

Smooth Vent Valve

Series *XVD*

Supply Line



Features

- **Space saving**
Piping space reduced to 1/4 that of the conventional model by integration of the valve and needle valve.
- **Adoption of a metal diaphragm on the seat achieves marked reduction of particles.**
- **The flow rate is adjustable both for the initial air supply and the main air supply.**

How to Order

XVD 2 — 02 V

Smooth vent valve •

Orifice size (ø3) •

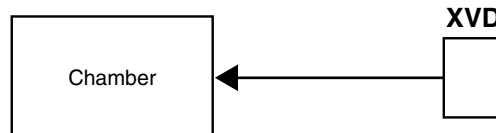
• Fitting type

V	For VCR®
S	For Swagelock®

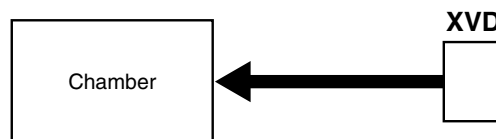
• Fitting size (1/4)

Application

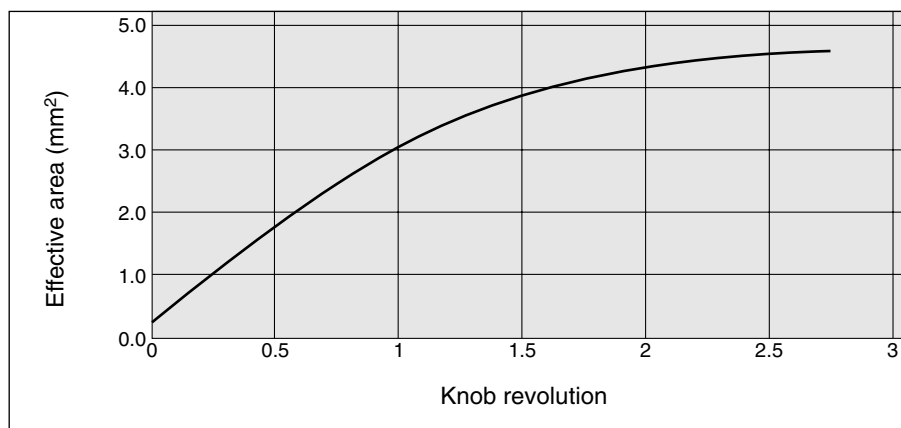
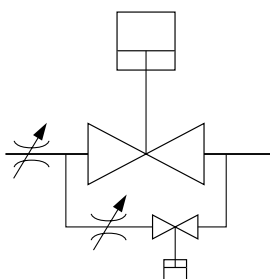
When the vacuum chamber is restored to the atmospheric pressure, introducing the set pressure all at once will cause particle turbulence inside the chamber. To prevent this, the pressure is introduced slowly at the initial stage and later switches to a full supply by the main valve circuit.



In the initial stage, the subvalve opens to supply the set pressure (by the needle valve) slowly to the chamber.



When the channel switches to the main valve circuit, a full pressure is introduced to the chamber.



Specifications

Model		XVD2-02V	XVD2-02S
Valve type		N.C. (Open when pressurized-Spring seal)	
Fluid		Nitrogen, Air, Inert gas	
Operating temperature °C		5 to 60°C (Baking temperature, 150°C or less)	
Operating pressure Pa		0.2M to 1×10^{-6}	
Orifice diameter mm		ø3	
Effective area mm ²	Main air supply	4.6	
	Initial air supply	0.2 to 4.6	
Leakage Pa·m ³ /s	Internal	5×10^{-9}	Not including gas permeation at normal temperature
	External	1.3×10^{-11}	Not including gas permeation at normal temperature
	Fittings	1.3×10^{-11}	1.3×10^{-10}
Piping connection system		For VCR®	For Swagelock®
Piping size		1/4B	
Main materials		Body : SUS316L/Bellows : SUS316L, 304/Seal : FKM	
Internal surface processing		EP processing (without bellows)	
Operation pressure MPa		0.4 to 0.7(Main air supply, Initial air supply (for normal operation))	
Port size		M5 x 0.8	
Service life in million cycles		0.5	
Weight kg		0.5	

Dimensions

