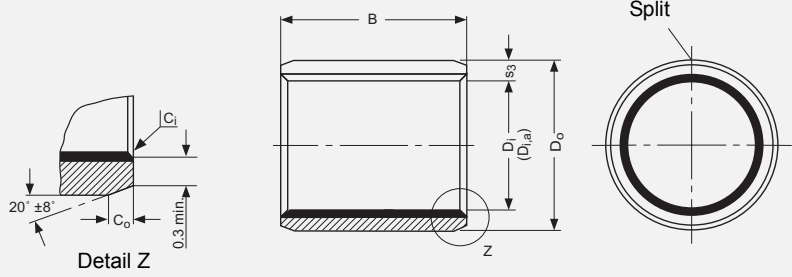
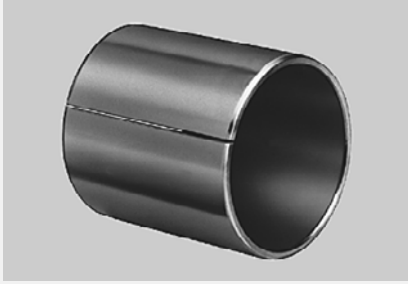


8 Standard Products

8.1 DU Cylindrical Bushes



Dimensions and Tolerances according to ISO 3547 and GSP-Specifications

All dimensions in mm

ID and OD chamfers

| s ₃ | C _o | C _i | s ₃ | C _o | C _i |
|----------------|----------------|----------------|----------------|----------------|----------------|
| 0.75 | 0.5 ± 0.3 | -0.1 to -0.4 | 2 | 1.2 ± 0.4 | -0.1 to -0.7 |
| 1 | 0.6 ± 0.4 | -0.1 to -0.5 | 2.5 | 1.6 ± 0.8 | -0.2 to -1.0 |
| 1.5 | 0.6 ± 0.4 | -0.1 to -0.7 | | | |

| Part No. | Nominal Diameter | | Bush Wall s ₃ | Length B | Shaft-∅ D _J | Housing-∅ D _H | Ass. Inside-∅ D _{i,a} | Clearance C _D |
|----------|------------------|----------------|--------------------------|----------|------------------------|--------------------------|--------------------------------|--------------------------|
| | D _i | D _o | | | | | | |
| 0203DU | 2 | 3.5 | 0.745 0.725 | 3.25 | 2.000 | 3.508 | 2.058 | 0.064 |
| 0205DU | | | | 2.75 | | | | |
| 0303DU | 3 | 4.5 | 0.750 0.730 | 3.25 | 3.000 | 4.508 | 3.048 | 0.054 |
| 0305DU | | | | 2.75 | | | | |
| 0306DU | | | | 4.75 | | | | |
| 0403DU | | | | 6.25 | | | | |
| 0404DU | 4 | 5.5 | 1.005 0.980 | 3.25 | 4.000 | 5.508 | 4.048 | 0.056 |
| 0406DU | | | | 2.75 | | | | |
| 0410DU | | | | 4.25 | | | | |
| 0505DU | | | | 3.75 | | | | |
| 0508DU | 5 | 7 | 1.005 0.980 | 6.25 | 4.990 | 7.015 | 5.055 | 0.077 |
| 0510DU | | | | 5.75 | | | | |
| 0604DU | | | | 10.25 | | | | |
| 0606DU | 6 | 8 | 1.005 0.980 | 9.75 | 5.990 | 8.015 | 6.055 | 0.077 |
| 0608DU | | | | 4.25 | | | | |
| 0610DU | | | | 3.75 | | | | |
| 0710DU | | | | 6.25 | | | | |
| 0806DU | 7 | 9 | 1.005 0.980 | 5.75 | 6.987 | 9.015 | 7.055 | 0.083 |
| 0808DU | | | | 10.25 | | | | |
| 0810DU | | | | 9.75 | | | | |
| | 8 | 10 | 1.005 0.980 | 10.25 | 7.987 | 10.015 | 8.055 | 0.083 |
| | | | | 9.75 | | | | |
| | | | | 10.25 | | | | |

8 Standard Products

| Part No. | Nominal Diameter | | Bush Wall s ₃ | Length B | Shaft-∅ D _J | Hou-sing- ∅ D _H | Ass. Inside-∅ D _{i,a} | Clearance C _D |
|----------|------------------|----------------|-----------------------------|------------------|---------------------------|----------------------------------|--------------------------------------|-----------------------------|
| | D _i | D _o | | | | | | |
| 0812DU | 8 | 10 | 1.005 0.980 | 12.25 | 7.987 7.972 | 10.015 10.000 | 8.055 7.990 | 0.083 0.003 |
| 1008DU | | | | 8.25 | | | | |
| 1010DU | 7.75 | | | | | | | |
| 1012DU | 10 | 12 | | 10.25 | 9.987 9.972 | 12.018 12.000 | 10.058 9.990 | 0.086 0.003 |
| 1015DU | | | | 9.75 | | | | |
| 1020DU | | | | 12.25 | | | | |
| 1208DU | | | | 11.75 | | | | |
| 1210DU | 12 | 14 | | 15.25 | 11.984 11.966 | 14.018 14.000 | 12.058 11.990 | 0.092 0.006 |
| 1212DU | | | | 14.75 | | | | |
| 1215DU | | | | 20.25 | | | | |
| 1220DU | | | | 19.75 | | | | |
| 1225DU | | | | 25.25 | | | | |
| 1310DU | | | | 24.75 | | | | |
| 1320DU | 13 | 15 | | 10.25 | 12.984 12.966 | 15.018 15.000 | 13.058 12.990 | 0.092 0.006 |
| 1405DU | | | | 9.75 | | | | |
| 1410DU | 14 | 16 | | 20.25 | 13.984 13.966 | 16.018 16.000 | 14.058 13.990 | 0.092 0.006 |
| 1412DU | | | | 19.75 | | | | |
| 1415DU | | | | 5.25 | | | | |
| 1420DU | | | | 4.75 | | | | |
| 1425DU | | | | 10.25 | | | | |
| 1510DU | | | | 9.75 | | | | |
| 1512DU | 15 | 17 | | 12.25 | 14.984 14.966 | 17.018 17.000 | 15.058 14.990 | 0.092 0.006 |
| 1515DU | | | | 11.75 | | | | |
| 1520DU | | | | 15.25 | | | | |
| 1525DU | | | 14.75 | | | | | |
| 1610DU | 16 | 18 | 20.25 | 15.984 15.966 | 18.018 18.000 | 16.058 15.990 | 0.092 0.006 | |
| 1612DU | | | 19.75 | | | | | |
| 1615DU | | | 25.25 | | | | | |
| 1620DU | | | 24.75 | | | | | |
| 1625DU | | | 10.25 | | | | | |
| 1720DU | | | 9.75 | | | | | |
| 1810DU | 17 | 19 | 12.25 | 16.984 16.966 | 19.021 19.000 | 17.061 16.990 | 0.095 0.006 | |
| 1815DU | | | 11.75 | | | | | |
| 1820DU | | | 15.25 | | | | | |
| 1825DU | | | 14.75 | | | | | |
| 1825DU | | | 20.25 | | | | | |
| 1825DU | 19.75 | | | | | | | |
| 1825DU | 25.25 | | | | | | | |
| 1825DU | 24.75 | | | | | | | |

| Part No. | Nominal Diameter | | Bush Wall S_3 | Length B | Shaft- \varnothing D_J | Hou-sing- \varnothing D_H | Ass. Inside- \varnothing $D_{i,a}$ | Clearance C_D |
|----------|------------------|-------|------------------------|------------------|----------------------------|-------------------------------|--------------------------------------|-----------------|
| | D_i | D_o | | | | | | |
| 2010DU | 20 | 23 | 1.505 1.475 | 10.25 9.75 | 19.980 19.959 | 23.021 23.000 | 20.071 19.990 | 0.112 0.010 |
| 2015DU | | | | 15.25 14.75 | | | | |
| 2020DU | | | | 20.25 19.75 | | | | |
| 2025DU | | | | 25.25 24.75 | | | | |
| 2030DU | | | | 30.25 29.75 | | | | |
| 2215DU | 22 | 25 | | 15.25 14.75 | 21.980 21.959 | 25.021 25.000 | 22.071 21.990 | |
| 2220DU | | | | 20.25 19.75 | | | | |
| 2225DU | | | | 25.25 24.75 | | | | |
| 2230DU | | | | 30.25 29.75 | | | | |
| 2415DU | 24 | 27 | | 15.25 14.75 | 23.980 23.959 | 27.021 27.000 | 24.071 23.990 | |
| 2420DU | | | | 20.25 19.75 | | | | |
| 2425DU | | | | 25.25 24.75 | | | | |
| 2430DU | | | | 30.25 29.75 | | | | |
| 2515DU | 25 | 28 | | 15.25 14.75 | 24.980 24.959 | 28.021 28.000 | 25.071 24.990 | |
| 2520DU | | | | 20.25 19.75 | | | | |
| 2525DU | | | | 25.25 24.75 | | | | |
| 2530DU | | | | 30.25 29.75 | | | | |
| 2550DU | | | | 50.25 49.75 | | | | |
| 2815DU | 28 | 32 | | 15.25 14.75 | 27.980 27.959 | 32.025 32.000 | 28.085 27.990 | |
| 2820DU | | | | 20.25 19.75 | | | | |
| 2825DU | | | 25.25 24.75 | | | | | |
| 2830DU | | | 30.25 29.75 | | | | | |
| 3010DU | 30 | 34 | 2.005 1.970 | 29.980 29.959 | 34.025 34.000 | 30.085 29.990 | 0.126 0.010 | |
| 3015DU | | | 10.25 9.75 | | | | | |
| 3020DU | | | 15.25 14.75 | | | | | |
| 3025DU | | | 20.25 19.75 | | | | | |
| 3030DU | | | 25.25 24.75 | | | | | |
| 3040DU | | | 30.25 29.75 | | | | | |
| 3220DU | 32 | 36 | 20.25 19.75 | 31.975 31.950 | 36.025 36.000 | 32.085 31.990 | 0.135 0.015 | |
| 3230DU | | | 30.25 29.75 | | | | | |
| 3240DU | | | 40.25 39.75 | | | | | |

