

26 SERIES FILTER

Operating Instructions and Parts List

Application:

The 26 Series Filter is rugged, yet compact so it offers an ideal solution for most design problems. These units are also available with many popular options so they can be tailored to suit your application.

Features & Benefits:

- Supplied with either 1/4" or 3/8" in / out ports.
- Provides excellent water removal efficiency.
- Coalescing filter removes 99.97% of oil and water aerosols as well as solids larger than .3 microns.
- Bowl guard supplied as standard and mounts directly to the filter body not the bowl.

Accessories:

	<i>Model No.</i>
Automatic Drain .....	.8851AD
Metal Bowl .....	.26F-41M
Metal Bowl with Sightglass .....	.26F-41S

Technical Data:

Maximum Supply Pressure:

Plastic Bowl .....	.150 PSI
Metal Bowl .....	.250 PSI

Maximum Operating Temperature:

Plastic Bowl .....	.120° F
Metal Bowl .....	.250° F

Filter Element:

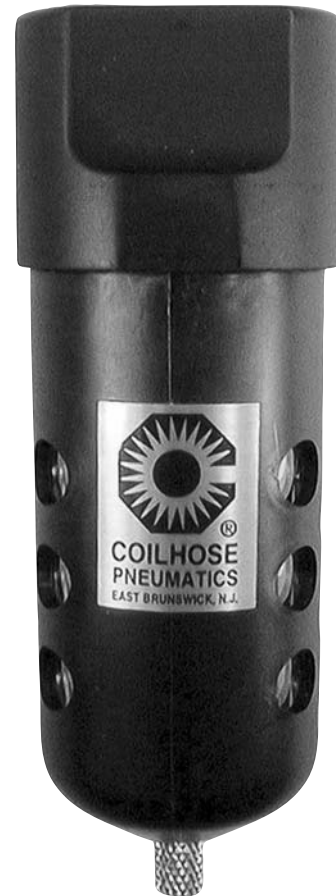
Standard .....	.40 micron
Option .....	.5 micron

Material:

Body .....	.Die Cast Aluminum
Standard Bowl .....	.Transparent Polycarbonate with High Impact Plastic Guard
Optional Bowl .....	.Zinc Die Cast
Filter Element .....	.Porous Polypropylene

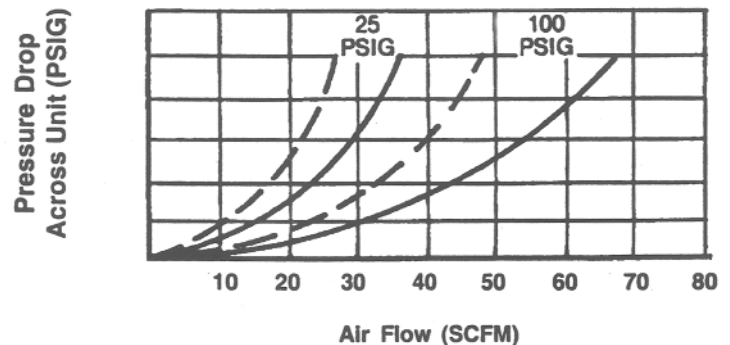
Dimensions and Weights:

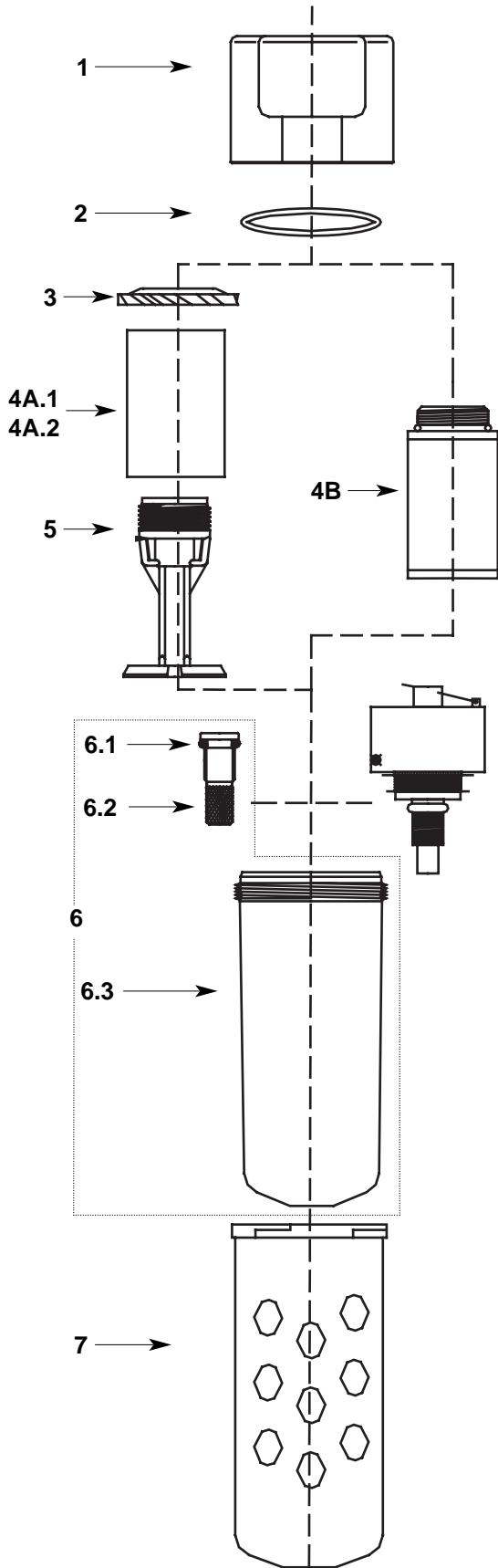
Height .....	.6 1/2"
Width .....	.2"
Weight .....	.1/2 lb.



