

### Air Preparation Equipment

ASCO's Modulair 100 Series offers all the control, flexibility and performance you need from your air preparation equipment. Components of the Modulair Series consist of filters, regulators and lubricators (FRLs). These components can be installed separately or can be assembled into a complete unit, as you require.

### What are FRLs and why should they be used?

Pneumatic actuators and controls perform more reliably and efficiently, and have a longer life, when the air is prepared for your specific application. These easy-to-use FRLs are specifically engineered to give you increased airflow from a modular system.

### Filters

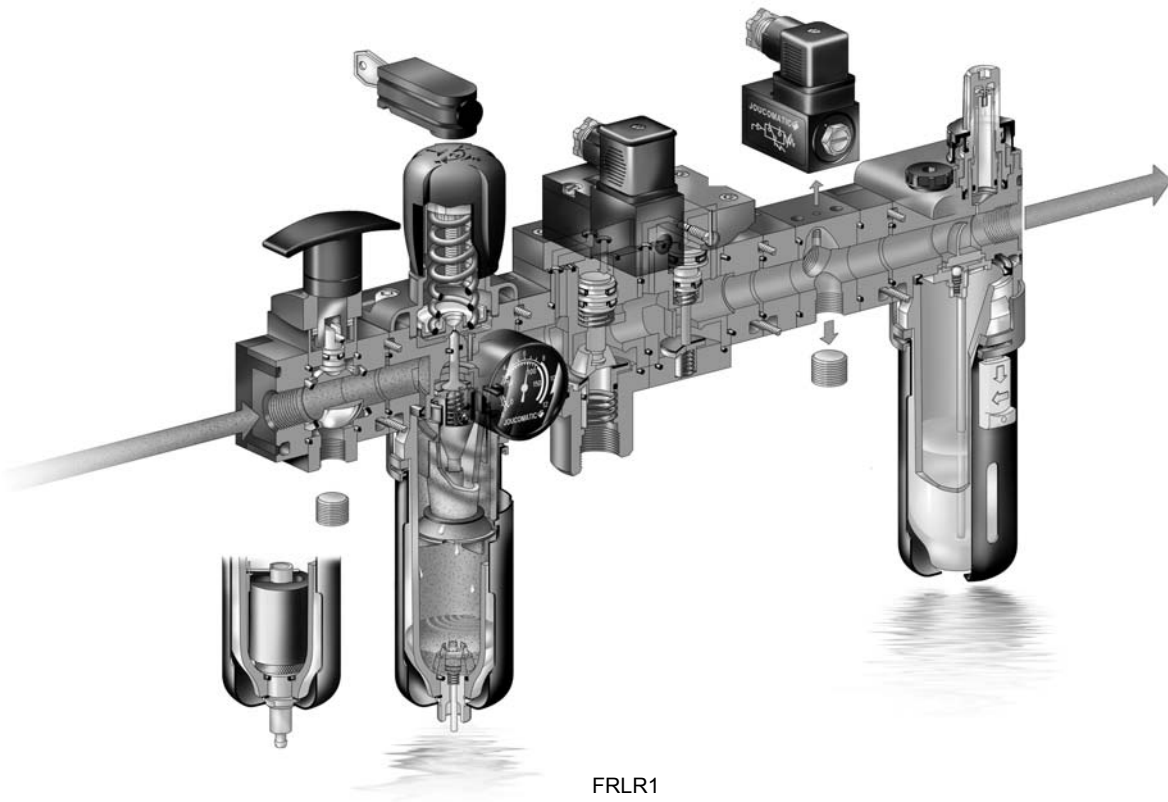
Condensation during the compression of air and water vapor can cause particles of pipe scale and other contaminants in the pipes. These particles need to be removed before they reach the pneumatic equipment, such as valves and cylinders. Particles can damage and clog small orifices in the equipment unless they are filtered out. Filters separate the water droplets and particles from the air before they reach your pneumatic equipment.

### Regulators

Compressed air must be kept at a constant pressure regardless of network fluctuations, variations in air consumption, or distance from the compressor. The regulator is used to maintain consistent downstream pressure.

### Lubricators

All moving parts must be kept lubricated for a longer life. The lubricator stores droplets of oil in the bowl, releasing the oil into the high velocity air stream and spreading the oil throughout the piping system to the components.



FRLR1

ASCO offers a complete line of air handling equipment. Filters, regulators, and lubricators are essential whenever pneumatic equipment is used. Filters come in a variety of micron ratings to clean the air of moisture and particulate coming out of your compressor. Regulators are located at specific locations to isolate areas of a pipe train that require unique pressures. Lubricators are used on pneumatic air components to give them the required lubrication for extended life. These components can be ordered separately for individual locations, or assembled for a central location.



## Construction

Modular Series	Pipe Size	Filters	Regulators	Water Reg.	Joinable Reg.	Lubricators	Monobloc F/L
<b>105</b>	<b>1/8", 1/4"</b>	<b>25um, 5um</b>					
<b>Body</b>		Polyamide (PA)	Polyamide	Polyamide	N/A	N/A	Polyamide (PA)
<b>Bowl</b>		Polycarbonate (PC)	-	-	N/A	N/A	Polycarbonate (PC)
<b>Bowl Protector</b>		Polyamide (PA)	-	-	N/A	N/A	Polyamide (PA)
<b>Filter Element</b>		Polyethylene (PE)	-	-	N/A	N/A	Polyethylene (PE)
<b>Seals</b>		Nitrile (NBR)	Nitrile (NBR)	NBR	N/A	N/A	Nitrile (NBR)
<b>107</b>	<b>1/8", 1/4"</b>	<b>25um, 5um</b>					
<b>Body</b>		Painted Zinc Alloy	Painted Zinc Alloy	N/A	N/A	Painted Zinc Alloy	N/A
<b>Bowl</b>		PC or PA	-	N/A	N/A	PC or PA	N/A
<b>Bowl Protector</b>		Painted Steel	-	N/A	N/A	Painted Steel	N/A
<b>Internal Parts</b>		-	-	N/A	N/A	-	N/A
<b>Filter Element</b>		Polyethylene (PE)	-	N/A	N/A	-	N/A
<b>Seals</b>		Nitrile (NBR)	Nitrile (NBR)	N/A	N/A	Nitrile (NBR)	N/A
<b>112</b>	<b>1/4", 3/8", 1/2"</b>	<b>25um, 5um</b>					
<b>Body</b>		Painted Zinc Alloy	Painted Zinc Alloy	N/A	Painted Zinc Alloy	Painted Zinc Alloy	N/A
<b>Bowl</b>		Metal or PC	-	N/A	-	Metal or PC	N/A
<b>Bowl Protector</b>		Painted Steel	-	N/A	-	Painted Steel	N/A
<b>Internal Parts</b>		-	-	N/A	-	-	N/A
<b>Filter Element</b>		Polyethylene (PE)	-	N/A	-	-	N/A
<b>Seals</b>		Nitrile (NBR)	Nitrile (NBR)	N/A	Nitrile (NBR)	Nitrile (NBR)	N/A
<b>160</b>	<b>3/4", 1"</b>	<b>30um, 5um</b>					
<b>Body</b>		Aluminum	Aluminum	N/A	N/A	Aluminum	N/A
<b>Bowl</b>		Metal with Polypropylene View Window	-	N/A	N/A	Metal with Polypropylene View Window	N/A
<b>Bowl Protector</b>		-	-	N/A	N/A	-	N/A
<b>Internal Parts</b>		-	-	N/A	N/A	-	N/A
<b>Filter Element</b>		Sintered Plastic	-	N/A	N/A	-	N/A
<b>Seals</b>		Nitrile (NBR)	Nitrile (NBR)	N/A	N/A	Nitrile (NBR)	N/A
<b>Page Number</b>		472, 473	474, 475	474, 475	474, 475	476, 477	476, 477



F/R	FRL	Coalescing Filters	Combination Coalescing Filters	Shut-Off Valves	Soft-Start Devices	3/2 Isolation Valves	Bypass Modules
Polyamide (PA)	Polyamide (PA)	N/A	N/A	N/A	N/A	N/A	N/A
Polycarbonate (PC)	Polycarbonate (PC)	N/A	N/A	N/A	N/A	N/A	N/A
Polyamide (PA)	Polyamide (PA)	N/A	N/A	N/A	N/A	N/A	N/A
Polyethylene (PE)	Polyethylene (PE)	N/A	N/A	N/A	N/A	N/A	N/A
Nitrile (NBR)	Nitrile (NBR)	N/A	N/A	N/A	N/A	N/A	N/A
		<b>.01um</b>	<b>5um pre filter -.01um</b>				
Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy
PC or PA	PC or PA	PC or PA	PC or PA	-	-	-	-
Painted Steel	Painted Steel	Painted Steel	Painted Steel	-	-	-	-
-	-	-	-	Brass, Acetal Resin	Brass, Acetal Resin	-	-
Polyethylene (PE)	Polyethylene (PE)	Polyethylene (PE)	Polyethylene (PE)	-	-	-	-
Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)
		<b>.01um</b>	<b>5um pre filter -.01um</b>				
Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy	Painted Zinc Alloy
PC	PC	PC	PC	-	-	-	-
Painted Steel	Painted Steel	Painted Steel	Painted Steel	-	-	-	-
-	-	-	-	Brass, Acetal Resin	Brass, Acetal Resin	-	-
Polyethylene (PE)	Polyethylene (PE)	Polyethylene (PE)	Polyethylene (PE)	-	-	-	-
Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)
		<b>.01um</b>	<b>5um pre filter -.01um</b>				
Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Metal with Polypropylene View Window	Metal with Polypropylene View Window	Metal with Polypropylene View Window	Metal with Polypropylene View Window	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	Aluminum, Brass	Aluminum, Brass	-	-
Sintered Plastic	Sintered Plastic	Sintered Plastic	Sintered Plastic	-	-	-	-
Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)	Nitrile (NBR)
478, 479	480, 481	482	482	484	484	483	483

