

# HIGH PURITY DIAPHRAGM PACKLESS VALVES

## Series 8300

### DESCRIPTION

The multiple metal diaphragm design and Kel-F® seat are the key elements to the high purity success of these valves. They are available in a variety of styles and fitting configurations to meet virtually any application.

The 90° lever operated option provides the inherent benefits of a diaphragm packless valve with the quick open/close action and easily identifiable operational status of a lever actuated valve.

### FEATURES

- Metal diaphragm packless construction for diffusion resistant operation.
- Capable of passing a helium leak-rate test to  $10^{-10}$ cc/sec.
- Available in multiple turn and 90° lever operated designs.

### APPLICATIONS

The Series 8300 valves are recommended whenever the diffusion of atmospheric gases and moisture into a gas system is undesirable. They are a must in all ultra high purity gas transfer systems, particularly those used for gas chromatography carrier gases, samples, and calibration standards.



### MATERIALS OF CONSTRUCTION

	Series 8310	Series 8320
Body	Brass	316 Stainless Steel
Seat	Kel-F®	Kel-F®
Diaphragm	Stainless Steel	Stainless Steel

### SPECIFICATIONS

Operating pressure: brass - 3000 psig  
stainless steel - 3000 psig

Operating temperature range: -65° to 150°F

Flow coefficient( $C_V$ ): 0.13

### HOW TO ORDER

Model*	Actuation	Connections	
		Inlet	Outlet
8310-P4FF	Multi-turn	1/4" NPT female	1/4" NPT female
8310L-P4MF	Multi-turn	1/4" NPT male long	1/4" NPT female
8310-P4MM	Multi-turn	1/4" NPT male	1/4" NPT male
8310-T4FF	Multi-turn	1/4" compression	1/4" compression
8311-P4FF	90° lever	1/4" NPT female	1/4" NPT female
8311L-P4MF	90° lever	1/4" NPT male long	1/4" NPT female
8311-P4MM	90° lever	1/4" NPT male	1/4" NPT male
8311-T4FF	90° lever	1/4" compression	1/4" compression
8320-P4FF	Multi-turn	1/4" NPT female	1/4" NPT female
8320L-P4MF	Multi-turn	1/4" NPT male long	1/4" NPT female
8320-P4MM	Multi-turn	1/4" NPT male	1/4" NPT male
8320-T4FF	Multi-turn	1/4" compression	1/4" compression
8321-P4FF	90° lever	1/4" NPT female	1/4" NPT female
8321L-P4MF	90° lever	1/4" NPT male long	1/4" NPT female
8321-P4MM	90° lever	1/4" NPT male	1/4" NPT male
8321-T4FF	90° lever	1/4" compression	1/4" compression

\*Other end connection configurations available on request.