



These are oil-impregnated bearings of our own proprietary lubrication characteristics, in which lipophilic fibers and special filler material are uniformly dispersed within polyacetal plastic resin, a plastic bearing material offering excellent bearing characteristics.

Bimetal type with back metal – DBB01

Features

- 1.Can be used without an oil supply
- 2.Can be used at high-load and at high speed
- 3.Dimensions and shape are stabilized. Thin wall permits compact equipment design.
- 4.Exhibits superior wear resistant properties where oil film formation is difficult such as reciprocating motion, oscillating motion or frequent start/stop
- 5.Abundant standard parts such as wrapped bushes and thrust washers are available.
- 6.There is interchangeability with DDK05 and DBX01 bearing.

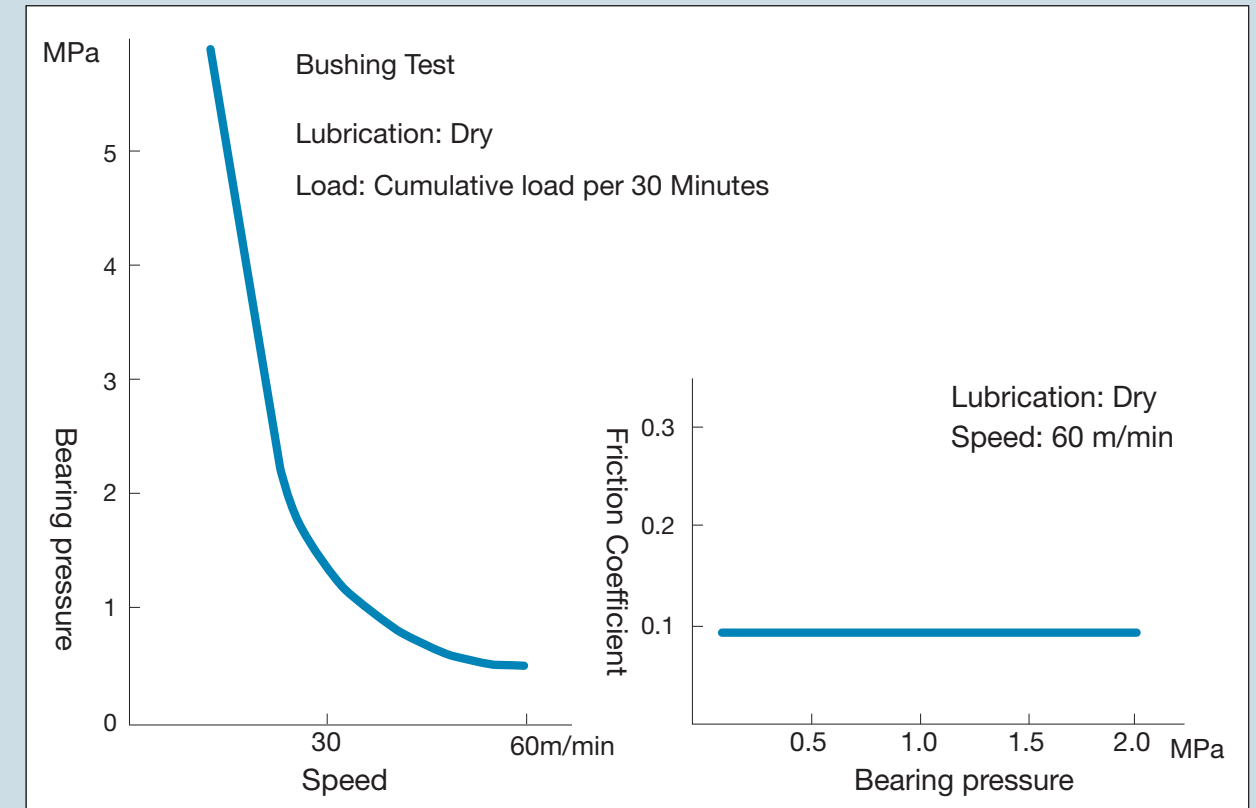
Material Characteristics DAIBEST(Typical Values)

Property of DAIBEST Bearing Resin Layer

| Gravity | Coefficient of Linear Thermal Expansion($\times 10^{-5}/^{\circ}\text{C}$) | Heat Transfer Coefficient (Cal/sec \cdot $^{\circ}\text{C}/\text{cm}$) | Tensile Strength (MPa) | Elongation (%) | Oil Content (%) |
|---------|--|---|------------------------|----------------|-----------------|
| 1.4 | 8.4 | 5.5×10^{-4} | Above 42 | Above 10 | Above 4 |

Bearing Characteristics and Test Data

DBB01

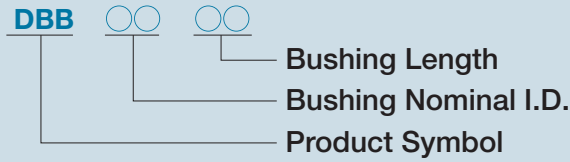


| Lubrication | No Oil supply |
|--|---------------|
| Allowable Max. Load MPa | 68.6 |
| Allowable Max. Speed m/min | 150 |
| Allowable Max. PV value MPa-m/min | 157 |
| Limit Service Temperature $^{\circ}\text{C}$ | -40 – +120 |

When the bearing is used under lubrication the bearing properties will increase depending on the condition.

DBB DBB01 Bushing (Bushing Inner Diameter: 5 to 100 mm)

Designation of Part Number



DBB 0504

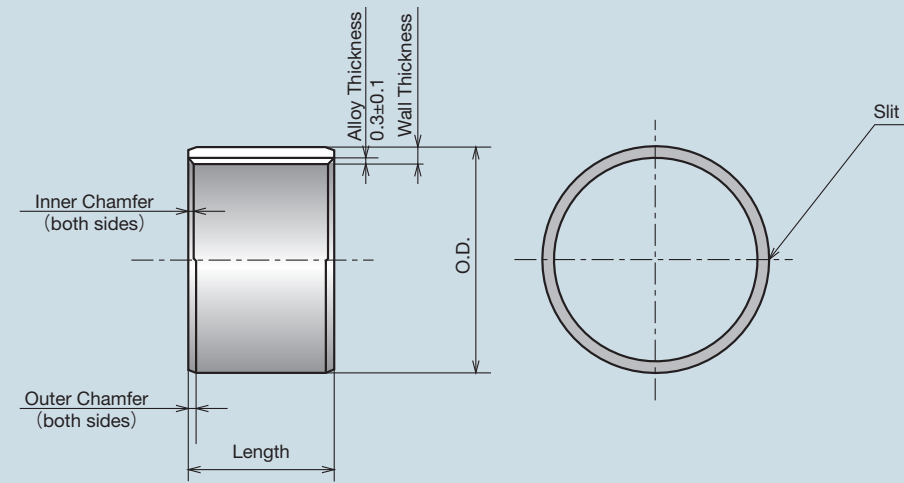
Please specify by part number.



Pb Free

RoHS

ELV



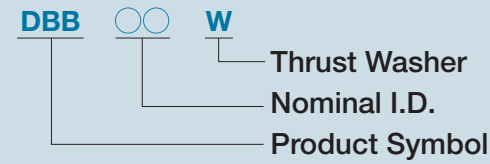
(Unit: mm)

