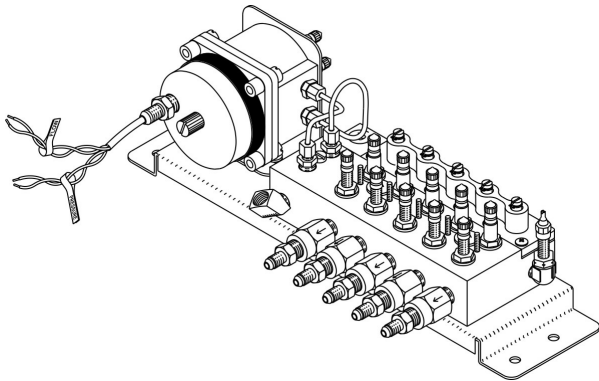


Manifold Monitoring Assemblies



To provide ease and convenience for monitored manifold installations, System Studies provides a bracket assembly with either one or two Flow Finder Manifolds™ pneumatically connected to a High Resolution Flow or High Resolution Dual (pressure/flow) Transducer. The pneumatic connections between the transducer and the manifold(s) are accomplished by the use of two 1/8 inch (0.3 cm) stainless steel rigid tubes. These tubes are standard on all models.

Please note that there are numerous ordering options for the Manifold Monitoring Assembly™. The variations are defined in the last eight characters of the model number (3061-MBS-1, for example). The first group of four digits identifies the type of conductor tube fitting supplied on the assembly's transducer. Model 3061 includes a 1/8 inch (0.3 cm) NPT to 3/8 inch (1 cm) plastic tube fitting; model 3064 is supplied with a 37° flared, stainless steel fitting.

The next group of three letters pertain to the Flow Finder™ ranges and the type of connector fittings/accessories supplied on the manifold's outgoing ports. The final numeric or alpha numeric designation identifies the type of transducer supplied ("1" for flow and "2" for dual) and whether the transducer is equipped with a pair saver ("P"). This internally installed device makes it possible to connect a dual transducer to a single conductor pair. A simplified ordering chart is provided at the end of this catalog section for reference.

When referencing the chart please note that any of the Manifold Monitoring Assemblies can also be ordered without a transducer by specifying the number "9" as the last digit in the part number. Similarly, substituting a "U" for the last digit will designate an assembly equipped with a resistive flow transducer in a range to match the orifice in the manifold's incoming port.

SPECIFICATIONS

Material

The Manifold Monitoring Assembly bracket is constructed of .062 inch (0.15 cm) stainless steel. The Flow Finder Manifold is nickel-plated brass with a silicone rubber gasket. Fittings are nickel, plated brass or stainless steel (depending upon model). High Resolution Flow or Dual Transducer is also constructed of nickel-plated brass with a mineral filled, nylon center barrier plate. Pneumatic tube between transducer and manifold is stainless steel, 1/8 inch (0.3 cm) O.D and 1/16 inch (0.16 cm) I.D. Wall thickness is approximately .035 inch (0.096 cm).

Dimensions

Single Assembly: 13 inches (33 cm) wide x 3 inches (7.6 cm) high; Double Manifold Monitoring Assembly: 19 inches (48.2 cm) wide x 3 inches (7.6 cm) high; both brackets contain three 1/4 inch (0.6 cm) mounting holes on the two mounting flanges.

Shipping Weight

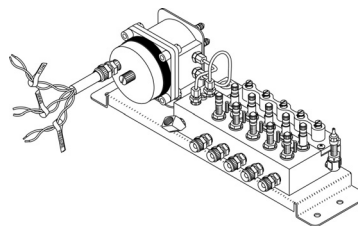
The 3061 model with a Dual Transducer weighs approximately 8 Pounds (3.6 Kg). The 3062 model with a Dual Transducer weighs approximately 12 Pounds (5.4 Kg). Other manifold assembly options vary, based on the components supplied.

Note: For additional information on Flow Finder Manifolds and High Resolution Flow and Dual Transducers, refer to the catalog specification information for these products.

MODEL DESCRIPTIONS

9800-3061-LBS-1 Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, Flow Transducer

9800-3061-LBS-2 Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, Dual Transducer



Both of the assemblies listed above include the following components: one six-port Flow Finder Manifold with a 0-19 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports. The pressure tube connector fittings are nickel-plated brass, 1/4" NPT to 3/8" (in manifold's outgoing ports). The assemblies are equipped with either a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer with nickel-plated brass, 3/8" conductor tubing fitting.

9800-3061-MBS-1 Manifold, Assembly, Single, Medium Range, 3/8" Brass Fittings, Flow Transducer

9800-3061-MBS-2 Manifold, Assembly, Single, Medium Range, 3/8" Brass Fittings, Dual Transducer

Components: one Flow Finder Manifold with a 0-47.5 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports; nickel-plated brass, 1/4" NPT to 3/8" tubing connector fittings (in manifold's outgoing ports); and a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer with nickel-plated brass, 3/8" conductor tubing fitting.

