Adsorption Applications

PRODUCT FEATURES / BENEFITS

- Variety of Physical Sizes and Pressure Ratings
- Refillable Loose Media
- "DIA" Design is Completely Disposable
- Over Ten Adsorbent Medias In Stock for Fast Delivery
- Gas Purifiers

Desiccant & Adsorption Products

T-Type Dryer Housings
Standard T-Type filter housings can be easily modified to hold loose desiccant media, converting them into dryer housings. The replaceable filter pad design allows for quick, clean, and efficient servicing.

Acrylic Adsorption Columns
Designed for laboratory drying and purification applications. Each column is supplied fully assembled and pre-filled with the selected adsorbent media.

Disposable In-Line Adsorbers (DIA Units)
Contain granular adsorbent media ultrasonically welded into a transparent Nylon or Kynar body. Available in four sizes with adsorbent volumes from 6cc to 120cc.

Loose Adsorbents Available
In addition to supplying fully assembled adsorption vessels, we also provide replacement adsorbent media for units already installed in the field. Loose adsorbent media is available for on-site refilling and in-field testing, offering flexibility and reduced maintenance downtime.

Applications

Industrial • Instrumentation • Laboratory • Medical

Adsorption Columns

PRODUCT FEATURES / BENEFITS

- Replaceable Adsorbent
- 5 Micron Filter Pads Included
- Full Contact with Adsorbent
- Available In Acrylic or Aluminum Construction
- Eliminate Ghost Peaks / Improve Baseline Readings
- Gas Purifiers
- Prevent “Freeze Outs”

Our In-Line Adsorption Columns effectively remove moisture, oil, and other impurities from gas streams prior to analysis. These cost-effective units offer a simple and reliable solution for the adsorption of various chemical contaminants.

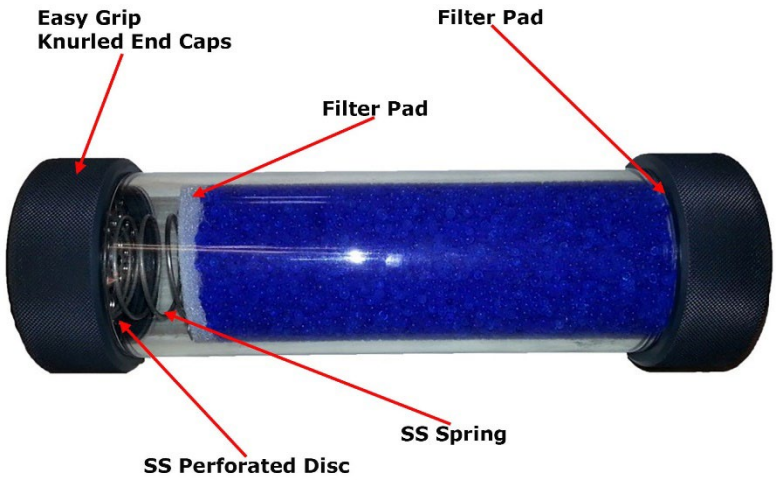
Each column comes fully assembled with your choice of adsorbent, ready for immediate installation. Adsorption efficiency depends on contact time—slower flow rates allow for better contaminant removal by increasing the interaction between the gas and the adsorbent media.

Design

Each unit comes fully assembled with high-efficiency filter pads and a stainless steel compression spring. The spring ensures uniform gas flow throughout the entire chamber, eliminating the risk of "channeling" through a single path.

Knurled end caps allow for quick and easy service without the need for specialized tools.

Note:
Units are filled during assembly, so the internal spring is typically not visible. Directional flow arrows are affixed to each unit to ensure correct installation orientation.



Acrylic Body – 1/4” NPT

Model Number	Replacement Adsorbent	Volume (cc)	Pressure (psig)	Tube OD	Cap Diameter	Overall Length
IACH-38-150-80-XX	RBIA-80-XX	80	80	1.50”	1.77”	5.91”
IACH-38-250-160-XX	RBIA-160-XX	160	80	1.50”	1.77”	9.84”
IACH-50-200-215-X	RBIA-215-XX	215	70	1.97”	2.36”	7.87”
IACH-50-350-440-XX	RBIA-440-XX	440	70	1.97”	2.36”	13.78”
IACH-70-250-610-XX	RBIA-610-XX	610	40	2.75”	3.15”	9.84”
IACH-70-450-1255-XX	RBIA-1255-XX	1255	40	2.75”	3.15”	17.72”
IACH-70-650-1900-XX	RBIA-1900-XX	1900	40	2.75”	3.15”	25.59”
IACH-100-350-2015-XX	RBIA-2015-XX	2015	30	3.94”	4.33”	13.78”
IACH-100-450-2700-XX	RBIA-2700-XX	2700	30	3.94”	4.33”	17.72”
IACH-100-650-4100-XX	RBIA-4100-XX	4100	30	3.94”	4.33”	25.59”

