

INTELLIFLO™ - IGFS

INLINE GAS FLOW SENSOR

Porosity Prevention

The IntelliFlo™ Inline Gas Flow Sensor (IGFS) is an innovative sensor designed to enhance welding precision and efficiency by monitoring gas flow and pressure in real-time. By providing critical insights into gas conditions at multiple points in the welding process, the IGFS promotes consistent welding quality and helps reduce gas waste. Its advanced diagnostic and troubleshooting capabilities support compliance with CQI-15 audit requirements, making it an essential tool for optimizing welding operations.

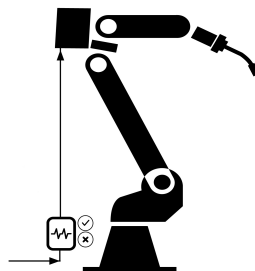
Gas Flow and Pressure Monitoring:

- Measures and checks for consistent and optimal gas flow upstream of the gas valve resulting in high-quality welds with fewer defects.
- Inline gas pressure monitoring verifies proper pressure during arc on and off time, enhancing diagnostic and troubleshooting capabilities.
- Comprehensive monitoring facilitates precise control of gas flow throughout the welding process.

Real-Time Data Display with IO-Link Connectivity:

- Intuitive display interface provides real-time data on gas flow rates.
- Enables welding technicians to make immediate adjustments for optimal performance.
- IO-Link communication enables seamless connectivity for data exchange with other devices and systems, promoting interoperability.

Features & Benefits



User-Friendly Interface:

- Easy-to-navigate interface with user-friendly controls.
- Simplifies operation for both seasoned welders and those new to the technology.

Precision and Accuracy:

- High-precision sensors deliver accurate measurement of gas flow, minimizing wastage and enhancing cost-effectiveness.
- IO-Link integration provides precise and reliable communication for accurate data transmission.

Compact and Durable Design:

- Compact form factor for easy integration into existing welding setups.
- Robust construction delivers durability in challenging welding environments.

Compatibility:

- Compatible with a wide range of welding systems and gases.
- Can be seamlessly integrated into various welding applications.
- IO-Link connectivity facilitates easy integration into industrial networks and control systems.

TECHNICAL DATA

Dimensions:	5.8" H x 3.6" D x 5.9" W
Flow:	1 to 22 LPM with Argon, 90:10 and 75:25 AR:CO2 mixed gases
Max Pressure:	60 PSI
Power Supply:	24 VDC 0.1 Amps

IO-LINK ADVANTAGE

IO-Link stands as a universally embraced open standard communications protocol by sensor and controls companies worldwide. This digital, bidirectional, point-to-point interface seamlessly integrates with a wide array of automated systems. Consequently, it establishes a fully digital pathway from a weld mounted sensor to your Programmable Logic Controller (PLC).

IGFS WITH IO-LINK

- Alerts operations of insufficient gas flow.
- Flow readings for various welding gas combinations.
- Gas pressure and accumulated flow.
- Calibrated for AR, 90:10 and 75:25 welding gases.
- Recalibration and custom calibration is available.

BENEFITS OF IO-LINK

The IntelliFlo™ is an essential tool for welding professionals seeking to optimize their welding processes, delivering precision, efficiency, and superior weld quality with the added benefit of IO-Link communication for enhanced connectivity and data exchange.

Improved Weld Quality:

Evaluates consistent and optimal gas flow, resulting in high-quality welds with fewer defects.

Increased Productivity:

Real-time monitoring allows for quick adjustments, reducing downtime and increasing overall welding productivity.

Enhanced Diagnostic and Troubleshooting with IO-Link:

IO-Link communication enables advanced diagnostic capabilities for prompt issue resolution.

Cost Savings:

Accurate gas flow control minimizes wastage, leading to cost savings in gas consumption.

Enhanced Safety:

Customizable alarms alert operators to potential issues, contributing to a safer working environment.

Compliance:

Helps in meeting industry standards including CQI-15 audit compliance requirements through accurate monitoring and documentation.

Inline Welding Sensor Setpoints

- 1) Gas Flow
- 2) Gas Pressure
- 3) Accumulated Flow Volume

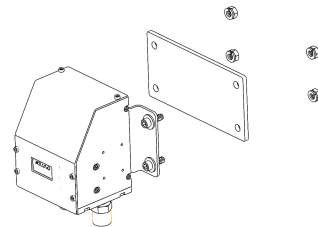
Inline Welding Sensor Signals

- 1) Accumulated Flow Volume Reset

Inline Welding Input Setpoints

- 1) Gas Selection
- 2) Metric or Imperial Units Selection

MOUNTING OPTIONS



INTELLIFLO™ IGFS MOUNTING KIT
GFS01-11

ORDERING INFORMATION

Inline Flow and Pressure Sensor, Line 1, for use with GFS20
Inline Flow and Pressure Sensor, Line 2, for use with GFS20 or GFS41
Inline Flow and Pressure Sensor with IO-Link
IO-Link Cable, 4 pin, 10M, M12
Communication Cable, 4 pin, 10M, M8
Intelliflo™ Inline Gas Flow Sensor Mounting Kit