8 Standard Products


| Part No. | Nominal Diameter | | Bush Wall s ₃ | Length B | Shaft-∅ D _J | Hou-sing- ∅ D _H | Ass. Inside-∅ D _{i,a} | Clearance C _D |
|----------|------------------|------------------|-----------------------------|------------------|---------------------------|----------------------------------|--------------------------------------|-----------------------------|
| | D _i | D _o | | | | | | |
| 3520DU | 35 | 39 | 2.005 1.970 | 20.25 | 34.975 34.950 | 39.025 39.000 | 35.085 34.990 | 0.135 0.015 |
| 3530DU | | | | 19.75 | | | | |
| 3535DU | | | | 30.25 | | | | |
| 3540DU | | | | 29.75 | | | | |
| 3550DU | | | | 35.25 | | | | |
| 3720DU | 37 | 41 | | 34.75 | 36.975 36.950 | 41.025 41.000 | 37.085 36.990 | |
| 4020DU | 40 | 44 | | 20.25 | 39.975 39.950 | 44.025 44.000 | 40.085 39.990 | |
| 4030DU | | | | 19.75 | | | | |
| 4040DU | | | | 30.25 | | | | |
| 4050DU | | | | 29.75 | | | | |
| 4520DU | | | 40.25 | | | | | |
| 4530DU | 39.75 | 45.105 44.990 | | | | | | |
| 4540DU | 45.25 | | | | | | | |
| 4545DU | 44.75 | | | | | | | |
| 4550DU | 50.25 | | | | | | | |
| 5020DU | 49.75 | | | | | | | |
| 5030DU | 20.25 | 49.975 49.950 | 55.030 55.000 | 50.110 49.990 | | | | |
| 5040DU | 19.75 | | | | | | | |
| 5050DU | 30.25 | | | | | | | |
| 5060DU | 29.75 | | | | | | | |
| 5520DU | 40.25 | | | | | | | |
| 5525DU | 39.75 | 54.970 54.940 | 60.030 60.000 | 55.110 54.990 | | | | |
| 5530DU | 50.25 | | | | | | | |
| 5540DU | 49.75 | | | | | | | |
| 5550DU | 55.25 | | | | | | | |
| 5555DU | 54.75 | | | | | | | |
| 5560DU | 60.25 | | | | | | | |
| 6020DU | 60 | 65 | 2.505 2.460 | 20.25 | 59.970 59.940 | 65.030 65.000 | 60.110 59.990 | |
| 6030DU | | | | 19.75 | | | | |
| 6040DU | | | | 30.25 | | | | |
| 6050DU | | | | 29.75 | | | | |
| 6060DU | | | | 40.25 | | | | |
| 6070DU | | | | 39.75 | | | | |
| | | | | 50.25 | | | | |
| | 49.75 | | | | | | | |
| | 60.25 | | | | | | | |
| | 59.75 | | | | | | | |
| | 70.25 | | | | | | | |
| | 69.75 | | | | | | | |

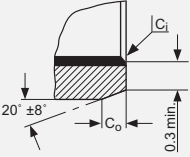
| Part No. | Nominal Diameter | | Bush Wall ϵ_3 | Length B | Shaft- \varnothing D_J | Hou-sing- \varnothing D_H | Ass. Inside- \varnothing $D_{i,a}$ | Clearance C_D |
|----------|------------------|-------|------------------------|--------------------|----------------------------|-------------------------------|--------------------------------------|-----------------|
| | D_i | D_o | | | | | | |
| 6530DU | 65 | 70 | 2.505 2.460 | 30.25 29.75 | 64.970 64.940 | 70.030 70.000 | 65.110 64.990 | 0.170 0.020 |
| 6550DU | | | | 50.25 49.75 | | | | |
| 6570DU | | | | 70.25 69.75 | | | | |
| 7040DU | 70 | 75 | | 40.25 39.75 | 69.970 69.940 | 75.030 75.000 | 70.110 69.990 | |
| 7050DU | | | | 50.25 49.75 | | | | |
| 7070DU | | | | 70.25 69.75 | | | | |
| 7560DU | 75 | 80 | 60.25 59.75 | 74.970 74.940 | 80.030 80.000 | 75.110 74.990 | | |
| 7580DU | | | 80.25 79.75 | | | | | |
| 8060DU | 80 | 85 | 60.50 59.50 | 80.000 79.954 | 85.035 85.000 | 80.155 80.020 | | |
| 80100DU | | | 100.50 99.50 | | | | | |
| 8530DU | 85 | 90 | 30.50 29.50 | 85.000 84.946 | 90.035 90.000 | 85.155 85.020 | | |
| 8560DU | | | 60.50 59.50 | | | | | |
| 85100DU | | | 100.50 99.50 | | | | | |
| 9060DU | 90 | 95 | 60.50 59.50 | 90.000 89.946 | 95.035 95.000 | 90.155 90.020 | | |
| 90100DU | | | 100.50 99.50 | | | | | |
| 9560DU | 95 | 100 | 60.50 59.50 | 95.000 94.946 | 100.035 100.000 | 95.155 95.020 | | |
| 95100DU | | | 100.50 99.50 | | | | | |
| 10050DU | 100 | 105 | 50.50 49.50 | 100.000 99.946 | 105.035 105.000 | 100.155 100.020 | | |
| 10060DU | | | 60.50 59.50 | | | | | |
| 100115DU | | | 115.50 114.50 | | | | | |
| 10560DU | 105 | 110 | 60.50 59.50 | 105.000 104.946 | 110.035 110.000 | 105.155 105.020 | | |
| 105115DU | | | 115.50 114.50 | | | | | |
| 11060DU | 110 | 115 | 60.50 59.50 | 110.000 109.946 | 115.035 115.000 | 110.155 110.020 | | |
| 110115DU | | | 115.50 114.50 | | | | | |
| 11550DU | 115 | 120 | 50.50 49.50 | 115.000 114.946 | 120.035 120.000 | 115.155 115.020 | | |
| 11570DU | | | 70.50 69.50 | | | | | |
| 12050DU | | | 50.50 49.50 | | | | | |
| 12060DU | 120 | 125 | 60.50 59.50 | 120.000 119.946 | 125.040 125.000 | 120.210 120.070 | | |
| 120100DU | | | 100.50 99.50 | | | | | |
| 125100DU | 125 | 130 | 100.50 99.50 | 125.000 124.937 | 130.040 130.000 | 125.210 125.070 | | |
| 13060DU | 130 | 135 | 60.50 59.50 | 130.000 129.937 | 135.040 135.000 | 130.210 130.070 | | |
| 130100DU | | | 100.50 99.50 | | | | | |

8 Standard Products

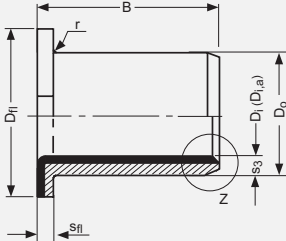
| Part No. | Nominal Diameter | | Bush Wall s_3 | Length B | Shaft- \varnothing D_J | Hou-sing- \varnothing D_H | Ass. Inside- \varnothing $D_{i,a}$ | Clearance C_D | | | | |
|----------|------------------|-------|-----------------|----------|----------------------------|-------------------------------|--------------------------------------|-----------------|----------------|----------------|-----------|-----------|
| | D_i | D_o | | | | | | | max. min. | max. min. | max. min. | max. min. |
| 13560DU | 135 | 140 | 2.465 2.415 | 60.50 | 135.000 | 140.040 | 135.210 | 0.273 0.070 | | | | |
| 13580DU | | | | 59.50 | | | | | 80.50 | 134.937 | 140.000 | 135.070 |
| 14060DU | 140 | 145 | | 60.50 | 140.000 | 145.040 | 140.210 | | | | | |
| 140100DU | | | | 59.50 | | | | | 100.50 | 139.937 | 145.000 | 140.070 |
| 15060DU | 150 | 155 | | 60.50 | 150.000 | 155.040 | 150.210 | | | | | |
| 15080DU | | | | 59.50 | | | | | 80.50 | 149.937 | 155.000 | 150.070 |
| 150100DU | | | | 79.50 | | | | | 100.50 | 149.937 | 155.000 | 150.070 |
| 16080DU | | | | 80.50 | | | | | 80.50 | 160.000 | 165.040 | 160.210 |
| 160100DU | 160 | 165 | | 79.50 | 159.937 | 165.000 | 160.070 | | | | | |
| 180100DU | | | | 180 | 185 | 180.000 | 185.046 | | 180.216 | 0.279 0.070 | | |
| 200100DU | 200 | 205 | | 200.000 | 205.046 | 200.216 | 200.070 | | 0.288 0.070 | | | |
| 210100DU | 210 | 215 | | 210.000 | 215.046 | 210.216 | 210.070 | | | | | |
| 220100DU | 220 | 225 | | 220.000 | 225.046 | 220.216 | 220.070 | | 0.294 0.070 | | | |
| 250100DU | 250 | 255 | | 250.000 | 255.052 | 250.222 | 250.070 | | | | | |
| 300100DU | 300 | 305 | | 300.000 | 305.052 | 300.222 | 300.070 | | 0.303 0.070 | | | |