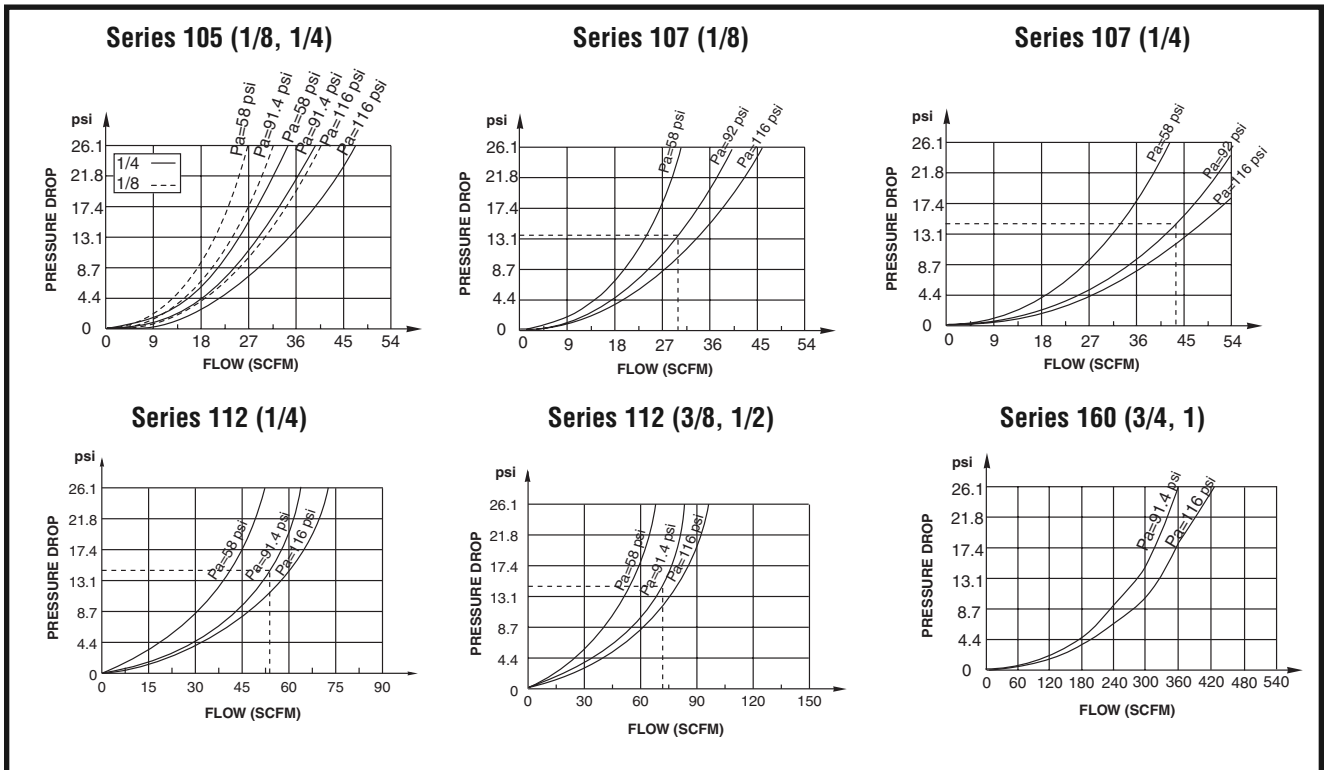
ACCESSORIES

Filter - Specifications

Series	Pipe Size (ins.)	Bowl Capacity (oz.)		Max. Flow @ 90 psi and 1 psi Drop (SCFM)	Max. Inlet Pressure (psi) @ 125°F	Filter Capacity (microns)	Min. Ambient Temp. °F	Max. Ambient Temp. °F	Semi Automatic Drain		Automatic Drain	
		Total	Useful						With Bowl Protection	Without Bowl Protection	With Bowl Protection	Without Bowl Protection
<b>Filter - 5 Micron Polycarbonate (PC) Bowl</b>												
105	1/8	0.90	0.32	26.7	150 ①	5	32	125	342 25 255	342 25 175	-	-
107	1/8	1.61	0.39	30.9	150 ②	5	32	125	342 04 017	342 04 029	-	-
105	1/4	0.90	0.32	31.5	150 ①	5	32	125	342 25 256	342 25 176	-	-
107	1/4	1.61	0.39	43.5	150 ②	5	32	125	342 04 018	342 04 030	-	-
112	1/4	3.65	1.28	54.0	150 ②	5	32	125	342 03 010	-	342 03 022	-
112	3/8	3.65	1.28	72.0	150 ②	5	32	125	342 03 011	-	342 03 023	-
112	1/2	3.65	1.28	72.0	150 ②	5	32	125	342 03 012	-	342 03 024	-
160	3/4	16	4.16	270	254	5	15	125	342 07 390 ④	-	342 07 396 ④	-
160	1	16	4.16	294	254	5	15	125	342 07 391 ④	-	342 07 397 ④	-
<b>Filter - 25 Micron Polycarbonate (PC) Bowl</b>												
105	1/8	0.90	0.32	31.4	150 ①	25	32	125	342 25 215	342 25 135	-	-
107	1/8	1.61	0.39	36.4	150 ②	25	32	125	342 04 013	342 04 025	-	-
105	1/4	0.90	0.32	37.1	150 ①	25	32	125	342 25 216	342 25 136	-	-
107	1/4	1.61	0.39	51.2	150 ②	25	32	125	342 04 014	342 04 026	-	-
112	1/4	3.65	1.28	63.5	150 ②	25	32	125	342 03 004	342 03 041	342 03 016	342 03 453
112	3/8	3.65	1.28	84.7	150 ②	25	32	125	342 03 005	342 03 042	342 03 017	342 03 454
112	1/2	3.65	1.28	84.7	150 ②	25	32	125	342 03 006	342 03 043	342 03 018	342 03 455
160	3/4	16	4.16	317.5	254	30	15	125	342 07 381 ③④	-	342 07 387 ③④	-
160	1	16	4.16	346	254	30	15	125	342 07 382 ③④	-	342 07 388 ③④	-

① 175 psi @ 75°F Max. Ambient & Fluid Temperature. ② 230 psi @ 75°F Max. Ambient & Fluid Temperature. ③ 30 micron filter. ④ Metal bowl with Polypropylene viewing window. Consult ASCO for manual drains on 160 Series.

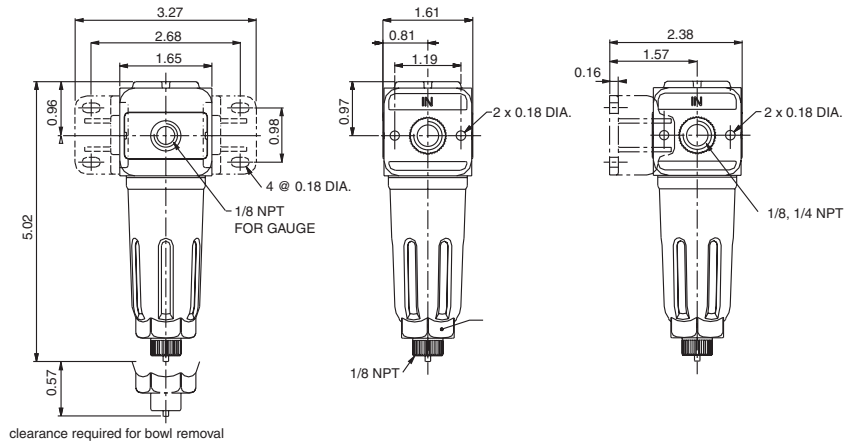
Filter - Flow Graphs



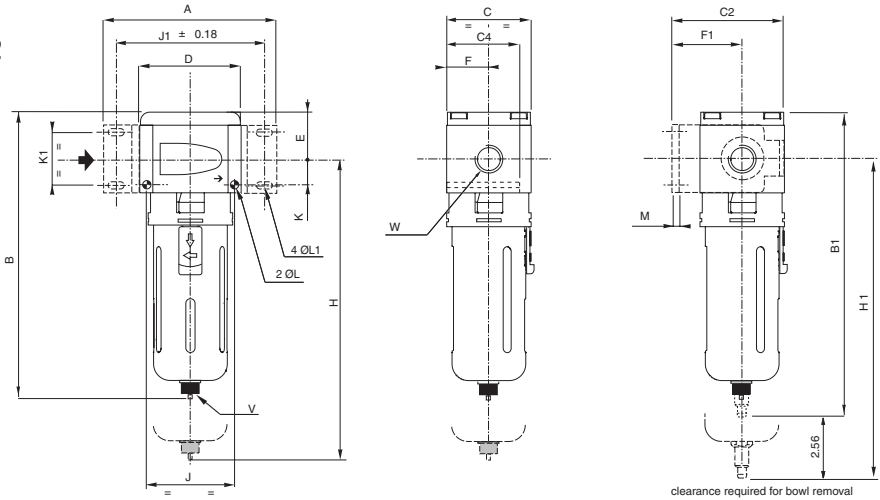
### Filter - Dimensions inches

Series	A	B	B1	C	C2	C4	D	E	F	F1	H	H1	J	J1	K	K1	L (Dia.)	L1 (Dia.)	M	V	W
107	3.27	6.28	-	1.65	2.40	1.50	1.65	1.00	0.83	1.57	7.48	-	1.26	2.70	0.39	1.10	0.16	0.18	0.12	1/8	1/8", 1/4" NPT
112	4.41	7.36	7.80	2.17	2.89	1.87	2.60	1.20	1.08	1.81	8.72	9.15	2.24	3.78	0.67	1.32	0.22	0.22	0.16	1/8	1/4", 3/8", 1/2" NPT

