

AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION Series FRC1

Cat No FRC1 - 02

FILTER REGULATOR COMBINATION 1/4 3/8 1/2

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 and FRC15 for faster response.
 - Non raising ' Press to lock ' adjusting knob for locking at any set pressure.
- Steel bowl guard , bayonet type on FRC14 & FRC15 models and threaded type on FRC13 model.
- Good flow and regulating characteristics.



Technical Specifications

Model	FRC 13	FRC 14	FRC 15
Medium	Compressed air		
Port size	G 1 / 4	G 3 / 8	G 1 / 2
Pressure gauge port size	G 1 / 8	G 1 / 8	G 1 / 8
Flow rate lts / min @	550	1800	3000
Max Supply pressure	10 bar		
Regulating Pressure Range #	0.2 - 2 bar, 0.2 - 4 bar, 0.5 - 7 bar, 0.5 - 10 bar (Standard)		
Ambient / Medium temperature	5° - 60° C		
Filtration #	5 µm, 25 µm, 40 µm (standard), 50 µm, 100 µm		
Bowl capacity (at maximum condensate level)	9 ml	32 ml	44 ml
Bowl material	Polycarbonate		
Installation	Vertical (as shown in the picture)		
Materials of construction	Aluminium, Bronze, Brass, Steel, Acetal, Polycarbonate, SS, Nitrile		
Weight	0.30 Kg	0.58 Kg	1.27 Kg
Optional accessories *	Clamp, Modular mounting kit, Pressure gauge		

© Supply pressure 7 bar , Set pressure 6 bar , Pressure drop $\Delta p = 1$ bar (For standard models)

For details see " How to order "

★ For details refer optional accessories Cat No. APA - 01

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.

Pressure Setting

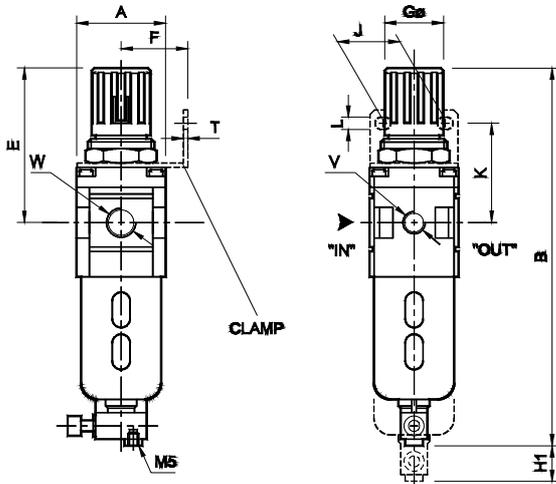
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position. (Turning the knob counter clockwise will reduce the pressure)

AIR PREPARATION UNITS

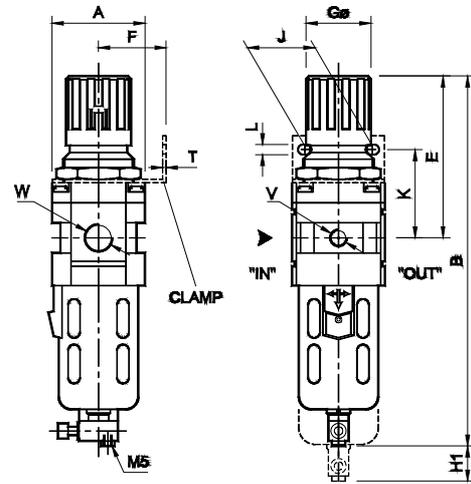
FILTER REGULATOR COMBINATION Series FRC1

