

# Air Conditioners

## Desiccant breathers



## Air conditioners

### Condensation in reservoirs

Hydraulic and lubricating oils must be kept free from contamination and water. Most fluid reservoirs must be able to breathe, thus allowing water vapour and solid contaminants to enter. Temperature fluctuations in the reservoir will cause this water vapour to condense which will not only cause oxidation of the oil, but can also lead to considerable mechanical damage.

### Filtration and drying: a single process

Standard air breathers remove some of the solid particles but allow water vapour in the air to pass freely. The RMF 'Air conditioner' deals effectively with both so reservoirs can breath clean, dry air. The air is first dried by passage through a column packed with Z-R gel granules. The dried air is then passed through a pleated synthetic fibre filter element (replaceable spin-on type) where solid particles are removed, so that the air reaching the reservoir is both clean and dry.

### Monitoring

The uptake of moisture can be observed by the change in colour of the indicator granules in the Z-R gel. They turn from ruby-red (active) to a light orange (replace). The Z-R gel granules are completely replaceable, non toxic and non carcinogenic. The operation of the air filter can be monitored by an optional 'filter minder'.

### Benefits RMF 'Air Conditioner'

Reducing the water contamination level prolongs the life of the additive

package and reduces oxidation of the oil, component and bearing surfaces.

- Eliminates rusting due to condensation;
- Reduces machine downtime;
- Reduces oxidation of the oil;
- Extends the machines useful life;
- Reduces cost of ownership;
- Reduces cost.

### Applications

RMF 'Air Conditioners' can be used on hydraulic power units, lube and oil tanks, gearboxes, diesel fuel tanks, storage tanks for biodegradable fluids.

Industries that are successfully applying 'Air Conditioners' include: steel industry, aviation industry, forestry industry, pulp & paper industry, cement industry, food processing industry and petrochemical industry.



**Managing your oil  
contamination**

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## Desiccant breathers



### Mini Air Conditioner (ACM61R)

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The Mini Air Conditioner (ACM61R) is the smallest in the range of desiccant breathers offered by RMF Systems.

It is constructed from a fully injection moulded body and a spin-on air filter. The body is so rugged that it is suited for all applications such as heavy duty mobile or industrial applications. The air filter is a 3 micron fibre glass replaceable spin-on filter. The Mini Air Conditioner has a 3/8 " BSP female thread at the base, in which a variety of adaptors can be fitted.

#### Spring loaded check valves

A unique feature of the Mini Air Conditioner is the spring loaded (0,01 bar) check valves fitted in the base in opposing directions, opening only whilst inhaling or exhaling. This way there is no atmospheric contact with the air and the Z-R gel under static conditions which increases the life time of the drying gel.

Due to its compact size the Mini Air Conditioner is particularly suited for mounting on small gearboxes or hydraulic power units. Applications where regular wash downs occur are also very suited to the Mini Air Conditioner.

The ACM61R Air Conditioners are filled with the unique Z-R Gel, a **non-toxic and non-carcinogenic** desiccant with excellent moisture uptake and colour indication for saturation.

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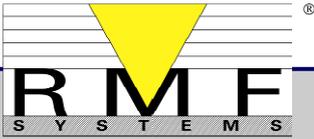
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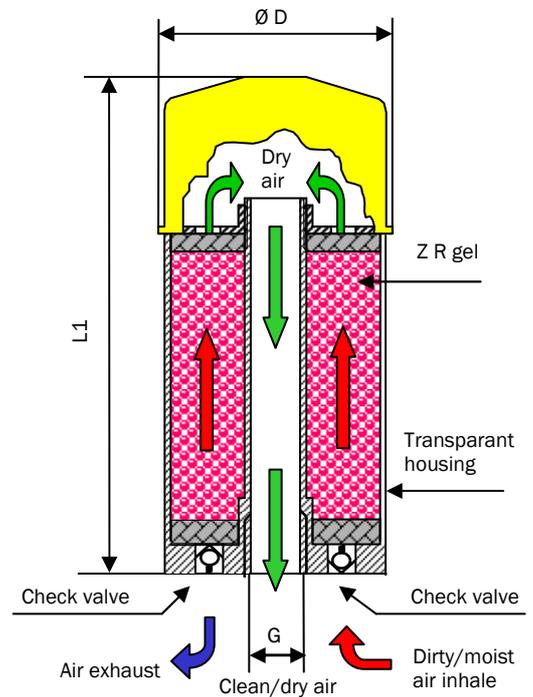
## Desiccant breathers



Spring loaded (0,01 bar) check valves fitted in the base in opposing directions



<b>LIGHT MINI VERSION ACM61R</b>	
<b>Product details</b>	
Height (L1)	135 mm
Diameter (Ø D)	68 mm
Connection (G)	3/8" BSP female
Total weight	0.35 kg
Z-R gel volume	100 cc
Water absorption capacity	29 gram
Max. air flow	50 l/min.
Absorption material	Z-R gel 3-6 mm
Z-R gel	Non toxic



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