

21AP Performance

METRIC

Pressure psi	Nozzle	Radius ft.	Flow GPM	■	▲
				Precip In/h	Precip In/h
40	08	41	2.8	0.16	0.19
	09	42	3.5	0.19	0.22
	10 *	43	4.4	0.23	0.26
	11	43	5.3	0.28	0.32
50	08	42	3.2	0.17	0.20
	09	43	3.9	0.20	0.23
	10 *	44	4.9	0.24	0.28
	11	45	5.9	0.28	0.32
60	08	43	3.5	0.18	0.21
	09	44	4.3	0.21	0.25
	10 *	45	5.4	0.26	0.30
	11	46	6.5	0.30	0.34
70	08	43	3.8	0.20	0.23
	09	44	4.6	0.23	0.26
	10 *	45	5.8	0.28	0.32
	11	47	7.0	0.31	0.35
80	08	44	4.0	0.20	0.23
	09	45	4.9	0.23	0.27
	10 *	46	6.2	0.28	0.33
	11	47	7.5	0.33	0.38

Precipitation Rates based on full-circle operation.

- Square spacing based on 50% diameter of throw.
- ▲ Triangular spacing based on 50% diameter of throw.

* Standard Nozzle Size

Performance data collected in zero wind conditions.

Pressure bars	Nozzle	Radius m	Flow m ³ /h	Flow l/s	■	▲
					Precip mm/h	Precip mm/h
2,8	08	12,5	0,64	0,18	4	5
	09	12,8	0,79	0,22	5	6
	10 *	13,1	1,00	0,28	6	7
	11	13,1	1,20	0,33	7	8
3,0	08	12,6	0,67	0,19	4	5
	09	12,9	0,83	0,23	5	6
	10 *	13,3	1,04	0,29	6	7
	11	13,4	1,26	0,35	7	8
3,5	08	12,8	0,72	0,20	4	5
	09	13,1	0,89	0,25	5	6
	10 *	13,4	1,12	0,31	6	7
	11	13,6	1,35	0,37	7	8
4,0	08	12,9	0,77	0,21	5	5
	09	13,3	0,95	0,26	5	6
	10 *	13,6	1,19	0,33	6	7
	11	13,8	1,44	0,40	7	9
4,5	08	13,1	0,82	0,23	5	6
	09	13,4	1,00	0,28	6	6
	10 *	13,7	1,27	0,35	7	8
	11	14,1	1,53	0,42	8	9
5,0	08	13,3	0,87	0,24	5	6
	09	13,6	1,06	0,29	6	7
	10 *	13,9	1,34	0,37	7	8
	11	14,3	1,64	0,45	8	9
5,5	08	13,4	0,91	0,25	5	6
	09	13,7	1,11	0,31	6	7
	10 *	14,0	1,41	0,39	7	8
	11	14,3	1,70	0,47	8	10

31AP Performance

METRIC

Pressure psi	Nozzle	Radius ft.	Flow GPM	■	▲
				Precip In/h	Precip In/h
40	12	44	6.3	0.31	0.36
	13	44	7.3	0.36	0.42
	14 *	44	8.4	0.42	0.48
	15	45	9.6	0.46	0.53
50	12	45	7	0.33	0.38
	13	45	8.2	0.39	0.45
	14 *	46	9.4	0.43	0.49
	15	46	10.8	0.49	0.57
60	12	46	7.7	0.35	0.40
	13	46	9	0.41	0.47
	14 *	47	10.4	0.45	0.52
	15	47	11.8	0.51	0.59
70	12	47	8.3	0.36	0.42
	13	47	9.8	0.43	0.49
	14 *	48	11.3	0.47	0.55
	15	48	12.8	0.54	0.62
80	12	48	8.9	0.37	0.43
	13	48	10.5	0.44	0.51
	14 *	49	12.1	0.49	0.56
	15	49	13.7	0.55	0.63

