

# DISPOSABLE INLINE FILTERS & ADSORBERS

## Features:

- Completely Disposable
- Blue Transparent Nylon
- Virgin Kynar Body
- Four Sizes Available
- Five Grades Of Filtration
- Two Or Three Port Design
- Filter Gases And Liquids

## Applications:

- HVAC Purification
- Analyzer And Sensor Protection
- Low Cost Scrubbers
- Last Chance Air Purifier
- Zero Air Gas Calibration
- Low Cost Scrubbers



Our Disposable In-Line Filters consists of permanently welded housings with encapsulated filter elements. This makes them ideal for portable analyzers and other analysis systems requiring a robust, easily replaceable filter. A choice of body materials makes them suitable for a wide range of chemical environments.

We also supply the DIF-BN50I, which contains a **red dye** that bleeds through the element to provide an accurate visual indication that liquid is present. The red dye will permeate through the element upon water and/or oil saturation. Simply order as **DIF-BN50I**.

### DISPOSABLE INLINE FILTERS – DIF-MN (“MINI”)

#### Mini – Part Number: DIF-MNxx

Replace “xx” with grade required 30, 40, 50, 60, 70, 80, e.g. **DIF-MN50**

Inlet / Outlet:	0.25”
Drain Connection	None
Maximum Pressure	125 PSIG
Volume (cc)	6
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.25
Body Diameter	1.00
Spigot Length	0.43
Overall Length	1.71
Materials of Construction:	
Body	Nylon
Filter Element	K Type
Filter Element Size	12-16-□



### GAS FLOW RATES – DIF-MN□ (12-16-□) – MINI

DIF Model Number	Filtration Efficiency Removal Of 0.01 Micron Particles	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop									
		1.5	10	20	30	40	60	80	100	125	
DIF-MN30	99.99998+%	0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.7	
DIF-MN40	99.99998+%	0.15	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.2	
DIF-MN50	99.99+%	0.3	0.4	0.6	0.8	1.0	1.7	2.1	2.8		
DIF-MN60	99.5+%	0.4	0.7	1.0	1.3	1.6	2.1	2.7	3.4	4.1	
DIF-MN70	95.0+%	0.5	0.8	1.1	1.4	1.8	2.4	3.0	3.7	4.7	
DIF-MN80	75.0+%	0.9	0.9	1.3	1.6	2.0	2.7	3.5	4.3	5.0	

### LIQUID FLOW RATES (12-16-□) - MINI

DIF Model Number	Filtration Efficiency 98% Removal Rating	Water Flow Rate Gallons/Hr at 1.5 PSIG Pressure Drop
DIF-MN30	0.3 micron	0.6
DIF-MN40	1 micron	1.6
DIF-MN50	2 micron	3.3
DIF-MN60	8 micron	6.5
DIF-MN70	25 micron	8.0
DIF-MN80	75 micron	8.5



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Partner of Headline Filters

# DISPOSABLE INLINE FILTERS & ADSORBERS

## Features:

- Standard OEM Size
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- Filter Gases And Liquids
- Ideal For Use With Standard 1/4" O.D. Compression Fittings

## Applications:

- HVAC Purification
- Analyzer And Sensor Protection
- Low Cost Scrubbers
- Last Chance Air Purifier
- Zero Air Gas Calibration
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Our standard DIF-BN series is by far the most commonly used size of DIF since it combines high efficiency filtration with low pressure drops in a compact package. Whether being used in an OEM cabinet, emission bench, or air monitor this little gem is an economical workhorse.

