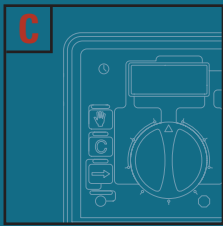
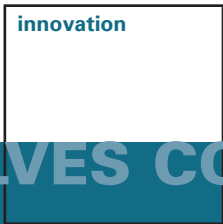
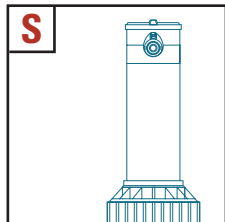
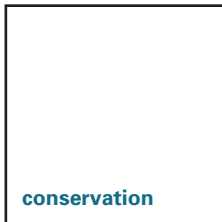
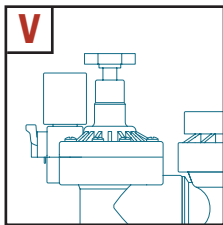


SPRINKLERS VALVES CONTROLLERS ACCESSORIES



# Contents

## Controllers..... 1-14

Control Center™	2-3
Control Star™	4-5
Dial Star	6-7
Superstar RF	8-9
Pocketstar- 2X	10
Remote Link	11
Pump Start Relay	12
RX-1 Rain Sensor	13
Hose Faucet Timers	14

## Electric Valves ..... 15-22

Micro-Valve	16
160 Series Commercial Valves	17
5700 Series Anti-Siphon Valves	18
200 Series Valves	19
400 Series Jartop Valve	20
Production Series Valves	21
Converter Valves	22

## Valve Boxes ..... 23-26

Black/Green/Sand	24
Curb Box	25
Rock Box	26

## Rotary Sprinklers ..... 27-32

5500 Series Rotor	28-29
5300 Series Rotor	30
55012	31
Impacts	32

## Spray Heads ..... 33-40

5400 Series™	34
5400 Series Hard Top™	35
5400 Series Soft Top™	36
5400 Series Spray Nozzles	37
5400 Series Spray Nozzle Performance Data	38
5400 Series Adjustable Nozzles	39
5400 Series ADJ Performance Data	40

## Irrigation Accessories ..... 41-45

Risers	42
Flex Pipe/ Accessories	43
Tools	44
Ball/Drain Valves	45
Curb Keys	46

## Micro Irrigation ..... 47-56

Apollo 8™	48
Adjustable Quad Manifold	49
Manifolds	50
Drippers	51
Micro Sprays	52
Stakes & Risers	53
Fittings & Adapters	54
Micro Filter/ Punch Tool	55
Distribution Tubing	56

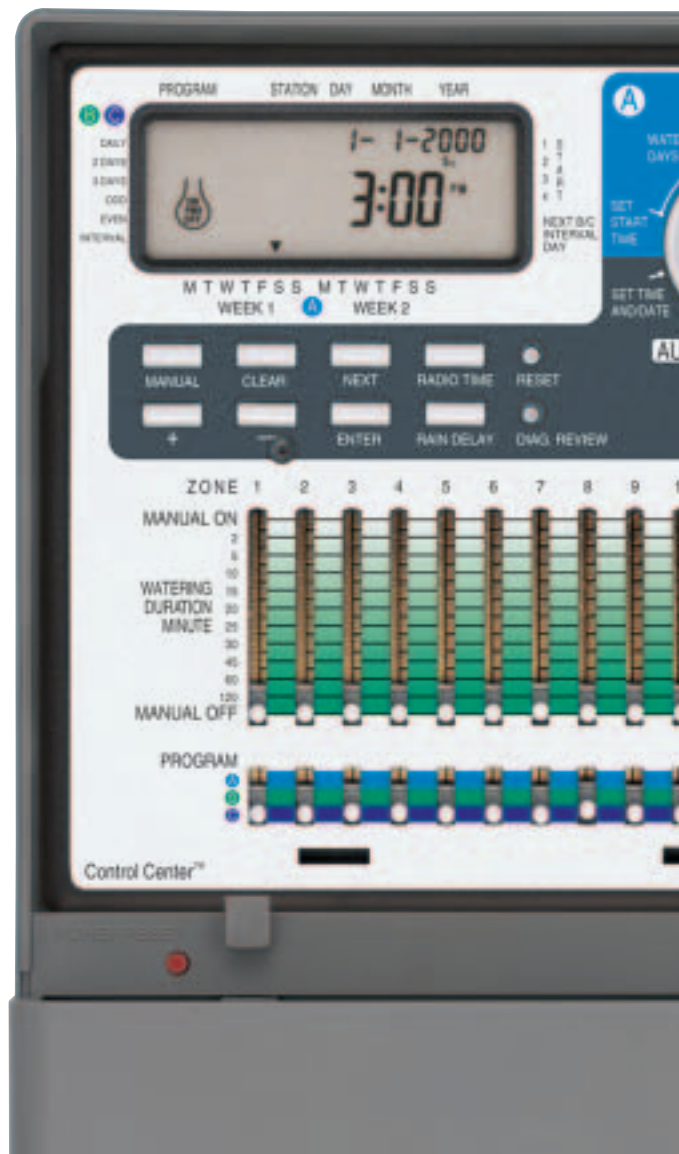
## Reference ..... 57

Conversion Factors	57
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## Seven Year Warranty

Orbit Irrigation Products, Inc., Professional Products Division warrants to its professional customers that its products will be free from defects in materials and workmanship for a period of seven years from the date of purchase (proof of purchase required). We reserve the right to inspect the defective part prior to replacement. All defectives must be authorized in writing by Orbit Irrigation Products, Inc. Orbit Irrigation Products, Inc. will not be responsible for consequential or incidental cost or damage caused by product failure. Orbit Irrigation Products, Inc. liability, under this warranty, is limited solely to the replacement or repair of defective parts. This warranty is given expressly and in place of all other expressed or implied warranties including, but not limited to, warranties on fitness for use or merchantability. Not agent or representative has the authority to waive or alter this warranty.

convenience



# CONTROLLERS

Designed for light commercial  
and custom residential  
project applications

Pro Series

# Controllers



## Control Center™

6, 9, 12 Stations Indoor Mount, Outdoor Mount

Expert planning, superior craftsmanship, and distinguished engineering have consistently placed Orbit's Control Center™ at the top of its class.

Designed with the landscape professional in mind, the Control Center™ allows for advanced capability in water scheduling, including water budgeting, system diagnostics, and programmable rain delay. All of this is available while keeping programming simple and station run times "at a glance." The Control Center™ controller is expandable from 6 to 12 zones.

With Control Center™, keeping accurate time is never a problem. The National Institute of Standards and Technology in Fort Collins, Colorado measures the vibrations of cesium atoms in a vacuum to create the definitive constant for time—accurate to within one second for every million years.

Radio waves are transmitted to calibrate atomic time-based clocks internal oscillators throughout the U.S. The signal is received three times daily by an antenna embedded in the controller—keeping the time in sync. The signal also accounts for daylight savings time, leap year and leap minutes.

### Applications:

Light commercial and custom residential projects.

### Controller Type:

Hybrid.

Model No.	Description
USA	
57546	6 station module
57549	9 station module
57552	12 station module
57540	Outdoor power box
57541	Indoor power box

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

## Outstanding Features:

- Expandable from 6 to 12 zones.
- Non-volatile program memory saves watering schedule in case of power outages.
- Three independent programs (A, B, C) allow for scheduling odd/even days, by specific day of the week, and interval from 1 to 28 days.
- Revolutionary atomic time feature automatically sets the time and date by receiving an AM frequency signal. The time and date are updated three times daily, ensuring accurate water scheduling.
- Six major operating modes: Auto, Manual, Extra, Test, Rain Delay and Off.
- Four cycle start times for each program adds versatility to most residential or light commercial site needs.
- Capable of operating two valves and a pump start relay per station.
- Diagnostic review mode identifies all currently unresolved faulty stations.
- Station run times from 2 through 120 minutes. The Control Center™ is capable of watering from 30 seconds to four hours per station up to four times per day with use of water budgeting.
- Water budgeting by program reduces or increases run times from 25 to 200 percent.
- Rain delay is capable of interruption watering from 1 day to 99 days with visual count-down on display.
- Leap year-proof through the year 2050.
- Programmable pump start/master valve by station.
- Heavy-duty water resistant locking case, with exterior "flying leads" ready for installation. (Lock on outdoor model only)
- Automatic resetting circuit breaker protects

the controller when power surge is detected by shutting down and turning back on when the spike has ended.

- A.M./ P.M. 365 day clock.
- Easy to install. All of the necessary mounting hardware, wall template and installation instructions are included in the box. Two AA batteries are also included in the package.
- Diagnostics notify property manager of electronic interruption to valves by displaying faulty value on the display.
- 10-minute daily watering default program.

## Electrical Specifications:

**Input required:** 117 VAC +/- 10%, 60 Hz (230 VAC +/- 10%, 50/60 Hz models available).

**Output:** 26 VAC @ 750 mA.

**Valve Capacity:** Up to two 24 VAC solenoid valves per station with a master valve/pump start.

**Screwless Terminal Strip:** Accepts #14, #16, #18, AWG wire (0,8 mm-1,4 mm).

**Common Terminals:** Two provided (for use with rain shut off, etc.).

**Electronic Self-Restoring Circuit Breaker:** Deactivates power when surges of 1 AMP or greater occur then automatically resets power. No loss of programming will occur.

**Circuit Protection:** MOV's provided across control wires, primary power and thermal protection on the CPU.

**Listings/Approvals:** UL® listed, CSA, CE, VDE, SAA.

## Mechanical Specifications:

### Outdoor

#### Power Box Description:

**Color:** Gray.

**Material:** ABS.

**Outdoor Closing Mechanism:** Indoor Cover (latch only) keyed latch, two keys provided.

**Indoor Closing Mechanism:** Latch.

**Access Hole Outdoor:** 1-15/16" (4,9 cm) diameter.

**Approvals:** ETL® approved, UL® standard enclosure.

#### Dimensions:

**Height:** 9-1/2" (24,1 cm).

**Width:** 7-3/4" (19,6 cm).

**Depth:** 2-1/2" (6,4 cm).

### Indoor

**Color:** Gray.

**Material:** ABS.

**Closing Mechanism:** Latch.

**Wiring Access Hole** 1-1/3" (3,3 cm).

**Mounting:** One tear drop hole, two lower through holes, hardware and template provided.

#### Dimensions:

**Height:** 8-1/2" (21,5 cm).

**Width:** 7-3/4" (19,6 cm).

**Depth:** 2-1/2" (6,4 cm).

# Controllers



## Control Star™

4, 6, 8, 12 Stations Indoor Mount, Outdoor Mount

You've invested your time, energy and money to make sure you get a great-looking landscape year after year.

That's why it makes sense to choose Control Star™, the easy programming controller that gives you automatic watering convenience and peace of mind. Control Star™ is the only watering system in the industry to feature Smart Scan™, an ingenious technological device that provides electrical circuitry protection. What does the convenience of Smart Scan™ mean to you?

It means that when there's a power surge you don't have to worry. Smart Scan's fuseless circuitry automatically resets itself retaining watering schedules and ensuring hassle-free watering whether you're at home or away.

Install the Outdoor Control Star™ in a convenient outside location where it can easily be serviced. The weatherproof locking cabinet provides protection for years of reliable use. What could be simpler?

### Applications:

Light commercial and custom residential projects.

### Controller Type:

Hybrid.

Model No.	Description
<b>USA</b>	
57342	12 station (outdoor)
57348	8 station (outdoor)
57346	6 station (outdoor)
57344	4 station (outdoor)
57252	12 Station (indoor)
57258	8 Station (indoor)
57256	6 Station (indoor)
57254	4 Station (indoor)
<b>International</b>	
94022	12 station (outdoor)
94028	8 station (outdoor)
94026	6 station (outdoor)
94024	4 station (outdoor)
94002	12 Station (indoor)
94008	8 Station (indoor)
94006	6 Station (indoor)
94004	4 Station (indoor)

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

## Outstanding Features:

- Easy to program, self-prompting display.
- Choose from three programs (A, B, AB) capable of watering up to eight times per day depending on your watering needs.
- Microprocessor uses 365-day calendar for ODD or EVEN day watering with leap-year intelligence through the year 2050.
- 14-day calendar allows every other day scheduling (Ex: M, W, F, Su, T, Th, S . . .); or watering selectable by any day of the week.
- Interval program from 1 to 28 days, or odd/even days.
- Smart Scan™ protection includes program backup, diagnostic scanner, and automatic resetting electronic circuit breaker.
- Easy to understand A.M./P.M. clock.
- Six operating modes: fully automatic, manual by station, manual by individual program group, manual all stations, programmable station 2-minute test with manual advance feature, and controller off.
- Rain or moisture sensor adaptability.
- Stations can be assigned to any or all programs.
- Microprocessor compensates for programmer error by automatically delaying a programming cycle that has been inadvertently set to come on at the same time as another (start time stacking).
- Seasonal watering adjustments available "at-a-glance."
- Semi-automatic delay from 24-72 hours pre-

vents overwatering when it rains or shuts off the water for event days. Counts down the hours and returns the Control Star™ to the next scheduled watering cycle.

- Large, easy-to-understand programming dial and high quality slide switches.
- Easy to Install. Technicians will appreciate how simple it is to install the Control Star™. All of the necessary mounting hardware, wall template and installation instructions are included in the box.
- Two AA batteries included in the package.

## Electrical Specifications:

**Input required:** 120 VAC +/- 10%, 60 Hz (230 VAC +/- 10%, 50 Hz models available).

**Output:** 26 VAC @ 600 mA.

**Valve Capacity:** Up to two valves per station or with pump start.

**Terminal Strip:** Screwless, accepts #14, #16, #18, and #20 AWG wire (0,813 mm - 1,63 mm).

**Common Terminals:** Two provided (for use with rain sensor, etc.).

**Electronic Self-Restoring Circuit Breaker:** Deactivates power when surges occur then automatically resets power. No loss of programming will occur.

**Lightning/Surge Protection:** Provided.

## Mechanical Specifications:

### Outdoor

#### Controller Box Description:

**Color:** Gray.

**Material:** ABS.

**Lock Mechanism:** Keyed latch, two keys provided.

**Valve Wiring Access Hole:** 1-15/16" (4,9 cm) diameter with glueless rubber grommet.

**Approvals:** ETL® approved, UL® standard enclosure.

#### Dimensions:

**Height:** 6.5" (16,5 cm).

**Width:** 9.25" (23,5 cm).

**Depth:** 2.75" (5,2 cm).

**Inlet Size:** 1.25" (3,2 cm).

### Indoor

**Closing Mechanism:** Latch.

**Wiring Access Hole:** 1-1/3" (3,3 cm).

**Mounting:** One tear drop hole, two lower through holes, hardware and template provided.

#### Dimensions:

**Height:** 6.5" (16,5 cm).

**Width:** 9.25" (23,5 cm).

**Depth:** 1.75" (3,2 cm).

# Controllers



## Dial Star™

4, 6, 9, 12 Station Indoor Mount, Outdoor Mount

Whether you want sophisticated programming or built-in convenience, look no further than the Dial Star controller. This power-packed, 4, 6, 9, and 12 station controller outperforms or provides more features than any other timer in its category.

With Dial Star, you choose the watering schedule that best suits your landscape: day of week, odd/even, second day or 1-28 day intervals. With eight different start times available and watering schedules that last from one minute to 13 hours, you can program the timer to give your landscape just the right amount of precipitation and meet most city scheduling codes.

Perfect for all residential landscapes, Super Dial gives you ease of use, reliability you can count on, and precision programming you can trust.

### Applications:

Residential projects.

### Controller Type:

Hybrid.

Model No.	Description
-----------	-------------

<b>USA</b>	
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57682	12 station (outdoor)
57689	9 station (outdoor)
57686	6 station (outdoor)
57684	4 station (outdoor)
57662	12 station (indoor)
57669	9 station (indoor)
57666	6 station (indoor)
57664	4 station (indoor)

<b>International</b>	
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94112	12 station (outdoor)
94119	9 station (outdoor)
94116	6 station (outdoor)
94114	4 station (outdoor)
94104	12 station (indoor)
94106	9 station (indoor)
94109	6 station (indoor)
94102	4 station (indoor)

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

## Outstanding Features:

- Large, easy-programming dial.
- Water resistant locking case.
- Manual advance.
- External primary power leads.
- Solid brass wiring port (USA only).
- Easy to program self-prompting display.
- Choose from two programs (A or B).
- Stations can be assigned to any or all programs (A, B, A and B).
- Microprocessor uses 365-day calendar for ODD or EVEN day watering with leap-year intelligence through the year 2050.
- Programmable by day of week, odd or even days, or every second day.
- Repeating day cycle allows irrigation frequency from 1 to 28 days.
- Eight available start times per valve per day.
- Station timing in one-minute increments for precise watering requirements.
- Watering capability from one minute to 13 hours per valve per day.
- Easy-to-understand A.M./P.M. clock.
- Five operating modes: fully automatic, manual by station, manual by individual program group, manual all stations, or controller off.
- Rain or moisture sensor adaptability.
- Microprocessor compensates for programmer error by automatically delaying a programming cycle that has been inadvertently set to come on at the same time as another (start time stacking).

- Programmable rain or event day delay from 24-72 hours prevents overwatering when it rains or shuts off the water for even days, counts down the hours and returns the Super Dial to the next scheduled watering cycle.
- Default watering 10 minutes per zone each day.
- Large, easy-to-understand programming dial.
- Easy to install. You'll appreciate the quick installation Super Dial offers. One center eyelet and two easily accessible mount screws makes installation clean and simple.

