

SPHERICAL BUSHINGS

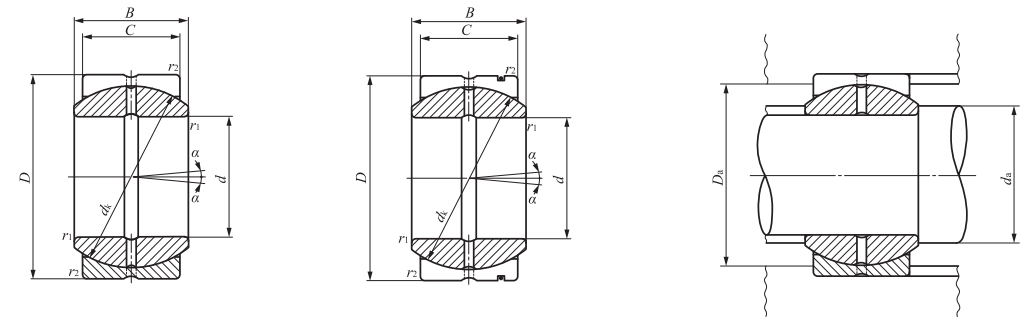
Steel-on-steel Spherical Bushings



Shaft dia. 12 – 100mm

| Shaft dia. mm | Identification number | | Mass (Ref.) kg | Boundary dimensions mm | | | | | | Permissible tilting angle degree α |
|------------------|-----------------------|-------------|----------------------|---------------------------|-----|-----|-----|-------|---------------------------|--|
| | SB | SB | | d | D | B | C | d_k | $r_{s \text{ min}}^{(1)}$ | |
| 12 | SB 12A | SB 122211 | 0.019 | 12 | 22 | 11 | 9 | 18 | 0.3 | 7 |
| 15 | SB 15A | SB 152613 | 0.028 | 15 | 26 | 13 | 11 | 22 | 0.3 | 6 |
| 20 | SB 20A | SB 203216 | 0.053 | 20 | 32 | 16 | 14 | 28 | 0.3 | 4 |
| 22 | SB 22A | SB 223719 | 0.085 | 22 | 37 | 19 | 16 | 32 | 0.3 | 6 |
| 25 | SB 25A | SB 254221 | 0.116 | 25 | 42 | 21 | 18 | 36 | 0.3 | 5 |
| 30 | SB 30A | SB 305027 | 0.225 | 30 | 50 | 27 | 23 | 45 | 0.6 | 6 |
| 35 | SB 35A | SB 355530 | 0.300 | 35 | 55 | 30 | 26 | 50 | 0.6 | 5 |
| 40 | SB 40A | SB 406233 | 0.375 | 40 | 62 | 33 | 28 | 55 | 0.6 | 6 |
| 45 | SB 45A | SB 457236 | 0.600 | 45 | 72 | 36 | 31 | 62 | 0.6 | 5 |
| 50 | SB 50A | SB 508042 | 0.870 | 50 | 80 | 42 | 36 | 72 | 0.6 | 5 |
| 55 | SB 55A | SB 559047 | 1.26 | 55 | 90 | 47 | 40 | 80 | 0.6 | 5 |
| 60 | SB 60A | SB 6010053 | 1.70 | 60 | 100 | 53 | 45 | 90 | 0.6 | 6 |
| 65 | SB 65A | SB 6510555 | 2.05 | 65 | 105 | 55 | 47 | 94 | 0.6 | 5 |
| 70 | SB 70A | SB 7011058 | 2.22 | 70 | 110 | 58 | 50 | 100 | 0.6 | 5 |
| 75 | SB 75A | SB 7512064 | 3.02 | 75 | 120 | 64 | 55 | 110 | 0.6 | 5 |
| 80 | SB 80A | SB 8013070 | 3.98 | 80 | 130 | 70 | 60 | 120 | 0.6 | 5 |
| 85 | SB 85A | SB 8513574 | 4.29 | 85 | 135 | 74 | 63 | 125 | 0.6 | 6 |
| 90 | SB 90A | SB 9014076 | 4.71 | 90 | 140 | 76 | 65 | 130 | 0.6 | 5 |
| 95 | SB 95A | SB 9515082 | 6.05 | 95 | 150 | 82 | 70 | 140 | 0.6 | 5 |
| 100 | SB 100A | SB 10016088 | 7.42 | 100 | 160 | 88 | 75 | 150 | 1 | 5 |

Notes⁽¹⁾ Minimum allowable value of chamfer dimensions r_1 and r_2
⁽²⁾ When Spherical Bushings are used with full tilting angle, the shaft shoulder dimension must be less than the maximum value of d_a .
 Remarks1. The inner ring and the outer ring have an oil groove and two oil holes, respectively.
 2. No grease is prepacked. Perform proper lubrication.



SB...A

SB

| Mounting dimensions mm | | | | Dynamic load capacity C_d N | Static load capacity C_s N |
|---------------------------|------------------------------|-------|---------------|--|---------------------------------------|
| Min. | d_a Max. ⁽²⁾ | Max. | D_a Min. | | |
| 14 | 14 | 19.5 | 17 | 15 900 | 95 300 |
| 17.5 | 17.5 | 23.5 | 21 | 23 700 | 142 000 |
| 22.5 | 23 | 29.5 | 26 | 38 400 | 231 000 |
| 24.5 | 25.5 | 34.5 | 30 | 50 200 | 301 000 |
| 27.5 | 29 | 39.5 | 34 | 63 500 | 381 000 |
| 34.5 | 36 | 45.5 | 42 | 101 000 | 609 000 |
| 39.5 | 40 | 50.5 | 46.5 | 127 000 | 765 000 |
| 44 | 44 | 57.5 | 51.5 | 151 000 | 906 000 |
| 49.5 | 50.5 | 67.5 | 58 | 188 000 | 1 130 000 |
| 54.5 | 58.5 | 75.5 | 67 | 254 000 | 1 530 000 |
| 59.5 | 64.5 | 85.5 | 74.5 | 314 000 | 1 880 000 |
| 64.5 | 72.5 | 95.5 | 83.5 | 397 000 | 2 380 000 |
| 69.5 | 76 | 100.5 | 87 | 433 000 | 2 600 000 |
| 74.5 | 81.5 | 105.5 | 93 | 490 000 | 2 940 000 |
| 79.5 | 89.5 | 115.5 | 102 | 593 000 | 3 560 000 |
| 84.5 | 97.5 | 125.5 | 112 | 706 000 | 4 240 000 |
| 89.5 | 100.5 | 130.5 | 116 | 772 000 | 4 630 000 |
| 94.5 | 105.5 | 135.5 | 121 | 829 000 | 4 970 000 |
| 99.5 | 113.5 | 145.5 | 130 | 961 000 | 5 770 000 |
| 105.5 | 121.5 | 154.5 | 139 | 1 100 000 | 6 620 000 |