Spray Nozzles

Major Products

	Rotary Nozzles	Variable ARC Sprays		Fixed ARC Sprays		
Primary Applications	**R-VAN** Best	**HE-VAN** Best	**VAN** Standard	**U-Series** Best	**SQ Nozzles** Standard	**MPR** Standard
Turfgrass	●	●	●	●	●	●
Slopes	●					
Narrow Strips					●	●
Small Areas	●	●			●	
Landscape Beds	●	●	●	●	●	●
High Efficiency	●	●		●		
High Winds	●	●		●		
High Pressure	●	●				

Water Saving Tips

- Rotary Nozzles have efficient water distribution through rotating streams that uniformly deliver water at a low precipitation rate, significantly reducing runoff and erosion.
- HE-VAN nozzles are fully adjustable from 0 to 360 degrees with high uniformity and efficiency. HE-VAN nozzles can reduce the number of variations that need to be carried to cover just about any field challenge. Available in radii from 8' to 15', this high efficient nozzle has you covered.
- U-Series Nozzles are dual-orifice nozzles that have better, more uniform water distribution. Water flowing from both orifices combines to form a continuous water stream and eliminates gaps for more uniform coverage throughout the entire watering area.

What is a High-Efficiency Nozzle?

Typical nozzles – Un-Even Watering

With typical nozzles, part of the lawn may not have enough water and other parts may be over-watered. A large portion of water may be lost to evaporation / misting, and over-spray.

High-efficiency nozzles – Even Watering

High-efficiency nozzles provide better coverage. Better coverage means shorter zone run-times while keeping grass healthy. Shorter run-times means you will save up to 25%+ water vs. typical nozzles. Rain Bird's high-efficiency nozzles are also engineered to produce large water droplets to reduce wind drift.

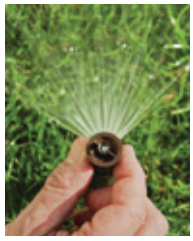
Standard or Low Precipitation Rate?

Low Precipitation Rate Nozzles

Low precipitation rate nozzles are best used in sloped or compacted soil areas to minimize run-off. The low watering rate makes run-times longer.

Standard Precipitation Rate Nozzles

Standard precipitation rate nozzles are best used for shorter distance irrigation, and when watering times may be limited due to city ordinances.

Low Precipitation Rate		Standard Precipitation Rate			
High-Efficiency Rotary Nozzles		High-Efficiency Nozzles		Standard Nozzles	
					
					
		HE-VAN	U-Series	VAN	MPR and SQ
Adjustable Arc (45° - 270°)	Full Circle (360°)	Adjustable Arc (0° - 360°)	Fixed Arc	Adjustable Arc	Fixed Arc

R-VAN Nozzles

NEW

High Efficiency, Multi-Stream

Rain Bird® R-VAN Adjustable Rotary Nozzles save more water, are easier to use, and are lower priced compared to leading rotating nozzles. R-VANs thick streams and large water droplets cut through the wind to deliver water where you want it. R-VANs are easier to use thanks to its hand-adjustable arc and radius.

R-VAN Nozzles

Features

- Matched precipitation across radius, arcs, and pattern types
- Low precipitation rate reduces run-off and erosion
- Adjust arc and radius without tools
- A pull-up to flush feature clears the nozzle of dirt and debris
- Maintains efficient performance at high operating pressures without misting or fogging
- Compatible with all models of Rain Bird spray bodies, risers and adapters
- Installing with Rain Bird 5000 MPR Series Rotors allows for matched precipitation from 8'to 35' (2.4m to 10.7m)
- Three year trade warranty

Operating Specifications

- 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

For Optimum Performance, Use Rain Bird 1800 45 PSI Regulated or RD1800 45 PSI Regulated Spray Bodies

How to Specify

R-VAN 18-360

Radius Range

8' - 14' (2.4 to 4.6m)
R-VAN14: 45° - 270°
R-VAN14-360: 360°

13' - 18' (4.0 to 5.5m)
R-VAN18: 45° - 270°
R-VAN18-360: 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 Adjustable Rotary Nozzle

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

[1] *Rain Bird recommends using 1800 P45 Spray Bodies to maintain optimum nozzle performance in higher pressure situations*

R-VAN Nozzles meet the requirements of the ASABE/ICC 802-2014 standard

The average DU(LQ) of the applicable products exceed 0.65 distribution uniformity.

Product	Type	Radius	DU(LQ)
R-VAN	Multi-stream	8 - 24 ft.	> 0.70

To view the complete document of compliance for Rain Bird products that have been tested to meet the requirements of the ASABE/ICC 802-2014 standard and the California MWELO go to: www.rainbird.com/agency/california/MWELO.htm

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'

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip ■ In/h	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
	55	15	1.17	0.67	0.77
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
	55	15	0.91	0.67	0.77
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
	55	15	0.78	0.67	0.77
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
	55	15	0.39	0.67	0.77

R-VAN14 2.4 to 4.6m METRIC

Nozzle	Pressure bar	Radius m	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
270°	2.1	4.0	3.18	16	19
	2.4	4.0	3.29	17	19
	2.8	4.3	3.48	15	18
	3.1	**4.3**	**3.56**	**16**	**18**
	3.4	4.6	4.20	16	19
	3.8	4.6	4.43	17	20
210°	2.1	4.0	2.46	16	19
	2.4	4.0	2.57	17	19
	2.8	4.3	2.73	15	18
	3.1	**4.3**	**2.76**	**16**	**18**
	3.4	4.6	3.26	16	19
	3.8	4.6	3.44	17	20
180°	2.1	4.0	2.12	16	19
	2.4	4.0	2.20	17	19
	2.8	4.3	2.31	15	18
	3.1	**4.3**	**2.38**	**16**	**18**
	3.4	4.6	2.80	16	19
	3.8	4.6	2.95	17	20
90°	2.1	4.0	1.06	16	19
	2.4	4.0	1.10	17	19
	2.8	4.3	1.17	16	18
	3.1	**4.3**	**1.21**	**15**	**18**
	3.4	4.6	1.40	16	19
	3.8	4.6	1.48	17	20

Full Circle Nozzles (360°)

R-VAN14 8' - 14'

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip ■ In/h	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
	55	15	1.45	0.62	0.72

R-VAN14-360 2.4 to 4.6m METRIC

Nozzle	Pressure bar	Radius m	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
360°	2.1	4.0	4.16	16	18
	2.4	4.0	4.24	16	19
	2.8	4.3	4.62	15	18
	3.1	**4.3**	**4.81**	**16**	**18**
	3.4	4.6	5.34	15	18
	3.8	4.6	5.49	16	18

Note: *All R-VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
R-VAN24 and R-VAN24-360: "Do not reduce the radius below 17' (5,2 m)
R-VAN18 and R-VAN18-360: "Do not reduce the radius below 13' (4,0 m)
R-VAN14 and R-VAN18-360: "Do not reduce the radius below 8' (2,4 m)

Adjustable Arc Nozzles (45° to 270°)

