



# Valves for Ultra-High Purity and Specialty Gases

## USES

- » Pure Gases and Mixes
- » Inert, Reactive, Corrosive, and Toxic Gases
- » All grade levels of purity to Ultra-high Purity (UHP)

**Game-changing exclusive worldwide partnership between Kohda Valves and the Cavagna Group to bring the highly successful line of stainless steel diaphragm valves.**

- » Manufactured in Japan
- » Long history with highly reliable design
- » Spring-loaded and tied-diaphragm stainless steel models
- » Proven experience in most challenging gas applications, including electronics manufacturing and Specialty Gas applications.
- » Validated use in Hydrogen Chloride (HCl), Hydrogen Sulfide (H<sub>2</sub>S), Nitrogen Trifluoride (NF<sub>3</sub>), Silane (SiH<sub>4</sub>), Germane (GeH<sub>4</sub>), ...
- » International certifications: ISO, CGA...
- » Clean room assembly
- » 100% Helium leak-tested

# VDA7 Diaphragm valves



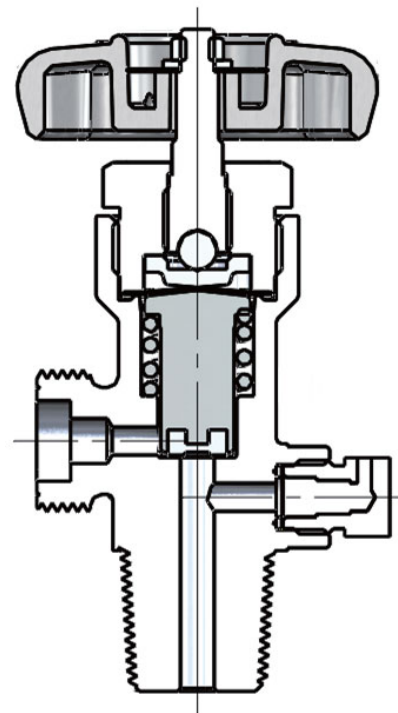
- » 3<sup>rd</sup> Generation of highly successful design.
- » Lower number of parts for increased reliability and durability.
- » Diaphragm prevents gas contact with valve operating mechanism.
- » Low operating torque.

## TECHNICAL SPECIFICATIONS

- » **Body Material:** 316L Stainless Steel
- » **Diaphragm:** 316L Stainless Steel or Hastelloy
- » **Seat:** PCTFE (Kel-F) or PVDF (Kynar)
- » **Working Pressure:** 2,220 psig / 150 bars
- » **Flow Coefficient (Cv):** 0.4
- » **Life Cycle:** 2,000 minimum
- » **Helium External Leak Rate:** 9.0E-10 atm.cc/sec
- » **Certifications:** ISO 10297 / CGA V-9
- » **International Outlet connections**
- » **Straight and tapered cylinder inlets**

## OPTIONS

- » 1/4"-18 NPT Inlet thread (dip tube)
- » Metal outlet cap
- » Safety relief device



# VDC2 Tied Diaphragm valves



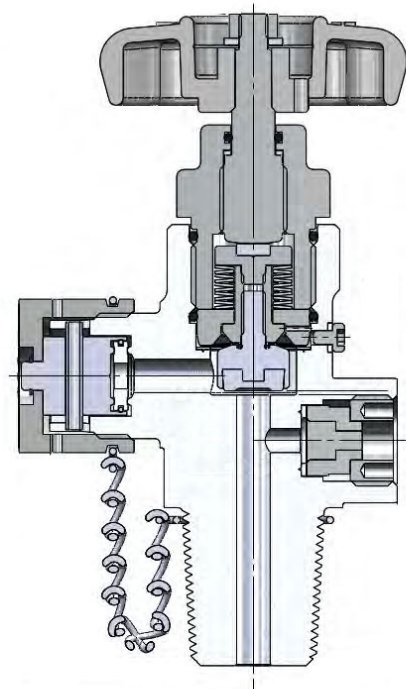
- » Springless welded diaphragm sealing design for increased purity and reliability.
- » Minimal gas wetted internal volume.
- » Absence of spring to reduce sources of impurities and particulates.
- » Diaphragm prevents gas contact with valve operating mechanism.

