

## AIR PREPARATION UNITS

### FILTER REGULATOR COMBINATION Series FRC1

Cat No FRC1 - 01 - C

#### FILTER REGULATOR COMBINATION - 1/4, 3/8, 1/2, 3/4, 1"

#### Features

- Modular type
- Suitable for panel mounting
- Filter
  - Bronze filtering element.
  - Separator and shield for efficient moisture separation.
- Regulator
  - Diaphragm operated, relieving type.
  - Pressure compensated by balanced poppet.
  - Flow compensated in models FRC14, FRC15 & FRC17 ( with venturi ) for faster response.
  - Non raising ' Press to lock ' adjusting knob for locking at any set pressure.
- Steel bowl guard, bayonet type on FRC14, FRC15 & FRC17 models and threaded type on FRC13 model.
- Good flow and regulating characteristics.

#### Technical Specifications

Model	FRC 13	FRC 14	FRC 15	FRC 17	FRC 17
Medium	Compressed air				
Port size	G1/4	G3/8	G1/2	G3/4	G1
Pressure gauge port size	G1/8	G1/8	G1/8	G1/4	G1/4
Flow rate ( lts / min ) <sup>@</sup>	550	1800	3000	4250	5500
Maximum supply pressure (bar)	10				
Regulating pressure range <sup>#</sup> (bar)	0.2 - 2, 0.2 - 4, 0.5 - 7, 0.5 - 10 (Standard)				
Ambient / Medium temperature	5° - 50° C				
Filtration <sup>#</sup> (µm)	1, 5, 25, 40 (standard), 50, 100				
Bowl capacity (ml) (at maximum condensate level)	9	32	44	165	165
Bowl material	Polycarbonate				
Installation	Vertical (as shown in the picture)				
Materials of construction	Aluminium, Bronze, Brass, Steel, Acetal, Polycarbonate, SS, Nitrile				
Optional accessories <sup>*</sup>	Clamp, Modular mounting kit, Pressure gauge				
Weight (Kg)	0.30	0.58	1.27	2.09	2.05

<sup>@</sup> Supply pressure 7 bar, Set pressure 6 bar, Pressure drop  $\Delta p = 1$  bar ( For standard models )

<sup>#</sup> For details see " How to order "

<sup>\*</sup> For details refer optional accessories Cat No APA - 01 - C

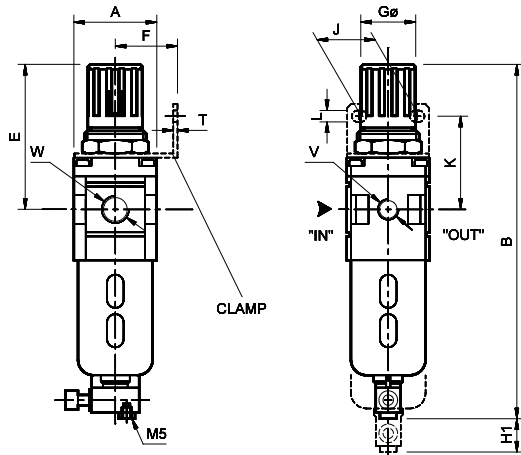
#### Precautions

1. Note the direction of flow before installation and connect piping accordingly.
2. Flush pipings for dirt, dust, rust and other foreign particles.
3. Install in clean atmosphere.
4. Nipples of taper threads ( R ) to be used with teflon tape. Ensure teflon tape does not enter the unit during tightening. Nipples of straight threads ( G ) to be used with sealing washer.
5. Polycarbonate bowls may get damaged and possibly fail if exposed to synthetic oils, thinner, solvents, trichloroethylene kerosene or other aromatic hydrocarbons.

