



Headline Filters Partner

"A leading worldwide supplier of high efficiency filters for a variety of industries and applications."

ADSORPTION DRYER HOUSINGS

Our Adsorption Housing Series (ADS) dryer housings are available throughout our product range. Virtually all standard housings can be ordered as adsorption ADS housings complete with integral filter pads and desiccant material. The units are an extension of our Disposable In-Line Adsorbers (DIA) and In-Line Columns (IACH/IAAH) assemblies. The ADS series is designed for easy desiccant change-outs, longer life, and more efficient contact time with low pressure drops.

The ADS series are designed for point-of use removal of water vapor, oil vapor as well as the adsorption of specific contaminants based upon your desiccant choice. The units should be protected with a coalescing pre-filter for better efficiency. A pleated 3 micron post filter is also recommended for complete desiccant dust in critical applications.

Desiccant types:

Silica Gel – We utilize an indicating silica gel which goes from a blue to pink when spent. It provides maximum moisture adsorption and dew points down to -40°F when sized properly. Sight Glasses (denoted STG) are recommended on housings to visually monitor the change in color, and life of the media.

Molecular Sieve – Are crystalline, metallic aluminum silicates. The type 4A offer exceptional water vapor adsorption characteristics. Dewpoints are attainable to -40°F.

Carbon – We utilize coconut carbon which has high fiber content and surface area for added oil vapor adsorption efficiency. Since carbon does not change color, sight glasses are not recommended.

A complete list of desiccant media is listed on... page 7.

Design:

The ADS series utilizes our standard housings with modified internals which allow loose desiccant to fill the bowl. As wet gas flows into the housing, it is directed down a hollow stack to the base of the bowl where it is defused through a 25 micron stainless steel frit. At this point the gas rises through a bed of desiccant and exits through a 5 micron filter pad with a backup disc to reduce the risk of media migration. As the gas/air rises through the desiccant, it is scrubbed of moisture or oil vapor depending on the media.

Features:

- Replaceable Adsorbent
- 5 Micron Filter Pads Included
- Full Contact With Adsorbent
- Functional Mini-Dryers
- Up to 5,000 PSIG

Applications:

- High Volume Dryers
- Gas Purifiers
- Prevent "Freeze Outs"
- Valve Actuation

ADSORPTION DRYER HOUSINGS

- Nylon Version For Low Pressure & Visual Monitoring
- Low Cost, High Strength Aluminum For Demanding Applications
- Aluminum Good To 1500 PSIG – Ideal For CNG Applications

The ADS housings T-Type design make installation simple and allow pre-filters and post particulate filters to be easily piped in a series utilizing one foot print. Likewise this blueprint makes servicing the desiccant media simple, fast, convenient, and economical. Our clear nylon models provide complete visual monitoring of desiccant life.



Nylon Version ⁽¹⁾	Maximum Pressure	Connection (NPT)	Volume (cc)	Replacement Adsorbent	Dimensions
705N-ADS-xx	100 PSIG	1/8" or 1/4"	45	RBIA-45-XX	1.57" Diameter 4.72" Length
755N-ADS-xx	100 PSIG	1/4" or 1/2"	165	RBIA-165-XX	2.74" Diameter 6.50" Length
775N-ADS-xx	100 PSIG	1/4" or 1/2"	315	RBIA-315-XX	2.74" Diameter 10.38" Length

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS

Aluminum Version (1) (2)	Maximum Pressure	Connection (NPT)	Volume (cc)	Replacement Adsorbent	Dimensions
305A-ADS-xx	500 PSIG	1/8" or 1/4"	45	RBIA-45-XX	1.57" Diameter 4.72" Length
355A-ADS-xx	500 PSIG	1/4" or 1/2"	165	RBIA-165-XX	2.74" Diameter 6.50" Length
370A-ADS-xx	500 PSIG	1/2"	315	RBIA-315-XX	2.74" Diameter 10.38" Length
380AHP-ADS-STG-xx	1500 PSIG	3/4" or 1"	675	RBIA-675-XX	4.33" Diameter 12.09" Length
385AHP-ADS-STG-xx	1000 PSIG	1 1/2"	1500	RBIA-1500-XX	5.51" Diameter 15.24" Length
390AHP-ADS-STG-xx	1000 PSIG	2"	3000	RBIA-3000-XX	5.51" Diameter 24.92" Length

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS

(2) Sight Glass Standard on Models 380AHP, 385AHP, & 390AHP. Optional Accessories on 355A and 370A Housings

ADSORPTION DRYER HOUSINGS

- All Stainless Steel Construction For Demanding High Pressure Applications
- Small Foot Print For Compact Service
- Up To 5000 PSIG
- Great For Test Stands



The ADS housings T-Type design make installation simple and allow pre-filters and post particulate filters to be easily piped in a series utilizing one foot print. Likewise this blueprint makes servicing the desiccant media simple, fast, convenient, and economical. The 114-126HP series provides point-of-use desiccant protection in an ultra-high pressure package.

