

## **AIR PREPARATION UNITS**

FRL MODULAR Series FRLM1

Cat No FRLM1 - 01 - C

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

Individual Filter, Regulator & 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 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	FRLM 13	FRLM 14	FRLM 15	FRLM 17	FRLM 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 @ (Its / min)	500 2000 3500		3500	3500	5000				
Maximum supply pressure (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 (lts / min)	12 40		45	50	50				
Bowl capacity Filter (ml) (at maximum condensate level)	9 32		44	165	165				
Bowl capacity Lubricator (ml) (at maximum condensate level)	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 *	Pressure gauge								
Weight (Kg)	0.72	1.38	2.65	4.93	4.87				

<sup>@</sup> Supply pressure 7 bar , Set pressure 6 bar , Pressure drop Δ pΔ= 1bar (For standard models )

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

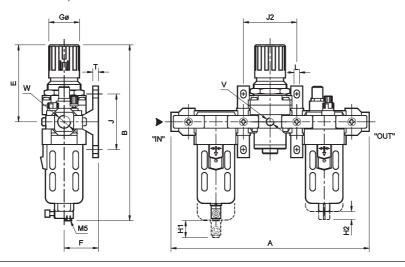
<sup>\*</sup> For details refer optional accessories Cat No APA - 01 - C

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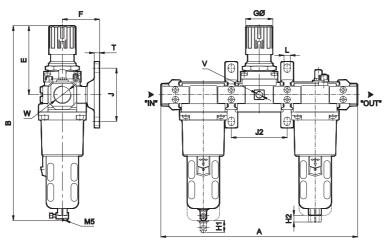
## FRL MODULAR Series FRLM 1

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#### Model FRLM1361, FRLM1462, FRLM1563



#### Model FRLM1764, FRLM1765



Model	w	V	Α	В	E	F	GØ	J	L	Т	H1	H2	J2
FRLM 13	G1/4	G1/8	200	170	68	35	28	50	7	7	50	35	52
FRLM 14	G3/8	G1/8	250	220	95	45	40	70	7	7	55	45	69
FRLM 15	G1/2	G1/8	305	280	125	55	51	90	9	9	80	45	86
FRLM 17	G3/4	G1/4	370	366	130	70	51	100	12	10	80	45	105
FRLM 17	G1	G1/4	370	366	130	70	51	100	12	10	80	45	105

#### **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**

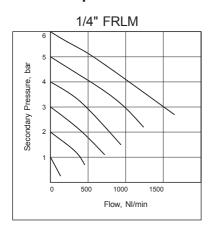
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position. ( Turning the knob counter clockwise will reduce the pressure )

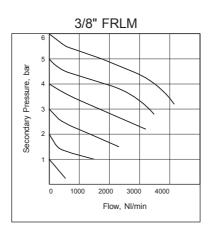
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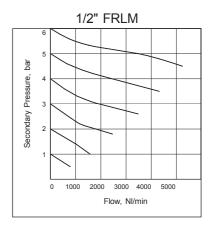
## FRL MODULAR Series FRLM 1

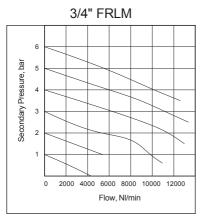
Cat No FRLM1 - 01 - C

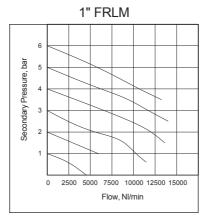
## Flow Graphs







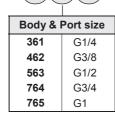


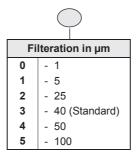


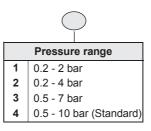
Flow graphs are for 40µm filterations only

#### How to order









Ordering example: Filter Regulator Lubricator Modular - 3/8 ( with G3/8 port size ) with 5µm Filter and pressure range 0.5 - 7 bar: Ordering No: FRLM 146213.

If ordered as 3/8 FRLM, our standard model FRLM 146234, with 40 $\mu$ m Filter and pressure range 0.5 - 10 bar will be supplied.