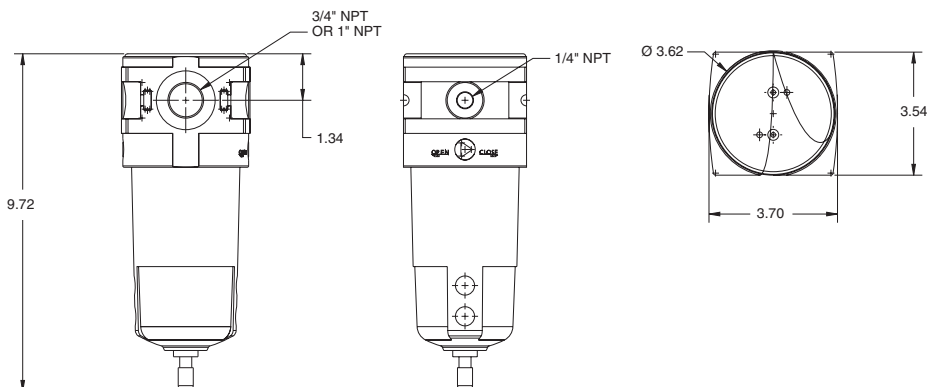
#### Series 105



#### Series 107, 112



#### Series 160

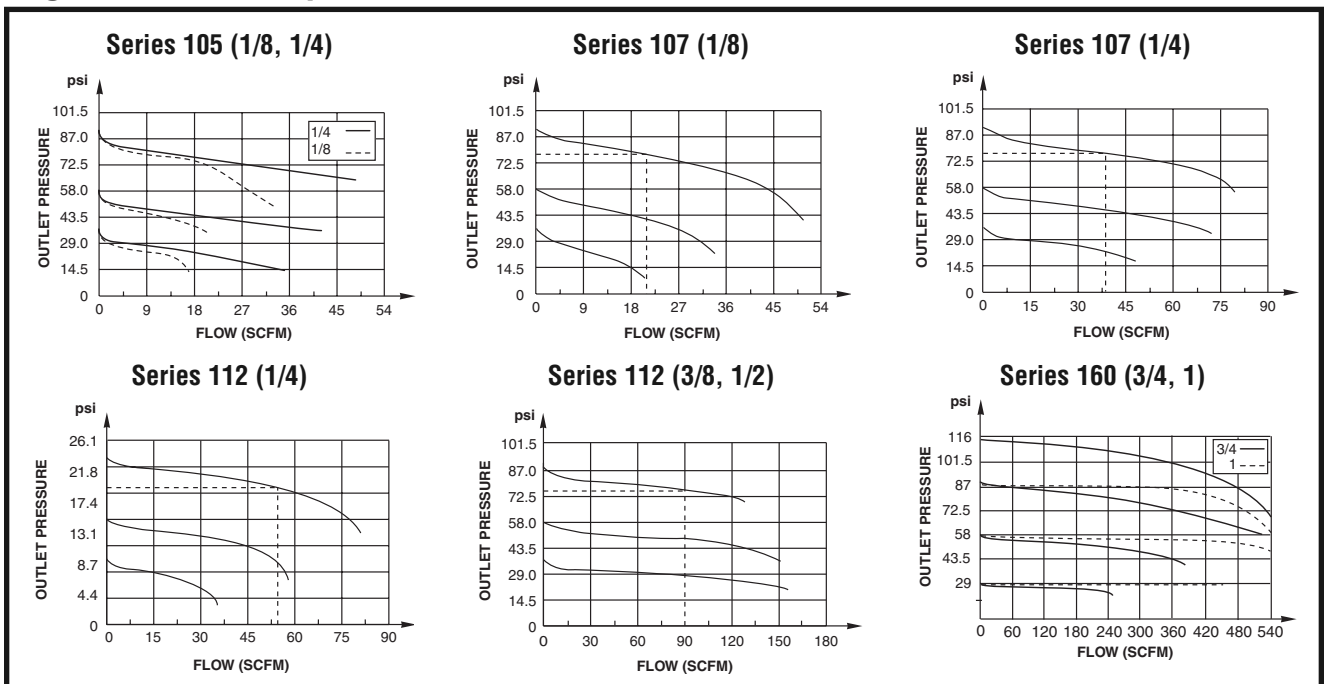


Regulator - Specifications

Series	Pipe Size (ins.)	Max. Flow @ 90 psi (SCFM)	Max. Inlet Pressure (psi)	Pressure Control Range (psi)	Min. Ambient Temp. °F	Max. Ambient Temp. °F	With Pressure Gauge	Without Pressure Gauge
<b>Regulator - Self-Relieving Air Service</b>								
105	1/8	19.4	175	7 - 120	32	125	342 25 027	342 25 019
105	1/8	19.4	175	3 - 44	32	125	342 25 265	342 25 263
107	1/8	24.7	230	7 - 145	15	140	342 04 200	342 04 035
107	1/8	24.7	230	3 - 44	15	140	342 04 198	342 04 041
105	1/4	22.9	175	7 - 120	32	125	342 25 028	342 25 020
105	1/4	22.9	175	3 - 44	32	125	342 25 266	342 25 264
107	1/4	45.9	230	7 - 145	15	140	342 04 201	342 04 036
107	1/4	45.9	230	3 - 44	15	140	342 04 199	342 04 042
112	1/4	63.5	230	7 - 145	15	140	342 03 061	342 03 055
112	1/4	63.5	230	3 - 44	15	140	342 03 073	342 03 067
112	3/8	105.9	230	7 - 145	15	140	342 03 062	342 03 056
112	3/8	105.9	230	3 - 44	15	140	342 03 074	342 03 068
112	1/2	105.9	230	7 - 145	15	140	342 03 063	342 03 057
112	1/2	105.9	230	3 - 44	15	140	342 03 075	342 03 069
160	3/4	423.3	254	7 - 175	15	140	342 07 438	342 07 435
160	1	582.1	254	7 - 175	15	140	342 07 439	342 07 436
<b>Regulator - Non Self-Relieving Water Service (max. flow in GPM)</b>								
105	1/8	2.6	175	3 - 44	40	125	342 25 277	342 25 275
105	1/8	2.6	175	7 - 87	40	125	342 25 281	342 25 279
105	1/4	4.0	175	3 - 44	40	125	342 25 278	342 25 276
105	1/4	4.0	175	7 - 87	40	125	342 25 282	342 25 280
<b>Joinable Regulator - Self-Relieving Air Service (Common inlet size 1/2" NPT) ①</b>								
112	3/8	105.9	230	3 - 44	15	140	342 03 770	342 03 768
112	3/8	105.9	230	7 - 145	15	140	342 03 774	342 03 772
112	1/2	105.9	230	3 - 44	15	140	342 03 771	342 03 769
112	1/2	105.9	230	7 - 145	15	140	342 03 775	342 03 773

① To supply different circuits with different pressures from a common supply.

