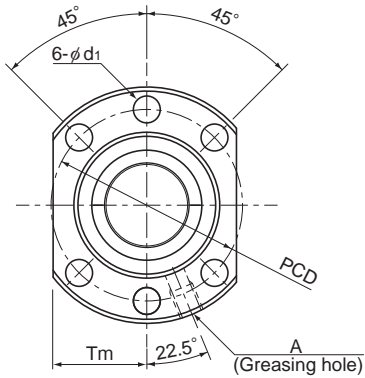


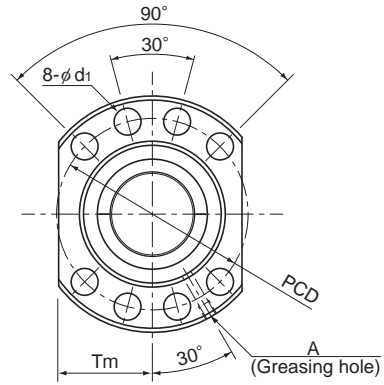
# EBB

## Oversized-ball Preload / No Preload

DN value	100000
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Hole type 1  
(Model EBB1605 to 3210)



Hole type 2  
(Model EBB4005 to 6320)

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

Note) ★ Basic Dynamic Load Rating(Ca) of the accuracy C7 and C7t is 0.9Ca.

### Model number coding

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

Shaft diameter | Number of turns | Clearance symbol | Accuracy symbol

Lead

Ball screw shaft length (mm)

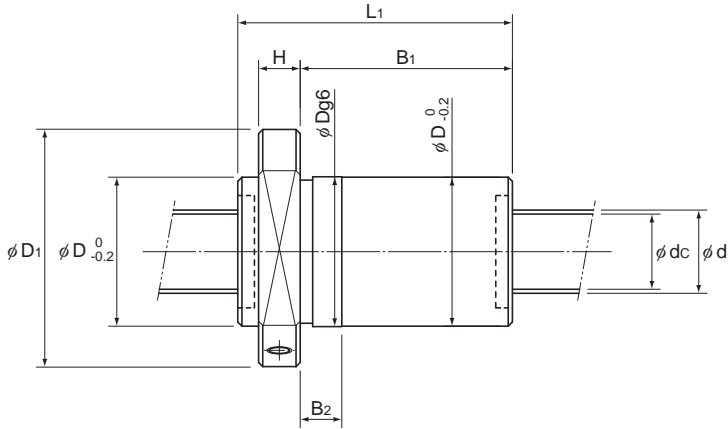
Seal symbol (RR : Labyrinth seal, WW : Wiper ring.)

With QZ Lubricator (no symbol without QZ Lubricator)

Flange shape: A: round; B: double chamfered; C: single chamfered

Nut type: oversized-ball preload type or non-preloaded type

## DIN Standard compliant Ball Screw (DIN69051)



Unit: mm

Nut dimensions											
Outer diameter	Flange diameter	Overall length					Hole type	PCD	d <sub>1</sub>	Tm	Greasing hole
D	D <sub>1</sub>	L <sub>1</sub>	H	B <sub>1</sub>	B <sub>2</sub>						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<sub>N</sub>) 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.