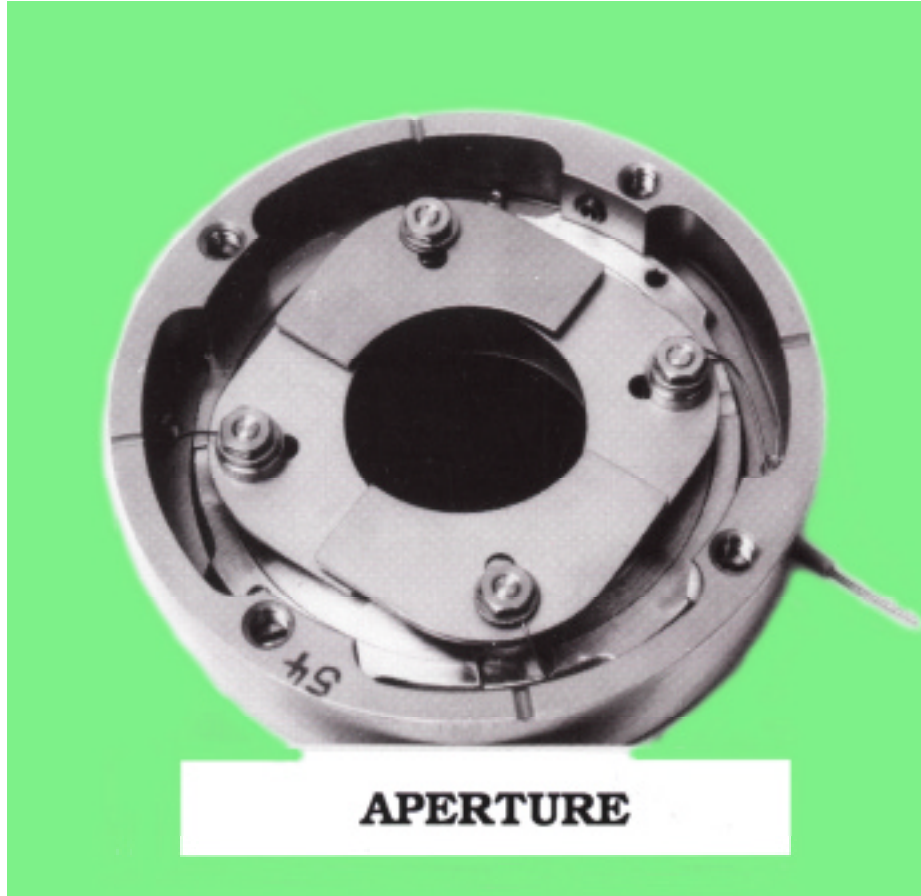


# VARIABLE SEGMENTED APERTURE DB 020



**PRINCETON  
SCIENTIFIC**  
CORPORATION

Tel: (609) 924-3011 • Fax (609) 924-3018  
[www.PrincetonScientific.com](http://www.PrincetonScientific.com)  
Email: [info@princetonscientific.com](mailto:info@princetonscientific.com)

## **Application**

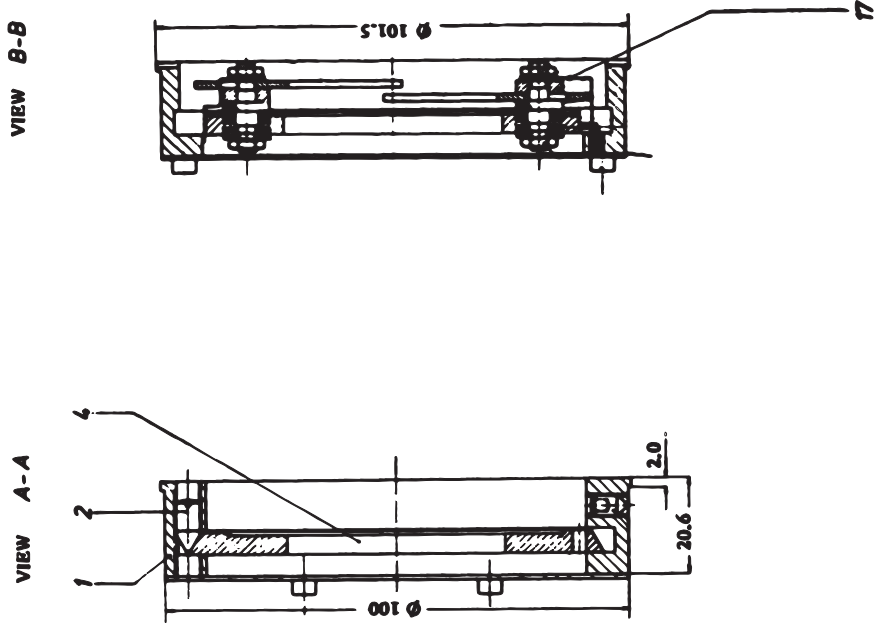
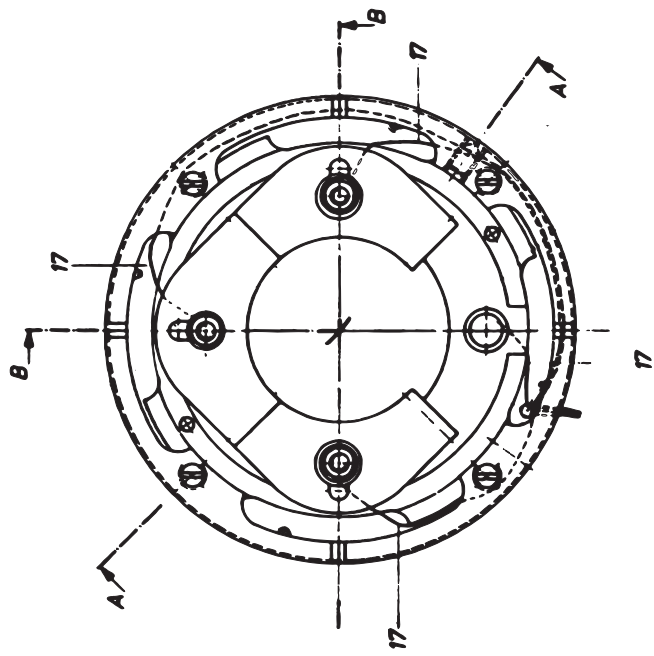
The variable segmented aperture fits into the entrance ports of vacuum chambers and performs the following functions:

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:**

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



Adjustment in radial direction via adjustment adjustment screws (part 2).  
 Avoidance of angular misalignment X and Y axis of part 1  
 and part 4 are always parallel.

Shown dimensions are in millimeters.