



Interactive Sprays Specification Guide



The Intelligent Use of Water.™

Introduction

Rest Easy with Rain Bird

Your job just got a little easier. Because the most current Rain Bird spray specifications are now all in one place. From model names to distribution uniformity to LEED point potential, you'll find answers to your most-asked questions here. For an at-a-glance summary of each product, look for icons at the bottom of the page indicating the product's country of origin, available design and technical resources, and special features. It's a simpler way to find what you're searching for—and one more reason to specify Rain Bird with complete confidence.

INTERACT TO LEARN MORE

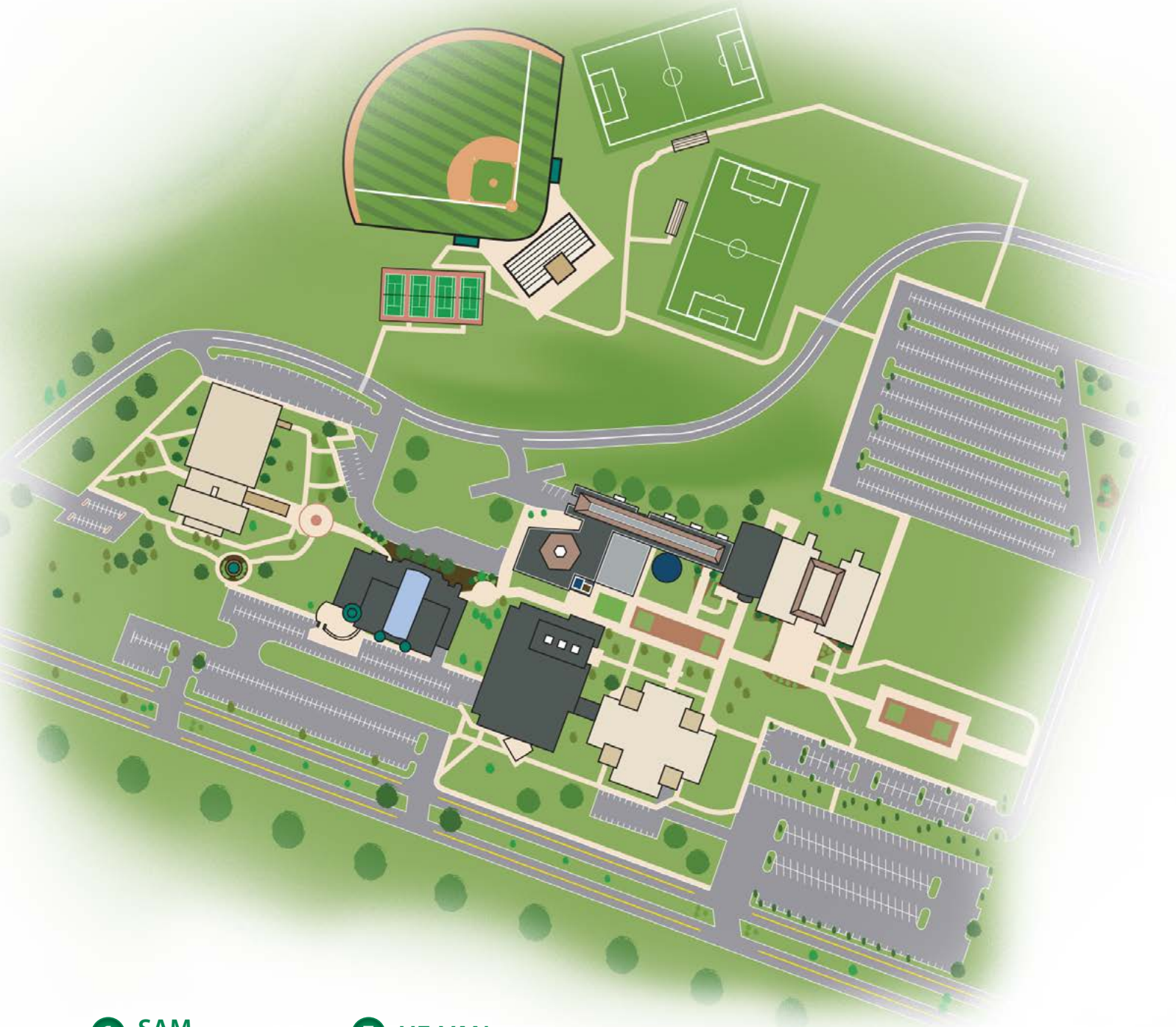
Easily navigate between sections, open pop-ups or watch videos—all with just a click or tap. Just look for the special interactive icons and text when viewing the PDF version of this document on your PC or Mac.



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1 SAM
(1800° and RD1800™)

2 Flow Shield
(RD1800™)

3 PRS
(1800° and RD1800™)

4 U-Series

5 HE-VAN

6 R-VAN

7 R-Series

8 Center Strip

9 Side Strip

10 End Strip

11 SQ Series



Top Green Codes and Green Programs

IGCC

International Green Construction Code

- All sprinkler nozzles must be MPR.
- Sprays are prohibited on slopes with 4-1 grade, except if the sprinkler has a precipitation rate of 0.50 in/hr or less.
- $DULQ$ not less than 65%.
- No more than 50% potable water.

IAPMO

International Association of Plumbing and Mechanical Officials

- All sprinkler nozzles must be MPR and less than a 1.00 in/hr precipitation rate.
- Sprays are prohibited on slopes with 4-1 grade, except if the sprinkler has a precipitation rate of 0.75 in/hr or less.
- No sprinklers in area less than 4 feet.
- Pressure regulation required at valve or head.
- Up to the authority having jurisdiction, but where available, system shall be designed to use a minimum of 75% of annual demand.

LEED

Leadership in Energy and Environmental Design

- LEED V4 in progress.
- Water Efficiency Credit 1.1: Reduce Irrigation need by 50% (2 points).
- Materials and Resources Credit: Recycled Content (1 point).
- No potable water in version 4.

California AB1881

California Model Efficient Landscape Ordinance

- Slopes greater than 25% must have spray nozzles that don't exceed 0.75 in/hr.
- Sprinkler system must have an Irrigation Efficiency of .71. ($IE = IME \times DU$). This means that the $DULH$ must be 79% or better (66% $DULQ$). Irrigation Management Efficiency is a constant (.90) ($IE .90 \times .79 = .71$).
- "Narrow or irregularly shaped areas, including turf, less than eight (8) feet in width in any direction shall be irrigated with subsurface irrigation or a low volume overhead irrigation system." Where the definition was added: "Low-volume overhead irrigation" means above-ground irrigation heads with an upper flow limit of 0.5 GPM. MP Rotator can qualify for this.

ASHRAE 189.1

- Site water use reduction
 - Prescriptive option** – 1/3 of area can use potable water
 - Performance option** – 35% of plant water demand can be potable
- Turf grass limitation of 40%. Only 40% of the landscape can have turf grass.

California's 20 x 2020 Water Conservation Plan

Intended to reduce statewide per capita urban water use by 20% by the year 2020 through many recommendations, such as:

- Referencing the need for a tighter compliance with AB1881-California Model Efficient Landscape Ordinance.
- Mandating Irrigation Best Management Practices (BMP).

LEED Project Checklist

WE 1.1 | Water Efficient Landscaping: Reduce by 50%

PRESSURE-REGULATING DEVICES

Maintain optimal water pressure. Every 5-psi reduction in pressure reduces water usage by 6–8%. A 70-psi system reduced to a recommended 30 psi can provide more than 50% in water savings.*

- 1800° PRS (pg 8)
- 1800° SAM-PRS (pg 10)
- 1800° SAM-P45 (pg 11)
- RD1800™ SAM-PRS (pg 12)
- RD1800™ SAM-PRS with FlowShield™ technology (pg 12)

*Derived from Bernoulli's equation (5.19). Refer to Roberson/Crowe, *Engineering Fluid Mechanics (Fourth Edition)*, Houghton Mifflin Co., Boston, MA 1990.

HIGH-EFFICIENCY NOZZLES

Provide more uniform distribution of water, and eliminate over-spray, which can result in 30%+ water savings.**

- U-Series (pg 21)
- HE-VAN (pg 23)
- Rotary Nozzle (pg 27)
- R-VAN (pg 27)
- SQ Nozzle (pg 29)

**U-Series nozzle water savings based on manufacturer's testing. Rotary-type nozzles use 20–30% less water than traditional spray heads because they operate with lower precipitation rates, greater uniformity of distribution and a greater radius of coverage, according to the Metropolitan Water District of Southern California.

WE 1.2 | Water Efficient Landscaping: No Potable Water Use or No Irrigation

RECYCLED WATER SPRAY HEADS

Designed with materials that protect against the chlorine and debris often found in recycled water.

- RD1800™ Series (pg 12)



Resources

To access the electronic documents, click on the green dots.

