

# DEINES IRRIGATION INC.

SEPTEMBER 19, 2025

WISH-119606

CUSTOMER : DESENFANTS

1975 LOCKWOOD 2200  
9 TOWER - 1286.53 FT  
SYSTEM 700 GPM @ 35 PSI

P.O. NO. : 12390

SENNINGER UP3 LDN SPRAY NOZZLES  
SENNINGER 10 PSI REGULATORS  
NELSON R65i #65 ORANGE  
ELEVATION 25 FT UP, 5 FT DOWN

1101 MAIN STREET  
TORRINGTON, WYOMING 82240  
(307)532-1173

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#### WARRANTY

WATER APPLICATION UNIFORMITY OBTAINED WITH THIS SYSTEM CAN BE ADVERSELY AFFECTED BY MANY VARIABLES INCLUDING THE IMPROPER MAKEUP OR INSTALLATION OF THE SPRINKLER OR SPRAY NOZZLE PACKAGE, OBSTRUCTED NOZZLES, MAINTAINING INCORRECT PIVOT PRESSURE, UNFAVORABLE CLIMATIC CONDITIONS, TIGHT AND/OR SLOPING SOILS, IMPROPER END GUN ARC SETTINGS, ERRATIC AND IMPROPER OPERATING SPEED OF THE SYSTEM, POOR QUALITY OF WATER WITH ABRASIVES, CORROSIVES, AND/OR SOLIDS WHICH CAN CAUSE PLUGGING AND JAMMING, AS WELL AS INHERENT VARIABLES IN THE MANY COMPONENTS COMPRISING THE SYSTEM. THEREFORE WESTERN IRRIGATION SUPPLY HOUSE, INC., MAKES NO WARRANTY AS TO THE UNIFORMITY OF COVERAGE OBTAINED FROM THIS WATER APPLICATION PRINTOUT OTHER THAN ITS MATHEMATICAL ACCURACY.

IT IS THE RESPONSIBILITY OF THE END USER TO DETERMINE IF ANY INCOMPATIBILITY EXISTS BETWEEN THE WATER DISTRIBUTION DEVICES AND THE CROP, THE SOIL, AND THE PHYSICAL STRUCTURE OF THE MECHANICAL MOVE SYSTEM. WESTERN IRRIGATION SUPPLY HOUSE, INC., THEREFORE, DISCLAIMS ANY LIABILITY FOR DAMAGES DUE TO FAILURE OF THE SYSTEM TO PERFORM AS CONTEMPLATED.

FIGURES PRESENTED ON THIS COMPUTER PRINTOUT ARE BASED ON THE FOLLOWING:

1. DATA FURNISHED TO WESTERN IRRIGATION SUPPLY HOUSE, INC., ON PIPE LENGTH, DIAMETER, SURFACE FINISH, OUTLET SPACINGS, WATER FLOW, PIVOT PRESSURE AND ALL OTHER APPLICABLE INFORMATION.
2. THERE IS 100% WATER APPLICATION EFFICIENCY (ZERO WIND VELOCITY AND NO EVAPORATION).
3. PIVOT PRESSURE IS MEASURED ON THE MAIN HORIZONTAL DISTRIBUTION PIPE JUST AFTER THE LAST ELBOW.
4. MAIN PIPE PRESSURE IS CALCULATED AS IF THE PIVOT IS ALWAYS ON LEVEL GROUND.
5. SPRINKLER OR SPRAY NOZZLE BASE PRESSURE MAY BE LESS THAN MAIN LINE PIPE PRESSURE DUE TO THE USE OF PRESSURE REGULATORS. WHERE DROP PIPES ARE USED THE STATIC HEAD IS ADDED TO AND FRICTION LOSS IS SUBTRACTED FROM THE MAIN LINE PIPE PRESSURE TO DETERMINE INLET PSI. REGULATORS ARE CONSIDERED MOUNTED AT THE SAME HEIGHT AS THE SPRINKLING DEVICE UNLESS NOTED.

