

Micrometering Valves

Micrometering (needle) valves combine the ease of connection associated with Valco zero dead volume fittings with convenient bulkhead mounting. The very low internal volume and precision design make this valve ideal for use as a gas control valve in chromatographic systems.

The Viton® model is rated at 225°C, while a version with Kalrez™ seals is capable of continuous operation at 315°C. This allows a needle valve to be mounted directly within a heated oven, facilitating control of flow

switching in multidimensional systems while keeping the gases at oven temperature.

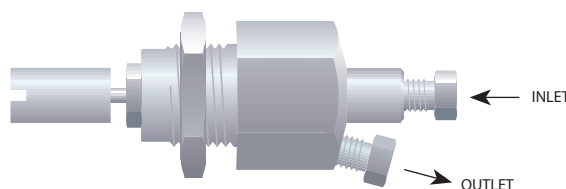
Valves are rated for maximum of 1000 psi gas. They are individually tested on a mass spectrometer leak detector to a helium leak rate specification of $< 1 \times 10^{-8}$ atm cc/sec.

An unlubricated version with a specially polished seat was designed to be used with our pulsed discharge detectors, and should be used upstream of any ultrapure gas system. There is also a 1/16" tube version.

1/16" micrometering valves

with Valco fittings

Seal	Lubrication	Prod No
Standard: 2–225 ml/min@ 15 psi N ₂ inlet		
Viton	Lubricated	ZBNV1
Viton	Non-lubricated	ZBNV1-D
Kalrez	Non-lubricated	ZBNV1-KZ
Fine control: 2–175 ml/min@ 15 psi N ₂ inlet		
Viton	Lubricated	ZBNV1F
Viton	Non-lubricated	ZBNV1F-D
Kalrez	Non-lubricated	ZBNV1F-KZ
Low flow: 2–90 ml/min@ 40 psi N ₂ inlet		
Viton	Lubricated	ZBNV1LF
Viton	Non-lubricated	ZBNV1LF-D
Kalrez	Non-lubricated	ZBNV1LF-KZ



1/16" micrometering valves

with 18" tubes

Seal	Lubrication	Prod No
Standard: 2–225 ml/min@ 15 psi N ₂ inlet		
Viton	Lubricated	BNV1
Viton	Non-lubricated	BNV1-D
Kalrez	Non-lubricated	BNV1-KZ
Low flow: 2–90 ml/min@ 40 psi N ₂ inlet		
Viton	Lubricated	BNV1LF
Viton	Non-lubricated	BNV1LF-D
Kalrez	Non-lubricated	BNV1LF-KZ