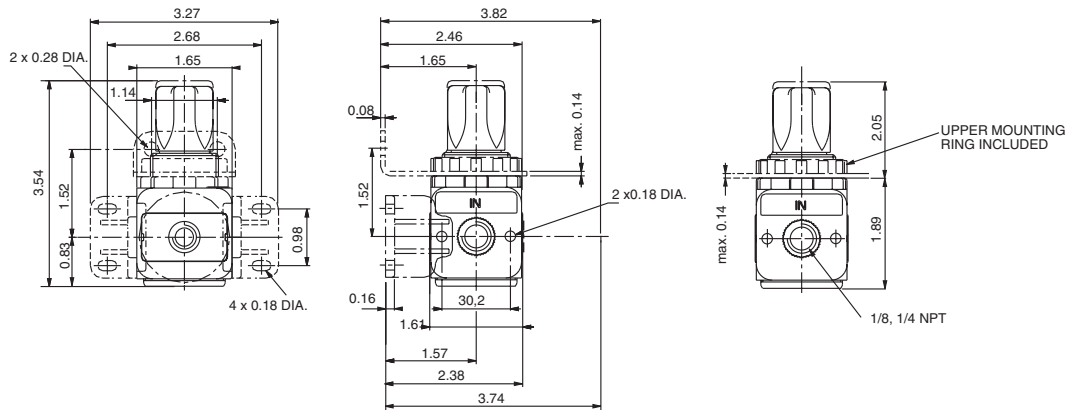
Regulator - Flow Graphs



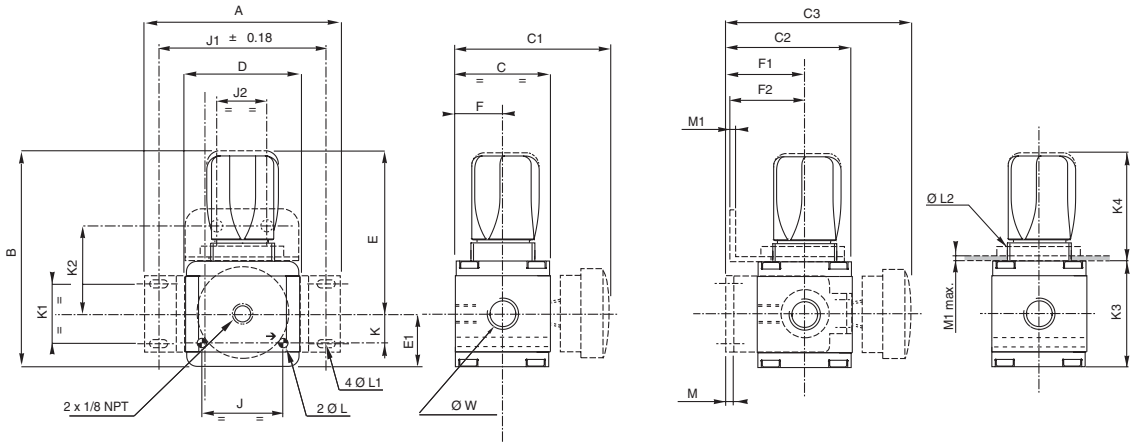
### Regulator - Dimensions inches

Series	A	B	C	C1	C2	C3	D	E	E1	F	F1	F2	J	J1	J2	K	K1	K2	K3	K4	L (Dia.)	L1 (Dia.)	L2 (Dia.)	M	M1	W
107	3.27	4.09	1.65	2.99	2.40	3.74	1.65	3.09	1.00	0.83	1.57	1.65	1.26	2.70	1.14	0.39	1.10	1.48	2.01	2.09	0.16	0.18	M30 x 2	0.12	0.08	1/8", 1/4" NPT
112	4.41	4.92	2.17	3.43	2.89	4.13	2.60	3.72	1.20	1.08	1.81	1.65	1.77	3.78	1.14	0.67	1.32	1.67	2.40	2.52	0.22	0.22	M37 x 2	0.16	0.08	1/4", 3/8", 1/2" NPT

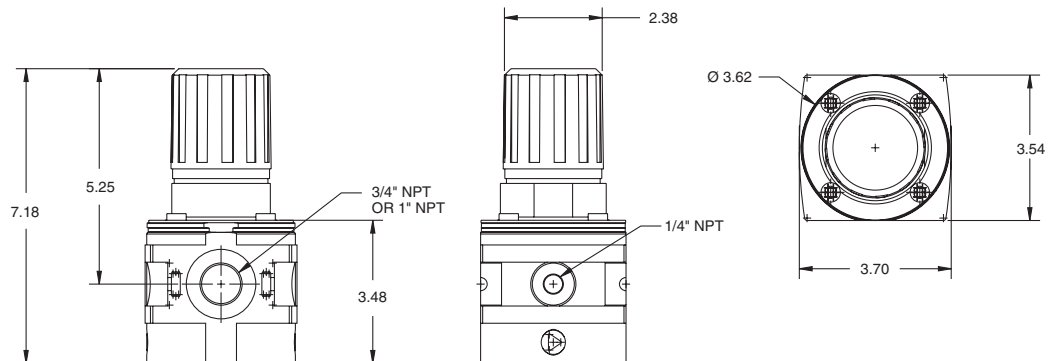
#### Series 105



#### Series 107, 112



#### Series 160

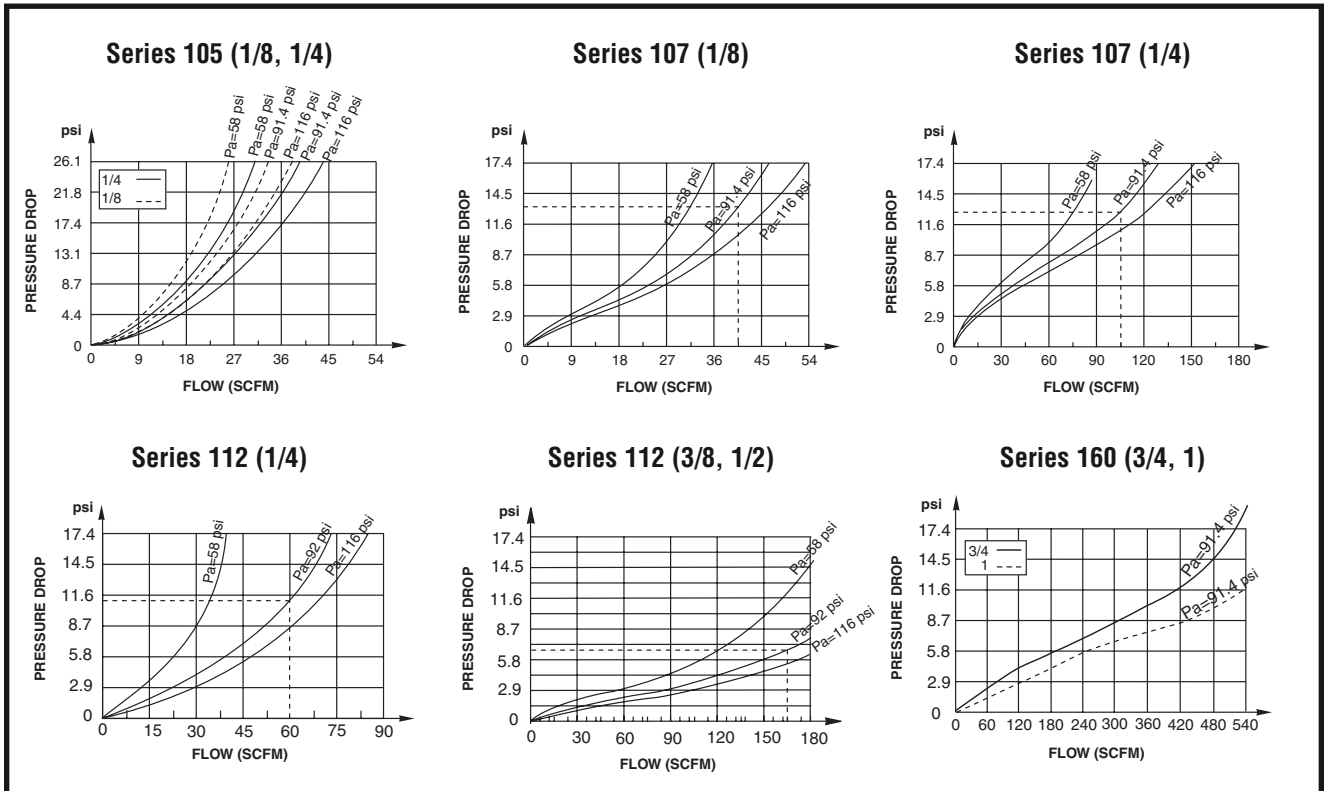


Lubricator - Specifications

Series	Pipe Size (ins.)	Bowl Capacity (oz.)	Max. Oil Capacity (oz.)	Min. Flow @ 90 psi (SCFM)	Max. Flow @ 90 psi (SCFM)	Max. Inlet Pressure (psi) @ 125°F	Min. Ambient Temp. °F	Max. Ambient Temp. °F	With Bowl Guard	Without Bowl Guard
<b>Lubricator - Selective Oil Fog</b>										
105	1/8	0.9	0.74	0.71	29.3	150	32	125	342 25 195 ②③	342 25 115 ②③
107	1/8	1.6	0.96	0.71	47.7	150 ①	32	125	342 04 003	342 04 007
105	1/4	0.9	0.74	0.71	33.5	150	32	125	342 25 196 ②③	342 25 116 ②③
107	1/4	1.6	0.96	0.71	123.6	150 ①	32	125	342 04 004	342 04 008
112	1/4	3.6	2.3	0.71	70.6	150 ①	32	125	342 03 273	342 03 279
112	3/8	3.6	2.3	0.71	194.2	150 ①	32	125	342 03 274	342 03 280
112	1/2	3.6	2.3	0.71	194.2	150 ①	32	125	342 03 275	342 03 281
160	3/4	16.6	16.0	3.17	564.5	254	15	125	342 07 555	-
160	1	16.6	16.0	3.17	624.5	254	15	125	342 07 556	-

① 175 psi @ 75°F Max. Ambient & Fluid Temperature. ② Includes 25 micron filter (see filter section for specifications). ③ Combination Filter-Lubricator only.