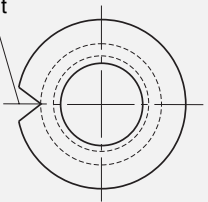
8.2 DU Flanged Bushes





Detail Z





| s_3 | 1,0 | 1,5 | 2,0 | 2,5 |
|-------|-------------------|--------|----------|--------|
| r | 1 ^{-0,5} | 1 ±0,5 | 1,4 ±0,5 | 2 ±0,5 |

Dimensions and Tolerances according to ISO 3547 and GSP-Specifications

All dimensions in mm

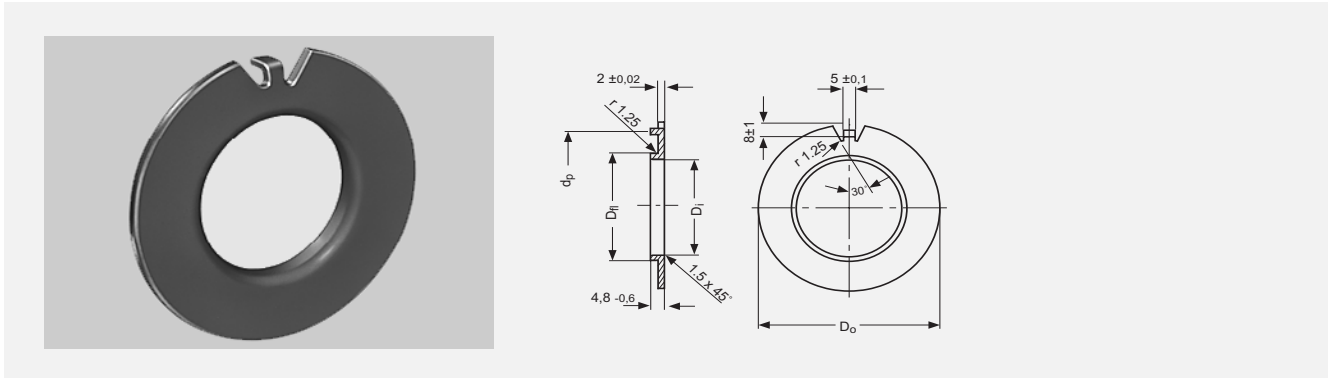
| Part No. | Nominal Diameter | | Bush Wall s_3 | Flange Wall s_{fl} | Flange- \varnothing D_{fl} | Length B | Shaft- \varnothing D_J | Hou-sing- \varnothing D_H | Ass. Inside- \varnothing $D_{i,a}$ | Clearance C_D |
|----------|------------------|-------|-----------------|----------------------|--------------------------------|----------|----------------------------|-------------------------------|--------------------------------------|-----------------|
| | D_i | D_o | | | | | | | | |
| BB0304DU | 3 | 4.5 | 0.750 0.730 | 0.800 0.700 | 7.500 | 4.25 | 3.000 | 4.508 | 3.048 | 0.054 0.000 |
| BB0404DU | 4 | 5.5 | | | 6.500 | | 2.994 | 4.500 | 3.000 | |
| BB0505DU | 5 | 7 | 1.005 0.980 | 1.050 0.950 | 9.500 | 3.75 | 4.000 | 5.508 | 4.048 | 0.056 0.000 |
| BB0604DU | 6 | 8 | | | 8.500 | | 3.992 | 4.500 | 4.000 | |
| BB0608DU | | | | | 10.500 | 4.75 | 4.990 | 7.015 | 5.055 | |
| | | | | | 9.500 | 4.978 | 7.000 | 4.990 | 4.990 | 0.077 0.000 |
| | | | | | 12.5 | 5.990 | 8.015 | 6.055 | 5.990 | |
| | | | | | 11.5 | 5.978 | 8.000 | 5.990 | 5.990 | |

| Part No. | Nominal Diameter | | Bush Wall s_3 | Flange Wall s_{fl} | Flange- $\varnothing D_{fl}$ | Length B | Shaft- $\varnothing D_J$ | Housing- $\varnothing D_H$ | Ass. Inside- $\varnothing D_{I,a}$ | Clearance C_D | |
|----------|------------------|-------|-----------------|----------------------|------------------------------|------------------|--------------------------|----------------------------|------------------------------------|-----------------|----------------|
| | D_i | D_o | max. min. | max. min. | max. min. | max. min. | max. min. | max. min. | max. min. | max. min. | |
| BB0806DU | 8 | 10 | 1.005 0.980 | 1.050 0.950 | 15.5 14.5 | 5.75 | 7.987 7.972 | 10.015 10.000 | 8.055 7.990 | 0.083 0.003 | |
| BB0808DU | | | | | | 5.25 | | | | | |
| BB0810DU | | | | | | 7.75 7.25 | | | | | |
| BB1007DU | 10 | 12 | | | 18.5 17.5 | 7.25 | 9.987 9.972 | 12.018 12.000 | 10.058 9.990 | | 0.086 0.003 |
| BB1009DU | | | | | | 6.75 | | | | | |
| BB1012DU | | | | | | 9.25 8.75 | | | | | |
| BB1017DU | | | | | 12.25 11.75 | | | | | | |
| BB1207DU | 12 | 14 | | | 20.5 19.5 | 7.25 | 11.984 11.966 | 14.018 14.000 | 12.058 11.990 | | 0.092 0.006 |
| BB1209DU | | | | | | 6.75 | | | | | |
| BB1212DU | | | | | | 9.25 8.75 | | | | | |
| BB1217DU | | | | | 12.25 11.75 | | | | | | |
| BB1412DU | 14 | 16 | | | 22.5 21.5 | 12.25 | 13.984 13.966 | 16.018 16.000 | 14.058 13.990 | | |
| BB1417DU | | | | | | 11.75 | | | | | |
| BB1509DU | 15 | 17 | | | 23.5 22.5 | 9.25 | 14.984 14.966 | 17.018 17.000 | 15.058 14.990 | | |
| BB1512DU | | | | | | 8.75 | | | | | |
| BB1517DU | | | 12.25 11.75 | | | | | | | | |
| BB1612DU | 16 | 18 | 24.5 23.5 | 12.25 | 15.984 15.966 | 18.018 18.000 | 16.058 15.990 | | | | |
| BB1617DU | | | | 11.75 | | | | | | | |
| BB1812DU | 18 | 20 | 26.5 25.5 | 12.25 | 17.984 17.966 | 20.021 20.000 | 18.061 17.990 | 0.095 0.006 | | | |
| BB1817DU | | | | 11.75 | | | | | | | |
| BB1822DU | | | | 17.25 16.75 | | | | | | | |
| BB2012DU | 20 | 23 | 30.5 29.5 | 11.75 | 19.980 19.959 | 23.021 23.000 | 20.071 19.990 | 0.112 0.010 | | | |
| BB2017DU | | | | 11.25 | | | | | | | |
| BB2022DU | | | | 16.75 16.25 | | | | | | | |
| BB2512DU | | | | 21.75 21.25 | | | | | | | |
| BB2517DU | 25 | 28 | 35.5 34.5 | 11.75 | 24.980 24.959 | 28.021 28.000 | 25.071 24.990 | | | | |
| BB2522DU | | | | 11.25 | | | | | | | |
| BB3016DU | 30 | 34 | 42.5 41.5 | 16.25 | 29.980 29.959 | 34.025 34.000 | 30.085 29.990 | | 0.126 0.010 | | |
| BB3026DU | | | | 15.75 | | | | | | | |
| BB3516DU | 35 | 39 | 47.5 46.5 | 16.25 | 34.975 34.950 | 39.025 39.000 | 35.085 34.990 | | 0.135 0.015 | | |
| BB3526DU | | | | 15.75 | | | | | | | |
| BB4016DU | 40 | 44 | 53.5 52.5 | 16.25 | 39.975 39.950 | 44.025 44.000 | 40.085 39.990 | | | | |
| BB4026DU | | | | 15.75 | | | | | | | |
| | | | | 26.25 | | | | | | | |
| | | | | 25.75 | | | | | | | |

8 Standard Products

| Part No. | Nominal Diameter | | Bush Wall s_3 | Flange Wall s_{fi} | Flange- \varnothing D_{fi} | Length B | Shaft- \varnothing D_J | Housing- \varnothing D_H | Ass. Inside- \varnothing $D_{i,a}$ | Clearance C_D |
|----------|------------------|-------|-----------------|----------------------|--------------------------------|-----------|----------------------------|------------------------------|--------------------------------------|-----------------|
| | D_i | D_o | max. min. | max. min. | max. min. | max. min. | max. min. | max. min. | max. min. | max. min. |
| BB4516DU | 45 | 50 | 2.505 | 2.600 | 58.5 | 16.25 | 44.975 | 50.025 | 45.105 | 0.155 |
| BB4526DU | | | 2.460 | 2.400 | 57.5 | 15.75 | | | | |

