Orifice Selector Plate Application Chart:

NOTE:

- Use the charts below to choose the correct orifice size for your application.
- It is recommended that the pressure is kept between 15 and 40 psi for best distribution performance.
- For solutions other than water, apply the appropriate conversion factor (shown on the right) to the flow table GPA values.
- This table is also available at <u>www.cds-johnblue.com</u>, or use a QR code reader for this direct link:



SOLUTION WEIGHT (LBS/GAL)	CONVERSION FACTOR
9.0	0.96
10.0	0.91
11.0	0.87
12.0	0.83
14.0	0.77
16.0	0.72

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PLATE "A":

				GPA fo	or Wate	r, 30" s	pacing	
		İ	3	4	5	6	8	10
	PSI	GPM/row	mph	mph	mph	mph	mph	mph
Υ	10	0.06	4.0	3.0	2.4	2.0	1.5	1.2
e 5	20	0.09	5.7	4.3	3.4	2.8	2.1	1.7
te A, Position 0.031 orifice	30	0.11	6.9	5.2	4.2	3.5	2.6	2.1
	40	0.12	8.0	6.0	4.8	4.0	3.0	2.4
	50	0.14	9.0	6.7	5.4	4.5	3.4	2.7
	60	0.15	9.8	7.4	5.9	4.9	3.7	2.9
Plate 0.0	70	0.16	10.6	8.0	6.4	5.3	4.0	3.2
<u>a</u>	80	0.17	11.3	8.5	6.8	5.7	4.3	3.4

				GPA fo	or Wate	r, 30" s	pacing	
			3	4	5	6	8	10
	PSI	GPM/row	mph	mph	mph	mph	mph	mph
B	10	0.15	9.6	7.2	5.8	4.8	3.6	2.9
e ou	20	0.21	13.6	10.2	8.2	6.8	5.1	4.1
Position orifice	30	0.25	16.7	12.5	10.0	8.3	6.2	5.0
ori Ori	40	0.29	19.2	14.4	11.5	9.6	7.2	5.8
A, F	50	0.33	21.5	16.1	12.9	10.8	8.1	6.5
	60	0.36	23.6	17.7	14.1	11.8	8.8	7.1
Plate 0.0	70	0.39	25.4	19.1	15.3	12.7	9.5	7.6
<u>a</u>	80	0.41	27.2	20.4	16.3	13.6	10.2	8.2

			GPA for Water, 30" spacing							
			3	4	5	6	8	10		
	PSI	GPM/row	mph	mph	mph	mph	mph	mph		
O	10	0.30	19.9	14.9	11.9	9.9	7.5	6.0		
e ou	20	0.43	28.1	21.1	16.9	14.0	10.5	8.4		
A, Position 369 orifice	30	0.52	34.4	25.8	20.6	17.2	12.9	10.3		
osition	40	0.60	39.7	29.8	23.8	19.9	14.9	11.9		
9.60	50	0.67	44.4	33.3	26.7	22.2	16.7	13.3		
ite A, 1	60	0.74	48.7	36.5	29.2	24.3	18.3	14.6		
Plate 0.0	70	0.80	52.6	39.4	31.5	26.3	19.7	15.8		
	80	0.85	56.2	42.1	33.7	28.1	21.1	16.9		

				GPA for Water, 30" spacing							
			3	4	5	6	8	10			
	PSI	GPM/row	mph	mph	mph	mph	mph	mph			
۵	10	0.62	40.9	30.7	24.5	20.5	15.3	12.3			
6 2	20	0.88	57.8	43.4	34.7	28.9	21.7	17.4			
osition	30	1.07	70.8	53.1	42.5	35.4	26.6	21.3			
Position orifice	40	1.24	81.8	61.4	49.1	40.9	30.7	24.5			
A, P	50	1.39	91.5	68.6	54.9	45.7	34.3	27.4			
te A, F 0.099	60	1.52	100.2	75.1	60.1	50.1	37.6	30.1			
Plate 0.0	70	1.64	108.2	81.2	64.9	54.1	40.6	32.5			
础	80	1.75	115.7	86.8	69.4	57.8	43.4	34.7			

PLATE "B":

				GPA fo	or Wate	r, 30" s	pacing	
			3	4	5	6	8	10
	PSI	GPM/row	mph	mph	mph	mph	mph	mph
4	10	0.72	47.8	35.8	28.7	23.9	17.9	14.3
e ou	20	1.02	67.6	50.7	40.5	33.8	25.3	20.3
osition	30	1.25	82.8	62.1	49.7	41.4	31.0	24.8
Position orifice	40	1.45	95.6	71.7	57.3	47.8	35.8	28.7
B, B	50	1.62	106.8	80.1	64.1	53.4	40.1	32.1
	60	1.77	117.0	87.8	70.2	58.5	43.9	35.1
Plate 0.1	70	1.92	126.4	94.8	75.9	63.2	47.4	37.9
<u>a</u>	80	2.05	135.1	101.4	81.1	67.6	50.7	40.5

