

# Installation and Operation Manual

## Hi-Pro Manifold



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### Parker Hannifin

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## IDENTIFICATION OF HAZARDS

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NEVER adjust valves under pressure.  
NEVER slacken or remove any valve parts under pressure.  
NEVER use any mechanical aids i.e. wrenches, extensions to operate handles.  
NEVER carry ball valves by the handle.  
NEVER obscure valve body marking.  
NEVER remove end connectors.

## INSTALLATION

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Wear suitable PPE before installation and follow appropriate site safety procedures.

Before installation, ensure that all valves are in the closed position.

Parker Hi-Pro manifold uses either integral fitting (A-LOK/CPI) or NPT female connections. For connection, please refer to the appropriate installation instruction.

NPT: Use standard practice for NPT taper threads. Use an appropriate thread tape or sealant to prevent galling.

A-LOK/CPI: See separate instruction sheet supplied with A-LOK products.

## HANDLING AND STORAGE

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### Storage

There is no specified shelf-life.

Boxed products should be stored in a covered area, preferably indoors, and away from excessive moisture, heat, or airborne contaminants.

The use of desiccant or corrosion inhibitors is not required during normal storage periods.



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### OPERATION

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#### **Ball Valve:**

**To close:** Operate the handle until it is at 90° from the valve body centreline.

**To open:** Operate the handle until it is in line with the centreline of the body and reaches the stop pin.

Movement is limited to 90° (except for vent ball valves) by a mechanical stop pin.

Ball valves should always be fully open or fully closed. Do not leave in a mid-position.

Three-way vent ball valves (red handle) have no firm centre-off position and are positioned visually.

#### **Needle Valve**

**To close:** Rotate handle clockwise until a stop is felt.

**To open:** Fully rotate the handle anti-clockwise until a stop is felt.

There are approximately three rotations between fully open and fully closed.

Do not force rotation past the stop, as damage may occur. Maximum torque is 6Nm

For anti-tamper designs only use the correct key for Parker manifolds.

### MAINTENANCE

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Parker Hi-Pro Manifolds are not user-serviceable, except for gland adjustment of the vent needle valve. Gland adjustment becomes necessary when the valve is visibly leaking through the spindle just below the operating handle, or prior to operation when no torque or resistance is evident when operating the valve handle. Adjustment to the gland can be carried out to prevent leakage. Replacement bonnets are available.

#### **H-series Needle Valve Gland Adjustment (see page 3)**

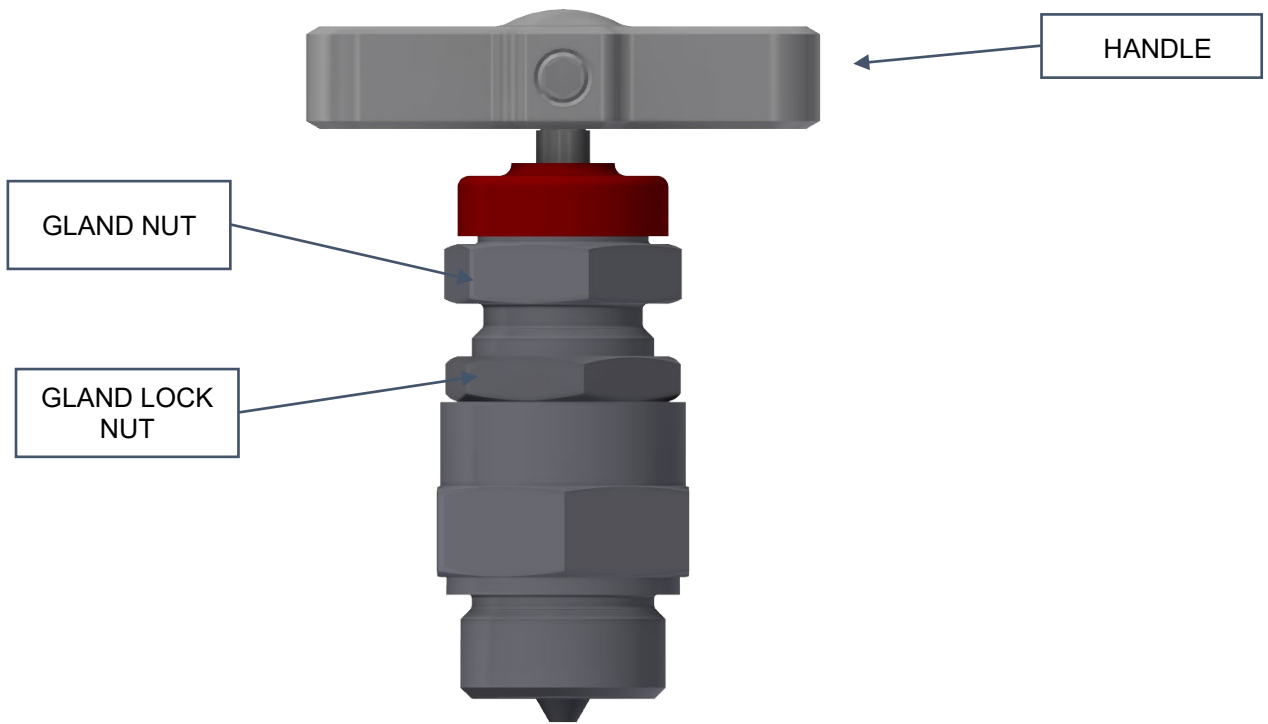
**CAUTION:** Adjustment of the gland must be carried out at zero pressure