1/4" Port
3/8" Port

Performance Data:





General Description of Operation:

Filter –

Pressurized air enters through a curved inlet and deflector vane plate (3A) directing the incoming air in a downward whirling pattern. Centrifugal force hurls the larger solids and liquid water particles outward where they collect on the inner surface of the filter bowl (6). The particles spiral down past a retainer baffle (5A) into a quiet chamber. The baffle (5A) prevents turbulent air in the upper bowl from re-entering liquid contaminants and carrying them downstream. Then the dry, clean air follows a convoluted path through the filter element (4A), where finer solid particles are filtered out.

Coalescing Filter –

Contaminated compressed air enters through the center of the graded porous element (4B). Solid particles are captured and held by direct impact, interception or diffusion, depending on their size. Liquid aerosols are also captured, but are forced through the filter matrix by the compressed air.

The element (4B) density lessens towards the outer surface, forcing the collected liquid to agglomerate into larger and larger droplets. As the enlarged droplets emerge on the outside of the element (4B) they are conducted to the drain sites by the drain layer. Gravity pulls the collected liquid to the bottom of the bowl (6.3) and is drained away by opening the draincock (6.2).

Cleaning and Maintenance:

It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or pressure drop of 10 PSID or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. Air supply must be shut off and the filter must be depressurized prior to disassembly. The filter element should be replaced and all other parts should be cleaned with nothing stronger than household detergent. Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the draincock can be opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

The bowl guard is removed by depressing the release tab with the thumb, while turning the guard counterclockwise and pulling downward. The guard will become disengaged when the clasps clear the locking points on the body.

The bowl can then be removed by turning it counterclockwise until it is completely unscrewed and free of the body.

Components:

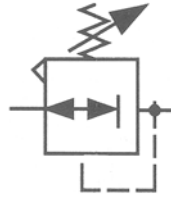
Chart

No.	Description	Model No.
1A	1/4" NPT Body	26F2-1
1B	3/8" NPT Body	26F3-1
2	Bowl Gasket	26F-16
3	Deflector Vane Plate	26F-11
4A.1	40 Micron Element	26F-12
4A.2	5 Micron Element	26F-12X
4B	Element, Coalescing	26C-14A
5	Retainer Baffle	26F-13
6	Polybowl and Draincock	26F-41L
6.1	Draincock O-Ring	26F-17
6.2	Brass Draincock	26F-18
6.3	Polycarbonate Bowl	26F-40L
7	Plastic Bowl Guard	26F-50

Rebuilding Kit:

Filter Bowl Repair Kit
(includes item 2, 6 and 7) 26FK01

We reserve the right to make engineering changes in design or materials without notification.



26 SERIES REGULATOR

Operating Instructions and Parts List

Application:

Combining a compact configuration with rugged durability, the 26 Series offers an ideal solution to most design problems. Available with many popular options, these units provide the advantages of a specially engineered system at substantial cost savings.

