

Intentions, perfect. It began in customer needs, and finally customer satisfaction!

Quality - is to get the trust of weight is the key to winning the competition, is the starting point for endless most demand, value and dignity.

## Related Design

### The service life of bushing

With the exception of being burnt, the service life of self-lubricating bushing depends on the abrasion degree of the bushing's inner diameter. In conditions like dry friction, boundary lubrication and oil lubrication, the abrasion of the same bushing will be different. Main factors that may influence the service life are: character and direction of the load, lubrication condition, running speed, environment temperature, hardness of the mating axis, roughness of the mating surface, material of the mating axis, air quality around etc. Therefore, it's difficult to calculate the actual abrasion quantity.

Regardless the factors like influence from the load and speed, difference caused by running direction, kinds of lubricating oil, mating clearance, roughness and impurities penetration degree, the abrasion  $W$  can be calculated by the following formula.

$$W=K \cdot P \cdot V \cdot T \quad (\text{mm}^3)$$

P:Load pressure( $\text{N}/\text{mm}^2$ )

V:Running velocity( $\text{m}/\text{s}$ );

K:Abrasion coefficient( $\text{mm}^3 / (\text{N}/\text{mm}^2 \cdot \text{m}/\text{s} \cdot \text{Hr})$ )

T:Running time (Hr)

Abrasion coefficient  $K$  gained under different lubrication conditions in the laboratory. Consult the following form for  $K$  value.

Lubrication conditions $\text{mm}^3 / (\text{N}/\text{mm}^2 \cdot \text{m}/\text{s} \cdot \text{Hr})$	
Non-lubrication(dry friction)	$3 \times 10^{-3} \sim 6 \times 10^{-4}$
Periodical lubrication(marginal lubrication)	$3 \times 10^{-4} \sim 6 \times 10^{-5}$
Oil lubrication(fluids lubrication)	$3 \times 10^{-5} \sim 6 \times 10^{-6}$