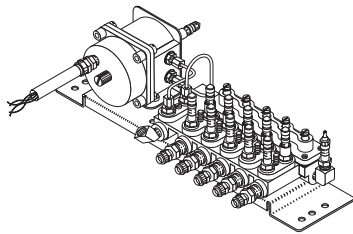
9800-3061-HBS-1 Manifold, Assembly, Single, High Range, 3/8" Brass Fittings, Flow Transducer

9800-3061-HBS-2 Manifold, Assembly, Single, High Range, 3/8" Brass Fittings, Dual Transducer

These assemblies are equipped with one Flow Finder Manifold with a 0-95 SCFH Flow Finder in the incoming port and 0-19 SCFH Flow Finders in the outgoing ports. Pressure tube fittings are nickel-plated brass, 1/4" NPT to 3/8" tube. Internal Flow Finders are monitored remotely by either a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer with nickel-plated brass, 3/8" conductor tubing fitting.

9800-3061-LBT-1 Manifold, Assembly, Single, Low Range, 1/4" Brass Fittings, Flow Transducer

9800-3061-LBT-2 Manifold, Assembly, Single, Low Range, 1/4" Brass Fittings, Dual Transducer



These Manifold Monitoring Assemblies include the following components: one Flow Finder Manifold with a 0-19 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports. The

pressure tube connector fittings are nickel-plated brass, 1/4" NPT to 1/4" tube. The assemblies are equipped with either a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer with nickel-plated brass, 3/8" conductor tubing fitting.

9800-3061-MBT-1 Manifold, Assembly, Single, Medium Range, 1/4" Brass Fittings, Flow Transducer

9800-3061-MBT-2 Manifold, Assembly, Single, Medium Range, 1/4" Brass Fittings, Dual Transducer

Components: one Flow Finder Manifold with a 0-47.5 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports; nickel-plated brass, 1/4" NPT to 1/4" tubing connector fittings (in manifold's outgoing ports); High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer with nickel-plated brass, 3/8" conductor tubing fitting.

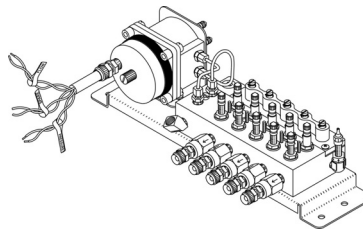
9800-3061-HBT-1 Manifold, Assembly, Single, High Range, 1/4" Brass Fittings, Flow Transducer

9800-3061-HBT-2 Manifold, Assembly, Single, High Range, 1/4" Brass Fittings, Dual Transducer

These assemblies include one Flow Finder Manifold with a 0-95 SCFH Flow Finder in the incoming port and 0-19 SCFH Flow Finders in the outgoing ports. The pneumatic tubing connectors are nickel-plated brass, 1/4" NPT to 1/4" tube. The High Resolution Flow or Dual Transducer is supplied with nickel-plated brass, 3/8" conductor tubing fitting (on the wire cover assembly).

9800-3061-LBV-1 Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, Check Valves, Flow Transducer

9800-3061-LBV-2 Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, Check Valves, Dual Transducer



These manifold Monitoring Assemblies are equipped with one Flow Finder Manifold with a 0-19 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports. The manifold's outgoing ports are equipped with nickel-plated brass, 1/4"

NPT to 3/8" tubing connector fittings with check valves. A High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer with nickel-plated brass, 3/8" conductor tubing fitting is also standard equipment.

9800-3061-MBV-1 Manifold, Assembly, Single, Medium Range, 3/8" Brass Fittings, Check Valves, Flow Transducer

9800-3061-MBV-2 Manifold, Assembly, Single, Medium Range, 3/8" Brass Fittings, Check Valves, Dual Transducer

Components: one Flow Finder Manifold with a 0-47.5 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports; nickel-plated brass, 1/4" NPT to 3/8" tubing connector fittings with check valves (in manifold's outgoing ports); High Resolution Flow or Dual Transducer with nickel-plated brass, 3/8" conductor tubing fitting.

9800-3061-HBV-1 Manifold, Assembly, Single, High Range, 3/8" Brass Fittings, Check Valves, Flow Transducer

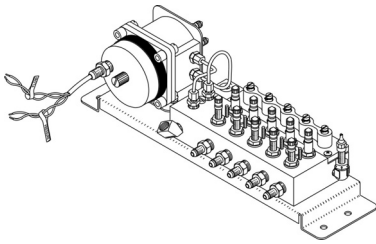
9800-3061-HBV-2 Manifold, Assembly, Single, High Range, 3/8" Brass Fittings, Check Valves, Dual Transducer

These two Manifold Monitoring Assemblies include one Flow Finder Manifold with a 0-95 SCFH Flow Finder in the incoming port and 0-19 SCFH Flow Finders in the outgoing ports. Like the four models described above, the pneumatic tubing connectors are nickel-plated brass, 1/4" NPT to 3/8" tube, each with a check valve. Also included is a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer with nickel-plated brass, 3/8" conductor tubing fitting.

The following Manifold Monitoring Assemblies are available for telcos that have requirements for stainless steel pneumatic components. Please note that the different designations pertain to the ranges of Flow Finders installed and the pneumatic tubing fittings on both the manifold and the transducer's wire cover. Please also make note of the product number change.

9800-3064-LSS-1 Manifold, Assembly, Single, Low Range, 37° Stainless Steel Fittings, Flow Transducer

9800-3064-LSS-2 Manifold, Assembly, Single, Low Range, 37° Stainless Steel Fittings, Dual Transducer



The above two assemblies are equipped with a Flow Finder Manifold with a 0-19 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports. The manifold's pneumatic tubing connectors are 37° flared,

stainless steel fittings (for use with stainless steel braided pneumatic tubing). The High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer is also supplied with a stainless steel, 37° flared connector (for the conductor pair tubing).