Product	Category	Country of Origin*	D-Number	Description
SPRAYANALYSIS CAMPAIGN				
Rain Bird Spray Heads and Spray Nozzles <i>(pg 7)</i>	High-Efficiency	N/A	D40229	Sprayanalysis Cycle Surge Test Sheet Video
			D40275	Sprayanalysis Pressure Test Sheet Video
			D40276	Sprayanalysis Durability Test Sheet Video
			D40277	Sprayanalysis Even Coverage Test Sheet Video
			D40512	Sprayanalysis Real World Wind Test Sheet Video
			D40510	Sprayanalysis Non-Potable Water Test Sheet Video
BODIES				
UNI-Spray™ <i>(pg 6)</i>	Value	China	D39784	UNI-Spray and VAN Nozzles Right Choice
			D39062FEO	UNI-Spray Tech Spec
1800® Series <i>(pg 7)</i>	Standard	USA (1802, 1803 & 1804 bodies)	D39783A	1800 Series and MPR Nozzles Right Choice
			D39025K	1800 Series Tech Spec
PRS <i>(pg 8)</i>	High-Efficiency	China	D40227	PRS Savings Card
			D40231A	PRS Flow Optimizer 4-page Brochure
			D40232	PRS Contractor Leave-Behind
RD1800™ <i>(pg 12)</i>	High-Efficiency	Mexico	D40212	RD1800 Brochure
			D40209B	RD1800 Challenging Landscapes – Cutaway Image
			D40201A	RD1800 Spray Solutions Guide
			D40205A	RD1800 Tech Spec
			D50088EO	RD1800 LEGOLAND Site Report (Short Version)
			D50089EO	RD1800 LEGOLAND Site Report (Long Version)
NOZZLES				
MPR <i>(pg 19)</i>	Standard	USA	D39026H	MPR Tech Spec
VAN <i>(pg 17)</i>	Value	USA	D39784	UNI-Spray and VAN Nozzles Right Choice
			D39287CEO	VAN Tech Spec
U-Series <i>(pg 21)</i>	High-Efficiency	USA	D39787	U-Series Right Choice
			D37038J	U-Series Tech Spec
HE-VAN <i>(pg 23)</i>	High-Efficiency	Mexico	D40106A	HE-VAN Brochure
			D40102A	HE-VAN Right Choice
			D40099A	HE-VAN Tech Spec
			—	HE-VAN Site Report; St. Augustine Roadway, Fla
R-Series Rotary Nozzles <i>(pg 25)</i>	High-Efficiency	Mexico	—	Rotary Nozzle Design Guide
			D39881	R-Series Rotary Nozzle Brochure
			D39515B	R-Series Rotary Nozzle Tech Spec
R-VAN Rotary Nozzles <i>(pg 27)</i>	High-Efficiency	Mexico	D40288	R-VAN Brochure
			—	R-VAN Printable Poster
			—	R-VAN Sell Sheet – English Spanish
			D50005EO	R-VAN Tech Spec – English Spanish
			D50004EO	R-VAN Installation Guide – English Spanish
SQ Nozzles <i>(pg 29)</i>	High-Efficiency	USA	—	SQ Nozzles Brochure
			D50005EO	SQ Nozzles Tech Spec
Bubblers <i>(pg 30)</i>	High-Efficiency	China	D50005EO	1300A-F/1400 Adjustable Full-Circle Bubblers Tech Spec

*Country of Origin is not the sole requirement for eligibility for Buy America and Buy America programs.



Spray Bodies

Put Efficiency on the Rise

Save water and protect the integrity of your designs with Rain Bird spray bodies. Thanks to a full range of sizes and options, you'll have a solution for every irrigation challenge. Rugged construction promotes years of reliable performance, while technologies like Seal-A-Matic™ (SAM) check valves and Pressure Regulating Stems (PRS) conserve our most precious resource.



	Products											
Applications	1802	1803	1804	1806	1812	1800 PRS	1800 SAM	1800 SAM-PRS	1800 SAM-PRS-45	RD1800	US-200	US-400
Turfgrass	●	●	●	●	–	●	●	●	●	●	●	●
Slopes	–	–	–	–	–	–	●	●	●	●	●*	●*
Ground Cover/Shrubs	●	●	●	●	●	●	●	●	●	●	●	●
High-Pressure Systems	–	–	–	–	–	●	–	●	●	●	–	–
Low-Pressure Systems	●	●	●	●	●	–	●	●	●	●	●	●
High-Wind Areas	●	●	●	●	●	●	●	●	●	●	●	●
Reclaimed Water Applications	–	–	–	–	–	–	–	–	–	●	–	–
Dirty Water Applications	–	–	–	–	–	–	–	–	–	●	–	–

*Optional US-SAM check valve is retrofittable on all UNI-Sprays™.

▼ Click the icon below for more information.



UNI-Spray™ Series

2" and 4"

- Pressure-activated, multi-functional wiper seal prevents excessive flow-by and water waste. Keeps debris from entering upon retraction.
- Durable two-piece stem ratchet allows for quick and easy nozzle pattern alignment.
- Rugged cover and body provide durability in high pressure and surge conditions.

Features

- Small exposed cover makes the unit virtually invisible for more attractive landscapes.
- UNI-Spray accepts all Rain Bird nozzles and accessories, which simplifies inventory management.
 - VAN nozzle and screen are easily removable for flushing.
- Internal parts removable from the top of the sprinkler for easy servicing.
- Optional field installable Seal-A-Matic™ (SAM) check valve prevents low-head drainage up to 5 feet of elevation difference.
- Plastic and stainless steel materials resist corrosion.

Operating Range (for pre-installed nozzle choices)

- Spacing:
 - 10 VAN series: 8 to 10 feet
 - 12 VAN series: 10 to 12 feet
 - 15 VAN series: 12 to 15 feet
 - 18 VAN series: 14 to 18 feet
- Pressure: 15 to 70 psi
- Optimum pressure: 30 psi
- Adjustable nozzle arc range: 0° to 360°

Specifications

- Flow-by: 0 at 10 psi or greater; 0.20 gpm otherwise

Dimensions

- ½" NPT female threaded inlet
- Body Height:
 - US-200: 3 ¾"
 - US-400: 5 ⅞"
- Exposed surface diameter: 1 ¼"



Models*

- **US-400:** 4" pop-up height
- **US-SAM:** UNI-Spray™ field-installed check valve

PRE-INSTALLED NOZZLE MODELS

- **US-410 VAN:** 4" pop-up height with 10-VAN nozzle attached
- **US-212 VAN:** 2" pop-up height with 12-VAN nozzle attached
- **US-412 VAN:** 4" pop-up height with 12-VAN nozzle attached
- **US-215 VAN:** 2" pop-up height with 15-VAN nozzle attached
- **US-415 VAN:** 4" pop-up height with 15-VAN nozzle attached
- **US-418 VAN:** 4" pop-up height with 18-VAN nozzle attached

*The UNI-Spray accepts all Rain Bird nozzles.

HOW TO SPECIFY

US - 4 - 15VAN



▼ Click the icons below for more information.

Country of Origin



CHINA

Design & Technical Resources



1800® Series 2", 3", 4", 6" and 12"

- Co-molded wiper seal is molded into the cap and features an encased plastic "cage" to provide unmatched resistance to grit, pressure and the environment. Additionally, the pressure-activated, multi-function seal design assures a positive seal without excess "flow-by" which enables more heads to be installed on the same valve.
- Strong stainless steel spring provides reliable stem retraction.
- Two-piece ratchet mechanism on all models allows easy nozzle pattern alignment and provides added durability.

Features

- Precision controlled flush at pop-down clears debris from unit, assuring positive stem retraction in all soil types.
 - Pre-installed orange 1800® Pop-Top™ flush plug blocks debris, larger than nozzle filter screen openings, from entering after flushing. Allows for easy nozzle installation.
- Constructed of time-proven UV-resistant plastic and corrosion resistant stainless steel parts, assuring long product life.
- All 1800 spray components are removable from the top without special tools, providing for quick and easy flushing and maintenance.
- Side and bottom inlets featured on 1806 and 1812 (non-SAM) models*.
- Five-year trade warranty.

Operating Range

- Spacing: 2.5 to 24 feet**
- Pressure: 15 to 70 psi

Specifications

- Flow-by: 0 gpm at 8 psi or greater; 0.10 gpm otherwise

Dimensions

- ½" NPT female threaded inlet
- Exposed surface diameter: 2 ¼"

Models

- **1802:** 4" body height; 2" pop-up height
- **1803:** 4 7/8" body height; 3" pop-up height
- **1804:** 6" body height; 4" pop-up height
- **1806:** 9 3/8" body height; 6" pop-up height
- **1812:** 16" body height; 12" pop-up height

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

**2.5 to 18 feet with standard Rain Bird spray head nozzles (SQ, MPR, VAN, U-Series); 13 to 24 feet with Rain Bird rotary nozzles.



HOW TO SPECIFY

1804 – 15H

NOZZLE SERIES/PATTERN
15 series MPR nozzle with half-circle pattern

MODEL
4" pop-up height

▼ Click the icons below for more information.