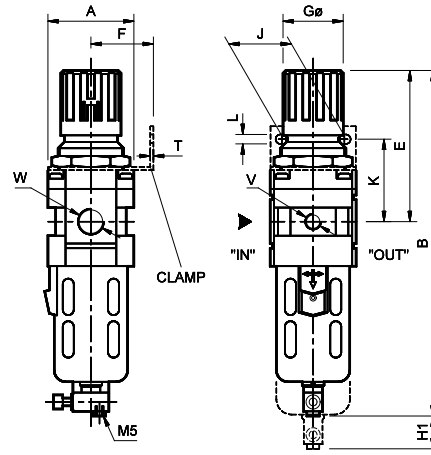
## AIR PREPARATION UNITS FILTER REGULATOR COMBINATION Series FRC1

Cat No FRC1 - 01 - C

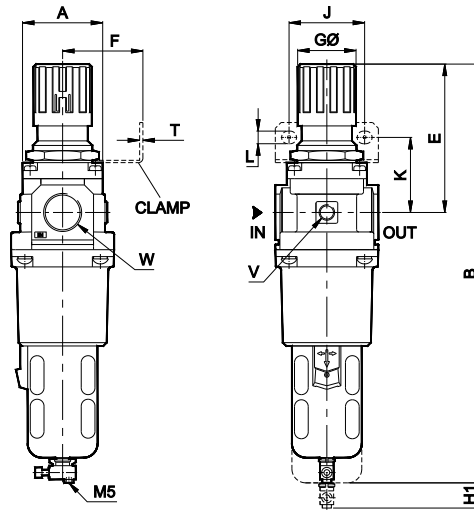
Model FRC13



Model FRC14 & FRC15



Model FRC17



Model	W	V	A	B	E	K	F	GØ	J	L	T	H1
FRC13	G1/4	G1/8	SQ 40	170	68	45	30	28	28	5.5	2	50
FRC14	G3/8	G1/8	SQ 55	220	95	53	40	40	40	6.5	2	55
FRC15	G1/2	G1/8	SQ 70	280	125	62	50	51	55	8.5	2	80
FRC17	G3/4	G1/4	SQ 90	370	130	65	70	51	66	11	5	80
FRC17	G1	G1/4	SQ 90	370	130	65	70	51	66	11	5	80

For Details of Clamp see optional accessories Cat No APA - 01 - C

### Pressure Setting

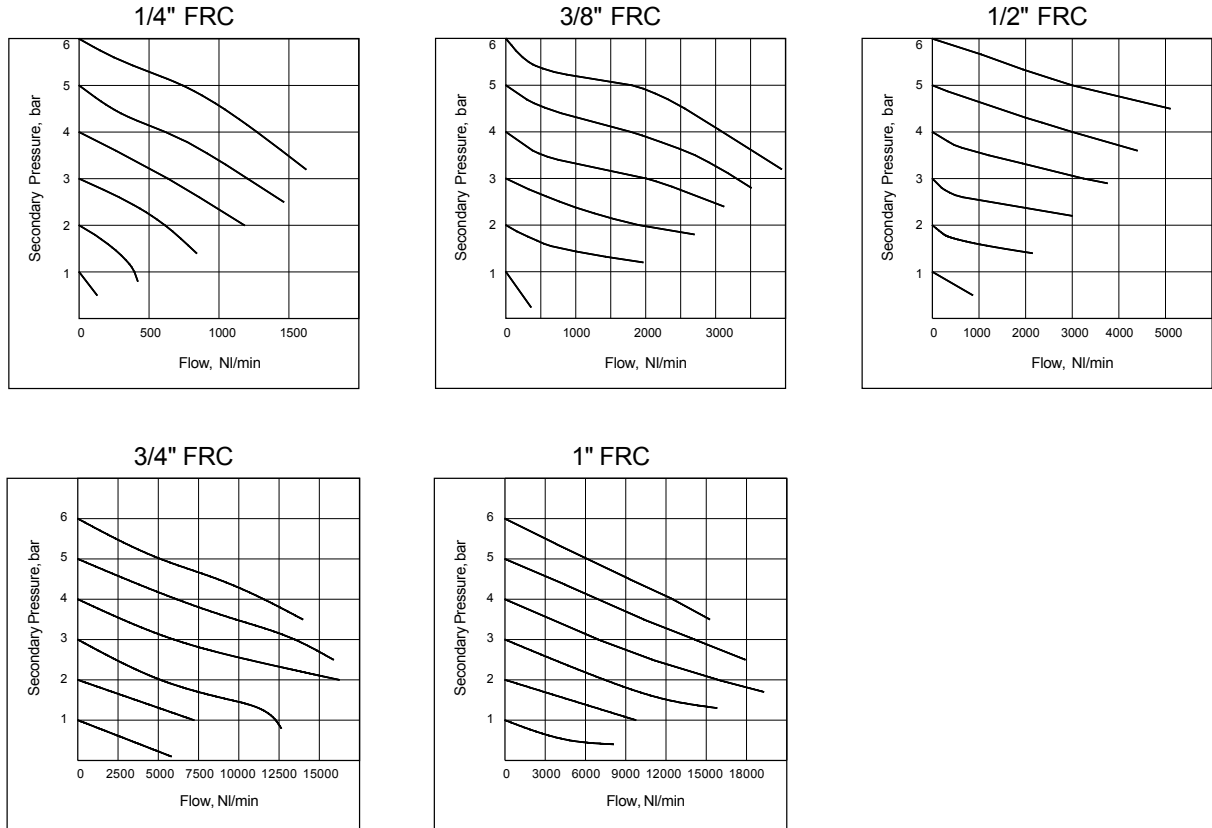
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position.  
( Turning the knob counter clockwise will reduce the pressure )