| Bushing I.D. | Recommended Dimension Mating Part | | Bushing Dimensions | | | | | | | | | | | | | | Bushing I.D. | |
|--------------|---|---|--|---|--|-------------|-------------|-------------|-------------|--|-------------|--------------|-------------|--------------|-------------|-------------|--------------|-----|
| | Housing I.D. | Shaft Dia. | O.D. | Wall Thickness | Part Number & Bushing Length Tolerance $_{-0.3}^0$ | | | | | | | | | | | | | |
| | | | | | 4 | 5 | 6 | 7 | 8 | | 10 | 12 | 15 | 20 | 25 | 30 | 40 | |
| 5 | $\phi 7H7$ ^{+0.015} ₀ | $\phi 5h7$ ⁰ _{-0.012} | $\phi 7$ ^{+0.053} _{+0.023} | 1.0 ^{-0.020} _{-0.060} | 0504 | 0505 | 0506 | | 0508 | | | | | | | | | 5 |
| 6 | $\phi 8H7$ ^{+0.015} ₀ | $\phi 6h7$ ⁰ _{-0.012} | $\phi 8$ ^{+0.053} _{+0.023} | 1.0 ^{-0.020} _{-0.060} | | 0605 | 0606 | 0607 | 0608 | | 0610 | | | | | | | 6 |
| 7 | $\phi 9H7$ ^{+0.015} ₀ | $\phi 7h7$ ⁰ _{-0.015} | $\phi 9$ ^{+0.053} _{+0.023} | 1.0 ^{-0.020} _{-0.060} | | 0705 | | 0707 | | | 0710 | 0712 | | | | | | 7 |
| 8 | $\phi 10H7$ ^{+0.015} ₀ | $\phi 8h7$ ⁰ _{-0.015} | $\phi 10$ ^{+0.055} _{+0.025} | 1.0 ^{-0.020} _{-0.060} | | | 0806 | | 0808 | | 0810 | 0812 | | | | | | 8 |
| 10 | $\phi 12H7$ ^{+0.018} ₀ | $\phi 10h7$ ⁰ _{-0.015} | $\phi 12$ ^{+0.053} _{+0.023} | 1.0 ^{-0.020} _{-0.060} | | | 1006 | 1007 | 1008 | | 1010 | 1012 | 1015 | 1020 | | | | 10 |
| 12 | $\phi 14H7$ ^{+0.018} ₀ | $\phi 12h7$ ⁰ _{-0.018} | $\phi 14$ ^{+0.060} _{+0.030} | 1.0 ^{-0.020} _{-0.060} | | | 1206 | | 1208 | | 1210 | 1212 | 1215 | 1220 | | | | 12 |
| 14 | $\phi 16H7$ ^{+0.018} ₀ | $\phi 14h7$ ⁰ _{-0.018} | $\phi 16$ ^{+0.063} _{+0.033} | 1.0 ^{-0.020} _{-0.060} | | | | | | | 1410 | 1412 | 1415 | 1420 | | | | 14 |
| 15 | $\phi 17H7$ ^{+0.018} ₀ | $\phi 15h7$ ⁰ _{-0.018} | $\phi 17$ ^{+0.073} _{+0.038} | 1.0 ^{-0.020} _{-0.060} | | | | | | | 1510 | 1512 | 1515 | 1520 | 1525 | | | 15 |
| 16 | $\phi 18H7$ ^{+0.018} ₀ | $\phi 16h7$ ⁰ _{-0.018} | $\phi 18$ ^{+0.073} _{+0.038} | 1.0 ^{-0.020} _{-0.060} | | | | | | | 1610 | 1612 | 1615 | 1620 | 1625 | | | 16 |
| 18 | $\phi 20H7$ ^{+0.021} ₀ | $\phi 18h7$ ⁰ _{-0.018} | $\phi 20$ ^{+0.081} _{+0.046} | 1.0 ^{-0.020} _{-0.060} | | | | | | | 1810 | 1812 | 1815 | 1820 | 1825 | | | 18 |
| 20 | $\phi 23H7$ ^{+0.021} ₀ | $\phi 20h7$ ⁰ _{-0.021} | $\phi 23$ ^{+0.081} _{+0.046} | 1.5 ^{-0.025} _{-0.065} | | | | | | | 2010 | 2012 | 2015 | 2020 | 2025 | 2030 | | 20 |
| 22 | $\phi 25H7$ ^{+0.021} ₀ | $\phi 22h7$ ⁰ _{-0.021} | $\phi 25$ ^{+0.086} _{+0.051} | 1.5 ^{-0.025} _{-0.065} | | | | | | | 2210 | 2212 | 2215 | 2220 | 2225 | | | 22 |
| 24 | $\phi 27H7$ ^{+0.021} ₀ | $\phi 24h7$ ⁰ _{-0.021} | $\phi 27$ ^{+0.086} _{+0.051} | 1.5 ^{-0.025} _{-0.065} | | | | | | | | | 2415 | 2420 | 2425 | 2430 | | 24 |
| 25 | $\phi 28H7$ ^{+0.021} ₀ | $\phi 25h7$ ⁰ _{-0.021} | $\phi 28$ ^{+0.093} _{+0.056} | 1.5 ^{-0.025} _{-0.065} | | | | | | | 2510 | 2512 | 2515 | 2520 | 2525 | 2530 | | 25 |
| 26 | $\phi 30H7$ ^{+0.021} ₀ | $\phi 26h7$ ⁰ _{-0.021} | $\phi 30$ ^{+0.115} _{+0.075} | 2.0 ^{-0.030} _{-0.080} | | | | | | | | | 2615 | 2620 | | 2630 | | 26 |
| 28 | $\phi 32H7$ ^{+0.025} ₀ | $\phi 28h7$ ⁰ _{-0.021} | $\phi 32$ ^{+0.115} _{+0.075} | 2.0 ^{-0.030} _{-0.080} | | | | | | | | 2812 | 2815 | 2820 | | 2830 | | 28 |
| 30 | $\phi 34H7$ ^{+0.025} ₀ | $\phi 30h7$ ⁰ _{-0.021} | $\phi 34$ ^{+0.115} _{+0.075} | 2.0 ^{-0.030} _{-0.080} | | | | | | | | 3012 | 3015 | 3020 | 3025 | 3030 | 3040 | 30 |
| 32 | $\phi 36H7$ ^{+0.025} ₀ | $\phi 32h7$ ⁰ _{-0.025} | $\phi 36$ ^{+0.115} _{+0.075} | 2.0 ^{-0.030} _{-0.080} | | | | | | | | | | 3220 | 3225 | 3230 | 3240 | 32 |
| | | | | | 12 | 15 | 20 | 25 | 30 | | 40 | 50 | 60 | 70 | 80 | 90 | 95 | |
| 35 | $\phi 39H7$ ^{+0.025} ₀ | $\phi 35h7$ ⁰ _{-0.025} | $\phi 39$ ^{+0.115} _{+0.075} | 2.0 ^{-0.030} _{-0.080} | 3512 | | 3520 | 3525 | 3530 | | 3540 | 3550 | | | | | | 35 |
| 38 | $\phi 42H7$ ^{+0.025} ₀ | $\phi 38h7$ ⁰ _{-0.025} | $\phi 42$ ^{+0.115} _{+0.075} | 2.0 ^{-0.030} _{-0.080} | | | 3820 | | | | 3840 | | | | | | | 38 |
| 40 | $\phi 44H7$ ^{+0.025} ₀ | $\phi 40h7$ ⁰ _{-0.025} | $\phi 44$ ^{+0.115} _{+0.075} | 2.0 ^{-0.030} _{-0.080} | 4012 | | 4020 | 4025 | 4030 | | 4040 | 4050 | | | | | | 40 |
| 45 | $\phi 50H7$ ^{+0.025} ₀ | $\phi 45h7$ ⁰ _{-0.025} | $\phi 50$ ^{+0.115} _{+0.075} | 2.5 ^{-0.040} _{-0.095} | | | 4520 | 4525 | 4530 | | 4540 | 4550 | | | | | | 45 |
| 50 | $\phi 55H7$ ^{+0.030} ₀ | $\phi 50h7$ ⁰ _{-0.025} | $\phi 55$ ^{+0.145} _{+0.095} | 2.5 ^{-0.040} _{-0.095} | | | 5020 | | 5030 | | 5040 | | 5060 | | | | | 50 |
| 55 | $\phi 60H7$ ^{+0.030} ₀ | $\phi 55h7$ ⁰ _{-0.030} | $\phi 60$ ^{+0.145} _{+0.095} | 2.5 ^{-0.040} _{-0.095} | | | | | 5530 | | 5540 | | 5560 | | | | | 55 |
| 60 | $\phi 65H7$ ^{+0.030} ₀ | $\phi 60h7$ ⁰ _{-0.030} | $\phi 65$ ^{+0.145} _{+0.095} | 2.5 ^{-0.040} _{-0.095} | | | | | 6030 | | 6040 | | 6060 | | | | | 60 |
| 65 | $\phi 70H7$ ^{+0.030} ₀ | $\phi 65h7$ ⁰ _{-0.030} | $\phi 70$ ^{+0.145} _{+0.095} | 2.5 ^{-0.040} _{-0.095} | | | | | 6530 | | 6540 | | 6560 | | | | | 65 |
| 70 | $\phi 75H7$ ^{+0.030} ₀ | $\phi 70h7$ ⁰ _{-0.030} | $\phi 75$ ^{+0.145} _{+0.095} | 2.5 ^{-0.040} _{-0.095} | | | | | | | 7040 | | 7060 | | 7080 | | | 70 |
| 75 | $\phi 80H7$ ^{+0.030} ₀ | $\phi 75h7$ ⁰ _{-0.030} | $\phi 80$ ^{+0.145} _{+0.095} | 2.5 ^{-0.040} _{-0.095} | | | | | 7530 | | 7540 | | 7560 | | 7580 | | | 75 |
| 80 | $\phi 85H7$ ^{+0.035} ₀ | $\phi 80h7$ ⁰ _{-0.030} | $\phi 85$ ^{+0.165} _{+0.100} | 2.5 ^{-0.040} _{-0.095} | | | | | | | 8040 | | 8060 | | 8080 | | | 80 |
| 85 | $\phi 90H7$ ^{+0.035} ₀ | $\phi 85h7$ ⁰ _{-0.035} | $\phi 90$ ^{+0.165} _{+0.100} | 2.5 ^{-0.040} _{-0.095} | | | | | | | 8540 | | 8560 | | 8580 | | | 85 |
| 90 | $\phi 95H7$ ^{+0.035} ₀ | $\phi 90h7$ ⁰ _{-0.035} | $\phi 95$ ^{+0.165} _{+0.100} | 2.5 ^{-0.040} _{-0.095} | | | | | | | 9040 | | 9060 | | | 9090 | | 90 |
| 100 | $\phi 105H7$ ^{+0.035} ₀ | $\phi 100h7$ ⁰ _{-0.035} | $\phi 105$ ^{+0.180} _{+0.115} | 2.5 ^{-0.040} _{-0.095} | | | | | | | | 10050 | | 10070 | | | 10095 | 100 |

* Some size requires special coating to avoid lube evaporate.
* Material thickness in the list does not include special coating thickness.

