

New: HDP10 Series Oil Purifier for fluid viscosities up to 1000 cSt



PGHDP10ENa

Water in hydraulic, lubrication, heat transfer and insulating fluids adversely affects fluid performance and is a threat to system reliability.

The HDP Series of purifiers combine the water removal performance of mass transfer technology with high reliability and ease-of-use to help ensure maximum equipment uptime and lowest cost of ownership — enabling you to focus on your process, and not the equipment.

The Pall HDP10 fluid conditioning purifier uses vacuum dehydration to remove 100 % free water and over 90 % of dissolved water. Unlike other methods it will not burn or otherwise alter the properties of the oil. It will also remove 100 % of free and entrained gases and up to 80 % dissolved air along with solid particulate contamination with an efficiency of 99.95 % (Beta \geq 2000) down to 3 microns.

Maximum Reliability, Lower Cost of Ownership

HDP series purifiers implement a design for maximum uptime, tightly based on historical Pall purifier design, which exhibits higher utilization rates even in the most demanding and continuous duty applications.

The HDP10 uses specially selected components to help ensure maximum reliability and lower cost of ownership. These premium components include:

- Schneider Electric PLC¹ and HMI
- Reliable Gardner Denver² VLR series vacuum pump with 12 month service interval (8760 hours run time)
- Rickmeier³ gear pumps — proven performers for more than 20 years in Pall purifiers



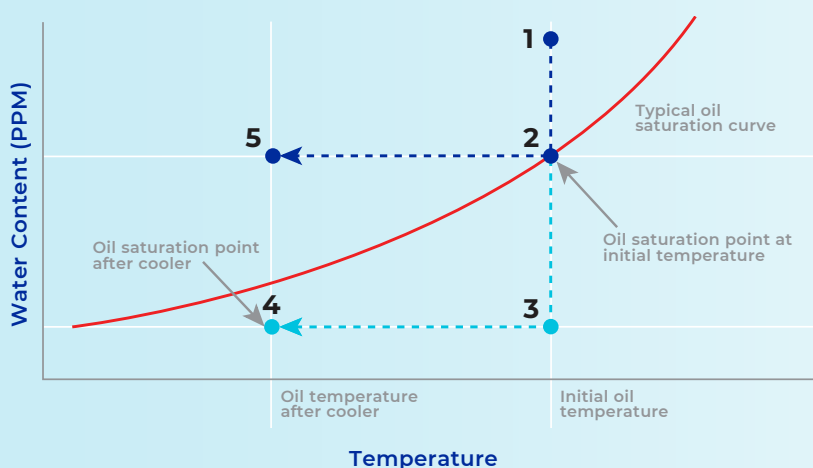
HDP10 Series Oil Purifier

Pall HDP Series purifiers standard features include:

- Pall WS12 Water Sensor
- Low watt density heater (8kw output)
- Pall Profile Star Coalescing Element to reduce risk of carry-over

Controlling the dissolved as well as the free water in the reservoir is critical in ensuring the absence of free water during operation. With the Pall HDP10 purifier, this is done efficiently, easily and reliably. The diagram below illustrates the concept.

Removing free water is never enough!



- 1 Initial water content is above saturation (free water).
- 2 Maximum water removal capability of 'free water removal' devices (coalescers, centrifuges, etc.) is to the oil's saturation point.
- 3 Water content achieved with mass transfer dehydration is significantly below the oil's saturation point.
- 4 Water content achieved with mass transfer dehydration remains below the oil's saturation point even after oil is cooled. This prevents the formation of free water, harmful to the system.
- 5 If only free water is removed at initial temperature, when oil is cooled the amount of harmful free water in the oil can increase significantly.

Flexible Flow Rates

The HDP's variable frequency inlet drive allows for efficient oil purification performance at flow rates ranging from 4-10 GPM.

Additional Design Improvements

Beyond equal to better dewatering performance when compared to the Pall HLP Oil Purifiers, the Pall HDP Oil Purifiers boast a series of design improvements over past versions. (1) The HDP will come standard with the ability to display water content PPM (parts per million) in most commonly available hydraulic and lube oils, giving you an all-in-one solution to measure and ensure oil quality. (2) Larger outlet check valves ensure reduced backpressure for more efficient, quieter running. (3) Upper tower level vacuum pump protection enabling a safe shutdown in challenging conditions.

Ease of Use

The HDP10 series offers the following features to increase versatility in service and lower cost of ownership:

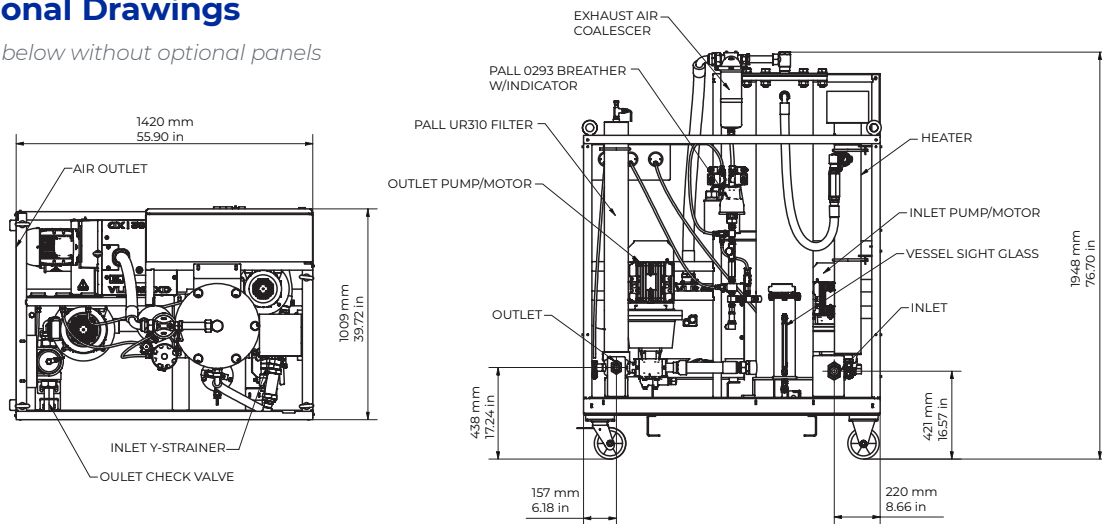
- Low maintenance
- Able to work with wide range of oil viscosities (3 cSt to 1000 cSt)
- No utility water required for cooling or pump operation

