DIF
Small Disposable In-Line Filters

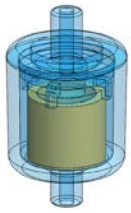
Materials	**Polyamide & PVDF**
Pressure	**Up to 8 Bar**
Ports	**1/4" or 6mm Spigots**
Element	**12.16.☐ & 12.32.☐**

Disposable In-Line Filters (DIF.M and DIF) consist of permanently welded housings with encapsulated microfibre filter elements. This makes them ideal for portable analysers and other analysis systems requiring a robust and easily replaceable filter.

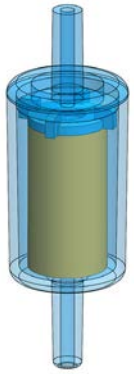
A choice of body materials makes them suitable for a wide range of chemical environments. The units on this page are designed for particulate removal in gas and liquid applications. The K type filter element is fitted as standard, but other element types can also be installed.

Replace the ☐ in the part number with the grade required, for example DIF.N5K

For larger size DIFs see data sheet CF/2.0/050a.



DIF.MN☐



DIF.N☐

Technical Specifications

Housing Model (1)	**DIF.MN☐**	**DIF.MN☐.6mm**	**DIF.MK☐**	**DIF.MK☐.6mm**	**DIF.N☐**	**DIF.N☐.6mm**	**DIF.K☐**	**DIF.K☐.6mm**
Port Spigot Size	Ø 1/4"	Ø 6mm	Ø 1/4"	Ø 6mm	Ø 1/4"	Ø 6mm	Ø 1/4"	Ø 6mm
Maximum Presure, Bar	8	8	4	4	8	8	4	4
Maximum Temperature, °C								
At 0 Bar	110	110	120	120	110	110	120	120
At Maximum Pressure,	50	50	50	50	50	50	50	50
Materials of Construction (2)								
Body	PA	PA	PVDF	PVDF	PA	PA	PVDF	PVDF
Filter Element Size	12.16	12.16	12.16	12.16	12.32	12.32	12.32	12.32
Standard Element (3)	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type
Principal Dimensions in mm								
Diameter	25	25	25	25	25	25	25	25
Body Length	27.5	27.5	27.5	27.5	43.5	43.5	53.5	43.5
Spigot Length	7.5	7.5	7.5	7.5	20	20	20	20
Volume, cc	6	6	6	6	11	11	11	11

Notes

(1) Replace the ☐ with the grade required, e.g. DIF.N5K

(2) Material abbreviations, PA = Polyamide, PVDF = Polyvinylidenediflouride

(3) Other binder types available to order

DIF
Disposable In-Line Filters

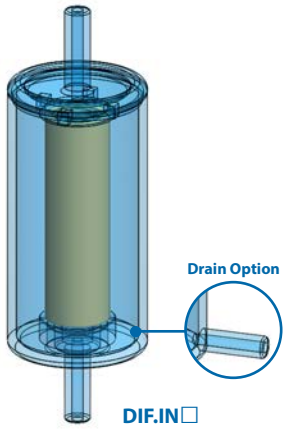
Materials	**Polyamide & PVDF**
Pressure	**Up to 8 Bar**
Ports	**1/4" or 1/2" Spigots**
Element	**12.57.☐ & 25.64.☐**

Disposable In-Line Filters (DIF.I & DIF.L) consist of permanently welded housings with encapsulated microfibre filter elements. This makes them ideal for portable analysers and other analysis systems requiring a robust and easily replaceable filter.

A choice of body materials makes them suitable for a wide range of chemical environments. The units on this page are designed for particulate removal in gas and liquid applications. The K type filter element is fitted as standard, but other element types can also be installed.

The DIF.IN & DIF.IK can be supplied with a drain port spigot for coalescing application.

Replace the ☐ in the part number with the grade required, for example DIF.LN5K



DIF.IN☐

DIF.LK☐

Technical Specifications

Housing Model (1&2)	DIF.IN☐	DIF.IK☐	DIF.LN☐	DIF.LN☐.201	DIF.LK☐	DIF.LK☐.201
Port Spigot Size	Ø 1/4"	Ø 1/4"	Ø 1/2"	1/4" NPT(M)	Ø 1/2"	1/4" NPT(M)
Maximum Presure, Bar	8	4	8	8	4	4
Maximum Temperature, °C						
At 0 Bar	110	120	110	120	110	120
At Maximum Pressure,	50	50	50	50	50	50
Materials of Construction (3)						
Body	PA	PVDF	PA	PA	PVDF	PVDF
Filter Element Size	12.57	12.57	25.64	25.64	25.64	25.64
Standard Element (4)	K Type	K Type	K Type	K Type	K Type	K Type
Principal Dimensions in mm						
Diameter	36.5	36.5	51	51	51	51
Body Length	73.5	73.5	79	79	79	79
Spigot Length	20	20	24	24	24	24
Volume, cc	50	50	110	110	110	110

