# LOCKOUT VALVES

<table>
<thead>
<tr>
<th>Bulletin Number</th>
<th>Bulletin Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V322BP</td>
<td>Installation &amp; Service Instructions</td>
</tr>
<tr>
<td>V324P</td>
<td>Rev. 2 LV &amp; EZ Valves, Installation &amp; Service Instructions</td>
</tr>
<tr>
<td>Safety Guide</td>
<td>PDN Safety Guide</td>
</tr>
</tbody>
</table>

Visit [www.pdnplu.com](http://www.pdnplu.com) for additional instruction sheets.
Pneumatic Division North America
Richland, Michigan 49083

WARNING

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer’s specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

Specifications

These products are intended for use in general purpose compressed air systems only.

Maximum Operating Pressure:

<table>
<thead>
<tr>
<th>psig</th>
<th>bar</th>
<th>kPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>17.2</td>
<td>1720</td>
</tr>
</tbody>
</table>

Ambient Temperature Range:
41°F to 122°F (5°C to 50°C)

ANSI Symbols

1 - Inlet
2 - Outlet to System
3 - Exhaust

Lockout Valve

Installation

1. The valve should be installed with reasonable accessibility for service whenever possible - a repair service kit is available. Keep pipe or tubing lengths to a minimum with inside clean and free of dirt, chips, and scale. Pipe joint compound should be used sparingly and applied only to the male pipe - never into the female port. Do not use PTFE tape to seal pipe joints - pieces have a tendency to break off and lodge inside the unit, possibly causing malfunction.

2. Install valve so that air flow is in the direction of arrow. Installation must be upstream from devices it is to service (e.g. lubricator, valve, cylinder or tool), and mounted closely to these devices. Mounting may be in any position.

3. Installing a filter upstream of the regulator (as close to the unit as possible) will provide added protection against rust, pipe scale, and other foreign matter.

Caution: Do not restrict exhaust from valve. Restricting exhaust may make valve difficult to shift. Back pressure in exhaust port should not exceed 10 psig (69 kPa).

Operation

Lockout Operation - With the handle pushed inward, inlet port 1 is blocked. Outlet port 2 is open to exhaust port 3. A hole for padlock is exposed for customer use.

Normal Flow Operation - With the handle pulled outward, inlet port 1 is open to outlet port 2. Exhaust port 3 is blocked.

Lubrication - Since these valves are pre-lubricated during assembly, no lubrication is necessary as a general rule.

Recommended Lubricant - After 10,000 cycles (or if valve becomes difficult to shift) clean and inspect internal parts. Lubricate seals and moving internal parts with Carleton Stewart Corporation’s Magnalube-G, or equivalent.

Ambient Conditions -
1. Protect the valve from exposure to extreme temperatures, dirt, and moisture to maximize valve life.
2. Do not use these valves in an atmosphere containing corrosive gases, chemicals, sea water, water, steam, etc.
3. If the valve is used at a temperature of less than 41°F (5°C), it will freeze. Therefore, take precautions to avoid this type of adverse condition. When the unit is used with dry air (e.g. from an air dryer), its minimum temperature can be extended to at least 23°F (-5°C).

Service Procedures

If you have questions concerning how to service this unit, contact your local authorized dealer or your customer service representative.

WARNING

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

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.
Pneumatic Division North America
Richland, Michigan 49083

Installation & Service Instructions
V-324P
Lockout LV & EZ Series Valves

ISSUED: March, 2013
Supersedes: May, 2001
Doc. # V324P, EN# 130079, Rev. 2

Parker

LV Inlet Pressure  0 to 300  0 to 20
EZ Inlet Pressure  0 to 150  0 to 10.3

3. All applicable instructions should be read and complied with before using any fluid power system in order to prevent harm to persons or equipment. In addition, overhauled or serviced valves must be functionally tested prior to installation and use.

4. Each Parker product should be used within its specification limits. Failure to follow these directions can adversely affect the performance of the product or result in the potential for human injury or damage to property.

**Installation**

⚠️ Per specifications and regulations, these valves are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES. Pneumatic equipment should be installed only by persons trained and experienced in such installation.

**LV or EZ Valve**

A LV valve or EZ valve can be installed in the main or a branch line of an air system.

LV Valve (Standard & Stainless): Pushing the handle inward cuts off the supply of air to downstream components, and at the same time exhausts the air in the downstream lines to the next obstruction. The LV valve is NOT an emergency stop device, but simply an energy isolation device. When the red operating handle is pulled outward, supply air is again allowed to flow into the downstream lines.

EZ Valve: Can be recognized by the BLUE dot on the nameplate. When its operating handle is pushed inward this valve functions like the LV valve described above. In addition, when the blue handle is pulled outward, the flow of air to the downstream lines is gradual. When outlet pressure reaches approximately 25 psi (1.7 bar) less than inlet pressure, the valve will then open fully until the upstream pressure is exhausted or the handle is pushed down.

