



# Disposable In-Line Filters

## Features

- Completely Disposable
- Blue Transparent Nylon & Virgin Kynar Body
- Four Sizes Available
- Five Grades of Filtration
- Two or Three Port Design
- Filter Gases & Liquids

## Applications

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

Our Disposable In-Line Filters consist 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.

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 coarse filtration.

A variety of barb/connection options are readily available from inventory. Keep in mind custom product can easily be built to order, regardless of quantity.

Please contact us directly for a *comprehensive quick quote*. No quantity is too small and turn-around is fast.



### Standard OEM Size with Microfiber Element (DIF-BN\_\_) \*add grade required

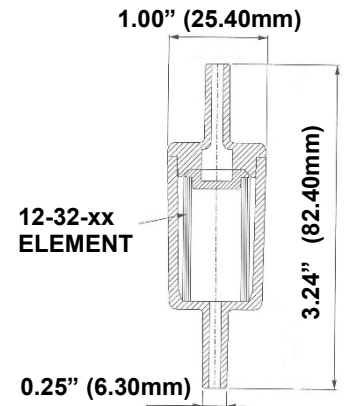
Our standard DIF-BN series is by far the most commonly used size of DIF since it combines high efficiency filtration with low pressure drops in a compact package. Whether being used in an OEM cabinet, emission bench, or air monitor this little gem is an economical workhorse.

Standard Grade: DIF-BN50 (99.99% @ 0.01 Micron) - Other Grades Available: 30, 40, 60, 70, 80



#### 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



### Standard OEM Size with Stainless Steel Screen (DIF-BN\_\_SS) \*add micron required

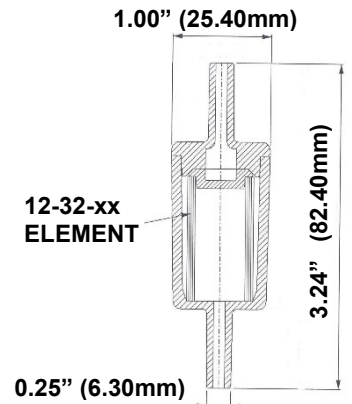
For applications where high efficiency microfiber elements are not necessary, we offer inexpensive Stainless Steel Screens which are commonly used in portable emission analyzers, bulk contaminate removal and liquid sampling.

For Portable Emission Analyzers use DIF-BN50SS. Other Micron Sizes Available: 05, 10, 25, 100



#### 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
- 304 Stainless Steel Screen Element
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



### Standard OEM Size w/1/8" Straight Barb (Short Spigot) (DIF-BN\_\_SP-1/8")

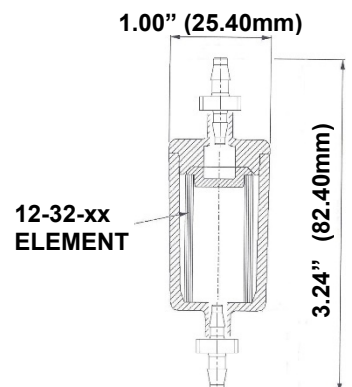
Our standard DIF-BN series is by far the most commonly used size of DIF since it combines high efficiency filtration with low pressure drops in a compact package. For applications with 1/8" tubing, using the same foot pattern and size, please specify DIF-BN50SP-1/8".

Standard: DIF-BN50SP-1/8" (99.99% @ 0.01 Micron) - Other Grades Available: 30, 40, 60, 70, 80



#### TECHNICAL INFORMATION

- 1/8" Tubing Connection on Inlet / Outlet
- 11.5cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 125 PSIG of Maximum Pressure at 110°F
- Material:
  - Body - 100% Grilamid TR 55 Blue Nylon
  - Straight Barb - Natural Nylon
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



Additional Variations are Available Upon Request

### Standard OEM Size with 1/8" Elbow Barb (DIF-BN\_\_-1/8"-90) \*add micron required

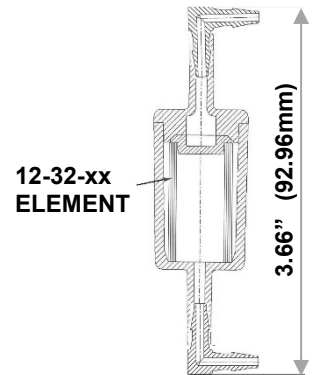
Our standard DIF-BN series is by far the most commonly used size of DIF since it combines high efficiency filtration with low pressure drops in a compact package. This DIF is ideal for installations with restricted tubing connection space. Combinations of different size barbs are available upon request.