# AIR PREPARATION UNITS

## FILTER REGULATOR COMBINATION Series FRC1

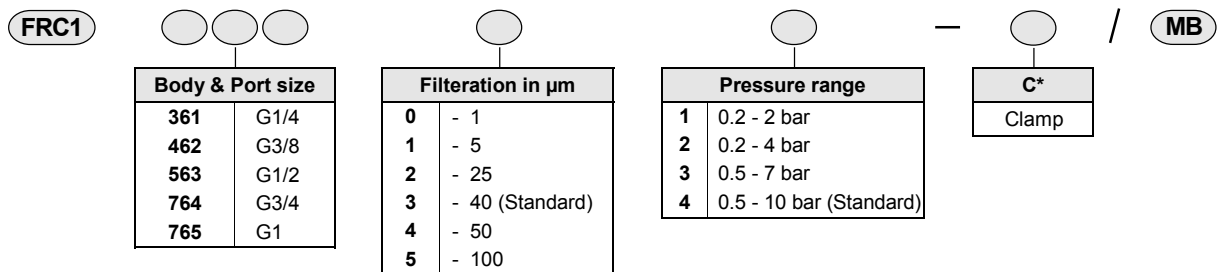
Cat No FRC1 - 01 - C

### Flow Graphs



Flow graphs are for 40µm filtrations only

### How to order



#### Ordering example

\* Filter Regulator Combination with Clamp :-

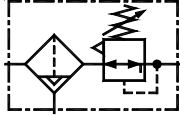
Filter Regulator Combination - 3/8 size ( with G3/8 port ), 50µm filter and pressure range 0.5 - 7 bar with clamp

Ordering No: **FRC146243-C/MB**

Filter Regulator Combination without Clamp :-

Filter Regulator Combination - 3/8 size ( with G3/8 port ), 50µm filter and pressure range 0.5 - 7 bar : Ordering No: **FRC146243/MB**

If ordered as FRC 3/8 our standard model FRC146234, with 40µm filter and pressure range 0.5 - 10 bar will be supplied.



## AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION WITH INTERNAL AUTODRAIN - Series FRC1A

Cat No FRC1A - 01 - C

### FILTER REGULATOR COMBINATION with Internal Autodrain - 3/8, 1/2, 3/4, 1"

#### Features

- Modular type
- Suitable for panel mounting
- Filter
  - Bronze filtering element.
  - Separator and shield for efficient moisture separation.
  - Bayonet type steel bowl guard
- Internal Autodrain
  - Float type, no electrical connections required.
  - Provided with manual drain.
  - Provision for drain tube connection, to take the condensate away from the unit, to keep the working area clean.
- Regulator
  - Diaphragm operated, relieving type.
  - Pressure compensated by balanced poppet.
  - Flow compensated ( with venturi ) for faster response.
  - Non raising ' Press to lock ' adjusting knob for locking at any set pressure.
- Good flow and regulating characteristics.

