

SF-40 青铜自润滑轴承

Bronze self-lubricating bearing



该产品以特殊配方的高密度铜合金带材为基体，表面轧制菱形油穴或半球形的油穴，具有密度高，承载压力大，耐磨性能好，使用寿命长。产品被广泛应用于起重机械、建筑机械、机床工业、采矿机械等领域。

SF-40 Bronze self-lubricating bearings used a kind of high density bronze alloy of special compositions as base, surface of alloy is rolled diamond type of the oil indents or half ball oil indents, this kind of bearing has higher density, load capacity, well wearing performance, longer lifetime. It has been widely used in many fields, such as hoist machines, building machinery, machine tool industry and mining machinery.

※技术参数: Technical Data

| 性能指标 Performance index | | 数据 Data |
|--|-----------------|----------------------------|
| 最大承载 P Max Load Capacity | 静载 Static load | 120N/mm ² |
| | 动载 Dynamic load | 40N/mm ² |
| 最高线速度 V Max Sliding Speed | | 2.0m/s |
| 最高 PV 值 Max PV Value Limit | | 2.8N/mm ² · m/s |
| 摩擦系数 μ Friction coefficient | | 0.08 ~ 0.25 |
| 使用温度 Working TEMP | | -100 ~ +200℃ |
| 导热系数 Thermal conductivity | | 60W/m · k |
| 热膨胀系数 Coefficient of thermal expansion | | 15 × 10 ⁻⁶ /k |

※材料特性: Material Characterisitc

| 材 料 Material | 化学成份 Chemica Composition | | | 机械性能 Machine Performance | | |
|-----------------|--------------------------|-----------|-------------|--------------------------|-----------------------|-------------------|
| | Cu% | Sn% | P% | 抗拉强度 Tensile Strength | 屈服强度 Yield Point | 延伸率 Elongation |
| CuSn8 | Rest | 7.0 ~ 9.0 | 0.03 ~ 0.45 | 450 N/mm ² | 250 N/mm ² | 40% |

SF-41 青铜冲孔自润滑轴承

Bronze With through Hole self-lubricating bearing



该产品CuSn8为基体，工作表面布满有规则油孔，具有承载高、耐磨性能好、摩擦系数低。产品被广泛应用于输送机、升降机、卷扬机、农用机械等。

SF-41 Bronze punch hole self-lubricating bearing used CuSn8 as base, designed regular oil holes bestrewn working surface, it has high load capacity, well wearing resistance and low friction coefficient, it has been widely applied to transportation machinery, elevator, coiling machinery and agriculture equipment.

※技术参数: Technical Data

| 性能指标 Performance index | | 数据 Data |
|--|-----------------|----------------------------|
| 最大承载 P Max Load Capacity | 静载 Static load | 120N/mm ² |
| | 动载 Dynamic load | 40N/mm ² |
| 最高线速度 V Max Sliding Speed | | 2.5m/s |
| 最高 PV 值 Max PV Value Limit | | 2.8N/mm ² · m/s |
| 摩擦系数 μ Friction coefficient | | 0.08 ~ 0.25 |
| 使用温度 Working TEMP | | -100 ~ +200℃ |
| 导热系数 Thermal conductivity | | 60W/m · k |
| 热膨胀系数 Coefficient of thermal expansion | | 15 × 10 ⁻⁶ /k |



SF-42 青铜固体自润滑轴承

Bronze With graphite solid-lubricating bearing

该产品CuSn8为基体，表面轧制螺旋角度菱形油穴，内嵌石墨或二硫化钼，润滑面积25%。具有摩擦系数小，良好的润滑性和抗磨性。产品被广泛应用于汽车起动电机，发电机，汽机车离合器等。

SF-42 bronze solid self-lubricating bearing used CuSn8 as base, agglomerated by porous bronze powder, surface of alloy is rolled the spirally diamond type of the oil hole, embedded lead and molybdenum disulfide, the lubrication area of the bearing surface is being about 25%. Characterized by low friction coefficient, good lubricating action and wear resistant action. This type of bearing is particularly applied in starting motor for automobiles, generators, automotive clutch parts etc.

※技术参数：Technical Data

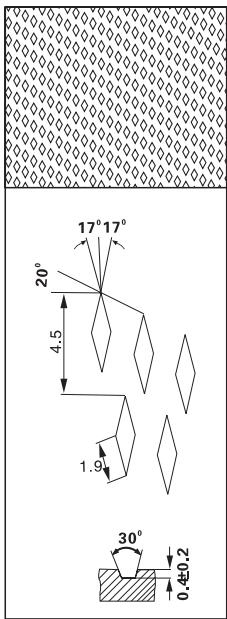
| 性能指标 Performance index | | 数据 Data |
|--|-----------------|----------------------------|
| 最大承载 P Max Load Capacity | 静载 Static load | 120N/mm ² |
| | 动载 Dynamic load | 40N/mm ² |
| 最高线速度 V Max Sliding Speed | | 2.5m/s |
| 最高 PV 值 Max PV Value Limit | | 2.8N/mm ² · m/s |
| 摩擦系数 μ Friction coefficient | | 0.05 ~ 0.25 |
| 使用温度 Working TEMP | | -100 ~ +200℃ |
| 导热系数 Thermal conductivity | | 60W/m · k |
| 热膨胀系数 Coefficient of thermal expansion | | 15 × 10 ⁻⁶ /k |

► 油穴类型

Oil Pocket Type

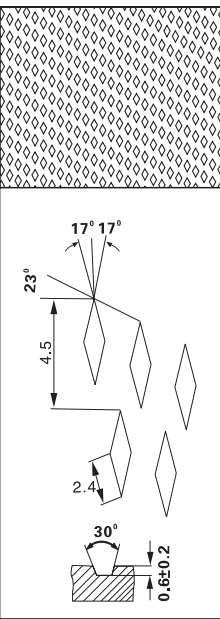
内径 $\varnothing d \leq 22$

Inner Diameter $\varnothing d \leq 22$



内径 $\varnothing d > 22$

Inner Diameter $\varnothing d > 22$

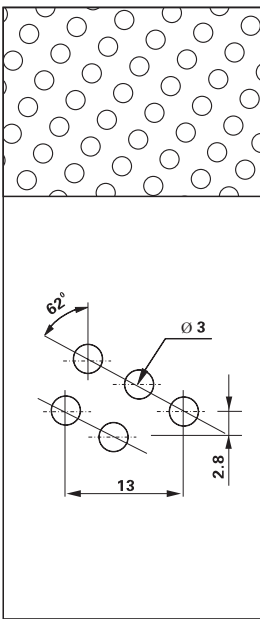


► 油孔类型

Oil Hole Type

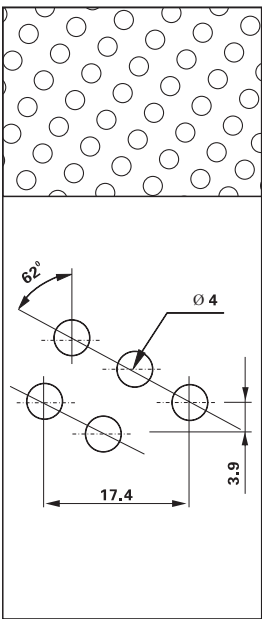
内径 $\varnothing d \leq 25$

Inner Diameter $\varnothing d \leq 25$



内径 $\varnothing d > 25$

Inner Diameter $\varnothing d > 25$



SF-40/41/42 标准公制轴套

Metric Standard Bushing

轴套外径公差表

Bushing O.D. Tolerances Table

| 外径 □ D Outer Diameter □ D | 外径公差 Outer Diameter Tolerance |
|------------------------------|----------------------------------|
| □ D ≤ 10 | +0.055 +0.025 |
| 10 < □ D ≤ 18 | +0.065 +0.030 |
| 18 < □ D ≤ 30 | +0.075 +0.035 |
| 30 < □ D ≤ 50 | +0.085 +0.045 |
| 50 < □ D ≤ 80 | +0.100 +0.055 |
| 80 < □ D ≤ 120 | +0.120 +0.070 |
| 120 < □ D ≤ 180 | +0.170 +0.100 |
| 180 < □ D ≤ 250 | +0.210 +0.130 |
| 250 < □ D ≤ 305 | +0.260 +0.170 |

轴套内径公差

Bushing Inner Diameter Tolerances Table

| 内径 □ d Inner Diameter □ d | 安装后内径公差H9 Inner Diameter Tolerance |
|------------------------------|---------------------------------------|
| □ d ≤ 10 | +0.036 0 |
| 10 < □ d ≤ 18 | +0.043 0 |
| 18 < □ d ≤ 30 | +0.052 0 |
| 30 < □ d ≤ 50 | +0.062 0 |
| 50 < □ d ≤ 80 | +0.074 0 |
| 80 < □ d ≤ 120 | +0.087 0 |
| 120 < □ d ≤ 180 | +0.100 0 |
| 180 < □ d ≤ 250 | +0.115 0 |
| 250 < □ d ≤ 305 | +0.130 0 |

※检验座孔公差表

Test Housing Tolerances Table

| 外径 □ D Outer Diameter □ D | 0 10 | 10 18 | 18 30 | 30 50 | 50 80 | 80 120 | 120 180 | 180 250 |
|------------------------------|---------|----------|----------|----------|----------|-----------|------------|------------|
| 座孔H7中值 Housing H7 Middle | D+0.008 | D+0.009 | D+0.011 | D+0.013 | D+0.015 | D+0.018 | D+0.020 | D+0.023 |

SF-40/41/42 系列产品压入座孔H7中值，内孔精度达到H9。

SF-40/41/42 Series products press into Housing H7 Middle, accuracy of inner diameter can reach H9.

