



- Introduction
- Spray Bodies
- Spray & Rotary Nozzles
- Rotors
- Valves
- Controllers
- Sensors & Meters
- Central Control and Water Management
- Drip Irrigation
- Filtration
- Drainage Products
- Resources

## Spray Bodies

Major Products												
	1802, 1804, 1806	1812	1800 PRS	1800 SAM	1800 SAM-PRS	1800 SAM-PRS-45	US-400	1300/1400 Bubblers	PA-80 PA-85	RD-04, RD-06	RD1800 SAM-PRS-F	RD1800 SAM-PRS-45-F
Primary Applications												
Turfgrass	●		●	●	●	●	●			●	●	●
Slopes				●	●	●					●	●
Ground Cover/Shrubs	●	●	●	●	●	●	●	●	●	●	●	●
High Pressure Systems			●		●	●		●	●	●	●	●
Low Pressure Systems	●	●					●	●	●	●		
High Wind Areas	●	●	●	●	●	●	●	●	●	●	●	●
Non-Potable Water									●	●	●	●
Vandalism/Damage Prone											●	●
Dirty Water										●	●	●

### Water Saving Water Saving Tips

- The patented, built-in PRS regulator maintains optimal operating pressure and restricts water loss by up to 70% if a nozzle is removed or damaged. It also ends water waste by eliminating misting and fogging caused by high pressure.
- Save water, stop low head drainage, and reduce water hammer by preventing water from draining out of pipes after irrigation with 1800/RD1800 Series Sprays featuring Seal-A-Matic™ (SAM) check valves.
- Exclusive Flow Shield Technology available in the RD1800 Series provides up to 90% reduction in water loss when a nozzle is removed, preventing potentially costly and unacceptable run-off.

## UNI-Spray™ Series

Compact and reliable spray heads for any application

### Features

- Small exposed cover makes the unit virtually invisible for more attractive landscapes
- Constructed of durable materials including corrosion resistant stainless steel, assuring long product life even in high pressure or surge conditions
- Pressure-activated wiper seal prevents excessive flow-by and water waste and keeps debris from entering upon retraction
- Two-piece ratchet mechanism allows easy nozzle pattern alignment and provides added durability
- Three Year Trade Warranty

### Operating Range

- Spacing: 0.8 to 7.3m\*\*
- Pressure: 1.0 to 4.8 bar

### Specifications

- Flow-by: 0 at 0.75 bar or greater; 0.04 m<sup>3</sup>/h; 0.60 l/m otherwise

### Models\*

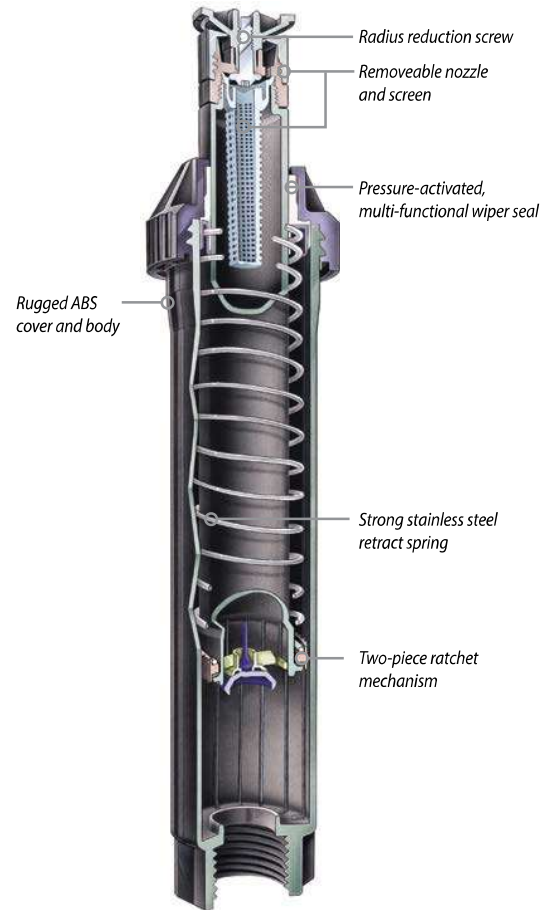
Select models shown. Review your regional price list for complete availability.

- US400: 10 cm (4") pop-up height, body only
- US410: 10 cm (4") pop-up height with VAN-10 attached
- US412: 10 cm (4") pop-up height with VAN-12 attached
- US415: 10 cm (4") pop-up height with VAN-15 attached
- US418: 10 cm (4") pop-up height with VAN-18 attached

### Models with High-Efficiency Nozzles Pre-Attached\*

- US408HE: 10 cm (4") pop-up height with HE-VAN-8 attached
- US410HE: 10 cm (4") pop-up height with HE-VAN-10 attached
- US412HE: 10 cm (4") pop-up height with HE-VAN-12 attached
- US415HE: 10 cm (4") pop-up height with HE-VAN-15 attached

\* The UNI-Spray accepts all Rain Bird nozzles



Spray Bodies



UNI-Spray™



High Efficiency  
Variable Arc Nozzles  
(2.4 m, 3.0 m, 3.7 m, or 4.6 m)  
are available pre-installed

### How to Specify

US - 4 - 10HE

Nozzle Series/Pattern  
HE-VAN nozzle  
R-VAN18 Nozzle

Body  
10.2cm (4")

Model  
UNI-Spray

## 1800® Series

The #1 irrigation spray head in the world

### Features

- Co-molded wiper seal provides unmatched resistance to grit, pressure and the environment
- Constructed of time-proven UV-resistant plastic and corrosion resistant stainless steel parts, ensuring long product life
- Precision controlled flush at pop-down clears debris from unit, assuring positive stem retraction in all soil types
- Two-piece ratchet mechanism allows easy nozzle pattern alignment and provides added durability
- Five Year Trade Warranty

