

# Insulating Oil Filters

## HCP30, HDP50 & HDP75

### Heavy Duty Filter Pumps Double Capacity, Twin Housings Water and Dirt Removal From Insulating Oil

#### HCP30

30 GPM Two Stage Series-Flow Model

#### HDP50 & HDP75

50 & 75 GPM Dual One-Stage Parallel-Flow Models

#### FEATURES

- High pumping rates
- Twin two-cartridge housings
- Quick cartridge change
- Minimum oil spill during operation
- Rugged welded steel construction
- Easy trailer mounting

#### DESCRIPTION

High performance HCP and HDP Series Filter Pumps provide fast, cost effective insulating oil filtration in the field.

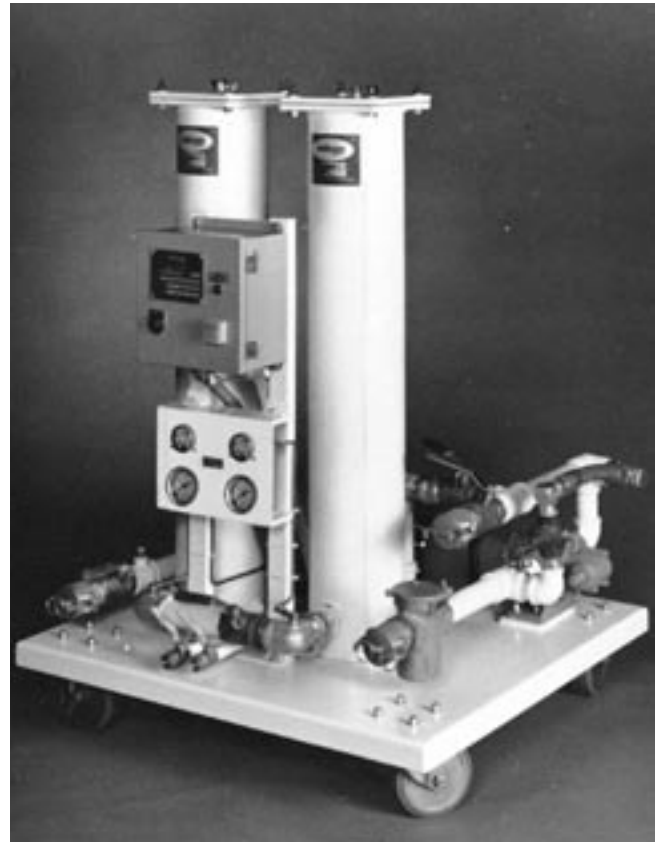
**HCP30 Series-Flow Filter-Pumps** were developed for use with insulating oil having high levels of carbon contamination as a primary problem and water contamination as a secondary problem.

The HCP configuration employs two different types of filter cartridges in series. The first housing, which holds two cost effective particulate cartridges, is utilized as a prefilter. The second housing holds two **Aquacon**<sup>®</sup> super-absorbent cartridges. Since the **Aquacon** Cartridges are utilized primarily for water removal, they seldom need to be replaced. This reduces operation costs.

**HDP50 and HDP75 Parallel-Flow Models** feature high flow rates. Oil is pumped through both two-cartridge housings at the same time, in parallel, for maximum flow.

Standard features for all models are listed on the reverse side of this data sheet. Safety features include a **Pump Pressure Relief Valve** to prevent over-pressuring of the system. Also included is a built-in **Adjustable Pressure Switch** which senses the pressure ahead of the filters. It will shut the system down if a sudden surge of water should plug the **Aquacon** Cartridges. In the HCP30, this sensor is positioned ahead of the second stage.

A number of useful options are offered. The **Delta P Gauge**, for example, is a direct reading differential pressure gauge which eliminates any uncertainty about when to change cartridges. It is highly recommended.



**HCP30, 30 GPM Filter-Pump. Shown with optional 6" Casters, Delta P Gauges and Flow Control Bypass.**

The manual **Flow Control Bypass** is used to reduce system flow rate and is useful when topping off a tank. It is also strongly recommended when working with oil at temperatures of 40°F and colder because resulting higher viscosity can cause motor overload.

The **Low RPM Motor** option is a special 1140 RPM motor. (Standard RPM is 1740.) It is used in combination with a larger pump to achieve the desired flow rate with long runs of standard suction hose or hose of smaller diameter than recommended. Use of this motor will reduce or eliminate very high noise levels which can be generated by pump cavitation at the higher RPM.

Additional options are detailed on the reverse side of this sheet.