▶ 可供产品的标注方式

Standard Bushing Label Mode

■ 直套标注方式 Bushing Label Mode

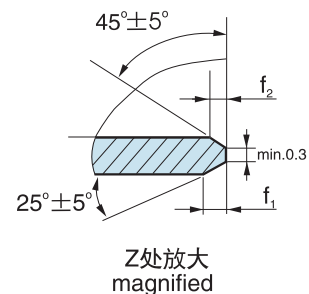
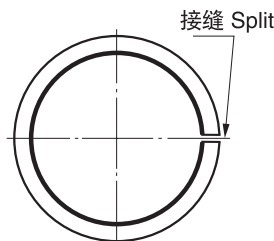
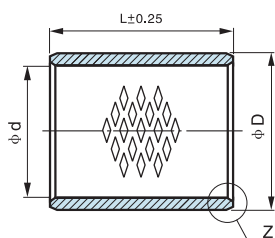
SF-4□ ×× ××
直套型号 ———
Bushing Type
直套内径 ——— 直套高度
Bushing Inner Diameter Bushing Length

■ 翻边套标注方式 Flange Bushing Label Mode

SF-4□F ×× ××
翻边套型号 ———
Flange Bushing Type
翻边套内径 ——— 翻边套高度
Flange Bushing Inner Diameter Flange Bushing Length

SF-40/41/42 标准公制轴套

Metric Standard Bushing



※标准直套标注方式 Standard Bushing Label Mode SF-4□ 1010

单位Unit: mm

| 型号 Type | 外径 Ø D | 内径 Ø d | 相配轴径 Axle | 相配座孔 Housing | f1 | f2 | L ± 0.25 | | | | | | |
|------------|-----------|-----------|---------------------------------|----------------------------|-----|-----|----------|------|------|------|------|------|------|
| | | | | | | | 10 | 15 | 20 | 25 | 30 | 40 | 50 |
| SF-4□ | 12 | 10 | 10 ^{-0.013 -0.028} | 12 ^{+0.018 0} | 0.6 | 0.3 | 1010 | 1015 | 1020 | | | | |
| SF-4□ | 14 | 12 | 12 ^{-0.016 -0.034} | 14 ^{+0.018 0} | | | 1210 | 1215 | 1220 | | | | |
| SF-4□ | 16 | 14 | 14 ^{-0.016 -0.034} | 16 ^{+0.018 0} | | | | 1415 | 1420 | | | | |
| SF-4□ | 17 | 15 | 15 ^{-0.016 -0.034} | 17 ^{+0.018 0} | | | | 1515 | 1520 | 1525 | | | |
| SF-4□ | 18 | 16 | 16 ^{-0.016 -0.034} | 18 ^{+0.018 0} | | | | 1615 | 1620 | 1625 | | | |
| SF-4□ | 19 | 17 | 17 ^{-0.016 -0.034} | 19 ^{+0.021 0} | | | | 1715 | 1720 | 1725 | | | |
| SF-4□ | 20 | 18 | 18 ^{-0.016 -0.034} | 20 ^{+0.021 0} | 0.8 | 0.4 | | 1815 | 1820 | 1825 | | | |
| SF-4□ | 23 | 20 | 20 ^{-0.020 -0.041} | 23 ^{+0.021 0} | | | | 2015 | 2020 | 2025 | 2030 | | |
| SF-4□ | 25 | 22 | 22 ^{-0.020 -0.041} | 25 ^{+0.021 0} | | | | 2215 | 2220 | 2225 | 2230 | | |
| SF-4□ | 27 | 24 | 24 ^{-0.020 -0.041} | 27 ^{+0.021 0} | | | | | 2420 | 2425 | 2430 | | |
| SF-4□ | 28 | 25 | 25 ^{-0.020 -0.041} | 28 ^{+0.021 0} | 1.2 | 0.6 | | | 2520 | 2525 | 2530 | | |
| SF-4□ | 32 | 28 | 28 ^{-0.020 -0.041} | 32 ^{+0.025 0} | | | | | 2820 | 2825 | 2830 | | |
| SF-4□ | 34 | 30 | 30 ^{-0.020 -0.041} | 34 ^{+0.025 0} | | | | | 3020 | 3025 | 3030 | 3040 | |
| SF-4□ | 36 | 32 | 32 ^{-0.025 -0.050} | 36 ^{+0.025 0} | | | | | 3220 | 3225 | 3230 | 3240 | |
| SF-4□ | 39 | 35 | 35 ^{-0.030 -0.060} | 39 ^{+0.025 0} | | | | | 3520 | 3525 | 3530 | 3540 | |
| SF-4□ | 44 | 40 | 40 ^{-0.025 -0.050} | 44 ^{+0.025 0} | 1.6 | 0.8 | | | 4020 | 4025 | 4030 | 4040 | |
| SF-4□ | 50 | 45 | 45 ^{-0.025 -0.050} | 50 ^{+0.025 0} | | | | | 4520 | 4525 | 4530 | 4540 | |
| SF-4□ | 55 | 50 | 50 ^{-0.025 -0.050} | 55 ^{+0.030 0} | | | | | | | 5030 | 5040 | 5050 |
| SF-4□ | 60 | 55 | 55 ^{-0.030 -0.060} | 60 ^{+0.030 0} | | | | | | | 5530 | 5540 | 5550 |
| SF-4□ | 65 | 60 | 60 ^{-0.030 -0.060} | 65 ^{+0.030 0} | | | | | | | 6030 | 6040 | 6050 |
| SF-4□ | 70 | 65 | 65 ^{-0.030 -0.060} | 70 ^{+0.030 0} | | | | | | | 6530 | 6540 | 6550 |
| SF-4□ | 75 | 70 | 70 ^{-0.030 -0.060} | 75 ^{+0.030 0} | | | | | | | 7030 | 7040 | 7050 |

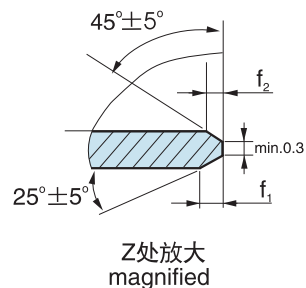
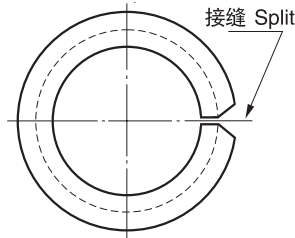
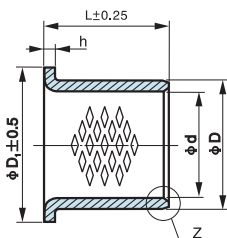
SF-40/41/42 标准公制轴套

Metric Standard Bushing

| 型号 Type | 外径 □ D | 内径 □ d | 相配轴径 Axle | 相配座孔 Housing | f1 | f2 | L ± 0.25 | | | | | |
|------------|-----------|-----------|----------------------------------|-----------------------------|-----|-----|----------|-------|-------|-------|--------|--------|
| | | | | | | | 40 | 50 | 60 | 80 | 100 | 120 |
| SF-4□ | 80 | 75 | 75 ^{-0.030 -0.060} | 80 ^{+0.030 0} | 1.6 | 0.8 | 7540 | 7550 | 7560 | | | |
| SF-4□ | 85 | 80 | 80 ^{-0.030 -0.060} | 85 ^{+0.035 0} | | | 8040 | 8050 | 8060 | | | |
| SF-4□ | 90 | 85 | 85 ^{-0.036 -0.071} | 90 ^{+0.035 0} | | | 8540 | 8550 | 8560 | | | |
| SF-4□ | 95 | 90 | 90 ^{-0.036 -0.071} | 95 ^{+0.035 0} | | | | 9050 | 9560 | 9580 | | |
| SF-4□ | 100 | 95 | 95 ^{-0.036 -0.071} | 100 ^{+0.035 0} | | | | 9550 | 9560 | 9580 | | |
| SF-4□ | 105 | 100 | 100 ^{-0.036 -0.071} | 105 ^{+0.035 0} | | | | 10050 | 10060 | 10080 | 100100 | |
| SF-4□ | 110 | 105 | 105 ^{-0.036 -0.071} | 110 ^{+0.035 0} | | | | 10550 | 10560 | 10580 | 105100 | |
| SF-4□ | 115 | 110 | 110 ^{-0.036 -0.071} | 115 ^{+0.035 0} | | | | 11050 | 11060 | 11080 | 110100 | |
| SF-4□ | 120 | 115 | 115 ^{-0.036 -0.071} | 120 ^{+0.035 0} | | | | 11550 | 11560 | 11580 | 115100 | |
| SF-4□ | 125 | 120 | 120 ^{-0.036 -0.071} | 125 ^{+0.040 0} | | | | | 12060 | 12080 | 120100 | |
| SF-4□ | 130 | 125 | 125 ^{-0.043 -0.083} | 130 ^{+0.040 0} | | | | | 12560 | 12580 | 125100 | |
| SF-4□ | 135 | 130 | 130 ^{-0.043 -0.083} | 135 ^{+0.040 0} | | | | | 13060 | 13080 | 130100 | |
| SF-4□ | 140 | 135 | 135 ^{-0.043 -0.083} | 140 ^{+0.040 0} | | | | | 13560 | 13580 | 135100 | |
| SF-4□ | 145 | 140 | 140 ^{-0.043 -0.083} | 145 ^{+0.040 0} | | | | | 14060 | 14080 | 140100 | |
| SF-4□ | 150 | 145 | 145 ^{-0.043 -0.083} | 150 ^{+0.040 0} | | | | | 14560 | 14580 | 145100 | |
| SF-4□ | 160 | 155 | 155 ^{-0.043 -0.083} | 160 ^{+0.040 0} | | | | | | 15580 | 155100 | 155120 |
| SF-4□ | 170 | 165 | 165 ^{-0.043 -0.083} | 170 ^{+0.040 0} | | | | | | 16580 | 165100 | 165120 |
| SF-4□ | 180 | 175 | 175 ^{-0.043 -0.083} | 180 ^{+0.040 0} | | | | | | 17580 | 175100 | 175120 |
| SF-4□ | 190 | 185 | 185 ^{-0.050 -0.096} | 190 ^{+0.046 0} | | | | | | 18580 | 185100 | 185120 |
| SF-4□ | 200 | 195 | 195 ^{-0.050 -0.096} | 200 ^{+0.046 0} | | | | | | 19580 | 195100 | 195120 |
| SF-4□ | 210 | 205 | 205 ^{-0.050 -0.096} | 210 ^{+0.046 0} | | | | | | 20580 | 205100 | 205120 |
| SF-4□ | 220 | 215 | 215 ^{-0.050 -0.096} | 220 ^{+0.046 0} | | | | | | 21580 | 215100 | 215120 |
| SF-4□ | 230 | 225 | 225 ^{-0.050 -0.096} | 230 ^{+0.046 0} | | | | | | 22580 | 225100 | 225120 |
| SF-4□ | 240 | 235 | 235 ^{-0.050 -0.096} | 240 ^{+0.046 0} | | | | | | 23580 | 235100 | 235120 |
| SF-4□ | 250 | 245 | 245 ^{-0.050 -0.096} | 250 ^{+0.046 0} | | | | | | 24580 | 245100 | 245120 |
| SF-4□ | 265 | 260 | 260 ^{-0.056 -0.108} | 265 ^{+0.052 0} | | | | | | 26080 | 260100 | 260120 |
| SF-4□ | 285 | 280 | 280 ^{-0.056 -0.108} | 285 ^{+0.052 0} | | | | | | 28080 | 280100 | 280120 |
| SF-4□ | 305 | 300 | 300 ^{-0.056 -0.108} | 305 ^{+0.052 0} | | | | | | 30080 | 300100 | 300120 |

