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| | | | | |
|---------------|---------------|---------------|---------------|------------------------|
| MSB-G | MSB-GF | MSB-FG | MSB-GN | MSB-G |
| | | | | |
| MFG | MFF-G | JDBS | MSB-GF | MSB-G |
| | | | | |
| MZB | MZL | MZP | MZH | MZB/MZL/MZP/MZH |
| | | | | |
| MSB-PG | MSB-PG | MSB-PG | MSB-PG | MSB-PG |
| | | | | |
| MSF-PG | MSF-PG | MSF-PG | MSF-PG | MSF-PG |
| | | | | |
| MUB | MUF | MU | MUW | MBM |
| | | | | |
| MX | MW-G | MXW | MW | FB090F |
| | | | | |

MU SELF-LUBRICATING BEARING

It is made of high quality low – carbon steel with bronze alloy of a particular formulation with high density with sintered bronze as its interlayer, and inside with the compound of PTFE. As it is without lead, which makes the bearing lubrication condition cleaner, and in accordance with environmental request.

| | |
|----------------------|----------------------------|
| Load capacity | 140N/mm ² |
| Temperature limit | -200°C~+280°C |
| Speed limit | 2m/s |
| Friction Coefficient | 0.03~0.18 |
| PV limit (dry) | 3,6N/mm ² · m/s |
| PV limit (oil) | 50N/mm ² · m/s |

Standard Metric Size reference to SF-1



MU-B WRAPPED BRONZE SELF-LUBRICATING BEARING

It is based on bronze alloy of a particular formulation with high density with sintered Bronze layer as its interlayer, with the compound of mostly PTFE and other factors. As it is Without lead, this makes the bearing lubricating condition cleaner, and in accordance With environmental request.

| | |
|----------------------|----------------------------|
| Max Load capacity | 140N/mm ² |
| Temperature Range | -195°C~+300°C |
| Max Speed | 2m/s |
| Friction Coefficient | 0.04~0.18 |
| Max PV Value(dry) | 4,3N/mm ² · m/s |
| Max PV Value(oil) | 50N/mm ² · m/s |

Standard Metric Size Reference to SF-1



MIP RECIPROCATING MOTION BEARING

The product is developed according to reciprocating motion of shock absorber and heavy Load in lateral. It has low friction coefficient and good anti-abrasion. It can work on the Condition of semi-dry. It's used in shock absorber of automobiles & motorcycles and Pneumatic cylinder. As it is without lead, which make the bearing lubricating condition Cleaner, and in accordance with environmental request.

| | |
|-------------------|-------------------------------|
| Load capacity | 140N/ mm ² |
| Temperature limit | -195°C+ 270°C |
| Speed limit | 2m /s |
| Friction clef | 0.04~0.20 |
| PV limit (dry) | 3,6 N/ mm ² · m /s |
| PV limit (oil) | 50 N/mm ² · m/s |

Standard Metric Size Reference to SF-1



MIS STAINLESS STEEL SELF-LUBRICATING BEARING

It is made of stainless steel, sintered porous bronze as its interlayer and the compound of PTFE material as its surface. As it is without lead, which makes the bearing lubricating Condition cleaner, and in accordance with environmental request.

| | |
|-------------------|----------------------------|
| Load capacity | 140N/mm ² |
| Temperature limit | -195°C+300°C |
| Speed limit | 2m/s |
| Friction clef | 0.04~0.18 |
| PV limit (dry) | 4,3N/mm ² · m/s |
| PV limit (oil) | 50N/mm ² · m/s |

Standard Metric Size Reference to SF-1



MU-R GEAR OIL PUMP BEARING

It composes of a specially designed surface layer of PTFE formulations and is specifically Applied for the high PV value of gear pump bearing. It can work on the condition of Semi-dry. It is used in medium, high-pressure gear pump, ram pump, vane pumps etc. As it is without lead, which make the bearing lubricating condition cleaner, and in accordance? With environmental request.

| | |
|------------------------------|----------------------------|
| Max Load Static Load | 250N/mm ² |
| Dynamic load | 120N/mm ² |
| Max Speed | 2m/s |
| Friction Coefficient | 0.04~0.18 |
| Max PV Value Dry Lubricating | 4.3N/mm ² · m/s |
| OIL lubricating | 60N/mm ² · m/s |
| Temperature Range | -195°C~+280°C |

Standard Metric Size Reference to SF-1



MI-D HYDRAULIC CYLINDER SPECIAL BEARING

Hydraulic special bearings is a new type of material, which in basis of (MI-D) and designed In principles of oil and shock absorber .it become more wear-resisting under breaking off The lubricating oil. These products also particularly suitable for the frequent reciprocating Motion besides having the advantages of (MI-D).

Its properties is similar to that of the foreign product designated as DP4, Currently the Product gradually replace (MI-D), applying to auto shock absorber, hydraulic cylinders and Other various fields.

| | |
|-------------------|-------------------------------|
| Load capacity | 140N/ mm ² |
| Temperature limit | -195°C+ 270°C |
| Speed limit | 2m /s |
| Friction clef | 0.04~0.20 |
| PV limit (dry) | 3.6 N/ mm ² · m /s |
| PV limit (oil) | 50 N/mm ² · m/s |



MUW SELF-LUBRICATING WASHER WITH PTFE

It's made of high quality low-carbon steel plate, sintered Porous bronze as its interlayer and The compound of PTFE Material as its surface without lead. It can offer the properties of Good self-lubricating anti-abrasion, low-friction, fully develop the advantages of metal and Multi-element polymer.

| | |
|----------------------|----------------------------|
| Load capacity | 140N/mm ² |
| Temperature limit | -200°C~+280°C |
| Speed limit | 2m/s |
| Friction Coefficient | 0.03~0.18 |
| PV limit (dry) | 3.6N/mm ² · m/s |
| PV limit (oil) | 50N/mm ² · m/s |

Standard Metric Size reference to SF-1

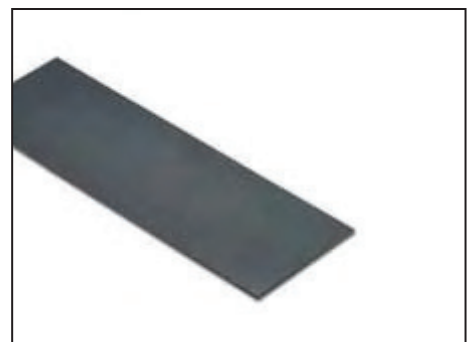


MUN STRIP WITH PTFE

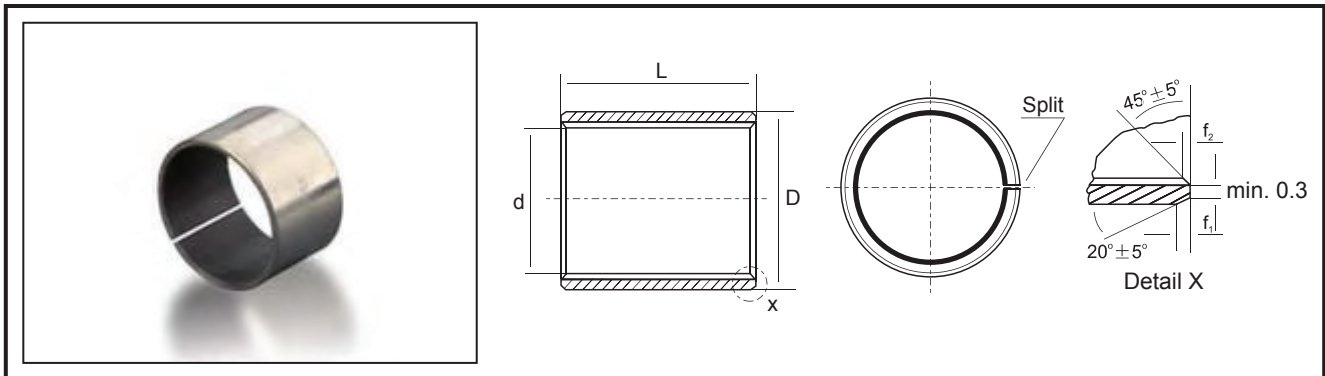
It's made of high quality low-carbon steel plate, sintered Porous bronze as its interlayer and The compound of PTFE Material as its surface without lead. It can offer the properties of Good self-lubricating anti-abrasion, low-friction, fully develop the advantages of metal and Multi-element polymer.

| | |
|----------------------|----------------------------|
| Load capacity | 140N/mm ² |
| Temperature limit | -200°C~+280°C |
| Speed limit | 2m/s |
| Friction Coefficient | 0.03~0.18 |
| PV limit (dry) | 3.6N/mm ² · m/s |
| PV limit (oil) | 50N/mm ² · m/s |

Standard Metric Size reference to SF-1



MU METRIC CYLINDRICAL BUSHES



Unit:mm

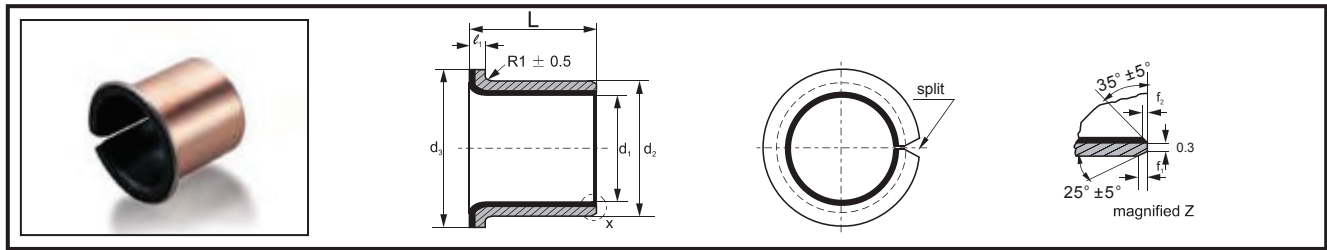
| Axle | Housing H7 | OD tolerance | ID after fixed | Wall thickness | f ₁ | f ₂ | L $\begin{matrix} 0 & d \leq \varphi & 30 & L - 0.3 \\ -0.40 & d \leq \varphi & 30 & L - 0.4 \end{matrix}$ | | | | | | | | | | | | | | | |
|------|------------------|--------------|----------------|----------------|------------------|------------------|--|-----|-----|------|------|------|------|------|------|------|------|------|------|--|--|--|
| | | | | | | | 6 | 8 | 10 | 12 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | | | | | |
| 6 | -0.013 -0.028 | 8 | +0.015 | 8 | +0.055 +0.025 | 5.990 6.055 | 0.980 1.005 | 0.6 | 0.3 | 0606 | 0608 | 0610 | | | | | | | | | | |
| 8 | -0.013 -0.028 | 10 | +0.015 | 10 | +0.055 +0.025 | 7.990 8.055 | | | | 0806 | 0808 | 0810 | 0812 | 0815 | | | | | | | | |
| 10 | -0.016 -0.034 | 12 | +0.018 | 12 | +0.065 +0.030 | 9.990 10.058 | | | | 1006 | 1008 | 1010 | 1012 | 1015 | 1020 | | | | | | | |
| 12 | -0.016 -0.034 | 14 | +0.018 | 14 | +0.065 +0.030 | 11.990 12.058 | | | | 1206 | 1208 | 1210 | 1212 | 1215 | 1220 | 1225 | | | | | | |
| 13 | -0.016 -0.034 | 15 | +0.018 | 15 | +0.065 +0.030 | 12.990 13.058 | | | | | | 1310 | | | 1320 | | | | | | | |
| 14 | -0.016 -0.034 | 16 | +0.018 | 16 | +0.065 +0.030 | 13.990 14.058 | | | | | | 1410 | 1412 | 1415 | 1420 | 1425 | | | | | | |
| 15 | -0.016 -0.034 | 17 | +0.018 | 17 | +0.065 +0.030 | 14.990 15.058 | | | | | | 1510 | 1512 | 1515 | 1520 | 1525 | | | | | | |
| 16 | -0.016 -0.034 | 18 | +0.018 | 18 | +0.065 +0.030 | 15.990 16.058 | | | | | | 1610 | 1612 | 1615 | 1620 | 1625 | | | | | | |
| 17 | -0.016 -0.034 | 19 | +0.021 | 19 | +0.075 +0.035 | 16.990 17.061 | | | | | | 1710 | 1712 | | 1720 | | | | | | | |
| 18 | -0.016 -0.034 | 20 | +0.021 | 20 | +0.075 +0.035 | 17.990 18.061 | | | | | | 1810 | 1812 | 1815 | 1820 | 1825 | | | | | | |
| 20 | -0.020 -0.041 | 23 | +0.021 | 23 | -0.075 +0.035 | 19.990 20.071 | 1.475 1.505 | 0.6 | 0.4 | | | 2010 | 2012 | 2015 | 2020 | 2025 | 2030 | | | | | |
| 22 | -0.020 -0.041 | 25 | +0.021 | 25 | +0.075 +0.035 | 21.990 22.071 | | | | | | 2210 | 2212 | 2215 | 2220 | 2225 | 2230 | | | | | |
| 24 | -0.020 -0.041 | 27 | +0.021 | 27 | +0.075 +0.035 | 23.990 24.071 | | | | | | | | | 2415 | 2420 | 2425 | 2430 | | | | |
| 25 | -0.020 -0.041 | 28 | +0.021 | 28 | +0.075 +0.035 | 24.990 25.071 | | | | | | 2510 | 2512 | 2515 | 2520 | 2525 | 2530 | 2540 | 2550 | | | |
| 28 | -0.020 -0.041 | 32 | +0.025 | 32 | +0.085 +0.045 | 27.990 28.085 | 1.970 2.005 | 1.2 | 0.4 | | | | | 2815 | 2820 | 2825 | 2830 | 2840 | | | | |
| 30 | -0.020 -0.041 | 34 | +0.025 | 34 | +0.085 +0.045 | 29.990 30.285 | | | | | | | 3012 | 3015 | 3020 | 3025 | 3030 | 3040 | | | | |
| 32 | -0.025 -0.050 | 36 | +0.025 | 36 | +0.085 +0.045 | 31.990 32.085 | | | | | | | | | 3220 | | 3230 | 3240 | | | | |
| 35 | -0.025 -0.050 | 39 | +0.025 | 39 | +0.085 +0.045 | 34.990 35.085 | | | | | | | 3512 | 3515 | 3520 | 3525 | 3530 | 3540 | 3550 | | | |
| 38 | -0.025 -0.050 | 42 | +0.025 | 42 | +0.085 +0.045 | 37.990 38.085 | | | | | | | | 3815 | | | 3830 | 3840 | | | | |
| 40 | -0.025 -0.050 | 44 | +0.025 | 44 | +0.085 +0.045 | 39.990 40.085 | | | | | | | 4012 | | 4020 | 4025 | 4030 | 4040 | 4050 | | | |