### Operating Range

- Spacing: 0.8 to 7.3m\*\*
- Pressure: 1.0 to 4.8 bar

### Specifications

- Flow-by: 0 at 0.6 bar or greater; 20 l/h otherwise

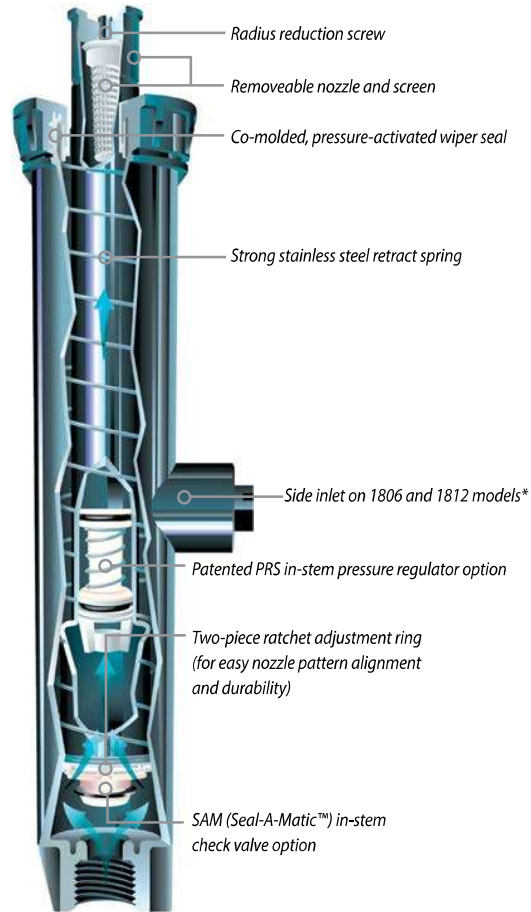
### Dimensions/Models

Select models shown. Review your regional price list for complete availability.

- ½" NPT female threaded inlet
- Models and height:
  - 1802: 10 cm (4") body height; 5 cm (2") pop-up height
  - 1804: 15 cm (6") body height; 10 cm (4") pop-up height
  - 1806: 23 cm (9 3/8") body height; 15 cm (6") pop-up height
  - 1812: 40 cm (16") body height; 30 cm (12") pop-up height
- Exposed surface diameter: 5.7 cm

\* 1806 and 1812-SAM, SAMPRS, and SAM-PRS-45 units do not have a side inlet

\*\* 0.8m to 4.6m with standard Rain Bird Spray Head Nozzles (SQ, U-Series, HE-VAN) 2.4m to 7.3m with Rain Bird Rotary Nozzles (R-VAN)



1800 Series



### How to Specify

#### 1804 SAM-PRS

**Option**  
 SAM: Seal-A-Matic™ check valve  
 PRS: Pressure regulator (30psi)  
 P4S: Pressure regulator (45psi)

**Pop-up Height**  
 1802: 5 cm (2") pop-up height  
 1804: 10 cm (4") pop-up height  
 1806: 15 cm (6") pop-up height  
 1812: 30 cm (12") pop-up height

**Model**  
 1800 Series Spray Bodies

## 1800°-SAM, 1800°-PRS, 1800°-P45, 1800°-SAM-PRS, 1800°-SAM-P45 Series

5.8 cm, 7.6 cm, 10.2 cm, 15.2 cm, 30.5 cm (2", 3", 4", 6", 12")

### Features

- **1800°-SAM Series:** Built-in Seal-A-Matic™ (SAM) check valve. Eliminates the need for under-the-head check valves. Traps water in lateral pipes in elevation changes of up to 4.2 m. Reduces wear on system components by minimizing water hammer during start-up
- **1800°-PRS Series:** Maintains constant outlet pressure at 2.1 bar. PRS pressure regulator built into the stem simplifies system design. Eliminates misting and fogging caused by high pressure. Saves time and money
- **1800°-P45 Series:** Maintains constant outlet pressure at 3.1 bar. P45 pressure regulator built into the stem simplifies system design. Eliminates misting and fogging caused by high pressure. Saves time and money
- **1800°-SAM-PRS Series:** Incorporates all 1800 Series SAM and PRS features. Meets the needs of all spray areas, regardless of changing elevation or water pressures
- **1800°-SAM-P45 Series:** Incorporates all 1800 Series SAM and P45 features. Maintains constant outlet pressure at 3.1 bar at varying inlet pressures. Ensures maximum spray body and nozzle performance, even with varying inlet pressures. Maintains constant pressure regardless of nozzle used

### Specifications

- 5.8 cm, 7.6 cm, 10.2 cm, 15.2 cm, 30.5 cm (2", 3", 4", 6", 12")
- SAM capability: holds up to 4.2 m) of head; 0.4 bar
- PRS and P45 models regulate nozzle pressure to an average 2.1 or 3.1 bar with inlet pressures of up to 4.8 bar
- Flow-by: 0 at 0.6 bar or greater; 0.02 m³/h; 0.36 l/m otherwise
- Installation: side or bottom inlet
- Side inlet installation not recommended in freezing climates
- Five Year Trade Warranty

### 1800°-SAM Models

- 1804-SAM: 10 cm (4") pop-up height
- 1806-SAM: 15 cm (6") pop-up height
- 1812-SAM: 30 cm (12") pop-up height

### 1800°-PRS Models

- 1802PRS: 5.8 cm (2") pop-up height
- 1803PRS: 7.6 cm (3") pop-up height
- 1804 PRS: 10 cm (4") pop-up height
- 1806 PRS: 15 cm (6") pop-up height
- 1812 PRS: 30 cm (12") pop-up height

### 1800°-P45 Models

- 1804 P45: 10 cm (4") pop-up height
- 1806 P45: 15 cm (6") pop-up height
- 1812 P45: 30 cm (12") pop-up height

### 1800°-SAM-PRS Models

- 1804-SAM-PRS: 10 cm (4") pop-up height
- 1806-SAM-PRS: 15 cm (6") pop-up height
- 1812-SAM-PRS: 30 cm (12") pop-up height

### 1800°-SAM-P45 Models

- 1804-SAM-P45: 10 cm (4") pop-up height
- 1806-SAM-P45: 15 cm (6") pop-up height
- 1812-SAM-P45: 30 cm (12") pop-up height

### Operating Range

- Spacing: 0.8 to 7.3m\*
- Pressure: 1.0 to 4.8 bar



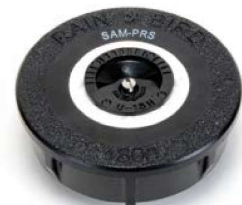
1800-SAM



1800-PRS



1800-PRS-45



1800-SAM-PRS



1800-SAM-P45



When using 2.1 bar and 3.1 bar pressure regulating spray heads



Built-in Seal-A-Matic check valve prevents low-head drainage, ideal for use in changing elevations



Patented pressure regulator in stem compensates for high or fluctuating water pressure to ensure maximum performance

\* 0.8m to 5.5m with standard Rain Bird Spray Head Nozzles (SQ, MPR, VAN, HE-VAN, U-Series), 2.4m to 7.3m with Rain Bird Rotary Nozzles (R-VAN)

