



# **RD1800 Series Spray Heads**

## **Industry's Premium Spray Heads**

RD1800 Series Spray Heads provide unmatched durability, reliability, and performance in the harshest applications.

Superior components and features make the RD1800 Series Spray Head the industry's leading spray head for grit tolerance and recyled water applications.

#### **Features**

Co-molded, pressure-activated, multi-functional wiper seal assures positive seal without excess "flow-by" which enables more heads to be installed on the same valve.

- Designed for use with all Rain Bird plastic spray head nozzles – U-Series, HE-VAN, R-VAN, MPR, VAN, and XPCN Series.
- Precision controlled flush at pop-down clears debris from unit, assuring positive stem retraction in all soil types.
- Strong stainless steel spring provides reliable stem retraction.
- Reinforced ratchet ring allows easy nozzle pattern alignment without tools and withstands harsh water over time.
- Pre-installed RD1800 Pop-Top<sup>™</sup> flush plug blocks debris 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 sprinkler components are removable from the top without special tools, providing for quick and easy flushing and maintenance of the sprinkler.
- · All models are no side inlet.
- Five-year trade warranty.

#### **Triple-Blade Wiper Seal**

Provides ultimate protection against grit and debris if the primary seal is damaged. The top seal flushes during pop-up and retraction, while the primary seal eliminates flow-by.

#### **Debris Pockets**

Hold grit in place, removing it from circulation and preventing long-term damage.

#### Flow-Shield

Low-flow service indication stream identifies a missing/damaged nozzle and provides up to 90% reduction in water loss when a nozzle is removed.

## **Operating Range**

- Spacing: 2.5 to 24 feet (0.8 to 7.3 m)
- Pressure: 15 to 100 psi (1.0 to 6.9 bar)

## **Specifications**

- Flow-by SAM Models: 0 at 15 psi (1.0 bar) or greater; 0.5 gpm (0.1 m³/h; 0.03 l/s)
- Flow-by All Other Models: 0 at 10 psi (0.7 bar) or greater; 0.5 gpm (0.1 m<sup>3</sup>/h; 0.03 l/s)

#### **Dimensions/Models**

- 1/2" (15/21) NPT female threaded inlet
- · Models and height:

RD04: 6" (15 cm) body height; 4" pop-up height (10 cm) RD06: 9 %" (24 cm) body height; 6" pop-up height (15 cm) RD12: 16" (40 cm) body height;

12" pop-up height (30 cm)

• Exposed surface diameter: 21/4" (5.7 cm)





#### Patented Triple-Blade Winer Seal

- Top seal provides exceptional debris tolerance
- Primary seal eliminates water flow-by during operation
- Exclusive third blade protects internal components to ensure long life



#### **Unique Debris Catch-Pockets**

 Hold grit in place and prevent re-circulation to deliver lasting performance

## **How To Specify**

## RD04 - S - P30 - F - NP

Optional Feature
NP: Non-potable,

purple marked cover

## Optional Feature

Flow Shield: Low flow indicator stream when nozzle is missing

#### Standard Feature

P30: 30psi (2.1 bar) in-stem pressure regulation P45: 45psi (3.1 bar) in-stem pressure regulation

#### Standard Feature

Model SAM: Seal-A-Matic<sup>™</sup> check valve RD04: 4" (10.2 cm) pop-up height

## **How To Specify**

## RD04 - S - P45 - F - NP - R-VAN24-360

#### Standard Feature SAM: Seal-

SAM: Seal-A-Matic<sup>™</sup> check valve

P45: 45psi (3.1 bar) in-stem pressure regulation

F: Flow Shield NP: Non-potable

Model

RD04: 4" (10.2 cm) pop-up height

**Note:** Specify sprinkler bodies and nozzles separately.

#### Radius Range

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

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

17' - 24' (5.2 to 7.3m) R-VAN24: 45° - 270° R-VAN24-360: 360°

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

(1.5 x 4.6m) R-VAN-SST: 5'x 30' (1.5 x 9.1m)

## RD1800 SAM-PRS-30-NP Non Potable Series

Meets the needs of spray body applications using Spray Nozzles regardless of changing elevation or water pressures. Incorporates RD1800 Series SAM feature and regulates operating pressure at 30 psi (2.1 bar).

- Designed to maximize application efficiency when using Spray Nozzles.
- Maintains constant outlet pressure at 30psi (2.1 bar) at varying inlet pressures.
   Maintains constant pressure regardless of nozzle used.
- "SAM-PRS-30" stamped on cap for easy identification and maintenance.
- Non-potable, purple wiper seal printed with "DO NOT DRINK/NO BEBA" and the international do not drink symbol.
- · Five-year trade warranty.