<u>DEALER</u>			<u>IRRIGATOR</u>				
DEINES IRRIGATION INC.			DESENFANTS				
1101 MAIN STREET							
TORRINGTON, WYOMING 82240			12390				
TOTAL TARGET GPM	700.00	FRICTION FACTOR USED	130	SPAN #	LENGTH	PIPE I.D.	# OF HEADS
TOP OF PIVOT PRESSURE	35.00	TOTAL LENGTH	1286.53	1	129.13	6.407	11
ENDGUN TARGET GPM	43.28	NUMBER OF TOWERS	9	2	126.30	6.407	12
NUMBER OF OUTLETS	122	NUMBER OF SPRINKLERS	121	3	126.30	6.407	12
						4	147.30
SENNINGER UP3 LDN SPRAY NOZZLES - FLAT GROOVED PADS						5	147.30
SENNINGER PSR-2 10 PSI SERIES REGULATORS						6	147.30
POLYDROPS® AVERAGE 6.5 FT						7	147.30
ELEVATION IS 25 FT UP AND 5 FT DOWN						8	147.30
						9	147.30
						OH	21.00
							6.407
							2

CAUTIONS AND WARNINGS

1. Inadequate crop clearance and/or structural interference may cause poor water distribution, resulting in decreased uniformity and possible streaking.

2. Over watering at beginning of system due to practical limitations on smallest nozzle sizes available and/or allowable for proper operation.

