.75	45.24	4 × 1	54.3	120.5	1,234
EPB 6310V-4	63	10	64.75	58.2	2 × 1	34.5	80.1	800

Note: When the QZ Lubricator and W wiper ring are attached, the overall length of the nut dimensions will increase. Contact THK for details.

Model number coding

EPB4005V-6 RR G0 +650L C3

Model No.

Clearance symbol

Accuracy symbol

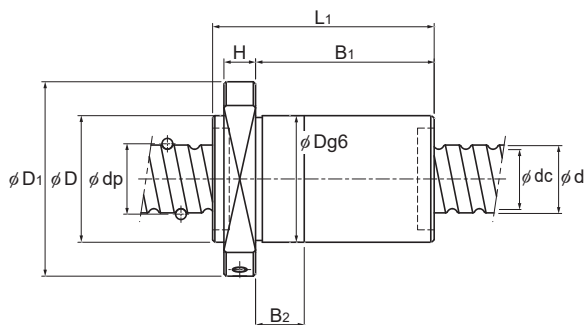
Ball screw shaft length (mm)

Seal symbol (RR : Labyrinth seal, WW : Wiper ring.)

A15-96 THK

Download data from
the THK Online Services website.

<https://www.thk.com/>



Unit: mm

	Nut dimensions										Nut mass kg	Shaft mass kg/m	Permissible rotational speed min ⁻¹
	Outer diameter D	Flange diameter D ₁	Overall length L ₁	H	B ₁	B ₂	PCD	d ₁	T _w	Lubrication hole A			
	63	93	59	14	45	12	78	9	70	M8	0.96	9.40	3,200
	63	93	65	14	51	12	78	9	70	M8	1.01	9.23	3,190
	63	93	117	14	103	18	78	9	70	M8	1.61	9.09	3,170
	63	93	113	14	99	18	78	9	70	M8	1.54	8.98	3,150
	63	93	105	14	91	20	78	9	70	M8	1.37	8.76	3,110
	63	93	129	14	115	20	78	9	70	M8	1.64	8.76	3,110
	63	93	152	14	138	20	78	9	70	M8	1.79	8.97	3,110
	75	110	104	16	88	18	93	11	85	M8	2.08	14.59	2,560
	75	110	115	16	99	18	93	11	85	M8	2.16	14.28	2,530
	75	110	131	16	115	18	93	11	85	M8	2.30	14.00	2,510
	90	125	89	18	71	18	108	11	95	M8	2.10	22.64	2,000

The rigidity values in the table represent spring constants each obtained from the load and the elastic deformation when providing a preload 8% 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 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 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