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

Aluminum Body – 1/2” NPT

Model Number	Replacement Adsorbent	Volume (cc)	Pressure (psig)	Tube OD	Cap Diameter	Overall Length
IAAH-1/2”-800-XX	RBIA-800-XX	800	250	3.47”	4.00”	8.00”
IAAH-1/2”-1600-XX	RBIA-1600-XX	1600	250	3.47”	4.00”	15.00”

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

Our adsorption products come filled and sealed with your choice of material.
Simply add the adsorbent code as a suffix to the model number:
(Example: IAAH-1/2-800-MB)

Loose Adsorbents

PRODUCT FEATURES / BENEFITS

- Purchase Only The Quantity Needed
- In Stock For Immediate Delivery
- Re-Sealable Containers
- Refill Housings with Exact Amount Needed – No Waste
- Ideal For Lab Projects
- Test Adsorbent Capabilites
- Beta Tests

Every adsorption application is unique, with numerous variables that can influence adsorption rates. For optimal results, in-field testing is essential to determine accurate performance percentages.

In addition to filling our adsorption vessels, we also supply replacement media for units already in the field. These are available in resealable containers of 500cc, 800cc, 1000cc, and 1600cc.

To place an order: RBIA – amount of adsorbent needed – Specify Adsorbent
Example Part Number: RBIA-500-4A

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_2S, SO_X
Molecular Sieve 13X	**13X**	Adsorption of CO_2, NH_3, H_2S, 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, HCI
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

Other Adsorbent Media and mixtures are available upon request.

Adsorption Dryer Housings

PRODUCT FEATURES / BENEFITS

- Replaceable Adsorbent
- 5 Micron Filter Pads Included
- Full Contact with Adsorbent / Functional Mini-Dryers
- Up To 5,000 PSIG
- Dryers / Gas Purifiers
- Prevent "Freeze Outs"
- Instrument Air Protection

Our **ADS (Adsorption Housing Series)** dryer housings are a robust and flexible solution for point-of-use air purification. Available across our product line, nearly all standard housings can be configured as ADS units—complete with integrated filter pads and desiccant media.

The ADS Series expands on the proven performance of our **Disposable In-Line Adsorbers (DIA)** and **In-Line Column Assemblies (IACH/IAAH)**, offering enhanced serviceability, increased desiccant life, and superior media contact time—all while maintaining low pressure drop.

Key Features

- Easy desiccant replacement
- Longer service life and high adsorption efficiency
- Minimal pressure drop
- Compatible with pleated 3-micron post-filters for critical applications
- Standard housings with modified internals for loose-fill desiccant
- T-type design allows for easy installation and filter series integration
- Simple and cost-effective servicing

Desiccant Options
(See last page for full list of available adsorbents)

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.

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.

Design:

ADS Series housings use a modified internal layout within our standard housings to accommodate loose-fill desiccant. Wet gas enters the housing and is directed down a central hollow stack to the base, where it is diffused evenly through a **25-micron stainless steel frit**. The gas then flows upward through the desiccant bed, where moisture or oil vapor is adsorbed. Before exiting the housing, the treated gas passes through a **5-micron filter pad** with a **support disc**, minimizing the risk of desiccant media migration into downstream equipment.

The **T-type configuration** of the ADS Series simplifies installation, enabling easy integration with pre-filters and post-filters in a single footprint. This design streamlines servicing, making desiccant change-outs fast, convenient, and economical.

Nylon / Polycarbonate Version for Visual Monitoring

The nylon/poly version offers reliable performance in a compact and durable design. Clear bowls allow for effortless visual monitoring of desiccant color changes, taking the guesswork out of media life and ensuring timely replacement.

