

AGV10

ADVANCED GAS VALVE

BENEFITS

- Closed-loop 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 less than 100 ms
- Modbus over RS-485, (proprietary) CAN bus
- Onboard diagnostics and optional display

GAS FUEL METERING VALVES FOR GAS TURBINES

The AGV10 meters natural gas for gas turbine engines from 850–5,800 hp, with a flow capacity up to 1,100 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 AGV10 calculates flow in real-time and uses the information to close the loop on flow, giving it extreme repeatability for starts. This advanced control strategy delivers an exceptionally fast response while maintaining outstanding accuracy and reliability across the operating range.

OEM-approved and highly adaptable: AGVs are the only solution in their class that can replace the accelerator limiter (loader) with full endorsement from major OEMs and offers configurable options to meet your precise requirements.

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



AGV10
FUEL METERING VALVE

AGV10 SPECIFICATIONS

Maximum fuel flow capacity:	1100 SCFM (3,081 lbs/hr)
Fuel:	Natural gas, propane, ethane, biogas, and other gaseous hydrocarbons
Applications:	Up to 5,820 hp (4.34 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:	1½" SAE series 61, 4-bolt flange 2" ANSI 600 lb, 8-bolt flange (optional)
Dimensions:	4-bolt: 13.9"L x 7.6"H x 6.5"W 8-bolt: 16.3"L x 7.6"H x 6.5"W
Approximate weight:	4-bolt: 36 lbs 8-bolt: 38 lbs
Environmental protection:	IP66 rating

Certifications:



Class I, Div 1, 2, Group D: T4



II 2 G EX d IIA



Pressure Equipment Directive (PED)



1-858-453-9880

info@continentalcontrols.com

7710 Kenamar Court, San Diego, CA 92121

ISO 9001 CERTIFIED