SF-40F/41F/42F 标准公制翻边轴套

Metric Standard Flange Bushing



※标准翻边套标注方式 Standard Flange Bushing Label Mode SF-4□F 2520

单位Unit: mm

| 型号规格 Designation | 内径 Ø d | 外径 Ø D | 法兰外径 Ø D ₁ ± 0.5 | 法兰壁厚 h ⁰ _{-0.20} | 高度 L ± 0.25 | f1 | f2 | 相配轴径 Axle | 相配座孔 Housing | | |
|---------------------|-----------|-----------|--------------------------------|---|----------------|-----|---|--|-----------------------------------|--|-----------------------------------|
| SF-4□F 2520 | 25 | 28 | 35 | 1.5 | 20 | 0.8 | 0.4 | 25 ^{-0.020} _{-0.041} | 28 ^{+0.021} ₀ | | |
| SF-4□F 2525 | | | | | 25 | | | | | | |
| SF-4□F 3020 | 30 | 34 | 45 | 2.0 | 20 | 1.2 | 0.6 | 30 ^{-0.020} _{-0.041} | 34 ^{+0.025} ₀ | | |
| SF-4□F 3025 | | | | | 25 | | | | | | |
| SF-4□F 3030 | | | | | 30 | | | | | | |
| SF-4□F 3530 | 35 | 39 | 50 | | 30 | | | 35 ^{-0.025} _{-0.050} | 39 ^{+0.025} ₀ | | |
| SF-4□F 3540 | | | | | 40 | | | | | | |
| SF-4□F 3550 | | | | | 50 | | | | | | |
| SF-4□F 4030 | | | | | 30 | | | | | | |
| SF-4□F 4040 | 40 | 44 | 55 | | 40 | | | 40 ^{-0.025} _{-0.050} | 44 ^{+0.025} ₀ | | |
| SF-4□F 4050 | | | | | 50 | | | | | | |
| SF-4□F 5030 | 50 | 55 | 65 | | 30 | | | 1.6 | 0.8 | 50 ^{-0.025} _{-0.050} | 55 ^{+0.030} ₀ |
| SF-4□F 5040 | | | | | 40 | | | | | | |
| SF-4□F 5050 | | | | | 50 | | | | | | |
| SF-4□F 5530 | 55 | 60 | 70 | | 30 | | | | | 55 ^{-0.030} _{-0.060} | 60 ^{+0.030} ₀ |
| SF-4□F 5540 | | | | | 40 | | | | | | |
| SF-4□F 5550 | | | | | 50 | | | | | | |
| SF-4□F 6040 | | | | | 40 | | | | | | |
| SF-4□F 6050 | 60 | 65 | 75 | | 50 | | | | | 60 ^{-0.030} _{-0.060} | 65 ^{+0.030} ₀ |
| SF-4□F 6060 | | | | | 60 | | | | | | |
| SF-4□F 8050 | 80 | 85 | 100 | 50 | 2.5 | 1.6 | 80 ^{-0.030} _{-0.060} | | | 85 ^{+0.035} ₀ | |
| SF-4□F 8060 | | | | 60 | | | | | | | |
| SF-4□F 8080 | | | | 80 | | | | | | | |
| SF-4□F 10050 | 100 | 105 | 120 | 50 | | | 100 ^{-0.036} _{-0.071} | | | 105 ^{+0.035} ₀ | |
| SF-4□F 10060 | | | | 60 | | | | | | | |
| SF-4□F 10080 | | | | 80 | | | | | | | |
| SF-4□F 16060 | 160 | 165 | 190 | 60 | | | 160 ^{-0.043} _{-0.083} | | | 165 ^{+0.040} ₀ | |
| SF-4□F 16080 | | | | 80 | | | | | | | |
| SF-4□F 20060 | 200 | 205 | 235 | 60 | | | 200 ^{-0.050} _{-0.096} | | | 205 ^{+0.046} ₀ | |
| SF-4□F 20080 | | | | 80 | | | | | | | |



SF-50/51/52/53/54/55 镶嵌式固体润滑轴承
Solid-lubricant inlaid bearing

该产品以高强度铜合金为基体，镶嵌特殊配方的固体润滑剂和润滑油，在摩擦过程中逐步释放润滑油和固体润滑剂。产品被广泛应用于注塑机，汽车模具、工程机械、食品机械、水轮机轴承等。

SF-50/51/52/53/54/55 Solid-lubricant inlaid bearing use high grade metal alloys as their base material, inlaid graphite and grease during the process of friction, it will release solidlubricant and lubricant oil automatically. The products are widely used in injection molding, automobile mold, engineering machine, food machinery and water turbines, etc.

※合金材料： Metal Material

| 型号 Type 对应牌号 Corresponding brands | SF-50 | SF-51 | SF-52 | SF-53 | SF-54 | SF-55 |
|--|----------------------|----------------------|---------------------|--------|---------|----------------|
| 中国牌号 GB1776-87 China Brands GB1776-87 | ZCuZn25 Al6Fe3Mn3 | ZCuZn25 Al6Fe3Mn3 | ZCuAl9Fe4 Ni4Mn2 | GCr15 | HT250 | ZCuSn10 Zn2 |
| 国际 ISO1338 International ISO1338 | GCuZn25 Al6Fe3Mn3 | GCuZn25 Al6Fe3Mn3 | GCuAl10 Fe3Ni5 | B1 | — | GCuSn10 Zn2 |
| 德国 DIN Germany DIN | G-CuZn25 Al5 | G-CuZn25 Al5 | G-CuAl10 Ni | 100Cr6 | — | G-CuSn10 Zn |
| 日本 JIS Japan JIS | HBsC4 | HBsC4 | AIBC3 | SUJ2 | FC250 | BC3 |
| 美国 ASTM / UNS America ASTM / UNS | C86300 | C86300 | C95500 | 52100 | Class40 | C90500 |
| 英国标准 (BS) England Standard | HTB2 | HTB2 | AB2 | — | — | G1 |

※技术参数： Technical Data

| 性能指标 Performance index 型号 Type | SF-50 | SF-51 | SF-52 | SF-53 | SF-54 | SF-55 |
|---|-----------------------------------|-------|-------|--------------------------------|-------|-------|
| 最大动承载 P (N/mm ²) Max Move Load Capacity | 100 | 150 | 50 | 200 | 15 | 70 |
| 最大线速度 V (m/min) Max sliding Speed | 15 | 10 | 20 | 5 | 15 | 10 |
| 最高 PV 值 (N/mm ² · m/min) Max PV Value Limit | 200 | 200 | 200 | 150 | 40 | 200 |
| 密度 ρ (g/cm ³) Density | 8.0 | 8.0 | 7.6 | 7.8 | 7.3 | 8.8 |
| 抗拉强度 (N/mm ²) Tensile Strength | > 750 | > 780 | > 500 | > 1500 | > 250 | > 350 |
| 延伸率 (%) Elongation | > 12 | > 4 | > 10 | — | — | > 8 |
| 硬度 (HB) Hardness | > 210 | > 250 | > 150 | HRC > 55 | > 160 | > 80 |
| 最高使用温度 ℃ Max Working Temperature | 300 | 300 | 400 | 300 | 400 | 400 |
| 摩擦系数 μ Friction coefficient | 油润滑：0.03 Oil Lubrication: 0.03 | | | 干摩擦：0.16 Dry Friction: 0.16 | | |

