

**VARIABLE SEGMENTED
APERTURE
DB 020**

PRINCETON SCIENCE CORP.

P.O. Box 143

Princeton, NJ 08542

Tel: (609) 924-3011 Fax: (609) 924-3018

Application

The variable segmented aperture fits into the entrance ports of vacuum chambers and performs the following functions:

1. Beam size limitation.
2. Rough estimation of beam position.
3. Using an appropriate hardware interlock system, accelerator components can be protected against incorrect beam adjustment.

Technical Specifications:

Material	:	Stainless steel (segments, frame)
	:	Ceramics (insulation of segments)
	:	Capton (insulation of wires)
Outer diameter of frame	:	3.94 inches (adapted to CF-100)
Frame thickness	:	0.81 inches
Adjustable aperture diameters	:	0.8 - 1.73 inches
1.	:	Set of segments 0.8 - 1.18
inches		
2.	:	Set of segments 1.37 - 1.73
inches		
Thickness of segments	:	0.059 inches
Signal leads for current measurement of segments	:	4 capton-insulated wires.

Cover Photograph: *Segmented Aperture, adjusted to an opening diameter of about 1.4 inches (well visible: Slots for aperture adjustment and capton insulated wires W*