**Air Lines:** Before installing this valve in a new or existing system, the air lines must be blown clean of all contaminants. It is recommended that an air filter be installed in the inlet line close to the valve.

**WARNING**

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

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.

---

**Safety Guide**

For more complete information on recommended application guidelines, see the Safety Guide section of Pneumatic Division catalogs or you can download the Pneumatic Division Safety Guide at: www.parker.com/safety

---

**Introduction**

Follow these instructions when installing, operating, or servicing the product.

**Application Limits**

These products are intended for use in general purpose compressed air systems only.

**Allowable Operating Pressure:**

<table>
<thead>
<tr>
<th>PSIG</th>
<th>bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV Inlet Pressure</td>
<td>0 to 300</td>
</tr>
<tr>
<td>EZ Inlet Pressure</td>
<td>0 to 150</td>
</tr>
</tbody>
</table>

**Ambient Temperature Range:**

40°F to 175°F (4°C to 80°C)

**Flow Media:** Filtered air; 5 micron recommended.

---

**Symbols**

1. Inlet
2. Outlet to System
3. Exhaust

---

**Pre-Installation or Service**

1. Before servicing a valve or other pneumatic component, be sure that all sources of energy are turned off, the entire pneumatic system is shut off and exhausted, and all power sources are locked out (ref: OSHA 1910.147, EN 1037).

2. All Parker products, including service kits and parts, should be installed and/or serviced only by persons having training and experience with pneumatic equipment. Because any installation can be tampered with or need servicing after installation, persons responsible for the safety of others or the care of equipment must check every installation on a regular basis and perform all necessary maintenance.

---

**WARNING**

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer’s specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

---

**Symbols**

- Filter or FRL
- LV or EZ Valve
- Pneumatic System

---

**LV Valve**

A LV valve or EZ valve can be installed in the main or a branch line of an air system.

---

**EZ Valve**

Can be recognized by the BLUE dot on the nameplate. When its operating handle is pushed inward this valve functions like the LV valve described above. In addition, when the blue handle is pulled outward, the flow of air to the downstream lines is gradual. When outlet pressure reaches approximately 25 psi (1.7 bar) less than inlet pressure, the valve will then open fully until the upstream pressure is exhausted or the handle is pushed down.

---

**Air Lines**

Before installing this valve in a new or existing system, the air lines must be blown clean of all contaminants. It is recommended that an air filter be installed in the inlet line close to the valve.

---

**WARNING**

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

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.
Valve Inlet (Port 1): Be sure that the supply line is of adequate size and does not restrict the air supply.

Valve Outlet (Port 2): For quick pressurizing and exhausting of downstream components, the downstream lines must be of adequate size and be free of crimps and sharp bends.

Valve Exhaust (Port 3): Do not restrict the air flow from the exhaust port as this can adversely affect the speed with which downstream lines and components can be exhausted. To reduce exhaust noise, an efficient silencer may be used.

Port Sizes

| 1/4 & 3/8 | 3/8, 1/2, 3/4, 1 & 1-1/4 | 1-1/2 & 2 | 1/4 thru 2 |

Sensing Port: A 1/8 NPT sensing port allows installation of either the Pop-Up Indicator (model number 988A30) or Pressure Switch option (model number PPS12C3-RHM) to verify pressure is released.

Operating Pressures and Temperatures: Allowable ranges for pressure and temperatures are given in the Valve Specifications. Exceeding these values can shorten valve life.

Pipe Installation: To install pipe in valve ports, engage pipe one turn, apply pipe thread sealant (tape not recommended), and tighten pipe. This procedure will prevent sealant from entering and contaminating the valve.

EZ Adjustment: If using an EZ valve with a blue dot on the nameplate, push the handle fully inward before applying line pressure to the inlet port. Turn the brass adjusting screw in the top of the blue handle clockwise until resistance is felt. DO NOT TIGHTEN OR THE SCREW MAY BE DAMAGED. Now turn the adjusting screw counterclockwise 1/2 turn. This will serve as a preliminary setting for the rate of pressure buildup. Further adjustment can then be made to suit the needs of your application.

Pneumatic equipment should be maintained only by persons trained and experienced in the maintenance of such equipment.

To service downstream equipment, the handle of the LV or EZ must be pushed inward to cut off the air supply. The valve should then be padlocked in this position to ensure that supply air is not inadvertently turned on.

Valves Padlocked in Closed Position.

Follow correct lockout procedure as prescribed by industry or your company’s lockout/tagout standards.

Supply Clean Air: Foreign material lodging in valves is a major cause of breakdowns. The use of a 5-micron rated air filter located close to the valve is strongly recommended. The filter bowl should be drained regularly, and if its location makes draining difficult, the filter should be equipped with an automatic drain.