MU METRIC CYLINDRICAL BUSHES

Unit:mm

| Axle | Housing H7 | OD tolerance | ID after fixed | Wall thick- ness | f ₁ | f ₂ | L _{-0.40} ⁰ | | | | | | | | | | |
|---|-----------------------|---|--------------------|------------------------|----------------|----------------|---------------------------------|------|------|------|-------|-------|-------|--------|--------|--------|--------|
| | | | | | | | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 100 | 115 | |
| 45 ^{-0.025} _{-0.050} | 50 ^{+0.025} | 50 ^{+0.085} _{+0.045} | 44.990 45.105 | 2.460 2.505 | 1.8 | 0.6 | 4520 | 4525 | 4530 | 4540 | 4550 | | | | | | |
| 50 ^{-0.025} _{-0.050} | 55 ^{+0.030} | 55 ^{+0.100} _{+0.055} | 49.990 50.110 | | | | 5020 | | 5030 | 5040 | 5050 | 5060 | | | | | |
| 55 ^{-0.030} _{-0.060} | 60 ^{+0.030} | 60 ^{+0.100} _{+0.055} | 54.990 55.110 | | | | | | 5530 | 5540 | 5550 | 5560 | | | | | |
| 60 ^{-0.030} _{-0.060} | 65 ^{+0.030} | 65 ^{+0.100} _{+0.055} | 59.990 60.110 | | | | | | 6030 | 6040 | 6050 | 6060 | 6070 | | | | |
| 65 ^{-0.030} _{-0.060} | 70 ^{+0.030} | 70 ^{+0.100} _{+0.055} | 64.990 65.110 | | | | | | 6530 | 6540 | 6550 | 6560 | 6570 | | | | |
| 70 ^{-0.030} _{-0.060} | 75 ^{+0.030} | 75 ^{+0.100} _{+0.055} | 69.990 70.110 | | | | | | 7040 | 7050 | 7060 | 7070 | 7080 | | | | |
| 75 ^{-0.030} _{-0.060} | 80 ^{+0.030} | 80 ^{+0.100} _{+0.055} | 74.990 75.110 | | | | | | 7530 | 7540 | 7550 | 7560 | 7570 | 7580 | | | |
| 80 ^{-0.030} _{-0.035} | 85 ^{+0.035} | 85 ^{+0.120} _{+0.070} | 80.020 80.155 | 2.440 2.490 | 1.8 | 0.6 | | | | 8040 | 8050 | 8060 | 8070 | 8080 | 80100 | | |
| 85 ^{-0.035} | 90 ^{+0.035} | 90 ^{+0.120} _{+0.070} | 85.020 85.155 | | | | | | 8540 | | 8560 | | 8580 | 85100 | | | |
| 90 ^{-0.035} | 95 ^{+0.035} | 95 ^{+0.120} _{+0.070} | 90.020 90.155 | | | | | | 9040 | 9050 | 9060 | | 9080 | 90100 | | | |
| 95 ^{-0.035} | 100 ^{+0.035} | 100 ^{+0.120} _{+0.070} | 95.020 95.155 | | | | | | | | 9550 | 9560 | | 9580 | 95100 | | |
| 100 ^{-0.035} | 105 ^{+0.035} | 105 ^{+0.120} _{+0.070} | 100.020 100.155 | | | | | | | | 10050 | 10060 | | 10080 | | 100115 | |
| 105 ^{-0.035} | 110 ^{+0.035} | 110 ^{+0.120} _{+0.070} | 105.020 105.155 | | | | | | | | | 10560 | | 10580 | | 105115 | |
| 110 ^{-0.035} | 115 ^{+0.035} | 115 ^{+0.120} _{+0.070} | 110.020 110.155 | | | | | | | | | 11060 | | 11080 | | 110115 | |
| 120 ^{-0.035} _{-0.040} | 125 ^{+0.040} | 125 ^{+0.170} _{+0.100} | 120.070 120.210 | 2.415 2.465 | 1.8 | 0.6 | | | | | 12060 | | 12080 | 120100 | | | |
| 125 ^{-0.040} | 130 ^{+0.040} | 130 ^{+0.170} _{+0.100} | 125.070 125.210 | | | | | | | | 12560 | | | 125100 | 125115 | | |
| 130 ^{-0.040} | 135 ^{+0.040} | 135 ^{+0.170} _{+0.100} | 130.070 130.210 | | | | | | | | | 13060 | | 13080 | 130100 | | |
| 140 ^{-0.040} | 145 ^{+0.040} | 145 ^{+0.170} _{+0.100} | 140.070 140.210 | | | | | | | | | 14060 | | 14080 | 140100 | | |
| 150 ^{-0.040} | 155 ^{+0.040} | 155 ^{+0.170} _{+0.100} | 150.070 150.210 | | | | | | | | | 15060 | | 15080 | 150100 | | |
| 160 ^{-0.040} | 165 ^{+0.040} | 165 ^{+0.170} _{+0.100} | 160.070 160.210 | | | | | | | | | 16060 | | 16080 | 160100 | 160115 | |
| 180 ^{-0.040} _{-0.046} | 185 ^{+0.046} | 185 ^{+0.210} _{+0.130} | 180.070 180.216 | | | | 2.415 2.465 | 1.8 | 0.6 | | | | | | | 18080 | 180100 |
| 190 ^{-0.046} | 195 ^{+0.046} | 195 ^{+0.210} _{+0.130} | 190.070 190.216 | | | | | | | | | | | 19080 | 190100 | | |
| 200 ^{-0.046} | 205 ^{+0.046} | 205 ^{+0.210} _{+0.130} | 200.070 200.216 | | | | | | | | | 20060 | | 20080 | 200100 | | |
| 220 ^{-0.046} | 225 ^{+0.046} | 225 ^{+0.210} _{+0.130} | 220.070 220.216 | | | | | | | | | | | 22080 | 220100 | | |
| 250 ^{-0.046} _{-0.052} | 255 ^{+0.052} | 255 ^{+0.260} _{+0.170} | 250.070 250.222 | 2.415 2.465 | 1.8 | 0.6 | | | | | | | 25080 | 250100 | | | |
| 260 ^{-0.052} | 265 ^{+0.052} | 265 ^{+0.260} _{+0.170} | 260.070 260.222 | | | | | | | | | | | 26080 | 260100 | | |
| 280 ^{-0.052} | 285 ^{+0.052} | 285 ^{+0.260} _{+0.170} | 280.070 280.222 | | | | | | | | | | | 28080 | 280100 | | |
| 300 ^{-0.052} | 305 ^{+0.052} | 305 ^{+0.260} _{+0.170} | 300.070 300.222 | | | | | | | | | | | 30080 | 300100 | | |

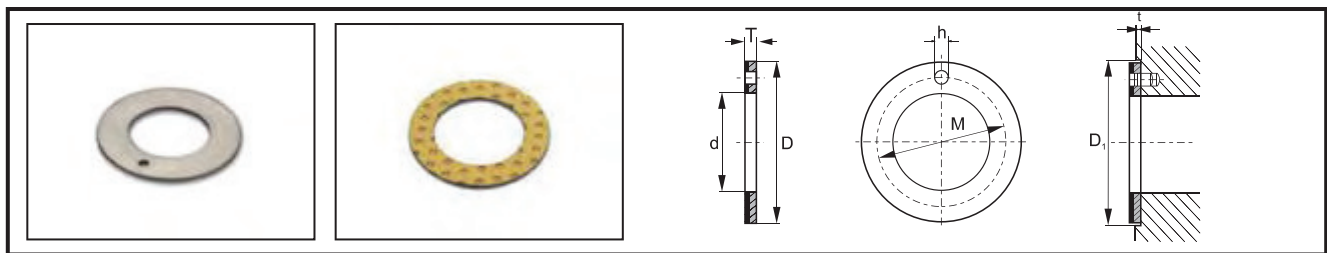
MUF FLANGED BEAR SERIES STANDARD SIZE TABLE



Unit: mm

| (Shaft) | (Housing) | (Desc.) | (Size) | | | | | f ₁ | f ₂ |
|------------------------|--------------|-------------|----------------|----------------|----------------------|----------|--------------------|----------------|----------------|
| | | | d ₁ | d ₂ | d ₃ ± 0.5 | L ± 0.25 | ℓ _{1-0.2} | | |
| 6 -0.013 -0.028 | 8 +0.015 | SF-1F 06040 | 6 | 8 | 12 | 4 | | | |
| | | SF-1F 06070 | | | | 7 | | | |
| 8 -0.013 -0.028 | 10 +0.015 | SF-1F 08055 | 8 | 10 | 15 | 5.5 | | | |
| | | SF-1F 08075 | | | | 7.5 | | | |
| | | SF-1F 10070 | | | | 7 | | | |
| 10 -0.016 -0.034 | 12 +0.018 | SF-1F 10090 | 10 | 12 | 18 | 9 | | | |
| | | SF-1F 10120 | | | | 12 | | | |
| | | SF-1F 12070 | | | | 7 | | | |
| 12 -0.016 -0.034 | 14 +0.018 | SF-1F 12090 | 12 | 14 | 20 | 9 | | | |
| | | SF-1F 12120 | | | | 12 | | | |
| | | SF-1F 14120 | | | | 12 | | | |
| 14 -0.016 -0.043 | 16 +0.018 | SF-1F 14170 | 14 | 16 | 22 | 17 | 1 | 0.5 | |
| | | SF-1F 15090 | | | | 9 | | | |
| | | SF-1F 15120 | | | | 12 | | | |
| 15 -0.016 -0.034 | 17 +0.018 | SF-1F 15170 | 15 | 17 | 23 | 17 | | | |
| | | SF-1F 16120 | | | | 12 | | | |
| | | SF-1F 16170 | | | | 17 | | | |
| 16 -0.016 -0.034 | 18 +0.018 | SF-1F 18120 | 16 | 18 | 24 | 12 | | | |
| | | SF-1F 18170 | | | | 17 | | | |
| | | SF-1F 18200 | | | | 20 | | | |
| 18 -0.016 -0.034 | 20 +0.021 | SF-1F 20115 | 18 | 20 | 26 | 20 | | | |
| | | SF-1F 20165 | | | | 16.5 | | | |
| | | SF-1F 20215 | | | | 21.5 | | | |
| 20 -0.020 -0.041 | 23 +0.021 | SF-1F 22150 | 20 | 23 | 30 | 15 | 1.5 | 0.8 | |
| | | SF-1F 22200 | | | | 20 | | | |
| | | SF-1F 25115 | | | | 11.5 | | | |
| 22 -0.020 -0.041 | 25 +0.021 | SF-1F 25165 | 22 | 25 | 32 | 20 | | | |
| | | SF-1F 25215 | | | | 21.5 | | | |
| | | SF-1F 30160 | | | | 16 | | | |
| 25 -0.020 -0.041 | 28 +0.021 | SF-1F 30260 | 25 | 28 | 35 | 26 | | | |
| | | SF-1F 35160 | | | | 16 | | | |
| | | SF-1F 35260 | | | | 26 | | | |
| 30 -0.025 -0.050 | 34 +0.025 | SF-1F 40260 | 30 | 34 | 42 | 26 | 2 | 1.0 | |
| | | SF-1F 40400 | | | | 40 | | | |
| | | SF-1F 40400 | | | | 40 | | | |

