

KAtherm®FH Self-Lubricating Liner System Data

Data Sheet 221

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Kamatics KAtherm®FH is a self-lubricating bearing material consisting of a high temperature thermoset resin which is reinforced by a woven fabric of high strength synthetic fibers and self-lubricating PTFE fibers. This unique combination of advanced materials provides for an optimized combination of high compressive strength, low wear, low friction, and thermal distortion stability. The material is applied as a thin self-lubricating liner onto a variety of components.

I. Characteristics:

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| A. | Nominal liner thickness: | .015 in. (.381 mm) |
| B. | Operating temperature range: | -65° F to +700° F (-53 to +371°C) |
| C. | Maximum Short-term Excursion: | 800° F (426° C) |
| D. | Coefficient of friction range: | 0.04 to 0.1, depending upon pressure, temperature, and velocity. |

II. Typical Load Carrying Capabilities:

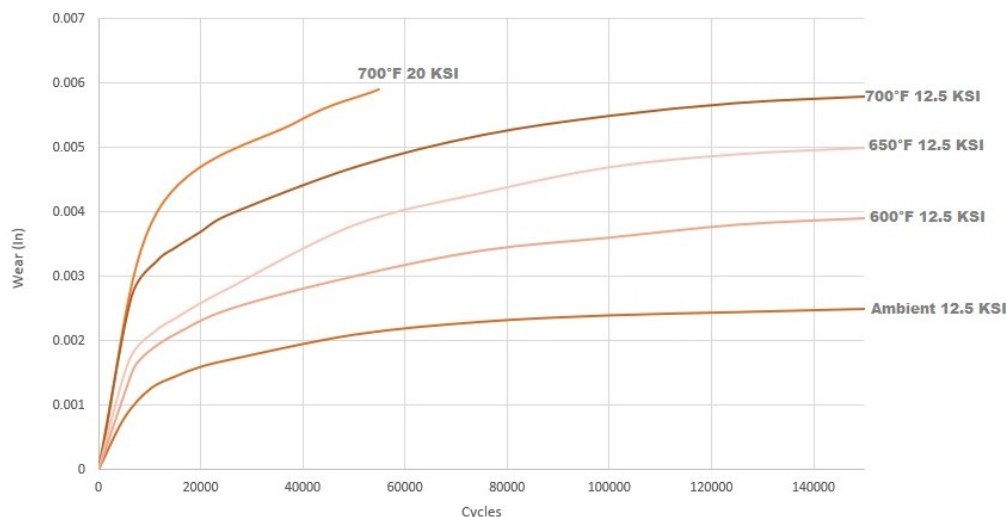
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|----|------------------------------------|--------------------------------------|
| A. | Static Ultimate * | 135,000 psi (930 MPa) |
| B. | Static Limit ** | 90,000 psi (620 MPa) |
| C. | Permanent Set at Static Limit Load | .002" (.051 mm) |
| D. | Maximum Dynamic Bearing Load*** | 20,000 psi (138 MPa) @ 700°F (371°C) |

Notes: * Equivalent to 1.5 times the static limit load, local liner distress may occur. Typical liner thickness 0.015 in. (0.381 mm)

** Maximum load which will result in a permanent set in the liner no greater than .004 (0.05mm) inches

***Higher short-term excursion loads and temperatures may be permitted.

III. Wear Data:



* ± 10° oscillation, 60 cpm, mating surface 440C, HRc 55-62

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