Notes

(1) Replace the ☐ with the grade required, e.g. DIF.IN5K

(2) DIF.IN and DIF.IK has the drain port option when fitted with a coalescing filter element e.g. DIF.IN5CK

(3) Material abbreviations, PA = Polyamide, PVDF = Polyvinylidenediflouride

(4) Other binder types available to order

DIA
Disposable In-Line Adsorbers

Materials	**Polyamide & PVDF**
Pressure	**Up to 8 Bar**
Ports	**1/4" or 1/2" Spigots**
Adsorbers	**Various**

Disposable In-Line Adsorbers (DIA) consist of polyamide or PVDF bodies filled with granular adsorption material with integral inlet and outlet filter pads. Two body sizes are available, containing approximately 11cc and 110cc of adsorbent.

Flow rates are the same as for grade 5 elements in the same size bodies. However, with adsorption more important considerations will be the volume of adsorbent and the contact time.

A range of adsorber materials are available, these are listed below. Replace the ☐ in the part number with the type required.

DIA.N☐

DIA.LN☐

Technical Specifications

Housing Model (1)	**DIA.N☐**	**DIA.N☐.6mm**	**DIA.K☐**	**DIA.K☐.6mm**	**DIA.LN☐**	**DIA.LN☐.201**	**DIA.LK☐**	**DIA.LK☐.201**
Port Size	Ø 1/4" Spigot	Ø 6mm Spigot	Ø 1/4" Spigot	Ø 6mm Spigot	Ø 1/2" Spigot	Ø 1/4" NPT(M)	Ø 1/2" Spigot	Ø 1/4" NPT(M)
Maximum Presure, Bar	8	8	4	4	8	8	4	4
Maximum Temperature, ºC								
At 0 Bar	110	110	120	120	110	120	110	120
At Maximum Pressure	50	50	50	50	50	50	50	50
Materials of Construction (2)								
Body	PA	PA	PVDF	PVDF	PA	PA	PVDF	PVDF
Adsober (see table below)								
Principal Dimensions in mm								
Diameter	25	25	25	25	51	51	51	51
Body Length	43.5	43.5	43.5	43.5	79	79	79	79
Spigot Length	20	20	20	20	24	24	24	24
Volume, cc	11	11	11	11	110	110	110	110

Grade	**Adsorber**	**Principle Uses**
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapours
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapours
03	Molecular Sieve 4A	Removal of CO_2, NH_3, H_2S, SO_x
04	Molecular Sieve 13X	Removal of CO_2, NH_3, H_2S, SO_x, aromatics, amines
05	Silica Gel (Blue)	Removal of water vapour
05a	Silica Gel (Orange)	Removal of water vapour
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO_2, SO_x, NO_x, HCl
07	Potassium Permanganate	Removal of SO_x and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO_2

Notes

(1) Replace the ☐ with the adsorber required, e.g. DIA.N01

(2) Material abbreviations, PA = Polyamide, PVDF = Polyvinylidenediflouride

Adsorber Cartridges
for Filter Housings

Vapour Adsorption

Coalescing filter elements will only remove liquid aerosols and droplets. If there is a liquid in vapour form to be removed then an adsorber cartridge should be used in an additional housing as a final stage.

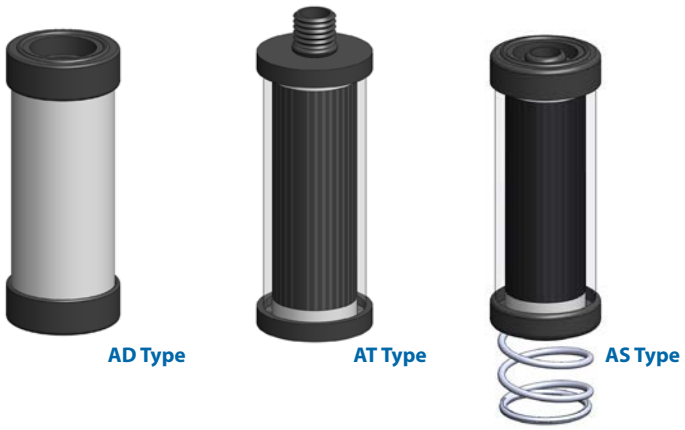
Adsorption cartridges can also be used to remove elements of a gas, for example acidic gases. A range of adsorber materials are available and these are listed below.

