Tank air breather filter/aerosol separator
Pi 0190 Mol

Nominal size: 5000 l/min

1. Short description

High-performance filters for modern hydraulic systems

Fast and permanent extraction and return flow processes for hydraulic oils promote the formation of oil mist in the tanks and return containers. This oil mist gets through the tank air breather filters into the surrounding area and may contaminate it. This frequency interferes with the work because this type of oil mist is to some degree harmful to the employees' health.

The Pi 0190 with a Mol element is intended for the ventilation of hydraulic tanks. It prevents dirt particles getting into the hydraulic system when drawing in air and the spread of the oil mist into the ambient air when venting the tank.

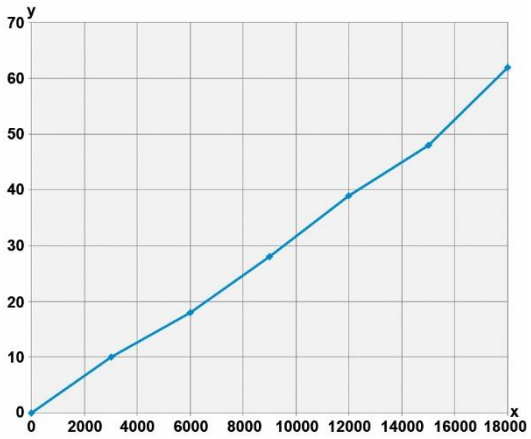
The Mol element has an excellent separation efficiency of 99.99 % with 1 µm particles, can prevent the oil mist escaping and separate up to 99 % of the oil content.

The oil mist flows through a fiberglass layer and becomes trapped on the individual fibers due to the effects of inertia, filtering action and diffusion. As they pass through the filter, the oil droplets in the fiberglass structure coalesce into larger droplets, thus forming an oil film. These droplets reach the outflow surface of the filter element with the air flow and are routed downwards into a drainage fleece by the force of gravity. The separated oil can be drained into a leakage tank. The oil with the necessary purity class again can be fed back into the oil reservoir through the additional use of a non-return valve and line filter.

Der Pi 0190 can also be used as an aerosol separator and air breather filter for containers and units that are under permanent overpressure.

- Modular principle
- Little space required thanks to compact design
- Equipped with highly efficient Mol oil separator elements
- Residual oil content < 1 mg/m³
- High dirt holding capacity and therefore a long service life
- Worldwide distribution

2. Flow rate/pressure drop curves - complete filter



y = differential pressure Δp [mbar]
x = volumetric flow V [l/min]

3. Order numbers

3.1 Complete filter		3.2 Clamping ring		3.3 Mol element		
Order number	**Type designation**	**Order number**	**Type designation**	**Order number**	**Type designation**	**Number per container**
72438673	Pi 0190 MOL FL	72405402	Clamping ring	79354390	on request	1
72438676	Pi 0190 MOL DN150					

Customer-specific version on request

4. Technical data

Separation
Pi 0190 Mol … Aerosols

Operating temperature range -10°C to +80 °C

Material
Element housing Steel plate, EPS RAL 9005
Housing cover Plastic

Sealing material
Pi 0190 Mol FL O-ring 183.52x5.33 NBR

Connection
Pi 0190 Mol FL Flange
Pi 0190 Mol DN150 DN150 pipe

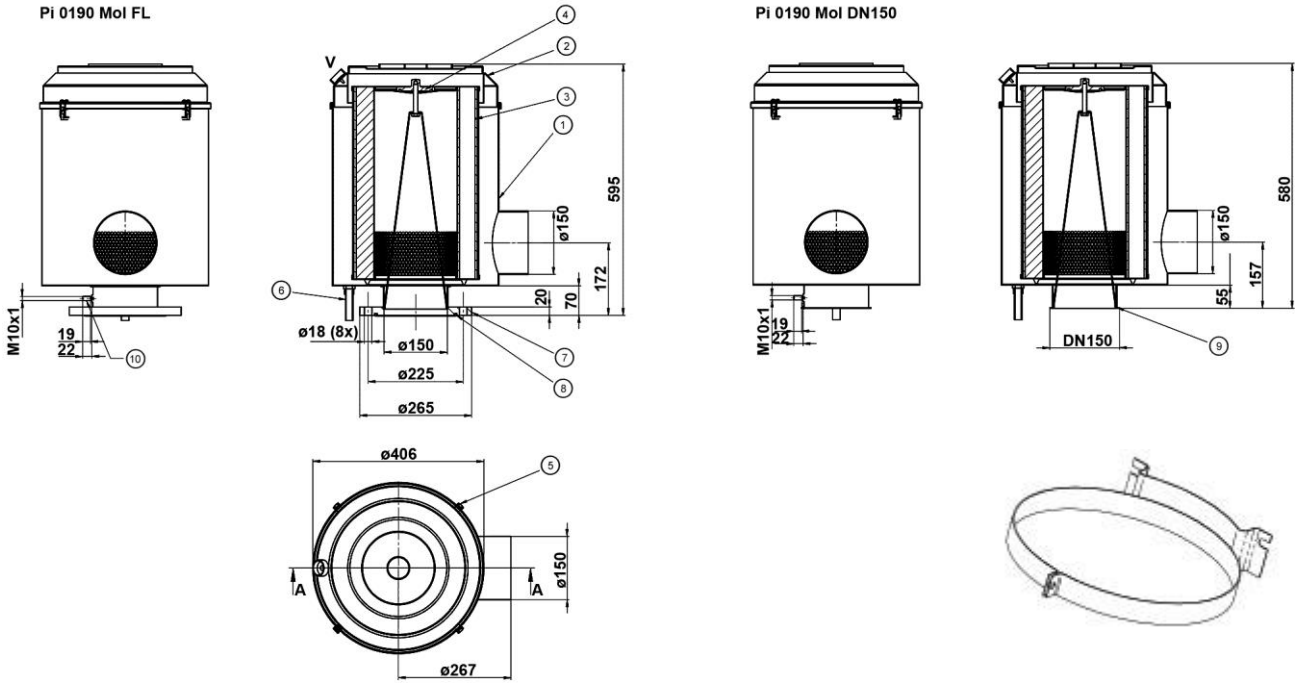
Resistance All hydraulic oils*
*Special versions for HFA, HFC and HFD on request

We draw attention to the fact that all values indicated are average values that do not always occur in specific individual cases. Our products are continually being further developed. Values, dimensions and weights can change as a result of this.
Our technical department will be happy to advise you

We recommend that you consult with us when using our filters in areas that are classified in accordance with EU Directive 94/9 EC (ATEX 95). The standard version is suitable for mineral oil-based liquids (corresponding fluids in Group 2 of Directive 97/23 EC Article 9). Please contact us when
using other media.

Subject to technical alteration without notice.

5. Dimensions



①	Filter housing	②	Filter cover	③	Oil separator element
④	Fastening nut with O-ring	⑤	Snap closure (4x)	⑥	Oil return hose (3 m)
⑦	Flange connection	⑧	O-ring 183.52x5.33 NBR	⑨	DN150 connection
⑩	Overpressure gauge connection (optional)	V	Bleed valve		

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