## Electrical Specifications:

**Input Required:** 117 VAC +/- 10%, 60 Hz (230 VAC +/- 10%, 50 Hz models available).

**Output:** 26 VAC @ 600 mA.

**Valve Capacity:** Up to two 24 VAC solenoid valves per station with pump start.

**Terminal Strip:** Screwless, accepts #14, #16, #18, and #20 AWG wire (0,813 mm - 1,6 mm).

**Circuit Protection:** MOV, Fuse Amp.

**Listings:** UL® listed, CSA/CE approved.

## Mechanical Specifications:

### Outdoor

**Color:** Gray.

**Material:** ABS.

**Closing Mechanism:** Key and latch with two keys provided.

**Mounting:** One tear drop hole, two corner hole with template provided. 1/2 MPT brass junction box mount.

### Dimensions:

**Width:** 9.25" (23,5 cm).

**Height:** 6.5" (16,5 cm).

**Depth:** 2.75" (5,2 cm).

### Indoor

**Color:** Gray.

**Material:** ABS.

**Closing Mechanism:** Latch.

**Wiring Access Hole:** 1.33 " (3,3 cm).

**Mounting:** Two lower through holes, hardware and template provided.

### Dimensions:

**Width:** 9.25" (23,5 cm).

**Height:** 6.5" (16,5 cm).

**Depth:** 1.75" (3,2 cm).

# Controllers



## Superstar RF™

6 or 12 Stations (Indoor Mount)

Thanks to the Superstar RF™ with remote control, a beautiful landscape is just a click away. Power-packed with features like non-volatile memory, rain/event day off, multiple automatic run times and the added flexibility of remote control, the Superstar RF™ is the most complete residential controller available.

Superstar RF's radio frequency key pad is the perfect companion to the controller, making on-site, semi-automatic watering easier than ever. Ideal for both contractors and residential maintenance companies, the RF touch pad makes checking the system and flushing lines simple and convenient.

### Applications:

Residential projects.

### Controller Type:

Hybrid.

Model No.	Description
<b>USA</b>	
57586	6 station
57592	12 station

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

## Outstanding Features:

- Easy to program, self-prompting display.
- Visual and audio response remote transmitter for easy on-site, semi-automatic control.
- Remote control transmitter operates on radio (FM) frequency up to 200' (60 meters) away from controller.
- Over 4000 unique codes ensure non-interference from neighboring systems using similar products.
- Handy transmitter holder.
- Choose from three programs (A, B, AB).
- Microprocessor uses 365-day calendar for ODD or EVEN day watering with leap year intelligence through the year 2050.
- Programmable by day of week, odd or even days, or every second day.
- Repeating day cycle allows irrigation frequency from 1 to 28 days.
- Non-volatile memory maintains watering schedules during power outage. When the power is back on, so is your programming.
- Eight available start times per valve per day.
- Station timing in one-minute increments for precise watering requirements.
- Watering capability from one minute to 13 hours per valve per day.
- Easy-to-understand A.M./P.M. clock.
- Five operating modes: fully automatic, manual by station, manual by individual program group, manual all stations, and controller off.
- Rain or moisture sensor adaptability.
- Stations can be assigned to individual or all programs.
- Microprocessor compensates for program-

mer error by automatically delaying a programming cycle that has been inadvertently set to turn on at the same time as another (start time stacking).

- Semi-automatic delay from 24-72 hours prevents overwatering when it rains or shuts off the water for event days. The controller counts down the hours and returns the Superstar RF™ to the next scheduled watering cycle.
- Large, easy-to-understand programming dial.
- Easy to Install. You'll appreciate the quick installation Superstar RF™ offers. One center eyelet and two easily accessible mount screws makes installation quick and simple.

## Electrical Specifications:

**Input Required:** 117 VAC +/- 10%, 60 Hz (230 VAC +/- 10%, 50 Hz models available).

**Output:** 26 VAC @ 600 mA.

**Valve Capacity:** Up to two 24 VAC solenoid valves per station with pump start.

**Terminal Strip:** Screwless, accepts #14, #16, #18, and #20 AWG wire (0,813 mm - 1,6 mm).

**Circuit Protection:** MOV, Electronic Self-Restoring Fuse.

**Listings/Approvals:** UL® listed, FCC, CSA/CE.

**Remote Control Transmitter:**

9 Volt battery required.

**Receiver:** Included in controller circuit board, 24 VAC, 0.010 Amps.

**Receiver Type:** Superheterdyne.

**Frequency:** 315 MHz.

**Range:** 200 feet (60 Meters).

*\* Orbit recommends placing the Superstar RF™ in non-metal buildings or enclosures to reduce interference with the range performance of the remote control receiver.*

## Mechanical Specifications:

**Color:** Gray.

**Material:** ABS.

**Closing Mechanism:** Not Available.

**Wiring Access Hole:** 1" (2,5 cm).

**Mounting:** One tear drop hole, two lower through holes.

**Dimensions:**

**Height:** 7" (17,8 cm).

**Width:** 8" (20,3 cm).

**Depth:** 1.5" (3,8 cm).

**Inlet Size:** 1" (2,5 cm).

# Controllers



## PocketStar 2X™

PocketStar 2X™ is a remarkable upgrade to the PocketStar. We've added features like rain delay, easy-touch buttons, and larger dial for increased customer satisfaction and convenience. PocketStar 2X™ represents incredible value and convenient programming. Two independent programs allow you to water various landscape types. Fully adaptable to systems requiring a pump, the PocketStar 2X™ features eight different start times per valve per day to help prevent erosion on new landscapes.

With the PocketStar 2X™, you get the ultimate in performance and an unbeatable value.

### Applications:

Residential tract projects.

Model No.	Description
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<b>USA</b>	
------------	--

57162	6 station
-------	-----------

<b>International</b>	
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94122	2 station
94124	4 station
94126	6 station

### Outstanding Features:

- Easy-to-program self-prompting display.
- Choose from two programs (A, B).
- Microprocessor uses 365-day calendar for ODD or EVEN day watering with leap-year intelligence through the year 2050.
- Programmable by day of week, odd or even days, or every second day. 7-day calendar.
- Repeating day cycle allows irrigation frequency from 1 to 28 days.
- Eight available start times per valve per day.
- Station timing in one-minute increments for precise watering requirements.
- Watering capability from one minute to 13 hours per valve per day.
- Five operating modes: fully automatic, manual by station, manual by individual program group, manual all stations, or controller off.

- Stations can be assigned to any or all programs (A, B, or A and B).
- 24-hour program delay prevents over-watering when it rains or shuts off the water for event days.
- Easy to install. You'll appreciate the quick installation PocketStar 2X™ offers. One center eyelet and two easily accessible mount screws makes installation clean and simple.
- Programmable rain delay up to 72 hours in 24 hour increments.
- Easy feel rubberized buttons for programming convenience.

### Electrical Specifications:

**Input required:** 117 VAC +/- 10%, 60 Hz (230 VAC +/- 10%, 50 Hz models available) Output: 26 VAC @ 0.25 A

**Valve Capacity:** One 24 VAC solenoid valve per station or one valve with pump start.

**Terminal Strip:** Accepts #14, #16, #18, and #20 AWG wire (0,813 mm - 1,6 mm) 125-V 500 mA fuse.

**Approvals/Listings:** UL® listed, CSA/CE approved.

### Mechanical Specifications:

**Color:** Gray.

**Material:** ABS.

**Closing Mechanism:** Not available.

**Mounting:** One tear drop hole, two lower through holes.

#### Dimensions:

**Height:** 3-3/4" (9,5 cm).

**Width:** 4-1/2" (11,4 cm).

**Depth:** 1" (2,5 cm).

**Inlet Size:** 1" (2,5 cm).

# Controllers



## Remote Link™

Now you can enjoy flexibility and convenience in irrigation troubleshooting with the touch of a button. Orbit's Remote Link™ puts the power in the palm of your hand, enabling you to activate valves on-site up to 200 feet away from the controller. This means no more walking to the valve or the controller to test heads or connections. Contractors and homeowners alike will enjoy the wide variety of options available with the Remote Link™: operate all stations in 2, 10, 30, or 60-minute cycles or manual advance by individual station in the same time increments.

Remote Link™ is easy to install and works with most brands of 24 volt controllers. With Remote Link™, it's never been easier to maintain a beautiful landscape!

Model No.	Description
USA	
57555	6 station transmitter
57556	12 station transmitter
57557	6 station receiver
57558	12 station receiver

### International

## Outstanding Features:

- Easy-to-understand audio and visual response transmitter touch pad.
- Available for use with controllers operating up to 12 stations.
- 2, 10, 30, 60 minute cycle times; available by all stations cycle or manual advance by individual station.
- Maximum of six transmitter touch pads can be used for each installed receiver.
- Master transmitter available.
- One transmitter can operate unlimited numbers of receivers.
- Operates on 315 MHz.
- Easy to Install. You'll appreciate the quick installation Remote Link™ offers: one center eyelet and two easily accessible mount screws makes installation quick and simple.

## Electrical Specifications:

**Input Required:** 117 VAC +/- 10%, 60 Hz.

**Output:** 26 VAC @ 0.75 A.

**Valve Capacity:** Up to two 24 VAC solenoid valves with pump start.

**Terminal Strip:** Accepts #14, #16, #18, and #20 AWG wire (0,813 mm - 1,6 mm).

**Listings/Approvals:** UL® listed, CSA/CE approved, FCC compliant.

**Transmitter:** 9 Volt battery required.

**Receiver Type:** Superheterdyne.

**Frequency:** 315 MHz.

**Range:** 200 feet (60 meters).

*\* Orbit recommends placing the Remote Timer Link™ in non-metal buildings or enclosures to reduce interference with the range performance of the remote control receiver.*

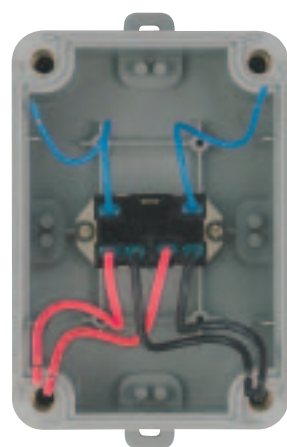
### Dimensions:

**Height:** 5-1/2" (13,9 cm).

**Width:** 8" (20,3 cm).

**Depth:** 1-1/2" (3,8 cm).

# Controllers



## Pump Start Relay

Dependability and protection are just two reasons why professional contractors consistently choose Orbit's Pump Start Relay. Designed to accommodate a variety of power sources and landscape needs, this pump start relay includes a UF/UL® rated enclosure and is fully compatible with all standard 24 VAC timers. Designed for easy installation and maximum user-friendliness, the relay allows you to protect your investment while extending the life of your irrigation system.

### Applications:

Residential and commercial projects.

Model No.	Description
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<b>USA</b>	
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57009	Pump Start Relay, 1-2 HP
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<b>International</b>	
----------------------	--

94061	Pump Start Relay
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### Outstanding Features:

- Automatically activates pump when the controller activates a valve.
- Locking, weather-resistant case.
- Covered wiring compartment for extra protection and safety.
- Simple, trouble-free design.

### Electrical Specifications:

- Contact UL® listed: 1 HP @ 120 VAC, 1 phase; 2 HP @ 240 VAC, 1 phase. Coil rating: 24 VAC, 3 VA (minimum).

*To help prevent malfunctions, Orbit® suggests following the precautions below when operating the Pump Start Relay with electronic controllers:*

- The Pump Start Relay should be mounted at least 5 feet from the controller.
- The controller should be at least 12 feet from the pump.
- The sprinkler controller and Pump Start Relay should be connected to separate power sources.

### Mechanical Specifications:

#### Controller Box Description:

**Color:** Gray.

**Material:** ABS.

**Access:** 4 bolts

**Approvals:** ETL® approved, UL® standard enclosure.

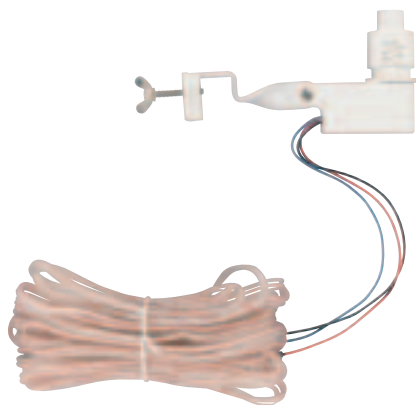
#### Dimensions:

Height: 7" (17,7 cm).

Width: 5" (13,9 m).

Depth: 4" (10,1 cm).

# Controllers



## RX-1

The RX-1, a rain switch developed for use with 24V output sprinkler controllers to interrupt the scheduled watering cycle in the event of rain. Development of the RX-1 shows Orbit's continuing commitment to water conservation. The RX-1 mounts easily to a rain gutter or wall.

### Applications:

Residential and light commercial projects.

Model No.	Description
USA	
57099	RX-1 Rain Switch

### Outstanding Features:

- UL listed Micro Switch
- Three wires for compatibility with most sprinkler controllers
- UV protected material

### Mechanical Specifications:

**Material:** ABS with UV inhibitors.

**Approvals:** UL® listed.

### Dimensions:

Height: 2 1/2"

Length: 4 1/2"

# Controllers



## Hose Faucet Timer

Watering concerns are a thing of the past with Orbit's state-of-the-art hose-end timers and accessories. Convenient and economical, now you can maintain the beauty of just about any kind of landscape on the planet.

### Applications:

Gardens and shrub planter projects.

Model No.	Description
62002	Hose Faucet Timer
62015	Dual Dial HF Timer
62018	2-Hour Hose Faucet Timer

### International

94065	Hose Faucet Timer
94066	Dual Dial HF Timer
94067	Mechanical Tap Timer

### Outstanding Features:

- Easy to install to any outdoor hose faucet.
- Battery-operated automatic water timer & valve combination.
- Standard 3/4" and 3/4" BSP (international) hose thread connections.
- Water-resistant design.
- Removable timer can be programmed anywhere (62002 and 62401 only).
- Swivel base allows the timer to be adjusted to a convenient viewing angle (62002 and 62401 only).
- Up to four start times per day.(62002/624010, 12 start times per day (62015).
- Waters up to 6 hours per start time, 2 hours (62015).
- Set daily, 2nd, or 3rd day watering intervals. Daily, 2nd, 3rd, 4th, 7th (62015).
- "Manual on" feature for quick temporary watering.
- 24-hour rain delay (62002 and 62401 only).

- High quality diaphragm valve.
- Latching solenoid uses very little power to open and close the valve.
- Mechanical dial (62018).
- Uses two 9-volt alkaline batteries (not included).
- Easy to install to any outdoor faucet.
- Battery-operated automatic water timer & valve combination.
- Ten watering interval options with durations from two minutes to two hours (two dial model).
- Timer cover provides protection from sun and water.
- Ideal for lawn, garden, shrub, drip, and patio watering.

### Electrical Requirements

Two (2) 9-volt batteries; 18 VAC, 60 Hz.

### Operation Range

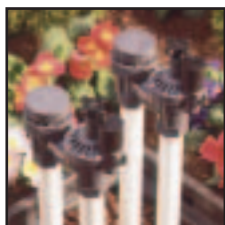
5-80 psi (0,05–15,0 bars).

### Temperature Range

35° F (min) – 110° F (max).

*Warning: Local codes may require the use of a backflow prevention device on inlet valve (Orbit part #51054).*

reliable



# IRRIGATION VALVES

Quality engineered and  
manufacturing provide years  
of reliable service

Pro Series

# Electric Valves



## Micro-Valve

When you need a system for low-flow, micro-watering or xeriscapes, look to Orbit's high-quality micro-flow valves. Designed for today's environment-conscious user, the micro-flow valves are precision engineered to the most exacting standards, helping to ensure you get the most accurate water flow and performance to last a lifetime.

### Applications:

Light commercial, residential, and agricultural projects.

Model No.	Description
62006	3/4" (20/27) NPT low flow

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Performance Data

Micro Valve		Standard
Valve Pressure Loss (psi)		
62006, 62005		
Flow gpm		Pressure psi
3		2.25
5		2.90
7		3.80
10		5.00
15		7.00
18		8.20

Micro Valve		Metric
Valve Pressure Loss (bars)		
62006, 62005		
Flow l/m		Pressure bars
11.3		0.16
18.9		0.20
26.5		0.26
37.8		0.34
56.7		0.48
68.1		0.57

### Outstanding Features:

- Durable glass filled polypropylene reinforced body for extended use.
- Low-flow design is ideal for drip systems.
- Rugged EPDM diaphragm.

### Operation Range:

- Flow Range: 2.7 GPM to 18 GPM (10.2 to 68.1 l/m).
- Operating Pressure: 5 to 80 psi (0.3 to 6.9 bars).

### Electrical Specifications:

- 24 VAC 50/60 cycle solenoid power requirement: 0.30 A (7.2 VA) inrush current; 0.19 A (4.6 VA) holding current.

### Mechanical Specifications:

#### Dimensions:

*Height:* 2" (5.1 cm).

*Width:* 1" (2.5 cm).

*Length:* 3" (7.6 cm).

# Electric Valves



## 160 Series Commercial

The 160 series are designed to stand up to the toughest conditions. The 160's Nylon body makes it suitable most residential, commercial, municipal, or agricultural projects. Each valve is manufactured with stainless steel screws and solenoid plunger making it durable over multiple years of use.

### Applications:

Residential, commercial, municipal, agricultural

### Operation Range:

- Pressure: 5-150 psi (1 to 10 bars)
- Flow: 30-150 GPM (1,9 to 9,4 l/s)
- Temperature: Up to 158° F (70° C)

### Electrical Specifications:

- 24 VAC 50/60 cycle solenoid power requirement: 0.30 A (7.2 VA) inrush current; 0.19 A (4.6 VA) holding current.

### Mechanical Specifications:

#### Dimensions:

##### 57025

Height: 4" (10,2 cm)

Width: 4" (10,2 cm)

Length: 5" (10,8 cm)

##### 57026

Height: 6" (15,2 cm)

Width: 4" (10,1 cm)

Length: 5" (12,7 cm)

##### 57027

Height: 10" (25,4 cm)

Width: 6" (15,2 cm)

Length: 9-3/4" (24,7 cm)

### Performance Data

Commercial Series		Standard	
Valve Pressure Loss* (psi) 57026, 57027			
Flow GPM	1 1/2" psi	2" psi	
2	-	-	
5	-	-	
10	-	-	
20	-	-	
30	1.7	-	
40	3.0	0.8	
50	4.8	1.0	
75	10.8	3.1	
100	19.2	5.0	
125	-	7.8	
150	-	11.2	

Commercial Series		Metric
Valve Pressure Loss* (bars)		
57026, 57027		
Flow l/s	1 1/2" bars	2" bars
0.13	-	-
0.20	-	-
0.56	-	-
0.83	-	-
1.11	-	-
1.39	-	-
1.67	-	-
1.94	0.13	-
2.22	0.16	-
2.50	0.20	-
2.78	0.25	-
3.33	0.35	0.08
3.89	0.50	0.12
4.40	0.66	0.16
6.10	1.24	0.33
7.80	-	0.55
9.44	-	0.81

(See Orbit's 2002 price sheet for order quantities and list pricing.)