MUW/MXW STANDARD SIZE TABLE



Unit: mm

| shfat | mode | (Size) | | | | | D _i +0.12 |
|-------|-------|---------|---------|---------|-----------|-------------------------------------|----------------------|
| | | d +0.25 | D -0.25 | T -0.05 | M ± 0.125 | h ^{+0.4} / _{+0.1} | |
| 8 | WC 10 | 10 | 20 | | 15 | | 20 |
| 10 | WC 12 | 12 | 24 | | 18 | 1.5 | 24 |
| 12 | WC 14 | 14 | 26 | | 20 | | 26 |
| 14 | WC 16 | 16 | 30 | | 23 | 2 | 30 |
| 16 | WC 18 | 18 | 32 | | 25 | | 32 |
| 18 | WC 20 | 20 | 36 | | 28 | | 36 |
| 20 | WC 22 | 22 | 38 | 1.5 | 30 | 3 | 38 |
| 22 | WC 24 | 24 | 42 | | 33 | | 42 |
| 24 | WC 26 | 26 | 44 | | 35 | | 44 |
| 26 | WC 28 | 28 | 48 | | 38 | | 48 |
| 30 | WC 32 | 32 | 54 | | 43 | | 54 |
| 36 | WC 38 | 38 | 62 | | 50 | | 62 |
| 40 | WC 42 | 42 | 66 | | 54 | 4 | 66 |
| 46 | WC 48 | 48 | 74 | | 61 | | 74 |
| 50 | WC 52 | 52 | 78 | | 65 | | 78 |
| 60 | WC 62 | 62 | 9 | | 76 | 1.5 | 90 |

MXW WASHER RESIN ACETALIC (POM)

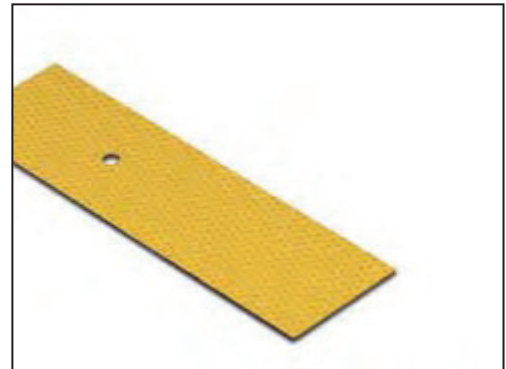
It is made of high quality low-carbon steel, sintered porous bronze as its interlayer, with the Compound of POM as its surface. And has good load capacity & wear-resistant. It's used in Vehicle chassis, forming machine tools, steel metallurgical machinery, Mineral Mountain Machinery, hydraulic industry and rolling steel industry, etc.



| | | |
|----------------------|-----------------|----------------------------|
| Max Load | Static Load | 250N/mm ² |
| | Dynamic load | 140N/mm ² |
| Max Speed | | 2,5m/s |
| Friction Coefficient | | 0.05~0.25 |
| Max PV Value | Dry Lubricating | 3.2N/mm ² · m/s |
| | OIL lubricating | 22N/mm ² · m/s |
| Temperature Range | | -40°C~+130°C |

MXN STRIP RESIN ACETALIC (POM)

It is made of high quality low-carbon steel, sintered porous bronze as its interlayer, with the Compound of POM as its surface. And has good load capacity & wear-resistant. It's used in Vehicle chassis, forming machine tools, steel metallurgical machinery, Mineral Mountain Machinery, hydraulic industry and rolling steel industry, etc.

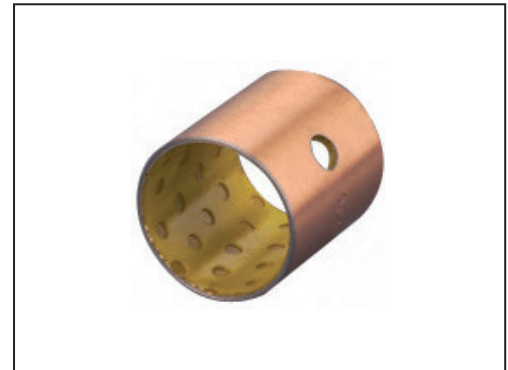


| | | |
|----------------------|-----------------|----------------------------|
| Max Load | Static Load | 250N/mm ² |
| | Dynamic load | 140N/mm ² |
| Max Speed | | 2,5m/s |
| Friction Coefficient | | 0.05~0.25 |
| Max PV Value | Dry Lubricating | 3.2N/mm ² · m/s |
| | OIL lubricating | 22N/mm ² · m/s |
| Temperature Range | | -40°C~+130°C |

MX BEARING ACETAL RESIN (POM)

It is made of high quality low-carbon steel, sintered porous bronze as its interlayer, with the Compound of POM as its surface. And has good load capacity & wear-resistant. It's used in Vehicle chassis, forming machine tools, steel metallurgical machinery, Mineral Mountain Machinery, hydraulic industry and rolling steel industry, etc. It is without lead, can meet the Requirements of environment protection.

| | | |
|----------------------|-----------------|----------------------------|
| Max Load | Static Load | 250N/mm ² |
| | Dynamic load | 140N/mm ² |
| Max Speed | | 2,5m/s |
| Friction Coefficient | | 0.05~0.25 |
| Max PV Value | Dry Lubricating | 3.2N/mm ² · m/s |
| | OIL lubricating | 22N/mm ² · m/s |
| Temperature Range | | -40°C~+130°C |



MX-R BEARING ACETAL RESIN (POM)

It's made of high quality low-carbon steel, with a interlayer of sintered porous bronze and POM on its surface. It's used in vehicle chassis, forming machine tools, steel metallurgical Machinery, mineral mountain machinery, hydraulic industry and rolling steel industries. Recommend fitting house H7.

| | | |
|----------------------|-----------------|---------------------------|
| Max Load | Static Load | 250N/mm ² |
| | Dynamic load | 120N/mm ² |
| Max Speed | | 2m/s |
| Friction Coefficient | | 0.05~0.25 |
| Wear depth limit | | 0.50mm ² |
| Max PV Value | Dry Lubricating | 3N/mm ² · m/s |
| | OIL lubricating | 22N/mm ² · m/s |
| Temperature Range | | -40°C~+130°C |



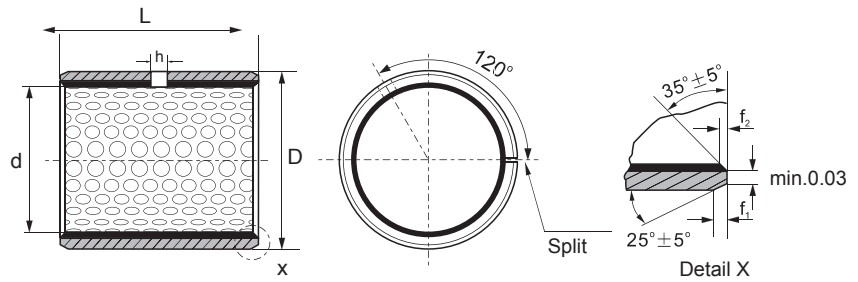
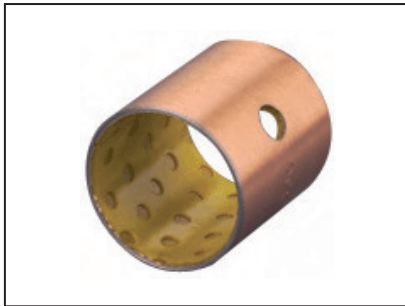
MX-B BEARING ACETAL RESIN (POM)

(MX-B) oil free lubrication bearing is an improved product used steel back as base, agglomerated by globular tin bronze powder in the middle and rolled by acetal resin and polymer material containing oleophylicity fibbers and special lubricant.

It is the same to external DS bearing and applicable for the situation of dry friction and little oil lubrication at ordinary temperature, characterized by low friction factor, well wearing performance and oil free condition lubrication. At present, the product has been used in swaying motion, situation easy to wear and erode, such as winding engines, dozers, printing and dyeing machines, coal-cutters, winch truck, travelling crane and so on.

| | | |
|----------------------|-----------------|---------------------------|
| Max Load | Static Load | 250N/mm ² |
| | Dynamic load | 120N/mm ² |
| Max Speed | | 2m/s |
| Friction Coefficient | | 0.05~0.25 |
| Wear depth limit | | 0.50mm ² |
| Max PV Value | Dry Lubricating | 3N/mm ² · m/s |
| | OIL lubricating | 22N/mm ² · m/s |
| Temperature Range | | -40°C~+130°C |



MX MATRIC CYLINDRICAL BUSHES

STANDARD SERIES OF SF-2 BUSH

Unit:mm

| d | D | shaft diamter h8 | H7 | Wall Thickness | | oil bone | f ₁ | f ₂ | L ⁰ _{-0.40} | | | | | | | | | |
|----|----|------------------------|----------------------|-------------------|-------|-------------|----------------|----------------|---------------------------------|------|------|------|------|----|------|------|------|------|
| | | | | Min | Max | | | | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 60 |
| 10 | 12 | 10 ^{-0.022} | 12 ^{+0.018} | 0.955 | 0.980 | 4 | 0.5 | 0.3 | 1010 | 1015 | 1020 | | | | | | | |
| 12 | 14 | 12 ^{-0.027} | 14 ^{+0.018} | | | | | | 1210 | 1215 | 1220 | | | | | | | |
| 14 | 16 | 14 ^{-0.027} | 16 ^{+0.018} | | | | | | 1415 | 1420 | | | | | | | | |
| 15 | 17 | 15 ^{-0.027} | 17 ^{+0.018} | | | | | | 1515 | 1520 | 1525 | | | | | | | |
| 16 | 18 | 16 ^{-0.027} | 18 ^{+0.018} | | | | | | 1615 | 1620 | 1625 | | | | | | | |
| 18 | 20 | 18 ^{-0.027} | 20 ^{+0.021} | | | | | | 1815 | 1820 | 1825 | | | | | | | |
| 20 | 23 | 20 ^{-0.033} | 23 ^{+0.021} | | | | | | 2015 | 2020 | 2025 | 2030 | | | | | | |
| 22 | 25 | 22 ^{-0.033} | 25 ^{+0.021} | 1.445 | 1.475 | 6 | 0.8 | 0.4 | 2215 | | 2225 | | | | | | | |
| 25 | 28 | 25 ^{-0.033} | 28 ^{+0.021} | | | | | | 2515 | 2520 | 2525 | 2530 | | | | | | |
| 28 | 32 | 28 ^{-0.033} | 32 ^{+0.025} | 1.935 | 1.970 | 8 | 1.0 | 0.6 | | | 2820 | | 2830 | | | | | |
| 30 | 34 | 30 ^{-0.033} | 34 ^{+0.025} | | | | | | 3020 | 3025 | 3030 | | 3040 | | | | | |
| 35 | 39 | 35 ^{-0.039} | 39 ^{+0.025} | | | | | | 3520 | | 3530 | 3535 | 3540 | | | | | |
| 40 | 44 | 40 ^{-0.039} | 44 ^{+0.025} | | | 4020 | | 4030 | | 4040 | | 4050 | | | | | | |
| 45 | 50 | 45 ^{-0.039} | 50 ^{+0.025} | 2.415 | 2.460 | 8 | 1.2 | 0.8 | | | 4520 | | 4530 | | 4540 | 4545 | 4550 | |
| 50 | 55 | 50 ^{-0.039} | 55 ^{+0.030} | | | | | | | | | | 5030 | | 5040 | | 5050 | 5060 |
| 55 | 60 | 55 ^{-0.046} | 60 ^{+0.030} | | | | | | | | | | 5530 | | 5540 | | 5550 | 5560 |
| 60 | 65 | 60 ^{-0.046} | 65 ^{+0.030} | | | | | | | | | | 6030 | | 6040 | | 6050 | 6060 |