Options and Accessories:

Options:	<i>Suffix</i>
Gauge .....	.G
Extra Low Pressure Spring (0 - 25 PSI) .....	.J
Low Pressure Spring (0 - 60 PSI) .....	.L
Panel Mount .....	.P

Accessories:	<i>Model No.</i>
Mounting Bracket and Panel Mount Nut	MR140MB
Recommended Standard Pressure Gauge (0 - 160 PSI with 1 1/2" dial) .....	.26G-160
Recommended Optional Gauge (0 - 60 PSI with 1 1/2" dial) .....	.26G-60



Technical Data:

Maximum Supply Pressure: 250 PSI

Maximum Operating Temperature: 250° F

Pressure Range:	
Standard	0 - 125 PSI
Option	0 - 25 PSI
Option	0 - 60 PSI

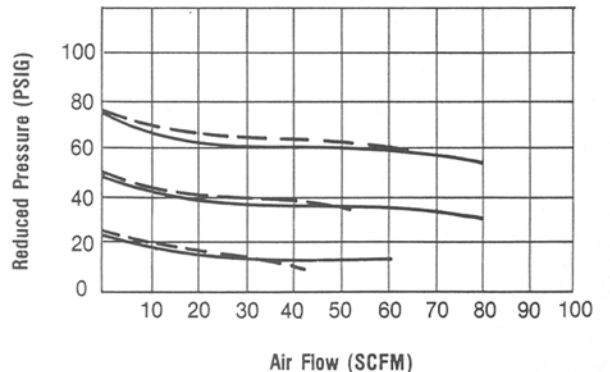
Material:	
Body	Die Cast Aluminum
Adjusting Knob	High Impact Plastic

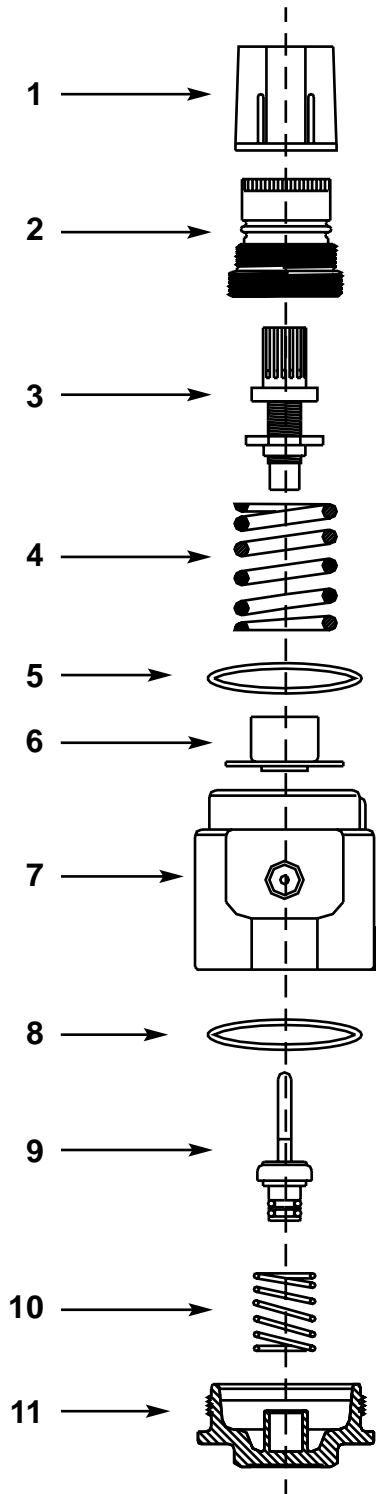
Dimensions and Weights:	
Height .....	.4"
Width .....	.2"
Weight .....	.1/2 lb.

Filter Performance Data:

1/4" Port
3/8" Port

Inlet Pressure: 100 PSIG





Rebuilding Kit

The Regulator Repair Kit includes items 5, 6, 8, 9, and 10. Use Model No. **26RK01B** when ordering.

We reserve the right to make engineering changes in design or materials without notification.

General Description of Operation

High pressure filtered air flows through the annular orifice around the poppet valve (9) toward the outlet. Downstream pressure is connected through an aspirator passage to the bottom of the diaphragm (6). As downstream pressure increases, the diaphragm (6) is forced upward, compressing the adjustment spring (4). When the diaphragm (6) moves, the bottom spring (10) pushes the poppet valve (9) upward to throttle the annular orifice. If downstream pressure exhausts, the mechanical sequence reverses and the poppet valve (9) opens the annular orifice until the set pressure is reached again. The poppet valve (9) normally blocks the relieving orifice in the center of the diaphragm (6). High excessive pressure lifts the diaphragm (6) off the poppet valve (9) and air bleeds through the orifice through the orifice and out the bonnet (2) vent until the system returns to set pressure.