Cartridge Types

We have three different styles of adsorber cartridge available - each designed for a particular filter housing.

The AD and AT types can be installed into a standard housing. The AS is designed for small stainless steel housings and to install this type the housing tie rod should be removed.

Refer to the housing data sheets to select the correct size and type of cartridge required.



AD Type AT Type AS Type

Technical Specifications

Cartridge Type (1)	☐.AD☐	☐.AT☐	☐.AS☐
Maximum Temperature, °C	50	50	50
Materials of Construction			
Body	Microfibre Filters	Acrylic	Acrylic
End Caps	PA	PA	PA
Seal	Viton	Viton	Viton
Filter Pads	-	PE	PE
Spring	-	-	SS
Adsorber (see table below)			

Standard Sizes

12.32. ☐ 12.57. ☐ 25.64. ☐ 25.178. ☐ 32.152. ☐ 51.230. ☐ 51.476. ☐

Grade	Adsorber	Principle Uses
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapours
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapours
03	Molecular Sieve 4A	Removal of CO_2, NH_3, H_2S, SO_x
04	Molecular Sieve 13X	Removal of CO_2, NH_3, H_2S, SO_x, aromatics, amines
05	Silica Gel (Blue)	Removal of water vapour
05a	Silica Gel (Orange)	Removal of water vapour
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO_2, SO_X, NO_X, HCl
07	Potassium Permanganate	Removal of SO_X and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO_2

Notes

(1) Replace the first ☐ with the cartridge size and the second ☐ with the adsorber required, e.g. 12.57.AS01

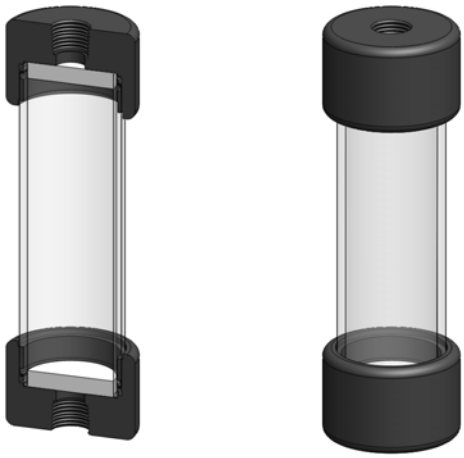
Adsorber Columns
for Granular Media

Vapour Adsorption Columns

Our in-line Adsorption Housings are for the adsorption of various vapours and gas types within a gas stream and provide a simple, low-cost solution. Adsorption columns can also be used to remove specific elements of a gas, for example acidic gases. The media can easily be replaced as the housings have a threaded connection and o-ring seals at each end. Replaceable filter pads are included to contain the media and also remove any loose particles from the granules. It is recommended to use a coalescing filter housing as a pre-filter to remove liquid aerosols and droplets.

Granular Adsorber Media

A range of granular adsorber materials are available and these are listed below. together with the principle uses. We are pleased to advise about any special applications you may have. The media is supplied in resealable plastic containers and two sizes are available, 1 litre or 4 litres.



NAD.38.150

Technical Specifications

Housing Model	NAD.38.150	NAD.38.250	NAD.50.200	NAD.50.350	NAD.70.250	NAD.70.450	NAD.70.650	NAD.100.450	NAD.100.650
Port Sizes	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT
Maximum Pressure, Bar	6	6	5	5	3	3	3	2	2
Maximum Temperature, °C	50	50	50	50	50	50	50	50	50
Materials of Construction									
Body	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic
End Caps	POM	POM	POM	POM	POM	POM	POM	POM	POM
Filter Pads	PE	PE	PE	PE	PE	PE	PE	PE	PE
Principal Dimensions in mm									
Diameter	38	38	50	50	70	70	70	100	100
Height	150	250	200	350	250	450	650	450	650
Volume, cc	80	160	215	440	610	1255	1900	2700	4100

Grade	Adsorber	Principle Uses
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapours
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapours
03	Molecular Sieve 4A	Removal of CO_2, NH_3, H_2S, SO_x
04	Molecular Sieve 13X	Removal of CO_2, NH_3, H_2S, SO_x, aromatics, amines
05	Silica Gel (Blue)	Removal of water vapour
05a	Silica Gel (Orange)	Removal of water vapour
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO_2, SO_X, NO_X, HCl
07	Potassium Permanganate	Removal of SO_X and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO_2