MX METRIC STANDARD SIZE FABLE

| d | D | h8 | H7 | wall thickness | | Oil | f ₁ | f ₂ | L ⁰ _{-0.40} | | | | | | | | | |
|-----|-----|-----------------------|-----------------------|----------------|-------|-------|----------------|----------------|---------------------------------|--------|-------|--------|-------|-------|--------|--------|--------|--|
| | | | | Min | max | | | | 40 | 50 | 60 | 80 | 90 | 95 | 100 | 110 | 120 | |
| 65 | 70 | 65 _{-0.046} | 70 ^{+0.030} | 2.415 | 2.460 | 8 | 1.2 | 0.8 | 6540 | | 6560 | | | | | | | |
| 70 | 75 | 70 _{-0.046} | 75 ^{+0.030} | | | | | | 7040 | 7050 | | 7080 | | | | | | |
| 75 | 80 | 75 _{-0.046} | 80 ^{+0.030} | | | | | | 7540 | | 7560 | 7580 | | | | | | |
| 80 | 85 | 80 _{-0.046} | 85 ^{+0.035} | 2.385 | 2.450 | 9.5 | 1.4 | 0.8 | 8040 | | 8060 | 8080 | | | | | | |
| 85 | 90 | 85 _{-0.054} | 90 ^{+0.035} | | | | | | 8540 | | 8560 | 8580 | | | | | | |
| 90 | 95 | 90 _{-0.054} | 95 ^{+0.035} | | | | | | 9040 | | 9060 | 9080 | 9090 | | | | | |
| 100 | 105 | 100 _{-0.054} | 105 ^{+0.035} | | | | | | | 10050 | | 10080 | | 10095 | | | | |
| 105 | 110 | 105 _{-0.054} | 110 ^{+0.035} | | | | | | | | 10560 | 10580 | | 10595 | | 105110 | | |
| 110 | 115 | 110 _{-0.054} | 115 ^{+0.035} | | | | | | | | 11060 | 11080 | | 11095 | | 110110 | | |
| 120 | 125 | 120 _{-0.054} | 125 ^{+0.040} | | | | | | | | | 12060 | 12080 | | | | 120110 | |
| 125 | 130 | 125 _{-0.063} | 130 ^{+0.040} | | | | | | | | | 12560 | | | | | 125110 | |
| 130 | 135 | 130 _{-0.063} | 135 ^{+0.040} | | | | | | | | | 13050 | 13060 | 13080 | | | 130100 | |
| 140 | 145 | 140 _{-0.063} | 145 ^{+0.040} | | | | | | | | | 14050 | 14060 | 14080 | | | 140100 | |
| 150 | 155 | 150 _{-0.063} | 155 ^{+0.040} | | | | 15050 | 15060 | 15080 | | | 150100 | | | | | | |
| 160 | 165 | 160 _{-0.063} | 165 ^{+0.040} | 9.5 | | | 1.4 | 0.8 | | 16050 | 16060 | 16080 | | | 160100 | | | |
| 170 | 175 | 170 _{-0.063} | 175 ^{+0.040} | | | | | | | 17050 | | 17080 | | | 170100 | | | |
| 180 | 185 | 180 _{-0.063} | 185 ^{+0.046} | | | | | | | 18050 | 18060 | 18080 | | | 180100 | | | |
| 190 | 195 | 190 _{-0.072} | 195 ^{+0.046} | | | | | | | 19050 | 19060 | 19080 | | | 190100 | | 190120 | |
| 200 | 205 | 200 _{-0.072} | 205 ^{+0.046} | | | | | | | 20050 | 20060 | 20080 | | | 200100 | | 200120 | |
| 220 | 225 | 220 _{-0.072} | 225 ^{+0.046} | | | | | | | 22050 | 22060 | 22080 | | | 220100 | | 220120 | |
| 240 | 245 | 240 _{-0.072} | 245 ^{+0.046} | | | | | | | 24050 | 24060 | 24080 | | | 240100 | | 240120 | |
| 250 | 255 | 250 _{-0.072} | 255 ^{+0.052} | | | | | | | 25050 | 25060 | 25080 | | | 250100 | | 250120 | |
| 260 | 265 | 260 _{-0.081} | 265 ^{+0.052} | | | | | | | 26050 | 26060 | 26080 | | | 260100 | | 260120 | |
| 280 | 285 | 280 _{-0.081} | 285 ^{+0.052} | | | | | | | 28050 | 28060 | 28080 | | | 280100 | | 280120 | |
| 300 | 305 | 300 _{-0.081} | 305 ^{+0.052} | | 30050 | 30060 | 30080 | | | 300100 | | 300120 | | | | | | |

MSB 650 BEARING BRONZE WITH GRAPHITE INSIDE

With material (CuZn24Al6) is made of strong cast bronze based metal with special solid Lubricants embedded. The base metal withstands high load and the solid lubricants Provide for self-lubrication. The bearing shows excellent performance without Pre-lubrication under conditions of extreme high/lower temperature with low speed.

| | |
|---------------------------------------|----------------------------|
| Base material | CuZn24AL6 |
| Base Hardness | HB230-270 |
| Friction coef(u) | <0.16 |
| Temperature limit | 300°C |
| Dynamic load limit | 2100N/mm ² |
| lLoad limit under l _m /min | 25N/mm ² |
| Speed limit | (Dry)0.4m/s (Oil)5m/s |
| PV limit | 3.8N/mm ² · m/s |



MSB-BM 450 BIMETALLIC BEARING WITH GRAPHITE INSIDE

MSB-BM 450 are suitable for low load position, wear performance worsens when under middle or high load. Most suitable for dry position in construction, metallurgical machines, conveyor machines etc.

| | |
|---------------------------------------|----------------------------|
| Base material | CuSn6Zn6Pb3 |
| Base Hardness | HB60-90 |
| Friction coef(u) | <0.14 |
| Temperature limit | 300°C |
| Dynamic load limit | 70N/mm ² |
| lLoad limit under l _m /min | 20N/mm ² |
| Speed limit | 2m/s |
| PV limit | 0.6N/mm ² · m/s |



MFG IRON BEARING WITH GRAPHITE (HB 180-230)

The basement of this product is cast iron; it has a special filling of prescription of solid lubricant inserted with a certain angle and density into the surface and processed with precision finishing. It is typically an economical product that largely reduced the cost to meet various requirements. This kind of products is mainly used in automobile die and injection mould.

| | |
|---------------------------------------|----------------------------|
| Base material | HT-250 |
| Base Hardness | HB180-230 |
| Friction coef(u) | <0.18 |
| Temperature limit | 400°C |
| Dynamic load limit | 60N/mm ² |
| lLoad limit under l _m /min | 15N/mm ² |
| Speed limit | 0.5m/s |
| PV limit | 0.8N/mm ² · m/s |



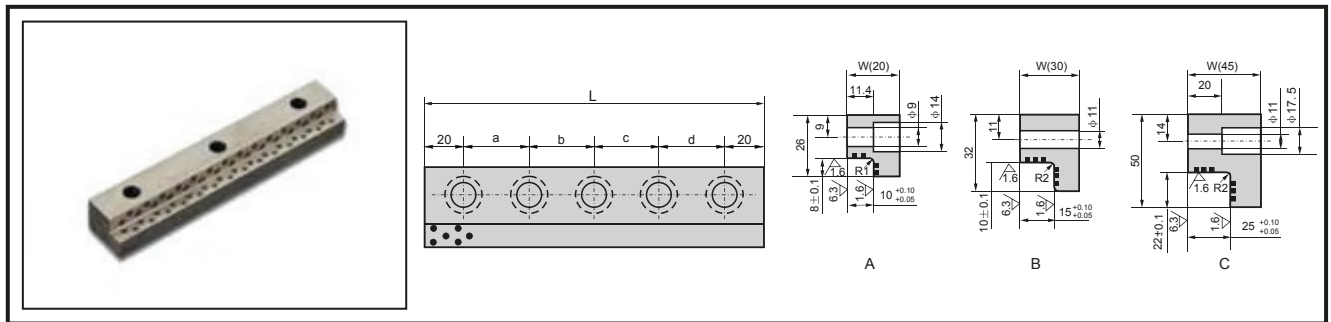
MFG IRON BEARING WITH GRAPHITE (HB 58-60)

The basement of this product is cast iron, it has a special filling of prescription of solid lubricant inserted with a certain angle and density into the surface and processed with precision finishing. It is typically an economical product that largely reduced the cost to meet various requirements. This kind of products is mainly used in automobile die and injection mould.

| | |
|---------------------------------------|----------------------------|
| Base material | GCr15 |
| Base Hardness | HB58-60 |
| Friction coef(u) | <0.17 |
| Temperature limit | 350°C |
| Dynamic load limit | 250N/mm ² |
| lLoad limit under l _m /min | 70N/mm ² |
| Speed limit | 0.1m/s |
| PV limit | 2.5N/mm ² · m/s |



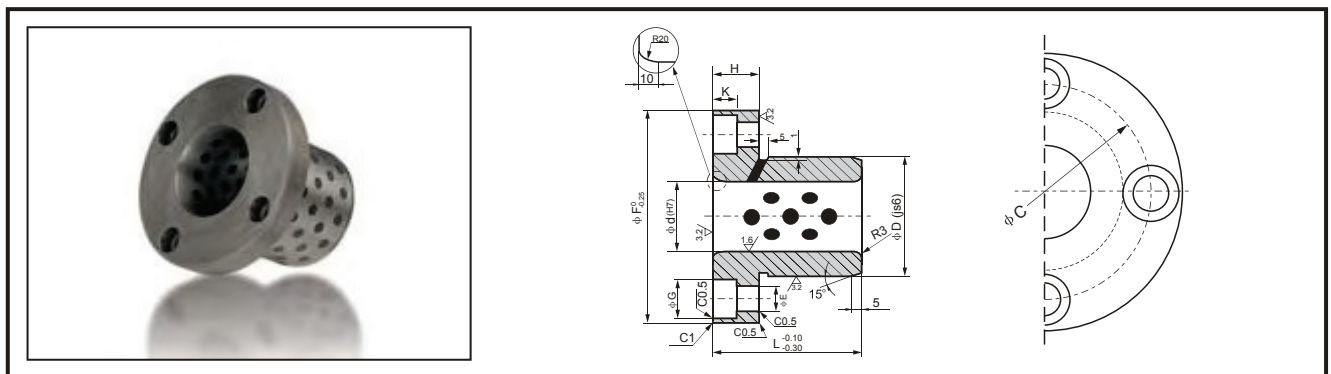
MSB-PG WEAR PLATE



Unit:mm

| Stanard No. | W | L | Bolt | | | | Size | Q'ty | Sketch |
|---------------|----|-----|------|-----|-----|-----|------|------|--------|
| | | | a | b | c | d | | | |
| MSB-PG-20 100 | 20 | 100 | 60 | --- | --- | --- | M8 | 2 | A |
| MSB-PG-20 150 | | 150 | 55 | 55 | --- | --- | | 3 | |
| MSB-PG-20 200 | | 200 | 55 | 50 | 55 | --- | | 4 | |
| MSB-PG-30 100 | 30 | 100 | 60 | --- | --- | --- | M10 | 2 | B |
| MSB-PG-30 150 | | 150 | 55 | 55 | --- | --- | | 3 | |
| MSB-PG-30 200 | | 200 | 55 | 50 | 55 | --- | | 4 | |
| MSB-PG-30 250 | | 250 | 70 | 70 | 70 | --- | | 4 | |
| MSB-PG-45 100 | 45 | 100 | 55 | 50 | 55 | --- | M10 | 4 | C |
| MSB-PG-45 150 | | 150 | 70 | 70 | 70 | --- | | 4 | |
| MSB-PG-45 200 | | 200 | 65 | 65 | 65 | 65 | | 5 | |
| MSB-PG-45 250 | | 250 | 80 | 75 | 75 | 80 | | 5 | |

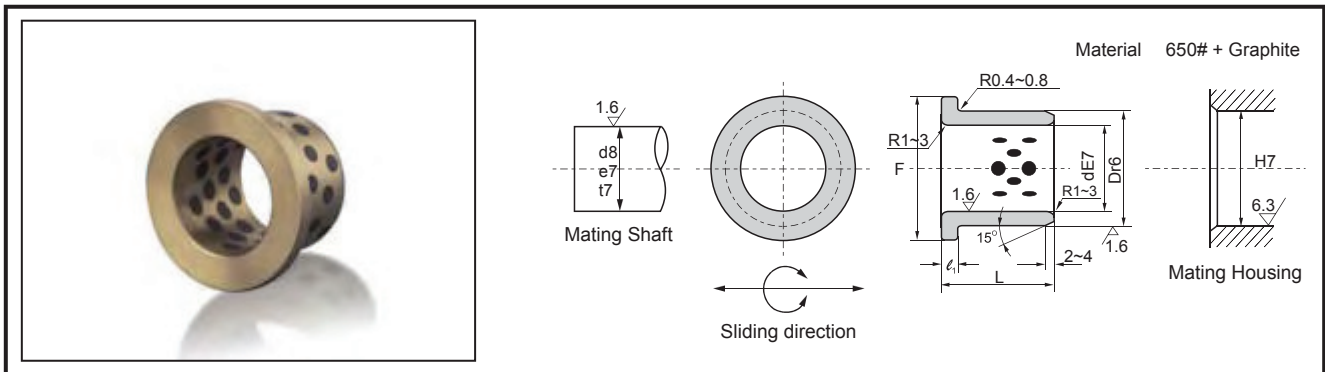
MFF-G SELF-LUBRICATING BEARING



Unit:mm

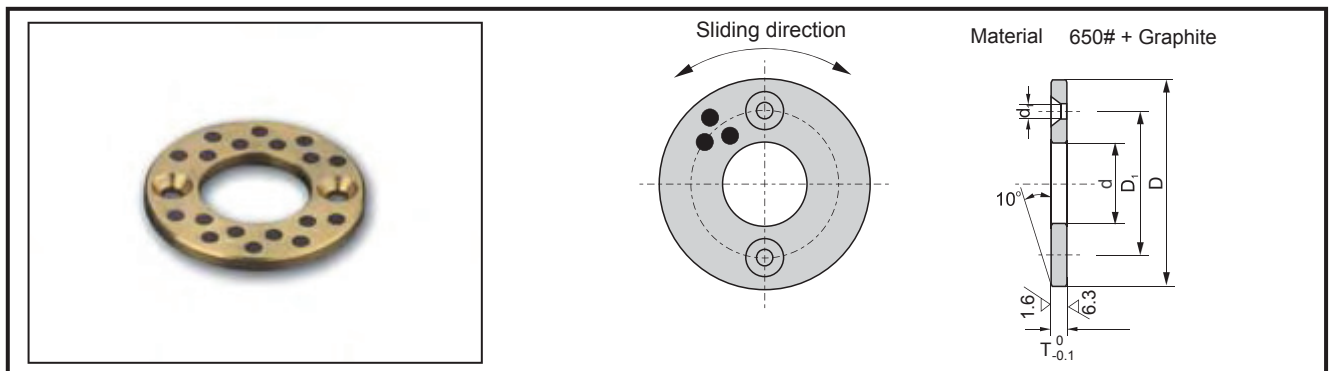
| Item | Code | Specification | φ F | φ D | φ d | H | L | φ C | φ E | φ G | K |
|------|-----------|-----------------|-----|-----|-----|----|-----|-----|-----|------|------|
| 1 | MFF-G-30 | 90/50 30 50 | 90 | 50 | 30 | 20 | 50 | 70 | 11 | 17.5 | 10.8 |
| 2 | MFF-G-40 | 100/80 40 65 | 100 | 60 | 40 | 20 | 65 | 80 | 11 | 17.5 | 10.8 |
| 3 | MFF-G-50 | 125/75 50 80 | 125 | 75 | 50 | 20 | 80 | 100 | 11 | 17.5 | 10.8 |
| 4 | MFF-G-60 | 135/85 60 100 | 135 | 85 | 60 | 20 | 100 | 110 | 11 | 17.5 | 10.8 |
| 5 | MFF-G-80 | 170/110 80 130 | 170 | 110 | 80 | 25 | 130 | 140 | 14 | 20 | 13 |
| 6 | MFF-G-100 | 190/130 100 160 | 190 | 130 | 100 | 25 | 160 | 160 | 14 | 20 | 13 |