Compatible Lubricants.

Although this valve does not require airline lubrication, it may be used with lubricated air being supplied to other mechanisms. Some oils contain additives that can harm seals or other valve components and so cause the valve to malfunction. Avoid oils with phosphate additives (e.g., zinc dithiophosphate), and diester oils; both types can harm valve components. The best oils to use are generally petroleum base oils with oxidation inhibitors, an aniline point between 180°F (82°C) and 220°F (104°C), and an ISO 32 or lighter viscosity. Some compatible oils are listed below. These oils, although believed to be compatible, could change without notice because manufacturers sometimes reformulate their oils. Therefore, use oils specifically compounded for air line service. If it is a synthetic oil, contact the oil manufacturer for compatibility information.

<table>
<thead>
<tr>
<th>Maker</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoco</td>
<td>American Industrial Oil 32</td>
</tr>
<tr>
<td></td>
<td>Amoco Spindle Oil C</td>
</tr>
<tr>
<td></td>
<td>Amolite 32</td>
</tr>
<tr>
<td>Citgo</td>
<td>Pacemaker 32</td>
</tr>
<tr>
<td>Exxon</td>
<td>Spinesstic 22</td>
</tr>
<tr>
<td></td>
<td>Teressic 32</td>
</tr>
<tr>
<td>Mobil</td>
<td>Velocite 10</td>
</tr>
<tr>
<td>Non-Fluid Oil</td>
<td>Air Lube 10H/NR</td>
</tr>
<tr>
<td>Shell</td>
<td>Turbo T32</td>
</tr>
<tr>
<td>Sun</td>
<td>Sunvis 11</td>
</tr>
<tr>
<td></td>
<td>Sunvis 722</td>
</tr>
<tr>
<td>Texaco</td>
<td>Regal R&amp;O 32</td>
</tr>
<tr>
<td>Union</td>
<td>Union Turbine Oil</td>
</tr>
</tbody>
</table>
1. GENERAL INSTRUCTIONS

1.1. Scope: This safety guide is designed to cover general guidelines on the installation, use, and maintenance of Pneumatic Division Valves, FRLs (Filters, Pressure Regulators, and Lubricators), Vacuum products and related accessory components.

1.2. Fail-Safe: Valves, FRLs, Vacuum products and their related components can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of associated valves, FRLs or Vacuum products will not endanger persons or property.


1.4. Distribution: Provide a copy of this safety guide to each person that is responsible for selection, installation, or use of Valves, FRLs or Vacuum products. Do not select, or use Parker valves, FRLs or vacuum products without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the products considered or selected.

1.5. User Responsibility: Due to the wide variety of operating conditions and applications for valves, FRLs, and vacuum products Parker and its distributors do not represent or warrant that any particular valve, FRL or vacuum product is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:

- Making the final selection of the appropriate valve, FRL, Vacuum component, or accessory.
- Assuring that all user’s performance, endurance, maintenance, safety, and warning requirements are met and that the application presents no health or safety hazards.
- Complying with all existing warning labels and/or providing all appropriate health and safety warnings on the equipment on which the valves, FRLs or Vacuum products are used; and,
- Assuring compliance with all applicable government and industry standards.

1.6. Safety Devices: Safety devices should not be removed, or defeated.

1.7. Warning Labels: Warning labels should not be removed, painted over or otherwise obscured.

1.8. Additional Questions: Call the appropriate Parker technical service department if you have any questions or require any additional information. See the Parker publication for the product being considered or used, or call 1-800-CPARKER, or go to www.parker.com, for telephone numbers of the appropriate technical service department.

2. PRODUCT SELECTION INSTRUCTIONS

2.1. Flow Rate: The flow rate requirements of a system are frequently the primary consideration when designing any pneumatic system. System components need to be able to provide adequate flow and pressure for the desired application.

2.2. Pressure Rating: Never exceed the rated pressure of a product. Consult product labeling, Pneumatic Division catalogs or the instruction sheets supplied for maximum pressure ratings.

2.3. Temperature Rating: Never exceed the temperature rating of a product. Excessive heat can shorten the life expectancy of a product and result in complete product failure.

2.4. Environment: Many environmental conditions can affect the integrity and suitability of a product for a given application. Pneumatic Division products are designed for use in general purpose industrial applications. If these products are to be used in unusual circumstances such as direct sunlight and/or corrosive or caustic environments, such use can shorten the useful life and lead to premature failure of a product.

2.5. Lubrication and Compressor Carryover: Some modern synthetic oils can and will attack nitrile seals. If there is any possibility of synthetic oils or greases migrating into the pneumatic components check for compatibility with the seal materials used. Consult the factory or product literature for materials of construction.