## **Operating Range**

- Spacing: 2.5 to 24 feet (0.8 to 7.3 m)
- Pressure: 25 to 100 psi (1.7 to 6.9 bar)

## **Specifications**

- SAM capability: holds up to 14 feet (4.2 m) of head; 6 psi (0.3 bar)
- Flow-by: 0 at 8 psi (0.6 bar) or greater;
   0.1 gpm (0.02 m³/h; 0.006 l/s) otherwise
- Installation: bottom inlet only
- Regulates nozzle pressure to an average 30 psi (2.1 bar) with inlet pressures of up to 100 psi (6.9 bar)

#### **Dimensions**

- ½"(15/21) NPT female threaded inlets
- Body height: RD04 SAM-PRS 6"(15 cm), RD06 SAM-PRS - 9%"(24 cm), RD12 SAM-PRS - 16"(40 cm)
- Exposed diameter: 2¼" (5.7 cm)

#### **Models**

- RD04SP30NP: 4" pop-up height
- RD06SP30NP: 6" pop-up height
- RD12SP30NP: 12" pop-up height



All Rain Bird Spray Bodies with PRS are WaterSense certified

## RD1800 SAM-PRS-30-F Potable Series

Meets the needs of spray body applications using Spray Nozzles regardless of changing elevation or water pressures. Incorporates RD1800 Series SAM feature and regulates operating pressure at 30 psi (2.1 bar).

- Designed to maximize application efficiency when using Spray Nozzles.
- Maintains constant outlet pressure at 30psi (2.1 bar) at varying inlet pressures.
   Maintains constant pressure regardless of nozzle used.
- "SAM-PRS-30-F" stamped on cap for easy identification and maintenance.
- · Five-year trade warranty.

## **Operating Range**

- Spacing: 2.5 to 24 feet (0.8 to 7.3 m)
- Pressure: 25 to 100 psi (1.7 to 6.9 bar)

## **Specifications**

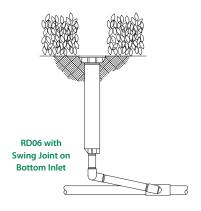
- SAM capability: holds up to 14 feet (4.2 m) of head; 6 psi (0.3 bar)
- Flow-by: 0 at 8 psi (0.6 bar) or greater;
   0.1 gpm (0.02 m³/h; 0.006 l/s) otherwise
- Installation: bottom inlet only
- Regulates nozzle pressure to an average 30 psi (2.1 bar) with inlet pressures of up to 100 psi (6.9 bar)

#### **Dimensions**

- ½"(15/21) NPT female threaded inlets
- Body height: RD04 SAM-PRS 6" (15 cm),
   RD06 SAM-PRS 9%" (24 cm),
   RD12 SAM-PRS 16" (40 cm)
- Exposed diameter: 21/4" (5.7 cm)

#### **Models**

- RD04SP30F: 4" pop-up height
- RD06SP30F: 6" pop-up height
- RD12SP30F: 12" pop-up height



## RD1800 SAM-PRS-F-NP Non Potable Series

Meets the needs of spray body applications using Spray Nozzles regardless of changing elevation or water pressures. Incorporates RD1800 Series SAM feature and regulates operating pressure at 30 psi (2.1 bar).

- Designed to maximize application efficiency when using Spray Nozzles.
- Maintains constant outlet pressure at 30psi (2.1 bar) at varying inlet pressures.
   Maintains constant pressure regardless of nozzle used.
- "SAM-PRS-30-F" stamped on cap for easy identification and maintenance.
- Non-potable, purple wiper seal printed with "DO NOT DRINK/NO BEBA" and the international do not drink symbol.
- · Five-year trade warranty.

#### **Operating Range**

- Spacing: 2.5 to 24 feet (0.8 to 7.3 m)
- Pressure: 25 to 100 psi (1.7 to 6.9 bar)

## **Specifications**

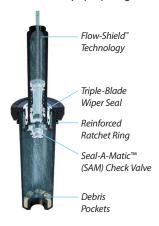
- SAM capability: holds up to 14 feet (4.2 m) of head; 6 psi (0.3 bar)
- Flow-by: 0 at 8 psi (0.6 bar) or greater;
   0.1 gpm (0.02 m³/h; 0.006 l/s) otherwise
- Installation: bottom inlet only
- Regulates nozzle pressure to an average 30 psi (2.1 bar) with inlet pressures of up to 100 psi (6.9 bar)

#### **Dimensions**

- ½" (15/21) NPT female threaded inlets
- Body height: RD04 SAM-PRS 6"(15 cm), RD06 SAM-PRS - 9%"(24 cm), RD12 SAM-PRS - 16"(40 cm)
- Exposed diameter: 2¼" (5.7 cm)

#### **Models**

- RD04SP30FNP: 4"pop-up height
- RD06SP30FNP: 6" pop-up height
- · RD12SP30FNP: 12" pop-up height



## RD1800 SAM-PRS-45-NP Non Potable Series

Meets the needs of spray body applications using Rotary Nozzles regardless of changing elevation or water pressures. Incorporates RD1800 Series SAM feature and regulates operating pressure at 45 psi (3.1 bar).