### DISPOSABLE INLINE FILTERS – DIF-BN (“STANDARD”)

**Standard – Part Number: DIF-BNxx**

**Kynar Part Number: DIF-BKxx**

Replace “xx” with grade required 30, 40, 50, 60, 70, 80, e.g. **DIF-BN50**

Inlet / Outlet:	0.25"
Drain Connection	None
Maximum Pressure	125 PSIG
Volume (cc)	11.5
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.25
Body Diameter	1.00
Spigot Length	0.79
Overall Length	3.23
Materials of Construction:	
Body	Nylon / Kynar
Filter Element	K Type
Filter Element Size	12-32-□



### GAS FLOW RATES – DIF-BN□ (12-32-□) – STANDARD

DIF Model Number*	Filtration Efficiency Removal Of 0.01 Micron Particles	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop									
		1.5	10	20	30	40	60	80	100	125	
DIF-BN30	99.99998+%	0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.3	1.5	
DIF-BN40	99.99998+%	0.3	0.4	0.7	0.8	1.0	1.4	1.7	2.1	2.5	
DIF-BN50	99.99+%	0.6	0.9	1.3	1.6	2.0	2.7	3.5	4.2	5.7	
DIF-BN60	99.5+%	0.9	1.4	2.0	2.6	3.2	4.3	5.4	6.9	8.2	
DIF-BN70	95.0+%	1.1	1.6	2.3	2.9	3.6	4.9	6.0	7.5	9.4	
DIF-BN80	75.0+%	1.2	1.8	2.6	3.3	4.0	5.5	7.0	8.6	10.0	

### LIQUID FLOW RATES – (12-32-□) – STANDARD

DIF Model Number*	Filtration Efficiency 98% Removal Rating	Water Flow Rate Gallons/Hr at 1.5 PSIG Pressure Drop
DIF-BN30	0.3 micron	1.3
DIF-BN40	1 micron	3.2
DIF-BN50	2 micron	6.6
DIF-BN60	8 micron	13.0
DIF-BN70	25 micron	16.0
DIF-BN80	75 micron	17.0

Notes: (\*) Use the same flow rates for DIF-BK



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## DISPOSABLE INLINE FILTERS – DIF-IN (“INTERMEDIATE”)

### Intermediate – Part Number: DIF-INxx

Replace “xx” with grade required 30, 40, 50, 60, 70, 80, e.g. **DIF-IN50**

Inlet / Outlet:	0.25"
Drain Connection	None
Maximum Pressure	100 PSIG
Volume (cc)	50
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.25
Body Diameter	1.44
Spigot Length	0.77
Overall Length	4.61
Materials of Construction:	
Body	Nylon
Filter Element	K Type
Filter Element Size	12-57-□



### Intermediate Coalescer – Part Number: DIF-INxxC

Replace “xx” with grade required 30, 40, 50, 60, 70, 80, e.g. **DIF-IN50C**

Inlet / Outlet:	0.25"
Drain Connection	0.25"
Maximum Pressure	100 PSIG
Volume (cc)	50
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.25
Body Diameter	1.44
Spigot Length	0.77
Overall Length	4.61
Materials of Construction:	
Body	Nylon
Filter Element	C Type
Filter Element Size	12-57-□C



## GAS FLOW RATES – DIF-IN□ (12-57-□) – INTERMEDIATE

DIF Model Number	Filtration Efficiency Removal Of 0.01 Micron Particles	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop								
		1.5	10	20	30	40	60	80	100	
DIF-IN30	99.99998+%	0.4	0.5	0.7	0.75	0.9	1.0	1.5	2.0	
DIF-IN40	99.99998+%	0.7	1.0	1.7	2.0	2.7	3.3	4.1	5.0	
DIF-IN50	99.99+%	1.5	2.1	3.4	4.0	5.3	6.6	8.3	10.0	
DIF-IN60	99.5+%	3.0	4.4	7.0	8.4	11.2	14.0	17.5	21.0	
DIF-IN70	95.0+%	3.6	5.2	8.4	10.0	13.5	17.0	21.5	26.0	
DIF-IN80	75.0+%	4.0	5.8	9.3	11.0	15.0	19.0	24.0	29.0	

## LIQUID FLOW RATES – (12-57-□) - INTERMEDIATE

DIF Model Number	Filtration Efficiency 98% Removal Rating	Water Flow Rate Gallons/Hr at 1.5 PSIG Pressure Drop	
DIF-IN30	0.3 micron		2.6
DIF-IN40	1 micron		6.4
DIF-IN50	2 micron		13.2
DIF-IN60	8 micron		26.0
DIF-IN70	25 micron		32.0
DIF-IN80	75 micron		34.0

