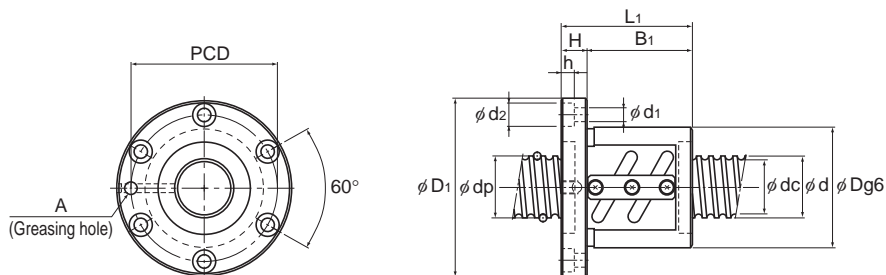


No Preload Type of Precision Ball Screw

| | |
|----------------------------|----------|
| Screw shaft outer diameter | 16 to 18 |
| Lead | 4 to 16 |



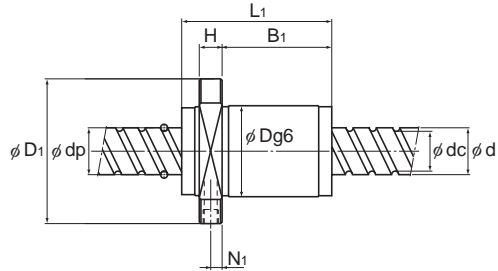
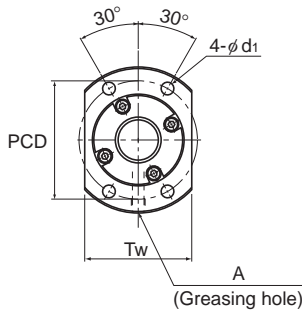
BNF

| Screw shaft outer diameter d | Lead Ph | Model No. | Ball center-to-center diameter dp | Thread minor diameter dc | No. of loaded circuits Rows X turns | Basic load rating | | Rigidity K N/ μ m | Rigidity | | |
|---------------------------------|------------|--------------|--------------------------------------|-----------------------------|--|-------------------|-----------------------|-----------------------------|---------------------|-----------------------------------|----|
| | | | | | | Ca kN | C _{0a} kN | | Outer diameter D | Flange diameter D ₁ | |
| 16 | 4 | BNF 1604-3 | 16.5 | 13.8 | 2 X 1.5 | 5.1 | 10.5 | 180 | 36 | 59 | |
| | | BNF 1605-2.5 | 16.75 | 13.2 | 1 X 2.5 | 7.4 | 13.9 | 170 | 40 | 60 | |
| | 5 | BNF 1605-3 | 16.75 | 13.2 | 2 X 1.5 | 8.7 | 16.8 | 200 | 40 | 60 | |
| | | BNF 1605-5 | 16.75 | 13.2 | 2 X 2.5 | 13.5 | 27.8 | 320 | 40 | 60 | |
| | | DK 1605-3 | 16.75 | 13.1 | 3 X 1 | 7.4 | 13 | 160 | 30 | 49 | |
| | | DK 1605-4 | 16.75 | 13.1 | 4 X 1 | 9.5 | 17.4 | 210 | 30 | 49 | |
| | 6 | BNF 1606-2.5 | 16.8 | 13.2 | 1 X 2.5 | 7.5 | 14 | 170 | 40 | 60 | |
| | | BNF 1606-5 | 16.8 | 13.2 | 2 X 2.5 | 13.5 | 28 | 320 | 40 | 60 | |
| | 10 | 10 | BNF 1610-1.5 | 16.8 | 13.5 | 1 X 1.5 | 4.8 | 8.5 | 100 | 40 | 63 |
| | | | BLK 1616-2.8 | 16.65 | 13.7 | 1 X 2.8 | 5.2 | 9.9 | 180 | 32 | 53 |
| 16 | | BLK 1616-3.6 | 16.65 | 13.7 | 2 X 1.8 | 7.1 | 14.3 | 220 | 32 | 53 | |
| | | BNF 1810-2.5 | 18.8 | 15.5 | 1 X 2.5 | 7.8 | 15.9 | 190 | 42 | 65 | |
| 18 | 10 | BNF 1810-3 | 18.8 | 15.5 | 2 X 1.5 | 9.2 | 19.1 | 220 | 42 | 65 | |

