

Variable Arc Nozzles (VANs)

Primary Application

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 **NEW!**

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 nozzle shall be capable of covering a _____ feet radius (FT. RAD)/meter at _____ pounds per square inch (psi)/(bar) with a discharge rate of _____ gallons per minute (gpm)/(m³/h,L/s).

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 Sprinkler Mfg. Corp., Glendora, 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						0° Trajectory						
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip. in/h	Precip. in/h	Nozzle	Pressure bar	Radius m	Flow m ³ /h	Flow l/s	Precip. mm/h	Precip. mm/h
330° Arc	15	3	0.62	7.23	8.35	330° Arc	1,0	0,9	0,14	0,04	189	218
	20	3	0.70	8.17	9.43		1,5	1,0	0,17	0,05	183	215
	25	4	0.80	5.25	6.06		2,0	1,2	0,20	0,06	152	176
	30	4	0.88	5.78	6.67		2,1	1,2	0,20	0,06	152	176
270° Arc	15	3	0.52	7.42	8.57	270° Arc	1,0	0,9	0,12	0,03	198	229
	20	3	0.58	8.27	9.55		1,5	1,0	0,14	0,04	187	216
	25	4	0.66	5.29	6.11		2,0	1,2	0,16	0,04	148	171
	30	4	0.73	5.86	6.77		2,1	1,2	0,17	0,05	157	181
180° Arc	15	3	0.32	6.84	7.90	180° Arc	1,0	0,9	0,07	0,02	173	200
	20	3	0.37	7.91	9.13		1,5	1,0	0,09	0,03	180	208
	25	4	0.41	4.93	5.69		2,0	1,2	0,10	0,03	139	161
	30	4	0.45	5.41	6.25		2,1	1,2	0,10	0,03	139	161
90° Arc	15	3	0.21	8.98	10.37	90° Arc	1,0	0,9	0,05	0,01	247	285
	20	3	0.24	10.27	11.86		1,5	1,0	0,06	0,02	240	277
	25	4	0.26	6.26	7.23		2,0	1,2	0,06	0,02	167	193
	30	4	0.29	6.98	8.06		2,1	1,2	0,07	0,02	194	224

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

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
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
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
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





METRIC

0° Trajectory

Nozzle	Pressure bar	Radius m	Flow m ³ /h	Flow l/s	Precip. mm/h	Precip. mm/h
330° Arc	1,0	1,2	0,19	0,05	144	166
	1,5	1,5	0,23	0,06	112	129
	2,0	1,8	0,27	0,08	91	105
	2,1	1,8	0,27	0,08	91	105
270° Arc	1,0	1,2	0,18	0,05	167	193
	1,5	1,5	0,21	0,06	124	143
	2,0	1,8	0,24	0,07	99	114
	2,1	1,8	0,25	0,07	103	119
180° Arc	1,0	1,2	0,10	0,03	139	161
	1,5	1,5	0,11	0,03	98	113
	2,0	1,8	0,13	0,04	80	92
	2,1	1,8	0,14	0,04	86	99
90° Arc	1,0	1,2	0,06	0,03	167	193
	1,5	1,5	0,07	0,02	124	143
	2,0	1,8	0,08	0,02	99	114
	2,1	1,8	0,08	0,02	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





METRIC

5° Trajectory

Nozzle	Pressure bar	Radius m	Flow m ³ /h	Flow l/s	Precip. mm/h	Precip. mm/h
330° Arc	1,0	1,8	0,27	0,08	91	105
	1,5	2,1	0,32	0,09	79	91
	2,0	2,3	0,38	0,11	78	90
	2,1	2,4	0,39	0,11	74	86
270° Arc	1,0	1,8	0,25	0,07	103	119
	1,5	2,1	0,30	0,08	91	105
	2,0	2,3	0,34	0,09	86	99
	2,1	2,4	0,35	0,10	81	94
180° Arc	1,0	1,8	0,19	0,05	117	135
	1,5	2,1	0,23	0,06	104	120
	2,0	2,3	0,26	0,07	98	113
	2,1	2,4	0,27	0,08	94	109
90° Arc	1,0	1,8	0,12	0,03	148	171
	1,5	2,1	0,14	0,04	127	147
	2,0	2,3	0,16	0,04	121	140
	2,1	2,4	0,16	0,04	111	128

