Series IFPM 72

Weight: approx. 528 kg

Dimensions: mm

Designs and performance values are subject to change.
Fluid Purifier System
Series IFPM 72

Description:

Effects of Water Contamination:

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

Principle of Operation:

The contaminated fluid is drawn into the Fluid Purifier System by a vacuum.

The fluid is passing a heater which is raising the temperature in order to increase the dewatering speed.

The fluid then enters through a solenoid valve into the vacuum chamber. In the vacuum chamber a big free surface is created with filling material. Here the water is absorbed by the air. Through an oil mist separator the humid air is released to the atmosphere with a vacuum pump.

With a gear pump the vacuum chamber is drained and the fluid is pumped back to the system through a high efficiency particulate removal filter.

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

Type index:

Fluid Purifier System: (ordering example)

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<tbody>
<tr>
<td>IFPM</td>
<td>72</td>
<td>6VG</td>
<td>10</td>
<td>B</td>
<td>V</td>
<td>-</td>
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<tr>
<td>P23</td>
<td>D01</td>
<td>VP07</td>
<td>VS5</td>
<td>A</td>
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1. series:
   - IFPM = Fluid Purifier System, mobile
2. nominal size: 72
3. filter material:
   - 10VG, 6VG, 3VG, 1VG microglass
4. filter element collapse rating:
   - 10 bar (1000 kPa)
5. filter element design:
   - B = both sides open
6. sealing material:
   - V = Viton (FPM)
7. filter element specification:
   - VA = stainless steel
8. pump unit:
   - P23 = pump unit 236, NG 80.50
9. motor:
   - D01 = rotary current motor 50 Hz:
     - 1,5 kW, 3-phase, 220...240/380...420V
     - rotary current motor 60 Hz:
     - 1,8 kW, 3-phase, 220...277/380...480V
   - VP07 = vacuum pump 07:
     - 50 Hz: 1,25 kW, 3-phase, 220...240/380...420V
     - 60 Hz: 1,50 kW, 3-phase, 220...277/380...480V
10. clogging sensor:
    - VS5 = VS5.1,5.V.-.NO.-.B.GS5, electric,
      - at p1 and p2, 1.5 bar (150 kPa), see sheet no. 1641
11. supply voltage:
    - A = 380V-415V; 50/60 Hz; 3Ph + N + PE
      - (delivery with 32A CEE plug for 3-phase current)
    - B = 440V-480V; 60 Hz; 3Ph + PE
    - E = 380V-415V; 50/60 Hz; 3Ph + PE
    - X = other voltage on request

Filter element: (ordering example)

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<tbody>
<tr>
<td>01NR</td>
<td>630</td>
<td>6VG</td>
<td>10</td>
<td>B</td>
<td>V</td>
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<td>1</td>
<td>Bauart:</td>
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<td>01NR = standard-return-line filter element according to DIN 24550, T4</td>
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<td>nominal size: 630</td>
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<td>see type index- Fluid Purifier Systems</td>
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Technical data:

inlet connection: 1 ½” SAE-flange 3000 PSI
outlet connection: 1 ¼” SAE-flange 3000 PSI
circulation flow rate:* 70,3 l/min (50 Hz) / 84,4 l/min (60 Hz)
heater power:
    supply voltage A + E: 6000 Watt/400V
    supply voltage B: 6000 Watt/460V
filter type: NF 631
seal material: Viton (FPM)
viscosity: 12…700 mm²/s
dewatering rate:** 54 l/day
protection class: IP54
ambient temperature: 0°C to +40°C
fluid temperature: 10°C to +80°C
external protection: 25 A

* At a viscosity of the fluid of 32 mm²/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
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 maintenance manual.