#### Technical Specifications

Model	FRC14....A	FRC15....A	FRC17....A	FRC17....A
Medium	Compressed air			
Port size	G3/8	G1/2	G3/4	G1
Pressure gauge port size	G1/8	G1/8	G1/4	G1/4
Flow rate (lts / min) <sup>@</sup>	1800	3000	4250	5500
Operating pressure (bar)	2 - 10			
Regulating pressure range <sup>#</sup> (bar)	0.2 - 2, 0.2 - 4, 0.5 - 7, 0.5 - 10 (Standard)			
Ambient / Medium temperature	5° - 50° C			
Filtration <sup>#</sup> (µm)	1, 5, 25 , 40 (Standard), 50, 100			
Bowl capacity (ml) (at maximum condensate level)	35	65	165	165
Bowl material	Polycarbonate			
Installation	Vertical (as in the picture)			
Materials of construction	Aluminium, Bronze, Steel, Acetal, Polycarbonate, SS, Nitrile			
Optional accessories <sup>*</sup>	Clamp, Modular mounting kit, Pressure Gauge			
Weight (Kg)	0.74	1.50	2.1	2.07

<sup>@</sup> Supply pressure 7 bar , Set pressure 6 bar , Pressure drop  $\Delta p = 1$  bar ( For standard models )

<sup>#</sup> For details see " How to order "

<sup>\*</sup> For details refer optional accessories Cat No APA - 01 - C

#### Precautions

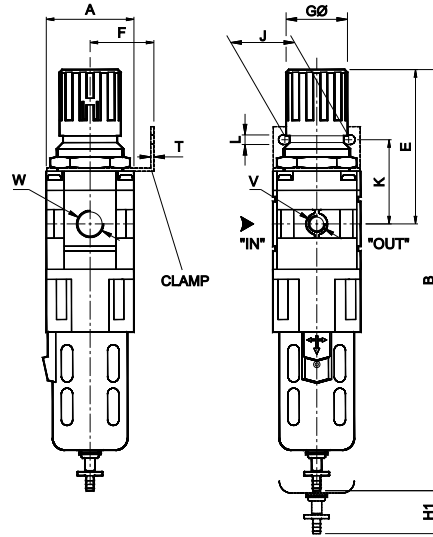
1. Note the direction of flow before installation and connect piping accordingly.
2. Flush pipings for dirt, dust, rust and other foreign particles.
3. Install in clean atmosphere.
4. Nipples of taper threads ( R ) to be used with teflon tape. Ensure teflon tape does not enter the unit during tightening.  
Nipples of straight threads ( G ) to be used with sealing washer.
5. Polycarbonate bowls may get damaged and possibly fail if exposed to synthetic oils, thinner, solvents, trichloroethylene kerosene or other aromatic hydrocarbons.

## AIR PREPARATION UNITS

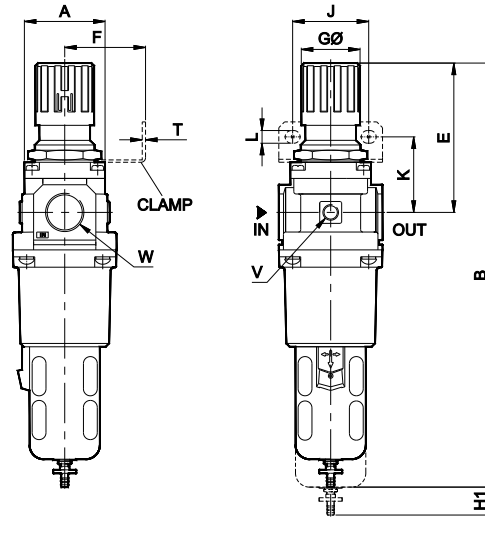
FILTER REGULATOR COMBINATION WITH INTERNAL AUTODRAIN - Series FRC1A