## RD1800™ Series Spray Heads

Robust Design for Harsh Applications

### Features

- Patented, Triple-Blade Wiper Seal precisely balances flushing, flow-by and debris protection to optimize performance and durability at pop-up and retraction. Precision-controlled flushing at pop-up and retraction clears debris, ensuring positive stem retraction in all soil types
- Unique debris pockets hold grit in place, removing it from circulation and preventing long-term damage. Parts resistant to corrosion in treated recycled water containing chlorine
- RD1800™ SAM PRS Series:** Incorporates all RD1800 Series SAM and PRS features. Meets the needs of all spray areas, regardless of changing elevation or water pressures
- RD1800™ SAM P45 Series:** Incorporates all RD1800 Series SAM and P45 features. Ensures maximum spray body and nozzle performance even with varying inlet pressures. Recommended for use with rotary nozzles (R-VAN)
- RD1800™ Flow-Shield™ Series:** Provides low flow vertical water jet visible from +61 meter line of sight when a nozzle has been removed
- RD1800™ Non-Potable Water Series:** Provides an alternative to clip-on caps and molded purple covers. Easy-to-read English "DO NOT DRINK", Spanish "NO BEBA" warnings, and international do not drink symbol

### Operating Range

- Spacing: 0.8 to 7.3 m
- Pressure: 1.0 to 6.9 bar

### Specifications

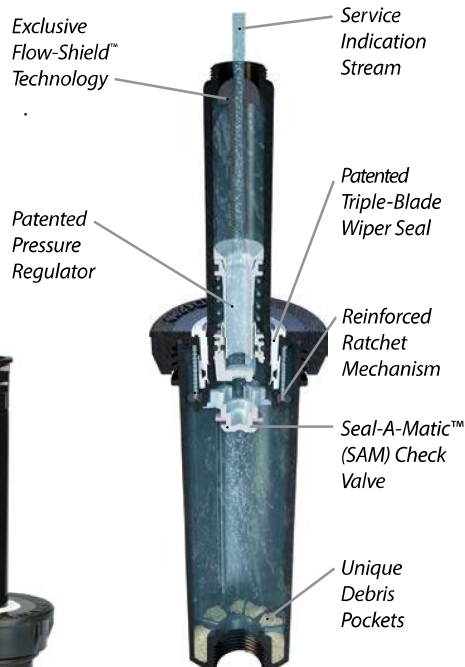
- 10.2 cm; 15.2 cm; 30.5 cm
- SAM capability: Holds up to 4.2 m of head; 0.3 bar
- Flow-by: SAM Models: 0 at 1.0 bar or greater; 0.1 m<sup>3</sup>/h; 0.03 l/s otherwise  
All Other Models: 0 at 0.7 bar or greater; 0.1 m<sup>3</sup>/h; 0.03 l/s otherwise
- SAM-PRS models regulate nozzle pressure to an average 2.1 bar with inlet pressures of up to 6.9 bar
- SAM-P45 models regulate nozzle pressure to an average 3.1 bar with inlet pressures of up to 6.9 bar
- Five-year trade warranty

### Dimensions

- ½" NPT female threaded inlet

### Models

10 cm (4")	15 cm (6")	30 cm (12")
RD04-NP	—	RD12-NP
RD04-S-P-30-NP	RD06-S-P-30-NP	RD12-S-P-30-NP
RD04-S-P-30-F	RD06-S-P-30-F	RD12-S-P-30-F
RD04-S-P-30-F-NP	RD06-S-P-30-F-NP	RD12-S-P-30-F-NP
RD04-S-P-45-NP	RD06-S-P-45-NP	RD12-S-P-45-NP
RD04-S-P-45-F	RD06-S-P-45-F	RD12-S-P-45-F
RD04-S-P-45-F-NP	RD06-S-P-45-F-NP	RD12-S-P-45-F-NP



RD1800 Series



When using 2.1 bar and 3.1 bar pressure regulating spray heads



Standard Cover



Non-Potable Cover

### How to Specify

#### RD-XX - X - Nozzle

**Nozzle**  
See R-VAN, U-Series, MPR, VAN, HE-VAN and SQ Nozzle specifications for more information

#### Optional Features

S: Seal-A-Matic™ check valve  
P30: 30 psi (2.1 bar) in-stem pressure regulation  
P45: 45 psi (3.1 bar) in-stem pressure regulation  
F: Flow-Shield™ Technology  
NP: Non-potable water use indicating cover

#### Model

RD-04: 4" (10 cm) pop-up height  
RD-06: 6" (15 cm) pop-up height  
RD-12: 12" (30.5 cm) pop-up height

#### Notes:

Specify sprinkler bodies and nozzles separately.

### 1800® NP Cover

Non-Potable 1800 Spray Head Cover

#### Features

- Designed for excellent retention on 1800 Series Spray Body covers
- Purple plastic cover for easy identification of non-potable water system
- Marked with "Do Not Drink!" warning in both English and Spanish
- Snaps onto all 1800® Series Spray Body covers

#### Model

- 1800-NP

1800-NP



### PA

Plastic Shrub Adapter

#### Features

- Adapts Rain Bird Nozzles for use with 1/2" (15/21) NPT threaded risers
- Accepts protective, non-clogging 1800 Series filter screen (shipped with nozzle) and PCS Series screens
- Durable, non-corrosive plastic construction
- Non-Potable Plastic Shrub Adapter

#### Specifications

- 1/2" (15/21) female inlet threads
- Fine top threads accept all Rain Bird nozzles

#### Model

- PA-8S
- PA-8S-NP



PA-8S

PA-8S-NP

### PA-80

Plastic Adapter

#### Features

- Adapts Rain Bird Spray Bodies for use with any 1/2" (15/21) NPT bubbler or spray nozzle
- Rugged, UV-resistant thermoplastic construction
- Easy to install; no tools required

#### Dimensions

- Height: 3.8 cm; 2.0 cm above 1800 cap

#### Model

- PA-80



PA-80

### 1800®-EXT

Plastic Extension

#### Features

- UV-resistant thermoplastic construction for long life
- Fits all Rain Bird Spray Bodies and Nozzles. Exception: Cannot be used with bubblers

#### Model

- 1800-EXT



1800-EXT

Spray Bodies

### PA-8S-PRS & PA-8S-P45

30 psi and 45 psi Pressure Regulating Shrub Adapters

#### Features

- Adapts nozzles for use with 1/2" (15/21) NPT threaded risers
- Patented PRS pressure regulator built into the stem. No parts to be installed at the site. Saves time and money
  - Maintains constant pressure at 2,1 bar or 3,1 bar
  - Restricts water loss by up to 70% if nozzle is removed or damaged. Saves water and money. Reduces liability. Recommended for vandal-prone areas
- Fits all Rain Bird plastic nozzles
- Rugged thermoplastic construction resists UV rays

