


- SPECIFICATIONS:**
- \*MANUAL ACTUATION
  - \*Ø 12.00" O.D. C.F. FLANGE
  - \*WELDED BELLOWS
  - \*VITON GATE AND METAL BONNET SEAL
  - \*OPERATING PRESSURE RANGE: 1X10<sup>-8</sup> MBAR TO 1200 MBAR
  - \*DIFFERENTIAL PRESSURE AT OPENING: ≤ 30 MBAR
  - \*DIFFERENTIAL PRESSURE ON THE GATE: ≤ 30 MBAR
  - \*LEAK RATE: < 1.3X10<sup>-9</sup> MBAR L/SEC
  - \*CYCLE LIFE: 100,000
  - \*TEMPERATURE FOR VALVE BODY: ≤ 200 °C
  - \*BAKE TEMPERATURE: ≤ 150 °C (CLOSE) & ≤ 200 °C (OPEN)
  - \*SST CONSTRUCTION
- NOTES:**

1. ALL WELDS TO BE VAC. TIGHT TO 2x10 MIN.<sup>-10</sup> SENSITIVITY.
2. NOTE GATE SEAL SIDE.
3. DIMENSIONS IN [X.XX] ARE IN mm.

**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TLI ENTERPRISES, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF THERMIONICS LABORATORY INC. IS PROHIBITED.

| 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:     | <br><b>thermionics laboratory, inc.</b> |         |            | 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>CH'K'D</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>APP'V'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. | CH'K'D |  |  |  |  |  | APP'V'D |  |  |  |  |  | MFG |  |  |  |  |  | Q.A |  |  |  |  |  |  | <b>thermionics laboratory inc.</b><br><b>3118 Depot Rd., Hayward Ca. 94545</b> |
| DESIGN/ENG.  | NAME | SIGNATURE   | DATE   | USED ON | NEXT ASSY. |   |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
| CH'K'D   |      |             |  |         |            |   |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
| APP'V'D  |      |             |  |         |            |   |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
| MFG  |      |             |  |         |            |   |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
| Q.A  |      |             |  |         |            |   |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
|  |      |             |  |         |            | <b>MANUAL GATE VALVE,<br/>         METAL BONNET,<br/>         OUTLINE DRAWING</b> |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
|  |      |             |  |         |            | DWG NO.   | A3        |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
|  |      |             |  |         |            | TLG10000-100-21-(12001000)-1200   |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
|  |      |             |  |         |            | WEIGHT:   | SCALE:1:8 |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |
|  |      |             |  |         |            | SHEET 1 OF 1  |           |      |         |            |        |  |  |  |  |  |         |  |  |  |  |  |     |  |  |  |  |  |     |  |  |  |  |  |  |  |