Pressure bars	Nozzle	Radius m	Flow m ³ /h	Flow l/s	■	▲
					Precip mm/h	Precip mm/h
2,8	12	13,4	1,43	0,40	8	9
	13	13,4	1,66	0,46	9	11
	14 *	13,4	1,91	0,53	11	12
	15	13,7	2,18	0,60	12	13
3,0	12	13,5	1,49	0,41	8	9
	13	13,5	1,73	0,48	9	11
	14 *	13,7	1,99	0,55	11	12
	15	13,8	2,28	0,63	12	14
3,5	12	13,7	1,60	0,44	8	10
	13	13,7	1,87	0,52	10	11
	14 *	13,9	2,15	0,60	11	13
	15	14,1	2,45	0,68	12	14
4,0	12	14,0	1,70	0,47	9	10
	13	14,0	2,00	0,55	10	12
	14 *	14,2	2,30	0,64	11	13
	15	14,3	2,62	0,73	13	15
4,5	12	14,2	1,81	0,50	9	10
	13	14,2	2,13	0,59	11	12
	14 *	14,5	2,45	0,68	12	14
	15	14,5	2,79	0,77	13	15
5,0	12	14,4	1,92	0,53	9	11
	13	14,4	2,26	0,63	11	13
	14 *	14,7	2,61	0,72	12	14
	15	14,7	2,95	0,82	14	16
5,5	12	14,6	2,02	0,56	9	11
	13	14,6	2,38	0,66	11	13
	14 *	14,9	2,75	0,76	12	14
	15	14,9	3,11	0,86	14	16

Precipitation Rates based on full-circle operation.

■ Square spacing based on 50% diameter of throw.

▲ Triangular spacing based on 50% diameter of throw.

* Standard Nozzle Size

Performance data collected in zero wind conditions.

Performance data derived from tests that conform with ASAE Standards; ASAE S398.1. See page 6 for complete ASAE Test Certification Statement.



41-51AP/41-51A-SAM Performance

Pressure psi	Nozzle	Radius ft.	Flow GPM	■	▲	Pressure psi	Nozzle	Radius ft.	Flow GPM	■	▲
				Precip In/h	Precip In/h					Precip In/h	Precip In/h
50	● 11 x 11	52	12.4	0.44	0.51	80	● 11 x 11	57	15.5	0.46	0.53
	● 12 x 11	53	13.4	0.46	0.53		● 12 x 11	59	16.7	0.46	0.53
	● 13 x 11	55	14.5	0.46	0.53		● 13 x 11	60	18.0	0.48	0.56
	○ 14 x 11 *	57	16.6	0.49	0.57		○ 14 x 11 *	63	20.7	0.50	0.58
	● 16 x 11	60	19.0	0.51	0.59		● 16 x 11	66	23.7	0.52	0.61
	● 18 x 11.5	62	21.7	0.54	0.63		● 18 x 11.5	69	27.1	0.55	0.63
	● 20 x 11.5	65	24.7	0.56	0.65		● 20 x 11.5	72	30.8	0.57	0.66
	● 22 x 13	69	28.9	0.58	0.68		● 22 x 13	76	36.0	0.60	0.69
	● 24 x 13	72	33.3	0.62	0.71		● 24 x 13	79	41.5	0.64	0.74
60	● 11 x 11	54	13.5	0.45	0.51	90	● 11 x 11	59	16.4	0.45	0.52
	● 12 x 11	55	14.6	0.46	0.54		● 12 x 11	60	17.6	0.47	0.54
	● 13 x 11	57	15.8	0.47	0.54		● 13 x 11	62	19.1	0.48	0.55
	○ 14 x 11 *	59	18.0	0.50	0.58		○ 14 x 11 *	65	21.8	0.50	0.57
	● 16 x 11	62	20.7	0.52	0.60		● 16 x 11	68	25.0	0.52	0.60
	● 18 x 11.5	65	23.7	0.54	0.62		● 18 x 11.5	71	28.7	0.55	0.63
	● 20 x 11.5	68	26.9	0.56	0.65		● 20 x 11.5	74	32.6	0.57	0.66
	● 22 x 13	71	31.4	0.60	0.69		● 22 x 13	78	38.1	0.60	0.70
	● 24 x 13	75	36.3	0.62	0.72		● 24 x 13	81	43.9	0.64	0.74
70	● 11 x 11	56	14.5	0.45	0.51	100	● 11 x 11	60	17.2	0.46	0.53
	● 12 x 11	57	15.7	0.47	0.54		● 12 x 11	62	18.5	0.46	0.54
	● 13 x 11	59	16.9	0.47	0.54		● 13 x 11	63	20.1	0.49	0.56
	○ 14 x 11 *	61	19.4	0.50	0.58		○ 14 x 11 *	66	23.0	0.51	0.59
	● 16 x 11	64	22.2	0.52	0.60		● 16 x 11	69	26.3	0.53	0.61
	● 18 x 11.5	67	25.5	0.55	0.63		● 18 x 11.5	72	30.2	0.56	0.65
	● 20 x 11.5	70	28.9	0.57	0.66		● 20 x 11.5	75	34.2	0.59	0.68
	● 22 x 13	74	33.8	0.59	0.69		● 22 x 13	79	40.0	0.62	0.71
	● 24 x 13	77	39.0	0.63	0.73		● 24 x 13	83	46.1	0.64	0.74