DBB DBB01 Thrust Washer

Designation of Part Number



Pb Free

RoHS

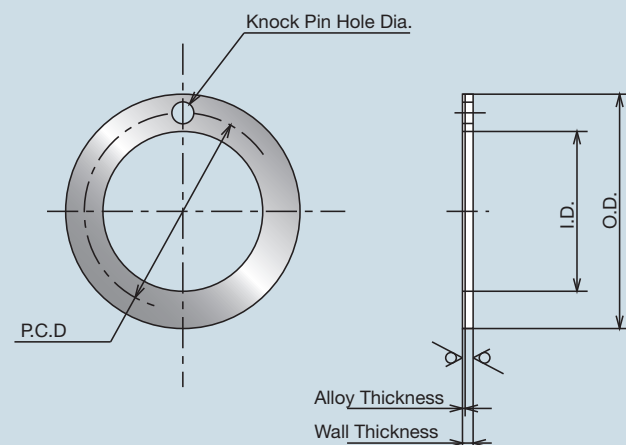
ELV

DBB 10W

Please specify by part number.

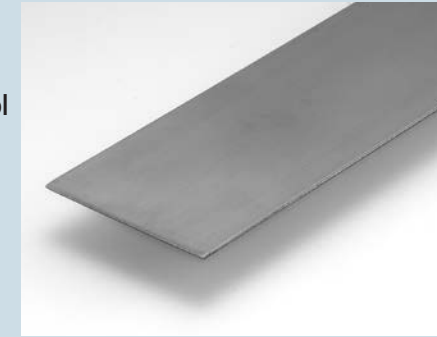
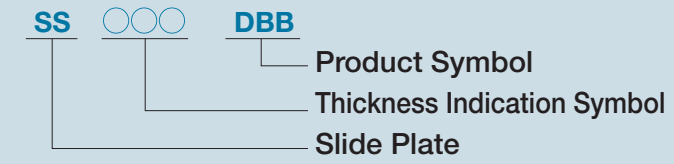
(Unit: mm)

| Nominal I.D. | Part Number | I.D. | O.D. | Thickness | Knock Pin Hole | | Recess Depth | |
|--------------|----------------|----------------------------------|----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------|----------|
| | | | | | Dia. | P. C. D | | |
| 10 | DBB 10W | 12 ^{+0.25} ₀ | 24 ⁰ _{-0.25} | 1.5 ^{-0.05} _{-0.20} | 1.6 ^{+0.45} _{+0.20} | 18 ±0.12 | 1.1 ⁰ _{-0.25} | |
| 12 | DBB 12W | 14 ^{+0.25} ₀ | 26 ⁰ _{-0.25} | | 2.0 ^{+0.45} _{+0.20} | 20 ±0.12 | | |
| 14 | DBB 14W | 16 ^{+0.25} ₀ | 30 ⁰ _{-0.25} | | | 23 ±0.12 | | |
| 16 | DBB 16W | 18 ^{+0.25} ₀ | 32 ⁰ _{-0.25} | | | 25 ±0.12 | | |
| 18 | DBB 18W | 20 ^{+0.25} ₀ | 36 ⁰ _{-0.25} | | | 28 ±0.12 | | |
| 20 | DBB 20W | 23 ^{+0.25} ₀ | 38 ⁰ _{-0.25} | | 3.0 ^{+0.45} _{+0.20} | 31 ±0.12 | | |
| 22 | DBB 22W | 25 ^{+0.25} ₀ | 42 ⁰ _{-0.25} | | | 34 ±0.12 | | |
| 24 | DBB 24W | 27 ^{+0.25} ₀ | 44 ⁰ _{-0.25} | | | 36 ±0.12 | | |
| 25 | DBB 25W | 28 ^{+0.25} ₀ | 48 ⁰ _{-0.25} | | | 4.0 ^{+0.45} _{+0.20} | | 38 ±0.12 |
| 30 | DBB 30W | 34 ^{+0.25} ₀ | 54 ⁰ _{-0.25} | | | | | 44 ±0.12 |
| 35 | DBB 35W | 39 ^{+0.25} ₀ | 62 ⁰ _{-0.25} | 51 ±0.12 | | | | |
| 40 | DBB 40W | 44 ^{+0.25} ₀ | 66 ⁰ _{-0.25} | 55 ±0.12 | | | | |
| 45 | DBB 45W | 50 ^{+0.25} ₀ | 74 ⁰ _{-0.25} | 2.5 ^{-0.05} _{-0.20} | 62 ±0.12 | 1.6 ⁰ _{-0.25} | | |
| 50 | DBB 50W | 55 ^{+0.25} ₀ | 78 ⁰ _{-0.25} | | 67 ±0.12 | | | |



DBB DBB01 Slide Plate

Designation of Part Number



Pb Free

RoHS

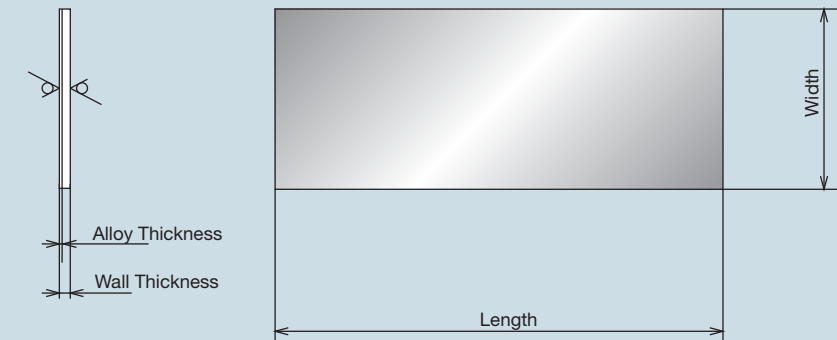
ELV

SS150 DBB

Please specify by part number.

(Unit: mm)

| Part Number | Thickness | Width | Length |
|-----------------|---------------------------------------|----------------------------------|-----------------------------------|
| SS150DBB | 1.5 ^{-0.05} _{-0.20} | 80 ^{+2.0} ₀ | 500 ^{+10.0} ₀ |
| SS200DBB | 2.0 ^{-0.05} _{-0.20} | 100 ^{+2.0} ₀ | |
| SS250DBB | 2.5 ^{-0.05} _{-0.20} | 100 ^{+2.0} ₀ | |



APPLICATION

MANUFACTURE

Polymer
Metallic
MATERIALS AND SIZE

PLANNING

CORPORATE PROFILE

SPECIFICATION SHEET

APPLICATION

MANUFACTURE

Polymer
Metallic
MATERIALS AND SIZE

PLANNING

CORPORATE PROFILE

SPECIFICATION SHEET



These are oil-impregnated bearings of our own proprietary lubrication characteristics, in which lipophilic fibers and special filler material are uniformly dispersed within polyacetal plastic resin, a plastic bearing material offering excellent bearing characteristics.

Solid type – DBS02

Features

- 1.Can be used without oil supply
- 2.Superior load carrying characteristics and wear resistant properties
- 3.Low friction coefficient ($\mu=0.01$ to 0.15) and excellent speed properties
- 4.Minimizes operating noise and free from stick slip phenomenon
- 5.Will not damage the surface of engaging component
- 6.Shaft misalignment tolerance is excellent.

