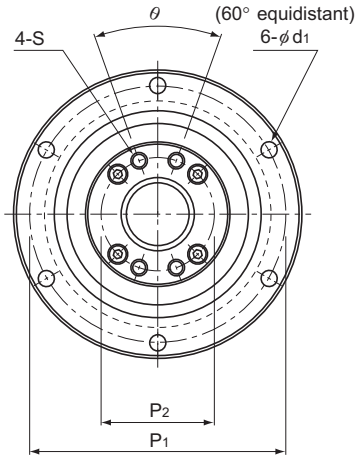


# BLR (Precision Ball Screw) No Preload

|          |        |
|----------|--------|
| DN value | 70,000 |
|----------|--------|

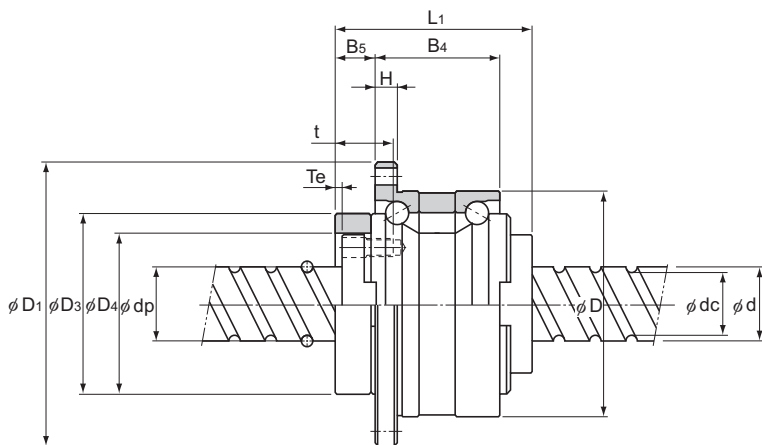


| Model No.    | Screw shaft outer diameter | Thread minor diameter | Lead | Ball center-to-center diameter | Basic load rating |                 |                                    |                 |                |                                    |
|--------------|----------------------------|-----------------------|------|--------------------------------|-------------------|-----------------|------------------------------------|-----------------|----------------|------------------------------------|
|              |                            |                       |      |                                | Ca                | C <sub>0a</sub> | Outer diameter                     | Flange diameter | Overall length |                                    |
|              | d                          | dc                    | Ph   | dp                             | kN                | kN              | D                                  | D <sub>1</sub>  | L <sub>1</sub> | D <sub>3</sub>                     |
| BLR 1616-3.6 | 16                         | 13.7                  | 16   | 16.65                          | 7.1               | 14.3            | 52 <sup>0</sup> <sub>-0.007</sub>  | 68              | 43.5           | 40 <sup>0</sup> <sub>-0.025</sub>  |
| BLR 2020-3.6 | 20                         | 17.5                  | 20   | 20.75                          | 11.1              | 24.7            | 62 <sup>0</sup> <sub>-0.007</sub>  | 78              | 54             | 50 <sup>0</sup> <sub>-0.025</sub>  |
| BLR 2525-3.6 | 25                         | 21.9                  | 25   | 26                             | 16.6              | 38.7            | 72 <sup>0</sup> <sub>-0.007</sub>  | 92              | 65             | 58 <sup>0</sup> <sub>-0.03</sub>   |
| BLR 3232-3.6 | 32                         | 28.3                  | 32   | 33.25                          | 23.7              | 59.5            | 80 <sup>0</sup> <sub>-0.007</sub>  | 105             | 80             | 66 <sup>0</sup> <sub>-0.03</sub>   |
| BLR 3636-3.6 | 36                         | 31.7                  | 36   | 37.4                           | 30.8              | 78              | 100 <sup>0</sup> <sub>-0.008</sub> | 130             | 93             | 80 <sup>0</sup> <sub>-0.03</sub>   |
| BLR 4040-3.6 | 40                         | 35.2                  | 40   | 41.75                          | 38.7              | 99.2            | 110 <sup>0</sup> <sub>-0.008</sub> | 140             | 98             | 90 <sup>0</sup> <sub>-0.035</sub>  |
| BLR 5050-3.6 | 50                         | 44.1                  | 50   | 52.2                           | 57.8              | 155             | 120 <sup>0</sup> <sub>-0.008</sub> | 156             | 126            | 100 <sup>0</sup> <sub>-0.035</sub> |

