

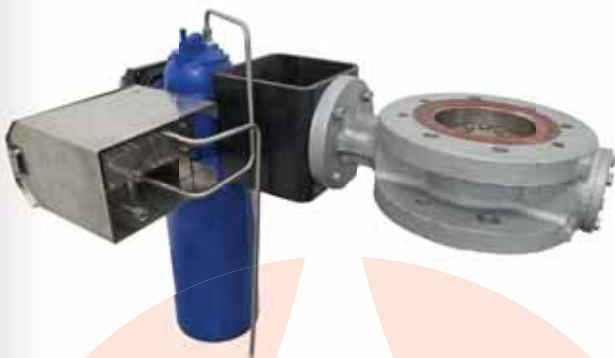


## MODEL: 6820 TRV

A Patented Total Relief Valve System

TRUSTED SOLUTIONS FOR OVER 25 YEARS

**TOTAL** Valve  
Systems



## MODEL 6820 TRV

- 6820-TRV-DP** : Differential Pressure Model
- 6820-TRV-SP** : Single Sensing Pressure Model
- 6820-TRV-XX** : Custom Pressure Sensing Model

See our TRV video at [TotalValve.com](http://TotalValve.com)

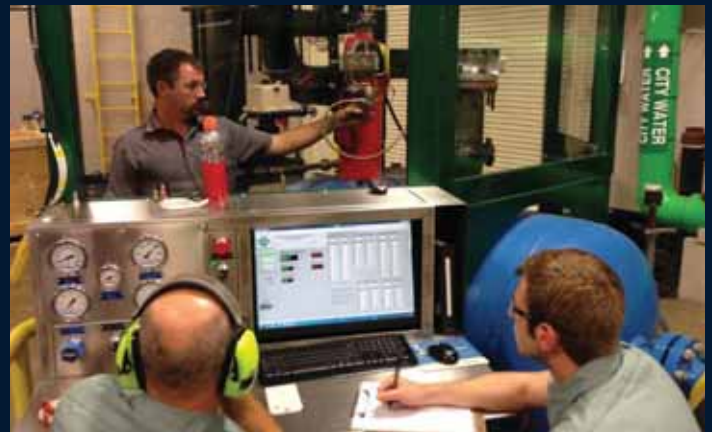
Meets API and ASME standards

# MODEL 6820 TRV

// Total Relief Valve

**6820 TRV is our proprietary system** to open or close a valve at desired set pressure. This patented system includes the TRV module, an actuator, and an isolation valve. The typical isolation valves are triple offset butterfly valves due to performance and durability.

This system allows the user to operate within 1-3% of the valve's desired set pressure. The relief capacity is much greater than typical relief systems on the market, allowing for lower overall system costs. No external power is required for the device; it is independent of system back pressure. When coupled with a ball valve, it offers a pigging capability and provides overpressure or shutdown protection.



National Board Tested/ASME "UD" Certified

## MARKETS SERVED

- Gas Processing
- Chemical Processing
- Nuclear Power
- Pulp & Paper Mills
- Oil & Gas / Refining
- Municipal Service
- Midstream/Pipeline
- Special Applications

# PROVEN SYSTEM

## WITH THE FOLLOWING COMPONENTS:



### 1 - TRV MODULE

Our patented technology allows for complete control of valve set pressures (+/- 2%). Set pressures can be adjusted. Key options for dual sensing lines and fluid media filters provide industry leading system reliability. Suitable for severe service where dirt, hydrates and high moisture levels occur in the fluid media.



### 2 - TRIPLE-OFFSET VALVE - 6820 MODEL

Triple-offset valves deliver proven performance across the spectrum of temperature, pressure and sealing classes. They operate from -450°F to 1500°F in accordance with valve specifications. Non-rubbing seat design offers bubble tight sealing performance. Options include all standard pressure classes.



### 3 - ACTUATION SYSTEM WITH KEY SYSTEM OPTIONS

Proven pneumatic and hydraulic actuation systems are integrated to the valve and TRV module. The modular design allows the use of special valve features including accumulator tanks, thermal protection plugs and other devices according to customer specifications.

