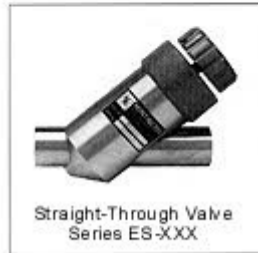
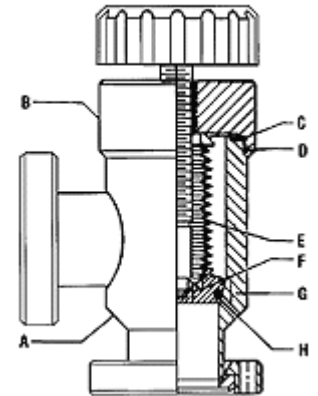


Operation and Maintenance of Manually Operated Viton[®]-Sealed Valves



DESIGN FEATURES

- A. Unibody Design**
- B. Valve Bonnet**
- C. Body/Bonnet O-Ring**
- D. Threaded Bonnet to Body Seal**
- E. Welded Bellows**
- F. Ball Bearing Poppets**
- G. Smoothly Tapered Sealing Seat**
- H. Poppet O-Ring**



OPERATION AND MAINTENANCE

- Do not torque these valves with any tools. They will open or fully close quite easily by hand. A light coat of anti-seize lubricant ([Model C-609-01](#)) applied periodically to the threaded shaft will assure easy turning.
- Viton[®] seals are limited to 204°C bakeouts (300°C for Kalrez[®]). Minimize baking of air-carried residue by having all ports under vacuum.
- If valve leaks when hand tightened - disassemble, clean, and replace O-rings. (If it still leaks, the actuator may need to be replaced.)

DISASSEMBLY

1. With valve fully open, loosen threaded bonnet with valve wrench (Model VW-15) and remove actuator from valve body.
2. Remove body/bonnet O-ring and poppet O-ring, and clean O-ring grooves.
3. Inspect valve seat for dirt or damage.

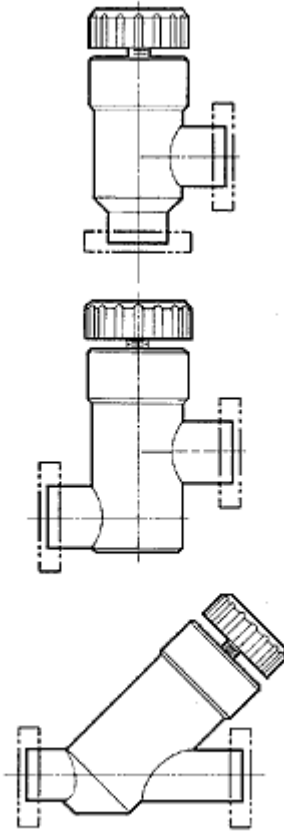
REASSEMBLY

1. Apply a light coat of high-vacuum grease (Model [C-200-05](#)) to each O-ring before replacing
2. Apply a light coat of anti-seize lubricant (Model [C-609-01](#)) to threads on actuator shaft and to bonnet/body threads.
3. Check again to make sure all internal parts are clean and free of any particles. Then, in full open position, screw the actuator back onto the valve body and use valve wrench to tighten. (Leak check, if possible.)

ALSO AVAILABLE ON REQUEST:

- Valves with speed flanges, specified flanges or no flanges
- Valves with copper bonnet seals
- Replacement actuators
- Manual and pneumatic gate valves and butterfly valves
- Tee valves or valves with roughing ports
- Kalrez[®] gasket kits (also polyimide gaskets)
- All-metal valves (bakeable to 450°C)

Ordering Information for Manually Operated Viton-Sealed Valves and Accessories



RIGHT-ANGLE VALVES		GASKET KITS	
Size	Model No.	Model No.	
3/8	EV-0370	EV-0370-G	
1/2	EV-050	EV-050-G	
5/8	EV-0620	EV-0620-G	
3/4	EV-075	EV-075-G	
1	EV-100	EV-100-G	
1-1/2	EV-150	EV-150-G	
2	EV-200	EV-200-G	
2-1/2	EV-250	EV-250-G	
3	EV-300	EV-300-G	

IN-LINE VALVES		GASKET KITS	
Size	Model No.	Model No.	
1	EVI-100	EV-100-G	
1-1/2	EVI-150	EV-150-G	
2	EVI-200	EV-200-G	
2-1/2	EVI-250	EV-250-G	

STRAIGHT-THROUGH VALVES		GASKET KITS	
Size	Model No.	Model No.	
3/4	ES-075	ES-075-G	
1-1/2	ES-150	ES-150-G	
2	ES-200	ES-200-G	

WARRANTY

HUNTINGTON MECHANICAL LABORATORIES, INC. (hereafter called "**HML**") warrants products it manufactures (except for electronic equipment, tubes and other expendable items as covered below) against defects in materials and workmanship for a period of twelve (12) months from the date of shipment to the buyer. Liability under this warranty is expressly limited to replacement or repair of defective parts. **HML** may at any time discharge its warranty as to any of its products by refunding the purchase price and taking back the product(s). This warranty applies only to parts manufactured, and labor provided, by **HML** under valid warranty claims received by **HML** within the applicable warranty period and subject to the terms and conditions hereof. All warranty replacement or repair of parts shall be limited to equipment malfunctions which, in the sole opinion of **HML**, are due or traceable to defects in original materials or workmanship. Malfunctions caused by abuse or neglect of the equipment are expressly not covered by this warranty. **HML** expressly disclaims responsibility for any loss or damage caused by the use of its products other than accordance with proper operating and safety procedures. Reasonable care must be taken by the user to avoid hazards.

Expendable Items. Expendable items such as tubes, heaters, sources, bellows, etc., by their nature, may not function for one year. If such items fail to give reasonable service for a reasonable period of time, as determined solely by **HML**, they will be repaired or replaced by **HML**. At its election in-warranty repaired or replaced parts are warranted only for the remaining unexpired portion of the original warranty period applicable to the parts which have been repaired or replaced. After expiration of the applicable warranty period, the buyer shall be charged at **HML**'s current prices for the parts and labor, plus transportation.

Except as stated herein, **HML** makes no warranty, express or implied (either in fact or by operation of law). **HML** shall have no liability for special or consequential damages of any kind or from any cause arising out of the sale installation, or use of any of its products. Statements made by any person, including representatives of **HML**, which are inconsistent or in conflict with the terms of the warranty shall not be binding upon **HML** unless reduced to writing and approved by an authorized officer of **HML**.

Electronic Equipment. Electronic equipment including gauges and controllers are covered for a period of (90) days from the date of purchase.

Tubes and Filaments. Thermocouple gauge tubes, and ionization gauge tubes are unconditionally guaranteed to meet specifications upon the customer's incoming inspection.