### Outstanding Features:

- Reinforced poly diaphragm
- Encapsulated stainless steel solenoid plunger.
- Nylon reinforced by 30% glass- long fiber.

# Electric Valves



## 5700 Series ASV

Built to handle the toughest jobs under the worst conditions, the 5700 Series Anti-Siphon valve is perfect for residential and light commercial areas where back-flow prevention is code.

Made of durable, high-quality PVC and a UV-resistant, glass-filled polyprop lid, this valve combines an angle valve and an atmospheric back-flow prevention device to prevent landscape water from siphoning back into the drinking water source. Its flow-control stem regulates water output and controls wasteful misting. This model also features a special orifice filter to prevent algae and mineral build-up on the diaphragm for long-lasting, reliable performance.

### Applications:

Residential and light commercial landscape projects where backflow prevention is required.

- Meets International Association of Plumbing and Mechanical Officials (IAPMO®) and A.S.S.E. listing specifications.
- Stainless steel internal parts.
- Thermo-plastic elastomer diaphragm is tear resistant and incorporates a heavy-duty seal for long-term reliability and extended use.
- Captured solenoid plunger

### Operation Range:

- **Pressure:** 10-125 psi (1-10 Bars).
- **Flow Rate:** 3/4" (20/27) 5 to 22 GPM (0,05 to 5,0 m³/h; 0,01 to 1,39 l/s). For flow rate below 3 GPM (0,75 m³/h; 0,21 l/s) or any low flow watering using micro emitters or micro sprays use 3/4" (20/27) 200 mesh filter installed upstream from the valve.
- 1" (26/34) 5-40\* GPM (0,05 to 10 m³/h 0,1 to 2,78 l/s). For flow rate below 3 GPM (0,75 m³/h; 0,21 l/s) or any low flow watering using micro emitters or micro sprays use 200 mesh filter installed upstream from the valve.

### Performance Data

5700 Series ASV		Standard
Valve Pressure Loss* (psi)		
Flow GPM	3/4" psi	1" psi
1	3.6	3.1
3	3.6	3.1
5	4.2	4.0
10	5.7	5.4
20	8.6	7.3
30	-	10.3
40	-	15.9

5700 Series ASV			Metric
Valve Pressure Loss* (Bars)			
Flow m³/h	l/s	3/4" bars	1" bars
0.5	0.13	0.25	0.22
0.75	0.21	0.25	0.22
1.0	0.28	0.28	0.25
2.0	0.56	0.35	0.34
5.0	1.39	0.60	0.50
7.5	2.08	-	0.72
10.0	2.78	-	1.11

Model No.	Description
57323	3/4" (20/27) ASV w/flow control
57324	1" (26/34) ASV w/flow control
57325	3/4" (20/27) ASV slip w/flow control

(See Orbit's 2002 price sheet for order quantities and list pricing.)

### Outstanding Features:

- Reliable, glass filled polypropylene lid is resistant to ultraviolet light and heat to 180 degrees.
- Los Angeles city approved.
- Internal bleed lever makes manual operation easy to use and won't fill up the valve box with unwanted water.
- Tamper-proof flow control stem reduces water flows up to 20%.

### Electrical Specifications:

- 24 VAC 50/60 cycle solenoid power requirement: 0.30 A (7.2 VA) inrush current; 0.19 A (4.6 VA) holding current.

### Mechanical Specifications:

#### Dimensions:

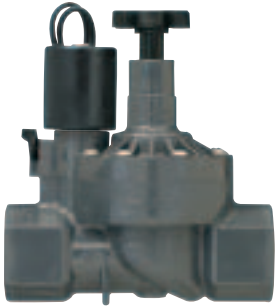
**Height:** 6" (15,2 cm).

**Width:** 2-3/4" (6,9 cm).

**Length:** 6-1/2" (16,5 cm).

\* Orbit recommends flow rates at or below 5 feet per second on all valve models.

# Electric Valves



## Performance Data

200 Series Electric Valves		Standard
Valve Pressure Loss (psi)		
Flow GPM	3/4" psi	1" psi
1	2.5	0.5
3	2.5	0.5
5	2.9	1.0
10	3.8	2.6
20	5.1	3.6
30	-	6.5
40	-	9.0

200 Series Electric Valves			Metric
Valve Pressure Loss (bars)			
Flow m³/h	Flow l/h	3/4" bars	1" bars
0.50	0.13	0.18	0.03
0.75	0.21	0.18	0.03
1.00	0.28	0.20	0.06
2.00	0.56	0.24	0.16
5.00	1.39	0.37	0.29
7.50	2.08	-	0.50
10.00	2.78	-	0.67

## 200 Series

When you need a hard working electric valve to handle your toughest jobs, it just makes sense to use Orbit's complete 200 Series Valves. Tested and tried under the harshest conditions, you simply won't find a harder-working reverse flow valve.

### Applications:

Light commercial and residential projects.

Model No.	Description
<b>USA</b>	
57200	1" (26/34) Valve
57201	1" Slip
57203	3/4" (20/27) Valve
57210	3/4" (20/27) w/flow control
57211	1" (26/34) w/flow control
57212	1" (26/34) Slip w/flow control

<b>International</b>	
94081	1" (26/34) BSP Valve
94083	1" (26/34) w/flow control
94080	3/4" NFC
94082	3/4" WFC

<b>Australia</b>	
57501	1" (26/34) BSP, 33 OHM
57502	1" (26/34) Slip, 33 OHM
57503	1" (26/34) BSP w/flow control, 33 OHM

### Outstanding Features:

- Balanced flow design keeps equal pressure on both sides of the diaphragm while the valve is off, effectively increasing the valve's longevity.
- Self-cleaning pilot-flow 90 mesh (200 micron) filter.
- Internal bleed lever makes manual "at the valve" operation easy and spray-free.
- Molded with heavy-duty ultraviolet light resistant poly vinyl chloride (PVC).
- "Quick-slip" glue joint models available for fast, clean installation.
- Glass filled polypropylene lid for extra strength.
- Strong, injection molded Santaprene®

diaphragm exceeds industry standards for strength, flexibility, and durability.

- Heavy-duty stainless steel spring and external bonnet hex head.
- Easy-to-use vandal resistant flow control stem allows flow 20% regulation at the valve.
- Captured solenoid plunger.

### Operation Range:

**Pressure:** 15-150 psi (1-10 Bars) 3/4" (20/27) 15-150 psi.

**Flow Rate:** 3/4" (20/27) 5 to 22 GPM (0.05 to 5.0 m<sup>3</sup>/h; 0.01 to 1.39 l/s). For flow rate below 3 GPM (0.75 m<sup>3</sup>/h; 0.21 l/s) or any low flow watering using micro emitters or micro sprays use 3/4" (20/27) 200 mesh filter installed upstream from the valve.

1" (26/34)\* 5-40 GPM (0.05 to 10 m<sup>3</sup>/h 0.1 to 2.78 l/s). For flow rate below 3 GPM (0.75 m<sup>3</sup>/h; 0.21 l/s) or any low flow watering using micro emitters or micro sprays, use 200 mesh filter installed upstream from the valve.

### Electrical Specifications:

- 24 VAC 50/60 cycle solenoid power requirement: 0.30 A (7.2 VA) inrush current; 0.19 A (4.6 VA) holding current.
- 33 OHM models 24 VAC 50 Hz. VA) inrush current; .258 A (6.20 VA) holding current; .15 A (3.75 VA).

### Mechanical Specifications:

#### Dimensions:

**Height:** With flow control: 5-1/2" (13,8 cm).

**Width:** 4" (10,2 cm).

**Length:** 4-1/2" (10,8 cm).

\* Orbit recommends flow rates at or below 5 feet per second on all valve models.

# Electric Valves



## 400 Series Jartop\*

The Jartop is the latest in a continually expanding line of Orbit residential valves. The 400 Series Jartop is both easy to install and easy to maintain through its screwless bonnet lid. The 400 Series is manufactured using high quality pvc and durable nylon reinforced polypropylene for years of extended use.

### Applications:

Residential and light commercial projects.

#### Model No. Description

##### USA

57470 1"(26/34) Jartop Electric Valve NPT

##### International

94150 1" (26/34) Jartop Electric Valve BSPT

(See Orbit's 2002 price sheet for order quantities and list pricing.)

### Performance Data

400 Series Jartop Valves		Standard
Valve Pressure Loss (psi)		
Flow GPM		1" psi
5		3.5
10		4.0
15		3.0
20		3.5
30		6.0

400 Series Jartop Valves		Metric
Valve Pressure Loss (bars)		
Flow m <sup>3</sup> /h	Flow l/h	1" bars
1.00	18.9	0.2
2.00	37.8	0.3
5.00	56.7	0.2
7.50	75.7	0.2
10.00	113	0.4

### Operation Range:

**Pressure:** 15-150 psi (1-10 Bars) 3/4" (20/27) 15-150 psi.

**Flow Rate:** 3/4" (20/27) 5 to 22 GPM (0,05 to 5,0 m<sup>3</sup>/h; 0,01 to 1,39 l/s). For flow rate below 3 GPM (0,75 m<sup>3</sup>/h; 0,21 l/s) or any low flow watering using micro emitters or micro sprays use 3/4" (20/27) 200 mesh filter installed upstream from the valve.

1" (26/34)\* 5-40 GPM (0,05 to 10 m<sup>3</sup>/h 0,1 to 2,78 l/s). For flow rate below 3 GPM (0,75 m<sup>3</sup>/h; 0,21 l/s) or any low flow watering using micro emitters or micro sprays, use 200 mesh filter installed upstream from the valve.

### Electrical Specifications:

- 24 VAC 50/60 cycle solenoid power requirement: 0.30 A (7.2 VA) inrush current; 0.19 A (4.6 VA) holding current.
- 33 OHM models 24 VAC 50 Hz. VA) inrush current; .258 A (6.20 VA) holding current; .15 A (3.75 VA).

### Mechanical Specifications:

#### Dimensions:

**Height:** 5" (13cm)

**Width:** 3" (7,6 cm)

**Length** 4" (10,2 cm)

*Orbit recommends flow rates at or below 5 feet per second on all valve models.*

*\*Available April 2, 2002*

# Valves



## Performance Data

Production Series Valves		Standard
Valve Pressure Loss (psi)		
Flow GPM		1" psi
5		1.0
10		2.6
20		3.6
30		6.5
40		9.0

Production Series Valves		Metric
Valve Pressure Loss (bars)		
Flow m <sup>3</sup> /h	Flow l/h	1" bars
1.00	0.28	0.06
2.00	0.56	0.16
5.00	1.39	0.29
7.50	2.08	0.50
10.00	2.78	0.67

## Production Series

Made especially for the residential building market, Orbit's Production Series Valves' self-cleaning wire rod design provides low maintenance and durability for years of extended use.

### Applications:

Residential and light commercial projects.

#### Model No. Description

##### USA

57019	1" (26/34) in-line or angle control valve w/flow control
57119	1" (26/34) FNPT w/flow control
57219	1" (26/34) FNPT

##### International

57018	1" (26/34) in-line or angle w/flow control BSP
57218	1" (26/34) BSP
57118	1" (26/34) BSP w/flow control

(See Orbit's 2002 price sheet for order quantities and list pricing.)

### Outstanding Features:

- Self-cleaning wire rod design.
- Manual external bleed.
- Available with or without flow control.
- Slow closure speed reduces water hammer and system wear.
- Heavy-duty diaphragm.
- Stainless steel spring.
- Made of non-corrosive UV-resistant PVC.
- Available in inline or inline/angle models.
- Captured solenoid plunger.

### Operation Range:

- **Pressure:** 15-125 psi (1-10 Bars)
- **Flow rate:** 3/4" (20/27) .5 to 22 GPM (0.05 to 5.0 m<sup>3</sup>/h; 0.01 to 1.39 l/s). For flow rate below 3 GPM (0.75 m<sup>3</sup>/h; 0.21 l/s) or any low flow watering using micro emitters or micro sprays use 3/4" (20/27) 200 mesh filter installed upstream from the valve.
- 1" (26/34)\* .5-40 GPM (0.05 to 10 m<sup>3</sup>/h 0.1 to 2.78 l/s). For flow rate below 3 GPM (0.75 m<sup>3</sup>/h; 0.21 l/s) or any low flow watering using micro emitters or micro sprays, use 200 mesh filter installed upstream from the valve.

### Electrical Specifications:

- 24 VAC 50/60 cycle solenoid power requirement: 0.30 A (7.2 VA) inrush current; 0.19 A (4.6 VA) holding current.
- 33 OHM models 24 VAC 50 Hz. VA) inrush current; .258 A (6.20 VA) holding current; .15 A (3.75 VA).

### Mechanical Specifications:

#### Dimensions:

**Height:** With Flow: 5-1/2" (13,8 cm),

Without Flow: 4-1/2" (11,4 cm).

**Width:** 3" (7,6 cm).

**Length:** 4-3/4" (12,1 cm).

\* Orbit recommends flow rates at or below 5 feet per second on all valve models.

# Valves



## Converter Valve

Easily convert manual brass or plastic valves to automatic with Orbit's Valve Converter. This unique product converts Orbit®, Champion™, and other manufacturers' brass or plastic valves without removing them from the valve manifold. It's simple to use – just unscrew the top of the manual valve and insert the conversion valve.

### Applications:

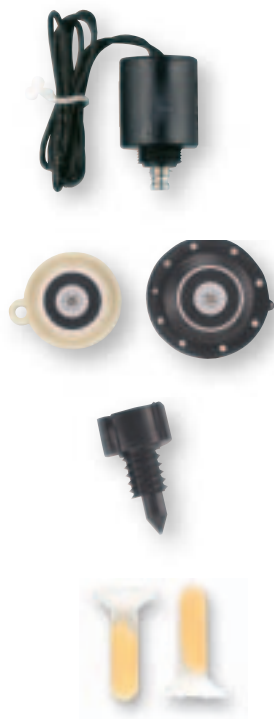
Residential or light commercial retro-fit.

Model No.	Description
57832	3/4" (20/27) valve converter
57833	1" (26/34) valve converter

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Outstanding Features:

- Brass adapter nut and O-ring seal make water tight connection to manual valve.
- Tamper-resistant flow control stem.
- Manual bleed screw for easy manual operation.



### Solenoid

- 24 VAC 50/60 cycles.
- Fits Orbit®, Watermaster®, Hardie®, Richdel®.

### Diaphragm

- Santaprene® construction.
- Fits Orbit® and Watermaster® valves.

### Bleed Screws

- Replaces manual bleed screw on Production Series Inline or Inline/Angle valves.

### Grease Cap with Wire Nut

- Waterproof wiring.
- Five connections.

### Operation Range:

- 3/4" (20/27) Flow: 2 to 22 GPM (0,05 to 5,0 m³/h; 0,01 to 1,39 l/s). For flow rate below 3 GPM (0,75 m³/h; 0,21 l/s) or any low flow watering using micro emitters or micro sprays use 3/4" (20/27) 200 mesh filter installed upstream from the valve.
- 1" (26/34) 2-40\* GPM (0,05 to 10 m³/h 0,1 to 2,78 l/s). For flow rate below 3 GPM (0,75 m³/h; 0,21 l/s) or any low flow watering using micro emitters or micro sprays, use 200 mesh filter installed upstream from the valve.

### Electrical Specifications:

- 24 VAC 50/60 cycle solenoid power requirement: 0.30 A (7.2 VA) inrush current; 0.19 A (4.6 VA) holding current.

### Mechanical Specifications:

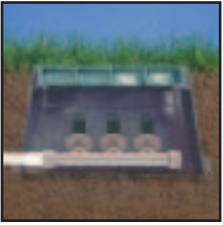
#### Dimensions:

*Height:* 7" (17,7 cm)

*Width:* 3" (7,6 cm)

Model No.	Description
57039	Solenoid 24 V
57058	5700 ASV Series
57046	Production Series
57045	200 Series
57055	5700 ASV Seal Carrier
57047	Bleed Screws
57505	Grease Cap/Wirenut (25 per bag)

quality



VALVE BOXES



## VALVE BOXES

Orbit® has a complete line of  
irrigation valve boxes to fit any  
professional application

Pro Series

# Valve Boxes



## Jumbo Valve Box

- Material: Foamed HDPE.
- Side Openings: 4" (H) x 3-1/4" (W).
- Built-in nut for locking lid (bolt not included).

### Model No.

### Description

53019	Black/Green
53993	Sand/Sand
53985	Green/Green
53157	Green Replacement Lid
53988	Sand Replacement Lid



## Jumbo Short Valve Box

- Material: Foamed HDPE.
- Side Openings: 4" (H) x 3-1/4" (W).
- Built-in nut for locking lid (bolt not included).

53119	Black/Green
53996	Sand/Sand
53986	Green/Green
53157	Green Replacement Lid
53988	Sand Replacement Lid



## Standard Valve Box

- Material: Foamed HDPE.
- Side Openings: 3-1/8" (H) x 3" (W).
- Built-in nut for locking lid (bolt not included).

53030	Black/Green
53993	Sand/Sand
53983	Green/Green
53152	Green Replacement Lid
53989	Sand Replacement Lid



## Extension Valve Box

- Material: Foamed HDPE.
- Side Openings: N/A.
- Built-in nut for locking lid (bolt not included).

53150	Black/Green
53994	Sand/Sand
53984	Green/Green
53152	Green Replacement Lid
53989	Sand Replacement Lid



## 10" Round Valve Box

- Material: Foamed HDPE.
- Side Openings: 3-1/4" (H) x 1-3/4" (W).
- Security Lid: (included).