Key Features:

- **Compact Design** – Saves space and fits easily into tight installations
- **Clear Bowls** – Quick, visual indication of desiccant status
- **Easy Mounting** – Simplifies installation and maintenance

Perfect for environments where precision and reliability are essential.

Nylon Version[1]	Maximum Pressure	Connection (NPT)	Volume (cc)	Maximum Flow Rate [2]	Replacement Adsorbent	Dimensions Diameter / Length
700N-ADS-xx	100 PSIG	1/8”	45	2	RBIA-45-XX	1.57” / 4.72”
705N-ADS-xx	100 PSIG	1/4”	45	2	RBIA-45-XX	1.57” / 4.72”
750N-ADS-xx	100 PSIG	1/4”	165	8	RBIA-165-XX	2.74” / 6.50”
755N-ADS-xx	100 PSIG	1/2”	165	8	RBIA-165-XX	2.74” / 6.50”
772N-ADS-xx	100 PSIG	1/4”	315	12	RBIA-315-XX	2.74” / 10.38”
775N-ADS-xx	100 PSIG	1/2”	315	12	RBIA-315-XX	2.74” / 10.38”

Notes: (1) Replace “XX” with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
(2) Recommended Flow Rate for Optimal Performance

Polycarbonate Version [1]	Maximum Pressure	Connection (NPT)	Volume (cc)	Maximum Flow Rate [2]	Replacement Adsorbent	Dimensions Diameter / Length
300-ADS-xx	150 PSIG	1/8”	45	2	RBIA-45-XX	1.57” / 4.72”
305-ADS-xx	150 PSIG	1/4”	45	2	RBIA-45-XX	1.57” / 4.72”
350-ADS-xx	150 PSIG	1/4”	165	8	RBIA-165-XX	2.74” / 6.50”
355-ADS-xx	150 PSIG	1/2”	165	8	RBIA-165-XX	2.74” / 6.50”
375-ADS-xx	150 PSIG	1/2”	315	12	RBIA-315-XX	2.74” / 10.38”

Notes: (1) Replace “XX” with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
(2) Recommended Flow Rate for Optimal Performance

Aluminum Version for Demanding Applications (1500 PSIG)

For demanding applications with higher pressures (up to 1500PSIG) we recommend our aluminum ADS housings. The robust machined anodized aluminum units deliver purification in harsh environments.

- Robust Environment
- CRN Approved

Aluminum Version (1)	Maximum Pressure	Connection (NPT)	Volume (cc)	Maximum Flow Rate (2)	Replacement Adsorbent	Dimensions Diameter / Length
300A-ADS-xx	500 PSIG	1/8”	45	2	RBIA-45-XX	1.57” / 4.72”
305A-ADS-xx	500 PSIG	1/4”	45	2	RBIA-45-XX	1.57” / 4.72”
350A-ADS-xx	500 PSIG	1/4”	165	8	RBIA-165-XX	2.74” / 6.50”
355A-ADS-xx	500 PSIG	1/2”	165	8	RBIA-165-XX	2.74” / 6.50”
375A-ADS-xx	500 PSIG	1/2”	315	12	RBIA-315-XX	2.74” / 10.38”
380AHP-ADS-xx	1500 PSIG	3/4”	675	15	RBIA-675-XX	4.33” / 12.09”
383AHP-ADS-xx	1500 PSIG	1”	675	15	RBIA-675-XX	4.33” / 12.09”
380AHP-241-ADS-xx	1500 PSIG	3/4”	1100	17	RBIA-1100-xx	4.33” / 15.67”
383AHP-241-ADS-xx	1500 PSIG	1”	1100	17	RBIA-1100-xx	4.33” / 15.67”
385AHP-ADS-xx	1000 PSIG	1 1/2”	1500	30	RBIA-1500-XX	5.51” / 15.24”
390AHP-ADS-xx	1000 PSIG	2”	3000	60	RBIA-3000-XX	5.51” / 24.92”

Notes: (1) Replace “XX” with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
(2) Recommended Flow Rate for Optimal Performance

Stainless Steel Version for Demanding High Pressure Applications (5000 & 10,000 PSIG)

The 114-126HP series provides point-of-use desiccant protection in an ultra-high pressure package. The all Stainless Steel construction satisfies most compatibility issues.

