

R-VAN Rotary Nozzles

Technical Specifications



Matched precipitation. Unmatched efficiency.

R-VAN is our curated collection of rotary nozzles designed to help you master any space, delivering precise and efficient coverage in beautiful patterns capable of transforming your next irrigation project into a work of art.

Features

- **High Uniformity**
Dependable distribution for even coverage
- **Matched Precipitation**
Common rate means fewer valves and fewer zones
- **High Efficiency**
Watering times that work within strict standards
- **Large Water Droplets**
Cutting through the wind to water with less waste
- **Low SKU Count**
Doing more with less
- **Hassle-free Maintenance**
Using and adjusting without tools

Models

- **8' - 14' (2.4 to 4.6m)**
R-VAN14: 45° - 270° Adjustable Arc
R-VAN14-360: 360° Full Circle
- **13' - 18' (4.0 to 5.5m)**
R-VAN18: 45° - 270° Adjustable Arc
R-VAN18-360: 360° Full Circle
- **17' - 24' (5.2 to 7.3m)**
R-VAN24: 45° - 270° Adjustable Arc
R-VAN24-360: 360° Full Circle
- **Strip Nozzles**
R-VAN-LCS: 5' x 15' (1.5 x 4.6m)
Left Corner Strip
R-VAN-RCS: 5' x 15' (1.5 x 4.6m)
Right Corner Strip
R-VAN-SST: 5' x 30' (1.5 x 9.1m)
Side Strip

Operating Range

- **Pressure Range**
30 to 55 psi (2.1 to 3.8 bar)
- **Recommended Operating Pressure**
45 psi (3.1 bar)
- **Spacing**
8' to 24' (2.4 to 7.3m)
- **Adjustments**
Arc and radius should be adjusted while water is running



8' to 14'
(2.4m to 4.6m)

13' to 18'
(4.0m to 5.5m)

17' to 24'
(5.2m to 7.3m)

Strip Nozzles



R-VAN14
45° - 270°

R-VAN14-360
360°

R-VAN18
45° - 270°

R-VAN18-360
360°

R-VAN24
45° - 270°

R-VAN24-360
360°

R-VAN-LCS
5' x 15'
Left Corner Strip

R-VAN-SST
5' x 30'
Side Strip

R-VAN-RCS
5' x 15'
Right Corner Strip

Adjustable Arc Nozzles (45° to 270°)

R-VAN14 (8' - 14') (2.4 to 4.6m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
270° 	30	13	0.84	0.64	0.76
	35	13	0.87	0.66	0.74
	40	14	0.92	0.60	0.71
	45	14	0.94	0.62	0.70
	50	15	1.11	0.63	0.73
210° 	30	13	0.65	0.64	0.76
	35	13	0.68	0.66	0.74
	40	14	0.72	0.60	0.71
	45	14	0.73	0.62	0.70
	50	15	0.86	0.63	0.73
180° 	30	13	0.56	0.64	0.76
	35	13	0.58	0.66	0.74
	40	14	0.61	0.60	0.71
	45	14	0.63	0.62	0.70
	50	15	0.74	0.63	0.73
90° 	30	13	0.28	0.64	0.76
	35	13	0.29	0.66	0.74
	40	14	0.31	0.62	0.71
	45	14	0.32	0.61	0.70
	50	15	0.37	0.63	0.73

R-VAN18 (13' - 18') (4.0 to 5.5m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
270° 	30	16	1.26	0.65	0.75
	35	16	1.35	0.64	0.74
	40	17	1.42	0.63	0.73
	45	17	1.51	0.64	0.73
	50	18	1.57	0.60	0.69
210° 	30	16	0.98	0.63	0.73
	35	16	1.05	0.68	0.78
	40	17	1.10	0.63	0.73
	45	17	1.17	0.64	0.77
	50	18	1.22	0.62	0.72
180° 	30	16	0.85	0.65	0.75
	35	16	0.91	0.64	0.74
	40	17	0.98	0.63	0.73
	45	17	1.01	0.64	0.73
	50	18	1.07	0.60	0.69
90° 	30	16	0.42	0.65	0.75
	35	16	0.47	0.64	0.74
	40	17	0.50	0.63	0.73
	45	17	0.50	0.64	0.73
	50	18	0.54	0.60	0.69