R-VAN18 13′ - 18′					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ 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
	55	18	1.62	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
	55	18	1.26	0.64	0.74
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
	55	18	1.09	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
	55	18	0.58	0.60	0.69

R-VAN18 4.0 to 5.5m METRIC					
Nozzle	Pressure bar	Radius m	Flow l/m	■ Precip mm/h	▲ Precip mm/h
270° 	2.1	4.9	4.77	17	19
	2.4	4.9	5.11	16	19
	2.8	5.2	5.38	16	19
	3.1	**5.2**	**5.72**	**16**	**19**
	3.4	5.5	5.94	15	18
	3.8	5.5	6.13	0	18
210° 	2.1	4.9	3.71	16	19
	2.4	4.9	3.97	17	20
	2.8	5.2	4.16	16	19
	3.1	**5.2**	**4.43**	**16**	**20**
	3.4	5.5	4.62	16	18
	3.8	5.5	4.77	16	19
180° 	2.1	4.9	3.22	17	19
	2.4	4.9	3.44	16	19
	2.8	5.2	3.71	16	19
	3.1	**5.2**	**3.82**	**16**	**19**
	3.4	5.5	4.05	15	18
	3.8	5.5	4.13	15	18
90° 	2.1	4.9	1.59	17	19
	2.4	4.9	1.78	16	19
	2.8	5.2	1.89	16	19
	3.1	**5.2**	**1.89**	**16**	**19**
	3.4	5.5	2.04	15	18
	3.8	5.5	2.20	15	18

Full Circle Nozzles (360°)

R-VAN18 13′ - 18′					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ 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
	55	18	2.11	0.63	0.72

R-VAN18 4.0 to 5.5m METRIC					
Nozzle	Pressure bar	Radius m	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° 	2.1	4.9	6.25	16	18
	2.4	4.9	6.32	16	19
	2.8	5.2	6.81	15	18
	3.1	**5.2**	**7.00**	**16**	**18**
	3.4	5.5	7.76	15	18
	3.8	5.5	7.99	16	18

Note: *All R-VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
R-VAN24 and R-VAN24-360: "Do not reduce the radius below 17′ (5,2 m)
R-VAN18 and R-VAN18-360: "Do not reduce the radius below 13′ (4,0 m)
R-VAN14 and R-VAN18-360: "Do not reduce the radius below 8′ (2,4 m)

Did you know?

You can use R-VAN Nozzles and 5000 Series MPR Rotors on the same zone!

- Matched precipitation rate (MPR) from 8' to 35′
- Superior coverage – >0.70 DU[LQ]
- Thick, wind-resistant streams – near to far

Adjustable Arc Nozzles (45° to 270°)

R-VAN24 17' - 24'					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip ■ In/h	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
	55	24	2.88	0.64	0.74
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	0.73
	55	24	2.24	0.64	0.74
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
	55	24	1.92	0.64	0.74
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
	55	24	0.96	0.64	0.74

R-VAN24 5.2 to 7.3m METRIC					
Nozzle	Pressure bar	Radius m	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
270° 	2.1	5.8	6.81	16	19
	2.4	6.1	7.38	16	18
	2.8	6.7	8.74	15	18
	3.1	**7.0**	**9.54**	**15**	**18**
	3.4	7.3	10.67	16	19
	3.8	7.3	10.90	16	19
210° 	2.1	5.8	5.30	16	19
	2.4	6.1	5.75	16	18
	2.8	6.7	6.81	15	18
	3.1	**7.0**	**7.42**	**15**	**18**
	3.4	7.3	8.29	16	19
	3.8	7.3	8.48	16	19
180° 	2.1	5.8	4.54	16	19
	2.4	6.1	4.92	16	18
	2.8	6.7	5.83	15	18
	3.1	**7.0**	**6.36**	**15**	**18**
	3.4	7.3	7.12	16	19
	3.8	7.3	7.27	16	19
90° 	2.1	5.8	2.27	16	19
	2.4	6.1	2.46	16	18
	2.8	6.7	2.91	15	18
	3.1	**7.0**	**3.18**	**15**	**18**
	3.4	7.3	3.56	16	19
	3.8	7.3	3.63	16	19

Full Circle Nozzles (360°)

R-VAN24 17' - 24'					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip ■ In/h	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
	55	24	3.74	0.62	0.72

R-VAN24 5.2 to 7.3m METRIC					
Nozzle	Pressure bar	Radius m	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
360° 	2.1	5.8	8.90	16	18
	2.4	6.1	9.54	15	18
	2.8	6.7	11.85	16	18
	3.1	**7.0**	**13.17**	**16**	**19**
	3.4	7.3	13.67	15	18
	3.8	7.3	14.16	16	18

Note: *All R-VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
R-VAN24 and R-VAN24-360: "Do not reduce the radius below 17' (5,2 m)
R-VAN18 and R-VAN18-360: "Do not reduce the radius below 13' (4,0 m)
R-VAN14 and R-VAN18-360: "Do not reduce the radius below 8' (2,4 m)

R-VAN Requires Half the Models to Cover 45° to 360°

Offering Valuable Bottom-Line Savings

- Shorter zone run times save water and energy
- Lower precipitation rates reduce wasteful runoff and costly erosion
- Fewer nozzles needed to cover any area, reducing your inventory costs

Strip Nozzles (Left Corner, Side, Right Corner)

R-VAN-LCS 5′ x 15′					
Nozzle	Pressure psi	Size ft.	Flow gpm	Precip ln/h —	Precip ln/h ▲
Left Corner Strip	30	4′x14′	0.18	0.62	0.62
	35	5′x15′	0.22	0.56	0.56
	40	5′x15′	0.23	0.59	0.59
	45	**5′x15′**	**0.24**	**0.62**	**0.62**
	50	5′x15′	0.25	0.64	0.64
	55	6′x16′	0.28	0.56	0.56

R-VAN-LCS 1.5 x 4.6m METRIC					
Nozzle	Pressure bar	Size m	Flow l/m	Precip mm/h —	Precip mm/h ▲
Left Corner Strip	2.1	1.2x4.3	0.68	16	16
	2.4	1.5x4.6	0.83	14	14
	2.8	1.5x4.6	0.87	15	15
	3.1	**1.5x4.6**	**0.91**	**16**	**16**
	3.4	1.5x4.6	0.95	16	16
	3.8	1.8x4.9	1.06	14	14

R-VAN-SST 5′ x 30′					
Nozzle	Pressure psi	Size ft.	Flow gpm	Precip ln/h —	Precip ln/h ▲
Side Strip	30	4′x28′	0.36	0.62	0.62
	35	5′x30′	0.44	0.56	0.56
	40	5′x30′	0.46	0.59	0.59
	45	**5′x30′**	**0.48**	**0.62**	**0.62**
	50	5′x30′	0.50	0.64	0.64
	55	6′x32′	0.56	0.56	0.56

