

## Mechanically Atomized Main Burner Oil Valve System with Electrohydraulic 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:

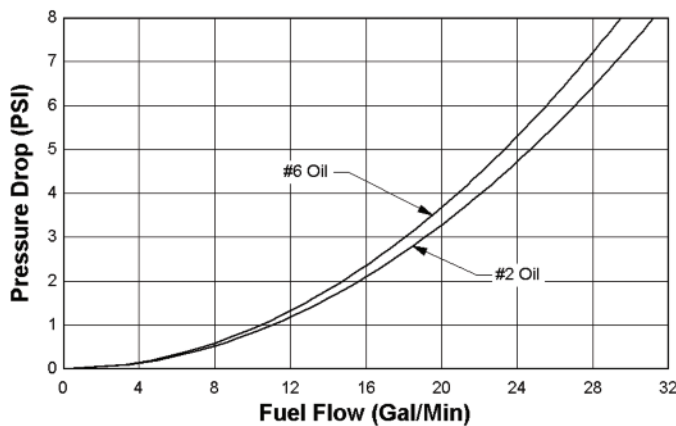
- Prevention of out-of-sequence operation, eliminating contamination of the purging media.
- Purge sequence is an integral part of our valve closure, allowing almost instantaneous switching from firing to purging modes.

### Application

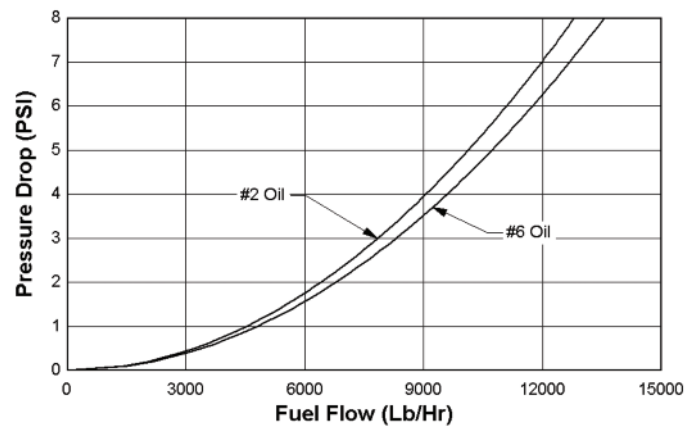
The T2000 valve systems are used with oil fired burners requiring straight Mechanical Atomization. These valve systems are completely self contained, and all necessary accessories are provided, such as indicator switches and junction boxes. While the straight mechanically atomized system is shown here,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



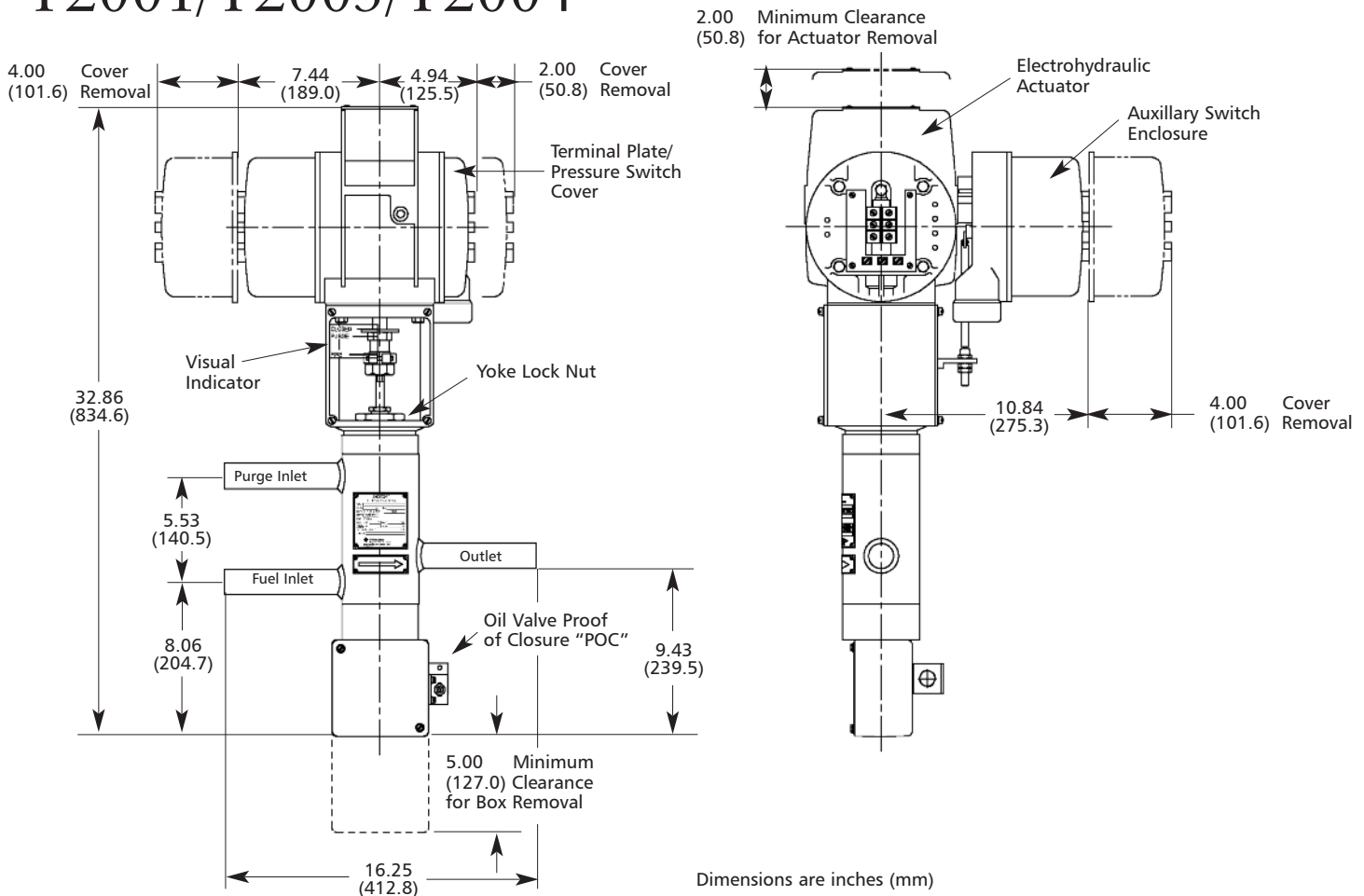
T2001/T2003/T2004 Valve Systems



T2001/T2003/T2004 Valve Systems



# Dimensional Specifications for the T2001/T2003/T2004



## Specifications for the T2001/T2003/T2004

**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 25 seconds

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 4 and 13

**Switch Rating:** 10 Amps at 125 VAC

**Solenoid Supply Voltages:**

110 VAC, 220 VAC, 50/60 Hz

12, 24, 48, 120 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