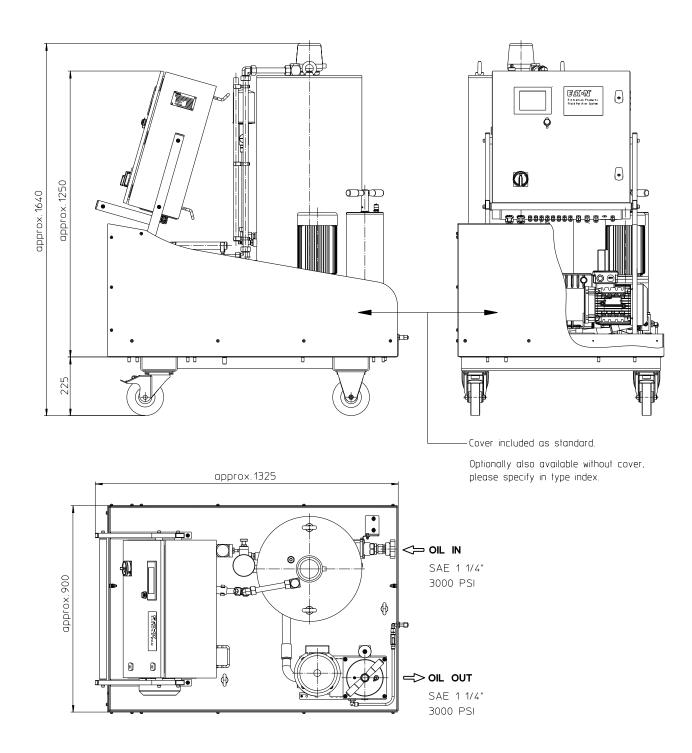
# Series IFPM 73



Weight: approx. 402 kg

Dimensions: mm

Designs and performance values are subject to change.

## Fluid Purifier System Series IFPM 73

### **Description:**

The filter system of the series IFPM73 is intended for dewatering, filtration and degassing of hydraulic and lubricating fluids in the offline circuit. The functional principle is the vacuum dewatering. So it is possible to remove free water as well as dissolved water.

Water is one of the most common contaminants and the second most destructive besides particulate contamination. Some of the most damaging problems water contamination can cause are:

- Fluid breakdown
- Additive depletion
- Reduction of the lubrication properties of the fluid
- Oil oxidation
- · Internal corrosion
- · Abrasive wear in system components
- · Reduced dielectric strength

#### Operating principle:

The contaminated fluid is drawn into the Fluid Purifier System by a vacuum. After a solenoid valve, the fluid passes a heater and then enters the vacuum chamber. At the same time, ambient air, which is sucked in through a fine filter and a throttle valve, flows against the oil in the vacuum chamber. In the vacuum chamber, a large free surface is created by packing material and the water is absorbed by the air. Through an oil mist separator the humid air is released to the atmosphere with a vacuum pump. The fluid is pumped back into the oil reservoir by a gear pump through a high efficiency fine filter.

The contamination level of the filter element is measured continuously with the clogging sensor VS5. When the filter element is contaminated, the filter system is automatically switched off. The filter element can be changed without tools. For protection against overpressure, the gear pump is equipped with a safety valve.

The filter system is controlled by a colored 5,7" Touch display. After start it works fully automatically. As standard, the display has an Ethernet connection and a web server for remote control.

The standard installed water sensor allows a permanent control of the water saturation of the fluid.

#### Type index:

Fluid Purifier System: (ordering example)

IFPM. 73. 10VG. 10. B. V. -.

1 2 3 4 5 6 7

P115. D01. VP20. VS5. I. A

8 9 10 11 12 13

1 series:

IFPM = Fluid Purifier System, mobile

2 nominal size: 73

3 filter material:

25VG, 16VG, 10VG, 6VG, 3VG, 1VG microglass

4 filter element collapse rating:

10 =  $\Delta p$  10 bar (1000 kPa)

5 | filter element design:

B = both sides open

6 sealing material:

V = Viton (FPM)

7 filter element specification:

= standardVA = stainless steel

8 pump unit:

P115 = pump unit 115, NG 80.50

9 **motor**:

D01 = rotary current motor 01:

50 Hz: 1,5 kW, 3-phase, 220...240/380...415V 60 Hz: 1,8 kW, 3-phase, 220...280/440...480V

10 vacuum pump:

VP20 = vacuum pump 20:

50 Hz: 1,4 kW, 3-phase, 220...240/380...415V 60 Hz: 1,7 kW, 3-phase, 250...280/440...480V

11 clogging sensor:

VS5 = VS5.1,5.V.-.NO.-.B.-, electric,

at p1 and p2, 1,5 bar (150 kPa), see sheet no. 1641

12 cover:

= Inclusive cover

- = without

13 supply voltage:

A = 380V-415V; 50/60 Hz; 3Ph + PE

(delivery with 32A CEE plug for 3-phase current)

B = 440V-480V; 60 Hz; 3Ph + PE X = other voltage on request

Filter element: (ordering example)

**01NR. 630. 6VG. 10. B. V. -**1 | 2 | 3 | 4 | 5 | 6 | 7 |

1 series:

01NR = standard-return-line filter element according to DIN 24550, T4

2 nominal size: 630

3 - 7 see type index- Fluid Purifier Systems

#### **Technical data:**

inlet connection: 1 1/4" SAE-flange 3000 PSI 1 1/4" SAE-flange 3000 PSI 71,8 I/min (50 Hz) / 85,8 I/min (60 Hz) outlet connection:

pump flow rate:\*

operating vacuum: -0,6 bar (-60 kPa)

supply voltage A: 6000 Watt/400V supply voltage B: 6000 Watt/460V heater power:

NF 631 filter type: seal material: Viton (FPM) 12...700 mm²/s 54 l/day viscosity: dewatering rate:\*\*

protection class: IP54

ambient temperature: 0°C to +40°C 10°C to +80°C fluid temperature:

external protection: 25 A

Flow rate of the gear pump at a viscosity of the fluid of 32 mm<sup>2</sup>/s.

Dewatering rate of free water, at a hydraulic oil of the viscosity class ISO VG32 and a fluid temperature of 60°C.

Test methods: Filter elements are tested according to the following ISO standards:

> ISO 2941 Verification of collapse/burst resistance ISO 2942

Verification of fabrication integrity
Verification of material compatibility with fluids ISO 2943

ISO 3723 Method for end load test

ISO 3724 Verification of flow fatigue characteristics

ISO 3968 Evaluation of pressure drop versus flow characteristics ISO 16889 Multi-pass method for evaluating filtration performance

Note: Spare parts see IFPM73 maintenance manual.



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