Standard Grade: DIF-BN50-1/8"-90 - Other Grades Available: 30, 40, 60, 70, 80



#### TECHNICAL INFORMATION

- 1/8" Tubing Connection on Inlet / Outlet
- 11.5cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 125 PSIG of Maximum Pressure at 110°F
- Material:
  - Body - 100% Grilamid TR 55 Blue Nylon
  - Elbow Barb - White Nylon
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



### Standard OEM Size For Chemical Compatibility (DIF-BK\_\_) \*add grade required

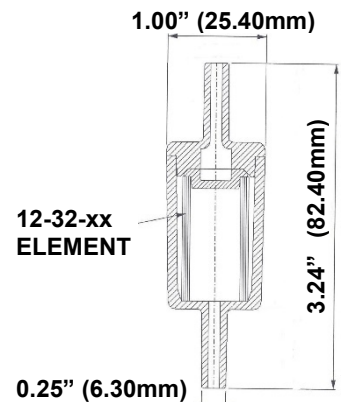
This series of DIF assemblies is constructed of virgin white kynar for corrosive applications. Compatible applications include (not limited to): sulfuric & hydrochloric acids, chlorine (gas or liquid), hydrogen peroxide, phenol, glycol, and ETO.

Standard Grade: DIF-BK50 (99.99% @ 0.01 Micron) - Other Grades Available: 30, 40, 60, 70, 80



#### 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



### Indicating Standard OEM Size with (DIF-BN50I)

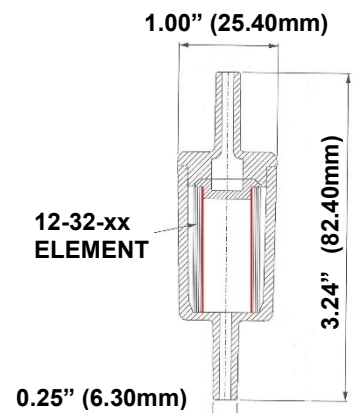
The DIF-BN50I contains a **red dye** that bleeds through the element to provide an accurate visual indication when oil is present. The red dye will permeate through the element upon oil saturation. One common application are HVAC control panels. This dye can be added to any of our microfiber elements.

Simply Order as DIF-BN50I.



#### 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 4.2 SCFM



Additional Variations are Available Upon Request

### Miniature OEM Size with Microfiber Element (DIF-MN\_\_) \*add grade required

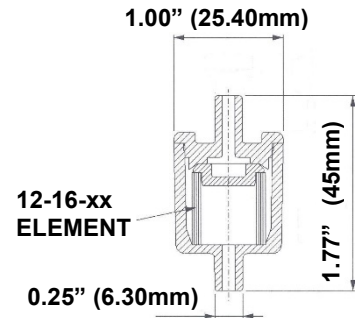
The DIF-MN, mini DIF was designed specifically as a final last chance filter for critical equipment with a small footprint. They are ideally used for HVAC / Pneumatic temperature control protection.

Standard Grade: DIF-MN50 (99.99% @ 0.01 Micron) - Other Grades Available: 30, 40, 60, 70, 80



#### 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 2.1 SCFM



### Miniature OEM Size with 1/8" Straight Barb (DIF-MN\_\_1/8") \*add grade required

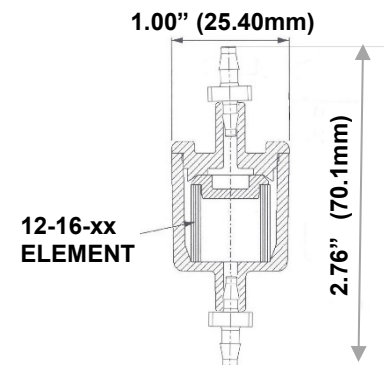
Our mini DIF was designed specifically as a final last chance filter for critical equipment with a small footprint and 1/8"ID tubing. They are ideally used for HVAC/Pneumatic temperature control protection.