Focus on Your Process, Not on Your Purifier

HDP Series purifiers requires the minimum of user interaction, which allows users to focus more on their process and less on the maintenance and upkeep of their purifier. The HDP purifier is one of the easiest purifiers to operate. Simply connect the purifier to the reservoir, power up, and press the start button. "Our standard is that the HDP users are able to just press the button and walk away."

Dimensional Drawings

NOTE: Views below without optional panels



HDP10 Specifications

Flow Rate:	Adjustable from 6-10 GPM
Viscosity Range:	3 to 1000 cSt when flow at or below 8 GPM. When flow >8 GPM, 3 - 820 cSt.
Dry Weight:	1411 Lbs (640 kg)
Dimensions (caster or floor mount):	77.2" H x 56" x 41.7" (196 cm x 142 cm x 106 cm)
Seal Material:	Fluorocarbon
Enclosure:	NEMA 4 (IP65)
Inlet Fluid Temperature:	167° F (75° C) Maximum
Ambient Temperature:	39° F to 104° F (4° C to 40° C)
(special options available for higher ambient temperatures)	
Inlet Pressure Range:	-14" Hg to 10 PSI (-0.5 bar to 0.7 bar)
Outlet Pressure Relief Setting:	80 psi (5.5 barg maximum)
Operating Vacuum Range:	-15" to -24" Hg (-0.51 bar to -0.80 bar)
Heater Capacity:	8 kW (low watt density)
Paint Scheme:	Two part polyurethane painted (suitable for industrial phosphate ester service)
Fluid Filter Housing:	UR310 Series with 40" element

* The flow rate may need to be slowed to 8GPM in order to achieve the full 1000 cSt range. Viscosity range to 820 cSt at 10GPM confirmed.

Purifier Part Numbers / Ordering Information

HDP10 1 2 Z 3 4 5 6 7 *WS12 Water Sensor is standard equipment on all HDP purifiers*

Table 1

Code	Voltage
R	380 Vac
S	400 Vac
T	415 Vac
W	480 Vac
1	575 Vac

Table 2

Frequency Code	Frequency
3	50 Hz, 3Ø
3	50 Hz, 3Ø
3	50 Hz, 3Ø
4	60 Hz, 3Ø
4	60 Hz, 3Ø

Table 3

Mounting Code	Description
C	Castor
N	Static

Note: Z indicates fluorocarbon seals and chlorinated polyethylene hoses are standard. Contact Pall Sales for other options.

Table 4

Port Code	Port Type
P	ISO228 - BSP Parallel (Inlet: G1-1/2, Outlet: G1)
T	ANSI B1.20.1 - NPT Taper (Inlet: 1-1/2", Outlet: 1")

Table 5

Language Code	Description
DE	German
EN	English
ES	Spanish
FR	French
IT	Italian
PT	Portuguese
RU	Russian

Table 6

Option Code	Special Options
Omit	No Special Options
A	Factory Testing With Fyrquel ⁴ Fluid

Table 7

Panel Code	Panel Options
Omit	No Panel
P	Panel

Outlet Element Part Numbers / Ordering Information

UE310 Rating Code Length Code Seal Code

Rating Code	Rating (ISO16889)	Length Code	Seal Code
AZ	β2.5 (C) ≥ 2000	40	Z
AP	β5 (C) ≥ 2000	40	Z
AN	β7 (C) ≥ 2000	40	Z
AS	β12 (C) ≥ 2000	40	Z
AT	β22 (C) ≥ 2000	40	Z



PALL CORPORATION

Corporate Headquarters
Port Washington, NY, USA
+1-800-717-7255 toll free (USA)
+1-516-484-5400 phone

European Headquarters
Fribourg, Switzerland
+41 (0)26 350 53 00 phone

Asia-Pacific Headquarters
Singapore
+65 6389 6500 phone

Visit us on the Web at www.pall.com/industry
Contact us at www.pall.com/contact

Pall Corporation has offices and plants throughout the world. To locate the Pall office or distributor nearest you, visit www.pall.com/contact.

The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

IF APPLICABLE Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

© Copyright 2021, Pall Corporation. Pall and are trademarks of Pall Corporation.

® Indicates a trademark registered in the USA.

¹ Schneider Electric PLC is a trademark of Rockwell Automation.

² Gardner Denver is a trademark of Gardner Denver Holdings Inc.

³ Rickmeier is a trademark of IDEX Corporation.

⁴ Fyrquel is a trademark of ICL-IP America Inc.

PGHDP10ENa
June 2021