#### Operating Range

- Pressure: 1.0 to 4.8 bar
- Flow: 0.05 to 0.91 m³/h; 0.06 to 15.0 l/m

#### Specifications

- 1/2" female inlet threads
- Fine top threads accept all Rain Bird nozzles
- Height: 13.3 cm

#### Models

- PA-8S-PRS
- PA-8S-P45



### SPX Series Swing Pipe

Swing Pipe with Spiral Barb Fittings Provides a Flexible Swing Assembly for Sprays and Rotors

#### Features and Benefits

- **SPX-FLEX100**
  - Superior flexibility allows pipe to be efficiently routed around hardscape, terraces, and uneven terrain to turn landscape design into reality
  - Textured surface makes product easier to handle, contributing to labor efficiency, especially under wet conditions
  - Resists kinking
  - Quick and easy installation lowers material and labor costs
  - Installs quickly leaving time for additional system installations and incremental revenue opportunities

#### Specifications

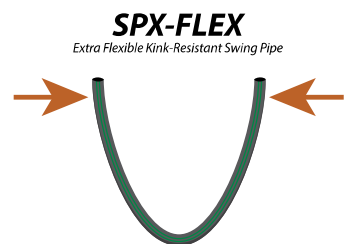
- Inside diameter: 1.24 cm
- Operating pressure: 5.5 bar
- Temperature: 43° C

#### Models

- SPX-FLEX-100: 30 m (100') coil



SPX-FLEX100



**SPX-FLEX**  
 Extra Flexible Kink-Resistant Swing Pipe

- Same High Quality
- NOW 25% More Flexible

## SB Series Spiral Barb Fittings

A Natural Product Complement to SPX Series Swing Pipe

### Features and Benefits

- Fittings are made of robust acetal material to make connecting swing pipe fast and easy
- Easy twist-in insertion – no glue or clamps needed for installation
- Aggressive barb lip makes a secure connection that is less likely to leak

Spray Bodies



- Broad range of shapes and sizes allow the contractor to choose the best fitting for the application
- Extended length and aggressive barb lip prevent blow outs, reducing likelihood of contractor call backs

### Specifications

- Operating pressure: 5.5 bar
- Temperature: Up to 43° C

### Models

- SB-CPLG: ½" barb x ½" barb coupling
- SBA-050: ½" M NPT x ½" barb adapter
- SBE-075: ¾" M NPT x ½" barb elbow
- SBE-050: ½" M NPT x ½" barb elbow
- SB-TEE: ½" barb x ½" barb x ½" barb tee

## SA Series

Swing Assemblies Connect Heads to Lateral Pipes.

### Features

- Quality alternative to locally assembled swing pipe/spiral barb fittings that do not carry a manufacturer's warranty
- Comprehensive range of products support a variety of landscape solutions
- Complementary engineered fittings and spray heads instill confidence in product specification

### Specifications

- The operating range of the Rain Bird Swing Assemblies matches or exceeds the operating range for most 1.3 cm sprays and 1.9 cm rotors
- Operating pressure: Up to 5.5 bar
- Surge pressure: Up to 15.5 bar
- Temperature: Up to 43° C
- Maximum flow: 0.5 l/sec

### Models

Select models shown. Review your regional price list for complete availability.

	Length	Inlet/Outlet
• SA-6050	15.2 cm	½" (1.3 cm)
• SA-125050	30.5 cm	½" (1.3 cm)



SA Series

### How to Specify

#### SA 12 5050

**Inlet/Outlet**  
050: 1.3 cm x 1.3 cm  
5050: 1.3 cm x 1.3 cm  
7575: 1.9 cm x 1.9 cm

**Length**  
18" (45.7 cm)  
12" (30.5 cm)  
6" (15.2 cm)

**Model**  
Swing Assembly



Swing Pipe Flexible Sprinkler Assembly



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## Spray & Rotary Nozzles

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

Refer to page 114 for more information on SQ Series, Square Pattern Nozzles



### 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 2.4m to 4.6m, 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	
<p>R-VAN</p>		<p>HE-VAN</p>	<p>U-Series</p>	<p>VAN</p>	<p>MPR</p>
Adjustable Arc (45° - 270°)	Full Circle (360°)	Adjustable Arc	Fixed Arc	Adjustable Arc	Fixed Arc

## R-VAN Nozzles

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.

### 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 2.4m to 10.7m
- Three year trade warranty

### Operating Specifications

- Pressure Range: 2.1 to 3.8 bar
- Recommended Operating Pressure: 3.1 bar
- Spacing: 2.4 to 7.3m
- Adjustments: Arc and radius should be adjusted while water is running

### Models

#### 2.4 to 4.6m

- R-VAN14: 45° - 270° Adjustable Arc
- R-VAN14-360: 360° Full Circle

#### 4.0 to 5.5m

- R-VAN18: 45° - 270° Adjustable Arc
- R-VAN18-360: 360° Full Circle

#### 5.2 to 7.3m

- R-VAN24: 45° - 270° Adjustable Arc
- R-VAN24-360: 360° Full Circle

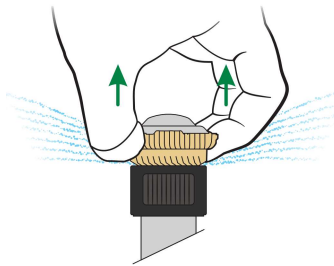
### Strip Nozzles

- R-VAN-LCS: 1.5 x 4.6m Left Corner Strip
- R-VAN-RCS: 1.5 x 4.6m Right Corner Strip
- R-VAN-SST: 1.5 x 9.1m Side Strip

<sup>1</sup> Rain Bird recommends using 1800 P45 Spray Bodies to maintain optimum nozzle performance



R-VAN Nozzles



Pull Up HARD to Flush

For Optimum Performance, Use Rain Bird 1800 3.1 Bar Regulated or RD1800 3.1 Bar Regulated Spray Bodies



### How to Specify

#### R-VAN 18-360

- Radius Range**  
2.4 to 4.6m  
R-VAN14: 45° - 270°  
R-VAN14-360: 360°
- 4.0 to 5.5m**  
R-VAN18: 45° - 270°  
R-VAN18-360: 360°
- 5.2 to 7.3m**  
R-VAN24: 45° - 270°  
R-VAN24-360: 360°
- Strip Nozzles**  
R-VAN-LCS: 1.5 x 4.6m  
R-VAN-RCS: 1.5 x 4.6m  
R-VAN-SST: 1.5 x 9.1m

Model  
R-VAN Adjustable Rotary Nozzle

R-VAN Nozzles meet the standard for high efficiency nozzles.