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE					SPRK NO.	REG SIZE	PLUG NO.
1		8.38	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	1
2	18.88	18.88	0.23	0.59	34.56	11.40	LD NOZ UP3	5	BEIGE			1	SPSR2-10	
3	10.50	29.38	0.24	0.59	34.26	11.40	LD NOZ UP3	5	BEIGE			2	SPSR2-10	
4	10.50	39.88	0.33	0.59	34.00	11.40	LD NOZ UP3	5	BEIGE			3	SPSR2-10	
5	10.50	50.38	0.42	0.59	33.79	11.40	LD NOZ UP3	5	BEIGE			4	SPSR2-10	
6	10.50	60.88	0.51	0.59	33.62	11.40	LD NOZ UP3	5	BEIGE			5	SPSR2-10	
7	10.50	71.38	0.59	0.59	33.50	11.40	LD NOZ UP3	5	BEIGE			6	SPSR2-10	
8	10.50	81.88	0.68	0.72	33.42	11.40	LD NOZ UP3	5.5	BEIGE			7	SPSR2-10	
9	10.50	92.38	0.77	0.72	33.38	11.40	LD NOZ UP3	5.5	BEIGE			8	SPSR2-10	
10	10.50	102.88	0.86	0.85	33.39	11.40	LD NOZ UP3	6	GOLD			9	SPSR2-10	
11	10.50	113.38	0.94	1.00	33.45	11.40	LD NOZ UP3	6.5	GOLD			10	SPSR2-10	
12	10.50	123.88	1.05	1.00	33.51	11.40	LD NOZ UP3	6.5	GOLD			11	SPSR2-10	
TOWER 1	129.13	129.13												
13	10.80	134.68	1.14	1.16	33.38	11.40	LD NOZ UP3	7	LIME			12	SPSR2-10	
14	10.50	145.18	1.21	1.16	33.05	11.40	LD NOZ UP3	7	LIME			13	SPSR2-10	
15	10.50	155.68	1.29	1.35	32.75	11.40	LD NOZ UP3	7.5	LIME			14	SPSR2-10	
16	10.50	166.18	1.38	1.35	32.50	11.40	LD NOZ UP3	7.5	LIME			15	SPSR2-10	
17	10.50	176.68	1.47	1.53	32.29	11.40	LD NOZ UP3	8	LAVENDER			16	SPSR2-10	
18	10.50	187.18	1.56	1.53	32.12	11.40	LD NOZ UP3	8	LAVENDER			17	SPSR2-10	
19	10.50	197.68	1.64	1.73	32.00	11.40	LD NOZ UP3	8.5	LAVENDER			18	SPSR2-10	
20	10.50	208.18	1.73	1.73	31.93	11.40	LD NOZ UP3	8.5	LAVENDER			19	SPSR2-10	
21	10.50	218.68	1.82	1.73	31.90	11.40	LD NOZ UP3	8.5	LAVENDER			20	SPSR2-10	
22	10.50	229.18	1.91	1.93	31.92	11.40	LD NOZ UP3	9	GREY			21	SPSR2-10	
23	10.50	239.68	1.99	1.93	31.98	11.40	LD NOZ UP3	9	GREY			22	SPSR2-10	
24	10.50	250.18	2.11	2.16	32.05	11.38	LD NOZ UP3	9.5	GREY			23	SPSR2-10	
TOWER 2	126.30	255.43												
25	10.80	260.98	2.20	2.16	31.92	11.38	LD NOZ UP3	9.5	GREY			24	SPSR2-10	
26	10.50	271.48	2.26	2.16	31.60	11.38	LD NOZ UP3	9.5	GREY			25	SPSR2-10	
27	10.50	281.98	2.35	2.39	31.30	11.36	LD NOZ UP3	10	TURQUOISE			26	SPSR2-10	
28	10.50	292.48	2.43	2.39	31.06	11.36	LD NOZ UP3	10	TURQUOISE			27	SPSR2-10	
29	10.50	302.98	2.52	2.63	30.86	11.34	LD NOZ UP3	10.5	TURQUOISE			28	SPSR2-10	
30	10.50	313.48	2.61	2.63	30.70	11.34	LD NOZ UP3	10.5	TURQUOISE			29	SPSR2-10	
31	10.50	323.98	2.69	2.63	30.59	11.34	LD NOZ UP3	10.5	TURQUOISE			30	SPSR2-10	
32	10.50	334.48	2.78	2.89	30.52	11.31	LD NOZ UP3	11	YELLOW			31	SPSR2-10	
33	10.50	344.98	2.87	2.89	30.50	11.31	LD NOZ UP3	11	YELLOW			32	SPSR2-10	
34	10.50	355.48	2.96	2.89	30.53	11.31	LD NOZ UP3	11	YELLOW			33	SPSR2-10	
35	10.50	365.98	3.04	3.15	30.60	11.28	LD NOZ UP3	11.5	YELLOW			34	SPSR2-10	
36	10.50	376.48	3.18	3.15	30.68	11.28	LD NOZ UP3	11.5	YELLOW			35	SPSR2-10	
TOWER 3	126.30	381.73												
37	10.80	387.28	3.27	3.16	30.57	11.28	LD NOZ UP3	11.5	YELLOW			36	SPSR2-10	
38	10.50	397.78	3.31	3.44	30.25	11.26	LD NOZ UP3	12	RED			37	SPSR2-10	
39	10.50	408.28	3.39	3.44	29.94	11.26	LD NOZ UP3	12	RED			38	SPSR2-10	
40	10.50	418.78	3.48	3.44	29.68	11.26	LD NOZ UP3	12	RED			39	SPSR2-10	
41	10.50	429.28	3.57	3.44	29.45	11.26	LD NOZ UP3	12	RED			40	SPSR2-10	
42	10.50	439.78	3.66	3.73	29.27	11.23	LD NOZ UP3	12.5	RED			41	SPSR2-10	