#### APPLICATIONS

- Transformers
- Tap Changers
- Switch Gear
- Circuit Breakers

## SPECIFICATIONS

Standard Features, all HCP and HDP Models

- Totally Enclosed Fan-Cooled (TEFC) Motor
- Integral Pump Pressure Relief Valve – prevents system over-pressure
- 100 psi system design pressure
- All controls and connections accessible from one side
- Static Pressure Gauge (two on HCP30)
- Adjustable Pressure Shut-down Switch
- NEMA 12 Motor Control Enclosure
- Motor Starter with Manual Reset
- “Motor Running” Indicator Light
- 1/2” Sampling Port – for quick check on filter performance
- Fast Acting Ball Valves on drains and main lines
- Full port inlet & outlet isolation valves
- Quick-Disconnect Male Coupling with dust caps installed on inlet and outlets
- Manual Filter Bypass – transfer oil without filtering
- Special Inlet Basket Strainer – for quick inspections and cleaning without tools
- Carbon steel construction
- Wiring complete to motor control – user to install power cord and plug

	HCP30	HDP50	HDP75
Flow Rate (GPM)	30	50	75
Flow Arrangement	Series	Parallel	Parallel
Inlet/Outlet (In.)	1 1/2	2	3
Motor Horsepower	2	3	5
Amps. (Single Phase)	115V/23A 230V/12A	115V/30A 230V/15A	230V/23A
Ht./Width/Depth (In.)	52/39/36	52/42/39	52/42/39
Weight (Lbs.)	370	615	650
Shipping Weight (Lbs.)	570	830	870

## FILTER CARTRIDGE INFORMATION

FO-718PL Series large surface area pleated media “dirt” cartridges are recommended for use in the first (prefilter) stage of the HCP30 only.

**Aquacon®** AC Series cartridges are for use in both systems. In addition to their outer particulate filter layer (offered in 0.3, 1/2, and 1 micron ratings), they also have a unique inner filter media which holds one to two quarts of water. Absorbed water is chemically locked in and cannot be squeezed out. When the cartridges reach their water holding capacity, their accordion pleats swell shut. This causes an increase in the differential pressure which signals the operator to change the cartridges. If operation is unattended, the pressure increase can activate the automatic pressure switch and cause the system to shut down until saturated cartridges are replaced.

## FILTER CARTRIDGE RECOMMENDATIONS

(Use two per housing)

**HCP30:** 1st Stage: FO-718PL1/2; 2nd Stage: AC-71801

**HDP50 and HDP75:** Either AC-7181/2 (Hi-Carbon) or AC-71801 (Hi-Water)

## ORDERING INFORMATION

Specify model number as shown below. Units are shipped without cartridges.

HCP30	HDP50	HDP75	POWER REQUIREMENT
HCP30-2	HDP50-2	HDP75-2	230 volts, 1 phase, 60 Hz
HCP30-3	HDP50-3	HDP75-3	230 volts, 3 phase, 60 Hz
HCP30-4	HDP50-4	HDP75-4	460 volts, 3 phase, 60 Hz
HCP30-5	HDP50-5	HDP75-5	575 volts, 3 phase, 60 Hz

**Also available:** 50 Hz power, explosion proof motor, variable speed motor, low RPM motor (contact factory)

## RECOMMENDED SPARES

- Cartridges, 6 ea.
- G-1045 Buna-N Lid Gaskets, 2 ea.

## OPTIONS AND ACCESSORIES

HCP30	HDP50	HDP75	DESCRIPTION
550Y040	550Y050	Contact Factory	Flow Control Bypass
553Z050	553Z060	Contact Factory	4-Way Inlet Valve
725Y004	725Y004	Contact Factory	Pressure Switch Alarm Light
703Z004	703Y004	Contact Factory	Delta P Gauge(s)
440Z404	440Z404	Contact Factory	Auto Air Eliminators
491Y001	Not Available	Not Available	6” Polyurethane Casters
491Y002	491Y002	Contact Factory	8” Polyurethane Casters
491Y010	Not Available	Not Available	10” Pneumatic Casters
491Y012	491Y012	Contact Factory	12” Pneumatic Casters
661Y012	661Y012	Contact Factory	Remote Stop/Start Switch
722Y006	722Y006	Contact Factory	Digital Flowmeter/Totalizer
150Y6XX	150Y8XX	Contact Factory	Hose w/Male x Female Cams (Substitute length in feet for XX)
151Y6XX	151Y8XX	Contact Factory	Hose w/Female Cams (Substitute length in feet for XX)
165X054	165X074	Contact Factory	Female Cam x Male NPT Fitting
165X052	165X072	Contact Factory	Male Cam x Male NPT Fitting



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