

## KAron® F

### 1. Characteristics:

- 1.1. Description: A non-peelable, non-fabric, matrix of PTFE fibers and a polyester resin system. KAron® F also employs an enriched surface of 100% PTFE that enable very low friction levels.
- 1.2. Nominal liner thickness: .010 to .015 in (.25 to .38 mm), Max .032 in.(0.81 mm)
- 1.3. Operating temperature range: -100° F to +250°F (-73 to +121°C)
- 1.4. Coefficient of friction range: .02 to .05, depending upon pressure, and velocity. *Example:* Ambient Coefficient of friction is approximately 0.03 under 10000 psi (69 MPa) and uncontaminated.
- 1.5. Compatible backing substrate materials: stainless steel, carbon steel, titanium, aluminum, nickel alloys, and composites.
- 1.6. Surface speeds to 10 fpm (3.0 m/min)

### 2. Fluid Compatibility:

- 2.1. Compatible with aircraft hydraulic fluids, lubricating oils, fuel, and cleaning and de-icing fluids and water.

### 3. Load Carrying Capabilities:

3.1. Static Ultimate*	60,000 psi (414 MPa)*
3.2. Static Limit**	40,000 psi (276 MPa)**
3.3. Dynamic (maximum)	30,000 psi (207 MPa)
3.4. Dynamic (continuous)***	20,000 psi (138 MPa)***

\* Equivalent to 1.5 times static limit load. Local distress may occur.

\*\* Maximum load that will result in permanent set less than 0.002 in (0.05mm) after load is applied for 3 minutes.

\*\*\* 65,000 cycles [ $\pm 25^\circ$  motion, 20,000 psi (138 MPa) pressure, dry, ambient temperature] for 0.0045 in (0.11 mm) liner wear.

### 4. Typical Applications:

- 4.1. For bearing applications requiring an extremely low friction level such as flap/slat track rollers, landing gear joints and shock strut bearings, fuel control/pumps, and mechanisms.

Due to its fibrous nature, Kamatics recommends the use of GO/NO-GO ring and plug gauges when measuring KAron F coated parts, as described in ARP 5448/9 Plug Gauging for Plain Bearings.