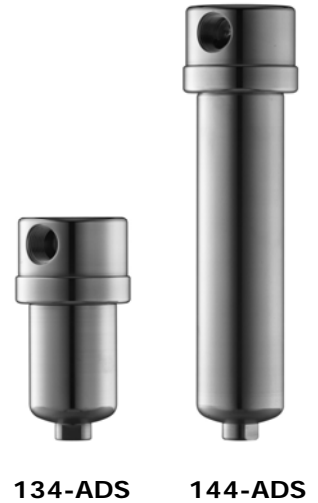
Stainless Steel Version ⁽¹⁾	Maximum Pressure	Connection (NPT)	Volume (cc)	Replacement Adsorbent	Dimensions
114-ADS-xx	5000 PSIG	1/8"	20	RBIA-20-XX	1.42" Diameter 2.92" Length
114HP-ADS-xx	10,000 PSIG	1/8"	26	RBIA-26-XX	2.56" Diameter 4.13" Length
116-ADS-xx	5000 PSIG	1/4"	20	RBIA-20-XX	1.42" Diameter 2.92" Length
116HP-ADS-xx	10,000 PSIG	1/4"	26	RBIA-26-XX	2.56" Diameter 4.13" Length
124-ADS-xx	5000 PSIG	1/8"	30	RBIA-30-XX	1.42" Diameter 3.98" Length
124HP-ADS-xx	10,000 PSIG	1/8"	40	RBIA-40-XX	2.56" Diameter 5.12" Length
126-ADS-xx	5000 PSIG	1/4"	30	RBIA-30-XX	1.42" Diameter 3.98" Length
126HP-ADS-xx	10,000 PSIG	1/4"	40	RBIA-40-XX	2.56" Diameter 5.12" Length

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS

ADSORPTION DRYER HOUSINGS

- All Stainless Steel Construction For Demanding High Pressure Applications
- Intermediate Size For Longer Media Life
- Up To 6000 PSIG
- Great For Test Stands

The ADS housings T-Type design make installation simple and allow pre-filters and post particulate filters to be easily piped in a series utilizing one foot print. Likewise this blueprint makes servicing the desiccant media simple, fast, convenient, and economical.



134-ADS

144-ADS

Stainless Steel Version ⁽¹⁾ ⁽²⁾	Maximum Pressure	Connection (NPT)	Volume (cc)	Replacement Adsorbent	Dimensions
134-ADS-xx	1500 PSIG	1/4"	110	RBIA-110-XX	2.36" Diameter 4.80" Length
134HP-ADS-xx	3000 PSIG	1/4"	115	RBIA-115-XX	2.52" Diameter 5.04" Length
134HHP-ADS-xx	6000 PSIG	1/4"	160	RBIA-160-xx	3.34" Diameter 6.37" Length
136-ADS-xx	1500 PSIG	1/2"	110	RBIA-110-XX	2.36" Diameter 4.80" Length
136HP-ADS-xx	3000 PSIG	1/2"	115	RBIA-115-XX	2.52" Diameter 5.04" Length
136HHP-ADS-xx	6000 PSIG	1/2"	160	RBIA-160-xx	3.34" Diameter 6.37" Length
144-ADS-xx	1500 PSIG	1/4"	265	RBIA-265-xx	2.36" Diameter 9.29" Length
144HP-ADS-xx	3000 PSIG	1/4"	300	RBIA-300-xx	2.52" Diameter 9.53" Length
144HHP-ADS-xx	6000 PSIG	1/4"	320	RBIA-320-xx	3.34" Diameter 11.06" Length
146-ADS-xx	1500 PSIG	1/2"	265	RBIA-265-xx	2.36" Diameter 9.29" Length
146HP-ADS-xx	3000 PSIG	1/2"	300	RBIA-300-xx	2.52" Diameter 9.53" Length
146HHP-ADS-xx	6000 PSIG	1/2"	320	RBIA-320-xx	3.34" Diameter 11.06" Length

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
 (2) Sight Glass Option Available on Models 134 or Larger

ADSORPTION DRYER HOUSINGS

- All Stainless Steel Construction For Demanding High Pressure Applications
- Large Volume For Longer Media Life
- Up To 6000 PSIG
- Great For CNG Applications

The ADS housings T-Type design make installation simple and allow pre-filters and post particulate filters to be easily piped in a series utilizing one foot print. Likewise this blueprint makes servicing the desiccant media simple, fast, convenient, and economical. The 150 and 160HHP series is our largest standard size ADS product offering up to 2700cc of media.



