

# Air Flow Rates

## Disposable Type 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 12.57.7K would be a grade 7 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
4	1.6	2.6	3.7	5.3	6.3	7.9	11.8	18.4	28.9	36.8	52.5
5	3.2	5.3	7.4	10.5	12.6	15.8	23.6	36.8	57.8	73.5	105.0
6	5.5	9.2	12.9	18.4	22.1	27.6	41.3	64.3	101.1	128.6	183.8
7	6.3	10.5	14.7	21.0	25.2	31.5	47.3	73.5	115.5	147.0	210.0
8	7.1	11.8	16.5	23.6	28.4	35.4	53.2	82.7	129.9	165.4	236.3

12.57.□	Air Pressure (Bar), 1/4" Port Size										
Grade	1	2	4	7	10	16	34	100	200	350	700
4	2.6	4.3	6.0	8.5	10.2	12.8	19.1	29.8	46.8	59.5	85.0
5	5.1	8.5	11.9	17.0	20.4	25.5	38.3	59.5	93.5	119.0	170.0
6	8.9	14.9	20.8	29.8	35.7	44.6	66.9	104.1	163.6	208.3	297.5
7	10.2	17.0	23.8	34.0	40.8	51.0	76.5	119.0	187.0	238.0	340.0
8	11.5	19.1	26.8	38.3	45.9	57.4	86.1	133.9	210.4	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
4	5.6	9.3	13.0	18.5	22.2	27.8	41.6	64.8	101.8	138.8	185.0
5	11.1	18.5	25.9	37.0	44.4	55.5	83.3	129.5	203.5	277.5	370.0
6	19.4	32.4	45.3	64.8	77.7	97.1	145.7	226.6	356.1	485.6	647.5
7	22.2	37.0	51.8	74.0	88.8	111.0	166.5	259.0	407.0	555.0	740.0
8	25.0	41.6	58.3	83.3	99.9	124.9	187.3	291.4	457.9	624.4	832.5

25.178.□	Air Pressure (Bar), 3/4" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	700
4	15.8	26.3	36.8	52.5	63.0	78.8	118.1	183.8	288.8	393.8	525.0
5	31.5	52.5	73.5	105.0	126.0	157.5	236.3	367.5	577.5	787.5	1050.0
6	55.1	91.9	128.6	183.8	220.5	275.6	413.4	643.1	1010.6	1378.1	1837.5
7	63.0	105.0	147.0	210.0	252.0	315.0	472.5	735.0	1155.0	1575.0	2100.0
8	70.9	118.1	165.4	236.3	283.5	354.4	531.6	826.9	1299.4	1771.9	2362.5

38.152.□	Air Pressure (Bar), 1" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	
4	20.3	33.8	47.3	67.5	81.0	101.3	151.9	236.3	371.3	506.3	
5	40.5	67.5	94.5	135.0	162.0	202.5	303.8	472.5	742.5	1012.5	
6	70.9	118.1	165.4	236.3	283.5	354.4	531.6	826.9	1299.4	1771.9	
7	81.0	135.0	189.0	270.0	324.0	405.0	607.5	945.0	1485.0	2025.0	
8	91.1	151.9	212.6	303.8	364.5	455.6	683.4	1063.1	1670.6	2278.1	

51.230.□	Air Pressure (Bar), 2" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	
4	41.9	69.8	97.7	139.5	167.4	209.3	313.9	488.3	767.3	1046.3	
5	83.7	139.5	195.3	279.0	334.8	418.5	627.8	976.5	1534.5	2092.5	
6	146.5	244.1	341.8	488.3	585.9	732.4	1098.6	1708.9	2685.4	3661.9	
7	167.4	279.0	390.6	558.0	669.6	837.0	1255.5	1953.0	3069.0	4185.0	
8	188.3	313.9	439.4	627.8	753.3	941.6	1412.4	2197.1	3452.6	4708.1	

51.476.□	Air Pressure (Bar), 2" Port Size										
Grade	1	2	4	7	10	16	34	100	200	400	
4	86.9	144.8	202.7	289.5	347.4	434.3	651.4	1013.3	1592.3	2171.3	
5	173.7	289.5	405.3	579.0	694.8	868.5	1302.8	2026.5	3184.5	4342.5	
6	304.0	506.6	709.3	1013.3	1215.9	1519.9	2279.8	3546.4	5572.9	7599.4	
7	347.4	579.0	810.6	1158.0	1389.6	1737.0	2605.5	4053.0	6369.0	8685.0	
8	390.8	651.4	911.9	1302.8	1563.3	1954.1	2931.2	4559.6	7165.1	9770.6	

**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.



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