SF-50/51/52/53/54/55 镶嵌式固体润滑轴承

Solid-lubricant inlaid bearing

※材料合金化学成份： Alloy Chemical Compositions

| 化学元素 Chemical elements | SF-50 | SF-51 | SF-52 | SF-53 | SF-54 | SF-55 |
|---------------------------|-------|-------|-------|-------------|-------|-------|
| Cu (%) | Rest | Rest | Rest | — | — | Rest |
| Sn (%) | — | — | — | — | — | 10 |
| Zn (%) | 25 | 25 | — | — | — | 2 |
| Ni (%) | — | — | 4 | — | — | — |
| Al (%) | 6 | 6 | 9 | — | — | — |
| Fe (%) | 3 | 3 | 4 | Rest | — | — |
| Mn (%) | 3 | 3 | 2 | 0.20 ~ 0.40 | — | — |
| Cr (%) | — | — | — | 1.30 ~ 1.65 | — | — |
| C (%) | — | — | — | 0.95 ~ 1.05 | — | — |
| Si (%) | — | — | — | 0.15 ~ 0.35 | — | — |

※固体润滑剂： Solid Lubricants

| 固体润滑剂代号 Codes Of Solid Lubricants | SM01 | SM02 | SM03 |
|--------------------------------------|--|--|--|
| 主要成份 Main Compositions | 石墨 Graphite | 石墨+二硫化钼 Graphite+MoS2 | 聚四氟乙烯+石墨+石蜡 PTFE+Graphite+Olefin |
| 特性 Features | 很好的化学稳定性， 使用温度 < 250℃ Good chemical stability, temperature < 250℃ | 很好的耐磨性和化学稳定性， 使用温度 < 400℃ Good wear performance and chemical stability, temperature < 400℃ | 极低的摩擦系数和很好的水润滑性， 使用温度范围-40 ~ 80℃ Lowest friction coefficient and good water lubrication,temperature Rang -40 ~ 80℃ |
| 适用场合 Application Place | 一般用 (大气) General(atmosphere) | 高温、高载荷 High temperature, high load capacity | 海 (水) 用，高压用 Seawater use, high pressure use |

镶嵌式固体润滑轴承的特性

The Advantages Of The Solid-lubricant Inlaid Bushing

1、无给油可使用

Dry operation.

2、高载荷、低转速的情况，仍可发挥优越的性能

Can be Performed well with high load and low speed.

3、往返运动、摇摆运动、起动停止频繁等油膜形成困难的场所，仍可发挥优越的耐磨性

Reciprocating motion, wagging motion, start and stop frequently are difficulty for keeping oil surface. It still may play advantageous of wear-resistance.

4、优越的耐药品性及耐蚀性

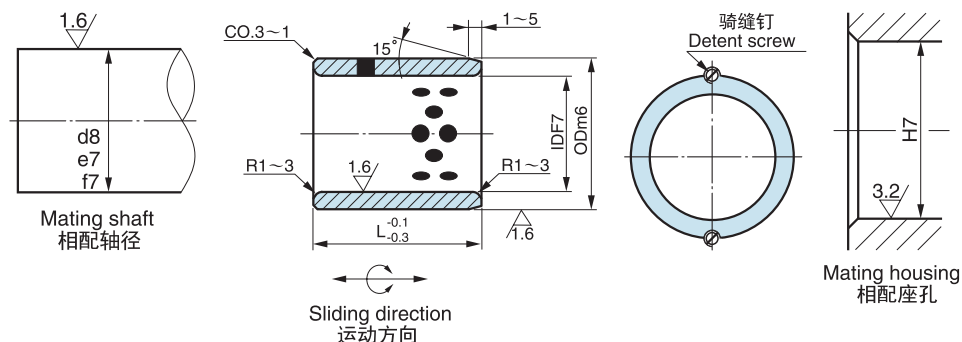
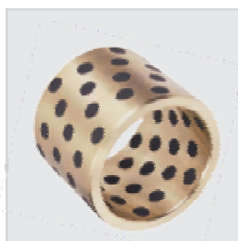
Excellent chemical resistance and low wear.

5、设计灵活、简单、方便，丰富的标准品，可配标准轴心使用

Flexible, simple, convenient and abundant designing of standard , can be choosed by standard axes.

SF-50 铜基镶嵌式固体润滑轴承

Cast Bronze Solid-lubricant inlaid bearing



※标准产品标注方式: Standard Bushing Label Mode SF-50 081208

单位Unit: mm

| d | D | ID F7 | OD m6 | L ^{-0.10 -0.30} | | | | | | | | | |
|----|----|-------|------------------|------------------------------|------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | 8 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 |
| 8 | 12 | 8 | +0.028 +0.013 | 12 | +0.018 +0.007 | 081208 | 081210 | 081215 | | | | | |
| 10 | 14 | 10 | | 14 | | 101408 | 101410 | 101415 | 101420 | | | | |
| 12 | 18 | 12 | +0.034 +0.016 | 18 | +0.021 +0.008 | | 121810 | 121815 | 121820 | 121825 | | | |
| 13 | 19 | 13 | | 19 | | | 131910 | 131915 | 131920 | | | | |
| 14 | 20 | 14 | | 20 | | | 142010 | 142015 | 142020 | 142025 | | | |
| 15 | 21 | 15 | | 21 | | | 152110 | 152115 | 152120 | 152125 | | | |
| 16 | 22 | 16 | | 22 | | | 162210 | 162215 | 162220 | 162225 | | | |
| 18 | 24 | 18 | +0.041 +0.020 | 24 | +0.025 +0.009 | | | 182415 | 182420 | 182425 | 182430 | | |
| 20 | 28 | 20 | | 28 | | | | 202815 | 202820 | 202825 | 202830 | | |
| 20 | 30 | 20 | | 30 | | | | | 203020 | 203025 | 203030 | 203035 | |
| 22 | 32 | 22 | | 32 | | | | 223215 | 223220 | 223225 | 223230 | | |
| 25 | 33 | 25 | | 33 | | | | 253315 | 253320 | 253325 | 253330 | 253335 | |
| 25 | 35 | 25 | +0.050 +0.025 | 35 | | | | 253515 | 253520 | 253525 | 253530 | 253535 | |
| 28 | 38 | 28 | | 38 | | | | | 283820 | 283825 | 283830 | 283835 | |
| 30 | 38 | 30 | | 38 | | | | | 303820 | 303825 | 303830 | 303835 | 303840 |
| 30 | 40 | 30 | | 40 | | | | | 304020 | 304025 | 304030 | 304035 | 304040 |
| 32 | 42 | 32 | | 42 | | | | | | 324230 | 324235 | 324240 | |
| 35 | 45 | 35 | +0.050 +0.025 | 45 | | | | | | 354530 | 354535 | 354540 | 354550 |
| 38 | 48 | 38 | | 48 | | | | | | 384830 | 384835 | 384840 | 384850 |
| 40 | 50 | 40 | | 50 | | | | | | 405030 | 405035 | 405040 | 405050 |
| | | | | | | | | | | | | 405060 | |

SF-50 铜基镶嵌式固体润滑轴承

Cast Bronze Solid-lubricant inlaid bearing

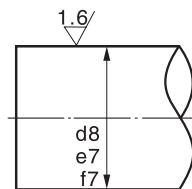
| d | D | ID F7 | | OD m6 | | L -0.10 -0.30 | | | | | | | |
|-----|-----|-------|------------------|-------|------------------|---------------------|--------|--------|---------|----------|----------|----------|-----------|
| | | | | | | 30 | 35 | 40 | 50 | 60 | 70 | 80 | 100 |
| 40 | 55 | 40 | +0.050 +0.025 | 55 | +0.030 +0.011 | 405530 | 405535 | 405540 | 405550 | 405560 | | | |
| 45 | 60 | 45 | | 60 | | | 456035 | 456040 | 456050 | 456060 | | | |
| 50 | 60 | 50 | | 60 | | | 506035 | 506040 | 506050 | 506060 | 506070 | | |
| 50 | 62 | 50 | | 62 | | | 506235 | 506240 | 506250 | 506260 | 506270 | | |
| 50 | 65 | 50 | | 65 | | | | 506540 | 506550 | 506560 | 506570 | | |
| 55 | 70 | 55 | +0.060 +0.030 | 70 | +0.035 +0.013 | | | 557040 | 557050 | 557060 | 557070 | | |
| 60 | 74 | 60 | | 74 | | | | 607440 | 607450 | 607460 | 607470 | | |
| 60 | 75 | 60 | | 75 | | | | 607540 | 607550 | 607560 | 607570 | | |
| 63 | 75 | 63 | | 75 | | | | | 637550 | 637560 | 637570 | | |
| 65 | 80 | 65 | | 80 | | | | | 658050 | 658060 | 658070 | 658080 | |
| 70 | 85 | 70 | | 85 | +0.040 +0.015 | | | | 708550 | 708560 | 708570 | 708580 | |
| 70 | 90 | 70 | | 90 | | | | | 709050 | 709060 | 709070 | 709080 | |
| 75 | 90 | 75 | | 90 | | | | | 759060 | 759070 | 759080 | | |
| 80 | 96 | 80 | | 96 | | | | | 809650 | 809660 | 809670 | 809680 | |
| 80 | 100 | 80 | | 100 | | | | | 8010050 | 8010060 | 8010070 | 8010080 | |
| 100 | 120 | 100 | +0.071 +0.036 | 120 | | | | | | 10012060 | 10012070 | 10012080 | 100120100 |
| 110 | 130 | 110 | | 130 | | | | | | | 11013070 | 11013080 | 110130100 |
| 120 | 140 | 120 | | 140 | | | | | | | 12014070 | 12014080 | 120140100 |
| 125 | 145 | 125 | +0.083 +0.043 | 145 | | | | | | | | 12514580 | 125145100 |
| 130 | 150 | 130 | | 150 | | | | | | | | 13015080 | 130150100 |
| 140 | 160 | 140 | | 160 | | | | | | | | 14016080 | 140160100 |
| 150 | 170 | 150 | | 170 | | | | | | | | 15017080 | 150170100 |
| 160 | 180 | 160 | | 180 | | | | | | | | 16018080 | 160180100 |