R-VAN-SST 1.5 x 9.1m METRIC					
Nozzle	Pressure bar	Size m	Flow l/m	Precip mm/h —	Precip mm/h ▲
Left Corner Strip	2.1	1.2x8.5	1.36	16	16
	2.4	1.5x9.1	1.67	14	14
	2.8	1.5x9.1	1.74	15	15
	3.1	**1.5x9.1**	**1.82**	**16**	**16**
	3.4	1.5x9.1	1.89	16	16
	3.8	1.8x9.8	2.12	14	14

R-VAN-RCS 5′ x 15′					
Nozzle	Pressure psi	Size ft.	Flow gpm	Precip ln/h —	Precip ln/h ▲
Right Corner Strip	30	4′x14′	0.18	0.62	0.62
	35	5′x15′	0.22	0.56	0.56
	40	5′x15′	0.23	0.59	0.59
	45	**5′x15′**	**0.24**	**0.62**	**0.62**
	50	5′x15′	0.25	0.64	0.64
	55	6′x16′	0.28	0.56	0.56

R-VAN-RCS 1.5 x 4.6m METRIC					
Nozzle	Pressure bar	Size m	Flow l/m	Precip mm/h —	Precip mm/h ▲
Left Corner Strip	2.1	1.2x4.3	0.68	16	16
	2.4	1.5x4.6	0.83	14	14
	2.8	1.5x4.6	0.87	15	15
	3.1	**1.5x4.6**	**0.91**	**16**	**16**
	3.4	1.5x4.6	0.95	16	16
	3.8	1.8x4.9	1.06	14	14

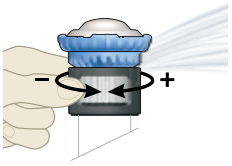
Note: *All R-VAN nozzles tested on 4" (10.2 cm) pop-ups*
Performance data taken in zero wind conditions

– *Straight-line spacing based on 50% overlap of throw for LCS, SST, and RCS*
▲ *Triangular spacing based on 50% overlap of throw for LCS, SST, and RCS*

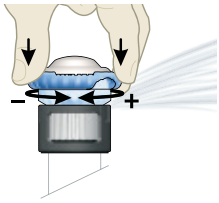
Easy Adjustments

Adjustable Arc Nozzles
R-VAN14, R-VAN18, R-VAN24

RADIUS ADJUSTMENT

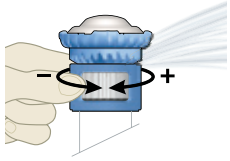


ARC ADJUSTMENT



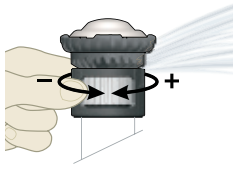
Full Circle Nozzles
R-VAN14-360, R-VAN18-360, RVAN24-360

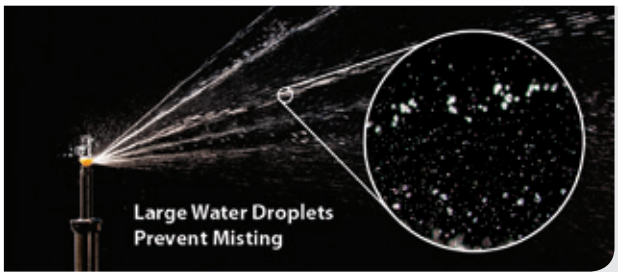
RADIUS ADJUSTMENT



Strip Nozzles
R-VAN-LCS, R-VAN-RCS, R-VAN-SST

SIZE ADJUSTMENT





Improving Watering Efficiencies Up to 30%

- Gentle, rotating streams create uniform coverage at lower precipitation rates
- Multi-stream technology optimizes absorption for healthier lawns
- Larger droplets and thicker streams cut through wind and keep water in target zone

HE-VAN Series Nozzles

High-Efficiency Variable Arc Spray Nozzles

Features

- HE-VAN's even coverage allows you to shorten run times by up to 35%, saving you water and money, while still maintaining a healthy lawn. HE-VAN has more than a 40 percent even-coverage improvement over existing variable arc nozzles
- HE-VAN nozzles have a unique stream pattern, designed for superior coverage and wind resistance. Low-trajectory spray and large water droplets prevent misting and airborne evaporation so the right amount of water is delivered to the right place. Gentle close-in watering eliminates dry-spots around the spray head
- HE-VAN nozzles throw to the exact specified radius, delivering the cleanest edge of any VAN on the market today
- Reduced zone run times, compared to competitive nozzles, help stay within tight watering windows, conserve water, and save money
- With full adjustability from 0° to 360°, you'll be able to efficiently water landscapes of all shapes, while saving time and stocking fewer nozzles
- Matched precipitation rates allow you to install Rain Bird HE-VAN, MPR and U-Series nozzles on the same zone
- HE-VAN nozzles have a tactile click to keep the arc setting from drifting over time
- Three year trade warranty

Operating Range

- Spacing: 6 to 15 feet (1.8 to 4.6m) [1]
- Pressure: 15 to 30 psi (1.0 to 2.1 bar)
- Optimum pressure: 30 psi (2.1 bar) [2]

Models

- HE-VAN-08: 6 to 8 feet (1.8 to 2.4 m)
- HE-VAN-10: 8 to 10 feet (2.4 to 3.0 m)
- HE-VAN-12: 9 to 12 feet (2.7 to 3.7 m)
- HE-VAN-15: 12 to 15 feet (3.7 to 4.6 m)

[1] *These ranges are based on proper pressure at nozzle*

[2] *Rain Bird recommends using 1800/RD1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations*

HE-VAN Nozzles meet the requirements of the ASABE/ICC 802-2014 standard

The average DU(LQ) of the applicable products exceed 0.65 distribution uniformity.

Product	Type	Radius	DU(LQ)
HE-VAN	Spray, Variable Arc	6 - 15 ft.	> 0.70

To view the complete document of compliance for Rain Bird products that have been tested to meet the requirements of the ASABE/ICC 802-2014 standard and the California MWELO go to: www.rainbird.com/agency/california/MWELO.htm

Stainless steel adjustment screw to adjust flow and radius, up to a 25% reduction in radius

Available in popular 8', 10', 12' and 15' models

Fits on all Rain Bird® 1800® Series Spray Heads, UNI-Spray™ Series Spray Heads and Rain Bird Shrub Adapters

How to Specify

HE-VAN-15

Radius Range
8: 6 to 8 feet (1.8 to 2.4 m)
10: 8 to 10 feet (2.4 to 3.0 m)
12: 9 to 12 feet (2.7 to 3.7 m)
15: 12 to 15 feet (3.7 to 4.6 m)

Feature
VAN: Variable Arc

Model
High Efficiency Nozzle

8 Series HE-VAN

24° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	5	0.83	3.19	3.68
	20	6	0.96	2.56	2.95
	25	7	1.07	2.10	2.42
	30	8	1.17	1.76	2.03
270° Arc	15	5	0.62	3.19	3.68
	20	6	0.72	2.56	2.95
	25	7	0.80	2.10	2.42
	30	8	0.88	1.76	2.03
180° Arc	15	5	0.41	3.19	3.68
	20	6	0.48	2.56	2.95
	25	7	0.53	2.10	2.42
	30	8	0.59	1.76	2.03
90° Arc	15	5	0.21	3.19	3.68
	20	6	0.24	2.56	2.95
	25	7	0.27	2.10	2.42
	30	8	0.29	1.76	2.03

