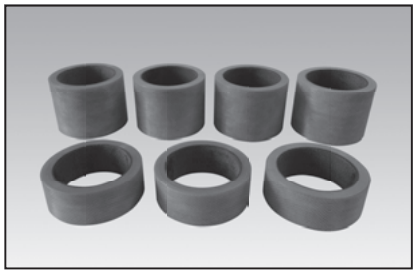
Oiles Fiberflon OH Multi-layer special phenol resin bearings



RoHS2 ELV

This product is registered in the New Technology Information System (NETIS) managed by MLIT.
Technology name : Solid-lubricant dispersed bearing FIBERFLON OH/Registration No. : KT-130060-VE (for water gates/underwater pumps)

Feature

- This product can be used in air, water or seawater.
- Demonstrates superior wear resistance under micro-motion.
- Due to the two-layer structure of the sliding layer and the backing material, this product offers load bearing characteristics equivalent to those of metal bearings.
- Easy dimensional setting due to a low swelling rate.
- Machining on the inner surface is possible.

Service range

Lubrication condition	Dry
Service temperature range ℃	−40～+120
Allowable max. pressure P N/mm² {kgf/cm²}	80 (150) {815 (1,530) }
Allowable max. velocity V m/s {m/min}	0.15 {9}
Allowable max. PV value N/mm²・m/s {kgf/cm²・m/min}	1.2 {734}

Condition: in atmosphere, bushing, shaft rotation. The values in parentheses are static bearing pressures, which are the bearing pressures in applications with no motion or very small motion (≦0.0017m/s[0.1m/min]).

Mechanical properties

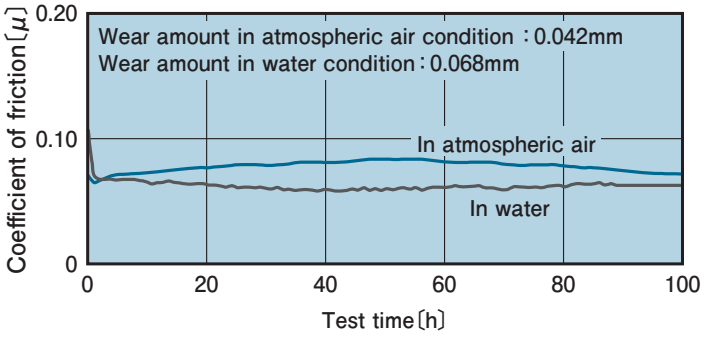
Specific gravity	JIS K 6911	——	1.7	Hardness	JIS K 6911	HRM	60
Tensile strength	JIS K 6911	N/mm² {kgf/mm²}	165 {16.8}	Izod impact strength (with notch)	JIS K 6911	J/m {kgf・cm/cm}	1,010 {103}
Compressive strength	JIS K 6911	N/mm² {kgf/mm²}	238 {24.3}	Co-efficient of linear expansion	ASTM D 696	×10⁻⁵ ℃⁻¹	5 ～ 8
Flexural property	JIS K 6911	N/mm² {kgf/mm²}	127 {13.0}	Swelling rate	——	%	0.35

※The values shown above are typical values, not the standard values.

Test data

Journal oscillation test

<Testing conditions>
Environment: : In atmospheric air, In water
Bearing dimension : φ60×φ75×ℓ50
Mating material : SUS403
Pressure : 24.5N/mm²
Velocity : 0.019m/s
Oscillating angle : ±45°
Oscillating cycle : 12cpm
Test time : 100h
Lubrication : dry



Journal oscillation test

<Testing conditions>
Environment: : In atmospheric air, In water
Bearing dimension : φ60×φ75×ℓ50
Mating material : SUS403
Pressure : 24.5N/mm²
Velocity : 0.0084m/s
Oscillating angle : ±2°
Oscillating cycle : 120cpm
Test time : 100h
Lubrication : dry