

# HAMILTON

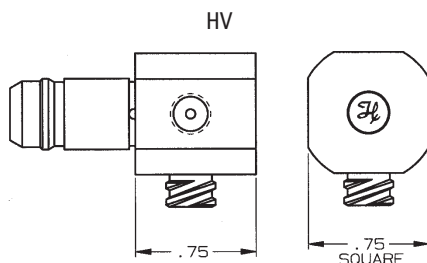
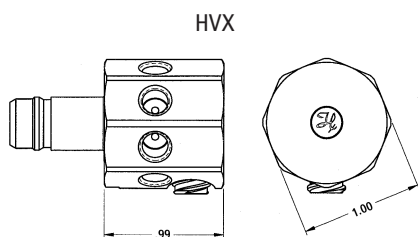
## (HV) PLUG VALVES

Congratulations! You have just purchased the highest quality precision valve available today. We at Hamilton Company combine top quality materials with skilled workmanship, ensuring the highest possible performance level of every precision fluid device that we manufacture. With proper care and handling, the HV will provide unsurpassed performance in liquid handling year after year. Hamilton Valves provide the perfect turnkey solution to compliment Hamilton Company's robust valve and syringe drive modules, or manual fluid direction and redirection applications.

### Typical valve configurations:

Designation	Description
HV	Hamilton Valve, Small Body
HVP	Hamilton Valve, Panel Mount, Small Body
HVX	Hamilton Valve, Large Body
HVM	Hamilton Valve for the Modular Valve Positioner (MVP), Small Body
HVXM	Hamilton Valve for the Modular Valve Positioner (MVP), Large Body
HVI	Hamilton Valve for Precision Syringe Drive Modules (PSD), Small Body
HVXI	Hamilton Valve for Precision Syringe Drive Modules (PSD), Large Body

### Specifications:



Valve Size	Configuration	Nominal Port Diameter
HV, HVP, HVM, HVI	All	.059"
HVX, HVXM, HVXI	2, 3, 4 port	.070"
	6, 8 port distribution	.059"
	6, 8 port loop	.040"

- Operating pressure: 100 psig
- Operating temperature: 10° to 100° C
- Storage temperature: 0° to 100° C
- Break away torque: 65 in. oz. (operating), Initial breakaway torque: 100 in. oz.
- Wetted paths are chemically inert CTFE and PTFE
- Threaded connections are 1/4 -28 UNF -2B x .250

### Intended Use

These valves are designed for use in manual applications or on Hamilton syringe and valve drives where the need for a robust valve is required.

The valves are specified to seal and operate with liquids only. The valves may be successful in sealing certain gases or vapors but is not explicitly specified or verified.

**Note:** Prior to installing the valve on an MVP or PSD, the installer should perform an initial breakaway rotation of the plug. Using a small flat blade screwdriver, rotate the inner drive shaft three times in both directions. The reason for this initial breakaway rotation is due to the potential of the the PTFE plug to cold flow thereby raising the initial break away torque to greater than the specified 65 in. oz.



**HAMILTON**  
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#### **Quality Hamilton Products:**

MICROLITER™ Syringes  
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Chromatography Syringes  
Syringes for Life Science  
Instrument Syringes  
SoftGrip™ Pipettes  
SoftTouch™ Electronic Pipettes  
SoftAide™ Pipette Controllers  
Miniature Valves  
Modular Valve Positioner  
Laboratory Fittings, Adapters & Tubing  
Precision Syringe Pumps  
MICROLAB® Diluters & Dispensers  
SoftTop™ Quik Dispensers  
Electrochemical Sensors  
DURACAL™ Buffer Solutions  
HPLC Columns & Resins

#### **Laboratory Automation for:**

Drug Discovery  
Genomics  
Proteomics  
Forensic  
In Vitro Diagnostics

## **Cleaning**

Flush the valve with a non-alkaline, non-phosphate detergent, preferably one that would be effective in solvating the sample or material flowing through the valve. Rinse the valve thoroughly and allow to air dry.

Note: Do not autoclave as damage may occur. Take care when using caustic cleaning solvents on the aluminum housing version as they may damage or discolor the valve housing. Do not immerse the valve. Do not attempt to disassemble the valve components from the housing as this will result in valve failure.

## **Recommended Fittings**

The Hamilton Ceramic Valve will accept HV 1/4 x 28 UNF flanged tube fittings and connectors. Caution should be used when using flangeless fittings as the higher torque required to seal the tubing may damage the valve.

Tube fitting torque specification : 13 in. oz.

#### **Trademarks:**

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MICROLAB® is a registered trademark of Hamilton Company

## **Warranty Statement**

Hamilton Company unconditionally guarantees its products to be free of defects in materials and workmanship. Any product which fails due to such defects will be repaired or replaced at our discretion without cost, provided the device is returned with an explanation. It is the responsibility of the purchaser to determine the suitability of application and material compatibility of the products based on the published specifications of the products.

## **Return of Goods**

Hamilton Company's return and repair policy is written to protect its employees from potentially hazardous materials (e.g. serum, radioactive materials, carcinogenic chemicals, etc.) or any substance that may cause them partial or permanent disability during the inspection or repair process. In returning product, the customer acknowledges that the product is free from any hazardous materials. Furthermore, the customer assumes responsibility should the returned product be determined to be hazardous.

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