Lubricator - Flow Graphs

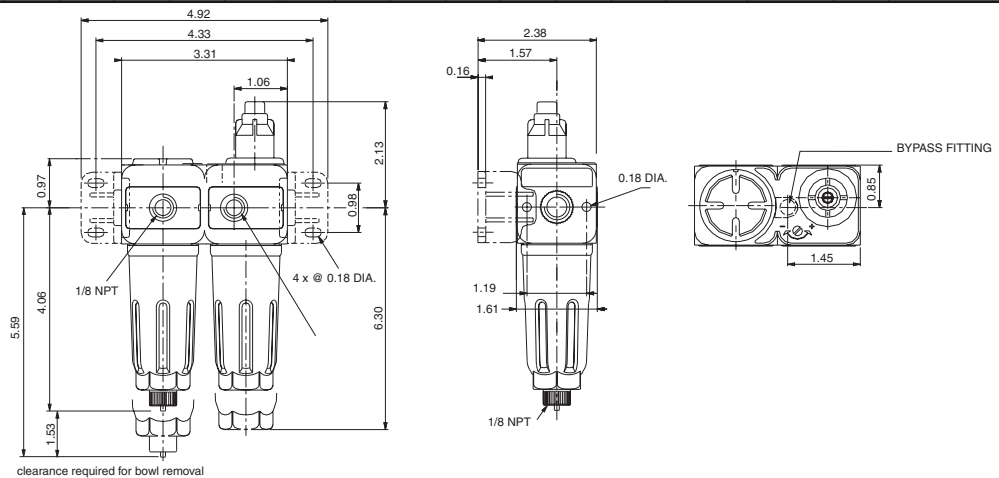




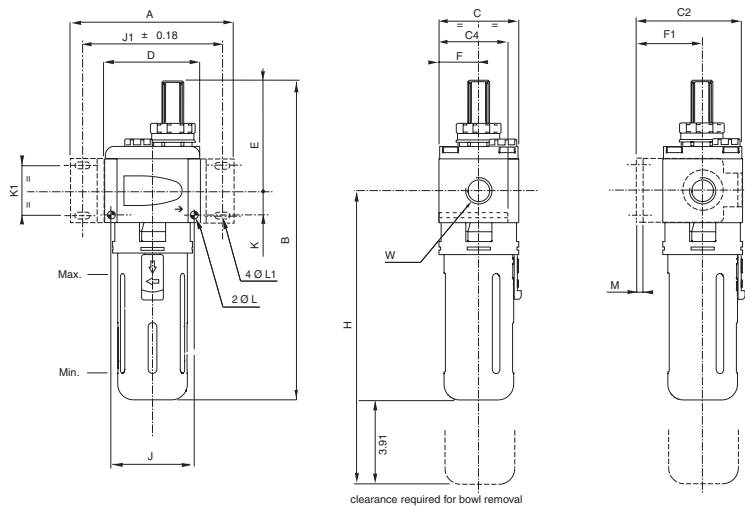
### Lubricator - Dimensions inches

Series	A	B	C	C2	C4	D	E	F	F1	H	J	J1	K	K1	L (Dia.)	L1 (Dia.)	M	W
107	3.27	7.36	1.65	2.40	1.50	1.65	2.56	0.83	1.57	8.46	1.26	2.70	0.39	1.10	0.16	0.18	0.16	1/8", 1/4" NPT
112	4.41	8.46	2.17	2.89	1.87	2.60	2.80	1.08	1.81	9.57	2.24	3.78	0.67	1.32	0.22	0.22	0.16	1/4", 3/8", 1/2" NPT

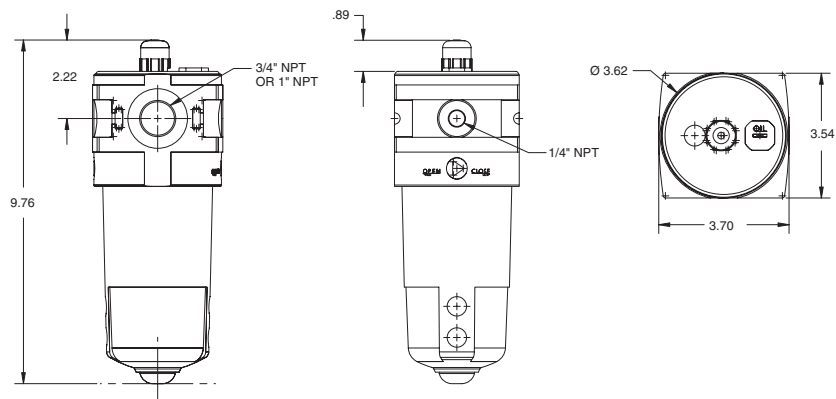
#### Series 105



#### Series 107, 112



#### Series 160



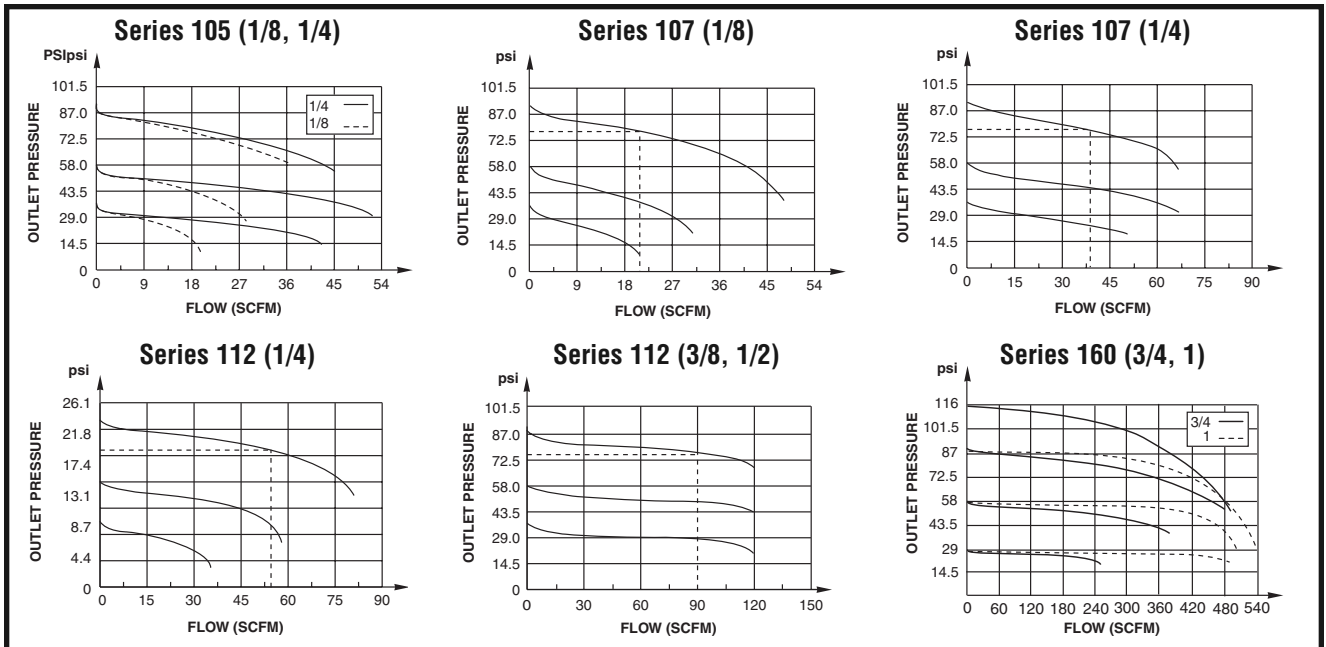
Filter/Regulator - Specifications

Series	Pipe Size (ins.)	Bowl Capacity (oz.)		Max. Flow @ 90 psi (SCFM)	Max. Inlet Pressure (psi) @ 125°F	Pressure Control Range (psi)	Min. Ambient Temp. °F	Max. Ambient Temp. °F	Semi Automatic Drain		Automatic Drain	
		Total	Useful						With Pressure Gauge	Without Pressure Gauge	With Pressure Gauge	Without Pressure Gauge
<b>Filter/Regulator Combined - 5 Micron Filtration with Bowl Protector</b>												
105	1/8	.90	0.32	15.9	150 ②	7 - 120	32	125	342 25 251	342 25 249	-	-
107	1/8	1.61	0.39	21.2	150 ①	7 - 145	32	125	342 04 170	342 04 053	-	-
105	1/4	.90	0.32	15.8	150 ②	7 - 120	32	125	342 25 252	342 25 250	-	-
107	1/4	1.61	0.39	38.8	150 ①	7 - 145	32	125	342 04 171	342 04 054	-	-
112	1/4	3.65	1.28	53.0	150 ①	7 - 145	32	125	342 03 101	342 03 095	342 03 150	342 03 144
112	3/8	3.65	1.28	88.3	150 ①	7 - 145	32	125	342 03 102	342 03 096	342 03 151	342 03 145
112	1/2	3.65	1.28	88.3	150 ①	7 - 145	32	125	342 03 103	342 03 097	342 03 152	342 03 146
160	3/4	16	4.16	328	254	7 - 175	15	125	342 07 468 ④	342 07 465 ④	342 07 480 ④	342 07 477 ④
160	1	16	4.16	469.2	254	7 - 175	15	125	342 07 469 ④	342 07 466 ④	342 07 481 ④	342 07 478 ④
<b>Filter/Regulator Combined - 25 Micron Filtration with Bowl Protector</b>												
105	1/8	0.90	0.32	19.4	150 ②	7 - 120	32	125	342 25 211	342 25 209	-	-
107	1/8	1.61	0.39	24.7	150 ①	7 - 145	32	125	342 04 178	342 04 047	-	-
105	1/4	0.90	0.32	22.9	150 ②	7 - 120	32	125	342 25 212	342 25 210	-	-
107	1/4	1.61	0.39	45.9	150 ①	7 - 145	32	125	342 04 179	342 04 048	-	-
112	1/4	3.65	1.28	63.5	150 ①	7 - 145	32	125	342 03 089	342 03 083	342 03 138	342 03 132
112	3/8	3.65	1.28	105.9	150 ①	7 - 145	32	125	342 03 090	342 03 084	342 03 139	342 03 133
112	1/2	3.65	1.28	105.9	150 ①	7 - 145	32	125	342 03 091	342 03 085	342 03 140	342 03 134
160	3/4	16	4.16	388	254	7 - 175	15	125	342 07 450 ③④	342 07 447 ③④	342 07 462 ③④	342 07 459 ③④
160	1	16	4.16	554	254	7 - 175	15	125	342 07 451 ③④	342 07 448 ③④	342 07 463 ③④	342 07 460 ③④
<b>Filter/Regulator Combined - 25 Micron Filtration without Bowl Protector</b>												
105	1/8	0.90	0.32	19.4	150 ②	7 - 120	32	125	342 25 131	342 25 129	-	-
107	1/8	1.61	0.39	24.7	150 ①	7 - 145	32	125	342 04 182	342 04 071	-	-
105	1/4	0.90	0.32	22.9	150 ②	7 - 120	32	125	342 25 132	342 25 130	-	-
107	1/4	1.61	0.39	45.9	150 ①	7 - 145	32	125	342 04 183	342 04 072	-	-
112	1/4	3.65	1.28	63.5	150 ①	7 - 145	32	125	342 03 465	342 03 343	342 03 462	342 03 459
112	3/8	3.65	1.28	105.9	150 ①	7 - 145	32	125	342 03 466	342 03 344	342 03 463	342 03 460
112	1/2	3.65	1.28	105.9	150 ①	7 - 145	32	125	342 03 467	342 03 345	342 03 464	342 03 461

① 230 psi @ 75°F Max. Ambient & Fluid Temperature. ② 175 psi @ 75°F Max. Ambient & Fluid Temperature. ③ 30 micron filtration.