- Designed to maximize application efficiency when using Rotary Nozzles.
- Maintains constant outlet pressure at 45psi (3.1 bar) at varying inlet pressures.
   Maintains constant pressure regardless of nozzle used.
- "SAM-PRS-45" stamped on cap for easy identification and maintenance.
- Non-potable, purple wiper seal printed with "DO NOT DRINK/NO BEBA" and the international do not drink symbol.
- · Five-year trade warranty.

## **Operating Range**

- Spacing: 8 to 24 feet (2.4 to 7.3 m)
- Pressure: 25 to 100 psi (1.7 to 6.9 bar)

#### **Specifications**

- SAM capability: holds up to 14 feet (4.2 m) of head; 6 psi (0.3 bar)
- Flow-by: 0 at 8 psi (0.6 bar) or greater;
   0.1 gpm (0.02 m³/h; 0.006 l/s) otherwise
- · Installation: bottom inlet only
- Regulates nozzle pressure to an average 45 psi (3.1 bar) with inlet pressures of up to 100 psi (6.9 bar)

## **Dimensions**

- 1/2" (15/21) NPT female threaded inlets
- Body height: RD04 SAM-P45 6" (15 cm), RD06 SAM-P45 - 9%" (24 cm), RD12 SAM-P45 - 16" (40 cm)
- Exposed diameter: 2¼" (5.7 cm)

#### **Models**

- RD04SP45NP: 4"pop-up height (10 cm)
- RD06SP45NP: 6" pop-up height (15 cm)
- RD12SP45NP: 12" pop-up height (30 cm)



All Rain Bird Spray Bodies with PRS are WaterSense certified

## RD1800 SAM-PRS-45-F Potable Series

Meets the needs of spray body applications using Rotary Nozzles regardless of changing elevation or water pressures. Incorporates RD1800 Series SAM feature and regulates operating pressure at 45 psi (3.1 bar).

- Designed to maximize application efficiency when using Rotary Nozzles.
- Maintains constant outlet pressure at 45
  psi (3.1 bar) at varying inlet pressures.
  Maintains constant pressure regardless of
  nozzle used.
- "SAM-PRS-45-F" stamped on cap for easy identification and maintenance.
- · Five-year trade warranty.

## **Operating Range**

- Spacing: 2.5 to 24 feet (0.8 to 7.3 m)
- Pressure: 25 to 100 psi (1.7 to 6.9 bar)

## **Specifications**

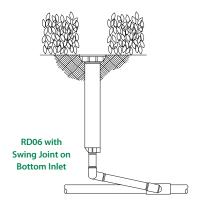
- SAM capability: holds up to 14 feet (4.2 m) of head; 6 psi (0.3 bar)
- Flow-by: 0 at 8 psi (0.6 bar) or greater;
   0.1 gpm (0.02 m³/h; 0.006 l/s) otherwise
- · Installation: bottom inlet only
- Regulates nozzle pressure to an average 45 psi (3.1 bar) with inlet pressures of up to 100 psi (6.9 bar)

#### **Dimensions**

- ½"(15/21) NPT female threaded inlets
- Body height: RD04 SAM-PRS 6"(15 cm), RD06 SAM-PRS - 9%"(24 cm), RD12 SAM-PRS - 16"(40 cm)
- Exposed diameter: 21/4" (5.7 cm)

#### **Models**

- RD04SP45F: 4" pop-up height (10 cm)
- RD06SP45F: 6" pop-up height (15 cm)
- RD12SP45F: 12" pop-up height (30 cm)



## RD1800 SAM-PRS-45-F-NP Non Potable Series

Meets the needs of spray body applications using Rotary Nozzles regardless of changing elevation or water pressures. Incorporates RD1800 Series SAM feature and regulates operating pressure at 45 psi (3.1 bar).

- Designed to maximize application efficiency when using Rotary Nozzles.
- Maintains constant outlet pressure at 45
  psi (3.1 bar) at varying inlet pressures.
  Maintains constant pressure regardless of
  nozzle used.
- "SAM-PRS-45-F" stamped on cap for easy identification and maintenance.
- Non-potable, purple wiper seal printed with "DO NOT DRINK/NO BEBA" and the international do not drink symbol.
- · Five-year trade warranty.