Cat No FRC1A - 01 - C

Model FRC14...-A, FRC15...-A



Model FRC17...-A



Model	W	V	A	B	E	K	F	GØ	J	L	T	H1
FRC14...A	G3/8	G1/8	SQ 55	272	95	53	40	40	40	6.5	2	60
FRC15...A	G1/2	G1/8	SQ 70	335	125	62	50	51	55	8.5	2	85
FRC17...A	G3/4	G1/4	SQ 90	368	130	65	70	51	66	11	5	85
FRC17...A	G1	G1/4	SQ 90	368	130	65	70	51	66	11	5	85

For Details of Clamp see optional accessories Cat No APA - 01 - C

### Pressure Setting

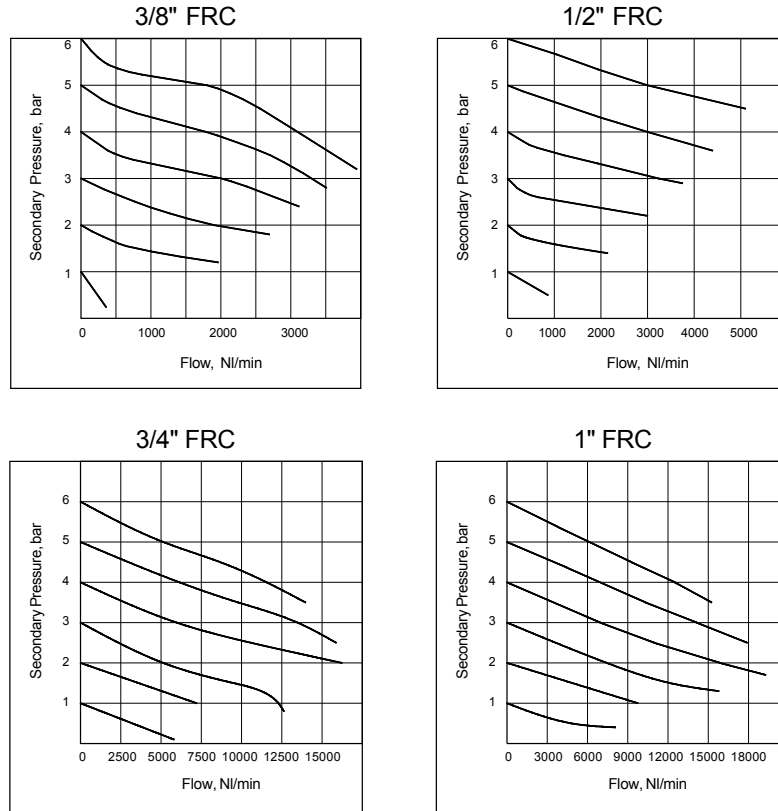
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position.  
( Turning the knob counter clockwise will reduce the pressure )

# AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION WITH INTERNAL AUTODRAIN - Series FRC1A

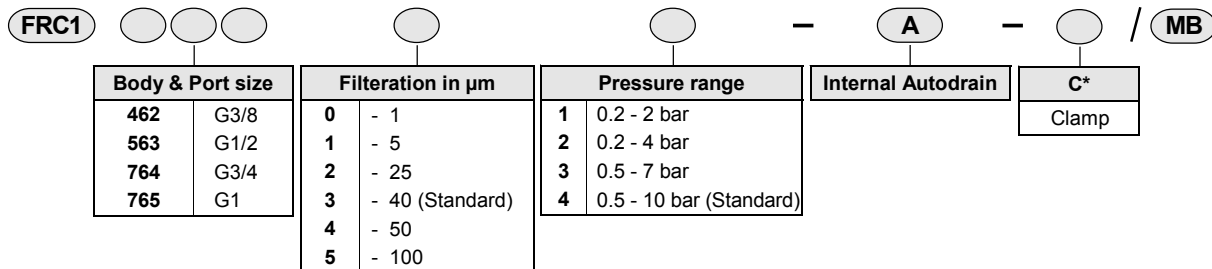
Cat No FRC1A - 01 - C

## Flow Graphs



Flow graphs are for 40µm filtrations only

## How to order

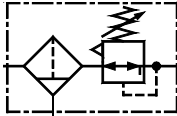


### Ordering example

\* Filter Regulator Combination Internal Autodrain with Clamp :-  
FRC Internal Autodrain - 3/8 size ( with G3/8 port ), 50µm filter and pressure range 0.5 - 7 bar with clamp  
Ordering No: **FRC146243-A-C/MB**

\* Filter Regulator Combination Internal Autodrain without Clamp :-  
FRC Internal Autodrain - 3/8 size ( with G3/8 port ), 50µm filter and pressure range 0.5 - 7 bar : Ordering No: **FRC146243-A/MB**

If ordered as FRC 3/8 our standard model FRC 146234, with 40µm filter and pressure range 0.5 -10 bar will be supplied.



## AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION WITH METAL BOWL - Series FRC1M

Cat No FRC1M - 01 - C

### FILTER REGULATOR COMBINATION with Metal Bowl - 1/4, 3/8, 1/2, 3/4, 1"

#### Features

- Modular type
- Suitable for panel mounting
- Filter
  - Bronze filtering element.
  - Separator and shield for efficient moisture separation.
  - Press type manual drain for easy operation
  - Suitable for automatic drain
- Regulator - Diaphragm operated, relieving type.
  - Pressure compensated by balanced poppet.
  - Flow compensated
  - Non raising ' Press to lock ' adjusting knob
- Aluminium bowl guard, bayonet type (3/4 and 1" only)
- Good flow and regulating characteristics.

#### Application

These type of filters are used for Chemical, Paintshops, Pharmaceutical, Foundry etc.

#### Technical Specifications

Model	FRC13...M	FRC14...M	FRC15...M	FRC17...M	FRC17...M
Medium	Compressed air				
Port size	G1/4	G3/8	G1/2	G3/4	G1
Pressure gauge port size	G1/8	G1/8	G1/8	G1/4	G1/4
Flow rate <sup>Ⓢ</sup> (lts / min)	550	1800	3000	6000	6500
Maximum supply pressure (bar)	20				
Regulating pressure range <sup>#</sup> (bar)	0.2 - 2, 0.2 - 4, 0.5 - 7, 0.5 - 10 (Standard)				
Ambient / Medium temperature	5° - 60° C				
Filtration <sup>#</sup> (µm)	1, 5, 25, 40 (standard), 50, 100				
Bowl capacity (ml) (At max. condensate level)	9	64	90	165	165
Bowl material	Aluminium				
Installation	Vertical (as shown in the picture)				
Materials of construction	Aluminium, Bronze, Brass, Steel, Acetal, SS, Nitrile				
Optional accessories *	Clamp, Modular mounting kit, Pressure gauge				
Weight (Kg)	0.30	0.70	1.50	2.16	2.12

<sup>Ⓢ</sup> Supply pressure 7 bar , Set pressure 6 bar , pressure drop  $\Delta p = 1$  bar ( For standard models ).

<sup>#</sup> For details see " How to order ".

\* For details refer optional accessories Cat No AP1A - 01 - C

#### Precautions

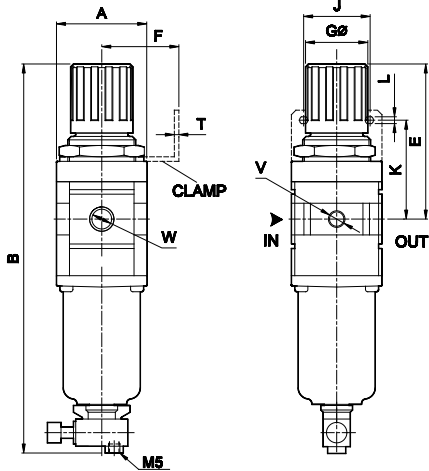
1. Note the direction of flow before installation and connect piping accordingly.
2. Flush pipings for dirt, dust, rust and other foreign particles.
3. Install in clean atmosphere.
4. Nipples with taper threads ( R ) to be used with teflon tape. Ensure teflon tape does not enter the unit during tightening.  
Nipples with straight threads ( G ) to be used with sealing washer.