Country of Origin



USA



CHINA

1802, 1803 and 1804 models only

1806 and 1812 models only

Design & Technical Resources



1800® PRS Series

4", 6" and 12"

- PRS pressure regulator built into the stem. No parts to be installed at the site. Saves time and money.
- Maintains constant outlet pressure at 30 psi. Spray bodies and nozzles perform best at 30 psi. Ensures maximum spray body and nozzle performance, even with varying inlet pressures. Maintains constant pressure regardless of nozzle used.
- Ends misting and fogging caused by high pressure. Stops water waste. Ensures necessary watering occurs in high pressure or wind conditions.

Features

- Restricts water loss by up to 70% if nozzle is removed or damaged. Saves water and money. Reduces possibility of accidents and property damage. Recommended for vandal-prone areas.
- Designed for use with all Rain Bird plastic spray head nozzles.
- "PRS" stamped on cap for easy identification and maintenance.
- Five-year trade warranty.

Operating Range

- Spacing: 2.5 to 24 feet*
- Pressure: 15 to 70 psi

Specifications

- Regulates nozzle pressure to an average 30 psi with inlet pressures of up to 70 psi
- Flow-by: 0 gpm at 8 psi or greater; 0.10 gpm otherwise
- Installation: side or bottom inlet*
- Side inlet installation not recommended in freezing climates

Dimensions

- ½" female threaded inlets
- Exposed surface diameter: 2¼"

Models

- **1804 PRS:** 6" body height; 4" pop-up height
- **1806 PRS:** 9 ¾" body height; 6" pop-up height
- **1812 PRS:** 16" body height; 12" pop-up height

*2.5 to 18 feet with standard Rain Bird spray head nozzles.
(SQ, MPR, VAN, U-Series); 13 to 24 feet with Rain Bird rotary nozzles.



HOW TO SPECIFY

1804 – PRS – 15H

NOZZLE SERIES/PATTERN
15 series MPR nozzle
with half-circle pattern

OPTIONAL FEATURE
In-stem pressure regulation

MODEL
4" pop-up height

▼ Click the icons below for more information.

Country of Origin



Design & Technical Resources



1800® SAM Series

4", 6" and 12"

- Built-in Seal-A-Matic™ (SAM) check valve. Eliminates the need for under-the-head check valves. No parts to be installed at the site.
- Traps water in lateral pipes in elevation changes of up to 14 feet. Reduces wear on system components by minimizing water hammer during start-up.
- Even stronger retract spring to accommodate elevation changes up to 14 feet. One of the strongest springs in the industry.

Features

- Prevents drainage from spray heads at lower elevations. Stops water waste. Ends landscape damage due to flooding and/or erosion.
- Designed for use with all Rain Bird plastic spray head nozzles.
- "SAM" stamped on cap for easy identification and maintenance.
- Five-year trade warranty.

Operating Range

- Spacing: 2.5 to 24 feet*
- Pressure: 25 to 70 psi

Specifications

- SAM capability: holds up to 14 feet of head; 6 psi
- Flow-by: 0 gpm at 8 psi or greater; 0.10 gpm otherwise

Dimensions

- ½" female threaded inlets
- Exposed surface diameter: 2 ¼"

Models

- **1804 SAM:** 6" body height; 4" pop-up height
- **1806 SAM:** 9 ¾" body height; 6" pop-up height
- **1812 SAM:** 16" body height; 12" pop-up height

*2.5 to 18 feet with standard Rain Bird spray head nozzles. (SQ, MPR, VAN, U-Series); 13 to 24 feet with Rain Bird rotary nozzles.



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VALUE

STANDARD

HIGH-EFFICIENCY

HOW TO SPECIFY

1804 – SAM – 15H

NOZZLE SERIES/PATTERN

15 series MPR nozzle with half-circle pattern

OPTIONAL FEATURE

Seal-A-Matic check valve

MODEL

4" pop-up height

▼ Click the icons below for more information.

Country of Origin



CHINA

Design & Technical Resources



1800® SAM-PRS Series

4", 6" and 12"

Features

- Incorporates all 1800® series Seal-A-Matic™ (SAM) and Pressure Regulating Stem (PRS) features.
- Meets the needs of all spray areas, regardless of changing elevation or water pressures.
- "SAM-PRS" stamped on the cap for easy identification and maintenance.

Operating Range

- Spacing: 2.5 to 24 feet*
- Pressure: 25 to 70 psi

**2.5 to 18 feet with standard Rain Bird spray head nozzles (SQ, MPR, VAN, U-Series); 13 to 24 feet with Rain Bird rotary nozzles.*

Specifications

- SAM capability: holds up to 14 feet of head; 6 psi
- Flow-by: 0 gpm at 8 psi or greater; 0.50 gpm otherwise

Dimensions

- ½" female threaded inlets
- Exposed surface diameter: 2 ¼"

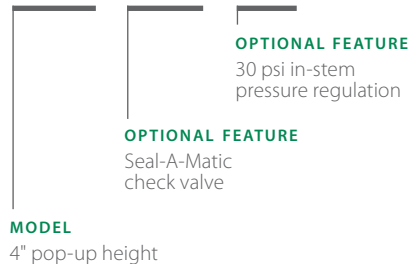
Models

- **1804 SAM-PRS:** 6" body height; 4" pop-up height
- **1806 SAM-PRS:** 9 ¾" body height; 6" pop-up height
- **1812 SAM-PRS:** 16" body height; 12" pop-up height



HOW TO SPECIFY

1804 – SAM – PRS



▼ Click the icons below for more information.

Country of Origin



Design & Technical Resources



1800® SAM-P45 Series

4", 6" and 12"

Features

- Meets the needs of spray body applications using rotary nozzles regardless of changing elevation or water pressures. Incorporates 1800® Series Seal-A-Matic™ (SAM) feature and regulates nozzle pressure at 45 psi.
- Designed to maximize application efficiency when using rotary nozzles.
- Maintains constant outlet pressure at 45 psi at varying inlet pressures. Ensures maximum spray body and nozzle performance, even with varying inlet pressures. Maintains constant pressure regardless of nozzle used.
- "SAM-PRS-45" stamped on the cap for easy identification and maintenance.
- Five-year trade warranty.

Operating Range

- Spacing: 2.5 to 24 feet*
- Pressure: 25 to 70 psi

Specifications

- SAM capability: holds up to 14 feet of head; 6 psi
- Flow-by: 0 gpm at 8 psi or greater; 0.50 gpm otherwise

Dimensions

- ½" female threaded inlets
- Exposed surface diameter: 2 ¼"

Models

- **1804 SAM-P45:** 6" body height; 4" pop-up height
- **1806 SAM-P45:** 9 ¾" body height; 6" pop-up height
- **1812 SAM-P45:** 16" body height; 12" pop-up height

**2.5 to 18 feet with standard Rain Bird spray head nozzles. (SQ, MPR, VAN, U-Series); 13 to 24 feet with Rain Bird rotary nozzles.*



12

VALUE

STANDARD

HIGH-EFFICIENCY

HOW TO SPECIFY

1804 – SAM-P45 – R13-18Q

NOZZLE SERIES/PATTERN
 13'-18' radius rotary nozzle
 with quarter pattern

OPTIONAL FEATURE

SAM: Seal-A-Matic check valve

P45: 45 psi in-stem pressure regulation

MODEL

4" pop-up height

▼ Click the icons below for more information.

Country of Origin



CHINA

Design & Technical Resources



RD1800™ 4", 6" and 12"

- Co-molded, pressure activated, Triple-Blade Wiper Seal assures positive seal without excess “flow-by” which enables more heads to be installed on the same valve. A base seal provides a positive seal during operation. Precision controlled flush at pop-down clears debris from the unit, ensuring positive stem retraction in all soil types.
- Debris pockets in the base of the spray body collect debris and prevent recirculation in the body during operation, reducing wear.
- Parts developed to be resistant to corrosion in treated recycled water containing chlorine and other chemicals.

Features

- Strong stainless steel spring provides reliable stem retraction and withstands corrosion.
- Reinforced ratchet mechanism on all models allows easy nozzle pattern alignment without tools, withstands chemicals in recycled water and prevents pattern misalignment over time.
- All sprinkler components are removable from the top without special tools, providing for quick and easy flushing and maintenance of the sprinkler.
- Side inlets featured on non-Seal-A-Matic™ (SAM) models only.
- Five-year trade warranty.

Operating Range

- Spacing: 2.5 to 24 feet*
- Pressure: 15 to 100 psi

Specifications

- Flow-by:
 - SAM models: 0 at 15 psi; 0.50 gpm otherwise
 - All other models: 0 at 10 psi; 0.50 gpm otherwise
- Installation: side or bottom inlet**

Dimensions

- ½" NPT female threaded inlets
- Exposed surface diameter: 2 ¼"
- **RD-04:** 6" body height; 4" pop-up height
- **RD-06:** 9 ¾" body height; 6" pop-up height
- **RD-12:** 16" body height; 12" pop-up height

*2.5 to 18 feet with standard Rain Bird spray head nozzles. (SQ, MPR, VAN, U-Series); 13 to 24 feet with Rain Bird rotary nozzles.