## **Operating Range**

- Spacing: 2.5 to 24 feet (0.8 to 7.3 m)
- Pressure: 25 to 100 psi (1.7 to 6.9 bar)

## **Specifications**

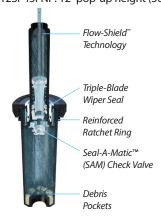
- SAM capability: holds up to 14 feet (4.2 m) of head; 6 psi (0.3 bar)
- Flow-by: 0 at 8 psi (0.6 bar) or greater;
   0.1 gpm (0.02 m³/h; 0.006 l/s) otherwise
- · Installation: bottom inlet only
- Regulates nozzle pressure to an average 45 psi (3.1 bar) with inlet pressures of up to 100 psi (6.9 bar)

#### **Dimensions**

- ½"(15/21) NPT female threaded inlets
- Body height: RD04 SAM-PRS 6"(15 cm), RD06 SAM-PRS - 9%"(24 cm), RD12 SAM-PRS - 16"(40 cm)
- Exposed diameter: 2<sup>1</sup>/<sub>4</sub>" (5.7 cm)

#### **Models**

- RD04SP45FNP: 4" pop-up height (10 cm)
- RD06SP45FNP: 6" pop-up height (15 cm)
- RD12SP45FNP: 12" pop-up height (30 cm)





## **Specifications**

#### **RD1800 Series Sprinkler**

The sprinkler body, stem, nozzle and screen shall be constructed of heavy-duty, ultra-violet resistant plastic. It shall have a heavy-duty stainless steel retract spring for positive pop-down and a ratcheting system for easy alignment of the pattern. The sprinkler shall have a soft elastomer pressure-activated co-molded wiper seal for cleaning debris from the pop-up stem as it retracts into the case to prevent the sprinkler from sticking up to minimize "flow-by."

The sprinkler shall have a matched precipitation rate (MPR) plastic or brass nozzle with an adjusting screw capable of regulating the radius and flow. The sprinkler shall be capable of housing protective, non-clogging filter screens or pressure compensating screens (PCS) under the nozzle. The screen shall be used in conjunction with the adjusting screw for regulating. All RD1800 models are bottom inlet only.

The sprinkler shall have a Pop-Top<sup>™</sup> Flush Plug pre-installed. The plug shall prevent debris from clogging the sprinkler during installation and allow for the system to be flushed before nozzling. The plug shall be bright orange in color and constructed of polypropylene material.

#### **RD1800 Series with SAM**

When so indicated on the design, the 4", 6" or 12" high pop-up spray sprinklers shall also include a Seal-A-Matic (SAM) check valve to prevent lowhead drainage of up to 14 feet (4.2 m) of head. This feature shall require the use of the bottom inlet only. These units shall be identifiable from the top with "SAM" marking on the cap. The sealing device shall be an integral part of the pop-up stem, removable through the top of the sprinkler, and shall seal against the bottom case inlet. It shall create no more than 1 psi pressure drop at the maximum rated flow.

#### RD1800 Series with PRS-30

When so indicated on the design, the 4", 6" or 12" high pop-up spray sprinkler shall also include a pressure regulating (PRS) device to prevent high pressure fogging to the nozzle stream. This regulating device shall be an integral part of the pop-up stem. These units shall be identifiable from the top with "PRS-30" markings on the cap.

The device shall regulate the nozzle pressure to 30 psi (2.1 bar) for inlet pressures from 35 to 100 psi (2.4 to 6.9 bar). Below 35 psi (2.4 bar) the pressure loss shall not exceed 6 psi (0.4 bar).

#### RD1800 with PRS-45

When so indicated on the design, the 4", 6" or 12" high pop-up spray sprinkler shall also include a pressure regulating (PRS) device to prevent high pressure fogging to the nozzle stream. This regulating device shall be an integral part of the pop-up stem, removable through the top of the case. These units shall be identifiable from the top with "PRS-45" markings on the cap.

The device shall regulate the nozzle pressure to 45 psi (3.1 bar) for inlet pressures from 50 to 100 psi (2.4 to 6.9 bar). Below 50 psi (3.4 bar) the pressure loss shall not exceed 6 psi (0.4 bar).

#### **RD1800 Series with Flow Shield**

Optional Feature Specifications:

When so indicated on the design, the 4", 6", or 12" high pop-up spray sprinkler shall also include Flow Shield. These units shall be indentifiable from the top with SAM-PRS-30-F or SAM-PRS-45-F markings on the cap.

The Flow Shield shall reduce water flow by 90% when a nozzle is missing or damaged. Flow shield shall create a highly visible indicator stream that the nozzle is missing or damaged and needs to be serviced.

#### RD1800 Series with NP (non-potable) covers

**Optional Feature Specifications:** 

When so indicated on the design, the 4", 6", or 12" high pop-up spray sprinkler shall also include a non-potable purple wiper seal and cover with "DO NOT DRINK/NO BEBA" purple markings and the international do not drink symbol.

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