Material: DBS02

POM + special filler material + lipophilic fibers + oil (oil-impregnation rate of 4% or higher)

Material Characteristics (typical values)

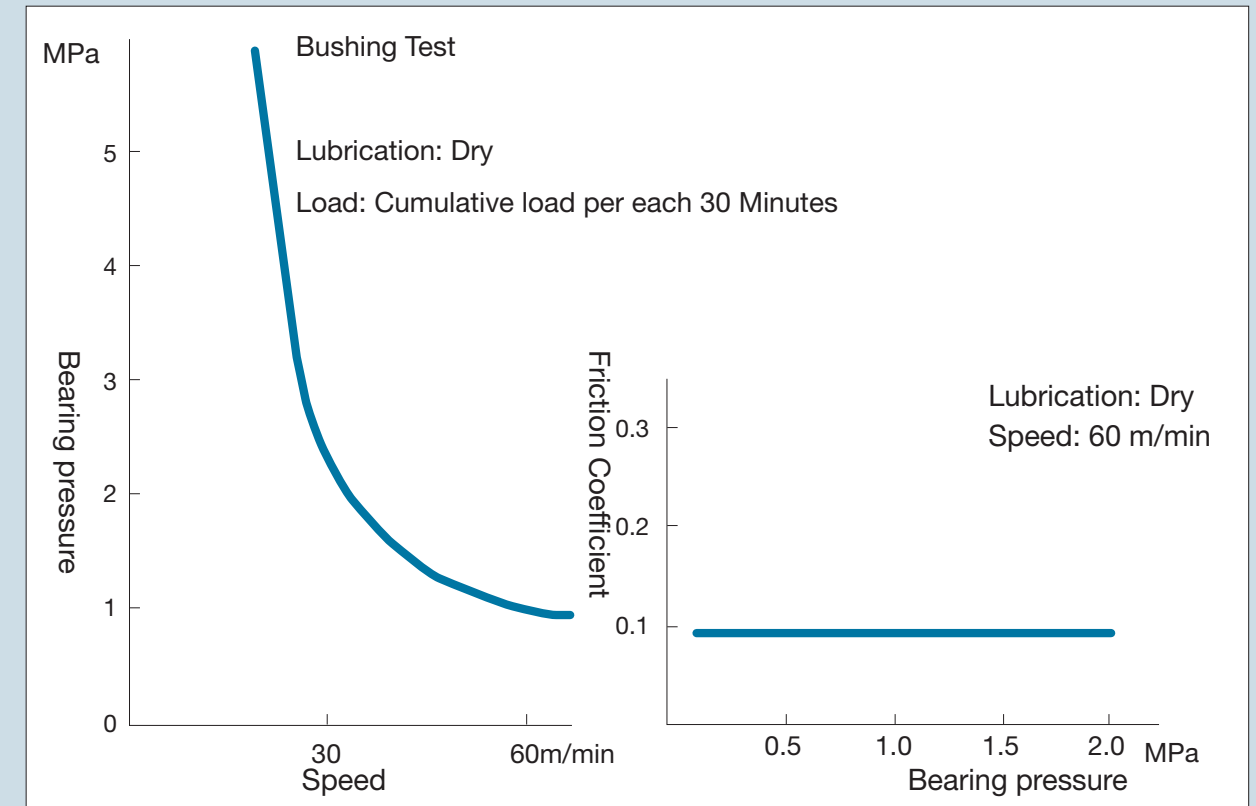
| Specific gravity | Tensile strength (MPa) | Elongation (%) | Hardness (HRM) | Linear-expansion coefficient |
|------------------|------------------------|----------------|----------------|------------------------------|
| 1.47 | 60.8 | 60 | 80 | 9 – 13 |

Sliding Characteristics (typical values)

| Material | Friction coefficient(μ) | Rated maximum load (MPa) | Rated maximum speed (m/min) | Service temperature range(°C) |
|----------|-------------------------------|--------------------------|-----------------------------|-------------------------------|
| DBS02 | 0.01 – 0.15 | 9.6 | 60 | -40 – 80 |

Bearing Characteristics and Test Data

• DBS02

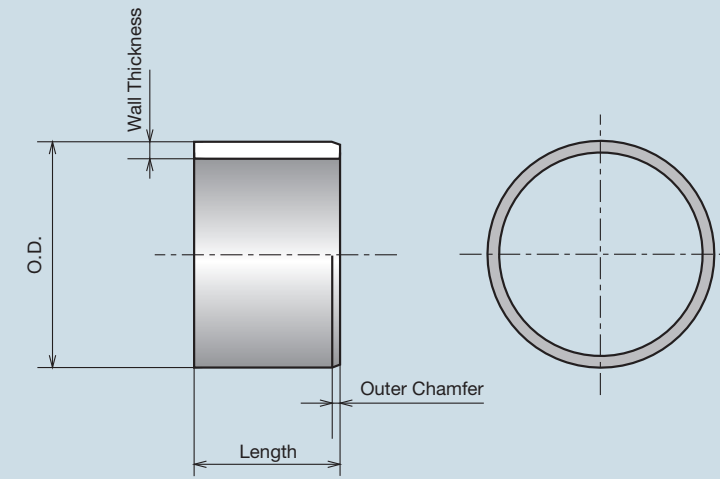
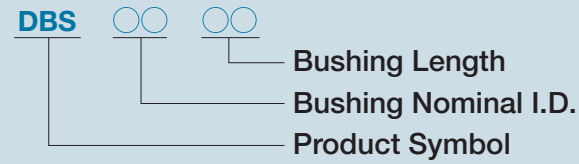


| Lubrication | No Oil supply |
|-----------------------------------|---------------|
| Allowable Max. Load MPa | 9.6 |
| Allowable Max. Speed m/min | 60 |
| Allowable Max. PV value MPa-m/min | 30 |
| Limit Service Temperature °C | -40 – +80 |

When the bearing is used under lubrication the bearing properties will improve depending on the condition.

DBS DBS02 Bushing (Bushing Inner Diameter: 3 to 30 mm)

Designation of Part Number



(Unit: mm)

DBS 0303

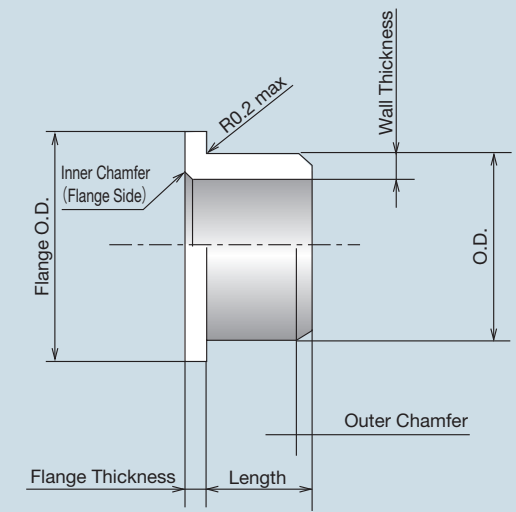
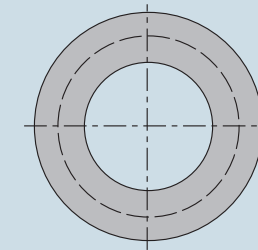
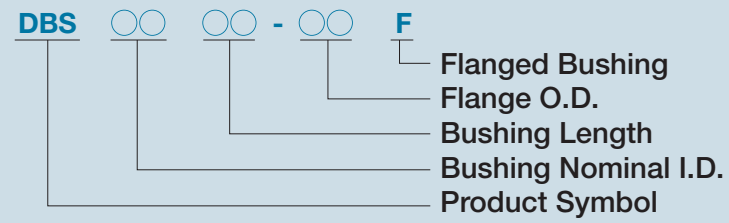
Please specify by part number.

