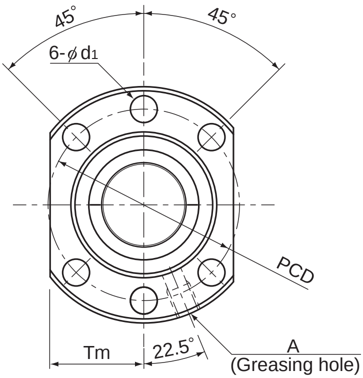
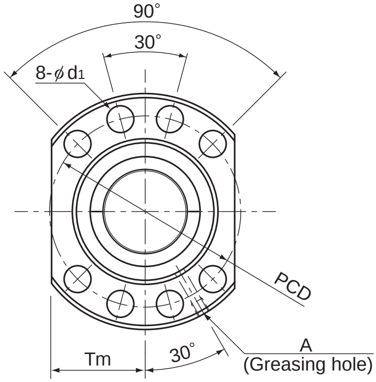
EPB
With Preload



Hole type 1
(Model EPB1605 to 3210)



Hole type 2
(Model EPB4005 to 6310)

Model No.	Screw shaft outer diameter d	Lead ℓ	Ball center-to-center diameter dp	Thread minor diameter d_c	No. of loaded circuits Rows x turns	Basic load rating Ca★ kN	 C_0a kN	Rigidity K N/μm
EPB 1605-6	16	5	16.75	13.1	3×1	9.3	13.1	317
EPB 2005-6	20	5	20.75	17.1	3×1	10.6	17.3	310
EPB 2505-6	25	5	25.75	22.1	3×1	12.1	22.6	490
EPB 2510-4	25	10	26	21.6	2×1	11.3	18	330
EPB 3205-6	32	5	32.75	29.2	3×1	13.9	30.2	620
EPB 3205-8	32	5	32.75	29.2	4×1	17.8	40.3	810
EPB 3210-6	32	10	33.75	26.4	3×1	32.1	52.2	600
EPB 4005-6	40	5	40.75	37.1	3×1	15.4	38.8	298
EPB 4010-6	40	10	41.75	34.7	3×1	37.3	69.3	750
EPB 4010-8	40	10	41.75	34.7	4×1	47.6	92.4	1000
EPB 5010-8	50	10	51.75	44.4	4×1	54.3	120.5	1230
EPB 6310-8	63	10	64.75	57.7	4×1	61.9	160.7	1550

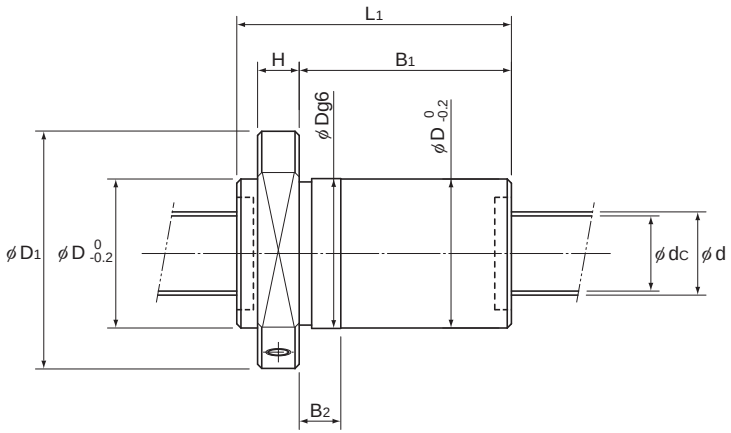
Note) ★ Basic Dynamic Load Rating(Ca) of the accuracy C7 and Ct7 is 0.9Ca.

Model number coding

EP B 20 05 -6 QZ RR G0 +650L C3

Shaft diameter
Number of turns
Clearance symbol
Accuracy symbol
Lead
Ball screw shaft length (mm)
Seal symbol (RR : Labyrinth seal, WW : Wiper ring.)
With QZ Lubricator (no symbol without QZ Lubricator)
Flange shape: A: round; B: double chamfered; C: single chamfered
Nut type: offset preloaded type

DIN Standard compliant Ball Screw (DIN69051)



Unit: mm

	Nut dimensions										
	Outer diameter	Flange diameter	Overall length								Greasing hole
	D	D_1	L_1	H	B_1	B_2	Hole type	PCD	d_1	Tm	A
	28	48	65	10	50	12	1	38	5.5	20	M6×1
	36	58	66	10	51	12	1	47	6.6	22	M6×1
	40	62	66	10	51	12	1	51	6.6	24	M6×1
	40	62	85	10	70	18	1	51	6.6	24	M6×1
	50	80	67	12	50	12	1	65	9	31	M6×1
	50	80	78	12	61	12	1	65	9	31	M6×1
	50	80	112	12	95	18	1	65	9	31	M6×1
	63	93	70	14	51	12	2	78	9	35	M8×1
	63	93	114	14	95	18	2	78	9	35	M8×1
	63	93	138	14	119	18	2	78	9	35	M8×1
	75	110	140	16	119	18	2	93	11	42.5	M8×1
	90	125	142	18	119	18	2	108	11	47.5	M8×1

Note) 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 0.08 Ca, the rigidity value (K_N) is obtained from the following equation.

$$K_N = K \left(\frac{Fa0}{0.08Ca} \right)^{\frac{1}{3}}$$

K: Rigidity value in the dimensional table.

Options⇒A15-335