

RBC Aerospace Bearings

Transport Dynamics Self-Lubricating Liners

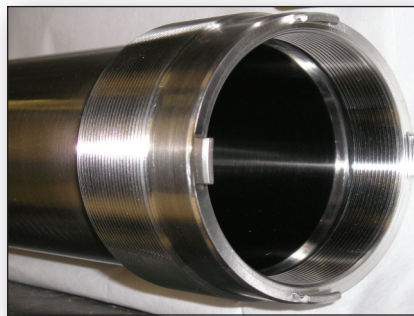
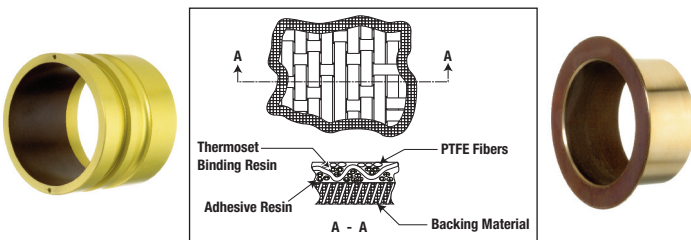
As the **World Leader in self-lubricating liner systems™** Transport Dynamics offers a full range of proprietary maintenance free liner systems. These liner systems have been the preferred option for critical aerospace applications since they were originally developed by Transport Dynamics in 1957.

A self-lubricating liner system features the low friction properties of polytetrafluoroethylene (PTFE), fibers with the rigidity and thermal stability of high temperature resin and structural fiber. The benefit is to achieve consistent low-friction performance without needing external lubrication.

Performance Benefits

- Low frictional coefficient, $\mu \sim .045$ to $.1$
- No re-lubrication or maintenance
- Environmentally friendly
- Vibration dampening characteristics
- Compatible with most common aviation fluids

These liner systems can also be custom bonded to any surface to provide the same operational benefits as part of our **Bond Only** offering.



Applications

- High Temperature – Engine
- High Speed – Helicopter
- Actuation Systems – Aircraft
- High Load/Long Life – MS Series
- Custom Bond Only

The use of a Transport Dynamics liner in a spherical, link, journal or rod end has proven to be the cost effective solution for most applications requiring reliability and a long operational life without requiring intervening maintenance.

Please consult with your local Sales Engineer or contact us directly to get a technical design consultation.

Liner	Common Applications	Operating Temperature Range °F (°C)		Maximum Radial Load Ratings - lb/in ² (MPa)			Maximum Velocity* ft/min (m/min)	Coefficient of Friction	SAE Approvals
		Min	Max	Limit	Ultimate	Dynamic*			
Fibriloid®	Hydraulic Actuators, Engine Mounts, Landing Gear Trunnions	-320 (-195)	450 (230)	80,000 (551)	120,000 (827)	60,000 (414)	10 (3.0)	.04-.15	AS81820** AS81934 AS81935
M889®	Landing Gear, Doors, Engine Mounts, Flap/Slat Linkages		325 (163)	80,000 (551)	120,000 (827)	60,000 (414)	10 (3.0)	-	AS81820 AS81934 AS81935
Fiberglide® VI	Helicopter Main Rotor, Pitch Links, Control Links, Swashplate Sliders		300 (149)	60,000 (414)	90,000 (621)	25,000 (172)	36 (11.0)	.03-.07	AS81819***
Fiberglide® V	Helicopter Pitch Links, Swashplate Sliders, Trunnion Dampers		300 (149)	60,000 (414)	90,000 (621)	30,000 (207)	15 (4.5)	.03-.10	AS8943
Fabroid® IIG2	Landing Gear Shock Struts, Actuators, Hinge Lines, Control Links		450 (232)	60,000 (414)	90,000 (621)	30,000 (207)	12 (3.7)	.03-.10	AS8942 AS8943
Fabroid® X	Turbine Engines, Nacelles, Stator Vane Bushings, Control Links, Variable Geometry Compressors		600 (316)	50,000 (345)	75,000 (517)	25,000 (172)	10 (3.0)	.03-.12	-
Fabroid® II	Rocket Motor Gimbals, Landing Gear Shock Struts		300 (149)	30,000 (207)	50,000 (345)	10,000 (69)	12 (3.7)	-	-
Fabroid® I	Rocket Motor Gimbals, Landing Gear Shock Struts		300 (149)	20,000 (138)	30,000 (207)	10,000 (69)	12 (3.7)	-	-
Fabroid® G	Industrial Equipment		400 (204)	60,000 (414)	90,000 (621)	20,000 (138)	35 (10.7)	-	-
Fiberglide® A	Industrial Equipment		300 (149)	38,000 (262)	57,000 (393)	20,000 (138)	35 (10.7)	-	-