※推荐座孔公差H7，轴径公差d8（高承载）、e7（低承载）、f7（高精度）

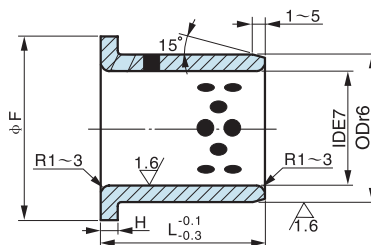
Note: recommended tolerance of the housing is H7 and the diameter tolerance of the shaft is d8 (High Load).
e7 (Low Load) or f7(High Precision)

SF-50F 铜基翻边镶嵌式固体润滑轴承

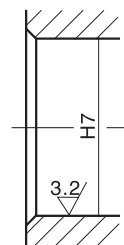
Cast Bronze flanged solid-lubricant-inlaid bearing



Mating shaft
相配轴径



Sliding direction
运动方向



Mating housing
相配座孔

※标准产品标注方式: Standard Bushing Label Mode SF-50F 1015

单位Unit: mm

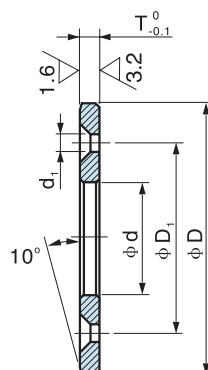
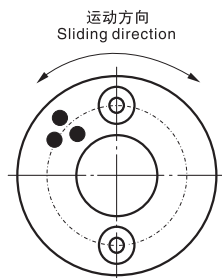
| ID E7 | | OD r6 | | F | H ⁰ _{-0.10} | L ^{-0.10} _{-0.30} | | | | | | | | | | |
|-------|------------------|------------------|------------------|------|---------------------------------|-------------------------------------|------|------|------|------|-------|-------|--------|------|-------|--|
| | | | | | | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 80 | 100 | |
| 10 | +0.040 +0.025 | 14 | +0.034 +0.023 | 22 | 2 | 1015 | 1020 | | | | | | | | | |
| 12 | +0.050 +0.032 | 18 | | 25 | 3 | 1215 | 1220 | | | | | | | | | |
| 13 | | 19 | 26 | 1315 | | 1320 | | | | | | | | | | |
| 14 | | 20 | 27 | 1415 | | 1420 | | | | | | | | | | |
| 15 | | 21 | 28 | 1515 | | 1520 | 1525 | 1530 | | | | | | | | |
| 16 | | 22 | 29 | 1615 | | 1620 | 1625 | 1630 | | | | | | | | |
| 20 | +0.061 +0.040 | 30 | +0.041 +0.028 | 40 | 5 | | 2020 | 2025 | 2030 | 2035 | | | | | | |
| 25 | | 35 | | 45 | | | 2520 | 2525 | 2530 | 2535 | | | | | | |
| 30 | | 40 | | 50 | | | 3020 | 3025 | 3030 | 3035 | 3040 | 3050 | | | | |
| 35 | +0.075 +0.050 | 45 | | 60 | | | | 3525 | 3530 | 3535 | 3540 | 3550 | | | | |
| 40 | | 50 | | 65 | | | | | 4030 | 4035 | 4040 | 4050 | | | | |
| 45 | | 55 | | 70 | | | | | 4530 | 4535 | 4540 | 4550 | 4560 | | | |
| 50 | | 60 | 75 | | | | | | | 5050 | 5050 | 5060 | | | | |
| 55 | +0.060 +0.034 | 65 | 80 | 7.5 | | | | | | | 5540 | 5550 | 5560 | | | |
| 60 | | 75 | 90 | | | | | | | 6040 | 6050 | 6060 | 6080 | | | |
| 70 | | 85 | 105 | | | | | | | | 7050 | 7060 | 7080 | | | |
| 75 | | 90 | 110 | | | | | | | | 7550 | 7560 | | | | |
| 80 | | +0.073 +0.051 | 100 | 120 | 10 | | | | | | | | 8060 | 8080 | 80100 | |
| 100 | 120 | | 150 | | | | | | | | 10060 | 10080 | 100100 | | | |
| 120 | 140 | | 170 | | | | | | | | 12060 | 12080 | 120100 | | | |

※推荐座孔公差H7, 轴径公差d8 (高承载)、e7 (低承载)、f7 (高精度)

Note: recommended tolerance of the housing is H7 and the diameter tolerance of the shaft is d8 (High Load).
e7 (Low Load) or f7(High Precision)

SF-50W 止推垫片

Oilless Thrust Washers



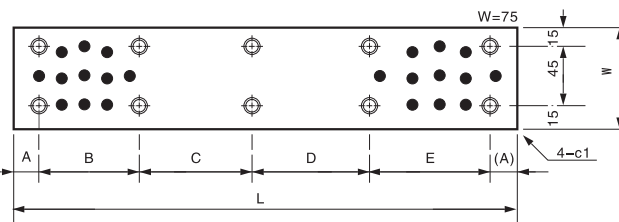
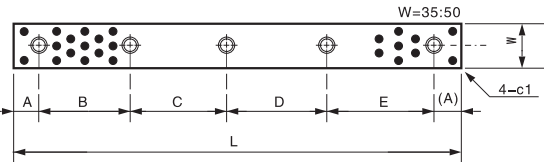
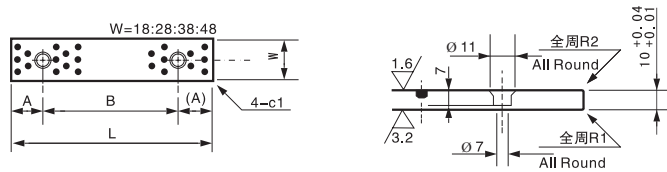
※标准产品标注方式: Standard Bushing Label Mode SF-50 W10

单位Unit: mm

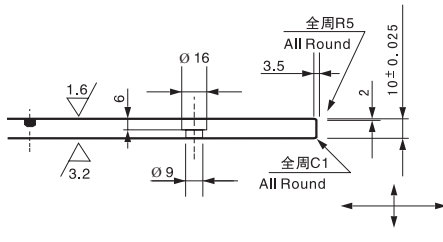
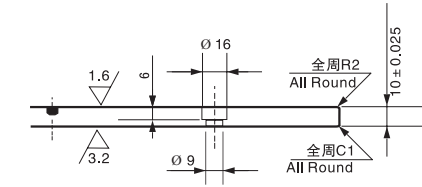
| 型号规格 Designation | Ø d | Ø D | T ⁰ _{-0.10} | 螺孔 Bolt Hole | | | |
|---------------------|-------|-----|---------------------------------|------------------|-------------------|-------------------|------------------|
| | | | | □ D ₁ | 平头螺钉 Crop Bolt | 孔数 Bore Number | Ø d ₁ |
| SF-50 W10 | 10.2 | 30 | 3 | 20 | M3 | 2 | 3.5 |
| SF-50 W12 | 12.2 | 40 | | 28 | M3 | 2 | 3.5 |
| SF-50 W13 | 13.2 | | | | | | |
| SF-50 W14 | 14.2 | | | | | | |
| SF-50 W15 | 15.2 | 50 | | 35 | — | — | — |
| SF-50 W16 | 16.2 | | | | | | |
| SF-50 W16A | | | | | | | |
| SF-50 W18 | 18.2 | | | 35 | | | |
| SF-50 W20 | 20.2 | 5 | M5 | 6.0 | | | |
| SF-50 W20A | | | — | — | — | — | |
| SF-50 W25 | 25.2 | 55 | 40 | M5 | 2 | 6 | |
| SF-50 W25A | | | — | — | — | — | |
| SF-50 W30 | 30.2 | 60 | 5 | 45 | M5 | 2 | 6 |
| SF-50 W35 | 35.2 | 70 | | 50 | | | |
| SF-50 W40 | 40.2 | 80 | 7 | 60 | M6 | 2 | 7 |
| SF-50 W45 | 45.3 | 90 | | 67.5 | | | |
| SF-50 W50 | 50.3 | 100 | 8 | 75 | M6 | 4 | 7 |
| SF-50 W55 | 55.3 | 110 | | 85 | | | |
| SF-50 W60 | 60.3 | 120 | | 90 | M8 | 4 | 9 |
| SF-50 W70 | 70.3 | 130 | 10 | 100 | M8 | 4 | 9 |
| SF-50 W75 | 75.3 | 140 | | 110 | | | |
| SF-50 W80 | 80.3 | 150 | | 120 | | | |
| SF-50 W90 | 90.5 | 170 | | 140 | M10 | 4 | 11 |
| SF-50 W100 | 100.5 | 190 | | 160 | | | |
| SF-50 W120 | 120.5 | 200 | | 175 | | | |

