

**DCA318 Return End
Extra Kapton**

**TS-SSC 91-227
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November 22, 1991**

Magnet Name	Average Interior Diameter - nom. (mils)	Extra Layers of 5 mil kapton	Hydraulic Pressure (psi)	Pi-tape De-flection (mils)
DCA313	-9±3	0	6029	3 ?
DCA314	-5±2	1	6300	4
DCA315	-5±1	1	7491	4
DCA316	-2±3	2	9800	5
DCA317	-7±3	1	9800	5
DCA318	2±3			

The second column of the table shows the average interior diameter (with the nominal value subtracted) of the return end clamp insulators shimmed tightly inside the return end clamp cylinder, measured with a telescoping micrometer¹. The average has been performed over measurements between quadrant pairs I-III and II-IV at axial positions 1/4", 1", and 2" from the collared coil end of the end clamp cylinder.

The DCA318 insulator average interior diameter is consistent with the nominal diameter. This is similar to the case of DCA316, which had sufficient loading with two additional layers of kapton. I therefore recommend using **two 5 mil layers of kapton** on the interior surfaces of the DCA318 return end insulators to insure adequate clamping.

¹Traveller 0102-ES-298290 Rev E., Step 1.11.