④ Metal bowl with Polypropylene viewing window. Consult ASCO for metal bowls or Polyamide bowls on 112 Series, and manual drains for 160 Series.

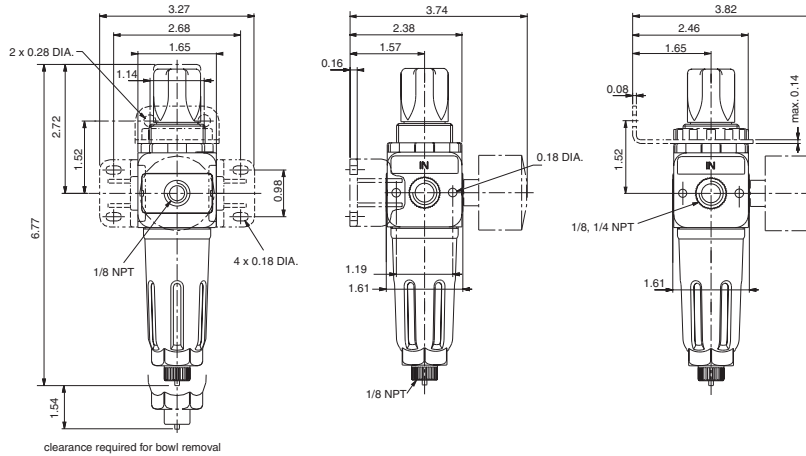
Filter/Regulator - Flow Graphs



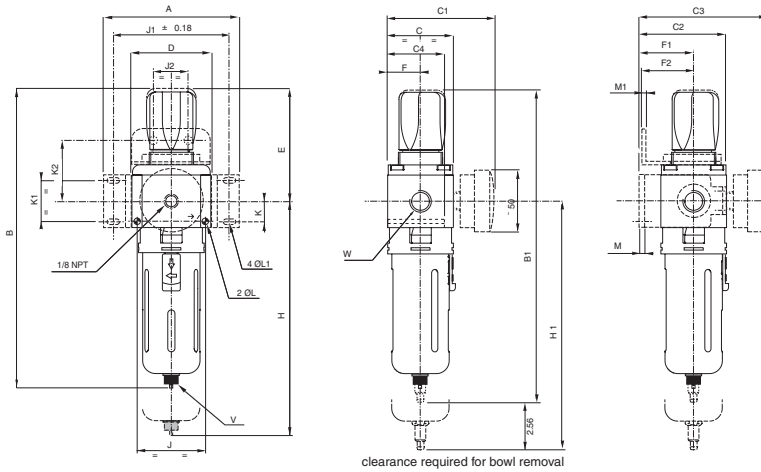
## Filter/Regulator - Dimensions inches

Series	A	B	B1	C	C1	C2	C3	C4	D	E	F	F1	F2	H	H1	J	J1	J2	K	K1	K2	L (Dia.)	L1 (Dia.)	M	M1	V	W
107	3.27	8.38	-	1.65	2.99	2.40	3.74	1.50	1.65	3.11	0.83	1.57	1.65	7.48	-	1.26	2.70	1.14	0.39	1.10	1.48	0.16	0.18	0.12	0.08	1/8	1/8", 1/4" NPT
112	4.41	9.88	10.31	2.17	3.42	2.89	4.13	1.87	2.60	3.72	1.08	1.81	1.65	8.72	9.15	2.24	3.78	1.14	0.67	1.32	1.67	0.22	0.22	0.16	0.08	1/8	1/4", 3/8", 1/2" NPT