SF-50SP 滑板

Oilless Sliding Plate



运动方向
movement direction
W=18:28:38:48



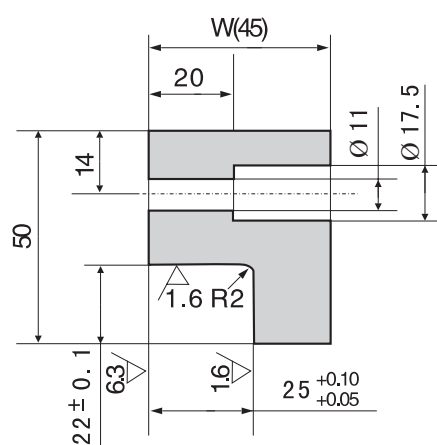
运动方向
movement direction
W > 48

※标准产品标注方式: Standard Bushing Label Mode SF-50SP 1875

单位Unit: mm

| 型号规格 Designation | W ^{-0.10 -0.30} | L ^{-0.10 -0.30} | 螺孔 Bolt Hole | | | | | 平头螺钉 Crop Bolt | |
|---------------------|------------------------------|------------------------------|--------------|-----|-----|-----|----|----------------|----------|
| | | | A | B | C | D | E | 规格Size | 数量Number |
| SF-50SP 1875 | 18 | 75 | 15 | 45 | — | — | — | M6 | 2 |
| SF-50SP 18100 | | 100 | 25 | 50 | — | — | — | | |
| SF-50SP 18125 | | 125 | | 75 | — | — | — | | |
| SF-50SP 18150 | | 150 | | 100 | — | — | — | | |
| SF-50SP 2875 | 28 | 75 | 15 | 45 | — | — | — | M6 | 2 |
| SF-50SP 28100 | | 100 | 25 | 50 | — | — | — | | |
| SF-50SP 28125 | | 125 | | 75 | — | — | — | | |
| SF-50SP 28150 | | 150 | | 100 | — | — | — | | |
| SF-50SP 35100 | 35 | 100 | 20 | 60 | — | — | — | M8 | 3 |
| SF-50SP 35150 | | 150 | | 55 | 55 | — | — | | |
| SF-50SP 35200 | | 200 | | 55 | 50 | 55 | — | | |
| SF-50SP 35250 | | 250 | | 70 | 70 | 70 | — | | |
| SF-50SP 35300 | | 300 | | 65 | 65 | 65 | 65 | | |
| SF-50SP 35350 | | 350 | | 80 | 75 | 75 | 80 | | |
| SF-50SP 3875 | 38 | 75 | 15 | 45 | — | — | — | M6 | 2 |
| SF-50SP 38100 | | 100 | 25 | 50 | — | — | — | | |
| SF-50SP 38125 | | 125 | | 75 | — | — | — | | |
| SF-50SP 38150 | | 150 | | 100 | — | — | — | | |
| SF-50SP 4875 | 48 | 75 | 15 | 45 | — | — | — | M6 | 2 |
| SF-50SP 48100 | | 100 | 25 | 50 | — | — | — | | |
| SF-50SP 48125 | | 125 | | 75 | — | — | — | | |
| SF-50SP 48150 | | 150 | | 100 | — | — | — | | |
| SF-50SP 50100 | 50 | 100 | 20 | 60 | — | — | — | M8 | 3 |
| SF-50SP 50150 | | 150 | | 55 | 55 | — | — | | |
| SF-50SP 50200 | | 200 | | 55 | 50 | 55 | — | | |
| SF-50SP 50250 | | 250 | | 70 | 70 | 70 | — | | |
| SF-50SP 50300 | | 300 | | 65 | 65 | 65 | 65 | | |
| SF-50SP 50350 | | 350 | | 80 | 75 | 75 | 80 | | |
| SF-50SP 75150 | 75 | 150 | 20 | 110 | — | — | — | M8 | 4 |
| SF-50SP 75200 | | 200 | | 80 | 80 | — | — | | |
| SF-50SP 75250 | | 250 | | 105 | 105 | — | — | | |
| SF-50SP 75300 | | 300 | | 85 | 90 | 85 | — | | |
| SF-50SP 75400 | | 400 | | 120 | 120 | 120 | — | | |
| SF-50SP 75450 | | 450 | | 140 | 140 | 140 | — | | |

Echelon sliding liner plate



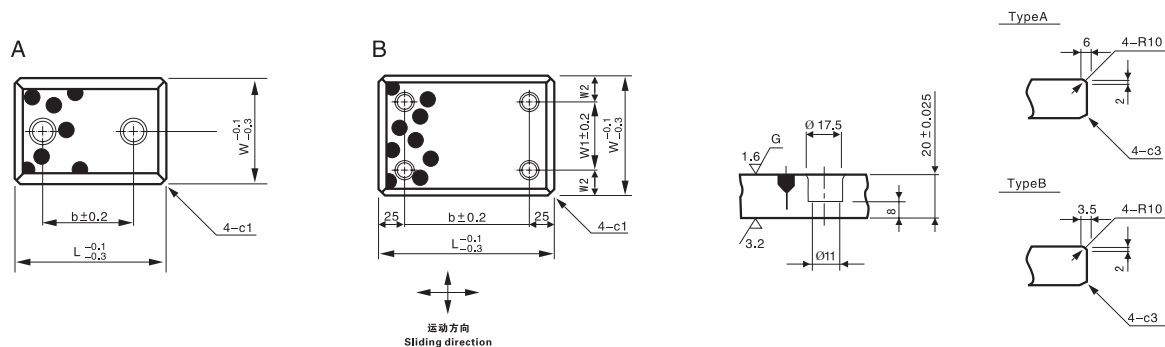
C

单位Unit: mm

| 型号规格 Designation | W | L | 螺孔 Bolt Hole | | | | 螺钉 Bolt | | 类型 Type |
|---------------------|----|-----|--------------|----|----|----|------------|--------------|------------|
| | | | a | b | c | d | 规格 Size | 数量 Number | |
| SF-50SL 20100 | 20 | 100 | 60 | — | — | — | M8 | 2 | A |
| SF-50SL 20150 | | 150 | 55 | 55 | — | — | | 3 | |
| SF-50SL 20200 | | 200 | 55 | 50 | 55 | — | | 4 | |
| SF-50SL 30100 | 30 | 100 | 60 | — | — | — | M10 | 2 | B |
| SF-50SL 30150 | | 150 | 55 | 55 | — | — | | 3 | |
| SF-50SL 30200 | | 200 | 55 | 50 | 55 | — | | 4 | |
| SF-50SL 30250 | | 250 | 70 | 70 | 70 | — | | 4 | |
| SF-50SL 45200 | 45 | 200 | 55 | 50 | 55 | — | M10 | 4 | C |
| SF-50SL 45250 | | 250 | 70 | 70 | 70 | — | | 4 | |
| SF-50SL 45300 | | 300 | 65 | 65 | 65 | 65 | | 5 | |
| SF-50SL 45350 | | 350 | 80 | 75 | 75 | 80 | | 5 | |

SF-50WP 滑块

Wear Plate



※标准产品标注方式：Standard Bushing Label Mode SF-50WP 2875

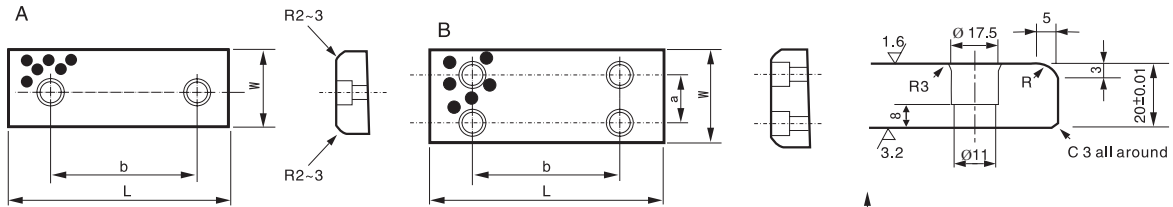
单位Unit: mm

| 型号规格 Designation | W ^{-0.10 -0.30} | L ^{-0.10 -0.30} | W1 | W2 | b | 类型 Type |
|---------------------|------------------------------|------------------------------|-----|------|-----|------------|
| SF-50WP 2875 | 28 | 75 | — | — | 45 | A |
| SF-50WP 28100 | | 100 | | | 50 | |
| SF-50WP 28150 | | 150 | | | 100 | |
| SF-50WP 3875 | 38 | 75 | — | — | 45 | |
| SF-50WP 38100 | | 100 | | | 50 | |
| SF-50WP 38150 | | 150 | | | 100 | |
| SF-50WP 4875 | 48 | 75 | — | — | 45 | |
| SF-50WP 48100 | | 100 | | | 50 | |
| SF-50WP 48150 | | 150 | | | 100 | |
| SF-50WP 48200 | | 200 | | | 150 | |
| SF-50WP 5875 | 58 | 75 | — | — | 45 | |
| SF-50WP 58100 | | 100 | | | 50 | |
| SF-50WP 58150 | | 150 | | | 100 | |
| SF-50WP 7575 | 75 | 75 | — | — | 25 | |
| SF-50WP 75100 | | 100 | | | 50 | |
| SF-50WP 75125 | | 125 | | | 75 | |
| SF-50WP 75150 | | 150 | | | 100 | |
| SF-50WP 75200 | | 200 | | | 150 | |
| SF-50WP 100100 | 100 | 100 | 50 | 25 | 50 | B |
| SF-50WP 100125 | | 125 | | | 75 | |
| SF-50WP 100150 | | 150 | | | 100 | |
| SF-50WP 100200 | | 200 | | | 150 | |
| SF-50WP 125125 | 125 | 125 | 50 | 37.5 | 75 | |
| SF-50WP 125150 | | 150 | | | 100 | |
| SF-50WP 125200 | | 200 | | | 150 | |
| SF-50WP 150150 | 150 | 150 | 100 | 25 | 100 | |
| SF-50WP 150200 | | 200 | | | 150 | |
| SF-50WP 150250 | | 250 | | | 200 | |
| SF-50WP 200200 | 200 | 200 | 150 | 25 | 150 | |
| SF-50WP 200250 | | 250 | | | 200 | |

