

Smart-Flow™ PRV

Advanced (and Smartest) Pressure Relief Valve Technology

Midland knows different shippers require different solutions. Commodity, tank size and shell, the use of a thermal blanket, and many other factors determine the appropriate rate of discharge for an external pressure relief valve (PRV). Because of this, Midland has developed the Smart-Flow Pressure Relief Valve to complement its existing line of PRVs.

Midland's new Smart-Flow Pressure Relief Valve delivers the right answers for your toughest crude-oil questions. Constructed with corrosion-resistant stainless steel, Smart-Flow solves DOT 117 / TC 117 car design needs and presents unmatched engineering excellence.

When the Smart-Flow detects a high-pressure situation of 75 psig, discharge of 12,000 SCFM occurs. The rapid and controlled release of pressure minimizes the likelihood of a high-energy event. However, if a pool fire were to occur, a tank car equipped with the Smart-Flow can withstand a 100-minute pool fire and 30-minute jet fire without rupture.

And since the Smart-Flow discharges at a lower rate than other valves, it delivers the best of both worlds – tank integrity AND a controlled environment should first responders be called to intervene.



Smart-Flow™
PRESSURE RELIEF VALVE

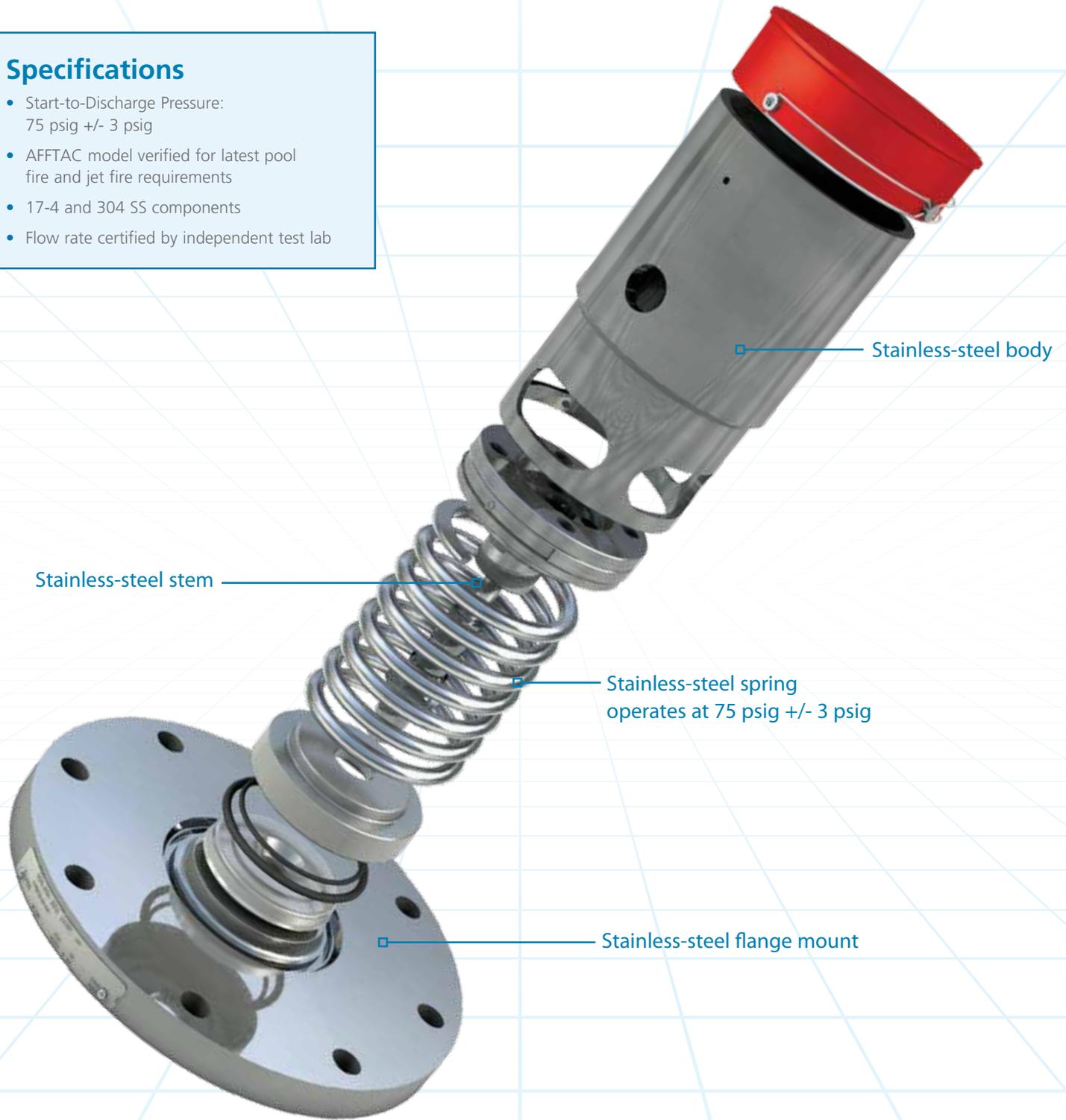
Features & Benefits

- External design utilizing stainless-steel construction that resists corrosion and assures reliable performance and long valve life
- 75 psig repeatable set-to-discharge
- Flow rating of 12,000 SCFM
- Compact, low profile (less than 9") meets anticipated AAR regulations for retrofit valves on stacks outside of enclosures
- 6-1/4" x 10-1/4" bolt circle, flange mount
- AFTAC model verified. Thermal protection package will ensure the tank car meets 100-minute pool fire and 30-minute jet fire requirements of DOT 117/TC 117 specifications
- Nickel coated threads on the upper body to prevent galling

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Specifications

- Start-to-Discharge Pressure:
75 psig +/- 3 psig
- AFTAC model verified for latest pool
fire and jet fire requirements
- 17-4 and 304 SS components
- Flow rate certified by independent test lab



Stainless-steel body

Stainless-steel stem

Stainless-steel spring
operates at 75 psig +/- 3 psig

Stainless-steel flange mount