



## HNP-021 Oil Purifier

The HNP-021 has been developed as a conditioner for hydraulic, lubrication and dielectric oils. It removes free and dissolved water; dirt; and free and dissolved air/ gases. This portable unit is compact and easy to use. The HNP oil purifier provides a wide range of opportunities for cost savings including: increased equipment uptime; improved machine performance; reduced component replacement costs; reduced maintenance labor costs; and lower oil replacement and disposal expense.

### Description

The Pall HNP fluid conditioning purifier removes 100% of free water and as much as 80% of dissolved water. It also removes 100% of free and entrained gases and up to 80% of dissolved gases. Particulate removal is achieved using a high Beta rated  $\beta_{5(c)} = 1000$  Ultipor® III filter element to polish the fluid before discharge back to the system reservoir. Other replacement filter media grades are also available to suit application requirements.

The HNP can be moved from one system to another or left as a permanent installation. The HNP purifier is simply connected to an electric supply, the inlet valve opened and “reset” and “start” buttons pressed to start the fluid purifying process.

Automatic controls, integral to the unit constantly monitor the operation and will safely shut down the system if fluid levels and pressures are outside normal limits.

Safety features include high and low level float level switches, discharge relief valve (set at 100 psid/7 bar), inlet oil vacuum pressure switch and drip tray float switch.

The HNP fluid conditioning purifier has been designed to be robust and reliable under the most arduous of conditions. All components are easy to maintain and filter elements are readily accessible for change out.



### HNP-021 Performance

The HNP purifier is designed to reduce and maintain the water content in a fluid system to below the saturation level of the system fluid. However, where a large water ingress occurs, the HNP 021 can remove up to 12 gallons (45L) per day. Actual water removal rate depends on many variables including system design, oil type, temperature, viscosity, water content, emulsion stability, and additives.

### Specifications

#### Dry Weight

350 lb (160 kg)

#### Overall Dimensions

Length (mm) 42 in. (1060 mm) max

Width (mm) 24 in. (620 mm) max

Height (mm) Caster mounted: 35 in. (885 mm)

Skid mounted: 33 in. (843 mm)

#### Inlet Connection

1" NPT

#### Outlet Connection

1" NPT

#### Circulation Flow Rate

7.5 gpm (28 L/min)

#### Total Motor Power

3 HP (2.25 kW)

#### Fluid Compatibility

Units with nitrile seals are compatible with petroleum oils. Fluorocarbon seals are required for industrial phosphate esters and specified synthetics

### Maximum Viscosity

3,000 SUS (700 cSt)

### Temperature Range

+60°F (15°C) to +165°F (70°C)

### Maximum Pressure for Inlet

6 psi (0.4 bar)

### Maximum Pressure for Outlet

100 psi (7 bar)

### Normal Operating Vacuum

24 in. Hg (-0.8 bar)

### Water Removal

Pall fluid conditioning purifiers remove all free water, free gases, dissolved water (up to 80%) and dissolved air (up to 80%)

### Warning

1. If there is any possibility that the fluid being purified has been contaminated with a toxic fluid, the vapors of which could cause a hazard, the Pall Purifier should not be used unless adequate precautions have been taken to vent the vapors in accordance with safety standards and local codes. This caution is necessary to prevent the possibility of toxic injury to personnel.

2. The oil purifier must not be used for fluids with flash point below 200°F (93°C) or for fluids contaminated with flammable or combustible fluids. This caution is necessary to prevent the possibility of fire or explosion.

## Ordering Information

Purifier P/N: **HNP021** CODE CODE CODE X

Replacement Element P/N **Inlet: HM55420** CODE CODE

**Outlet: HC9100** 8 CODE CODE

**Air Breather: HC0293SEE5**

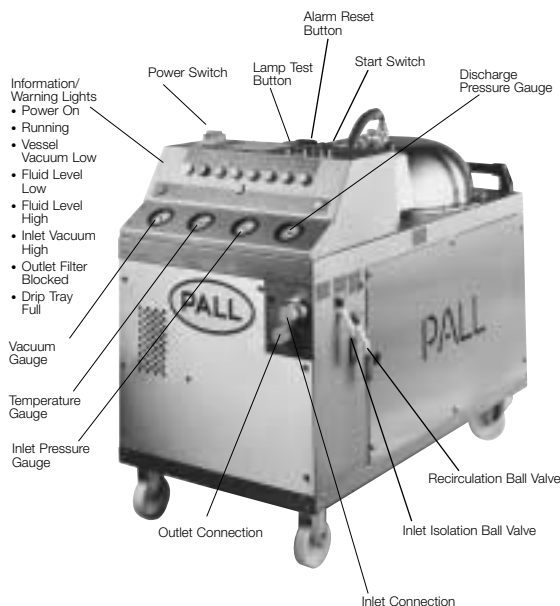
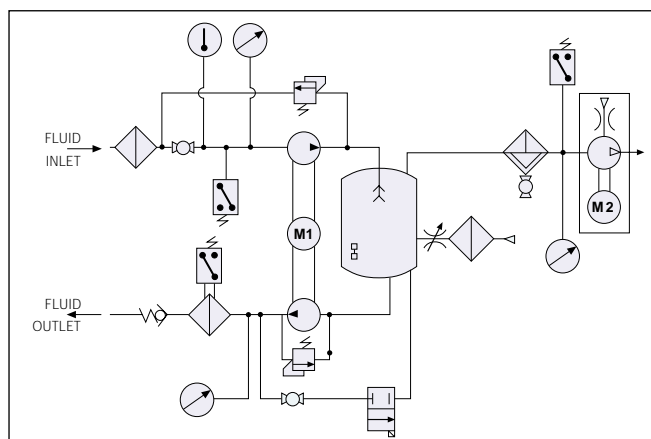
**Vacuum Pump Coalescer Element: H574499**

Code	Description
M6	220V 60 Hz 1 ph
N4	230V 60 Hz 3 ph
V4	460V 60 Hz 3 ph
14	575V 60 Hz 3 ph
M5	220V 50 Hz 1 ph
R3	380V 50 Hz 3 ph

Code	Filter Medium
FKZ	KZ ( $\beta_{<1} \geq 200$ )
FKP	KP ( $\beta_3 \geq 200$ )
EOS	OS (105 $\mu$ m mesh)*

Code	Seal Material
H	Nitrile
Z	Fluorocarbon

## Flow Schematic



**Note:** Pall also designs and manufactures larger purifiers and explosion protected purifiers. Customers with applications requiring purifiers for hazardous environments should contact the Pall sales office.



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