Pressure Adjustment

To adjust pressure setting, pull up black adjusting knob. Turning the adjusting knob in a clockwise direction will increase the pressure setting and counterclockwise will decrease the pressure setting.

The downstream pressure should always be adjusted approximately 10 PSI above the required working pressure, even in the event of pressure fluctuation. It is advisable to adjust the setting under constant pressure conditions (unit not operating), as a changing flow rate affects the set value.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a high to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting. Once desired pressure setting is reached, push in the black adjusting knob to lock and maintain proper setting.

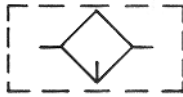
Cleaning and Maintenance

A clean supply of air to the regulator will assure long periods of uninterrupted service. Dirt in the poppet valve assembly will lead to erratic operation or loss of regulation. When cleaning becomes necessary, air line should be shut off and depressurized. The regulator should be disassembled using the parts drawing on this page as a guide. All assembly parts should be cleaned with mild household detergent and the regulator body should be blown out with compressed air.

For proper reassembly, the poppet valve assembly must be firmly in place and the poppet stem must fit into the center hold of the diaphragm assembly. The bonnet assembly should be tightened slightly more than hand tight (approximately 50 inch pounds of torque).

Components:

Chart No.	Description	Model No.
1	Adjusting Knob	26R-12A
2	Bonnet	26R-14B
3	Adjusting Screw Assembly	26R-13A
4	Adjusting Spring: 0 - 125 PSI	26R-15
-	Adjusting Spring: 0 - 25 PSI	26R-15J
-	Adjusting Spring: 0 - 60 PSI	26R-15L
5	Spacer Ring - Diaphragm	26R-16B
6	Diaphragm Assembly	26R-17B
7	1/4" NPT Integral Body	26FC2-1
-	3/8" NPT Integral Body	26FC3-1
8	Bottom Plug Gasket	26F-16
9	Poppet Valve Assembly	26R-18B
10	Bottom Spring	26R-19
11	Bottom Plug	26R-20



26 SERIES LUBRICATOR

Operating Instructions and Parts List

Application:

The 26 Series Lubricator is rugged, yet compact so it offers an ideal solution for most design problems. These units are also available with many popular options so they can be tailored to suit your application.

Features & Benefits:

- Supplied with either 1/4" or 3/8" in / out ports.
- Lubricant can be added through fill port without shutting down air line – bowl removal and depressurization is not necessary.
- Tamperproof adjusting cap allows required oil delivery rate to be locked in place.
- Once delivery rate is set, lubricant is proportionately delivered at all other air flows – no readjustment is required.
- Bowl guard is supplied as standard and can be attached directly to lubricator body.

Accessories:

	Model No.
Metal Bowl . . . . .	.26L-41M
Metal Bowl with Sightglass . . . . .	.26L-41S

Technical Data:

Maximum Supply Pressure:

Plastic Bowl	150 PSI
Metal Bowl	250 PSI

Maximum Operating Temperature:

Plastic Bowl	120° F
Metal Bowl	250° F

Material:

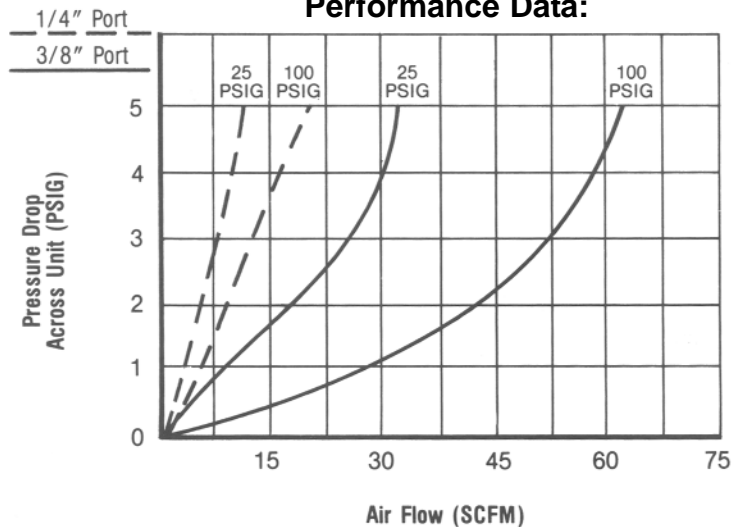
Body	Die Cast Aluminum
Standard Bowl	Transparent Polycarbonate
.	with High Impact Plastic
Guard	
Optional Bowl	Zinc Die Cast

Dimensions and Weights:

Height	6 1/2"
Width	2"
Weight	1/2 lb.



