TECH SPECS

Variable Arc Nozzles (VANs)

Adjustable nozzles for all standard and irregular-shaped turf and shrub areas. Fit all Rain Bird spray heads and shrub adapters.

Features

- Easy arc adjustment from 0° to 360° for 10-, 12-, 15- and 18 VAN; 0° to 330° for 4-, 6- and 8 VAN.
- Simple twist of center collar increases or decreases arc setting.
- No special tools required.
- Stainless steel adjustment screw to adjust flow and radius.
- Ideal for watering odd-shaped areas.
- 12-, 15-, and 18 VAN have matched precipitation rates with Rain Bird MPR Nozzles.
- Shipped with blue filter screen (.02 x .02) to maintain precise radius adjustment and prevent clogging.

Models

- 4-VAN
- 6-VAN
- 8-VAN
- 10-VAN
- 12-VAN
- 15-VAN
- 18-VAN

Operating Range

- Radius: *

4-VAN: 3 to 4 feet (0,9 to 1,2 m)
6-VAN: 4 to 6 feet (1,2 to 1,8 m)
8-VAN: 6 to 8 feet (1,8 to 2,4 m)
10-VAN: 8 to 10 feet (2,4 to 3,0 m)
12-VAN: 10 to 12 feet (3,0 to 3,7 m)
15-VAN: 12 to 15 feet (3,7 to 4,6 m)
18-VAN: 14 to 18 feet (4,3 to 5,5 m)

- Pressure: 15 to 30 psi (1 to 2,1 bar)
- Optimum pressure: 30 psi (2,1 bar)

**These ranges are based on proper pressure at nozzle.*

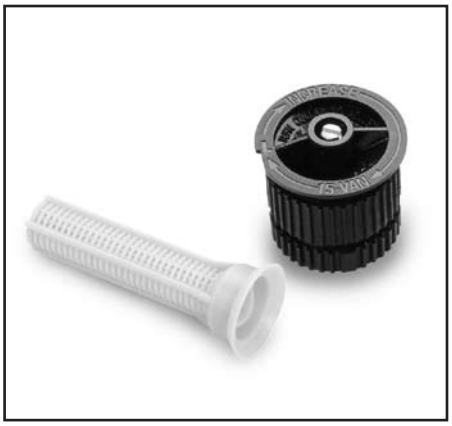
Specifications

4, 6, 8, 10, 12, 15 and 18 Series VAN Nozzles

The plastic VAN nozzle shall be constructed of UV resistant plastic. The radius adjustment screw shall be constructed of stainless steel.

The nozzle shall accept the Rain Bird blue filter screen to allow for radius adjustment.

The plastic VAN nozzles shall be manufactured by Rain Bird Corporation, Azusa, California.



Simply twist collar to adjust arc pattern

How to Specify/Order

1804-15-VAN

Spray Head Model | **Nozzle Series Pattern**

This specifies an 1800 Series spray head with 4" (10 cm) pop-up height; 15 Series Variable Arc Nozzle providing 0° - 360° coverage.

4 Series VAN

0° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
330° Arc	15	3	0.62	7.23	8.35
	20	3	0.70	8.17	9.43
	25	4	0.80	5.25	6.06
	30	4	0.88	5.78	6.67
270° Arc	15	3	0.52	7.42	8.57
	20	3	0.58	8.27	9.55
	25	4	0.66	5.29	6.11
	30	4	0.73	5.86	6.77
180° Arc	15	3	0.32	6.84	7.90
	20	3	0.37	7.91	9.13
	25	4	0.41	4.93	5.69
	30	4	0.45	5.41	6.25
90° Arc	15	3	0.21	8.98	10.37
	20	3	0.24	10.27	11.86
	25	4	0.26	6.26	7.23
	30	4	0.29	6.98	8.06

4 Series VAN METRIC

0° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
330° Arc	1,0	0,9	0,14	2,3	189	218
	1,5	1,0	0,17	2,8	183	215
	2,0	1,2	0,20	3,3	152	176
	2,1	1,2	0,20	3,3	152	176
270° Arc	1,0	0,9	0,12	2,0	198	229
	1,5	1,0	0,14	2,3	187	216
	2,0	1,2	0,16	2,7	148	171
	2,1	1,2	0,17	2,8	157	181
180° Arc	1,0	0,9	0,07	1,2	173	200
	1,5	1,0	0,09	1,5	180	208
	2,0	1,2	0,10	1,7	139	161
	2,1	1,2	0,10	1,7	139	161
90° Arc	1,0	0,9	0,05	0,8	247	285
	1,5	1,0	0,06	0,9	240	277
	2,0	1,2	0,06	1,1	167	193
	2,1	1,2	0,07	1,1	194	224