MSB-GF SOLID-LUBRICANTS BEARING STANDARD METRIC SIZE



Unit:mm

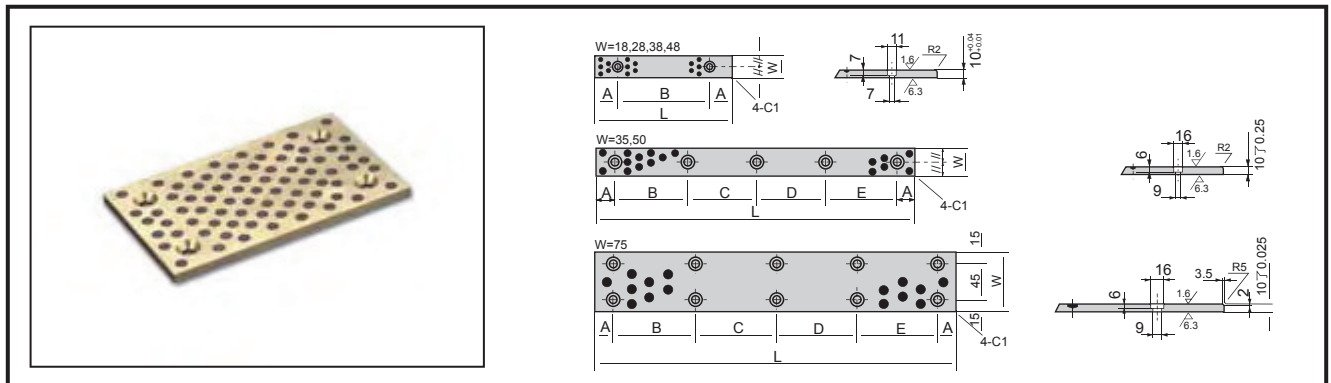
| d | D | IDE7 | ODr6 | F | ϵ_1 -0.10 | L -0.10 -0.30 | | | | | | | | | | | |
|------|-----|------|----------------------|-----|-----------------------|---------------------|-----|------|------|------|------|------|------|------|------|-------|--------|
| | | | | | | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 80 | 100 | | |
| 10 | 14 | 10 | $+0.040$ $+0.025$ | 14 | $+0.034$ $+0.023$ | 22 | 2 | 1015 | 1020 | | | | | | | | |
| 12 | 18 | 12 | | 18 | | 25 | | 1215 | 1220 | | | | | | | | |
| 13 | 19 | 13 | | 19 | | 26 | | 1315 | 1320 | | | | | | | | |
| 14 | 20 | 14 | $+0.050$ $+0.032$ | 20 | | 27 | 3 | 1415 | 1420 | | | | | | | | |
| 15 | 21 | 15 | | 21 | $+0.041$ $+0.028$ | 28 | | 1515 | 1520 | 1525 | 1530 | | | | | | |
| 16 | 22 | 16 | | 22 | | 29 | | 1615 | 1620 | 1625 | 1630 | | | | | | |
| 20 | 30 | 20 | | 30 | | 40 | | 2015 | 2020 | 2025 | 2030 | 2040 | | | | | |
| 25 | 35 | 25 | $+0.061$ $+0.040$ | 35 | | 45 | | 2515 | 2520 | 2525 | 2530 | 2540 | | | | | |
| 30 | 40 | 30 | | 40 | | 50 | | | 3020 | 3025 | 3030 | 3035 | 3040 | 3050 | | | |
| 31.5 | 40 | 31.5 | | 40 | $+0.050$ $+0.034$ | 50 | | | 3120 | | 3135 | | | | | | |
| 35 | 45 | 35 | | 45 | | 60 | 5 | | 3520 | | 3530 | | 3540 | 3550 | | | |
| 40 | 50 | 40 | $+0.075$ $+0.050$ | 50 | | 65 | | | 4020 | | 4030 | | 4040 | 4050 | | | |
| 45 | 55 | 45 | | 55 | | 70 | | | | | 4530 | | 4540 | 4550 | 4560 | | |
| 50 | 60 | 50 | | 60 | $+0.060$ $+0.041$ | 75 | | | | | 5030 | | 5040 | 5050 | 5060 | | |
| 55 | 65 | 55 | | 65 | | 80 | | | | | | 5540 | | 5560 | | | |
| 60 | 75 | 60 | | 75 | | 90 | | | | | | 6040 | 6050 | | | 6080 | |
| 63 | 75 | 63 | | 75 | $+0.062$ $+0.043$ | 85 | 7.5 | | | | | | | | | 6367 | |
| 70 | 85 | 70 | $+0.090$ $+0.060$ | 85 | | 105 | | | | | | | 7050 | | | 7080 | |
| 75 | 90 | 75 | | 90 | $+0.073$ $+0.051$ | 110 | | | | | | | | 7560 | | | |
| 80 | 100 | 80 | | 100 | | 120 | | | | | | | | 8060 | 8080 | 80100 | |
| 90 | 110 | 90 | | 110 | | 130 | | | | | | | | 9060 | 9080 | | |
| 100 | 120 | 100 | $+0.107$ $+0.072$ | 120 | $+0.076$ $+0.054$ | 150 | 10 | | | | | | | | | 10080 | 100100 |
| 120 | 140 | 120 | | 140 | $+0.088$ $+0.063$ | 170 | | | | | | | | | | 12080 | 120100 |

MSB-GW STANDARD SIZE OF JTW THRUST WASHER


Unit:mm

| Stanard No. | d | D | T _{-0.1} ⁰ | Bolt | | | |
|-------------|-------|-----|--------------------------------|----------------|-------|-------|----------------|
| | | | | D ₁ | Q'ty | size | d ₁ |
| MSB-GW -10 | 10.2 | 30 | | ----- | ----- | ----- | ----- |
| MSB-GW -12 | 12.2 | | | | | | |
| MSB-GW -13 | 13.2 | 40 | | 28 | | | |
| MSB-GW -14 | 14.2 | | | | 2 | M 3 | 3.5 |
| MSB-GW -15 | 15.2 | | 3 | | | | |
| MSB-GW -16 | 16.2 | | | | 35 | | |
| MSB-GW -16N | 16.2 | 50 | | ----- | ----- | ----- | ----- |
| MSB-GW -18 | 18.2 | | | | 35 | 2 | M 3 |
| MSB-GW -20 | 20.2 | | | | | M 5 | 6 |
| MSB-GW -20N | | | | ----- | ----- | ----- | ----- |
| MSB-GW -25 | 25.2 | 55 | 5 | 40 | 2 | M 5 | 6 |
| MSB-GW -25N | | | | ----- | ----- | ----- | ----- |
| MSB-GW -30 | 30.2 | 60 | | 45 | | M 5 | 6 |
| MSB-GW -35 | 35.2 | 70 | | 50 | 2 | | |
| MSB-GW -40 | 40.2 | 80 | | 60 | | | |
| MSB-GW -45 | 45.3 | 90 | 7 | 67.5 | | M 6 | 7 |
| MSB-GW -50 | 50.3 | 100 | | 75 | | | |
| MSB-GW -55 | 55.3 | 110 | 8 | 85 | | | |
| MSB-GW -60 | 60.3 | 120 | | 90 | | | |
| MSB-GW -65 | 65.3 | 125 | | 95 | | | |
| MSB-GW -70 | 70.3 | 130 | | 100 | 4 | M 8 | 9 |
| MSB-GW -75 | 75.3 | 140 | | 110 | | | |
| MSB-GW -80 | 80.3 | 150 | | 120 | | | |
| MSB-GW -90 | 90.5 | 170 | 10 | 140 | | | |
| MSB-GW -100 | 100.5 | 190 | | 160 | | M 10 | 11 |
| MSB-GW -120 | 120.5 | 200 | | 175 | | | |

MSB-PG STANDARD SIZE OF HDB-JSP METRIC SIZE



Unit:mm

| Standard No. | W | L | A | B | C | D | E | Flat Head Screw | No. of Holes | |
|---------------|----|-----|-----|-----|-----|-----|-----|-----------------|--------------|--|
| MSB-PG -1875 | 18 | 75 | 15 | 45 | | | | M 6 | 2 | |
| MSB-PG -18100 | | 100 | 25 | 60 | | | | | | |
| MSB-PG -18125 | | 125 | | 75 | | | | | | |
| MSB-PG -18150 | | 150 | 100 | | | | | | | |
| MSB-PG -2875 | 28 | 75 | 15 | 45 | | | | M 6 | 2 | |
| MSB-PG -28100 | | 100 | 25 | 50 | | | | | | |
| MSB-PG -28125 | | 125 | | 75 | | | | | | |
| MSB-PG -28150 | | 150 | 100 | | | | | | | |
| MSB-PG -35100 | 35 | 100 | 20 | 60 | | | | M 8 | 3 | |
| MSB-PG -35150 | | 150 | | 55 | 55 | | | | | |
| MSB-PG -35200 | | 200 | | 55 | 50 | 55 | | | | |
| MSB-PG -35250 | | 250 | | 70 | 70 | 70 | | | | |
| MSB-PG -35300 | | 300 | | 65 | 65 | 65 | 65 | | | |
| MSB-PG -35350 | | 350 | | 80 | 75 | 75 | 80 | | | |
| MSB-PG -3875 | 38 | 75 | 15 | 45 | | | | M 6 | 2 | |
| MSB-PG -38100 | | 100 | 25 | 50 | | | | | | |
| MSB-PG -38125 | | 125 | | 75 | | | | | | |
| MSB-PG -38150 | | 150 | 100 | | | | | | | |
| MSB-PG -4875 | 48 | 75 | 15 | 45 | | | | M 6 | 2 | |
| MSB-PG -48100 | | 100 | 25 | 50 | | | | | | |
| MSB-PG -48125 | | 125 | | 75 | | | | | | |
| MSB-PG -48150 | | 150 | 100 | | | | | | | |
| MSB-PG -50100 | 50 | 100 | 20 | 60 | | | | M 8 | 3 | |
| MSB-PG -50150 | | 150 | | 55 | 55 | | | | | |
| MSB-PG -50200 | | 200 | | 55 | 50 | 55 | | | | |
| MSB-PG -50250 | | 250 | | 70 | 70 | 70 | | | | |
| MSB-PG -50300 | | 300 | | 65 | 65 | 65 | 65 | | | |
| MSB-PG -50400 | | 400 | | 90 | 90 | 90 | 90 | | | |
| MSB-PG -75150 | 75 | 150 | 20 | 110 | | | | M 8 | 4 | |
| MSB-PG -75200 | | 200 | | 80 | 80 | | | | | |
| MSB-PG -75250 | | 250 | | 105 | 105 | | | | | |
| MSB-PG -75300 | | 300 | | 85 | 90 | 85 | | | | |
| MSB-PG -75400 | | 400 | | 120 | 120 | 120 | | | | |
| MSB-PG -75500 | | 500 | | 115 | 115 | 115 | 115 | | | |

MBM (JF-800) DOUBLE METAL LAYER BEARING

JF800 Double Metal Bearing takes steel plate as the base and with the sintering of alloy of Tin and bronze on the surface. The bronze layer is sintered twice under high temperature And calendared firmly in the strip. The high bonding strength load capacity and fatigue Make it with stand medium load and low speed high load condition. It was widely used in The following field as automobile engine, motorcycle clutches, rubbing plate of gear Pumps and other hoist machines.

| | |
|----------------------|----------------------|
| Load capacity | 120N/mm ² |
| Temperature limit | -100°C~+200°C |
| Speed limit | 2m/s |
| Chemical composition | Cu80Pb10Sn10 |
| Alloy hardness | HB(60-90) |



MBM (JF-800) DOUBLE METAL LAYER BEARING INSIDE GRAPHAID

It is used steel backing as base. The bearing is sintered with CuSn10Pb10 after press. It has Moderate fatigue strength and load capacity good corrosion resistance, relative good Sliding performance. It is used widely in high speed low load inner combustion engine, aircompressor and refrigerator.