43	10.50	450.28	3.74	3.73	29.13	11.23	LD NOZ UP3	12.5	RED			42	SPSR2-10	
44	10.50	460.78	3.83	3.73	29.03	11.23	LD NOZ UP3	12.5	RED			43	SPSR2-10	
45	10.50	471.28	3.92	4.03	28.98	11.20	LD NOZ UP3	13	WHITE			44	SPSR2-10	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE				SPRK NO.	REG SIZE	PLUG NO.
46	10.50	481.78	4.01	4.03	28.96	11.20	LD NOZ UP3 13	WHITE			45	SPSR2-10	
47	10.50	492.28	4.09	4.03	28.99	11.20	LD NOZ UP3 13	WHITE			46	SPSR2-10	
48	10.50	502.78	4.18	4.03	29.06	11.20	LD NOZ UP3 13	WHITE			47	SPSR2-10	
49	10.50	513.28	4.27	4.34	29.18	11.17	LD NOZ UP3 13.5	WHITE			48	SPSR2-10	
50	10.50	523.78	4.42	4.34	29.26	11.17	LD NOZ UP3 13.5	WHITE			49	SPSR2-10	
TOWER 4	147.30	529.03											
51	10.80	534.58	4.51	4.66	29.17	11.13	LD NOZ UP3 14	BLUE			50	SPSR2-10	
52	10.50	545.08	4.53	4.66	28.87	11.13	LD NOZ UP3 14	BLUE			51	SPSR2-10	
53	10.50	555.58	4.62	4.66	28.58	11.13	LD NOZ UP3 14	BLUE			52	SPSR2-10	
54	10.50	566.08	4.71	4.66	28.33	11.13	LD NOZ UP3 14	BLUE			53	SPSR2-10	
55	10.50	576.58	4.79	4.66	28.12	11.13	LD NOZ UP3 14	BLUE			54	SPSR2-10	
56	10.50	587.08	4.88	4.99	27.96	11.10	LD NOZ UP3 14.5	BLUE			55	SPSR2-10	
57	10.50	597.58	4.97	4.99	27.83	11.10	LD NOZ UP3 14.5	BLUE			56	SPSR2-10	
58	10.50	608.08	5.06	4.99	27.75	11.10	LD NOZ UP3 14.5	BLUE			57	SPSR2-10	
59	10.50	618.58	5.14	4.99	27.72	11.10	LD NOZ UP3 14.5	BLUE			58	SPSR2-10	
60	10.50	629.08	5.23	5.34	27.72	11.04	LD NOZ UP3 15	DK BROWN			59	SPSR2-10	
61	10.50	639.58	5.32	5.34	27.77	11.04	LD NOZ UP3 15	DK BROWN			60	SPSR2-10	
62	10.50	650.08	5.41	5.34	27.86	11.04	LD NOZ UP3 15	DK BROWN			61	SPSR2-10	
63	10.50	660.58	5.49	5.34	27.99	11.04	LD NOZ UP3 15	DK BROWN			62	SPSR2-10	
64	10.50	671.08	5.66	5.68	28.09	10.98	LD NOZ UP3 15.5	DK BROWN			63	SPSR2-10	
TOWER 5	147.30	676.33											
65	10.80	681.88	5.75	5.68	28.02	10.98	LD NOZ UP3 15.5	DK BROWN			64	SPSR2-10	
66	10.50	692.38	5.76	5.68	27.74	10.98	LD NOZ UP3 15.5	DK BROWN			65	SPSR2-10	
67	10.50	702.88	5.85	5.68	27.47	10.98	LD NOZ UP3 15.5	DK BROWN			66	SPSR2-10	
68	10.50	713.38	5.94	6.04	27.24	10.91	LD NOZ UP3 16	ORANGE			67	SPSR2-10	
69	10.50	723.88	6.03	6.04	27.05	10.91	LD NOZ UP3 16	ORANGE			68	SPSR2-10	
70	10.50	734.38	6.11	6.04	26.91	10.91	LD NOZ UP3 16	ORANGE			69	SPSR2-10	
71	10.50	744.88	6.20	6.04	26.80	10.91	LD NOZ UP3 16	ORANGE			70	SPSR2-10	
72	10.50	755.38	6.29	6.40	26.74	10.85	LD NOZ UP3 16.5	ORANGE			71	SPSR2-10	
73	10.50	765.88	6.38	6.41	26.73	10.85	LD NOZ UP3 16.5	ORANGE			72	SPSR2-10	
74	10.50	776.38	6.46	6.41	26.75	10.85	LD NOZ UP3 16.5	ORANGE			73	SPSR2-10	
75	10.50	786.88	6.55	6.41	26.82	10.85	LD NOZ UP3 16.5	ORANGE			74	SPSR2-10	
76	10.50	797.38	6.64	6.78	26.93	10.78	LD NOZ UP3 17	DK GREEN			75	SPSR2-10	
77	10.50	807.88	6.73	6.78	27.08	10.78	LD NOZ UP3 17	DK GREEN			76	SPSR2-10	
78	10.50	818.38	6.91	6.78	27.21	10.78	LD NOZ UP3 17	DK GREEN			77	SPSR2-10	
TOWER 6	147.30	823.63											
79	10.80	829.18	7.00	7.16	27.15	10.71	LD NOZ UP3 17.5	DK GREEN			78	SPSR2-10	
80	10.50	839.68	6.99	7.16	26.90	10.71	LD NOZ UP3 17.5	DK GREEN			79	SPSR2-10	
81	10.50	850.18	7.07	7.16	26.65	10.71	LD NOZ UP3 17.5	DK GREEN			80	SPSR2-10	
82	10.50	860.68	7.16	7.16	26.44	10.71	LD NOZ UP3 17.5	DK GREEN			81	SPSR2-10	
83	10.50	871.18	7.25	7.16	26.27	10.71	LD NOZ UP3 17.5	DK GREEN			82	SPSR2-10	
