Bal Seal® spring-energized seals in dental hand drills
PN-320-1 (Rev. 01, 10-31-18)
Overview

To meet the ergonomic and surgical requirements of their operating environment, dental drill designs must be light and pencil-like. These characteristics provide users with more precise control during oral procedures.

In most drills, a rotary tool or bit is mounted at the drill head. The tool and drill head are exposed to oral surgical conditions (i.e. body fluids, temperatures) and harsh sterilization processes. Through this area of connection, the bearings and the drive unit are also exposed to the environment. These components must operate freely, and must not affect power loss or heat build-up, which can make the unit uncomfortable to hold.

Operating Parameters

- **Pressure**: Atmospheric to autoclaved 30 psi (2 kg/cm²)
- **Speed**: 250 rpm to 30,000 rpm
- **Temperature**: 70 °F to autoclaved 275 °F (21 °C to 135 °C)
- **Media**: Air, bearing grease, oral and sterilization fluids
- **Additional**: Low friction and autoclavable

Features

- Bal Seal® Series KC31X, with press-in metal locking ring
- Low friction seal design minimizes heat buildup
- Bal Spring® canted coil spring energizer provides near-constant force for even wear, longer service life

Benefits

- Excellent sealing performance through autoclave sterilization cycles
- Superior protection against leakage/weepage of bearing grease from tool, and from ingress of contamination that could compromise tool performance
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