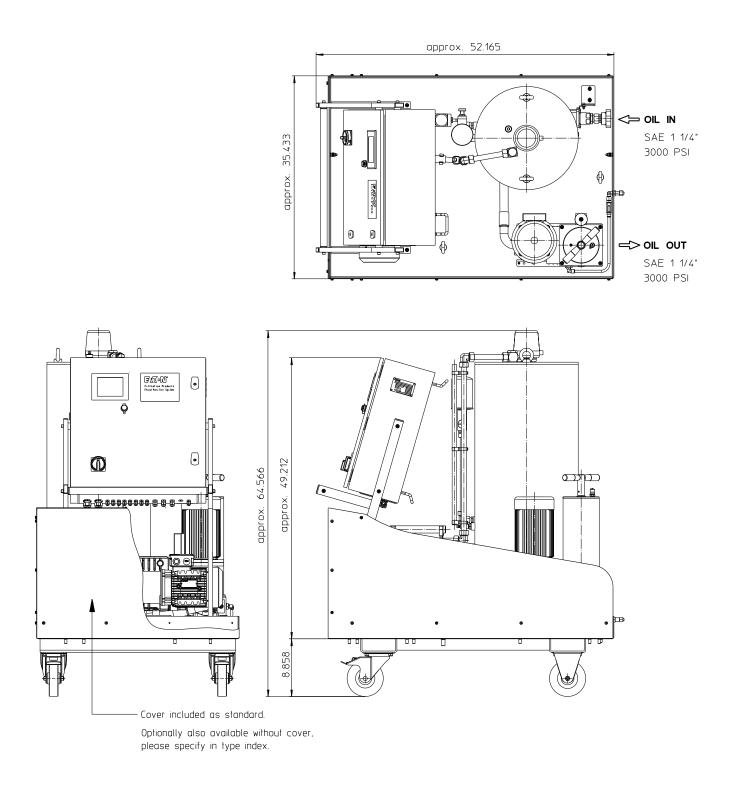
# Series IFPM 73



Weight: approx. 887 lbs.



Dimensions: inches 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)

		10VG.					
1	2	3	4	5	6	7	
P115.	D01	. VP20	. VS	<b>3</b> 5.	I.	Α	

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 = ∆p 145 PSI (1000 kPa)
- 5 filter element design:
  - B = both sides open
- 6 sealing material: V = Viton (FPM)
- 7 filter element specification: = standard
  - VA = stainless steel
- 8 pump unit:
  - P115 = pump unit 115, NG 80.50
- 9 motor:
  - D01 = rotary current motor 01: 50 Hz: 2.0 HP, 3-phase, 220...240/380...415V 60 Hz: 2.4 HP, 3-phase, 220...280/440...480V
- 10 vacuum pump:
  - VP20 = vacuum pump 20: 50 Hz: 1.9 HP, 3-phase, 220...240/380...415V 60 Hz: 2.2 HP, 3-phase, 250...280/440...480V
- 11 clogging sensor:
  - VS5 = VS5.1,5.V.-.NO.-.B.-, electric, at p1 and p2, 22 PSI (150 kPa), see sheet no. 1641
- 12 cover:
  - I = 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.	Β.	V.	-
1	2	3	4	5	6	7
1 series 01NR	= star	ndard-retu ording to [	••••			nent
2 nomir	nal size:	630				

3 - 7 see type index- Fluid Purifier Systems

#### **Technical data:**

inlet connection: outlet connection: pump flow rate:\* operating vacuum: heater power:

filter type: seal material: viscosity: dewatering rate:\*\* protection class: ambient temperature: fluid temperature: external protection: 1 ¼" SAE-flange 3000 PSI 1 ¼" SAE-flange 3000 PSI 18.9 GPM (50 Hz) / 22.6 GPM (60 Hz) - 8.7 PSI (-60 kPa) supply voltage A: 6000 Watt/400V supply voltage B: 6000 Watt/460V NF 631 Viton (FPM) 56...3200 SUS 14.2 gal./day IP54 +32°F to +100°F +50°F to +176°F 25 A

\* Flow rate of the gear pump at a viscosity of the fluid of 146 SUS.

\*\* Dewatering rate of free water, at a hydraulic oil of the viscosity class ISO VG32 and a fluid temperature of 140°F.

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		
	ISO 2943	Verification of material compatibility with fluids		
	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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