SF-54MWP 铸铁滑块

Iron Wear Plate

| | |
|----------|----------------|
| 材质 | 铸铁+石墨 |
| Material | FC250+Graphite |



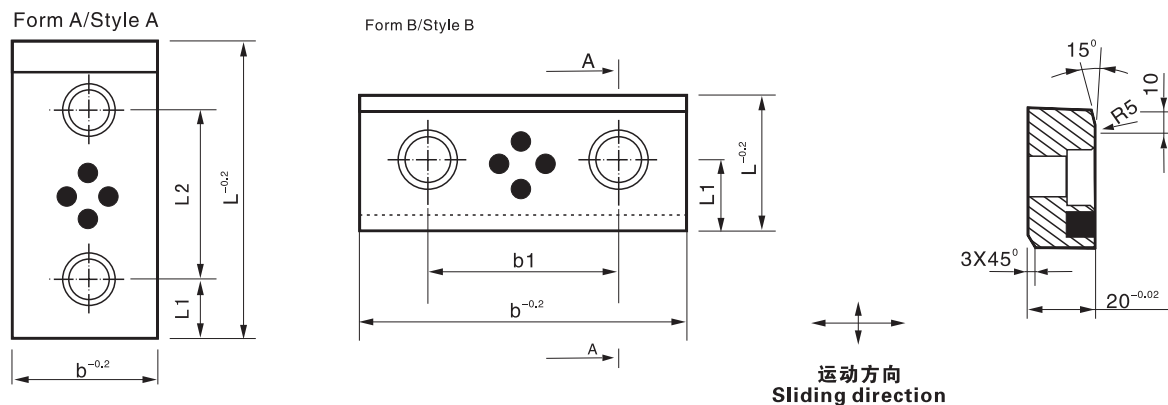
※标准产品标注方式: Standard Bushing Label Mode SF-54MWP 2875

单位Unit: mm

| 型号规格 Designation | W | L | a | b | 类型 Type |
|---------------------|-----|-----|-----|-----|------------|
| SF-54MWP 2875 | 28 | 75 | — | 45 | A |
| SF-54MWP 28100 | | 100 | | 50 | |
| SF-54MWP 28150 | | 150 | | 100 | |
| SF-54MWP 3875 | 38 | 75 | — | 45 | |
| SF-54MWP 38100 | | 100 | | 50 | |
| SF-54MWP 38150 | | 150 | | 100 | |
| SF-54MWP 4875 | 48 | 75 | — | 45 | |
| SF-54MWP 48100 | | 100 | | 50 | |
| SF-54MWP 48150 | | 150 | | 100 | |
| SF-54MWP 48200 | | 200 | | 150 | |
| SF-54MWP 5875 | 58 | 75 | — | 45 | |
| SF-54MWP 58100 | | 100 | | 50 | |
| SF-54MWP 58150 | | 150 | | 100 | |
| SF-54MWP 7575 | 75 | 75 | — | 25 | |
| SF-54MWP 75100 | | 100 | | 50 | |
| SF-54MWP 75125 | | 125 | | 75 | |
| SF-54MWP 75150 | | 150 | | 100 | |
| SF-54MWP 75200 | | 200 | | 150 | |
| SF-54MWP 100100 | 100 | 100 | 50 | 50 | B |
| SF-54MWP 100125 | | 125 | | 75 | |
| SF-54MWP 100150 | | 150 | | 100 | |
| SF-54MWP 100200 | | 200 | | 150 | |
| SF-54MWP 125125 | 125 | 125 | 50 | 75 | |
| SF-54MWP 125150 | | 150 | | 100 | |
| SF-54MWP 125200 | | 200 | | 150 | |
| SF-54MWP 150150 | 150 | 150 | 100 | 100 | |
| SF-54MWP 150200 | | 200 | | 150 | |
| SF-54MWP 150250 | | 250 | | 200 | |
| SF-54MWP 200200 | 200 | 200 | 150 | 150 | |
| SF-54MWP 200250 | | 250 | | 200 | |
| SF-54MWP 200300 | | 300 | | 250 | |

SF-50MSP 模具导板

Mould Slide Plate



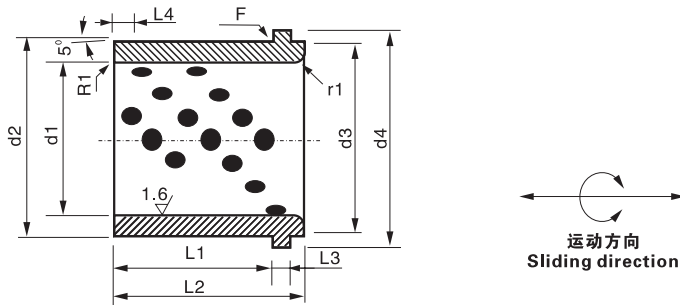
※标准产品标注方式: Standard Bushing Label Mode SF-50MSP 5080

单位Unit: mm

| 型号规格 Designation | W | L | b1 ± 0.1 | L1 ± 0.1 | L2 ± 0.1 | 类型 Type |
|---------------------|-----|-----|----------|----------|----------|------------|
| SF-50MSP 5080 | 50 | 80 | — | 25 | 30 | A |
| SF-50MSP 50100 | 50 | 100 | | 25 | 50 | |
| SF-50MSP 50125 | 50 | 125 | | 25 | 75 | |
| SF-50MSP 50160 | 50 | 160 | | 25 | 110 | |
| SF-50MSP 50200 | 50 | 200 | | 25 | 150 | |
| SF-50MSP 8050 | 80 | 50 | 30 | 25 | — | B |
| SF-50MSP 8050 | 80 | 80 | — | 25 | 30 | A |
| SF-50MSP 80100 | 80 | 100 | | 25 | 50 | |
| SF-50MSP 80125 | 80 | 125 | | 25 | 75 | |
| SF-50MSP 80160 | 80 | 160 | | 25 | 110 | |
| SF-50MSP 80200 | 80 | 200 | | 25 | 150 | |
| SF-50MSP 80250 | 80 | 250 | | 40 | 170 | |
| SF-50MSP 80315 | 80 | 315 | | 40 | 235 | |
| SF-50MSP 10050 | 100 | 50 | 50 | 25 | — | B |
| SF-50MSP 10080 | 100 | 80 | | 40 | — | |
| SF-50MSP 100100 | 100 | 100 | — | 25 | 50 | A |
| SF-50MSP 100125 | 100 | 125 | | 25 | 75 | |
| SF-50MSP 100160 | 100 | 160 | | 25 | 110 | |
| SF-50MSP 100200 | 100 | 200 | | 25 | 150 | |
| SF-50MSP 100250 | 100 | 250 | | 40 | 170 | |
| SF-50MSP 100315 | 100 | 315 | | 40 | 235 | |
| SF-50MSP 12550 | 125 | 50 | 75 | 25 | — | B |
| SF-50MSP 12580 | 125 | 80 | | 40 | — | |
| SF-50MSP 16050 | 160 | 50 | 110 | 25 | — | |
| SF-50MSP 16080 | 160 | 80 | | 40 | — | |

SF-50PGB 偏法兰模具导套

Partial Flange Of Mould Guide Bush



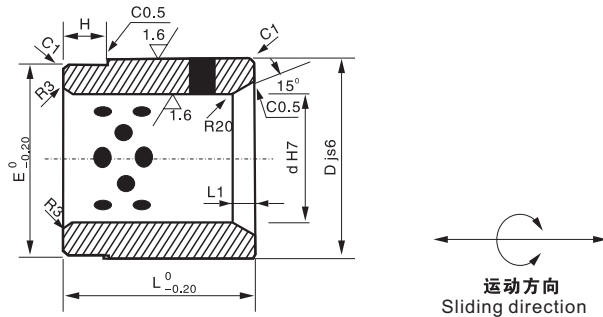
※标准产品标注方式: Standard Bushing Label Mode SF-50PGB 25

单位Unit: mm

| 型号规格 Designation | d1 H7 | d2 h6 | d3 ⁰ _{-0.25} | d4 ⁰ _{-0.80} | L1 ^{-2.0} _{-3.0} | L2 ⁰ _{-1.60} | L3 ^{+0.10} ₀ | L4 ±1.0 | r1 |
|---------------------|----------|----------|----------------------------------|----------------------------------|------------------------------------|----------------------------------|----------------------------------|---------|----|
| SF-50PGB 25 | 25 | 32 | 32 | 40 | 30 | 40 | 6.3 | 4 | 3 |
| SF-50PGB 32 | 32 | 40 | 40 | 50 | 40 | 50 | 6.3 | 4 | 3 |
| SF-50PGB 40 | 40 | 50 | 50 | 63 | 50 | 63 | 6.3 | 5 | 3 |
| SF-50PGB 50 | 50 | 63 | 63 | 71 | 56 | 71 | 6.3 | 6.3 | 5 |
| SF-50PGB 63 | 63 | 80 | 80 | 90 | 63 | 80 | 10 | 8 | 6 |
| SF-50PGB 80 | 80 | 100 | 100 | 112 | 80 | 100 | 10 | 10 | 8 |
| SF-50PGB 100 | 100 | 125 | 125 | 140 | 106 | 125 | 10 | 12.5 | 10 |
| SF-50PGB 125 | 125 | 160 | 160 | 180 | 132 | 160 | 10 | 16 | 12 |
| SF-50PGB 160 | 160 | 200 | 200 | 220 | 170 | 200 | 10 | 16 | 18 |

SF-50MGB 模具导向套

Mould Guide Bush



| | | |
|----------|----------|----------------|
| SF-50MGB | 材质 | 高力黄铜+石墨 |
| | Material | SF-50+Graphite |

| | | |
|----------|----------|----------------|
| SF-54MGB | 材质 | FC250铸铁+石墨 |
| | Material | SF-54+Graphite |