84	10.50	881.68	7.34	7.16	26.15	10.71	LD NOZ UP3 17.5	DK GREEN			83	SPSR2-10	
85	10.50	892.18	7.43	7.55	26.07	10.64	LD NOZ UP3 18	PURPLE			84	SPSR2-10	
86	10.50	902.68	7.51	7.55	26.03	10.64	LD NOZ UP3 18	PURPLE			85	SPSR2-10	
87	10.50	913.18	7.60	7.55	26.03	10.64	LD NOZ UP3 18	PURPLE			86	SPSR2-10	
88	10.50	923.68	7.69	7.55	26.08	10.64	LD NOZ UP3 18	PURPLE			87	SPSR2-10	
89	10.50	934.18	7.78	7.95	26.17	10.57	LD NOZ UP3 18.5	PURPLE			88	SPSR2-10	
90	10.50	944.68	7.86	7.95	26.30	10.57	LD NOZ UP3 18.5	PURPLE			89	SPSR2-10	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE					SPRK NO.	REG SIZE	PLUG NO.
TOWER 7	91	10.50	955.18	7.95	7.95	26.47	10.57	LD	NOZ	UP3	18.5	PURPLE	90	SPSR2-10
	92	10.50	965.68	8.15	7.95	26.62	10.57	LD	NOZ	UP3	18.5	PURPLE	91	SPSR2-10
		147.30	970.93											
	93	10.80	976.48	8.24	8.35	26.59	10.50	LD	NOZ	UP3	19	BLACK	92	SPSR2-10
	94	10.50	986.98	8.21	8.35	26.35	10.50	LD	NOZ	UP3	19	BLACK	93	SPSR2-10
	95	10.50	997.48	8.30	8.35	26.12	10.50	LD	NOZ	UP3	19	BLACK	94	SPSR2-10
	96	10.50	1007.98	8.38	8.35	25.93	10.50	LD	NOZ	UP3	19	BLACK	95	SPSR2-10
	97	10.50	1018.48	8.47	8.35	25.79	10.50	LD	NOZ	UP3	19	BLACK	96	SPSR2-10
	98	10.50	1028.98	8.56	8.76	25.69	10.42	LD	NOZ	UP3	19.5	BLACK	97	SPSR2-10
	99	10.50	1039.48	8.64	8.76	25.62	10.42	LD	NOZ	UP3	19.5	BLACK	98	SPSR2-10
100	10.50	1049.98	8.72	8.76	25.61	10.42	LD	NOZ	UP3	19.5	BLACK	99	SPSR2-10	
101	10.50	1060.48	8.81	8.76	25.63	10.42	LD	NOZ	UP3	19.5	BLACK	100	SPSR2-10	
102	10.50	1070.98	8.90	8.76	25.70	10.43	LD	NOZ	UP3	19.5	BLACK	101	SPSR2-10	
103	10.50	1081.48	8.99	9.17	25.80	10.35	LD	NOZ	UP3	20	DK TURQUOISE	102	SPSR2-10	
104	10.50	1091.98	9.07	9.18	25.95	10.35	LD	NOZ	UP3	20	DK TURQUOISE	103	SPSR2-10	
105	10.50	1102.48	9.15	9.18	26.15	10.35	LD	NOZ	UP3	20	DK TURQUOISE	104	SPSR2-10	
106	10.50	1112.98	9.37	9.18	26.31	10.35	LD	NOZ	UP3	20	DK TURQUOISE	105	SPSR2-10	
TOWER 8	147.30	1118.23												
107	10.80	1123.78	9.47	9.60	26.30	10.27	LD	NOZ	UP3	20.5	DK TURQ	106	SPSR2-10	
108	10.50	1134.28	9.42	9.60	26.08	10.27	LD	NOZ	UP3	20.5	DK TURQ	107	SPSR2-10	
109	10.50	1144.78	9.50	9.60	25.86	10.27	LD	NOZ	UP3	20.5	DK TURQ	108	SPSR2-10	
110	10.50	1155.28	9.58	9.60	25.69	10.27	LD	NOZ	UP3	20.5	DK TURQ	109	SPSR2-10	
111	10.50	1165.78	9.66	9.60	25.56	10.27	LD	NOZ	UP3	20.5	DK TURQ	110	SPSR2-10	
112	10.50	1176.28	9.75	9.60	25.48	10.27	LD	NOZ	UP3	20.5	DK TURQ	111	SPSR2-10	
113	10.50	1186.78	9.86	10.02	25.43	10.19	LD	NOZ	UP3	21	MUSTARD	112	SPSR2-10	
114	10.50	1197.28	9.92	10.02	25.43	10.19	LD	NOZ	UP3	21	MUSTARD	113	SPSR2-10	
115	10.50	1207.78	10.00	10.03	25.47	10.19	LD	NOZ	UP3	21	MUSTARD	114	SPSR2-10	
116	10.50	1218.28	10.08	10.03	25.55	10.20	LD	NOZ	UP3	21	MUSTARD	115	SPSR2-10	
117	10.50	1228.78	10.18	10.03	25.67	10.20	LD	NOZ	UP3	21	MUSTARD	116	SPSR2-10	
118	10.50	1239.28	10.30	10.44	25.83	10.08	LD	NOZ	UP3	21.5	MUSTARD	117	SPSR2-10	
119	10.50	1249.78	10.35	10.44	26.04	10.08	LD	NOZ	UP3	21.5	MUSTARD	118	SPSR2-10	
120	10.50	1260.28	11.15	11.29	26.21	9.86	LD	NOZ	UP3	22.5	MAROON	119	SPSR2-10	
TOWER 9	147.30	1265.53												
121	12.00	1272.28	10.42	10.44	26.21	10.08	LD	NOZ	UP3	21.5	MUSTARD	120	SPSR2-10	
122	9.00	1281.28	9.92	10.02	26.21	10.19	LD	NOZ	UP3	21	MUSTARD	121	SPSR2-10	
OVERHANG	21.00	1286.53		43.50	ENDGUN	( 1 )	NELSON R65i #65 ORANGE							