| Bushing I.D. | Recommended Dimension Mating Part | | Bushing Dimensions | | | | | | | | | | | | | | Bushing I.D. | | |
|--------------|-----------------------------------|--------------------------|-----------------------------|--------------------------|--|-------------|-------------|-------------|-------------|-------------|----|-------------|-------------|-------------|-------------|-------------|--------------|-------|--|
| | Housing I.D. | Shaft Dia. | O.D. | Wall Thickness | Part Number & Bushing Length Tolerance $^{0}_{-0.3}$ | | | | | | | | | | | | | | |
| | | | | | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 15 | 20 | 25 | 30 | 40 | | | |
| 3 | $\phi 5H7^{+0.012}_{0}$ | $\phi 3h7^{0}_{-0.010}$ | $\phi 5^{+0.210}_{+0.072}$ | 1.0 $^{-0.015}_{-0.046}$ | 0303 | | 0305 | | | | | | | | | | | 3 | |
| 4 | $\phi 6H7^{+0.012}_{0}$ | $\phi 4h7^{0}_{-0.012}$ | $\phi 6^{+0.210}_{+0.072}$ | 1.0 $^{-0.023}_{-0.078}$ | | 0404 | | 0406 | | | | | | | | | | 4 | |
| 5 | $\phi 7H7^{+0.015}_{0}$ | $\phi 5h7^{0}_{-0.012}$ | $\phi 7^{+0.270}_{+0.095}$ | 1.0 $^{-0.025}_{-0.085}$ | | | 0505 | | 0508 | 0510 | | | | | | | | 5 | |
| 6 | $\phi 8H7^{+0.015}_{0}$ | $\phi 6h7^{0}_{-0.012}$ | $\phi 8^{+0.270}_{+0.095}$ | 1.0 $^{-0.025}_{-0.085}$ | | | 0605 | 0606 | 0608 | 0610 | | | | | | | | 6 | |
| 8 | $\phi 10H7^{+0.015}_{0}$ | $\phi 8h7^{0}_{-0.015}$ | $\phi 10^{+0.270}_{+0.095}$ | 1.0 $^{-0.025}_{-0.085}$ | | | | 0806 | 0808 | 0810 | | 0812 | 0815 | | | | | 8 | |
| 10 | $\phi 12H7^{+0.018}_{0}$ | $\phi 10h7^{0}_{-0.015}$ | $\phi 12^{+0.340}_{+0.108}$ | 1.0 $^{-0.025}_{-0.085}$ | | | | | 1008 | 1010 | | 1012 | 1015 | | | | | 10 | |
| 12 | $\phi 14H7^{+0.018}_{0}$ | $\phi 12h7^{0}_{-0.018}$ | $\phi 14^{+0.340}_{+0.108}$ | 1.0 $^{-0.025}_{-0.085}$ | | | | | | 1210 | | 1212 | 1215 | 1220 | | | | 12 | |
| 14 | $\phi 16H7^{+0.018}_{0}$ | $\phi 14h7^{0}_{-0.018}$ | $\phi 16^{+0.340}_{+0.108}$ | 1.0 $^{-0.025}_{-0.085}$ | | | | | | 1410 | | | 1415 | 1420 | | | | 14 | |
| 15 | $\phi 17H7^{+0.018}_{0}$ | $\phi 15h7^{0}_{-0.018}$ | $\phi 17^{+0.340}_{+0.108}$ | 1.0 $^{-0.025}_{-0.085}$ | | | | | | 1510 | | | 1515 | 1520 | | | | 0.115 | |
| 16 | $\phi 18H7^{+0.018}_{0}$ | $\phi 16h7^{0}_{-0.018}$ | $\phi 18^{+0.340}_{+0.108}$ | 1.0 $^{-0.025}_{-0.085}$ | | | | | | | | 1615 | 1620 | 1625 | | | | 16 | |
| 18 | $\phi 20H7^{+0.021}_{0}$ | $\phi 18h7^{0}_{-0.018}$ | $\phi 20^{+0.450}_{+0.121}$ | 1.0 $^{-0.025}_{-0.085}$ | | | | | | | | 1815 | 1820 | 1825 | | | | 18 | |
| 20 | $\phi 23H7^{+0.021}_{0}$ | $\phi 20h7^{0}_{-0.021}$ | $\phi 23^{+0.450}_{+0.121}$ | 1.5 $^{-0.027}_{-0.087}$ | | | | | 2010 | | | 2015 | 2020 | 2025 | 2030 | | | 20 | |
| 22 | $\phi 25H7^{+0.021}_{0}$ | $\phi 22h7^{0}_{-0.021}$ | $\phi 25^{+0.450}_{+0.121}$ | 1.5 $^{-0.027}_{-0.087}$ | | | | | | | | | 2220 | | 2230 | | | 22 | |
| 25 | $\phi 28H7^{+0.021}_{0}$ | $\phi 25h7^{0}_{-0.021}$ | $\phi 28^{+0.450}_{+0.121}$ | 1.5 $^{-0.027}_{-0.087}$ | | | | | | | | | | 2520 | 2525 | 2530 | | 25 | |
| 28 | $\phi 32H7^{+0.025}_{0}$ | $\phi 28h7^{0}_{-0.021}$ | $\phi 32^{+0.550}_{+0.131}$ | 2.0 $^{-0.030}_{-0.090}$ | | | | | | | | | | 2820 | 2825 | 2830 | | 28 | |
| 30 | $\phi 34H7^{+0.025}_{0}$ | $\phi 30h7^{0}_{-0.021}$ | $\phi 34^{+0.550}_{+0.131}$ | 2.0 $^{-0.030}_{-0.090}$ | | | | | | | | | | 3020 | | 3030 | 3040 | 30 | |

Note: Dimensions are subject to change without prior notice.

DBS DBS02 Flanged Bushing (Bushing Inner Diameter: 3 to 35 mm)

Designation of Part Number



(Unit: mm)

| Bushing I.D. | Recommended Dimension Mating Part | Bushing Dimensions | | | | | | | | | | | | | | | | | Bushing I.D. | | | |
|--------------|-----------------------------------|--------------------------|--------------------|-------------------|-----------------------------|-------------------------|-----------------|--|-----------------|-----------------|-----------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----|----|
| | | Housing I.D. | Shaft Dia. | Flange O.D. | Flange Thickness | O.D. | Wall Thickness | Part Number & Bushing Length Tolerance $^{0}_{-0.3}$ | | | | | | | | | | | | | | |
| | | | | | | | | 3 | 4 | 5 | 6 | | 7 | 8 | 10 | 12 | 15 | 20 | 25 | 30 | 40 | |
| 3 | $\phi 5H7^{+0.012}_0$ | $\phi 3h7^{0}_{-0.010}$ | $\phi 8 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 5^{+0.210}_{+0.072}$ | $1.0^{-0.015}_{-0.070}$ | | 0303-8F | | | | | | | | | | | | | | 3 |
| 4 | $\phi 6H7^{+0.012}_0$ | $\phi 4h7^{0}_{-0.012}$ | $\phi 9 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 6^{+0.210}_{+0.072}$ | $1.0^{-0.023}_{-0.078}$ | | | 0404-9F | | 0406-9F | | | | | | | | | | | 4 |
| 5 | $\phi 7H7^{+0.015}_0$ | $\phi 5h7^{0}_{-0.012}$ | $\phi 10 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 7^{+0.270}_{+0.095}$ | $1.0^{-0.025}_{-0.085}$ | | | 0504-10F | 0505-10F | | | 0507-10F | | | | | | | | | 5 |
| 6 | $\phi 8H7^{+0.015}_0$ | $\phi 6h7^{0}_{-0.012}$ | $\phi 12 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 8^{+0.270}_{+0.095}$ | $1.0^{-0.025}_{-0.085}$ | | | | 0605-12F | 0606-12F | | | 0608-12F | | | | | | | | 6 |
| 7 | $\phi 9H7^{+0.015}_0$ | $\phi 7h7^{0}_{-0.015}$ | $\phi 13 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 9^{+0.270}_{+0.095}$ | $1.0^{-0.025}_{-0.085}$ | | | | 0705-13F | | | 0707-13F | | | | | | | | | 7 |
| 8 | $\phi 10H7^{+0.015}_0$ | $\phi 8h7^{0}_{-0.015}$ | $\phi 15 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 10^{+0.270}_{+0.095}$ | $1.0^{-0.025}_{-0.085}$ | 0803-15F | | | | 0806-15F | | | 0808-15F | 0810-15F | | | | | | | 8 |
| 10 | $\phi 12H7^{+0.018}_0$ | $\phi 10h7^{0}_{-0.015}$ | $\phi 18 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 12^{+0.340}_{+0.108}$ | $1.0^{-0.025}_{-0.085}$ | | | | | 1006-18F | | | 1008-18F | 1010-18F | 1012-18F | 1015-18F | | | | | 10 |
| 12 | $\phi 14H7^{+0.018}_0$ | $\phi 12h7^{0}_{-0.018}$ | $\phi 20 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 14^{+0.340}_{+0.108}$ | $1.0^{-0.025}_{-0.085}$ | | | | | 1206-20F | | | 1208-20F | 1210-20F | 1212-20F | 1215-20F | | | | | 12 |
| 14 | $\phi 16H7^{+0.018}_0$ | $\phi 14h7^{0}_{-0.018}$ | $\phi 22 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 16^{+0.340}_{+0.108}$ | $1.0^{-0.025}_{-0.085}$ | | | | | | | | | 1410-22F | 1412-22F | 1415-22F | 1420-22F | | | | 14 |
| 15 | $\phi 17H7^{+0.018}_0$ | $\phi 15h7^{0}_{-0.018}$ | $\phi 23 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 17^{+0.340}_{+0.108}$ | $1.0^{-0.025}_{-0.085}$ | | | | | | | | | 1510-23F | 1512-23F | 1515-23F | 1520-23F | | | | 15 |
| 16 | $\phi 18H7^{+0.018}_0$ | $\phi 16h7^{0}_{-0.018}$ | $\phi 24 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 18^{+0.340}_{+0.108}$ | $1.0^{-0.025}_{-0.085}$ | | | | | | | | | 1610-24F | | 1615-24F | 1620-24F | | | | 16 |
| 18 | $\phi 20H7^{+0.021}_0$ | $\phi 18h7^{0}_{-0.018}$ | $\phi 26 \pm 0.25$ | $1.0^{0}_{-0.1}$ | $\phi 20^{+0.450}_{+0.121}$ | $1.0^{-0.025}_{-0.085}$ | | | | | | | | | 1810-26F | 1812-26F | 1815-26F | 1820-26F | | | | 18 |
| 20 | $\phi 23H7^{+0.021}_0$ | $\phi 20h7^{0}_{-0.021}$ | $\phi 31 \pm 0.25$ | $1.5^{0}_{-0.15}$ | $\phi 23^{+0.450}_{+0.121}$ | $1.5^{-0.027}_{-0.087}$ | | | | | | | | | 2010-31F | | 2015-31F | 2020-31F | 2025-31F | | | 20 |
| 22 | $\phi 25H7^{+0.021}_0$ | $\phi 22h7^{0}_{-0.021}$ | $\phi 33 \pm 0.25$ | $1.5^{0}_{-0.15}$ | $\phi 25^{+0.450}_{+0.121}$ | $1.5^{-0.027}_{-0.087}$ | | | | | | | | | 2210-33F | | 2215-33F | 2220-33F | 2225-33F | | | 22 |
| 25 | $\phi 28H7^{+0.021}_0$ | $\phi 25h7^{0}_{-0.021}$ | $\phi 36 \pm 0.25$ | $1.5^{0}_{-0.15}$ | $\phi 28^{+0.450}_{+0.121}$ | $1.5^{-0.027}_{-0.087}$ | | | | | | | | | 2510-36F | | 2515-36F | 2520-36F | 2525-36F | 2530-36F | | 25 |
| 30 | $\phi 34H7^{+0.025}_0$ | $\phi 30h7^{0}_{-0.021}$ | $\phi 42 \pm 0.25$ | $2.0^{0}_{-0.15}$ | $\phi 34^{+0.550}_{+0.131}$ | $2.0^{-0.030}_{-0.090}$ | | | | | | | | | | | | 3020-42F | 3030-42F | 3040-42F | | 30 |
| 35 | $\phi 39H7^{+0.025}_0$ | $\phi 35h7^{0}_{-0.025}$ | $\phi 49 \pm 0.25$ | $2.0^{0}_{-0.15}$ | $\phi 39^{+0.550}_{+0.131}$ | $2.0^{-0.030}_{-0.090}$ | | | | | | | | | | | | 3520-49F | 3530-49F | 3540-49F | | 35 |

