

Air Flow Rates

Stainless Steel Filter Elements

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Air flow rates in SCFM at stated line pressure with a 1.5 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 installed using the housing data sheets and then use the charts below to read the flow rate at the desired pressure against the element grade. Replace the □ in the part number shown with the required grade, for example 12.57.S2V would be a grade S2 on the charts below. The maximum flow rate also depends on the flow path though the housing - for housings with a smaller port size please consult us for the exact figure.

12.32.□	Air Pressure (psi), 1/4" Port Size										
Grade	15	30	60	100	150	230	500	1500	3000	5000	10000
S1	0.3	0.4	0.6	0.9	1.1	1.3	2.0	3.1	4.9	6.2	8.8
S2	0.5	0.9	1.2	1.8	2.1	2.6	4.0	6.2	9.7	12.4	17.7
S10	1.2	2.1	2.9	4.1	4.9	6.2	9.3	14.4	22.7	28.8	41.2
S20	1.5	2.5	3.5	5.0	6.0	7.5	11.3	17.5	27.5	35.0	50.0
S40	1.7	2.8	3.9	5.5	7.8	8.3	12.4	19.3	30.3	45.3	64.7
S100	2.6	4.3	6.0	8.5	12.0	12.8	19.1	29.8	46.8	70.0	100.1
S200	3.4	5.6	7.9	11.3	15.9	16.9	25.3	39.4	61.9	92.7	132.4

12.57.□	Air Pressure (psi), 1/4" Port Size										
Grade	15	30	60	100	150	230	500	1500	3000	5000	10000
S1	0.5	0.8	1.1	1.5	1.8	2.3	3.4	5.3	8.3	10.5	15.0
S2	0.9	1.5	2.1	3.0	3.6	4.5	6.8	10.5	16.5	21.0	30.0
S10	2.1	3.5	4.9	7.0	8.4	10.5	15.8	24.5	38.5	49.0	70.0
S20	2.6	4.3	6.0	8.5	10.2	12.8	19.1	29.8	46.8	59.5	85.1
S40	2.8	4.7	6.5	9.4	13.2	14.0	21.0	32.7	51.5	77.0	110.1
S100	4.3	7.2	10.1	14.5	20.4	21.7	32.5	50.6	79.5	119.1	170.1
S200	5.7	9.6	13.4	19.1	27.0	28.7	43.1	67.0	105.2	157.6	225.1

25.64.□	Air Pressure (psi), 1/2" Port Size										
Grade	15	30	60	100	150	230	500	1500	3000	5000	10000
S1	1.0	1.7	2.4	3.4	4.1	5.2	7.7	12.1	18.9	25.8	34.4
S2	2.1	3.4	4.8	6.9	8.3	10.3	15.5	24.1	37.9	51.6	68.9
S10	4.8	8.0	11.2	16.1	19.3	24.1	36.2	56.2	88.4	120.5	160.7
S20	5.9	9.8	13.7	19.5	23.4	29.3	43.9	68.3	107.3	146.3	195.1
S40	6.4	10.7	15.0	21.5	30.3	32.2	48.3	75.1	118.0	189.4	252.5
S100	10.0	16.6	23.2	33.2	46.8	49.8	74.6	116.1	182.4	292.7	390.2
S200	13.2	22.0	30.7	43.9	62.0	65.9	98.8	153.7	241.5	387.4	516.5

25.178.□	Air Pressure (psi), 3/4" Port Size										
Grade	15	30	60	100	150	230	500	1500	3000	5000	10000
S1	3.0	5.1	7.1	10.2	12.2	15.2	22.8	35.5	55.8	76.1	101.5
S2	6.1	10.2	14.2	20.3	24.4	30.5	45.7	71.1	111.7	152.3	203.1
S10	14.2	23.7	33.2	47.4	56.9	71.1	106.6	165.8	260.6	355.4	473.8
S20	17.3	28.8	40.3	57.5	69.0	86.3	129.5	201.4	316.4	431.5	575.3
S40	19.0	31.6	44.3	63.3	89.3	94.9	142.4	221.5	348.1	558.4	744.6
S100	29.3	48.9	68.5	97.8	138.1	146.7	220.1	342.3	537.9	863.0	1150.7
S200	38.8	64.7	90.6	129.5	182.8	194.2	291.3	453.1	712.0	1142.2	1523.0

38.152.□	Air Pressure (psi), 1" Port Size										
Grade	15	30	60	100	150	230	500	1500	3000	6000	
S1	4.0	6.6	9.3	13.2	15.9	19.9	29.8	46.4	72.8	99.3	
S2	7.9	13.2	18.5	26.5	31.8	39.7	59.6	92.7	145.7	198.6	
S10	18.5	30.9	43.3	61.8	74.2	92.7	139.1	216.3	339.9	463.5	
S20	22.5	37.5	52.5	75.0	90.1	112.6	168.8	262.7	412.7	562.8	
S40	24.8	41.3	57.8	82.5	116.5	123.8	185.7	288.9	454.0	728.4	
S100	38.3	63.8	89.3	127.6	180.1	191.4	287.0	446.5	701.7	1125.7	
S200	50.7	84.4	118.2	168.8	238.4	253.3	379.9	591.0	928.7	1489.8	

51.230.□	Air Pressure (psi), 2" Port Size										
Grade	15	30	60	100	150	230	500	1500	3000	6000	
S1	7.9	13.2	18.5	26.5	31.8	39.7	59.6	92.7	145.7	198.6	
S2	15.9	26.5	37.1	53.0	63.6	79.5	119.2	185.4	291.3	397.3	
S10	37.1	61.8	86.5	123.6	148.3	185.4	278.1	432.6	679.8	927.0	
S20	45.0	75.0	105.1	150.1	180.1	225.1	337.7	525.3	825.5	1125.7	
S40	49.5	82.5	115.6	165.1	233.1	247.6	371.5	577.8	908.0	1456.7	
S100	76.5	127.6	178.6	255.2	360.2	382.7	574.1	893.0	1403.3	2251.3	
S200	101.3	168.8	236.4	337.7	476.8	506.5	759.8	1181.9	1857.3	2979.7	

51.476.□	Air Pressure (psi), 2" Port Size										
Grade	15	30	60	100	150	230	500	1500	3000	6000	
S1	16.7	27.8	38.9	55.6	66.7	83.4	125.1	194.7	305.9	417.2	
S2	33.4	55.6	77.9	111.2	133.5	166.9	250.3	389.3	611.8	834.3	
S10	77.9	129.8	181.7	259.6	311.5	389.3	584.0	908.5	1427.6	1946.7	
S20	94.6	157.6	220.6	315.2	378.2	472.8	709.2	1103.1	1733.5	2363.9	
S40	104.0	173.4	242.7	346.7	489.5	520.1	780.1	1213.5	1906.9	3059.2	
S100	160.7	267.9	375.1	535.8	756.4	803.7	1205.6	1875.4	2947.0	4727.8	
S200	212.8	354.6	496.4	709.2	1001.2	1063.8	1595.6	2482.1	3900.4	10631.3	

Notes (1) The above flow rates are for air at 70°F. Flow rates for other gases 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.