THERE IS NO BOOSTER PUMP

FRICTION LOSS THROUGH ENDGUN VALVE IS 0.63 PSI - ENDGUN PRESSURE IS 25.58 PSI

TOTAL GPM = 700.51

GPA = 5.50

MINIMUM RECOMMENDED REGULATOR INLET PRESSURE IS 15.00 PSI

WITH GRADUATED ELEVATION OF 25.00 FT THE INLET PRESSURE IS 16.98 PSI FOR SPRINKLER 119

THIS POSITION IS THE CLOSEST TO THE MINIMUM RECOMMENDED INLET PRESSURE

### HYDRAULICS SUMMARY

<u>TOWER NUMBER</u>	<u>ACRES UNDER SPAN</u>	<u>GPM NEED</u>	<u>ACTUAL GPM</u>	<u>PERCENT DEVIATION</u>	<u>GPM PER ACRE</u>	<u>AVERAGE IN. PER HR DELIVERED UNDER SPAN</u>	<u>AVERAGE IN. DELIVERED FOR REVOLUTION TIME</u>		
							<u>36 HR</u>	<u>48 HR</u>	<u>60 HR</u>
1	1.20	6.62	7.84	19%	6.52	0.014	0.52	0.69	0.86
2	3.50	19.27	19.23	0%	5.49	0.012	0.44	0.58	0.73
3	5.80	31.93	31.95	0%	5.51	0.012	0.44	0.58	0.73
4	9.68	53.23	52.97	0%	5.47	0.012	0.44	0.58	0.73
5	12.81	70.45	70.23	0%	5.48	0.012	0.44	0.58	0.73
6	15.93	87.66	87.23	0%	5.47	0.012	0.44	0.58	0.73
7	19.06	104.88	104.95	0%	5.51	0.012	0.44	0.58	0.73
8	22.19	122.10	122.24	0%	5.51	0.012	0.44	0.58	0.73
9	25.32	139.32	139.02	0%	5.49	0.012	0.44	0.58	0.73
OVERHANG	3.87	21.26	21.36	0%	5.53	0.012	0.44	0.59	0.73
ENDGUN	7.10	43.28	43.50	11%	6.13				
TOTAL	126.47	700.00	700.51		5.54				

**SUMMARY OF SPRINKLERS**

6 LD NOZ UP3 5 BEIGE  
2 LD NOZ UP3 5.5 BEIGE  
1 LD NOZ UP3 6 GOLD  
2 LD NOZ UP3 6.5 GOLD  
2 LD NOZ UP3 7 LIME  
2 LD NOZ UP3 7.5 LIME  
2 LD NOZ UP3 8 LAVENDER  
3 LD NOZ UP3 8.5 LAVENDER  
2 LD NOZ UP3 9 GREY  
3 LD NOZ UP3 9.5 GREY  
2 LD NOZ UP3 10 TURQUOISE  
3 LD NOZ UP3 10.5 TURQUOISE  
3 LD NOZ UP3 11 YELLOW  
3 LD NOZ UP3 11.5 YELLOW  
4 LD NOZ UP3 12 RED  
3 LD NOZ UP3 12.5 RED  
4 LD NOZ UP3 13 WHITE  
2 LD NOZ UP3 13.5 WHITE  
5 LD NOZ UP3 14 BLUE  
4 LD NOZ UP3 14.5 BLUE  
4 LD NOZ UP3 15 DK BROWN  
4 LD NOZ UP3 15.5 DK BROWN  
4 LD NOZ UP3 16 ORANGE  
4 LD NOZ UP3 16.5 ORANGE  
3 LD NOZ UP3 17 DK GREEN  
6 LD NOZ UP3 17.5 DK GREEN  
4 LD NOZ UP3 18 PURPLE  
4 LD NOZ UP3 18.5 PURPLE  
5 LD NOZ UP3 19 BLACK  
5 LD NOZ UP3 19.5 BLACK  
4 LD NOZ UP3 20 DK TURQUOISE  
6 LD NOZ UP3 20.5 DK TURQ  
6 LD NOZ UP3 21 MUSTARD  
3 LD NOZ UP3 21.5 MUSTARD  
1 LD NOZ UP3 22.5 MAROON

