

## **FEATURES:**

- Choice of NPT female by NPT female or NPT female by flange models.
- Gyrolok tube fittings provide installation versatility and elimination of elliptical flanges.
- Purge ports are provided on the process side of block valves for applications requiring continuous purging.
- Bleed or vent ports on the instrument side of block valves.
- Manifold is available with Bleed Valves. See page 5.
- Replaceable seats in the manifold block prolong service life.
- Dyna-Pak TFE or high-temperature (600°F) Graph-lock/TFE wafer packing is standard.
- Bonnet locks prevent accidental disengagement of the bonnet.
- Select from two stem point styles: Non-rotating hardened metal stem tip and nonrotating replaceable Kel-F stem tip.
- Integral backseats on all valve stems prevent accidental removal.
- Mounting bolts and TFE gaskets come with flanged models.
- Packing below stem threads prevents process liquids from contaminating or washing away the thread lubricants.



# **HOKE** Trifold Needle Valve Manifold

Hoke Trifold needle valve manifolds are available in 316 stainless steel and carbon steel to satisfy a broad range of temperature, pressure, and fluid requirements.

Our patented Dyna-Pak Wafer stem packing below the stem threads prevents process fluid from contaminating or washing away thread lubricants. For high temperature service to 600°F, Graph-lock/TFE Wafer packing is provided as standard.

Replaceable seats are utilized for easy seat maintenance and manifold reconditioning in corrosive service. Bonnet locks prevent accidental disengagement of the bonnet.

A choice of two stems are available. A hardened, nonrotating stem point minimizes seat galling and provides a good metal to metal seal for positive shut-off. A nonrotating stem with a replaceable Kel-F tip is also available. All stems are designed with integral backseats to prevent accidental removal.

In addition, various process and instrument connections are available to suit the different installations used to measure flow by the differential pressure method.

The 1/2 " NPT female inlet and outlet model is the most universal design for both remote or close coupled installations or for D.P. transmitters with non-standard center distance mounting. This is possible by proper selection of pipe, tubing with 1/2 " Gyrolok male connections, and elliptical flange connectors generally supplied with the D.P. cell.

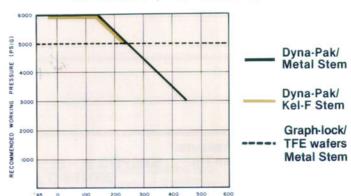
A 1/2 " NPT female process connection with flanged instrument connection is available for direct mounting of the D.P. transmitter and remote or close coupling to the process side.

#### Maximum Operating Pressure:

Dyna-Pak/Metal Stem Tip: 6000 PSIG @ -65° to 150°F (420 Kg/Cm<sup>2</sup> @ -54° to 66°C) 3000 PSIG @ 450°F (211 Kg/Cm2 @ 232°C) Graph-lock/TFE Wafer Packing: 5000 PSIG @ -60° to 600°F (352 Kg/Cm<sup>2</sup> @ -51° to 316°C)

### **Operating Temperature Range:**

Dyna-Pak/Metal Stem Tip: -65° to 450°F (-54° to 232°C) Dyna-Pak/Kel-F Stem Tip: - 20° to 250°F (-29° to 121°C) Graph-lock/TFE Wafer Packing Metal Stem Tip:  $-60^{\circ}$  to  $600^{\circ}$ F  $(-51^{\circ}$  to  $316^{\circ}$ C)



TEMPERATURE - (DEGREES FAHRENHEIT)

#### FLANGE/PIPE MODELS

| CONNECTIONS     |            |                             | MATERIALS OF CONSTRUCTION |             |                            |                           |                         |  |
|-----------------|------------|-----------------------------|---------------------------|-------------|----------------------------|---------------------------|-------------------------|--|
| Process         | Instrument | Order By<br>Model<br>Number | Body &<br>Bonnet          | Seat & Stem | Stem<br>Point              | Packing                   | Handle                  |  |
| ½ NPT<br>Female | Flange     | 8123F8Y                     | 316SS                     | 316SS       | Non-<br>Rotating<br>Kel-F  | Dyna-<br>Pak              | Round<br>ABS<br>Plastic |  |
| ½ NPT<br>Female | Flange     | 8122F8Y                     | 316SS                     | 316SS       | Non-<br>Rotating<br>17-4PH | Dyna-                     | Bar<br>316SS            |  |
| ½ NPT<br>Female | Flange     | 8128F8Y                     | 316SS                     | 316SS       | Non-<br>Rotating<br>17-4PH | Graph-lock/<br>TFE wafers | Bar<br>316SS            |  |

