

# Air Flow Rates

## Stainless Steel Filter Elements

### Air flow rates in Nm<sup>3</sup>/hr at stated line pressure with a 0.1 Bar 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 through the housing - for housings with a smaller port size please consult us for the exact figure.

12.32.□	Air Pressure (Bar), 1/4" Port Size										
Grade	1	2	4	7	10	16	34	100	200	350	700
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	85.0
S40	2.8	4.7	6.5	9.4	13.2	14.0	21.0	32.7	51.4	77.0	110.0
S100	4.3	7.2	10.1	14.5	20.4	21.7	32.5	50.6	79.5	119.0	170.0
S200	5.7	9.6	13.4	19.1	27.0	28.7	43.0	66.9	105.2	157.5	225.0

12.57.□	Air Pressure (Bar), 1/4" Port Size										
Grade	1	2	4	7	10	16	34	100	200	350	700
S1	0.8	1.3	1.8	2.6	3.1	3.8	5.7	8.9	14.0	17.9	25.5
S2	1.5	2.6	3.6	5.1	6.1	7.7	11.5	17.9	28.1	35.7	51.0
S10	3.6	6.0	8.3	11.9	14.3	17.9	26.8	41.7	65.5	83.3	119.0
S20	4.3	7.2	10.1	14.5	17.3	21.7	32.5	50.6	79.5	101.2	144.5
S40	4.8	7.9	11.1	15.9	22.4	23.8	35.8	55.6	87.4	130.9	187.0
S100	7.4	12.3	17.2	24.6	34.7	36.8	55.3	86.0	135.1	202.3	289.0
S200	9.8	16.3	22.8	32.5	45.9	48.8	73.2	113.8	178.8	267.8	382.5

25.64.□	Air Pressure (Bar), 1/2" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	700
S1	1.8	2.9	4.1	5.9	7.0	8.8	13.2	20.5	32.2	43.9	58.5
S2	3.5	5.9	8.2	11.7	14.0	17.6	26.3	41.0	64.4	87.8	117.0
S10	8.2	13.7	23.2	27.3	32.8	41.0	61.4	95.6	150.2	204.8	273.0
S20	9.9	16.6	25.5	33.2	39.8	49.7	74.6	116.0	182.3	248.6	331.5
S40	10.9	18.2	39.4	36.5	51.5	54.7	82.0	127.6	200.6	321.8	429.0
S100	16.9	28.2	39.4	56.4	79.6	84.5	126.8	197.2	310.0	497.3	663.0
S200	22.4	37.3	52.2	74.6	105.3	111.9	167.8	261.1	410.2	658.1	877.5

25.178.□	Air Pressure (Bar), 3/4" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	700
S1	5.2	8.6	12.1	17.3	20.7	25.9	38.8	60.4	94.9	129.4	172.5
S2	10.4	17.3	24.2	34.5	41.4	51.8	77.6	120.8	189.8	258.8	345.0
S10	24.2	40.3	56.4	80.5	96.6	120.8	181.1	281.8	442.8	603.8	805.0
S20	29.3	48.9	68.4	97.8	117.3	146.6	219.9	342.1	537.6	733.1	977.5
S40	32.3	53.8	75.3	107.5	151.8	161.3	241.9	376.3	591.4	948.8	1265.0
S100	49.9	83.1	116.3	166.2	234.6	249.3	373.9	581.6	914.0	1466.3	1955.0
S200	66.0	110.0	154.0	219.9	310.5	329.9	494.9	769.8	1209.7	1940.6	2587.5

38.152.□	Air Pressure (Bar), 1" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	
S1	6.8	11.3	15.8	22.5	27.0	33.8	50.6	78.8	123.8	168.8	
S2	15.8	26.3	36.8	52.5	63.0	78.8	118.1	183.8	288.8	393.8	
S10	31.5	52.5	73.5	105.0	126.0	157.5	236.3	367.5	577.5	787.5	
S20	38.3	63.8	89.3	127.5	153.0	191.3	286.9	446.3	701.3	956.3	
S40	42.1	70.1	98.2	140.3	198.0	210.4	315.6	490.9	771.4	1237.5	
S100	65.0	108.4	151.7	216.8	306.0	325.1	487.7	758.6	1192.1	1912.5	
S200	86.1	143.4	200.8	286.9	405.0	430.3	645.5	1004.1	1577.8	2531.3	

51.230.□	Air Pressure (Bar), 2" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	
S1	13.5	22.5	31.5	45.0	54.0	67.5	101.3	157.5	247.5	337.5	
S2	27.0	45.0	63.0	90.0	108.0	135.0	202.5	315.0	495.0	675.0	
S10	63.0	105.0	147.0	210.0	252.0	315.0	472.5	735.0	1155.0	1575.0	
S20	76.5	127.5	178.5	255.0	306.0	382.5	573.8	892.5	1402.5	1912.5	
S40	84.2	140.3	196.4	280.5	396.0	420.8	631.1	981.8	1542.8	2475.0	
S100	130.1	216.8	303.5	433.5	612.0	650.3	975.4	1517.3	2384.3	3825.0	
S200	172.1	286.9	401.6	573.8	810.0	860.6	1290.9	2008.1	3155.6	5062.5	

51.476.□	Air Pressure (Bar), 2" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	
S1	28.4	47.3	66.2	94.5	113.4	141.8	212.6	330.8	519.8	708.8	
S2	56.7	94.5	132.3	189.0	226.8	283.5	425.3	661.5	1039.5	1417.5	
S10	132.3	220.5	308.7	441.0	529.2	661.5	992.3	1543.5	2425.5	3307.5	
S20	160.7	267.8	374.9	535.5	642.6	803.3	1204.9	1874.3	2945.3	4016.3	
S40	176.7	294.5	412.3	589.1	831.6	883.6	1325.4	2061.7	3239.8	5197.5	
S100	273.1	455.2	637.2	910.4	1285.2	1365.5	2048.3	3186.2	5006.9	8032.5	
S200	361.5	602.4	843.4	1204.9	1701.0	1807.3	2711.0	4217.1	6626.8	10631.3	

**Notes** (1) The above flow rates are for air at 20°C. 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 0.2 bar can be tolerated flow rates can be doubled.