53024	Black/Green
53992	Sand/Sand
53982	Green/Green
53156	Green Replacement Lid
53990	Sand Replacement Lid



## 6" Round Valve Box

- Material: Foamed HDPE.
- Side Openings: 3-1/4" (H) x 1-3/4" (W).
- Security Lid: (included).

53021	Black/Green
53991	Sand/Sand
53981	Green/Green
53155	Green Replacement Lid
53989	Sand Replacement Lid

# Valve Boxes



## Curb Box

- Material: Foamed HDPE - ABS/PVC.
- Side Openings: 3-3/4" (H) x 3" (W).
- A friction collar allows easy adjustment from 32" to 54" in length.
- Built-in nut for locking lid (bolt not included).

**Model No.**

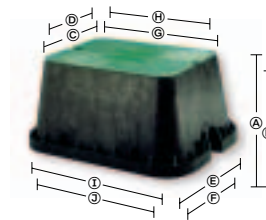
53029

**Description**

Curb Box

## Measurements

Valve Boxes										Standard
Product	A Outside Height	B Inside Height	C Outside Top Width	D Inside Top Width	E Ou-Bottom Width	F In-Bottom Width	G Outside Top Length	H Inside Top Length	I Out Bottom Length	J In-Bottom Length
Jumbo	12 1/4"	10 1/4"	15 1/8"	12 1/2"	19 3/4"	18"	21 1/8"	18"	26"	24"
Jumbo Short	6"	5"	15 1/8"	12 1/2"	19 3/4"	18"	21 1/8"	18"	26"	24"
Standard	12 1/2"	10"	11 3/4"	9 3/8"	16"	14 1/2"	17"	13 3/4"	21 1/4"	19 3/4"
Extension	8 1/4"	5 1/2"	11 3/4"	9 3/8"	14 1/4"	12 3/4"	17"	13 3/4"	19 1/2"	18"
10" Round	10 1/4"	9 1/4"	9 3/8"	8 1/2"	13 1/4"	12"	-	-	-	-
6" Round	9 1/4"	8 1/8"	6 3/8"	6"	9"	7 1/8"	-	-	-	-
Curb Box	32"-54"	7"	5" dia.	4 1/2" dia.	6 1/4" dia.	5 1/4" dia.	-	-	-	-



Valve Boxes										Metric
Product	A Outside Height	B Inside Height	C Outside Top Width	D Inside Top Width	E Ou-Bottom Width	F In-Bottom Width	G Outside Top Length	H Inside Top Length	I Out Bottom Length	J In-Bottom Length
Jumbo	31	26	38	31	50	45	53	45	66	60
Jumbo Short	15	13	38	31	50	45	53	45	66	60
Standard	32	25	30	23	40	36	43	35	53	50
Extension	21	14	30	23	36	32	43	35	50	45
10" Round	2	23	24	21	33	30	-	-	-	-
6" Round	23	20	17	15	22	20	-	-	-	-
Curb Box	81-137	18	13	11	18	13	-	-	-	-



# Valve Boxes

## Rock Box

Orbit's innovative and durable Rock Box Covers are your solution to unsightly above grade valves. Choose from three natural looking colors: sandstone, moss, or granite. Each Orbit® Rock Box Cover conveniently snaps into Orbit's Jumbo (53019) or Jumbo Short (53119) valve box bodies. Rock Box Covers are also used in decorative landscaping as a cover for atmospheric vacuum breaker valves, pressure vacuum breakers, exposed water meters, and other exposed fittings or valves.

### Applications:

Residential and light commercial projects.

Model No.	Description
53016	Granite Cover
53017	Sandstone Cover

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Outstanding Features:

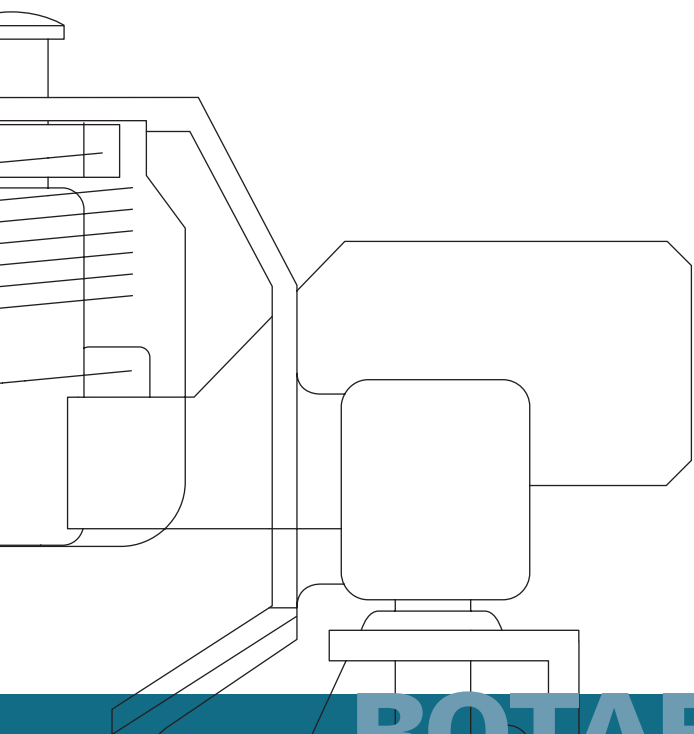
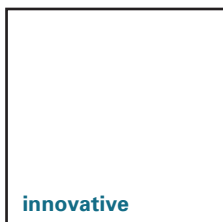
- Available in natural-looking colors.
- Protects valves from damage due to sunlight or weather.
- Made with weather-resistant material.
- Fits over up to four Orbit® anti-siphon valves.
- Easily snaps into a WaterMaster® jumbo valve box.

### Dimensions:

**Height:** 19" (48,2 cm).

**Width:** 22-1/2" (57,1 cm).

**Length:** 19" (48,2 cm).



# ROTARY SPRINKLERS

Innovative products that  
meet the needs of today's  
landscape designer

# Rotors



## 5500 Series

Looking for a long-lasting, high performance sprinkler to keep your landscape in great shape?

Look no further than the 5500 Series PR, Orbit's largest closed-case rotor.

Built especially for medium to large residential and commercial landscapes, the 5500 Series PR has a complete set of 12 interchangeable nozzles, allowing you to choose the right amount of water for the needs of your landscape.

Amazingly simple to install and easy to adjust with the water on or off, contractors have counted on the durable 5500 Series PR for years of precise, trouble-free operation.

## Applications:

Residential and light commercial projects.

Model No.	Description
55161	Professional ADJ (adjustable)
55163	Professional F (full circle only)
55162	Professional S (shrub)
55167	Professional IR (impact replacement)

## Accessories

55070	Adjustment Key
55071	Standard Nozzles
55072	Low Angle Nozzles
55073	Nozzle Insertion Collar

(See Orbit's 2001 price sheet for order quantities and list pricing.)

## Performance Data

Professional		Standard	
Low Angle Nozzles			
Nozzle	θ	Radius ft.	GPM
4	30	22'	1.4
	40	24'	1.7
	50	26'	1.8
	60	28'	2.0
5	30	25'	1.6
	40	27'	1.9
	50	28'	2.1
	60	30'	2.3
6	30	27'	2.1
	40	30'	2.5
	50	33'	2.8
	60	35'	3.0
7	30	29'	2.8
	40	32'	3.1
	50	35'	3.5
	60	37'	3.8
8	30	31'	3.4
	40	34'	3.9
	50	37'	4.4
	60	38'	4.7
9	30	33'	4.3
	40	37'	5.0
	50	40'	5.6
	60	42'	6.1
10	40	38'	6.5
	50	40'	7.3
	60	42'	8.0
	70	44'	8.6
P	Blank nozzle plug for turning off selected sprinklers during repairs, maintenance, etc.		

Professional			Metric		
Low Angle Nozzles					
Nozzle	Pressure bars	Pressure kPa	Radius m	Flow m³/hr	Flow l/min
4	2.1	206	6,7	0,32	5,3
	2.8	275	7,3	0,39	6,4
	3,4	344	7,9	0,41	6,8
	4,1	413	8,5	0,45	7,6
5	2.1	206	7,6	0,36	6,1
	2.8	275	8,2	0,43	7,2
	3,4	344	8,5	0,48	7,9
	4,1	413	9,1	0,52	8,7
6	2.1	206	8,2	0,48	7,9
	2.8	275	9,1	0,57	9,5
	3,4	344	10,1	0,64	10,6
	4,1	413	10,7	0,68	11,4
7	2.1	206	8,8	0,64	10,6
	2.8	275	9,8	0,70	11,7
	3,4	344	10,7	0,80	13,2
	4,1	413	11,3	0,86	14,4
8	2.1	206	9,4	0,77	12,9
	2.8	275	10,4	0,89	14,8
	3,4	344	11,3	1,00	16,7
	4,1	413	11,6	1,07	17,8
9	2.1	206	10,1	0,98	16,3
	2.8	275	11,3	1,14	18,9
	3,4	344	12,2	12,7	21,2
	4,1	413	12,8	13,9	23,1
10	2.1	206	11,6	14,8	24,6
	2.8	275	12,2	1,66	27,6
	3,4	344	12,8	1,82	30,3
	4,1	413	13,4	1,95	32,6
P	Blank nozzle plug for turning off selected sprinklers during repairs, maintenance, etc.				

## Outstanding Features:

- 5500 Series PR models ADJ, S, and IR adjust easily from 40° to 360°, while Voyager II F is factory-set to continually rotate in a circular pattern.
- Grass green flexible rubber cover (standard on all models) helps keep dirt away from adjustment area.
- All models are quiet and gear driven, unlike impact heads that continually pulsate loudly to rotate the sprinkler.
- Professional models offer an even distribution of water through precision-engineered nozzles, available in a variety of sizes, and are easily interchangeable depending on your landscape needs.
- The standard dirty-water screen protects against nozzle clogging and is readily accessible through the top of the sprinkler.

# Rotors

- 55167 is an easy fix for outdated impact-in-a-can sprinklers. The IR replaces Orbit's Super Jet (55100) and Rainbird's Maxi-Paw 2045A (AG-5) and Mini-Paw 15103 (MG-4, LG-3). No digging is required because the replacement rotor just screws into the existing can.
- 55162 is ideal for large planter and shrub areas where sprinklers are installed above the ground cover.
- All models include Orbit's® three-year manufacturer guarantee.

## Operation Range:

- Precipitation Rate: approximately .4" (10 mm) per hour at 50 psi (3,4 Bars; 344 kPa) for spacings 25' to 45' (7,6 to 13,7 m).
- Radius: 22' to 52' (6,7 to 15,9 m).
- Pressure Range: 30 to 70 psi (2,1 to 4,8 Bars; 206 to 482 kPa).
- Flow: .5 to 14.4 gpm (0,1 to 3,27 m3/hr; 1,5 to 54,5 l/min).

## Specifications:

3/4" (15/21) FNPT bottom inlet.

Nozzle outlet trajectory is 25° standard or 13° low angle.

### Dimensions:

#### Overall height:

55161 PR ADJ 7-3/8" (19 cm).

55163 PR F 7-3/8" (19 cm).

55162 PR S 7-3/8" (19 cm).

55167 PR IR 7" (18,7 cm).

#### Exposed Surface Diameter:

55161 PR ADJ 1-3/4" (4 cm).

55163 PR F 1-3/4" (4 cm).

55167 PR IR 3-3/4" (9,5 cm).

#### Pop-up height:

All models\*, 4" (10,1 cm).

\* Excluding 55162 shrub model.



## Performance Data

Professional Standard Nozzles		Standard	
Nozzle	psi	Radius ft.	GPM
<b>1</b>	30	28'	.5
	40	29'	.6
	<b>50</b>	<b>29'</b>	<b>.7</b>
	60	30'	.8
<b>2</b>	30	29'	.7
	40	30'	.8
	<b>50</b>	<b>30'</b>	<b>.9</b>
	60	31'	1.0
<b>3</b>	30	30'	.9
	40	31'	1.0
	<b>50</b>	<b>31'</b>	<b>1.2</b>
	60	32'	1.3
<b>4</b>	30	32'	1.2
	40	33'	1.4
	<b>50</b>	<b>34'</b>	<b>1.6</b>
	60	34'	1.8
<b>5</b>	30	34'	1.6
	40	36'	1.8
	<b>50</b>	<b>38'</b>	<b>2.0</b>
	60	38'	2.2
<b>6</b>	30	36'	2.0
	40	38'	2.4
	<b>50</b>	<b>40'</b>	<b>2.7</b>
	60	40'	2.9
<b>7</b>	30	36'	2.6
	40	40'	3.0
	<b>50</b>	<b>42'</b>	<b>3.4</b>
	60	42'	3.7
<b>8</b>	30	37'	3.2
	40	40'	3.7
	<b>50</b>	<b>43'</b>	<b>4.2</b>
	60	44'	4.6
<b>9</b>	30	38'	4.2
	40	43'	4.9
	<b>50</b>	<b>46'</b>	<b>5.5</b>
	60	47'	6.0
<b>10</b>	40	45'	6.0
	50	48'	6.8
	<b>60</b>	<b>49'</b>	<b>7.6</b>
	70	51'	8.2
<b>11</b>	40	46'	8.0
	50	48'	8.9
	<b>60</b>	<b>50'</b>	<b>9.8</b>
	70	51'	10.5
<b>12</b>	40	46'	11.4
	50	48'	12.2
	<b>60</b>	<b>50'</b>	<b>13.2</b>
	70	52'	14.4

Professional Standard Nozzles		Metric			
Nozzle	Pressure bars	Pressure kPa	Radius m	Flow m³/hr	Flow l/min
<b>1</b>	2,1	206	8,5	0,11	1,9
	2,8	275	8,8	0,14	2,3
	<b>3,4</b>	<b>344</b>	<b>8,8</b>	<b>0,16</b>	<b>2,7</b>
	4,1	413	9,1	0,18	3,0
<b>2</b>	2,1	206	8,8	0,16	2,6
	2,8	275	9,1	0,18	3,0
	<b>3,4</b>	<b>344</b>	<b>9,1</b>	<b>0,20</b>	<b>3,4</b>
	4,1	413	9,4	0,23	3,8
<b>3</b>	2,1	206	9,1	0,20	3,4
	2,8	275	9,4	0,23	3,8
	<b>3,4</b>	<b>344</b>	<b>9,4</b>	<b>0,27</b>	<b>4,5</b>
	4,1	413	9,8	0,30	4,9
<b>4</b>	2,1	206	9,8	0,27	4,5
	2,8	275	10,1	0,32	5,3
	<b>3,4</b>	<b>344</b>	<b>10,4</b>	<b>0,36</b>	<b>6,1</b>
	4,1	413	10,4	0,31	6,8
<b>5</b>	2,1	206	10,4	0,36	6,1
	2,8	275	11,0	0,41	6,8
	<b>3,4</b>	<b>344</b>	<b>11,6</b>	<b>0,45</b>	<b>7,6</b>
	4,1	413	11,6	0,50	8,3
<b>6</b>	2,1	206	11,0	0,45	7,6
	2,8	275	11,6	0,55	9,1
	<b>3,4</b>	<b>344</b>	<b>11,6</b>	<b>0,61</b>	<b>10,2</b>
	4,1	413	12,2	0,66	11,0
<b>7</b>	2,1	206	11,0	0,59	9,8
	2,8	275	12,2	0,68	11,4
	<b>3,4</b>	<b>344</b>	<b>12,8</b>	<b>0,77</b>	<b>12,9</b>
	4,1	413	12,8	0,84	14,0
<b>8</b>	2,1	206	11,3	0,73	12,1
	2,8	275	12,2	0,84	14,0
	<b>3,4</b>	<b>344</b>	<b>13,1</b>	<b>0,95</b>	<b>15,9</b>
	4,1	413	13,4	1,04	17,4
<b>9</b>	2,1	206	11,6	0,95	15,9
	2,8	275	13,1	1,11	18,5
	<b>3,4</b>	<b>344</b>	<b>14,0</b>	<b>1,25</b>	<b>20,8</b>
	4,1	413	14,3	1,36	22,7
<b>10</b>	2,8	275	13,7	1,36	22,7
	3,4	344	14,6	1,54	25,7
	<b>4,1</b>	<b>413</b>	<b>14,9</b>	<b>1,73</b>	<b>28,8</b>
	4,8	482	15,5	1,86	31,0
<b>11</b>	2,8	275	14,0	1,82	30,3
	3,4	344	14,6	2,02	33,7
	<b>4,1</b>	<b>413</b>	<b>15,2</b>	<b>2,23</b>	<b>37,1</b>
	4,8	482	15,5	2,39	39,7
<b>12</b>	2,8	275	14,0	2,59	43,2
	3,4	344	14,6	2,77	46,2
	<b>4,1</b>	<b>413</b>	<b>15,2</b>	<b>3,00</b>	<b>50,0</b>
	4,8	482	15,9	3,27	54,5

# Rotors



## 5300 Series

When your landscape is too large to be watered with sprays yet too small for a full-size rotor, the 5300 Series PMR is the perfect solution. Created specifically for those in-between problems, the 5300 Series PMR works with larger rotors to combine big and small areas in a single zone. What does that mean for you?

It means you'll enjoy increased efficiency and affordability, since you'll be using fewer heads. You'll save even more with the precision adjustment feature, which allows you to fine-tune the spray and keep water off driveways, sidewalks and other non-landscaped surfaces.

The 5300 Series PMR also features three water-efficient nozzles that can be easily identified by flow rates, making installation and adjustment faster and simpler than ever.

### Applications:

Residential and light commercial projects.

Model No.	Description
55169	55169 4" Pop-up (10 cm)
55075	Replacement Nozzles

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Outstanding Features:

- 40° to 360° adjustable arc.
- Fast, hassle-free adjustment.
- 15' to 30' adjustable radius.
- Proven gear drive provides superior reliability.
- Extra-large filter screen traps debris to prevent clogging.
- Variable stator provides consistency of rotation speed regardless of nozzle size or pressure.
- Solid riser seal conserves water by stopping excess flow.
- Adjusts easily with regular screwdriver or coin.
- Nozzles included.

