DAIDYNE DDK02

This product is the environmentally friendly "Lead free bearing". This bearing material structure of DAIDYNE DDK02 consists of the multi layers of polytetrafluoroethylen resin layer + Porous intermediate layer + Steel liner (similar to that of DDK05 Dry Bearing), and has improved performance of boundary surface and fluid lubrication by the improvement of sliding layer and porous intermediate layer.

〈Characteristics〉

Specific Load MPa		Sliding Speed m/min		Service Temp. Range ℃	Friction Coefficient μ	Tolerance of Foreign Particles
Normal	Max.	Normal	Max.	Min. to Max.		
49.0 and less	137	180and less (Boundary Lubrication)	240 (Boundary Lubrication)	−200～280	0.01～0.1 (Boundary Lubrication)	Small

〈Characteristic Standard〉

Structure	Sliding Layer Component	Wear Resistance			Load Resistance		
		No Lubrication	Grease	Boundary and Fluid	No Lubrication	Grease	Boundary and Fluid
With Steel Backing	PTFE+α	4	4	5	4	4	5

Sliding Speed			Friction Coefficient			Tolerance of Foreign Particles	Effect of Various Atmospheres				
No Lubrication	Grease	Boundary and Fluid	No Lubrication	Grease	Boundary and Fluid		In Air	In Vacuum	In Water	In Vapor	In Acid or Alkali
3	3	5	4	4	5	3	5	5	3	3	3

5=Excellent 4=Very good 3=Good 2=Fair 1=Poor

〈Major Applications〉

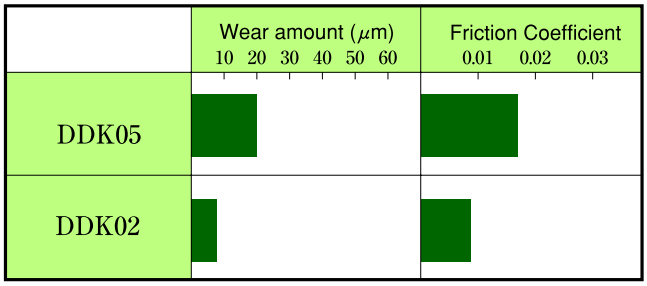
Shock absorber, Gear pump, PS pump, Automobile parts and Generic industrial machine

Features

- Excellent wear resistance by the performance of boundary surface and fluid lubrication Two or three times of wear resistance compared with DDK05
- Excellent load resistance by the performance of boundary surface and fluid lubrication More than two times of load resistance compared with DDK05
- Low friction characteristics by the performance of boundary surface and fluid lubrication Lower friction characteristics DDK05
- Excellent cavitation resistance compared with DDK05

Performance Comparison between DDK05 and DDK02

The following show the comparison results of wear amount and friction coefficient under the condition of lubrication of shock absorber oil.



Test Conditions	
1. Bushing Size（mm）	ϕ20×ϕ23×20L
2. Speed（m/min）	3
3.Specific Load (MPa)	19.6
4.Clearance （Diameter）(mm)	0.08～0.10
5.Lubrication	ISO VG22・0.13 cc/min
6.Temperature	Room Temperature
7.Shaft Material Roughness（μm Rmax） Hardness（Hv）	S55C 1.0 500～600
8.Test Time（H）	100

Standard Dimensions of the DDK02 Bushing

Thickness Dimensions of the DDK02 Bushing (Unit: mm)

Bushing nominal inner diameter		Thickness (T)
More than	Not more than	
—	ϕ19	1.0 $^{0}_{-0.020}$
ϕ19	ϕ25	1.5 $^{0}_{-0.020}$
ϕ25	ϕ40	2.0 $^{0}_{-0.025}$
ϕ40	ϕ60	2.5 $^{0}_{-0.040}$
ϕ60	ϕ160	2.47 $^{0}_{-0.050}$

Dimensions other than thickness tolerance are identical with the DDK05 bushing.
Refer to the dimension table for the DDK05 bushing.