| | |
|----------------------|----------------------|
| Load capacity | 120N/mm ² |
| Temperature limit | -100°C~+200°C |
| Speed limit | 2m/s |
| Chemical composition | Cu80Pb10Sn10 |
| Alloy hardness | HB(60-90) |

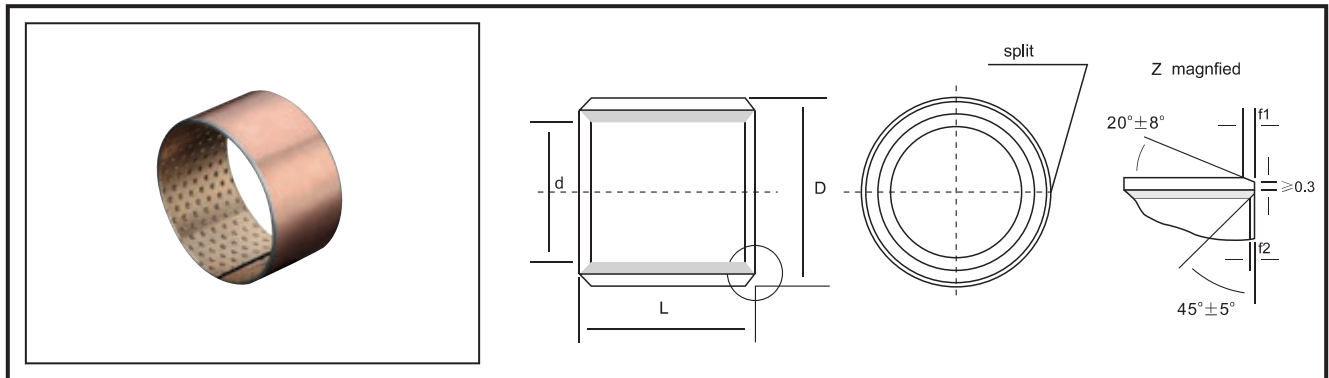


MBM-F (JF-800) DOUBLE METAL LAYER FLANGED BEARING

JF800 Double Metal Bearing takes steel plate as the base and with the sintering of alloy of Tin and bronze on the surface. The bronze layer is sintered twice under high temperature And calendared firmly in the strip. The high bonding strength load capacity and fatigue Make it with stand medium load and low speed high load condition. It was widely used in The following field as automobile engine, motorcycle clutches, rubbing plate of gear Pumps and other heavy machines.

| | |
|----------------------|----------------------|
| Load capacity | 120N/mm ² |
| Temperature limit | -100°C~+200°C |
| Speed limit | 2m/s |
| Chemical composition | Cu80Pb10Sn10 |
| Alloy hardness | HB(60-90) |



MBM DOUBLE METAL LAYER BEARING


Unit :mm

| d | D | Wall Thickness | O.D. Tolerance | I.D.(H8) Tolerance | H7 Housing Bore | f7 Journal Diameter | f1 | f2 | L -0.4 | | | | | | | | | | | | | |
|----|----|-----------------------|--|--|----------------------|--|-----|-----|--------|------|------|------|------|------|------|----|----|----|-----|--|--|--|
| | | | | | | | | | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | | | |
| 10 | 12 | | 12 ^{+0.065} / _{+0.030} | 10 ^{+0.022} / _{+0.000} | 12 ^{+0.018} | 10 ^{-0.013} / _{-0.028} | 0.5 | 0.3 | 1010 | 1015 | 1020 | | | | | | | | | | | |
| 12 | 14 | | 14 ^{+0.065} / _{+0.030} | 12 ^{+0.027} / _{+0.000} | 14 ^{+0.018} | 12 ^{-0.016} / _{-0.034} | 0.5 | 0.3 | 1210 | 1215 | 1220 | | | | | | | | | | | |
| 14 | 16 | 1 ^{-0.025} | 16 ^{+0.065} / _{+0.030} | 14 ^{+0.027} / _{+0.000} | 16 ^{+0.018} | 14 ^{-0.016} / _{-0.034} | 0.5 | 0.3 | 1410 | 1415 | 1420 | | | | | | | | | | | |
| 15 | 17 | | 17 ^{+0.065} / _{+0.030} | 15 ^{+0.027} / _{+0.000} | 17 ^{+0.018} | 15 ^{-0.016} / _{-0.034} | 0.5 | 0.3 | 1510 | 1515 | 1520 | | | | | | | | | | | |
| 16 | 18 | | 18 ^{+0.075} / _{+0.035} | 16 ^{+0.027} / _{+0.000} | 18 ^{+0.018} | 16 ^{-0.016} / _{-0.034} | 0.8 | 0.4 | 1610 | 1615 | 1620 | | | | | | | | | | | |
| 18 | 20 | | 20 ^{+0.075} / _{+0.035} | 18 ^{+0.033} / _{+0.000} | 20 ^{+0.021} | 18 ^{-0.016} / _{-0.034} | 0.8 | 0.4 | 1810 | 1815 | 1820 | 1825 | | | | | | | | | | |
| 20 | 23 | | 23 ^{+0.075} / _{+0.035} | 20 ^{+0.033} / _{+0.000} | 23 ^{+0.021} | 20 ^{-0.020} / _{-0.041} | 0.8 | 0.4 | 1210 | 1215 | 1220 | 1225 | | | | | | | | | | |
| 22 | 25 | 1.5 ^{-0.030} | 25 ^{+0.075} / _{+0.035} | 22 ^{+0.033} / _{+0.000} | 25 ^{+0.021} | 22 ^{-0.020} / _{-0.041} | 0.8 | 0.4 | 2210 | 2215 | 2220 | 2225 | | | | | | | | | | |
| 24 | 27 | | 27 ^{+0.075} / _{+0.035} | 24 ^{+0.033} / _{+0.000} | 27 ^{+0.021} | 24 ^{-0.020} / _{-0.041} | 1.0 | 0.5 | 2410 | 2415 | 2420 | 2425 | 2430 | | | | | | | | | |
| 25 | 28 | | 28 ^{+0.075} / _{+0.035} | 25 ^{+0.033} / _{+0.000} | 28 ^{+0.021} | 25 ^{-0.020} / _{-0.041} | 1.0 | 0.5 | | 2515 | 2520 | 2525 | 2530 | | | | | | | | | |
| 26 | 30 | | 30 ^{+0.075} / _{+0.035} | 26 ^{+0.033} / _{+0.000} | 30 ^{+0.021} | 26 ^{-0.020} / _{-0.041} | 1.0 | 0.5 | | 2615 | 2620 | 2625 | 2630 | | | | | | | | | |
| 28 | 32 | | 32 ^{+0.085} / _{+0.045} | 28 ^{+0.033} / _{+0.000} | 32 ^{+0.025} | 28 ^{-0.020} / _{-0.041} | 1.0 | 0.5 | | 2815 | 2820 | 2825 | 2830 | 2840 | | | | | | | | |
| 30 | 34 | | 34 ^{+0.085} / _{+0.045} | 30 ^{+0.039} / _{+0.000} | 34 ^{+0.025} | 30 ^{-0.020} / _{-0.041} | 1.2 | 0.6 | | 3015 | 3020 | 3025 | 3030 | 3040 | | | | | | | | |
| 32 | 36 | 2 ^{-0.035} | 36 ^{+0.085} / _{-0.045} | 32 ^{+0.039} / _{+0.000} | 36 ^{+0.025} | 32 ^{-0.025} / _{-0.050} | 1.2 | 0.6 | | 3215 | 3220 | 3225 | 3230 | 3240 | | | | | | | | |
| 35 | 39 | | 39 ^{+0.085} / _{+0.045} | 35 ^{+0.039} / _{+0.000} | 39 ^{+0.025} | 35 ^{-0.025} / _{-0.050} | 1.2 | 0.6 | | | 3520 | 3525 | 3530 | 3540 | 3550 | | | | | | | |
| 38 | 42 | | 42 ^{+0.085} / _{+0.045} | 38 ^{+0.039} / _{+0.000} | 42 ^{+0.025} | 38 ^{-0.025} / _{-0.050} | 1.2 | 0.6 | | | 3820 | 3825 | 3830 | 3840 | 3850 | | | | | | | |
| 40 | 44 | | 44 ^{+0.085} / _{+0.045} | 40 ^{+0.039} / _{+0.000} | 44 ^{+0.025} | 40 ^{-0.025} / _{-0.050} | 1.2 | 0.6 | | | 4020 | 4025 | 4030 | 4040 | 4050 | | | | | | | |

MBM DOUBLE METAL LAYER BEARING

Unit :mm

| d | D | Wall Thickness | O.D. Tolerance | I.D.(H8) Tolerance | H7 Housing Bore | f7 Journal Diameter | f1 | f2 | L -0.4 | | | | | | | | | | |
|-----|-----|----------------|---|---|-----------------------|---|-----|-----|--------|----|------|------|------|-------|-------|-------|------|----|--------|
| | | | | | | | | | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 |
| 45 | 50 | | 50 ^{+0.085} / _{+0.045} | 45 ^{+0.039} / _{+0.000} | 50 ^{+0.025} | 45 ^{-0.025} / _{-0.050} | 1.5 | 1.0 | | | 4520 | 4525 | 4530 | 4540 | 4550 | | | | |
| 50 | 55 | | 55 ^{+0.100} / _{+0.050} | 50 ^{+0.039} / _{+0.000} | 55 ^{+0.030} | 50 ^{-0.030} / _{-0.050} | 1.5 | 1.0 | | | | | 5030 | 5040 | 5050 | | | | |
| 55 | 60 | | 60 ^{+0.100} / _{+0.050} | 55 ^{+0.046} / _{+0.000} | 60 ^{+0.030} | 55 ^{-0.030} / _{-0.050} | 1.5 | 1.0 | | | | | 5530 | 5540 | 5550 | 5560 | | | |
| 60 | 65 | 2.5 -0.040 | 65 ^{+0.100} / _{+0.050} | 60 ^{+0.046} / _{+0.000} | 65 ^{+0.030} | 60 ^{-0.030} / _{-0.050} | 1.5 | 1.0 | | | | | 6030 | 6040 | 6050 | 6060 | | | |
| 65 | 70 | | 70 ^{+0.100} / _{+0.050} | 65 ^{+0.046} / _{+0.000} | 70 ^{+0.030} | 65 ^{-0.030} / _{-0.060} | 1.5 | 1.0 | | | | | 6530 | 6540 | 6550 | 6560 | | | |
| 70 | 75 | | 75 ^{+0.100} / _{+0.050} | 70 ^{+0.046} / _{+0.000} | 75 ^{+0.030} | 70 ^{-0.030} / _{-0.060} | 1.5 | 1.0 | | | | | 7030 | 7040 | 7050 | 7060 | 7080 | | |
| 75 | 80 | | 80 ^{+0.100} / _{+0.050} | 75 ^{+0.046} / _{+0.000} | 80 ^{+0.035} | 75 ^{-0.030} / _{-0.060} | 1.5 | 1.0 | | | | | 7530 | 7540 | 7550 | 7560 | | | |
| 80 | 85 | | 85 ^{+0.120} / _{+0.070} | 80 ^{+0.054} / _{+0.000} | 85 ^{+0.035} | 80 ^{-0.030} / _{-0.060} | 1.5 | 1.0 | | | | | 8040 | 8050 | 8060 | 8080 | | | |
| 84 | 90 | | 90 ^{+0.120} / _{+0.070} | 84 ^{+0.054} / _{+0.000} | 90 ^{+0.035} | 84 ^{-0.036} / _{-0.071} | 1.8 | 1.2 | | | | | 8440 | 8450 | 8460 | 8480 | | | |
| 89 | 95 | | 95 ^{+0.120} / _{+0.070} | 89 ^{+0.054} / _{+0.000} | 95 ^{+0.035} | 89 ^{-0.036} / _{-0.071} | 1.8 | 1.2 | | | | | 8940 | 8950 | 8960 | 8980 | | | |
| 94 | 100 | | 100 ^{+0.120} / _{+0.070} | 94 ^{+0.054} / _{+0.000} | 100 ^{+0.035} | 94 ^{-0.036} / _{-0.071} | 1.8 | 1.2 | | | | | | 9450 | 9460 | 9480 | 9490 | | |
| 99 | 105 | 3 -0.045 | 105 ^{+0.120} / _{+0.070} | 99 ^{+0.054} / _{+0.000} | 105 ^{+0.035} | 99 ^{-0.036} / _{-0.071} | 1.8 | 1.2 | | | | | | 9950 | 9960 | 9980 | 9990 | | |
| 104 | 110 | | 110 ^{+0.120} / _{+0.070} | 104 ^{+0.054} / _{+0.000} | 110 ^{+0.035} | 104 ^{-0.036} / _{-0.071} | 1.8 | 1.2 | | | | | | 10450 | 10460 | 10480 | | | |
| 109 | 115 | | 115 ^{+0.120} / _{+0.070} | 109 ^{+0.054} / _{+0.000} | 115 ^{+0.035} | 109 ^{-0.036} / _{-0.071} | 1.8 | 1.2 | | | | | | 10950 | 10960 | 10980 | | | |
| 114 | 120 | | 120 ^{+0.120} / _{+0.070} | 114 ^{+0.054} / _{+0.000} | 120 ^{+0.040} | 114 ^{-0.036} / _{-0.083} | 1.8 | 1.2 | | | | | | 11450 | 11460 | 11480 | | | |
| 119 | 125 | | 125 ^{+0.170} / _{+0.100} | 119 ^{+0.054} / _{+0.000} | 125 ^{+0.040} | 119 ^{-0.036} / _{-0.083} | 1.8 | 1.2 | | | | | | 11950 | 11960 | 11980 | | | |
| 123 | 130 | | 130 ^{+0.170} / _{+0.100} | 123 ^{+0.054} / _{+0.000} | 130 ^{+0.040} | 123 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | 12350 | 12360 | 12380 | | | 123100 |
| 128 | 135 | | 135 ^{+0.170} / _{+0.100} | 128 ^{+0.063} / _{+0.000} | 135 ^{+0.040} | 128 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | 12850 | 12860 | 12880 | | | 128100 |
| 133 | 140 | | 140 ^{+0.170} / _{+0.100} | 133 ^{+0.063} / _{+0.000} | 140 ^{+0.040} | 133 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | 13350 | 13360 | 13380 | | | 133100 |
| 138 | 145 | | 145 ^{+0.170} / _{+0.100} | 138 ^{+0.063} / _{+0.000} | 145 ^{+0.040} | 138 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 13860 | 13880 | | | 138100 |
| 143 | 150 | | 150 ^{+0.170} / _{+0.100} | 143 ^{+0.063} / _{+0.000} | 150 ^{+0.040} | 143 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 14360 | 14380 | | | 143100 |
| 148 | 155 | 3.5 -0.050 | 155 ^{+0.170} / _{+0.100} | 148 ^{+0.063} / _{+0.000} | 155 ^{+0.040} | 148 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 14860 | 14880 | 1489 | | |
| 153 | 160 | | 160 ^{+0.170} / _{+0.100} | 153 ^{+0.063} / _{+0.000} | 160 ^{+0.040} | 153 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 15360 | 15380 | 1539 | | |
| 158 | 165 | | 165 ^{+0.170} / _{+0.100} | 158 ^{+0.063} / _{+0.000} | 165 ^{+0.040} | 158 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 15860 | 15880 | | | 158100 |
| 163 | 170 | | 170 ^{+0.170} / _{+0.100} | 163 ^{+0.063} / _{+0.000} | 170 ^{+0.040} | 163 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 16360 | 16380 | | | 163100 |
| 168 | 175 | | 175 ^{+0.170} / _{+0.100} | 168 ^{+0.063} / _{+0.000} | 175 ^{+0.046} | 168 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 16860 | 16880 | | | 168100 |
| 173 | 180 | | 180 ^{+0.170} / _{+0.100} | 173 ^{+0.063} / _{+0.000} | 180 ^{+0.046} | 173 ^{-0.043} / _{-0.083} | 2 | 1.5 | | | | | | | 17360 | 17380 | | | 173100 |