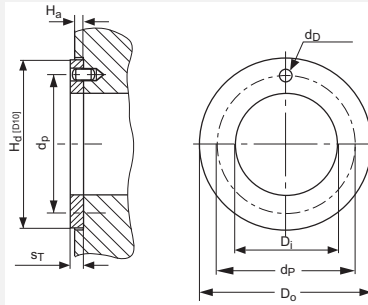
8.3 DU Flanged Washers



All dimensions in mm

| Part No. | Inside- \varnothing D_i | Body- \varnothing D_o | Outside- \varnothing D_{fi} | Location- \varnothing d_p |
|-----------|-----------------------------|---------------------------|---------------------------------|-------------------------------|
| | max. min. | max. min. | max. min. | max. min. |
| BS 40 DU | 40.7 40.2 | 44.000 43.900 | 75.0 74.5 | 65.0 64.5 |
| BS 50 DU | 51.5 51.0 | 55.000 54.880 | 85.0 84.5 | 75.0 74.5 |
| BS 60 DU | 61.5 61.0 | 65.000 64.880 | 95.0 94.5 | 85.0 84.5 |
| BS 70 DU | 71.5 71.0 | 75.000 74.880 | 110.0 109.5 | 100.0 99.5 |
| BS 80 DU | 81.5 81.0 | 85.000 84.860 | 120.0 119.5 | 110.0 109.5 |
| BS 90 DU | 91.5 91.0 | 95.000 94.860 | 130.0 129.5 | 120.0 119.5 |
| BS 100 DU | 101.5 101.0 | 105.000 104.860 | 140.0 139.5 | 130.0 129.5 |

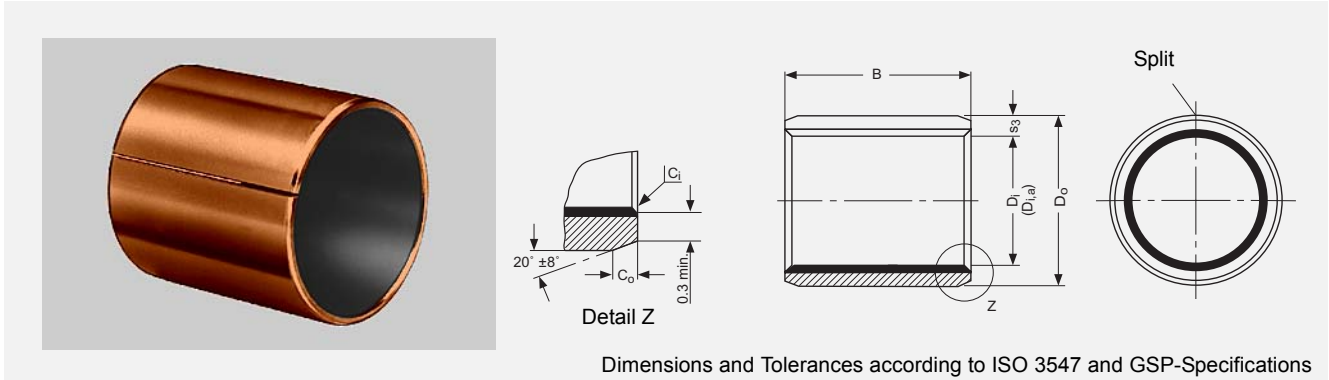
8.4 DU Thrust Washer



All dimensions in mm

| Part No. | Inside- \varnothing D_i | | Outside- \varnothing D_o | | Wall thickness s_T | Dowel hole- \varnothing d_D | Dowel hole PCD- \varnothing d_P | Recess Depth H_a |
|----------|--------------------------------|-------|---------------------------------|-------|-------------------------|---------------------------------------|--|-----------------------|
| | min. | max. | max. | min. | | | | |
| WC 08 DU | 10.00 | 10.25 | 20.00 | 19.75 | 1.50 1.45 | No Hole | No Hole | 1.20 0.95 |
| WC 10 DU | 12.00 | 12.25 | 24.00 | 23.75 | | 1.875 1.625 | 18.12 17.88 | |
| WC 12 DU | 14.00 | 14.25 | 26.00 | 25.75 | | 2.375 2.125 | 20.12 19.88 | |
| WC 14 DU | 16.00 | 16.25 | 30.00 | 29.75 | | | 22.12 21.88 | |
| WC 16 DU | 18.00 | 18.25 | 32.00 | 31.75 | | 3.375 3.125 | 25.12 24.88 | |
| WC 18 DU | 20.00 | 20.25 | 36.00 | 35.75 | | | 28.12 27.88 | |
| WC 20 DU | 22.00 | 22.25 | 38.00 | 37.75 | | 4.375 4.125 | 30.12 29.88 | |
| WC 22 DU | 24.00 | 24.25 | 42.00 | 41.75 | | | 33.12 32.88 | |
| WC 24 DU | 26.00 | 26.25 | 44.00 | 43.75 | | 61.12 60.88 | 35.12 34.88 | |
| WC 25 DU | 28.00 | 28.25 | 48.00 | 47.75 | | | 38.12 37.88 | |
| WC 30 DU | 32.00 | 32.25 | 54.00 | 53.75 | | 65.12 64.88 | 43.12 42.88 | |
| WC 35 DU | 38.00 | 38.25 | 62.00 | 61.75 | | | 50.12 49.88 | |
| WC 40 DU | 42.00 | 42.25 | 66.00 | 65.75 | | 76.12 75.88 | 54.12 53.88 | |
| WC 45 DU | 48.00 | 48.25 | 74.00 | 73.75 | 61.12 60.88 | | | |
| WC 50 DU | 52.00 | 52.25 | 78.00 | 77.75 | 1.70 1.45 | 65.12 64.88 | | |
| WC 60 DU | 62.00 | 62.25 | 90.00 | 89.75 | | 76.12 75.88 | | |

8.5 DU-B Cylindrical Bushes



Dimensions and Tolerances according to ISO 3547 and GSP-Specifications

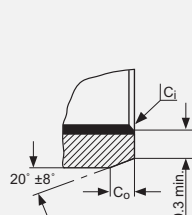
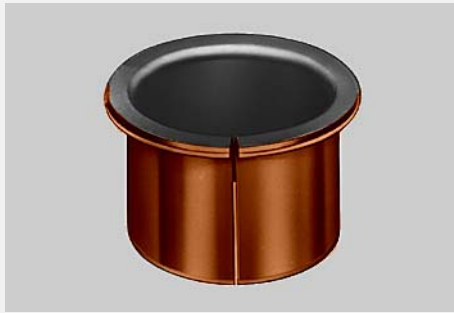
All dimensions in mm
ID and OD chamfers

| s ₃ | C _o | C _i | s ₃ | C _o | C _i |
|----------------|----------------|----------------|----------------|----------------|----------------|
| 0.75 | 0.5 ± 0.3 | -0.1 to -0.4 | 2 | 1.2 ± 0.4 | -0.1 to -0.7 |
| 1 | 0.6 ± 0.4 | -0.1 to -0.5 | 2.5 | 1.6 ± 0.8 | -0.2 to -1.0 |
| 1.5 | 0.6 ± 0.4 | -0.1 to -0.7 | | | |

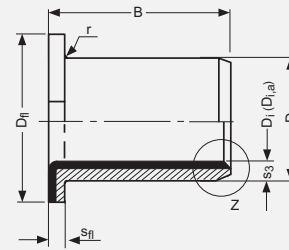
| Part No. | Nominal Diameter | | Wall thickness s ₃ max. min. | Length B max. min. | Shaft-∅ D _J max. min. | Housing-∅ D _H max. min. | Ass. Inside-∅ D _{i,a} max. min. | Clearance C _D max. |
|-----------|------------------|----------------|--|-----------------------|-------------------------------------|---------------------------------------|---|----------------------------------|
| | D _i | D _o | | | | | | |
| 0203 DU-B | 2 | 3.5 | 0.750 0.730 | 3.25 | 2.000 1.994 | 3.508 3.500 | 2.048 2.000 | 0.054 0.000 |
| 0205 DU-B | | | | 4.75 | | | | |
| 0306 DU-B | 3 | 4.5 | 6.25 | 3.000 2.994 | 4.508 4.500 | 3.048 3.000 | | |
| 0406 DU-B | 4 | 5.5 | 5.75 | 4.000 3.992 | 5.508 5.500 | 4.048 4.000 | | |
| 0505 DU-B | 5 | 7 | 1.005 0.980 | 5.25 | 4.990 4.978 | 7.015 7.000 | 5.055 4.990 | 0.077 0.000 |
| 0510 DU-B | | | | 9.75 | | | | |
| 0606 DU-B | 6 | 8 | 6.25 | 5.990 5.978 | 8.015 8.000 | 6.055 5.990 | | |
| 0608 DU-B | | | 7.75 | | | | | |
| 0610 DU-B | | | 9.75 | | | | | |
| 0808 DU-B | 8 | 10 | 8.25 | 7.987 7.972 | 10.015 10.000 | 8.055 7.990 | | |
| 0812 DU-B | | | 11.75 | | | | | |
| 1010 DU-B | 10 | 12 | 10.25 | 9.987 9.972 | 12.018 12.000 | 10.058 9.990 | | |
| 1015 DU-B | | | 14.75 | | | | | |
| 1208 DU-B | 12 | 14 | 8.25 | 11.984 11.966 | 14.018 14.000 | 12.058 11.990 | | |
| 1210 DU-B | | | 9.75 | | | | | |
| 1212 DU-B | | | 11.75 | | | | | |
| 1215 DU-B | | | 11.75 | | | | | |
| 1415 DU-B | | | 14.75 | | | | | |
| 1420 DU-B | 14 | 16 | 20.25 19.75 | 13.984 13.966 | 16.018 16.000 | 14.058 13.990 | 0.092 0.006 | |
| 1515 DU-B | 15 | 17 | 15.25 | 14.984 14.966 | 17.018 17.000 | 15.058 14.990 | | |
| 1525 DU-B | | | 24.75 | | | | | |

