

3010 Series Electric Gas Control Valves



*3010 Series Choked Flow
Electromechanically Actuated (EMA)
Gas Control Valve (3")*

3010 Series EMA Gas Control Valves Specifications:

Line Size:	1" Valve	1" Valve	2" Valve	2" Valve	3" Valve	3" Valve	4" Valve	6" Valve
Flow Profile	Linear	Non-Linear	Linear	Non-Linear	Linear	Non-Linear	Linear	Linear
Rated Cg	Up to 311 Cg		Up to 1200 Cg		Up to 2900 Cg		Up to 4300 Cg	Up to 6600 Cg
Estimated Dry Weight	75 lbs. (34 kg)		95 lbs. (43 kg)		160 lbs. (73 kg)		255 lbs. (116 kg)	370 lbs. (168 kg)
Slew Time	≤250ms		≤250ms		≤350ms		≤700ms	
Trip Time	≤250ms						≤350ms	
Maximum Operating Pressure	Carbon Steel: 620 psig (42.7 barg) · Stainless Steel: 497 psig (34.2 barg)							
Burst Pressure	5x maximum operating pressure							
Valve Flange Size	ASME B16.5, Class 300 RF Flange							
Fluid Temperature Range	0°F to 450°F (-18°C to 232°C)							
Ambient Temperature Range	-4°F to 212°F (-20°C to 100°C)							
Mean Time Between Service	96,000 Hours							
Mean Time Between Failures (MTBF)	290,000 hours							
Valve Materials	Available in Carbon Steel or Stainless Steel (NACE MRO175 Compliant)							
Bandwidth/Frequency Response	Customizable up to 23 Hz with 3dB attenuation							
Independent Feedback	2 LVDTs (optional)							
Motor Coil	Class F insulation (311°F, 155°C)							
LVDT Wiring	6.56 ft (2 m) Flying Lead or MIL Connector							
Motor Wiring	3 ft (.91 m) Flying Lead or 32.8 ft (10 m) Jacketed Cable							
Visual Position Indicator	Yes							
Ingress Protection	IP65							
Stem Leakage	Zero leakage, as shipped							
Seat Leakage	Class IV per ANSI FCI 70-2							
Failure Mode	Spring to drive valve to safe position (Fail Close)							
Environmental	MIL-STD-810 - Shock and Vibration							
Command	4-20 mA Position, -8 to +8 mA Triple Redundant Velocity							
Certifications	Standard Assembly: Class 1 Div 2, Group B, C & D, T3  II 2G Ex db IIB+H2 T3 Gb With Optional LVDTs: Class 1 Div 2, Group B, C & D, T3  II 2G Ex db ib IIB+H2 T3 Gb							



