

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

### Bushing's dimension

#### 1、Inside diameter of the bushing

Generally, the inside diameter of the bushing depends on the diameter of its mating axis.

#### 2、Length of the bushing

The length of the bushing depends on the size of the pressure-shouldering surface. The longer the bushing, the less pressure at the surface, for the longer bushing, the load on the bushing is relatively lessened. But simultaneously, it may result in deviation contact or lower cooling efficiency and thus shorten the service life of the bushing. On the contrary, if the length of the bushing is too short, lubricating grease may quickly flow out of the bushing. Therefore, it hardly forms a grease film and capability of the bushing is accordingly debased.

A comparison of L/d's effect on the bushings, especially oil lubricating bushings

Short bushing ( $d > L$ )	Comparison items	Long bushing ( $d < L$ )
Small	Force on the oil film	Great
Strong	Cooling ability	Weak
Can not be too high	Surface pressure	Can be high
High	Safety against beating deviation	Low
Weak	Bushing rigidity	Strong
Week	Shock absorbing ability	Strong

#### 3、Bushing thickness

The main advantage of standard composite self-lubricating bushings rest with their thin wall thickness. Standard thickness can be 0.5mm, 0.75mm, 1.0mm, 1.5mm, 2.0mm, 2.5mm.

In thickness design of the non-standard gliding bushing, the designer could consult the following proportion of SB and D.

- A) For thin wall thickness gliding metallic bushing, proportion between SB and D equals to 0.03 ~ 0.06.
- B) For thin wall thickness gliding metallic bushing, proportion between SB and D equals to 0.08 ~ 0.12
- C) For plastic gliding bushing, proportion between SB and D equals to 0.1 ~ 0.12

#### 4、Bushing Chamfer

In order to make fixing easier and avoid deviation load, the bushing must be inner and outer chamfered in the direction of its length. Dimension of the chamfer are showing in the following form.

Wall thickness	Out Chamfer Dimension	Inner Chamfer Dimension
≤0.5	Burr polished	Burr polished
0.75	$0.5 \pm 0.3 \times 20^\circ$	$0.3+0.2 \times 45^\circ$
1.0	$0.6 \pm 0.3 \times 20^\circ$	$0.3+0.2 \times 45^\circ$
1.5	$0.6 \pm 0.3 \times 20^\circ$	$0.4+0.2 \times 45^\circ$
2.0	$1.2 \pm 0.3 \times 20^\circ$	$0.6+0.2 \times 45^\circ$
2.5	$1.8 \pm 0.3 \times 20^\circ$	$0.6+0.2 \times 45^\circ$