

**DCA317 Return End
Extra Kapton**

**TS-SSC 91-202
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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			

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 DCA317 insulator interior diameter lies in between DCA313 and DCA314. DCA313 had low loading with 0 extra layers of kapton, and DCA314 was a bit on the low side as well. Therefore, I recommend using **one 5 mil layer of kapton** on the interior surfaces of the DCA317 insulators to insure adequate clamping.

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