Note: Dimensions are subject to change without prior notice.



As this is a pre-lubricating bearing ensure it is filled with lubricant before installation. Then the material will supply a small amount of lubricant at predetermined intervals to allow the bearing to withstand long term operation. The bearing has a structure where bronze in a spherical powdered form is sintered on to the steel backing. Polyacetal resin is then impregnated into the surface.

Features

- 1.Operation is quiet, free from squeaking or knocking.
- 2.Low friction characteristic prevents damage to the shaft (mating surface).
- 3.The bearing surface remains virtually wear-free with minimum amount of lubricant (grease or oil).
- 4.Low starting friction permits very smooth rotation at start up and at low speed under high load conditions. Sliding surfaces are also seizure free.
- 5.Shaft misalignment tolerance is excellent.
- 6.The bearing can withstand impact loads.
- 7.Excellent load-carrying performance is maintained even under oscillating and fretting conditions.

Characteristics

1.Load Carrying Capability

The capability varies depending on the load properties and lubrication conditions. The maximum load that DBX01 can carry is shown in Table 1.

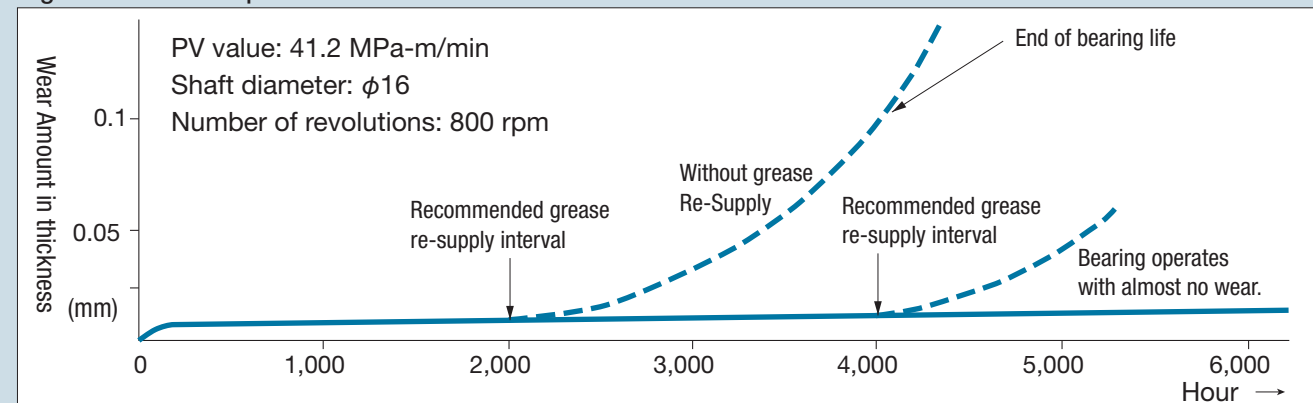
Table 1: Allowable Load(U)

| Load | Motion Condition | Lubrication | U MPa |
|--|------------------------------|--------------------------------------|--|
| 1.Static Load | Slight or very slow movement | Grease or Oil | 137.0 |
| 2.Static Load | Continuous Rotation | Grease or Oil (Boundary lubrication) | 68.6 |
| 3.Static Load or Dynamic Load | Continuous Rotation | Oil (Fluid Lubrication) | 44.1 |
| 4.Static Load | Oscillating Rotation | Grease or Oil | * |
| 5.Dynamic Load | Continuous Rotation | Grease or Oil (Boundary lubrication) | * |
| * These values vary according to the frequency of the cycle. The representative values are shown on the right. | | | 10 ⁵ cycles or less 10 ⁷ cycles 10 ⁸ cycles or more |
| | | | 137.0 19.6 4.9 |

2.Relation betweenWear and the interval of lubrication

Oil is supplied to DBX01 bearings at assembly. The amount of wear after running in is very small . Furthermore, wear is kept to a minimum until the lubricant is exhausted (Figure 1).

Figure 1: Relationship between wear and the interval of lubrication



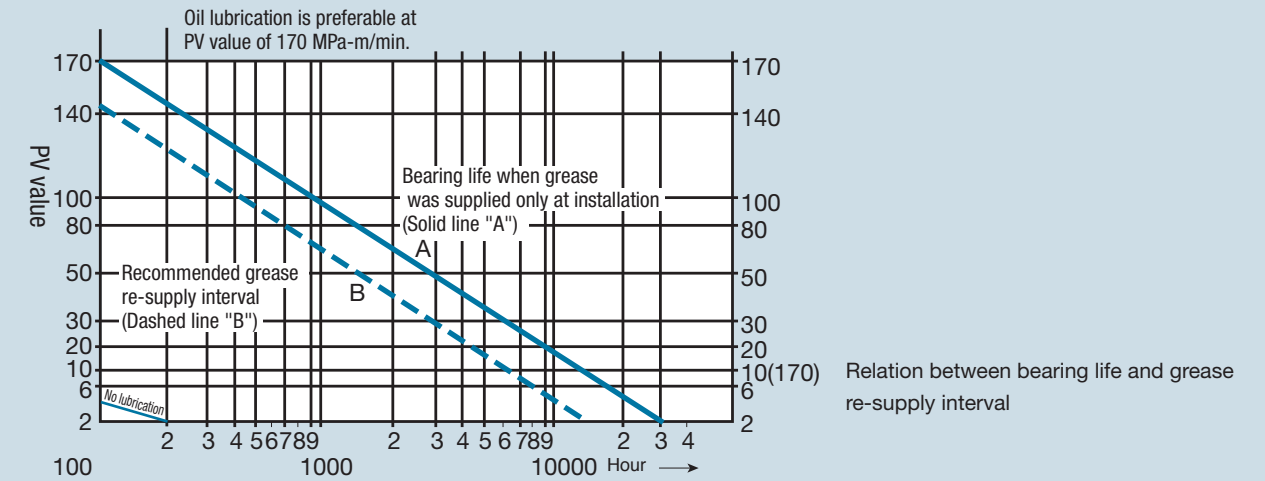
3.PV Value and Bearing performance

The performance of bearing is influenced by the PV value and the operating conditions.

The PV value is the product of Specific Load (MPa) and sliding speed (m/min). The solid line "A" in Figure 2 shows the bearing life when grease was supplied only at installation, and the dashed line "B" shows the recommended grease re-supply interval.

When the PV value exceeds 170 MPa-m/min, successive oil lubrication is desired.

