

Insulated Bushings

Copper Alloy
Straight Type
SO#50SP2


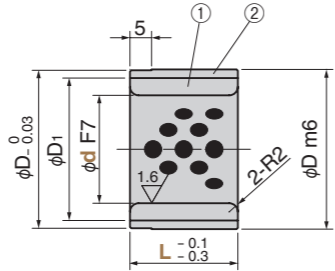


Insulated Washers

Copper Alloy
Washer Type
SO#50SP2




IB

- Recommended mating post tolerance: e7
- Recommended housing hole tolerance: H7

Material ① Base Copper alloy (SO-2)
Solid lubricant (GR-1)
② Insulation (Resin)

● Sliding Direction



■ Operation Range

Lubricant Type	Lubricating Condition	Environment Condition	Max. Allowable Load P N/mm ²	Max. Allowable Sliding Speed V m/min	Max. Allowable PV value N/mm ² · m/min	Operation Range Temperature °C
GR-1	No lubrication	Atmosphere	100	15	150	-50 ~ +300
	Regular lubrication (Grease)			30	200	-50 ~ +150


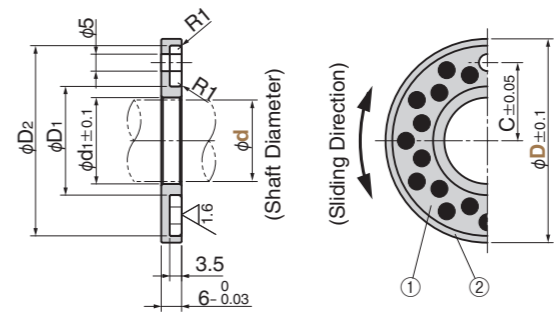
■ Physical Properties (Bronze Bushing)

Specific Gravity	Hardness HB	Elongation %	Tensile Strength N/mm ²	Linear Expansion Coefficient × 10 ⁻⁵ /°C
7.9	210 or more	12 or more	755 or more	1.9

d F7	D m6	D ₁	Catalog No.	d	L
16 +0.034 +0.016	28	+0.021 +0.008		16	20
25	37	33		25	16
30 +0.041 +0.020	42	37 +0.025 +0.009	IB	30	20
35	52	38 +0.030 +0.011		35	17
		44		35	20

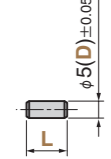
Order **Catalog No.** **IB** **d** - **L**
25 - 16

IW

Material ① Base Copper alloy (SO-2)
Solid lubricant (GR-1)
② Insulation (Resin)

■ Located Pin
ZWP



■ Operation Range

Lubricant Type	Lubricating Condition	Environment Condition	Max. Allowable Load P N/mm ²	Max. Allowable Sliding Speed V m/min	Max. Allowable PV value N/mm ² · m/min	Operation Range Temperature °C
GR-1	No lubrication	Atmosphere	100	15	150	-50 ~ +300
	Regular lubrication (Grease)			30	200	-50 ~ +150

■ Physical Properties (Bronze Bushing)

Specific Gravity	Hardness HB	Elongation %	Tensile Strength N/mm ²	Linear Expansion Coefficient × 10 ⁻⁵ /°C
7.9	210 or more	12 or more	755 or more	1.9

d ₁	D ₁	D ₂	C	Catalog No.	d	D
25.4	35	62	26		25	70
30.4	40	62	27	IW	30	70
	40	80	31		30	90

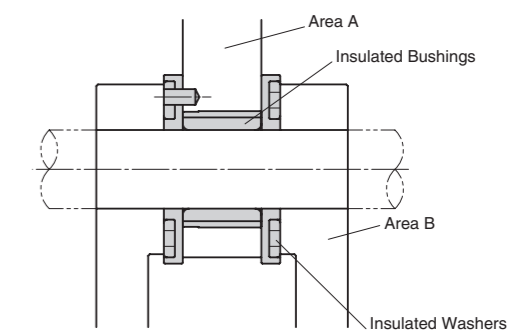
Order **Catalog No.** **IW** **d** - **D**
30 - 70

■ Located Pin

Catalog No.	D	L
ZWP	5	5
		10
		12

Order **Catalog No.** **ZWP** **D** - **L**
5 - 5

■ Example



(Part of welding gun)

- Area A is electrically separated from area B.