- High Pressure
- CRN Approved
- Easily Serviced

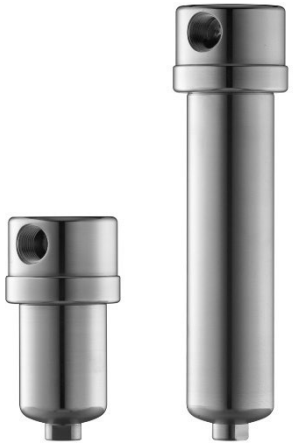
Stainless Steel Version (1)	Maximum Pressure	Connection (NPT)	Volume (cc)	Maximum Flow Rate (2)	Replacement Adsorbent	Dimensions Diameter / Length
114-ADS-xx	5000 PSIG	1/8"	20	2	RBIA-20-XX	1.42" / 2.92"
114HP-ADS-xx	10,000 PSIG	1/8"	26	2	RBIA-26-XX	2.56" / 4.13"
116-ADS-xx	5000 PSIG	1/4"	20	2	RBIA-20-XX	1.42" / 2.92"
116HP-ADS-xx	10,000 PSIG	1/4"	26	2	RBIA-26-XX	2.56" / 4.13"
124-ADS-xx	5000 PSIG	1/8"	30	3	RBIA-30-XX	1.42" / 3.98"
124HP-ADS-xx	10,000 PSIG	1/8"	40	3	RBIA-30-XX	2.56" / 5.12"
126-ADS-xx	5000 PSIG	1/4"	30	3	RBIA-40-XX	1.42" / 3.98"
126HP-ADS-xx	10,000 PSIG	1/4"	40	3	RBIA-40-XX	2.56" / 5.12"

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
(2) Recommended Flow Rate for Optimal Performance

Stainless Steel Version for Demanding High Pressure Applications (Up To 6000 PSIG)

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.

- High Pressure
- CRN Approved



Stainless Steel Version (1)	Maximum Pressure	Connection (NPT)	Volume (cc)	Maximum Flow Rate (2)	Replacement Adsorbent	Dimensions Diameter / Length
134-ADS-xx	1500 PSIG	1/4"	110	8	RBIA-110-XX	2.36" / 4.80"
134HP-ADS-xx	3000 PSIG	1/4"	115	8	RBIA-115-XX	2.52" / 5.04"
134HHP-ADS-xx	6000 PSIG	1/4"	160	8	RBIA-160-xx	3.34" / 6.37"
136-ADS-xx	1500 PSIG	1/2"	110	8	RBIA-110-XX	2.36" / 4.80"
136HP-ADS-xx	3000 PSIG	1/2"	115	8	RBIA-115-XX	2.52" / 5.04"
136HHP-ADS-xx	6000 PSIG	1/2"	160	8	RBIA-160-xx	3.34" / 6.37"
144-ADS-xx	1500 PSIG	1/4"	265	15	RBIA-265-xx	2.36" / 9.29"
144HP-ADS-xx	3000 PSIG	1/4"	300	15	RBIA-300-xx	2.52" / 9.53"
144HHP-ADS-xx	6000 PSIG	1/4"	320	15	RBIA-320-xx	3.34" / 11.06"
146-ADS-xx	1500 PSIG	1/2"	265	15	RBIA-265-xx	2.36" / 9.29"
146HP-ADS-xx	3000 PSIG	1/2"	300	15	RBIA-300-xx	2.52" / 9.53"
146HHP-ADS-xx	6000 PSIG	1/2"	320	15	RBIA-320-xx	3.34" / 11.06"

Notes: (1) Replace "XX" with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
(2) Recommended Flow Rate for Optimal Performance

Stainless Steel Version for Demanding High Pressure Applications (Up To 6000 PSIG)

The 150 series is our large standard size ADS product offering up to 1500cc of media. Typically used on critical high flow systems. Redundant set-up is recommended for continuation of the purification process.