Standard: DIF-MN50-1/8" (99.99% @ 0.01 Micron) - Other Grades Available: 30, 40, 60, 70, 80



#### TECHNICAL INFORMATION

- 1/8" Tubing Connection on Inlet / Outlet
- 6cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 125 PSIG of Maximum Pressure at 110°F
- Material:
  - Body - 100% Grilamid TR 55 Blue Nylon
  - Straight Barb - White Nylon
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 2.1 SCFM



### Miniature OEM Size with 1/8" Elbow Barb (DIF-MN\_\_-1/8"-90) \*add grade required

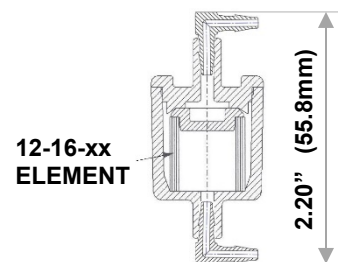
Our mini DIF was designed specifically as a final last chance filter for critical equipment needing a small footprint and 1/8"ID tubing at a 90° angle. Ideally used for HVAC/Pneumatic temperature control protection.

Standard Grade: DIF-MN50-1/8"-90 (99.99% @ 0.01 Micron) - Other Grades Available: 30, 40, 60, 70, 80



#### TECHNICAL INFORMATION

- 1/8" Tubing Connection on Inlet / Outlet
- 6cc of Volume
- 230°F Maximum Temp. At 0 PSIG
- 125 PSIG of Maximum Pressure at 110°F
- Material:
  - Body - 100% Grilamid TR 55 Blue Nylon
  - Elbow Barb - White Nylon
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 2.1 SCFM



Additional Variations are Available Upon Request

## Intermediate OEM High Flow DIF w/ Microfiber Element (DIF-IN\_\_) \*add grade required

Our intermediate range is utilized where higher particulate holding capacity is required.

**Kynar Version Now Available: Designate "IK" Standard Grade: DIF-IK50**

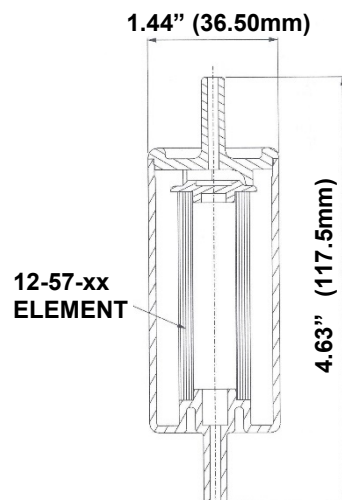
Standard Grade: DIF-IN50 (99.99% @ 0.01 Micron)

Other Grades Available: 30, 40, 60, 70, 80



### 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 10.0 SCFM



## Intermediate OEM High Flow DIF with SS Screen (DIF-IN\_\_SS) \*add micron required

For applications where high efficiency microfiber elements are not necessary, we offer inexpensive Stainless Steel Screens which are commonly used in portable emission analyzers, bulk contaminate removal and liquid sampling.

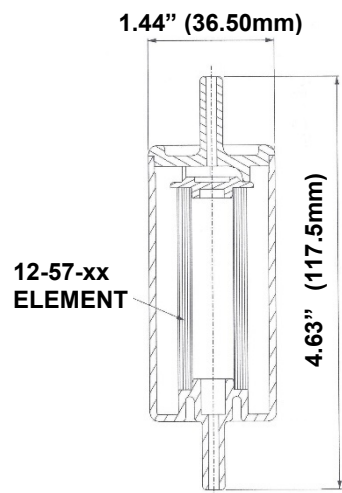
For Portable Emission Analyzers use DIF-IN50SS.

Other Micron Sizes Available: 05, 10, 25, 100



### 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
- 304 Stainless Steel Screen Element
- Standard Gas Flow at 100 PSIG is 10.0 SCFM



## Intermediate OEM High Flow Coalescing DIF (DIF-IN\_\_C) \*add grade required

Our intermediate DIF with 3<sup>rd</sup> spigot is utilized when coalescing (liquid removal) is required.

