# Airmatic

## **OPTIMA-401- FILTER-REGULATORS**

MODEL : FR - 401 Polycarbonate Bowl (Relieving) FR - 410 Metal Bowl (Relieving)

Suffix AD-C for Auto Drain

## **TEMPERATURE AND PRESSURE RATING**

SIZES	MODEL	BOWL	MAX. PRESSURE	MAX. TEMP	WITH AUT	O DRAIN
G1/4, G3/8, G½	FR - 401	Poly.	12 Kg/cm <sup>2</sup>	50° C	12 Kg/cm <sup>2</sup>	50 <sup>0</sup> C
	FR - 410	Metal	18 Kg/cm <sup>2</sup>	70 <sup>0</sup> C	12 Kg/cm <sup>2</sup>	50° C

WARNING : Never use these polycarbonate plastic bowls on air supplied by a compressor lubricated with synthetic oils or oils containing phosphate esters or chlorinated hydrocarbons. They can carry over into the air distribution system and chemically attack and possibly rupture the bowls. On these applications use a metal bowl. Also do not expose these polycarbonate plastic bowl to materials such as carbon tetrachloride, trichloroethylene, acetone, paint thinner cleaning fluids, or other harmful materials, for they too will craze and/or rupture the bowl. If materials harmful to polycarbonate are present either outside or inside the bowl, use a metal bowl.

### INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS

#### INSTALLATION

Before installing, blow-out pipe line to remove scale and other foreign matter. This unit has DRYSEAL pipe threads; use pipe compound or type sparingly to male threads only. Install filter-regulator in pipe line so that air will flow in direction of arrow stamped on body, Install as near as possible to equipment serviced. Filter-regulator must be installed with bowl in a vertical position.

#### REDUCED PRESSURE ADJUSTMENT

To adjust reduced pressure settings turn adjustment screw tee clockwise to increase the reduced or regulated pressure & counter-clockwise to lower the pressure. With relieving type regulators, the reduced pressure follows adjustment of the screw.

To lock adjustment, simply tighten the lock-Nut. with non-relieving regulators adjustment for lower reduced pressure will not be obtained until the reduced pressure system is "bleed-off" or until air

#### MAINTENANCE-CLEANING

To clean, it is not necessary to remove FR-combination from line.

To maintain maximum filtering efficiency and to avoid excessive pressure drop, the filter must be kept clean. Turn drain valve anti-clockwise to remove any bowl accumulation before it reaches level of lower baffle. A visible coating of dirt or condensate on filter element or excessive pressure drop indicates cleaning is necessay.

If the air supply is kept clean, the regulator should provide long period of uninterupted service. Erratic regulator operation or loss of regulation is most always due to dirt in the disc area. To clean, shut off air line pressure depressurize and disassemble the filter-regulator. Clean parts with denatured alcohol and blow out body with compressed air.

When reassembling, make sure the disc stem fits into enter hole of diaphragm assembly. If diaphragm assembly is replaced, make sure disc stem fits into its center hole, make sure the PTFE backup ring must be kept between diaphragm & bonnet. Tighten bonnet slightly more than hand tight (to 60 inch pound torque).

Wash porous filter elements with kerosene or soap water CLEAN PLASTIC BOWL ONLY WITH HOUSE HOLD SOAP WATER.

SEE OTHER SIDE FOR REPLACEMENT PARTS LIST.



C Copyright 2009

flow stars.



# MODEL - FR 401 / FR 410 REPLACEMENT PARTS ORDER BY SIZE AND KIT NUMBER

CONSISTS OF PART NAME	KIT NAME		KIT No.
Dianhuann Assu	Dianhuann Assur Kit	* Relieving	R201-DAR
Diaphragm Assy.	Diaphragm Assy. Kit	Non-Relieving	R201-DANR
Diaphragm Assy., Stem Assy.	Service Kit	* Relieving	FR401-SKR
Bow I `O' Ring D/C Assy.	Service Rit	Non Relieving	FR401-SKNR
Gasket Upper / Low er	Element Kit	*25 Micron	F401-E25
Filter Element		40 Micron	F401-E40
David with Drain Cook	Devul Deple coment l/it	* Plastic	F401-BAP
Bow I with Drain Cock	Bow I Replacement Kit	Metal	F401-BAM
Drain cock Assy. * Standard	Drain Cock Kit		F401-DCA

\* Standard

# **METAL BOWL**