R-VAN24 (17' - 24') (5.2 to 7.3m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
270° 	30	19	1.80	0.64	0.74
	35	20	1.95	0.63	0.72
	40	22	2.31	0.61	0.71
	45	23	2.52	0.61	0.71
	50	24	2.82	0.63	0.73
210° 	30	19	1.40	0.64	0.74
	35	20	1.52	0.63	0.72
	40	22	1.80	0.61	0.71
	45	23	1.96	0.61	0.71
	50	24	2.19	0.63	0.72
180° 	30	19	1.20	0.64	0.74
	35	20	1.30	0.63	0.72
	40	22	1.54	0.61	0.71
	45	23	1.68	0.61	0.71
	50	24	1.88	0.63	0.73
90° 	30	19	0.60	0.64	0.74
	35	20	0.65	0.63	0.72
	40	22	0.77	0.61	0.71
	45	23	0.84	0.61	0.71
	50	24	0.94	0.63	0.73

Full Circle Nozzles (360°)

R-VAN14-360 (8' - 14') (2.4 to 4.6m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
360° 	30	13	1.10	0.63	0.72
	35	13	1.12	0.64	0.74
	40	14	1.22	0.60	0.69
	45	14	1.27	0.62	0.72
	50	15	1.41	0.60	0.70

R-VAN18-360 (13' - 18') (4.0 to 5.5m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
360° 	30	16	1.65	0.62	0.72
	35	16	1.67	0.63	0.73
	40	17	1.80	0.60	0.69
	45	17	1.85	0.62	0.71
	50	18	2.05	0.61	0.70

R-VAN24-360 (17' - 24') (5.2 to 7.3m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
360° 	30	19	2.35	0.63	0.72
	35	20	2.52	0.61	0.70
	40	22	3.13	0.62	0.72
	45	23	3.48	0.63	0.73
	50	24	3.61	0.60	0.70

Strip Nozzles (Left Corner, Side, Right Corner)

R-VANLCS (5' x 15') (1.5 x 4.6m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
Left Corner Strip 	30	4x14	0.18	0.62	0.62
	35	5x15	0.22	0.56	0.56
	40	5x15	0.23	0.59	0.59
	45	5x15	0.24	0.62	0.62
	50	5x15	0.25	0.64	0.64

R-VANSST (5' x 30') (1.5 x 9.1m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
Side Strip 	30	4x28	0.36	0.62	0.62
	35	5x30	0.44	0.56	0.56
	40	5x30	0.46	0.59	0.59
	45	5x30	0.48	0.62	0.62
	50	5x30	0.50	0.64	0.64

R-VANRCS (5' x 15') (1.5 x 4.6m)					
Arc	Pressure psi	Radius ft.	Flow gpm	Precip. (in/h)	
Right Corner Strip 	30	4x14	0.18	0.62	0.62
	35	5x15	0.22	0.56	0.56
	40	5x15	0.23	0.59	0.59
	45	5x15	0.24	0.62	0.62
	50	5x15	0.25	0.64	0.64

Note: All R-VAN nozzles tested on 4" (10.2 cm) pop-ups

Performance data taken in zero wind conditions

R-VAN24 and R-VAN24-360: Do not reduce the radius below 17'.

R-VAN18 and R-VAN18-360: Do not reduce the radius below 13'.

R-VAN14 and R-VAN14-360: Do not reduce the radius below 8'.

■ Square spacing based on 50% diameter of throw for 14', 18', and 24'

▲ Triangular spacing based on 50% diameter of throw for 14', 18' and 24'

- Straight-line spacing based on 50% overlap of throw for LCS, SST, and RC

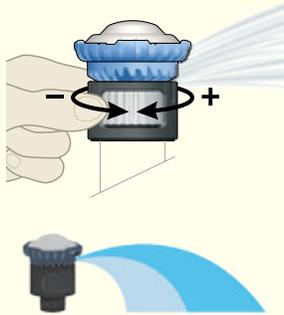
▲ Triangular spacing based on 50% overlap of throw for LCS, SST, and RC