8 Series HE-VAN METRIC

24° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° Arc	1.03	1.52	0.19	3.14	82	95
	1.38	1.83	0.22	3.62	66	76
	1.72	2.13	0.25	4.05	54	62
	2.07	2.44	0.27	4.43	45	52
270° Arc	1.03	1.52	0.14	2.35	82	95
	1.38	1.83	0.16	2.72	66	76
	1.72	2.13	0.18	3.04	54	62
	2.07	2.44	0.20	3.33	45	52
180° Arc	1.03	1.52	0.10	1.57	82	95
	1.38	1.83	0.11	1.81	66	76
	1.72	2.13	0.12	2.02	54	62
	2.07	2.44	0.13	2.22	45	52
90° Arc	1.03	1.52	0.05	0.78	82	95
	1.38	1.83	0.05	0.91	66	76
	1.72	2.13	0.06	1.01	54	62
	2.07	2.44	0.07	1.11	45	52

10 Series HE-VAN

27° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	7	1.26	2.48	2.86
	20	8	1.46	2.19	2.53
	25	9	1.63	1.94	2.24
	30	10	1.78	1.72	1.98
270° Arc	15	7	0.95	2.48	2.86
	20	8	1.09	2.19	2.53
	25	9	1.22	1.94	2.24
	30	10	1.34	1.72	1.98
180° Arc	15	7	0.63	2.48	2.86
	20	8	0.73	2.19	2.53
	25	9	0.81	1.94	2.24
	30	10	0.89	1.72	1.98
90° Arc	15	7	0.32	2.48	2.86
	20	8	0.36	2.19	2.53
	25	9	0.41	1.94	2.24
	30	10	0.45	1.72	1.98

10 Series HE-VAN METRIC

27° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° Arc	1.03	2.13	0.29	4.78	64	74
	1.38	2.44	0.34	5.52	56	65
	1.72	2.74	0.37	6.17	50	57
	2.07	3.05	0.41	6.76	44	51
270° Arc	1.03	2.13	0.22	3.59	64	74
	1.38	2.44	0.25	4.14	56	65
	1.72	2.74	0.28	4.63	50	57
	2.07	3.05	0.31	5.07	44	51
180° Arc	1.03	2.13	0.15	2.39	64	74
	1.38	2.44	0.17	2.76	56	65
	1.72	2.74	0.19	3.09	50	57
	2.07	3.05	0.21	3.38	44	51
90° Arc	1.03	2.13	0.07	1.20	64	74
	1.38	2.44	0.08	1.38	56	65
	1.72	2.74	0.09	1.54	50	57
	2.07	3.05	0.10	1.69	44	51

Note: *All HE-VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

12 Series HE-VAN

23° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	9	1.67	1.99	2.30
	20	10	1.93	1.86	2.15
	25	11	2.16	1.72	1.99
	30	12	2.37	1.58	1.83
270° Arc	15	9	1.25	1.99	2.30
	20	10	1.45	1.86	2.15
	25	11	1.62	1.72	1.99
	30	12	1.77	1.58	1.83
180° Arc	15	9	0.84	1.99	2.30
	20	10	0.97	1.86	2.15
	25	11	1.08	1.72	1.99
	30	12	1.18	1.58	1.83
90° Arc	15	9	0.42	1.99	2.30
	20	10	0.48	1.86	2.15
	25	11	0.54	1.72	1.99
	30	12	0.59	1.58	1.83

12 Series HE-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	2.7	0.38	6.33	50.5	58.3
	1.4	3.0	0.44	7.31	47.3	54.6
	1.7	3.4	0.49	8.18	43.7	50.4
	2.1	3.7	0.54	8.96	40.2	46.4
270° Arc	1.0	2.7	0.28	4.75	50.5	58.3
	1.4	3.0	0.33	5.48	47.3	54.6
	1.7	3.4	0.37	6.16	43.7	50.4
	2.1	3.7	0.40	6.72	40.2	46.4
180° Arc	1.0	2.7	0.19	3.17	50.5	58.3
	1.4	3.0	0.22	3.66	47.3	54.6
	1.7	3.4	0.25	4.09	43.7	50.4
	2.1	3.7	0.27	4.48	40.2	46.4
90° Arc	1.0	2.7	0.09	1.58	50.5	58.3
	1.4	3.0	0.11	1.83	47.3	54.6
	1.7	3.4	0.12	2.04	43.7	50.4
	2.1	3.7	0.13	2.24	40.2	46.4

15 Series HE-VAN

25° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc	15	11	2.62	2.08	2.40
	20	12	3.02	2.02	2.33
	25	14	3.38	1.66	1.92
	30	15	3.70	1.58	1.83
270° Arc	15	11	1.96	2.08	2.40
	20	12	2.27	2.02	2.33
	25	14	2.53	1.66	1.92
	30	15	2.78	1.58	1.83
180° Arc	15	11	1.31	2.08	2.40
	20	12	1.51	2.02	2.33
	25	14	1.69	1.66	1.92
	30	15	1.85	1.58	1.83
90° Arc	15	11	0.65	2.08	2.40
	20	12	0.76	2.02	2.33
	25	14	0.84	1.66	1.92
	30	15	0.93	1.58	1.83

15 Series HE-VAN METRIC

25° 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	0.59	9.91	52.9	61.1
	1.4	3.7	0.69	11.44	51.3	59.3
	1.7	4.3	0.77	12.79	42.2	48.7
	2.1	4.6	0.84	14.01	40.2	46.5
270° Arc	1.0	3.4	0.45	7.43	52.9	61.1
	1.4	3.7	0.51	8.58	51.3	59.3
	1.7	4.3	0.58	9.59	42.2	48.7
	2.1	4.6	0.63	10.51	40.2	46.5
180° Arc	1.0	3.4	0.30	4.95	52.9	61.1
	1.4	3.7	0.34	5.72	51.3	59.3
	1.7	4.3	0.38	6.39	42.2	48.7
	2.1	4.6	0.42	7.00	40.2	46.5
90° Arc	1.0	3.4	0.15	2.48	52.9	61.1
	1.4	3.7	0.17	2.86	51.3	59.3
	1.7	4.3	0.19	3.20	42.2	48.7
	2.1	4.6	0.21	3.50	40.2	46.5

Note: *All HE-VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

U-Series Nozzles

Dual orifice spray nozzles that use 30% less water[1]

U-Series Nozzles

Features

- Additional orifice for close-in watering minimizes brown spots around the spray head and eliminates gaps in coverage so the entire watering area is more uniformly covered
- Superior coverage for efficient watering. Use up to 30% less water
- Matched precipitation rate with Rain Bird HE-VAN and MPR nozzles
- Five year trade warranty