- High Pressure
- CRN Approved

Stainless Steel Version (1)	Maximum Pressure	Connection (NPT)	Volume (cc)	Maximum Flow Rate (2)	Replacement Adsorbent	Dimensions Diameter / Length
150-ADS-xx	1500 PSIG	1”	1500	30	RBIA-1500-xx	4.33” / 15.04”
150HP-ADS-xx	3000 PSIG	1”	1500	30	RBIA-1500-xx	4.72” / 14.29”
150HHP-ADS-xx	6000 PSIG	1”	1500	30	RBIA-1500-xx	5.90” / 17.09”
151-ADS-xx	1500 PSIG	1 1/2”	1500	30	RBIA-1500-xx	4.33” / 15.04”
151HP-ADS-xx	3000 PSIG	1 1/2”	1500	30	RBIA-1500-xx	5.11” / 15.47”
151HHP-ADS-xx	6000 PSIG	1 1/2”	1500	30	RBIA-1500-xx	5.90” / 17.09”
152-ADS-xx	1500 PSIG	2”	1500	30	RBIA-1500-xx	4.52” / 15.83”
152HP-ADS-xx	3000 PSIG	2”	1500	30	RBIA-1500-xx	5.11” / 15.47”
152HHP-ADS-xx	6000 PSIG	2”	1500	30	RBIA-1500-xx	5.90” / 17.09”

Notes: (1) Replace “XX” with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
(2) Recommended Flow Rate for Optimal Performance

Stainless Steel Version for Demanding High Pressure Applications (Up To 6000 PSIG)

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 160 series is our largest standard size ADS product offering up to 2700cc of media.

- High Pressure Service
- Large Volume Capacity

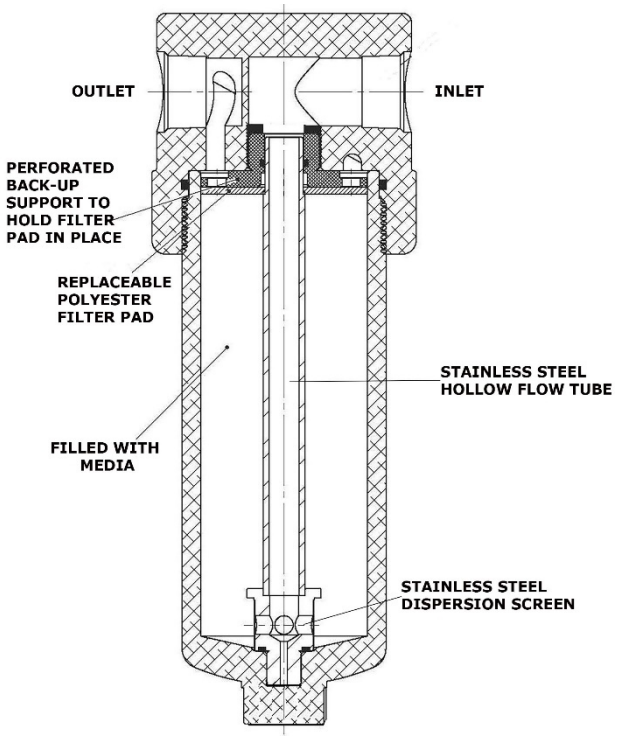
Stainless Steel Version (1)	Maximum Pressure	Connection (NPT)	Volume (cc)	Maximum Flow Rate (2)	Replacement Adsorbent	Dimensions Diameter / Length
160-ADS-xx	1500 PSIG	1”	2700	60	RBIA-2700-xx	4.33” / 24.49”
160HP-ADS-xx	3000 PSIG	1”	2222	60	RBIA-2222-xx	4.72” / 23.98”
160HHP-ADS-xx	6000 PSIG	1”	2222	60	RBIA-2222-xx	6.50” / 26.77”
161-ADS-xx	1500 PSIG	1 1/2”	2700	60	RBIA-2700-xx	4.33” / 24.49”
161HP-ADS-xx	3000 PSIG	1 1/2”	2222	60	RBIA-2222-xx	5.11” / 25.16”
161HHP-ADS-xx	6000 PSIG	1 1/2”	2222	60	RBIA-2222-xx	6.50” / 26.77”
162-ADS-xx	1500 PSIG	2”	2700	60	RBIA-2700-xx	4.52” / 25.27”
162HP-ADS-xx	3000 PSIG	2”	2222	60	RBIA-2222-xx	5.11” / 25.16”
162HHP-ADS-xx	6000 PSIG	2”	2222	60	RBIA-2222-xx	6.50” / 26.77”

Notes: (1) Replace “XX” with adsorption grade required, CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS
(2) Recommended Flow Rate for Optimal Performance

PRODUCT FEATURES / BENEFITS

- Variety of Media Available
- Hollow Tube Design Utilizes Entire Adsorption Media Bed
- T-Type Housing Design for Easy Installation & Quick Media Replacement