9800-3064-MSS-1 Manifold, Assembly, Single, Medium Range, 37° Stainless Steel Fittings, Flow Transducer

9800-3064-MSS-2 Manifold, Assembly, Single, Medium Range, 37° Stainless Steel Fittings, Dual Transducer

These assemblies are supplied with the following components: one Flow Finder Manifold with a 0-47.5 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports; manifold supplied with stainless steel, 37° flared tubing connectors (for use with stainless steel braided pneumatic tubing); High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer, also supplied with stainless steel, 37° flared conductor tubing connector.

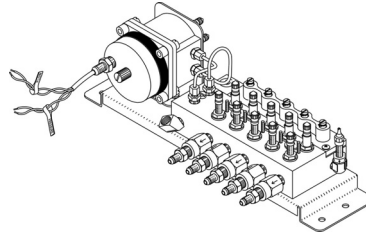
9800-3064-HSS-1 Manifold, Assembly, Single, High Range, 37° Stainless Steel Fittings, Flow Transducer

9800-3064-HSS-2 Manifold, Assembly, Single, High Range, 37° Stainless Steel Fittings, Dual Transducer

Components: one Flow Finder Manifold with a 0-95 SCFH Flow Finder in the incoming port and 0-19 SCFH Flow Finders in the outgoing ports; manifold supplied with stainless steel, 37° flared tubing connectors (for use with stainless steel braided pneumatic tubing); High Resolution Dual Transducer, also supplied with stainless steel, 37° flared conductor tubing connector.

9800-3064-LSV-1 Manifold, Assembly, Single, Low Range, 37° Stainless Steel Fittings, Check Valves, Flow Transducer

9800-3064-LSV-2 Manifold, Assembly, Single, Low Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer



These Manifold Monitoring Assemblies are equipped with the following components: one Flow Finder Manifold with a 0-19 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports; manifold supplied

with stainless steel, 37° flared tubing connectors (for use with stainless steel braided pneumatic tubing) and nickel-plated brass check valves; High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer, also supplied with stainless steel, 37° flared conductor tubing connector.

9800-3064-MSV-1 Manifold, Assembly, Single, Medium Range, 37° Stainless Steel Fittings, Check Valves, Flow Transducer

9800-3064-MSV-2 Manifold, Assembly, Single, Medium Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer

These assemblies have the same components as the two described above, with the exception of the manifold's Flow Finder range. The "M" assemblies have a 0-47.5 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports.

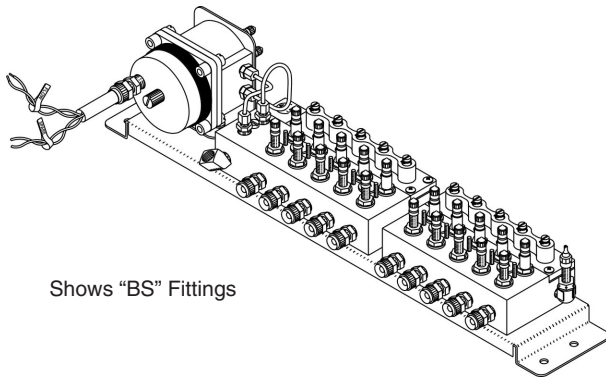
9800-3064-HSV-1 Manifold, Assembly, Single, High Range, 37° Stainless Steel Fittings, Check Valves, Flow Transducer

9800-3064-HSV-2 Manifold, Assembly, Single, High Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer

These Manifold Monitoring Assemblies are equipped with the following components: one Flow Finder Manifold with a 0-95 SCFH Flow Finder in the incoming port and 0-19 SCFH Flow Finders in the outgoing ports; stainless steel, 37° flared pneumatic tubing connectors and nickel-plated brass check valves (for use with stainless steel braided pneumatic tubing on manifold putports); and either a High Resolution Flow or Dual Transducer.

9800-3064-CSV-2 Manifold, Assembly, Single, Custom Range, 37° Stainless Steel Fittings, Dual Transducer

This "custom range" manifold assembly consists of one Flow Finder Manifold equipped with a 0-47.5 SCFH Flow Finder in the incoming port and five 0-19 SCFH Flow Finders in the outgoing ports. Pneumatic tubing connectors for the five outgoing ports are 37° flared, stainless steel. The transducer is a High Resolution Dual Transducer with a flared, stainless steel fitting to use with braided stainless steel conductor tubing.

ASSEMBLIES WITH TWO MANIFOLDS

Shows "BS" Fittings

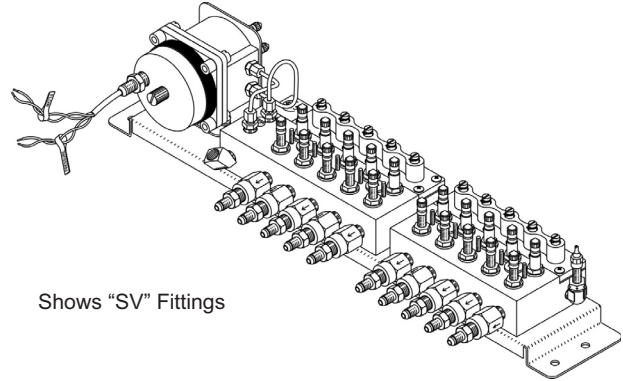
Please note that the assemblies listed below contain two Flow Finder Manifolds instead of one. In all other respects they are identical to those listed above. Model variations pertain to the last seven characters in the part number. Models with the "3062" designation have transducers with a 3/8 inch tube fitting on wire cover assembly: "3065" models use the stainless steel, 37° flared conductor tubing connector (for use with braided stainless steel tubing).

