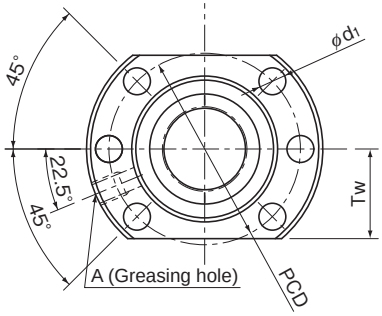
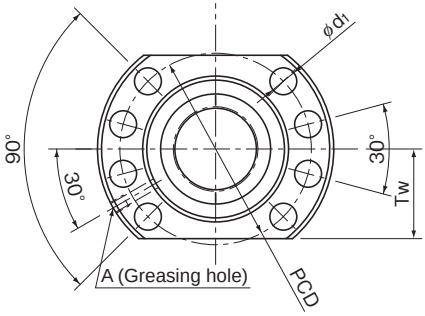
Model EBB (Dimensional Table of Model EBB Oversized-ball preload type or non-preloaded type)



Hole type 1
(Model EBB1605 to 3210)



Hole type 2
(Model EBB4005 to 6320)

Model No.	Screw shaft outer diameter d	Lead ℓ	Ball diameter Da	Ball center-to-center diameter dp	Thread minor diameter d_3	No. of loaded circuits Rows x turns	Basic load rating Ca★ kN	Basic load rating C_0a kN	Rigidity K N/μm
EBB 1605-4	16	5	3.175	16.75	13.1	4×1	11.9	17.4	210
EBB 2005-3	20	5	3.175	20.75	17.1	3×1	10.6	17.3	200
EBB 2505-3	25	5	3.175	25.75	22.1	3×1	12.1	22.6	250
EBB 2510-3	25	10	3.969	26	21.6	3×1	15.9	27	250
EBB 2510-4	25	10	3.969	26	21.6	4×1	20.9	37.6	330
EBB 3205-3	32	5	3.175	32.75	29.2	3×1	13.9	30.2	300
EBB 3205-4	32	5	3.175	32.75	29.2	4×1	17.8	40.3	400
EBB 3205-6	32	5	3.175	32.75	29.2	6×1	25.1	60.4	600
EBB 3210-3	32	10	6.35	33.75	26.4	3×1	32.1	52.2	300
EBB 3210-4	32	10	6.35	33.75	26.4	4×1	41.3	69.7	390
EBB 4005-6	40	5	3.175	40.75	37.1	6×1	26.6	77.5	716
EBB 4010-3	40	10	6.35	41.75	34.4	3×1	37.3	69.3	380
EBB 4010-4	40	10	6.35	41.75	34.4	4×1	47.6	92.4	500
EBB 4020-3	40	20	6.35	41.75	34.7	3×1	36.8	69.3	750
EBB 5010-4	50	10	6.35	51.75	44.4	4×1	54.3	120.5	610
EBB 5020-3	50	20	7.938	52.25	43.6	3×1	55.3	108.8	470
EBB 6310-6	63	10	6.35	64.75	57.7	6×1	87.9	242.1	1140
EBB 6320-3	63	20	9.525	65.7	56.0	3×1	104.4	229.3	1470

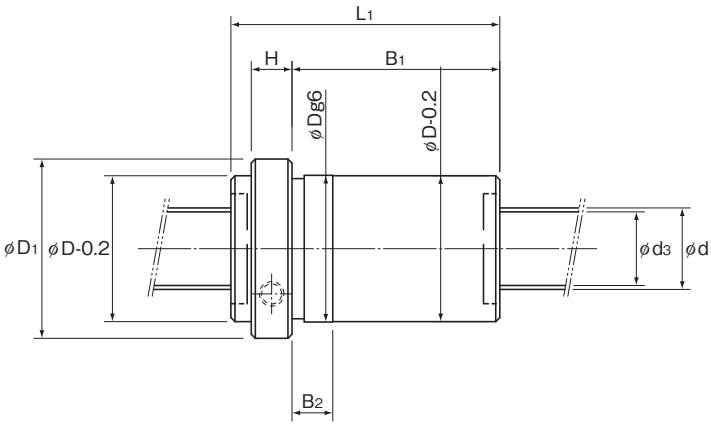
Note) ★ Basic Dynamic Load Rating(Ca) of the accuracy C7 and Ct7 is 0.9Ca.

Model number coding

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

- EB: Nut type: oversized-ball preload type or non-preloaded type
- B: Flange shape: A: round; B: double chamfered; C: single chamfered
- 20: Shaft diameter
- 05: Lead
- -6: Number of turns
- QZ: With QZ Lubricator (no symbol without QZ Lubricator)
- RR: Seal symbol (RR : Labyrinth seal, WW : Wiper ring.)
- G0: Clearance symbol
- +650L: Ball screw shaft length (mm)
- C3: Accuracy symbol

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	Tw	A
	28	48	55	10	40	12	1	38	5.5	20	M6×1
	36	58	50	10	35	12	1	47	6.6	22	M6×1
	40	62	50	10	35	12	1	51	6.6	24	M6×1
	40	62	80	10	65	18	1	51	6.6	24	M6×1
	40	62	85	10	70	18	1	51	6.6	24	M6×1
	50	80	52	12	35	12	1	65	9	31	M6×1
	50	80	57	12	40	12	1	65	9	31	M6×1
	50	80	67	12	50	12	1	65	9	31	M6×1
	50	80	82	12	65	18	1	65	9	31	M6×1
	50	80	94	12	77	18	1	65	9	31	M6×1
	63	93	70	14	51	12	2	78	9	35	M8×1
	63	93	84	14	65	18	2	78	9	35	M8×1
	63	93	94	14	75	18	2	78	9	35	M8×1
	63	93	129	14	105	25	2	78	9	35	M8×1
	75	110	96	16	75	18	2	93	11	42.5	M8×1
	75	110	134	16	108	27	2	93	11	42.5	M8×1
	90	125	119	18	96	18	2	108	11	47.5	M8×1
	95	135	136	18	108	27	2	115	13.5	50	M8×1

Note) The rigidity values in the table represent spring constants each obtained from the load and the Elastic Deformation finish when providing an axial load 24% of the basic dynamic load rating (Ca).
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 axial load (Fa) is not 0.24 Ca, the rigidity value (K_N) is obtained from the following equation.

$$K_N = K \left(\frac{Fa}{0.24Ca} \right)^{\frac{1}{3}}$$

K: Rigidity value in the dimensional table.

Options⇒A15-349