### Specifications:

#### Dimensions:

**Pop-Up Height:** 4" (10,1 cm).

- 1/2" female inlet NPT.
- 1/2" male inlet (shrub model only).

**Exposed diameter:** 1-1/4" (3 cm).

### Operation Range:

**Discharge rate:** .5 to 3.0 gpm (0.11 to 0.68 m³/hr; 1.9 to 11.41/min).

**Radius:** 15' to 30' (4.6 to 9.1 m).

**Pressure range:** 30 to 50 psi (2.1 to 3.4 bars; 206 to 344 kPa).

**Precipitation rates:** Approximately 0.45" (11 mm) per hour at 40 psi (2.8 bars; 275 kPa) for spacings from 15' to 30' (4.6 to 9.1 m).

**Nozzle trajectory:** Approximately 18°.

### Performance Data

5300 Series			Standard
55169			
Nozzle	Radius psi	Radius ft	Radius gpm
<b>.75</b> Red	30	17'	.64
	40	18'	.75
	50	18'	.85
<b>1.5</b> Blue	30	23'	1.3
	40	24'	1.5
	50	24'	1.7
<b>3.0</b> Green	30	28'	2.5
	40	30'	3.0
	50	30'	3.4

5300 Series			Metric		
55169					
Nozzle	Pressure bars	Pressure kPa	Radius m	Flow m³/hr	Flow l/min
.75 Red	2,1	206	5,2	0,15	2,4
	2,8	275	5,5	0,17	2,8
	3,4	344	5,5	0,19	3,2
1.5 Blue	2,1	206	7,0	0,30	4,9
	2,8	275	7,3	0,34	5,7
	3,4	344	7,3	0,39	6,4
3.0 Green	2,1	206	8,5	0,57	9,5
	2,8	275	9,1	0,68	11,4
	3,4	344	9,1	0,77	12,9



# Rotors



## 55012

The 55026 impact is the right choice for easy installation and low maintenance in a variety of residential and light commercial applications. The 55012 pops up and waters evenly at distances up to 45 feet (13,7 meters), then retracts back to ground level—out of sight and out of your way.

Performance is at a premium with the 55012; the weighted, heavy-duty impact sprinkler rotates slowly, distributing water evenly throughout the landscape. The 55012's traditional straight-through flow design makes the sprinkler particularly effective in dirty water.

One look at Orbit's original impact head and you'll see why customers have been coming back to the 55026 impact year after year.

### Applications:

Residential and light commercial projects.

Model No.	Description
55012	Impact Rotor

(See Orbit's 2002 price sheet for order quantities and list pricing.)

### Outstanding Features:

- Weighted arm for slow rotation and even water distribution.
- Full or part circle adjustable from 20° to 360°.
- Interchangeable nozzles require no tools for installation.
- Internal wiper seal prevents interference due to sand, grass, etc.
- Strong stainless steel retraction spring.
- 1/2" or 1/2 and 3/4" side or bottom inlet for use in freezing or non-freezing climates.
- Removable lid makes adjustments and maintenance easy from the top.
- Diffuser screw reduces watering radius up to 25 percent without changing nozzles.
- Heavy-duty, UV-resistant canister with reinforced ribbed design.

- One 5/32" (3,9 mm) and one 9/64" (3,9 mm) nozzle included.

### Operation Range:

**Precipitation Rate:** 0.27" to 0.86"/hr (0,69 to 1,6 mm/hr).

**Radius:** 22"-45" (3,7 to 3,7 m).

**Pressure:** 25-60 psi (1,7 to 4 Bars).

**Flow:** 2.7 to 5.5 GPM (10,5 to 20,6 l/min).

### Specifications:

Combination 1/2" (15/21) or 3/4" (20/27) FNPT bottom inlet, 1/2" (15/21) side inlet

**Nozzles:** 9/64" (3,5 mm), 5/32" (3,9 mm) 1/8" (3,1 mm).

Nozzle outlet trajectory is 23°.

*Side inlet installation is recommended in non-freezing climates or in freezing climates with an Orbit® automatic drain installed in the bottom of the 55026.*

### Dimensions:

**Overall height:** 8-1/4" (20,9 cm)

**Pop-up height:** 2-1/2" (6,3 cm)

**Exposed surface diameter:** 5" (12,7 cm)

### Accessories:

Model No.	Description
53270	55026 Head Wrench
55010	Replacement Impact Sprinkler

## Performance Data

55026						
Nozzle	Pressure psi	Pressure bars	Radius feet	Radius meters	Flow gpm	Flow l/min
9/64" 3.571 mm	25	1,72	33	10,06	2,79	10,56
	30	2,07	37	11,28	3,13	11,85
	35	2,41	39	11,89	3,47	13,14
	40	2,76	42	12,80	3,74	14,17
	45	3,10	45	13,72	4,01	15,20
	50	3,45	45	13,72	4,13	15,63
	55	3,79	46	14,02	4,18	15,84
5/32" 3.967 mm	25	1,72	35	10,67	3,54	13,40
	30	2,07	39	11,89	3,94	14,94
	35	2,41	42	12,80	4,35	16,49
	40	2,76	43	13,11	4,62	17,52
	45	3,10	44	13,41	4,90	18,55
	50	3,45	47	14,33	5,17	19,58
	55	3,79	48	14,63	5,44	20,61

# Rotors



## 1/2" Adjustable Full or Part Circle Brass Impact

- 1/2" NPT connection.
- Single brass 5/32" nozzle.
- Full- or part-circle coverage.
- Deflector and diffuser pin assembly.
- Stainless steel arm spring, trip spring, trip collars, & trip pin.
- Anti-backsplash arm.

Model No.	Description
55003	Adjustable 1/2"



## 3/4" Adjustable Full or Part Circle Dual Nozzle Brass Impact

- 3/4" NPT connection.
- Double brass 3/16" and 3/32" nozzles.
- Full- or part-circle coverage.
- Stainless steel arm spring, trip spring, trip collars, & trip pin.
- Anti-backsplash tube.

55016	Adjustable 3/4"
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## 3/4" Full Circle Agricultural

- 3/4" NPT connection.
- Full circle coverage.
- Body only, rear nozzle plug included.

55110	3/4" Full Circle Agricultural/plug
55008	3/4" Double Nozzle Agricultural



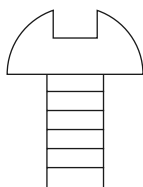
## Orbit Jet™

- Use independently or to replace head for 55026 pop-up impact.
- 9/64" standard nozzle.
- Deflector and diffuser pin assembly.
- Anti-backsplash arm.
- Brass weighted driver arm.
- 1/2" NPT connection.
- Full or part circle coverage.
- Functions well on high or low pressure.

55010	Adjustable 1/2" plastic
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## Performance Data

55110 / 55016 Double Nozzle							55003							55010						
Nozzle	Pressure psi	Pressure bars	Radius feet	Radius meters	Flow gpm	Flow l/min	Nozzle	Pressure psi	Pressure bars	Radius feet	Radius meters	Flow gpm	Flow l/min	Nozzle	Pressure psi	Pressure bars	Radius feet	Radius meters	Flow gpm	Flow l/min
5/32" x 3/32" 3.967 x 2.380 mm	30	2.07	41	12.50	3.94	14.94	5/32" 3.967 mm	25	1.72	35	10.67	3.54	13.40	9/64" 3.571 mm	25	1.72	33	10.67	3.54	13.40
	35	2.41	42	12.80	4.35	16.49		30	2.07	39	11.89	3.94	14.94		30	2.07	37	11.89	3.94	14.94
	40	2.76	43	13.11	4.62	17.52		35	2.41	42	12.80	4.35	16.49		35	2.41	39	12.80	4.35	16.49
	45	3.10	44	13.41	4.90	18.55		40	2.76	43	13.11	4.62	17.52		40	2.76	42	13.11	4.62	17.52
	50	3.45	45	13.72	5.17	19.58		45	3.10	44	13.41	4.90	18.55		45	3.10	45	13.41	4.90	18.55
	55	3.79	45	13.72	5.44	20.61		50	3.45	47	14.33	5.17	19.58		50	3.45	45	14.33	5.17	19.58
	60	4.14	46	14.02	5.64	21.38		55	3.79	48	14.63	5.44	20.61		55	3.79	46	14.63	5.44	20.61



# SPRAY HEADS

Designed to provide the  
ultimate in versatility and  
watering performance

Pro Series

# Spray Heads



## 5400 Series

Orbit's 5400 series offers an extensive line of innovative spray heads that set industry standards for turf and shrub applications. Ideal for use in residential and commercial landscapes, the 5400 Series handles the most intricately designed, high-maintenance areas with ease.

The 5400 series is easy to adjust even when the water is on. The ratchet-stem mechanism allows you to place water exactly where you want, keeping it off sidewalks, buildings and driveways. It also features an anti-drain check valve for keeping the water from draining onto sidewalks, creating slippery hazards or wasting water.

Built tough with a strong stainless steel retraction spring and pressure-activated molded wiper seal, the Orbit 5400 Series ste, rises and retracts smoothly while the wiper seal keeps flow-by to a minimum.

With Orbit's 5400 Series, it's never been easier to get a great-looking landscape.

### Applications:

Commercial and residential shrub and turf landscapes.

### Models:

Model No.	Description
54457	4" pop-up height (10 cm)
54459	4" pop-up height (10 cm) with check valve
54117	4" pop-up height w/15' Adj. nozzle preinstalled
54442	5400 plastic shrub adapter

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*



### Outstanding Features:

- Seven-year warranty.
- Molded, pressure-activated wiper seal stops excessive flow-by and cleans the stem upon completion of watering.
- Factory-installed dual-port flush cap provides clean out and easy access to nozzle installation.
- Ratchet stem allows quick directional adjustments during watering operation.
- Stainless steel spring tension is equal to or greater than any in the industry to insure reliable stem retraction following water cycle.
- Constructed of UV-light-resistant plastic for years of worry-free use.
- Check valve prevents unwanted drainage from heads installed at lower elevations (check valve models only).
- Riser stem threads are compatible to most brands of female-threaded nozzles.

### Operation Range:

**Pressure:** 15-70 psi (1 to 4,8 Bars). Pressure activated molded seal fully functional at 8 psi (0,6 Bars) or greater.

### Specifications:

#### Dimensions:

1/2" (15/21) female threaded inlet.

**Exposed surface diameter:** 2-1/4" (5,7 cm).

**Body height, pop-up height:**

No. 54457, 6" (15 cm) body height, 4" pop-up height (10 cm).

No. 54459, 6" (15 cm) body height, 4" pop-up height (10 cm).

# Spray Heads



## 5400 Series Hard Top™

Your landscape will look great for generations to come, thanks to Orbit's® extra-durable 5400 series Hard Top™. This body features a solid metal cap to provide you with extra protection against trimmers and the natural aging effects of weather. Ideal for use in residential and commercial landscapes, the Hard Top™ is built tough for performance that will never let you down.

### Applications:

Commercial and residential shrub and turf landscapes.

### Models:

Model No.	Description
54458	4" pop-up height (10 cm) Hardtop
54460	4" pop-up height (10 cm) Hardtop/check valve
54118	4" pop-up w/Hardtop 15' adj. nozzle preinstalled

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Outstanding Features:

- Seven-year warranty.
- Metal cap prevents excessive wear from regular lawn maintenance including trimmers and edgers.
- Molded, pressure-activated wiper seal stops excessive flow-by and cleans the stem upon completion of watering.

- Factory-installed dual-port flush cap provides clean out and easy access to nozzle installation.
- Ratchet stem allows quick directional adjustments during watering operation.
- Stainless-steel spring size and tension is equal to or greater than any in the industry to insure reliable stem retraction.
- Check valve prevents unwanted drainage (optional) from heads installed at lower elevations (check valve models only).
- Riser stem threads are compatible with Orbit® 5400 series and most brands of female-threaded nozzles.

### Operation Range:

**Pressure:** 15-70 psi (1 to 4,8 Bars): Pressure activated molded seal fully functional at 8 psi (0,6 Bars) or greater.

### Specifications:

#### Dimensions:

1/2" (15/21) female threaded inlet.

#### Exposed surface diameter:

2-1/4" (5,7 cm).

#### Body height, pop-up height:

No. 54458, 6" (15 cm) body height, 4" pop-up height (10 cm).

No. 54460, 6" (15 cm) body height, 4" pop-up height (10 cm).

No. 57118, 6" (15 cm) body height, 4" pop-up height (10 cm).

# Spray Heads



## 5400 Series Soft Top™

Designers of high traffic areas, residential lawns, and commercial site water systems will appreciate Orbit's 5400 Series Soft Top™.

### Applications:

Commercial and residential shrub and turf landscapes.

Model No.	Description
54455	4" pop-up height (10 cm) soft top
54456	4" pop-up height (10 cm) soft top/ check valve

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Outstanding Features:

- Seven-year warranty.
- Rubber cover helps prevent injury to those who may be playing on the grass.
- Molded, pressure-activated wiper seal stops excessive flow-by and cleans the stem upon completion of watering.
- Factory-installed dual-port flush cap provides clean out and easy access to nozzle installation.
- Ratchet stem allows quick directional adjustments during watering operation.

- Stainless-steel spring size and tension is equal to or greater than any in the industry to insure reliable stem retraction.
- Check valve prevents unwanted drainage from heads installed at lower elevations (check valve models only).
- Riser stem threads are compatible with Orbit® 5400 series and most brands of female-threaded nozzles.

### Operation Range:

**Pressure:** 15-70 psi (1 to 4,8 Bars). Pressure activated molded seal fully functional at 8 psi (0,6 Bars) or greater.

### Specifications:

#### Dimensions:

1/2" (15/21) female-threaded inlet

#### Exposed surface diameter:

2-1/4" (5,7 cm)

#### Body height, pop-up height:

No. 54455, 6" (15 cm) body height, 4" pop-up height (10 cm)

No. 54456, 6" (15 cm) body height, 4" pop-up height (10 cm)

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

# Spray Heads

## 5400 Series Spray Nozzles



Precise water distribution and durability are two of the features you can count on when installing Orbit's 5400 series matched precipitation rate spray nozzles. Fixed arc nozzles come in a variety of styles and distance capabilities so you can place water where your landscape needs it while keeping it off sidewalks, walls, or driveways.

Brass models include a second orifice located directly under the standard orifice; this "under-cut" nozzle design helps to distribute water directly around the sprinkler, reducing the chance of dry spots.

### Applications:

Residential and commercial turf and shrub landscapes.

### 5400 Series Plastic MPR Nozzles

Model No.	Description
53491	Full Pattern 15'
53492	Half Pattern 15'
53493	Quarter Pattern 15'
53494	End Strip Pattern 15'
53495	Side Strip Pattern 15'
53471	Full Pattern 12'
53472	Half Pattern 12'
53473	Quarter Pattern 12'
53461	Full Pattern 10'
53462	Half Pattern 10'
53463	Quarter Pattern 10'
53451	Full Pattern 8'
53452	Half Pattern 8'
53453	Quarter Pattern 8'

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Outstanding Features:

- Matched precipitation rates across sets and across patterns in 12' and 15' series for even water distribution.
- 5400 Series' 16 mesh white screens (shipped with nozzles) prevent clogging.
- Stainless steel adjustment screw allows easy flow and radius adjustment.




### Operation Range:



**Spacing:** 2 to 15 feet (.87 to 4.5 m).




**Pressure:** 15 to 30 psi (1 to 2 Bars).



# Spray Heads



## Performance Data



5400 Series				Standard		
12" Fixed 30" Trajectory						
Nozzle	Pressure psi	Radius ft.	Flow GPM	Precipit. in/hr		Precipit. in/hr
 <b>12F</b> 53471	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
 <b>12H</b> 53472	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
 <b>12Q</b> 53473	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




5400 Series					Metric		
12" Fixed Nozzles 30" Trajectory							
Nozzle Arc	Pressure Bars	Radius m	Flow m³/hr	Flow l/s	Precipit. mm/hr	Precipit. mm/hr	
<b>12F</b> 53471 	1.0	2.7	0.41	0.11	54	63	
	1.5	3.0	0.48	0.13	51	59	
	2.0	3.6	0.59	0.16	44	51	
	2.0	3.6	0.59	0.16	44	51	
<b>12H</b> 53472 	1.0	2.7	0.20	0.06	54	63	
	1.5	3.0	0.24	0.07	51	59	
	2.0	3.6	0.30	0.08	44	51	
	2.0	3.6	0.30	0.08	44	51	
<b>12Q</b> 53473 	1.0	2.7	0.13	0.04	54	63	
	1.5	3.0	0.15	0.04	51	59	
	2.0	3.6	0.18	0.05	44	51	
	2.0	3.6	0.18	0.05	44	51	




5400 Series				Standard	
15" Fixed Nozzle 30" trajectory					
Nozzle	Pressure psi	Radius ft.	Flow GPM	Precipit. in/hr ■	Precipit. in/hr ▲
<b>15F</b> 53481 	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
<b>15H</b> 53482 	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
<b>15Q</b> 53483 	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.83	1.62	1.87
	30	15	0.93	1.58	1.83

5400 Series					Metric	
15" Fixed Nozzles 30" Trajectory						
Nozzle Arc	Pressure Bars	Radius m	Flow l/s	Flow mm/hr	Precipit. mm/hr	Precipit. mm/hr
<b>15F</b> 53481 	1.0	3.3	0.59	0.16	53	61
	1.5	3.6	0.68	0.19	51	60
	2.0	4.5	0.84	0.23	40	46
	2.0	4.5	0.84	0.23	40	46
<b>15H</b> 53482 	1.0	3.3	0.30	0.08	53	61
	1.5	3.6	0.34	0.09	51	60
	2.0	4.5	0.42	0.12	40	46
	2.0	4.5	0.42	0.12	40	46
<b>15Q</b> 53483 	1.0	3.3	0.15	0.04	53	61
	1.5	3.6	0.17	0.05	51	60
	2.0	4.5	0.21	0.06	40	46
	2.0	4.5	0.21	0.06	40	46