MW (FB090) WRAPPED BRONZE BEARING

This product takes the bronze alloy of high density as the base and spherical or diamond shaped indentations oil grooves and oil holes could be processed on its surface. It has the advantages of high density, wear resistance. It was widely used in the field of hoisting of hoisting machines. Construction machines. Mineral engines and etc.

| | | |
|-------------------|-----------------|----------------------|
| Max Load | Static Load | 300N/mm ² |
| | Dynamic load | |
| Max Speed | Oil lubricating | 3m/s |
| Temperature range | | -100°C~+200°C |
| Alloy composition | | CuSn8/CuSn6 |
| Alloy hardness | | HB90~110 |



MW-F (FBB090) WRAPPED BRONZE FLANGED BEARING

This product takes the bronze alloy of high density as the base and spherical or diamond shaped indentations oil grooves and oil holes could be processed on its surface. It has the advantages of high density, wear resistance. It was widely used in the field of hoisting of hoisting machines. Construction machines. Mineral engines and etc.

| | | |
|-------------------|-----------------|----------------------|
| Max Load | Static Load | 300N/mm ² |
| | Dynamic load | |
| Max Speed | Oil lubricating | 3m/s |
| Temperature range | | -100°C~+200°C |
| Alloy composition | | CuSn8/CuSn6 |
| Alloy hardness | | HB90~110 |



MW-2 (FB092) WRAPPED BRONZE BEARING

It is improved from the materials of MW (FB 090) the lubricating holes on surface are produced by being arranged orderly in certain and density.

| | | |
|-------------------|-------------|----------------------|
| Max Load | Static Load | 120N/mm ² |
| Temperature Range | | 100°C~+200°C |
| Max Speed | | 2.5m/s |
| Alloy composition | | CuSn8/CuSn6 |
| Alloy hardness | | HB90~110 |

Standard Metric Size Reference to FB-090

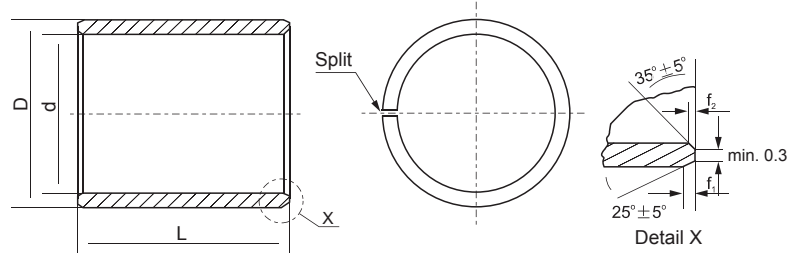


MW-G (FB09G) BRONZE WITH GRAPHITE BEARING

The bearing is product with special solid-lubricants imbedded into lozenge oil indentation on surface. It is with very low coefficient of friction, good wear-resistance and can still work under the condition of no oil or little oil.

| | | |
|---------------------------------|--|----------------------|
| Density | | 8.8g/cm ³ |
| Compression strength Rm | | 70 N/m ² |
| Thermal conductivity | | 58W/mk |
| Coefficient of linear expansion | | 18.5 · 10 /k |
| Hardness | | 90~120 HB |
| Elongation | | 40% |



MW METRIC CYLINDRICAL BUSHES


Unit:mm

| d | D | f ₁ | f ₂ | L ⁰ _{-0.40} | | | | | | | | | | | | | | | |
|-----|-----|----------------|----------------|---------------------------------|------|------|------|------|------|-------|-------|-------|-------|--------|-------|--------|--|--|--|
| | | | | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | | | |
| 10 | 12 | 0.5 | 0.3 | 1010 | 1015 | 1020 | | | | | | | | | | | | | |
| 12 | 14 | | | 1210 | 1215 | 1220 | | | | | | | | | | | | | |
| 14 | 16 | | | 1410 | 1415 | 1420 | 1425 | | | | | | | | | | | | |
| 15 | 17 | | | 1510 | 1515 | 1520 | 1525 | | | | | | | | | | | | |
| 16 | 18 | | | 1610 | 1615 | 1620 | 1625 | | | | | | | | | | | | |
| 18 | 20 | | | 1810 | 1815 | 1820 | 1825 | | | | | | | | | | | | |
| 20 | 23 | 0.8 | 0.4 | 2010 | 2015 | 2020 | 2025 | | | | | | | | | | | | |
| 22 | 25 | | | 2210 | 2215 | 2220 | 2225 | 2230 | | | | | | | | | | | |
| 24 | 27 | | | | 2415 | 2420 | 2425 | 2430 | | | | | | | | | | | |
| 25 | 28 | | | | 2515 | 2520 | 2525 | 2530 | | | | | | | | | | | |
| 28 | 31 | | | | 2815 | 2820 | 2825 | 2830 | | | | | | | | | | | |
| 30 | 34 | 1.0 | 0.6 | | 3015 | 3020 | 3025 | 3030 | 3035 | 3040 | | | | | | | | | |
| 32 | 36 | | | | 3215 | 3220 | 3225 | 3230 | 3235 | 3240 | | | | | | | | | |
| 35 | 39 | | | | 3515 | 3520 | 3525 | 3530 | 3535 | 3540 | | | | | | | | | |
| 40 | 44 | 1.2 | 0.8 | | | 4020 | 4025 | 4030 | 4035 | 4040 | 4050 | | | | | | | | |
| 45 | 50 | | | | | 4520 | 4525 | 4530 | 4535 | 4540 | 4550 | | | | | | | | |
| 50 | 55 | | | | | 5020 | 5025 | 5030 | 5035 | 5040 | 5050 | 5060 | | | | | | | |
| 55 | 60 | | | | | 5520 | 5525 | 5530 | 5535 | 5540 | 5550 | 5560 | | | | | | | |
| 60 | 65 | | | | | | 6025 | 6030 | 6035 | 6040 | 6050 | 6560 | 6070 | | | | | | |
| 65 | 70 | | | | | | | 6530 | 6535 | 6540 | 6550 | 6560 | 6570 | | | | | | |
| 70 | 75 | | | | | | | 7030 | 7035 | 7040 | 7050 | 7060 | 7070 | 7080 | | | | | |
| 75 | 80 | | | | | | | 7530 | 7535 | 7540 | 7550 | 7560 | 7570 | 7580 | | | | | |
| 80 | 85 | | | | | | | 8030 | 8035 | 8040 | 8050 | 8060 | 8070 | 8080 | | | | | |
| 85 | 90 | | | | | | | 8530 | 8535 | 8540 | 7550 | 8560 | 8570 | 8580 | 8590 | | | | |
| 90 | 95 | 1.4 | 0.8 | | | | | 9030 | 9035 | 9040 | 9050 | 9060 | 9070 | 9080 | 9090 | | | | |
| 95 | 100 | | | | | | | | | 9540 | 9550 | 9560 | 9570 | 9580 | 9590 | 95100 | | | |
| 100 | 105 | | | | | | | | | | 10050 | 10060 | 10070 | 10080 | 10090 | 100100 | | | |
| 105 | 110 | | | | | | | | | | 10550 | 10560 | 10570 | 10580 | 10590 | 105100 | | | |
| 110 | 115 | | | | | | | | | | 11050 | 11060 | 11070 | 11080 | 11090 | 110100 | | | |
| 115 | 120 | | | | | | | | | | 11550 | 11560 | 11570 | 11580 | 11590 | 115100 | | | |
| 120 | 125 | | | | | | | | | | | 12060 | 12070 | 12080 | 12090 | 120100 | | | |
| 125 | 130 | | | | | | | | | | | 12560 | 12570 | 12580 | 12590 | 125100 | | | |
| 130 | 135 | | | | | | | | | | | 13060 | 13070 | 13080 | 13090 | 130100 | | | |
| 135 | 140 | | | | | | | | | | | 13560 | 13570 | 13580 | 13590 | 135100 | | | |
| 140 | 145 | | | | | | | | | 14060 | 14070 | 14080 | 14090 | 140100 | | | | | |
| 145 | 150 | | | | | | | | | 14560 | 14570 | 14580 | 14590 | 145100 | | | | | |
| 150 | 155 | | | | | | | | | 15060 | 15070 | 15080 | 15090 | 150100 | | | | | |
| 155 | 160 | | | | | | | | | 15560 | 15570 | 15580 | 15590 | 155100 | | | | | |
| 160 | 165 | | | | | | | | | 16060 | 16070 | 16080 | 16090 | 160100 | | | | | |

MSB BRONZE SINTERED BEARING

It is made of bronze or iron powder, mould pressed under high pressure and then sintered under high temperature and oil is soaked into the homogeneously spreader tiny pores of the metal under vacuum. It's used in domestic electric appliances, electric tools, textiles machinery etc. (recommend fitting house H7)

| | |
|-------------------|-----------------------------|
| Load capacity | 35N/mm ² |
| Temperature limit | -80°C~+160°C |
| Speed limit | 2.5m/s |
| Friction coef | 0.12~0.20 |
| PV limit (oil) | 2.45N/mm ² · m/s |



MFR BRONZE SELF-LUBRICATING BEARING

It is made of phosphorous bronze mesh and the compound of modified PTFE as its layers on both or single side of the backing. It's used in machines for textiles, joint bearings, out door hinge, the operating rod for cars etc. (recommend fitting house H7)

| | |
|-------------------|-----------------------------|
| Load capacity | 30N/mm ² |
| Temperature limit | -40°C~+260°C |
| Speed limit | 2.5m/s |
| Friction coef | 0.05~0.20 |
| PV limit (oil) | 1.65N/mm ² · m/s |



MBM-A ALUMINIUM TIN BIMETAL BEARING

It is made of high quality low-carbon steel, rolled with aluminium - tin alloy on surface with special techniques. It has medium fatigue strength, load capacity, good corrosion resistance and super surface property. It is mainly applied to main shaft and con rod shaft of internal combustion engine, pressure-squeeze machine and cooling machine.

| | | |
|-------------------|-------------------|----------------------|
| Max Load | Static Load | 280N/mm ² |
| | Dynamic load | 120N/mm ² |
| Max Speed | Oil lubricating | 2m/s |
| | Temperature Range | -100°C~+260°C |
| Alloy composition | Cu80pb10sn10 | |
| Hardness | HB60~90 | |