Adjustable Arc Nozzles

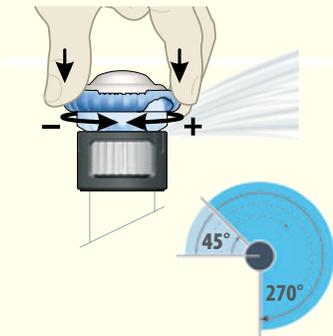
R-VAN14, R-VAN18, R-VAN24



Radius Adjustment



Arc Adjustment

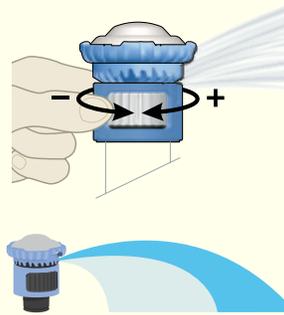


Full Circle Nozzles

R-VAN14-360, R-VAN18-360,
RVAN24-360



Radius Adjustment

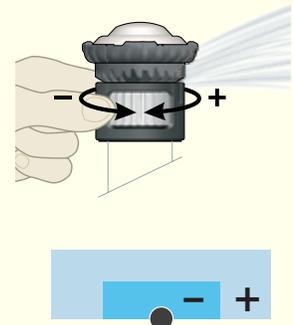


Strip Nozzles

R-VAN-LCS, R-VAN-RCS, R-VAN-SST



Size Adjustment



All Models



Pull UP
to Flush

Recommended immediately
after installation



No Tools Required

Specifications

- The R-VAN nozzle shall have a variable arc that is adjustable without a tool at specified operating pounds per square inch (bar).
- The R-VAN nozzle shall have a radius that is adjustable without a tool at specified operating pounds per square inch (bar).
- The R-VAN nozzle shall have multiple arced streams and have a matched precipitation rate of ___ in/h (mm/h).
- The R-VAN nozzle shall have a variable arc of 45° to 270°.
- The R-VAN nozzle variable arc shall be capable of covering a ___ foot (meter) radius at ___ pounds per square inch (bar).
- The R-VAN nozzle shall have a discharge rate of ___ gallons per minute (l/m).
- The R-VAN nozzle angle of the trajectory shall vary from 4 to 34°.
- The R-VAN nozzle shall be constructed of UV-resistant plastic. The protective metal cap shall be of stainless steel.
- The R-VAN nozzle shall include a removable mesh screen to protect the nozzle against clogging. Nozzles include a green screen (58 mesh / 305 Microns), or a white screen (35 mesh / 508 Microns) depending on the model.
- The R-VAN nozzle shall have a precipitation rate matched with Rain Bird 5000 Series MPR Rotor Nozzles.
- The R-VAN nozzle shall have a 3 year trade warranty.

Performance Data Notes

- R-VAN tested on 4 inch (10.2cm) spray bodies.
- Performance data taken in zero wind conditions.
- Radius refers to recommended spacing to achieve optimal precipitation rate and distribution uniformity with head to head spacing.
- Square spacing based on 50% diameter of throw.
- Triangular spacing based on 50% diameter of throw.
- The R-VAN nozzle shall have a discharge rate of ___ gallons per minute (l/m).
- Single row applications are not recommended.
- Installation on Rain Bird 1800SAM-P45 spray bodies recommended in sandy environments.
- Performance data derived from tests that conform with ASAE and ASABE Standards; ASAE S398.1; ASABE/ICC 802-2014.



How To Specify

R-VAN 18-360

Radius Range

8' - 14' (2.4 to 4.6m)

R-VAN4: 45° - 270°

R-VAN4-360: 360°

13' - 18' (4.0 to 5.5m)

R-VAN8: 45° - 270°

R-VAN8-360: 360°

17' - 24' (5.2 to 7.3m)

R-VAN24: 45° - 270°

R-VAN24-360: 360°

Strip Nozzles

R-VAN-LCS: 5' x 15' (1.5 x 4.6m)

R-VAN-RCS: 5' x 15' (1.5 x 4.6m)

R-VAN-SST: 5' x 30' (1.5 x 9.1m)

Model

R-VAN Rotary Nozzle

For Optimum Performance,
Use Rain Bird 1800 or RD1800
Spray Bodies with 45 PSI
(3.1 bar) Pressure Regulation

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