

AIR PREPARATION UNITS

FRCL MODULAR Series FRCLM1

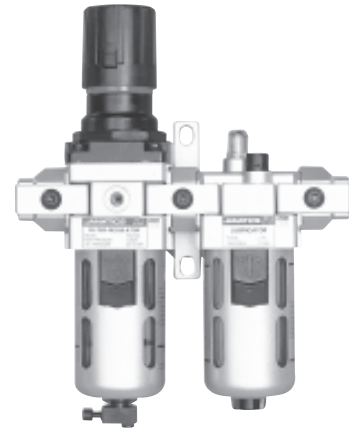
Cat No FRCLM1 - 02 - C

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

Individual Filter- Regulator combination & Lubricator units easily removable / mountable without disturbing the pipe line

Features

- ❑ Modular type for easy and fast maintenance
- ❑ Suitable for wall mounting
- ❑ Filter
 - Bronze filtering element
 - Separator and shield for efficient moisture separation
 - Press type manual drain for easy operation
- ❑ Regulator
 - Diaphragm operated, relieving type
 - Pressure compensated by balanced poppet
 - Flow compensated (with venturi) in models FRCLM14, FRCLM15 and FRCLM17 for faster response
 - Non raising ' Press to lock ' adjusting knob for locking at any set pressure
- ❑ Lubricator
 - Fog / Mist type Lubricator
 - Fine adjustment of lubrication
 - Lubrication proportional to flow
- ❑ Steel bowl guard, bayonet type on FRCLM14, FRCLM15 & FRCLM17 models and threaded type on FRCLM13 model
- ❑ Good flow and regulating characteristics



Technical Specifications

Model	FRCLM 13	FRCLM 14	FRCLM 15	FRCLM 17	FRCLM 17
Medium	Compressed air				
Port size	NPT 1/4 (G1/4)	NPT 3/8 (G3/8)	NPT 1/2 (G1/2)	NPT 3/4 (G3/4)	NPT 1 (G1)
Pressure gauge port size	NPT 1/8 (G1/8)			NPT 1/4 (G1/4)	
Flow rate [ⓐ] (lts / min)	17.5 (500)	43.75 (1250)	98 (2800)	123.6 (3500)	141.3 (4000)
Max supply pressure in psi (bar)	140 (10)				
Regulating Pressure Range in psi (bar) [#]	3 - 30 (0.2 - 2), 3 - 60 (0.2 - 4), 7 - 100 (0.5 - 7), 7 - 140 (0.5 - 10) (Standard)				
Ambient / Medium temperature	41° - 120° F (5° - 50° C)				
Filtration in microns [#]	1, 5, 25, 40 (standard), 50, 100				
Min operating flow in scfm (NI / min)	0.424 (12)	1.41 (40)	1.6 (45)	1.77 (50)	1.77 (50)
Bowl capacity Filter in ounce (ml) (at maximum condensate level)	0.30 (9)	1.08 (32)	1.48 (44)	5.58 (165)	5.58 (165)
Bowl capacity Lubricator in ounce (ml) (at maximum condensate level)	0.68 (20)	1.98 (57)	5.13 (152)	6.8 (200)	6.8 (200)
Recommended oil	ISO VG 32 (Servo System 32)				
Bowl material	Polycarbonate				
Installation	Vertical (as shown in the picture)				
Materials of construction	Aluminium, Bronze, Brass, Steel, Acetal, Polycarbonate, SS, Nitrile				
Optional accessories [*]	Pressure gauge				
Weight in lb (Kg)	1.39 (0.63)	2.53 (1.15)	4.99 (2.27)	9.22 (4.18)	8.97 (4.07)

[ⓐ] Supply pressure 100 psi (7 bar), Set pressure 85 psi (6 bar), Pressure drop $\Delta p = 14.5$ psi (1bar) (For standard models)

[#] For details see " How to order "

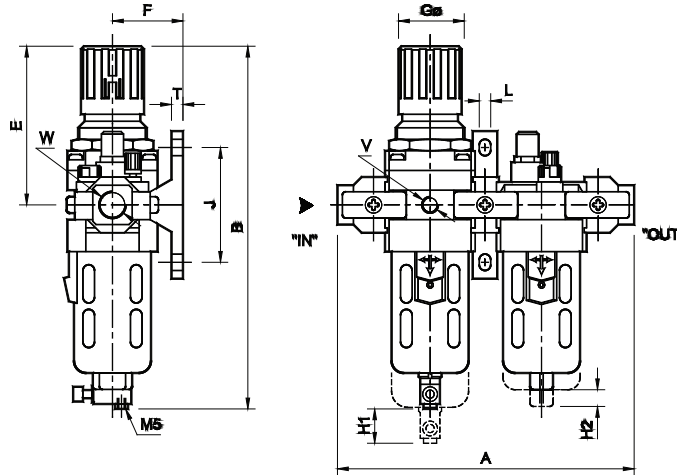
^{*} For details refer optional accessories Cat No APA - 02 - C