#### PIPE CONNECTION MODELS

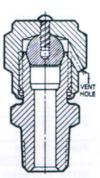
| CONNECTIONS     |                 |                             | MATERIALS OF CONSTRUCTION |             |                            |                           |                                 |  |
|-----------------|-----------------|-----------------------------|---------------------------|-------------|----------------------------|---------------------------|---------------------------------|--|
| Process         | Instrument      | Order By<br>Model<br>Number | Body &<br>Bonnet          | Seat & Stem | Stem<br>Point              | Packing                   | Handle                          |  |
| ½ NPT<br>Female | ½ NPT<br>Female | 8113F8E                     | Carbon<br>Steel           | 316SS       | Non-<br>Rotating<br>Kel-F  | Dyna-<br>Pak              | Round<br>ABS<br>Plastic         |  |
| ½ NPT<br>Female | ½ NPT<br>Female | 8112F8E                     | Carbon<br>Steel           | 316SS       | Non-<br>Rotating<br>17-4PH | Dyna-<br>Pak              | Bar<br>C.S.<br>Nickel<br>Plated |  |
| ½ NPT<br>Female | ½ NPT<br>Female | 8118F8E                     | Carbon<br>Steel           | 316SS       | Non-<br>Rotating<br>17-4PH | Graph-lock/<br>TFE wafers | Bar<br>C.S.<br>Nickel<br>Plated |  |
| ½ NPT<br>Female | ½ NPT<br>Female | 8113F8Y                     | 316SS                     | 316SS       | Non-<br>Rotating<br>Kel-F  | Dyna-<br>Pak              | Round<br>ABS<br>Plastic         |  |
| ½ NPT<br>Female | ½ NPT<br>Female | 8112F8Y                     | 316SS                     | 316SS       | Non-<br>Rotating<br>17-4PH | Dyna-<br>Pak              | Bar<br>316SS                    |  |
| ½ NPT<br>Female | ½ NPT<br>Female | 8118F8Y                     | 316SS                     | 316SS       | Non-<br>Rotating<br>17-4PH | Graph-lock/<br>TFE wafers | Bar<br>316SS                    |  |

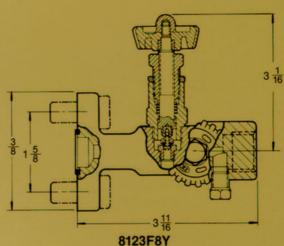
#### **BLEED VALVE ACCESSORY MODELS**

This miniaturized valve permits the venting of liquids and gases.

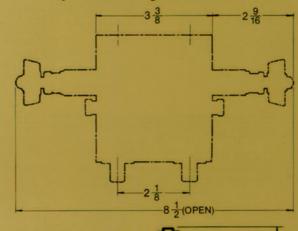
Operated with any  $\frac{5}{8}$ " wrench as the handle, excess pressure is vented through a hole drilled in the nut at an angle away from the user. As the nut is turned, positive pullback releases the ball from the seat relieving the pressure.

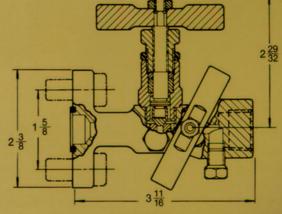
| Connections | Order By<br>Model Number | Material   |  |
|-------------|--------------------------|------------|--|
| % NPT Male  | 6610M2Y                  | FI MINI    |  |
| ¼ NPT Male  | 6610M4Y                  | 316SS      |  |
| ½ NPT Male  | 6610M8Y                  | MORVING EN |  |



