

SJ3-VR STREAMJET

VARIABLE RATE FERTILIZER TIPS

The SJ3-VR line of variable rate fertilizer spray tips feature a variable diameter orifice that produces a wide range of flow rates - it's like having five-tips in one. This allows for a wider range of ground speeds and/or application rates from a single tip for improved productivity. These tips are also ideal for variable rate prescription map applications. The elastomer metering orifice provides consistent flow rate performance while utilizing a simple, reliable design with no springs or moving parts.

FEATURES:

- SJ3-VR tip produces three identical fluid streams for excellent distribution quality in directed applications.
- Solid stream pattern minimizes leaf burn and virtually eliminates drift.
- Acetal body and deflector plate construction for good wear life and chemical resistance.
- Simple, elastomer (EPDM) variable orifice for reliable operation.
- Recommended operating pressure: 20-100 PSI (1.5-7.0 bar).
- SJ3-VR are intended for use with flow meter based control systems only.
- Multiple capacities available for a wider range of application rates.



SJ3-VR-X0.5



SJ3-VR-X1.0



SJ3-VR-X2.0

SPEED RANGE FOR VARIOUS APPLICATION RATES

Nozzle	Ground Speed Range (MPH) for 15" Spacing							
	5 GPA	10 GPA	15 GPA	20 GPA	25 GPA	30 GPA	35 GPA	40 GPA
SJ3-VR-X0.5	10 - 33	5.1 - 17	3.4 - 11	2.6 - 8.3	2.1 - 6.7	1.7 - 5.5	1.5 - 4.8	1.3 - 4.2
SJ3-VR-X1.0	17 - 74	8.3 - 37	5.5 - 25	4.2 - 18	3.3 - 15	2.8 - 12	2.4 - 11	2.1 - 9.2
SJ3-VR-X2.0	-	22 - 65	15 - 43	11 - 32	8.7 - 26	7.3 - 22	6.2 - 19	5.4 - 16

Nozzle	Ground Speed Range (MPH) for 20" Spacing							
	5 GPA	10 GPA	15 GPA	20 GPA	25 GPA	30 GPA	35 GPA	40 GPA
SJ3-VR-X0.5	7.7 - 25	3.9 - 12	2.6 - 8.3	1.9 - 6.2	1.5 - 5.0	1.3 - 4.2	1.1 - 3.6	1.0 - 3.1
SJ3-VR-X1.0	12 - 55	6.2 - 28	4.2 - 18	3.1 - 14	2.5 - 11	2.1 - 9.2	1.8 - 7.9	1.6 - 6.9
SJ3-VR-X2.0	-	16 - 49	11 - 32	8.2 - 24	6.5 - 19	5.4 - 16	4.7 - 14	4.1 - 12