Cat No FRC1 - 02

Model FRC 13



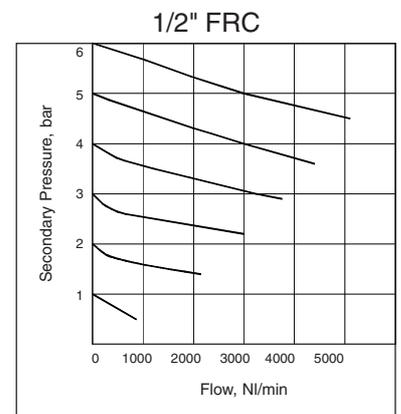
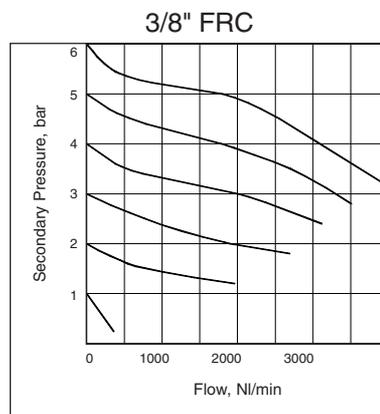
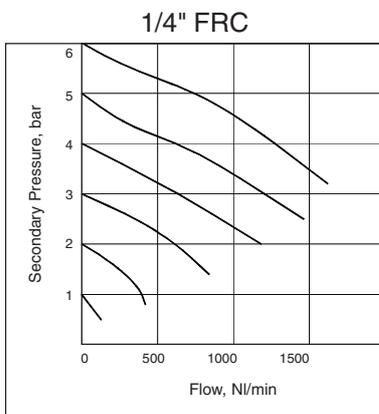
Model FRC 14 & FRC 15



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

Model	W	V	A	B	E	K	F	GØ	J	L	T	H1
FRC13	G1/4	G1/8	40 [□]	170	68	45	30	28	28	5.5	2	50
FRC14	G3/8	G1/8	55 [□]	220	95	53	40	40	40	6.5	2	55
FRC15	G1/2	G1/8	70 [□]	280	125	62	50	51	55	8.5	2	80

Flow Graphs



How to order

FRC 1



Body & Port size
3 6 1 -- G 1 / 4
4 6 2 -- G 3 / 8
5 6 3 -- G 1 / 2



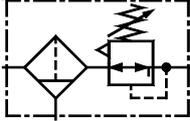
Filtration in µm
1 --- 5 µm
2 --- 25 µm
3 --- 40 µm (Standard)
4 --- 50 µm
5 --- 100 µm



Pressure Range
1 -- 0.2 - 2 bar
2 -- 0.2 - 4 bar
3 -- 0.5 - 7 bar
4 -- 0.5 - 10 bar (Standard)

Ordering example :- Filter Regulator Combination - 3/8 size (with G3/8 port) with 5µm Filter and pressure range 0.5 - 7 bar
Ordering No : FRC 146213.
If ordered as FRC 3/8 our standard model FRC 146234, with 40µm Filter and pressure range 0.5 -10 bar will be supplied.

Subject to change



AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION Series FRC1

Cat No FRC1 - 1 - 02 - 01

FILTER REGULATOR COMBINATION - 3/4 & 1" SIZES

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 (with venturi) for faster response
 - Non raising ' Press to lock ' adjusting knob for locking at any set pressure.
- Steel bowl guard, bayonet type
- Good flow and regulating characteristics.



Technical Specifications

Model	FRC17	
Medium	Compressed air	
Port size	G3/4	G1
Pressure gauge port size	G1/4	
Flow rate lts / min @	4250	5500
Max Supply pressure	10 bar	
Regulating Pressure Range #	0.2 - 2 bar, 0.2 - 4 bar, 0.5 - 7 bar, 0.5 - 10 bar (Standard)	
Ambient / Medium temperature	5° - 60° C	
Filteration #	1 µm, 5 µm, 25 µm, 40 µm (standard), 50 µm, 100 µm	
Bowl capacity (at maximum condensate level)	165 ml	165 ml
Bowl material	Polycarbonate	
Installation	Vertical (as in the picture)	
Materials of construction	Aluminium, Bronze, Steel, Acetal, Polycarbonate, SS, Nitrile	
Optional accessories *	Clamp, Modular mounting kit, Pressure gauge	
Weight	2.090	2.050

@ Supply pressure 7 bar, Set pressure 6 bar, Pressure drop $\Delta p = 1\text{bar}$ (For standard models)

For details see " How to order "

* For details refer optional accessories Cat No. APA - 02

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.

