



Reference Tables



INJECTOR AND ORIFICE TABLES

MODEL

5010
5016



Rev. 5.25.2022

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Injectors - 20" Row Spacing

Speed (MPH)	20 Gallons Per Acre										25 Gallons Per Acre									
	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)		1	7	10	15	19	24	29	33	2	6	13	18	24	29	36	41	47		
#15 Injector (psi)					3	6	9	12	16			2	5	9	13	17	20	25		
#20 Injector (psi)							2	4	7					2	4	8	10	13		
#30 Injector (psi)																		2		
#40 Injector (psi)																				
GPM (per nozzle)	0.34	0.43	0.52	0.60	0.69	0.77	0.86	0.95	1.03	0.43	0.54	0.64	0.75	0.86	0.97	1.07	1.18	1.29		
Flow Indicator 1/2" SS Ball Level	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	0.9	1.3	1.7	2.0	2.4	2.8	3.1	3.5	3.9		
Flow Indicator 7/16" SS Ball Level						0.1	0.3	0.5	0.7					0.3	0.6	0.9	1.1	1.4		

Speed (MPH)	30 Gallons Per Acre										35 Gallons Per Acre									
	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	6	12	20	26	33	39	47	53	61	11	17	27	33	42	49	58	66	74		
#15 Injector (psi)		1	6.3	10	15	19	24	29	34	1	5	11	15	21	26	32	37	43		
#20 Injector (psi)				2	6	9	13	16	20			3	6	11	14	19	22	27		
#30 Injector (psi)							1	4	6					1	3	5	8	11		
#40 Injector (psi)																	1	3		
GPM (per nozzle)	0.52	0.64	0.77	0.90	1.03	1.16	1.29	1.42	1.55	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.66	1.81		
Flow Indicator 1/2" SS Ball Level	1.2	1.7	2.1	2.5	3.0	3.4	3.9	4.3	4.7	1.5	2.0	2.5	3.0	3.6	4.1	4.6	5.1	5.6		
Flow Indicator 7/16" SS Ball Level			0.1	0.4	0.7	1.1	1.4	1.8	2.1			0.4	0.8	1.2	1.6	2.0	2.4	2.8		

Speed (MPH)	40 Gallons Per Acre										45 Gallons Per Acre									
	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	15	23	33	41	50	59	70	78	88	20	28	40	48	59	69	81	90	102		
#15 Injector (psi)	4	8	15	20	28	33	39	45	52	7	12	20	26	34	40	47	53	61		
#20 Injector (psi)		1	6	10	15	19	25	29	33		3	10	14	20	24	30	35	40		
#30 Injector (psi)					4	6	9	12	15				2	7	9	13	16	20		
#40 Injector (psi)							2	4	6						2	4	7	10		
GPM (per nozzle)	0.69	0.86	1.03	1.20	1.38	1.55	1.72	1.89	2.06	0.77	0.97	1.16	1.35	1.55	1.74	1.93	2.13	2.32		
Flow Indicator 1/2" SS Ball Level	1.8	2.4	3.0	3.6	4.1	4.7	5.3	5.9	6.5	2.1	2.8	3.4	4.1	4.7	5.4	6.1	6.7			
Flow Indicator 7/16" SS Ball Level		0.3	0.7	1.2	1.6	2.1	2.5	3.0	3.4	0.1	0.6	1.1	1.6	2.1	2.6	3.1	3.6	4.1		

NOTES:

- The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 20 inches.
- Density or viscosity of the liquid can effect operating range.
- A displayed pressure higher than the calculated pressure may be due to a pressure drop in the fertilizer hoses.
- With #10 on the center, use #15 for one and a half rate outside, (35 knife).
- With #15 on the center, use #8 for half rate outside, (37 knife), and #20 for one and a half rate outside, (35 knife).
- With #20 on the center, use #10 for half rate outside, (37 knife), and #30 for one and a half rate outside, (35 knife).
- With #30 on the center, use #15 for half rate outside, (37 knife), and #40 for **one and a third** rate outside, (35 knife).
- With #40 on the center, use #20 for half rate outside, (37 knife), and #60 for one and a half rate outside, (35 knife).

For replacement injectors, see "Coulter Injector Assembly" on page 27 in the Operator's Manual.

The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Injectors - 20" Row Spacing

	50 Gallons Per Acre										55 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	24	33	47	56	68	79	93	103	115	29	39	54	64	77	89	104	115	129		
#15 Injector (psi)	10	16	24	31	40	46	54	61	70	13	19	29	36	46	53	61	69	79		
#20 Injector (psi)	2	6	13	18	24	29	36	41	47	4	9	17	22	29	34	41	47	54		
#30 Injector (psi)			2	5	10	13	17	20	24			4	8	13	16	21	25	29		
#40 Injector (psi)					2	4	7	10	13					4	7	10	13	17		
GPM (per nozzle)	0.86	1.07	1.29	1.50	1.72	1.93	2.15	2.36	2.58	0.95	1.18	1.42	1.66	1.89	2.13	2.36	2.60	2.84		
Flow Indicator 1/2" SS Ball Level	2.4	3.1	3.9	4.6	5.3	6.1	6.8			2.7	3.5	4.3	5.1	5.9	6.7					
Flow Indicator 7/16" SS Ball Level	0.3	0.9	1.4	2.0	2.5	3.1	3.7	4.2	4.8	0.5	1.1	1.8	2.4	3.0	3.6	4.2	4.8	5.5		

	60 Gallons Per Acre										65 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	33	44	60	71	86	99	115	128	143	38	50	67	79	94	109	127	140	156		
#15 Injector (psi)	16	23	33	41	53	60	69	78	88	19	26	38	47	59	67	76	86	97		
#20 Injector (psi)	6	12	20	26	33	39	47	53	60	8	14	23	30	38	44	53	59	67		
#30 Injector (psi)		1	6	10	16	20	25	29	33		3	8	13	19	23	29	33	38		
#40 Injector (psi)				2	6	9	13	16	20			1	4	8	12	16	19	23		
GPM (per nozzle)	1.03	1.29	1.55	1.81	2.06	2.32	2.58	2.84	3.10	1.12	1.40	1.68	1.96	2.24	2.52	2.79	3.07	3.35		
Flow Indicator 1/2" SS Ball Level	3.0	3.9	4.7	5.6	6.5					3.3	4.2	5.2	6.1							
Flow Indicator 7/16" SS Ball Level	0.7	1.4	2.1	2.8	3.4	4.1	4.8	5.5	6.1	1.0	1.7	2.4	3.2	3.9	4.6	5.3	6.1	6.8		