APPLICATION INFORMATION

Nozzle	Liquid Pressure in PSI	Capacity 1 Nozzle in GPM	GPA for 15" Spacing (water)									
			5 MPH	6 MPH	7 MPH	8 MPH	10 MPH	12 MPH	14 MPH	16 MPH	18 MPH	20 MPH
SJ3-VR-X0.5	20	0.13	10.3	8.6	7.4	6.4	5.1	4.3	3.7	3.2	2.9	2.6
	30	0.16	12.7	10.6	9.1	7.9	6.3	5.3	4.5	4.0	3.5	3.2
	40	0.18	14.3	11.9	10.2	8.9	7.1	5.9	5.1	4.5	4.0	3.6
	50	0.21	16.6	13.9	11.9	10.4	8.3	6.9	5.9	5.2	4.6	4.2
	60	0.24	19.0	15.8	13.6	11.9	9.5	7.9	6.8	5.9	5.3	4.8
	70	0.28	22	18.5	15.8	13.9	11.1	9.2	7.9	6.9	6.2	5.5
	80	0.32	25	21	18.1	15.8	12.7	10.6	9.1	7.9	7.0	6.3
	90	0.37	29	24	21	18.3	14.7	12.2	10.5	9.2	8.1	7.3
100	0.42	33	28	24	21	16.6	13.9	11.9	10.4	9.2	8.3	
SJ3-VR-X1.0	20	0.21	16.6	13.9	11.9	10.4	8.3	6.9	5.9	5.2	4.6	4.2
	30	0.28	22	18.5	15.8	13.9	11.1	9.2	7.9	6.9	6.2	5.5
	40	0.35	28	23	19.8	17.3	13.9	11.6	9.9	8.7	7.7	6.9
	50	0.43	34	28	24	21	17.0	14.2	12.2	10.6	9.5	8.5
	60	0.51	40	34	29	25	20	16.8	14.4	12.6	11.2	10.1
	70	0.61	48	40	35	30	24	20	17.3	15.1	13.4	12.1
	80	0.71	56	47	40	35	28	23	20	17.6	15.6	14.1
	90	0.82	65	54	46	41	32	27	23	20	18.0	16.2
100	0.93	74	61	53	46	37	31	26	23	20	18.4	
SJ3-VR-X2.0	20	0.55	44	36	31	27	22	18.2	15.6	13.6	12.1	10.9
	30	0.70	55	46	40	35	28	23	19.8	17.3	15.4	13.9
	40	0.84	67	55	48	42	33	28	24	21	18.5	16.6
	50	0.97	77	64	55	48	38	32	27	24	21	19.2
	60	1.11	88	73	63	55	44	37	31	27	24	22
	70	1.25	99	83	71	62	50	41	35	31	28	25
	80	1.38	109	91	78	68	55	46	39	34	30	27
	90	1.51	120	100	85	75	60	50	43	37	33	30
100	1.64	130	108	93	81	65	54	46	41	36	32	
Nozzle	Liquid Pressure in PSI	Capacity 1 Nozzle in GPM	GPA for 20" Spacing (water)									
			5 MPH	6 MPH	7 MPH	8 MPH	10 MPH	12 MPH	14 MPH	16 MPH	18 MPH	20 MPH
SJ3-VR-X0.5	20	0.13	7.7	6.4	5.5	4.8	3.9	3.2	2.8	2.4	2.1	1.9
	30	0.16	9.5	7.9	6.8	5.9	4.8	4.0	3.4	3.0	2.6	2.4
	40	0.18	10.7	8.9	7.6	6.7	5.3	4.5	3.8	3.3	3.0	2.7
	50	0.21	12.5	10.4	8.9	7.8	6.2	5.2	4.5	3.9	3.5	3.1
	60	0.24	14.3	11.9	10.2	8.9	7.1	5.9	5.1	4.5	4.0	3.6
	70	0.28	16.6	13.9	11.9	10.4	8.3	6.9	5.9	5.2	4.6	4.2
	80	0.32	19.0	15.8	13.6	11.9	9.5	7.9	6.8	5.9	5.3	4.8
	90	0.37	22	18.3	15.7	13.7	11.0	9.2	7.8	6.9	6.1	5.5
100	0.42	25	21	17.8	15.6	12.5	10.4	8.9	7.8	6.9	6.2	
SJ3-VR-X1.0	30	0.28	16.6	13.9	11.9	10.4	8.3	6.9	5.9	5.2	4.6	4.2
	40	0.35	21	17.3	14.9	13.0	10.4	8.7	7.4	6.5	5.8	5.2
	50	0.43	26	21	18.2	16.0	12.8	10.6	9.1	8.0	7.1	6.4
	60	0.51	30	25	22	18.9	15.1	12.6	10.8	9.5	8.4	7.6
	70	0.61	36	30	26	23	18.1	15.1	12.9	11.3	10.1	9.1
	80	0.71	42	35	30	26	21	17.6	15.1	13.2	11.7	10.5
90	0.82	49	41	35	30	24	20	17.4	15.2	13.5	12.2	
100	0.93	55	46	39	35	28	23	19.7	17.3	15.3	13.8	
SJ3-VR-X2.0	20	0.55	33	27	23	20	16.3	13.6	11.7	10.2	9.1	8.2
	30	0.70	42	35	30	26	21	17.3	14.9	13.0	11.6	10.4
	40	0.84	50	42	36	31	25	21	17.8	15.6	13.9	12.5
	50	0.97	58	48	41	36	29	24	21	18.0	16.0	14.4
	60	1.11	66	55	47	41	33	27	24	21	18.3	16.5
	70	1.25	74	62	53	46	37	31	27	23	21	18.6
	80	1.38	82	68	59	51	41	34	29	26	23	20
	90	1.51	90	75	64	56	45	37	32	28	25	22
100	1.64	97	81	70	61	49	41	35	30	27	24	

How To Order:

Example:

PART NUMBER	DESCRIPTION
SJ3-VR-X2.0	3 Stream Variable Rate Fertilizer Tip

WEIGHT OF SOLUTION	SPECIFIC GRAVITY	CONVERSION FACTOR
7.0 lbs./gal	0.84	0.92
8.0 lbs./gal	0.96	0.98
8.34 lbs./gal	1.00 - WATER	1.00
9.0 lbs./gal	1.08	1.04
10.0 lbs./gal	1.20	1.10
10.65 lbs./gal	1.28 - 28% NITROGEN	1.13
11.0 lbs./gal	1.32	1.15
12.0 lbs./gal	1.44	1.20
14.0 lbs./gal	1.68	1.30

*NOTE: Conversion factors must be used when spraying solutions heavier or lighter than water. First, multiply desired application rate by the appropriate conversion factor above. Then use the new application rate to select the most appropriate operating pressure from the application chart on this page.

OPTIMUM SPRAY HEIGHT	
NOZZLE SPACING	SPRAY HEIGHT
15"	15"
20"	20"
30"	30"

* For best spray distribution maintain a 1:1 ratio of tip height to tip spacing.

*Note: Always double check your application rates. Tabulations are based on spraying water at 70°F (21°C).