Performance Data:



General Description of Operation:

As filtered and regulated air enters the lubricator, a small portion is diverted through the inlet passage to pressurize the lubricator bowl (14). At low flow rates the majority of air passes through the venturi section of the back pressure valve assembly (9.2) and creates a suction to draw oil from the bowl (14), through the capillary drip tube (12) and past the oil check ball (9.3) to the sight dome assembly (2). This is where the oil flow rate is controlled manually by the metering screw (2). When drops are formed, the oil flows through the clearance between the drip spout (5) and sight dome (2) dripping through the point of injection. There, the air stream breaks the oil up into fine particles and mixes it with the swirling air to be carried to the outlet.

Under high flow conditions, the spring loaded back pressure valve (9.2) opens and the excess flow bypasses the venturi section, then blends with lubricated air at a downstream port. The oil check ball (9.3) assures that when there is no air flow, oil in the feed tube (12) is held in place, shortening the time required to resume oil delivery when flow is reestablished. The fill plug (7) at the top of the lubricator provides access to refill the bowl (15) with oil.

Lubricant -

Lubricants, as recommended by the equipment manufacturer, may be used, provided that they are not heavier than SAE#40 (S.U.V. 800 SEC at 100°F). **We recommend the use of Coilhose nondetergent ATL rustproofing lubricant in temperatures above 40° F. For applications between 45° F and -45° F, we suggest using Coilhose ATLW lubricant.**

Filling -

Lubricators may be filled through the fill port while under pressure and without shutting down the equipment. After carefully removing fill plug, insert the tip of a long spout oil can into the bottom of the fill port to avoid any blow back. Lubricator bowl should be filled to within 1/2" of the top.

Lubricators may also be filled by removing the bowl after the system has been depressurized. **Once the bowl has been filled and replaced, be sure it is in the locked position before repressurizing the system.**

Adjustment:

When the adjustment knob is turned completely clockwise, oil is not being delivered through the system and the equipment is not being lubricated. The adjusting knob should be set to the desired drip rate after the air has been turned on and flowing. Turning the adjustment knob in a clockwise direction reduces the oil feed rate. Although proper lubrication is determined through demand and experience, a good starting point is one to two drops per minute. To check lubrication rate, we suggest the following: Hold a piece of cardboard at the exhaust hole of the component in the least favorable position (farthest away from the lubricator or in the highest position). After the unit has run for about 100 strokes, an oil film on the cardboard will indicate that the setting is correct. If the oil film on the cardboard runs, the setting is too high. In order to prevent gumming, it is preferable to add too little rather than too much oil.

Cleaning and Maintenance:

The lubricator will provide long periods of uninterrupted service as long as both the air and oil supplies are kept clean and the oil level is kept above the end of the tube in the bowl. Failure of oil to drip through the sight dome, regardless of the position of the adjusting knob, indicates that cleaning is required. The lubricator does not need to be removed from the line for cleaning. Depressurize the air line and disassemble the lubricator using the parts drawing on this page as a guide. Cleaning is normally needed only in the oil metering area.

After unscrewing the adjusting knob / sight dome assembly, remove the inner drip spout and clean all components with warm water and mild household detergent only.

The bowl guard is removed by depressing the release tab with the thumb, while turning the guard counterclockwise and pulling downward. The guard will become disengaged when the clasps clear the locking points on the body. The bowl can then be removed by turning it counterclockwise until it is completely unscrewed and free of the body.

Components:

