

Safety Related Valves

Tank Emergency Shut-Off Valves (TESO) – Models 29 and 73

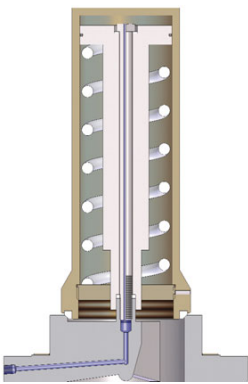
TESO valves protect large storage tanks in emergency circumstances. They are commonly used in tanks containing toxic or flammable fluids.

Under normal operation conditions the valve is held open by air pressure and in the event of an emergency (e.g. an earthquake or fire) a spring or weight closes the valve.

In-lying TESO valves – Model 73

- Installed from top to the bottom of the tank
- A long spindle connects the pneumatic actuator and disc or plug valve at the bottom
- In case of an emergency a heavy weight moves the disc or plug downwards closing the valve

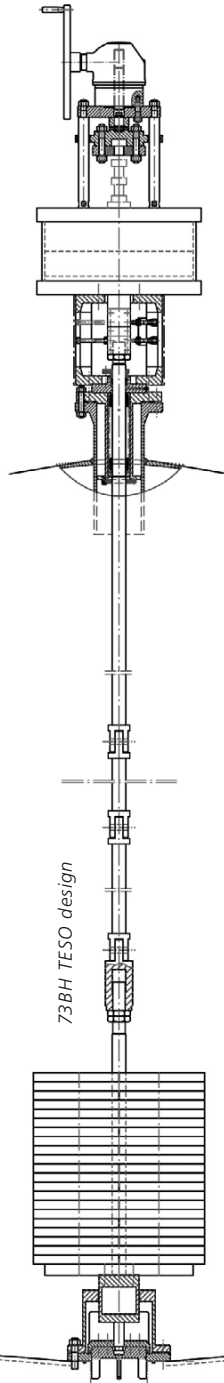
- 73BH – In-lying disc safety valve
- 73ID – In-lying plug safety valve
- 73IS – Compact TESO design



73IS Compact TESO design

TESO for tank side installation

- Extended valve seat bridges the space between the inner and outer tank walls
- 73IH – Side mounted safety disc valve for double wall tanks



TESO Valves – Key Features:

- The in-lying valve seat is unaffected by damage to pipework or to the valve itself
- Valves can have bellows sealed spindles
- Automatic opening by air pressure
- Suitable for cryogenic services such as liquefied gases

TESO for tank bottom installation – Model 29BH

- Valve seat welded into the vessel bottom
- In emergency cases the spring inside the vessel closes the valve
- The valve disc that is flush with the tank outlet is detachable from the valve spindle which is outside the tank wall. This ensures a tight seal even if the outer parts of the valve are damaged
- Optionally with an extended pad seat



29BH TESO with in-lying spring