

# Aquacon<sup>®</sup> AC Series

## AC Series for Removal of Water and Dirt from Oils and Fuels

Aquacon<sup>®</sup> cartridges are constructed to remove dirt and water from hydrocarbon and other oils. The outer media layer filters out silt, rust and other particulate contaminants. The inner layers absorb water and chemically bond it so that no water will release downstream.

When the Aquacon Cartridge reaches its water holding limit, the media swells shut and the differential pressure rapidly increases. This signals the operator that the cartridge must be changed.

### BENEFITS

- Removes free and emulsified water to less than 2 ppm
- Differential pressure increase alerts operator to change cartridges
- Effectively filters silt and other particulates
- No media migration or “linting”
- Easy to install and remove
- Does not affect oil additives
- Fits standard filter housings

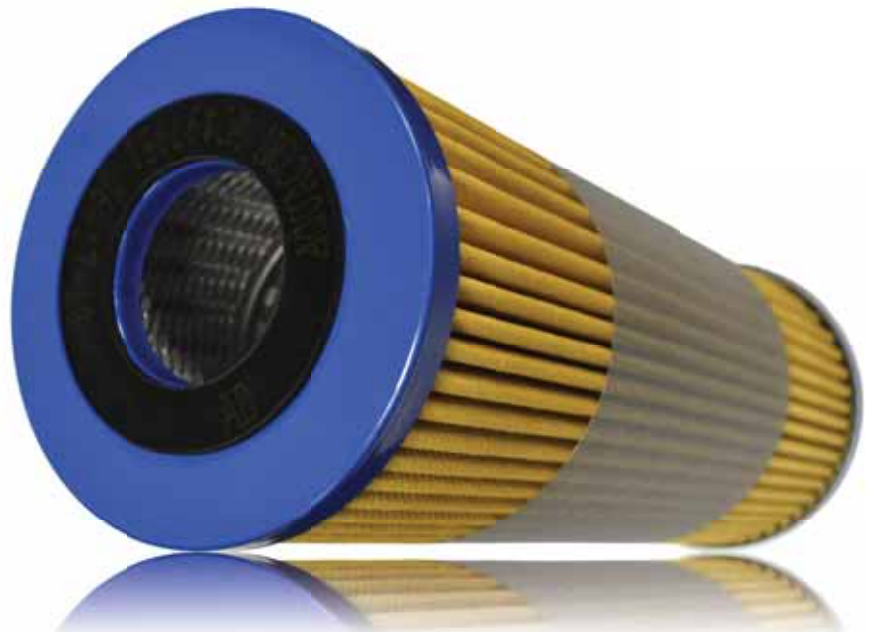
### TECHNICAL INFORMATION

- Maximum operating temperature is 250°F (121.1°C).
- Aquacon Cartridges will shut off flow when loaded with water or dirt. Appropriate precautions should be taken in critical applications where oil flow must be maintained.
- With some lube and hydraulic oils all of the water may not be removed in one pass, and extra passes will be required for total removal.
- Water capacity for the AC-718 cartridges ranges from 2 to 4 quarts.

### APPLICATIONS

- Gasoline
- Hydraulic Oil
- Kerosene
- Turbine Lube Oil
- Diesel Fuel
- Quench Oil
- Insulating Oil
- Synthetic Oil
- Biodiesel
- Phosphate Ester Oil

**WARNING:** Absorbent-type monitor cartridges will not remove water from fuel containing alcohol-blending agents (commonly called gasohol). For removal of solids, please use Velcon particle removal filters specifically made for gasohol. Consult your Parker representative



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## CARTRIDGE INFORMATION

Model Number	Micrometer Reading		I.D. (in.)	O.D. (in.)	Length (in.)	Collapse Pressure, psi	Interchange Information
	Normal	Beta <sub>x</sub> = 75					
AC-718P3 <sup>(1)</sup>	0.3	2	2 9/16	6 1/4	18	75	Fits Velcon industrial housings and portable filters, interchangeable with Velcon FO-718PL and FO-736PL Series Cartridges
AC-718P4D	0.4	2.5	2 9/16	6 1/4	18	75	
AC-7181/2 <sup>(1)</sup>	0.5	3	2 9/16	6 1/4	18	75	
AC-71801	1	6	2 9/16	6 1/4	18	75	
AC-71805	5	40	2 9/16	6 1/4	18	75	
AC-7361/2 <sup>(1)</sup>	0.5	3	2 9/16	6 1/4	36	75	
AC-73601	1	6	2 9/16	6 1/4	36	75	
AC-73605	5	40	2 9/16	6 1/4	36	75	

Notes: (1) The AC-718P3, AC-7181/2 and AC-7361/2 are increased surface area/reduced water capacity cartridges specifically designed for circuit breaker oil.

