

**REGO IS A LEADING MANUFACTURER OF
GAS AND CRYOGENIC VALVES, REGULATORS
AND RELIEF VALVES FOR GAS AND CRYOGENIC
STORAGE/DISTRIBUTION SYSTEMS.**

Visit Our Website at: www.regoproducts.com

WARNING: Installation, usage and maintenance of this product must be in compliance with all RegO[®] instructions as well all requirements and provisions of national, and local standards, codes, regulations, and laws. Inspection and maintenance on a periodic basis is essential. Only qualified personnel should perform installation and maintenance. Be sure all instructions are read and understood before installation, operation and maintenance. These instructions must be passed on to the end user of the valve.

CAUTION: Avoiding the inhalation of, or skin contact with compressed and cryogenic gases is advised. Many of these gases can cause asphyxiation, serious injury, or death. See MSDS for specific information regarding the safe handling of the service gas. Evacuation of gas should take place in a well-ventilated area to ensure dispersion. Keep gases far away from open flames or other sources of ignition to prevent fire or explosion.

NOTE: HP9560 Series suitable for use on Oxygen (O₂), Hydrogen (H₂), Helium (He), Argon (Ar), Nitrogen (N₂), Nitrous Oxide (N₂O), Carbon Dioxide (CO₂), Acetylene (C₂H₂), Compressed Air, and mixtures of the gases. Maximum allowable pressure 5600 PSIG (386 bar). HP9560C Series suitable for use on Oxygen (O₂), Argon (Ar), Nitrogen (N₂), Nitrous Oxide (N₂O), Carbon Dioxide (CO₂), Compressed Air, and mixtures of these gases. Maximum allowable pressure 5600 PSIG (386 bar).

Operation:

RegO[®] valves are designed to provide positive shut-off and offer a long, low maintenance service life for vapor service: they are designed to stop flow in either direction.

1. Follow your company's established operating procedures.
2. Wear eye protection & suitable gloves to prevent freeze burns.
3. Ensure all threads engage smoothly and easily. Do not hammer or force the valve in any manner.
4. To open the valve, turn the handwheel counterclockwise, and ensure that it is opened fully (back seated). Do not partially open the valve. With the valve pressurized, inspect the connections for signs of leakage - no leakage permissible.
5. To close the valve, turn the handwheel clockwise until it stops. This indicates that the seat disc has contacted the seat. Do not over torque the handwheel after the seat disc has engaged the seat, doing so may result in seat damage.
6. If the valve must be removed from the system, evacuate internal pressure before uncoupling valve connections.
7. Valves installed in piping systems such that vapor could be isolated from a pressure relief device require installation of a suitable pressure relief device.

**OPERATING INSTRUCTIONS
FOR HP9560 & HP9560C SERIES**

BRAZED & THREADED CONNECTION VALVES & PANEL MOUNTED VALVES

Installation: (Brazed)

Note: Before the valve can be brazed into place, the internal mechanisms must be removed to avoid damaging the seat and seals.

1. Clamp the valve body in a vise. Remove the locknut, handwheel, and slip washer. Using an appropriate wrench, remove the bonnet cap. Remove the stem, stem seals, and backup ring from the valve body.
2. Ensure connections are clean and free of any debris.
3. Position the valve such that the flow arrow is in the proper direction for the intended application.
4. Braze the connections to the body. Follow all national, regional, and/or local codes, standards or specifications for the proper brazing procedures.
5. Replace the stem and seat disc assembly (make sure that the seat disc is threaded all the way up the stem). Replace the retainer, o-ring, and backup ring. Thread the bonnet onto the body and torque to 83-100 ft-lbs (113-136 N-m). Replace slip washer, handwheel, and nut; tighten nut firmly to stem.

Note: If using the Panel Mount version of this valve, bore a 1 5/8" (4.128 cm) hole in the panel at the desired location of the valve. Maximum distance between the bonnet and panel nut is 0.45" (11.43 mm). Follow all local or national codes and standards for pressure testing and leak checking the installation before startup of the system.

Installation: (Threaded)

1. Ensure connections are clean and free of any debris.
2. Apply an appropriate sealant that is compatible with the intended service to the male threads of the connection.
3. Position the valve such that the flow arrow is in the proper direction for the intended application.
4. Restrain the valve with a vise or suitable wrench, and using an appropriate wrench for the connection, tighten the connection to the valve.

Do not over tighten connections, as this will damage threads.

Note: If using the Panel Mount version of this valve, bore a 1 5/8" (4.128 cm) hole in the panel at the desired location of the valve. Maximum distance between the bonnet and panel nut is 0.45" (11.43 mm). Follow all local or national codes and standards for pressure testing and leak checking the installation before startup of the system.