Figure 2: Lubrication Diagram of DBX01 Bearing



4. Conditions of use

To calculate service life and lubrication interval accurately, it is necessary to take such factors as speed, type of load, and ambient temperature as well as the condition of the housing and roughness of the mating surfaces into consideration, which requires that figures obtained from Fig. 2 must be multiplied by coefficients of usage q, t, and s, found in Tables 2, 3, and 4, respectively.

Table 2: Coefficient of usage q for grease lubrication per speed and bearing performance at an ambient temperature of 25°C

| Speed in m/min | 24 or less | 24 – 45 | 45 – 90 | 90 or more |
|---|------------|---------|---------|------------|
| Maximum allowable PV value MPa·m/min | 170.0 | 170.0 | 170.0 | 62.0 |
| DBX01 Bushing Static loading, vertical (Lubricant flows into the loaded region.) | 2.0 | 2.0 | 1.5 | 0.8 |
| DBX01 Bushing Static loading, other than vertical (Lubricant flows out of the loaded region.) | 1.0 | 1.0 | 0.8 | 0.4 |
| DBX01 Bushing rotational loading | 3.0 | 3.0 | 2.0 | 1.2 |
| DBX01 Thrust washer | 1.0 | 0.5 | 0.1 | – |

Table 3: Coefficient of usage t for the effect of temperature per operating temperature range

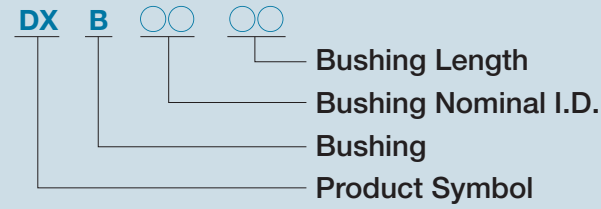
| Condition of the housing | Type of grease | Ambient temperature of axle in °C | | | |
|---|----------------|-----------------------------------|------|------------------|-----|
| | | 20 – 40 | 50 | 75 | 100 |
| Ordinary heat dissipation properties | Silicone-based | 1.0 | 0.7 | 0.4 | 0.2 |
| | Lithium-based | 1.0 | 0.6 | 0.3 | 0.1 |
| Light-weight stamped-metal housing with poor heat dissipation properties or segmented housing | Silicone-based | 0.5 | 0.35 | 0.2 | 0.1 |
| | Lithium-based | 0.4 | 0.25 | 0.1 | |
| Non-metal housing with poor heat dissipation properties | Silicone-based | 0.3 | 0.2 | Not recommended. | |
| | Lithium-based | 0.2 | 0.1 | Not recommended. | |

Table 4: Coefficient of usage s for the effect of mating surface roughness.

| Mating surface roughness | Coefficient of usage s |
|--------------------------|------------------------|
| 0 – 2.5µm Rmx | 1.00 |
| 2.5 – 3.9µm Rmx | 0.25 |
| 3.9 – 5.5µm Rmx | 0.10 |
| 5.5 – 7.8µm Rmx | 0.05 |

DXB DBX01 Bushing (Bushing Inner Diameter: 10 to 100 mm)

Designation of Part Number



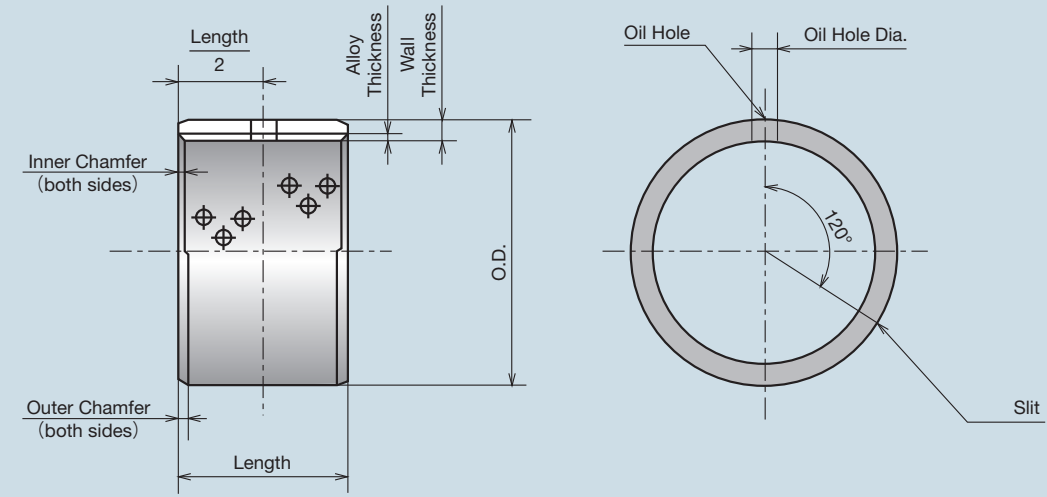
Pb Free

RoHS

ELV

DXB 1010

Please specify by part number.

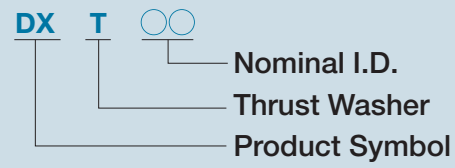


(Unit: mm)