**Kynar Version Now Available: Designate "IK" Standard Grade: DIF-IK50C**

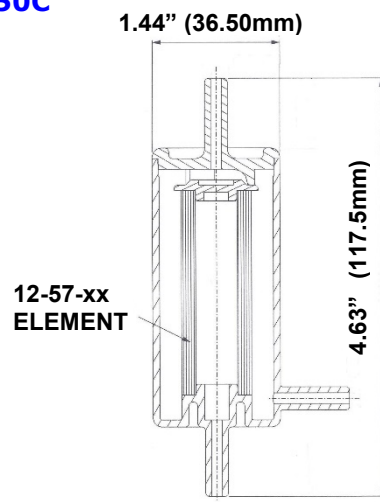
Standard Grade: DIF-IN50C (99.99% @ 0.01 Micron)

Other Grades Available: 30, 40, 60, 70, 80



### TECHNICAL INFORMATION

- 1/4" Inlet , Outlet, and Drain Port
- 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 10.0 SCFM



**Additional Variations are Available Upon Request**



## Large OEM Maximum Flow DIF w/ Microfiber Element (DIF-LN\_\_) \*add grade required

Our largest DIF is commonly specified where extreme amounts of particulate is present or for remote sites. Typical applications include ambient air monitoring.

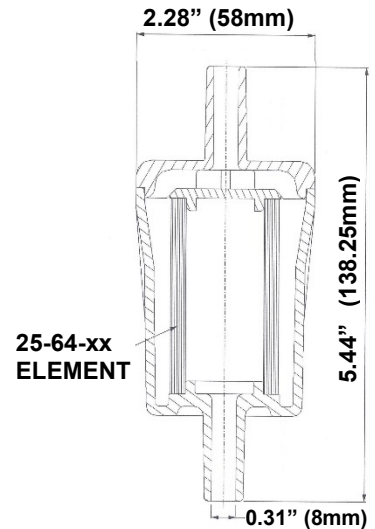
Standard Grade: DIF-LN60 (99.5% @ 0.01 Micron)

Other Grades Available: 30, 40, 50, 70, 80



### 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



## Large OEM Maximum Flow DIF with SS Screen (DIF-LN\_\_SS-1/4") \*add micron required

For applications where high efficiency microfiber elements are not necessary, we offer inexpensive

Stainless Steel Screens which are commonly used in liquid sampling and pump protection. 2.28" (58mm)

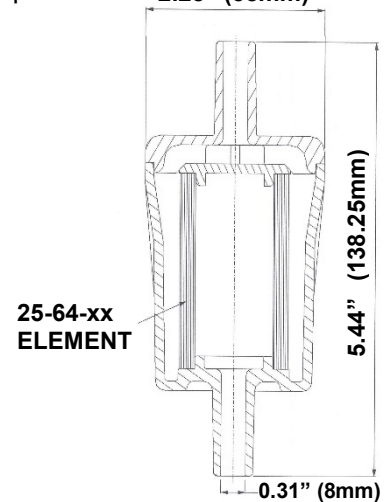
For Liquid Sampling use DIF-LN50SS-1/4".

Other Micron Sizes Available: 05, 10, 25, 100



### 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
- 304 Stainless Steel Screen Element
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



## Large OEM Maximum Flow Coalescing DIF (DIF-LN\_\_C) \*add grade required

Our large DIF with 3<sup>rd</sup> spigot is utilized when coalescing (liquid removal) is required.

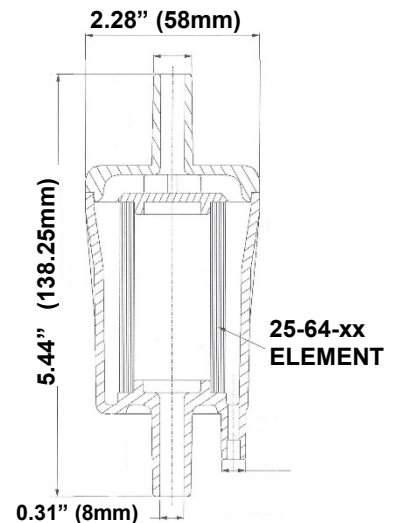
Standard Grade: DIF-LN60C (99.5% @ 0.01 Micron)

Other Grades Available: 30, 40, 50, 70, 80



### TECHNICAL INFORMATION

- 1/4" NPT Inlet / Outlet or 1/2" Slip On Connection
- 1/4" Drain Port
- 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



Additional Variations are Available Upon Request

## Large OEM Maximum Flow DIF for Chemical Compatibility (DIF-LK\_\_) \*add grade required

The DIF-LK assemblies are constructed of black kynar for corrosive applications. Compatible applications include (not limited to): sulfuric & hydrochloric acids, chlorine (gas or liquid), hydrogen peroxide, Etc.