6 Series VAN

0° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
330° Arc	15	4	0.85	5.58	6.44
	20	5	0.96	4.03	4.65
	25	5	1.09	4.58	5.29
	30	6	1.20	3.50	4.04
270° Arc	15	4	0.79	6.34	7.32
	20	5	0.88	4.52	5.22
	25	5	1.00	5.13	5.92
	30	6	1.10	3.92	4.53
180° Arc	15	4	0.42	5.05	5.83
	20	5	0.49	3.77	4.35
	25	5	0.55	4.24	4.90
	30	6	0.60	3.21	3.71
90° Arc	15	4	0.26	6.26	7.23
	20	5	0.30	4.62	5.33
	25	5	0.34	5.24	6.05
	30	6	0.37	3.96	4.57

6 Series VAN METRIC

0° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
330° Arc	1,0	1,2	0,19	3,2	144	166
	1,5	1,5	0,23	3,8	112	129
	2,0	1,8	0,27	4,5	91	105
	2,1	1,8	0,27	4,5	91	105
270° Arc	1,0	1,2	0,18	3,0	167	193
	1,5	1,5	0,21	3,5	124	143
	2,0	1,8	0,24	4,1	99	114
	2,1	1,8	0,25	4,2	103	119
180° Arc	1,0	1,2	0,10	1,6	139	161
	1,5	1,5	0,11	1,9	98	113
	2,0	1,8	0,13	2,2	80	92
	2,1	1,8	0,14	2,3	86	99
90° Arc	1,0	1,2	0,06	1,0	167	193
	1,5	1,5	0,07	1,2	124	143
	2,0	1,8	0,08	1,4	99	114
	2,1	1,8	0,08	1,4	99	114

8 Series VAN

5° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
330° Arc	15	6	1.21	3.53	4.07
	20	7	1.36	2.91	3.36
	25	7	1.55	3.32	3.83
	30	8	1.70	2.79	3.22
270° Arc	15	6	1.11	3.95	4.55
	20	7	1.24	3.24	3.74
	25	7	1.41	3.69	4.25
	30	8	1.55	3.10	3.58
180° Arc	15	6	0.84	4.49	5.18
	20	7	0.97	3.81	4.40
	25	7	1.09	4.28	4.94
	30	8	1.19	3.58	4.13
90° Arc	15	6	0.51	5.46	6.29
	20	7	0.59	4.64	5.35
	25	7	0.66	5.19	5.98
	30	8	0.72	4.33	5.00

8 Series VAN METRIC

5° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
330° Arc	1,0	1,8	0,27	4,6	91	105
	1,5	2,1	0,32	5,4	79	91
	2,0	2,3	0,38	6,3	78	90
	2,1	2,4	0,39	6,4	74	86
270° Arc	1,0	1,8	0,25	4,2	103	119
	1,5	2,1	0,30	4,9	91	105
	2,0	2,3	0,34	5,8	86	99
	2,1	2,4	0,35	5,9	81	94
180° Arc	1,0	1,8	0,19	3,2	117	135
	1,5	2,1	0,23	3,8	104	120
	2,0	2,3	0,26	4,4	98	113
	2,1	2,4	0,27	4,5	94	109
90° Arc	1,0	1,8	0,12	1,9	148	171
	1,5	2,1	0,14	2,3	127	147
	2,0	2,3	0,16	2,7	121	140
	2,1	2,4	0,16	2,7	111	128

Note: *Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc*

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

10 Series VAN

10° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	7	1.93	3.80	4.39
	20	8	2.32	3.50	4.04
	25	9	2.52	3.00	3.46
	30	10	2.60	2.50	2.89
270° Arc	15	7	1.45	3.80	4.39
	20	8	1.75	3.50	4.04
	25	9	1.89	3.00	3.46
	30	10	2.10	2.70	3.12
180° Arc	15	7	0.97	3.80	4.39
	20	8	1.20	3.50	4.04
	25	9	1.26	3.00	3.46
	30	10	1.45	2.80	3.23
90° Arc	15	7	0.48	3.80	4.39
	20	8	0.58	3.50	4.04
	25	9	0.63	3.00	3.46
	30	10	0.75	2.90	3.35

10 Series VAN METRIC

10° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° Arc	1,0	2,1	0,44	7,3	96	111
	1,5	2,4	0,53	9,0	89	103
	2,0	2,7	0,57	9,8	76	88
	2,1	3,1	0,59	9,8	63	73
270° Arc	1,0	2,1	0,33	5,5	96	111
	1,5	2,4	0,4	6,8	89	103
	2,0	2,7	0,43	7,8	76	88
	2,1	3,1	0,48	7,9	68	79
180° Arc	1,0	2,1	0,22	3,7	96	111
	1,5	2,4	0,27	4,6	89	103
	2,0	2,7	0,29	5,3	76	88
	2,1	3,1	0,33	5,5	71	82
90° Arc	1,0	2,1	0,11	1,8	96	111
	1,5	2,4	0,13	2,3	89	103
	2,0	2,7	0,14	2,7	76	88
	2,1	3,1	0,17	2,8	73	85