Please refer to the corresponding designations above for a description of model differences. You may also reference the ordering charts at the end of this catalog section for help with model selections.

- 9800-3062-LBS-1** Manifold, Assembly, Dual, Low Range, 3/8" Brass Fittings, Flow Transducer
- 9800-3062-LBS-2** Manifold, Assembly, Dual, Low Range, 3/8" Brass Fittings, Dual Transducer
- 9800-3062-MBS-1** Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Flow Transducer
- 9800-3062-MBS-2** Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Dual Transducer
- 9800-3062-HBS-1** Manifold, Assembly, Dual, High Range, 3/8" Brass Fittings, Flow Transducer
- 9800-3062-HBS-2** Manifold, Assembly, Dual, High Range, 3/8" Brass Fittings, Dual Transducer
- 9800-3062-LBV-1** Manifold, Assembly, Dual, Low Range, 3/8" Brass Fittings, Check Valves, Flow Transducer
- 9800-3062-LBV-2** Manifold, Assembly, Dual, Low Range, 3/8" Brass Fittings, Check Valves, Dual Transducer
- 9800-3062-MBV-1** Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Check Valves, Flow Transducer
- 9800-3062-MBV-2** Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Check Valves, Dual Transducer

9800-3062-HBV-1 Manifold, Assembly, Dual, High Range, 3/8" Brass Fittings, Check Valves, Flow Transducer

9800-3062-HBV-2 Manifold, Assembly, Dual, High Range, 3/8" Brass Fittings, Check Valves, Dual Transducer



Shows "SV" Fittings

The "3065" designations for these assemblies indicates that: 1) there are two manifolds supplied, and 2) the fitting located at the bottom of the High Resolution Transducer is constructed of 37° flared, stainless steel. "HSV" describes the range of the Flow Finders (0-95 SCFH incoming port) and 0-19 SCFH outgoing ports) as well as the type of fittings used on the output ports to the cables (37° flared, stainless steel fittings with a nickel-plated brass check valves). The "1" or "2" identifies the type High Resolution Transducer.

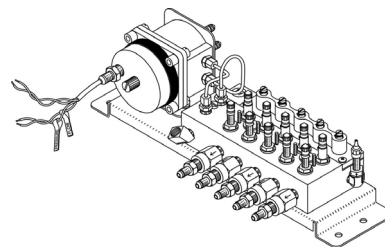
9800-3065-MBV-1 Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Check Valves, Flow Transducer

9800-3065-MBV-2 Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Check Valves, Dual Transducer

9800-3065-HSV-2 Manifold, Assembly, Dual, High Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer

ASSEMBLIES WITH SELECTOR PAIR SAVERS

9800-3064-LSV-2P Manifold, Assembly, Single, Low Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer w/Selector Pair Saver



This Manifold Monitoring Assembly is identical to the "3064-LSV-2" model, except that it includes an internal Selector Pair Saver which enables the assembly's High Resolution Dual Transducer to transmit data from its pressure and flow sensors over a single pair of conductor wires. The single Flow Finder Manifold is equipped with 0-19 SCFH Flow Finder in the incoming port and a 0-9.5 SCFH Flow Finder in each of the outgoing cable ports. Pneumatic tubing connectors for the five outgoing ports are 37° flared, stainless steel. Nickel-plated brass check valves are also provided.

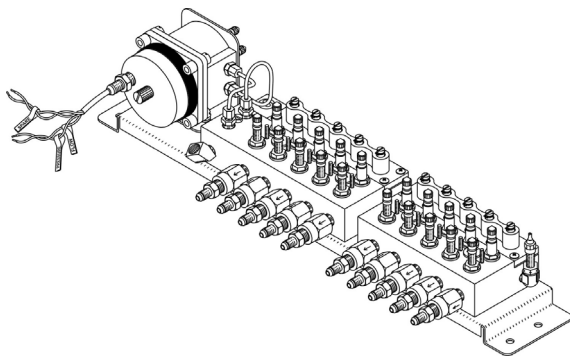
9800-3064-HSV-2P Manifold, Assembly, Single, High Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer w/Selector Pair Saver

The components that define this Manifold Monitoring Assembly are as follows: single manifold with a 0-95 SCFH Flow Finder in the incoming port and 0-19 SCFH Flow Finders in each of the outgoing cable ports; nickel-plated brass check valves and 37° flared, stainless steel pneumatic tubing fittings in outgoing cable ports; and a High Resolution Dual Transducer equipped with a Selector Pair Saver.

9800-3064-CSV-2P Manifold, Assembly, Single, Custom Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer w/Pair Saver

This “custom range” manifold assembly consists of one Flow Finder manifold equipped with a 0-47.5 SCFH Flow Finder in the incoming port and five 0-19 SCFH Flow Finders in the outgoing ports. Pneumatic tubing connectors for the five outgoing ports are 37° flared, stainless steel. Check valves are also provided. The transducer supplied on this model is a High Resolution Dual Transducer with an internal Selector Pair Saver. The pair saver permits the use of a single conductor pair for both the pressure and flow sensors.