**Side inlet installation not recommended in freezing climates.



Models

4" MODELS

- | | | |
|---------------|-------------------|-------------------|
| • RD-04-NP | • RD-04-P30-F-NP | • RD-04-S-P45-F |
| • RD-04-S | • RD-04-S-P30 | • RD-04-S-P45-F-N |
| • RD-04-S-NP | • RD-04-S-P30-F | |
| • RD-04-P30-F | • RD-04-S-P30-F-N | |

6" MODELS

- | | | |
|--------------|------------------|-------------------|
| • RD-06 | • RD-06-P30-F | • RD-06-S-P30-F-N |
| • RD-06-NP | • RD-06-P30-F-NP | • RD-06-S-P45-F |
| • RD-06-S | • RD-06-S-P30 | • RD-04-S-P45-F-N |
| • RD-06-S-NP | • RD-06-S-P30-F | |

12" MODELS

- | | | |
|--------------|------------------|-------------------|
| • RD-12 | • RD-12-P30-F | • RD-12-S-P30-F-N |
| • RD-12-NP | • RD-12-P30-F-NP | • RD-12-S-P45-F |
| • RD-12-S | • RD-12-S-P30 | • RD-12-S-P45-F-N |
| • RD-12-S-NP | • RD-12-S-P30-F | |

OPTIONAL FEATURE GUIDE

S: Seal-A-Matic™ (SAM) check valve

P30: 30 psi in-stem pressure regulation

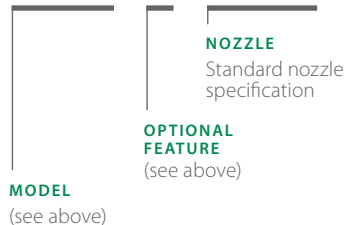
P45: 45 psi in-stem pressure regulation

F: Flow-Shield™ technology

NP: Non-potable cover

HOW TO SPECIFY

RD-XX – X – Nozzle



▼ Click the icons below for more information.

Country of Origin



Design & Technical Resources



1800®-EXT Plastic Extension

Features

- Extends all Rain Bird spray head models an additional 6½" in height.
- ½" inlet female threads.
- Fine top threads accept all Rain Bird nozzles.
- UV-resistant thermoplastic construction for long life.
- Fits all Rain Bird spray bodies and nozzles. Cannot be used with bubblers.
- Easily installed without any tools.
- Can be reinstalled without damaging the threads if accidentally knocked off the riser or spray head.
- Maximum of two extensions per spray body recommended.
- Three-year trade warranty.

Model

- 1800-EXT



PA-80 Plastic Adapter

Features

- Converts pop-up stem to ½" male pipe thread.
- Adapts Rain Bird spray bodies for use with any ½" FPT bubbler or spray nozzle.
- Rugged, UV-resistant thermoplastic construction.
- Easy to install; no tools required.

Dimensions

- Height: 1 ½"; 0.8" above 1800 cap

Model

- PA-80



HOW TO SPECIFY

1804 – EXT



MODEL

4" pop-up height

MODIFIER

Plastic Extension

HOW TO SPECIFY

PA-80



MODEL

Plastic Adapter

Country of Origin



CHINA

Country of Origin



CHINA



PA-8S

Plastic Shrub Adapter

Features

- Adapts Rain Bird nozzles for use with ½" MPT threaded risers.
- Accepts protective, non-clogging 1800® Series filter screen (shipped with nozzle) and PCS Series screens.
- Durable, non-corrosive plastic construction.
- Purple plastic shrub adapter for easy identification of a non-potable water system (PA-8S-NP).

Dimensions

- ½" female inlet threads
- Fine top threads accept all Rain Bird nozzles

Models

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



PA-8S-PRS

Pressure Regulating Shrub Adapter

Features

- Attaches nozzle to riser to irrigate ground cover and shrub areas requiring pressure regulation.
- Rugged thermoplastic construction resists UV rays.
- Adapts nozzles for use with ½" MPT threaded risers.
- Patented PRS pressure regulator built into the stem.
- No parts to be installed at the site. Saves time and money.
- Maintains constant outlet pressure at 30 psi.
- Ensures maximum spray head and nozzle performance.
- Regulates and maintains constant pressure regardless of nozzle used.
- Ends misting and fogging caused by high pressure.
- Prevents water waste and minimizes liability.
- 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 and brass nozzles.
- Five-year trade warranty.

Specifications

- Pressure: 15 to 70 psi
- Flow: 0.2 to 4.0 GPM

Dimensions

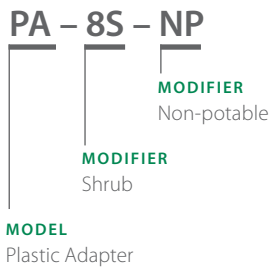
- ½" female inlet threads
- Fine top threads accept all Rain Bird nozzles
- Height: 5 ¼"

Model

- PA-8S-PRS



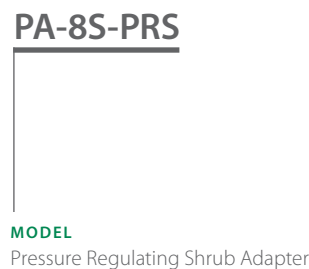
HOW TO SPECIFY



Country of Origin



HOW TO SPECIFY



Country of Origin



1800 PCS

Pressure Compensating Screens

- Compensates for pressure variations.*
- Eliminates fogging and water waste caused by high pressures.
- Nozzles can be matched with screens to create short-throw, reduced-radius patterns and/or flush-mounted bubblers.

**With a pressure compensator, outlet pressure will be reduced, but will fluctuate as the inlet pressure changes. A pressure compensator cannot maintain outlet pressure at a constant rate. A pressure regulator establishes and maintains a constant outlet pressure of 30 psi as long as the inlet pressure at the spray head is greater than 30 psi.*

Features

- 0.25 gpm screen allows greater flexibility in achieving 4', 6' and 7' radius patterns.
- Color-coded for easy identification.
- Use with all 1800® Series plastic nozzles (MPR, VAN, U-Series, strips and bubblers).
- Easily installed in new and retrofit applications. Simply replace standard screen with PCS screen.

Operating Range

- Flow: 0.20 to 0.90 gpm
- Pressure: 15 to 70 psi

Dimensions

- ½" female inlet threads
- Fine top threads accept all Rain Bird nozzles

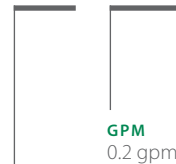
Models

- **PCS-020:** 0.2 gpm — Brown
- **PCS-025:** 0.25 gpm — Pink
- **PCS-030:** 0.3 gpm — Silver
- **PCS-040:** 0.4 gpm — Orange
- **PCS-060:** 0.6 gpm — Black
- **PCS-090:** 0.9 gpm — White



HOW TO SPECIFY

PCS – 020



MODEL
 Pressure Compensating Screens

▼ Click the icons below for more information.

Country of Origin



Design & Technical Resources



Nozzles

Save Water at Every Turn

Rain Bird nozzles are proof that saving time and saving water can go hand-in-hand. Flexible adjustment and matched precipitation rates make specifying these nozzles simple and straightforward. High distribution uniformity and wind resistant droplets make them good for Mother Nature and your peace of mind. Specify them, and be confident the job will be done right the first time.



Products		Applications
VALUE		
VAN Nozzles	Easy, flexible and convenient	Turf
STANDARD		
MPR Nozzles	Matched precipitation simplifies the design process	Turf
Bubblers	Low-volume	Flower beds
HIGH-EFFICIENCY		
U-Series Nozzles	More even distribution through dual orifice and even wetting through radius	Turf, flower beds
HE-VAN Nozzles	High-efficiency variable arc nozzles	Turf, flower beds
R-Series Nozzles	Fixed-arc rotary nozzles	Turf, hills, slopes, flower beds, compact soils
R-VAN Nozzles	Variable-arc rotary nozzles	Turf, hills, slopes, flower beds, compact soils
SQ Nozzles	Low-volume, uniform square wetting pattern with pressure-compensation	Narrow turf or flower beds

VAN Series Nozzles

Variable Arc Nozzles

- Easy arc adjustment from 0° – 360° for 10-, 12-, 15- and 18-VAN; 0°– 330° for 4-, 6- and 8-VAN.
- Simple twist of the center collar increases or decreases arc setting.
- 12-, 15- and 18-VAN have matched precipitation rates with Rain Bird® MPR nozzles.

Features

- Captured screw slot prevents screwdriver strippage.
- No special tools required.
- Stainless steel adjustment screw to adjust flow and radius.
- Tactile left edge indicator.
- Ideal for watering odd-shaped areas.
- Shipped with blue filter screen (0.02" x 0.02") to maintain precise radius adjustment and prevent clogging.

Operating Range

- Radius*:
 - 4-VAN: 3 to 4 feet
 - 6-VAN: 4 to 6 feet
 - 8-VAN: 6 to 8 feet
 - 10-VAN: 8 to 10 feet
 - 12-VAN: 10 to 12 feet
 - 15-VAN: 12 to 15 feet
 - 18-VAN: 14 to 18 feet
- Pressure: 15 to 30 psi
- Optimum pressure: 30 psi**

Models

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

*These ranges are based on proper pressure at nozzle.

**Rain Bird recommends using 1800® PRS spray bodies to maintain optimum nozzle performance in higher-pressure situations.