| Part No. | Nominal Diameter | | Wall thickness s_3 | Length B | Shaft- \varnothing D_J | Housing- \varnothing D_H | Ass. Inside- \varnothing $D_{i,a}$ | Clearance C_D | | | | |
|-------------|------------------|-------|----------------------|----------|----------------------------|------------------------------|--------------------------------------|-----------------|-----------|-----------|-----------|-----------|
| | D_i | D_o | | | | | | | max. min. | max. min. | max. min. | max. min. |
| 1615 DU-B | 16 | 18 | 1.005 0.980 | 15.25 | 15.984 | 18.018 | 16.058 | 0.092 | | | | |
| 1625 DU-B | | | | 14.75 | | | | | 15.966 | 18.000 | 15.990 | 0.006 |
| 1820 DU-B | 18 | 20 | 1.005 0.980 | 20.25 | 17.984 | 20.021 | 18.061 | 0.095 | | | | |
| 1825 DU-B | | | | 19.75 | | | | | 17.966 | 20.000 | 17.990 | 0.006 |
| 2015 DU-B | 20 | 23 | 1.505 1.475 | 15.25 | 19.980 | 23.021 | 20.071 | 0.112 | | | | |
| 2020 DU-B | | | | 14.75 | | | | | 19.959 | 23.000 | 19.990 | 0.010 |
| 2030 DU-B | | | | 20.25 | | | | | 19.75 | 23.000 | 19.990 | 0.010 |
| 2215 DU-B | 22 | 25 | 1.505 1.475 | 30.25 | 21.980 | 25.021 | 22.071 | 0.112 | | | | |
| 2220 DU-B | | | | 29.75 | | | | | 21.959 | 25.000 | 21.990 | 0.010 |
| 2225 DU-B | | | | 15.25 | | | | | 21.959 | 25.000 | 21.990 | 0.010 |
| 2525 DU-B | 25 | 28 | 1.505 1.475 | 14.75 | 24.980 | 28.021 | 25.071 | 0.112 | | | | |
| 2830 DU-B | 28 | 32 | 2.005 1.970 | 24.75 | 24.959 | 28.000 | 24.990 | 0.135 | | | | |
| 3020 DU-B | 30 | 34 | 2.005 1.970 | 30.25 | 27.980 | 32.025 | 28.085 | 0.126 | | | | |
| 3030 DU-B | | | | 29.75 | | | | | 27.959 | 32.000 | 27.990 | 0.010 |
| 3040 DU-B | | | | 20.25 | | | | | 27.959 | 32.000 | 27.990 | 0.010 |
| 3520 DU-B | 35 | 39 | 2.005 1.970 | 19.75 | 29.980 | 34.025 | 30.085 | 0.135 | | | | |
| 3530 DU-B | | | | 19.75 | | | | | 29.959 | 34.000 | 29.990 | 0.010 |
| 4030 DU-B | | | | 30.25 | | | | | 29.75 | 34.000 | 29.990 | 0.010 |
| 4050 DU-B | 40 | 44 | 2.505 2.460 | 49.75 | 39.975 | 44.025 | 40.085 | 0.170 | | | | |
| 4530 DU-B | 45 | 50 | 2.505 2.460 | 30.25 | 44.975 | 50.025 | 45.105 | 0.155 | | | | |
| 4550 DU-B | | | | 29.75 | | | | | 44.950 | 50.000 | 44.990 | 0.015 |
| 5040 DU-B | 50 | 55 | 2.505 2.460 | 40.25 | 49.975 | 55.030 | 50.110 | 0.160 | | | | |
| 5060 DU-B | | | | 39.75 | | | | | 49.950 | 55.000 | 49.990 | 0.015 |
| 5540 DU-B | | | | 60.25 | | | | | 49.950 | 55.000 | 49.990 | 0.015 |
| 6040 DU-B | 60 | 65 | 2.505 2.460 | 59.75 | 54.970 | 60.030 | 55.110 | 0.170 | | | | |
| 6070 DU-B | | | | 39.75 | | | | | 54.940 | 60.000 | 54.990 | 0.020 |
| 7050 DU-B | 70 | 75 | 2.505 2.460 | 70.25 | 69.970 | 75.030 | 70.110 | 0.209 | | | | |
| 7070 DU-B | | | | 69.75 | | | | | 69.940 | 75.000 | 69.990 | 0.020 |
| 8060 DU-B | | | | 50.25 | | | | | 69.75 | 75.000 | 69.990 | 0.020 |
| 80100 DU-B | 80 | 85 | 2.490 2.440 | 60.50 | 80.000 | 85.035 | 80.155 | 0.201 | | | | |
| 9060 DU-B | | | | 59.50 | | | | | 79.954 | 85.000 | 80.020 | 0.020 |
| 90100 DU-B | 90 | 95 | 2.490 2.440 | 99.50 | 90.000 | 95.035 | 90.155 | 0.209 | | | | |
| 10060 DU-B | | | | 60.50 | | | | | 89.946 | 95.000 | 90.020 | 0.020 |
| 100115 DU-B | | | | 59.50 | | | | | 89.946 | 95.000 | 90.020 | 0.020 |
| 10060 DU-B | 100 | 105 | 2.490 2.440 | 60.50 | 100.000 | 105.035 | 100.155 | 0.209 | | | | |
| 100115 DU-B | | | | 59.50 | | | | | 99.946 | 105.000 | 100.020 | 0.020 |
| 100115 DU-B | 100 | 105 | 2.490 2.440 | 114.50 | 99.946 | 105.000 | 100.020 | 0.209 | | | | |

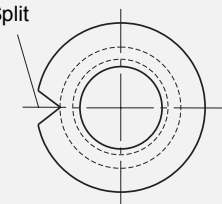
8.6 DU-B Flanged Bushes



Detail Z



Split



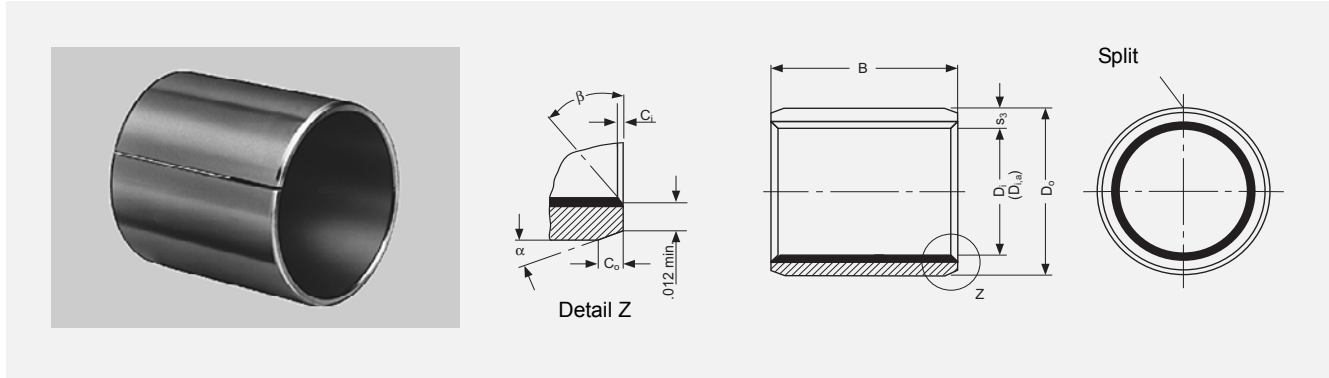
Dimensions and Tolerances according to ISO 3547 and GSP-Specifications

| | | | | |
|-------|------------|-------------|---------------|-------------|
| s_3 | 1,0 | 1,5 | 2,0 | 2,5 |
| r | $1^{-0,5}$ | $1 \pm 0,5$ | $1,4 \pm 0,5$ | $2 \pm 0,5$ |