				GPA fo	or Wate	r, 30" s	pacing	
			3	4	5	6	8	10
	PSI	GPM/row	mph	mph	mph	mph	mph	mph
m m	10	0.99	65.2	48.9	39.1	32.6	24.5	19.6
Position	20	1.40	92.2	69.2	55.3	46.1	34.6	27.7
	30	1.71	112.9	84.7	67.8	56.5	42.4	33.9
ori os	40	1.98	130.4	97.8	78.3	65.2	48.9	39.1
8, F	50	2.21	145.8	109.4	87.5	72.9	54.7	43.7
	60	2.42	159.7	119.8	95.8	79.9	59.9	47.9
Plate 0.1	70	2.61	172.5	129.4	103.5	86.3	64.7	51.8
☲	80	2.79	184.4	138.3	110.7	92.2	69.2	55.3

				GPA fo	or Wate	r, 30" s	pacing	GPA for Water, 30" spacing						
			3	4	5	6	8	10						
	PSI	GPM/row	mph	mph	mph	mph	mph	mph						
O	10	1.28	84.2	63.1	50.5	42.1	31.6	25.2						
e ou	20	1.80	119.0	89.3	71.4	59.5	44.6	35.7						
orifice	30	2.21	145.8	109.3	87.5	72.9	54.7	43.7						
Position orifice	OSI 40	2.55	168.3	126.2	101.0	84.2	63.1	50.5						
B, F	50	2.85	188.2	141.1	112.9	94.1	70.6	56.5						
	60	3.12	206.1	154.6	123.7	103.1	77.3	61.8						
Plate 0.1	70	3.37	222.6	167.0	133.6	111.3	83.5	66.8						
础	80	3.61	238.0	178.5	142.8	119.0	89.3	71.4						

				GPA fo	or Wate	r, 30" s	pacing	
			3	4	5	6	8	10
	PSI	GPM/row	mph	mph	mph	mph	mph	mph
٥	10	1.42	93.9	70.4	56.3	47.0	35.2	28.2
E 9	20	2.01	132.8	99.6	79.7	66.4	49.8	39.8
Position orifice	30	2.46	162.6	122.0	97.6	81.3	61.0	48.8
ori	40	2.85	187.8	140.9	112.7	93.9	70.4	56.3
B, P	50	3.18	210.0	157.5	126.0	105.0	78.7	63.0
	60	3.49	230.0	172.5	138.0	115.0	86.3	69.0
Plate 0.1	70	3.76	248.4	186.3	149.1	124.2	93.2	74.5
础	80	4.02	265.6	199.2	159.4	132.8	99.6	79.7

Orifice Selector Plate Application Chart (continued):

PLATE "C":

				GPA fo	or Wate	r, 30" s	pacing	
			3	4	5	6	8	10
	PSI	GPM/row	mph	mph	mph	mph	mph	mph
⋖	10	0.04	2.4	1.8	1.4	1.2	0.9	0.7
e o	20	0.05	3.4	2.5	2.0	1.7	1.3	1.0
osition	30	0.06	4.2	3.1	2.5	2.1	1.6	1.2
Position orifice	40	0.07	4.8	3.6	2.9	2.4	1.8	1.4
C, P	50	0.08	5.4	4.0	3.2	2.7	2.0	1.6
	60	0.09	5.9	4.4	3.5	2.9	2.2	1.8
Plate 0.0	70	0.10	6.4	4.8	3.8	3.2	2.4	1.9
<u>a</u>	80	0.10	6.8	5.1	4.1	3.4	2.5	2.0

				GPA fo	or Wate	r, 30" s	pacing	
			3	4	5	6	8	10
	PSI	GPM/row	mph	mph	mph	mph	mph	mph
8	10	0.10	6.3	4.8	3.8	3.2	2.4	1.9
L 9	<u>9</u> 20	0.14	9.0	6.7	5.4	4.5	3.4	2.7
Position orifice	30	0.17	11.0	8.2	6.6	5.5	4.1	3.3
osi	30 0.17 30 0.17 40 0.19 50 50 0.22	0.19	12.7	9.5	7.6	6.3	4.8	3.8
C, P		0.22	14.2	10.6	8.5	7.1	5.3	4.3
	60	0.24	15.5	11.7	9.3	7.8	5.8	4.7
Plate 0.0	70	0.25	16.8	12.6	10.1	8.4	6.3	5.0
<u>a</u>	80	0.27	18.0	13.5	10.8	9.0	6.7	5.4