## Model number coding

**BLR2020-3.6 K UU G1 +1000L C5**

|              |                                              |                                                          |                              |
|--------------|----------------------------------------------|----------------------------------------------------------|------------------------------|
| Model number | Flange orientation symbol                    | Symbol for clearance in the axial direction <sup>2</sup> | Accuracy symbol <sup>3</sup> |
|              | Symbol for support bearing seal <sup>1</sup> | Overall screw shaft length (in mm)                       |                              |



Unit: mm

| Ball screw dimensions |                                |    |                |                |                |                |                |     |    |                |    |  | Support bearing basic load rating |                       | Nut inertial moment   | Nut mass | Shaft mass | Permissible rotational speed |
|-----------------------|--------------------------------|----|----------------|----------------|----------------|----------------|----------------|-----|----|----------------|----|--|-----------------------------------|-----------------------|-----------------------|----------|------------|------------------------------|
|                       | D <sub>4</sub>                 | H  | B <sub>4</sub> | B <sub>5</sub> | T <sub>e</sub> | P <sub>1</sub> | P <sub>2</sub> | S   | t  | d <sub>1</sub> | θ° |  | Ca<br>kN                          | C <sub>0a</sub><br>kN | kg·m <sup>2</sup>     | kg       | kg/m       | min <sup>-1</sup>            |
| 32                    | <sup>+0.025</sup> <sub>0</sub> | 5  | 27.5           | 9              | 2              | 60             | 25             | M4  | 12 | 4.5            | 40 |  | 19.4                              | 19.2                  | 4.80×10 <sup>-5</sup> | 0.38     | 1.41       | 4,200                        |
| 39                    | <sup>+0.025</sup> <sub>0</sub> | 6  | 34             | 11             | 2              | 70             | 31             | M5  | 16 | 4.5            | 40 |  | 26.8                              | 29.3                  | 1.44×10 <sup>-4</sup> | 0.68     | 2.25       | 3,370                        |
| 47                    | <sup>+0.025</sup> <sub>0</sub> | 8  | 43             | 12.5           | 3              | 81             | 38             | M6  | 19 | 5.5            | 40 |  | 28.2                              | 33.3                  | 3.23×10 <sup>-4</sup> | 1.1      | 3.52       | 2,690                        |
| 58                    | <sup>+0.03</sup> <sub>0</sub>  | 9  | 55             | 14             | 3              | 91             | 48             | M6  | 19 | 6.6            | 40 |  | 30                                | 39                    | 6.74×10 <sup>-4</sup> | 1.74     | 5.83       | 2,100                        |
| 66                    | <sup>+0.03</sup> <sub>0</sub>  | 11 | 62             | 17             | 3              | 113            | 54             | M8  | 22 | 9              | 40 |  | 56.4                              | 65.2                  | 1.68×10 <sup>-3</sup> | 3.2      | 7.34       | 1,870                        |
| 73                    | <sup>+0.03</sup> <sub>0</sub>  | 11 | 68             | 16.5           | 3              | 123            | 61             | M8  | 22 | 9              | 50 |  | 59.3                              | 74.1                  | 2.79×10 <sup>-3</sup> | 3.95     | 9.01       | 1,670                        |
| 90                    | <sup>+0.035</sup> <sub>0</sub> | 12 | 80             | 25             | 4              | 136            | 75             | M10 | 28 | 11             | 50 |  | 62.2                              | 83                    | 5.82×10 <sup>-3</sup> | 6.22     | 14.08      | 1,340                        |