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

METRIC

10° Trajectory





Nozzle	Pressure bar	Radius m	Flow m ³ /h	Flow l/s	Precip. mm/h	Precip. mm/h
360° Arc	1,0	2,1	0,44	0,12	96	111
	1,5	2,4	0,53	0,15	89	103
	2,0	2,7	0,57	0,16	76	88
	2,1	3,1	0,59	0,16	63	73
270° Arc	1,0	2,1	0,33	0,09	96	111
	1,5	2,4	0,40	0,11	89	103
	2,0	2,7	0,43	0,12	76	88
	2,1	3,1	0,48	0,13	68	79
180° Arc	1,0	2,1	0,22	0,06	97	112
	1,5	2,4	0,27	0,08	92	103
	2,0	2,7	0,29	0,08	76	88
	2,1	3,1	0,33	0,09	71	82
90° Arc	1,0	2,1	0,11	0,03	96	111
	1,5	2,4	0,13	0,04	89	103
	2,0	2,7	0,14	0,04	76	88
	2,1	3,1	0,17	0,05	73	85

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

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.





12 Series VAN

15° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip. in/h	Precip. in/h
	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
	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
	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
	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





METRIC

15° Trajectory

Nozzle	Pressure bar	Radius m	Flow m ³ /h	Flow l/s	Precip. mm/h	Precip. mm/h
	1,0	2,7	0,40	0,11	55	63
	1,5	3,2	0,48	0,14	47	54
	2,0	3,6	0,59	0,16	46	53
	2,1	3,7	0,60	0,16	44	51
	1,0	2,7	0,30	0,09	55	63
	1,5	3,2	0,36	0,10	47	54
	2,0	3,6	0,45	0,12	46	53
	2,1	3,7	0,45	0,12	44	51
	1,0	2,7	0,20	0,06	55	63
	1,5	3,2	0,24	0,07	47	54
	2,0	3,6	0,30	0,08	46	53
	2,1	3,7	0,30	0,08	44	51
	1,0	2,7	0,10	0,03	55	63
	1,5	3,2	0,12	0,03	47	54
	2,0	3,6	0,15	0,04	46	53
	2,1	3,7	0,15	0,04	44	51





15 Series VAN

23° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip. in/h	Precip. in/h
	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
	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
	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
	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





METRIC

23° Trajectory

Nozzle	Pressure bar	Radius m	Flow m ³ /h	Flow l/s	Precip. mm/h	Precip. mm/h
	1,0	3,4	0,60	0,16	52	60
	1,5	3,9	0,72	0,19	47	55
	2,0	4,5	0,84	0,23	41	48
	2,1	4,6	0,84	0,23	40	46
	1,0	3,4	0,45	0,12	52	60
	1,5	3,9	0,54	0,15	47	55
	2,0	4,5	0,63	0,17	41	48
	2,1	4,6	0,63	0,18	40	46
	1,0	3,4	0,30	0,08	52	60
	1,5	3,9	0,36	0,10	47	55
	2,0	4,5	0,42	0,11	41	48
	2,1	4,6	0,42	0,12	40	46
	1,0	3,4	0,15	0,04	52	60
	1,5	3,9	0,18	0,05	47	55
	2,0	4,5	0,21	0,06	41	48
	2,1	4,6	0,21	0,06	40	46





18 Series VAN NEW!

26° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip. in/h	Precip. in/h
	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
	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
	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
	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

METRIC

26° Trajectory

Nozzle	Pressure bar	Radius m	Flow m ³ /h	Flow l/s	Precip. mm/h	Precip. mm/h
	1,0	4,3	0,96	0,27	52	60
	1,5	4,8	1,07	0,30	47	55
	2,0	5,4	1,20	0,33	41	48
	2,1	5,5	1,21	0,34	40	46
	1,0	4,3	0,72	0,20	52	60
	1,5	4,8	0,80	0,22	47	55
	2,0	5,4	0,90	0,25	41	48
	2,1	5,5	0,91	0,25	40	46
	1,0	4,3	0,48	0,13	52	60
	1,5	4,8	0,54	0,15	47	55
	2,0	5,4	0,60	0,17	41	48
	2,1	5,5	0,61	0,17	40	46
	1,0	4,3	0,24	0,07	52	60
	1,5	4,8	0,27	0,08	47	55
	2,0	5,4	0,30	0,08	41	48
	2,1	5,5	0,30	0,08	40	46

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

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.



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Rain Bird. Conserving More Than Water

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