	70 Gallons Per Acre										75 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	42	55	74	87	103	118	138	152	170	47	60	80	94	112	128	149	165	184		
#15 Injector (psi)	22	30	42	52	65	74	84	94	106	25	34	47	57	71	80	91	102	115		
#20 Injector (psi)	11	17	27	33	42	49	58	65	74	13	20	30	37	47	54	64	71	80		
#30 Injector (psi)	1	5	11	15	22	26	32	37	42	2	6	13	18	25	30	36	41	47		
#40 Injector (psi)			3	6	11	14	19	22	27			5	8	13	17	22	26	30		
GPM (per nozzle)	1.20	1.50	1.81	2.11	2.41	2.71	3.01	3.31	3.61	1.29	1.61	1.93	2.26	2.58	2.90	3.22	3.55	3.87		
Flow Indicator 1/2" SS Ball Level	3.6	4.6	5.6	6.6						3.9	5.0	6.1								
Flow Indicator 7/16" SS Ball Level	1.2	2.0	2.8	3.5	4.3	5.1	5.9	6.7		1.4	2.3	3.1	3.9	4.8	5.6	6.5				

NOTE - The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 20 inches. The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Injectors - 22" Row Spacing

	15 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12
#10 Injector (psi)			2	5	9	12	17	20	24
#15 Injector (psi)						1	4	7	9
#20 Injector (psi)									2
#30 Injector (psi)									
#40 Injector (psi)									
GPM (per nozzle)	0.25	0.31	0.38	0.44	0.50	0.57	0.63	0.69	0.75
Flow Indicator Red Glass Ball Level	1.1	1.7	2.2	2.8	3.3	3.8	4.4	4.9	5.5
Flow Indicator 1/2" SS Level	0.3	0.5	0.7	1.0	1.2	1.4	1.6	1.8	2.0

	20 Gallons Per Acre									25 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
#10 Injector (psi)		3	9	13	19	23	29	34	39	4	9	17	22	28	34	41	47	54
#15 Injector (psi)				2	5	8	12	15	19			4	7	12	16	21	24	29
#20 Injector (psi)						1	4	7	9					4	7	10	13	17
#30 Injector (psi)																	2	4
#40 Injector (psi)																		
GPM (per nozzle)	0.38	0.47	0.57	0.66	0.76	0.85	0.95	1.04	1.14	0.47	0.59	0.71	0.83	0.95	1.06	1.18	1.30	1.42
Flow Indicator 1/2" SS Ball Level	0.8	1.1	1.4	1.7	2.0	2.4	2.7	3.0	3.3	1.1	1.5	1.9	2.3	2.7	3.1	3.5	3.9	4.3
Flow Indicator 7/16" SS Ball Level					0.0	0.3	0.5	0.8	1.0				0.2	0.5	0.8	1.1	1.4	1.8

	30 Gallons Per Acre									35 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
#10 Injector (psi)	9	15	24	30	38	45	54	61	69	14	21	31	39	48	56	66	74	84
#15 Injector (psi)		3	9	13	19	23	29	33	39	3	7	14	19	26	31	37	42	49
#20 Injector (psi)			2	5	9	12	17	20	24			5	9	14	18	23	27	31
#30 Injector (psi)						1	4	6	9					3	5	8	11	14
#40 Injector (psi)									2							1	3	5
GPM (per nozzle)	0.57	0.71	0.85	0.99	1.14	1.28	1.42	1.56	1.70	0.66	0.83	0.99	1.16	1.32	1.49	1.66	1.82	1.99
Flow Indicator 1/2" SS Ball Level	1.4	1.9	2.4	2.8	3.3	3.8	4.3	4.8	5.3	1.7	2.3	2.8	3.4	4.0	4.5	5.1	5.7	6.2
Flow Indicator 7/16" SS Ball Level			0.3	0.6	1.0	1.4	1.8	2.1	2.5		0.2	0.6	1.1	1.5	1.9	2.4	2.8	3.2

NOTES:

- The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 22 inches.
- Density or viscosity of the liquid can effect operating range.
- A displayed pressure higher than the calculated pressure may be due to a pressure drop in the fertilizer hoses.
- With #10 on the center, use #15 for one and a half rate outside, (35 knife).
- With #15 on the center, use #8 for half rate outside, (37 knife), and #20 for one and a half rate outside, (35 knife).
- With #20 on the center, use #10 for half rate outside, (37 knife), and #30 for one and a half rate outside, (35 knife).
- With #30 on the center, use #15 for half rate outside, (37 knife), and #40 for **one and a third** rate outside, (35 knife).
- With #40 on the center, use #20 for half rate outside, (37 knife), and #60 for one and a half rate outside, (35 knife).

For replacement injectors, see "Coulter Injector Assembly" on page 27 in the Operator's Manual.

The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Injectors - 22" Row Spacing

Speed (MPH)	40 Gallons Per Acre										45 Gallons Per Acre									
	4	5	6	7	8	9	10	11	12		4	5	6	7	8	9	10	11	12	
#10 Injector (psi)	19	27	39	47	57	67	79	88	99		24	33	46	55	67	78	91	102	114	
#15 Injector (psi)	6	11	19	25	33	38	45	51	59		9	15	24	30	40	46	53	60	69	
#20 Injector (psi)		3	9	13	19	23	29	34	39		1	6	13	18	24	29	35	40	46	
#30 Injector (psi)				2	6	9	12	15	19				1	5	9	12	17	20	24	
#40 Injector (psi)						1	4	6	9						1	4	7	10	13	
GPM (per nozzle)	0.76	0.95	1.14	1.32	1.51	1.70	1.89	2.08	2.27		0.85	1.06	1.28	1.49	1.70	1.92	2.13	2.34	2.55	
Flow Indicator 1/2" SS Ball Level	2.0	2.7	3.3	4.0	4.6	5.3	5.9	6.6			2.4	3.1	3.8	4.5	5.3	6.0	6.7			
Flow Indicator 7/16" SS Ball Level		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0		0.3	0.8	1.4	1.9	2.5	3.0	3.6	4.2	4.7	

