# ACCESSORIES FOR GRAFTEL LEAKAGE RATE MONITORS

# **Quick Fill Manifolds**

Part Number: 9623QFM Part Number: 9623QFM.5



This manifold allows for the quick filling of large volumes. This stainless steel manifold incorporates 1" and 1/2"pipe, welded fittings and 1/4 turn ball valves. This device allows for quick pressurization, testing as well as quick depressurization as shown below.

### **Quick Fill Configuration**

This configuration allows for the test volume to be directly filled from the air supply though a 1" or ½" line. The pressure gauge on the LRM may be used to monitor the test volume pressure as it is being filled.

### **Testing Configuration**

By closing the inlet and outlet valves and opening the vent valve, the manifold both allows the test volume to be tested by the LRM and ensures that any possible supply air leakage through the manifold cannot bypass the monitor and enter the test volume unmetered.

### **Quick Venting Configuration**

This configuration allows for the test volume to be quickly vented to though the 1" or ½" line. The pressure gauge on the LRM may be used to monitor the test volume pressure as it is being vented. The test volume air may be either discharged to ambient or routed to a remote location.



Quick Venting Configuration

# Check Nozzles

Part Number: 9623CN-XXXX-YY.Y-ZZZZ



Calibrated orifices, certified to flow at a prescribed flow rate at a specified inlet pressure.

Just screw a check nozzle into the test port of the LRM and set the monitor pressure to the test pressure labeled on the Nozzle Check.

The LRM's Nozzle Check Screen will tell you if the measured flow rate is within tolerance to the expected flow rate labeled on the Check Nozzle.

This allows the users to field check the accuracy of each flow meter prior to use. This eliminates questions concerning the validity of any test results should an monitor become lost, contaminated or be later found out of tolerance.



All nozzles are 1/4" or 3/8 " NPT and made from stainless steel.

Each Check Nozzle comes with a NIST traceable certificate of calibration.

A  $\frac{1}{4}$ " NPT Check Nozzle certified to flow 26.5 scfh with a 55.0 psia inlet pressure would be have the part number listed below.

### 9623CN-26.5scfh-55.0psia-1/4"NPT.

## **Pressure Decay Option**

Part Numbers:9202 (Temp Sensor) & E-20 (High Accuracy Pressure Transmitter)





E20 (HA Pressure Transmitter)

9202 Temperature Sensor

The quickest and most accurate way to leakage rate test a large volume, (such as airlocks) is using the pressure decay method. Graftel's temperature sensor sensor Model 9202 can be used with high accuracy pressure transmitter to performing pressure decay tests on LRMs.

A five conductor electrical connection between the 9202 and the LRM is required. This may be accomplished using an existing electrical penetration.



AIR LOCK or TEST VOLUME

Alternately, for airlock testing, Graftel can supply a paper thin flat cables that the airlock door can be closed on. These cables conduct the required signals while at the same time allowing a perfect door seal.

The LRMs pressure decay screen reads pressure and temperature data from the 9202 and displays the leakage rate, air pressure and temperature.

### LRM Pressure Decay Specifications

Pressure: 0 to 100 psia, 0.05% of Full Scale Accuracy Temperature: 32F to 130 F, 0.1 °F Accuracy NIST Traceable Calibration Certificates on both Pressure and Temperature





### Supply Air Conditioner/Pre-Regulator Part Number: GT-1399K12

Most flow meter as found out of tolerances are due to the use of dirty, wet or oily supply air. This simple low cost device connected to the LRM inlet alleviates all of those conditions. This device both filters particles and traps any entrained oil or water from the supply air before it can enter the LRM.

In addition, because this device also includes a pressure regulator and inlet pressure gauge, the supply air pressure to the regulator may be both monitored and automatically controlled. This adds insurance that leakage rate test results are immune to any sudden changes in supply system air pressure.

A transparent polyurethane bowl won't crack in systems heavy with synthetic compressor oils and allows you to see what's being filtered. The drain is manual. The filter has a polypropylene element and removes particles as small as 5 microns.

Max inlet pressure is 150 psig and the regulating range 0 to 125 psig. This regulator can flow up to 1000 scfh, (approx 500 slm) at 100 psig.