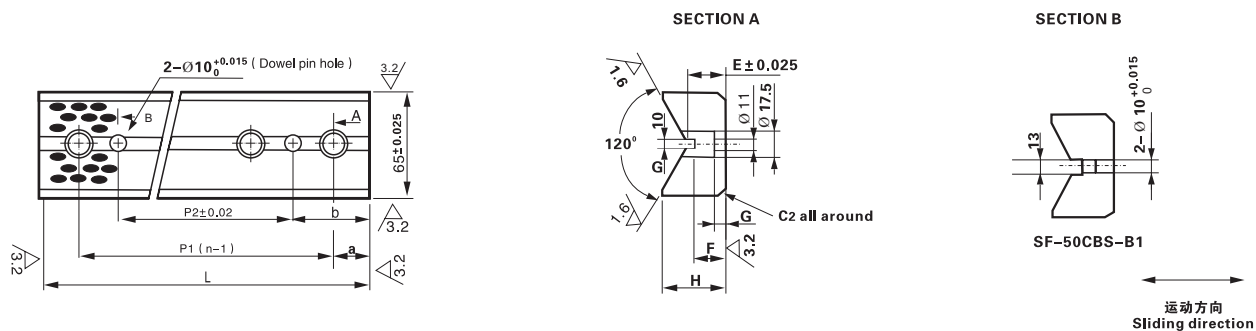
※标准产品标注方式: Standard Bushing Label Mode SF-50MGB 305050

单位Unit: mm

| 型号规格 Designation | Djs6 | dH7 | L ⁰ _{-0.20} | E ⁰ _{-0.20} | H | L1 |
|---------------------|------|-----|---------------------------------|---------------------------------|----|----|
| SF-50MGB 305050 | 50 | 30 | 50 | 49 | 10 | 5 |
| SF-50MGB 406060 | 60 | 40 | 60 | 59 | 10 | 5 |
| SF-50MGB 507075 | 70 | 50 | 75 | 69 | 15 | 5 |
| SF-50MGB 608090 | 80 | 60 | 90 | 79 | 20 | 10 |
| SF-50MGB 80100120 | 100 | 80 | 120 | 99 | 25 | 10 |
| SF-50MGB 100120150 | 120 | 100 | 150 | 119 | 25 | 10 |
| SF-50MGB 120140180 | 140 | 120 | 180 | 139 | 25 | 10 |
| SF-54MGB 305050 | 50 | 30 | 50 | 49 | 10 | 5 |
| SF-54MGB 406060 | 60 | 40 | 60 | 59 | 10 | 5 |
| SF-54MGB 507075 | 70 | 50 | 75 | 69 | 15 | 5 |
| SF-54MGB 608090 | 80 | 60 | 90 | 79 | 20 | 10 |
| SF-54MGB 80100120 | 100 | 80 | 120 | 99 | 25 | 10 |
| SF-54MGB 100120150 | 120 | 100 | 150 | 119 | 25 | 10 |
| SF-54MGB 120140180 | 140 | 120 | 180 | 139 | 25 | 10 |

SF-50CBS 模具导轨

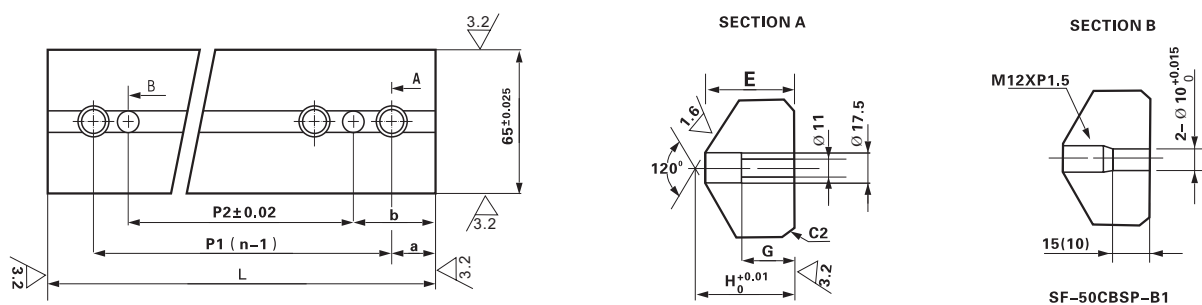
CAM Bottom Guide Plate



※标准产品标注方式: Standard Bushing Label Mode SF-50CBS 100

单位Unit: mm

| 型号规格 Designation | L | H | E | F | G | a | p1 | n | b | p2 |
|---------------------|-----|----|----|----|----|----|-----|---|----|-----|
| SF-50CBS 100 | 100 | 35 | 18 | 15 | 8 | 20 | 60 | 2 | 40 | 20 |
| SF-50CBS 150 | 150 | | | | | 25 | 50 | 3 | 50 | 50 |
| SF-50CBS 200 | 200 | | | | | | | 4 | | 100 |
| SF-50CBS 250 | 250 | | | | | | | 5 | | 150 |
| SF-50CBS 300 | 300 | | | | | | | 6 | | 200 |
| SF-50CBS 100B1 | 100 | 37 | 20 | 20 | 10 | 20 | 60 | 2 | 40 | 20 |
| SF-50CBS 150B1 | 150 | | | | | 25 | 100 | 3 | 50 | 50 |
| SF-50CBS 200B1 | 200 | | | | | | 75 | | | 100 |
| SF-50CBS 250B1 | 250 | | | | | | 100 | | | 150 |
| SF-50CBS 300B1 | 300 | | | | | | 125 | | | 200 |



※标准产品标注方式: Standard Bushing Label Mode SF-50CBSP 100

单位Unit: mm

| 型号规格 Designation | L | H | E | G | a | p1 | n | b | p2 |
|---------------------|-----|----|----|----|----|-----|---|----|-----|
| SF-50CBSP 100 | 100 | 47 | 44 | 20 | 20 | 60 | 2 | 40 | 20 |
| SF-50CBSP 150 | 150 | | | | 25 | 50 | 3 | 50 | 50 |
| SF-50CBSP 200 | 200 | | | | | | 4 | | 100 |
| SF-50CBSP 250 | 250 | | | | | | 5 | | 150 |
| SF-50CBSP 300 | 300 | | | | | | 6 | | 200 |
| SF-50CBSP 100B1 | 100 | 30 | 26 | 10 | 20 | 60 | 2 | 40 | 20 |
| SF-50CBSP 150B1 | 150 | | | | 25 | 100 | 3 | 50 | 50 |
| SF-50CBSP 200B1 | 200 | | | | | 75 | | | 100 |
| SF-50CBSP 250B1 | 250 | | | | | 100 | | | 150 |
| SF-50CBSP 300B1 | 300 | | | | | 125 | | | 200 |

SF-70/71/72/73 粉末冶金轴承
Powder metallurgy bearing



该产品是以铜粉、铁粉为原料，经过模具压制，高温烧结后整形，真空吸油后而成。适用于中速，低载荷的场所。产品被广泛应用于家用电器、电动工具、纺织机械、化工机械、汽车工业和办公设备等。

SF-70/71/72/73 Powder metallurgy bearings as material is copper powder, iron powder . It is though a combination of mold pressing and sintering, inhale oil in vacuum. It is applied for middle speed, low load location. This is widely used in domestic electric and electronic machines, spinning and weaving machinery, chemical engineering machinery, automobiles and official business machines.

※技术参数：Technic Data

| 性能指标 Performance index | | 数据 Data |
|--|-----------------|----------------------------|
| 最大承载 P Max Load Capacity | 静载 Static load | 120N/mm ² |
| | 动载 Dynamic load | 40N/mm ² |
| 最高线速度 V Max Sliding Speed | | 2.0m/s |
| 最高 Pv 值 Max PV Value Limit | | 2.8N/mm ² · m/s |
| 摩擦系数 μ Friction coefficient | | 0.05 ~ 0.22 |
| 使用温度 Working temperature | | -100 ~ +200℃ |
| 导热系数 Thermal conductivity | | 60W/m · k |
| 热膨胀系数 Coefficient of thermal expansion | | 15 × 10 ⁻⁶ /k |

※化学成分和机械性能：
Chemical Compositions and Mechanical Properties

| 型号 Material Type | 化学成分 Chemical Compositions | | | | | | | 机械性能 Mechanical Properties | | | |
|---------------------|----------------------------|-----------|-------------|------------|-----------|-----------|-------|----------------------------|------|---------------------------|---------|
| | Fe | C | Cu | Sn | Zn | Pb | Other | Density g/cm ³ | Oil% | Press Kgf/mm ² | HB |
| SF-70 | Rest | — | 18.0 ~ 22.0 | — | — | — | < 3.0 | 6.0 | ≥ 18 | > 30 | 30 ~ 60 |
| SF-71 | < 0.5 | 0.5 ~ 2.0 | Rest | 5.0 ~ 7.0 | 5.0 ~ 7.0 | 2.0 ~ 4.0 | < 1.5 | 6.4 | ≥ 18 | > 15 | 20 ~ 50 |
| SF-72 | Rest | < 1.0 | — | — | — | — | < 3.0 | 6.0 | ≥ 18 | > 15 | 30 ~ 60 |
| SF-73 | < 0.5 | 0.5 ~ 2.0 | Rest | 8.0 ~ 11.0 | — | — | — | 6.0 | ≥ 25 | > 15 | 25 ~ 55 |

► 产品公差 Tolerance Of Product

| | |
|--------|---|
| 内径公差 | Tolerance Of Inside Diameter: dF7 |
| 外径公差 | Tolerance Of Outsider: Dr7 |
| 高度公差 | Tolerance Of Length: Lhjs13 |
| 法兰直径公差 | Tolerance Of Flange Diameter: D _{ijs} 13 |
| 法兰厚度公差 | Tolerance Of Flange Thickness: Bhjs13 |