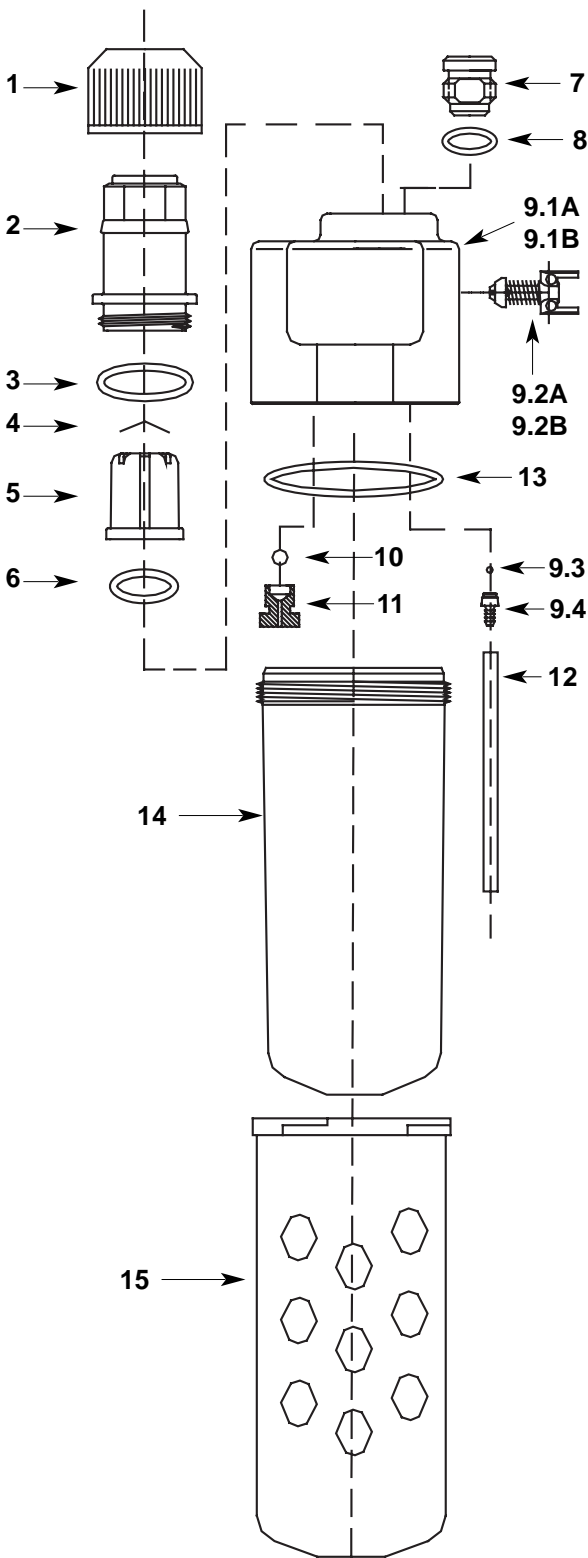
Chart

No.	Description	Model No.
1	Tamperproof Cap	8742-31A
2	Sight Dome Assembly	8742-32A
3	Retainer O-Ring	26L-12
4	Spring Washer	8742-42A
5	Drip Spout	8742-33A
6	Drip Spout O-Ring	26L-14
7	Fill Plug	8844-10
8	Fill Plug O-Ring	3294C-8
9A*	1/4" Lubricator Head Ass'y	26L2-55
9B*	3/8" Lubricator Head Ass'y	26L3-55
9.1A	1/4" Lubricator Head	26L2-1
9.1B	3/8" Lubricator Head	26L3-1

Chart

No.	Description	Model No.
9.2A	1/4" Back Pressure Valve Assembly	26L-15
9.2B	3/8" Back Pressure Valve Assembly	26L-16
9.3	Oil Check Ball	26L-18
9.4	Drip Tube Barb	26L-17
10	Air Check Ball	26L-19
11	Check Stud	26L-20
12	Feed Tube	8844-5
13	Bowl Gasket	26F-16
14	Polycarbonate Bowl	26L-41L
15	Plastic Bowl Guard	26F-50

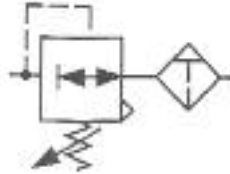
* 9A and 9B include 9.1A or 9.1B and 9.2A or 9.2B, depending on size. 9A and 9B are factory assembled and should be purchased as an assembly.



Rebuilding Kit:

Lubricator Bowl Repair Kit
(includes item 13, 14 and 15)26LK01

We reserve the right to make engineering changes in design or materials without notification.



26 SERIES INTEGRAL FILTER / REGULATOR

Installation Instructions, Operating Instructions and Parts List

Application:

This Integral Filter / Regulator combination unit offers a rugged and dependable design in a compact space saving configuration. Available with many popular options, these units provide the advantages of a specially engineered system at substantial cost savings.