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## DISPOSABLE INLINE FILTERS – DIF-LN (“LARGE”)

### Large – Part Number: DIF-LNxx

#### Kynar Part Number: DIF-LKxx

Replace “xx” with grade required 30, 40, 50, 60, 70, 80, e.g. **DIF-LN50**

Inlet / Outlet: (1)	1/4" NPT
Drain Connection	None
Maximum Pressure	100 PSIG
Volume (cc)	120
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.50
Body Diameter	2.28
Spigot Length	1.05
Overall Length	5.43
Materials of Construction:	
Body	Nylon / Kynar
Filter Element	K Type
Filter Element Size	25-64-□



### Large Coalescer – Part Number: DIF-LNxxC

#### Kynar Part Number: DIF-LKxxC

Replace “xx” with grade required 30, 40, 50, 60, 70, 80, e.g. **DIF-LN50C**

Inlet / Outlet: (1)	1/4" NPT
Drain Connection	0.30"
Maximum Pressure	100 PSIG
Volume (cc)	120
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.50
Body Diameter	2.28
Spigot Length	1.05
Overall Length	5.43
Materials of Construction:	
Body	Nylon / Kynar
Filter Element	C Type
Filter Element Size	25-64-□C



Notes: (1) 1/4" MNPT (Threads) = 1/2" OD which can accommodate 1/2" ID tubing. If threads are not desired order as "DIF-LN60-SlipOn"

## GAS FLOW RATES – DIF-LN□ (25-64-□) - LARGE

DIF Model Number*	Filtration Efficiency Removal Of 0.01 Micron Particles	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop								
		1.5	10	20	30	40	60	80	100	
DIF-LN30	99.99998+%	0.7	1.0	1.5	2.0	2.5	3.2	4.1	5.1	
DIF-LN40	99.99998+%	1.2	1.8	2.6	3.2	4.0	5.5	7.2	8.0	
DIF-LN50	99.99+%	2.4	3.6	5.1	6.3	7.9	11.0	14.0	17.0	
DIF-LN60	99.5+%	3.8	5.9	8.3	10.0	13.0	17.0	22.0	26.0	
DIF-LN70	95.0+%	4.3	6.4	9.3	12.0	14.0	19.0	24.0	30.0	
DIF-LN80	75.0+%	4.7	6.9	10.0	13.0	16.0	22.0	27.0	34.0	

## LIQUID FLOW RATES – (25-64-□) - LARGE

DIF Model Number*	Filtration Efficiency 98% Removal Rating	Water Flow Rate Gallons/Hr at 1.5 PSIG Pressure Drop
DIF-LN30	0.3 micron	13.0
DIF-LN40	1 micron	26.0
DIF-LN50	2 micron	62.0
DIF-LN60	8 micron	84.0
DIF-LN70	25 micron	95.0
DIF-LN80	75 micron	118.0

Notes: (\*) Use the same flow rates for DIF-LK

# DISPOSABLE INLINE FILTERS & ADSORBERS

## Features:

- Completely Disposable
- Blue Transparent Nylon
- Virgin Kynar Body
- Four Body Sizes
- Wide Range Of Adsorbents (DIA)
- No Handling Of Loose Adsorbents
- Ideal "Last Chance" Protection

## Applications:

- HVAC Purification
- Analyzer And Sensor Protection
- Low Cost Scrubbers
- Last Chance Air Purifier
- Zero Air Gas Calibration
- Low Cost Scrubbers

Our Disposable In-Line Adsorbents consist of nylon or kynar bodies filled with granular adsorption material with integral inlet and outlet filter pads. For best results, the longer the contact time, the more effective the adsorbents will be. Choose the appropriate adsorbent for your application from the list below. Our Disposable In-Line Adsorbents 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 INLINE ADSORBERS – DIA-MN ("MINI")

#### Mini – Part Number: DIA-MNxx

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

Inlet / Outlet:	0.25"
Drain Connection	None
Maximum Pressure	125 PSIG
Volume (cc)	6
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.25
Body Diameter	1.00
Spigot Length	0.43
Overall Length	1.71
Materials of Construction:	
Body	Nylon
Adsorbent	Specify Adsorbent