All dimensions in mm

| Part No. | Nominal Diameter | | Bush Wall s_3 | Flange Wall s_{fl} | Flange- $\varnothing D_{fl}$ | Length B | Shaft- $\varnothing D_J$ | Housing- $\varnothing D_H$ | Ass. Inside- $\varnothing D_{i,a}$ | Clearance C_D | | | | | |
|------------|------------------|-------|-----------------|----------------------|---------------------------------|------------------|-----------------------------|-------------------------------|---------------------------------------|-----------------|----------------|------------------|------------------|------------------|-----------|
| | D_i | D_o | | | | | | | | | max. min. | max. min. | max. min. | max. min. | max. min. |
| BB0304DU-B | 3 | 4.5 | 0.750 0.730 | 0.800 0.700 | 7.500 6.500 | 4.25 | 3.000 2.994 | 4.508 4.500 | 3.048 3.000 | 0.054 0.000 | | | | | |
| BB0404DU-B | 4 | 5.5 | | | 9.500 8.500 | 3.75 | 4.000 3.992 | 5.508 4.500 | 4.048 4.000 | 0.056 0.000 | | | | | |
| BB0505DU-B | 5 | 7 | 1.005 0.980 | 1.050 0.950 | 10.500 9.500 | 5.25 4.75 | 4.990 4.978 | 7.015 7.000 | 5.055 4.990 | 0.077 0.000 | | | | | |
| BB0604DU-B | 6 | 8 | | | 12.5 11.5 | 4.25 3.75 | 5.990 5.978 | 8.015 8.000 | 6.055 5.990 | 0.000 | | | | | |
| BB0806DU-B | 8 | 10 | | | 15.5 14.5 | 5.75 5.25 | 7.987 7.972 | 10.015 10.000 | 8.055 7.990 | 0.083 0.000 | | | | | |
| BB0810DU-B | | | | | | | | | | | 9.75 9.25 | 7.987 7.972 | 10.000 | 7.990 | 0.000 |
| BB1007DU-B | 10 | 12 | | | 18.5 17.5 | 7.25 6.75 | 9.987 9.972 | 12.018 12.000 | 10.058 9.990 | 0.086 0.003 | | | | | |
| BB1012DU-B | | | | | | | | | | | 12.25 11.75 | 9.987 9.972 | 12.000 | 9.990 | 0.000 |
| BB1207DU-B | 12 | 14 | | | 20.5 19.5 | 9.25 8.75 | 11.984 11.966 | 14.018 14.000 | 12.058 11.990 | 0.092 0.006 | | | | | |
| BB1209DU-B | | | | | | | | | | | 12.25 11.75 | 11.984 11.966 | 14.000 | 11.990 | 0.000 |
| BB1212DU-B | | | | | | | | | | | | | | | |
| BB1417DU-B | | | | | | | | | | | 12.25 11.75 | 14.984 14.966 | 17.018 17.000 | 15.058 14.990 | 0.000 |
| BB1512DU-B | 15 | 17 | | | 23.5 22.5 | 17.25 16.75 | 14.984 14.966 | 17.000 | 14.990 | 0.000 | | | | | |
| BB1517DU-B | | | | | | | | | | | 12.25 11.75 | 15.984 15.966 | 18.018 18.000 | 16.058 15.990 | 0.000 |
| BB1612DU-B | 16 | 18 | | | 24.5 23.5 | 17.25 16.75 | 15.984 15.966 | 18.000 | 16.000 | 15.990 | 0.000 | | | | |
| BB1617DU-B | | | | | | | | | | | | 12.25 11.75 | 15.984 15.966 | 18.000 | 16.000 |
| BB1822DU-B | 18 | 20 | | | 26.5 25.5 | 22.25 21.75 | 17.984 17.966 | 20.021 20.000 | 18.061 17.990 | 0.095 0.006 | | | | | |
| BB2012DU-B | 20 | 23 | | | 30.5 29.5 | 11.75 11.25 | 19.980 19.959 | 23.021 23.000 | 20.071 19.990 | 0.112 0.010 | | | | | |
| BB2017DU-B | | | 16.75 16.25 | 19.959 | | | | | | | 23.000 | 19.990 | 0.000 | | |
| BB2522DU-B | 25 | 28 | 35.5 34.5 | 21.75 21.25 | 24.980 24.959 | 28.021 28.000 | 25.071 24.990 | 0.126 0.010 | | | | | | | |
| BB3016DU-B | 30 | 34 | 42.5 41.5 | 16.25 15.75 | 29.980 29.959 | 34.025 34.000 | 30.085 29.990 | 0.126 0.010 | | | | | | | |
| BB3026DU-B | | | | | | | | | 26.25 25.75 | 29.959 | 34.000 | 29.990 | 0.000 | | |
| BB3526DU-B | 35 | 39 | 47.5 46.5 | 25.75 | 34.975 34.950 | 39.025 39.000 | 35.085 34.990 | 0.135 0.015 | | | | | | | |
| BB4026DU-B | 40 | 44 | 2.005 1.970 | 2.100 1.900 | 53.5 52.5 | 26.25 | 39.975 39.950 | 44.025 44.000 | 40.085 39.990 | 0.135 0.015 | | | | | |
| BB4526DU-B | 45 | 50 | 2.505 2.460 | 2.600 2.400 | 58.5 57.5 | 25.75 | 44.975 44.950 | 50.025 50.000 | 45.105 44.990 | 0.155 0.015 | | | | | |

8.7 DU Cylindrical Bushes - Inch sizes



All dimensions in inch

ID and OD chamfers

| D _i | C _o | α | C _i | β |
|----------------|-----------------|---------|-----------------|---------|
| 1/8" - 5/16" | 0.008" - 0.024" | 30°-45° | 0.004" - 0.012" | 30°-45° |
| 3/8" - 11/16" | 0.020" - 0.040" | 20°-30° | 0.005" - 0.025" | 40°-55° |
| 3/4" - 7" | 0.020" - 0.040" | 15°-25° | 0.005" - 0.025" | 40°-50° |

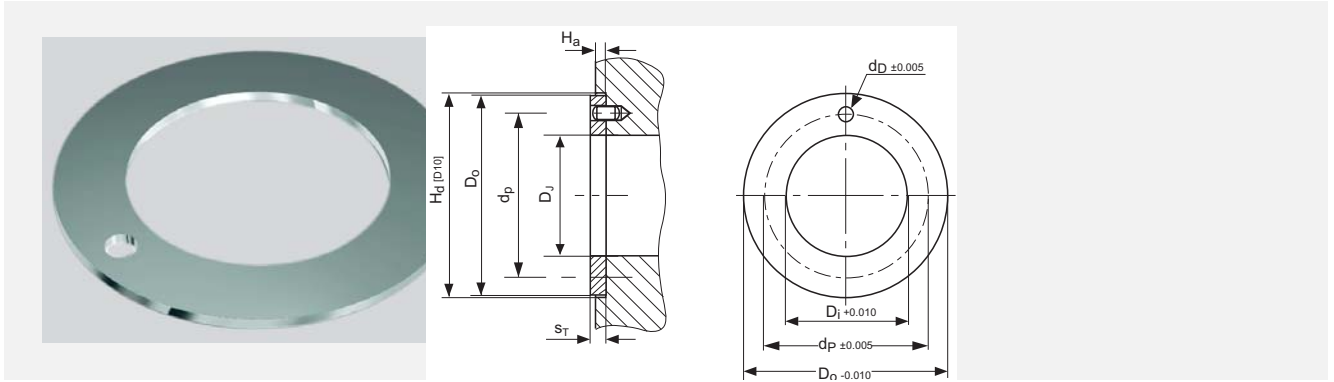
| Part No. | Nominal Diameter | | | Bush Wall s ₃ max. min. | Length B max. min. | Shaft-∅ D _J max. min. | Housing- ∅ D _H max. min. | Ass. Inside-∅ D _{i,a} max. min. | Clearan ce C _D max. min. | | | | |
|----------|------------------|----------------|------|---|-----------------------------|---|--|--|--|--------|--------|--------|--------|
| | D _i | D _O | B | | | | | | | | | | |
| 02DU02 | 1/8 | 3/16 | 1/8 | 0.0315 0.0305 | 0.1350 | 0.1243 | 0.1878 | 0.1268 | 0.0032 | | | | |
| 02DU03 | | | 3/16 | | 0.1150 | | | | | 0.1236 | 0.1873 | 0.1243 | 0.0000 |
| 025DU025 | 5/32 | 7/32 | 5/32 | | 0.16625 | 0.1554 | 0.2191 | 0.1581 | 0.0034 | | | | |
| 025DU04 | | | 1/4 | | 0.14265 | | | | | 0.1547 | 0.2186 | 0.1556 | 0.0002 |
| 03DU03 | 3/16 | 1/4 | 3/16 | | 0.1975 | 0.1865 | 0.2503 | 0.1893 | 0.0035 | | | | |
| 03DU04 | | | 1/4 | | 0.1775 | | | | | 0.1858 | 0.2497 | 0.1867 | 0.0002 |
| 03DU06 | | | 3/8 | | 0.2600 | | | | | 0.3850 | 0.3650 | 0.2600 | 0.2490 |
| 04DU04 | 1/4 | 5/16 | 1/4 | | 0.2400 | 0.2481 | 0.3122 | 0.2492 | | | | | |
| 04DU06 | 1/4 | 5/16 | 3/8 | | 0.3850 | 0.3115 | 0.3753 | 0.3143 | 0.0002 | | | | |
| 05DU06 | | | 3/8 | | 0.3650 | | | | | 0.3747 | 0.3117 | | |
| 05DU08 | 5/16 | 3/8 | 1/2 | | 0.5100 | 0.3106 | 0.3747 | 0.3117 | | | | | |
| 06DU06 | 3/8 | 15/32 | 3/8 | | 0.3850 | 0.3740 | 0.4691 | 0.3769 | 0.0038 | | | | |
| 06DU08 | | | 1/2 | | 0.3650 | | | | | 0.4684 | 0.3742 | 0.0002 | |
| 06DU12 | | | 3/4 | | 0.5100 | | | | | 0.4900 | 0.3731 | 0.4684 | 0.3742 |
| 07DU08 | 7/16 | 17/32 | 1/2 | | 0.7600 | 0.4365 | 0.5316 | 0.4394 | 0.0039 | | | | |
| 07DU12 | | | 3/4 | | 0.7400 | | | | | 0.4355 | 0.5309 | 0.4367 | 0.0002 |
| 08DU06 | 1/2 | 19/32 | 3/8 | 0.5100 | 0.4990 | 0.5941 | 0.5019 | 0.0039 | | | | | |
| 08DU08 | | | 1/2 | 0.4900 | | | | | 0.4980 | 0.5934 | 0.4992 | | |
| 08DU10 | | | 5/8 | 0.6350 | | | | | 0.6150 | 0.5934 | 0.4992 | | |
| 08DU14 | | | 7/8 | 0.8850 | | | | | 0.8650 | 0.5934 | 0.4992 | | |
| 09DU08 | | | 9/16 | 21/32 | | | | | 1/2 | 0.5100 | 0.5615 | 0.6566 | 0.5644 |
| 09DU12 | 3/4 | 0.4900 | | | 0.5605 | 0.6559 | 0.5617 | | | | | | |
| | | | | 0.7600 | | | | | | | | | |
| | | | | 0.7400 | | | | | | | | | |

