

KAtherm T-87 Data Self Lubricating Liner Material

1. Characteristics:

- 1.1. Nominal liner thickness: .010 to .015 in. (.25 to .38 mm), Max .060 in. (1.52 mm)
- 1.2. Operating temperature range : -100° F to +500°F (-73°C to +260°C)
- 1.3. Coefficient of friction range: .02 to .11, depending upon temperature, pressure, and velocity.
- 1.4. Compatible backing substrate materials: stainless steel, titanium, aluminum, high nickel alloys, composites.
- 1.5. Surface speeds up to 30 fpm (9 m/min)

2. Physical Properties:

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| 2.1. Specific Gravity | 1.366 |
| 2.2. Density | 1.37 gm/cc |
| 2.3. Hardness | Rockwell M 80/90 |
| 2.4. Compression Modulus | 125,000 psi (875 MPa)
(.012 in. (.305 mm) liner on CRES) |

3. Typical Load Carrying Capabilities:

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| 3.1. Static Ultimate | 45,000 psi (310 MPa) |
| 3.2. Static Limit | 30,000 psi (207 MPa) |
| 3.3. Dynamic (max. @ 500°F) | 20,000 psi (138 MPa) |
| 3.4. Wear @ 500°F (260°C) | Less than .005" (0.127 mm) at 20,000
psi (138 MPa) ±25°, 20 cpm |

4. Typical Applications:

- 4.1. Gas Turbine Engine variable stator vanes bushings; sync ring pads; engine control bearings, cam followers, and linkage; thrust reverser bearings, cam followers, and high temperature industrial bearings, cam followers and linkages. Also high speed oscillating applications on helicopters such as main/tail rotor pitch change, pitch link, and scissors link bearings.