Precipitation Rates based on full-circle operation.

■ Square spacing based on 50% diameter of throw.

▲ Triangular spacing based on 50% diameter of throw.

* Standard Nozzle Size

Performance data collected in zero wind conditions.

41-51AP/41-51A/41-51A-SAM Performance

METRIC

Pressure bars	Nozzle	Radius m	Flow m³/h	Flow l/s	■	▲
					Precip mm/h	Precip mm/h
3,5	● 11 x 11	15,9	2,81	0,78	11	13
	● 12 x 11	16,2	3,04	0,84	12	13
	● 13 x 11	16,8	3,29	0,91	12	14
	○ 14 x 11 *	17,4	3,77	1,05	12	14
	● 16 x 11	18,3	4,31	1,20	13	15
	● 18 x 11,5	18,9	4,93	1,37	14	16
	● 20 x 11,5	19,8	5,61	1,56	14	16
	● 22 x 13	21,0	6,56	1,82	15	17
4,0	● 11 x 11	16,4	3,01	0,84	11	13
	● 12 x 11	16,7	3,26	0,90	12	14
	● 13 x 11	17,3	3,52	0,98	12	14
	○ 14 x 11 *	17,9	4,03	1,12	13	15
	● 16 x 11	18,8	4,62	1,28	13	15
	● 18 x 11,5	19,6	5,28	1,47	14	16
	● 20 x 11,5	20,5	6,00	1,67	14	16
	● 22 x 13	21,6	7,02	1,95	15	17
4,5	● 11 x 11	16,7	3,17	0,88	11	13
	● 12 x 11	17,1	3,43	0,95	12	14
	● 13 x 11	17,6	3,70	1,03	12	14
	○ 14 x 11 *	18,3	4,24	1,18	13	15
	● 16 x 11	19,2	4,86	1,35	13	15
	● 18 x 11,5	20,0	5,56	1,54	14	16
	● 20 x 11,5	21,0	6,32	1,75	14	17
	● 22 x 13	22,1	7,38	2,05	15	17
5,0	● 11 x 11	17,1	3,33	0,92	11	13
	● 12 x 11	17,5	3,59	1,00	12	14
	● 13 x 11	18,0	3,89	1,08	12	14
	○ 14 x 11 *	18,7	4,45	1,23	13	15
	● 16 x 11	19,6	5,10	1,41	13	15
	● 18 x 11,5	20,5	5,84	1,62	14	16
	● 20 x 11,5	21,4	6,63	1,84	14	17
	● 22 x 13	22,6	7,75	2,15	15	18
5,5	● 11 x 11	17,4	3,49	0,97	12	13
	● 12 x 11	17,8	3,76	1,04	12	14
	● 13 x 11	18,3	4,07	1,13	12	14
	○ 14 x 11 *	19,1	4,66	1,29	13	15
	● 16 x 11	20,0	5,33	1,48	13	15
	● 18 x 11,5	20,9	6,12	1,70	14	16
	● 20 x 11,5	21,8	6,94	1,93	15	17
	● 22 x 13	23,0	8,11	2,25	15	18
6,0	● 11 x 11	17,8	3,65	1,01	12	13
	● 12 x 11	18,2	3,93	1,09	12	14
	● 13 x 11	18,7	4,25	1,18	12	14
	○ 14 x 11 *	19,5	4,87	1,35	13	15
	● 16 x 11	20,5	5,57	1,55	13	15
	● 18 x 11,5	21,4	6,39	1,77	14	16
	● 20 x 11,5	22,3	7,25	2,01	15	17
	● 22 x 13	23,5	8,48	2,35	15	18
6,5	● 11 x 11	18,1	3,81	1,06	12	13
	● 12 x 11	18,6	4,09	1,14	12	14
	● 13 x 11	19,0	4,44	1,23	12	14
	○ 14 x 11 *	19,9	5,08	1,41	13	15
	● 16 x 11	20,9	5,81	1,61	13	15
	● 18 x 11,5	21,8	6,67	1,85	14	16
	● 20 x 11,5	22,7	7,57	2,10	15	17
	● 22 x 13	23,9	8,85	2,46	15	18
6,9	● 11 x 11	18,3	3,90	1,08	12	13
	● 12 x 11	18,9	4,20	1,17	12	14
	● 13 x 11	19,2	4,56	1,27	12	14
	○ 14 x 11 *	20,1	5,22	1,45	13	15
	● 16 x 11	21,0	5,97	1,66	13	16
	● 18 x 11,5	22,0	6,86	1,90	14	16
	● 20 x 11,5	22,9	7,76	2,15	15	17
	● 22 x 13	24,1	9,08	2,52	16	18