Speed (MPH)	50 Gallons Per Acre										55 Gallons Per Acre									
	4	5	6	7	8	9	10	11	12		4	5	6	7	8	9	10	11	12	
#10 Injector (psi)	29	39	54	64	77	89	104	115	129		34	45	61	72	87	100	116	129	144	
#15 Injector (psi)	13	19	29	36	46	53	61	69	79		16	23	34	42	53	61	70	78	89	
#20 Injector (psi)	4	9	17	22	29	34	41	47	54		6	12	20	26	34	40	48	54	61	
#30 Injector (psi)			4	8	13	16	21	25	29			1	6	10	16	20	25	29	34	
#40 Injector (psi)					4	7	10	13	17					3	6	9	13	16	20	
GPM (per nozzle)	0.95	1.18	1.42	1.66	1.89	2.13	2.36	2.60	2.84		1.04	1.30	1.56	1.82	2.08	2.34	2.60	2.86	3.12	
Flow Indicator 1/2" SS Ball Level	2.7	3.5	4.3	5.1	5.9	6.7					3.0	3.9	4.8	5.7	6.6					
Flow Indicator 7/16" SS Ball Level	0.5	1.1	1.8	2.4	3.0	3.6	4.2	4.8	5.5		0.8	1.4	2.1	2.8	3.5	4.2	4.8	5.5	6.2	

Speed (MPH)	60 Gallons Per Acre										65 Gallons Per Acre									
	4	5	6	7	8	9	10	11	12		4	5	6	7	8	9	10	11	12	
#10 Injector (psi)	39	51	68	80	96	110	129	143	159		44	57	76	89	106	121	141	156	174	
#15 Injector (psi)	19	27	39	48	60	68	78	87	99		23	31	44	53	67	76	86	96	109	
#20 Injector (psi)	9	15	24	30	39	45	54	60	68		11	18	28	35	44	51	60	67	76	
#30 Injector (psi)		3	9	13	19	24	29	34	39		1	5	11	16	23	27	34	38	44	
#40 Injector (psi)			2	5	9	12	16	20	24				4	7	11	15	20	23	28	
GPM (per nozzle)	1.14	1.42	1.70	1.99	2.27	2.55	2.84	3.12	3.41		1.23	1.54	1.84	2.15	2.46	2.77	3.07	3.38	3.69	
Flow Indicator 1/2" SS Ball Level	3.3	4.3	5.3	6.2							3.7	4.7	5.7	6.8						
Flow Indicator 7/16" SS Ball Level	1.0	1.8	2.5	3.2	4.0	4.7	5.5	6.2	6.9		1.3	2.1	2.9	3.7	4.5	5.3	6.1	6.9		

Speed (MPH)	70 Gallons Per Acre										75 Gallons Per Acre									
	4	5	6	7	8	9	10	11	12		4	5	6	7	8	9	10	11	12	
#10 Injector (psi)	49	63	83	97	116	132	154	170	189		54	68	91	106	125	143	166	183	204	
#15 Injector (psi)	26	35	49	59	74	83	94	105	119		29	39	54	65	81	91	102	114	129	
#20 Injector (psi)	14	21	32	39	49	56	66	74	83		16	24	35	43	54	62	72	81	91	
#30 Injector (psi)	3	7	14	19	26	31	38	43	49		4	9	16	22	29	35	42	47	54	
#40 Injector (psi)			5	9	14	18	23	27	32			2	7	11	16	21	26	30	35	
GPM (per nozzle)	1.32	1.66	1.99	2.32	2.65	2.98	3.31	3.64	3.97		1.42	1.77	2.13	2.48	2.84	3.19	3.55	3.90	4.26	
Flow Indicator 1/2" SS Ball Level	4.0	5.1	6.2								4.3	5.5	6.7							
Flow Indicator 7/16" SS Ball Level	1.5	2.4	3.2	4.1	5.0	5.8	6.7				1.8	2.7	3.6	4.5	5.5	6.4				

NOTE - The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 22 inches. The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).



Injectors - 30" Row Spacing

	15 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12
#10 Injector (psi)		4	10	14	20	24	30	35	40
#15 Injector (psi)				2	6	9	13	16	20
#20 Injector (psi)						2	5	7	10
#30 Injector (psi)									
#40 Injector (psi)									
GPM (per nozzle)	0.34	0.43	0.51	0.60	0.68	0.77	0.86	0.94	1.03
Flow Indicator Red Glass Ball Level	1.9	2.7	3.4	4.1	4.9	5.6	6.4		
Flow Indicator 1/2" SS Ball Level	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0
Flow Indicator 7/16" SS Ball Level						0.1	0.3	0.5	0.7

	20 Gallons Per Acre									25 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
#10 Injector (psi)	6	12	20	26	33	39	47	53	61	13	20	30	37	46	54	64	72	81
#15 Injector (psi)		1	6	10	15	19	24	29	34	2	6	13	18	25	30	35	41	47
#20 Injector (psi)				2	6	9	13	16	20			5	8	13	17	22	26	30
#30 Injector (psi)							1	4	6					2	4	7	10	13
#40 Injector (psi)																	2	5
GPM (per nozzle)	0.52	0.64	0.77	0.90	1.03	1.16	1.29	1.42	1.55	0.64	0.81	0.97	1.13	1.29	1.45	1.61	1.77	1.93
Flow Indicator 1/2" SS Ball Level	1.2	1.7	2.1	2.5	3.0	3.4	3.9	4.3	4.7	1.7	2.2	2.8	3.3	3.9	4.4	5.0	5.5	6.1
Flow Indicator 7/16" SS Ball Level			0.1	0.4	0.7	1.1	1.4	1.8	2.1		0.2	0.6	1.0	1.4	1.8	2.3	2.7	3.1

	30 Gallons Per Acre									35 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
#10 Injector (psi)	20	28	40	48	59	69	81	90	102	27	36	50	60	72	84	98	109	122
#15 Injector (psi)	7	12	20	26	36	40	47	53	61	11	17	27	34	43	50	58	65	75
#20 Injector (psi)		3	10	14	20	24	30	35	40	3	8	15	20	27	32	39	44	50
#30 Injector (psi)				2	7	9	13	16	20			3	6	11	15	19	22	27
#40 Injector (psi)						2	4	7	10					3	5	9	11	15
GPM (per nozzle)	0.77	0.97	1.16	1.35	1.55	1.74	1.93	2.13	2.32	0.90	1.13	1.35	1.58	1.81	2.03	2.26	2.48	2.71
Flow Indicator 1/2" SS Ball Level	2.1	2.8	3.4	4.1	4.7	5.4	6.1	6.7		2.5	3.3	4.1	4.8	5.6	6.4			
Flow Indicator 7/16" SS Ball Level	0.1	0.6	1.1	1.6	2.1	2.6	3.1	3.6	4.1	0.4	1.0	1.6	2.2	2.8	3.4	3.9	4.5	5.1