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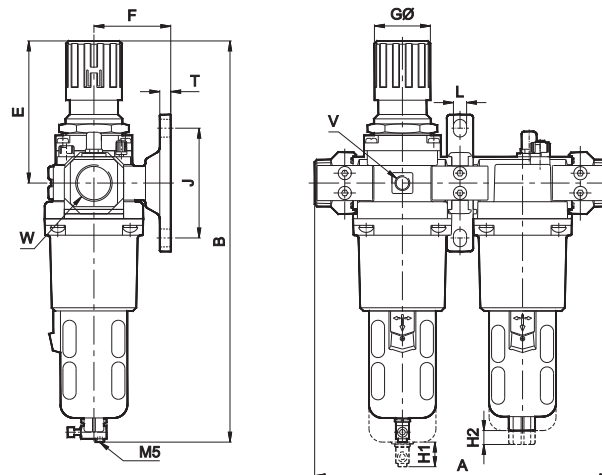
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Model FRCLM13, FRCLM14, FRCLM15



Model FRCLM17



Model	W	V	A	B	E	F	GØ	J	L	T	H1	H2
FRCLM13	NPT 1/8 (G1/8) NPT 1/4 (G1/4)	NPT 1/8 (G1/8)	5.75 (146)	6.69 (170)	2.677 (68)	1.378 (35)	1.102 (28)	1.968 (50)	0.275 (7)	0.275 (7)	1.968 (50)	1.378 (35)
FRCLM14	NPT 1/4 (G1/4) NPT 3/8 (G3/8)	NPT 1/8 (G1/8)	7.165 (182)	8.66 (220)	3.74 (95)	1.772 (45)	1.575 (40)	2.756 (70)	0.275 (7)	0.275 (7)	2.165 (55)	1.772 (45)
FRCLM15	NPT 1/4 (G1/4) NPT 3/8 (G3/8) NPT 1/2 (G1/2)	NPT 1/8 (G1/8)	8.66 (220)	11.02 (280)	4.921 (125)	2.165 (55)	2.008 (51)	3.543 (90)	0.354 (9)	0.354 (9)	3.15 (80)	1.772 (45)
FRCLM17	NPT 3/4 (G3/4)	NPT 1/4 (G1/4)	10.63 (270)	14.57 (370)	5.12 (130)	2.756 (70)	2.008 (51)	3.94 (100)	0.472 (12)	0.394 (10)	3.150 (80)	1.772 (45)
FRCLM17	NPT 1 (G1)	NPT 1/4 (G1/4)	10.63 (270)	14.57 (370)	5.12 (130)	2.756 (70)	2.008 (51)	3.94 (100)	0.472 (12)	0.394 (10)	3.150 (80)	1.772 (45)

Precautions

- Note the direction of flow before installation and connect piping accordingly.
- Flush pipings for dirt, dust, rust and other foreign particles.
- Install in clean atmosphere.
- Nipples of taper threads (R) to be used with teflon tape. Ensure teflon tape doesnot enter the unit during tightening.
Nipples of straight threads (G) to be used with sealing washer.
- Polycarbonate bowls may get damaged and possibly fail if exposed to synthetic oils, thinner, solvents, trichloroethylene, kerosene or other aromatic hydrocarbons.