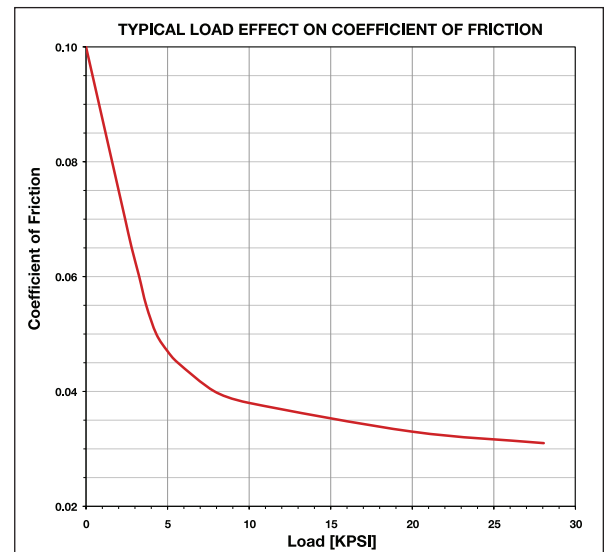
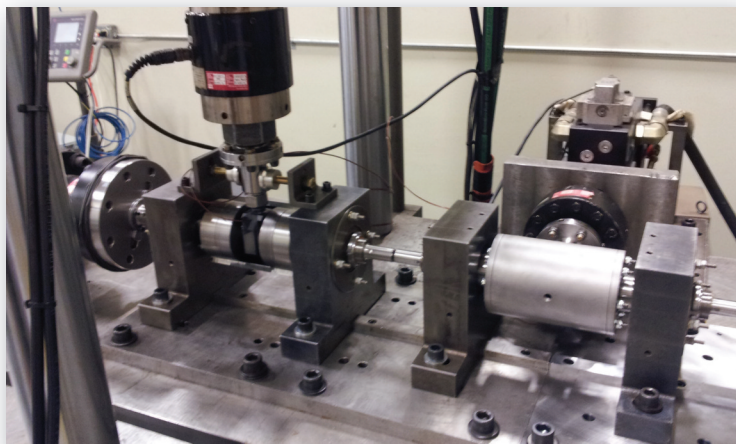
*The maximum allowable PV is less than the Max P x Max V listed in the table

**Also meets Type A requirements

*** Meets or exceeds

RBC liner systems are resistant to

Phosphate Ester Hydraulic Fluid	Aerospace Cleaning Detergents
MIL-PRF-87937 Aerospace Detergent	MIL-STD-810, Salt Spray
MIL-PRF-7808 Lubricating Oil	MIL-STD-810, Fungus
MIL-PRF-5606 Hydraulic Oil	Liquid Nitrogen
MIL-PRF-83282 Hydraulic Oil	Water
MIL-DTL-5624 Turbine Fuel	Sand and Dust
1-1-1 Trichloroethane	Vacuum



RBC Test Lab Capabilities

- Steady State Load
- Reversing Load
- High Speed Capabilities
- High/Low Temperature
- Contamination Testing



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www.rbcbearings.com

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