Maintenance and Inspection:

Periodically check for:

1. Any signs of corrosion due to salt water, industrial pollutants, chemicals, and roadway contaminants;
2. Any physical damage that would prevent proper sealing and usage or that may cause product failure under pressure;
3. Leaks in the valve bonnet area, body, and end connections of the valve.

Keep all equipment clean, and replace damaged equipment immediately.

Hazards:

These valves are capable of stopping flow in both directions, however, the flow arrow on the valve indicates inlet to outlet orientation. The inlet should be positioned towards the side typically under higher pressure than the outlet.

Be aware of piping systems that confine gas without the appropriate protection against over pressurization.

Never uncouple any part of the valve without relieving all pressure in the system.

NOTICE

Failure to install parts exactly as described in the instructions could result in a product that will not perform satisfactorily. Even if parts are correctly installed, the product might fail to perform satisfactorily if other parts are worn, corroded or dirty. Improper repair can cause leaks and malfunction, which could result in bodily injury and property damage. **Any such use or installation of parts must ONLY be done by experienced and trained personnel using accepted governmental and industrial safety procedures.**

RegO® assumes no responsibility or liability for performance of products repaired in the field. It must be clearly understood that the person or organization repairing the product assumes total responsibility for the performance of the product.

WARNING

All RegO® products are mechanical devices that will eventually become inoperative due to wear, corrosion and aging of components made of materials such as rubber, plastic, etc. The environment and conditions of use will determine the safe service life of these products. Periodic inspection and maintenance are essential to avoid serious injury and property damage.

Many RegO® products are manufactured components which are incorporated by others on or in other products or systems used for storage, transport, transfer and otherwise for use of toxic, flammable and dangerous liquids and gases. Such substances must be handled by experienced and trained personnel only, using accepted governmental and industrial safety procedures.

LIMITED WARRANTY AND LIMITATIONS OF LIABILITY

LIMITED WARRANTY

RegO® warrants products and repair kits manufactured by it to be free from defects in materials and workmanship under normal use and service for a period of 10 years from the date of manufacture. If within 30 days after buyer's discovery of what buyer believes is a defect, buyer must notify RegO® thereof in writing. RegO®, at its option, and within 45 days, will repair, replace F.O.B. point of manufacture, or refund the purchase price of that part or product found by it to be defective. Failure of buyer to give such written notice within 30 days shall be deemed an absolute and unconditional waiver of any and all claims of buyer arising out of such defect.

This warranty does not extend to any product or part that is not installed and used in accordance with RegOs'® printed instruction, all applicable state and local regulations, national standards, such as those promulgated by NFPA, DOT and ANSI. This warranty does not extend to any product or part that has been damaged by accident, misuse, abuse or neglect, nor does it extend to any product or part which has been modified, altered, or repaired in the field.

Except as expressly set forth above, and subject to the limitation of liability below, RegO® makes NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A

PARTICULAR PURPOSE, with respect to its products and parts, whether used alone or in a combination with others. RegO® disclaims all warranties not stated herein.

LIMITATION OF LIABILITY

RegO® total liability for any and all losses and damages arising out of any cause whatsoever shall in no event exceed the purchase price of the products or parts in respect of which such a cause arises, whether such cause be based on theories of contract, negligence, strict liability, tort or otherwise.

RegO® shall not be liable for incidental, consequential or punitive damages or other losses. RegO® shall not be liable for, and buyer assumes liability for all personal injury and property damage connected with the handling, transportation, possession, further manufacture, other use or resale of products, whether used alone or in combination with any other products or material.

From time to time buyers might call to ask RegO® for technical advice based upon limited facts disclosed to RegO®. If RegO® furnishes technical advice to buyer, whether or not at buyer's request, with respect to application, further manufacture or other use of the products and parts, RegO® shall not be liable for such technical advice provided to buyer by any third party and buyer assumes all risk of such advice and the results thereof.

NOTE: Some states do not allow the exclusion or limitation of incidental, consequential or punitive damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights that vary from state to state. The portions of this limited warranty and limitation of liability shall be considered severable and all portions which are not disallowed by applicable law shall remain in full force and effect.

NOTICE TO USERS OF PRODUCTS

The Limited Warranty stated above is a factory warranty to the first purchasers of RegO® products. Since most users have purchased these products from RegO® distributors, the user must, within 30 days after the user's discovery of what the user believes is a defect, notify in writing the distributor from whom he purchased the product or parts. The distributor may or may not at the distributor's option, choose to submit the product or parts to RegO®, pursuant to its Limited Warranty. Failure by buyer to give such written notice within 30 days shall be deemed an absolute and unconditional waiver of buyer's claim for such defects. Acceptance of any alleged defective product or parts by RegO® distributor for replacement or repairs under terms of RegO® Limited Warranty in no way obligates RegO® to the terms of the above warranty. Because of a policy of continuous product improvement, RegO® reserves the right to change designs, materials or specification without notice.

