

## Product Data Sheet

### Metco 4GF Gas Flowmeter for Combustion Spray

**The Metco™ 4GF is a highly accurate and reliable instrument for regulating and measuring the flow of both oxygen and fuel gas in a manual powder or wire combustion spray system.**

The Metco 4GF has precision needle valves, actuated by adjustment knobs on the front panel, that control the flow of gas. Flow unit readout is provided in both Metric (NLPM) and U.S. Customary (SCFH) units.

Separate flowmeters are provided for the regulation of oxygen and fuel gas, which are isolated from each other. As an additional safety feature, each meter incorporates a check valve in the piping from the meter outlet to the combustion spray gun, which protects against high back pressure that could result from gun backfire and prevents any possibility of mixing of the process gases. These check valves can be replaced, if necessary, and are available from Oerlikon Metco.

#### 1 General Description

Observation of the flowmeters during operation can warn the operator of possible obstructions or leaks in the gas lines. The use of the sliders facilitate monitoring of the process gases for such an event. These indicators allow an easy and quick check of process gas flow at a distance and without the need to read the exact scale marking.

Acetylene, hydrogen, propane, MAPP and natural gas can be safely used; however, the fuel gas flowmeter is calibrated for acetylene.

Customers can use the Metco 4GF with standard cylinders of compressed gas or with gas supplied through plant pipelines, or in combination. Whatever the source of the process gas, it is important that appropriate pressure regulators be used upstream from the Oerlikon Metco 4GF unit.

#### 2 Features and Benefits

- Economical and simple: Inexpensive to own and operate; minimal training required
- Precise: Provides precision metering of process gas flow for consistent results
- Versatile: Can be used with a choice of fuel gases to accommodate different applications and production needs
- Safe: Built in check valves protect against high back pressure

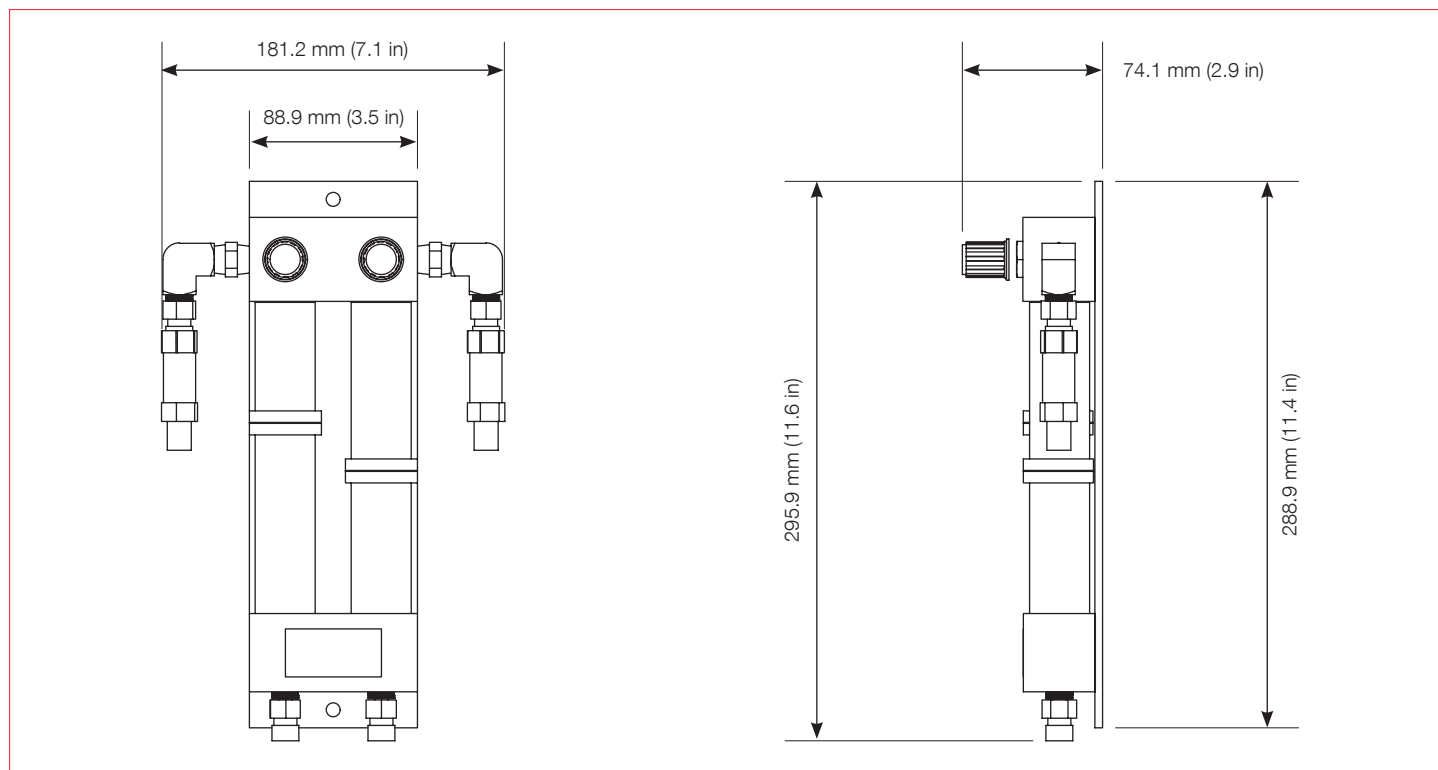


4GF Gas Flowmeter

- Safe connection system: Fuel and oxygen connections are threaded in the opposite direction from one another, to prevent improper hookup
- Convenient: Easily mounts on a wall
- Easy to read: Sliding indicators and flow units in both NLPM and SCFH
- Rugged design: Built for long service life with very little maintenance
- Precalibrated by Oerlikon Metco

### 3 Technical Data

#### 3.1 Dimensions



#### 3.2 Specifications

##### Process Gases

acetylene, hydrogen, propane, MPS, MAPP, natural gas  
oxygen

##### Meter (Read-out scale)

|        |                            |                        |
|--------|----------------------------|------------------------|
| Oxygen | 0 to 110 NLPM @ 2.41 bar   | 0 to 260 SCFH @ 35 psi |
| Fuel   | 0 to 52.6 NLPM @ 1.035 bar | 0 to 120 SCFH @ 15 psi |

##### Maximum operating pressure

|                   |         |         |
|-------------------|---------|---------|
| Oxygen and fuel * | 6.9 bar | 100 psi |
|-------------------|---------|---------|

##### Connections (inlet and outlet)

|        |                   |        |         |
|--------|-------------------|--------|---------|
| Oxygen | right-hand thread | CGA022 | 9/16-18 |
| Fuel   | left-hand thread  | CGA023 | 9/16-18 |

##### Weight

|                              |        |        |
|------------------------------|--------|--------|
| Approximate (flowmeter only) | 1.9 kg | 4.2 lb |
|------------------------------|--------|--------|

\* Acetylene should not be used above 1 bar (15 psi)

Information is subject to change without prior notice.