

AIR PREPARATION UNITS

FRL MODULAR WITH METALBOWL Series FRLM1-MM

Cat No FRLM1-MM/W - 01 - 01 - A

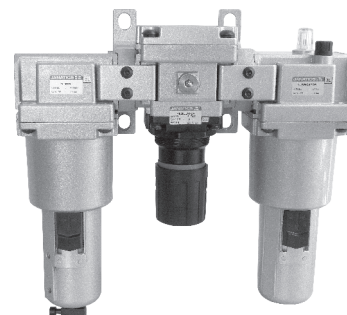
FILTER - REGULATOR - LUBRICATOR, MODULAR - 1/4, 3/8, 1/2, 3/4, 1"

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

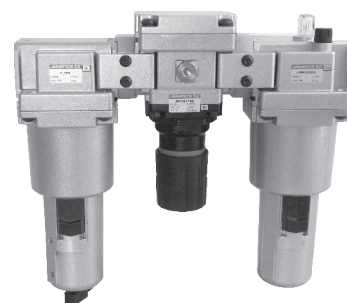
Features

- ❑ For higher pressure range above 10 bar
- ❑ 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
- ❑ Metal bowl- Aluminium
 - Bayonet type on FRLM17 models
 - Direct mounting type on FRLM13, FRLM14, FRLM15 models
- ❑ Good flow and regulating characteristics

Model FRLM1.../W



Model FRLM1.../S



Technical Specifications

Model	FRLM13-MM/W	FRLM14-MM/W	FRLM15-MM/W	FRLM17-MM/W	FRLM17-MM/W
	FRLM13-MM/S	FRLM14-MM/S	FRLM15-MM/S	FRLM17-MM/S	FRLM17-MM/S
Medium	Compressed air				
Port size	G1/4	G3/8	G1/2	G3/4	G1
Pressure gauge port size	G1/8			G1/4	
Flow rate in NI / min @	500	2000	3500	3500	5000
Max supply pressure in bar	20				
Regulating pressure range in bar #	0.2 - 2, 0.2 - 4, 0.5 - 7, 0.5 - 10 (Standard)				
Ambient temperature	-10° to +60° C				
Medium temperature	+5° to +50° C				
Filtration in microns #	1, 5, 25, 40 (standard), 50, 100				
Min operating flow in NI / min	12	40	45	50	50
Bowl capacity Filter in ml (at maximum condensate level)	9	64	90	165	165
Bowl capacity Lubricator in ml (at maximum condensate level)	20	100	200	200	200
Recommended oil	ISO VG 32 (Servo System 32)				
Bowl material	Aluminium				
Installation	Any position for Regulator. Vertical for Filter and Lubricator				
Materials of construction	Aluminium, Bronze, Brass, Steel, Acetal, SS, Nitrile				
Optional accessories *	Pressure gauge				
Weight in Kg	FRLM1-MM/W	0.64	1.35	2.64	4.57
	FRLM1-MM/S	0.61	1.30	2.59	4.27

@ Supply pressure 7 bar, Set pressure 6 bar, Pressure drop $D_p = 1$ bar (For standard models).

For details see " How to order ".

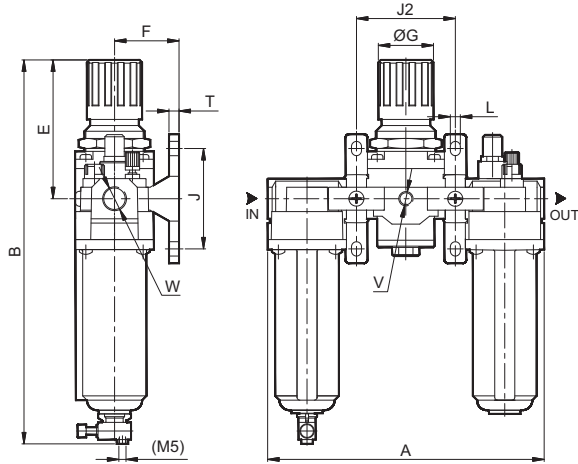
* For details refer optional accessories Cat No APA - 01 - C