NN212.AD & NN232.AD
Absorber Housing

Materials Polyamide
Pressure 10 Bar
Ports 1/4" or 1/2"

The NN212 & NN232 Adsorber Housings are a simple, cost effective solution for the adsorption of various chemical vapours in a gaseous stream. The hollow tube, with integral filter diverts the gas flow to the base of the bowl allowing complete passage of gas through the adsorber granules. Simply remove the filter bowl without disturbing the line connections to replace the used adsorber media. It is recommended to use a coalescing filter housing as a pre-filter to remove liquid aerosols and droplets.

Housings are available with 1/4" or 1/2" ports and have NPT ports and Viton seals. Other seal types are available as an option. BSPT and BSPP port types are also available.

A range of granular adsorber materials are available and these are listed below. together with the principle uses. We are pleased to advise about any special applications you may have. The media is supplied in resealable plastic containers and two sizes are available, 1 litre or 4 litres.

Technical Specifications

Housing Model	NN212.201.AD	NN212.401.AD	NN232.201.AD	NN232.401.AD
Port Size	1/4" NPT	1/2" NPT	1/4" NPT	1/2" NPT
Drain	None	None	None	None
Maximum Pressure, Bar	10	10	10	10
Maximum Temperature, °C	50	50	50	50
Materials of Construction				
Head, Bowl & Internals	PA	PA	PA	PA
Seals	Viton	Viton	Viton	Viton
Filter Pads	PE	PE	PE	PE
Principal Dimensions in mm				
Diameter	65	65	65	65
Height	147	147	246	246
Volume, cc	125	125	250	250
Weight, kg	0.2	0.2	0.25	0.25
Accessories				
Mounting Bracket	MBSS21	MBSS21	MBSS21	MBSS21

Grade	Adsorber	Principle Uses
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapours
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapours
03	Molecular Sieve 4A	Removal of CO_2, NH_3, H_2S, SO_x
04	Molecular Sieve 13X	Removal of CO_2, NH_3, H_2S, SO_x, aromatics, amines
05	Silica Gel (Blue)	Removal of water vapour
05a	Silica Gel (Orange)	Removal of water vapour
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO_2, SO_X, NO_X, HCl
07	Potassium Permanganate	Removal of SO_X and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO_2

SS127.AD
Absorber Housing

Materials	**316L Stainless Steel**
Pressure	**350 Bar**
Ports	**1/8” or 1/4”**

The SS127 Adsorber Housings are a compact, simple but high performance solution for the adsorption of various chemical vapours in a gaseous stream. The hollow tube, with integral filter diverts the gas flow to the base of the bowl allowing complete passage of gas through the adsorber granules. Simply remove the filter bowl without disturbing the line connections to replace the used adsorber media. It is recommended to use a coalescing filter housing as a pre-filter to remove liquid aerosols and droplets.

Housings are available with 1/4" or 1/2" ports and have NPT ports and Viton seals. Other seal types are available as an option. BSPT and BSPP port types are also available.

A range of granular adsorber materials are available and these are listed below. together with the principle uses. We are pleased to advise about any special applications you may have. The media is supplied in resealable plastic containers and two sizes are available, 1 litre or 4 litres.

Technical Specifications

Housing Model	**SS127.101.AD**	**SS127.201.AD**
Port Size	1/8" NPT	1/4" NPT
Drain	None	None
Maximum Pressure, Bar	350	350
Maximum Temperature, ºC	200	200
Materials of Construction		
Head, Bowl & Internals	316L SS	316L SS
Seals	Viton	Viton
Filter Disc	316L SS	316L SS
Principal Dimensions in mm		
Diameter	36	36
Height	103.5	103.5
Volume, cc	25	25
Weight, kg	0.5	0.5
Accessories		
Mounting Bracket	MBSS11	MBSS11

Grade	**Adsorber**	**Principle Uses**
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapours
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapours
03	Molecular Sieve 4A	Removal of CO_2, NH_3, H_2S, SO_x
04	Molecular Sieve 13X	Removal of CO_2, NH_3, H_2S, SO_x, aromatics, amines
05	Silica Gel (Blue)	Removal of water vapour
05a	Silica Gel (Orange)	Removal of water vapour
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO_2, SO_X, NO_X, HCl
07	Potassium Permanganate	Removal of SO_X and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO_2

SS215.AD & SS235.AD
Absorber Housing

Materials 316L Stainless Steel
Pressure 100 Bar
Ports 1/4" or 1/2"

The SS215 and SS235 Adsorber Housings are a simple but high performance solution for the adsorption of various chemical vapours in a gaseous stream. The hollow tube, with integral filter diverts the gas flow to the base of the bowl allowing complete passage of gas through the adsorber granules. Simply remove the filter bowl without disturbing the line connections to replace the used adsorber media. It is recommended to use a coalescing filter housing as a pre-filter to remove liquid aerosols and droplets.