5400 Series				Standard	
15" Fixed Strip Nozzles 30" Trajectory					
Nozzle Arc	Pressure psi	W x L ft.	Flow GPM	Precipit. in/hr ■	Precipit. in/hr ▲
<b>15EST</b> 53484 	15	4x13	0.45	1.65	—
	20	4x14	0.50	1.72	—
	25	4x14	0.56	1.91	—
	30	4x15	0.61	1.94	—
<b>15SST</b> 53485 	15	4x26	0.45	1.65	—
	20	4x28	0.50	1.72	—
	25	4x28	0.56	1.91	—
	30	4x30	0.61	1.94	—

5400 Series					Metric		
15" Fixed Strip Nozzles 30" Trajectory							
Nozzle Arc	Pressure Bars	W x L m	Flow m³/hr	Flow l/s	Precipit. l/s ■	Precipit. mm/hr ▲	
<b>15SST</b> 53484 	1,0	1,2 x 4	0,10	0,03	41	—	
	1,5	1,2 x 4,2	0,11	0,03	44	—	
	2,0	1,2 x 4,5	0,14	0,04	49	—	
	2,0	1,2 x 4,5	0,14	0,04	49	—	
<b>15SST</b> 53485 	1,0	1,2 x 8	0,20	0,06	41	—	
	1,5	1,2 x 8,5	0,23	0,06	44	—	
	2,0	1,2 x 9	0,27	0,08	49	—	
	2,0	1,2 x 9	0,27	0,08	49	—	

5400 Series				Standard		
10" Fixed 15" Trajectory						
Nozzle	Pressure psi	Radius ft.	Flow GPM	Precipit. in/hr ■	Precipit. in/hr ▲	
<b>10F</b> 53461 	15	7.0	1.20	3.20	2.60	
	20	8.0	1.30	3.00	2.30	
	25	9.0	1.50	2.60	2.00	
	30	10.0	1.60	2.40	1.80	
<b>10H</b> 53462 	15	7.0	0.60	3.20	2.60	
	20	8.0	0.65	3.00	2.30	
	25	9.0	0.70	2.60	2.00	
	30	10.0	0.80	2.40	1.80	
<b>10Q</b> 53463 	15	7.0	0.30	3.20	2.60	
	20	8.0	0.33	3.00	2.30	
	25	9.0	0.38	2.60	2.00	
	30	10.0	0.40	2.40	1.80	

5400 Series				Standard	
8" Fixed 15" Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow GPM	Precipit. in/hr ■	Precipit. in/hr ▲
<b>8F</b> 53461 	15	6.0	1.20	3.20	3.70
	20	6.5	1.30	3.00	3.40
	25	7.5	1.50	2.60	3.00
	30	8.0	1.60	2.40	2.80
<b>8H</b> 53462 	15	6.0	1.20	3.20	3.70
	20	6.5	1.30	3.00	3.40
	25	7.5	1.50	2.60	3.00
	30	8.0	1.60	2.40	2.80
<b>8Q</b> 53463 	15	6.0	1.20	3.20	3.70
	20	6.5	1.30	3.00	3.40
	25	7.5	1.50	2.60	3.00
	30	8.0	1.60	2.40	2.80

# Spray Heads

## 5400 Series Adjustable Nozzles

5400 Series Adjustable Nozzles offer precision and convenience to the supplier, contractor, and end-user. 5400 Series Adjustables eliminate the need for stocking full, half, quarter, and strip pattern nozzles. 5400 Series Adjustable Nozzles have spray distances from 7' to 17' (2,1 to 5,2 m) and easily adjust from 25° to 360°.

Model No.	Description
53489	Adjustable 7' (2,1m) (brown)
53478	Adjustable 10' (3,1m) (red)
53479	Adjustable 12' (3,6m) (green)
53480	Adjustable 15' (4,5m) (black)
53481	Adjustable 17' (5,1m) (gray)
55070	Adjustment Tool

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

### Applications:

Residential and commercial turf and shrub landscapes.

### Outstanding Features:

- Superior performance design.
- Matched precipitation rates promote even water distribution.
- Radius adjustment screw provides up to 25% reduction in overspray.
- Fits Orbit® 5400, Rainbird® 1800, and Irritrol® pop-up bodies.
- Adjustable arc provides for variable patterns and helps reduce inventory of many fixed patterns.
- UV-resistant materials prevent excessive sun damage.
- Five-year trade warranty on brass model, three-year warranty on plastic models.
- Arc adjusts from 25° to 360°.

### Operation Range:

**Spacing:** 7' to 17' (2,1 m to 5,1 m).






See specific models for spacing.






**Pressure:** 70 psi (1 to 4.8 Bars).

**Precipitation Rate:** 1.5" (38 mm) approx. per hour.

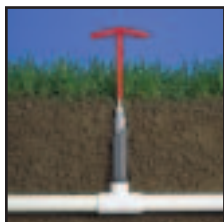
# Spray Heads

## Performance Data

Standard Adjustable Nozzle		Model (7A) 53489 Radius: 7 ft. Adjustable from 25° to 360° Trajectory 28° Color Code: Brown		Model (10A) 53478 Radius: 10 ft. Adjustable from 25° to 360° Trajectory 15° Color Code: Red		Model (12A) 53479 Radius: 12 ft. Adjustable from 25° to 360° Trajectory 28° Color Code: Green		Model (15A) 53480 Radius: 15 ft. Adjustable from 25° to 360° Trajectory 28° Color Code: Black		Model (17A) 53481 Radius: 17 ft. Adjustable from 25° to 360° Trajectory 28° Color Code: Gray	
Radius Arc	Pressure PSI	Radius ft.	Flow GPM	Radius ft.	Flow GPM	Radius ft.	Flow GPM	Radius ft.	Flow GPM	Radius ft.	Flow GPM
 45°	20	7	0.17	10'	0.17	12'	0.27	14'	0.39	16'	0.48
	<b>25</b>	<b>7</b>	<b>0.19</b>	<b>10'</b>	<b>0.19</b>	<b>12'</b>	<b>0.28</b>	<b>15'</b>	<b>0.44</b>	<b>17'</b>	<b>0.56</b>
	30	7	0.24	11'	0.24	13'	0.36	16'	0.46	18'	0.60
	35	8	0.26	11'	0.26	14'	0.38	16'	0.52	18'	0.63
 90°	20	7	0.34	10'	0.34	12'	0.53	14'	0.77	16'	0.97
	<b>25</b>	<b>7</b>	<b>0.39</b>	<b>10'</b>	<b>0.39</b>	<b>12'</b>	<b>0.56</b>	<b>15'</b>	<b>0.88</b>	<b>17'</b>	<b>1.13</b>
	30	7	0.49	11'	0.49	13'	0.71	16'	0.93	18'	1.20
	35	8	0.51	11'	0.51	14'	0.76	16'	1.03	18'	1.25
 120°	20	7	0.45	10'	0.45	12'	0.71	14'	1.03	16'	1.29
	<b>25</b>	<b>7</b>	<b>0.52</b>	<b>10'</b>	<b>0.52</b>	<b>12'</b>	<b>0.75</b>	<b>15'</b>	<b>1.17</b>	<b>17'</b>	<b>1.50</b>
	30	7	0.65	11'	0.65	13'	0.95	16'	1.24	18'	1.61
	35	8	0.68	11'	0.68	14'	1.02	16'	1.37	18'	1.67
 180°	20	7	0.68	10'	0.68	12'	1.07	14'	1.54	16'	1.94
	<b>25</b>	<b>7</b>	<b>0.78</b>	<b>10'</b>	<b>0.78</b>	<b>12'</b>	<b>1.12</b>	<b>15'</b>	<b>1.75</b>	<b>17'</b>	<b>2.25</b>
	30	7	0.97	11'	0.97	13'	1.42	16'	1.86	18'	2.41
	35	8	1.02	11'	1.02	14'	1.52	16'	2.06	18'	2.50
 240°	20	7	0.91	10'	0.91	12'	1.42	14'	2.06	16'	2.58
	<b>25</b>	<b>7</b>	<b>1.04</b>	<b>10'</b>	<b>1.04</b>	<b>12'</b>	<b>1.50</b>	<b>15'</b>	<b>2.34</b>	<b>17'</b>	<b>3.00</b>
	30	7	1.3	11'	1.30	13'	1.90	16'	2.48	18'	3.21
	35	8	1.36	11'	1.36	14'	2.03	16'	2.75	18'	3.34
 270°	20	7	1.02	10'	1.02	12'	1.60	14'	2.31	16'	2.90
	<b>25</b>	<b>7</b>	<b>1.17</b>	<b>10'</b>	<b>1.17</b>	<b>12'</b>	<b>1.68</b>	<b>15'</b>	<b>2.63</b>	<b>17'</b>	<b>3.38</b>
	30	7	1.46	11'	1.46	13'	2.14	16'	2.79	18'	3.61
	35	8	1.53	11'	1.53	14'	2.29	16'	3.09	18'	3.76
 360°	20	7	1.36	10'	1.36	12'	2.13	14'	3.08	16'	3.87
	<b>25</b>	<b>7</b>	<b>1.56</b>	<b>10'</b>	<b>1.56</b>	<b>12'</b>	<b>2.24</b>	<b>15'</b>	<b>3.50</b>	<b>17'</b>	<b>4.50</b>
	30	7	1.95	11'	1.95	13'	2.85	16'	3.71	18'	4.82
	35	8	2.04	11'	2.04	14'	3.05	16'	4.12	18'	5.01
	40	9	2.92	12'	2.92	15'	3.35	17'	4.54	19'	5.51

Metric Adjustable Nozzle			Model (7A) 53489 Radius: 5.2 m Adjustable from 25° to 360° Trajectory 28° Color Code: Brown			Model (10A) 53478 Radius: 3.0 m Adjustable from 25° to 360° Trajectory 15° Color Code: Red			Model (12A) 53479 Radius: 3.7 m Adjustable from 25° to 360° Trajectory 28° Color Code: Green			Model (15A) 53480 Radius: 4.6 m Adjustable from 25° to 360° Trajectory 28° Color Code: Black			Model (17A) 53481 Radius: 5.2 m Adjustable from 25° to 360° Trajectory 28° Color Code: Gray		
Radius Arc	Flow Bars	Flow kPa	Radius m	Flow m³/hr	Flow l/m	Radius m	Flow m³/hr	Flow l/m	Radius m	Flow m³/hr	Flow l/m	Radius m	Flow m³/hr	Flow l/m	Radius m	Flow m³/hr	Flow l/m
 45°	1,4	137	2,1	0,04	0,6	3,0	0,04	0,7	3,7	0,06	1,0	4,3	0,09	1,5	4,9	0,11	1,8
	<b>1,7</b>	<b>172</b>	<b>2,1</b>	<b>0,04</b>	<b>0,7</b>	<b>3,0</b>	<b>0,04</b>	<b>0,7</b>	<b>3,7</b>	<b>0,06</b>	<b>1,1</b>	<b>4,6</b>	<b>0,10</b>	<b>1,7</b>	<b>5,2</b>	<b>0,13</b>	<b>2,1</b>
	2,1	206	2,1	0,05	1,0	3,4	0,05	1,0	4,0	0,08	1,4	4,9	0,10	1,7	5,5	0,14	2,3
	2,4	241	2,4	0,06	1,0	3,4	0,06	1,0	4,3	0,09	1,4	4,9	0,12	2,0	5,5	0,14	2,4
 90°	2,8	275	2,7	0,08	1,4	3,7	0,08	1,4	4,6	0,10	1,6	5,2	0,13	2,2	5,8	0,16	2,6
	1,4	137	2,1	0,08	1,3	3,0	0,08	1,3	3,7	0,12	2,0	4,3	0,17	2,9	4,9	0,22	3,7
	<b>1,7</b>	<b>172</b>	<b>2,1</b>	<b>0,09</b>	<b>1,5</b>	<b>3,0</b>	<b>0,09</b>	<b>1,5</b>	<b>3,7</b>	<b>0,13</b>	<b>2,1</b>	<b>4,6</b>	<b>0,20</b>	<b>3,3</b>	<b>5,2</b>	<b>0,26</b>	<b>4,3</b>
	2,1	206	2,1	0,11	1,9	3,4	0,11	1,9	4,0	0,16	2,7	4,9	0,21	3,5	5,5	0,27	4,5
 120°	2,4	241	2,4	0,12	1,9	3,4	0,12	1,9	4,3	0,17	2,9	4,9	0,23	3,9	5,5	0,28	4,7
	2,8	275	2,7	0,17	2,8	3,7	0,17	2,8	4,6	0,19	3,2	5,2	0,26	4,3	5,8	0,31	5,2
	1,4	137	2,1	0,10	1,7	3,0	0,10	1,7	3,7	0,16	2,7	4,3	0,23	3,9	4,9	0,29	4,9
	<b>1,7</b>	<b>172</b>	<b>2,1</b>	<b>0,12</b>	<b>2,0</b>	<b>3,0</b>	<b>0,12</b>	<b>2,0</b>	<b>3,7</b>	<b>0,17</b>	<b>2,8</b>	<b>4,6</b>	<b>0,27</b>	<b>4,4</b>	<b>5,2</b>	<b>0,34</b>	<b>5,7</b>
 180°	2,1	206	2,1	0,15	2,5	3,4	0,15	2,5	4,0	0,22	3,6	4,9	0,28	4,7	5,5	0,37	6,1
	2,4	241	2,4	0,15	2,6	3,4	0,15	2,6	4,3	0,23	3,9	4,9	0,31	5,2	5,5	0,38	6,3
	2,8	275	2,7	0,22	3,7	3,7	0,22	3,7	4,6	0,25	4,2	5,2	0,34	5,7	5,8	0,42	7,0
	1,4	137	2,1	0,15	2,6	3,0	0,15	2,6	3,7	0,24	4,1	4,3	0,35	5,8	4,9	0,44	7,3
 240°	<b>1,7</b>	<b>172</b>	<b>2,1</b>	<b>0,18</b>	<b>3,0</b>	<b>3,0</b>	<b>0,18</b>	<b>3,0</b>	<b>3,7</b>	<b>0,25</b>	<b>4,2</b>	<b>4,6</b>	<b>0,40</b>	<b>6,6</b>	<b>5,2</b>	<b>0,51</b>	<b>8,5</b>
	2,1	206	2,1	0,22	3,7	3,4	0,22	3,7	4,0	0,32	5,4	4,9	0,42	7,0	5,5	0,55	9,1
	2,4	241	2,4	0,23	3,9	3,4	0,23	3,9	4,3	0,35	5,8	4,9	0,47	7,8	5,5	0,57	9,5
	2,8	275	2,7	0,33	5,5	3,7	0,33	5,5	4,6	0,38	6,4	5,2	0,52	8,6	5,8	0,62	10,4
 270°	1,4	137	2,1	0,21	3,4	3,0	0,21	3,4	3,7	0,32	5,4	4,3	0,47	7,8	4,9	0,59	9,8
	<b>1,7</b>	<b>172</b>	<b>2,1</b>	<b>0,24</b>	<b>3,9</b>	<b>3,0</b>	<b>0,24</b>	<b>3,9</b>	<b>3,7</b>	<b>0,34</b>	<b>5,7</b>	<b>4,6</b>	<b>0,53</b>	<b>8,9</b>	<b>5,2</b>	<b>0,68</b>	<b>11,4</b>
	2,1	206	2,1	0,3	4,9	3,4	0,30	4,9	4,0	0,43	7,2	4,9	0,56	9,4	5,5	0,73	12,2
	2,4	241	2,4	0,31	5,1	3,4	0,31	5,1	4,3	0,46	7,7	4,9	0,62	10,4	5,5	0,76	12,6
 360°	2,8	275	2,7	0,44	7,4	3,7	0,44	7,4	4,6	0,51	8,5	5,2	0,69	11,4	5,8	0,83	13,9
	1,4	137	2,1	0,23	3,9	3,0	0,23	3,9	3,7	0,36	6,1	4,3	0,52	8,7	4,9	0,66	11,0
	<b>1,7</b>	<b>172</b>	<b>2,1</b>	<b>0,27</b>	<b>4,4</b>	<b>3,0</b>	<b>0,27</b>	<b>4,4</b>	<b>3,7</b>	<b>0,38</b>	<b>6,4</b>	<b>4,6</b>	<b>0,60</b>	<b>10,0</b>	<b>5,2</b>	<b>0,77</b>	<b>12,8</b>
	2,1	206	2,1	0,33	5,5	3,4	0,33	5,5	4,0	0,49	8,1	4,9	0,63	10,6	5,5	0,82	13,7
 360°	2,4	241	2,4	0,35	5,8	3,4	0,35	5,8	4,3	0,52	8,7	4,9	0,70	11,7	5,5	0,85	14,2
	2,8	275	2,7	0,5	8,3	3,7	0,50	8,3	4,6	0,57	9,5	5,2	0,77	12,9	5,8	0,94	15,6
	1,4	137	2,1	0,31	5,1	3,0	0,31	5,1	3,7	0,48	8,1	4,3	0,70	11,7	4,9	0,88	14,6
	<b>1,7</b>	<b>172</b>	<b>2,1</b>	<b>0,35</b>	<b>5,9</b>	<b>3,0</b>	<b>0,35</b>	<b>5,9</b>	<b>3,7</b>	<b>0,51</b>	<b>8,5</b>	<b>4,6</b>	<b>0,80</b>	<b>13,2</b>	<b>5,2</b>	<b>1,02</b>	<b>17,0</b>
 360°	2,1	206	2,1	0,44	7,4	3,4	0,44	7,4	4,0	0,65	10,8	4,9	0,84	14,0	5,5	1,09	18,2
	2,4	241	2,4	0,46	7,7	3,4	0,46	7,7	4,3	0,69	11,5	4,9	0,94	15,6	5,5	1,14	19,0
	2,8	275	2,7	0,66	11,1	3,7	0,66	11,1	4,6	0,76	12,7	5,2	1,03	17,2	5,8	1,25	20,9

durable



# IRRIGATION ACCESSORIES

Durable products that  
complement light commercial or  
custom residential systems

Pro Series

# Irrigation Accessories



## Extension Adapter

- 1/2" (15/21) NPT x 3/4" (20/27) NPT riser.
- Sturdy, polyethylene construction.
- For adapting FNPT fittings to 1/2" or 3/4" NPT.
- Not for use under continuous pressure.