**1 PLUG****SUMMARY OF REGULATORS**

121 Senn PSR2 10 psi

**TOTAL OF 121 REGULATORS**



## NOZZLE POSITION CHART

LD NOZ UP3 5 BEIGE	1, 2, 3, 4, 5, 6
LD NOZ UP3 5.5 BEIGE	7, 8
LD NOZ UP3 6 GOLD	9
LD NOZ UP3 6.5 GOLD	10, 11
LD NOZ UP3 7 LIME	12, 13
LD NOZ UP3 7.5 LIME	14, 15
LD NOZ UP3 8 LAVENDER	16, 17
LD NOZ UP3 8.5 LAVENDER	18, 19, 20
LD NOZ UP3 9 GREY	21, 22
LD NOZ UP3 9.5 GREY	23, 24, 25
LD NOZ UP3 10 TURQUOISE	26, 27
LD NOZ UP3 10.5 TURQUOISE	28, 29, 30
LD NOZ UP3 11 YELLOW	31, 32, 33
LD NOZ UP3 11.5 YELLOW	34, 35, 36
LD NOZ UP3 12 RED	37, 38, 39, 40
LD NOZ UP3 12.5 RED	41, 42, 43
LD NOZ UP3 13 WHITE	44, 45, 46, 47
LD NOZ UP3 13.5 WHITE	48, 49
LD NOZ UP3 14 BLUE	50, 51, 52, 53, 54
LD NOZ UP3 14.5 BLUE	55, 56, 57, 58
LD NOZ UP3 15 DK BROWN	59, 60, 61, 62
LD NOZ UP3 15.5 DK BROWN	63, 64, 65, 66
LD NOZ UP3 16 ORANGE	67, 68, 69, 70
LD NOZ UP3 16.5 ORANGE	71, 72, 73, 74
LD NOZ UP3 17 DK GREEN	75, 76, 77
LD NOZ UP3 17.5 DK GREEN	78, 79, 80, 81, 82, 83
LD NOZ UP3 18 PURPLE	84, 85, 86, 87
LD NOZ UP3 18.5 PURPLE	88, 89, 90, 91
LD NOZ UP3 19 BLACK	92, 93, 94, 95, 96
LD NOZ UP3 19.5 BLACK	97, 98, 99, 100, 101
LD NOZ UP3 20 DK TURQUOISE	102, 103, 104, 105
LD NOZ UP3 20.5 DK TURQ	106, 107, 108, 109, 110, 111
LD NOZ UP3 21 MUSTARD	112, 113, 114, 115, 116, 121
LD NOZ UP3 21.5 MUSTARD	117, 118, 120
LD NOZ UP3 22.5 MAROON	119