9800-3065-HSV-2P Manifold, Assembly, Dual, High Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer w/Pair Saver



This assembly contains the following components: two manifolds, one with a 0-95 SCFH Flow Finder in the incoming port and 0-19 SCFH Flow Finders in each of the outgoing cable ports (the second manifold also has 0-19 SCFH Flow Finders installed); nickel-plated brass check valves and 37° flared, stainless steel pneumatic tubing fittings in all outgoing cable ports; and a High Resolution Dual Transducer equipped with a Selector Pair Saver. The transducer’s wire cover assembly is also equipped with 37° flared, stainless steel conductor tube fitting.

CURVED MANIFOLD ASSEMBLIES

In order to provide the option of installing a manifold monitoring assembly in the neck of a manhole, we also supply a double Manifold Monitoring Assembly with a curved bracket.

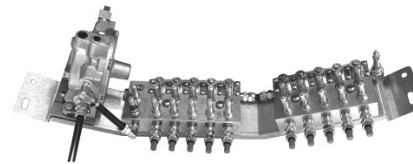
9802-3062-MBV-2 Manifold, Assembly, Dual, Curved, Medium Range, 3/8" Brass Fittings, Check Valves, Dual Transducer



This curved Manifold Monitoring Assembly contains all of the components described for our 9800-3062-MBV-2 assembly, except

that the mounting bracket is curved to facilitate mounting in a manhole collar. This model has two Flow Finder Manifolds equipped with nickel-plated brass check valves and 3/8" brass conductor tubing fittings in each port. It is monitored by a High Resolution Dual Transducer.

9802-3062-MBS-U Manifold, Assembly, Dual, Curved, Medium Range, 3/8" Brass Fittings, Resistive Flow Transducer

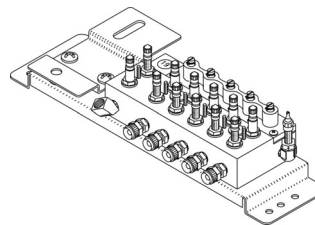


A variation of the curved manifold assembly described above is also available with a resistive flow transducer. This “U” version is

equipped with the following components: curved stainless steel mounting bracket, 0-50 SCFH resistive flow transducer, and two Flow Finder Manifolds (with 0-47.5 SCFH incoming port Flow Finder and ten outgoing port 0-9.5 SCFH Flow Finders). Cable connector fittings are nickel plated brass, 1/4" NPT to 3/8" tube.

ASSEMBLIES WITHOUT TRANSDUCERS

9800-3061-LBS-9 Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, No Transducer



The “9” designation indicates that this manifold assembly is not supplied with a High Resolution Dual or Flow Transducer. Instead, it is equipped with a universal mounting bracket for installing one of the other types of

flow transducers on the market. Components: one Flow Finder Manifold with a 0-19 SCFH Flow Finder in the incoming port and 0-9.5 SCFH Flow Finders in the outgoing ports; nickel-plated brass, 1/4" NPT to 3/8" tubing connector fittings; no transducer.

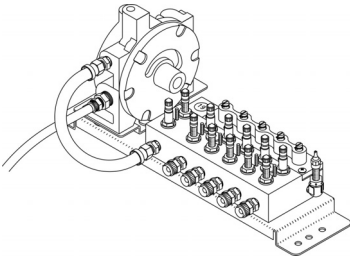
Please note that all other ordering options apply to this assembly model. When ordering, please specify range (L, M, or H) and connector fitting types (BS, BT, BV, SS, and SV).

9800-3062-LBS-9 Manifold, Assembly, Dual, Low Range, 3/8" Brass Fittings, No Transducer

The description above also applies to this manifold assembly, except that this version is supplied with two Flow Finder Manifolds (a 6-port and a 5-port). Once again, other Flow Finder Ranges and connector fittings (as indicated above) can be specified with ordering this 2-manifold bracket assembly.

ASSEMBLIES WITH RESISTIVE FLOW TRANSDUCERS

9800-3061-LBS-U Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, Resistive Flow Transducer



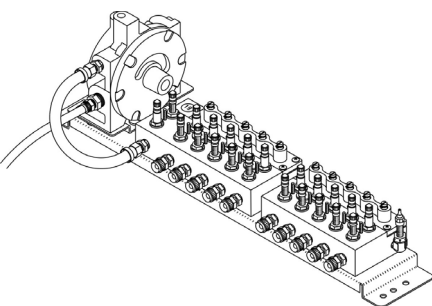
Unlike the other Manifold Monitoring Assemblies described previously in this section, this product number identifies an assembly equipped with one Flow Finder manifold and a 0-20 SCFH resistive flow

transducer. The manifold's input Flow Finder range is 0-19 SCFH and the output Flow Finders are 0-9.5 SCFH. Pressure tube connector fittings are 3/8 inch, nickel-plated brass.

9800-3061-LBV-U Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, Check Valves, Resistive Flow Transducer

This Manifold Monitoring Assembly is essentially the same as the one described above, with the addition of check valves. The assembly's manifold is equipped with a nickel-plated brass check valve in each outgoing port between the manifold body and the 3/8" fitting.

9800-3062-LBS-U Manifold, Assembly, Dual, Low Range, 3/8" Brass Fittings, Resistive Flow Transducer



This assembly consists of two Flow Finder Manifolds monitored by a 0-20 SCFH resistive flow transducer. The 6-port manifold is equipped with a 0-19 SCFH Flow Finder in the

incoming port. Each outgoing port (on both manifolds) contains a 0-9.5 SCFH Flow Finder. Fittings are 3/8 inch, male NPT, nickel-plated brass. The resistive flow transducer reads from 0-20 SCFH in twenty 1.0 SCFH steps.