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

Product	Type	Radius	DU(LQ)
R-VAN	Multi-stream	2.4 to 7.3m	> 0.70



## 2.4m to 4.6m

## 4.0m to 5.5m

## 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**  
1.5 x 4.6m  
Left Corner Strip

**R-VAN-SST**  
1.5 x 9.1m  
Side Strip

**R-VAN-RCS**  
1.5 x 4.6m  
Right Corner Strip

Spray & Rotary Nozzles

### 2.4 to 4.6m Adjustable Arc Nozzles (45° to 270°)

R-VAN14		2.4 to 4.6m				
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
270°	2.1	4.0	0.19	3.18	16	19
	2.4	4.0	0.20	3.29	17	19
	2.8	4.3	0.21	3.48	15	18
	<b>3.1</b>	<b>4.3</b>	<b>0.21</b>	<b>3.56</b>	<b>16</b>	<b>18</b>
	3.4	4.6	0.25	4.20	16	19
210°	3.8	4.6	0.27	4.43	17	20
	2.1	4.0	0.15	2.46	16	19
	2.4	4.0	0.15	2.57	17	19
	2.8	4.3	0.16	2.73	15	18
180°	3.1	<b>4.3</b>	<b>0.17</b>	<b>2.76</b>	<b>16</b>	<b>18</b>
	3.4	4.6	0.20	3.26	16	19
	3.8	4.6	0.21	3.44	17	20
	2.1	4.0	0.13	2.12	16	19
90°	2.4	4.0	0.13	2.20	17	19
	2.8	4.3	0.14	2.31	15	18
	<b>3.1</b>	<b>4.3</b>	<b>0.14</b>	<b>2.38</b>	<b>16</b>	<b>18</b>
	3.4	4.6	0.17	2.80	16	19
270°	3.8	4.6	0.18	2.95	17	20
	2.1	4.0	0.06	1.06	16	19
	2.4	4.0	0.07	1.10	17	19
	2.8	4.3	0.07	1.17	16	18
210°	<b>3.1</b>	<b>4.3</b>	<b>0.07</b>	<b>1.21</b>	<b>15</b>	<b>18</b>
	3.4	4.6	0.08	1.40	16	19
	3.8	4.6	0.09	1.48	17	20

### 4.0 to 5.5m Adjustable Arc Nozzles (45° to 270°)

R-VAN18		4.0 to 5.5m				
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
270°	2.1	4.9	0.29	4.77	17	19
	2.4	4.9	0.31	5.11	16	19
	2.8	5.2	0.32	5.38	16	19
	<b>3.1</b>	<b>5.2</b>	<b>0.34</b>	<b>5.72</b>	<b>16</b>	<b>19</b>
	3.4	5.5	0.36	5.94	15	18
210°	3.8	5.5	0.37	6.13	0	18
	2.1	4.9	0.22	3.71	16	19
	2.4	4.9	0.24	3.97	17	20
	2.8	5.2	0.25	4.16	16	19
180°	<b>3.1</b>	<b>5.2</b>	<b>0.27</b>	<b>4.43</b>	<b>16</b>	<b>20</b>
	3.4	5.5	0.28	4.62	16	18
	3.8	5.5	0.29	4.77	16	19
	2.1	4.9	0.19	3.22	17	19
90°	2.4	4.9	0.21	3.44	16	19
	2.8	5.2	0.22	3.71	16	19
	<b>3.1</b>	<b>5.2</b>	<b>0.23</b>	<b>3.82</b>	<b>16</b>	<b>19</b>
	3.4	5.5	0.24	4.05	15	18
270°	3.8	5.5	0.25	4.13	15	18
	2.1	4.9	0.10	1.59	17	19
	2.4	4.9	0.11	1.78	16	19
	2.8	5.2	0.11	1.89	16	19
210°	<b>3.1</b>	<b>5.2</b>	<b>0.11</b>	<b>1.89</b>	<b>16</b>	<b>19</b>
	3.4	5.5	0.12	2.04	15	18
	3.8	5.5	0.13	2.20	15	18

### 2.4 to 4.6m Full Circle Nozzles (360°)

R-VAN14-360		2.4 to 4.6m				
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360°	2.1	4.0	0.25	4.16	16	18
	2.4	4.0	0.25	4.24	16	19
	2.8	4.3	0.28	4.62	15	18
	<b>3.1</b>	<b>4.3</b>	<b>0.29</b>	<b>4.81</b>	<b>16</b>	<b>18</b>
	3.4	4.6	0.32	5.34	15	18
	3.8	4.6	0.33	5.49	16	18

### 4.0 to 5.5m Full Circle Nozzles (360°)

R-VAN18-360		4.0 to 5.5m				
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360°	2.1	4.9	0.38	6.25	16	18
	2.4	4.9	0.38	6.32	16	19
	2.8	5.2	0.41	6.81	15	18
	<b>3.1</b>	<b>5.2</b>	<b>0.42</b>	<b>7.00</b>	<b>16</b>	<b>18</b>
	3.4	5.5	0.47	7.76	15	18
	3.8	5.5	0.48	7.99	16	18

Note: All R-VAN nozzles tested on 10 cm pop-ups

■ Square spacing based on 50% diameter of throw

▲ Triangular spacing based on 50% diameter of throw




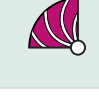
Performance data taken in zero wind conditions