NOTES:

- The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 30 inches.
- Density or viscosity of the liquid can effect operating range.
- A displayed pressure higher than the calculated pressure may be due to a pressure drop in the fertilizer hoses.
- With #10 on the center, use #15 for one and a half rate outside, (23 knife).
- With #15 on the center, use #8 for half rate outside, (25 knife), and #20 for one and a half rate outside, (23 knife).
- With #20 on the center, use #10 for half rate outside, (25 knife), and #30 for one and a half rate outside, (23 knife).
- With #30 on the center, use #15 for half rate outside, (25 knife), and #40 for **one and a third** rate outside, (23 knife).
- With #40 on the center, use #20 for half rate outside, (25 knife), and #60 for one and a half rate outside, (23 knife).

For replacement injectors, see "Coulter Injector Assembly" on page 27 in the Operator's Manual.

The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Injectors - 30" Row Spacing

	40 Gallons Per Acre										45 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	33	44	60	71	86	99	115	128	143	40	52	70	83	99	113	132	146	163		
#15 Injector (psi)	16	23	33	41	53	60	69	78	88	20	28	40	49	62	70	80	90	102		
#20 Injector (psi)	6	12	20	26	33	39	47	53	60	10	16	25	32	40	47	55	62	70		
#30 Injector (psi)		1	6	10	16	20	25	29	33		4	10	14	20	25	31	35	40		
#40 Injector (psi)				2	6	9	13	16	20			2	5	10	13	17	21	25		
GPM (per nozzle)	1.03	1.29	1.55	1.81	2.06	2.32	2.58	2.84	3.10	1.16	1.45	1.74	2.03	2.32	2.61	2.90	3.19	3.48		
Flow Indicator 1/2" SS Ball Level	3.0	3.9	4.7	5.6	6.5					3.4	4.4	5.4	6.4							
Flow Indicator 7/16" SS Ball Level	0.7	1.4	2.1	2.8	3.4	4.1	4.8	5.5	6.1	1.1	1.8	2.6	3.4	4.1	4.9	5.6	6.4			

	50 Gallons Per Acre										55 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	47	60	80	94	112	128	149	165	184	54	68	91	106	125	143	166	183	204		
#15 Injector (psi)	25	34	47	57	71	80	91	102	115	29	39	54	65	81	91	102	114	129		
#20 Injector (psi)	13	20	30	37	47	54	64	71	80	16	24	35	43	54	62	72	81	91		
#30 Injector (psi)	2	6	13	18	25	30	36	41	47	4	9	16	22	29	35	42	47	54		
#40 Injector (psi)			5	8	13	17	22	26	30		2	7	11	16	21	26	30	35		
GPM (per nozzle)	1.29	1.61	1.93	2.26	2.58	2.90	3.22	3.55	3.87	1.42	1.77	2.13	2.48	2.84	3.19	3.55	3.90	4.26		
Flow Indicator 1/2" SS Ball Level	3.9	5.0	6.1							4.3	5.5	6.7								
Flow Indicator 7/16" SS Ball Level	1.4	2.3	3.1	3.9	4.8	5.6	6.5			1.8	2.7	3.6	4.5	5.5	6.4					

	60 Gallons Per Acre										65 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	60	77	101	117	138	158	183	202	224	67	85	111	128	152	173	200	221	245		
#15 Injector (psi)	34	45	60	73	90	101	113	127	142	38	50	67	81	100	111	124	139	156		
#20 Injector (psi)	20	28	40	49	60	69	81	90	101	23	32	46	55	67	77	89	99	111		
#30 Injector (psi)	7	12	20	26	34	40	48	54	60	9	15	23	30	38	45	54	60	67		
#40 Injector (psi)		4	10	14	20	24	30	35	40	1	6	12	17	23	28	34	40	46		
GPM (per nozzle)	1.55	1.93	2.32	2.71	3.10	3.48	3.87	4.26	4.64	1.68	2.10	2.52	2.93	3.35	3.77	4.19	4.61	5.03		
Flow Indicator 1/2" SS Ball Level	4.7	6.1																		
Flow Indicator 7/16" SS Ball Level	2.1	3.1	4.1	5.1	6.1					2.4	3.5	4.6	5.7	6.8						

	70 Gallons Per Acre										75 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
#10 Injector (psi)	74	93	121	140	165	188	217	239	265	81	101	131	151	178	203	234	258	286		
#15 Injector (psi)	43	55	74	89	109	121	136	151	170	48	61	81	96	118	131	147	163	183		
#20 Injector (psi)	27	36	51	61	74	84	98	108	121	30	40	56	67	81	92	106	117	131		
#30 Injector (psi)	11	17	27	34	43	50	60	66	74	13	20	30	38	48	55	66	73	81		
#40 Injector (psi)	3	8	15	20	27	32	39	44	51	5	10	18	23	30	36	43	49	56		
GPM (per nozzle)	1.81	2.26	2.71	3.16	3.61	4.06	4.51	4.97	5.42	1.93	2.42	2.90	3.39	3.87	4.35	4.84	5.32	5.80		
Flow Indicator 7/16" SS Ball Level	2.8	3.9	5.1	6.3						3.1	4.4	5.6	6.9							

NOTE - The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 30 inches. The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).



