

# combination filter

JUN-AIR compressors are used for a number of different applications (industrial, laboratory, dental etc.). Due to the low noise level of the oil-lubricated JUN-AIR compressor, they are the obvious alternative to oil-less compressors. However, oil mist is unavoidable in the outlet air of oil-lubricated compressors hence justifying the need for a combination filter.

The combination filter combines a powerful 0.01  $\mu\text{m}$  coalescing filter with a highly efficient activated carbon filter as an option to the standard 5  $\mu\text{m}$  and 0.01  $\mu\text{m}$  filters.

Obvious benefits when mounting a combination filter on your compressor:

- Provides high quality, clean compressed air
- Enhances health and safety
- Reduces maintenance costs on your equipment
- Removes the presence and smell of oil
- Easy to mount

Please visit [www.jun-air.dk](http://www.jun-air.dk) to find your local JUN-AIR distributor.

**Combination filters from JUN-AIR provide air 1,000,000 times cleaner than the air we normally breathe**

**JUN-AIR**<sup>®</sup>

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All compressed air systems use atmospheric air often contaminated with dirt, water vapour and bacteria. Additionally, acidic oil from the lubricating system of the compressor and wear particles may be added to the air. Furthermore, particles of corrosion will be transferred inside the compressed air system.

This combination of dirt, oil and water contamination will become an abrasive liquid, which rapidly wears the pneumatic tubing, blocks valves and corrodes piping systems leading to:

- Costly air leaks
- Increased maintenance costs on your equipment
- Unnecessary wear of external equipment
- Polluted air getting in direct contact with the user of the air

## The filtration principle of the JUN-AIR combination filter

Please see the illustration of the path of the air inside the filter to the right. After entering the filter (1), the air is let via the 0.01 µm filter (2), where solid particles and liquids (water and oil) coalesce inside the re-entrainment barrier and fall into the filter bowl to be discharged via the automatic drain system at the bottom housing (3). Unlike typical filters, which are quickly soaked and therefore saturated, the 0.01 µm JUN-AIR filter does not soak up liquids, ensuring the available open area to be kept to a maximum for dirt entrapment.

When the water and oil liquids have been removed, the air is conducted to the activated carbon filter (4), which unlike ordinary mechanical filters is able to remove gaseous contaminants such as oil vapour and odours. Activated carbon, having an affinity for oil vapour molecules and an extremely high surface area, is used for this purpose in the combination filter.

After this two-stage filtration of the air, it is ready for use (5).

# JUN-AIR®

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General specifications	
Dimensions (Height x Width x Depth)	266 mm x 76 mm x 65 mm
Port sizes	1/4" (ISO 1179)
Maximum inlet pressure	16 barg
Operation temperature	2°C (35.6°F) to 30°C (86°F)
Filter element	0.01 µm
Max. remaining oil vapour content	0.003 ppm
Maximum flow with 7 bar inlet pressure and pressure drop of 0.27 bar	360 l/min
Internal coating	Aloxrom treatment and tough epoxy paint finish
Material of construction	Bowl: Diecasted aluminium
Drain	Automatic

Available with a special bracket for wall mounting - item no. 4089000

## Maintenance intervals on replacement parts

The filter housing is guaranteed for 10 years lifetime under normal working conditions. However, the following parts have to be replaced on a regular basis in order to ensure proper functioning of the combination filter.

Description	Each	Item number
Activated carbon filter element	1000 hours	4080500
0.01 µm filter element (min. annually)	2000 hours	4081600
Auto drain f/combination filter	4000 hours	4087600

Both filter elements are very easy to remove and replace. Failure to replace the filter elements will result in a reduced air quality and increased running costs.