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: Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc. ■ Square spacing based on 50% diameter of throw. ▲ Triangular spacing based on 50% diameter of throw. Performance data taken in zero wind conditions.

HOW TO SPECIFY

1804 – 8-VAN

NOZZLE SERIES/PATTERN

8 series VAN nozzle

MODEL

4" pop-up height

▼ Click the icons below for more information.





Country of Origin







USA

Design & Technical Resources





6 Series VAN 0° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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





8 Series VAN 5° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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





10 Series VAN 10° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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





12 Series VAN 10° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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

15 Series VAN 10° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	15	11	2.60	2.07	2.39
	20	12	3.00	2.01	2.32
	25	14	3.30	1.62	1.87
	30	15	3.70	1.58	1.83
	15	11	1.95	2.07	2.39
	20	12	2.25	2.01	2.32
	25	14	2.48	1.62	1.87
	30	15	2.78	1.58	1.83
	15	11	1.30	2.07	2.39
	20	12	1.50	2.01	2.32
	25	14	1.65	1.62	1.87
	30	15	1.85	1.58	1.83
	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.82	1.62	1.87
	30	15	0.92	1.58	1.83

18 Series VAN 10° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	15	14	4.21	2.07	2.39
	20	15	4.70	2.01	2.32
	25	17	4.86	1.62	1.87
	30	18	5.32	1.58	1.83
	15	14	3.16	2.07	2.39
	20	15	3.52	2.01	2.32
	25	17	3.65	1.62	1.87
	30	18	3.99	1.58	1.83
	15	14	2.11	2.07	2.39
	20	15	2.35	2.01	2.32
	25	17	2.43	1.62	1.87
	30	18	2.66	1.58	1.83
	15	14	1.05	2.07	2.39
	20	15	1.17	2.01	2.32
	25	17	1.22	1.62	1.87
	30	18	1.33	1.58	1.83

Note: Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc. ■ Square spacing based on 50% diameter of throw. ▲ Triangular spacing based on 50% diameter of throw. Performance data taken in zero wind conditions.

Click the icon for more information.

Plastic MPR Nozzles

Matched Precipitation Rate Nozzles

- Matched precipitation rate across sets and across patterns in 5 series, 8 series, 10 series, 12 series and 15 series for even water distribution and design flexibility.
- 5 series nozzles meet small-area shrub or turf requirements.
- 8 series nozzles now have a lower water flow, which allows more spray heads per zone.

Features

- 1800® series white filter (0.035" x 0.035") screens (shipped with nozzles) maintain precise radius adjustment and prevent clogging.
 - 5 and 8 series nozzles are shipped with blue fine mesh (0.02" x 0.02") filter screens.
- Stainless steel adjustment screw to adjust flow and radius.

Operating Range

- Spacing: 3 to 20 feet
- Pressure: 15 to 30 psi
- Optimum pressure: 30 psi*

*Rain Bird recommends using 1800 PRS spray bodies to maintain optimum nozzle performance in higher pressure situations.

Models

- 5 series
- 5 series: bubbler nozzles
- 8 series
- 8 FLT series: designed for lower-trajectory applications, such as windy areas
- 10 series
- 12 series
- 15 series
- 15 strip series



HOW TO SPECIFY

1804 – 10F

NOZZLE SERIES/PATTERN

10 series MPR nozzle with full-circle pattern

MODEL

4" pop-up height

▼ Click the icons below for more information.

Country of Origin






USA

Design & Technical Resources





5 Series MPR

5° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
5F 	15	3	0.29	2.07	2.39
	20	4	0.33	2.01	2.32
	25	4	0.37	1.62	1.87
	30	5	0.41	1.58	1.83
5H 	15	3	0.14	2.07	2.39
	20	4	0.16	2.01	2.32
	25	4	0.18	1.62	1.87
	30	5	0.20	1.58	1.83
5Q 	15	3	0.07	2.07	2.39
	20	4	0.08	2.01	2.32
	25	4	0.09	1.62	1.87
	30	5	0.10	1.58	1.83





8 Series MPR

10° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
8F 	15	5	0.74	1.11	1.29
	20	6	0.86	1.29	1.49
	25	7	0.96	1.44	1.67
	30	8	1.05	1.58	1.82
8H 	15	5	0.37	1.11	1.29
	20	6	0.42	1.26	1.46
	25	7	0.47	1.41	1.63
	30	8	0.52	1.56	1.81
8T 	15	5	0.25	1.13	1.30
	20	6	0.29	1.31	1.51
	25	7	0.32	1.44	1.67
	30	8	0.35	1.58	1.82
8Q 	15	5	0.18	1.08	1.25
	20	6	0.21	1.26	1.46
	25	7	0.24	1.44	1.67
	30	8	0.26	1.56	1.81

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
10T 	15	7	0.39	2.28	2.63
	20	8	0.43	1.96	2.26
	25	9	0.48	1.71	1.98
	30	10	0.53	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







Note: All MPR nozzles tested on 4" pop-ups. Specify spray body and nozzles separately. Radius reduction over 25% of the normal throw of the nozzle is not recommended.





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

Performance data taken in zero wind conditions.



12 Series MPR 30° Trajectory					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	15	9	1.80	2.14	2.47
	20	10	2.10	2.02	2.34
	25	11	2.40	1.91	2.21
	30	12	2.60	1.74	2.01
	15	9	1.35	2.14	2.47
	20	10	1.58	2.02	2.34
	25	11	1.80	1.91	2.21
	15	9	0.90	2.14	2.47
	20	10	1.05	2.02	2.34
	25	11	1.20	1.91	2.21
	15	9	0.60	2.14	2.47
	20	10	0.70	2.02	2.34
	25	11	0.80	1.91	2.21
	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

15 Series MPR 30° Trajectory					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	15	5	0.74	2.07	2.39
	20	6	0.86	2.01	2.32
	25	7	0.96	1.62	1.87
	30	8	1.05	1.58	1.83
	15	5	0.74	2.07	2.39
	20	6	0.86	2.01	2.32
	25	7	0.96	1.62	1.87
	15	5	0.74	2.07	2.39
	20	6	0.86	2.01	2.32
	25	7	0.96	1.62	1.87
	15	5	0.74	2.07	2.39
	20	6	0.86	2.01	2.32
	25	7	0.96	1.62	1.87
	15	5	0.74	2.07	2.39
	20	6	0.86	2.01	2.32
	25	7	0.96	1.62	1.87
	30	8	1.05	1.58	1.83

15 Strip Series 30° Trajectory			
Nozzle	Pressure (psi)	W x L (ft)	Flow (gpm)
	15	4 x 13	0.45
	20	4 x 14	0.50
	25	4 x 14	0.56
	30	4 x 15	0.61
	15	4 x 26	0.89
	20	4 x 28	1.00
	25	4 x 28	1.11
	30	4 x 30	1.21
	15	3 x 11	0.35
	20	3 x 12	0.40
	25	4 x 14	0.45
	30	4 x 15	0.49
	15	3 x 11	0.35
	20	3 x 12	0.40
	25	4 x 14	0.45
	30	4 x 15	0.49
	15	4 x 26	0.89
	20	4 x 28	1.00
	25	4 x 28	1.11
	30	4 x 30	1.21
	15	9 x 15	1.34
	20	9 x 16	1.47
	25	9 x 18	1.60
	30	9 x 18	1.73

5 Series MPR Bubbler Nozzles 0° Trajectory			
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)
	15	5	1.50
	20	5	1.50
	25	5	1.50
	30	5	1.50
	15	5	1.00
	20	5	1.00
	25	5	1.00
	30	5	1.00
	15	5	0.50
	20	5	0.50
	25	5	0.50
	30	5	0.50
	15	5	0.50
	20	5	0.50
	25	5	0.50
	30	5	0.50

Note: Indicates adjusted radius at psi shown. Flow at adjust radius of 5 feet.

8 FLT Series MPR 5° Trajectory					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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

Click the icon for more information.



1300A-F

Adjustable Full-Circle Bubbler

Features

- Fully adjustable flow.
- Shipped with SR-050 ½" inlet filter screen for easy installation and resistance to debris.
- Operates over a wide range of pressures.
- Non-corrosive plastic and stainless steel construction for long life.
- Five-year trade warranty.

Operating Range


- Spacing: 1 to 3 feet
- Flow rates: 1.0 to 2.3 gpm
- Pressure: 10 to 60 psi

Model

- **1300A-F**



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

HOW TO SPECIFY

1300A-F – PA80

MODEL
For Fixed Riser Applications

MODEL
If Installed on a Spray Head

▼ Click the icons below for more information.

Country of Origin



Design & Technical Resources

1400 Series

Pressure Compensating Full-Circle Bubbler

Features

- Low flow rates allow water to be absorbed as needed. Reduces runoff.
- Flow will not fluctuate at pressures between 20 and 90 psi.
- Flow is not adjustable, providing increased vandal resistance.
- No adjustment required.
- Corrosion-proof plastic and rubber construction for long life.
- Five-year trade warranty.
- Shipped with SR-050 ½" inlet filter screen for easy installation and resistance to debris.
- Trickle pattern on models 1401 and 1402; umbrella pattern on models 1404 and 1408.