## CARTRIDGE FLOW RATE (USGPM) VS. VISCOSITY DATA

### FOR 2 PSI AND 5 PSI INITIAL PRESSURE DROPS

CARTRIDGE	33 SUS			39 SUS		46 SUS		59 SUS		98 SUS		142 SUS		187 SUS	
	2 CS			4 CS		6 CS		10 CS		20 CS		30 CS		40 CS	
	CAP	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI
AC-718P3	670	50	50	33	50	22	50	13	32	7	17	4	10	3	8
AC-7181/2	670	50	50	36	50	24	50	15	36	7	18	5	12	4	9
AC-71801	1850	50	50	36	50	24	50	15	36	7	18	5	12	4	9
AC-71805	1850	50	50	50	50	50	50	33	50	17	42	11	28	8	21
AD-71825	1850	50	50	50	50	50	50	50	50	41	50	27	50	20	50

CARTRIDGE	233 SUS		348 SUS		463 SUS		927 SUS		1390 SUS		1853 SUS		2316 SUS	
	50 CS		75 CS		100 CS		200 CS		300 CS		400 CS		500 CS	
	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI
AC-718P3	3	7	2	5	1	3	-	1	-	1	-	-	-	-
AC-7181/2	3	7	2	5	1	4	1	2	-	1	-	1	-	-
AC-71801	3	7	2	5	1	4	1	2	-	1	-	1	-	-
AC-71805	7	17	4	11	3	8	2	4	1	3	1	2	1	2

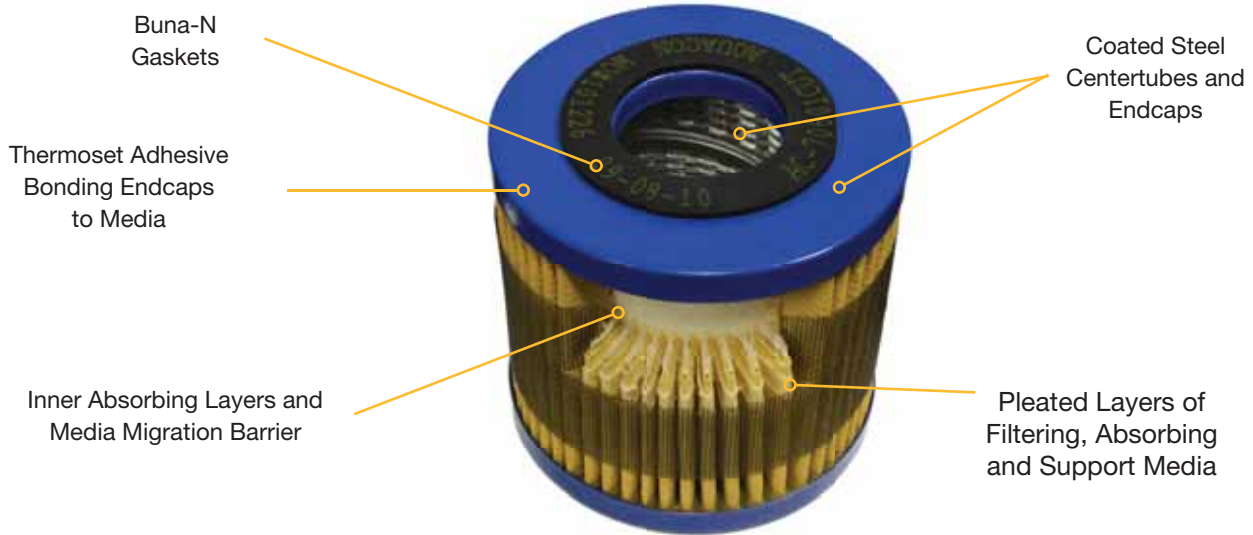
#### NOTES:

- Figures in table are flow rates (USGPM) that will cause a pressure drop of 2 or 5 psi across the cartridge.
- "CAP" is the water holding capacity in milliliters for 33 SUS (2 CS) fuel at the flow rates shown. These flow rates are the generally recommended maximum values for the specific cartridges.