R-VAN24 and R-VAN24-360: "Do not reduce the radius below 5.2 m


R-VAN18 and R-VAN18-360: "Do not reduce the radius below 4.0 m

R-VAN14 and R-VAN18-360: "Do not reduce the radius below 2.4 m

### 5.2 to 7.3m Adjustable Arc Nozzles (45° to 270°)

R-VAN24		5.2 to 7.3m				
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
270° 	2.1	5.8	0.41	6.81	16	19
	2.4	6.1	0.44	7.38	16	18
	2.8	6.7	0.52	8.74	15	18
	<b>3.1</b>	<b>7.0</b>	<b>0.57</b>	<b>9.54</b>	<b>15</b>	<b>18</b>
	3.4	7.3	0.64	10.67	16	19
210° 	2.1	5.8	0.32	5.30	16	19
	2.4	6.1	0.35	5.75	16	18
	2.8	6.7	0.41	6.81	15	18
	<b>3.1</b>	<b>7.0</b>	<b>0.45</b>	<b>7.42</b>	<b>15</b>	<b>18</b>
	3.4	7.3	0.50	8.29	16	19
180° 	2.1	5.8	0.27	4.54	16	19
	2.4	6.1	0.30	4.92	16	18
	2.8	6.7	0.35	5.83	15	18
	<b>3.1</b>	<b>7.0</b>	<b>0.38</b>	<b>6.36</b>	<b>15</b>	<b>18</b>
	3.4	7.3	0.43	7.12	16	19
90° 	2.1	5.8	0.14	2.27	16	19
	2.4	6.1	0.15	2.46	16	18
	2.8	6.7	0.17	2.91	15	18
	<b>3.1</b>	<b>7.0</b>	<b>0.19</b>	<b>3.18</b>	<b>15</b>	<b>18</b>
	3.4	7.3	0.21	3.56	16	19
3.8	7.3	0.22	3.63	16	19	

### 5.2 to 7.3m Full Circle Nozzles (360°)

R-VAN24-360		5.2 to 7.3m				
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
360° 	2.1	5.8	0.53	8.90	16	18
	2.4	6.1	0.57	9.54	15	18
	2.8	6.7	0.71	11.85	16	18
	<b>3.1</b>	<b>7.0</b>	<b>0.79</b>	<b>13.17</b>	<b>16</b>	<b>19</b>
	3.4	7.3	0.82	13.67	15	18
	3.8	7.3	0.85	14.16	16	18

Note: All R-VAN nozzles tested on 10 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 5.2 m

R-VAN18 and R-VAN18-360: "Do not reduce the radius below 4.0 m

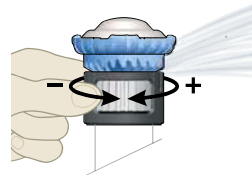
R-VAN14 and R-VAN18-360: "Do not reduce the radius below 2.4 m

### Easy Adjustments

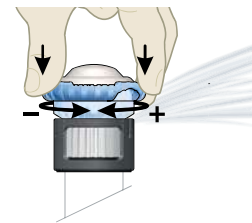
#### Adjustable Arc Nozzles

R-VAN14, R-VAN18, R-VAN24

##### RADIUS ADJUSTMENT



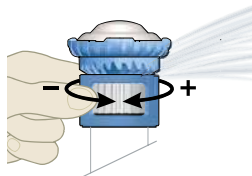
##### ARC ADJUSTMENT



#### Full Circle Nozzles

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

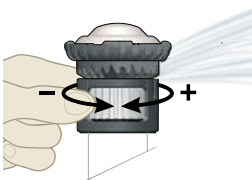
##### RADIUS ADJUSTMENT



#### Strip Nozzles

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

##### SIZE ADJUSTMENT



### Did you know?


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


- Matched precipitation rate (MPR) from 2.4m to 10.7m
- Superior coverage – >0.70 DU[LQ]
- Thick, wind-resistant streams – near to far




## Strip Nozzles (Left Corner, Side, Right Corner)

Spray & Rotary Nozzles

R-VAN-LCS 1.5 x 4.6m						
Nozzle	Pressure bar	Size m	Flow m <sup>3</sup> /h	Flow l/m	— Precip mm/h	▲ Precip mm/h
Left	2.1	1.2x4.3	0.04	0.68	16	16
Corner	2.4	1.5x4.6	0.05	0.83	14	14
Strip	2.8	1.5x4.6	0.05	0.87	15	15
	<b>3.1</b>	<b>1.5x4.6</b>	<b>0.05</b>	<b>0.91</b>	<b>16</b>	<b>16</b>
	3.4	1.5x4.6	0.06	0.95	16	16
	3.8	1.8x4.9	0.06	1.06	14	14

R-VAN-RCS 1.5 x 4.6m						
Nozzle	Pressure bar	Size m	Flow m <sup>3</sup> /h	Flow l/m	— Precip mm/h	▲ Precip mm/h
Right	2.1	1.2x4.3	0.04	0.68	16	16
Corner	2.4	1.5x4.6	0.05	0.83	14	14
Strip	2.8	1.5x4.6	0.05	0.87	15	15
	<b>3.1</b>	<b>1.5x4.6</b>	<b>0.05</b>	<b>0.91</b>	<b>16</b>	<b>16</b>
	3.4	1.5x4.6	0.06	0.95	16	16
	3.8	1.8x4.9	0.06	1.06	14	14

R-VAN-SST 1.5 x 9.1m						
Nozzle	Pressure bar	Size m	Flow m <sup>3</sup> /h	Flow l/m	— Precip mm/h	▲ Precip mm/h
Side	2.1	1.2x8.5	0.08	1.36	16	16
Strip	2.4	1.5x9.1	0.10	1.67	14	14
	2.8	1.5x9.1	0.10	1.74	15	15
	<b>3.1</b>	<b>1.5x9.1</b>	<b>0.11</b>	<b>1.82</b>	<b>16</b>	<b>16</b>
	3.4	1.5x9.1	0.11	1.89	16	16
	3.8	1.8x9.8	0.13	2.12	14	14

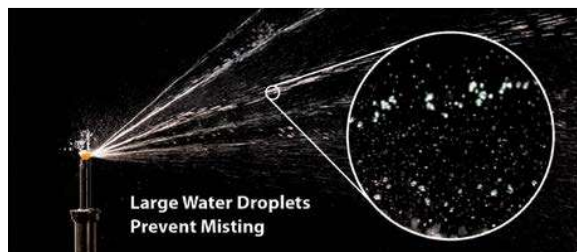
**Note:** All R-VAN nozzles tested on 10 cm pop-ups  
Performance data taken in zero wind conditions  
— Straight-line spacing based on 50% overlap of throw for LCS, SST, and RCS  
▲ Triangular spacing based on 50% overlap of throw for LCS, SST, and RCS

## 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



### 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: 1.8 to 4.6m<sup>1</sup>
- Pressure: 1.0 to 2.1 bar
- Optimum pressure: 2.1 bar<sup>2</sup>

### Models

- HE-VAN-08: 1.8 to 2.4 m
- HE-VAN-10: 2.4 to 3.0 m
- HE-VAN-12: 2.7 to 3.7 m
- HE-VAN-15: 3.7 to 4.6 m