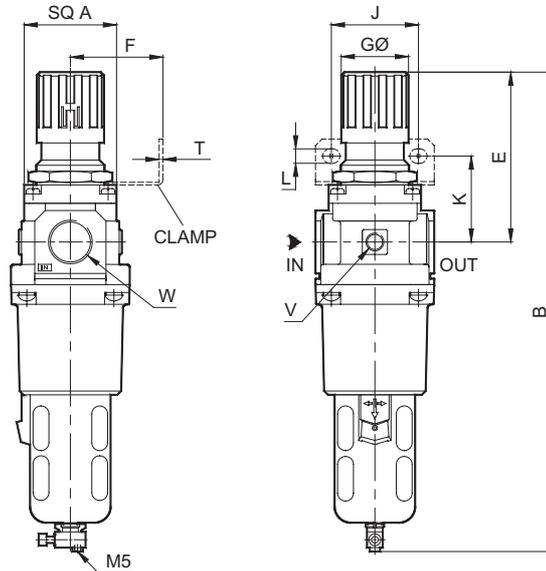
Pressure Setting

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 - 1 - 02 - 01

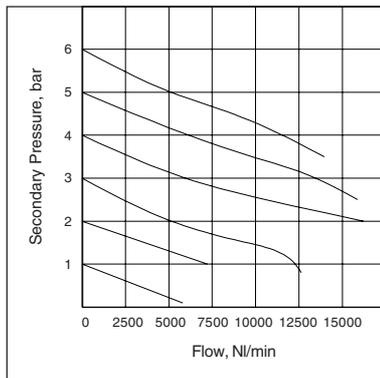
Model FRC1764, FRC1765



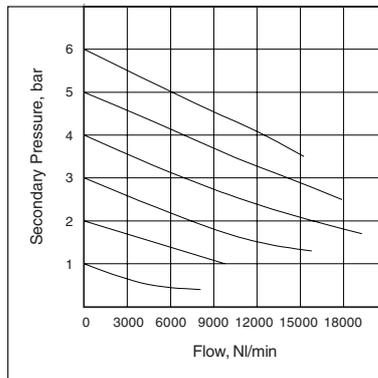
Model	W	V	A	B	E	K	F	GØ	J	L	T
FRC1764	G3/4	G1/4	SQ 90	370	130	65	70	51	66	11	5
FRC1765	G1	G1/4	SQ 90	370	130	65	70	51	66	11	5

Flow Graphs

3/4" FRC



1" FRC



Flow graphs are for 40µm filtrations only

How to order

FRC 1

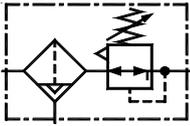
○
Body & Port size
764 -- G3/4
765 -- G1

○
Filtration µm
0 --- 1 µm
1 --- 5 µm
2 --- 25 µm
3 --- 40 µm (Standard)
4 --- 50 µm
5 --- 100 µm

○
Pressure Range
1 -- 0.2 - 2 bar
2 -- 0.2 - 4 bar
3 -- 0.5 - 7 bar
4 -- 0.5 - 10 bar (Standard)

Ordering example :- Filter Regulator Combination - 3/4 size (with G3/4 port) with 5µm Filter and pressure range 0.5 - 7 bar : Ordering No : FRC 176413
If ordered as FRC 3/4 our standard model FRC 176434, with 40µm Filter and pressure range 0.5 - 10 bar will be supplied.

Subject to change



AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION WITH INTERNAL AUTODRAIN - Series FRC1A

Cat No FRC1A - 01

FILTER REGULATOR COMBINATION with Internal Autodrain - 3/8, 1/2 SIZES

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

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

For details see " How to order "

* For details refer optional accessories Cat No. APA - 01

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.
4. Polycarbonate bowls may get damaged and possibly fail if exposed to synthetic oils, thinner, solvents, trichloroethylene kerosene or other aromatic hydrocarbons.

