### Model 450B

# **High Pressure / Low Capacity Gas Purifier**

#### Description

The Model 450B Gas Purifier is ideal for removing oil, water vapor and foreign particles from many\* non-corrosive gases, and is designed for operating at high line working pressures where lower capacities of contaminant removal are required. The Model 450B is constructed of a black anodized aluminum housing that accepts purifier cartridges for specific applications. Removal of foreign matter is accomplished through the use of molecular sieve



materials and special filters in replaceable cartridges. Matheson Tri-Gas Model 450B accepts any one of the four cartridges for various applications. The inlet and outlet parts are located at the top of the shell on the cylinder head. The purifier must be used with replaceable cartridges 451, 452, 453 or 454. Cartridges are shipped separately in hermetically sealed cans.

#### **Specifications**

Maximum Operating Pressure: 2000 psig

Maximum Oxygen

Operating Pressure: 500 psig

Temperature Range: -40 to 165°F (-40 to 74°C)

Pressure Drop: 0.2 psi for 1 scfm

0.9 psi for 2 scfm 2.4 psi for 3 scfm 2" dia x 5-3/4" I

Dimensions: 2" dia. x 5-3/4" L Inlet & Outlet: 1/4" FPT Water Removal Capacity: 451: 5.4 grams

452: 6 grams

Dew Point Achieved: -100°F (-73°C) (1.5 ppm)

Shipping Weight: 2 lbs

#### **Materials of Construction**

Shell Body: Black anodized aluminum
Cylinder Head: Nickel plated brass
O-Ring: Buna N (P/N RNS-0126-BU)

Cartridge:

Buna N (P/N RNS-0126-BU)
451: 13X Molecular sieve
452: 4A Molecular sieve

452: 4A Molecular sieve453: Sintered bronze454: Activated charcoal

Description

## Ordering Information Model No. (Housing)

450B	Purifier Housing (without cartridge)		
Model No	. (Cartridge)	Description	
451	For Removal of Oil and Water		
452	For Remova	al of Water	
453	For Remova	al of particles over 5 microns*	
454	Activated (	Charcoal Purifier***	

\* Consult Matheson Tri-Gas for specific applications.

\*\* Not for Acetylene use

\*\*\* For acetone control in acetylene