12 Series VAN

15° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	9	1.80	2.14	2.47
	20	10	2.10	2.02	2.34
	25	11	2.40	1.91	2.21
	30	12	2.60	1.74	2.01
270° Arc	15	9	1.35	2.14	2.47
	20	10	1.58	2.02	2.34
	25	11	1.80	1.91	2.21
	30	12	1.95	1.74	2.01
180° Arc	15	9	0.90	2.14	2.47
	20	10	1.05	2.02	2.34
	25	11	1.20	1.91	2.21
	30	12	1.30	1.74	2.01
90° Arc	15	9	0.45	2.14	2.47
	20	10	0.53	2.02	2.34
	25	11	0.60	1.91	2.21
	30	12	0.65	1.74	2.01

12 Series VAN METRIC

15° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° Arc	1,0	2,7	0,40	6,8	55	63
	1,5	3,2	0,48	8,3	47	54
	2,0	3,6	0,59	9,7	46	53
	2,1	3,7	0,60	9,8	44	51
270° Arc	1,0	2,7	0,30	5,1	55	63
	1,5	3,2	0,36	6,3	47	54
	2,0	3,6	0,45	7,3	46	53
	2,1	3,7	0,45	7,4	44	51
180° Arc	1,0	2,7	0,20	3,4	55	63
	1,5	3,2	0,24	4,2	47	54
	2,0	3,6	0,30	4,8	46	53
	2,1	3,7	0,30	4,9	44	51
90° Arc	1,0	2,7	0,10	1,7	55	63
	1,5	3,2	0,12	2,1	47	54
	2,0	3,6	0,15	2,4	46	53
	2,1	3,7	0,15	2,5	44	51

15 Series VAN

23° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	11	2.60	2.07	2.39
	20	12	3.00	2.01	2.32
	25	14	3.30	1.62	1.87
	30	15	3.70	1.58	1.83
270° Arc	15	11	1.95	2.07	2.39
	20	12	2.25	2.01	2.32
	25	14	2.48	1.62	1.87
	30	15	2.78	1.58	1.83
180° Arc	15	11	1.30	2.07	2.39
	20	12	1.50	2.01	2.32
	25	14	1.65	1.62	1.87
	30	15	1.85	1.58	1.83
90° Arc	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.82	1.62	1.87
	30	15	0.92	1.58	1.83

15 Series VAN METRIC

23° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° Arc	1,0	3,4	0,60	9,8	52	60
	1,5	3,9	0,72	11,8	47	55
	2,0	4,5	0,84	13,7	41	48
	2,1	4,6	0,84	14,0	40	46
270° Arc	1,0	3,4	0,45	7,4	52	60
	1,5	3,9	0,54	8,8	47	55
	2,0	4,5	0,63	10,3	41	48
	2,1	4,6	0,63	10,5	40	46
180° Arc	1,0	3,4	0,30	4,9	52	60
	1,5	3,9	0,36	5,9	47	55
	2,0	4,5	0,42	6,9	41	48
	2,1	4,6	0,42	7,0	40	46
90° Arc	1,0	3,4	0,15	2,5	52	60
	1,5	3,9	0,18	2,9	47	55
	2,0	4,5	0,21	3,4	41	48
	2,1	4,6	0,21	3,5	40	46

Note: *Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc*

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

18 Series VAN

26° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	14	4.21	2.07	2.39
	20	15	4.70	2.01	2.32
	25	17	4.86	1.62	1.87
	30	18	5.32	1.58	1.83
270° Arc	15	14	3.16	2.07	2.39
	20	15	3.52	2.01	2.32
	25	17	3.65	1.62	1.87
	30	18	3.99	1.58	1.83
180° Arc	15	14	2.11	2.07	2.39
	20	15	2.35	2.01	2.32
	25	17	2.43	1.62	1.87
	30	18	2.66	1.58	1.83
90° Arc	15	14	1.05	2.07	2.39
	20	15	1.17	2.01	2.32
	25	17	1.22	1.62	1.87
	30	18	1.33	1.58	1.83

18 Series VAN METRIC

26° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° Arc	1,0	4,3	0,96	15,9	52	60
	1,5	4,8	1,07	18,0	47	55
	2,0	5,4	1,20	19,8	41	48
	2,1	5,5	1,21	20,1	40	46
270° Arc	1,0	4,3	0,72	12,0	52	60
	1,5	4,8	0,80	13,5	47	55
	2,0	5,4	0,90	14,8	41	48
	2,1	5,5	0,91	15,1	40	46
180° Arc	1,0	4,3	0,48	8,0	52	60
	1,5	4,8	0,54	9,0	47	55
	2,0	5,4	0,60	9,9	41	48
	2,1	5,5	0,61	10,1	40	46
90° Arc	1,0	4,3	0,24	4,0	52	60
	1,5	4,8	0,27	4,5	47	55
	2,0	5,4	0,30	5,0	41	48
	2,1	5,5	0,30	5,0	40	46

Note: *Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc*

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

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