

DDK05 Metal Polymer Bearings



An environmentally friendly, lead-free, self-lubricating metal polymer bearing, ideally suited as a general purpose material for dry and wet running conditions. DDK05 combines a low-friction PTFE (polytetrafluoroethylene) surface with a metal backing for strength and dimensional stability. The DDK05 bearing material is Daido's standard material for inch and metric size bearings.

AVAILABLE BEARING FORMATS: Cylindrical Bearings, Flanged Bearings, Thrust Washers, Sliding Plates and Customized Sizes. Typically availability from stock.

FEATURES

- Superior Performance
- Dimensionally interchangeable with competing brands
- Low coefficient of friction with good wear resistance
- Accommodates high loads, impact loads, intermittent operation and reciprocating motion
- Ideal for dry running conditions and oil lubrication
- Resistance to most industrial chemicals and solvents such as petroleum and alcohol
- Elimination of stick-slip and able to extend service life in many applications

MICROSTRUCTURE



- PTFE + special fillers
- Porous sintered bronze
- Steel backing

CHARACTERISTICS

		Metric		Imperial	
Max Load, P	Static	MPa (N/mm ²)	304	psi	44,100
	Dynamic	MPa (N/mm ²)	140	psi	20,000
Temperature Range		°C	-200 ~ +280	°F	-328 ~ +536
Coefficient of Thermal Exp.	Parallel to Surface	10 ⁻⁶ /°C	11	10 ⁻⁶ /°F	6
	Thickness Direction	10 ⁻⁶ /°C	30	10 ⁻⁶ /°F	17
Dry Condition	Max Sliding Speed, V	m/s	2.5	fpm	500
	Max PV	MPa x m/s	1.7	psi x fpm	49,300
Coefficient of Friction			0.03-0.2*		0.03-0.2*
Wet condition	Max Sliding Speed, V	m/s	10	fpm	2,000
	Max PV	MPa x m/s	10	psi x fpm	290,000
Coefficient of Friction			0.01-0.1*		0.01-0.1*

* Depending on the operating conditions

Note: This data is not guaranteed. Since conditions differ every application, it may be able to be used beyond the listed value.