# AIR PREPARATION UNITS

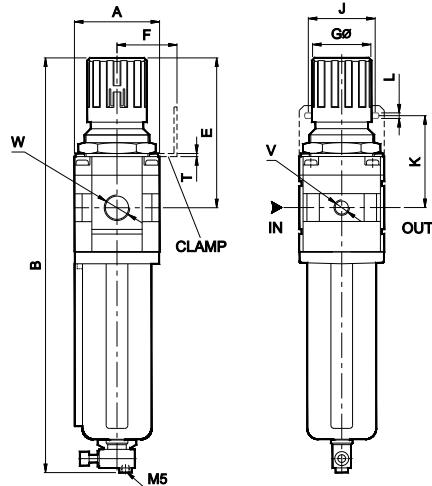
## FILTER REGULATOR COMBINATION WITH METAL BOWL - Series FRC1M

Cat No FRC1M - 01 - C

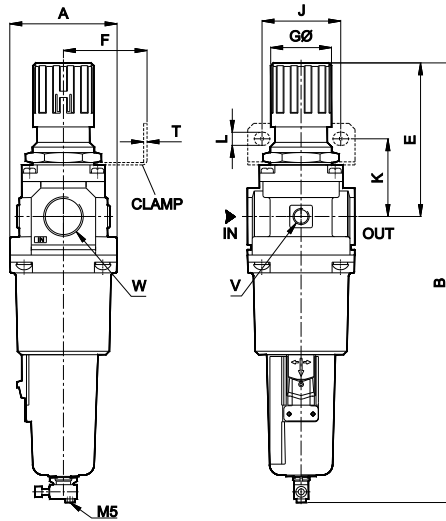
Model FRC13...M



Model FRC14...M & FRC15...M



Model FRC17...-MM



Model	W	V	A	B	E	K	F	GØ	J	L	T
FRC13...M	G1/4	G1/8	SQ 40	172	68	45	30	28	28	5.5	2
FRC14...M	G3/8	G1/8	SQ 55	265	95	53	40	40	40	6.5	2
FRC15...M	G1/2	G1/8	SQ 70	330	125	62	50	51	55	8.5	2
FRC17...M	G3/4	G1/4	SQ 90	371	130	65	70	51	66	11	5
FRC17...M	G1	G1/4	SQ 90	371	130	65	70	51	66	11	5

For Details of Clamp see optional accessories Cat No APA - 01

### Pressure Setting

Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position.  
( Turning the knob counter clockwise will reduce the pressure )