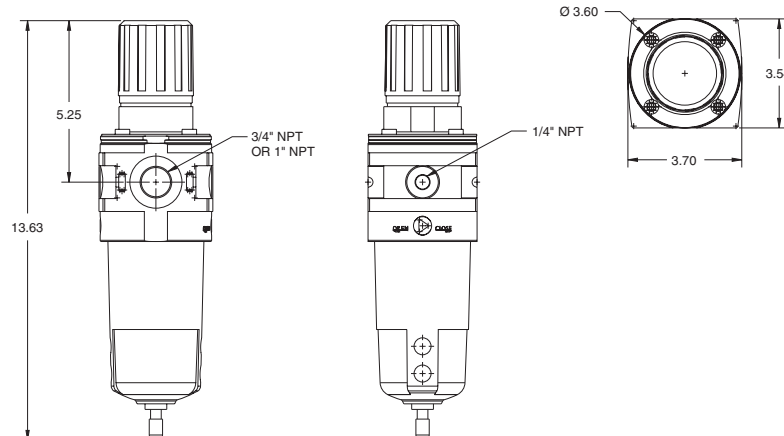
### Series 105



### Series 107, 112



### Series 160

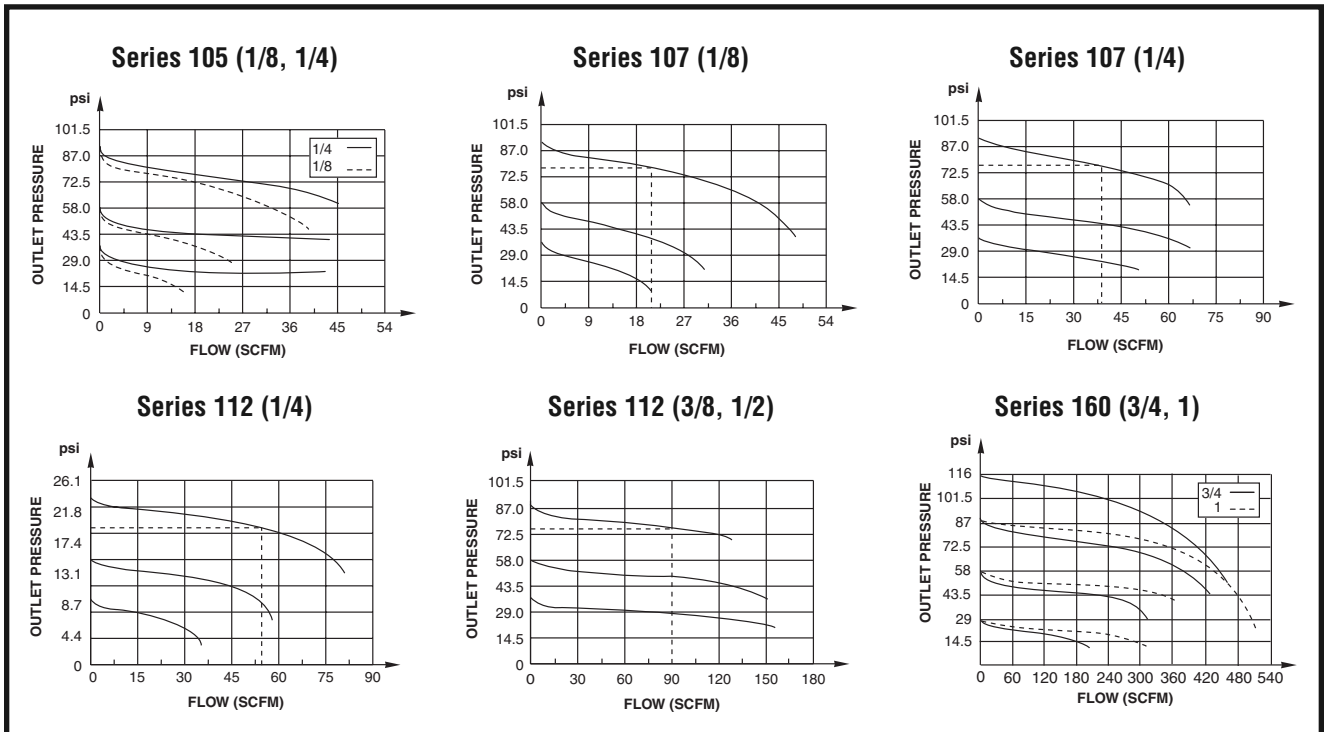


Filter/Regulator/Lubricator - Specifications

Series	Pipe Size (ins.)	Bowl Capacity (oz.)		Max. Oil Capacity (oz.)	Min. Flow @ 90 psi (SCFM)	Max. Flow @ 90 psi (SCFM)	Max. Inlet Pressure (psi)	Pressure Control Range (psi)	Min. Ambient Temp. °F	Max. Ambient Temp. °F	Semi Automatic Drain		Automatic Drain	
		Total	Useful								With Pressure Gauge	Without Pressure Gauge	With Pressure Gauge	Without Pressure Gauge
<b>Filter/Regulator/Lubricator Combined - 25 Micron Filtration with Bowl Protector</b>														
105	1/8	0.90	0.32	0.74	1.1	14.1	150 ②	7 - 120	32	125	342 25 191	342 25 189	-	-
107	1/8	1.61	0.39	0.96	1.1	24.7	150 ①	7 - 145	32	125	342 04 204	342 04 129	-	-
105	1/4	0.90	0.32	0.74	1.1	19.4	150 ②	7 - 120	32	125	342 25 192	342 25 190	-	-
107	1/4	1.61	0.39	0.96	1.1	45.9	150 ①	7 - 145	32	125	342 04 205	342 04 130	-	-
112	1/4	3.65	1.28	2.34	1.1	63.5	150 ①	7 - 145	32	125	342 03 293	342 03 305	342 03 441	342 03 438
112	3/8	3.65	1.28	2.34	1.1	105.9	150 ①	7 - 145	32	125	342 03 294	342 03 306	342 03 442	342 03 439
112	1/2	3.65	1.28	2.34	1.1	105.9	150 ①	7 - 145	32	125	342 03 295	342 03 307	342 03 443	342 03 440
160	3/4	16	4.16	16	3.2	388	254	7 - 175	15	125	342 07 561 ③	342 07 558 ③	342 07 573 ③	342 07 570 ③
160	1	17.6	4.16	16	3.2	476	254	7 - 175	15	125	342 07 562 ③	342 07 559 ③	342 07 574 ③	342 07 571 ③
<b>Filter/Regulator/Lubricator Combined - 25 Micron Filtration without Bowl Protector</b>														
105	1/8	0.90	0.32	0.74	1.1	14.1	150 ②	7 - 120	32	125	342 25 111	342 25 109	-	-
107	1/8	1.61	0.39	0.96	1.1	24.7	150 ①	7 - 145	32	125	342 04 206	342 04 135	-	-
105	1/4	0.90	0.32	0.74	1.1	19.4	150 ②	7 - 120	32	125	342 25 112	342 25 110	-	-
107	1/4	1.61	0.39	0.96	1.1	45.9	150 ①	7 - 145	32	125	342 04 207	342 04 136	-	-
112	1/4	3.65	1.28	2.34	1.1	63.5	150 ①	7 - 145	32	125	342 03 317	342 03 329	342 03 447	342 03 444
112	3/8	3.65	1.28	2.34	1.1	105.9	150 ①	7 - 145	32	125	342 03 318	342 03 330	342 03 448	342 03 445
112	1/2	3.65	1.28	2.34	1.1	105.9	150 ①	7 - 145	32	125	342 03 319	342 03 331	342 03 449	342 03 446
<b>Filter/Regulator/Lubricator Combined - 5 Micron Filtration with Bowl Protector ④</b>														
105	1/8	0.90	0.32	0.74	.94	12	150 ②	7 - 120	32	125	342 25 231	342 25 229	-	-
105	1/4	0.90	0.32	0.74	.94	16.5	150 ②	7 - 120	32	125	342 25 232	342 25 230	-	-
160	3/4	16	4.16	16	3.2	363.4	254	7 - 175	15	125	342 07 579 ⑤	342 07 576 ⑤	342 07 591 ⑤	342 07 588 ⑤
160	1	16	4.16	16	3.2	388	254	7 - 175	15	125	342 07 580 ⑤	342 07 577 ⑤	342 07 592 ⑤	342 07 589 ⑤

① 230 psi @ 75°F Max. Ambient & Fluid Temperature. ② 175 psi @ 75°F Max. Ambient & Fluid Temperature. ③ 30 micron filtration and metal bowl.  
 ④ Approx. 15% flow reduction with 5 micron filter element. ⑤ Metal bowl with polypropylene viewing window. Consult ASCO for manual drain on 160 Series.

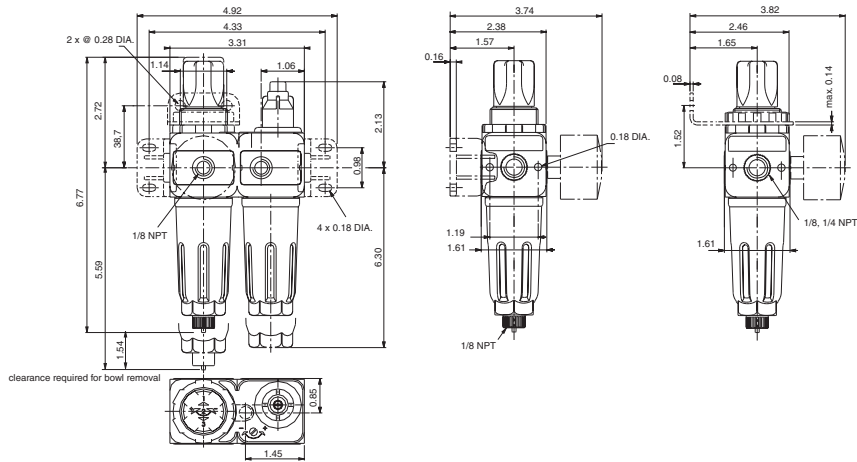
Filter/Regulator/Lubricator - Flow Graphs



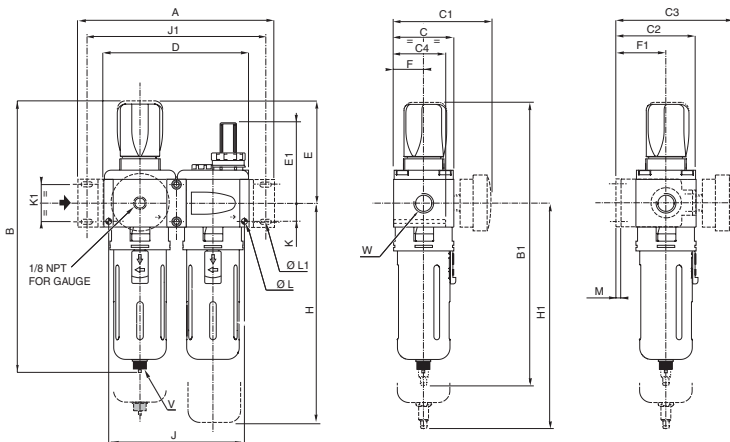
## Filter/Regulator/Lubricator - Dimensions inches

Series	A	B	B1	C	C1	C2	C3	C4	D	D1	E	E1	F	F1	H	H1	J	J1	K	K1	L (Dia.)	L1 (Dia.)	M	V	W
107	4.92	8.38	-	1.65	3.00	2.40	3.74	1.50	3.30	1.65	3.11	2.55	0.83	1.57	8.46	-	2.91	4.35	0.39	1.10	0.16	0.18	0.12	1/8	1/8", 1/4" NPT
112	7.01	9.84	10.33	2.17	3.43	2.89	4.13	1.87	5.20	2.60	3.72	2.80	1.08	1.81	9.57	9.15	4.48	6.38	0.67	1.32	0.22	0.22	0.16	1/8	1/4", 3/8", 1/2" NPT