Knife - 20" Row Spacing

	10 Gallons Per Acre										15 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12	
0.075 Orifice Pressure (psi)				3	6	10	13	17	20		5	10	15	20	25	31	36	41	
0.107 Orifice Pressure (psi)																2	4	7	
0.132 Orifice Pressure (psi)																			
0.161 Orifice Pressure (psi)																			
GPM (per nozzle)	0.15	0.19	0.23	0.27	0.30	0.34	0.38	0.42	0.46	0.23	0.29	0.34	0.40	0.46	0.51	0.57	0.63	0.68	
Flow Indicator Red Glass Ball Level	0.3	0.6	0.9	1.3	1.6	1.9	2.2	2.6	2.9	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	
Flow Indicator 1/2" SS Ball Level		0.1	0.2	0.4	0.5	0.6	0.8	0.9	1.0	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	

	20 Gallons Per Acre										25 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
0.075 Orifice Pressure (psi)	6	13	20	27	34	41	48	55	62	13	22	31	39	48	57	65	74	82		
0.107 Orifice Pressure (psi)					4	7	10	14	17				6	10	15	19	23	27		
0.132 Orifice Pressure (psi)									5						3	6	9	12		
0.161 Orifice Pressure (psi)																				
GPM (per nozzle)	0.30	0.38	0.46	0.53	0.61	0.68	0.76	0.84	0.91	0.38	0.48	0.57	0.67	0.76	0.86	0.95	1.05	1.14		
Flow Indicator Red Glass Ball Level	1.6	2.2	2.9	3.6	4.2	4.9	5.5	6.2	6.9	2.2	3.1	3.9	4.7	5.5	6.4					
Flow Indicator 1/2" SS Ball Level	0.5	0.8	1.0	1.3	1.5	1.8	2.1	2.3	2.6	0.8	1.1	1.4	1.7	2.1	2.4	2.7	3.0	3.3		
Flow Indicator 7/16" SS Ball Level								0.2	0.4						0.3	0.5	0.8	1.0		

	30 Gallons Per Acre										35 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
0.075 Orifice Pressure (psi)	20	31	41	51	62	72	82	93	103	27	39	51	63	76	88	100	112	124		
0.107 Orifice Pressure (psi)		2	7	12	17	22	27	32	37		6	12	18	24	30	36	42	48		
0.132 Orifice Pressure (psi)					5	8	12	15	18				6	9	13	17	21	25		
0.161 Orifice Pressure (psi)								3	5							5	7	10		
GPM (per nozzle)	0.46	0.57	0.68	0.80	0.91	1.03	1.14	1.26	1.37	0.53	0.67	0.80	0.93	1.07	1.20	1.33	1.46	1.60		
Flow Indicator Red Glass Ball Level	2.9	3.9	4.9	5.9	6.9															
Flow Indicator 1/2" SS Ball Level	1.0	1.4	1.8	2.2	2.6	3.0	3.3	3.7	4.1	1.3	1.7	2.2	2.6	3.1	3.5	4.0	4.5	4.9		
Flow Indicator 7/16" SS Ball Level				0.1	0.4	0.7	1.0	1.3	1.6			0.1	0.5	0.8	1.2	1.5	1.9	2.2		

NOTES:

- Values highlighted in green indicate pressures that are within the optimal range of 20 - 50 psi. The row spacing is 20 inches.
- Density or viscosity of the liquid can effect operating range.
- A displayed pressure higher than the calculated pressure may be due to a pressure drop in the fertilizer hoses.
- With .075 on the center, use .054 for half rate outside (37 knife) and .093 for one and a half rate outside (35 knife).
- With .107 on the center, use .075 for half rate outside (37 knife) and .132 for one and a half rate outside (35 knife).
- With .132 on the center, use .093 for half rate outside (37 knife) and .161 for one and a half rate outside (35 knife).
- With .161 on the center, use .107 for half rate outside (37 knife) and .196 for one and a half rate outside (35 knife).

For replacement orifices, see "Check Valve" on page 37 in the Operator's Manual.

Kit	0.075	0.093	0.107	0.132	0.161	0.196
23 Knife	0	0	21	21	21	2
25 Knife	2	2	23	23	23	0

The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Knife - 20" Row Spacing

	40 Gallons Per Acre									45 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	34	48	62	76	89	103	117	131	145	41	57	72	88	103	119	134	150	165
0.107 Orifice Pressure (psi)	4	10	17	24	31	37	44	51	58	7	15	22	30	37	45	53	60	68
0.132 Orifice Pressure (psi)			5	9	14	18	23	27	31		3	8	13	18	23	28	33	38
0.161 Orifice Pressure (psi)						5	8	11	14					5	9	12	15	18
GPM (per nozzle)	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.67	1.83	0.68	0.86	1.03	1.20	1.37	1.54	1.71	1.88	2.05
Flow Indicator 1/2" SS Ball Level	1.5	2.1	2.6	3.1	3.6	4.1	4.6	5.2	5.7	1.8	2.4	3.0	3.5	4.1	4.7	5.3	5.9	6.5
Flow Indicator 7/16" SS Ball Level			0.4	0.8	1.2	1.6	2.0	2.4	2.8		0.3	0.7	1.2	1.6	2.1	2.5	3.0	3.4

	50 Gallons Per Acre									55 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	48	65	82	100	117	134	152	169	186	55	74	93	112	131	150	169	188	207
0.107 Orifice Pressure (psi)	10	19	27	36	44	53	61	70	78	14	23	32	42	51	60	70	79	88
0.132 Orifice Pressure (psi)		6	12	17	23	28	33	39	44		9	15	21	27	33	39	45	51
0.161 Orifice Pressure (psi)				5	8	12	16	19	23			3	7	11	15	19	23	27
GPM (per nozzle)	0.76	0.95	1.14	1.33	1.52	1.71	1.90	2.09	2.28	0.84	1.05	1.26	1.46	1.67	1.88	2.09	2.30	2.51
Flow Indicator 1/2" SS Ball Level	2.1	2.7	3.3	4.0	4.6	5.3	5.9	6.6		2.3	3.0	3.7	4.5	5.2	5.9	6.6		
Flow Indicator 7/16" SS Ball Level	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	0.2	0.8	1.3	1.9	2.4	3.0	3.5	4.1	4.6

	60 Gallons Per Acre									65 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	62	82	103	124	145	165	186	207	228	69	91	114	136	158	181	203	226	248
0.107 Orifice Pressure (psi)	17	27	37	48	58	68	78	88	99	21	32	43	54	65	76	87	98	109
0.132 Orifice Pressure (psi)	5	12	18	25	31	38	44	51	58	7	14	21	29	36	43	50	57	64
0.161 Orifice Pressure (psi)			5	10	14	18	23	27	32			7	12	17	22	27	31	36
GPM (per nozzle)	0.91	1.14	1.37	1.60	1.83	2.05	2.28	2.51	2.74	0.99	1.24	1.48	1.73	1.98	2.23	2.47	2.72	2.97
Flow Indicator 1/2" SS Ball Level	2.6	3.3	4.1	4.9	5.7	6.5				2.8	3.7	4.5	5.4	6.2				
Flow Indicator 7/16" SS Ball Level	0.4	1.0	1.6	2.2	2.8	3.4	4.0	4.6	5.2	0.6	1.3	1.9	2.6	3.2	3.9	4.5	5.1	5.8