| Bushing I.D. | Recommended Dimension Mating Part | | Bushing Dimensions | | | | | | | | | | | | | | | Bushing I.D. | | |
|--------------|-----------------------------------|-------------------------|------------------------------|-----------------------------|---------------|---|-------------|-------------|-------------|-------------|--|-------------|-------------|-------------|-------------|--------------|----|--------------|----|-----|
| | Housing I.D. | Shaft Dia. | O.D. | Wall Thickness | Oil Hole Dia. | Part Number & Bushing Length Tolerance -0.4 | | | | | | | | | | | | | | |
| | | | | | | 10 | 15 | 20 | 25 | 30 | | | | 40 | 50 | 60 | 80 | 90 | 95 | |
| 10 | $\phi 13H7^{+0.018}_0$ | $\phi 10h7^0_{-0.015}$ | $\phi 13^{+0.060}_{+0.030}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 4$ | 1010 | 1015 | 1020 | | | | | | | | | | | | 10 |
| 12 | $\phi 15H7^{+0.018}_0$ | $\phi 12h7^0_{-0.018}$ | $\phi 15^{+0.063}_{+0.033}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 4$ | | 1215 | 1220 | | | | | | | | | | | | 12 |
| 14 | $\phi 17H7^{+0.018}_0$ | $\phi 14h7^0_{-0.018}$ | $\phi 17^{+0.073}_{+0.038}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 4$ | | 1415 | 1420 | | | | | | | | | | | | 14 |
| 15 | $\phi 18H7^{+0.018}_0$ | $\phi 15h7^0_{-0.018}$ | $\phi 18^{+0.073}_{+0.038}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 4$ | | 1515 | | 1525 | | | | | | | | | | | 15 |
| 16 | $\phi 19H7^{+0.021}_0$ | $\phi 16h7^0_{-0.018}$ | $\phi 19^{+0.081}_{+0.046}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 4$ | | 1615 | 1620 | 1625 | | | | | | | | | | | 16 |
| 18 | $\phi 21H7^{+0.021}_0$ | $\phi 18h7^0_{-0.018}$ | $\phi 21^{+0.081}_{+0.046}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 4$ | | 1815 | 1820 | 1825 | | | | | | | | | | | 18 |
| 20 | $\phi 23H7^{+0.021}_0$ | $\phi 20h7^0_{-0.021}$ | $\phi 23^{+0.081}_{+0.046}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 4$ | | 2015 | | 2025 | 2030 | | | | | | | | | | 20 |
| 22 | $\phi 25H7^{+0.021}_0$ | $\phi 22h7^0_{-0.021}$ | $\phi 25^{+0.086}_{+0.051}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 6$ | | 2215 | 2220 | 2225 | | | | | | | | | | | 22 |
| 24 | $\phi 27H7^{+0.021}_0$ | $\phi 24h7^0_{-0.021}$ | $\phi 27^{+0.086}_{+0.051}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 6$ | | 2415 | 2420 | 2425 | 2430 | | | | | | | | | | 24 |
| 25 | $\phi 28H7^{+0.021}_0$ | $\phi 25h7^0_{-0.021}$ | $\phi 28^{+0.093}_{+0.056}$ | $1.5^{(-0.026)}_{(-0.058)}$ | $\phi 6$ | | 2515 | | 2525 | 2530 | | | | | | | | | | 25 |
| 30 | $\phi 34H7^{+0.025}_0$ | $\phi 30h7^0_{-0.021}$ | $\phi 34^{+0.115}_{+0.075}$ | $2.0^{(-0.032)}_{(-0.068)}$ | $\phi 6$ | | | 3020 | | 3030 | | 3040 | | | | | | | | 30 |
| 35 | $\phi 39H7^{+0.025}_0$ | $\phi 35h7^0_{-0.025}$ | $\phi 39^{+0.115}_{+0.075}$ | $2.0^{(-0.032)}_{(-0.068)}$ | $\phi 6$ | | | 3520 | | 3530 | | | 3550 | | | | | | | 35 |
| 40 | $\phi 44H7^{+0.025}_0$ | $\phi 40h7^0_{-0.025}$ | $\phi 44^{+0.115}_{+0.075}$ | $2.0^{(-0.032)}_{(-0.068)}$ | $\phi 8$ | | | 4020 | | 4030 | | | 4050 | | | | | | | 40 |
| 45 | $\phi 50H7^{+0.025}_0$ | $\phi 45h7^0_{-0.025}$ | $\phi 50^{+0.115}_{+0.075}$ | $2.5^{(-0.040)}_{(-0.086)}$ | $\phi 8$ | | | | | 4530 | | | 4550 | | | | | | | 45 |
| 50 | $\phi 55H7^{+0.030}_0$ | $\phi 50h7^0_{-0.025}$ | $\phi 55^{+0.145}_{+0.095}$ | $2.5^{(-0.040)}_{(-0.086)}$ | $\phi 8$ | | | | | | | 5040 | | 5060 | | | | | | 50 |
| 55 | $\phi 60H7^{+0.030}_0$ | $\phi 55h7^0_{-0.030}$ | $\phi 60^{+0.145}_{+0.095}$ | $2.5^{(-0.040)}_{(-0.086)}$ | $\phi 8$ | | | | | | | 5540 | | 5560 | | | | | | 55 |
| 60 | $\phi 65H7^{+0.030}_0$ | $\phi 60h7^0_{-0.030}$ | $\phi 65^{+0.145}_{+0.095}$ | $2.5^{(-0.040)}_{(-0.086)}$ | $\phi 8$ | | | | | | | 6040 | | 6060 | | | | | | 60 |
| 65 | $\phi 70H7^{+0.030}_0$ | $\phi 65h7^0_{-0.030}$ | $\phi 70^{+0.145}_{+0.095}$ | $2.5^{(-0.050)}_{(-0.116)}$ | $\phi 8$ | | | | | | | 6540 | | 6560 | | | | | | 65 |
| 70 | $\phi 75H7^{+0.030}_0$ | $\phi 70h7^0_{-0.030}$ | $\phi 75^{+0.145}_{+0.095}$ | $2.5^{(-0.050)}_{(-0.116)}$ | $\phi 8$ | | | | | | | 7040 | | | 7080 | | | | | 70 |
| 75 | $\phi 80H7^{+0.030}_0$ | $\phi 75h7^0_{-0.030}$ | $\phi 80^{+0.160}_{+0.095}$ | $2.5^{(-0.050)}_{(-0.116)}$ | $\phi 9.5$ | | | | | | | 7540 | | | 7580 | | | | | 75 |
| 80 | $\phi 85H7^{+0.035}_0$ | $\phi 80h7^0_{-0.030}$ | $\phi 85^{+0.165}_{+0.100}$ | $2.5^{(-0.050)}_{(-0.116)}$ | $\phi 9.5$ | | | | | | | 8040 | | | 8080 | | | | | 80 |
| 85 | $\phi 90H7^{+0.035}_0$ | $\phi 85h7^0_{-0.035}$ | $\phi 90^{+0.165}_{+0.100}$ | $2.5^{(-0.050)}_{(-0.116)}$ | $\phi 9.5$ | | | | | | | 8540 | | | 8580 | | | | | 85 |
| 90 | $\phi 95H7^{+0.035}_0$ | $\phi 90h7^0_{-0.035}$ | $\phi 95^{+0.165}_{+0.100}$ | $2.5^{(-0.050)}_{(-0.116)}$ | $\phi 9.5$ | | | | | | | 9040 | | | | 9090 | | | | 90 |
| 100 | $\phi 105H7^{+0.035}_0$ | $\phi 100h7^0_{-0.035}$ | $\phi 105^{+0.180}_{+0.115}$ | $2.5^{(-0.050)}_{(-0.116)}$ | $\phi 9.5$ | | | | | | | | | | | 10095 | | | | 100 |

DXT DBX01 Thrust Washer

Designation of Part Number



Pb Free

RoHS

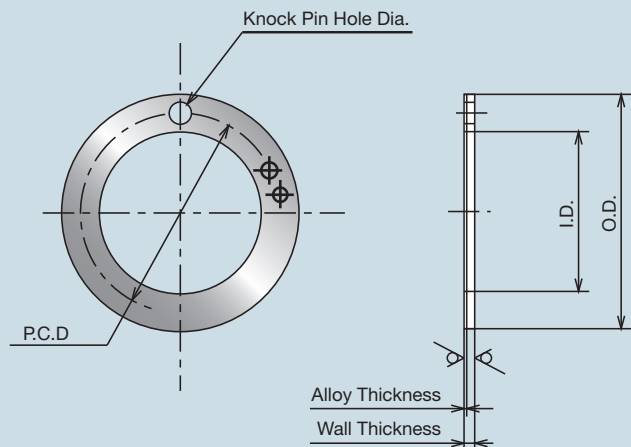
ELV

DXT 10

Please specify by part number.

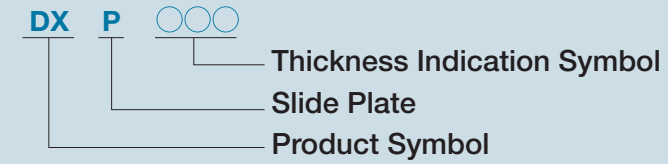
(Unit: mm)

| Nominal I.D. | Part Number | I.D. | O.D. | Thickness | Knock Pin Hole | | Housing Recess Depth |
|--------------|--------------|----------------------------------|----------------------------------|---------------------------------------|---------------------------------------|---------------------|-----------------------------------|
| | | | | | Dia. | P.C.D | |
| 10 | DXT10 | 12 ^{+0.25} ₀ | 24 ⁰ _{-0.25} | 1.5 ^{-0.08} _{-0.15} | 1.625 ^{+0.25} ₀ | 18 ^{±0.12} | 1.1 ⁰ _{-0.25} |
| 12 | DXT12 | 14 ^{+0.25} ₀ | 26 ⁰ _{-0.25} | | 2.125 ^{+0.25} ₀ | 20 ^{±0.12} | |
| 14 | DXT14 | 16 ^{+0.25} ₀ | 30 ⁰ _{-0.25} | | | 23 ^{±0.12} | |
| 16 | DXT16 | 18 ^{+0.25} ₀ | 32 ⁰ _{-0.25} | | | 25 ^{±0.12} | |
| 18 | DXT18 | 20 ^{+0.25} ₀ | 36 ⁰ _{-0.25} | | | 28 ^{±0.12} | |
| 20 | DXT20 | 22 ^{+0.25} ₀ | 38 ⁰ _{-0.25} | | 3.125 ^{+0.25} ₀ | 30 ^{±0.12} | |
| 22 | DXT22 | 24 ^{+0.25} ₀ | 42 ⁰ _{-0.25} | | | 33 ^{±0.12} | |
| 24 | DXT24 | 26 ^{+0.25} ₀ | 44 ⁰ _{-0.25} | | | 35 ^{±0.12} | |
| 25 | DXT25 | 28 ^{+0.25} ₀ | 48 ⁰ _{-0.25} | | | 38 ^{±0.12} | |
| 30 | DXT30 | 32 ^{+0.25} ₀ | 54 ⁰ _{-0.25} | | | 43 ^{±0.12} | |
| 35 | DXT35 | 38 ^{+0.25} ₀ | 62 ⁰ _{-0.25} | 4.125 ^{+0.25} ₀ | | 50 ^{±0.12} | |
| 40 | DXT40 | 42 ^{+0.25} ₀ | 66 ⁰ _{-0.25} | | 54 ^{±0.12} | | |
| 45 | DXT45 | 48 ^{+0.25} ₀ | 74 ⁰ _{-0.25} | | 61 ^{±0.12} | | |
| 50 | DXT50 | 52 ^{+0.25} ₀ | 78 ⁰ _{-0.25} | | 2.5 ^{-0.07} _{-0.15} | 65 ^{±0.12} | 1.6 ⁰ _{-0.25} |



DXP DBX01 Slide Plate

Designation of Part Number



Pb Free

RoHS

ELV

DXP 150

Please specify by Part number.
 This product is produced on order only.

| Part Number | Thickness | Width | Length |
|---------------|---------------------------------------|----------------------------------|-----------------------------------|
| DXP150 | 1.5 ^{-0.05} _{-0.15} | 90 ^{+0.2} ₀ | 500 ^{+10.0} ₀ |
| DXP200 | 2.0 ^{-0.05} _{-0.15} | 100 ^{+0.2} ₀ | |
| DXP250 | 2.5 ^{-0.05} _{-0.15} | 100 ^{+0.2} ₀ | |

(Unit: mm)

