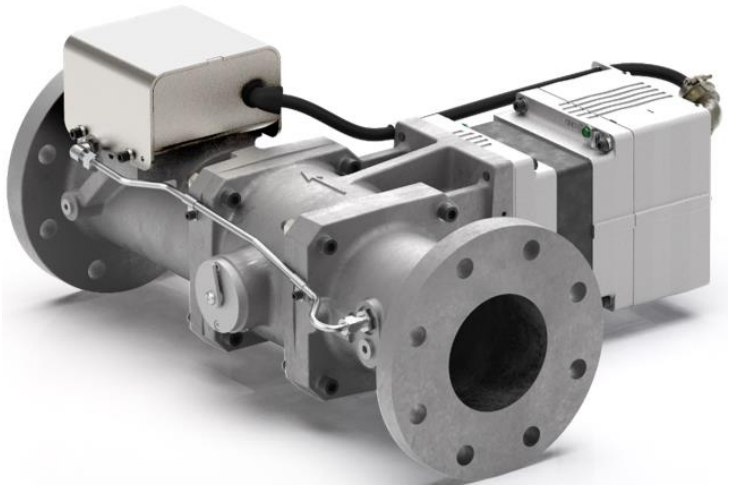
TecJet™ 110

Intelligent Electronic Gas Metering Valves



- Full Authority Gas Control Valve for example the E6 (Lean-Burn) gas engine control
- Bi-directional J1939 communication via CAN
- Fast response to flow commands
- Accurate mass flow control
- Suitable for different gas types and qualities
- Compensates for gas pressure, gas temperature and corrects for gas property changes

Description

Efficiency, performance, and emissions. In today's marketplace, these factors play a key role in gas engine development. As engine performance advances are made, gas metering devices should be more flexible and accurate, and be used for a wide range of gas qualities from Hydrogen to Methane to Mine gas.

Meet the TecJet valve. The TecJet is an electronic gas metering valve for single-point injection. It has integrated sensors and electronics, which provide the correct gas flow under all specified conditions.

In general, a separate engine control system, like the E6 Lean-Burn control, calculates the desired gas flow from the different engine and gas parameters. This desired gas flow is transmitted through a CAN link to the TecJet valve(s). The TecJet valve ensures that the desired gas flow is attained, automatically compensating for changes in gas pressure and gas temperature.

The microcomputer inside the TecJet valve converts the desired gas flow signal and gas parameter information into a valve position (which corresponds to the desired gas flow), depending on gas inlet pressure, gas temperature, and the pressure difference across the valve.

Product Manual: 26185

Specifications

Flow Bore Size	105 mm
Input Voltage Range	18–32 Vdc
Input Current Range	≤4.0 steady state, 13.0 peak
Gas Inlet Pressure	876 to 1289 mbar absolute (12.7 to 18.7 psia)
Gas Delta Pressure	30 to 275 mbar absolute (0.4 to 4 psid)
Ambient Temperature:	–20 to +85 °C (–4 to +185 °F)
Gas Temperature	0 to +85 °C (+32 to +185 °F)
Flow Accuracy	±20% point accuracy: <7% valve maximum flow area ±10% point accuracy: 7% to 25% valve maximum flow area ±6% point accuracy: >25% valve maximum flow area
Vibration	Woodward RV2 specification, 10–2000 Hz @ 0.1 G^2/Hz,12.8 Grms
Weight	31 kg (68 lb)
I/O Interface	J1939 CAN bus Other options available on request

Regulatory Compliance

Contact Woodward for current compliance listings.

International Ordinary Location Compliance:

EMC: Compliant to applicable EMC locations
Machinery: Compliant as partly completed machinery
Pressure: Exempt from Pressure Equipment

North American Compliance:

Hazardous: Certified for use in Class I, Division 2, Groups A, B, C, and D T3

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Woodward has company-owned plants, subsidiaries, and branches, as well as authorized distributors and other authorized service and sales facilities throughout the world.

For more information contact: