

ARO-Flo Series

Filters, regulators, and lubricators



ARO-Flo Series

For more than 100 years, Ingersoll Rand ARO has been an industry leader in the design and manufacture of compressors, pneumatic tools, and air preparation equipment. Clean air is a key ingredient that enables effective and efficient operation of tools, equipment, and machinery in almost every industry. As such, the use of air preparation devices, such as filters, regulators, and lubricators (FRLs) is an excellent means of keeping your air supply in top condition, as well as enabling your tools and equipment to operate at their peak performance. The new ARO-Flo Series FRLs continue the tradition of offering premium products for your operation, and also raises the bar in the industry for safety, flow performance, and modularity.

Safety:

Providing safe tools and equipment is our top priority. ARO-Flo Series FRLs are designed with integrated safety features such as locking bowls and clear multilingual markings. Accessories such as lockout valves, check valves, and soft-start valves allow the air supply to be safely managed and controlled.



Performance: ARO-Flo Series FRLs set the standard for flow performance. Simply put, air flows better through ARO-Flo filters, regulators, and lubricators than almost any other other air filtration device. This means less air is choked during the air preparation process, and your equipment can perform at its peak performance.

Modularity: All ARO-Flo accessories are designed to integrate with each other within each size range. From pipe adapters to T-brackets, your complete FRL assembly and its individual components can be easily, safely, and quickly assembled or disassembled with a minimum of tools — no fuss or complications, even with fixed piping.

Best in class

The following regulators were put through head-to-head tests to determine how they compare with the new ARO-Flo Series.

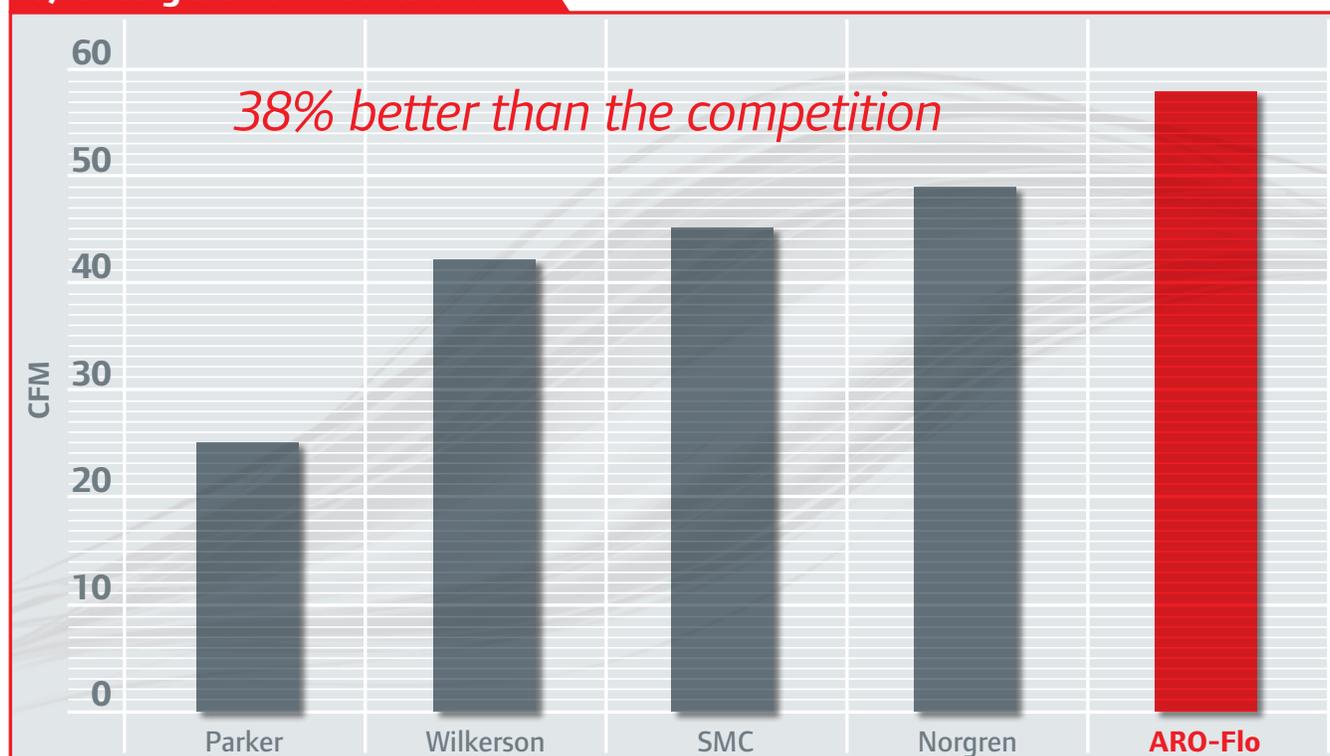
Manufacturer	Model Number	Flow Rate
Parker	14R118F	27 cfm
Wilkerson®	R08-02-F0G0	44 cfm
SMC®	AR20-N02E-Z	48 cfm
Norgren	R72G-2AK-RMG	51 cfm
ARO-Flo	R37121-620	59 cfm

How did we do? On average, the ARO-Flo 1/4" 1000 Series regulator flowed 38 percent better than the competition. All regulators were tested under the same conditions, and all units were new — right out of the box.



R37121-620

1/4" Regulator — Flow Test



Test parameters: 100 psi inlet pressure, 90 psi set pressure, and 33 psi drop

This is not the largest 1/4" regulator in the ARO-Flo Series, but rather the smallest. How did we do it? We designed the ARO-Flo Series from the ground up to allow air to pass through the units with a minimum of flow loss. The bottom line: If you want superior flow in your application, you can't miss with the new ARO-Flo Series.

To obtain the actual test report, email your request to arowebleads.com.

Features and benefits

By utilizing a modular lockout valve the user can close off the downstream air supply for maintenance and pressure isolation. Units are threaded for direct plumbing or can be installed in the modular arrangement.

Optional filter life indicator works off of pressure differential to show a visible alert when the filter needs replacement.

A T-bracket wall mount is standard on all combo units.

The settable gauge fan is a visual reference that allows the user to display the specific pressure range that is needed for their application.



Use of modular threaded pipe adapters allow for ease of service by allowing a unit to be quickly removed from the air line. Adapters can be used to pipe different thread sizes in the plumbing setup.

The ARO soft-start valve allows system pressure to build gradually, protecting downstream equipment and creating a safer start-up condition.

A panel nut is standard on all ARO-Flo regulators and piggybacks.

Spares and Accessories

See our accessories catalog or go to our Web site for the complete selection of accessories for your application.



Refurb kits
104302



Mounting brackets
104409



Replacement parts
104338



Pressure switch
104415



The pressure switch is typically threaded into a manifold port block, and allows the sensing of high or low pressure thresholds set by the user.

The oil drip rate is controlled by adjusting the sight dome adjustment screw in a clockwise or counter-clockwise direction.

The auto-fill option is standard on all ARO-Flo lubricators. Lubricating oil can be added while lubricators are under pressure.



The ARO-Flo check valve is typically installed downstream of the regulator. It is used to help prevent downstream pressure from moving upstream of the valve in the event of upstream pressure loss.

The positive locking thumb switch engages with an audible click, and visually aligns to the locking symbols.

Optional tamper kit installs in seconds and prevents adjustment of the regulated pressure.

The installation of a manifold port block enables design flexibility by allowing clean, regulated air to be diverted to other applications.

3/8", 1/2", and 3/4"
www.airoflo.com



Gauges
104334

Manifold block kit
104413-3-2

Lubricating oil
29665

2000 Series filters

3/8", 1/2", and 3/4" Ports

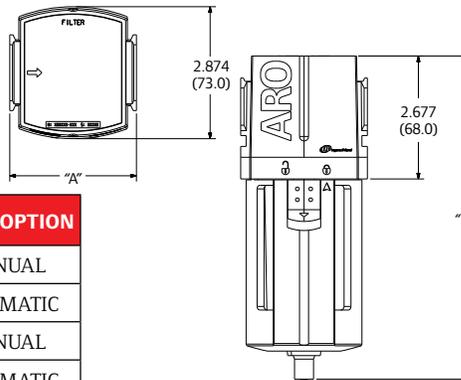
2000 Series

Technical data		
Polycarbonate bowl	Polycarbonate	
Polycarbonate bowl guard	Nylon	
Metal bowl	Aluminum	
Metal bowl sight glass	Nylon	
Filter body	Aluminum	
Manual drain	Brass + nitrile	
Auto drain	Acetal	
Standard filter	Polyethylene	
Coalescing filter	HEPA paper + felt	
Seals	Nitrile	
Filter baffle	Acetal	
	POLYCARBONATE BOWL	METAL / METAL W/ SIGHT GLASS
Max inlet pressure (psi)	150	250
Temperature range (F)	23 - 125	23 - 175
Bowl cap — manual drain (oz)	1.9	2.4
Bowl cap — auto drain (oz)	2.3	2.8
Flow capacity — 3/8" port*	156 scfm	
Flow capacity — 1/2" port*	197 scfm	
Flow capacity — 3/4" port*	216 scfm	

*Inlet pressure 90 psi (6.2 bar) with 10 psi drop (0.7 bar)

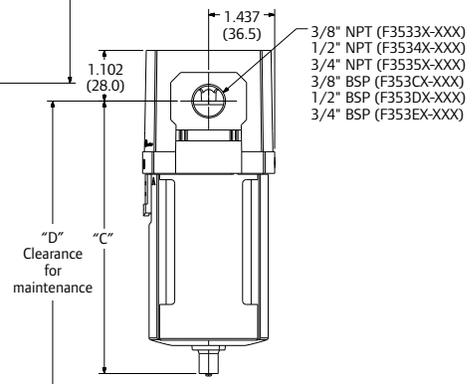


MODEL	A (MM)	PORT SIZE
F3533X-XXX	2.756 (70.0)	3/8" NPT
F3534X-XXX	2.756 (70.0)	1/2" NPT
F3535X-XXX	2.992 (76.0)	3/4" NPT



MODEL	B (MM)	SERVICE INDICATOR	DRAIN OPTION
F353X1-XX0	7.047 (179)	NONE	MANUAL
F353X1-XX1	7.913 (201)	NONE	AUTOMATIC
F353X2-XX0	7.717 (196)	MECHANICAL	MANUAL
F353X2-XX1	8.583 (218)	MECHANICAL	AUTOMATIC

MODEL	C (MM)	D (MM)	BOWL OPTION	DRAIN OPTION
F353XX-X00	5.945 (151)	8.945 (227)	POLYCARBONATE	MANUAL
F353XX-X10	5.945 (151)	8.445 (215)	METAL W/ SIGHT GLASS	MANUAL
F353XX-X20	5.945 (151)	8.445 (215)	METAL	MANUAL
F353XX-X01	6.811 (173)	9.811 (249)	POLYCARBONATE	AUTOMATIC
F353XX-X11	6.811 (173)	9.311 (236)	METAL W/ SIGHT GLASS	AUTOMATIC
F353XX-X21	6.811 (173)	9.311 (236)	METAL	AUTOMATIC



How to order

To configure the desired part number, use the chart below to select the port size, thread type, and configuration options.

Port size	Base model				
3/8"	F353 3	X	X	X	X
1/2"	F353 4	X	X	X	X
3/4"	F353 5	X	X	X	X

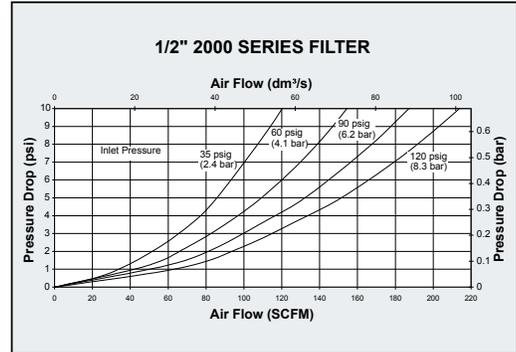
Note: Some menu combinations not available. Please consult price book to verify. Popular options are shown in **red** below.

Thread type	Service indicator	Filter element	Bowl option	Drain option
3 3/8" NPT	1 None	3 0.3-Micron coalescing	0 Polycarbonate w/ guard	0 Manual
4 1/2" NPT	2 Mechanical (standard w/ coalescing)	4 5-Micron	1 Metal w/ sight glass	1 Automatic
5 3/4" NPT			2 Metal	
C 3/8" BSP				
D 1/2" BSP				
E 3/4" BSP				

Popular configurations

Port size NPT	Filter type	Element (microns)	Bowl cap (oz)	Service indicator	Model
MANUAL DRAIN • POLYCARBONATE BOWL W/ GUARD					
3/8"	Standard	5	1.9	None	F35331-400
3/8"	Coalescing	0.3	1.9	Mechanical	F35332-300
1/2"	Standard	5	1.9	None	F35341-400
1/2"	Coalescing	0.3	1.9	Mechanical	F35342-300
3/4"	Standard	5	1.9	None	F35351-400
MANUAL DRAIN • METAL BOWL					
3/8"	Standard	5	2.4	None	F35331-420
3/8"	Coalescing	0.3	2.4	Mechanical	F35332-320
1/2"	Standard	5	2.4	None	F35341-420
1/2"	Coalescing	0.3	2.4	Mechanical	F35342-320
MANUAL DRAIN • METAL BOWL W/ SIGHT GLASS					
3/8"	Standard	5	2.4	None	F35331-410
3/8"	Coalescing	0.3	2.4	Mechanical	F35332-310
1/2"	Standard	5	2.4	None	F35341-410
1/2"	Coalescing	0.3	2.4	Mechanical	F35342-310
3/4"	Standard	5	2.4	None	F35351-410
AUTO DRAIN • POLYCARBONATE BOWL W/ GUARD					
3/8"	Standard	5	2.3	None	F35331-401
3/8"	Coalescing	0.3	2.3	Mechanical	F35332-301
1/2"	Standard	5	2.3	None	F35341-401
1/2"	Coalescing	0.3	2.3	Mechanical	F35342-301
3/4"	Standard	5	2.3	None	F35351-401
AUTO DRAIN • METAL BOWL W/ SIGHT GLASS					
3/8"	Standard	5	2.8	None	F35331-411
3/8"	Coalescing	0.3	2.8	Mechanical	F35332-311
1/2"	Standard	5	2.8	None	F35341-411
1/2"	Coalescing	0.3	2.8	Mechanical	F35342-311
3/4"	Standard	5	2.8	None	F35351-411

1/2" Pressure drop test



See page 77 for additional flow charts

Replacement parts

MODEL	DESCRIPTION
104315	Replacement auto drain*
104316	Replacement manual drain
104317	5-Micron element
104318	40-Micron element
104319	0.3-Micron element
104320	Poly bowl, manual drain
104321	Poly bowl, auto drain
104322	Metal bowl, manual drain
104323	Metal bowl, auto drain
104324	Metal bowl, sight glass, auto drain
104325	Metal bowl, sight glass, manual drain
104326	Filter bowl service kit

* Replacement auto drains can only be used with auto drain bowls.

Accessories

See page 65 for details

MODEL	DESCRIPTION
104392-3	3/8" NPT lock-out valve
104392-4	1/2" NPT lock-out valve
104396	Modular clamp
104398-3	3/8" NPT pipe adapter
104398-4	1/2" NPT pipe adapter
104479-3	3/8" Check valve
104479-4	1/2" Check valve
104401	T-type wall mount
104405	L-type wall mount
104409	C-type wall mount
104413-3-3	3/8" x 3/8" Manifold block
104413-4-3	1/2" x 3/8" Manifold block