Operating Range

- Spacing: 5 to 15 feet (1.7 to 4.6 m)[2]
- Pressure: 15 to 30 psi (1.0 to 2.1 bar)
- Optimum pressure: 30 psi (2.1 bar)[3]

U-Series Nozzle with screen

Models

- U-8 Series: 8-foot Quarter, Half, Full nozzles
- U-10 Series: 10-foot Quarter, Half, Full nozzles
- U-12 Series: 12-foot Quarter, Half, Full nozzles
- U-15 Series: 15-foot Quarter, Half, Full nozzles

U-Series nozzles offer better, more uniform water distribution. Water flowing from both orifices combines to form a continuous water stream. Eliminates gaps for more uniform coverage throughout the entire watering area

[1] *When U-Series dual-orifice nozzles are installed instead of standard nozzles on every spray body in the zone. Results may vary based on site-specific conditions such as sprinkler spacing, wind, temperature, soil and grass type.*

[2] *These ranges are based on proper pressure at nozzle.*

[3] *Rain Bird recommends using 1800/RD1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.*

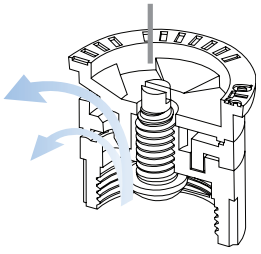
U-Series Nozzles meet the requirements of the ASABE/ICC 802-2014 standard

The average DU(LQ) of the applicable products exceed 0.65 distribution uniformity.

Product	Type	Radius	DU(LQ)
U-Series	Spray, Fixed Arc	6 - 15 ft.	> 0.70

To view the complete document of compliance for Rain Bird products that have been tested to meet the requirements of the ASABE/ICC 802-2014 standard and the California MWELO go to: www.rainbird.com/agency/california/MWELO.htm

Stainless steel adjustment screw to adjust flow and radius



Fits all Rain Bird Spray Bodies and Shrub Adapters

How to Specify

U12H

Pattern
F: Full
H: Half
Q: Quarter

Radius Range
8: 5-8 feet (1.7-2.4 m)
10: 7-10 feet (2.1-3.1 m)
12: 9-12 feet (2.7-3.7 m)
15: 11-15 feet (3.4-4.6 m)

Model
U-Series Nozzle

U8 Series

10° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip ■ In/h	Precip ▲ In/h
U-8F	15	5	0.74	2.85	3.29
	20	6	0.86	2.30	2.66
	25	7	0.96	1.89	2.18
	30	8	1.05	1.58	1.83
U8H	15	5	0.37	2.85	3.29
	20	6	0.42	2.25	2.59
	25	7	0.47	1.85	2.13
	30	8	0.52	1.58	1.83
U8Q	15	5	0.18	2.77	3.20
	20	6	0.21	2.25	2.59
	25	7	0.24	1.89	2.18
	30	8	0.26	1.58	1.83

U8 Series METRIC

10° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
U-8F	1.0	1.7	0.16	2.8	72	84
	1.5	2.1	0.20	3.4	58	68
	2.0	2.4	0.23	3.9	48	55
	2.1	2.4	0.24	4.0	40	46
U-8H	1.0	1.7	0.08	1.4	72	84
	1.5	2.1	0.10	1.7	57	66
	2.0	2.4	0.12	1.9	47	54
	2.1	2.4	0.12	2.0	40	46
U-8Q	1.0	1.7	0.04	0.7	70	81
	1.5	2.1	0.05	0.8	57	66
	2.0	2.4	0.06	1.0	48	55
	2.1	2.4	0.06	1.0	40	46

Note: *All U-Series nozzles tested on 4" (10.2 cm) pop-ups*

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

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

Performance data taken in zero wind conditions

Radius refers to recommended product spacing. Actual radii along arc may vary

U10 Series

12° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
U-10F	15	7	1.16	2.07	2.39
	20	8	1.34	2.01	2.32
	25	9	1.50	1.62	1.87
	30	10	1.64	1.58	1.83
U-10H	15	7	0.58	2.07	2.39
	20	8	0.67	2.01	2.32
	25	9	0.75	1.62	1.87
	30	10	0.82	1.58	1.83
U-10Q	15	7	0.29	2.07	2.39
	20	8	0.33	2.01	2.32
	25	9	0.37	1.62	1.87
	30	10	0.41	1.58	1.83

U10 Series METRIC

12° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
U-10F	1.0	2.1	0.26	4.4	52	60
	1.5	2.6	0.30	5.3	47	55
	2.0	3.0	0.34	6.1	41	48
	2.1	3.1	0.37	6.2	40	46
U-10H	1.0	2.1	0.13	2.2	52	60
	1.5	2.6	0.15	2.6	47	55
	2.0	3.0	0.17	3.1	41	48
	2.1	3.1	0.19	3.1	40	46
U-10Q	1.0	2.1	0.07	1.1	52	60
	1.5	2.6	0.08	1.3	47	55
	2.0	3.0	0.08	1.5	41	48
	2.1	3.1	0.09	1.6	40	46

U12 Series

23° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
U-12F	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
U-12H	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
U-12Q	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

U12 Series METRIC

23° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
U-12F	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
U-12H	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
U-12Q	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

U15 Series

23° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
U-15F	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
U-15H	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
U-15Q	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

U15 Series METRIC

23° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
U-15F	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
U-15H	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
U-15Q	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: *All U-Series nozzles tested on 4" (10.2 cm) pop-ups*

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

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

Performance data taken in zero wind conditions

Radius refers to recommended product spacing. Actual radii along arc may vary

VAN Series Nozzles

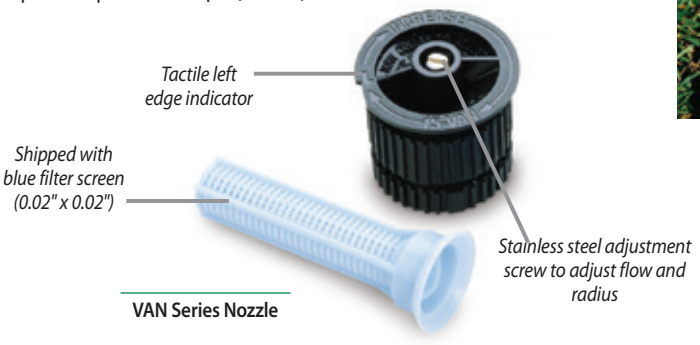
Variable Arc Nozzles

Features

- A simple twist of the center collar with no special tools increases or decreases the arc setting making it ideal for watering odd shaped areas
- Quickly identify radius with Top Color-coded™ nozzles even when system is not operating
- 12, 15, and 18-VAN have matched precipitation rates with Rain Bird MPR Nozzles
- Three year trade warranty

Operating Range

- Spacing: 3 to 18 feet (0.9 m to 5.5 m)[1]
- Pressure: 15 to 30 psi (1.0 to 2.1 bar)
- Optimum pressure: 30 psi (2.1 bar)[2]