	70 Gallons Per Acre									75 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	76	100	124	148	172	196	221	245	269	82	108	134	160	186	212	238	264	290
0.107 Orifice Pressure (psi)	24	36	48	60	71	83	95	107	119	27	40	53	66	78	91	104	116	129
0.132 Orifice Pressure (psi)	9	17	25	32	40	48	55	63	71	12	20	28	36	44	53	61	69	77
0.161 Orifice Pressure (psi)		5	10	15	20	25	30	35	40		6	12	17	23	28	34	39	45
GPM (per nozzle)	1.07	1.33	1.60	1.86	2.13	2.40	2.66	2.93	3.20	1.14	1.43	1.71	2.00	2.28	2.57	2.85	3.14	3.42
Flow Indicator 1/2" SS Ball Level	3.1	4.0	4.9	5.8	6.7					3.3	4.3	5.3	5.3	6.3				
Flow Indicator 7/16" SS Ball Level	0.8	1.5	2.2	2.9	3.6	4.3	5.0	5.7	6.4	1.0	1.8	2.5	3.3	4.0	4.7	5.5	6.2	7.0

NOTE - The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 20 inches. The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Knife - 22" Row Spacing

	10 Gallons Per Acre										15 Gallons Per Acre									
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12		
0.075 Orifice Pressure (psi)			2	5	9	13	17	21	24	2	7	13	19	24	30	36	41	47		
0.107 Orifice Pressure (psi)															2	4	7	10		
0.132 Orifice Pressure (psi)																				
0.161 Orifice Pressure (psi)																				
GPM (per nozzle)	0.17	0.21	0.25	0.29	0.33	0.38	0.42	0.46	0.50	0.25	0.31	0.38	0.44	0.50	0.57	0.63	0.69	0.75		
Flow Indicator Red Glass Ball Level	0.4	0.8	1.1	1.5	1.8	2.2	2.6	2.9	3.3	1.1	1.7	2.2	2.8	3.3	3.8	4.4	4.9	5.5		
Flow Indicator 1/2" SS Ball Level		0.2	0.3	0.5	0.6	0.7	0.9	1.0	1.2	0.3	0.5	0.7	1.0	1.2	1.4	1.6	1.8	2.0		

	20 Gallons Per Acre										25 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12	
0.075 Orifice Pressure (psi)	9	17	24	32	40	47	55	62	70	17	26	36	45	55	64	74	83	93	
0.107 Orifice Pressure (psi)					6	10	14	17	21			4	9	14	18	23	28	32	
0.132 Orifice Pressure (psi)								5	8					3	6	9	12	15	
0.161 Orifice Pressure (psi)																		3	
GPM (per nozzle)	0.33	0.42	0.50	0.59	0.67	0.75	0.84	0.92	1.00	0.42	0.52	0.63	0.73	0.84	0.94	1.05	1.15	1.26	
Flow Indicator Red Glass Ball Level	1.8	2.6	3.3	4.0	4.8	5.5	6.2	6.9	7.7	2.6	3.5	4.4	5.3	6.2					
Flow Indicator 1/2" SS Ball Level	0.6	0.9	1.2	1.5	1.7	2.0	2.3	2.6	2.9	0.9	1.2	1.6	2.0	2.3	2.7	3.0	3.4	3.7	
Flow Indicator 7/16" SS Ball Level							0.2	0.5	0.7					0.2	0.5	0.8	1.1	1.3	

	30 Gallons Per Acre										35 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12	
0.075 Orifice Pressure (psi)	24	36	47	59	70	81	93	104	116	32	45	59	72	85	98	112	125	138	
0.107 Orifice Pressure (psi)		4	10	16	21	27	32	38	44		9	16	22	29	35	42	48	55	
0.132 Orifice Pressure (psi)				4	8	11	15	18	22			4	8	12	17	21	25	29	
0.161 Orifice Pressure (psi)							3	5	8						4	7	10	13	
GPM (per nozzle)	0.50	0.63	0.75	0.88	1.00	1.13	1.26	1.38	1.51	0.59	0.73	0.88	1.03	1.17	1.32	1.46	1.61	1.76	
Flow Indicator Red Glass Ball Level	3.3	4.4	5.5	6.6															
Flow Indicator 1/2" SS Ball Level	1.2	1.6	2.0	2.5	2.9	3.3	3.7	4.2	4.6	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.4	
Flow Indicator 7/16" SS Ball Level				0.3	0.7	1.0	1.3	1.7	2.0			0.3	0.7	1.1	1.5	1.9	2.3	2.6	

NOTES:

- Values highlighted in green indicate pressures that are within the optimal range of 20 - 50 psi. The row spacing is 22 inches.
- Density or viscosity of the liquid can effect operating range.
- A displayed pressure higher than the calculated pressure may be due to a pressure drop in the fertilizer hoses.
- With .075 on the center, use .054 for half rate outside (37 knife) and .093 for one and a half rate outside (35 knife).
- With .107 on the center, use .075 for half rate outside (37 knife) and .132 for one and a half rate outside (35 knife).
- With .132 on the center, use .093 for half rate outside (37 knife) and .161 for one and a half rate outside (35 knife).
- With .161 on the center, use .107 for half rate outside (37 knife) and .196 for one and a half rate outside (35 knife).

For replacement orifices, see "Check Valve" on page 37 in the Operator's Manual.

Kit	0.075	0.093	0.107	0.132	0.161	0.196
23 Knife	0	0	21	21	21	2

The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).