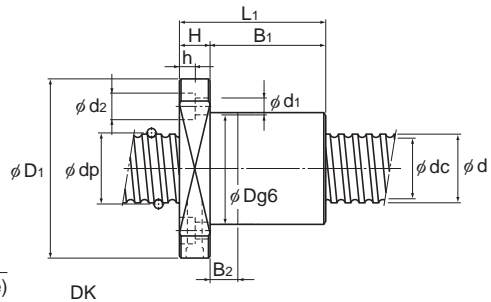
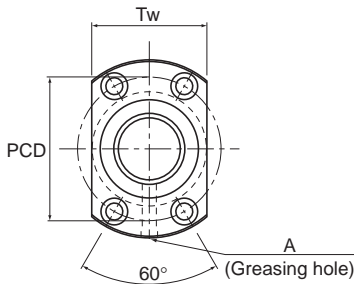
Note) The model numbers in dimmed type indicate semi-standard types.

If desiring them, contact THK.

Large Lead Precision Ball Screw model BLK cannot be attached with seal.



BLK



DK

Unit: mm

| Nut dimensions | | | | | | | | | | | | Screw shaft inertial moment/mm ⁴ | Nut mass | Shaft mass |
|----------------|----|----------------|----------------|-----|----------------|----------------|-----|----|----------------|---------------|-------------------------------------|---|----------|------------|
| Overall length | | | | | | | | | | Greasing hole | | | | |
| L ₁ | H | B ₁ | B ₂ | PCD | d ₁ | d ₂ | h | Tw | N ₁ | A | kg•cm ² /mm ⁴ | kg | kg/m | |
| 45 | 11 | 34 | — | 47 | 5.5 | 9.5 | 5.5 | — | — | M6 | 5.05×10 ⁻⁴ | 0.32 | 1.35 | |
| 41 | 10 | 31 | — | 50 | 4.5 | 8 | 4.5 | — | — | M6 | 5.05×10 ⁻⁴ | 0.37 | 1.24 | |
| 51 | 10 | 41 | — | 50 | 4.5 | 8 | 4.5 | — | — | M6 | 5.05×10 ⁻⁴ | 0.47 | 1.24 | |
| 56 | 10 | 46 | — | 50 | 4.5 | 8 | 4.5 | — | — | M6 | 5.05×10 ⁻⁴ | 0.49 | 1.24 | |
| 45 | 10 | 35 | 10 | 39 | 4.5 | 8 | 4.5 | 31 | — | M6 | 5.05×10 ⁻⁴ | 0.24 | 1.25 | |
| 50 | 10 | 40 | 10 | 39 | 4.5 | 8 | 4.5 | 31 | — | M6 | 5.05×10 ⁻⁴ | 0.26 | 1.25 | |
| 44 | 10 | 34 | — | 50 | 4.5 | 8 | 4.5 | — | — | M6 | 5.05×10 ⁻⁴ | 0.41 | 1.3 | |
| 62 | 10 | 52 | — | 50 | 4.5 | 8 | 4.5 | — | — | M6 | 5.05×10 ⁻⁴ | 0.49 | 1.3 | |
| 42 | 11 | 31 | — | 51 | 5.5 | 9.5 | 5.5 | — | — | M6 | 5.05×10 ⁻⁴ | 0.32 | 1.41 | |
| 54 | 10 | 37.5 | — | 42 | 4.5 | — | — | 38 | 5 | M6 | 5.05×10 ⁻⁴ | 0.32 | 1.41 | |
| 38 | 10 | 21.5 | — | 42 | 4.5 | — | — | 38 | 5 | M6 | 5.05×10 ⁻⁴ | 0.21 | 1.41 | |
| 69 | 12 | 57 | — | 53 | 5.5 | 9.5 | 5.5 | — | — | M6 | 8.09×10 ⁻⁴ | 0.67 | 1.81 | |
| 75 | 12 | 63 | — | 53 | 5.5 | 9.5 | 5.5 | — | — | M6 | 8.09×10 ⁻⁴ | 0.63 | 1.81 | |

For model number coding, see [A15-248](#).