Standard ADS T-Type Design



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_2S, SO_X
Molecular Sieve 13X	**13X**	Adsorption of CO_2, NH_3, H_2S, 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, HCI
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

Disposable In-Line Adsorbers

PRODUCT FEATURES / BENEFITS

- Completely Disposable / No Handling of Loose Adsorbents
- Available In Blue Transparent Nylon Body or High Purity Virgin Kynar Body for Enhanced Compatibility
- Four Body Sizes
- Wide Range of Adsorbents (DIA)
- HVAC Purification
- Analyzer & Sensor Protection
- Low Cost Scrubbers
- Last Chance Air Purifier / Zero Air Gas Calibration

Our Disposable In-Line Adsorbers consist of nylon or Kynar (for chemical compatibility) bodies filled with granular adsorption material with integral inlet and outlet filter pads. For best results longer contact time will increase the efficiency of the desiccant media providing a more effective adsorber. A wide choice of adsorbents permits the selective removal of vapors from air and other gases. Desiccant choices are listed on page 5.

Our Disposable In-Line Adsorbers consist of granular adsorbent material ultrasonically welded into a see-through nylon or Kynar body. Integral filter pads eliminate adsorbent migration. Four sizes are available, containing from 6cc up to 120cc of adsorbent.

Disposable In-Line Adsorbers (DIAs) selectively remove vapors from air and other gases, depending on the adsorbent used. The captured vapor remains trapped in the solid bed, giving each unit a fixed maximum capacity. Because regeneration is generally not feasible once the adsorption limit is reached, DIAs are best suited for applications involving small quantities of vapor.

To maximize performance, they are typically installed as close as possible to the equipment being protected, since the available media volume is minimal. The standard OEM DIA-BN-BK body, which holds 11 cc of media, is the most commonly used configuration, offering a cost-effective balance of adsorption capacity and size. Three additional body sizes are available, providing flexibility in meeting space constraints and service life requirements.

For applications requiring greater adsorbent volume, which is replaceable refer to our IACH series of adsorption housings, which can accommodate up to 4100cc of media. The IACH series is better suited for laboratories or continuous-use environments.
Please see Adsorption Columns.

Also, we have the ability to factory convert any of our T-Type housing to hold loose replaceable media. These assemblies are referred to by the "ADS" suffix. Example: 126-ADS
Please see Adsorption Dryer Housings.

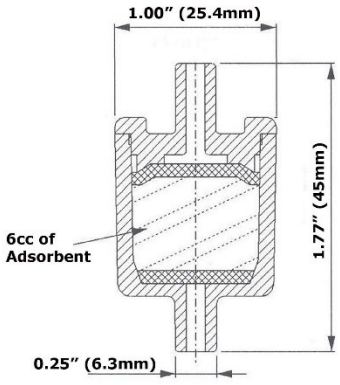
Miniature Size Filled with Media

The DIA-MN (Mini DIA) is specifically designed as a final, last-chance adsorber for critical equipment where space is limited. Its compact footprint makes it ideal for use in HVAC and pneumatic temperature control systems, providing essential protection at the point of use.

DIA-MN__ *add media required
Replace "__" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-MNCC**

TECHNICAL INFORMATION

- 1/4" Inlet / Outlet
- 6cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 125 PSIG of Maximum Pressure at 110°F
- 100% Grilamid TR 55 Blue Nylon body
- Specify Adsorbent
- Standard Gas Flow at 100 PSIG is 2.1 SCFM



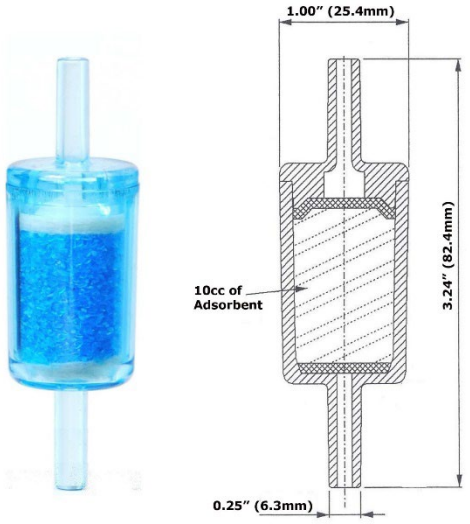
Standard OEM Size Filled with Media

The DIA-BN Series is our most widely used DIA model—and for good reasons. DIAs are best suited for applications requiring the removal of small quantities of vapor. Whether installed in OEM cabinets, emissions benches, or zero-air systems, this compact unit is an economical and reliable workhorse.

