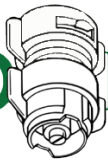


# TURBODROP®



## TurboDrop® Variable Rate Nozzle

**TURBODROP®  
VARIABLE RATE  
(TDVR)**



TDVR015  
TDVR02  
TDVR03  
TDVR05

**TURBODROP®  
VARIABLE RATE  
DUALFAN  
(TWVR)**



TWVR015  
TWVR02  
TWVR03  
TWVR05

Each TurboDrop® Variable Rate nozzle will cover the range of two to three standard TurboDrop® nozzle sizes. The flow rate increases more rapidly with an increase in pressure, making Variable Rate nozzles useful in covering wider speed ranges or providing on-the-go variable rate application. As with all ag spray nozzles, it is important to match droplet size to the application type.

The DualFan Variable Rate will provide a smaller droplet size spectrum compared to the single fan version, as well as deliver dual spray coverage. To maximize coverage with the TWVR nozzles, alternate them on the boom to deliver four angles of spray orientation to the target.

- 3x flow rate at constant speed (Variable rate applications)
- 3x speed range at constant GPA rate (Variable speed applications)
- Flow tolerance: ± 5% (MKII version)
- Flow control (vs. pressure control) systems will be more accurate
- Flush with clean water after each use
- Operate above 45 psi for best patterning
- Tabulations based on spraying water at 70°F

**Pressure Range:** 40-140 psi **Recommended Boom Height:** 18-36" (on 20" centers)

**Materials of Construction:** Polyacetal, EPDM, Stainless steel

TDVR015		TWVR015		Press. PSI	DROPLET SIZE ASABE	DROPLET SIZE ASABE	Flow GPM	GALLONS PER ACRE BASED ON 20" NOZZLE SPACING																			
								4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20				
40	XC	VC	0.17	12.6	10.1	8.4	6.3	5.6	5.0	4.6	4.2	3.9	3.6	3.4	3.2	3.0	2.8	2.7	2.5								
50	VC	VC	0.22	16.3	13.1	10.9	8.2	7.3	6.5	5.9	5.4	5.0	4.7	4.4	4.1	3.8	3.6	3.4	3.3								
60	VC	C	0.27	20.0	16.0	13.4	10.0	8.9	8.0	7.3	6.7	6.2	5.7	5.3	5.0	4.7	4.5	4.2	4.0								
70	C	C	0.33	24.5	19.6	16.3	12.3	10.9	9.8	8.9	8.2	7.5	7.0	6.5	6.1	5.8	5.4	5.2	4.9								
80	M	M	0.38	28.2	22.6	18.8	14.1	12.5	11.3	10.3	9.4	8.7	8.1	7.5	7.1	6.6	6.3	5.9	5.6								
90	M	M	0.42	31.2	24.9	20.8	15.6	13.9	12.5	11.3	10.4	9.6	8.9	8.3	7.8	7.3	6.9	6.6	6.2								
100	M	F	0.45	33.4	26.7	22.3	16.7	14.9	13.4	12.2	11.1	10.3	9.5	8.9	8.4	7.9	7.4	7.0	6.7								
120	F	F	0.50	37.1	29.7	24.8	18.6	16.5	14.9	13.5	12.4	11.4	10.6	9.9	9.3	8.7	8.3	7.8	7.4								
140	F	F	0.54	40.1	32.1	26.7	20.0	17.8	16.0	14.6	13.4	12.3	11.5	10.7	10.0	9.4	8.9	8.4	8.0								

TDVR02		TWVR02		Press. PSI	DROPLET SIZE ASABE	DROPLET SIZE ASABE	Flow GPM	GALLONS PER ACRE BASED ON 20" NOZZLE SPACING																			
								4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20				
40	XC	VC	0.22	16.3	13.1	10.9	8.2	7.3	6.5	5.9	5.4	5.0	4.7	4.4	4.1	3.8	3.6	3.4	3.3								
50	XC	VC	0.29	21.5	17.2	14.4	10.8	9.6	8.6	7.8	7.2	6.6	6.2	5.7	5.4	5.1	4.8	4.5	4.3								
60	VC	C	0.42	31.2	24.9	20.8	15.6	13.9	12.5	11.3	10.4	9.6	8.9	8.3	7.8	7.3	6.9	6.6	6.2								
70	C	C	0.51	37.9	30.3	25.2	18.9	16.8	15.1	13.8	12.6	11.7	10.8	10.1	9.5	8.9	8.4	8.0	7.6								
80	C	M	0.58	43.1	34.5	28.7	21.5	19.1	17.2	15.7	14.4	13.3	12.3	11.5	10.8	10.1	9.6	9.1	8.6								
90	M	M	0.64	47.5	38.0	31.7	23.8	21.1	19.0	17.3	15.8	14.6	13.6	12.7	11.9	11.2	10.6	10.0	9.5								
100	M	F	0.69	51.2	41.0	34.2	25.6	22.8	20.5	18.6	17.1	15.8	14.6	13.7	12.8	12.1	11.4	10.8	10.2								
120	M	F	0.75	55.7	44.6	37.1	27.8	24.8	22.3	20.3	18.6	17.1	15.9	14.9	13.9	13.1	12.4	11.7	11.1								
140	F	F	0.82	60.9	48.7	40.6	30.4	27.1	24.4	22.1	20.3	18.7	17.4	16.2	15.2	14.3	13.5	12.8	12.2								