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1. Fully close the valve by turning the handle in a clockwise direction to stop lightly on seat (max. 2 Nm).
  2. Open the valve one full turn by rotating the handle in a counter clockwise direction.
  3. Loosen gland lock nut.
  4. Tighten gland nut to 11 Nm
  5. Re-tighten gland lock nut to 25 Nm
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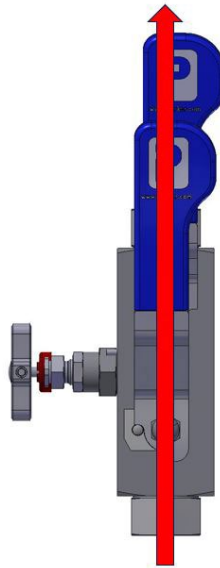


H-Series Bonnet

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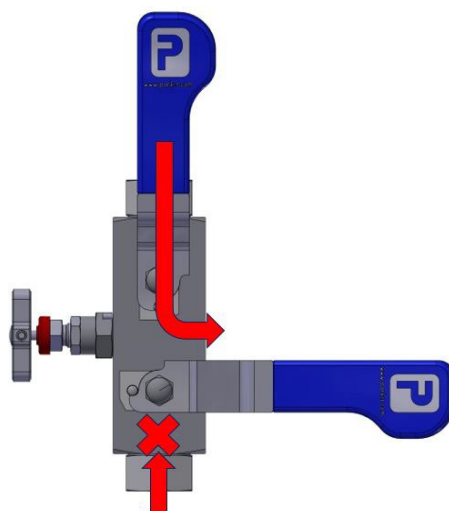
These valves are primarily used for double isolation of an instrument, be that a gauge or a transmitter.

The primary and secondary valves are in the open position during normal operating conditions allowing the process pressure to enter the gauge or transmitter to perform its function to give a pressure reading. The primary valve is situated nearest to the inlet.



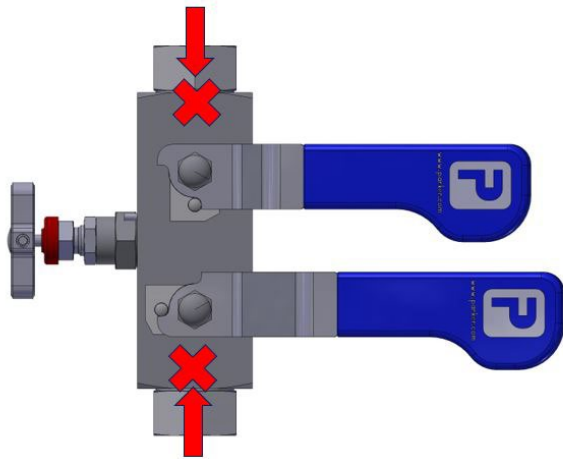
### Standard operating sequence to perform safe venting:

1. Close the primary valve to block the pressure.
2. Open the vent valve to release the line pressure.

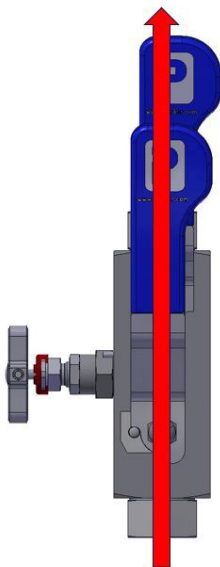


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3. Close the vent valve.
  4. Close the secondary valve.
  5. Perform the required downstream functions.
- The double block gives two isolations to prevent process media escaping.



6. Once the downstream functions, such as instrument calibration or replacement, have been performed, open the primary and secondary valves again to allow pressure measurement to continue.



**Vent plug:** The valve is shipped with a vent plug, loose or installed as per the client's requirements. While venting the valve, this plug must be removed. The plug can be re-fitted for safety reasons or to prevent ingress of the environment. That is the operator's decision and should be in their operating procedures. It is suggested that PTFE tape or sealant is used to prevent galling of the threads.

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### **WARNING - USER RESPONSIBILITY**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

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