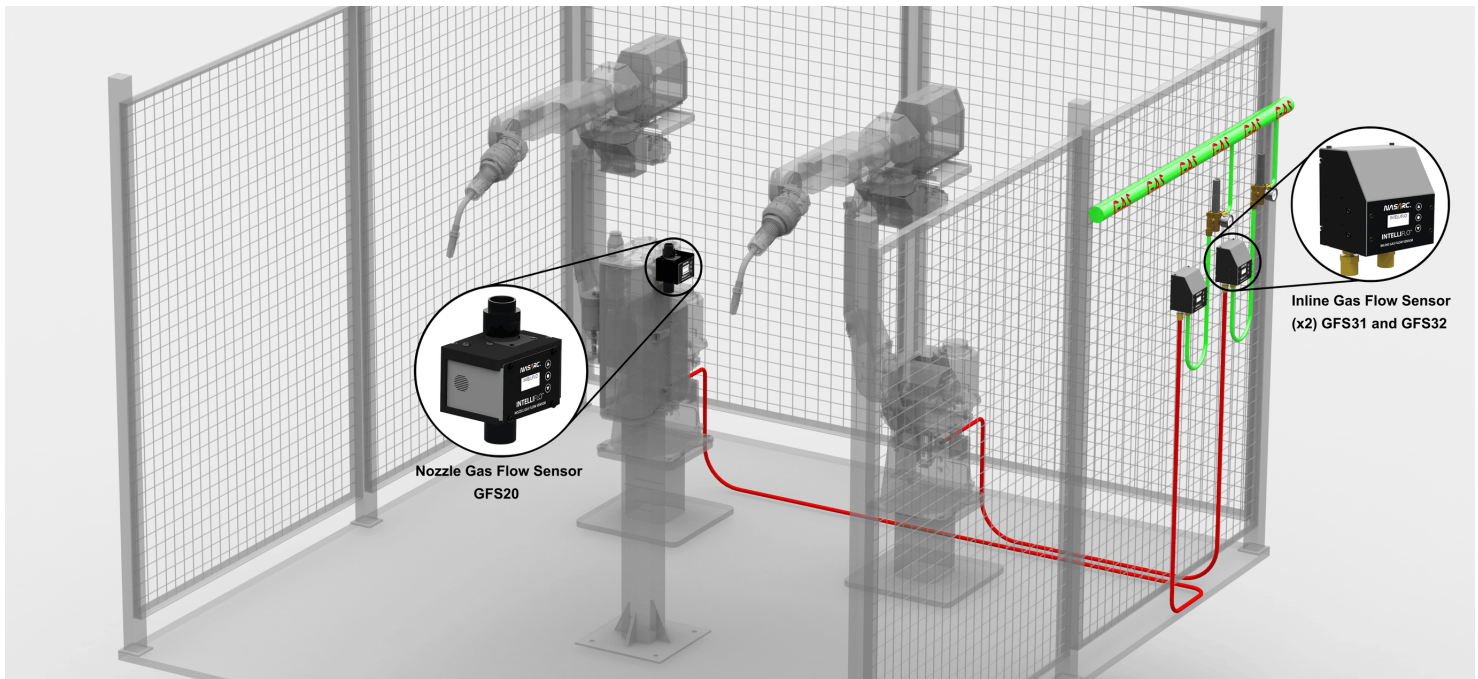
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IntelliFlo™ System

Unlock the full potential of gas flow monitoring with The IntelliFlo™ system. This architecture combines the Nozzle Gas Flow Sensor (NGFS) and the Inline Gas Flow Sensor (IGFS), offering a seamless turnkey solution for superior welding gas monitoring. Individually, each sensor delivers precision insights: the NGFS measures gas flow and temperature directly from the nozzle, while the IGFS monitors gas flow and pressure in the line between the regulator and wire feeder. Together, they create a highly integrated system that delivers consolidated readings, simplifies setup, and streamlines troubleshooting through a single IO-Link device. This unified approach not only eliminates the complexity of managing separate devices, but also enhances diagnostic accuracy. By leveraging calibration data stored in one memory, the system provides consistent and reliable performance across all sensors. The NGFS and IGFS together allow you to pinpoint gas flow issues more effectively, minimizing waste, improving weld quality, and maximizing productivity.

Features of using both sensors in combination

- Easily detect leaks in the system by measuring differential flow.
- Turn-key solution.
- Communication to the combined system through a single IO-Link device connection.
- Parameter settings for all sensors via IO-Link.
- Calibration for all sensors is stored in one memory.



Combination & Compatibility Matrix			
	Point of Use	Inline 1	Inline 2
Point of Use	GFS20		
Point of Use + 1 Inline	GFS20	GFS31	
Point of Use + 2 Inline	GFS20	GFS31	GFS32
1 Inline		GFS41	
2 Inline		GFS41	GFS32