			GPA for Water, 30" spacing							
			3	4	5	6	8	10		
T	PSI	GPM/row	mph	mph	mph	mph	mph	mph		
U	10	0.22	14.5	10.9	8.7	7.3	5.4	4.4		
e 2	20	0.31	20.5	15.4	12.3	10.3	7.7	6.2		
Position orifice	30	0.38	25.2	18.9	15.1	12.6	9.4	7.5		
ori	40	0.44	29.1	21.8	17.4	14.5	10.9	8.7		
on l	50	0.49	32.5	24.4	19.5	16.2	12.2	9.7		
Plate C, 0.059	60	0.54	35.6	26.7	21.4	17.8	13.3	10.7		
	70	0.58	38.4	28.8	23.1	19.2	14.4	11.5		
<u>a</u>	80	0.62	41.1	30.8	24.7	20.5	15.4	12.3		

			GPA for Water, 30" spacing							
			3	4	5	6	8	10		
	PSI	GPM/row	mph	mph	mph	mph	mph	mph		
	10	0.45	29.4	22.1	17.7	14.7	11.0	8.8		
Position orifice	20	0.63	41.6	31.2	25.0	20.8	15.6	12.5		
	30	0.77	51.0	38.3	30.6	25.5	19.1	15.3		
o io	40	0.89	58.9	44.2	35.3	29.4	22.1	17.7		
Plate C, P 0.084	50	1.00	65.8	49.4	39.5	32.9	24.7	19.8		
	60	1.09	72.1	54.1	43.3	36.1	27.0	21.6		
	70	1.18	77.9	58.4	46.7	39.0	29.2	23.4		
	80	1.26	83.3	62.5	50.0	41.6	31.2	25.0		

PLATE "D":

			GPA for Water, 30" spacing						
			3	4	5	6	8	10	
	PSI	GPM/row	mph	mph	mph	mph	mph	mph	
Ø	10	0.85	56.2	42.1	33.7	28.1	21.1	16.8	
e on	20	1.20	79.4	59.6	47.7	39.7	29.8	23.8	
Position orifice	30	1.47	97.3	73.0	58.4	48.6	36.5	29.2	
ori ori	40	1.70	112.3	84.2	67.4	56.2	42.1	33.7	
- 6	50	1.90	125.6	94.2	75.3	62.8	47.1	37.7	
Plate D	60	2.08	137.6	103.2	82.5	68.8	51.6	41.3	
	70	2.25	148.6	111.4	89.1	74.3	55.7	44.6	
<u>a</u>	80	2.41	158.8	119.1	95.3	79.4	59.6	47.7	

			GPA for Water, 30" spacing							
			3	4	5	6	8	10		
	PSI	GPM/row	mph	mph	mph	mph	mph	mph		
B	10	1.12	73.8	55.4	44.3	36.9	27.7	22.1		
Position orifice	20	1.58	104.4	78.3	62.6	52.2	39.2	31.3		
	30	1.94	127.9	95.9	76.7	63.9	47.9	38.4		
ori ori	40	2.24	147.6	110.7	88.6	73.8	55.4	44.3		
33	50	2.50	165.1	123.8	99.0	82.5	61.9	49.5		
Plate D	60	2.74	180.8	135.6	108.5	90.4	67.8	54.2		
	70	2.96	195.3	146.5	117.2	97.7	73.2	58.6		
<u>a</u>	80	3.16	208.8	156.6	125.3	104.4	78.3	62.6		

			GPA for Water, 30" spacing							
			3	4	5	6	8	10		
	PSI	GPM/row	mph	mph	mph	mph	mph	mph		
U	10	1.39	91.4	68.6	54.8	45.7	34.3	27.4		
Plate D, Position 0.148 orifice	20	1.96	129.3	97.0	77.6	64.6	48.5	38.8		
	30	2.40	158.3	118.8	95.0	79.2	59.4	47.5		
	40	2.77	182.8	137.1	109.7	91.4	68.6	54.8		
	50	3.10	204.4	153.3	122.6	102.2	76.7	61.3		
	60	3.39	223.9	167.9	134.4	112.0	84.0	67.2		
	70	3.66	241.9	181.4	145.1	120.9	90.7	72.6		
<u> </u>	80	3.92	258.6	193.9	155.1	129.3	97.0	77.6		

			GPA for Water, 30" spacing							
			3	4	5	6	8	10		
- [PSI	GPM/row	mph	mph	mph	mph	mph	mph		
	10	1.66	109.5	82.1	65.7	54.8	41.1	32.9		
Plate D, Position 0.162 orifice	20	2.35	154.9	116.2	92.9	77.4	58.1	46.5		
	30	2.87	189.7	142.3	113.8	94.9	71.1	56.9		
	40	3.32	219.1	164.3	131.4	109.5	82.1	65.7		
	50	3.71	244.9	183.7	146.9	122.5	91.8	73.5		
	60	4.06	268.3	201.2	161.0	134.1	100.6	80.5		
	70	4.39	289.8	217.3	173.9	144.9	108.7	86.9		
<u>a</u>	80	4.69	309.8	232.3	185.9	154.9	116.2	92.9		