

**COALESCING FILTER SEPARATORS**

**With Wire Mesh Mist Extractor (Horizontal Vessel), 2 PSID Flg-Flg**

Stock Part #	Filter O.D.	Length	Stock Gas In/Out	No. Sock Element & Length	Liquid Outlet	50#			100#			200#			300#			400#		
						Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow
FG210056	8-5/8"	7'6"	2"F	(3)-3 1/2" x 36"	1"S	0.4	2.0	4"	0.8	3.0	4"	1.6	4.9	4"	2.4	6.0	4"	3.0	6.9	3"
FG210055	10-3/4"	8'0"	3"F	(3)-3 1/2" x 36"	1"S	1.1	2.0	4"	1.9	3.0	4"	3.6	4.9	4"	5.3	6.3	4"	7.1	7.1	-
FG210057, FG210058	12-3/4"	8'0"	3"F	(4)-3 1/2" x 36"	1"S	1.1	2.6	6"	1.9	4.0	6"	3.6	6.5	4"	5.3	8.4	4"	7.1	9.4	4"
FG210059, FG210060	16"	8'6"	4"F	(5)-4 1/2" x 36"	1"S	1.9	7.2	8"	3.3	11.0	8"	6.3	14.2	6"	9.4	20.0	6"	12.6	23.8	6"
FG210147	20"	12'0"	6"F	(6)-4 1/2" x 72"	1"S	4.2	8.6	10"	7.5	13.2	8"	14.2	19.2	8"	21.2	24.0	8"	29.7	28.5	-
FG210148, FG210061, FG210062	24"	12'6"	8"F	(12)-4 1/2" x 72"	1"S	7.5	16.8	12"	13.3	26.5	12"	25.3	38.4	10"	37.7	48.0	10"	50.5	57.0	10"
FG210108	24"	12'6"	10"F	(12)-4 1/2" x 72"	1"S	11.7	16.8	12"	20.8	26.5	12"	39.6	38.4	-	58.9	48.0	-	72.8	57.0	-
FG210104	30"	12'6"	8"F	(21)-4 1/2" x 72"	1"S	7.5	29.8	16"	13.3	46.4	16"	25.3	64.5	14"	37.7	78.0	12"	50.5	89.4	12"
FG210210, FG210211	36"	12'6"	10"F	(26)-4 1/2" x 72"	1"S	11.7	37.4	18"	20.8	57.4	18"	39.6	83.1	16"	58.9	104.0	14"	72.8	123.6	14"

**STOCK STANDARD FILTER CAPACITY, MMSCFD**

Stock Part #	Filter O.D.	Length	Stock Gas In/Out	No. Sock Element & Length	Liquid Outlet	600#			800#			1000#			1200#			1400#		
						Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow	Nozzle Flow	Element Flow	N-E Flow
FG210056	8-5/8"	7'6"	2"F	(3)-3 1/2" x 36"	1"S	3.9	8.0	3"	4.7	8.6	3"	5.4	9.5	3"	6.1	10.0	3"	6.8	10.5	3"
FG210055	10-3/4"	8'0"	3"F	(3)-3 1/2" x 36"	1"S	9.8	8.0	-	11.5	8.6	-	13.0	9.5	-	14.4	10.0	-	15.8	10.5	-
FG210057, FG210058	12-3/4"	8'0"	3"F	(4)-3 1/2" x 36"	1"S	9.8	10.7	4"	11.5	11.5	-	13.0	12.7	-	14.4	13.4	-	15.8	14.0	-
FG210059, FG210060	16"	8'6"	4"F	(5)-4 1/2" x 36"	1"S	17.5	27.0	6"	20.6	28.8	6"	23.5	31.7	6"	26.2	33.1	6"	28.8	34.6	6"
FG210147	20"	12'0"	6"F	(6)-4 1/2" x 72"	1"S	39.6	32.4	-	46.3	34.6	-	52.5	38.0	-	58.3	39.7	-	63.7	41.5	-
FG210148, FG210061, FG210062	24"	12'6"	8"F	(12)-4 1/2" x 72"	1"S	70.5	64.8	-	82.5	69.1	-	93.5	76.0	-	103.7	79.5	-	113.3	82.9	-
FG210108	24"	12'6"	10"F	(12)-4 1/2" x 72"	1"S	110.3	64.8	-	129.0	69.1	-	146.1	76.0	-	162.2	79.5	-	172.2	82.9	-
FG210104	30"	12'6"	8"F	(21)-4 1/2" x 72"	1"S	70.5	108.3	10"	82.5	121.0	10"	93.5	133.1	10"	103.7	139.1	10"	113.3	145.2	10"
FG210210, FG210211	36"	12'6"	10"F	(26)-4 1/2" x 72"	1"S	110.3	140.4	12"	129.0	149.8	12"	146.1	164.7	12"	162.2	172.2	12"	172.2	179.7	12"

**Instructions:**

1. Selecting operating pressure. Follow Element Flow down to required capacity. If the cell is shaded, the required nozzle size is stated in N-E Flow. Pick the smallest filter separator with this nozzle size or modify the stock. Select Stock Part Number in left column 1. Consult Engineering for cases with large variance from design basis.
3. Consult engineering for cases requiring less than 2 psi flange to flange pressure drop.
4. Consult engineering for applications upstream of compression. Design may require reducing gas velocity to 40 ft/sec. Design results in reduced filter capacity but improve pulsation dampening and reduces maintenance due to improved filter separator efficiency.

**Notes:**

1. Condition design basis: T=60 °F, SG=0.65, C=80
2. Filter Elements: 0.10 gal/MMscf of liquid.
3. Element capacity from Chart 1.
4. Nozzle capacity based on 60 ft/sec (API-14-C).
5. Nozzle-Element (N-E) Flow matches nozzle to maximum element flow. For gas temperatures above 104° F reduce chart capacity by 5%.
6. Element Surface Area is shown on Table 3.