DIA-BN__ *add media required
Replace "__" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-BNCC**

TECHNICAL INFORMATION

- 1/4" Inlet / Outlet
- 11.5cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 125 PSIG of Maximum Pressure at 110°F
- 100% Grilamid TR 55 Blue Nylon body
- Specify Adsorbent
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



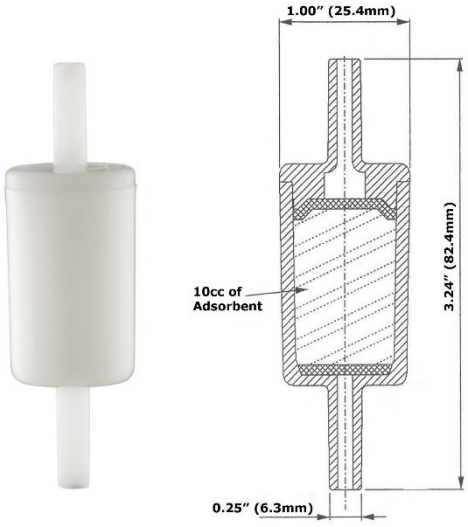
Standard OEM Size for Chemical Compatibility

This series of DIA assemblies is constructed from virgin white Kynar®, making it ideal for use in corrosive environments.

DIA-BK__ *add media required
Replace "__" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-BKCC**

TECHNICAL INFORMATION

- 1/4" Inlet / Outlet
- 11.5cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 125 PSIG of Maximum Pressure at 110°F
- Virgin White Kynar body
- Specify Adsorbent
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



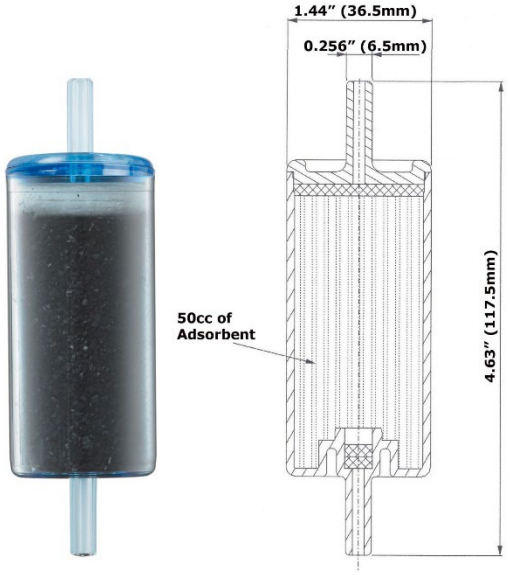
Intermediate High Flow with Media

Our Nylon intermediate range is designed for applications requiring higher vapor holding capacity. With increased internal volume, these units offer extended service life and improved performance for general applications.

DIA-IN__ *add media required
Replace "__" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-INCC**

TECHNICAL INFORMATION

- 1/4" Inlet / Outlet
- 50cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 100 PSIG of Maximum Pressure at 110°F
- 100% Grilamid TR 55 Blue Nylon body
- Specify Adsorbent
- Standard Gas Flow at 100 PSIG is 10.0 SCFM



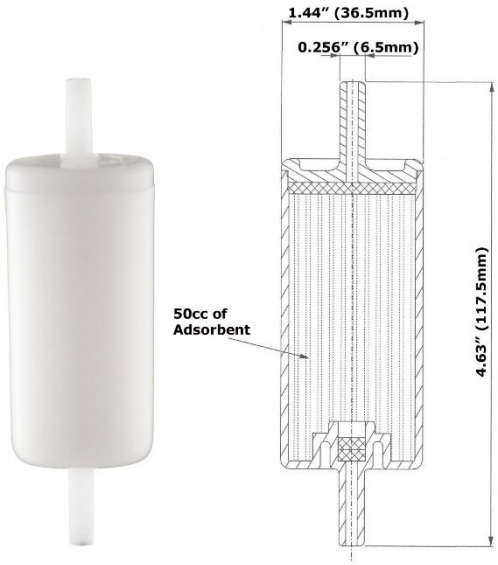
Intermediate High Flow for Chemical Compatibility

Our Kynar (PVDF) intermediate range is designed for applications requiring higher vapor holding capacity. With increased internal volume, these units offer extended service life and improved performance in demanding corrosive environments.