MSB-SG SELF-LUBRICATING SPHERICAL BEARINGS

Self-lubricating spherical plain bearings are possessed of such strong points as high bearing capacity, small friction coefficient, self-lubricating, long service life and automatic centre-adjusting, etc... This series bearing are mainly used on the hydraulic shaped sluice gates, hydraulic open & close machines, flat face sluice gates and hoisting & transportation equipment, etc.

| | | |
|----------------------|----------------------|---------------------|
| Base material | Strong brass | Bronze |
| Max dynamic Load | 100N/mm ² | 80N/mm ² |
| Friction coef. (dry) | 0.08~0.14 | 0.10~0.16 |
| Friction coef. (oil) | 0.05~0.07 | 0.07~0.09 |
| Temperature limit | -100°C~+300°C | 100°C~+250°C |



MZB

The basement of this product is copper. With the high quality roller being arranged orderly in certain angle and density, it is produced by special workmanship. This kind of products is used in punching mould and high-precision machine tools.

| | |
|--------------------------------------|---------------------|
| Load capacity P | 30N/mm ² |
| Assembling shrink | 0.01mm~0.02mm |
| MAX sliding velocity | 6m/s |
| Friction coef u | 0.01~0.08 |
| Deviation of the steel ball diameter | <0.002mm |



MZL

The basement of this product is aluminium. With the high quality roller being arranged orderly in certain angle and density, it is produced by special workmanship. This kind of product is used in punching mould and high-precision machine tools.

| | |
|--------------------------------------|---------------------|
| Load capacity P | 30N/mm ² |
| Assembling shrink | 0.01mm~0.02mm |
| MAX sliding velocity | 6m/s |
| Friction coef u | 0.01~0.08 |
| Deviation of the steel ball diameter | <0.002mm |

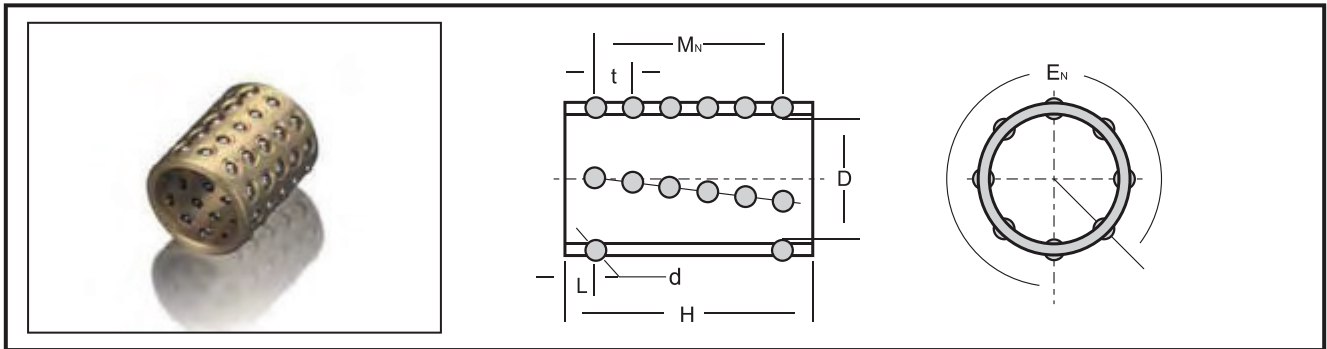


MZP

The basement of this product is POM. With the high quality roller being arranged orderly in certain angle and density, it is produced by special workmanship. This kind of products is used in punching mould and high-precision machine tools.

| | |
|--------------------------------------|---------------------|
| Load capacity P | 30N/mm ² |
| Assembling shrink | 0.01mm~0.02mm |
| MAX sliding velocity | 6m/s |
| Friction coef u | 0.01~0.08 |
| Deviation of the steel ball diameter | <0.002mm |



MZB BALL RETAINERS SERIES


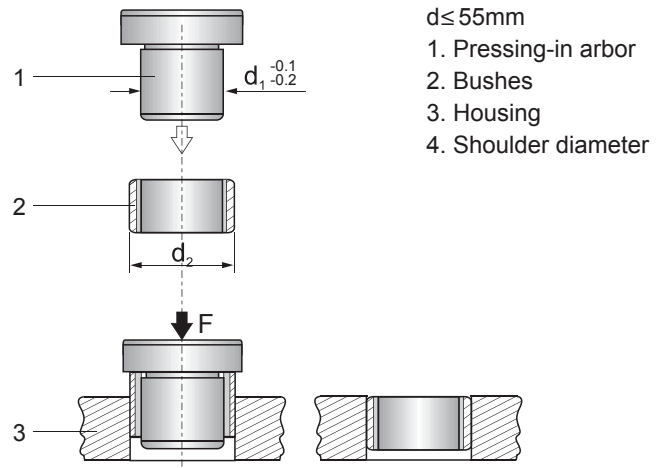
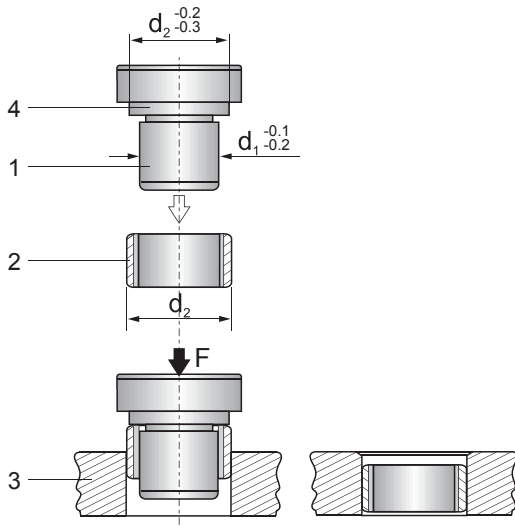
SIZE TABLE

Unit: mm

| Model | D | H | d | E _N | M _N | Balls | t | L |
|-----------|----|-----|---|----------------|----------------|-------|------|------|
| MZB-1950 | 19 | 50 | 3 | 12 | 8 | 96 | 5.5 | 5.75 |
| MZB-1960 | 19 | 60 | 3 | 12 | 10 | 120 | 5.5 | 5.25 |
| MZB-2050 | 20 | 50 | 3 | 12 | 8 | 96 | 5.5 | 5.75 |
| MZB-2060 | 20 | 60 | 3 | 12 | 10 | 120 | 5.5 | 5.25 |
| MZB-2250 | 22 | 50 | 3 | 14 | 8 | 112 | 5.5 | 5.75 |
| MZB-2260 | 22 | 60 | 3 | 14 | 10 | 140 | 5.5 | 5.25 |
| MZB-2360 | 23 | 60 | 3 | 14 | 10 | 140 | 5.5 | 5.25 |
| MZB-2475 | 24 | 75 | 3 | 16 | 13 | 208 | 5.45 | 4.8 |
| MZB-2550 | 25 | 50 | 3 | 16 | 8 | 128 | 5.5 | 5.75 |
| MZB-2560 | 25 | 60 | 3 | 16 | 10 | 160 | 5.5 | 5.25 |
| MZB-2575 | 25 | 75 | 3 | 16 | 13 | 208 | 5.45 | 4.8 |
| MZB-2775 | 27 | 75 | 3 | 16 | 13 | 208 | 5.45 | 4.8 |
| MZB-2860 | 28 | 60 | 4 | 14 | 8 | 112 | 6.5 | 7.25 |
| MZB-2875 | 28 | 75 | 4 | 14 | 11 | 154 | 6.5 | 5.0 |
| MZB-3060 | 30 | 60 | 4 | 14 | 8 | 112 | 6.5 | 7.25 |
| MZB-3075 | 30 | 75 | 4 | 14 | 11 | 154 | 6.5 | 5.0 |
| MZB-3260 | 32 | 60 | 4 | 16 | 8 | 128 | 6.5 | 7.25 |
| MZB-3275 | 32 | 75 | 4 | 16 | 11 | 176 | 6.5 | 5.0 |
| MZB-3290 | 32 | 90 | 4 | 16 | 13 | 208 | 6.5 | 6.0 |
| MZB-3685 | 36 | 85 | 4 | 16 | 12 | 192 | 6.5 | 6.75 |
| MZB-3690 | 36 | 90 | 4 | 16 | 13 | 208 | 6.5 | 6.0 |
| MZB-3870 | 38 | 70 | 5 | 16 | 8 | 128 | 8.0 | 7.0 |
| MZB-3890 | 38 | 90 | 5 | 16 | 11 | 176 | 7.9 | 5.5 |
| MZB-4090 | 40 | 90 | 5 | 16 | 11 | 176 | 7.9 | 5.5 |
| MZB-4590 | 45 | 90 | 5 | 18 | 11 | 198 | 7.9 | 5.5 |
| MZB-45110 | 45 | 110 | 5 | 18 | 13 | 234 | 8.0 | 7.0 |
| MZB-5090 | 50 | 90 | 5 | 20 | 11 | 220 | 7.9 | 5.5 |
| MZB-50110 | 50 | 110 | 5 | 20 | 13 | 260 | 8.0 | 7.0 |
| MZB-6090 | 60 | 90 | 5 | 22 | 11 | 242 | 7.9 | 5.5 |
| MZB-60110 | 60 | 110 | 5 | 22 | 13 | 286 | 8.0 | 7.0 |
| MZB-80130 | 80 | 130 | 5 | 28 | 15 | 420 | 8.0 | 9.0 |

BEARINGS INSTALLATION

Bushes

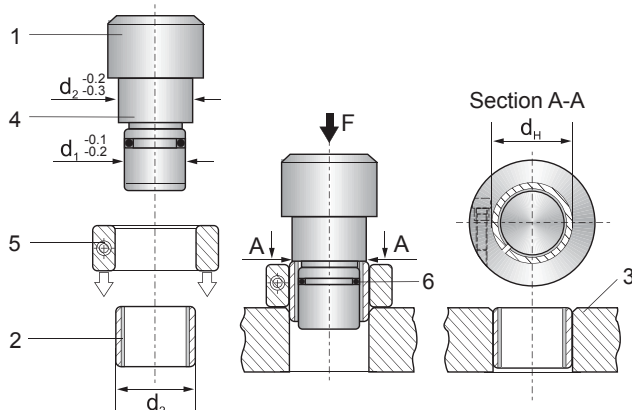


- $d \leq 55\text{mm}$
1. Pressing-in arbor
 2. Bushes
 3. Housing
 4. Shoulder diameter

In most cases, RCB slide bearings are used with a pressfit in the same manner as general sleeve bearings. Fit the bearings into housings using mandrels or press. In case of a relatively large interference, provide both the I.D. Of the housing and the O.D. of the bearing with chamfers, and fit the bearing into the housing with mandrel for easy installation. When using plastic bearings in an environment where temperature fluctuates, install the bearings using set screws, keys or flange pins for better results.

method of inserting a bush in its housing and provides the optimum interference fit without risking bearing damage during press fitting. Frozen carbon dioxide(CO₂)should be packed around the bearing for up to 2 hours, depending on the cress section of bush to be cooled. Once removed from the CO₂, the bush should be offered to its housing without delay. It should fit without force, gravity will usually be adequate for a vertical installation.

For some special application like RCB-JDB bushes for injection molding machines, can be used shrink fitting. This is the preferred



- $d \geq 55\text{mm}$
1. Pressing-in arbor
 2. Bushes
 3. Housing
 4. Shoulder diameter
 5. Auxiliary ring
 6. O ring

| $D_2\text{mm}$ | $D_H\text{mm}$ |
|------------------------|-----------------------|
| $55 \leq d_2 \leq 100$ | $d_2^{+0.28}_{+0.25}$ |
| $100 < d_2 \leq 200$ | $d_2^{+0.40}_{+0.36}$ |
| $200 < d_2 \leq 305$ | $d_2^{+0.50}_{+0.46}$ |

⊙ Main Materials Recommendation

Metal type

| Standard | Cast bronze | Copper alloy | Copper alloy | Copper alloy | Strong cast bronze | Cast iron |
|------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Base material | CuZn24Al6 | CuSn5Zn5Pb5 | CuAl10Ni5 | CuSn12 | CuZn24Al6 | HT250 |
| Hardness HB | >210 | >70 | >150 | >80 | >250 | >160 |
| Tensile strength N/mm ² | >750 | >200 | >500 | >360 | >800 | >250 |
| Elongation% | >12 | 15 | >10 | >8 | >4 | |
| Coefficient of linear expansion | 1.9*10 ⁻⁵ /C | 1.8*10 ⁻⁵ /C | 1.6*10 ⁻⁵ /C | 1.8*10 ⁻⁵ /C | 1.9*10 ⁻⁵ /C | 1.0*10 ⁻⁵ /C |
| Limit Temp. | 300 C | 400 C | 400 C | 400 C | 300 C | 400 C |
| Max. Load N/mm ² | 100 | 60 | 50 | 70 | 150 | 10 |
| Max. Speed m/min | 15 | 10 | 20 | 10 | 10 | 15 |
| Max. PV PV N/mm ² m/min | 200 | 200 | 200 | 200 | 200 | 40 |
| 400N/mm ² | <0.01 | <0.05 | <0.04 | <0.05 | <0.005 | <0.015 |

As special request also can supply the strong cast bronze of special high hardness HB>270, HB>300

