

Mechanically Atomized Main Burner Oil Valve System with Pneumatic Actuator

System Description

The Skotch Trifecta is a valve system with all components housed within a single valve body. Conventional systems require multiple valves and actuators to accomplish what we provide with a single valve system. We perform all key functions including fuel sequencing and purging of the down stream piping.

An extension of the successful T1005/T1006/T1007 series, the T2000 valve system provides the same proven performance advantages over separate valves, or packaged multiple valve systems, including:

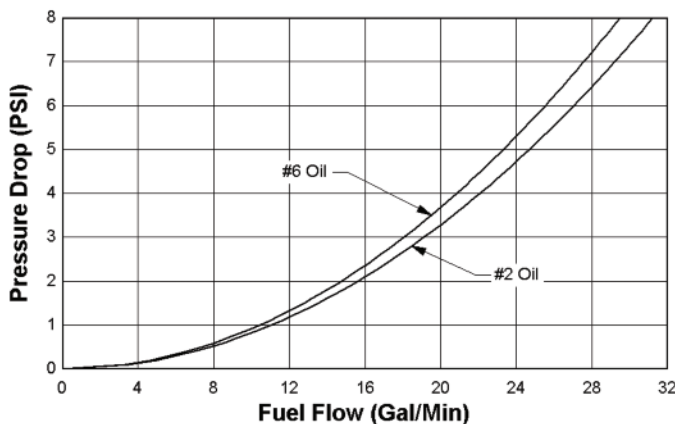
- Prevention of out-of-sequence operation, eliminating contamination of the purging media.
- Purge sequence is an integral part of our valve closure, allowing almost instantaneous switching from firing to purging modes.

Application

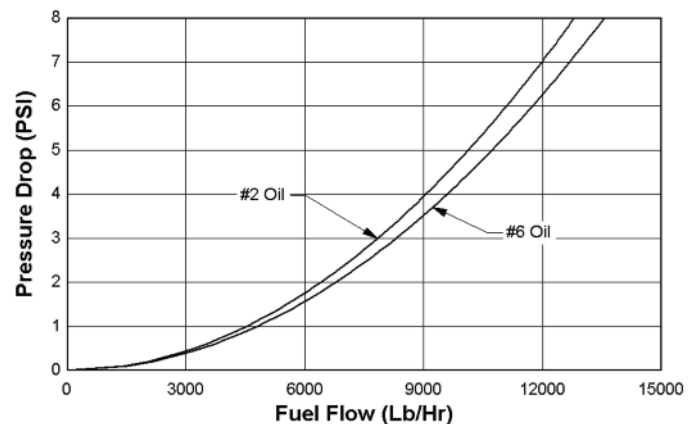
The T2000 valve systems are used with oil fired burners requiring straight Mechanical Atomization. These valve systems are completely self contained, and Engineered Valves Group provides all necessary accessories, such as indicator switches and junction boxes. While the straight mechanically atomized system is shown here, we can also provide systems for Wide Range Tip Return systems employing return and recirculation of the oil. Please consult factory for more information.