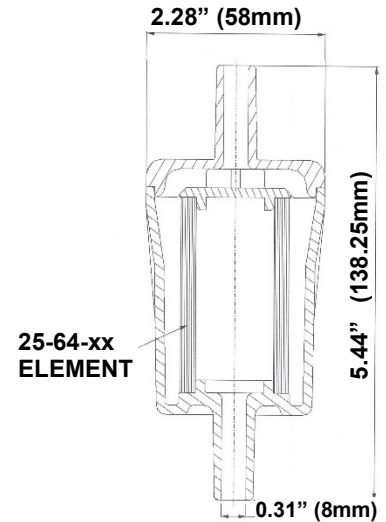
Standard Grade: DIF-LK60 (99.5% @ 0.01 Micron)

Other Grades Available: 30, 40, 50, 70, 80



### 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



## Large Maximum Flow DIF for Chemical Compatibility (DIF-LK\_\_PT) \*add micron required

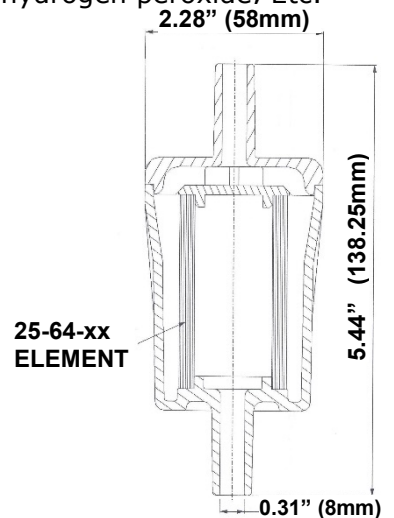
The DIF-LK assemblies are constructed of black kynar for corrosive applications. Compatible applications include (not limited to): sulfuric & hydrochloric acids, chlorine (gas or liquid), hydrogen peroxide, Etc.

Standard Grade: DIF-LK25PT - Other Micron Available: 03PT



### 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
- Teflon (PTFE) Element
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



## Large OEM High Flow DIF with 1/4" Push Connect Fitting (DIF-LN\_\_-1/4"PTC)

This DIF is specified where extreme amounts of particulate is present and can easily replace the DIF-BN series. The filter comes complete with 1/4" push connect adapters (PTC).

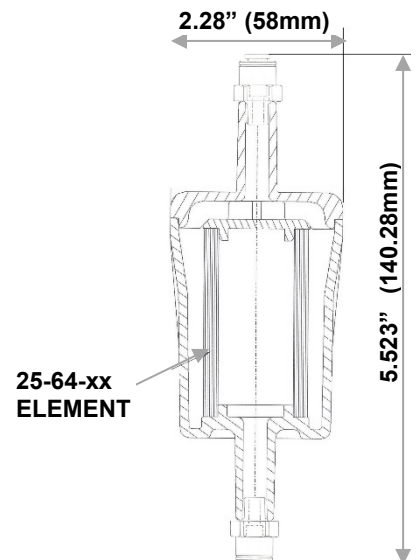
Standard Grade: DIF-LN60-1/4"PTC (99.5% @ 0.01 Micron)

Other Grades Available: 30, 40, 50, 70, 80



### TECHNICAL INFORMATION

- 1/4" Push Connect Fitting
- 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
- Fluorocarbon Borosilicate Glass Microfiber Element
- Standard Gas Flow at 100 PSIG is 17.0 SCFM



Additional Variations are Available Upon Request

# Disposable In-Line Filters – Flow Rate Charts

## 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 PSIG With 1.5 PSID						
		1.5	20	40	60	80	100	125
DIF-MN30	99.99998+%	0.1	0.2	0.3	0.4	0.5	0.6	0.7
DIF-MN40	99.99999+%	0.15	0.3	0.5	0.7	0.8	1.0	1.2
DIF-MN50	99.99+%	0.3	0.6	1.0	1.0	1.7	2.1	2.8
DIF-MN60	99.5+%	0.4	1.0	1.6	2.1	2.7	3.4	4.1
DIF-MN70	95.0+%	0.5	1.1	1.8	2.4	3.0	3.7	4.7
DIF-MN80	75.0+%	0.9	1.3	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 Rates with 1.5 PSID
DIF-MN30	0.3 micron	0.6 GPH / 0.04 LPM
DIF-MN40	1 micron	1.6 GPH / 0.12 LPM
DIF-MN50	2 micron	3.3 GPH / 0.25 LPM
DIF-MN60	8 micron	6.5 GPH / 0.49 LPM
DIF-MN70	25 micron	8.0 GPH / 0.60 LPM
DIF-MN80	75 micron	8.5 GPH / 0.64 LPM

