

Improved Drive System for High Current Variable Vacuum Capacitors

Some years ago COMET introduced the first long life drive system “Lead screw coating 1997” for vacuum capacitors used in standard SEMI applications (SB-47).

During the last years the development of the FPD market demands for vacuum capacitors with higher current capability but with the same durable drive system as in the SEMI industry. In order to satisfy customer demands and requirements, COMET developed the Power-Con, Hexa-Con and Maxi-Con Series. This series requires higher torque values caused by the larger bellows which leads to higher wear rates of the drive system.

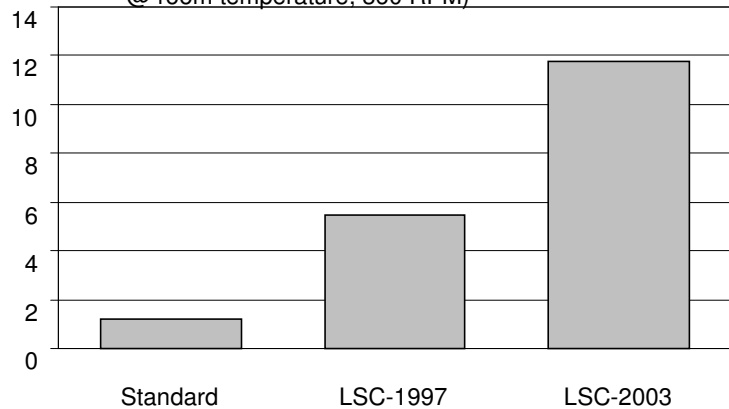
After outstanding tests the latest development of the drive system “Lead screw coating 2003” is now available for the FPD-Series with the following advantages:

- 10 times longer life time than the standard drive system
- More than two times the life time of the “Lead Screw Coating 1997”
- Running-in procedure of Drive System is no longer necessary (SB-09)
- Lower torque required for adjusting the capacitor

A special treatment of the thread surface before coating allows using this screw with the standard nut material and the well established lubricant.

Fig. 1: Life time of lead screws

Life time of different drive systems - Turns [Mio]
 (Test performed with Maxi-Con CVMX-500CW/25
 @ room temperature, 360 RPM)



The improved drive system “lead screw coating 2003” is available for the following series:

- Power-Con
- Maxi-Con
- Hexa-Con

The type designation will change as follows:

Example: CVMX-1500CA/8-BEAB
 CVMX-1500CA/8-BEAA

LSC-2003, Lead screw coating 2003
 LSC-1997, Lead screw coating 1997