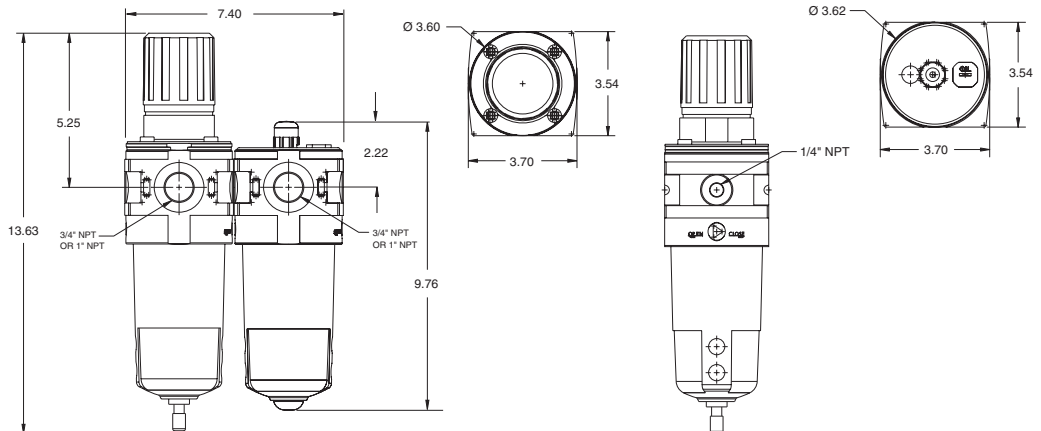
### Series 105



### Series 107, 112



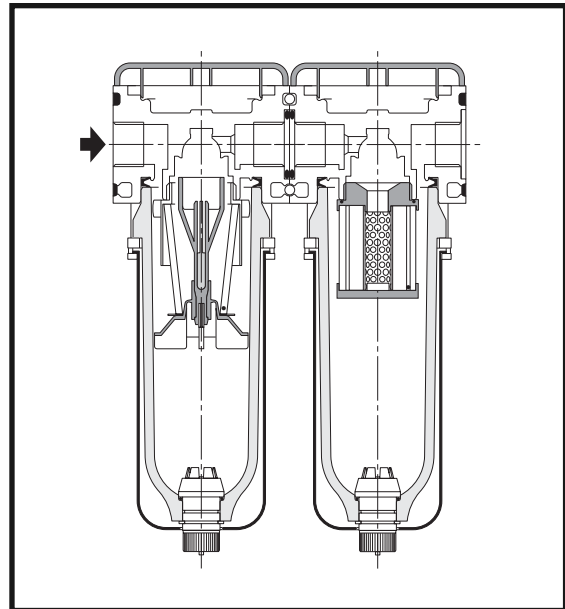
### Series 160



Coalescing Filters - Specifications

Series	Pipe Size (ins.)	Bowl Capacity (oz.)		Max. Flow @ 90 psi and 1 psi Drop (SCFM)	Max. Inlet Pressure (psi) @ 125°F	Min. Ambient Temp. °F	Max. Ambient Temp. °F	Semi Automatic Drain		Automatic Drain	
		Total	Useful					With Bowl Protection	Without Bowl Protection	With Bowl Protection	Without Bowl Protection
<b>Coalescing Filter - .01 Micron Polycarbonate (PC) Bowl ①</b>											
107	1/8	2.4	0.39	25	150	35	125	342 04 141	-	-	-
107	1/4	2.4	0.39	25	150	35	125	342 04 142	-	-	-
112	1/4	4.0	1.28	37	150	35	125	342 03 468	-	342 03 477	-
112	3/8	4.0	1.28	37	150	35	125	342 03 469	-	342 03 478	-
112	1/2	4.0	1.28	37	150	35	125	342 03 470	-	342 03 479	-
160	3/4	16	4.16	115.5	254	15	125	342 07 399	-	342 07 405	-
160	1	16	4.16	115.5	254	15	125	342 07 400	-	342 07 406	-
<b>Pre-Filter (5 Micron) and Coalescing Filter (.01 Micron) Polycarbonate (PC) Bowl ①</b>											
107	1/8	2.4	0.39	25	150	35	125	342 04 145	-	-	-
107	1/4	2.4	0.39	25	150	35	125	342 04 146	-	-	-
112	1/4	4.0	1.28	37	150	35	125	342 03 489	-	342 03 501	-
112	3/8	4.0	1.28	37	150	35	125	342 03 490	-	342 03 502	-
112	1/2	4.0	1.28	37	150	35	125	342 03 491	-	342 03 503	-
160	3/4	16	4.16	115.5	254	15	125	342 07 669	-	342 07 675	-
160	1	16	4.16	115.5	254	15	125	342 07 670	-	342 07 676	-
<b>Pre-Filter/Regulator (5 Micron) and Coalescing Filter (.01 Micron) Polycarbonate (PC) Bowl without gauge ① ②</b>											
107	1/8	2.4	0.39	25	150 ③	35	125	342 04 153	-	-	-
107	1/4	2.4	0.39	25	150 ③	35	125	342 04 154	-	-	-
112	1/4	4.0	1.28	37	150 ③	35	125	342 03 513	-	342 03 525	-
112	3/8	4.0	1.28	37	150 ③	35	125	342 03 514	-	342 03 526	-
112	1/2	4.0	1.28	37	150 ③	35	125	342 03 515	-	342 03 527	-

① See Filter section for dimensions. ② See filter/regulator section for dimensions. ③ 7-145 psi pressure control range.



# ADDITIONAL COMPONENTS

### Bypass Module

Installed between two components in the air preparation set and allows the user to tap off for high pressure filtered air or non-lubricated air, depending on where it is located in the air preparation assembly.

Series	1/4"	3/8"	1/2"	3/4"	1"
112	343 03 026	343 03 027	343 03 028	-	-
160	-	-	-	343 07 032	343 07 032

A pressure switch can be fitted to some bypass modules to monitor and control the pressure at the end of the air preparation assembly.

### Adjustable Pressure Switch

Series	1/4"
112, 160	349 00 030
112, 160	349 00 031 (Led + protection)



### Manually Operated Isolation Valve

An isolation valve allows the user to safely turn off the air flow through the air preparation assembly for maintenance or service of the air preparation assembly, or the downstream equipment and machinery.

Series	1/8"	1/4"	3/8"	1/2"	3/4"	1"
107	Standard	-	-			
	Padlockable	343 04 019	343 04 020			
112	Standard		343 03 035	343 03 036	343 03 037	
	Padlockable		343 03 055	343 03 056	343 03 057	
160	Standard				-	-
	Padlockable				343 07 023	343 07 024

### Key Lock for Regulator Adjustment Knob

This accessory is used to lock the adjusting knob to prevent inadvertent adjustment or tampering with the operating pressure settings. Can be fitted to stand alone regulators or when regulators are combined with other components.

Series	Unit Supplied with Key Lock Installed	Key Lock Supplied Separately
107, 112, 160	Specify S05 Suffix	343 03 050*

Example: 342 03 071S05

\* Only available for regulators with S05 suffix.



# ADDITIONAL COMPONENTS

## Emergency Shut-Off Valve and Soft-Start Devices

A 3/2 shut-off valve is controlled by a CNOMO pad-mounted solenoid valve, and vents the air system by de-energizing the solenoid valve when an unsafe condition is sensed.

	Series	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT
Size 30 Shut-off Valve	107	343 94 003	343 94 004	-	-
Size 30 Shut-off Valve	112	-	343 93 126	343 93 127	343 93 128

A soft-start device allows for gradual pressurization of the downstream equipment. An adjustable air flow causes the actuators to move slowly, and prevents damage from machinery being started at full speed. It can also return machinery to a safe, end-of-cycle position before re-starting.



### There are two types of control for this system to switch to the normal speed mode:

**Automatic Soft-Start** will switch to full flow and normal operating speed when the downstream pressure reaches 60-70% of the supply (upstream) pressure. As long as supply pressure is maintained, it is in the full flow position. When the air supply is cut off, the soft-start returns to the low flow position.

	Series	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT
Automatic Soft-Start Valve	107	343 04 023	343 04 024	-	-
Automatic Soft-Start Valve	112	-	343 03 044	343 03 045	343 03 046

**Solenoid/Air Controlled Soft-Start** allows the user to specify when the device switches to the full flow position. Position sensors on the machinery trigger the energization of the solenoid pilot valve. The solenoid pilot valve is energized under normal operating conditions, and upon de-energization the device switches to the low flow position.

	Series	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT
Sol/Air Controlled Soft-Start	112	-	343 93 017	343 93 018	343 93 019

The shut-off and soft-start units must be installed after the filter and before the lubricator.

## Emergency Shut-Off Valve and Soft-Start Devices as a System

	Series	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT	Valves Required
Emergency Shut-off/Automatic Soft-Start	107	343 94 007	343 94 008	-	-	-	-	1X
Emergency Shut-off/Automatic Soft-Start	112	-	343 93 120	343 93 121	343 93 122	-	-	1X
Emergency Shut-off/Sol/Air Soft-Start	112	-	343 93 123	343 93 124	343 93 125	-	-	2X
Emergency Shut-off/Air-Op/Automatic Soft-Start	160	-	-	-	-	343 07 027	343 07 028	-
Emergency Shut-off/Sol/Air Soft-Start	160	-	-	-	-	343 97 027	343 97 028	1X

## Solenoid Valves

①	Without Manual Operator	Impulse (Non-Locking) Manual Operator
Size 30 Solenoid Valves	189 00 007	-
Size 30 Solenoid Valves	190 00 005	190 00 017
Size 30 Solenoid Valves	192 00 007	192 00 009

① Solenoids must be ordered with voltage. (ex. 189 00 007 - 120/60)

## Shut-Off Valve Silencers

Shut-off Valve Silencers	Sintered Bronze	Porous Plastic
107 (G 1/4)	346 00 002	346 00 407
112 (G 1/2)	346 00 004	346 00 409

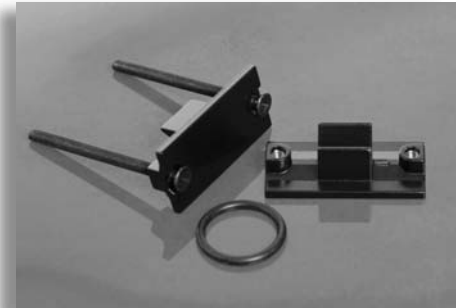


# ACCESSORIES

### Two Part Assembly Kit

This kit enables assembly of two components of the same series

	Series	Kit Number
2 assembly screws/nuts 1 component joining seal (not shown)	105	343 05 001
1 each front and rear assembly yokes, 2 screws 1 component joining seal	107	343 04 001
	112	343 03 001
2 assembly yokes, screws/nuts 1 component joining seal (not shown)	160	343 07 005

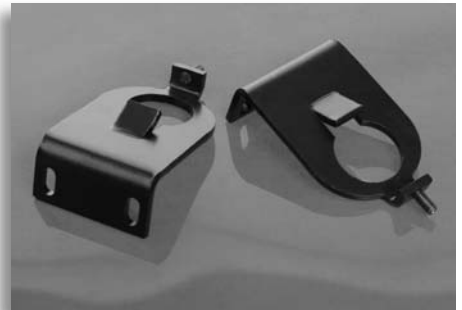


### Side Mounting Brackets

For surface mounting of any component in the series.

1 set of 2 mounting brackets.

	Series	Kit Number
2 brackets of glass-fiber reinforced polyamide 6/6	105	343 25 005
2 black painted steel brackets with steel retaining screws	107	343 04 003
	112	343 03 003
	160	343 07 017



### Top Mounting Ring And Brackets

For top mounting regulators and filter/regulator combinations.

The mounting ring can also be used for panel mounting the regulator.

Mounting Ring	Material	Series	Kit Number
1 mounting ring	Glass-fiber reinforced polyamide	105	343 00 011
		107	343 00 011
		112	343 00 004
	Aluminum alloy	160	343 07 015
Mounting Bracket			
1 top mounting bracket	Black zinc plating or epoxy coated steel	105	343 00 016
		107	343 00 016
		112	343 00 017
	Aluminum alloy	160	343 07 016



### Guages For Regulators/Assemblies

	NPT	All Series
1 1/2" dia. 0-60 psi	1/8"	343 00 015
1 1/2" dia. 0-160 psi	1/8"	343 00 014
2" dia. 0-60 psi	1/8"	343 00 064
2" dia. 0-200 psi	1/8"	343 00 062
2" dia. 0-235 psi	1/4"	287093-001