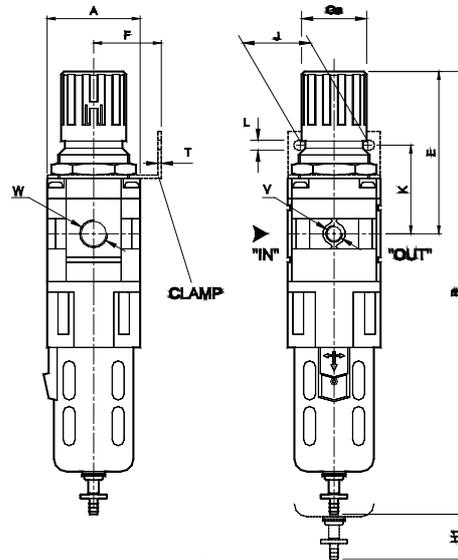
Pressure Setting

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

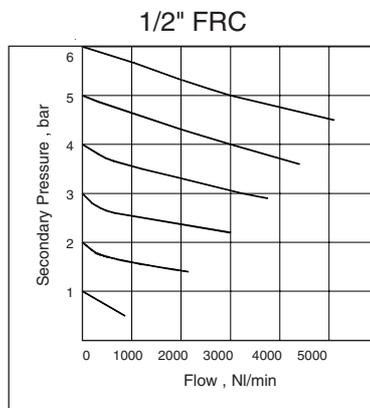
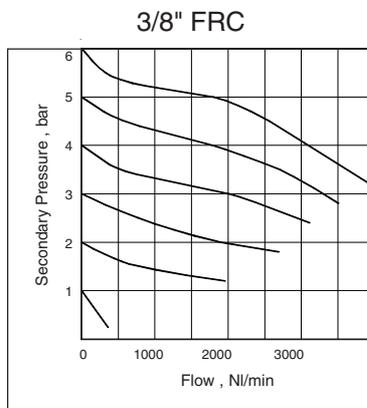
Cat No FRC1A - 01



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

Model	W	V	A	B	E	K	F	GØ	J	L	T	H1
FRC14.....A	G 3/8	G 1/8	55	272	95	53	40	40	40	6.5	2	60
FRC15.....A	G 1/2	G 1/8	70	335	125	62	50	51	55	8.5	2	85

Flow Graphs



How to order

FRC1



Body & Port size

4 6 2 -- G 3/8
5 6 3 -- G 1/2



Filtration in µm

1 --- 5 µm
2 --- 25 µm
3 --- 40 µm (Standard)
4 --- 50 µm
5 --- 100 µm



Pressure Range

1 -- 0.2 - 2 bar
2 -- 0.2 - 4 bar
3 -- 0.5 - 7 bar
4 -- 0.5 - 10 bar (Standard)



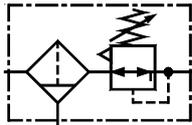
A

Internal Autodrain

Ordering example :- Filter Regulator Combination - 3/8 size (with G3/8 port) with a 5µm Filter, pressure range 0.5 - 7 bar with Internal Autodrain : Ordering No: FRC146213 - A.

If ordered as 3/8 FRC with Internal Autodrain, our standard model FRC146234 - A, with a 40µm Filter, pressure range 0.5 - 10 bar with Internal Autodrain will be supplied.

Subject to change



AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION WITH INTERNAL AUTODRAIN - Series FRC1A

Cat No FRC1A - 1 - 02 - 01

FILTER REGULATOR COMBINATION with Internal Autodrain - 3/4 & 1" SIZES

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	FRC17.....-A	
Medium	Compressed air	
Port size	G3/4	G1
Pressure gauge port size	G1/4	
Flow rate lts / min @	4250	5500
Max Supply pressure	2 - 10 bar	
Regulating Pressure Range #	0.2 - 2 bar, 0.2 - 4 bar, 0.5 - 7 bar, 0.5 - 10 bar (Standard)	
Ambient / Medium temperature	5° - 60° C	
Filteration #	1 µm, 5 µm, 25 µm, 40 µm (standard), 50 µm, 100 µm	
Bowl capacity (at maximum condensate level)	165 ml	165 ml
Bowl material	Polycarbonate	
Installation	Vertical (as in the picture)	
Materials of construction	Aluminium, Bronze, Steel, Acetal, Polycarbonate, SS, Nitrile	
Optional accessories *	Clamp, Modular mounting kit, Pressure gauge	
Weight Kg	2.100	2.065

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

For details see " How to order "

* For details refer optional accessories Cat No. APA - 02

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.

