

## Introduction

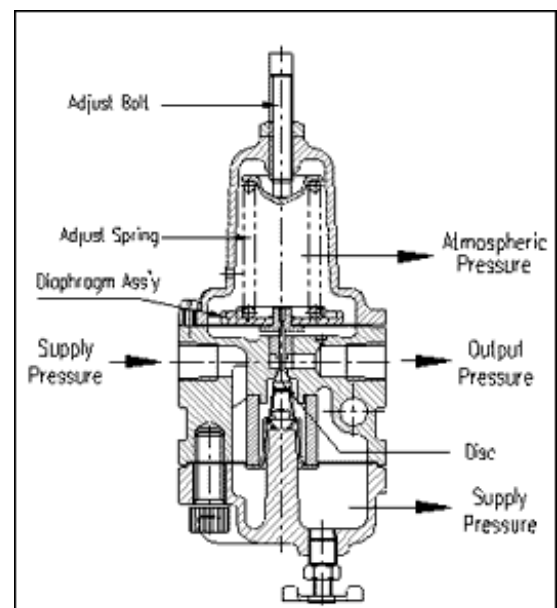
- The Triac Controls FR100-1 Filter / Regulator is an excellent feature to add to all pneumatic controls and equipment. The FR100-1 can be utilized to filter out dirt, foreign particles and moisture that can be harmful to positioners, solenoids and actuators.
- The FR100-1 will accurately control secondary pressure between 2 to 100 PSI. The self-relief function will relieve when the output pressure is higher than the regulator pressure setting.
- Corrosion resistant construction - Aluminum diecast with chromate finish.
- High capacity 5 Micron filter.



## Operation

When the Adjust Bolt is rotated the set pressure exerted by the Adjust Spring and the output pressure becomes unbalanced. An unbalanced state between the output pressure and the set pressure causes a corresponding reaction in the diaphragm and supply valve assemblies

If the output pressure rises above the set pressure, an upward force is exerted on the diaphragm assembly causing the relief seat to lift and open. Excess pressure is vented to atmosphere until equilibrium is reached. If the output pressure drops below the set pressure the unbalanced force of the range spring causes an upward force on the diaphragm assembly. The supply valve then opens until the pressure builds up once more to the equilibrium condition.



## Specification

Port Size	1/4" NPT
Output Range	60 & 100 PSIG
Max. Supply Pressure	150 PSIG
Temperature	-5 F to 150 F
Max. Hydrostatic Test	215 PSIG
Weight	1.66 Lbs

## Installation & Operation

- Install Filter / Regulator so the air flow is in the direction "IN - OUT" as indicated on the head of all units. The Filter / Regulator should be installed as close as possible to the pneumatic controls or equipment being serviced. When lubricators are installed, it should be mounted downstream of the Filter / Regulator.
- Before applying input pressure, turn the adjust bolt counterclockwise until the spring tension is completely released.
- Apply supply pressure to the "IN" Port.
- To remove accumulated condensation from the Filter / Regulator, slowly open the Drain Plug and bleed liquid out. Sediment should not be permitted to fill above the filter element.

## Dimensions & Bill Of Material

No.	Part Name	Material	Qty.
1	Body	ADC12	1
2	Spring Case	ADC12	1
3	Filter Case	ADC12	1
4	Stem	C3604 BD / NBR	1
5	Filter Holder	SS41	1
6	Stem Guide	C3604 BD	1
7	Low Diaphragm Plate	SS41	1
8	Relief Seat	C3604 BD	1
9	Diaphragm	NBR	1
10	Adjust Spring	HSW 3	1
11	Up Diaphragm Plate	SS41	1
12	Filter	PA	1
13	Adjust Bolt	SS41	1
14	Top Spring Seat	SS41	1
15	Gasket	EPDM	1
16	Name Plate	Sticker	1
17	Disc Con Spring	STS304	1
18	Holder Con Spring	STS304	1
19	Lock Nut	SS41	1
20	Drain Plug	C3604 BD	1
21	Spring Case Bolt	SS41	6
22	Filter Case Bolt	SCM	4

