


SPECIFICATIONS:  
\*PORT: Ø 4.5" O.D. CF FLANGE  
\*MATERIALS:  
BODY: 304 SST, ELECTROPOLISHED  
BELLOWS: WELDED AM-350 SST  
BONNET SEAL: VITON  
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: ≤150°C [302°F]  
INTERMITTENT: ≤ 204°C [399°F]  
VACUUM RANGE: VITON BONNET SEAL: ≥ 1x10<sup>-9</sup> TORR HIGH VACUUM  
OPTIONS: FITTINGS AND O-RINGS

NOTES:  
1. ALL WELDS TO BE VAC. TIGHT TO 2x10<sup>-10</sup> MIN. SENSITIVITY.  
2. DIMENSIONS IN [X.XX] ARE IN mm.

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|   |      |           |   |         |            |  |              |
|---|------|-----------|---|---------|------------|--|--------------|
| DIMENSIONS ARE IN INCHES<br>TOLERANCES:<br>FRACTIONAL ± N/A<br>ANGULAR: MACH ± BEND ± 5°<br>ONE PLACE DECIMAL ± .1<br>TWO PLACE DECIMAL ± .01<br>THREE PLACE DECIMAL ± .005<br>SURFACE FINISH 63 R.M.S. |      | FINISH:   |  |         |            | DO NOT SCALE DRAWING   | REVISION     |
| DESIGN/ENG.   | NAME | SIGNATURE | DATE  | USED ON | NEXT ASSY. | <b>thermionics laboratory inc.</b><br><b>Hayward Ca. 94545</b> |              |
| CHK'D   |      |           |   |         |            | <b>ANGLE VALVE, RIGHT ANGLE,<br/>MANUAL ACTUATION</b>          |              |
| APPV'D  |      |           |   |         |            |  |              |
| MFG   |      |           |   |         |            |  |              |
| Q.A   |      |           |   |         |            | DWG NO.  | A3           |
|   |      |           |   |         |            | A-250-H-CF   |              |
|   |      |           |   |         |            | SCALE:1:3  | SHEET 1 OF 1 |
|   |      |           |   |         |            | WEIGHT:  |              |