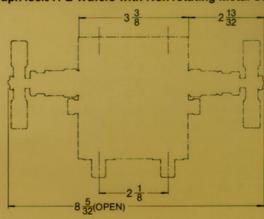


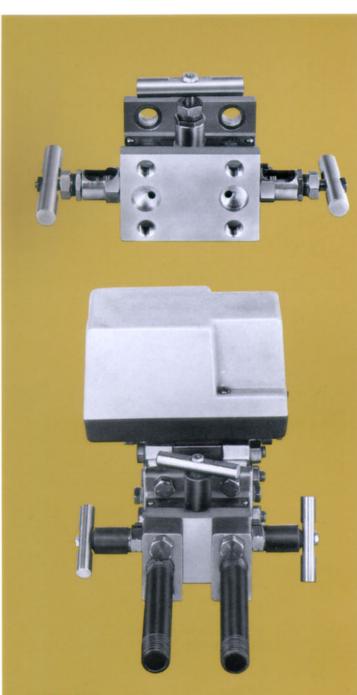
Dyna-Pak Packing with Kel-F Stem





8128F8Y
Graph-lock/TFE Wafers with Non-rotating Metal Stem





#### **FEATURES:**

- Double flange design permits direct mounting to a differential pressure transmitter and easy direct or close coupled connection to the process line.
- Dyna-Pak packing below stem threads protects the valve from process corrosion.
- Graph-lock/TFE wafer packing is available for hi-temperature applications 600°F.
- Hardened non-rotating stem point prevents seat galling and assures a good metal-to-metal seal for positive shut-off.
- Seats are removable to prolong valve life without discarding entire manifold.
- Mounting bolts and gaskets come with all models.
- Choose from carbon steel or 316SS models.
- Easy-to-use tee bar handles.



This needle valve manifold is used to make up the most compact D.P. cell installation arrangement for differential pressure flow measurement in process applications.

The manifold body is machined from a rugged H shaped extrusion with a flange on each end.

The other flange either mates with the process flange or is connected to the process line with elliptical footballs and short pipe nipples.

#### **Maximum Operating Pressure:**

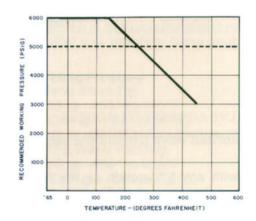
Dyna-Pak Valves: 6000 PSIG @ -65° to 150°F (420 Kg/Cm² @ -54° to 66°C) 3000 PSIG @ 450°F (211 Kg/Cm² @ 232°C)

Graph-lock/TFE Wafer Packing: 5000 PSIG @ -60° to 600°F (352 Kg/Cm² @ -51° to 316°C)

#### **Operating Temperature Range:**

Dyna-Pak/Metal Stem Tip:
- 65° to 450°F (-54° to 232°C)

Graph-lock/TFE Wafers/Metal Stem Tip:
- 60° to 600°F (-51° to 316°C)

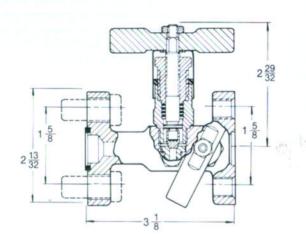


Graph-lock/TFE ---- Dyna-Pak ----

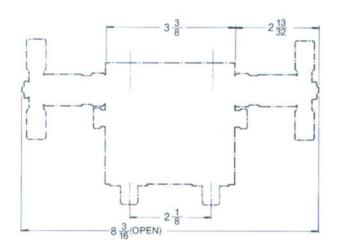
#### **FLANGE BY FLANGE**

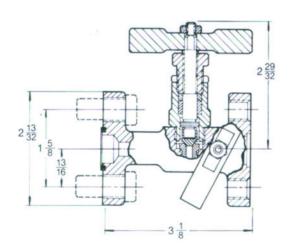
| CONNECTIONS |            |                             | MATERIALS OF CONSTRUCTION |                |               |                           |                        |  |
|-------------|------------|-----------------------------|---------------------------|----------------|---------------|---------------------------|------------------------|--|
| Process     | Instrument | Order By<br>Model<br>Number | Body &<br>Bonnet          | Seat &<br>Stem | Stem<br>Point | Packing                   | Handle                 |  |
| Flange      | Flange     | 8132EE                      | Carbon<br>Steel           | 316SS          | 17-4PH        | Dyna-<br>Pak              | Bar<br>Carbon<br>Steel |  |
| Flange      | Flange     | 8138EE                      | Carbon<br>Steel           | 316SS          | 17-4PH        | Graph-lock/<br>TFE wafers | Bar<br>Carbon<br>Steel |  |
| Flange      | Flange     | 8132YY                      | 316SS                     | 316SS          | 17-4PH        | Dyna-<br>Pak              | Bar<br>316SS           |  |
| Flange      | Flange     | 8138YY                      | 316SS                     | 316SS          | 17-4PH        | Graph-lock/<br>TFE wafers |                        |  |

NOTE: Soft seats are available on special order.



**8132YY** Dyna-Pak/Metal Stem Tip





**8138YY**Graph-lock/TFE Wafers/Metal Stem Tip

