

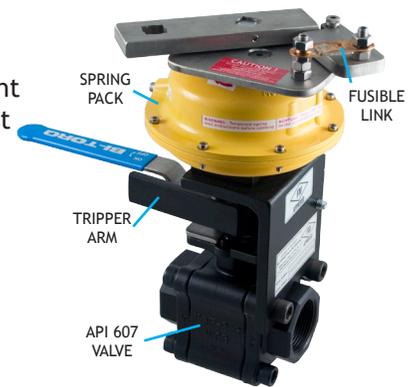


# THERMAL SHUT-OFF VALVES FOR BUILDINGS

GOVERNMENT BUILDINGS • COLLEGES • UNIVERSITIES • OFFICE COMPLEXES • HEALTHCARE FACILITIES

Fire protection in buildings doesn't start and end with sprinkler systems. The approach needs to be multi-faceted, including provisions for automatic isolation of flammable or hazardous media at their source, keeping them from further fueling a fire. Additionally, key choke points in a building should also be isolated. The media is typically diesel fuel or natural gas, but colleges, universities and healthcare facilities will have additional safety needs.

The solution of choice is an FM approved thermal shut-off valve also known as a fusible link valve. This type of assembly will *automatically close* a valve and isolate a pipeline or tank in the event of a fire. The principle of operation is straight forward. A clock wound spring is held under tension with a fusible link. In the event of a fire, the ambient heat of the fire will cause a special alloy in the link to melt, causing the link to release the spring tension. Once released, the spring will drive the tripper arm to close the valve using the valve's lever handle. The valves used in line are API 607 fire safe. API 607 valve have two seats - a soft primary seat and a secondary metal seat. When the soft seat burns away in a fire, the metal seat is employed, holding the seal. The valve also uses graphoil body and shaft seals to contain the media. The *FM approval* signifies that a rigorous series of tests were done and certified by a global leader in loss prevention, ensuring performance.



The strategic placement of thermal shut-off valves maximizes facility safety 3 major ways. First, it allows for fuel lines to be shut down at critical junctures once the units are activated. The assemblies will stop flow into buildings or at branch points to keep flammable media from feeding a fire due to ruptured pipes, broken fittings or other leak points in the system. The thermal shut-off valves will also *isolate tanks at their source*, keeping the bulk of the flammable material safely in storage tanks. Well-placed thermal shut-off valves add extra time to evacuate a building and help keep first responders safe by reducing the risk of escalation.

## SEE THE BI-TORQ ADVANTAGE

BI-TORQ Valve Automation's FLP series thermal shut-off valves are available 1/2" through 2" in NPT or socket weld end connections or 1/2" through 6" with 150# flanges. Valve bodies options include carbon or stainless steel. Fusible links are offered in 4 temperatures - 165°F, 212°F, 286°F and 500°F.

What really sets BI-TORQ's FLP series apart from the competition on this type of assembly is its *versatility*. The assembly is easily field resettable and allows for manual lever operation while armed. The FLPs are also low maintenance and simply need annual link replacement as part of an overall facility maintenance program. The installation process is also streamlined. Simply put the valve in line and arm the device.

**OPTIONS**

- Butterfly valve models
- Position feedback
- High pressure models
- Fail open versions
- Visual indication
- Thermal-electric links



**DIFFERENTIATORS**

- FM approval
- Manual use while armed
- Low maintenance
- Field resettable
- API 607 valves
- True isolation valve