

# Dual Motion Shutoff Valve

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## Key Features

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### Dual Motion Mechanism

- Robust sequencing driver and eccentric shaft mechanism linearly retracts the valve disk from seal surface and rotates the valve disk to open. The reverse sequence controls valve closing.
- Maximizes seal life
- Reduces leakage
- Minimizes operating torque and pressure drop
- Patent Pending

### Electric Motor Operated Rotary Actuator

- High reliability optical switches for position control, as used in many qualified commercial and military aircraft applications
- Qualified to RTCA/DO-160 environmental and electrical requirements
- Modular, adaptable to any valve.



## Product Overview

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The 3" (76.2 mm) Dual Motion Shutoff Valve from ITT Aerospace Controls is an electric motor actuated, normally closed segmented ball valve. The ball segment retracts linearly from the spring-energized seal prior to rotational transition to fully opened position. This design effectively eliminates sliding and friction wear of the seal contact during valve opening and closing operations, maximizes seal life, minimizes operating torque, and reduces leakage over the valve operating life. Our Dual Motion Shutoff Valve supports both fuel and nitrogen-enriched air flow systems.



**ITT**

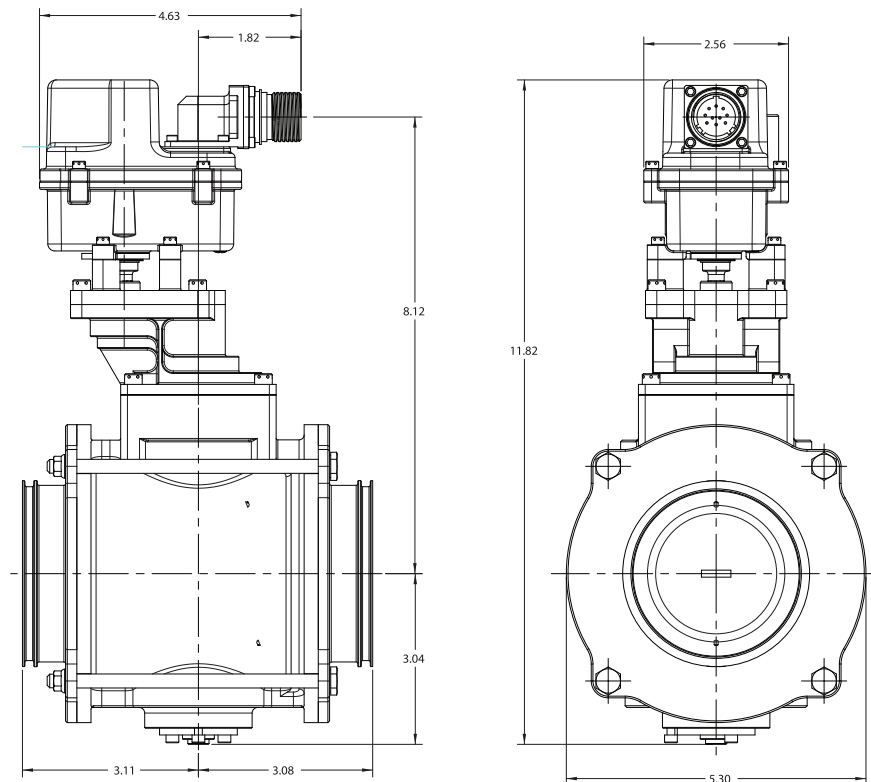
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# Specifications

<b>Pressure</b>	
Operating	120 psig (8.27 bar)
Proof	240 psig (16.55 bar)
Burst	360 psig (24.82 bar)
Negative	60 psig (4.14 bar)
<b>Temperature</b>	
Ambient	-65 °F to +160 °F (-54 °C to +71 °C)
Fluid	-65 °F to +135 °F (-54 °C to +57 °C)
<b>Operating Torque</b>	Pressurized @ 120 psig and -65 °F (@ 8.27 bar and -54 °C) Open 95 in-lb, Close 18 in-lb. (Open 10.73 Nm, Close 2.03 Nm)
<b>Internal Leakage</b>	
Jet Fuel	< 0.1 sccm from -12.2 psig to +120 psig (-0.84 bar to +8.27 bar)
Nitrogen (GN <sub>2</sub> )	< 1.0 sccm from -12.2 psig to +120 psig (-0.84 bar to +8.27 bar)
<b>External Leakage</b>	
Jet Fuel / Nitrogen (GN <sub>2</sub> )	0 psig to 360 psig (0 bar to 24.82 bar)
<b>Pressure Drop</b>	3.5 Psid max. at 600 gpm fuel (0.24 bar max. at 2271.25 lpm fuel)
<b>Weight</b>	7.6 lbs max. (3.45 Kg max.)
<b>Operating Life</b>	38,000 cycles

# Product Dimensions



Note: All dimensions are in inches and are for reference only.