Technical Data:

Maximum Supply Pressure:

Plastic Bowl150 PSI
 Metal Bowl250 PSI

Maximum Operating Temperature:

Plastic Bowl120° F
 Metal Bowl250° F

Filter Element:

Standard40 micron
 Option5 micron

Pressure Range:

Standard0 - 125 PSI
 Option0 - 25 PSI
 Option0 - 60 PSI

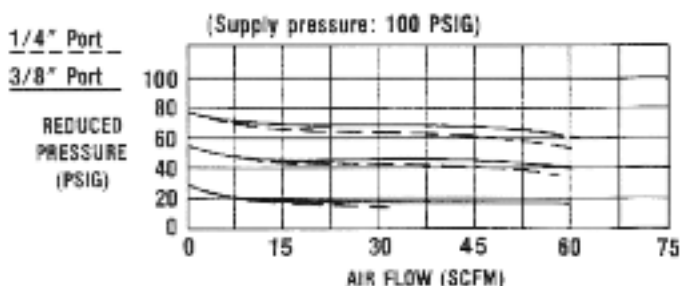
Material:

BodyDie-cast aluminum
 Adjusting KnobHigh-impact plastic
 Standard BowlTransparent polycarbonate with high impact plastic guard
 Optional BowlZinc (die-cast)
 Filter ElementPorous polypropylene

Dimensions and Weights:

Height8"
 Width2"
 Weight3/4 lb.

Flow Characteristics / Performance Data:



Options and Accessories:

Options*:	Suffix
<u>Filter</u> –	
Automatic Drain .....	.D
Metal Bowl (without sightglass) .....	.M
Metal Bowl (with sightglass) .....	.S
Extra Fine Element (5 micron) .....	.X
<u>Regulator</u> –	
Gauge .....	.G
Extra Low Pressure Spring (0 - 25 PSI) .....	.J
Low Pressure Spring (0 - 60 PSI) .....	.L

*Add a dash followed by the suffix(es) in alphabetical order to the model number.

Accessories:	Model No.
Mounting Bracket and Panel Mount Nut .....	.MR140MB
Automatic Drain .....	.8851AD
Metal Bowl (without sightglass) .....	.26F-41M
Metal Bowl (with sightglass) .....	.26F-41S
Recommended Std. Pressure Gauge	
0 - 160 PSI (1 1/2" dial) .....	.26G-160
Recommended Optional Gauge	
0 - 60 PSI (1 1/2" dial) .....	.26G-60

General Description of Operation

Pressurized air enters through a curved inlet and deflection vane plate (13) directing the incoming air in a downward whirling pattern. Centrifugal force hurls the larger solids and liquid water particles outward where they collect on the inner surface of the filter bowl (16). The particles spiral down past a retainer baffle (15) into a quiet chamber. The baffle (15) prevents turbulent air in the upper bowl from re-entering liquid contaminants and carrying them downstream. Then the dry, clean air follows a convoluted path through the filter element (14), where finer solid particles are filtered out. High pressure filtered air passes up the center of the element and flows through the annular orifice around the poppet valve (11) toward the outlet. Downstream pressure is connected through an aspirator tube to the bottom of the diaphragm (6). As downstream pressure increases, the diaphragm (6) is forced upward, compressing the adjustment spring (4). When the diaphragm (6) moves, the bottom spring (12) pushes the poppet valve (11) upward to throttle the annular orifice. If downstream pressure exhausts, the mechanical sequence reverses, the poppet valve (11) normally blocks the relieving orifice in the center of the diaphragm (6). High excessive pressure lifts the diaphragm (6) off the poppet valve (11) and air bleeds through the orifice and out the bonnet (2) vent until the system returns to set pressure.

Filter –

Cleaning and Maintenance

It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or a pressure drop of 10 PSI or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. Air supply must be shut off and the filter must be depressurized prior to disassembly. The filter element should be replaced and all other parts should be cleaned with nothing stronger than household detergent. Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the drain cock is opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

Regulator –

Pressure Adjustment

To adjust pressure setting, pull up the black adjusting knob. Turning the adjusting knob in a clockwise direction will increase the pressure setting and counterclockwise will decrease the pressure setting. Once the desired pressure setting is reached, push in the black adjusting knob to lock and maintain the proper setting.

The downstream pressure should always be adjusted to approximately 10 PSI above the required working pressure, even in the event of pressure fluctuations. It is advisable to adjust the setting under constant pressure conditions (unit not operating), as a changing flow rate affects the set valve.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a higher to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting.

