

## **TDV-Series Triple Duty Valves Installation and Maintenance Instructions**

### **ELBI MODEL TDV–SERIES TRIPLE DUTY VALVE**

Our Triple Duty Valve combines a calibrated balancing valve, a shut-off valve, and a center guided silent check valve into a single unit.

### **INSTALLATION**

Determine the system flow requirements. Refer to pressure drop charts and select a valve whose 50% flow rate is closest to this figure. (NOTE: The valve size may not be the same as the line size).

Install valve, flow arrow in direction of flow, 5-10 pipe diameters from the discharge of the pump. System operating conditions are not to exceed operating conditions of 175 psig @ 250 degrees F.

### **OPERATION**

1. Turn hand wheel counter clockwise until indicator reads in the 100% open position.
2. Start system pump, and purge all air from system.
3. Install test plugs or pressure gauges in the two ports on the inlet and outlet of the TDV-Series valve and read the differential pressure across the valve. Pressure drop across the valve should not exceed 11 psi. Excessive noise or damage to the valve may occur on pressure drop above 11 psi.
4. Refer to the appropriate performance curve or CV rating table to determine flow based on the results from step “3” and the “percent open” as indicated.
5. Slow close the valve, turning hand wheel clockwise, until the specified GPM flow rate is achieved. Secure or remove hand wheel to maintain this setting.
6. Consult pump manufacturers guidelines if specified GPM is achieved with the valve at < 50% open, pump impeller may need to be trimmed.

### **MAINTENANCE**

TDV Series Triple Duty valves requires no regular maintenance. Replacement parts are available. Contact Elbi of America, Inc. or your nearest representative. Prior to closing the valve be sure to note percentage (%) open location and return to this position.

### **WARRANTY**

Triple Duty Valves from Elbi of America, Inc. are warranted to be free of defects in workmanship for a period of one (1) year. Valves are warranted to be free of defects in workmanship and material for a period of twelve (12) months from the date of installation and test, or eighteen (18) months from the date of purchase, whichever occurs first.

**ELBI of America, Inc.**

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In the event of a claim under this limited warranty, Elbi of America's obligation and liability, is limited to the repair and replacement of the valve only. Elbi of America, Inc. is not liable for any incidental or consequential damages.

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