MINI-ADSORBER
Compact Desiccant Dryer

APPLICATIONS

PSB'S **Mini-Adsorber**, the equivalent of a compact single tower, manually-regenerative dryer, is designed to dry small volumes of compressed air for point-of-use applications. For example, the **Mini-Adsorber** is especially suitable for use in:

- Protecting moisture-sensitive analytical equipment.
- Small-volume air uses
- Paint spraying equipment
- Remote area installation, where temperatures fall below 32°F.
- Purging enclosures before sealing.
- Pressurizing/inflating containers without the problems caused by moisture.
- Drying air for truck brakes.

Features:

- Full Bed Drying
- Built-in Afterfilter
- Easy Cartridge Replacemnet
- Low Dewpoints - Nominal -40°F

OPERATION

The **Mini-Adsorber** is the only compact desiccant dryer whose design provides full-bed drying. The compressed air flow is directed downward to the bottom of the cannister, then upward through the core, utilizing the entire desiccant bed for drying. As water vapor is adsorbed, the dewpoint of the compressed air is lowered.

Drying Time

Drying time can be determined by Theoretical Life Charts, or by using an easy, "fail-safe" method of a disposable moisture indicator. Available as an accessory, the indicator can be quickly installed and easily read. (Silica gel in the indicator changes color from blue to pink when the cartridge becomes saturated.)

DESICCANT

Both standard **Mini-Adsorber** models are furnished with Activated Alumina. This desiccant provides high adsorption capacity, long life, and is more reliable than silica gels used in other dryers. Activated carbon and molecular sieve versions are available for special applications, i.e. removal of carbon doixide, selective hydrocarbons, etc.

The Activated Alumina is regenerated by the entire cannister being baked in an oven at 275° F for 3-4 hours. (adding a purge with dry gas is recommended.) Regeneration may also be accomplished by installing a purge valve and a thermostatically controlled heater wrap.

A standby or spare desiccant cartridge can be installed while regenerating. Replacement involves a simple "spin-off, spin-on" design (similar to an automobile oil filter), guaranteeing ease of maintenance.

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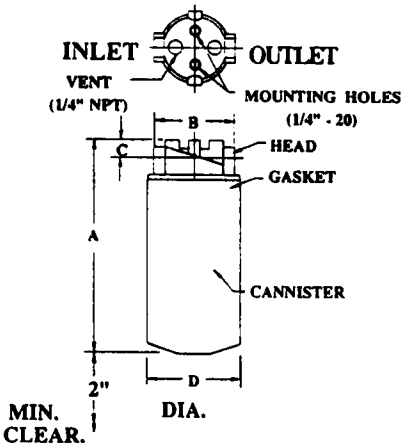
TECHNICAL DATA

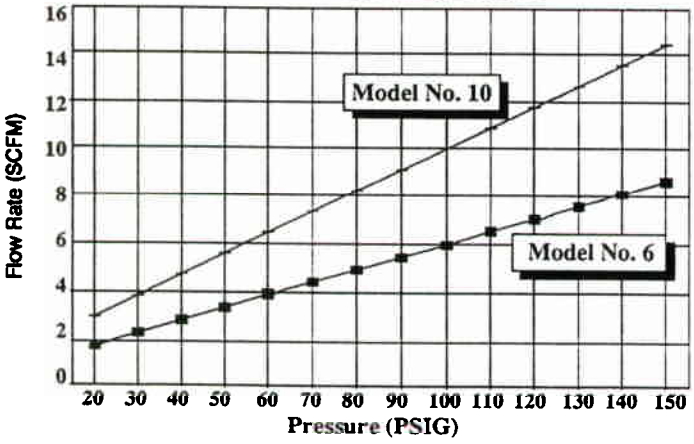


Housing and Assembly Data

Model No.	Dimensions (In.) A	B	C	D	Wt. (lbs.)	Max. SCFM @ 100 PSIG.	Desic. Type	Replacement Part Nos. Cannister	Gasket	Head
6	6 3/4	3 1/2	3/4	3 5/8	2	6	Activ. Alum.	77934-1	77935-1	77936-1
							Mol. Sieve	77934-3		
							Activ. Carbon	77934-5		
10	11 7/8	3 1/2	3/4	4 1/4	4	10	Activ. Alum.	77934-2		
							Mol. Sieve.	77934-4		
							Activ. Carbon	77934-6		

Comments: 1 - Both models have connections of 1/2" NPT.
2 - Maximum conditions for both models are 150ºF and 150 PSIG (125 PSIG if moisture indicator is attached.)
3 - Initial ΔP at rated conditions is 1.0 PSID max. for both models.

Mini-Adsorber
Flow Rates vs. Operating Pressure



Maximum Flow Rate - Model No. 6 & 10

To determine the maximum SCFM (Flow Rate) of air that can be processed by the Mini-Adsorber at various operating pressures, refer to the chart on the left. Locate operating pressure, read up to the model number you are using, then read across to the SCFM figure on the left.

Cartridge Theoretical Life Expectancy - Model No. 6 & 10

To determine the volume of 100% RH air processed by the Mini-Adsorber before the desiccant requires regeneration, first locate the inlet air temperature to the cartridge on the graphs below. Then, find the line depicting the operating pressure. At the point where these two meet, read across to the SCF figure on the left.