## 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 PSIG With 1.5 PSID						
		1.5	20	40	60	80	100	125
DIF-BN30 or BK30	99.99998+%	0.2	0.4	0.6	0.8	1.0	1.3	1.5
DIF-BN40 or BK40	99.99999+%	0.3	0.7	1.0	1.4	1.7	2.1	2.5
DIF-BN50 or BK50	99.99+%	0.6	1.3	2.0	2.7	3.5	4.2	5.7
DIF-BN60 or BK60	99.5+%	0.9	2.0	3.2	4.3	5.4	6.9	8.2
DIF-BN70 or BK70	95.0+%	1.1	2.3	3.6	4.9	6.0	7.5	9.4
DIF-BN80 or BK80	75.0+%	1.2	2.6	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 Rates with 1.5 PSID
DIF-BN30 or BK30	0.3 micron	1.3 GPH / 0.10 LPM
DIF-BN40 or BK40	1 micron	3.2 GPH / 0.24 LPM
DIF-BN50 or BK50	2 micron	6.6 GPH / 0.50 LPM
DIF-BN60 or BK60	8 micron	13.0 GPH / 0.98 LPM
DIF-BN70 or BK70	25 micron	16.0 GPH / 1.21 LPM
DIF-BN80 or BK80	75 micron	17.0 GPH / 1.29 LPM

Additional Variations are Available Upon Request



**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 PSIG With 1.5 PSID					
		1.5	20	40	60	80	100
DIF-IN30	99.99998+%	0.4	0.7	0.9	1.0	1.5	2.0
DIF-IN40	99.9999+%	0.7	1.7	2.7	3.3	4.1	5.0
DIF-IN50	99.99+%	1.5	3.4	5.3	6.6	8.3	10.0
DIF-IN60	99.5+%	3.0	7.0	11.2	14.0	17.5	21.0
DIF-IN70	95.0+%	3.6	8.4	13.5	17.0	21.5	26.0
DIF-IN80	75.0+%	4.0	9.3	15.0	19.0	24.0	29.0

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

DIF Model Number	Filtration Efficiency 98% Removal Rating	Water Flow Rates with 1.5 PSID	
DIF-IN30	0.3 micron	2.6 GPH / 0.19 LPM	
DIF-IN40	1 micron	6.4 GPH / 0.48 LPM	
DIF-IN50	2 micron	13.2 GPH / 1.00 LPM	
DIF-IN60	8 micron	26.0 GPH / 1.97 LPM	
DIF-IN70	25 micron	32.0 GPH / 2.42 LPM	
DIF-IN80	75 micron	34.0 GPH / 2.57 LPM	

**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 PSIG With 1.5 PSID					
		1.5	20	40	60	80	100
DIF-LN30 or LK30	99.99998+%	0.7	1.5	2.5	3.2	4.1	5.1
DIF-LN40 or LK40	99.9999+%	1.2	2.6	4.0	5.5	7.2	8.0
DIF-LN50 or LK50	99.99+%	2.4	5.1	7.9	11.0	14.0	17.0
DIF-LN60 or LK60	99.5+%	3.8	8.3	13.0	17.0	22.0	26.0
DIF-LN70 or LK70	95.0+%	4.3	9.3	14.0	19.0	24.0	30.0
DIF-LN80 or LK80	75.0+%	4.7	10.0	16.0	22.0	27.0	34.0

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

DIF Model Number	Filtration Efficiency 98% Removal Rating	Water Flow Rates with 1.5 PSID	
DIF-LN30 or LK30	0.3 micron	13.0 GPH / 0.98 LPM	
DIF-LN40 or LK40	1 micron	26.0 GPH / 19.7 LPM	
DIF-LN50 or LK50	2 micron	62.0 GPH / 4.70 LPM	
DIF-LN60 or LK60	8 micron	84.0 GPH / 6.36 LPM	
DIF-LN70 or LK70	25 micron	95.0 GPH / 7.20 LPM	
DIF-LN80 or LK80	75 micron	118.0 GPH / 8.94 LPM	

