CONTINENTAL CONTROLS CORPORATION

– A VALVE YOU CAN TRUST –

AGV50

ADVANCED GAS VALVE

BENEFITS

- Closed-loop on flow control improves turbine start reliability
- Spring-return, fail-safe closed operation
- High tolerance to dirt and debris
- Pilot actuated off supply pressure
- Drop-in compatibility reduces installation costs
- Built-in flow meter delivers true mass flow readings that remain stable regardless of pressure or temperature fluctuations
- Modbus protocol for diagnostics, existing system integrations, data display and logging
- Power: 24 VDC @<1 amp
- Frictionless design ensures smooth operation
- Servo valve with integrated pressure and flow sensors
- Voice-coil-actuated valve delivers full stroke in under 100 ms
- Modbus over RS-485
- Onboard diagnostics
- Flow accuracy results in more reliable starts

GAS FUEL METERING VALVES FOR GAS TURBINES

The AGV50 meters natural gas for gas turbine engines from 5,800–45,594 hp, with a flow capacity of up to 7,300 SCFM. It is an intelligent electronic gas fuel metering valve engineered to meet the demands of all gas turbine applications.

Featuring a unique design with an onboard computer and integrated flow meter, the AGV50 uses a nested loop control architecture with the outer loop closed on internal flow meter feedback. This advanced digital control strategy delivers exceptionally fast response while maintaining outstanding accuracy and reliability across the complete engine operating range.

OEM-approved and highly adaptable: AGVs offer configurable custom options to meet specific requirements, and are the only solution in their class able to replace the accelerator limiter (loader) with full endorsement from major OEMs.

AGVs are designed to provide an optimal digital interface between the control system and the engine. Linear control ensures the fuel flow matches the 4–20 mA demand signal from any PLC or legacy control system.



AGV50
FUEL METERING VALVE

CONTINENTAL CONTROLS CORPORATION

– A VALVE YOU CAN TRUST –

AGV50 SPECIFICATIONS

Maximum fuel flow capacity:	7,300 SCFM (26,176 lbs/hr)
Fuel:	Natural gas, propane, ethane, biogas, and other gaseous hydrocarbons
Applications:	Up to 45,594 hp (34.0 MW)
Maximum operating pressure:	500 psig
Filtration requirement:	10–20 micron absolute
External pilot filtration requirement:	0.01 micron absolute
Operating temperature:	-40°C (-40°F) to +85°C (+185°F) -20°C (-4°F) to +85°C (+185°F) [ATEX]
Response time:	100 ± 10 ms (10–90% flow command)
Flow accuracy:	±3.0% of reading or 0.5% of full scale
Fuel demand signal [to fuel control valve]:	4–20 mA (standard) 0–50 mA (optional), 0–200 mA (optional)
Fuel demand signal [from fuel control valve]:	4–20 mA (standard)
Power input:	19–30 VDC, 1.0 A max
Electrical interface:	3/4" ridged conduit, 84" pigtail wires
Data communication interface:	Modbus over RS-485
Wetted materials:	6061-T6 anodized aluminum, 300 series stainless steel, Viton® seals, nitrile seals
Flanges:	2" SAE series 61, 4-bolt flange
Dimensions:	13.8"L x 8.75"H x 6.5"W
Approximate weight:	44.2 lbs
Environmental protection:	IP66 rating
Certifications:	C SA US Class I, Div 1, 2, Group D: T4 Ex II 2 G EX d IIA CE 0344 UKCA 8505 Pressure Equipment Directive **(PED)** CE 0036 UKCA 0168

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ISO 9001 CERTIFIED