

## AIR PREPARATION UNITS

### FRL MODULAR Series FRLM1

Cat No FRLM1...W - 01 - C

### FILTER - REGULATOR - 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.
- Bronze filtering element. Filter
  - 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 FRLM14, FRLM15 and FRLM17 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 FRLM14, FRLM15 & FRLM17 models and threaded type on FRLM13 model.
- Good flow and regulating characteristics.







### **Technical Specifications**

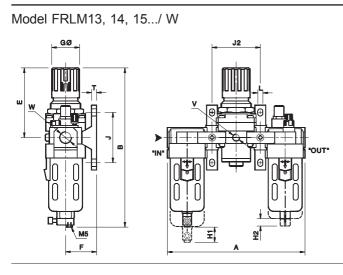
Model		FRLM13/W FRLM14/W		FRLM15/W	FRLM17/W	FRLM17/W FRLM17/S				
		FRLM13/S	FRLM14/S	RLM14/S FRLM15/S						
Medium		Compressed air								
Port size		G1/4	G1/4 G3/8 G1/2		G3/4	G1				
Pressure gauge port s	ize	G1/8	G1/8	G1/8	G1/4	G1/4				
Flow rate @ (Its / min	1)	500 2000 3500 3500				5000				
Maximum supply pres	sure (bar)	10								
Regulating pressure range # (bar)		0.2 - 2, 0.2 - 4, 0.5 - 7, 0.5 - 10 (Standard)								
Ambient / Medium temperature		5° - 50° C								
Filteration # (µm)		1, 5, 25, 40 (standard), 50, 100								
Min operating flow (It	s / min)	12	40	45	50	50				
Bowl capacity Filter ( (at maximum condensate		9	32	44	165	165				
Bowl capacity Lubricat (at maximum condensate		20 57 152 200				200				
Recommended oil		ISO VG 32 (Servo System 32)								
Bowl material		Polycarbonate								
Installation		Any position for Regulator. Vertical for Filter and Lubricator								
Materials of construction		Aluminium, Bronze, Brass, Steel, Acetal, Polycarbonate, SS, Nitrile								
Optional accessories *	ŧ	Pressure gauge								
Weight (Kg)	FRLM1/W	0.63 Kg	1.23 Kg	2.39 Kg	4.47	4.45				
	FRLM1/S	0.60 Kg	1.18 Kg	2.30 Kg	4.17	4.05				

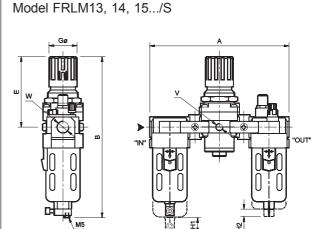
Supply pressure 7 bar , Set pressure 6 bar , Pressure drop  $\Delta$  p $\Delta$ = 1bar ( For standard models ) For details see " How to order " For details refer optional accessories Cat No. APA - 01

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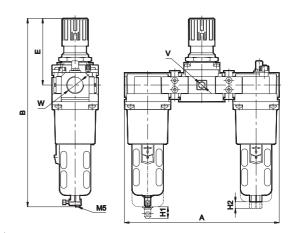
# FRL MODULAR Series FRLM1

Cat No FRLM1...W - 01 - C





Model FRLM17.../ W



Model FRLM17.../S

Model	w	v	Α	В	E	F	GØ	J	L	т	Н1	H2	J2
FRLM13/W	G1/4	G1/8	146	170	68	35	28	50	7	7	50	35	52
FRLM14/W	G3/8	G1/8	192	220	95	45	40	70	7	7	55	45	69
FRLM15/W	G1/2	G1/8	241	280	125	55	51	90	9	9	80	45	86
FRLM17/W	G3/4	G1/4	300	366	130	70	51	100	12	10	80	45	105
FRLM17/W	G1	G1/4	300	366	130	70	51	100	12	10	80	45	105

Model	w	٧	Α	В	E	GØ	H1	H2
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FRLM15/S	G1/2	G1/8	241	280	125	51	80	45
FRLM17/S	G3/4	G1/4	300	366	130	51	80	45
FRLM17/S	G1	G1/4	300	366	130	51	80	45

#### **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 doesnot 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**

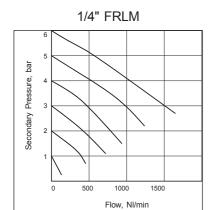
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position. ( Turning the knob counter clockwise will reduce the pressure )

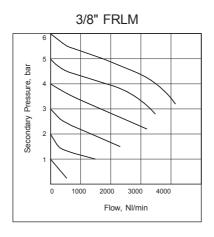
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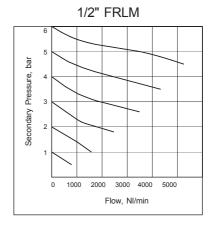
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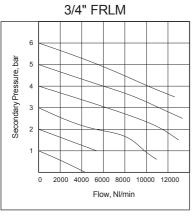
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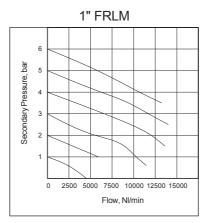
### **Flow Graphs**







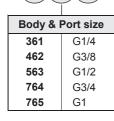


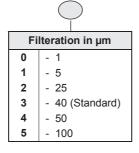


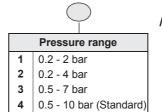
Flow graphs are for 40µm filterations only

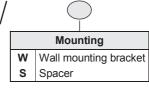
#### How to order











Ordering example: Filter Regulator Lubricator Modular - 3/8 ( with G3/8 port size ) and wall mounting bracket, with 5µm Filter and pressure range 0.5 - 7 bar: Ordering No: FRLM146213 / W.