DIA-IK__ *add media required
Replace "__" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-IKCC**

TECHNICAL INFORMATION

- 1/4" Inlet / Outlet
- 50cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 100 PSIG of Maximum Pressure at 110°F
- Virgin White Kynar Body
- Specify Adsorbent
- Standard Gas Flow at 100 PSIG is 10.0 SCFM



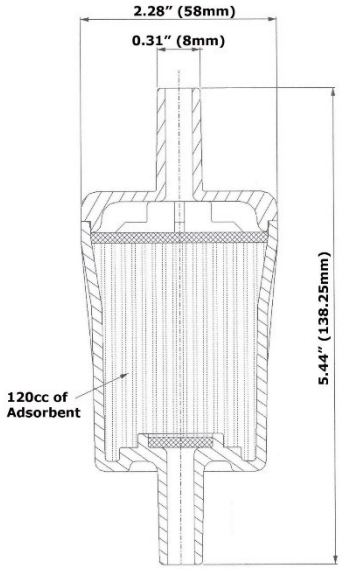
Maximum Flow DIA with Media

Our largest DIA is typically specified for environments with extreme vapor presence or remote locations, where its larger volume ensures a longer service life.

DIA-LN__ *add media required
Replace "__" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-LNCC**

TECHNICAL INFORMATION

- 1/4" NPT Inlet / Outlet or 1/2" Slip On Connection
- 120cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 100 PSIG of Maximum Pressure at 110°F
- 100% Grilamid TR 55 Blue Nylon body
- Specify Adsorbent
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



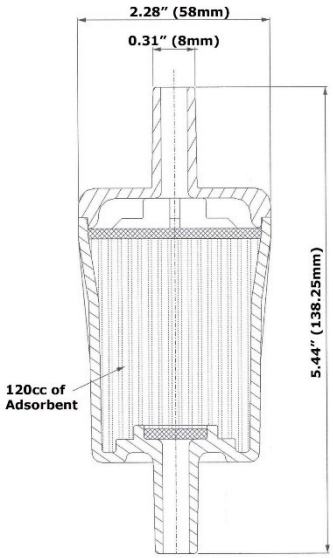
Maximum Flow for Chemical Compatibility

The DIA-LK assemblies are constructed from black Kynar, making them ideal for corrosive applications.

DIA-LK__ *add media required
Replace "__" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-LKCC**

TECHNICAL INFORMATION

- 1/4" NPT Inlet / Outlet or 1/2" Slip On Connection
- 120cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 100 PSIG of Maximum Pressure at 110°F
- Black Kynar body
- Specify Adsorbent
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



Flow Rate Charts

GAS FLOW RATES – DIA-MN□ – MINI

DIA Model Number	Gas Flow In SCFM At Stated PSIG With 1.5 PSID						
	1.5	20	40	60	80	100	125
DIA-MN	0.3	0.6	1.0	1.0	1.7	2.1	2.8

GAS FLOW RATES – DIA-BN□ – STANDARD

DIA Model Number	Gas Flow In SCFM At Stated PSIG With 1.5 PSID						
	1.5	20	40	60	80	100	125
DIA-BN or BK	0.6	1.3	2.0	2.7	3.5	4.2	5.7

GAS FLOW RATES – DIA-IN□ – INTERMEDIATE

DIF Model Number	Gas Flow In SCFM At Stated PSIG With 1.5 PSID					
	1.5	20	40	60	80	100
DIA-IN or IK	1.5	3.4	5.3	6.6	8.3	10.0

GAS FLOW RATES – DIA-LN□ – LARGE

DIF Model Number	Gas Flow In SCFM At Stated PSIG With 1.5 PSID					
	1.5	20	40	60	80	100
DIA-LN or LK	2.4	5.1	7.9	11.0	14.0	17.0

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_2S, SO_X
Molecular Sieve 13X	**13X**	Adsorption of CO_2, NH_3, H_2S, SO_X, aromatics, amines
Silica Gel	**SG**	Adsorption of water vapor
Drierite	**DR**	Adsorption of water vapor
Anhydrous Calcium Sulfate Mixed Bases	**MB**	Removal of acidic gases, CO_2, SO_X, NO_X, HCI
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