VAN Series Nozzle

Models

- 4-VAN Series: 3 to 4 feet (0.9 to 1.2 m)
- 6-VAN Series: 4 to 6 feet (1.2 to 1.8 m)
- 8-VAN Series: 6 to 8 feet (1.8 to 2.4 m)
- 10-VAN Series: 7 to 10 feet (2.1 to 3.1 m)
- 12-VAN Series: 9 to 12 feet (2.7 to 3.7 m)
- 15-VAN Series: 11 to 15 feet (3.4 to 4.6 m)
- 18-VAN Series: 14 to 18 feet (4.3 to 5.5 m)

[1] *These ranges are based on proper pressure at nozzle.*

[2] *Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.*

Easy to Adjust

How to Specify

8 VAN

Radius Range
4: 3-4 feet (0.9-1.2 m)
6: 4-6 feet (1.2-1.8 m)
8: 6-8 feet (1.8-2.4 m)
10: 7-10 feet (2.1-3.0 m)
12: 9-12 feet (2.7-3.7 m)
15: 11-15 feet (3.4-4.6 m)
18: 14-18 feet (4.3-5.5 m)

Nozzle Type
VAN: Variable Arc Nozzle

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

Note: *All VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

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

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

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: *All VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

Did you know?

You can use HE-VAN nozzles to have better coverage and save water vs. VAN nozzles.

- Stronger streams and larger water droplets for increased wind resistance.
- Superior close-in watering and edges provide better coverage.
- Shortened run times saves up to 35% in water

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	1.56	1.86	2.14
	20	10	1.86	1.79	2.06
	25	11	2.12	1.68	1.95
	30	12	2.36	1.58	1.82
270° Arc	15	9	1.17	1.86	2.14
	20	10	1.39	1.79	2.06
	25	11	1.59	1.68	1.94
	30	12	1.77	1.58	1.82
180° Arc	15	9	0.78	1.86	2.14
	20	10	0.93	1.79	2.06
	25	11	1.06	1.68	1.95
	30	12	1.18	1.58	1.82
90° Arc	15	9	0.39	1.86	2.14
	20	10	0.46	1.79	2.06
	25	11	0.53	1.68	1.95
	30	12	0.59	1.58	1.82

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	0.35	5.80	48	55
	1.5	3.2	0.44	7.37	43	50
	2.0	3.6	0.52	8.75	41	47
	2.1	3.7	0.54	9.02	40	46
270° Arc	1.0	2.7	0.26	4.35	48	55
	1.5	3.2	0.33	5.53	43	50
	2.0	3.6	0.39	6.56	41	47
	2.1	3.7	0.41	6.76	40	46
180° Arc	1.0	2.7	0.17	2.90	48	55
	1.5	3.2	0.22	3.69	43	50
	2.0	3.6	0.26	4.37	41	47
	2.1	3.7	0.27	4.51	40	46
90° Arc	1.0	2.7	0.09	1.45	48	55
	1.5	3.2	0.11	1.84	43	50
	2.0	3.6	0.13	2.19	41	47
	2.1	3.7	0.14	2.25	40	46

Note: *All VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

Did you know?

You can use HE-VAN nozzles to have better coverage and save water vs. VAN nozzles.

- Stronger streams and larger water droplets for increased wind resistance.
- Superior close-in watering and edges provide better coverage.
- Shortened run times saves up to 35% in water

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

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: *All VAN nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

Did you know?

You can use HE-VAN nozzles to have better coverage and save water vs. VAN nozzles.

- Stronger streams and larger water droplets for increased wind resistance.
- Superior close-in watering and edges provide better coverage.
- Shortened run times saves up to 35% in water

MPR Spray Nozzles

Matched Precipitation Rate Nozzles

Features

- Matched precipitation rates across sets and patterns in 5 Series, 8 Series, 10 Series, 12 Series, and 15 Series for even water distribution and design flexibility
- MPR Nozzles are installed by more contractors than all other brands combined
- Quickly identify radius and arc with Top Color-coded™ nozzles even when system is not operating
- Three year trade warranty

Operating Range

- Spacing: 3 to 15 feet (0.9 to 4.6 m)[1]
- Pressure: 15 to 30 psi (1 to 2.1 bar)
- Optimum pressure: 30 psi (2.1 bar)[2]

Models

- 5 Series: Quarter, Half, Full Nozzles
- 5 Series: Bubbler Nozzles
- 8 Series: Quarter, Half, Full Nozzles
- 8 FLT Series: Designed for lower trajectory applications, such as windy areas
- 10 Series Nozzles
- 12 Series Nozzles
- 15 Series: Quarter, Half, Full Nozzles
- 15 Strip Series Nozzles

[1] *These ranges are based on proper pressure at nozzle.*

[2] *Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.*

Rain Bird® MPR Nozzles, The Industry Standard

MPR Nozzle and Screen

How to Specify

5 F

Pattern
F: Full
H: Half
Q: Quarter

MPR Radius Range
5: 3-5 feet (1.1-1.5 m)
8: 5-8 feet (1.7-2.4 m)
10: 7-10 feet (2.1-3.1)
12: 19-2 feet (2.7-3.7 m)
15: 11-15 feet (3.4-4.6 m)

5 Series MPR

5° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
5F	15	3	0.29	3.10	3.58
	20	4	0.33	1.99	2.29
	25	4	0.37	2.23	2.57
	30	5	0.41	1.58	1.83
5H	15	3	0.14	3.00	3.46
	20	4	0.16	1.93	2.22
	25	4	0.18	2.17	2.50
	30	5	0.20	1.54	1.78
5Q	15	3	0.07	3.00	3.46
	20	4	0.08	1.93	2.22
	25	4	0.09	2.17	2.50
	30	5	0.10	1.54	1.78

Note: *All MPR nozzles tested on 4" (10.2 cm) pop-ups*

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

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

5 Series MPR — METRIC

5° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
5F	1.0	1.1	0.06	1.1	79	91
	1.5	1.3	0.08	1.4	51	58
	2.0	1.5	0.09	1.6	57	65
	2.1	1.5	0.09	1.6	40	46
5H	1.0	1.1	0.03	0.5	76	88
	1.5	1.3	0.04	0.7	49	56
	2.0	1.5	0.04	0.7	55	64
	2.1	1.5	0.05	0.9	39	45
5Q	1.0	1.1	0.02	0.4	76	88
	1.5	1.3	0.02	0.4	49	56
	2.0	1.5	0.02	0.4	55	64
	2.1	1.5	0.02	0.4	39	45

Performance data taken in zero wind conditions

Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

8 Series MPR

10° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
8F	15	5	0.74	2.85	3.29
	20	6	0.86	2.30	2.66
	25	7	0.96	1.89	2.18
	30	8	1.05	1.58	1.82
8H	15	5	0.37	2.85	3.29
	20	6	0.42	2.25	2.59
	25	7	0.47	1.85	2.13
	30	8	0.52	1.56	1.81
8Q	15	5	0.18	2.77	3.20
	20	6	0.21	2.25	2.59
	25	7	0.24	1.89	2.18
	30	8	0.26	1.56	1.81

