

# PH Filter Cartridges



*Hilco PH Filter Cartridges are suitable for filtration of oils, water, water-based fluids and a wide range of chemicals.*

Today's modern machinery with its tighter clearances, operates at higher fluid pressures and speeds. This in turn places a far greater demand on the fluid cleanliness. Therefore, high efficiency filtration is essential to meet these stringent requirements.

The Hilco PH series of filter cartridges achieves the demand for higher efficiency without sacrificing dirt capacity and low pressure drop by incorporating modern synthetic filter fibers with much smaller diameters than traditional cellulose fibers. Smaller fibers take up less space in the filter matrix, leaving more room for dirt capacity. Smaller fibers also represent less resistance to fluid flow, maintaining lower pressure drops with closer fiber spacing and the resultant smaller pore sizes.



Water is a common contaminant in most fuel, lube, and hydraulic systems. Synthetic fibers do not absorb water and swell or soften as cellulose fibers can, making them far more reliable under adverse conditions.

## **Benefits for the system packager or OEM**

- \* Filter housing cost savings
- \* Space savings
- \* Cartridge cost savings

## **Benefits for the end user**

- \* Cartridge cost savings
- \* Smaller physical inventory
- \* Reduced number of inter-cartridge seals

## Features

- \* Microglass filter media is sandwiched between two protective layers of nylon media then supported with an epoxy-coated steel screen.
- \* Support screens provide a rigid pleat structure to withstand high cyclic and pulse flow fatigue.
- \* Synthetic media enables the cartridge to be used in a wide range of applications, including those which could deteriorate a standard cellulose paper cartridge (i.e., water exposure).

## Filtration Efficiency

Media Number	Beta <sub>x</sub> = 75*	Beta <sub>x</sub> = 200*	Beta <sub>x</sub> = 1000*
-16		2	3
-14	2	3	5
-12	3	4	6
-11	9	10	12
-01	14	15	17
-03	24	25	27
-05	40	41	43
-10	50	51	53
-20	64	69	74
-40	100	110	125

**Collapse Pressure:** 100 psid  
**Maximum Service Temperature:** 250 deg. F

## Applications

- > Engine and Turbine Lube
- > Compressor Lube and Seal Oil
- > Fuel Oil
- > Flushing
- > High-Speed Coupling Oil
- > EHC Fluid
- > Oil with Water
- > Process Water
- > Cooling Water
- > EDM Coolant
- > Chemicals

\* The "Beta Ratio" rating is an industry standard for measuring particle separation efficiency. For example, Beta<sub>3</sub> = 75 is equivalent to removing 98.7% of all particles 3 micrometers and larger, and Beta<sub>3</sub> = 200 is equivalent to removing 99.5% of all particles 3 micrometers and larger.

## Nomenclature

**PH718-01-CN**

Size: 310, 511, 518, 718, and 736 \_\_\_\_\_  
 Media Number: 16, 12, 11, 01, 03, 05, and 10 \_\_\_\_\_  
 End Seal Arrangement (Consult Factory) \_\_\_\_\_

*The Hilliard Corporation reserves the right to change specifications and dimensions at any time.  
 Please contact the factory for the most current information.*

### The Hilliard Corporation

100 West Fourth Street  
 Elmira, New York 14902-1504  
 Phone: 607-733-7121  
 Fax: 607-733-0928  
<http://www.hilliardcorp.com>

### Your Local Representative:

### Northeast Filter & Equipment Co.



135 Parker Court  
 Chardon, OH 44024  
 PH: 800-333-6332  
 FX: 440-285-0730  
[www.nefilter.com](http://www.nefilter.com)