<sup>1</sup> These ranges are based on proper pressure at nozzle

<sup>2</sup> Rain Bird recommends using 1800/RD1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations



Available in popular 2.4m, 3.0m, 3.7m, and 4.6m models

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

For Optimum Performance, Use Rain Bird 1800 2.1 Bar Regulated or RD1800 2.1 Bar Regulated Spray Bodies



### How to Specify

#### HE-VAN-15

Radius Range	8: 1.8 to 2.4 m
	10: 2.4 to 3.0 m
	12: 2.7 to 3.7 m
	15: 3.7 to 4.6 m
Feature	VAN: Variable Arc
Model	High Efficiency Nozzle







HE-VAN Nozzles meet the standard for high efficiency nozzles.			
The average DU(LQ) of the applicable products exceed 0.65 distribution uniformity.			
Product	Type	Radius	DU(LQ)
HE-VAN	Spray, Variable Arc	1.8m - 4.6m	> 0.70

Spray & Rotary Nozzles





## 8 Series HE-VAN

### 24° Trajectory

Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	1.0	1.5	0.19	3.14	82	95
	1.4	1.8	0.22	3.62	66	76
	1.7	2.1	0.25	4.05	54	62
	2.1	2.4	0.27	4.43	45	52
	1.0	1.5	0.14	2.35	82	95
	1.4	1.8	0.16	2.72	66	76
	1.7	2.1	0.18	3.04	54	62
	2.1	2.4	0.20	3.33	45	52
	1.0	1.5	0.10	1.57	82	95
	1.4	1.8	0.11	1.81	66	76
	1.7	2.1	0.12	2.02	54	62
	2.1	2.4	0.13	2.22	45	52
	1.0	1.5	0.05	0.78	82	95
	1.4	1.8	0.05	0.91	66	76
	1.7	2.1	0.06	1.01	54	62
	2.1	2.4	0.07	1.11	45	52





## 12 Series HE-VAN

### 23° Trajectory

Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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
	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





## 10 Series HE-VAN

### 27° Trajectory

Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	1.0	2.1	0.29	4.78	64	74
	1.4	2.4	0.34	5.52	56	65
	1.7	2.7	0.37	6.17	50	57
	2.1	3.1	0.41	6.76	44	51
	1.0	2.1	0.22	3.59	64	74
	1.4	2.4	0.25	4.14	56	65
	1.7	2.7	0.28	4.63	50	57
	2.1	3.1	0.31	5.07	44	51
	1.0	2.1	0.15	2.39	64	74
	1.4	2.4	0.17	2.76	56	65
	1.7	2.7	0.19	3.09	50	57
	2.1	3.1	0.21	3.38	44	51
	1.0	2.1	0.07	1.20	64	74
	1.4	2.4	0.08	1.38	56	65
	1.7	2.7	0.09	1.54	50	57
	2.1	3.1	0.10	1.69	44	51

## 15 Series HE-VAN

### 25° Trajectory

Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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
	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 10 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<sup>1</sup>

### 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: 1.7 to 4.6 m<sup>2</sup>
- Pressure: 1.0 to 2.1 bar
- Optimum pressure: 2.1 bar<sup>3</sup>

### Models

- U-8 Series: 2.4m Quarter, Half, Full nozzles
- U-10 Series: 3.1m Quarter, Half, Full nozzles
- U-12 Series: 3.7m Quarter, Half, Full nozzles
- U-15 Series: 4.6m Quarter, Half, Full nozzles

<sup>1</sup> 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.

<sup>2</sup> These ranges are based on proper pressure at nozzle.

<sup>3</sup> Rain Bird recommends using 1800/RD1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.



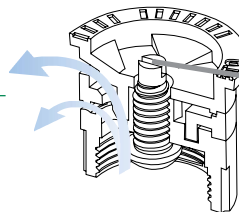
U-Series Nozzles



U-Series Nozzle with screen



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



Fits all Rain Bird Spray Bodies and Shrub Adapters

Stainless steel adjustment screw to adjust flow and radius

For Optimum Performance, Use Rain Bird 1800 2.1 Bar Regulated or RD1800 2.1 Bar Regulated Spray Bodies



### How to Specify

#### U12H

Radius Range  
8: 1.7-2.4 m  
10: 2.1-3.1 m  
12: 2.7-3.7 m  
15: 3.4-4.6 m

Pattern  
F: Full  
H: Half  
Q: Quarter




Model  
U-Series Nozzle









### U-Series Nozzles meet the standard for high efficiency nozzles.




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

Product	Type	Radius	DU(LQ)
U-Series	Spray, Fixed Arc	1.8m - 4.6m	> 0.70

U8 Series						
10° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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

U10 Series						
12° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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 bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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 bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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 10 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

## SQ Series, Square Pattern Nozzles

Precise and efficient, low-volume spray nozzle for irrigation around the perimeter of trees or shrubs



SQ Nozzles with Screens

### Operating Range

- Flow Rates: 22.7, 45.4, 68.1, and 90.8 l/hr
- Pressure: 1.4 to 3.5 bar
- Required Filtration: 375 micron

**Refer to page 114 for more information**



## 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

### Easy to Adjust



4 Series VAN						
0° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /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
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
90° Arc	2.1	1.2	0.10	1.7	139	161
	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 bar	Radius m	Flow m <sup>3</sup> /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
180° Arc	2.1	1.8	0.25	4.2	103	119
	1.0	1.2	0.10	1.6	139	161
	1.5	1.5	0.11	1.9	98	113
90° Arc	2.0	1.8	0.13	2.2	80	92
	2.1	1.8	0.14	2.3	86	99
	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

**Note:** All VAN nozzles tested on 10 cm pop-ups  
 ■ Square spacing based on 50% diameter of throw  
 ▲ Triangular spacing based on 50% diameter of throw

### Operating Range

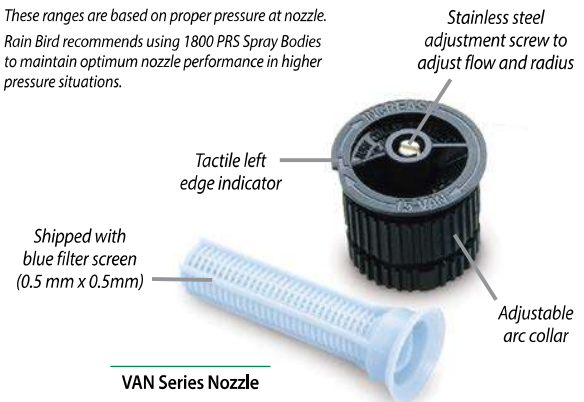
- Spacing: 0.9 m to 5.5 m<sup>1</sup>
- Pressure: 1.0 to 2.1 bar
- Optimum pressure: 2.1 bar<sup>2</sup>

### Models

- 4-VAN Series: 0.9 to 1.2 m
- 6-VAN Series: 1.2 to 1.8 m
- 8-VAN Series: 1.8 to 2.4 m
- 10-VAN Series: 2.1 to 3.1 m
- 12-VAN Series: 2.7 to 3.7 m
- 15-VAN Series: 3.4 to 4.6 m
- 18-VAN Series: 4.3 to 5.5 m

<sup>1</sup> These ranges are based on proper pressure at nozzle.

