

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 2 CS			39 SUS 4 CS		46 SUS 6 CS		59 SUS 10 CS		98 SUS 20 CS		142 SUS 30 CS		187 SUS 40 CS	
CANTRIDGE	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-61405	1270	50	50	50	50	37	50	22	50	11	28	7	18	6	14
AD-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-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 50 CS		348 SUS 75 CS		463 SUS 100 CS		927 SUS 200 CS		1390 SUS 300 CS		1853 SUS 400 CS		2316 SUS 500 CS	
CARTRIDGE	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-61405	5	11	3	7	2	6	1	3	1	2	-	1	-	1
AD-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-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.

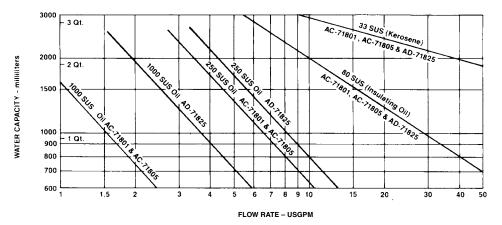
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FILTER SIZING INFORMATION

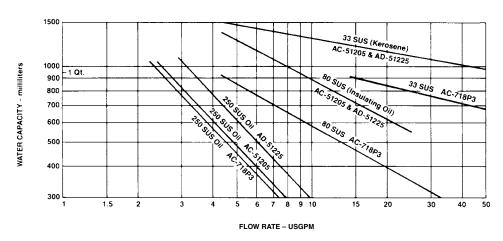
- 1. Select the desired filter cartridge type and micron rating.
- 2. Determine the viscosity at the operating temperature for the fluid being filtered. See Bulletin 1533.
- 3. From the cartridge flow rate data, estimate the flow rate that will result in a 2 psi differential pressure.
- 4. Divide the 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-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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