High Vacuum Valves
Leader in Quality and Value

88200 Series
Aluminum Transfer Valve

New HVA 88200 Series

OEM Integration. All our products are engineered to be compatible with the latest Semiconductor tools and offer a retrofit solution for upgrading previous generation tools. Whether it is an etch, CVD, PVD cluster tool or implanter, HVA offers easy OEM Integration for all your MESC applications. Our valves come equipped with standard interfaces for 150, 200, 300 and 450mm technologies.

Flexible Design. If you need more flexibility, we can design specific sizes and interfaces for your transfer or load lock application up to 4000mm.

Process Compatible. Every valve leaves our factory with the highest quality MIL SPEC type II Anodize finish. The inherent design of the HVA valve accomodates operation in high process temperatures up to 150C. Higher temperature options available.

Vacuum Performance. Body and gate are precision machined from High Grade 6061 T6 billet. No welding or casting is involved in the manufacturing process for reduced out gassing. When you use an HVA valve you know you are getting the best vacuum performance possible.

System Reliability. HVA valves are equipped with hardened stainless steel shafts and our moly wiper protection system to ensure the valves continue to operate during multiple substrate breakages and extends the service interval to >2,000,000 cycles.

Easy Service / Cost Effective. We design our products to be maintenance friendly. Standard service items can be exchanged by end user during a regular minor service reducing downtime and service costs.

Lifetime Warranty. You can be confident you have made the smart choice. We back up our craftsmanship on every valve that leaves the factory with our limited lifetime warranty*

(* standard service items, o-rings, bellows excluded. Frequency dependent on process conditions)

Lifetime Warranty*

HVA, LLC
12880 Moya Blvd, Reno NV 89506

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Toll Free: (800) 551-4422
Fax: (775) 359-1369

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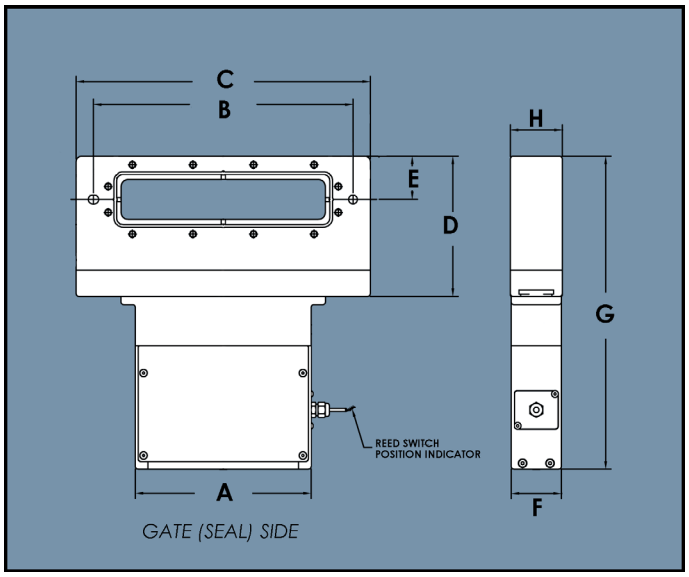

DN					
	mm inch	32 x 222 1.26 x 8.74	46 x 236 1.81 x 9.29	50 x 336 1.97 x 13.23	56 x 496 1.81 x 9.29
A	mm inch	203.2 8.00	203.2 8.00	203.2 8.00	249.9 9.84
B	mm inch	300.0 11.81	300.0 11.81	400.0 15.75	586.0 23.07
C	mm inch	340.0 13.39	340.0 13.39	440.0 17.32	645.0 25.39
D	mm inch	162.1 6.38	162.1 6.38	162.1 6.38	210.8 8.30
E	mm inch	50.0 1.97	50.0 1.97	50.0 1.97	67.0 2.64
F	mm inch	58.0 2.28	58.0 2.28	58.0 2.28	60.0 2.36
G	mm inch	361.7 14.24	361.7 14.24	361.7 14.24	401.7 15.82

*Dimensions subject to change

Ordering Guide

Pneumatic with Viton® Bonnet

DN mm	DN inch	Model Number Bolted Body	Model Number Clamped Body
32 x 220	1.26 x 8.74	88212-0109RXJ	88212-0109RXK
32 x 332	1.26 x 13.07	88212-0113RXJ	88212-0113RXK
46 x 236	1.81 x 9.29	88212-0209RXJ	88212-0209RXK
50 x 336	1.97 x 13.23	88212-0213RXJ	88212-0213RXK
50 x 486	1.97 x 19.13	88212-0219RXJ	88212-0219RXK

Includes reed switch position indicator and 120VAC solenoid.
For 24V DC solenoid change to: 8821[**1**]-

88200 Series Standard Technical Specifications

Materials

Valve body and gate	6061-T6 Aluminum
Welded bellows	AM-350
Driveshaft and pins	Hardened stainless steel
Bonnet / gate seals	Viton® o-ring std, FFKM option

Vacuum

Pressure Range	1×10^{-9} mbar
Helium leak rate	$< 2 \times 10^{-9}$ mbar l/s
Differential pressure closed	1.5 bar in either direction
Maximum Δ pressure before opening	≤ 30 mbar

Bakeout Temperature without solenoid

Body	150°C
Actuator	60°C

Mechanism

Pneumatic air service	2 - 7 bar
Solenoid (Upon power loss valve remains in same position)	4.3 Watts
Position indicator, max	115 VAC or 28 VDC, 20 mA

Mounting Position any

Cycles Until Service >2,000,000 cycles dependent on process

Options: Body and gate hard anodized, electrical interface, temperature management, o-ring material, body flange interface, roughing port, valve body prep for sensors

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