TDVR03		TWVR03		Press. PSI	DROPLET SIZE ASABE	DROPLET SIZE ASABE	Flow GPM	GALLONS PER ACRE BASED ON 20" NOZZLE SPACING																			
								4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20				
40	XC	VC	0.33	24.5	19.6	16.3	12.3	10.9	9.8	8.9	8.2	7.5	7.0	6.5	6.1	5.8	5.4	5.2	4.9								
50	XC	VC	0.41	30.4	24.4	20.3	15.2	13.5	12.2	11.1	10.1	9.4	8.7	8.1	7.6	7.2	6.8	6.4	6.1								
60	VC	C	0.51	37.9	30.3	25.2	18.9	16.8	15.1	13.8	12.6	11.7	10.8	10.1	9.5	8.9	8.4	8.0	7.6								
70	VC	C	0.67	49.7	39.8	33.2	24.9	22.1	19.9	18.1	16.6	15.3	14.2	13.3	12.4	11.7	11.1	10.5	9.9								
80	C	M	0.80	59.4	47.5	39.6	29.7	26.4	23.8	21.6	19.8	18.3	17.0	15.8	14.9	14.0	13.2	12.5	11.9								
90	C	M	0.87	64.6	51.7	43.1	32.3	28.7	25.8	23.5	21.5	19.9	18.5	17.2	16.1	15.2	14.4	13.6	12.9								
100	M	F	0.93	69.1	55.2	46.0	34.5	30.7	27.6	25.1	23.0	21.2	19.7	18.4	17.3	16.2	15.3	14.5	13.8								
120	M	F	1.02	75.7	60.6	50.5	37.9	33.7	30.3	27.5	25.2	23.3	21.6	20.2	18.9	17.8	16.8	15.9	15.1								
140	M	F	1.10	81.7	65.3	54.5	40.8	36.3	32.7	29.7	27.2	25.1	23.3	21.8	20.4	19.2	18.2	17.2	16.3								

TDVR05		TWVR05		Press. PSI	DROPLET SIZE ASABE	DROPLET SIZE ASABE	Flow GPM	GALLONS PER ACRE BASED ON 20" NOZZLE SPACING																			
								4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20				
40			0.78	57.9	46.3	38.6	33.1	29.0	25.7	23.2	21.1	19.3	17.8	16.5	15.4	14.5	13.6	12.9	11.6								
50			0.98	72.8	58.2	48.5	41.6	36.4	32.3	29.1	26.5	24.3	22.4	20.8	19.4	18.2	17.1	16.2	14.6								
60			1.15	85.4	68.3	56.9	48.8	42.7	38.0	34.2	31.1	28.5	26.3	24.4	22.8	21.3	20.1	19.0	17.1								
70			1.33	98.8	79.0	65.8	56.4	49.4	43.9	39.5	35.9	32.9	30.4	28.2	26.3	24.7	23.2	21.9	19.8								
80	TBD	TBD	1.45	107.7	86.1	71.8	61.5	53.8	47.9	43.1	39.2	35.9	33.1	30.8	28.7	26.9	25.3	23.9	21.5								
90			1.57	116.6	93.3	77.7	66.6	58.3	51.8	46.6	42.4	38.9	35.9	33.3	31.1	29.1	27.4	25.9	23.3								
100			1.69	125.5	100.4	83.7	71.7	62.7	55.8	50.2	45.6	41.8	38.6	35.9	33.5	31.4	29.5	27.9	25.1								
120			1.80	133.7	106.9	89.1	76.4	66.8	59.4	53.5	48.6	44.6	41.1	38.2	35.6	33.4	31.4	29.7	26.7								
140			1.89	140.3	112.3	93.6	80.2	70.2	62.4	56.1	51.0	46.8	43.2	40.1	37.4	35.1	33.0	31.2	28.1								