

# AIR PREPARATION UNITS

## FRCL MODULAR Series FRCLM1

Cat No FRCLM1 - 01 - D

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

Without piping adaptor and spacer

#### 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

Model FRCLM1.../W



Model FRCLM1.../S



#### Technical Specifications

Model	FRCLM13.../W	FRCLM14.../W	FRCLM15.../W	FRCLM17.../W	FRCLM17.../W	
	FRCLM13.../S	FRCLM14.../S	FRCLM15.../W	FRCLM17.../W	FRCLM17.../W	
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)	500	1250	2800	3500	4000	
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 temperature	-10° to +50° C					
Medium temperature	+5° to +50° C					
Filtration <sup>#</sup> (µm)	1, 5, 25, 40 (standard), 50, 100					
Min operating flow (lts / min)	12	40	45	50	50	
Bowl capacity FRC (ml) (at maximum condensate level)	9	32	44	165	165	
Bowl capacity Lubricator (ml) (at maximum oil level)	20	57	152	200	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 (Kg)	FRCLM1.../W	0.54	1.00	2.01	3.69	3.64
	FRCLM1.../S	0.51	0.95	1.92	3.55	3.49

<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 ".

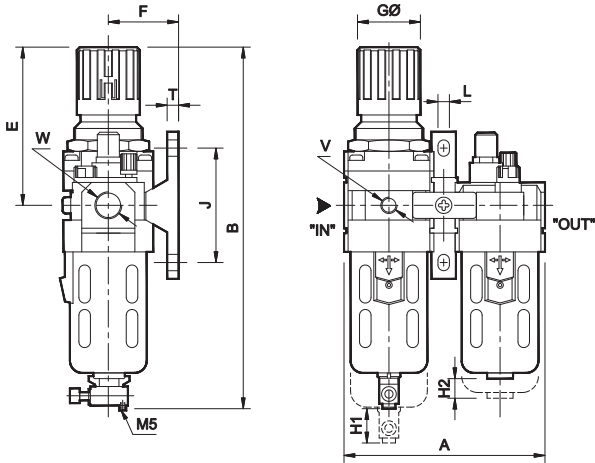
\* For details refer optional accessories Cat No APA - 01 - C

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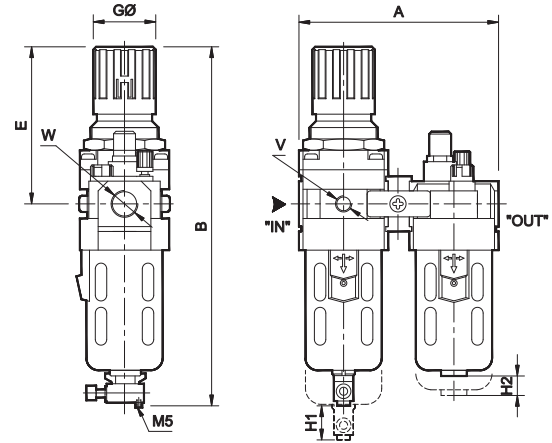
## FRCL MODULAR Series FRCLM1

Cat No FRCLM1 - 01 - D

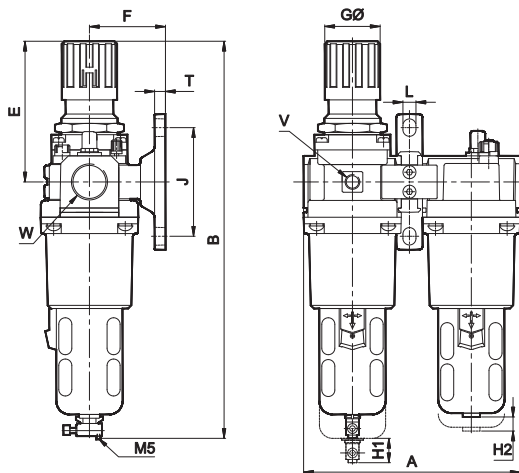
Model FRCLM13, 14, 15.../W



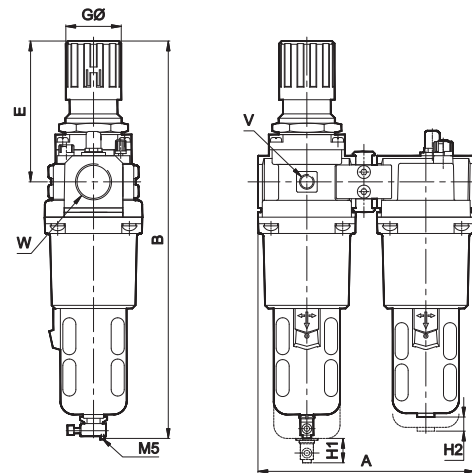
Model FRCLM13, 14, 15.../S



Model FRCLM17.../W



Model FRCLM17.../S



Model	W	V	A	B	E	F	GØ	J	L	T	H1	H2
FRCLM13.../W	G1/4	G1/8	92	170	68	35	28	50	7	7	50	35
FRCLM14.../W	G3/8	G1/8	124	220	95	45	40	70	7	7	55	45
FRCLM15.../W	G1/2	G1/8	156	280	125	55	51	90	9	9	80	45
FRCLM17.../W	G3/4	G1/4	200	370	130	70	51	100	12	10	80	45
FRCLM17.../W	G1	G1/4	200	370	130	70	51	100	12	10	80	45