Rotation time at 100% = 14.05 Hours Or 843 minutes

700 GPM @ 35 PSI

Installation Chart

Page 1

Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg
1	PLUG				7		56	14.5	PSR210	7		112	21	PSR210
2		1	5	PSR210	8		57	14.5	PSR210	8		113	21	PSR210
3		2	5	PSR210	9		58	14.5	PSR210	9		114	21	PSR210
4		3	5	PSR210	10		59	15	PSR210	10		115	21	PSR210
5		4	5	PSR210	11		60	15	PSR210	11		116	21	PSR210
6		5	5	PSR210	12		61	15	PSR210	12		117	21.5	PSR210
7		6	5	PSR210	13		62	15	PSR210	13		118	21.5	PSR210
8		7	5.5	PSR210	14		63	15.5	PSR210	14		119	22.5	PSR210
9		8	5.5	PSR210		TOWER 5					TOWER 9			
10		9	6	PSR210	1		64	15.5	PSR210	1		120	21.5	PSR210
11		10	6.5	PSR210	2		65	15.5	PSR210	2		121	21	PSR210
12		11	6.5	PSR210	3		66	15.5	PSR210					
	TOWER 1				4		67	16	PSR210					
1		12	7	PSR210	5		68	16	PSR210					
2		13	7	PSR210	6		69	16	PSR210					
3		14	7.5	PSR210	7		70	16	PSR210					
4		15	7.5	PSR210	8		71	16.5	PSR210					
5		16	8	PSR210	9		72	16.5	PSR210					
6		17	8	PSR210	10		73	16.5	PSR210					
7		18	8.5	PSR210	11		74	16.5	PSR210					
8		19	8.5	PSR210	12		75	17	PSR210					
9		20	8.5	PSR210	13		76	17	PSR210					
10		21	9	PSR210	14		77	17	PSR210					
11		22	9	PSR210		TOWER 6								
12		23	9.5	PSR210	1		78	17.5	PSR210					
	TOWER 2				2		79	17.5	PSR210					
1		24	9.5	PSR210	3		80	17.5	PSR210					
2		25	9.5	PSR210	4		81	17.5	PSR210					
3		26	10	PSR210	5		82	17.5	PSR210					
4		27	10	PSR210	6		83	17.5	PSR210					
5		28	10.5	PSR210	7		84	18	PSR210					
6		29	10.5	PSR210	8		85	18	PSR210					
7		30	10.5	PSR210	9		86	18	PSR210					
8		31	11	PSR210	10		87	18	PSR210					
9		32	11	PSR210	11		88	18.5	PSR210					
10		33	11	PSR210	12		89	18.5	PSR210					
11		34	11.5	PSR210	13		90	18.5	PSR210					
12		35	11.5	PSR210	14		91	18.5	PSR210					
	TOWER 3					TOWER 7								
1		36	11.5	PSR210	1		92	19	PSR210					
2		37	12	PSR210	2		93	19	PSR210					
3		38	12	PSR210	3		94	19	PSR210					
4		39	12	PSR210	4		95	19	PSR210					
5		40	12	PSR210	5		96	19	PSR210					
6		41	12.5	PSR210	6		97	19.5	PSR210					
7		42	12.5	PSR210	7		98	19.5	PSR210					
8		43	12.5	PSR210	8		99	19.5	PSR210					
9		44	13	PSR210	9		100	19.5	PSR210					
10		45	13	PSR210	10		101	19.5	PSR210					
11		46	13	PSR210	11		102	20	PSR210					
12		47	13	PSR210	12		103	20	PSR210					
13		48	13.5	PSR210	13		104	20	PSR210					
14		49	13.5	PSR210	14		105	20	PSR210					
	TOWER 4					TOWER 8								
1		50	14	PSR210	1		106	20.5	PSR210					
2		51	14	PSR210	2		107	20.5	PSR210					
3		52	14	PSR210	3		108	20.5	PSR210					
4		53	14	PSR210	4		109	20.5	PSR210					
5		54	14	PSR210	5		110	20.5	PSR210					
6		55	14.5	PSR210	6		111	20.5	PSR210					

PRECIPITATION CHART FOR FULL CIRCLE

WISH-119606

SEPTEMBER 19, 2025

DEALER - DEINES IRRIGATION INC.

IRRIGATOR - DESENFANTS

TOTAL LENGTH PIPE = 1286.53    SYSTEM PRESSURE = 35 PSI  
GPM UNDER PIPE = 657.01    TOTAL GPM = 700.51  
ACRES UNDER PIPE = 119.37  
RANGE OF ENDGUN = 37.70  
GPM OF ENDGUN = 43.50  
ACRES UNDER ENDGUN = 7.10  
WATERING LENGTH = 1324.23

MOTOR SIZE (HP) = 3/4  
LOADED MOTOR RPM = 1725  
CENTER GEAR BOX RATIO = 40  
WHEEL GEAR BOX RATIO = 50  
TIRE SIZE = 11 X 22.5  
LAST TOWER SPEED (FPM) = 9.43

PRECIPITATION DATA FIGURED WITH ENDGUN RUNNING

PRECIPITATION BASED			% TIMER BASED		
PRECIPITATION INCHES	% TIMER SETTING	TIME HOURS	% TIMER SETTING	PRECIPITATION INCHES	TIME HOURS
.17	100.00	14.05 - 843(min)	100.00	.17	14.05 - 843(min)
.20	85.45	16.45	90.00	.19	15.62
.25	68.36	20.56	80.00	.21	17.57
.30	56.97	24.67	70.00	.24	20.08
.40	42.73	32.89	60.00	.28	23.42
.50	34.18	41.11	50.00	.34	28.11
.60	28.48	49.34	45.00	.38	31.23
.70	24.42	57.56	40.00	.43	35.13
.75	22.79	61.67	35.00	.49	40.15
.80	21.36	65.78	30.00	.57	46.85
.90	18.99	74.01	25.00	.68	56.21
1.00	17.09	82.23	20.00	.85	70.27
1.25	13.67	102.79	15.00	1.14	93.69
1.50	11.39	123.34	10.00	1.71	140.54
1.75	9.77	143.90	5.00	3.42	281.07

CAUTION: The relationship between precipitation rate, timer setting, and hours per revolution provided above are theoretical numbers based on the data list at the top of the page. Actual precipitation rates may vary due to the following field and machine conditions: wind drift; evaporation; tire slippage, tire loaded radius; drive train efficiency; elevation changes; soil type. Due to these varying field and machine conditions the above chart should be used as a guide only.