Pressure Setting

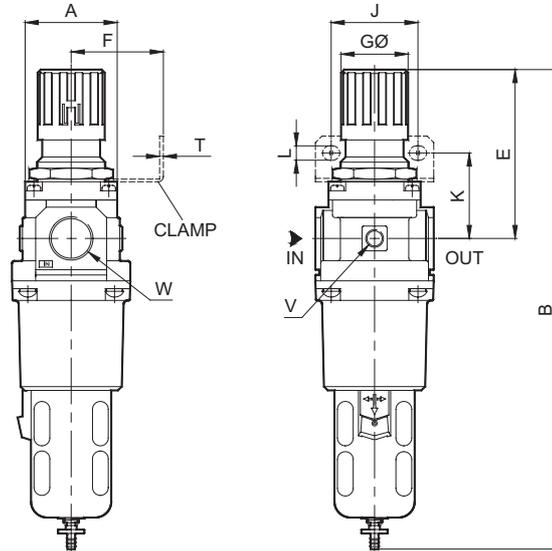
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position. (Turning the knob counter clockwise will reduce the pressure)

AIR PREPARATION UNITS

FILTER REGULATOR COMBINATION WITH INTERNAL AUTODRAIN - Series FRC1A

Cat No FRC1A - 1 - 02 - 01

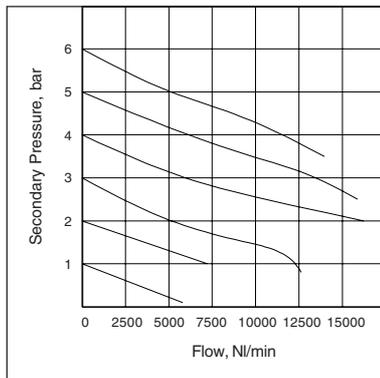
Model FRC1764...-A, FRC1765...-A



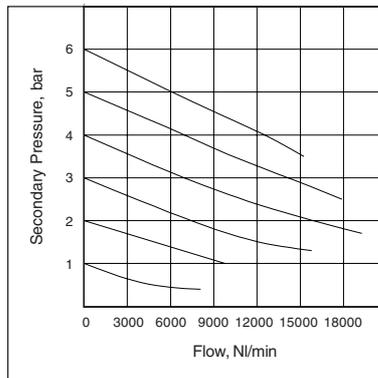
Model	W	V	A	B	E	K	F	GØ	J	L	T
FRC1764...A	G3/4	G1/4	SQ 90	368	130	65	70	51	66	11	5
FRC1765...A	G1	G1/4	SQ 90	368	130	65	70	51	66	11	5

Flow Graphs

3/4" FRC



1" FRC



Flow graphs are for 40µm filtrations only

How to order

FRC 1



Body & Port size
7 6 4 -- G 3 / 4
7 6 5 -- G 1



Filtration µm
0 --- 1 µm
1 --- 5 µm
2 --- 25 µm
3 --- 40 µm (Standard)
4 --- 50 µm
5 --- 100 µm



Pressure Range
1 -- 0.2 - 2 bar
2 -- 0.2 - 4 bar
3 -- 0.5 - 7 bar
4 -- 0.5 - 10 bar (Standard)



A

Internal Autodrain

Ordering example :- Filter Regulator Combination - 3/4 size (with G3/4 port) with 5µm Filter and pressure range 0.5 - 7 bar with Internal Autodrain : Ordering No : FRC 176413-A

If ordered as FRC 3/4 with Internal Autodrain our standard model FRC 176434-A, with 40µm Filter and pressure range 0.5 - 10 bar with Internal Autodrain will be supplied.

Subject to change