9800-3062-LBV-U Manifold, Assembly, Dual, Low Range, 3/8" Brass Fittings, Check Valves, Resistive Flow Transducer

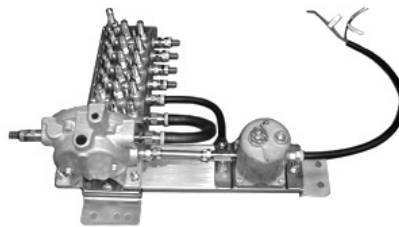
"LBV" dual Manifold Monitoring Assembly contains the same fittings and Flow Finder/transducer ranges as described above, but it is supplied with nickel-plated check valves.

9800-3062-MBS-U Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Resistive Flow Transducer

This Manifold Monitoring Assembly consists of two Flow Finder Manifolds monitored by a 0-47.5 SCFH resistive flow transducer. Outgoing ports to the individual cables are each equipped with a 0-9.5 SCFH Flow Finder. Tubing connector fittings are 3/8" NPT-M brass.

ASSEMBLIES WITH TWO RESISTIVE TRANSDUCERS

9800-3061-LBS-U2 Manifold, Assembly, Single, Low Range, 3/8" Brass Fittings, Resistive Flow & Pressure Transducers



This unique Manifold Monitoring Assembly is equipped with one Flow Finder manifold and two resistive transducers: both a 0-20 SCFH resistive flow transducer and a 0-9.5 PSI resistive pressure transducer.

The manifold's input Flow Finder range is 0-19 SCFH and the output Flow Finders are 0-9.5 SCFH. Pressure tube connector fittings are 3/8 inch, nickel-plated brass.

9800-3062-MBS-U2 Manifold, Assembly, Dual, Medium Range, 3/8" Brass Fittings, Resistive Flow & Pressure Transducers

Like the Part No. 9800-3061-LBS-U2, this assembly is also equipped with both a resistive flow transducer and a resistive pressure transducer (0-47.5 SCFH and 0-9.5 PSI respectively). The MBS product designation identifies an assembly supplied with a Flow Finder Manifold equipped with one 0-47.5 SCFH incoming port and 0-9.5 SCFH outgoing ports. The numeric "3062" designation indicates that two Flow Finder Manifolds are included—providing air distribution for up to ten cables. Pressure tube connector fittings are 3/8 inch, nickel-plated brass.

Several other flow range options are available for assemblies equipped with resistive flow and resistive flow/pressure transducers. Please note that the "L," "M," and "H" designations identify the input and output of the Flow Finders supplied in the manifold(s), as well as the range of the resistive flow transducer ("L" for 0-20 SCFH, "M" for 0-47.5 SCFH, and "H" for 0-100 SCFH).

Assemblies Used in the Positive Air Flow System

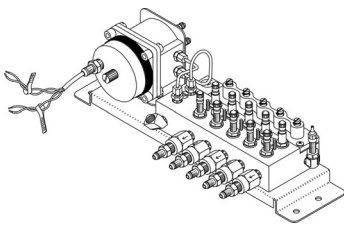
In addition to the standard Manifold Monitoring Assemblies used in most telephone companies, System Studies has also developed a selection of manifold assemblies for the Positive Air Flow System™ (PAF). This innovative air pressure system was designed by System Studies to reduce or eliminate the occurrence of moisture accumulation in underground cables as a result of unusual environmental conditions. The success of the Positive Air Flow System is based on the controlled and continual movement of air through the cables. The increased air consumption requirements of the system are made possible by the use of the one inch air pipe (Power Pipe™).

There are two types of Manifold Monitoring Assemblies used in the Positive Air Flow System: “source” manifold assemblies and “return” manifold assemblies. Each is monitored by a High Resolution Dual Transducer, with model variations defined by the range of orifices (input and output) and types of fittings used.

As the names imply, the source manifold is used at locations where air is introduced into the cables; the “return” manifold, which is installed approximately midway between source manifold assemblies, is used to remove air from the cables. Like the source manifold assemblies, the return manifolds are connected to a one inch air pipe, which routes air back to the CO for removal outside of the office. A return pipe panel regulates the volume of air removed from the system, which can be increased or decreased based on monitored cable pressures and circulated air requirements. Assemblies can be ordered with one or two manifolds in the configurations listed below.

SOURCE MANIFOLD ASSEMBLIES

9800-3901-CSV-2 Manifold Assembly, PAF Source, Single, Custom Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer



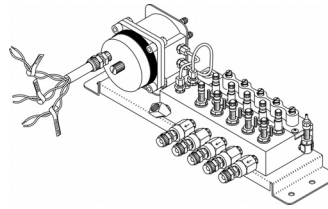
This PAF Source Manifold Assembly consists of one Flow Finder Manifold and a High Resolution Dual Transducer mounted on a stainless steel bracket. The manifold contains five stainless steel, 37° flared fittings for the connection to the cables,

with nickel-plated brass check valves are installed between the manifold body and the fittings to prevent backflow from the field into the manifold. The flow range of this custom assembly is 0–47.5 SCFH for the incoming port and 0–19 SCFH for all outgoing ports.