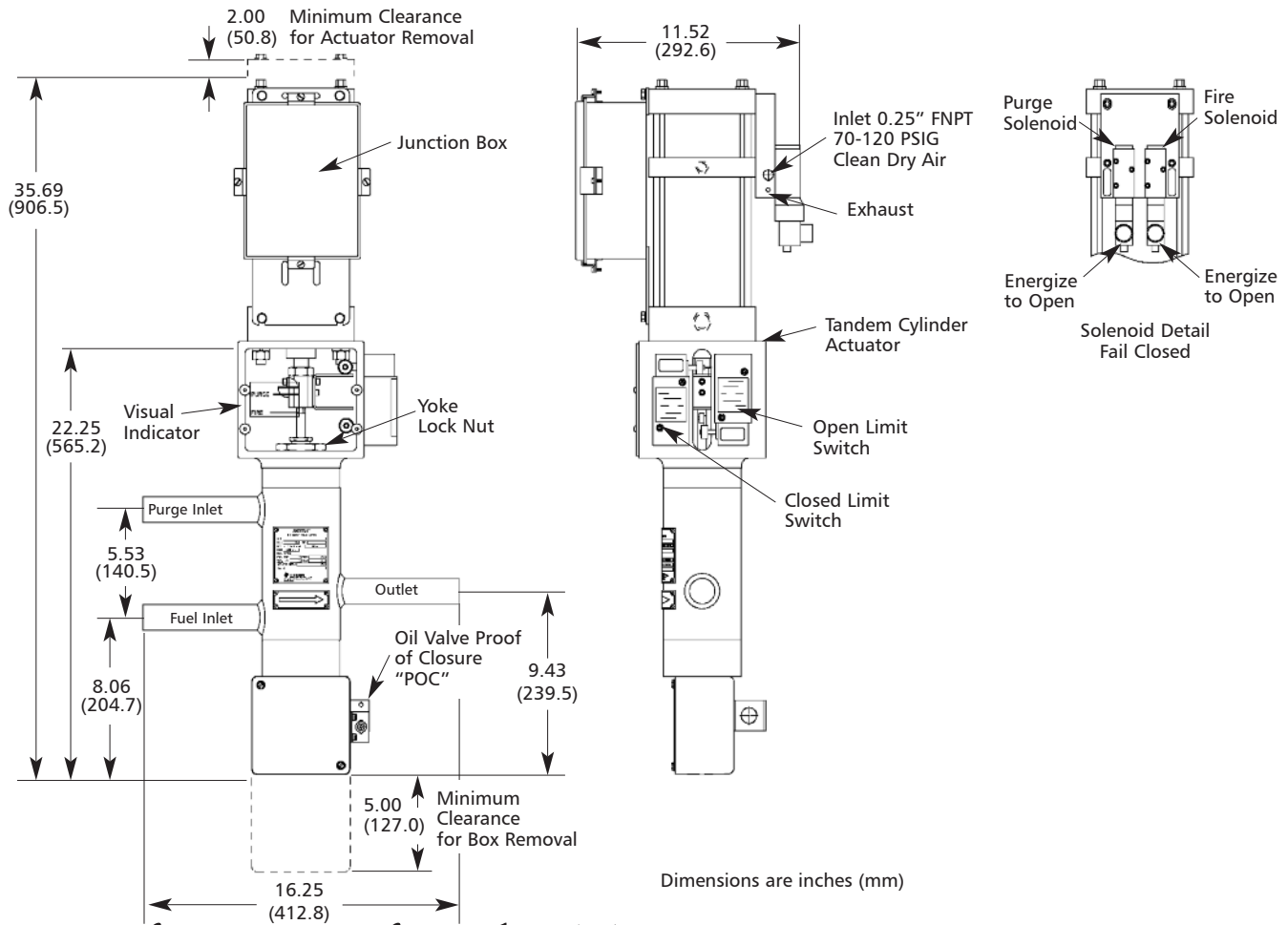
T2005/T2006/T2007 Valve Systems



T2005/T2006/T2007 Valve Systems



Dimensional Specifications for the T2005/T2006/T2007



Dimensions are inches (mm)

Specifications for the T2005/2006/2007

Design Pressure and Temperature

Standard Valve: 300 PSIG @ 450°F

Optional: 600 PSIG (fuel) @ 450°F

Maximum Differential Pressure:

Equal to design rating

Sizes: ¾" or 1"

End Connections:

Sch. 40 or 80 Spigot, Butt Weld, ANSI CL. 300

Raised Face Flange, Socketweld,

Male NPT in Sch. 80

Flow Orientation:

Left-to-right or right-to-left

Field reversible (consult factory)

Failure Mode:

Closed or last position upon electric or pneumatic failure.

Shutoff Classification:

Per ANSI/FCI 70-2

Atomizing seat – Meets or exceeds CL. IV

Purge seat – Meets or exceeds CL. IV

Fuel seat – Meets or exceeds CL. VI

Total Stroke: 1 ¼" for both models

Operating Speed:

Opening – Approximately 0.8 seconds, maximum determined by speed control.

Closing – Oil valve closure in approximately 1 second, full closure in approximately 2 seconds

Ambient Temperature Rating:

Standard: 140°F (FM approved)

Optional: 180°F (non-FM approved)

Electrical Rating:

Standard: Nema 1, 3, 4, 13

Optional: Nema 7, Class 1 Div 2

Nema 7, Class 1 Div 1 (consult factory)

Switch Rating: 10 Amps at 125 VAC

Solenoid Supply Voltages:

110 VAC, 220 VAC, 50/60 Hz

12, 24, 48, 125 VDC

Air Supply Pressure:

70-120 PSIG – Clean, dry air

Weight: Approximately 85 lbs per valve assembly

Cv Ratings:

Purge Cv – 3.5

Fuel Cv – 10.0