

Sentinel NTE-5 Safety Valve

The Sentinel™ NTE-5 is a surface-controlled, tubing-retrievable safety valve (TRSV) rated for working pressures up to 5,000 psi (34.5 MPa) and temperatures up to 300°F (149°C). The NTE-5 uses a non-elastomeric single-piston actuator, optional self-equalizing flapper, and metal-to-metal flapper closure seal to provide 100% well containment when closed.

The surface-controlled emergency shutdown (ESD) system supplies hydraulic control pressure to actuate the NTE-5's non-elastomeric piston rod to open and close the flapper. The NTE-5 is a fail-safe, normally closed valve that will protect production installations from uncontrolled flow if wellhead equipment is damaged in a catastrophic event. After shut-ins, the optional self-equalizing flapper design facilitates a rapid return to production, reducing operational downtime.

The NTE-5 is tested/certified to API-14A-V1 and manufactured in accordance with ISO-9001:2015 standards. Materials selection options are based on NACE MR-0175 compliance.

The Sentinel NTE-5 safety valve has a full compliment of accessory tools including an exercise tool, lockout tool, and communication tool for contingency operations.

We provide global service support for installation, field repair, and maintenance worldwide. Contact your NOV sales representative or application engineer to discuss your specific requirements.



Features

- Compact OD design
- Non-elastomeric piston actuator
- Metal-to-metal flapper and body seals
- Standard self-equalizing
- Accepts dedicated wireline service tools

Optional features

- Equalizing and non-equalizing versions
- Premium piston stops
- H₂S/CO₂ trim
- 1,000- or 2,000-ft (305- or 610-m) placement options

Benefits

- Long-term reliability
- Time-proven design
- Easy to operate
- Serviceable by wireline

Technical data

Tubing size in. (mm)	Max. OD in. (mm)	Polished bores in. (mm)	Working pressure psi (MPa)	Tensile strength (ambient temp.) lbf (N)	Tensile strength lbf (N)	Overall length in. (mm)
2.875 (73.03)	4.600 (116.84)	2.313 (58.75)	5,000 (34,474)	253,097 (1.13E6)	236,097 (1.05E6)	42.00 (106.70)
3.500 (88.90)	5.160 (131.06)	2.813 (71.45)	5,000 (34,474)	283,208 (1.26E6)	263,383 (1.17E6)	51.13 (129.87)

Note: The engineering data provided illustrates the scope of this product offering and is not all inclusive. Additional sizes and functionality are available upon request.