### GAS FLOW RATES – DIA-MN□ – MINI

DIA Model Number	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop									
	1.5	10	20	30	40	60	80	100	125	
DIA-MNxx	0.3	0.4	0.6	0.8	1.0	1.3	1.7	2.1	2.8	

### DISPOSABLE INLINE ADSORBERS – DIA-BN ("STANDARD")

#### Standard – Part Number: DIA-BNxx

#### Kynar Part Number: DIA-BKxx

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

Inlet / Outlet:	0.25"
Drain Connection	None
Maximum Pressure	125 PSIG
Volume (cc)	11.5
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.25
Body Diameter	1.00
Spigot Length	0.79
Overall Length	3.23
Materials of Construction:	
Body	Nylon / Kynar
Adsorbent	Specify Adsorbent



### GAS FLOW RATES – DIA-BN□ – STANDARD

DIA Model Number*	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop									
	1.5	10	20	30	40	60	80	100	125	
DIA-BNxx	0.6	0.9	1.3	1.6	2.0	2.7	3.5	4.2	5.7	

Notes: (\*) Use the same flow rates for DIA-BK



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## DISPOSABLE INLINE ADSORBERS – DIA-IN ("INTERMEDIATE")

### Intermediate – Part Number: DIA-INxx

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

Inlet / Outlet:	0.25"
Drain Connection	None
Maximum Pressure	100 PSIG
Volume (cc)	50
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.25
Body Diameter	1.44
Spigot Length	0.77
Overall Length	4.61
Materials of Construction:	
Body	Nylon
Adsorbent	Specify Adsorbent



## GAS FLOW RATES – DIA-IN – INTERMEDIATE

DIA Model Number	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop							
	1.5	10	20	30	40	60	80	100
DIA-INxx	1.5	2.1	3.4	4.0	5.3	6.6	8.3	10.0

## DISPOSABLE INLINE ADSORBERS – DIA-LN ("LARGE")

### Large – Part Number: DIA-LNxx

#### Kynar Part Number: DIA-LKxx

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

Inlet / Outlet: (1)	1/4"
Drain Connection	None
Maximum Pressure	100 PSIG
Volume (cc)	120
Maximum Temperature:	
°F At 0 PSIG	230
°F At 100 PSIG	120
Principle Dimensions: (Inches)	
Spigot Diameter	0.50
Body Diameter	2.28
Spigot Length	1.05
Overall Length	5.43
Materials of Construction:	
Body	Nylon / Kynar
Adsorbent	Specify Adsorbent



Notes: (1) 1/4" MNPT (Threads) = 1/2" OD which can accommodate 1/2" ID tubing. If threads are not desired order as "DIA-LNCC-SlipOn"

## GAS FLOW RATES – DIA-LN – LARGE

DIA Model Number*	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop							
	1.5	10	20	30	40	60	80	100
DIA-LNxx	2.4	3.6	5.1	6.3	7.9	11.0	14.0	17.0

Notes: (\*) Use the same flow rates for DIA-LK

Adsorbent	Code	Principles
Activated Carbon	CC	Adsorption of hydrocarbons and other organic vapors Zero Air Calibration
Molecular Sieve 4A	4A	Adsorption of CO <sub>2</sub> , NH <sub>3</sub> , H <sub>2</sub> S, SO <sub>x</sub>
Molecular Sieve 13X	13X	Adsorption of CO <sub>2</sub> , NH <sub>3</sub> , H <sub>2</sub> S, SO <sub>x</sub> , 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 <sub>2</sub> , SO <sub>x</sub> , NO <sub>x</sub> , HCl
Potassium Permanganate	PP	Removal of SO <sub>x</sub> , Hg, and other acidic gases
Hopcalite	HO	Removal of CO by catalytic oxidation to CO <sub>2</sub>
Sodium Bicarbonate	SB	Acid Neutralizer
Copper Sulfate	CS	Removal of ammonia