Model No.	Description
37217	1/2" NPT x 3/4" NPT



## Polyethylene Riser

- Molded, black polyethylene material.
- Not for use under continuous pressure.

37129T	1/2" x Close
37064T	1/2" x 2"
37065	1/2" x 3"
37066	1/2" x 4"
37067	1/2" x 5"
37068	1/2" x 6"
37130	1/2" x 8"
37132	1/2" x 12"



## Multi-Flex™ Riser

- Protects pipe connections from breaking.
- Flexible polyethylene material.
- Not for use under continuous pressure.
- Male x Male or Male x Female.

37111	1/2" x 4" M x M
37112	1/2" x 6" M x M
37127	1/2" x 4" M x F
37128	1/2" x 6" M x F



## Cut-Off Riser

- Molded, polyethylene material.
- Full (ASTM) standard threads.
- Not for use under continuous pressure.
- Cut to desired length.

37069P	1/2" x 6"
37169	1/2" x 12"
37113	3/4" x 6"
37114	1/2" x 3/4" x 6"
37126	1/2" x 6" Multi-Flex™ Cut-Off



## PVC Riser

- Molded gray schedule 80 PVC construction.
- Tapered inside ends allow standard pop-up heads to slide up and down without restriction.
- Not for use under continuous pressure.

Stock #	NPT x Length	Stock #	NPT x Length
38081	1/2" x close	38099	3/4" x 4"
38082	1/2" x 2"	38100	3/4" x 5"
38083	1/2" x 3"	38101	3/4" x 6"
38084	1/2" x 4"	38109	3/4" x 8"
38085	1/2" x 5"	38110	3/4" x 10"
38086	1/2" x 6"	38102	3/4" x 12"
38088	1/2" x 8"	38165D	3/4" x 18"
38090	1/2" x 10"	38166D	3/4" x 24"
38091	1/2" x 12"	38167	3/4" x 36"
38094	1/2" x 18"	38168	3/4" x 48"
38095	1/2" x 24"	38103	1" x close
38143	1/2" x 36"	38104	1" x 2"
38144	1/2" x 48"	38105	1" x 3"
38096	3/4" x close	38106	1" x 4"
38097	3/4" x 2"	38108	1" x 6"
38098	3/4" x 3"		

# Irrigation Accessories



## Cut-Off Riser Extension

- Molded, black, high-grade polyethylene construction.
- Use to raise sprinkler heads above grass level.
- Cut to desired length.
- Not for use under continuous pressure.

### Model No.

37017

### Description

1/2" (15/21) x 2-1/2"



## Marlex® Swing Joint Elbow

- Durable polyethylene construction.
- Ideal for installing swing joints.
- Not for use under continuous pressure.

86463

1/2" (15/21) FNPT x 1/2" (15/21) NPT

86464

3/4" (20/27) FNPT x 3/4" (20/27) NPT



## Riser Flex Pipe

- Durable low density polyethylene tubing.
- Ideal for fabrication of flexible swing joints.
- Pressure: 80 psi (5,5 bars) Max at 100° F.
- I.D. .49" O.D. .68" Wall .095".

38931

100' Roll



## Pre-Assembled Swing Joints

- Factory pre-fabricated in variable lengths.
- Use with 1/2" (15/21) spray heads or 3/4" (20/27) rotors.
- Made up of two barb ells, one length of pipe and one Marlex® swing ell.
- Spray head not included.

37263

1/2" (15/21) NPT x 1/2" (15/21) FNPT (15/21) x 6" (15,2 cm)

37264

1/2" (15/21) NPT x 1/2" (15/21) FNPT x 12" (30,4cm)

37265

1/2" (15/21) NPT x 3/4" (20/27) x 12" (30,4 cm)

37266

1/2" x 1/2" w/drain



## Riser Flex Fittings

- 1/2" (15/21) NPT x 1/2" spiral barb and 3/4" (20/27) NPT spiral barb thread.
- For use with Riser Flex Pipe.
- Prevent low heads from freezing with 37167 and Orbit® auto drain valve (51039).
- Pressure: 80 psi (5,5 bars) Max @ 110°F.

37159T

1/2" NPT (15/21) x barb elbow

37160T

1/2" NPT (15/21) x barb adapter

37161T

3/4" NPT (20/27) x barb adapter

37162T

3/4" NPT (20/27) x barb elbow

86465

1/2" Barb x barb coupling

86466

1/2" Barb x barb tee

37167

1/2" Barb x 1/2" (15/21) NPT x

1/2" (15/21) FNPT

37259T

1/2" Female barbed elbow

# Irrigation Accessories



## Professional Pipe Cutting Tool

- Cuts plastic pipe up to 1-1/2" in diameter.
- Heavy-duty steel construction.
- Replaceable power-point blade.
- Hooked jaws, locking handles, and switch blade release.
- Built-in ratchet assembly.

### Model No.

26096

53289

### Description

1/2" – 1 1/2" cutter

Replacement Blade



## Plastic Pipe Cutting Tool

- Cuts plastic pipe up to 1" in diameter.
- Sharp, heat-treated, stainless steel replaceable blade.
- Hooked jaws, locking handles, and switch blade release.
- Built-in ratchet assembly.

26086

53268

1/2" – 1" cutter

Replacement Blade



## 2" Plastic Pipe Cutting Tool

- Cuts plastic pipe up to 2" in diameter.
- Heavy-duty aluminum and steel construction.
- Easily cuts through pipe, leaving no burrs.
- Hooked jaws hold pipe in place.
- Built-in ratchet assembly.

26090

53284

1/2" – 2" cutter

Replacement Blade



## Plastic Pipe Cutting Tool

- Cuts plastic pipe up to 1" in diameter.
- Heavy-duty aluminum and steel construction.
- Sharp, heat-treated, steel replaceable blade.
- Rubber covered handles.
- Built-in ratchet assembly.

26085

53267

1/2" – 1" cutter

Replacement Blade



## Nipple Extractor

- Unique, patented design.
- Aluminum one-piece design.
- Plastic-coated handle.

26073D

26074D

1/2" Pro Series

3/4" Pro Series



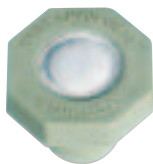
## Shut-Off Tool

- Water meter.
- Gas.
- Texas meter cover.

26097

Emergency Shut-Off Tool

# Irrigation Accessories



### Automatic Drain Valve

**Plastic/Brass**

- Corrosion-resistant spring/plastic plunger.
- Opening pressure: 3 to 5 psi (0,2 to 0,34 bars).
- Closing pressure: 5 psi (0,34 bars) or greater.

Model No.	Description
51039	1/2" Brass
51040W	1/2" Plastic
51041	3/4" Plastic



### PVC Ball Valve

- Schedule 80 PVC construction.
- Los Angeles City approved.
- Thread/slip.
- Pressure: 150 psi max (10,3 bars).

Model No.	Description
44120W	1/2" IPS PVC Ball Valve
44121W	3/4" IPS PVC Ball Valve
41122W	1" IPS PVC Ball Valve
41123W	1-1/4" IPS PVC Ball Valve
41124W	1-1/2" IPS PVC Ball Valve
41125W	5" IPS PVC Ball Valve
41126W	1/2" Solvent-Weld PVC Ball Valve
41127W	3/4" Solvent-Weld PVC Ball Valve
41128W	1" Solvent-Weld PVC Ball Valve
41129W	1-1/4" Solvent-Weld PVC Ball Valve
41130W	1-1/2" Solvent-Weld PVC Ball Valve
41131W	2" Solvent-Weld PVC Ball Valve

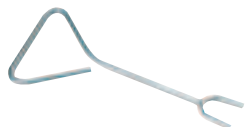
# Irrigation Accessories



## Curb Key

- Use to open and close meter and underground stop and waste valves.

Model No.	Description
53266	28"
53039	28" Heavy-duty
53034	5'



## Valve Control Key

- Use when opening and closing sprinkler control valves.
- Heavy-duty cold-rolled steel construction.

53264	6"
53033	30"
53265	54"



## Pressure Gauge

- Gauges water pressure up to 200 psi.
- 3/4" FHT.
- Plastic lens.
- Includes a hose washer.

53020	0-200 lbs
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## Thread-Seal Tape

- Use to seal threaded joints on metal or plastic pipe fittings.
- 4 mil rating.

31273	1/2" x 520"
31275	3/4" x 520"



## Sprinkler Flags

- For marking locations of heads, valves, and drains.
- 15" length.

53326	Sprinkler Flags
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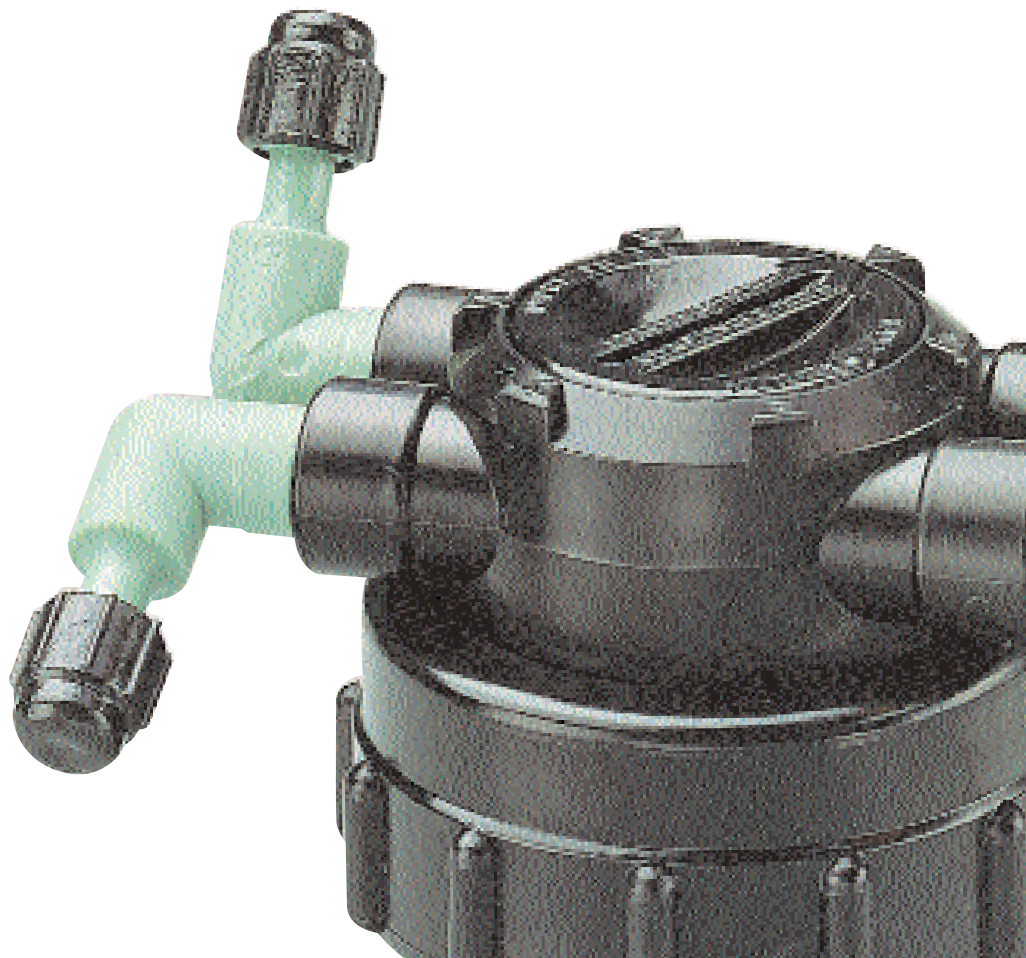
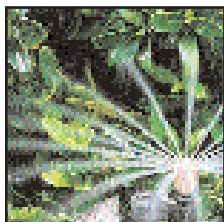


## Walkway Tunnel Tool

- Durable construction.
- Adapts to 3/4" or 1" PVC pipe.
- Connects to standard garden hose.
- Jet stream nozzle is ideal for tunneling under drive-ways, walkways, etc.

53333	3/4" FHT x 3/4" Socket
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conservation



# MICRO IRRIGATION

Conserving water with a  
complete line of environmentally  
conscious products

Pro Series

# Micro Irrigation



## Apollo 8™

Careful planning, innovative design, and versatility are just a few reasons why the Apollo 8™ has been a bestseller year after year.

Ideal for use with soaker tubing, micro-spray heads, or insect plugs, the Apollo 8™ features patented swivel elbows that allow you to water in virtually any direction. You can easily adjust the flow from port to port without replacing flow regulators or changing the entire manifold. Apollo 8™ features a top mount, easy-access filter and individual flow control. To give you the most flexible watering system available in its class.

### Applications:

Residential, commercial, shrub and desertcape projects.

Model No.	Description
61008W	Apollo 8™ Manifold

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

## Performance Data

Apollo 8			Standard		
psi	4 Open Ports full	8 Open Ports full	1 Open Port 1/3 open	1 Open Port 2/3 open	1 Open Port full
	gph	gph	gph	gph	gph
10	30	51	4.1	6.1	6.3
20	42	81	5.7	8.8	9.7
30	51	99	6.4	10.0	11.9
40	63	123	6.9	12.0	13.6
50	72	141	7.9	13.8	16.0

Apollo 8			Metric		
bars	4 Open Ports full	8 Open Ports full	1 Open Port 1/3 open	1 Open Port 2/3 open	1 Open Port full
	l/hr	l/hr	l/hr	l/hr	l/hr
0.6	112.5	191.2	15.3	22.8	23.6
1.3	157.5	303.7	21.3	33.0	36.3
2.0	191.2	371.2	24.0	37.5	44.2
2.7	236.2	461.2	25.8	45.0	51.0
3.4	270.0	528.7	27.6	51.7	60.0

## Outstanding Features:

- Adjustable flow ports emit water from a threaded riser to multiple locations, increasing adaptability to a variety of differing plant types with varying watering needs.
- Patented swing arm design provides directional versatility and can be shut off individually when not in use.
- Bug-proof 10-32 threaded cap shuts off the port when not in use.
- Integral 200-mesh (75 micron) filter helps prevent clogging and is serviceable from the top without disconnecting tubing.
- Made with UV-resistant material for use in direct sunlight. Orbit® recommends underground installation in a 6 inch Orbit® valve box.
- Easily adaptable when retrofitting existing spray heads in beds to drip or micro irrigation by way of a 1/2" (15/21) inlet.
- For use with 1/4" vinyl distribution or soaker tubing.
- Combination 1/4" barb and 10-32 thread on swing arms add strength and durability to the tubing connection.

## Operation Range:

**Flow:** 0 to 141 gph (0 to 528,7 l/h).

(8 ports full open port at 50 psi [2,8 bars]).

**Pressure:** 10 to 60 psi (0,8 to 4,1 bars).

## Specifications:

### Dimensions:

**Inlet:** 1/2" (15/21).

**Outlets:** 1/4" barb/10-32 thread.

**Height:** 2" (5,0 cm).

**Width:** 3-1/2" (8,8 cm).

# Micro Irrigation



## Adjustable Quad Manifold

Ideal for use with soaker tubing, micro-spray heads, and insect plugs, Orbit's Adjustable Quad Manifold is designed for years of worry-free use. This unique model is designed to work with other DripMaster® products and is perfect for new installations or to be retrofitted to existing systems.

### Applications:

Residential, commercial, shrub and xeriscape projects.

Model No.	Description
61006W	Adjustable Quad Manifold

### Performance Data

Adjustable Quad						Standard
Four Open Ports						
Avg. psi	Flow Setting					
	6	1	2	3	4	5
	gph	gph	gph	gph	gph	gph
10	0.0	12.0	24.0	30.0	30.0	36.0
20	3.0	24.0	42.0	51.0	60.0	57.0
30	6.0	30.0	51.0	60.0	69.0	75.0
40	6.0	30.0	54.0	72.0	78.0	85.0
50	6.0	36.0	57.0	72.0	84.0	90.0

Adjustable Quad						Metric
Four Open Ports						
Avg. bars	Flow Setting					
	6	1	2	3	4	5
	l/hr	l/hr	l/hr	l/hr	l/hr	l/hr
0.6	0	45	90	112	118	135
1.3	11	90	157	191	235	213
2.0	22	112	191	225	258	281
2.7	22	112	202	270	292	315
3.4	22	135	213	270	315	337

### Outstanding Features:

- One Adjustable Quad Manifold replaces up to four non-adjustable color-coded models.
- Compact size for above or below ground installation.
- No guesswork with this low-flow irrigation manifold—just dial in the precise water requirements.
- Union body design provides easy access to filter or pressure regulator disk without disturbing tubing.
- Four 1/4" watering ports from a single source. Swivel elbows provide a strong connection and directional versatility, allowing easy access to above or below ground installation situations.
- Fully adjustable for changes in soil, season, or vegetation.

See Orbit's 2002 price sheet for order quantities and list pricing.)

### Operation Range:

**Flow:** 1 to 90 gph (2,2 to 337 l/h) four ports open @ 50 psi (3,4 bars)

**Pressure:** 10 to 60 psi (0,8 to 4,1 bars)

### Specifications:

#### Dimensions:

**Inlet:** 1/2" (15/21),

**Outlets:** 1/4" barb/10-32 thread

**Height:** 2" (5,0 cm)

**Width:** 3" (7,6 cm)

# Micro Irrigation



## Full-Flow Quad Manifold

- 4 full-flow 10-32 thread 1/4" barb ports w/caps.
- 1/2" (15/21) female inlet.
- Pressure: 10 to 50 psi (0,5 to 3,5 bars).
- Flow: 18 to 195 GPH (68,1 to 738,1 l/hr).
- Height: 2-1/2" (6,3 cm).
- Width: 2" (4,5 cm).