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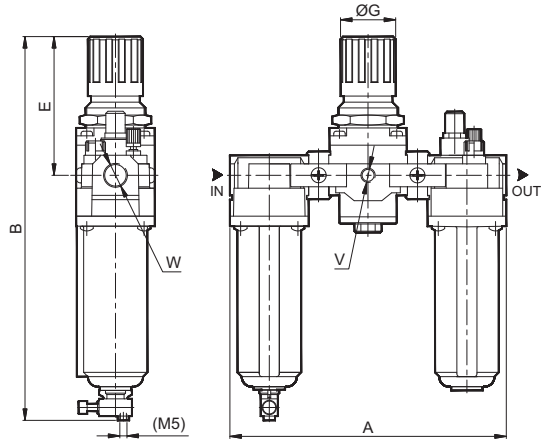
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Cat No FRLM1-MM/W - 01 - 01 - A

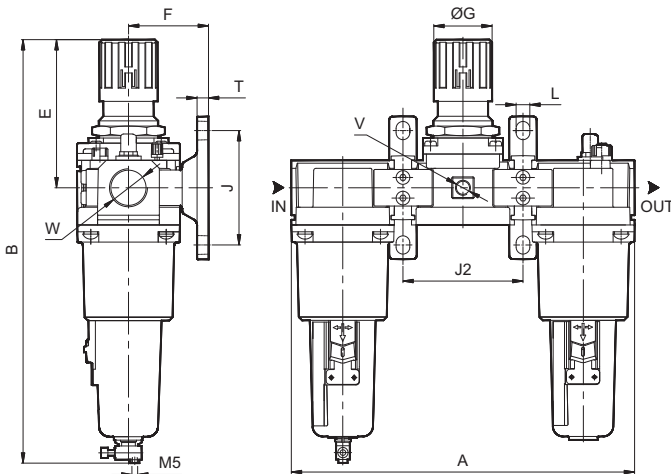
Model FRLM13, 14, 15...-MM/W



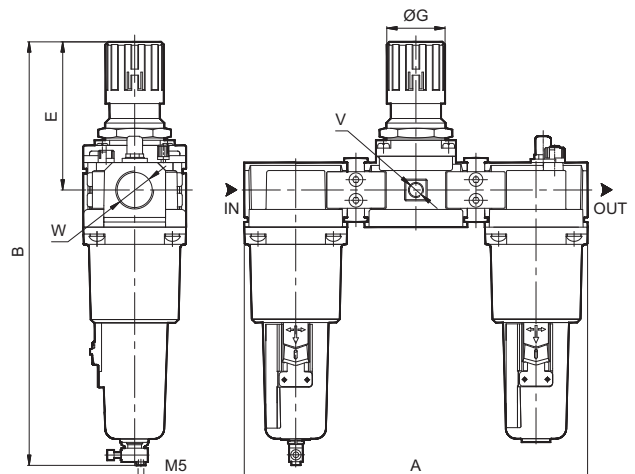
Model FRLM13, 14, 15...-MM/S



Model FRLM17...-MM/W



Model FRLM17...-MM/S



Model	W	V	A	B	E	F	ØG	J	L	T	J2
FRLM13-MM/W	G1/4	G1/8	146	170	68	35	28	50	7	7	52
FRLM14-MM/W	G3/8	G1/8	192	270	95	45	40	70	7	7	69
FRLM15-MM/W	G1/2	G1/8	241	328	125	55	51	90	9	9	86
FRLM17-MM/W	G3/4	G1/4	300	366	130	70	51	100	12	10	105
FRLM17-MM/W	G1	G1/4	300	366	130	70	51	100	12	10	105

Model	W	V	A	B	E	ØG
FRLM13-MM/S	G1/4	G1/8	146	170	68	28
FRLM14-MM/S	G3/8	G1/8	192	270	95	40
FRLM15-MM/S	G1/2	G1/8	241	328	125	51
FRLM17-MM/S	G3/4	G1/4	300	366	130	51
FRLM17-MM/S	G1	G1/4	300	366	130	51

Pressure Setting

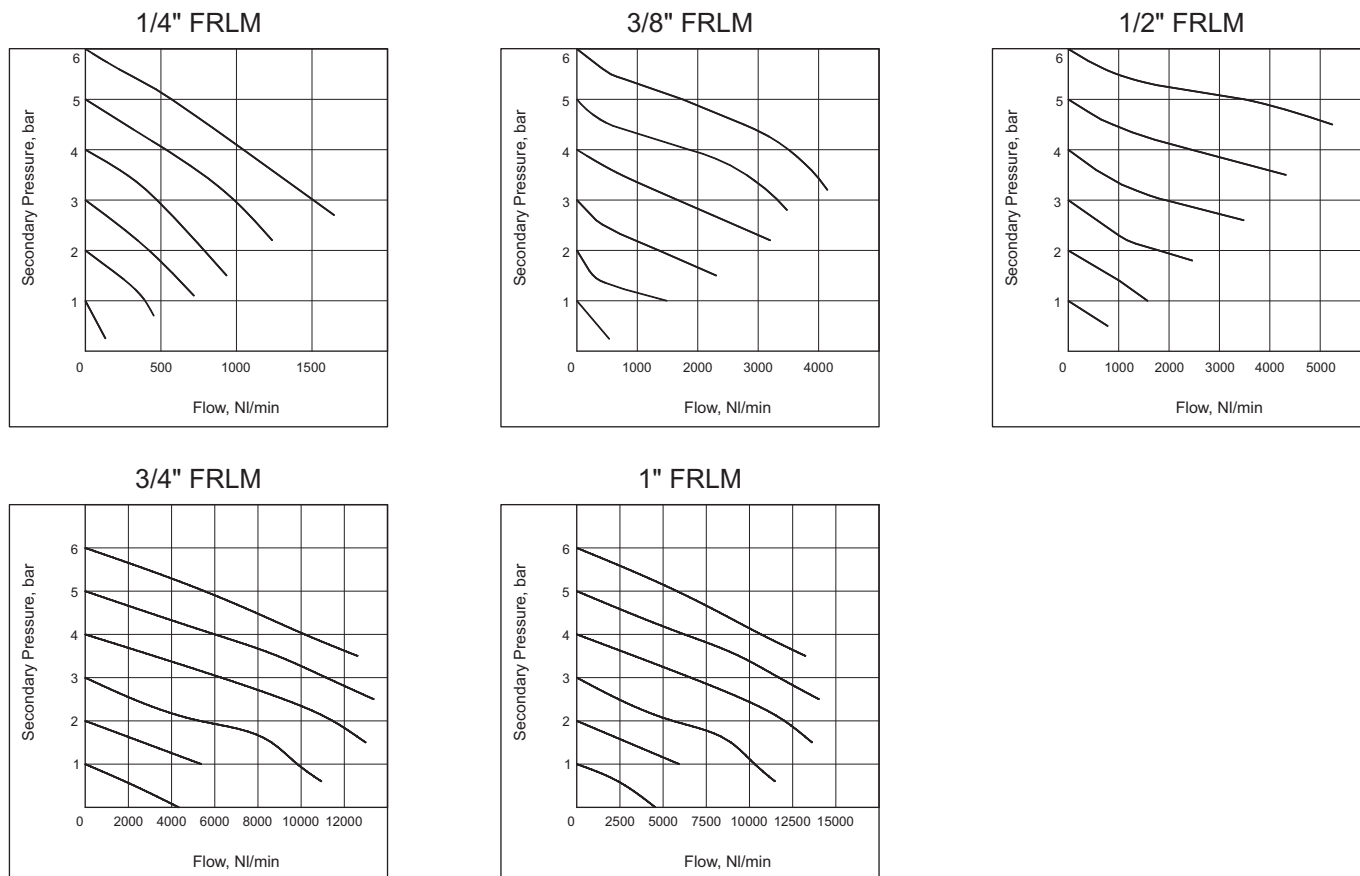
Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position. (Turning the knob counter clockwise will reduce the pressure)

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Flow Graphs



Flow graphs are for 40µm filtrations only

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 doesn't enter the unit during tightening. Nipples of straight threads (G) to be used with sealing washer.

How to order

FRLM1	462	3	4	—	M	M	/	W			
Body & Port size		Filtration in µm		Pressure range		Metal bowl		Drain arrangement		Mounting	
361	G1/4	0	- 1	1	0.2 - 2 bar	M	Without level indicator	M	Manual drain (Standard)	W	Wall mounting bracket
462	G3/8	1	- 5	2	0.2 - 4 bar	L[#]	With level indicator			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								

- Applicable for L14, L15, L17 models only.

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Ordering example:

Filter Regulator Lubricator Modular - 3/8 size (with G3/8 port) with Wall mounting bracket, 5µm filter and pressure range 0.5 - 7 bar, Metal bowl without level indicator and Manual drain : Ordering No : **FRLM 146213-MM/W**

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

Subject to change