150-ADS

160HP-ADS

Stainless Steel Version ⁽¹⁾ ⁽²⁾	Maximum Pressure	Connection (NPT)	Volume (cc)	Replacement Adsorbent	Dimensions
150-ADS-xx	1500 PSIG	1"	1500	RBIA-1500-xx	4.33" Diameter 15.04" Length
150HP-ADS-xx	3000 PSIG	1"	1500	RBIA-1500-xx	4.72" Diameter 14.29" Length
150HHP-ADS-xx	6000 PSIG	1"	1500	RBIA-1500-xx	5.90" Diameter 17.09" Length
151-ADS-xx	1500 PSIG	1 1/2"	1500	RBIA-1500-xx	4.33" Diameter 15.04" Length
151HP-ADS-xx	3000 PSIG	1 1/2"	1500	RBIA-1500-xx	5.11" Diameter 15.47" Length
151HHP-ADS-xx	6000 PSIG	1 1/2"	1500	RBIA-1500-xx	5.90" Diameter 17.09" Length
152-ADS-xx	1500 PSIG	2"	1500	RBIA-1500-xx	4.52" Diameter 15.83" Length
152HP-ADS-xx	3000 PSIG	2"	1500	RBIA-1500-xx	5.11" Diameter 15.47" Length
152HHP-ADS-xx	6000 PSIG	2"	1500	RBIA-1500-xx	5.90" Diameter 17.09" Length

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
 (2) Sight Glass Option Available on Models 134 or Larger

ADSORPTION DRYER HOUSINGS

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150-ADS

160HP-ADS

Stainless Steel Version ⁽¹⁾ ⁽²⁾	Maximum Pressure	Connection (NPT)	Volume (cc)	Replacement Adsorbent	Dimensions
160-ADS-xx	1500 PSIG	1"	2700	RBIA-2700-xx	4.33" Diameter 24.49" Length
160HP-ADS-xx	3000 PSIG	1"	2700	RBIA-2700-xx	4.72" Diameter 23.98" Length
160HHP-ADS-xx	6000 PSIG	1"	2700	RBIA-2700-xx	6.50" Diameter 26.77" Length
161-ADS-xx	1500 PSIG	1 1/2"	2700	RBIA-2700-xx	4.33" Diameter 24.49" Length
161HP-ADS-xx	3000 PSIG	1 1/2"	2700	RBIA-2700-xx	5.11" Diameter 25.16" Length
161HHP-ADS-xx	6000 PSIG	1 1/2"	2700	RBIA-2700-xx	6.50" Diameter 26.77" Length
162-ADS-xx	1500 PSIG	2"	2700	RBIA-2700-xx	4.52" Diameter 25.27" Length
162HP-ADS-xx	3000 PSIG	2"	2700	RBIA-2700-xx	5.11" Diameter 25.16" Length
162HHP-ADS-xx	6000 PSIG	2"	2700	RBIA-2700-xx	6.50" Diameter 26.77" Length

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
 (2) Sight Glass Option Available on Models 134 or Larger

ADSORPTION DRYER HOUSINGS

- Variety of Media Available For Immediate Delivery
- Sight Glass Models Available For Quick Color Change Monitoring of Silica Gel
- T-Type Housing Design For Easy Installation & Quick Media Replacement



Adsorbent	Code	Principles
Activated Carbon	CC	Adsorption of hydrocarbons and other organic vapors Zero Air Calibration
Molecular Sieve 4A	4A	Adsorption of CO ₂ , NH ₃ , H ₂ S, SO _x
Molecular Sieve 13X	13X	Adsorption of CO ₂ , NH ₃ , H ₂ S, SO _x , aromatics, amines
Silica Gel	SG	Adsorption of water vapor
Drierite - Anhydrous Calcium Sulfate	DR	Adsorption of water vapor
Mixed Bases	MB	Removal of acidic gases, CO ₂ , SO _x , NO _x , HCl
Potassium Permanganate	PP	Removal of SO _x , Hg, and other acidic gases
Hopcalite	HO	Removal of CO by catalytic oxidation to CO ₂
Sodium Bicarbonate	SB	Acid Neutralizer
Copper Sulfate	CS	Removal of ammonia

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