8 Standard Products

| Part No. | Nominal Diameter | | | Bush Wall s ₃ max. min. | Length B max. min. | Shaft- D _J max. min. | Housing- ∅ D _H max. min. | Ass. Inside-∅ D _{i,a} max. min. | Clearan ce C _D max. min. |
|----------|------------------|----------------|-------|---|-----------------------------|--|--|--|--|
| | D _i | D _O | B | | | | | | |
| 10DU08 | 5/8 | 23/32 | 1/2 | 0.0471 0.0461 | 0.5100 0.4900 | 0.6240 0.6230 | 0.7192 0.7184 | 0.6270 0.6242 | 0.0040 0.0002 |
| 10DU10 | | | 5/8 | | 0.6350 0.6150 | | | | |
| 10DU12 | | | 3/4 | | 0.7600 0.7400 | | | | |
| 10DU14 | | | 7/8 | | 0.8850 0.8650 | | | | |
| 11DU14 | 11/16 | 25/32 | 7/8 | | | 0.6865 0.6855 | 0.7817 0.7809 | 0.6895 0.6867 | |
| 12DU08 | 3/4 | 7/8 | 1/2 | 0.0627 0.0615 | 0.5100 0.4900 | 0.7491 0.7479 | 0.8755 0.8747 | 0.7525 0.7493 | 0.0046 0.0002 |
| 12DU12 | | | 3/4 | | 0.7600 0.7400 | | | | |
| 12DU16 | | | 1 | | 1.0100 0.9900 | | | | |
| 14DU12 | 7/8 | 1 | 3/4 | 0.0627 0.0615 | 0.7600 0.7400 | 0.8741 0.8729 | 1.0005 0.9997 | 0.8775 0.8743 | 0.0047 0.0001 |
| 14DU14 | | | 7/8 | | 0.8850 0.8650 | | | | |
| 14DU16 | | | 1 | | 1.0100 0.9900 | | | | |
| 16DU12 | 1 | 1 1/8 | 3/4 | 0.0784 0.0770 | 0.7600 0.7400 | 0.9991 0.9979 | 1.1256 1.1246 | 1.0026 0.9992 | 0.0052 0.0002 |
| 16DU16 | | | 1 | | 1.0100 0.9900 | | | | |
| 16DU24 | | | 1 1/2 | | 1.5100 1.4900 | | | | |
| 18DU12 | 1 1/8 | 1 9/32 | 3/4 | 0.0784 0.0770 | 0.7600 0.7400 | 1.1238 1.1226 | 1.2818 1.2808 | 1.1278 1.1240 | 0.0056 0.0002 |
| 18DU16 | | | 1 | | 1.0100 0.9900 | | | | |
| 20DU12 | 1 1/4 | 1 13/32 | 3/4 | 0.0784 0.0770 | 0.7600 0.7400 | 1.2488 1.2472 | 1.4068 1.4058 | 1.2528 1.2490 | 0.0056 0.0002 |
| 20DU16 | | | 1 | | 1.0100 0.9900 | | | | |
| 20DU20 | | | 1 1/4 | | 1.2600 1.2400 | | | | |
| 20DU28 | | | 1 3/4 | | 1.7600 1.7400 | | | | |
| 22DU16 | 1 3/8 | 1 17/32 | 1 | 0.0784 0.0770 | 1.0100 0.9900 | 1.3738 1.3722 | 1.5318 1.5308 | 1.3778 1.3740 | 0.0056 0.0002 |
| 22DU22 | | | 1 3/8 | | 1.3850 1.3650 | | | | |
| 22DU28 | | | 1 3/4 | | 1.7600 1.7400 | | | | |
| 24DU16 | | | 1 | | 1.0100 0.9900 | | | | |
| 24DU20 | 1 1/2 | 1 21/32 | 1 1/4 | 0.0941 0.0923 | 1.2600 1.2400 | 1.4988 1.4972 | 1.6568 1.6558 | 1.5028 1.4990 | 0.0064 0.0002 |
| 24DU24 | | | 1 1/2 | | 1.5100 1.4900 | | | | |
| 24DU32 | | | 2 | | 2.0100 1.9900 | | | | |
| 26DU16 | | | 1 | | 1.0100 0.9900 | | | | |
| 26DU24 | 1 5/8 | 1 25/32 | 1 1/2 | 0.0941 0.0923 | 1.5100 1.4900 | 1.6238 1.6222 | 1.7818 1.7808 | 1.6278 1.6240 | 0.0056 0.0002 |
| 28DU16 | 1 3/4 | 1 15/16 | 1 | 0.0941 0.0923 | 1.0100 0.9900 | 1.7487 1.7471 | 1.9381 1.9371 | 1.7535 1.7489 | 0.0064 0.0002 |
| 28DU24 | | | 1 1/2 | | 1.5100 1.4900 | | | | |
| 28DU28 | | | 1 3/4 | | 1.7600 1.7400 | | | | |
| 28DU32 | | | 2 | | 2.0100 1.9900 | | | | |

