# **OPERATION MANUAL**

# I. Applications

UCFR-UCMF-UCMFK is a triple stage Filter Regulator with Coalescing filter and Activated Carbon filter combination set designed to stabilise, control and provide clean compressed air.

The 5µ pre filter removes particles over 0.01mm and 90% of water or oil vapour, 0.01µ Red Coalescing filter removes particles over 0.0001mm and 99% of any remaining oil vapour, finally the Activated Carbon filter traps and biological particles, remaining oil vapour and faint odours giving technical absolutely clean air for the highest demanding air applications and provides safe, breathable air for the spraybooth.

# 2. Before using

Please make sure that application meets the technical specifications (such as operating pressure, ambient temperature...etc.).

Please make note of compressed air you use and environment of installation, please use away from chlorine, carbohydrate, aromatic compound, condensed acid and alkaline to avoid the damage for filter bowl. Use Acid resistant bowls for this environment.

Please pressurise whole system slowly to prevent damage or use VSS soft start valve.

Any modification without permission will invalidate warranty.



## **3. Installation**

Please make sure the air supply is shut off before installation and maintenance (such as replacing filter element.).

Please note the mark of arrow ""," on the body of the product for air supply direction from inlet to outlet when installing.

In order to remove filter bowl and replace filter element easily, the bottom of the bowl should be keep at least 100mm above surface when it is installed.





Please install the product horizontally  $(\pm 5^{\circ})$  tolerance is allowed) by mounting bracket so filters can operate correctly (water accumulate at bottom of bowl).

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# 4. Operation

### **Pressure Regulation**

Pull up regulator knob to unlock ready for pressure adjustment.

Turn the knob counter-clockwise (toward symbol " $\Rightarrow$  –" on regulator knob) to reduce pressure.

Turn the knob clockwise (toward symbol "⇔ +" on regulator knob) to increase required outlet pressure, displayed by pressure gauge. The inlet pressure must be at least 0.1 Bar higher than required outlet pressure.

Push back down and lock regulator knob to prevent accidental pressure adjustment.

## **Air filtration**

Turn on air supply so that compressed air will come into the filter, the air will be cleaned by filter automatically. The water, dust and other residue in the air will accumulate in filter bowl and will discharge by the semiautomatic (optional manual) drain in filter bowl.

Drain: Water and oil will automatically discharge when air pressure in filter bowl drops below 0.5 Bar Or you may manually push up the nozzle on the drain anytime to discharge water. (Optional manual drain, will only drain with manual intervention).

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Pressure / flow status indicators

activated carbon

0.01 micron coal

### 5. Maintenance

Please replace filter elements regularly to prevent clogging and retain good air quality. For  $0.01 \,\mu\text{m}$  filter elements, when the orange ball has risen up in the pressure / flow status indicator, please change filter element immediately. For  $5\mu\text{m}$  filter element, please do regular checks at least once a week, the checking frequency may increase according to the cleanliness of compressed air supplied and usage.

Warning: This product will malfunction if the filter elements become clogged.

Please replace filter element in time by following steps:

- Shut off air supply and pressure regulator.
- Turn filter bowl counter-clockwise to remove filter bowl.
- Turn element holder counter-clockwise to replace old filter element with a new one.
- Reinstall all parts.
- Please follow point 4 to operate the product again.

Please clean the filter bowls with clean water (Maximum temperature:+60°C)

on filter element