

Disposable In-Line Adsorbers

Features

- •Completely Disposable
- •Blue Transparent Nylon & Virgin Kynar Body
- •Four Body Sizes
- •Wide Range of Adsorbents (DIA)
- •No Handling of Loose Adsorbents

Applications

- 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 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 4.

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.



Standard OEM Size Filled With Media (DIA-BN__) *add media required

Our standard DIA-BN series is by far the most commonly used size of DIA. DIA's should be used only when small quantities of vapor are to be removed. Whether being used in an OEM cabinet, emission bench, or zero air applications this little gem is an economical workhorse.

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



Standard OEM Size For Chemical Compatibility Filled w/ Media (DIA-BK__)

This series of DIA assemblies is constructed of virgin white kynar for corrosive applications. Replace "___" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-BKCC**



Miniature OEM Size Filled With Media (DIA-MN__) *add media required

The DIA-MN, mini DIA was designed specifically as a final last chance adsorber for critical equipment with a small footprint. They are ideally used for HVAC / Pneumatic temperature control protection. Replace "___" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS, e.g. **DIA-MNCC**



Intermediate OEM High Flow DIA w/ Media (DIA-IN_) *add adsorbent required

Our intermediate range is utilized where higher vapor holding capacity is required. Larger volume for longer service life. 1.44" (36.50mm)

Replace "____ w/media required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS

	0.256" (6.50mm)
TECHNICAL INFORMATION	
• 1/4" Inlet / Outlet	
 50cc of Volume 	
 230°F Maximum Temp. At 0 PSIG 	
 100 PSIG of Maximum Pressure at 110°F 	50cc of
 100% Grilamid TR 55 Blue Nylon body 	ADSORBENT
 Specify Adsorbent 	
 Standard Gas Flow at 100 PSIG is 10.0 SCFM 	

Large OEM Maximum Flow DIA w/ Media (DIA-LN) *add adsorbent required

Our largest DIA is commonly specified where extreme amounts of vapor is present or for remote sites. Larger volume for longer service life. 2.28" (58mm) 0.31" (8mm)

Replace " " with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS



Large OEM High Flow DIA for Chemical Compatibility (DIA-LK__) *add adsorbent required

The DIA-LK assemblies are constructed of black kynar for corrosive applications. Replace "___" with grade required CC, 4A, 13X, SG, DR, MB, PP, HO, SB, CS



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



Disposable In-Line Adsorbers – Flow Rate Charts

GAS FLOW RATES – DIA-MND – 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-BND – STANDARD							
DIA Model Number	Gas Flow In SCFM At Stated PSIG With 1.5 PSID				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-IND – INTERMEDIATE						
DIA Model Number	Gas Flow In SCFM At Stated PSIG With 1.5 PSID					
	1.5	20	40	60	80	100
DIA-IN	1.5	3.4	5.3	6.6	8.3	10.0

GAS FLOW RATES – DIF-LN – LARGE						
DIF Model Number	Gas Flow In SCFM At Stated PSIG With 1.5 PSID			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 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 , HCI
Potassium Permanganate	PP	Removal of SO _x , Hg, and other acidic gases
Hopcalite	НО	Removal of CO by catalytic oxidation to CO ₂
Sodium Bicarbonate	SB	Acid Neutralizer
Copper Sulfate	CS	Removal of ammonia