Housings are available with 1/4" or 1/2" ports and have NPT ports and Viton seals. Other seal types are available as an option. BSPT and BSPP port types are also available.

A range of granular adsorber materials are available and these are listed below. together with the principle uses. We are pleased to advise about any special applications you may have. The media is supplied in resealable plastic containers and two sizes are available, 1 litre or 4 litres.

Technical Specifications

Housing Model	SS215.201.AD	SS215.401.AD	SS235.201.AD	SS235.401.AD
Port Size	1/4" NPT	1/2" NPT	1/4" NPT	1/2" NPT
Drain	None	None	None	None
Maximum Pressure, Bar	100	100	100	100
Maximum Temperature, °C	50	50	50	50
Materials of Construction				
Head, Bowl & Internals	316L SS	316L SS	316L SS	316L SS
Seals	Viton	Viton	Viton	Viton
Filter Pads	PE	PE	PE	PE
Principal Dimensions in mm				
Diameter	60	60	60	60
Height	128.5	128.5	241.5	241.5
Volume, cc	110	110	220	220
Weight, kg	1.45	1.45	1.95	1.95
Accessories				
Mounting Bracket	MBSS21	MBSS21	MBSS21	MBSS21

Grade	Adsorber	Principle Uses
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapours
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapours
03	Molecular Sieve 4A	Removal of CO_2, NH_3, H_2S, SO_x
04	Molecular Sieve 13X	Removal of CO_2, NH_3, H_2S, SO_x, aromatics, amines
05	Silica Gel (Blue)	Removal of water vapour
05a	Silica Gel (Orange)	Removal of water vapour
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO_2, SO_x, NO_x, HCl
07	Potassium Permanganate	Removal of SO_x and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO_2

SS218.AD & SS238.AD
Absorber Housing

Materials 316L Stainless Steel
Pressure 400 Bar
Ports 1/4" or 1/2"

The SS218 and SS238 Adsorber Housings are a simple but high performance solution for the adsorption of various chemical vapours in a gaseous stream. The hollow tube, with integral filter diverts the gas flow to the base of the bowl allowing complete passage of gas through the adsorber granules. Simply remove the filter bowl without disturbing the line connections to replace the used adsorber media. It is recommended to use a coalescing filter housing as a pre-filter to remove liquid aerosols and droplets.

Housings are available with 1/4" or 1/2" ports and have NPT ports and Viton seals. Other seal types are available as an option. BSPT and BSPP port types are also available.

A range of granular adsorber materials are available and these are listed below. together with the principle uses. We are pleased to advise about any special applications you may have. The media is supplied in resealable plastic containers and two sizes are available, 1 litre or 4 litres.

Technical Specifications

Housing Model	SS218.201.AD	SS218.401.AD	SS238.201.AD	SS238.401.AD
Port Size	1/4" NPT	1/2" NPT	1/4" NPT	1/2" NPT
Drain	None	None	None	None
Maximum Pressure, Bar	400	400	400	400
Maximum Temperature, ºC	50	50	50	50
Materials of Construction				
Head, Bowl & Internals	316L SS	316L SS	316L SS	316L SS
Seals	Viton	Viton	Viton	Viton
Filter Pads	PE	PE	PE	PE
Principal Dimensions in mm				
Diameter	85	85	85	85
Height	147	147	264	264
Volume, cc	110	110	220	220
Weight, kg	2.55	2.55	5.75	5.75
Accessories				
Mounting Bracket	MBSS218	MBSS218	MBSS218	MBSS218

Grade	Adsorber	Principle Uses
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapours
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapours
03	Molecular Sieve 4A	Removal of CO_2, NH_3, H_2S, SO_x
04	Molecular Sieve 13X	Removal of CO_2, NH_3, H_2S, SO_x, aromatics, amines
05	Silica Gel (Blue)	Removal of water vapour
05a	Silica Gel (Orange)	Removal of water vapour
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO_2, SO_X, NO_X, HCl
07	Potassium Permanganate	Removal of SO_X and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO_2