Liquid Flow Rates
Stainless Steel Filter Elements

Liquid flow rates in Gal/hr at 2 psi pressure drop

Flow rates will depend on which filter element grade is installed in the filter housing. First check the size of the filter element using the housing data sheets and then use the charts below to read the flow rate against the element grade. Replace the ☐ in the part number shown with the required grade, for example 12.57.S20V

The figures shown here are based on the viscosity of water and oil (32cSt). See note (4) for other liquids.

12.32.☐	Flow Rates in Gal/hr 1/8" Port Sizes							
	S1	S2	S5	S10	S20	S40	S100	S200
Water	0.75	1.80	4.15	8.50	17.1	25.4	34.0	68.1
Oil (32 cSt)	0.02	0.05	0.15	0.30	0.60	0.90	1.20	2.45

12.57.☐	Flow Rates in Gal/hr for 1/4" Port Sizes							
	S1	S2	S5	S10	S20	S40	S100	S200
Water	1.55	3.10	8.10	15.8	31.70	47.5	63.4	127
Oil (32 cSt)	0.05	0.10	0.25	0.55	1.10	1.70	2.25	4.55

25.64.☐	Flow Rates in Gal/hr for 1/4" Port Sizes							
	S1	S2	S5	S10	S20	S40	S100	S200
Water	3.60	7.50	18.7	37.4	74.6	125	149	187[5]
Oil (32 cSt)	0.10	0.25	0.65	1.35	2.65	4.00	5.35	6.70[5]

25.178.☐	Flow Rates in Gal/hr for 1/2" Port Sizes							
	S1	S2	S5	S10	S20	S40	S100	S200
Water	10.6	21.3	53.5	107	214	280[5]	280[5]	280[5]
Oil (32 cSt)	0.35	0.75	1.90	3.80	7.65	10.0[5]	10.0[5]	10.0[5]

38.152.☐	Flow Rates in Gal/hr for 3/4" Port Sizes							
	S1	S2	S5	S10	S20	S40	S100	S200
Water	13.7	27.8	69.4	138	277	416	555	1109
Oil (32 cSt)	0.45	0.95	2.45	4.10	9.90	14.9	19.8	39.7

51.230.☐	Flow Rates in Gal/hr for 1" Port Sizes							
	S1	S2	S5	S10	S20	S40	S100	S200
Water	28.3	56.6	141	283	567	850	1134	1778[5]
Oil (32 cSt)	1.00	2.00	5.05	101	20.3	30.4	40.6	66.0[5]

51.476.☐	Flow Rates in Gal/hr for 2" Port Sizes							
	S1	S2	S5	S10	S20	S40	S100	S200
Water	59.0	118	295	591	1182	1773	2364	4728
Oil (32 cSt)	2.10	4.20	10.50	21.1	43.3	58.3	84.7	169.4

Notes (1) The above flow rates are for water and oil at 70ºF. Flow rates for other liquids can be derived from relative viscosity data.
(2) Flow rates are generally proportional to pressure drop. If an initial drop of 3 psi can be tolerated flow rates can be doubled.
(3) Flow rates are generally inversely proportional to liquid viscosity.
(4) Water = 1 centipoise, for higher viscosity liquids divide the flow rates by the actual viscosity in centipoise.
(5) Flow rate limited by the port dimensions. Please contact us to discuss larger port options..

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