Knife - 22" Row Spacing

	40 Gallons Per Acre									45 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	40	55	70	85	100	116	131	146	161	47	64	81	98	116	133	150	167	184
0.107 Orifice Pressure (psi)	6	14	21	29	36	44	51	59	66	10	18	27	35	44	52	60	69	77
0.132 Orifice Pressure (psi)			8	12	17	22	27	32	37		6	11	17	22	28	33	38	44
0.161 Orifice Pressure (psi)					5	8	11	14	18				4	8	12	15	19	22
GPM (per nozzle)	0.67	0.84	1.00	1.17	1.34	1.51	1.67	1.84	2.01	0.75	0.94	1.13	1.32	1.51	1.70	1.88	2.07	2.26
Flow Indicator 1/2" SS Ball Level	1.7	2.3	2.9	3.5	4.0	4.6	5.2	5.7	6.3	2.0	2.7	3.3	4.0	4.6	5.2	5.9	6.5	
Flow Indicator 7/16" SS Ball Level		0.2	0.7	1.1	1.5	2.0	2.4	2.9	3.3		0.5	1.0	1.5	2.0	2.5	3.0	3.5	3.9

	50 Gallons Per Acre									55 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	55	74	93	112	131	150	169	188	207	62	83	104	125	146	167	188	209	230
0.107 Orifice Pressure (psi)	14	23	32	42	51	60	70	79	88	17	28	38	48	59	69	79	89	100
0.132 Orifice Pressure (psi)		9	15	21	27	33	39	45	51	5	12	18	25	32	38	45	52	58
0.161 Orifice Pressure (psi)			3	7	11	15	19	23	27			5	10	14	19	23	28	32
GPM (per nozzle)	0.84	1.05	1.26	1.46	1.67	1.88	2.09	2.30	2.51	0.92	1.15	1.38	1.61	1.84	2.07	2.30	2.53	2.76
Flow Indicator 1/2" SS Ball Level	2.3	3.0	3.7	4.5	5.2	5.9	6.6			2.6	3.4	4.2	5.0	5.7	6.5			
Flow Indicator 7/16" SS Ball Level	0.2	0.8	1.3	1.9	2.4	3.0	3.5	4.1	4.6	0.5	1.1	1.7	2.3	2.9	3.5	4.1	4.7	5.3

	60 Gallons Per Acre									65 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	70	93	116	138	161	184	207	230	252	78	102	127	152	176	201	226	250	275
0.107 Orifice Pressure (psi)	21	32	44	55	66	77	88	100	111	25	37	49	61	73	86	98	110	122
0.132 Orifice Pressure (psi)	8	15	22	29	37	44	51	58	66	10	18	26	34	41	49	57	65	73
0.161 Orifice Pressure (psi)		3	8	13	18	22	27	32	37		5	10	16	21	26	31	37	42
GPM (per nozzle)	1.00	1.26	1.51	1.76	2.01	2.26	2.51	2.76	3.01	1.09	1.36	1.63	1.90	2.18	2.45	2.72	2.99	3.26
Flow Indicator 1/2" SS Ball Level	2.9	3.7	4.6	5.4	6.3					3.2	4.1	5.0	5.9	6.9				
Flow Indicator 7/16" SS Ball Level	0.7	1.3	2.0	2.6	3.3	3.9	4.6	5.3	5.9	0.9	1.6	2.3	3.0	3.7	4.4	5.1	5.9	6.6

	70 Gallons Per Acre									75 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	85	112	138	165	192	218	245	271	298	93	121	150	178	207	235	264	292	321
0.107 Orifice Pressure (psi)	29	42	55	68	81	94	107	120	133	32	46	60	74	88	102	116	130	144
0.132 Orifice Pressure (psi)	12	21	29	38	46	55	63	72	80	15	24	33	42	51	60	69	78	87
0.161 Orifice Pressure (psi)		7	13	18	24	30	35	41	47	3	9	15	21	27	33	39	45	51
GPM (per nozzle)	1.17	1.46	1.76	2.05	2.34	2.64	2.93	3.22	3.52	1.26	1.57	1.88	2.20	2.51	2.83	3.14	3.45	3.77
Flow Indicator 1/2" SS Ball Level	3.5	4.5	5.4	6.4						3.7	4.8	5.9	6.9					
Flow Indicator 7/16" SS Ball Level	1.1	1.9	2.6	3.4	4.2	4.9	5.7	6.5		1.3	2.1	3.0	3.8	4.6	5.4	6.2		

NOTE - The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 22 inches. The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Knife - 30" Row Spacing

Speed (MPH)	10 Gallons Per Acre									15 Gallons Per Acre								
	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)		5	10	15	20	25	31	36	41	10	18	25	33	41	49	57	64	72
0.107 Orifice Pressure (psi)							2	4	7				3	7	11	15	18	22
0.132 Orifice Pressure (psi)															1	3	6	8
0.161 Orifice Pressure (psi)																		
GPM (per nozzle)	0.23	0.29	0.34	0.40	0.46	0.51	0.57	0.63	0.68	0.34	0.43	0.51	0.60	0.68	0.77	0.86	0.94	1.03
Flow Indicator Red Glass Ball Level	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	1.9	2.7	3.4	4.1	4.9	5.6	6.4		
Flow Indicator 1/2" SS Ball Level	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0
Flow Indicator 7/16" SS Ball Level															0.1	0.3	0.5	0.7

Speed (MPH)	20 Gallons Per Acre									25 Gallons Per Acre								
	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	20	31	41	51	62	72	82	93	103	31	44	57	69	82	95	108	121	134
0.107 Orifice Pressure (psi)			7	12	17	22	27	32	37		8	15	21	27	34	40	46	53
0.132 Orifice Pressure (psi)					5	8	12	15	18			3	7	12	16	20	24	28
0.161 Orifice Pressure (psi)								3	5						4	6	9	12
GPM (per nozzle)	0.46	0.57	0.68	0.80	0.91	1.03	1.14	1.26	1.37	0.57	0.71	0.86	1.00	1.14	1.28	1.43	1.57	1.71
Flow Indicator Red Glass Ball Level	2.9	3.9	4.9	5.9	6.9					3.9	5.1	6.4						
Flow Indicator 1/2" SS Ball Level	1.0	1.4	1.8	2.2	2.6	3.0	3.3	3.7	4.1	1.4	1.9	2.4	2.9	3.3	3.8	4.3	4.8	5.3
Flow Indicator 7/16" SS Ball Level				0.1	0.4	0.7	1.0	1.3	1.6			0.3	0.7	1.0	1.4	1.8	2.1	2.5