3010 Series Line Sizes:

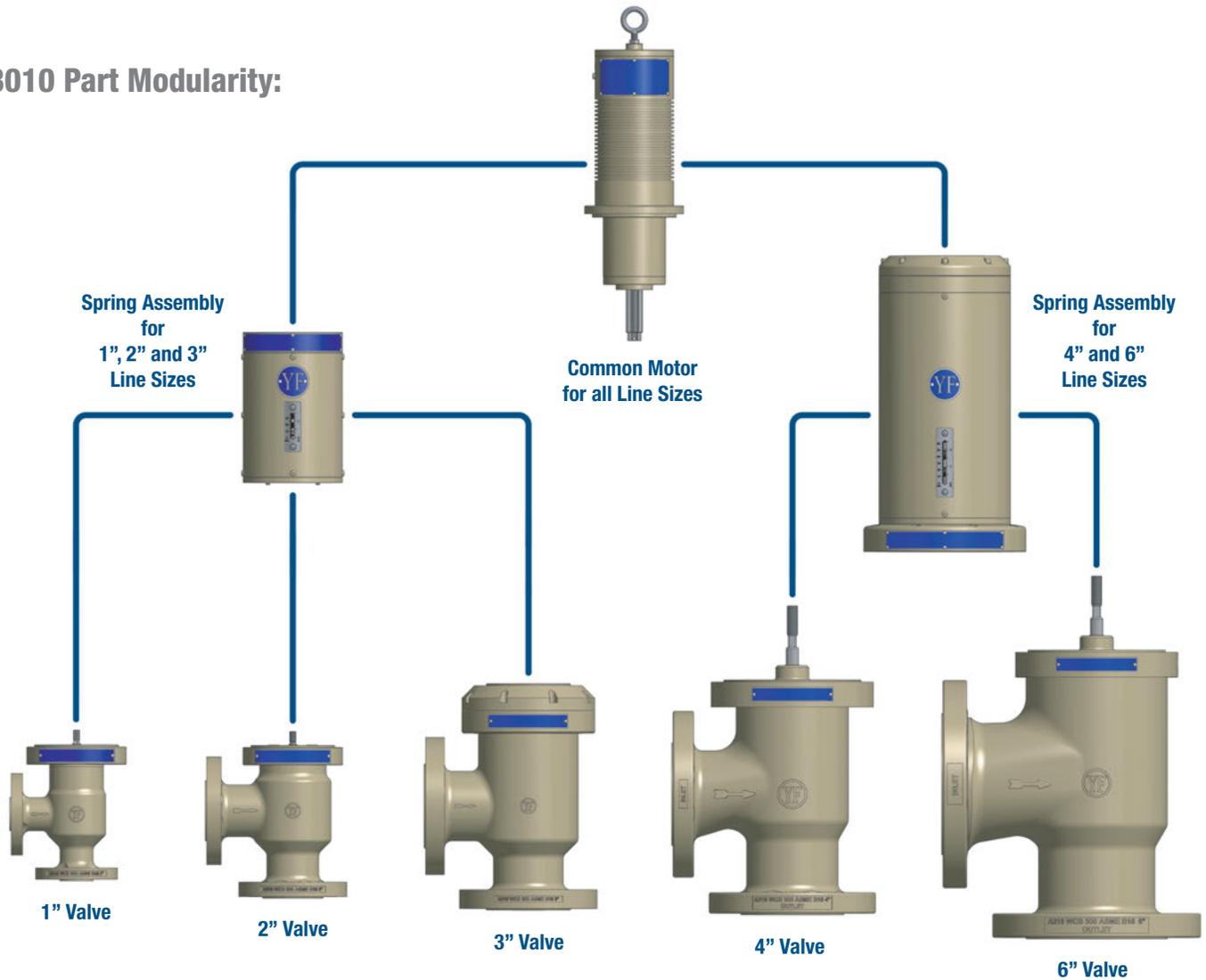


Dimensions

Measurement Key	1" Valve	2" Valve	3" Valve	4" Valve	6" Valve
Overall Assembly Height	29.94" (750.4 mm)	30.55" (776.1 mm)	34.95" (887.9mm)	43.6" (1107.8 mm)	46.83" (1189.6 mm)
Overall Assembly Width	5.97" (151.6 mm)	5.97" (151.6 mm)	7.98" (202.7mm)	10" (254 mm)	12.5" (317.5 mm)
Overall Assembly Length	7.08" (179.7 mm)	8.33" (211.7 mm)	10.24" (260.1mm)	12.25" (311.2mm)	15.56" (395.3 mm)
Face-to-Centerline Dimension	4" (101.6 mm)	5.25" (133.4mm)	6.25" (158.8 mm)	7.25" (184.2 mm)	9.31" (236.5 mm)

The Young & Franklin 3010 Series sonic flow Gas Control Valves (GCVs) are electro-mechanically actuated (EMA) to provide excellent speed and valve position accuracy. This GCV electronically homes on power cycle and has a turndown ratio of ~100:1. The entire YF 3010 Series is certified for use in hazardous locations around the world and available in a range of sizes suitable for industrial or power turbines of any size.

3010 Part Modularity:



The valve body is coupled to an actuator assembly that contains a fail-safe spring to quickly close the valve, halting fuel flow in the event of a power failure or turbine trip condition. Shock absorbers protect the actuator drive mechanism and valve seats during rapid closing thus ensuring reliable operation, and independent position feedback can be obtained via 2 optional LVDTs. The complete system provides precise fuel flow delivery with reliable operation. No routine maintenance is required.