9800-3901-LBS-2 Manifold Assembly, PAF Source, Single, Low Range, 3/8” Brass Fittings, Dual Transducer

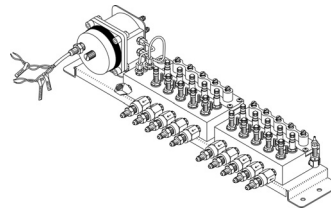
This Positive Air Flow System Source Manifold Assembly is supplied with one Flow Finder Manifold and one High Resolution Dual Transducer. Nickel-plated brass fittings are supplied for all outgoing cable ports. The designated flow range is 0–19 SCFH incoming and 0–9.5 SCFH outgoing.

9800-3901-LBV-2 Manifold Assembly, PAF Source, Single, Low Range, 3/8” Brass Fittings, Check Valves, Dual Transducer



This assembly is identical to the one described above, except that it also includes a nickel-plated brass shutoff valve in each of the outgoing ports.

9800-3903-HSV-2 Manifold Assembly, PAF Source, Dual, High Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer



The 3903 designation indicates that the assembly is supplied with two Flow Finder Manifolds and one High Resolution Dual Transducer. SV indicates that stainless steel 37° flared fittings and nickel-plated check valves are used at all cable ports. The H specifies the use of 0–95 SCFH

Flow Finder in the incoming port and 0–19 SCFH Flow Finders in the outgoing ports.

9800-3903-MBS-2 Manifold Assembly, PAF Source, Dual, Medium Range, 3/8” Brass Fittings, Dual Transducer

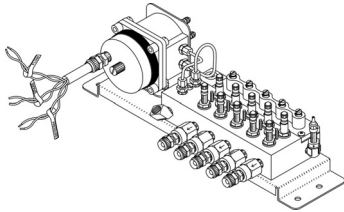
This mid-range Positive Air Flow System Source Manifold Assembly is supplied with two Flow Finder Manifolds and one High Resolution Dual Transducer. 0–47.5 SCFH Flow Finder is used in the incoming port and 0–9.5 Flow Finders provide flow readings for outgoing ports. Fittings are nickel-plated brass.

9800-3903-MBV-2 Manifold Assembly, PAF Source, Dual, Medium Range, 3/8” Brass Fittings, Check Valves, Dual Transducer

This PAF Source Manifold Monitoring Assembly consists of the same components as the one described above, with the addition of nickel-plated brass shutoff valves in each of the outgoing ports.

RETURN MANIFOLD ASSEMBLIES

9800-3902-CBV-2 Manifold Assembly, PAF Return, Single, Custom Range, 3/8" Brass Fittings, Check Valves, Dual Transducer



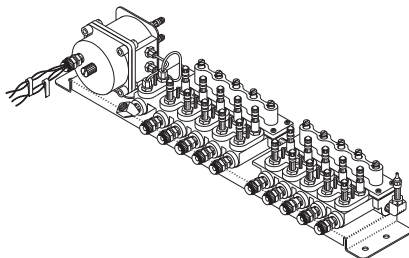
The 3902 designation identifies Positive Air Flow Return Manifold Monitoring Assemblies consisting of one PAF Return Manifold. This particular assembly uses nickel-plated brass fittings and check valves on the

manifold, and it is monitored by a High Resolution Dual Transducer. The "C" represents a non-standard flow range configuration that can be specified when ordering.

9800-3902-MSV-2 Manifold Assembly, PAF Return, Single, Medium Range, 37° Stainless Steel Fittings, Check Valves, Dual Transducer

This PAF Return Assembly is supplied with a single Flow Finder Manifold equipped with 0-9.5 SCFH Flow Finders in the incoming ports from the cable and a 0-47.5 SCFH Flow Finder in the outgoing port to the return air pipe. It has stainless steel fittings, brass check valves and a High Resolution Dual Transducer.

9800-3904-CBS-2 Manifold Assembly, PAF Return, Dual, Custom Range, 3/8" Brass Fittings, Dual Transducer



The 3904 designation identifies Positive Air Flow Return Manifold Monitoring Assemblies that have two manifolds installed on a stainless steel bracket along with a High Reso-

lution Dual Transducer. The "C" in this part number indicates that the manifolds have custom port configurations that can be specified when ordering. Possible variations would be a 0-95 SCFH or 0-47.5 SCFH output to the return pipe, and 0-9.5 SCFH Flow Finders in the individual ports to measure incoming return flow from the cables.

9800-3904-CBV-2 Manifold Assembly, PAF Return, Dual, Custom Range, 3/8" Brass Fittings, Check Valves, Dual Transducer

This assembly is nearly identical to the one described above, except that it has nickel-plated check valves installed between the manifold and the 3/8" brass pressure tubing connectors.

9800-3904-CSV-2 Manifold Assembly, PAF Return, Dual, Custom Range, 37° Flared Stainless Steel Fittings, Check Valves, Dual Transducer

This dual PAF Return Manifold Monitoring Assembly consists of two manifolds, each equipped with flared stainless steel tubing connectors and nickel-plated brass shutoff valves. This model can also be ordered as a custom flow range configuration. It includes a High Resolution Dual Transducer.

PRESSURE RELIEF ASSEMBLIES

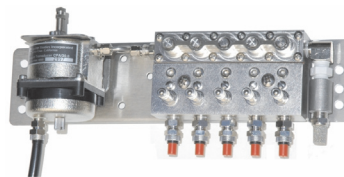
9800-3906-BS-0 Sensor, Assembly, Pressure Relief



This single transducer assembly is used in a Positive Air Flow System to monitor individual cable pressure. The assembly is equipped with a stainless steel, 90-degree transducer bracket containing a 0-30 psi High Resolution Pressure Transducer. Pneumatically connected to the transducer is a branch T with a 1/4" NPT-M to 3/8" tubing

connector on one end (to accept feed from the cable), and a pressure relief valve, manual shutoff valve and particulate filter on the other end. The pressure relief valve permits air to flow from the pneumatically connected cable to atmosphere. When cable pressure drops to 4.85 psi, the valve closes to maintain adequate cable pressure protection.