Speed (MPH)	30 Gallons Per Acre									35 Gallons Per Acre								
	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	41	57	72	88	103	119	134	150	165	51	69	88	106	124	142	160	178	196
0.107 Orifice Pressure (psi)	7	15	22	30	37	45	53	60	68	12	21	30	39	48	57	66	74	83
0.132 Orifice Pressure (psi)		3	8	13	18	23	28	33	38		7	13	19	25	30	36	42	48
0.161 Orifice Pressure (psi)					5	9	12	15	18				6	10	13	17	21	25
GPM (per nozzle)	0.68	0.86	1.03	1.20	1.37	1.54	1.71	1.88	2.05	0.80	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.40
Flow Indicator Red Glass Ball Level	4.9	6.4																
Flow Indicator 1/2" SS Ball Level	1.8	2.4	3.0	3.5	4.1	4.7	5.3	5.9	6.5	2.2	2.9	3.5	4.2	4.9	5.6	6.3	6.9	
Flow Indicator 7/16" SS Ball Level		0.3	0.7	1.2	1.6	2.1	2.5	3.0	3.4	0.1	0.7	1.2	1.7	2.2	2.7	3.3	3.8	4.3

NOTES:

- Values highlighted in green indicate pressures that are within the optimal range of 20 - 50 psi. The row spacing is 30 inches.
- Density or viscosity of the liquid can effect operating range.
- A displayed pressure higher than the calculated pressure may be due to a pressure drop in the fertilizer hoses.
- With .075 on the center, use .054 for half rate outside (25 knife) and .093 for one and a half rate outside (23 knife).
- With .107 on the center, use .075 for half rate outside (25 knife) and .132 for one and a half rate outside (23 knife).
- With .132 on the center, use .093 for half rate outside (25 knife) and .161 for one and a half rate outside (23 knife).
- With .161 on the center, use .107 for half rate outside (25 knife) and .196 for one and a half rate outside (23 knife).

For replacement orifices, see "Check Valve" on page 37 in the Operator's Manual.

The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).

Kit						
	0.075	0.093	0.107	0.132	0.161	0.196
11 Knife	0	0	9	9	9	2
13 Knife	2	2	11	11	11	0
15 Knife	0	0	13	13	13	2
17 Knife	2	2	15	15	15	0



Knife - 30" Row Spacing

	40 Gallons Per Acre									45 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	62	82	103	124	145	165	186	207	228	72	95	119	142	165	189	212	235	259
0.107 Orifice Pressure (psi)	17	27	37	48	58	68	78	88	99	22	34	45	57	68	80	91	102	114
0.132 Orifice Pressure (psi)	5	12	18	25	31	38	44	51	58	8	16	23	30	38	45	53	60	67
0.161 Orifice Pressure (psi)			5	10	14	18	23	27	32		4	9	13	18	23	28	33	38
GPM (per nozzle)	0.91	1.14	1.37	1.60	1.83	2.05	2.28	2.51	2.74	1.03	1.28	1.54	1.80	2.05	2.31	2.57	2.83	3.08
Flow Indicator 1/2" SS Ball Level	2.6	3.3	4.1	4.9	5.7	6.5				3.0	3.8	4.7	5.6	6.5				
Flow Indicator 7/16" SS Ball Level	0.4	1.0	1.6	2.2	2.8	3.4	4.0	4.6	5.2	0.7	1.4	2.1	2.7	3.4	4.1	4.7	5.4	6.1

	50 Gallons Per Acre									55 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	82	108	134	160	186	212	238	264	290	93	121	150	178	207	235	264	292	321
0.107 Orifice Pressure (psi)	27	40	53	66	78	91	104	116	129	32	46	60	74	88	102	116	130	144
0.132 Orifice Pressure (psi)	12	20	28	36	44	53	61	69	77	15	24	33	42	51	60	69	78	87
0.161 Orifice Pressure (psi)		6	12	17	23	28	34	39	45	3	9	15	21	27	33	39	45	51
GPM (per nozzle)	1.14	1.43	1.71	2.00	2.28	2.57	2.85	3.14	3.42	1.26	1.57	1.88	2.20	2.51	2.83	3.14	3.45	3.77
Flow Indicator 1/2" SS Ball Level	3.3	4.3	5.3	6.3						3.7	4.8	5.9	6.9					
Flow Indicator 7/16" SS Ball Level	1.0	1.8	2.5	3.3	4.0	4.7	5.5	6.2	7.0	1.3	2.1	3.0	3.8	4.6	5.4	6.2		

	60 Gallons Per Acre									65 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	103	134	165	196	228	259	290	321	352	114	147	181	215	248	282	316	349	383
0.107 Orifice Pressure (psi)	37	53	68	83	99	114	129	144	160	43	59	76	92	109	125	142	158	175
0.132 Orifice Pressure (psi)	18	28	38	48	58	67	77	87	97	21	32	43	53	64	75	86	96	107
0.161 Orifice Pressure (psi)	5	12	18	25	32	38	45	51	58	7	15	22	29	36	43	50	57	65
GPM (per nozzle)	1.37	1.71	2.05	2.40	2.74	3.08	3.42	3.77	4.11	1.48	1.85	2.23	2.60	2.97	3.34	3.71	4.08	4.45
Flow Indicator 1/2" SS Ball Level	4.1	5.3	6.5															
Flow Indicator 7/16" SS Ball Level	1.6	2.5	3.4	4.3	5.2	6.1	7.0			1.9	2.9	3.9	4.8	5.8	6.8			

	70 Gallons Per Acre									75 Gallons Per Acre								
Speed (MPH)	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12
0.075 Orifice Pressure (psi)	124	160	196	233	269	305	342	378	414	134	173	212	251	290	329	367	406	445
0.107 Orifice Pressure (psi)	48	66	83	101	119	137	155	172	190	53	72	91	110	129	148	167	186	206
0.132 Orifice Pressure (psi)	25	36	48	59	71	82	94	105	117	28	40	53	65	77	90	102	114	127
0.161 Orifice Pressure (psi)	10	17	25	33	40	48	56	64	71	12	20	28	37	45	53	61	70	78
GPM (per nozzle)	1.60	2.00	2.40	2.80	3.20	3.60	3.99	4.39	4.79	1.71	2.14	2.57	3.00	3.42	3.85	4.28	4.71	5.14
Flow Indicator 7/16" SS Ball Level	2.2	3.3	4.3	5.3	6.4					2.5	3.6	4.7	5.9	7.0				

NOTE - The values highlighted in green indicate pressures that are in the optimal pressure range of 20 - 50 psi. The row spacing is 30 inches. The values highlighted in yellow indicate the ball that will keep it closest to the center of flow blockage monitor (3.5).