8 Series MPR METRIC

10° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
8F	1.0	1.7	0.16	2.8	72	84
	1.5	2.1	0.20	3.4	58	68
	2.0	2.4	0.23	3.9	48	55
	2.1	2.4	0.24	4.0	40	46
8H	1.0	1.7	0.08	1.4	72	84
	1.5	2.1	0.10	1.7	57	66
	2.0	2.4	0.12	1.9	47	54
	2.1	2.4	0.12	2.0	40	46
8Q	1.0	1.7	0.04	0.7	70	81
	1.5	2.1	0.05	0.8	57	66
	2.0	2.4	0.06	1.0	48	55
	2.1	2.4	0.06	1.0	40	46

10 Series MPR

15° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
10F	15	7	1.16	2.28	2.63
	20	8	1.30	1.96	2.26
	25	9	1.44	1.71	1.98
	30	10	1.58	1.52	1.75
10H	15	7	0.58	2.28	2.63
	20	8	0.65	1.96	2.26
	25	9	0.72	1.71	1.98
	30	10	0.79	1.52	1.75
10Q	15	7	0.29	2.28	2.63
	20	8	0.33	1.96	2.26
	25	9	0.36	1.71	1.98
	30	10	0.39	1.52	1.75

10 Series MPR METRIC

15° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
10F	1.0	2.1	0.26	4.2	58	67
	1.5	2.4	0.29	4.8	50	58
	2.0	3.0	0.35	6.0	39	45
	2.1	3.1	0.36	6.0	37	43
10H	1.0	2.1	0.13	2.4	58	67
	1.5	2.4	0.14	2.4	50	58
	2.0	3.0	0.18	3.0	39	45
	2.1	3.1	0.18	3.0	37	43
10Q	1.0	2.1	0.06	1.2	58	67
	1.5	2.4	0.07	1.2	50	58
	2.0	3.0	0.09	1.2	39	45
	2.1	3.1	0.09	1.2	37	43

12 Series MPR

30° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
12F	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
12H	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
12Q	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 MPR METRIC

30° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
12F	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
12H	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	4.9	46	53
	2.1	3.7	0.30	4.9	44	51
12Q	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

Note: *All MPR nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

15 Series MPR

30° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
15F	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
15H	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
15Q	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

Note: *All MPR nozzles tested on 4" (10.2 cm) pop-ups*
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*

15 Series MPR METRIC

30° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
15F	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
15H	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	6.8	41	48
	2.1	4.6	0.42	7.0	40	46
15Q	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

Performance data taken in zero wind conditions
Note: *Radius reduction over 25% of the normal throw of the nozzle is not recommended*

5 Series MPR Stream Bubbler Nozzles

0° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm
5F-B	15	5	1.50
	20	5	1.50
	25	5	1.50
	30	5	1.50
5H-B	15	5	1.00
	20	5	1.00
	25	5	1.00
	30	5	1.00
5Q-B	15	5	0.50
	20	5	0.50
	25	5	0.50
	30	5	0.50
5CST-B	15	5	0.50
	20	5	0.50
	25	5	0.50
	30	5	0.50

5 Series MPR Stream Bubbler Nozzles METRIC

0° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m
5F-B	1.0	1.5	0.35	5.7
	1.5	1.5	0.35	5.7
	2.0	1.5	0.35	5.7
	2.1	1.5	0.35	5.7
5H-B	1.0	1.5	0.23	3.8
	1.5	1.5	0.23	3.8
	2.0	1.5	0.23	3.8
	2.1	1.5	0.23	3.8
5Q-B	1.0	1.5	0.12	1.9
	1.5	1.5	0.12	1.9
	2.0	1.5	0.12	1.9
	2.1	1.5	0.12	1.9
5CST-B	1.0	1.5	0.12	1.9
	1.5	1.5	0.12	1.9
	2.0	1.5	0.12	1.9
	2.1	1.5	0.12	1.9

Note: *Indicates adjusted radius at psi shown*
Note: *Flow at adjusted radius of 5 feet (1.5 m)*

Did you know?

You can use HE-VAN or U-Series nozzles to have better coverage and save water vs. VAN nozzles.

- Stronger streams and larger water droplets for increased wind resistance.
- Superior close-in watering and edges provide better coverage.
- Shortened run times saves up to 35% in water

15 Strip Series

30° Trajectory

Nozzle	Pressure psi	W x L ft.	Flow gpm
15EST	15	4 x 13	0.45
	20	4 x 14	0.50
	25	4 x 14	0.56
	30	4 x 15	0.61
15CST	15	4 x 26	0.89
	20	4 x28	1.00
	25	4x 28	1.11
	30	4 x 30	1.21
15RCS	15	3 x 11	0.35
	20	3 x 12	0.40
	25	4 x 14	0.45
	30	4 x 15	0.49
15LCS	15	3 x 11	0.35
	20	3 x 12	0.40
	25	4 x 14	0.45
	30	4 x 15	0.49
15SST	15	4 x 26	0.89
	20	4 x 28	1.00
	25	4 x 28	1.11
	30	4 x 30	1.21
9SST	15	9 x 15	1.34
	20	9 x 16	1.47
	25	9 x 18	1.60
	30	9 x 18	1.73

***W** = Width of coverage pattern* ***L** = Length of coverage pattern*

***Note:** Radius reduction over 25% of the normal throw of the nozzle is not recommended*

15 Strip Series METRIC

30° Trajectory

Nozzle	Pressure bar	W x L m	Flow m^3/h	Flow l/m
15EST	1.0	1.2 x 4.0	0.10	1.7
	1.5	1.2 x 4.3	0.11	2.0
	2.0	1.2 x 4.3	0.13	2.3
	2.1	1.2 x 4.6	0.14	2.3
15CST	1.0	1.2 x 7.9	0.20	3.4
	1.5	1.2 x 8.5	0.23	4.0
	2.0	1.2 x 8.5	0.25	4.5
	2.1	1.2 x 9.2	0.27	4.6
15RCS	1.0	0.8 x 3.2	0.08	1.3
	1.5	1.0 x 3.9	0.09	1.6
	2.0	1.2 x 4.5	0.11	1.8
	2.1	1.2 x 4.6	0.11	1.9
15LCS	1.0	0.8 x 3.2	0.08	1.3
	1.5	1.0 x 3.9	0.09	1.6
	2.0	1.2 x 4.5	0.11	1.8
	2.1	1.2 x 4.6	0.11	1.9
15SST	1.0	1.2 x 7.9	0.20	3.4
	1.5	1.2 x 8.5	0.23	4.0
	2.0	1.2 x 8.5	0.25	4.5
	2.1	1.2 x 9.2	0.27	4.6
9SST	1.0	2.7 x 4.6	0.30	5.1
	1.5	2.7 x 4.9	0.33	5.8
	2.0	2.7 x 5.5	0.36	6.5
	2.1	2.7 x 5.5	0.39	6.5

