

LV Series Lab Valves

Product Data Sheet



< STANDARDS >



ASTM D1784
ASTM D2466
ASTM F1498

IPEX LV Lab Valves are an ingenious PVC quarter turn product ideal for many simple plumbing applications. These compact, economical valves are supplied with an assortment of connections that match up with any kind of existing pipe or hose. LV Lab Valves are part of our complete systems of pipe, valves, and fittings, engineered and manufactured to our strict quality, performance, and dimensional standards.



VALVE AVAILABILITY

Body Material	PVC, CPVC
Size Range	1/4"
Pressure	150 psi
Seals	Teflon® (PTFE)
End Connections	Threaded (MNPT) Hose Adaptor

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Sample Specification

1.0 Lab Valves - LV

1.1 Material

- The valve body and ball shall be made of PVC compound which shall meet or exceed the requirements of cell classification 12454 according to ASTM D1784.

1.2 Seats

- The ball seats shall be made of Teflon® (PTFE).

1.3 Seals

- The o-ring seals shall be made of EPDM.

2.0 Connections

2.1 Threaded style

- The male NPT threaded PVC end connections shall conform to the dimensional standards ASTM D2464, ASTM F1498, and ANSI B1.20.1.

2.2 Hose adaptor style

- Hose adaptors may be substituted for the male NPT threaded PVC end connections.

3.0 Design Features

- The valve shall have a double stop polypropylene handle.
- The valve shall allow for bi-directional flow.

3.1 Pressure Rating

- All valves shall be rated at 150 psi at 73°F.

3.2 Markings

- All valves shall be marked to indicate size, material designation, and manufacturers name or trade mark.

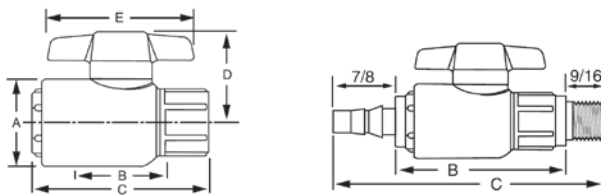
3.3 Color Coding

- All PVC valves shall be color-coded dark gray.
- 4.0 All valves shall be Xirtec® PVC by IPEX or approved equal.

Valve Selection

Size (inches)	Body Material	O-ring Material	IPEX Part Number IPS Socket	Pressure Rating at 73°F
1/4	PVC	EPDM	052308	150 psi
1/4 w/kit	PVC	EPDM	052308	150 psi

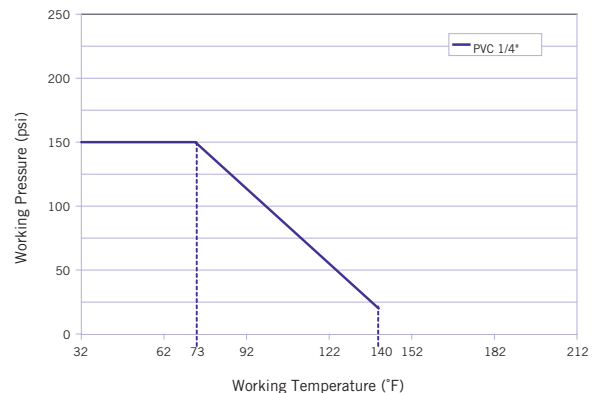
Dimensions and Weights



Dimension (inches)

Size	A	B	C	D	E	W (lbs)
1/4	1.06	0.938	2.13	1.06	1.75	0.10
1/4 w/kit	1.06	2.44	3.88	1.06	1.75	0.14

Pressure – Temperature Ratings



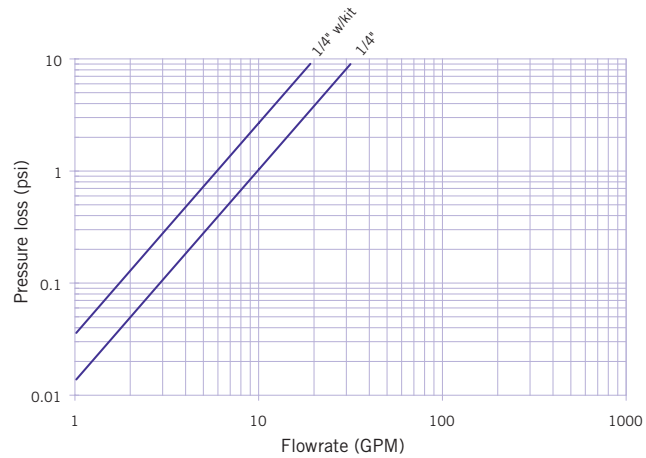
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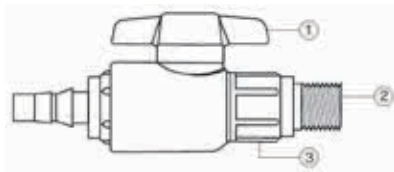
Flow Coefficients

Size	C_v
1/4	10.0
1/4 w/kit	6.00

Pressure Loss Chart



Components



#	Component	Material	Qty
1	handle	PP	1
2	end connector	PVC	1
3	body	PVC	2

Installation Procedures

1. Install the o-ring in the groove at the base of the threads on the desired end connector (part #2 on previous page).
2. Hand-tighten each end connector into the valve body (3).
Do not use Teflon® tape or thread sealant.
3. Tighten down the end connectors using the supplied plastic wrench.
Caution: Over-tightening may cause damage to the valve body and/or end connectors.
4. Use the appropriate fittings or tube and ring clamps to connect the valve to the system.

Removal from the System

1. If removing the valve from an operating system, isolate the valve from the rest of the system. **Be sure to depressurize and drain the isolated branch and valve before continuing.**
2. Depending on the connection type, either loosen the fittings or ring clamps to remove the valve.
3. The valve can now be reused and/or replaced.

Note: The LV Lab Valve has a one piece valve body. It cannot be disassembled.



Testing and Operating

The purpose of system testing is to assess the quality of all joints and fittings to ensure that they will withstand the design working pressure, plus a safety margin, without loss of pressure or fluid. Typically, the system will be tested and assessed in sub-sections as this allows for improved isolation and remediation of potential problems. With this in mind, the testing of a specific installed valve is achieved while carrying out a test of the overall system.

An onsite pressure test procedure is outlined in the IPEX Industrial Technical Manual Series, "Volume I: Vinyl Process Piping Systems" under the section entitled, "Testing". The use of this procedure should be sufficient to assess the quality of a valve installation. **In any test or operating condition, it is important to never exceed the pressure rating of the lowest rated appurtenance in the system.**

Important points:

- Never test thermoplastic piping systems with compressed air or other gases including air-over-water boosters.
- When testing, do not exceed the rated maximum operating pressure of the valve.
- Avoid the rapid closure of valves to eliminate the possibility of water hammer which may cause damage to the pipeline or the valve.

Please contact IPEX customer service and technical support with regard to any concern not addressed in this data sheet or the technical manual.

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Markets served by IPEX group products are:

- Electrical systems
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- Industrial process piping systems
- Municipal pressure and gravity piping systems
- Plumbing and mechanical piping systems
- Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems
- PVC, CPVC, PP, PVDF, PE, ABS, and PEX pipe and fittings

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