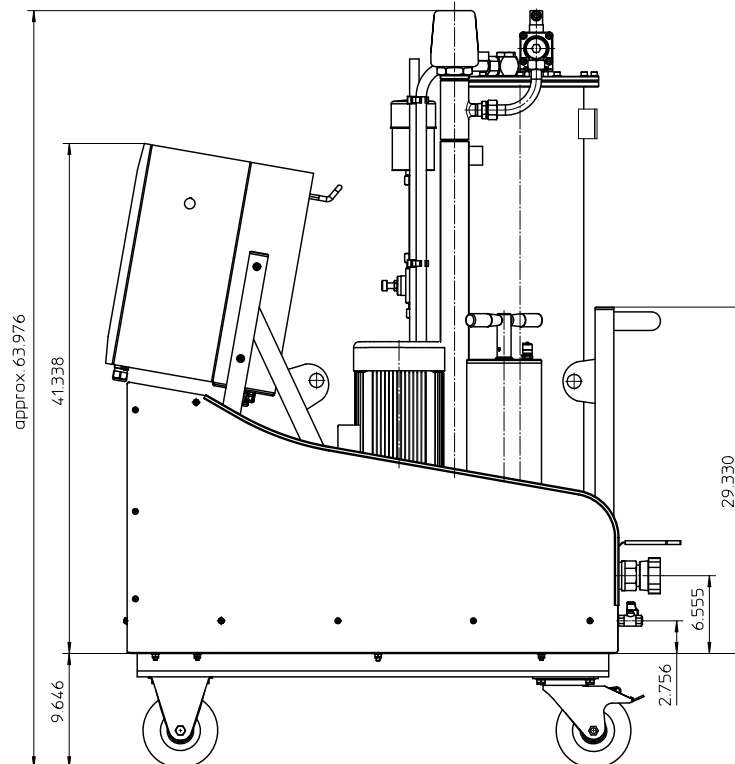
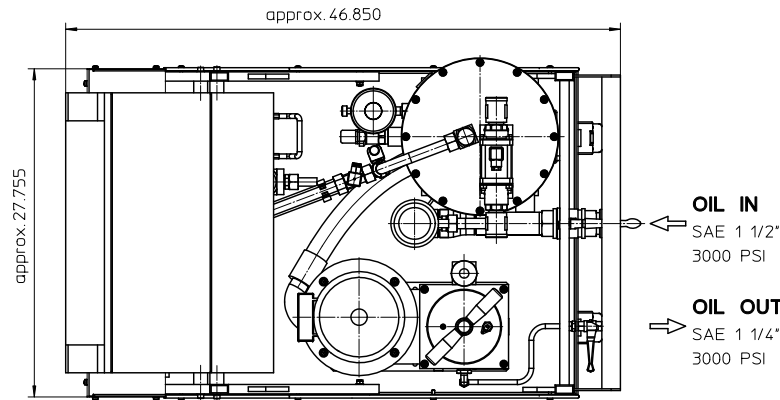


**FLUID PURIFIER SYSTEMS, mobile**  
**Series IFPM 32**

Sheet No.  
**4038 C**



**1. Type index:**

**1.1. Fluid Purifier System: (ordering example)**

**IFPM. 32. 6VG. 10. B. V. -. P22. D27. VP01. VS5. A**

1	2	3	4	5	6	7	8	9	10	11	12
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- 1 series:**  
IFPM = Fluid Purifier System, mobile
- 2 nominal size:** 32
- 3 filter-material and filter-fineness:**  
10 VG = 10  $\mu\text{m}_{(e)}$ , 6 VG = 7  $\mu\text{m}_{(e)}$ , 3 VG = 5  $\mu\text{m}_{(e)}$ , 1 VG = 4  $\mu\text{m}_{(e)}$  Interpor fleece (glass fiber)
- 4 resistance of pressure difference for filter element:**  
10 =  $\Delta p$  10 bar
- 5 filter element design:**  
B = both sides open
- 6 sealing material:**  
V = Viton (FPM)
- 7 filter element specification:**  
- = standard  
VA = stainless steel  
IS06 = see sheet-no. 31601
- 8 pump unit:**  
P22 = pump unit 22, NG 60.40
- 9 motor:**  
D27 = rotary current motor 50 Hz: 1.0 HP, 3-phase, 220...240/380...415V  
60 Hz: 1.2 HP, 3-phase, 255...277/440...480V  
D89 = rotary current motor 60 Hz: 1.0 HP, 3-phase, 332/575V
- 10 vacuum pump:**  
VP01 = vacuum pump 01, 50 Hz: 0.7 HP, 3-phase, 200...240/346...415V  
60 Hz: 0.7 HP, 3-phase, 200...277/346...480V  
VP09 = vacuum pump 09, 60 Hz: 0.7 HP, 3-phase, 332/575V
- 11 clogging sensor:**  
VS5 = VS5.1,5.V.-.NO.-.B.GS5, electrical, at  $p_1$  and  $p_2$ , 22 PSI, see sheet-no. 1641
- 12 supply voltage:**  
A = 380V-415V; 50/60 Hz; 3Ph + N + PE (Delivery with 16A CEE plug for three-phase current)  
B = 440V-480V; 60 Hz; 3Ph + PE  
C = 220V-240V; 50/60 Hz; 3Ph + PE  
E = 380V-415V; 50/60 Hz; 3Ph + PE  
F = 332/575V, 60 Hz, 3Ph + PE  
X = other voltage on request

**1.2. Filter element: (ordering example)**

**01NR. 630. 6VG. 10. B. V. -**

1	2	3	4	5	6	7
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- 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

Changes of measures and design are subject to alteration!

## 2. Description:

### 2.1. 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

### 2.2. 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.

## 3. Technical data:

Inlet connection:	1 ½" SAE-flange 3000 PSI
Outlet connection:	1 ¼" SAE-flange 3000 PSI
Circulation flow rate:*	7.5 GPM (50 Hz) / 9.0 GPM (60 Hz)
Operating vacuum:	8.7 PSI
Heater power:	Supply voltage A + E: 3000 Watt/400V Supply voltage B: 3000 Watt/460V Supply voltage C: 3000 Watt/230V Supply voltage F: 3000 Watt/575V
Filter type:	NF 631
Seal material:	Viton (FPM)
Viscosity:	56...3200 SUS
Dewatering rate:**	5.8 gal./Day
Protection class:	IP54
Ambient temperature:	+32°F to +104°F
Fluid temperature:	+50°F to +176°F
Weight:	approx. 680 lbs.

\* 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

## 4. 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.