Isolation Valve Kits
MKS Original Parts

A leaking valve can stop production and create costly downtime. MKS offers predefined isolation valve kits to support in situ self-service to reduce repair and maintenance downtime. MKS isolation valves are designed for high performance gauge or system isolation. These are commonly used in semiconductor and flat screen manufacturing, high energy physics research and thin film deposition.

MKS isolation valves are designed for long life and high reliability; however all valves can develop leaks over time due to failing seals and/or cracks developing in a worn bellows. In addition, bellows and seal lifetimes may be shortened in corrosive or high deposition processes. In these harsh processes, a rebuild kit allows for valve self-service on pre-determined preventive maintenance schedules reducing service turnaround time.

Isolation valve kits either contain the fully assembled valve internals, including seals and bellows, or only the seals. With the removal of a few bolts the valve can be repaired, reducing time and expense of removing and replacing the part from the line and shipping it back to MKS for repair or full replacement. No special tooling or skills are required. The kits contain original MKS components, assuring a perfect fit into the valve. Keeping kits on hand makes regularly scheduled maintenance easy and minimizes down time due to unexpected valve leakage.

Many valve kits are available online for quick turnaround and easy purchase via MKS’ Ultra-High Velocity web store. To identify the correct kit(s) and check price and availability, enter the valve part number into the search field on the MKS website.

Product Features

- **Internal Rebuild Kit:** Includes the complete fully assembled internals, with seals and bellows assembly, for a specific valve.
- **Seal Kit:** Includes seals most likely to wear down with use.
- **Additional feature:** Alternative seal materials to Viton® are available. Contact MKS Technical Support for seal material assistance.

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Key Benefits

- Rebuild kits contain original MKS parts ensuring a perfect valve resulting in the proper vacuum seal after replacement.
- Valve can be quickly repaired in place, reducing repair or maintenance down time.
- Valve kits have a lower cost than replacing the entire valve.
**Pneumatic Valve**

1. Assy, Internal
2. Assy, Bellows
3. Flange, Bellows
4. Nosepiece
5. Stem
6. O-ring, Nosepiece
7. Spring, Closing
8. Bushing, Spring
9. O-ring, Bellows Flange
10. Assy, Cylinder End
12. U-cup, Stem Seal
13. Retainer, Stem Seal
14. Screw, Pan Head w/Lock Washer
15. Bushing, Piston
16. Piston
17. Washer Warning
18. Nut, Piston
19. O-Ring, Cylinder
20. Washer, Limit Switch Actuating
21. Spacer
22. Screw, Socket Head

**Manual Valve**

1. Assy, Internal
2. Assy, Bellows
3. Bellows
4. Flange, Bellows
5. Nosepiece
6. Stem
7. O-ring, Nosepiece
8. Spring, Closing
9. Bushing, Spring
10. O-ring, Bellows Flange
11. Assy, Cylinder End
12. Guide, Stem
13. Washer Warning
14. Washer, Limit Switch Actuating
15. Spacer
16. Screw, Socket Head
17. Washer, Limit Switch Actuating
18. Spacer
19. Screw, Socket Head
20. Washer Warning
21. Nut, Piston
22. Washer, Limit Switch Actuating
23. Spacer
24. Screw, Socket Head
25. Washer Warning
26. Nut, Piston
27. Washer, Limit Switch Actuating
28. Spacer
29. Screw, Socket Head
30. Washer Warning

**Available Rebuild Kits**

- 145 Vacuum Sentry Valve
- 150/160, V-100 and 170/180 Bellows Sealed Isolation Valves
- CV Compact Vacuum Valves and Electromagnetic Compact Vacuum Valves
- LPV and LPV1 LoPro Bellows Sealed Isolation Valves
- HCV High Cycle Valves
- L2 and LPV2 Two Stage Bellows Sealed Isolation Valves
- UHV Ultra High Vacuum Valves
- J1, J2 and LPJ1 Jalapeño Valves

Visit [www.MKSINST.com](http://www.MKSINST.com) for a list of valve part numbers and spare part kits.