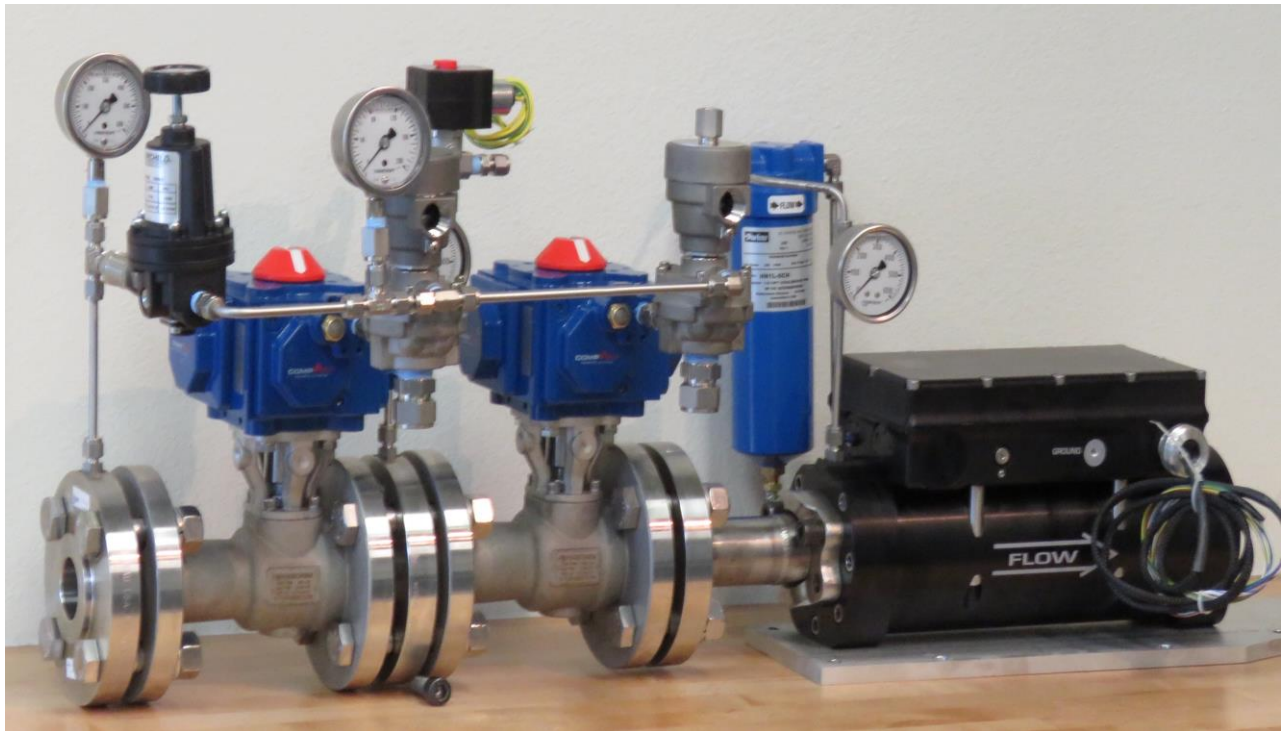


Technical Specifications

Fuel Train, FT50





Applications:

The Fuel Train FT50 is designed to provide extremely fast shutoff of gaseous fuel flow to an industrial gas turbine engine. Gas flow is stopped when the valve is closed, or when pilot pressure is removed, with zero leakage from inlet to outlet. It is suitable for operation with gas temperatures between -40 and +185°F (-20 and +85°C).

The valve can achieve ANSI Class IV shut-off capability. The normally-closed valve may be used for emergency and normal shut down operation. Stainless steel construction assures availability of the valve despite corrosive service conditions or even catastrophic fire.

This product is suitable for use on industrial turbines up to 38,000 hp output range with single or multiple combustion fuel manifold systems.

Description:

The Fuel Train isolation valve provides shutdown on a gas turbine by rapidly halting the flow of gaseous fuel. The supply pressure is used to move a spring-loaded piston in the valve. When the valve is energized, gas pressure drives the spring-loaded piston open, admitting fuel to the turbine. When the current signal to the electrical solenoid is interrupted, the spring loaded second-stage piston changes states to vent off primary control pressure. The main spring then forces the primary piston to the seal, stopping all flow. The pneumatic valve, pilot valve for pneumatic and ¼" vent valve are normally closed valves.

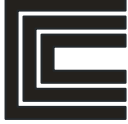
Features:

- All stainless steel piping and tubing
- Pre-assembled and pressure tested
- Closes in <200 ms
- Spring return (fail-safe)
- Safety Integrity Level (SIL) 2 to 3
- Vent Valve for block and bleed
- Fuel temperature range -40 °C to +85 °C
- Better than Class VI shutoff
- Compliant with CSA, ATEX, PED, API
- Certified Per ASME Section 9 B31.1
- Certified for use in explosive atmospheres
- Designed for natural gas, propane, ethane, or methane
- Operates from line pressure



Specifications:

	Performance:	Closing Time Within 0.200 second
Operating Conditions / Environment		
	Chemical Compatibility:	NACE Compliant for all typical gas fuels
	Fuel Temperature:	-40 °C to +85 °C
	Ambient Temperature:	-40 °C to +85 °C
	Fuel Types:	Natural Gas, Propane, Ethane, Methane
	Fuel Train Supply Pressure:	Normal Operation 150 to 500 psig
	Pneumatic Isolation Valve Reg. Pressure:	Normal Operation 110 to 140 psig
	Fuel Solid Particle Contaminant:	<10 µm diameter, 30 ppm by volume
	Pilot Filtration:	10 µm
Electrical Specifications		
	Voltage Available:	24 Vdc, 2 amps
	Wiring Interface:	½-14 NPT Conduit Entry
Mechanical Specifications		
	Inlet:	2" socket weld flange per ANSI B16.5; 600 lb
	Outlet:	SAE Series 61, 2" 4-bolt flange
	Pneumatic Valve Status:	Normally Closed
	Pneumatic Isolation Valve Status:	Normally Closed
	¼" Vent Valve Status:	Normally Open
Regulatory Compliance		
	CSA:	CSA Certified for Class I Div 1 and Div 2, Groups C & D, T4
	ATEX:	Declared to 94/9/EEC
	PED:	PED 97/23/EC module H
	API:	API 607, ISO 10497
	Safety Integrity Level (SIL):	IEC 61508-2 SIL 2/3
	Valve Design:	ANSI B16.34, API 6D / ISO 14313, ISO 17292
	H2S:	NASE MR-0175, ISO 15156-1/2/3



Mechanical Construction:

The Design dimensions

