

DISPOSABLE INLINE FILTERS & ADSORBERS

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**.

The economical DIF Series offers all the advantages of a microfiber filter element for high efficiency gas and liquid filtration, with the convenience of complete disposability. We have the ability to insert other filter media, such as PTFE or Stainless Steel Screens for course filtration. If you require a custom solution, regardless of quantity, please contact us directly for a comprehensive quick quote. No quantity is too small, and turn-around is fast.

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



DISPOSABLE INLINE FILTERS & ADSORBERS

The DIF-MN, mini DIF was designed specifically as a final last chance filter for critical equipment with a small footprint. They are ideally used for HVAC / Pneumatic temperature control protection.

- For Dental Pneumatics
- Air Logic Filter
- Food Packaging Filter



TECHNICAL INFORMATION

Disposable Inline Filters - 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

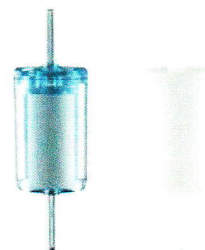
DIF Model Number	Filtration Efficiency Removal Of 0.01 Micron Particles	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop									
		1.5	10	20	30	40	60	80	100	125	
DIF-MN30	99.99998+%	0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.7	
DIF-MN40	99.9999+%	0.15	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.2	
DIF-MN50	99.99+%	0.3	0.4	0.6	0.8	1.0	1.0	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

DISPOSABLE INLINE FILTERS & ADSORBERS

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.



Features:

- Standard OEM Size
- Blue Transparent Nylon
- Virgin Kynar Body
- 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

TECHNICAL INFORMATION

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	3.24
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 / DIF-BK30	99.99998+%	0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.3	1.5	
DIF-BN40 / DIF-BK40	99.9999+%	0.3	0.4	0.7	0.8	1.0	1.4	1.7	2.1	2.5	
DIF-BN50 / DIF-BK50	99.99+%	0.6	0.9	1.3	1.6	2.0	2.7	3.5	4.2	5.7	
DIF-BN60 / DIF-BK60	99.5+%	0.9	1.4	2.0	2.6	3.2	4.3	5.4	6.9	8.2	
DIF-BN70 / DIF-BK70	95.0+%	1.1	1.6	2.3	2.9	3.6	4.9	6.0	7.5	9.4	
DIF-BN80 / DIF-BK80	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 / DIF-BK30	0.3 micron	1.3
DIF-BN40 / DIF-BK40	1 micron	3.2
DIF-BN50 / DIF-BK50	2 micron	6.6
DIF-BN60 / DIF-BK60	8 micron	13.0
DIF-BN70 / DIF-BK70	25 micron	16.0
DIF-BN80 / DIF-BK80	75 micron	17.0

DISPOSABLE INLINE FILTERS & ADSORBERS

TECHNICAL INFORMATION

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	99.9999+%	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

DISPOSABLE INLINE FILTERS & ADSORBERS

TECHINCAL INFORMATION

Large – Part Number: DIF-LNxx-1/4" MNPT

Kynar Part Number: DIF-LKxx-1/4" MNPT

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 /
Filter Element	Kynar
	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 /
Filter Element	Kynar
	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

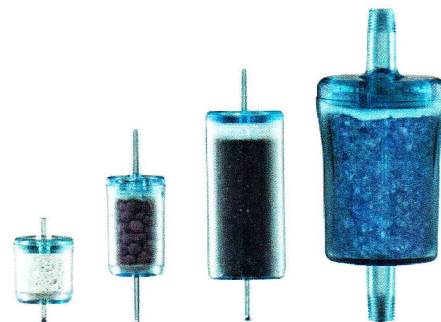
DIF Model Number	Filtration Efficiency Removal Of 0.01 Micron Particles	Gas Flow In SCFM At Stated Line Pressure In PSIG And 1.5 PSIG Pressure Drop							
		1.5	10	20	30	40	60	80	100
DIF-LN30 / DIF-LK30	99.99998+%	0.7	1.0	1.5	2.0	2.5	3.2	4.1	5.1
DIF-LN40 / DIF-LK40	99.9999+%	1.2	1.8	2.6	3.2	4.0	5.5	7.2	8.0
DIF-LN50 / DIF-LK50	99.99+%	2.4	3.6	5.1	6.3	7.9	11.0	14.0	17.0
DIF-LN60 / DIF-LK60	99.5+%	3.8	5.9	8.3	10.0	13.0	17.0	22.0	26.0
DIF-LN70 / DIF-LK70	95.0+%	4.3	6.4	9.3	12.0	14.0	19.0	24.0	30.0
DIF-LN80 / DIF-LK80	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 / DIF-LK30	0.3 micron		13.0
DIF-LN40 / DIF-LK40	1 micron		26.0
DIF-LN50 / DIF-LK50	2 micron		62.0
DIF-LN60 / DIF-LK60	8 micron		84.0
DIF-LN70 / DIF-LK70	25 micron		95.0
DIF-LN80 / DIF-LK80	75 micron		118.0

DISPOSABLE INLINE FILTERS & ADSORBERS

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, the longer the contact time, the more effective the adsorbers will be. Choose the appropriate adsorbent for your application from the list below. 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.



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

TECHNICAL INFORMATION

Mini Adsorber– 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
0.3	0.4	0.6	0.8	1.0	1.3	1.7	2.1	2.8

DIA-MNxx

DISPOSABLE INLINE FILTERS & ADSORBERS

TECHNICAL INFORMATION

Standard Adsorber – 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	3.24
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 / DIA-BKxx	0.6	0.9	1.3	1.6	2.0	2.7	3.5	4.2	5.7

TECHNICAL INFORMATION

Intermediate Adsorber – 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 FILTERS & ADSORBERS

TECHNICAL INFORMATION

Large Adsorber – Part Number: DIA-LNxx-1/4" MNPT

Kynar Part Number: DIA-LKxx-1/4" MNPT

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

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	DR	Adsorption of water vapor
Anhydrous Calcium Sulfate	MB	Removal of acidic gases, CO ₂ , SO _x , NO _x , HCl
Mixed Bases	PP	Removal of SO _x , Hg, and other acidic gases
Potassium Permanganate	HO	Removal of CO by catalytic oxidation to CO ₂
Hopcalite	SB	Acid Neutralizer
Sodium Bicarbonate	CS	Removal of ammonia
Copper Sulfate		

****More Adsorbent Materials Available Upon Request****