| Part No. | Nominal Diameter | | | Bush Wall S ₃ max. min. | Length B max. min. | Shaft-∅ D _J max. min. | Housing-∅ D _H max. min. | Ass. Inside-∅ D _{I,a} max. min. | Clearance C _D max. min. | | | | | | | | |
|----------|-------------------------------|---------------------------------|-------------------------------|---------------------------------------|-----------------------|-------------------------------------|---------------------------------------|---|---------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | D _i | D _O | B | | | | | | | | | | | | | | |
| 30DU16 | 1 ⁷ / ₈ | 2 ¹ / ₁₆ | 1 | 0.0941 0.0923 | 1.0100 0.9900 | 1.8737 1.8721 | 2.0633 2.0621 | 1.8787 1.8739 | 0.0066 0.0002 | | | | | | | | |
| 30DU30 | | | 1 ⁷ / ₈ | | 1.8850 1.8650 | | | | | | | | | | | | |
| 30DU36 | | | 2 ¹ / ₄ | | 2.2600 2.2400 | | | | | | | | | | | | |
| 32DU16 | 2 | 2 ³ / ₁₆ | 1 | | 0.0928 0.0902 | 1.0100 0.9900 | 1.9987 1.9969 | 2.1883 2.1871 | 2.0037 1.9989 | 0.0068 0.0002 | | | | | | | |
| 32DU24 | | | 1 ¹ / ₂ | | | 1.5100 1.4900 | | | | | | | | | | | |
| 32DU32 | | | 2 | | | 2.0100 1.9900 | | | | | | | | | | | |
| 32DU40 | | | 2 ¹ / ₂ | 2.5100 2.4900 | | | | | | | | | | | | | |
| 36DU32 | 2 ¹ / ₄ | 2 ⁷ / ₁₆ | 2 | 0.0928 0.0902 | | 2.0100 1.4900 | 2.2507 2.2489 | 2.4377 2.4365 | 2.2573 2.2509 | 0.0084 0.0002 | | | | | | | |
| 36DU36 | | | 2 ¹ / ₄ | | | 2.2600 2.2400 | | | | | | | | | | | |
| 36DU40 | | | 2 ¹ / ₂ | | | 2.5100 2.4900 | | | | | | | | | | | |
| 36DU48 | | | 3 | | | 3.0100 2.9900 | | | | | | | | | | | |
| 40DU32 | 2 ¹ / ₂ | 2 ¹¹ / ₁₆ | 2 | | 0.0928 0.0902 | 2.0100 1.9900 | 2.5011 2.4993 | 2.6881 2.6869 | 2.5077 2.5013 | | 0.0084 0.0002 | | | | | | |
| 40DU40 | | | 2 ¹ / ₂ | | | 2.5100 2.4900 | | | | | | | | | | | |
| 40DU48 | | | 3 | | | 3.0100 2.9900 | | | | | | | | | | | |
| 40DU56 | | | 3 ¹ / ₂ | | | 3.5100 3.4900 | | | | | | | | | | | |
| 44DU32 | 2 ³ / ₄ | 2 ¹⁵ / ₁₆ | 2 | | | 0.0928 0.0902 | 2.0100 1.9900 | 2.7500 2.7482 | 2.9370 2.9358 | | | 2.7566 2.7502 | 0.0086 0.0002 | | | | |
| 44DU40 | | | 2 ¹ / ₂ | | | | 2.5100 2.4900 | | | | | | | | | | |
| 44DU48 | | | 3 | | | | 3.0100 2.9900 | | | | | | | | | | |
| 44DU56 | | | 3 ¹ / ₂ | | | | 3.5100 3.4900 | | | | | | | | | | |
| 48DU32 | 3 | 3 ³ / ₁₆ | 2 ¹ / ₂ | 0.0928 0.0902 | | | 2.5100 2.4900 | 3.0000 2.9982 | 3.1872 3.1858 | 3.0068 3.0002 | | 0.0086 0.0002 | | | | | |
| 48DU48 | | | 3 | | | | 3.0100 2.9900 | | | | | | | | | | |
| 48DU60 | | | 3 ³ / ₄ | | | | 3.7600 3.7400 | | | | | | | | | | |
| 56DU40 | 3 ¹ / ₂ | 3 ¹¹ / ₁₆ | 2 ¹ / ₂ | | | | 0.0928 0.0902 | 2.5100 2.4900 | 3.5000 3.4978 | 3.6872 3.6858 | | | | 3.5068 3.5002 | 0.0090 0.0002 | | |
| 56DU48 | | | 3 | | 3.0100 2.9900 | | | | | | | | | | | | |
| 56DU60 | | | 3 ³ / ₄ | | 3.7600 3.7400 | | | | | | | | | | | | |
| 64DU48 | 4 | 4 ³ / ₁₆ | 3 | | 0.0928 0.0902 | | | 3.0100 2.9900 | 4.0000 3.9978 | 4.1872 4.1858 | 4.0068 4.0002 | | | 0.0090 0.0002 | | | |
| 64DU60 | | | 3 ³ / ₄ | | | | | 3.7600 3.7400 | | | | | | | | | |
| 64DU76 | | | 4 ³ / ₄ | | | 4.7600 4.7400 | | | | | | | | | | | |
| 80DU48 | 5 | 5 ³ / ₁₆ | 3 | | | 0.0928 0.0902 | | 3.0100 2.9900 | 4.9986 4.9961 | 5.1860 5.1844 | 5.0056 4.9988 | | 0.0095 0.0002 | | | | |
| 80DU60 | | | 3 ³ / ₄ | | | | | 3.7600 3.7400 | | | | | | | | | |
| 96DU48 | 6 | 6 ³ / ₁₆ | 3 | | | | | 0.0928 0.0902 | 3.0100 2.9900 | 6.0000 5.9975 | 6.1874 6.1858 | | | | | 6.0070 6.0002 | 0.0097 0.0002 |
| 96DU60 | | | 3 ³ / ₄ | 3.7600 3.7400 | | | | | | | | | | | | | |
| 112DU60 | 7 | 7 ³ / ₁₆ | 3 ³ / ₄ | | | | | | 3.7600 3.7400 | 6.9954 6.9929 | 7.1830 7.1812 | 7.0026 6.9956 | | | | 0.0097 0.0002 | |

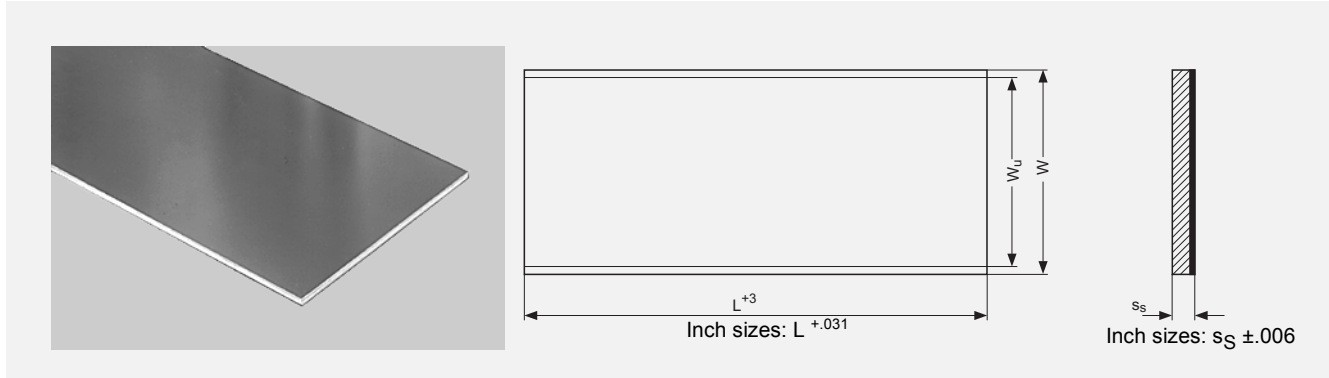
8.8 DU Thrust Washers - Inch sizes



All dimensions in inch

| Part No. | Inside- \varnothing D_i | | Outside- \varnothing D_o | Wall thickness s_T | Dowel hole- \varnothing d_D | Dowel hole PCD- \varnothing d_p | Recess Depth H_a | |
|----------|--------------------------------|-------|---------------------------------|----------------------|---------------------------------------|---|--------------------------|----------------|
| | max. | min. | | | | | | max. min. |
| DU06 | 0.510 | 0.500 | 0.875 0.865 | 0.063 0.061 | 0.077 0.067 | 0.692 0.682 | 0.050 0.040 | |
| DU07 | 0.572 | 0.562 | 1.000 0.990 | | 0.077 0.067 | 0.786 0.776 | | |
| DU08 | 0.635 | 0.625 | 1.125 1.115 | | 0.109 0.099 | 0.880 0.870 | | |
| DU09 | 0.697 | 0.687 | 1.187 1.177 | | 0.109 0.099 | 0.942 0.932 | | |
| DU10 | 0.760 | 0.750 | 1.250 1.240 | | 0.109 0.099 | 1.005 0.995 | | |
| DU11 | 0.822 | 0.812 | 1.375 1.365 | | 0.109 0.099 | 1.099 1.089 | | |
| DU12 | 0.885 | 0.875 | 1.500 1.490 | | 0.140 0.130 | 1.192 1.182 | | |
| DU14 | 1.010 | 1.000 | 1.750 1.740 | | 0.140 0.130 | 1.380 1.370 | | |
| DU16 | 1.135 | 1.125 | 2.000 1.990 | | 0.171 0.161 | 1.567 1.557 | | |
| DU18 | 1.260 | 1.250 | 2.125 2.115 | | 0.171 0.161 | 1.692 1.682 | | |
| DU20 | 1.385 | 1.375 | 2.250 2.240 | | 0.171 0.161 | 1.817 1.807 | | |
| DU22 | 1.510 | 1.500 | 2.500 2.490 | | 0.202 0.192 | 2.005 1.995 | | 0.080 0.070 |
| DU24 | 1.635 | 1.625 | 2.625 2.615 | | | 2.130 2.120 | | |
| DU26 | 1.760 | 1.750 | 2.750 2.740 | | | 2.255 2.245 | | |
| DU28 | 2.010 | 2.000 | 3.000 2.990 | 2.505 2.495 | | | | |
| DU30 | 2.135 | 2.125 | 3.125 3.115 | 2.630 2.620 | | | | |
| DU32 | 2.260 | 2.250 | 3.250 3.240 | 2.755 2.745 | | | | |

8.9 DU Strip



All dimensions in mm

| Part No. | Length L | Total Width W | Useable Width W _U | Thickness s _S | |
|------------|----------|---------------|------------------------------|--------------------------|-------|
| | | | | max. | min. |
| S 07150 DU | 500 | 160 | 150 | 0.744 | 0.704 |
| S 10200 DU | | 225 | 215 | 0.990 | 0.950 |
| S 15240 DU | | 254 | 245 | 1.510 | 1.470 |
| S 20240 DU | | | | 2.000 | 1.960 |
| S 25240 DU | | | | 2.500 | 2.460 |
| S 30240 DU | | | | 3.060 | 3.020 |

8.10 DU-B Strip

All dimensions in mm

| Part No. | Length L | Total Width W | Useable Width W _U | Thickness s _S | |
|--------------|----------|---------------|------------------------------|--------------------------|-------|
| | | | | max. | min. |
| S 10180 DU-B | 500 | 193 | 180 | 0.990 | 0.950 |
| S 15180 DU-B | | | | 1.500 | 1.470 |
| | | | | S 20180 DU-B | 2.000 |
| S 25180 DU-B | | | | 2.500 | 2.460 |

8.11 DU Strip - Inch sizes

All dimensions in inch

| Part No. | Length L | Total Width W | Thickness s _S |
|----------|----------|---------------|--------------------------|
| Group 0 | 18 | 2.75 | 0.0277-0.0293 |
| Group 1 | | 4.00 | 0.0431-0.0447 |
| Group 2 | | | 0.0586-0.0602 |
| Group 3 | | | 0.0740-0.0756 |
| Group 4 | | | 0.0897-0.0913 |
| Group 5 | | 0.1190-0.1210 | |