Model	W	V	A	B	E	GØ	H1	H2
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FRCLM14.../S	G3/8	G1/8	124	220	95	40	55	45
FRCLM15.../S	G1/2	G1/8	156	280	125	51	80	45
FRCLM17.../S	G3/4	G1/4	200	370	130	51	80	45
FRCLM17.../S	G1	G1/4	200	370	130	51	80	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 doesn't 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)

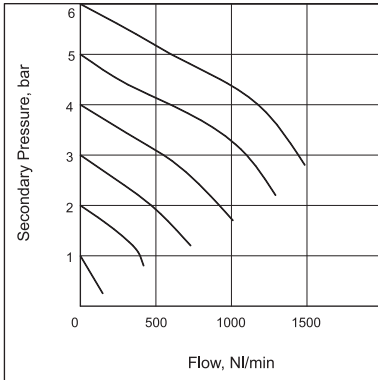
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## FRCL MODULAR Series FRCLM1

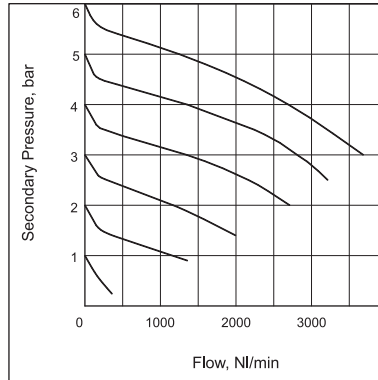
Cat No FRCLM1 - 01 - D

### Flow Graphs

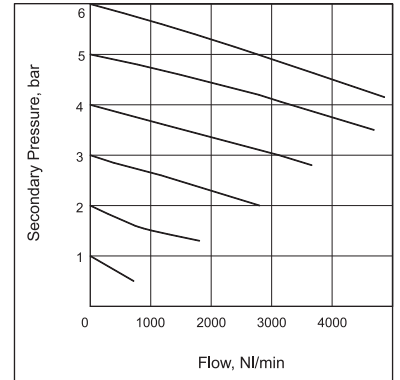
1/4" FRCLM



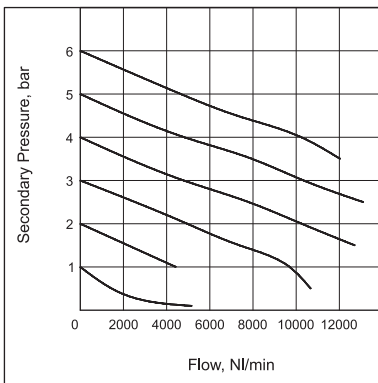
3/8" FRCLM



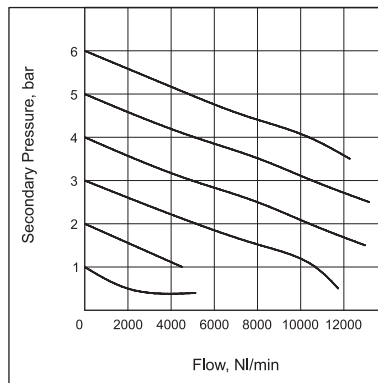
1/2" FRCLM



3/4" FRCLM



1" FRCLM



Flow graphs are for 40µm filtrations only

### How to order

<b>FRCLM1</b>	<b>462</b>	<b>3</b>	<b>4</b>	<b>W</b>
<b>Body &amp; Port size</b>	<b>Filteration in µm</b>	<b>Pressure range</b>	<b>Mounting</b>	
361 G1/4	0 - 1	1 0.2 - 2 bar	W Wall mounting bracket	
462 G3/8	1 - 5	2 0.2 - 4 bar	S Spacer	
563 G1/2	2 - 25	3 0.5 - 7 bar		
764 G3/4	3 - 40 (Standard)	4 0.5 - 10 bar (Standard)		
765 G1	4 - 50			
	5 - 100			

### Ordering example:

Filter Regulator Combination and Lubricator Modular - 3/8 size ( with G3/8 port ) and wall mounting bracket with 5µm Filter and pressure range 0.5 - 7 bar : Ordering No: **FRCLM146213/W**