## TECHNICAL SPECIFICATIONS

- » **Body Material:** 316L Stainless Steel
- » **Diaphragm:** Hastelloy
- » **Seat:** PCTFE (Kel-F) or PVDF (Kynar)
- » **Working Pressure:** 2,900 psig / 200 bars
- » **Flow Coefficient (Cv):** 0.4
- » **Life Cycle:** 2,000 minimum
- » **Helium External Leak Rate:** 9.0E-10 atm.cc/sec
- » **Certifications:** ISO 10297 / CGA V-9
- » **Tapped vent hole (M4) for leak detection**
- » **International Outlet connections including for Ultra High integrity service (DISS)**
- » **Straight and tapered cylinder inlets**

## OPTIONS

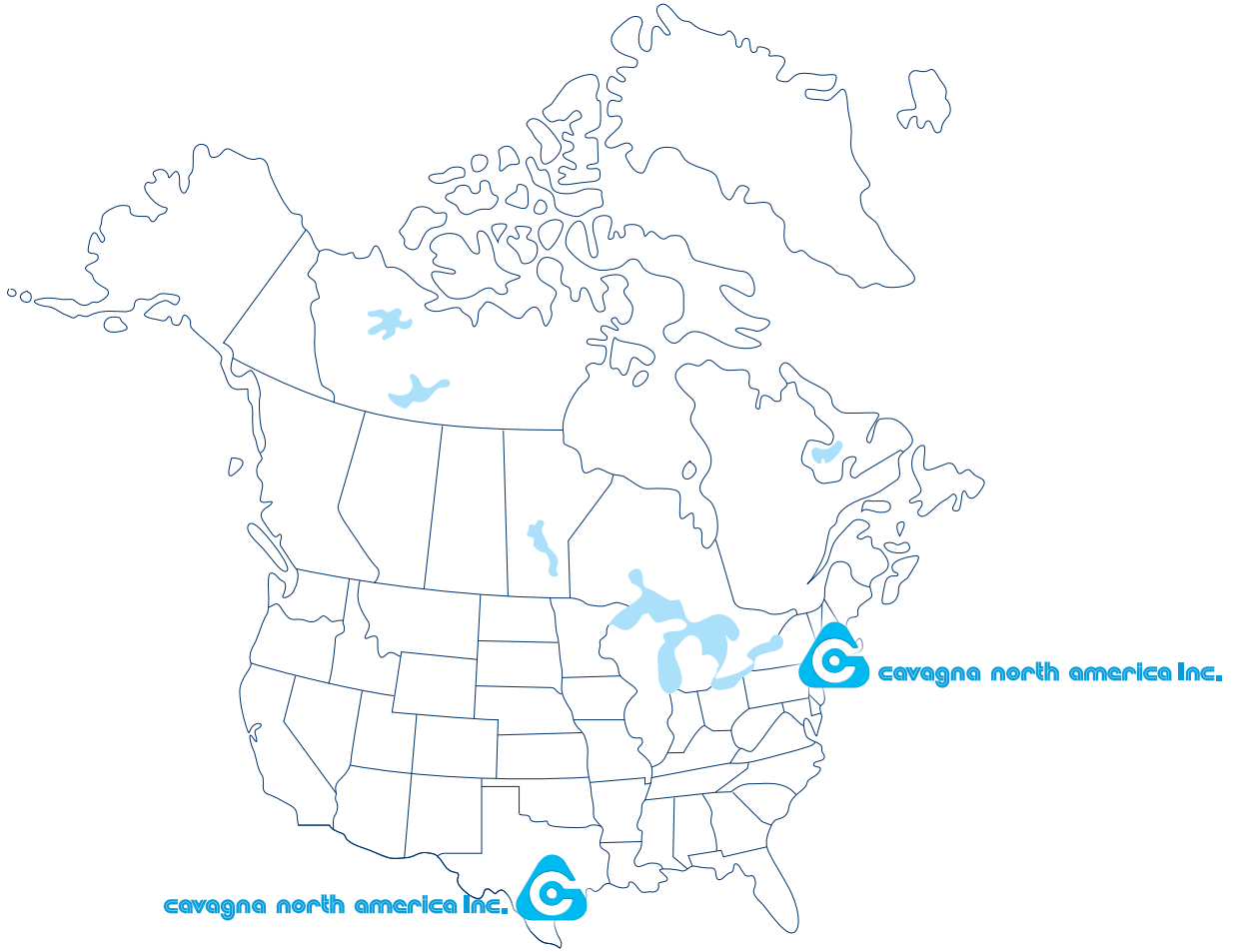
- » Metal outlet cap
- » RFO outlet thread
- » 1/4"-18 NPT Inlet thread (dip tube)



# Cavagna Group's HP stocking locations

**Cavagna North America, Inc**  
50 Napoleon Court  
Somerset, NJ 08873  
Phone: 001-732-4692100  
Fax: 001-732-4693344  
Email: [info@cavagna.com](mailto:info@cavagna.com)

**Distribution Center:  
Cavagna North America, Inc**  
5910 W By Northwest Blvd.  
Houston, TX 77040  
Email: [info@cavagna.com](mailto:info@cavagna.com)



**cavagna north america Inc.**

50 Napoleon Court Somerset, NJ 08873  
732-469-2100 • Fax 732-469-3344

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[info@cavagna.com](mailto:info@cavagna.com) - [www.cavagnana.com](http://www.cavagnana.com)