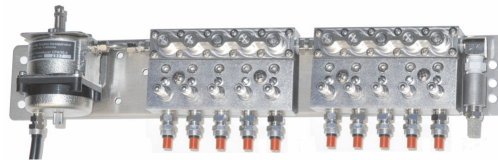
9800-3905-BS-0 Manifold, Assembly, Pressure Relief



The Pressure Relief Manifold Assembly serves an identical Positive Air Flow System function as the Part No. 9800-3906-BS-0 assembly, except that it is designed for up to five cables. The assembly con-

sists of a stainless steel bracket containing a 0-30 psi High Resolution Pressure Transducer and a 5-port nickel-plated brass manifold. Mounted directly to the manifold is a pressure relief valve that allows air to escape from the pneumatically connected cables until pressure drops to 4.85 psi. The transducer provides remote monitoring of pressure changes at the installation location to assist in leak locating.

9800-3915-BS-0 Manifold, Assembly, Pressure Relief



The 10-Port manifold assembly provides the same function as the one above. It

consists of a stainless steel bracket containing a 0-30 psi High Resolution Pressure Transducer, two nickel-plated brass manifolds, and a pressure relief valve.

For additional information regarding Manifold Monitoring Assembly ordering options, please refer to the ordering chart below. If you have any questions, please contact our Sales Department at (800) 247-8255/(831) 475-5777 or by e-mail (sales@airtalk.com).

The words Flow Finder Manifold™, Flow Finder™, Flow Gauge™, High Resolution Flow Transducer™, High Resolution Dual Transducer™, Power Pipe™ and Positive Air Flow System™ are trademarks of System Studies Incorporated.

MANIFOLD MONITORING ASSEMBLY

| PART NUMBER | RANGE* | FITTING** | TD TYPE*** |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|--------------------|
| 9800-3061 ONE MANIFOLD (transducer supplied with nickel-plated brass conductor tubing connector) | L, M, H, C | BS, BT, BV | 1, 2, 9, U, U2, 2P |
| 9800-3064 ONE MANIFOLD (transducer supplied with 37° stainless steel conductor tubing connector) | L, M, H, C | SS, SV | 1, 2, 9, 2P |
| 9800-3062 TWO MANIFOLDS (transducer supplied with 3/8" nickel-plated brass conductor tubing connector) | L, M, H, C | BS, BT, BV | 1, 2, 9, U, U2, 2P |
| 9800-3065 TWO MANIFOLDS (transducer supplied with 37° stainless steel conductor tubing connector) | L, M, H, C | SS, SV | 1, 2, 9, 2P |
| 9802-3062 TWO MANIFOLDS (manifold and transducer installed on curved bracket, transducer supplied with 3/8" nickel-plated brass conductor tubing connector) | M, H | BS, BV | 1, 2, U |

Please note that a part number, range, fitting and transducer type must be specified for each Manifold Monitoring Assembly when ordering.

*Flow Finder Ranges:

- L** Low: Input = 19.0 SCFH, Output = 9.5 SCFH
- M** Medium: Input = 47.5 SCFH, Output = 9.5 SCFH
- H** High: Input = 95.0 SCFH, Output = 19.0 SCFH
- C** Custom: Multiple output ranges to meet customer specifications (contact System Studies Incorporated)

**Fittings:

- BS** Manifold supplied with nickel-plated brass, standard tubing connectors. For use with 3/8" plastic tubing.
- BT** Manifold(s) supplied with nickel-plated brass tubing connectors. For use with 1/4" plastic tubing.
- BV** Manifold supplied with nickel-plated brass, standard tubing connectors, along with nickel-plated brass check valves on all outputs. For use with 3/8" plastic tubing.
- SS** Manifold supplied with stainless steel, 37° flared tubing connectors. For use with 1/4" stainless steel braided tubing.
- SV** Manifold supplied with stainless steel, 37° flared tubing connectors, along with nickel-plated brass check valves on all outputs. For use with 1/4" stainless steel braided tubing.

***Transducer Type:

- | | |
|-------------------------------------------------------------------|------------------------------------------------|
| 1 High Resolution Flow Transducer | 2 High Resolution Dual Transducer |
| 9 No transducer supplied | U Resistive Flow Transducer |
| 2P High Resolution Dual Transducer (w/Selector Pair Saver) | U2 Resistive Flow & Pressure Transducer |

Ordering Examples:

If you ordered part number 3064-H-SV-2, for example, you would receive an assembly consisting of a Flow Finder Manifold with a high flow range (95.0 SCFH input and 19.0 SCFH outputs), 37° stainless steel flared tubing connectors with nickel-plated brass check valves, and a High Resolution Dual Transducer with a 37° stainless steel conductor fitting

If you ordered part number 3065-H-SV-2, for example, you would receive an assembly with two Flow Finder Manifolds with a high flow range (input of 95.0 SCFH and output of 19.0 SCFH), 37° stainless steel, flared tubing connectors with nickel-plated check valves, and a High Resolution Dual with a 37° stainless steel conductor fitting.