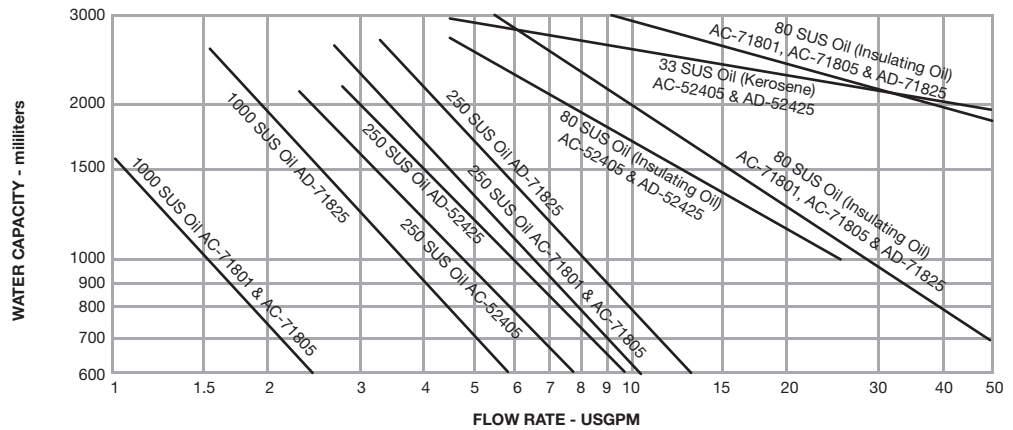
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## TYPICAL AQUACON® CARTRIDGE CONSTRUCTION

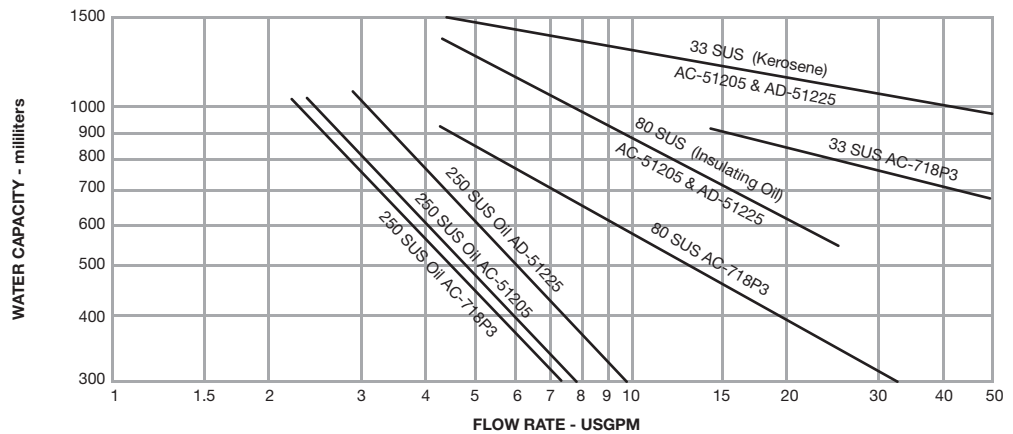


## WATER HOLDING CAPACITY

Water capacity decreases when viscosity or flow rate increases. The graphs below show typical characteristics. For any specific application you must trade off between capacity (how much water the cartridge will hold before it must be changed) and flow rate (size of filter housing and initial cost). For long term operating cost benefits, it is always best to use a larger housing (reduce the flow rate per cartridge).



WATER CAPACITY AS A FUNCTION OF VISCOSITY AND FLOW RATE  
AC-52405, AD-52425, AC-71801, AC-71805, and AD-71825 CARTRIDGES



WATER CAPACITY AS A FUNCTION OF VISCOSITY AND FLOW RATE  
AC-51205, AD-51225, AC-718P3, and AC-7181/2 CARTRIDGES