Pressure Setting

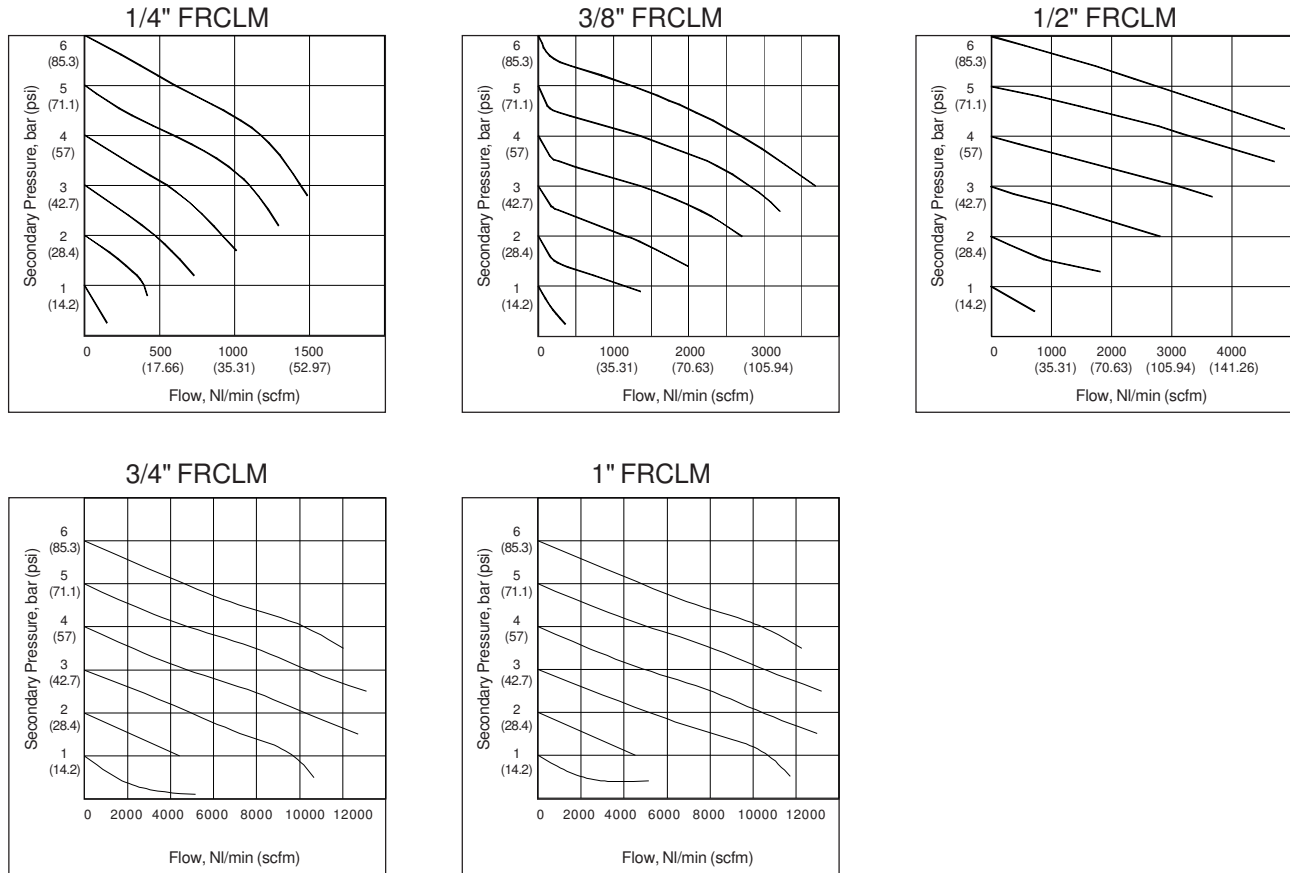
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position.
(Turning the knob counter clockwise will reduce the pressure)

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Flow Graphs



Flow graphs are for 40µm filtrations only

How To Order

FRCLM1

Body & Port size	
390 (360)	NPT1/8 (G1/8)
391 (361)	NPT1/4 (G1/4)
491 (461)	NPT1/4 (G1/4)
492 (462)	NPT3/8 (G3/8)
591 (561)	NPT1/4 (G1/4)
592 (562)	NPT3/8 (G3/8)
593 (563)	NPT1/2 (G1/2)
794 (764)	NPT3/4 (G3/4)
795 (765)	NPT1 (G1)

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

Pressure range in psi (bar)	
1	3 - 30 (0.2 - 2)
2	3 - 60 (0.2 - 4)
3	7 - 100 (0.5 - 7)
4	7 - 140 (0.5 - 10) Standard

Ordering example : Filter Regulator Combination and Lubricator Modular - 3/8 size (with NPT 3/8 (G3/8) port) with 5 microns Filter and pressure range 7 - 100 psi: Ordering No: FRCLM 1492 (1462) 13.

If ordered as 3/8 FRCLM, our standard model FRCLM 1492 (1462) 34, with 40 microns Filter and pressure range 7 - 140 psi will be supplied.

- For safety instructions, please refer instruction manual IS - FRCLM1 - 2 - 01

Subject to change