Performance data taken in zero wind conditions

8 FLT Series MPR

5° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip ln/h	▲ Precip ln/h
8H-FLT	15	6	0.56	3.36	3.88
	20	7	0.65	2.91	3.36
	25	7	0.72	2.60	3.01
	30	8	0.79	2.38	2.75
8Q-FLT	15	6	0.28	3.32	3.83
	20	7	0.32	2.87	3.32
	25	7	0.36	2.57	2.97
	30	8	0.39	2.35	2.71

***Note:** All MPR nozzles tested on 4" (10.2 cm) pop-ups*

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

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

8 FLT Series MPR METRIC

5° Trajectory

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
8H-FLT	1.0	1.7	0.12	2.1	87	101
	1.5	2.1	0.15	2.6	71	82
	2.0	2.4	0.18	2.9	62	71
	2.1	2.4	0.18	3.0	60	70
8Q-FLT	1.0	1.7	0.06	1.1	86	100
	1.5	2.1	0.07	1.3	71	81
	2.0	2.4	0.09	1.4	61	71
	2.1	2.4	0.09	1.5	60	69

Performance data taken in zero wind conditions

***Note:** Radius reduction over 25% of the normal throw of the nozzle is not recommended*

SQ Nozzle Installed on PolyFlex Riser with Nozzle Adapter

SQ Nozzles with Screens

One Nozzle…Two Throws

With a simple turn of the nozzle to the next preset stop, the Rain Bird SQ Nozzle adjusts from a 2.5' (0.8 m) throw to a 4' (1.2 m) throw. It's like having two nozzles in one.

Can be used on…

The SQ Nozzle is an ideal solution for a wide range of difficult-to-design areas, thanks to its compatibility with popular irrigation products.

1800® Series Spray Heads | Xeri-Pop Spray Heads | Polyflex Risers | Schedule 80 Risers

SQ Series, Square Pattern Nozzles

The Most Precise and Efficient, Low-Volume Spray Solution for Irrigation of Small Areas with Dense Plantings

Features

- Square spray pattern and pressure compensation offer increased efficiency and control, reducing overspray, property damage and liability
- Simplify design and installation with the flexibility of applications: one nozzle throws 2.5' or 4' (0.8 m or 1.2 m) and can be used on a variety of spray heads and risers
- Meets micro irrigation system requirement for less than 26 gph flow rate at 30 psi
- Square spray pattern with edge-to-edge coverage allows you to easily design and install in small spaces
- Pressure compensation design delivers uniform flow over the pressure range
- Available in 3 models—quarter, half and full patterns with matched precipitation rate
  - Virtually no-mist performance from 20 psi to 50 psi
  - Two throw distances in each nozzle. One simple click adjusts to 2.5' or 4' (0.8 m or 1.2 m)
  - Shipped with blue filter screen (0.02" x 0.02") to maintain precise distance of flow, and to prevent clogging
- Compatible with all 1800 Sprays, Xeri-Pops, New PolyFlex Riser Adapter, UNI-Spray and SCH 80 risers

Operating Range

- Pressure: 20 to 50 psi (1.4 to 3.5 bar)
- Flow rates: 6, 12 and 24 gph (22.7, 45.4 and 90.8 l/h)
- Required filtration: 40 mesh

Note: See page 119 for SQ Series performance charts.

Models

- SQ-QTR: SQ Nozzle, quarter pattern
- SQ-HLF: SQ Nozzle, half pattern
- SQ-FUL: SQ Nozzle, full pattern
- SQ-ADP12: SQ Nozzle Adapter with 12" PolyFlex Riser
- SQ-ADP24: SQ Nozzle Adapter with 24" PolyFlex Riser
- SQ-ADP: SQ PolyFlex Riser Adapter only

* ***Note:*** *A PA-8S Plastic Shrub Adapter (see page 10) is needed when using an SQ Series Nozzle mounted on a SCH 80 riser.*

1300A-F

Adjustable Full-Circle Bubbler

Features

- Stainless Steel adjustment screw regulates flow and radius for spacing between from 1 to 3 feet (0.3 m to 0.9 m) apart
- Non-corrosive plastic and stainless steel construction for long life
- Shipped with SR-050 1/2" (15/21) inlet filter screen for easy installation and resistance to debris
- Operates over a wide range of pressures
- Five year trade warranty

Operating Range

- Flow: 1.0 to 2.3 gpm (3.6 to 8.4 l/m)
- Spacing: 1 to 3 feet (0.3 to 0.9 m)[1]
- Pressure: 10 to 60 psi (0.7 to 4.1 bar)[2]

Model

- 1300A-F

[1] *These ranges are based on proper pressure at nozzle*

[2] *Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations*

1300A-F

Nozzle	Pressure psi	Flow gpm
F	10	1.0
	20	1.4
	30	1.7
	40	1.9
	50	2.1
	60	2.3

1300A-F METRIC

Nozzle	Pressure bar	Flow m^3/h	Flow l/m
F	0.7	0.23	3.6
	1.0	0.26	4.2
	1.5	0.30	4.8
	2.0	0.34	5.4
	2.5	0.39	6.0
	3.0	0.43	7.2
	3.5	0.48	7.8
	4.0	0.52	8.4
	4.1	0.53	8.4

1300A-F

1400 Series

Pressure Compensating Full-Circle Bubblers

Features

- Low flow rates allow water to be absorbed as needed. Reduces runoff
- Flow will not fluctuate at pressures between 20 and 90 psi (1.4 to 6.2 bar)
- Flow is not adjustable for increased vandal resistance
- Shipped with special SR-050 ½" (15/21) bubbler filter screen for easy installation and resistance to debris
- Trickle pattern on models 1401 and 1402; umbrella pattern on models 1404 and 1408
- Five-year trade warranty

1400 Series

Operating Range

- Flow: 0.25 to 2.00 gpm (1.2 to 7.2 l/m)
- Spacing: 1 to 3 feet (0.3 to 0.9 m)*
- Pressure: 20 to 90 psi (1.4 to 6.2 bar)

Models

- 1401: 0.25 gpm (0.06 m^3/h; 0.9 l/m); full-circle, trickle pattern
- 1402: 0.50 gpm (0.11 m^3/h; 1.8 l/m); full-circle, trickle pattern
- 1404: 1.00 gpm (0.23 m^3/h; 3.6 l/m); full-circle, umbrella pattern
- 1408: 2.00 gpm (0.46 m^3/h; 7.2 l/m); full-circle, umbrella pattern

* *These ranges are based on proper pressure at nozzle. Rain Bird recommends using 1800/ RD1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.*

Pressure-Compensating Modules

Point-Source Medium-Flow Emitters for Watering Larger Shrubs and Trees

PCT-05, PCT-07, PCT-10

• ½" FPT inlet that easily threads onto a ½" PVC riser

Operating Range

- Flow: 5, 7, 10 gph (18.93, 26.50, 37.95 l/h)
- Pressure: 10 to 50 psi (0.7 to 3.5 bar)
- Required filtration: 100 mesh (150 micron)

Refer to page 116 for more information