System Lubrication Information

Since lubrication is inherent in the bearing surface of Fiber-Lube™, engineers do not have to worry about these bearings drying out, causing shaft seizure and costly repairs. Because lubricants are not required, shaft corrosion can be a problem depending on shaft selection. Daemar recommends shafts of stainless steel or other non-corrosive materials. If non-stainless steel alloys are used, they should be chrome plated. Where design limits permit, hard anodized aluminum or hard anodized aluminum penetrated with a Teflon® dispersion is generally recommended. If lubricants are used with Fiber-Lube™ bearings, Daemar suggests not using fluorocarbon oils and greases, as they may soften the PTFE fibers, increasing the bearing's rate of wear. On the other hand, hydrocarbon oils may actually reduce wear rates by up to eight times. Liquid lubricants can carry away heat and reduce the coefficient of friction. Greases can be used to help prevent corrosion and keep contamination out of the housing. Under some circumstances, additional lubrication can increase the performance characteristics of composite bearings.

Electrical Properties

Fiber-Lube™ bearings exhibit similar electrical properties to the UL-FW-G-10 specification. The bearing wall provides dielectric strengths in excess of 200 volts/mil.