



**SPECIFICATIONS:**  
 \*PORT: 4.50" O.D. CF FLANGE  
 \*MATERIALS:  
 BODY: 304 SST, ELECTROPOLISHED  
 BELLOWS: WELDED AM-350 SST  
 BONNET SEAL: COPPER  
 POPPET SEAL: VITON  
 OTHER MATERIALS AVAILABLE  
 ACTUATION: SELF-LUBRICATING BRONZE NUTS  
 WITH ACME THREADS  
 DIFFERENTIAL PRESSURE: MAXIMUM 20 PSIA ACROSS VALVE SEAT  
 MAXIMUM TEMPERATURE VITON SEALS:  
 SUSTAINED:  $\leq 150^{\circ}\text{C}$  [302 $^{\circ}\text{F}$ ]  
 INTERMITTENT:  $\leq 204^{\circ}\text{C}$  [399 $^{\circ}\text{F}$ ]  
 VACUUM RANGE: METAL BONNET SEAL:  $\geq 1 \times 10^{-10}$  TORR HIGH VACUUM  
 OPTIONS: FITTINGS AND O-RINGS

**NOTES:**  
 1. ALL WELDS TO BE VAC. TIGHT TO  $2 \times 10^{-10}$  MIN. SENSITIVITY.  
 2. DIMENSIONS IN [X.XX] ARE IN mm.

**PROPRIETARY AND CONFIDENTIAL**  
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DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm$ N/A ANGULAR: MACH $\pm$ BEND $\pm 5^{\circ}$ ONE PLACE DECIMAL $\pm 0.1$ TWO PLACE DECIMAL $\pm 0.01$ THREE PLACE DECIMAL $\pm 0.005$ SURFACE FINISH 63 R.M.S.		FINISH:				DO NOT SCALE DRAWING	REVISION																													
<table border="1"> <thead> <tr> <th>DESIGN/ENG.</th> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> <th>USED ON</th> <th>NEXT ASSY.</th> </tr> </thead> <tbody> <tr> <td>CHK'D</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>APPV'D</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MFG</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Q.A</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		DESIGN/ENG.				NAME	SIGNATURE	DATE	USED ON	NEXT ASSY.	CHK'D						APPV'D						MFG						Q.A							<b>thermionics laboratory inc.</b> <b>Hayward Ca. 94545</b>
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