

ABSTRACT

Arrangements are described wherein fluid is supplied under pressure to lubricate and replenish the fluid film located between the rotating, inner bearing sleeve and the outer, stationary sleeve insert of the bearing assemblies of a motor. The sleeve insert is provided with fluid metering passages that permit lubricating fluid to pass through the body of the sleeve insert. The sleeve insert is disposed radially within a sleeve insert holder, and a fluid gap is defined between the two components. During operation, vibration of the rotor shaft within the stator bore is damped by the fluid spring created by the metering of fluid through the sleeve insert. As a result, friction is reduced and the lifespan of the motor increased.

