



Filter Sizing Information

AC and AD Series Aquacon® Cartridges

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-21005	240	20	20	11	20	7	18	4	11	2	5	1	4	1	3
AC-405SP	150	13	13	6	13	4	11	3	7	1	3	1	2	1	2
AC-409SP	240	20	20	11	20	7	18	4	11	2	5	1	4	1	3
AC-51205	980	50	50	45	50	31	50	18	46	9	23	6	15	5	12
AC-52405	1960	100	100	90	100	62	100	36	92	18	46	12	30	10	24
AC-61405	1270	50	50	50	50	37	50	22	50	11	28	7	18	6	14
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-21025	240	20	20	20	20	14	20	9	20	4	11	3	7	2	5
AD-51225	980	50	50	50	50	50	50	44	50	22	50	15	36	11	28
AD-52425	1960	100	100	100	100	100	100	88	100	44	100	30	72	22	56
AD-61425	1270	50	50	50	50	50	50	50	50	27	50	18	45	14	35
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-21005	1	2	-	1	-	1	-	-	-	-	-	-	-	-
AC-405SP	-	1	-	1	-	-	-	-	-	-	-	-	-	-
AC-409SP	1	2	-	1	-	1	-	-	-	-	-	-	-	-
AC-51205	4	9	2	6	2	5	1	2	1	2	-	1	-	1
AC-52405	8	18	4	12	4	10	2	4	2	4	1	2	1	2
AC-61405	5	11	3	7	2	6	1	3	1	2	-	1	-	1
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
AD-21025	2	4	1	3	1	2	-	1	-	1	-	-	-	-
AD-51225	9	22	6	15	4	11	2	5	1	4	1	3	1	2
AD-52425	18	44	12	30	8	22	4	10	2	8	2	6	2	4
AD-61425	11	27	7	18	5	13	3	7	2	5	1	3	1	2
AD-71825	16	40	11	27	8	20	4	10	3	7	2	5	2	4

- NOTES:** 1. Figures in table are flow rates (USGPM) that will cause a pressure drop of 2 or 5 psi across the cartridge.
 2. "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.

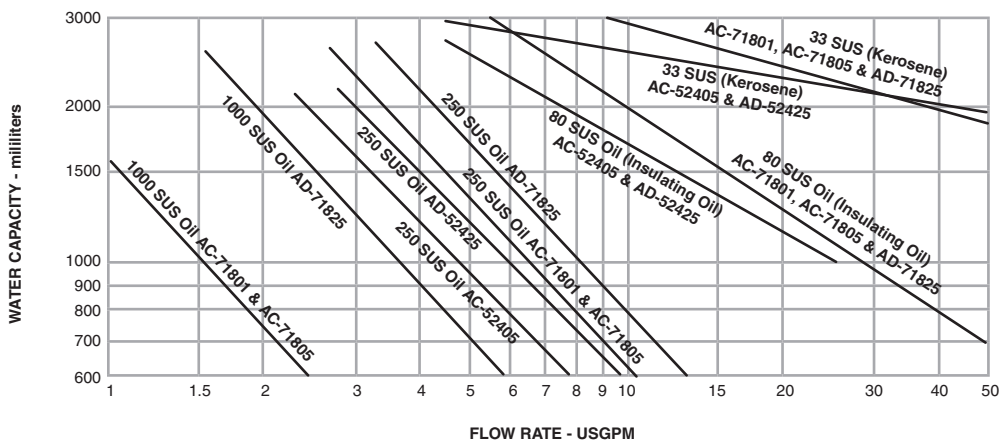
FILTER SIZING INFORMATION

1. Select the desired filter cartridge type and micron rating.
2. Determine the viscosity at the operating temperature for the fluid being filtered. See Bulletin 1533.
3. From the cartridge flow rate data, estimate the flow rate that will result in a 2 psi differential pressure.
4. Divide the total desired flow rate by the flow rate determined in 3, above. This will give the required number of cartridges.
5. Select a filter housing that will hold the required number of cartridges.

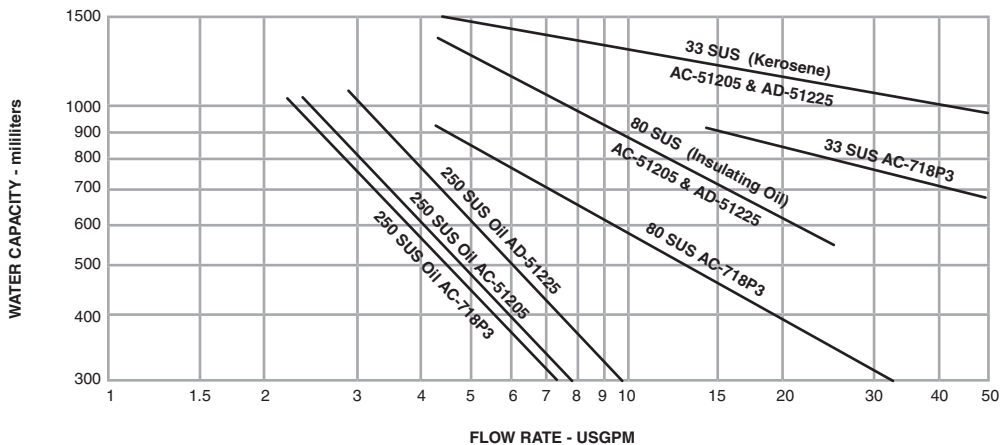
- NOTES:**
- a) The recommended maximum flow rate can be exceeded by as much as 50% for “fuse-monitor” type applications with fuels and other low viscosity fluids. However, water holding capacity will be reduced and pressure losses from the filter housing itself may become excessive.
 - b) For higher viscosity fluids, a 5 psi differential pressure is frequently used for cartridge selection. This is acceptable, but you should consider the resulting loss in water capacity.

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



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