Regulator –

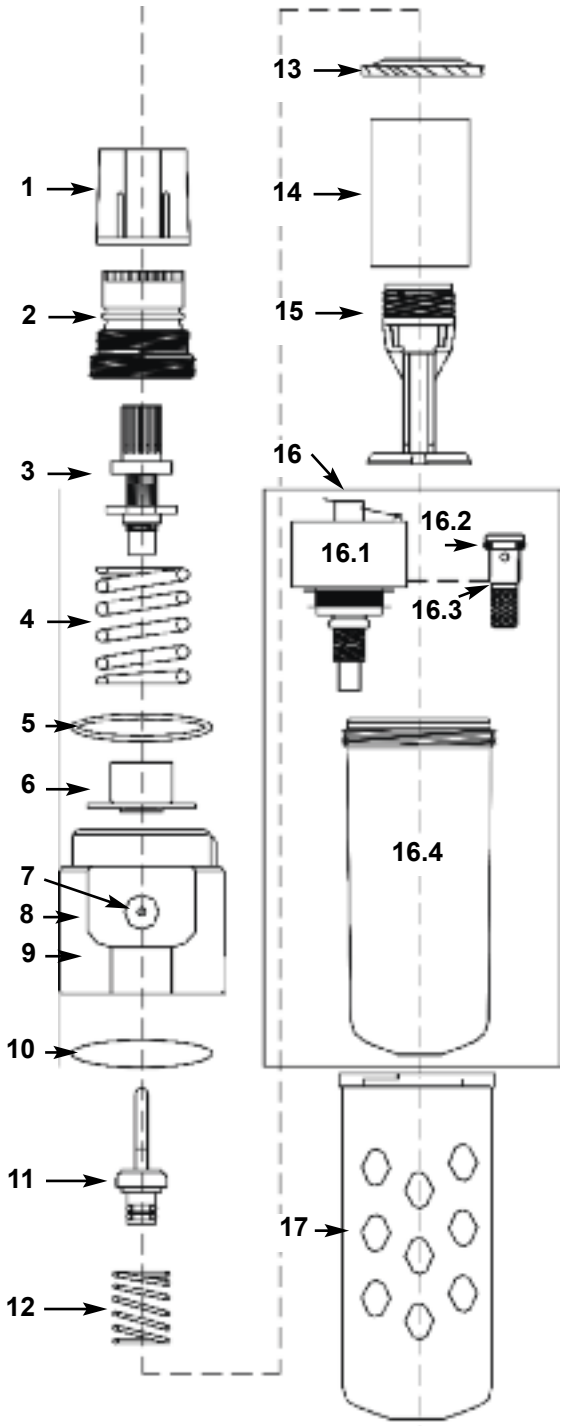
Cleaning and Maintenance

A clean supply of air to the regulator will assure long periods of uninterrupted service. Dirt in the poppet valve assembly will lead to erratic operation or loss of regulation. When cleaning becomes necessary, air line should be shut off and depressurized. The regulator should be disassembled using the parts drawing on this page as a guide. All assembly parts should be cleaned with mild household detergent and the regulator body should be blown out with compressed air.

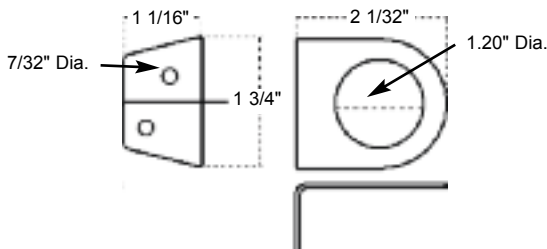
For proper reassembly, the poppet valve assembly must be firmly in place and the poppet stem must fit into the center hold of the diaphragm assembly. The bonnet assembly should be tightened slightly more than hand tight (approximately 45 foot pounds torque).

Components:

Chart No.	Description	Model No.
1	Adjusting knob	26R-12A
2	Bonnet	26R-14B
3	Adjusting screw assembly	26R-13A
4	Adjusting spring – 125 PSI	26R-15
–	Adjusting spring – 0 - 25 PSI	26R-15J
–	Adjusting spring – 0 - 60 PSI	26R-15L
5	Spacer ring - diaphragm	26R-16B
6	Diaphragm assembly	26R-17B
7	Gauge port plug	PI002S
8	1/4" NPT integral body	26FC2-1
9	3/8" NPT integral body	26FC3-1
10	Bowl gasket	26F-16
11	Poppet valve assembly	26R-18B
12	Bottom spring	26R-19
13	Deflector vane plate	26F-11
14.1	40 micron element	26F-12
14.2	5 micron element	26F-12X
15	Retainer baffle	26F-13
16	Polybowl and draincock	26F-41L
16.1	Automatic Drain	8851AD
16.2	Draincock o-ring	26F-17
16.3	Brass draincock	26F-18
16.4	Polycarbonate bowl	26F-40L
17	Plastic bowl guard	26F-50



Mounting Bracket Dimensions



Rebuilding Kits

Filter Bowl Repair Kit (Includes items 10, 16 and 17)

26FK01

Regulator Repair Kit (Includes items 5, 6, 10, 11 and 12)

26RK0B1

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