

## COALESCING FILTERS



Luthra coalescing filters protect air-driven equipment and delicate instruments from the dirt, water and oil usually found in compressed air. It removes these contaminants at a very high retention efficiency of up to 99.9% and grade efficient for 0.1 micron size of particles and droplets.

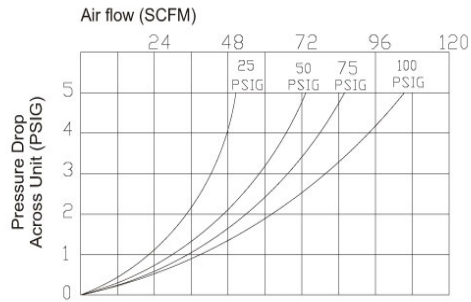
It is based on the high performance & high efficient two stage filtration principle. The first is a prefilter with a baffle system of moisture & impurities separation and it is fitted with a 25 micron pure sintered bronze filter element, which captures the coarser particles of dirt, water, oil and contaminants, which means less work, long-service life and top performance, most economically, for the final filter.

The second is the final filter with a coalescer system of moisture and impurities separation. It has a 0.1 micron **IMPORTED AMERICAN MICROFIBRE FILTER CARTRIDGE**.

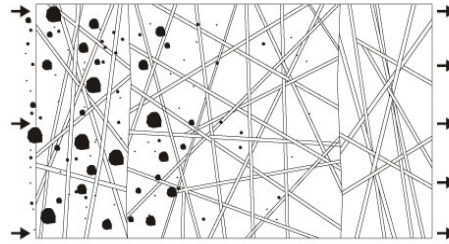
Liquid drips from the filter cartridge as rapid as it enters the filter. This allows a coalescing filter to keep removing liquids for an unlimited time without loss of efficiency or flow capacity. Over the time, solid particles caught in the filter cause a permanent increase in flow resistance. Therefore the useful life of the replaceable filter cartridge is determined by the quantity of solids in the compressed air and not by the quantity of liquid. In typical compressed air systems, filter cartridge life is about one year.

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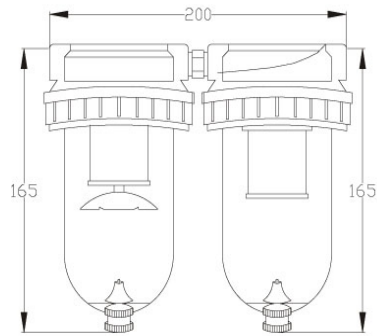
### Performance Data



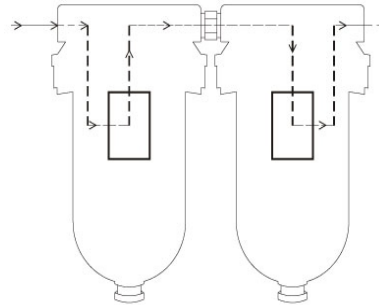
### Coalescing Illustration



### Dimensions



### The Schematics



- Air flows from outside to inside of the pure sintered bronze cartridge. 25 micron particle & mist removal.
- Air flows from inside to outside of the microfibre cartridge. 0.1 micron particle & mist removal.

Coalescing filter traps dirt particles and microscopic droplets in a network of glass fibres. The dirt particles remain trapped, but the droplets slide down the fibres & unite or coalesce with other droplets at crossover points. The compressed air pushes the collected liquid to the outside of the filter cartridge where it drips to the bottom of the bowl, & liquid is removed through a manually operated drain valve.

Microfibre filter cartridges are constructed from borosilicate glass fibres with fluorocarbon resin binders, resistant to water, all hydrocarbon & synthetic lubricants. The filter cartridges are self supporting and self gasketing.

The filter media in microfibre filter cartridge is about 95% void volume and only 5% fibre volume. This results in an exceptionally low pressure drop and exceptionally high dirt retention capacity.

### Point :

- It is ADVISABLE to use the filter with metallic Bowl Guards for enhanced SAFETY requirements to avoid personal injury and/or property damage.
- Available in three port sizes of 1/4", 3/8" & 1/2" B.S.P.