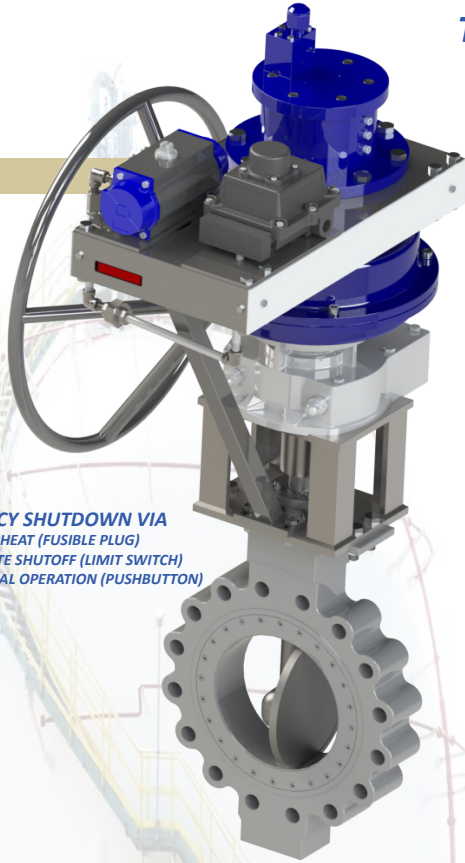




## RE-SETTABLE EMERGENCY BLOCK VALVE FOR CRITICAL APPLICATIONS

**THE ONLY RESETTABLE EMERGENCY BLOCK VALVE  
MADE WITH REFINERIES IN MIND**



**EMERGENCY SHUTDOWN VIA**

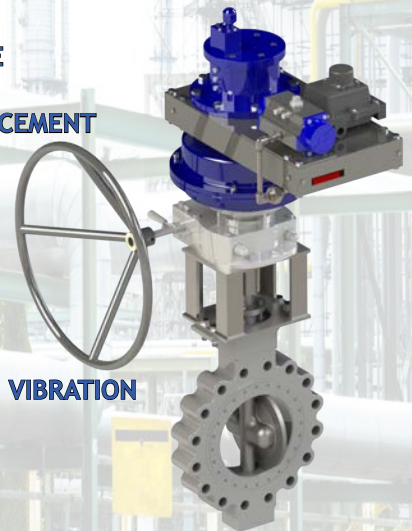
- LOCAL HEAT (FUSIBLE PLUG)
- REMOTE SHUTOFF (LIMIT SWITCH)
- MANUAL OPERATION (PUSHBUTTON)

### OVERVIEW

BI-TORQ® Valve Automation's Re-settable Emergency Block Valve (R-EBV) is designed for critical applications in refineries, natural gas production pipelines, chemical facilities, or any other process involving flammable liquids or gases. Our R-EBV will shut down an API 607 1/4-turn ball or butterfly valve in case of flames or high local heat, reducing chances that dangerous media will further feed a fire. The unit also can be shut down through a remote signal in advance of an approaching fire. In addition to those safety features, the R-EBV can be manually operated as part of a regular maintenance program, assuring proper function of this crucial safety device at all times.

### KEY FEATURES

- **AUTOMATIC CLOSURE IN CASE OF AMBIENT HEAT FROM FIRE, REMOTE SIGNAL OR LOCAL PUSHBUTTON**
- **CAN BE INSTALLED ON BOTH FIRE SAFE APPROVED QUARTER-TURN BALL OR BUTTERFLY VALVES**
- **FULLY RE-SETTABLE/TESTABLE FOR QUARTERLY OR ANNUAL MAINTENANCE**
- **STAINLESS STEEL COMPONENTS; MODULAR DESIGN FOR EASY PARTS REPLACEMENT**
- **OPERATIONAL BY ONE PERSON**
- **LOW AIR CONSUMPTION FOR ACTUATOR AND SOLENOID**
- **TORQUE OUTPUT TO 21,000 INCH POUNDS WITH CLOCKSING DESIGN**
- **ADJUSTABLE SPEED OF CLOSURE TO PREVENT VALVE DAMAGE OR PIPELINE VIBRATION**
- **CONTINUOUS POSITION FEEDBACK THROUGH LIMIT SWITCH**
- **PATENTED DESIGN (PATENT # 503397577)**





# RE-SETTABLE EMERGENCY BLOCK VALVE FOR CRITICAL APPLICATIONS

## HOW IT WORKS

**BI-TORQ® Valve Automation's Re-Settable Emergency Block Valve (R-EBV) is designed for critical applications in refineries, natural gas production pipelines, chemical facilities, or any other process involving flammable liquids or gases. Our R-EBV will shut down an API 607 1/4-turn valve in case of flames or high local heat, reducing chances that dangerous media will further feed a fire. The unit also can be shut down through a remote signal in advance of an approaching fire. In addition to those safety features, the R-EBV can be manually operated as part of a regular maintenance program, assuring proper function of this crucial safety device at all times.**

**THERMAL SHUTDOWN:** In case of an emergency shut-down due to local heat/fire, a fusible plug in the air line connected to the pneumatic actuator supply port will melt, allowing air to vent to atmosphere. Loss of air to the solenoid valve will cause the pneumatic actuator to rotate counter-clockwise. This will allow the engagement arm to release, causing the clockspring to freely rotate while the dashpot dampens the spring closing force.

**SIGNAL SHUTDOWN:** If the operator wants to close the valve in the absence of local fire/heat, a 24VDC signal is sent to the solenoid valve/limit switch. The voltage signal causes the solenoid valve to shift, resulting in the same series of movements listed above to shut the valve.

**PUSHBUTTON SHUTDOWN:** If the operator wants to manually close the valve through an air signal, it can also be done locally at the unit by using the solenoid pushbutton. Depressing the pushbutton causes the solenoid spool valve to shift, resulting in the same series of movements listed above to shut the valve.

**MANUAL OPERATION:** The R-EBV can be operated through a declutchable manual override to either simulate the function of the automatic closing device or to turn the valve 90 degrees open-close as part of a regular maintenance program. The ability to operate the unit ensures that no crucial parts "freeze up" and that the valve is fully operational.

## APPLICATIONS

**Although the R-EBV was developed through feedback from refinery personnel, this safety product has a number of other application uses for ANY potentially flammable or toxic media. Other applications include but are not limited to:**

- GAS AND OIL
- BIOFUELS
- BULK LOADING
- STEAM REGENERATION
- NUCLEAR
- CHEMICAL
- ALCOHOLS/SOLVENTS
- BACKUP GENERATORS
- POWER PLANTS
- HOSPITALS/OXYGEN
- FUELING STATIONS
- AIRPORTS/JET FUEL
- STORAGE TANKS
- PHARMACEUTICAL
- PAINT PROCESSING
- NATURAL GAS LINES
- HIGH PRESSURE GAS
- MANUFACTURING