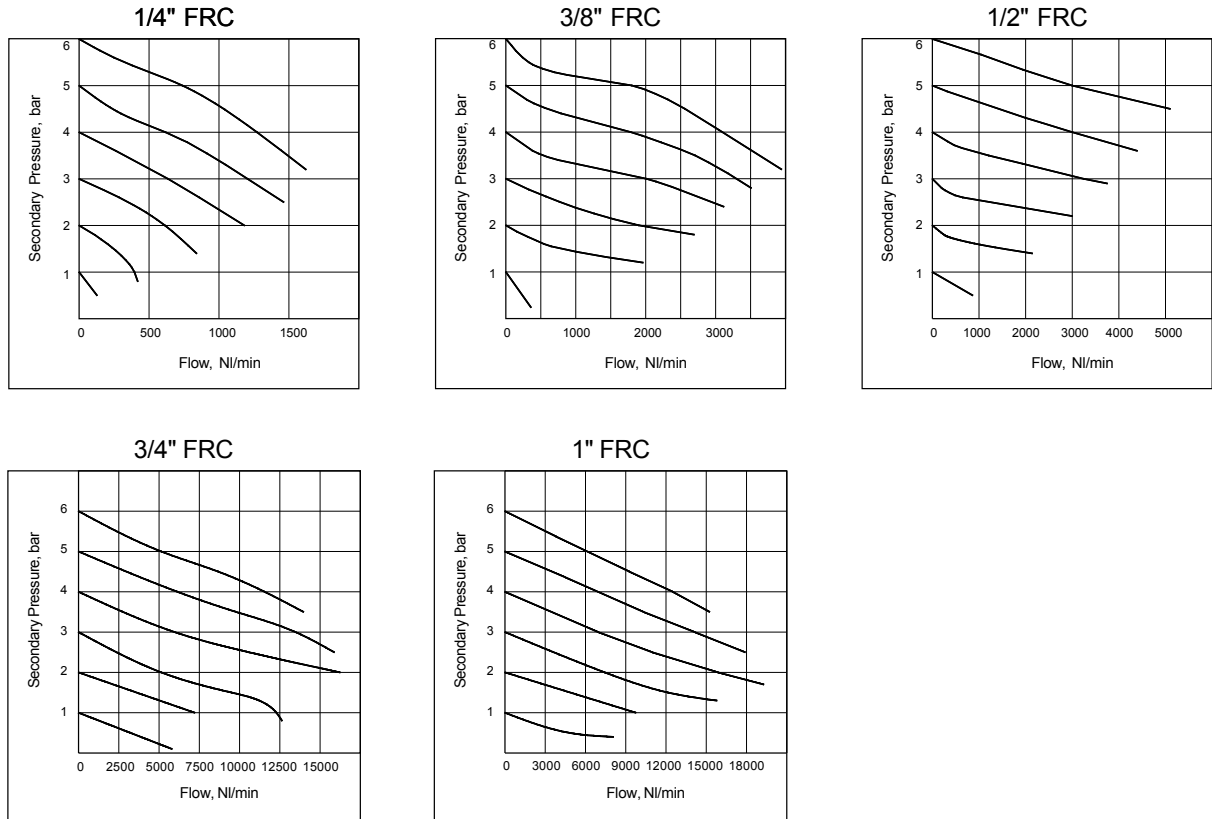


# AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION WITH METAL BOWL - Series FRC1M

Cat No FRC1M - 01 - C

## Flow Graphs



Flow graphs are for 40µm filtrations only

## How to order

Body & Port size	Filteration in µm	Pressure range	Metal bowl	Drain arrangement	C*
<b>361</b> G1/4	<b>0</b> - 1	<b>1</b> 0.2 - 2 bar	<b>M</b> Without level indicator	<b>M</b> Manual drain (Standard)	Clamp
<b>462</b> G3/8	<b>1</b> - 5	<b>2</b> 0.2 - 4 bar			
<b>563</b> G1/2	<b>2</b> - 25	<b>3</b> 0.5 - 7 bar	<b>A*</b> Auto drain		
<b>764</b> G3/4	<b>3</b> - 40 (Standard)	<b>4</b> 0.5 - 10 bar (Standard)			
<b>765</b> G1	<b>4</b> - 50				
	<b>5</b> - 100				

\* Auto Drain - G3/8, G1/2, G3/4 & G1 model only

### Ordering example

\* Filter Regulator Combination Metal bowl with Clamp :-

FRC Metal bowl - 3/8 size ( with G3/8 port ), 50µm filter and pressure range 0.5 - 7 bar with clamp: Ordering No: **FRC146243-MA-C/MB**

\* Filter Regulator Combination Metal bowl without Clamp :-

FRC Metal bowl - 3/8 size ( with G3/8 port ), 50µm filter and pressure range 0.5 - 7 bar : Ordering No: **FRC146243-MA/MB**

If ordered as FRC 3/8 our standard model FRC 146234, with 40µm Filter and pressure range 0.5 -10 bar will be supplied.