Operating Range

- Spacing: 1 to 3 feet
- Flow rates: 0.25 to 2.00 gpm
- Pressure: 20 to 90 psi

Models

- **1401:** 0.25 gpm, trickle pattern
- **1402:** 0.50 gpm, trickle pattern
- **1404:** 1.00 gpm, umbrella pattern
- **1408:** 2.00 gpm, umbrella pattern



HOW TO SPECIFY

1401 – PA80

MODEL
If Installed on a Spray Head

MODEL
0.25 gpm, Trickle Pattern
For Fixed Riser Applications

▼ Click the icons below for more information.

Country of Origin



Design & Technical Resources



Plastic U-Series Nozzles

Dual Orifice Spray Nozzles

- Additional orifice for close-in watering. Minimizes brown spots around spray heads.
- Low scheduling coefficient for efficient watering.¹ Use up to 30% less water².
- Matched precipitation rate between sets and matched flow and precipitation rates with Rain Bird® MPR nozzles.

Features

- U-Series offers a full family of nozzles, providing greater flexibility.
- Fine mesh screen protects bottom orifice from debris.
- Stainless steel adjustment screw to adjust flow and radius.
- Five-year trade warranty.
- Fits all Rain Bird spray bodies and shrub adapters.

Operating Range

- Spacing: 5 to 15 feet
- Pressure: 15 to 30 psi
- Optimum pressure: 30 psi*

¹When U-Series dual-orifice nozzles are installed instead of standard nozzles on every spray body in the zone. Results may vary.

²Scheduling coefficient (SC) measures the efficiency of spray heads. The lower the SC, the better the spray heads distribute water.

*Rain Bird recommends using 1800® PRS spray bodies to maintain optimum nozzle performance in higher pressure situations.



Models

8-FOOT RADIUS

- **U-8Q:** quarter-circle pattern
- **U-8T:** one-third-circle pattern
- **U-8H:** half-circle pattern
- **U-8F:** full-circle pattern

10-FOOT RADIUS

- **U-10Q:** quarter-circle pattern
- **U-10T:** one-third-circle pattern
- **U-10H:** half-circle pattern
- **U-10F:** full-circle pattern

12-FOOT RADIUS

- **U-12Q:** quarter-circle pattern
- **U-12T:** one-third-circle pattern
- **U-12H:** half-circle pattern
- **U-12TT:** two-third-circle pattern
- **U-12TQ:** three-quarter-circle pattern
- **U-12F:** full-circle pattern

15-FOOT RADIUS

- **U-15Q:** quarter-circle pattern
- **U-15T:** one-third-circle pattern
- **U-15H:** half-circle pattern
- **U-15TT:** two-third-circle pattern
- **U-15TQ:** three-quarter-circle pattern
- **U-15F:** full-circle pattern

HOW TO SPECIFY

1804 – U12H



MODEL
4" pop-up height

NOZZLE SERIES/PATTERN
12 series U-Series nozzle
with half-circle pattern

▼ Click the icons below for more information.

Country of Origin



USA

Design & Technical Resources





Nozzle Performance













DISTRIBUTION
UNIFORMITY









SCHEDULING
COEFFICIENT

U8 Series 10° Trajectory					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	15	5	0.74	2.07	2.39
	20	6	0.86	2.01	2.32
	25	7	0.96	1.62	1.87
	30	8	1.05	1.58	1.83
	15	5	0.37	2.07	2.39
	20	6	0.42	2.01	2.32
	25	7	0.47	1.62	1.87
	30	8	0.52	1.58	1.83
	15	5	0.25	2.07	2.39
	20	6	0.29	2.01	2.32
	25	7	0.32	1.62	1.87
	30	8	0.35	1.58	1.83
	15	5	0.18	2.07	2.39
	20	6	0.21	2.01	2.32
	25	7	0.24	1.62	1.87
	30	8	0.26	1.58	1.83

U10 Series 12° Trajectory					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	15	7	0.39	2.07	2.39
	20	8	0.45	2.01	2.32
	25	9	0.50	1.62	1.87
	30	10	0.55	1.58	1.83
	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

U12 Series 23° Trajectory					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	15	9	1.80	2.14	2.47
	20	10	2.10	2.02	2.34
	25	11	2.40	1.91	2.21
	30	12	2.60	1.74	2.01
	15	9	1.35	2.14	2.47
	20	10	1.58	2.02	2.34
	25	11	1.80	1.91	2.21
	30	12	1.95	1.74	2.01
	15	9	1.20	2.14	2.47
	20	10	1.40	2.02	2.34
	25	11	1.60	1.91	2.21
	30	12	1.74	1.74	2.01
	15	9	0.90	2.14	2.47
	20	10	1.05	2.02	2.34
	25	11	1.20	1.91	2.21
	30	12	1.30	1.74	2.01
	15	9	0.60	2.14	2.47
	20	10	0.70	2.02	2.34
	25	11	0.80	1.91	2.21
	30	12	0.87	1.74	2.01
	15	9	0.45	2.14	2.47
	20	10	0.53	2.02	2.34
	25	11	0.60	1.91	2.21
	30	12	0.65	1.74	2.01

U15 Series 23° Trajectory					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	15	11	2.60	2.07	2.39
	20	12	3.00	2.01	2.32
	25	14	3.30	1.62	1.87
	30	15	3.70	1.58	1.83
	15	11	1.95	2.07	2.39
	20	12	2.25	2.01	2.32
	25	14	2.48	1.62	1.87
	30	15	2.78	1.58	1.83
	15	11	1.74	2.07	2.39
	20	12	2.01	2.01	2.32
	25	14	2.21	1.62	1.87
	30	15	2.48	1.58	1.83
	15	11	1.30	2.07	2.39
	20	12	1.50	2.01	2.32
	25	14	1.65	1.62	1.87
	30	1.85	1.58	1.83	1.83
	15	11	0.87	2.07	2.39
	20	12	1.00	2.01	2.32
	25	14	1.10	1.62	1.87
	30	15	1.23	1.58	1.83
	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.82	1.62	1.87
	30	15	0.92	1.58	1.83

Note: All U-Series nozzles tested on 4" 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.



HE-VAN Series Nozzles

High-Efficiency Variable Arc Spray Nozzles

- Easy arc adjustment from 0° to 360° with a simple twist of the center collar to increase or decrease arc setting.
- ExactEdge™ takes the guesswork out of arc adjustment. As you turn the nozzle to the desired arc setting, you'll feel it lock into place for a clean, consistent edge every time.
- Patent-pending Flow Control technology provides superior close-in watering and uniform coverage across the entire pattern.

Features

- Thicker streams and large water droplets for greater wind resistance.
- Matched precipitation rates with Rain Bird® MPR and U-Series nozzles.
- A strong top deflector to minimize nozzle damage due to normal wear and tear.
- No special tools required.
- Stainless steel adjustment screw to adjust flow and radius, up to a 25% reduction in radius.
- Shipped with blue filter screens (0.02 x 0.02) to maintain precise radius adjustment and prevent clogging.
- Fits on all Rain Bird® 1800® series spray heads, UNI-Spray™ series spray heads and Rain Bird shrub adapters.



Operating Range

- Spacing: 5 to 15 feet
- Pressure: 15 to 30 psi
- Optimum pressure: 30 psi*

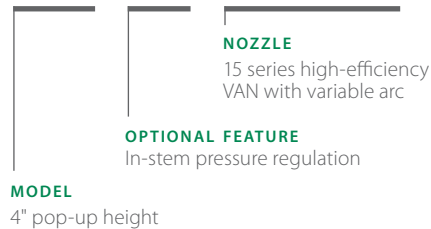
Models

- HE-VAN-8
- HE-VAN-10
- HE-VAN-12
- HE-VAN-15

*Rain Bird recommends using 1800® PRS spray bodies to maintain optimum nozzle performance in higher pressure situations

HOW TO SPECIFY

1804 – PRS – HE-VAN-15



▼ Click the icons below for more information.

Country of Origin







Design & Technical Resources





Nozzle Performance







8 Series HE-VAN 0° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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





10 Series HE-VAN 5° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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

12 Series HE-VAN 10° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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

15 Series HE-VAN 10° Trajectory

Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	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
	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
	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
	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

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

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

Performance data taken in zero wind conditions.



R-Series

Fixed-Arc Rotary Nozzles

- Low precipitation rate of 0.60 in/hr reduces runoff and erosion.
- With approximately 60% less flow than conventional spray nozzles, rotary nozzles allow more heads per zone, reducing overall system complexity and cost.
- Multiple, rotating streams uniformly distribute water throughout the 13' to 24' radius range.