**Set Pressure Capability, Certification and Tolerance :** All 6820 TRV's are calibrated before shipment to meet the user's required set or differential pressure and tolerance with a set point reliability of +/- 2%.

**Operating Pressure Ratio :** TRV's technology provides outstanding resistance to operating pressure conditions. System performance is not impacted by system backpressures.

**Pressure Cycling Service :** This system has superior performance to pin type valves and rupture discs due to the TRV module's advanced design. The system does not rely on a prediction of a material failure as in pin valves and rupture discs.

**Installation :** The TRV 6820 is designed for "in line" installation between pipe flanges. Each device is a "full face" design with pipe flange bolting for lug, wafer and short pattern body configurations.

**Field Testing and Resetting :** The unit's field test connection port affords in-the-field testing. New settings can be reset in the field if a desired set pressure change is required. The feature allows smoother start-ups and quicker resets (in less than 3 seconds) when the device opens, versus the processes required for pin type valves or rupture discs.

**Valve Activation :** The 6820 TRV has two basic configurations the 6820 TRV-DP model for positive differential pressure applications. The 6820 TRV-SP is the model for single positive sensing line pressure applications.

**Other Options Include :** Accumulator / Remote Closure System / Weatherproof Enclosure  
**See spec sheet for further options.**



## Total Valve Systems

1300 East Memphis  
Broken Arrow, OK 74012

Capacity Certification, Valve Type:  
TRV 6820 NB Cap Cert. No.: TVO-M00606

## Sizes from 6" to 48" are available with the 6820 TRV system

**Flange Ratings :** 150, 300, 600

**Set Pressures :** 3 psi to 1500 psi

**Temperatures :** -450°F to 1500°F

**Accuracy :** +/- 2% of set pressure

# We design, manufacture and ship from our vertically integrated 65,000 sq. ft. facility in Tulsa, Oklahoma.



## VALVE WARRANTIES Standard Products and Services :

L6, Inc. d/b/a Total Valve Systems, hereinafter called "Total Valve" warrants as follows: (a) That each new Total Valve product and service is free from defects in material and workmanship if installed and used in accordance with ASME and other accredited agency certifications. Any valve repair/service not performed under ASME or accredited symbol has no implied or express warranty. (b) That each new Total Valve product and service is fit for the purpose for which similar type product and services are ordinarily intended. Purchaser shall be solely responsible for determining suitability for use and in no event shall Total Valve be liable in this respect.

**DURATION** – The warranty period shall begin on the date of shipment to the first purchaser and extend for twelve (12) months.

**EXCLUSIVE REMEDY** – Total Valve will repair or replace at its sole discretion, any product and service it finds to be defective under this warranty, upon return of the product and service, prepaid, to Total Valve at 1300 East Memphis, Broken Arrow, Oklahoma 74012 or any warehouse designated by Total Valve. Such repairs or replacements are clients exclusive remedy and Total Valve SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY OR ANY OTHER THEORY OR RECOVERY.

**DISCLAIMER** – Total Valve excludes from this warranty failures due to corrosion, erosion, abrasion, cavitations, or other application related failures. Further, it is the end user's responsibility to account for environmental influences such as traffic, wind, earthquake or other external loadings, decomposition of unstable fluids, simultaneous loadings or loadings due to fluid weight. There are no warranties that extend beyond the terms hereof and no one is authorized to assume for TOTAL VALVE any other liability in connection with the sale of TOTAL product and services. This warranty supersedes all previous warranties.

**CUSTOM VALVE WARRANTY (manufactured valves to customer specifications):** Total Valve personnel shall perform the services in accordance with the care, skill and diligence of applicable industry standards currently recognized as of the date of the execution of this agreement. Total Valve disclaims all other warranties, presentations and statements, express or implied, statutory or otherwise. No oral or written information or advice given by Total Valve or its agents, Representatives or employees, shall create a warranty or in any way increase the scope of these warranties and the client may not rely on any such information or advice unless it is set forth in writing signed by an authorized officer of Total Valve.

Design: We reserve the right to make design changes without notice.

**[www.totalvalve.com](http://www.totalvalve.com)**

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