Pressure bars	Nozzle	Radius m	Flow m³/h	Flow l/s	■	▲
					Precip mm/h	Precip mm/h
5,5	● 11 x 11	17,4	3,49	0,97	12	13
	● 12 x 11	17,8	3,76	1,04	12	14
	● 13 x 11	18,3	4,07	1,13	12	14
	○ 14 x 11 *	19,1	4,66	1,29	13	15
	● 16 x 11	20,0	5,33	1,48	13	15
	● 18 x 11,5	20,9	6,12	1,70	14	16
	● 20 x 11,5	21,8	6,94	1,93	15	17
	● 22 x 13	23,0	8,11	2,25	15	18
6,0	● 11 x 11	17,8	3,65	1,01	12	13
	● 12 x 11	18,2	3,93	1,09	12	14
	● 13 x 11	18,7	4,25	1,18	12	14
	○ 14 x 11 *	19,5	4,87	1,35	13	15
	● 16 x 11	20,5	5,57	1,55	13	15
	● 18 x 11,5	21,4	6,39	1,77	14	16
	● 20 x 11,5	22,3	7,25	2,01	15	17
	● 22 x 13	23,5	8,48	2,35	15	18
6,5	● 11 x 11	18,1	3,81	1,06	12	13
	● 12 x 11	18,6	4,09	1,14	12	14
	● 13 x 11	19,0	4,44	1,23	12	14
	○ 14 x 11 *	19,9	5,08	1,41	13	15
	● 16 x 11	20,9	5,81	1,61	13	15
	● 18 x 11,5	21,8	6,67	1,85	14	16
	● 20 x 11,5	22,7	7,57	2,10	15	17
	● 22 x 13	23,9	8,85	2,46	15	18
6,9	● 11 x 11	18,3	3,90	1,08	12	13
	● 12 x 11	18,9	4,20	1,17	12	14
	● 13 x 11	19,2	4,56	1,27	12	14
	○ 14 x 11 *	20,1	5,22	1,45	13	15
	● 16 x 11	21,0	5,97	1,66	13	16
	● 18 x 11,5	22,0	6,86	1,90	14	16
	● 20 x 11,5	22,9	7,76	2,15	15	17
	● 22 x 13	24,1	9,08	2,52	16	18

Performance data derived from tests that conform with ASAE Standards; ASAE S398.1. See page 6 for complete ASAE Test Certification Statement.