Features

- Large droplets for consistent performance.
- Effective close-in watering.
- Even distribution over the entire radius.
- Designed for use on Rain Bird spray bodies.
- Color-coded radius reduction plugs for easy identification.
- Stainless steel radius reduction screw allows reduction down to 13' on the R13-18 and to 17' on the R17-24 to accommodate varying landscape needs.
- Matched precipitation rate across radii and pattern simplify the design process.
- Precipitation rate matches Rain Bird® 5000/5000 Plus MPR rotor nozzles, allowing MPR irrigation designs from 13' to 35'.
- Maintains highly efficient performance throughout the 20 to 55 psi pressure range, with no misting or fogging at high pressures.
- Use in conjunction with 1800-SAM-P45 spray heads for maximum nozzle performance (see page 9 for more information).
- Rubber collar keeps out large debris particles while enabling small ones to exit easily to keep deflector clean and clear of debris.
- Screen mesh size prevents large debris from entering nozzle through spray.
- Three-year trade warranty.

Operating Range

- Spacing: 13 to 24 feet
- Pressure: 20 to 55 psi
- Optimum pressure: 30 psi*

*Rain Bird recommends using 1800® PRS spray bodies to maintain optimum nozzle performance in higher pressure situations.



Models

13- TO 18-FOOT RADIUS

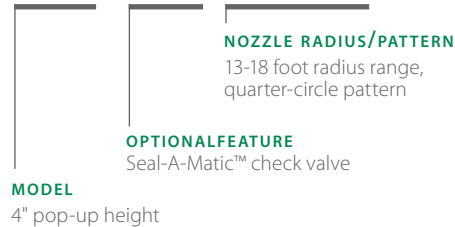
- **R13-18F**: full-circle pattern
- **R13-18TQ**: three-quarter-circle pattern
- **R13-18TT**: two-thirds-circle pattern
- **R13-18H**: half-circle pattern
- **R13-18T**: one-third-circle pattern
- **R13-18Q**: quarter-circle pattern

17- TO 24-FOOT RADIUS

- **R17-24F**: full-circle pattern
- **R17-24TQ**: three-quarter-circle pattern
- **R17-24TT**: two-thirds-circle pattern
- **R17-24H**: half-circle pattern
- **R17-24T**: one-third-circle pattern
- **R17-24Q**: quarter-circle pattern

HOW TO SPECIFY

1804 – SAM – R13-18Q



▼ Click the icons below for more information.

Country of Origin

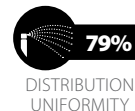


Design & Technical Resources







Nozzle Performance – R13-18



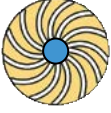





Nozzle Performance – R17-24



R13-18 Series (Black)

Arc	Pressure (psi)	Radius* (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	R13-18F 20	13	1.31	0.75	0.86
	25	14	1.46	0.67	0.77
	30	16	1.60	0.61	0.70
	35	16	1.73	0.61	0.70
	40	17	1.85	0.61	0.70
	45	18	1.96	0.61	0.70
	50	18	2.07	0.61	0.70
55	18	2.17	0.61	0.70	
	R13-18TQ 20	13	0.98	0.75	0.86
	25	14	1.10	0.67	0.77
	30	16	1.20	0.61	0.70
	35	16	1.30	0.61	0.70
	40	17	1.39	0.61	0.70
	45	18	1.47	0.61	0.70
	50	18	1.55	0.61	0.70
55	18	1.62	0.61	0.70	
	R13-18TT 20	13	0.87	0.75	0.86
	25	14	0.97	0.67	0.77
	30	16	1.07	0.61	0.70
	35	16	1.15	0.61	0.70
	40	17	1.23	0.61	0.70
	45	18	1.31	0.61	0.70
	50	18	1.38	0.61	0.70
55	18	1.44	0.61	0.70	
	R13-18H 20	13	0.65	0.75	0.86
	25	14	0.73	0.67	0.77
	30	16	0.80	0.61	0.70
	35	16	0.86	0.61	0.70
	40	17	0.92	0.61	0.70
	45	18	0.98	0.61	0.70
	50	18	1.03	0.61	0.70
55	18	1.08	0.61	0.70	
	R13-18T 20	13	0.44	0.75	0.86
	25	14	0.49	0.67	0.77
	30	16	0.53	0.61	0.70
	35	16	0.58	0.61	0.70
	40	17	0.62	0.61	0.70
	45	18	0.65	0.61	0.70
	50	18	0.69	0.61	0.70
55	18	0.72	0.61	0.70	
	R13-18Q 20	13	0.33	0.75	0.86
	25	14	0.37	0.67	0.77
	30	16	0.40	0.61	0.70
	35	16	0.43	0.61	0.70
	40	17	0.46	0.61	0.70
	45	18	0.49	0.61	0.70
	50	18	0.52	0.61	0.70
55	18	0.54	0.61	0.70	

R17-24 Series (Yellow)

Arc	Pressure (psi)	Radius* (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
	R17-24F 20	17	2.45	0.79	0.92
	25	19	2.74	0.71	0.82
	30	21	3.00	0.65	0.75
	35	22	3.24	0.65	0.75
	40	23	3.46	0.65	0.75
	45	23	3.67	0.65	0.75
	50	24	3.87	0.65	0.75
55	24	4.06	0.65	0.75	
	R17-24TQ 20	17	1.84	0.79	0.92
	25	19	2.05	0.71	0.82
	30	21	2.25	0.65	0.75
	35	22	2.43	0.65	0.75
	40	23	2.60	0.65	0.75
	45	23	2.76	0.65	0.75
	50	24	2.90	0.65	0.75
55	24	3.05	0.65	0.75	
	R17-24TT 20	17	1.63	0.79	0.92
	25	19	1.83	0.71	0.82
	30	21	2.00	0.65	0.75
	35	22	2.16	0.65	0.75
	40	23	2.31	0.65	0.75
	45	23	2.45	0.65	0.75
	50	24	2.58	0.65	0.75
55	24	2.71	0.65	0.75	
	R17-24H 20	17	1.22	0.79	0.92
	25	19	1.37	0.71	0.82
	30	21	1.50	0.65	0.75
	35	22	1.62	0.65	0.75
	40	23	1.73	0.65	0.75
	45	23	1.84	0.65	0.75
	50	24	1.94	0.65	0.75
55	24	2.03	0.65	0.75	
	R17-24T 20	17	0.82	0.79	0.92
	25	19	0.91	0.71	0.82
	30	21	1.00	0.65	0.75
	35	22	1.08	0.65	0.75
	40	23	1.15	0.65	0.75
	45	23	1.22	0.65	0.75
	50	24	1.29	0.65	0.75
55	24	1.35	0.65	0.75	
	R17-24Q 20	17	0.61	0.79	0.92
	25	19	0.68	0.71	0.82
	30	21	0.75	0.65	0.75
	35	22	0.81	0.65	0.75
	40	23	0.87	0.65	0.75
	45	23	0.92	0.65	0.75
	50	24	0.97	0.65	0.75
55	24	1.02	0.65	0.75	

Note: All Rotary Nozzles tested on 4" 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 spacing to achieve optimal precipitation rate and distribution uniformity with head-to-head spacing. Single row applications are not recommended. Do not reduce radius below 13' on the R13-18 model and below 17' on the R17-24 model.

Installation on Rain Bird® 1800-SAM spray bodies recommended in sandy environments. Performance data derived from tests that conform with ASAE Standards; ASAE S398.1.

Click the icon for
more information.



R-VAN Series

Adjustable Rotary Nozzles

- Rotating stream technology uniformly delivers water at a low precipitation rate, significantly reducing runoff and erosion.
- Retrofitting standard spray nozzles with R-VAN adjustable rotary nozzles can reduce flow by up to 60% and improve water efficiency by up to 30%.
- Nozzle spray pattern and distance are easily adjusted by hand with no tools required.

Features

- Adjust arc and radius without tools.
- Low precipitation rate reduces run-off and erosion.
- Maintains efficient performance at high operating pressures without misting or fogging.
- Compatible with all models of Rain Bird spray bodies in addition to a wide variety of risers and adapters.
- Matched precipitation rates across radius and arcs simplify the design process.
- Installing with Rain Bird® 5000 series rotor matched precipitation rate (MPR) nozzles allows for MPR irrigation designs from 13' to 35'.
- Three year trade warranty.

Operating Range

- Spacing: 13 to 24 feet
- Pressure: 20 to 55 psi
- Optimum pressure: 45 psi*

*Rain Bird recommends using 1800® PRS spray bodies to maintain optimum nozzle performance in higher pressure situations.

Models

13- TO 18-FOOT RADIUS

- **R-VAN1318:** 45° to 270° arc

17- TO 24-FOOT RADIUS

- **RVAN1318:** 45° to 270° arc



HOW TO SPECIFY

1804 – SAM-P45 – R-VAN1318

NOZZLE RADIUS/PATTERN
Adjustable, 13-18 foot radius range

OPTIONAL FEATURE
SAM: Seal-A-Matic check valve
P45: 45 psi in-stem pressure regulation

MODEL
4" pop-up height

▼ Click the icons below for more information.