2.6. Polycarbonate Bowls and Sight Glasses: To avoid potential polycarbonate bowl failures:

- Do not locate polycarbonate bowls or sight glasses in areas where they could be subject to direct sunlight, impact blow, or temperatures outside of the rated range.
- Do not expose or clean polycarbonate bowls with detergents, chlorinated hydro-carbons, ketones, esters or certain alcohols.
- Do not use polycarbonate bowls or sight glasses in air systems where compressors are lubricated with fire resistant fluids such as phosphate ester and di-ester lubricants.

PDNSG-1
2.7. Chemical Compatibility: For more information on plastic component chemical compatibility see Pneumatic Division technical bulletins Tec-3, Tec-4, and Tec-5

2.8. Product Rupture: Product rupture can cause death, serious personal injury, and property damage.
• Do not connect pressure regulators or other Pneumatic Division products to bottled gas cylinders.
• Do not exceed the maximum primary pressure rating of any pressure regulator or any system component.
• Consult product labeling or product literature for pressure rating limitations.

3. PRODUCT ASSEMBLY AND INSTALLATION INSTRUCTIONS

3.1. Component Inspection: Prior to assembly or installation a careful examination of the valves, FRLs or vacuum products must be performed. All components must be checked for correct style, size, and catalog number. DO NOT use any component that displays any signs of nonconformance.

3.2. Installation Instructions: Parker published Installation Instructions must be followed for installation of Parker valves, FRLs and vacuum components. These instructions are provided with every Parker valve or FRL sold, or by calling 1-800-CPARKER, or at www.parker.com.

3.3. Air Supply: The air supply or control medium supplied to Valves, FRLs and Vacuum components must be moisture-free if ambient temperature can drop below freezing

4. VALVE AND FRL MAINTENANCE AND REPLACEMENT INSTRUCTIONS

4.1. Maintenance: Even with proper selection and installation, valve, FRL and vacuum products service life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a component failure, and experience with any known failures in the application or in similar applications should determine the frequency of inspections and the servicing or replacement of Pneumatic Division products so that products are replaced before any failure occurs. A maintenance program must be established and followed by the user and, at minimum, must include instructions 4.2 through 4.10.

4.2. Installation and Service Instructions: Before attempting to service or replace any worn or damaged parts consult the appropriate Service Bulletin for the valve or FRL in question for the appropriate practices to service the unit in question. These Service and Installation Instructions are provided with every Parker valve and FRL sold, or are available by calling 1-800-CPARKER, or by accessing the Parker web site at www.parker.com.


4.4. Visual Inspection: Any of the following conditions requires immediate system shut down and replacement of worn or damaged components:
• Air leakage: Look and listen to see if there are any signs of visual damage to any of the components in the system. Leakage is an indication of worn or damaged components.
• Damaged or degraded components: Look to see if there are any visible signs of wear or component degradation.
• Kinked, crushed, or damaged hoses. Kinked hoses can result in restricted air flow and lead to unpredictable system behavior.
• Any observed improper system or component function: Immediately shut down the system and correct malfunction.
• Excessive dirt build-up: Dirt and clutter can mask potentially hazardous situations.

Caution: Leak detection solutions should be rinsed off after use.

4.5. Routine Maintenance Issues:
• Remove excessive dirt, grime and clutter from work areas.
• Make sure all required guards and shields are in place.

4.6. Functional Test: Before initiating automatic operation, operate the system manually to make sure all required functions operate properly and safely.

4.7. Service or Replacement Intervals: It is the user’s responsibility to establish appropriate service intervals. Valves, FRLs and vacuum products contain components that age, harden, wear, and otherwise deteriorate over time. Environmental conditions can significantly accelerate this process. Valves, FRLs and vacuum components need to be serviced or replaced on routine intervals. Service intervals need to be established based on:
• Previous performance experiences.
• Government and / or industrial standards.
• When failures could result in unacceptable down time, equipment damage or personal injury risk.

4.8. Servicing or Replacing of any Worn or Damaged Parts: To avoid unpredictable system behavior that can cause death, personal injury and property damage:
• Follow all government, state and local safety and servicing practices prior to service including but not limited to all OSHA Lockout Tagout procedures (OSHA Standard – 29 CFR, Part 1910.147, Appendix A, The Control of Hazardous Energy – Lockout / Tagout).
• Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
• Disconnect air supply and depressurize all air lines connected to system and Pneumatic Division products before installation, service, or conversion.
• Installation, servicing, and / or conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
• After installation, servicing, or conversions air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or if the product does not operate properly, do not put product or system into use.
• Warnings and specifications on the product should not be covered or painted over. If masking is not possible, contact your local representative for replacement labels.

4.9. Putting Serviced System Back into Operation: Follow the guidelines above and all relevant Installation and Maintenance Instructions supplied with the valve FRL or vacuum component to insure proper function of the system.