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

PV value bearings

1、 Definition

○ Load Pressure P:Load pressure equals to the result gained by making the value of load pressure divide the vertical shade projected by the load-shouldering surface of the bushing (Unit: N/mm^2).

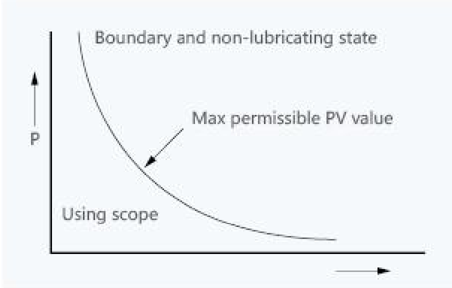
○ Running Velocity V: Defined running velocity as the relative linear velocity against the mating surface (Unit: N/mm^2).

○ PV Value:Define PV value as the result gained by multiplying the load value P and the velocity V (Unit: $N/mm^2 \cdot m/s$).

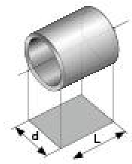
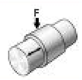
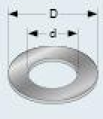
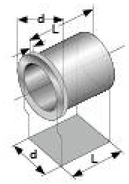
○ Permissible PV value:Max permissible value shall be smaller than the value gained by multiplying the max permissible pressure and the max permissible velocity. (Unit: $N/mm^2 \cdot m/s$).

2、Max permissible PV value

The bushing can run for a short time when achieves its max PV value. It's the running service life requirement that decides the requirement for the value. In bushing design, we require that the max permissible PV value shall be smaller than the value gained by multiplying the max permissible load pressure and the max permissible running velocity.



Max permissible PV value

BUSHING		PRESSURE, P PN/mm² {kgf/cm²}	VELOCITY, V m/s {m/min}	PV Value N/mm²*m/s {kgf/cm²*m/min}
Sleeve Bushing 	1.Rotating motion in single direction of radial journal 	$\frac{F}{dL}$ $\left\{\frac{10^2F}{dL}\right\}$	$\frac{\pi dn}{10^3}$ $\left\{\frac{\pi dn}{10^3}\right\}$	$\frac{\pi Fn}{10^3L}$ $\left\{\frac{\pi Fn}{10L}\right\}$
	2.Oscillating motion 	$\frac{F}{dL}$ $\left\{\frac{10^2F}{dL}\right\}$	$\frac{dC\theta}{10^3}$ $\left\{\frac{\pi dc\theta}{180\times10^3}\right\}$	$\frac{FC\theta}{10^3L}$ $\left\{\frac{\pi Fc\theta}{180\times10^2L}\right\}$
	3.Reciprocating motion 	$\frac{F}{dL}$ $\left\{\frac{10^2F}{dL}\right\}$	$\frac{2cS}{10^3}$ $\left\{\frac{2cS}{10^3}\right\}$	$\frac{2FcS}{10^3dL}$ $\left\{\frac{FcS}{5dL}\right\}$
Thrust Washer 	1.Rotating motion 	$\frac{4F}{\pi(D^2-d^2)}$ $\left\{\frac{400F}{\pi(D^2-d^2)}\right\}$	$\frac{\pi Dn}{10^3}$ $\left\{\frac{\pi Dn}{10^3}\right\}$	$\frac{4FDn}{10^3(D^2-d^2)}$ $\left\{\frac{4FDn}{10(D^2-d^2)}\right\}$
	2.Oscillating motion 	$\frac{4F}{\pi(D^2-d^2)}$ $\left\{\frac{400F}{\pi(D^2-d^2)}\right\}$	$\frac{DC\theta}{10^3}$ $\left\{\frac{\pi Dc\theta}{180\times10^3}\right\}$	$\frac{4FDC\theta}{10^3\pi(D^2-d^2)}$ $\left\{\frac{4FDc\theta}{180\times10(D^2-d^2)}\right\}$
Flange Bushing 	1.Sleeve Bushing	Use above formulas for sleeve bushing (L=l+t)	Use above formulas for sleeve bushing	Use above formulas for sleeve bushing
	2.Flange surface	Use above formulas for thrust whsher	Use above formulas for thrust whsher	Use above formulas for thrust whsher
Slide Plate 	1.Reciprocating motion 	$\frac{F}{BL}$ $\left\{\frac{10^2F}{WL}\right\}$	$\frac{2cS}{10^3}$ $\left\{\frac{2cS}{10^3}\right\}$	$\frac{2FcS}{10^3BL}$ $\left\{\frac{FcS}{5WL}\right\}$

F : load .... N {kgf}

N : Rotations .... S-1{rpm}

c : Cylindrical velocity of reciprocating or oscillating motion .... S-1{cpm}

S : Stroke distance .... m {mm}

θ : Oscillating angle .... rad { }

d : Bushing ID .... mm^2 {mm^2}

D : Bushing OD .... mm^2 {mm^2}

L : Bushing length .... mm^2 {mm^2}

W : Stirp/Slide way width .... mm^2 {mm^2}