<sup>2</sup> Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.



Shipped with blue filter screen (0.5 mm x 0.5mm)

VAN Series Nozzle

For Optimum Performance, Use Rain Bird 1800-SAM-PRS 2.1 Bar Regulated or RD1800-SAM-PRS 2.1 Bar Regulated Spray Bodies



### How to Specify





8 VAN	
Radius Range	Nozzle Type
4: 0.9-1.2 m	VAN: Variable Arc Nozzle
6: 1.2-1.8 m	
8: 1.8-2.4 m	
10: 2.1-3.0 m	
12: 2.7-3.7 m	
15: 3.4-4.6 m	
18: 4.3-5.5 m	





8 Series VAN						
5° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /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
180° Arc	2.1	2.4	0.35	5.9	81	94
	1.0	1.8	0.19	3.2	117	135
	1.5	2.1	0.23	3.8	104	120
90° Arc	2.0	2.3	0.26	4.4	98	113
	2.1	2.4	0.27	4.5	94	109
	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





Performance data taken in zero wind conditions





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

Spray & Rotary Nozzles

10 Series VAN						
10° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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
	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 bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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
	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

15 Series VAN						
23° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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
	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 bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
	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
	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
	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
	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 10 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: 0.9 to 4.6 m<sup>1</sup>
- Pressure: 1 to 2.1 bar
- Optimum pressure: 2.1 bar<sup>2</sup>



Rain Bird® MPR Nozzles, The Industry Standard

### 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

<sup>1</sup> These ranges are based on proper pressure at nozzle.

<sup>2</sup> Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.



MPR Nozzle and Screen

For Optimum Performance, Use  
Rain Bird 1800 2.1 Bar Regulated or  
RD1800 2.1 Bar Regulated Spray Bodies






### How to Specify

5 F

Pattern  
F: Full  
H: Half  
Q: Quarter

MPR Radius Range




5: 1.1-1.5 m  
8: 1.7-2.4 m  
10: 2.1-3.1 m  
12: 2.7-3.7 m  
15: 3.4-4.6 m

5 Series MPR						
5° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /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

Note: All MPR nozzles tested on 10 cm pop-ups




■ Square spacing based on 50% diameter of throw




▲ Triangular spacing based on 50% diameter of throw




8 Series MPR						
10° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /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







Performance data taken in zero wind conditions

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

10 Series MPR						
15° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/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 bar	Radius m	Flow m³/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

15 Series MPR						
30° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/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

15 Strip Series				
30° Trajectory				
Nozzle	Pressure bar	W x L m	Flow m³/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

Note: All MPR nozzles tested on 10 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

## 1300A-F

Adjustable Full-Circle Bubbler

### Features

- Stainless Steel adjustment screw regulates flow and radius for spacing between from 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: 3.6 to 8.4 l/m
- Spacing: 0.3 to 0.9 m<sup>1</sup>
- Pressure: 0.7 to 4.1 bar<sup>2</sup>

### Model


- 1300A-F

<sup>1</sup> These ranges are based on proper pressure at nozzle

<sup>2</sup> Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations



1300A-F

1300A-F			
Nozzle	Pressure bar	Flow m <sup>3</sup> /h	Flow l/m
	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

## 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 1.4 to 6.2 bar
- Flow is not adjustable for increased vandal resistance
- Shipped with special SR-050 1/2" (15/21) bubbler filter screen for easy installation and resistance to debris
- Trickle pattern on models 1401 and 1402; umbrella pattern only available on 1404 model
- Five-year trade warranty



1400 Series

### Operating Range

- Flow: 0.9 to 3.6 l/m
- Spacing: 0.3 to 0.9 m\*
- Pressure: 1.4 to 6.2 bar

### Models

- 1401: 0.06 m<sup>3</sup>/h; 0.9 l/m; full-circle, trickle pattern
- 1402: 0.11 m<sup>3</sup>/h; 1.8 l/m; full-circle, trickle pattern
- 1404: 0.23 m<sup>3</sup>/h; 3.6 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

- 1/2" FPT inlet that easily threads onto a 1/2" PVC riser

### Operating Range

- Flow: 18.93, 26.50, 37.95 l/h
- Pressure: 0.7 to 3.5 bar
- Required filtration: 150 micron

Refer to page 112 for more information



- Introduction
- Spray Bodies
- Spray & Rotary Nozzles
- Rotors**
- Valves
- Controllers
- Sensors & Meters
- Central Control and Water Management
- Drip Irrigation
- Filtration
- Drainage Products
- Resources

## Rotors

Major Products	Gear Driven Rotors				Impact Rotors	
	3500 Series	5000 Series	Falcon™ 6504 Series	8005 Series	2045A Maxi-Paw™ Series	XLR Water Jet Series
<b>Primary Applications</b>						
Turfgrass 4.6 m to 10.7 m	●	●				
Turfgrass 7.6 m to 15.2 m		●	●	●	●	
Turfgrass more than 15.2 m			●	●		●
Residential	●	●			●	
Commercial	●	●	●	●	●	●
Vandalism/Damage Prone Areas				●		
Slopes	●	●	●	●	●	●
Ground Cover/Shrubs		●				
Athletic Fields			●	●		●
Pressure Regulating		●				
High Wind Areas	●	●	●	●	●	●
Taller Turfgrass		●		●		●
Non-Potable Water		●	●	●	●	●



### Water Saving Tips

- Rain Curtain™ nozzle technology is the standard in water-saving nozzle performance. Rain Curtain™ performance is available in all Rain Bird Rotors.
- 5000 Series Rotors with PRS reduce water waste from 15%-45%. By eliminating pressure variation and/or over pressurization, you'll save water and deliver greener results.
- All rotors with Seal-a-Matic™ (SAM) check valves prevent drainage from heads at lower elevations, stop water waste and eliminate landscape damage due to flooding and/or erosion.