

# SJ7A-VR STREAMJET

## VARIABLE RATE FERTILIZER TIPS

The SJ7A-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:

- SJ7A-VR tip produces seven identical fluid streams for excellent distribution quality in broadcast 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: 30-80 PSI (2.0-5.5 bar).
- SJ7A-VR are intended for use with flow meter based control systems only.
- Multiple capacities available for wider range of application rates.



SJ7A-VR-X0.5



SJ7A-VR-X1.0



SJ7A-VR-X2.0

### SPEED RANGE FOR VARIOUS APPLICATION RATES

Nozzle	Ground Speed Range (km/h) for 50cm Spacing							
	100 l/ha	200 l/ha	300 l/ha	400 l/ha	500 l/ha	600 l/ha	700 l/ha	800 l/ha
SJ7A-VR-X0.5	7.1 - 16	3.5 - 8.0	2.4 - 5.3	1.8 - 4.0	1.4 - 3.2	1.2 - 2.7	1.0 - 2.3	0.9 - 2.0
SJ7A-VR-X1.0	12 - 35	6.1 - 18	4.0 - 12	3.0 - 8.8	2.4 - 7.1	2.0 - 5.9	1.7 - 5.0	1.5 - 4.4
SJ7A-VR-X2.0	-	16 - 36	10 - 24	7.9 - 18	6.3 - 14	5.2 - 12	4.5 - 10	3.9 - 8.9

Nozzle	Ground Speed Range (km/h) for 75cm Spacing							
	100 l/ha	200 l/ha	300 l/ha	400 l/ha	500 l/ha	600 l/ha	700 l/ha	800 l/ha
SJ7A-VR-X0.5	4.7 - 11	2.4 - 5.3	1.6 - 3.5	1.2 - 2.7	0.9 - 2.1	0.8 - 1.8	0.7 - 1.5	0.6 - 1.3
SJ7A-VR-X1.0	8.1 - 24	4.0 - 12	2.7 - 7.8	2.0 - 5.9	1.6 - 4.7	1.3 - 3.9	1.2 - 3.4	1.0 - 2.9
SJ7A-VR-X2.0	-	10 - 24	7.0 - 16	5.2 - 12	4.2 - 9.5	3.5 - 7.9	3.0 - 6.8	2.6 - 5.9

## APPLICATION INFORMATION

Nozzle	Liquid Pressure in bar	Capacity 1 Nozzle in l/min	l/ha for 50cm Spacing (water)									
			8 km/hr	10 km/hr	12 km/hr	14 km/hr	16 km/hr	18 km/hr	20 km/hr	25 km/hr	30 km/hr	35 km/hr
SJ7A-VR-X0.5	2.0	0.59	88.5	70.8	59.0	50.6	44.3	39.3	35.4	28.3	23.6	20.2
	2.5	0.67	101	80.4	67.0	57.4	50.3	44.7	40.2	32.2	26.8	23.0
	3.0	0.76	114	91.2	76.0	65.1	57.0	50.7	45.6	36.5	30.4	26.1
	3.5	0.85	128	102	85.0	72.9	63.8	56.7	51.0	40.8	34.0	29.1
	4.5	1.07	161	128	107	91.7	80.3	71.3	64.2	51.4	42.8	36.7
5.5	1.33	200	160	133	114	99.8	88.7	79.8	63.8	53.2	45.6	
SJ7A-VR-X1.0	2.0	1.01	152	121	101	86.6	75.8	67.3	60.6	48.5	40.4	34.6
	2.5	1.20	180	144	120	103	90.0	80.0	72.0	57.6	48.0	41.1
	3.0	1.42	213	170	142	122	107	94.7	85.2	68.2	56.8	48.7
	4.0	1.94	291	233	194	166	146	129	116	93.1	77.6	66.5
	5.0	2.58	387	310	258	221	194	172	155	124	103	88.5
5.5	2.94	441	353	294	252	221	196	176	141	118	101	
SJ7A-VR-X2.0	2.0	2.62	393	314	262	225	197	175	157	126	105	89.8
	2.5	3.00	450	360	300	257	225	200	180	144	120	103
	3.0	3.42	513	410	342	293	257	228	205	164	137	117
	3.5	3.87	581	464	387	332	290	258	232	186	155	133
	4.5	4.84	726	581	484	415	363	323	290	232	194	166
5.5	5.92	888	710	592	507	444	395	355	284	237	203	

Nozzle	Liquid Pressure in bar	Capacity 1 Nozzle in l/min	l/ha for 75cm Spacing (water)									
			8 km/hr	10 km/hr	12 km/hr	14 km/hr	16 km/hr	18 km/hr	20 km/hr	25 km/hr	30 km/hr	35 km/hr
SJ7A-VR-X0.5	2.0	0.59	59.0	47.2	39.3	33.7	29.5	26.2	23.6	18.9	15.7	13.5
	2.5	0.67	67.0	53.6	44.7	38.3	33.5	29.8	26.8	21.4	17.9	15.3
	3.0	0.76	76.0	60.8	50.7	43.4	38.0	33.8	30.4	24.3	20.3	17.4
	3.5	0.85	85.0	68.0	56.7	48.6	42.5	37.8	34.0	27.2	22.7	19.4
	4.5	1.07	107	85.6	71.3	61.1	53.5	47.6	42.8	34.2	28.5	24.5
5.5	1.33	133	106	88.7	76.0	66.5	59.1	53.2	42.6	35.5	30.4	
SJ7A-VR-X1.0	2.0	1.01	101	80.8	67.3	57.7	50.5	44.9	40.4	32.3	26.9	23.1
	2.5	1.20	120	96.0	80.0	68.6	60.0	53.3	48.0	38.4	32.0	27.4
	3.0	1.42	142	114	94.7	81.1	71.0	63.1	56.8	45.4	37.9	32.5
	4.0	1.94	194	155	129	111	97.0	86.2	77.6	62.1	51.7	44.3
	5.0	2.58	258	206	172	147	129	115	103	82.6	68.8	59.0
5.5	2.94	294	235	196	168	147	131	118	94.1	78.4	67.2	
SJ7A-VR-X2.0	2.0	2.62	262	210	175	150	131	116	105	83.8	69.9	59.9
	2.5	3.00	300	240	200	171	150	133	120	96.0	80.0	68.6
	3.0	3.42	342	274	228	195	171	152	137	109	91.2	78.2
	3.5	3.87	387	310	258	221	194	172	155	124	103	88.5
	4.5	4.84	484	387	323	277	242	215	194	155	129	111
5.5	5.92	592	474	395	338	296	263	237	189	158	135	

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

### How To Order:

#### Example:

PART NUMBER	DESCRIPTION
SJ7A-VR-X2.0	7 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
50 cm	50 cm
75 cm	75 cm
100 cm	100 cm

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