Country of Origin

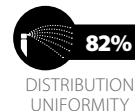





Design & Technical Resources




Nozzle Performance – R-VAN1318



Nozzle Performance – R-VAN1724



R-VAN1318 (Black)					
Arc	Pressure (psi)	Radius* (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
270° 	20	13	0.95	0.72	0.83
	25	14	1.12	0.69	0.80
	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	18	1.51	0.60	0.69
	50	18	1.57	0.60	0.69
180° 	20	13	0.75	0.72	0.83
	25	14	0.83	0.69	0.80
	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	18	1.01	0.60	0.69
	50	18	1.07	0.60	0.69
90° 	20	13	0.37	0.72	0.83
	25	14	0.39	0.69	0.80
	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	18	0.50	0.60	0.69
	50	18	0.54	0.60	0.69
55	18	0.58	0.60	0.69	

R-VAN1724 (Yellow)					
Arc	Pressure (psi)	Radius* (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
270° 	20	17	1.77	0.76	0.88
	25	19	1.99	0.72	0.83
	30	21	2.26	0.70	0.81
	35	22	2.39	0.66	0.76
	40	23	2.55	0.63	0.73
	45	23	2.73	0.61	0.70
	50	24	2.76	0.61	0.70
180° 	20	17	1.24	0.76	0.88
	25	19	1.30	0.72	0.83
	30	21	1.41	0.70	0.81
	35	22	1.55	0.66	0.76
	40	23	1.69	0.63	0.73
	45	23	1.83	0.61	0.70
	50	24	1.91	0.61	0.70
90° 	20	17	0.59	0.76	0.88
	25	19	0.67	0.72	0.83
	30	21	0.73	0.70	0.81
	35	22	0.78	0.66	0.76
	40	23	0.85	0.63	0.73
	45	23	0.91	0.61	0.70
	50	24	0.98	0.61	0.70
55	24	1.05	0.61	0.70	

Note: All Rotary Nozzles tested on 4" 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 spacing to achieve optimal precipitation rate and distribution uniformity with head-to-head spacing. Single row applications are not recommended. Do not reduce radius below 13' on the R-VAN1318 model and below 17' on the R-VAN1724 model.

Installation on Rain Bird® 1800® SAM spray bodies recommended in sandy environments. Performance data derived from tests that conform with ASAE Standards; ASAE S398.1.



SQ Series

Square Pattern Nozzles

- Square spray pattern and pressure compensation offer increased efficiency and control, reducing overspray, property damage and liability.
- Unique edge-to-edge capabilities for non-turf applications reduces the number of nozzles needed, which decreases cost and dramatically reduces installation time.
- Simplify design and installation with the flexibility of applications: one nozzle throws 2.5' or 4' 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.

Features

- 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.
 - Virtual no-mist performance from 20 psi to 50 psi.
 - Two throw distances in each nozzle. One simple click adjusts to 2.5' or 4'.
 - 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

- Flow rates: 6, 12 and 24 gph
- Pressure: 20 to 50 psi
- Required filtration: 40 mesh

Models

- **SQ QTR:** quarter pattern
- **SQ HLF:** half pattern
- **SQ FUL:** full pattern
- **SQ ADP12:** SQ nozzle adapter with 12" PolyFlex riser
- **SQ ADP24:** SQ nozzle adapter with 24" PolyFlex riser
- **SQ ADP12:** SQ nozzle adapter only

Country of Origin






USA

▼ Click the icons below for more information.

Design & Technical Resources




SQ Nozzle

2.5-foot throw – 6" height above grade

Nozzle	Pressure (psi)	Radius (ft)	Flow (gph)	Flow (gpm)	Precip* (in/h)
Q 	20	2.5	6.4	0.11	1.64
	30	2.5	7.4	0.12	1.90
	40	3.0	7.4	0.12	1.32
	50	3.0	7.4	0.12	1.32
H 	20	2.5	10.2	0.17	1.31
	30	2.5	12.2	0.20	1.57
	40	3.0	13.7	0.23	1.22
	50	3.0	13.7	0.23	1.22
F 	20	2.5	20.0	0.33	1.28
	30	2.5	24.2	0.40	1.55
	40	3.0	27.3	0.46	1.22
	50	3.0	27.3	0.46	1.22

SQ Nozzle

4-foot throw – 6" height above grade

Nozzle	Pressure (psi)	Radius (ft)	Flow (gph)	Flow (gpm)	Precip* (in/h)
Q 	20	4.0	6.4	0.11	0.64
	30	4.0	7.4	0.12	0.74
	40	4.5	7.4	0.12	0.59
	50	4.5	7.4	0.12	0.59
H 	20	4.0	10.2	0.17	0.51
	30	4.0	12.2	0.20	0.61
	40	4.5	13.7	0.23	0.54
	50	4.5	13.7	0.23	0.54
F 	20	4.0	20.0	0.33	0.50
	30	4.0	24.2	0.40	0.61
	40	4.5	27.3	0.46	0.54
	50	4.5	27.3	0.46	0.54

*Precipitation rate based on no overlap.

Performance data taken in zero wind conditions.



HOW TO SPECIFY

SQ – QTR

NOZZLE SERIES/PATTERN

Quarter Pattern

MODEL

Square Pattern Nozzles

The Intelligent Use of Water.™

LEADERSHIP • EDUCATION • PARTNERSHIPS • PRODUCTS

At Rain Bird, we believe it is our responsibility to develop products and technologies that use water efficiently. Our commitment also extends to education, training and services for our industry and our communities.

The need to conserve water has never been greater. We want to do even more, and with your help, we can. Visit www.rainbird.com for more information about The Intelligent Use of Water.™



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SAM

1800[®] and RD1800[™]



Sloped applications where drainage is a problem

- Seal-A-Matic[™] (SAM) check valve prevents spray head drainage at low elevations.
- Traps water in lateral pipes in elevation changes of up to 14 feet (4,2 m).
- Reduces wear on system components by minimizing water hammer during start-up.

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RD1800™



Vandal-prone areas and/or non-potable water

- The RD1800's exclusive Flow-Shield™ technology delivers a low-flow, 15-foot service indication stream when a nozzle is removed.
- The Triple-Blade Wiper Seal, SAM check valve and ratchet ring protect against the chlorine and debris commonly found in non-potable water.
- With each irrigation cycle, unique debris pockets hold grit in place, preventing component damage.

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PRS

1800[®] and RD1800[™]



Areas with high water pressure

- Pressure Regulating Stems (PRS) save water and money in areas with high pressure.
- Regulates high or fluctuating inlet pressure at the spray (30/45 psi).
- Complies with local water legislation.
- Optimizes the flow rate, putting down less water and reducing misting/fogging.
- Ensures long-term performance by minimizing component wear and tear.

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U-Series Nozzles

Highly efficient, fixed-arc nozzle for 6'–15' applications

- Additional orifice for close-in watering.
- Minimizes dry brown spots around spray heads.
- Low scheduling coefficient for efficient watering.
- Matched precipitation rate between sets and matched flow and precipitation rates with all Rain Bird® MPR nozzles.



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HE-VAN Nozzles

High-efficiency variable arc spray nozzle for 6'-15' applications

- With Flow Control technology, HE-VAN nozzles deliver more uniform coverage and superior close-in watering, even in windy conditions.
- Achieves greater than 70% average DULQ.
- When compared with competitive nozzles, HE-VANs dramatically reduce zone run times.
- With full adjustability from 0° to 360°, HE-VANs efficiently water landscapes of all shapes and sizes.



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R-VAN Nozzles

Highly efficient, adjustable rotary nozzle for 13'–24' applications

- R-VANs provide water efficiency and design flexibility.
- Rotating stream technology uniformly delivers water at low precipitation rate, reducing runoff and erosion.
- Compared to standard nozzles, R-VANs reduce flow by up to 60% and raise water efficiency by up to 30%.
- Nozzle spray pattern and distance are easily adjusted by hand, no tools required.
- True flushing mechanism allows the nozzle to be completely flushed, not just the deflector pocket.



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R-Series Nozzles

Efficient, fixed-arc rotary nozzle for 13'–24' applications

- R-Series rotary nozzles help reduce water waste and make it easier to design systems.
- More heads can be installed per zone, reducing system complexity and cost.
- Multiple rotating streams deliver close-in watering and even coverage throughout the radius range.
- Low precipitation rate significantly reduces wasteful run-off and erosion.



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15 STRIP SERIES

Center Strip



Matched Precipitation Rate nozzle for 3'-20' applications

- Even water distribution and design flexibility for center strips.
- 1800® series white filter screens maintain precise radius adjustment and prevent clogging.
- Stainless steel adjustment screw to adjust flow and radius.



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15 STRIP SERIES

Side Strip

Matched Precipitation Rate nozzle for 3'-20' applications

- Even water distribution and design flexibility for side strips.
- 1800® series white filter screens maintain precise radius adjustment and prevent clogging.
- Stainless steel adjustment screw to adjust flow and radius.



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15 STRIP SERIES

End Strip



Matched Precipitation Rate nozzle for 3'-20' applications

- Even water distribution and design flexibility for end strips.
- 1800® series white filter screens maintain precise radius adjustment and prevent clogging.
- Stainless steel adjustment screw to adjust flow and radius.



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SQ Series

Adjustable short throw nozzle for 2.5' or 4' applications

- Square spray pattern and pressure compensation offer increased efficiency and control
- One nozzle throws 2.5' or 4' 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



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