**Model No.**

61004W

**Description**

Full-Flow Quad



## Quad Adapter Manifold

- 4 full-flow 10-32 thread 1/4" barb ports w/caps.
- 1/2" (15/21) female by 1/2" (15/21) male.
- Pressure: 10 to 50 psi (0,5 to 3,5 bars).
- Flow: 18 to 195 GPH (68,1 to 738,1 l/hr).
- Height: 4" (10,1 cm).
- Width: 2-1/2" (6,3 cm).

61003W

Quad Adapter Manifold



## Bi-Manifold II

- 2 full-flow 10-32 thread 1/4" barb ports w/caps.
- 1/2" (15/21) female inlet.
- Pressure: 10 to 50 psi (0,5 to 3,5 bars).
- Flow: 18 to 93 GPH (68,1 to 352,0 l/hr).
- Height: 2-1/2" (6,3 cm).
- Width: 2" (4,5 cm)

61005W

Bi-Manifold II



## Bi-Manifold Barb

- 2 full-flow 1/4" barbed ports.
- 1/2" (15/21) female inlet.
- Pressure: 10 to 50 psi (0,5 to 3,5 bars).
- Flow: 36 to 93 GPH (136,2 to 352,0 l/hr).
- Height: 1-1/2" (3,8 cm).
- Width: 1-1/2" (3,8 cm)

61411W

Bi-Manifold



## Riser Adapter

- One full-flow 10-32 thread 1/4" barb port.
- 1/2" (15/21) female by 1/2" (15/21) male connection.
- Pressure: 10 to 50 psi (0,5 to 3,5 bars).
- Flow: 33 GPH (128,9 l/hr) @ 30 psi (2,0 bars).

61010W

Riser Adapter

## Performance Data

Full Flow Manifolds		Standard			
psi	Number of Open Ports				
	1	2	3	4	
	GPH	GPH	GPH	GPH	
10	18	36	51	66	
20	33	63	90	117	
30	42	84	114	159	
40	45	90	135	180	
50	51	93	144	195	

Full Flow Manifolds		Metric			
bars	Number of Open Ports				
	1	2	3	4	
	GPH	GPH	GPH	GPH	
0,5	68,1	136,2	193,0	193,0	
1,5	124,9	238,4	340,6	340,6	
2	158,9	317,9	431,5	431,5	
2,5	170,3	340,6	511,0	511,0	
3	193,0	352,0	545,0	545,0	

# Micro Irrigation



## Multi-Stream Dripper/Emitter

- Combination 10-32 thread/barb or dual 1/4" inline barb.
- Adjustable flow cap.
- Pressure: 10 to 30 psi (0,69 to 2,0 bars).
- Flow: 0 to 43 GPH (0 to 163,6 l/hr).

(Refer to flow chart.)

61037W	Inline Multi-Stream Dripper
61237	Inline Multi-Stream Dripper
61030W	Multi-Stream Dripper
61230	Multi-Stream Dripper

## Flag Dripper

- 1/4" barb inlet, 1/4" outlet.
- Available in three flow rates.
- Pressure: 5 to 40 psi (0,5 to 2,5 bars).
- Flow: 0 to 1, 0 to 2, 0 to 4 GPH (0 to 3,7; 0 to 7,5; 0 to 15,1 l/hr).

61464W	0 to 1 GPH (0 to 3,7 l/hr)
61465W	0 to 2 GPH (0 to 7,5 l/hr)
61466W	0 to 4 GPH (0 to 15,1 l/hr)

## Pressure Compensating Dripper

- 1/4" self-piercing barb inlet, 1/4" barb outlet.
- Available in two flow rates.
- Pressure: 10 to 50 psi (0,7 to 3,5 bars).
- Flow: 1 and 2 GPH (3,7 to 7,5 l/hr).

(Refer to flow chart.)

61467D	1 GPH (3,7 l/hr) black
61477D	2 GPH (7,5 l/hr) green

## Performance Data

Emission Device						Standard
Pressure Compensating Dripper maximum recommended length of run (feet)						
Model	Initial psi	Spacing Between Emitters			48"	60"
		18"	24"	36"		
61467	20	280'	340'	440'	530'	620'
	30	375'	450'	580'	690'	820'
	40	440'	530'	690'	840'	965'
61477	20	200'	240'	305'	370'	435'
	30	265'	320'	405'	490'	575'
	40	310'	370'	475'	575'	675'

Emission Device		Standard
Pressure Compensating Drippers		
psi	61407 GPH	61477 GPH
10	1.10	1.95
15	1.13	2.01
20	1.14	2.01
25	1.17	2.06
30	1.20	2.17
40	1.21	2.22

Emission Device		Standard
Multi Stream Drippers		
Part # I61030W, 61037W & 61013W		
Pressure psi	Flow g/h	Radius ft
10	20.25	4.38
15	30.30	6.50
20	37.48	8.31
25	40.78	9.38
30	43.23	10.50

Emission Device					Metric	
Pressure Compensating Dripper maximum recommended length of run (meters)						
Model	Initial bars	Spacing Between Emitters			121cm	152cm
		45cm	60cm	91cm		
61467	1,3	85	103	134	164	188
	2,0	114	137	176	210	249
	2,7	134	161	210	256	294
61477	1,3	60	73	92	112	132
	2,0	80	97	123	149	175
	2,7	94	112	144	175	208

Emission Device		Metric
Pressure Compensating Drippers		
bars	61407 l/h	61477 l/h
0,7	4,1	7,3
1,0	4,3	7,5
1,3	4,4	7,5
1,7	4,4	7,7
2,0	4,5	8,1
2,7	4,6	8,3

Emission Device		Metric
Multi Stream Drippers		
Part # (61030W, 61037W & 61013W)		
Pressure bars	Flow l/h	Radius m
0,7	76,65	1,34
1,0	114,70	1,98
1,3	141,86	2,53
1,7	154,37	2,86
2,0	163,64	3,20

# Micro Irrigation



## Micro Spray

- Combination 10-32 thread 1/4" barb.
- Adjustable flow/radius.
- Pressure: 10 to 30 psi (0,75 to 2 bars).
- Flow: 0 to 29 GPH (0 to 109,6 l/hr) @ 25 psi.
- Radius: 0 to 10 feet (0 to 3,0 m).

### Model No.

61034

61035

61036

### Description

Micro Spray Full (Brown)

Micro Spray Half (Blue)

Micro Spray Quarter (Red)



## Micro Rotating Sprinkler

- 10-32 thread 1/4" barb ports.
- Radius: Adjustable 0 to 12' (0 to 3,6 m) @ 30 psi.
- Pressure: 15 to 50 psi (1,0 to 3,5 bars).
- Flow: 0 to 27 GPH (0 to 102,1 l/hr) @ 30 psi. (2,0 bars)

61233

61033W

Micro Rotating Sprinkler

Micro Rotating Sprinkler



## Foggers

- 1/4" barb, 1/8" NPT, or 10-32 thread.
- Provides fine mist.
- Pressure: 10 to 50 psi (0,5 to 3,5 bars).
- Flow: .5 GPH @ 25 psi (1,89 l/hr @ 1,7 bars).
- Adjustable Micro-Mist (61232) Flow: 0 to 8 GPH (0 to 30,01 l/hr) @ 25 psi (1,72 bars).

61450

61032D

1/4" Barb Fogger

Micro Mist Sprayer/Adj.

## Performance Data

Emission Device					Standard	
Micro Sprays & 12" Spray Stakes						
Pressure: psi	Flow GPH	Full Radius of Throw ft	Half Radius of Throw ft	Quarter Radius of Throw ft	Strip Radius of Throw ft	
10	0 - 16.7	0 - 9.2	0 - 6.7	0 - 6.4	0 - 6.0	
15	0 - 21.0	0 - 11.3	0 - 8.1	0 - 8.1	0 - 7.5	
20	0 - 24.5	0 - 12.9	0 - 9.5	0 - 9.4	0 - 9.0	
25	0 - 28.0	0 - 13.2	0 - 10.1	0 - 9.8	0 - 10.5	
30	0 - 31.0	0 - 13.4	0 - 10.6	0 - 10.3	0 - 11.0	

Emission Device						Metric
Micro Sprays & 12" Spray Stakes						
Pressure psi	Flow l/h	Full Radius of Throw m	Half Radius of Throw m	Quarter Radius of Throw m	Strip Radius of Throw m	
0.7	0 - 60.6	0 - 2.8	0 - 2.0	0 - 1.9	0 - 1.8	
1.0	0 - 81.4	0 - 3.5	0 - 2.5	0 - 2.5	0 - 2.2	
1.5	0 - 94.9	0 - 3.9	0 - 2.9	0 - 2.8	0 - 2.7	
1.7	0 - 108.5	0 - 4.0	0 - 3.1	0 - 3.0	0 - 3.2	
2.0	0 - 120.1	0 - 4.1	0 - 3.2	0 - 3.1	0 - 3.3	

Emission Device		Standard
Micro Rotating Sprinkler Part # 61033W, 61233		
Pressure psi	Flow g/h	Radius ft.
10	13.4	7.0
15	18.2	8.1
20	20.6	9.1
25	22.9	9.5
30	27.4	11.9

Emission Device		Metric
Micro Rotating Sprinkler Part # 61033W, 61233		
Pressure bars	Flow l/h	Radius m
0.7	50.72	2.15
1.0	69.08	2.48
1.5	78.26	2.80
1.7	86.97	2.90
2.0	103.81	3.64

# Micro Irrigation



## Adjustable Heads on 8" and 12" Stakes

- 8" (20,3 cm) stakes with multi-stream dripper heads.
- 12" (30,4 cm) stakes available with full, 1/2, 1/4, or strip pattern low-volume sprinklers.

Refer to chart "micro sprays" for performance data (12") or page 53 "Emission Device" (8").

Model No.	Description
61264	8" (20,3 cm) w/Multi-Stream
61238	12" (30,4 cm) Full (Brown)
61239	12" (30,4 cm) 1/2 (Blue)
61268	12" (30,4 cm) 1/4 (Red)
61229	12" (30,4 cm) Strip (Black)

(See Orbit's 2002 price sheet for order quantities and list pricing.)



## Tubing Stakes

- 6" (15,2 cm) and 12" (30,4 cm) tubing stakes hold drip heads and tubing in place and at a desired height for watering.
- 6" (15,2 cm) inline stakes provide secure installation of any 10-32 threaded head using 1/4" distribution tubing.

61052W	6" (15,2 cm) Tubing
61253	12" (30,4 cm) Tubing

(See Orbit's 2002 price sheet for order quantities and list pricing.)



## Loop Stakes

- Used to hold down drip tubing during and after construction.
- Durable galvanized construction.
- For above ground installations.

61443W	1/4" Loop Stake
61442W	1/2" Loop Stake

(See Orbit's 2002 price sheet for order quantities and list pricing.)



## Spring Loaded Pop-Up Riser

- For use with micro sprays.

61478	9" Riser
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## Extension Risers

- Adds length and stability to micro sprinklers.
- Inlet size 1/4" barb, outlet fits 10-32 thread.

61057W	6" (15,2 cm) Extension Riser
61257	6" (15,2 cm) Extension Riser
61058W	12" (30,4 cm) Extension Riser

(See Orbit's 2002 price sheet for order quantities and list pricing.)

# Micro Irrigation



## 1/4" Tubing Fittings

- 1/4" barb connections.
- For use with 1/4" distribution or soaker tubing.
- Pressure: 0 to 50 psi (0 to 3,5 bars).

Model No.	Description
61221	Tee
61220	Elbow
61222	Coupling



## 1/4" Micro Valve & End Plugs

- Barb inlet fits into 1/4" distribution tubing.
- Micro valve controls flow.
- Insect water plug keeps bugs and debris out.
- Pressure: 0 to 50 psi (0 to 3,5 bars).

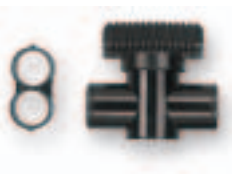
61226	End Plug
61265	Insect Water Plug
61227	Shut-Off Valve



## 1/2" Tubing Fittings (.700"-.710")

- 1/2" (15/21) compression fittings.
- Fits .700" through .710" O.D. tubing.
- Pressure: 0 to 50 psi (0 to 3,5 bars).

61242	Tee
61243	Elbow
61241	Coupling



## 1/2" Shut-Off Valve & Tube End Fittings

- Fits .700" to .710" Tubing.
- 1/2" valve controls flow or shuts off laterals.
- Figure eight and end cap are positive shut offs.
- Pressure: 0 to 50 psi (0 to 3,5 bars).

61247	Figure 8 Shut-Off
61286	1/2" Shut-Off Valve



## Universal Blow-Proof Fittings

- For use with .580" through .710" tube.
- Unique cinch-down thread design.
- Reusable.
- Pressure: 0 to 85 psi (0 to 5,8 bars).

61428W	Tee
61427W	Elbow
61426W	Coupling
61425W	1/2" NPT x 1/2" Adapter
61425W	MHT x 1/2" Adapter w/cap
61429W	FHT x 1/2" Adapter



## 1/2" Tubing Adapters

- Converts from PVC to drip-tube.
- Converts from hose faucet to drip-tube.
- Adapts .620" tubing to .700" tubing.
- Pressure: 0 to 50 psi (0 to 3,5 bars).

61245	FHT x .700" Comp Tee
61244	FHT x .700" Comp
61067	MHT x .700" Comp w/cap
61266	3/4" NPT x MHT
61283	3/4" MSW w/FSW Comp

# Micro Irrigation



## Tubing Straps

- 1/4" and 1/2" tubing straps.
- Secures tubing to a solid surface.
- Durable plastic.
- Stainless steel nail (included).
- Corrosion-resistant.

Model No.	Description
61051	1/4" Strap
61248	1/2" Strap



## Filters

- 150 mesh removable screen.
- Clean-out cap.
- Rated at 12 GPM (45,42 l/m).
- Y filter accepts fertilizer tablets.

61062W	3/4" NPT WYE Filter
--------	---------------------



## Pressure Regulators

- Regulates downstream pressure.
- Can be installed above or below ground.
- Regulates pressure to 25 psi.

61260	25 psi (1,7 bars) 3/4" FNPT x 3/4" NPT
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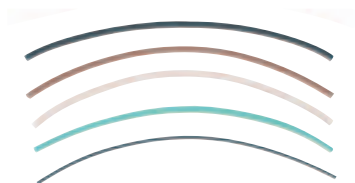


## Punch Tool

- Allows quick and easy punching of 1/2" drip distribution for insertion of 1/4" barbed fittings.

61085	Punch Tool
-------	------------

# Micro Irrigation



## 1/8" & 1/4" Distribution Tubing

- Made from flexible polyvinyl materials.
- Extends from feedline to plant base.
- Available in black, brown, green and sand colors.
- UV-resistant.
- 1/8" O.D. may be used as flag dripper extensions to plant base.
- Pressure: 0 to 50 psi (0 to 3,5 bars).

Model No.	Description
61070	1/4" x 50' Black
61071	1/4" x 100' Black
61075	1/4" x 500' Black
61074	1/4" x 50' Green
61482	1/4" x 50' Tan
61481	1/4" x 50' Brown



## 1/2" Distribution Tubing

- Available in .620" OD and .700" OD in variable lengths.
- For use as feedline for micro or drip irrigation.
- UV-resistant.
- Pressure: 0 to 80 psi (0 to 5,5 bars).

61079	.700" x 50' Black
61080	.700" x 100' Black
61081	.700" x 500' Black



## 1/4" Laser Tubing

- Used for soaker applications.
- Laser cut spacing is 18" (45,7 cm).
- UV-resistant.
- Flow: 1/2 GPH/ft. (5,6 l/h) @ 25 psi (1,7 bars).

61072	1/4" x 15' Laser
61073	1/4" x 60' Laser

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*



## Porous Tubing

- Above or beneath ground applications.
- For use in shrub or vegetable garden areas.
- Not recommended for over 10' 1/4" (3,4 m) runs.
- Pressure 30 psi (2,0 bars) max.

*For flow data information contact Orbit® technical service.*

61173	1/4" x 50' Porous
61488	1/4" x 100' Porous
61496	5/8" (.710") x 25' Porous w/Hose Fittings
61497	5/8" (.710") x 50' Porous w/Hose Fittings

*(See Orbit's 2002 price sheet for order quantities and list pricing.)*

# Reference

## Maximum Precipitation Rates

Inches Per Hour

Soil Texture	0 to 5% Slope		5 to 8% Slope		8 to 12% Slope		12% + Slope	
	Cover	Bare	Cover	Bare	Cover	Bare	Cover	Bare
Course Sandy Soil	2.00	2.00	2.00	1.50	1.50	1.00	1.00	0.50
Course Sandy Soils Over Compact Subsoils	1.75	1.50	1.25	1.00	1.00	0.75	0.75	0.40
Light Sandy Loams Uniform	1.75	1.00	1.25	0.80	1.00	0.60	0.75	0.40
Light Sandy Loams Over Compact Subsoils	1.25	0.75	1.00	0.50	0.75	0.40	0.50	0.30
Uniform Silt Loams	1.00	0.50	0.80	0.40	0.60	0.30	0.40	0.20
Silt Loams Over Compact Subsoil	0.60	0.30	0.50	0.25	0.40	0.15	0.30	0.10
Heavy Clay or Clay Loam	0.20	0.15	0.15	0.10	0.12	0.08	0.10	0.06

The maximum PR values listed above are as suggested by the United States Department of Agriculture.  
The values are average and may vary with respect to actual soil condition and condition of ground cover.

## Formulas

	Standard		Metric	
<b>Precipitation Rates</b>				
Equilateral Triangular Spacing	P.R.= (in/hr)	$\frac{(\text{GPM of } 360) \times 96.25}{(\text{Head Spacing})^2 \times .866}$	P.R.= (mm/hr)	$\frac{\text{m}^3/\text{hr of } 360 \times 1000}{\text{m}^2 \times .866}$
Square/Rectangular Spacing	P.R.= (in/hr)	$\frac{(\text{GPM of } 360) \times 96.25}{\text{Head Spacing} \times \text{Row Spacing}}$	P.R.= (mm/hr)	$\frac{\text{m}^3/\text{hr of } 360 \times 1000}{\text{Head Spacing} \times \text{Row Spacing}}$
Square/Rectangular Spacing	P.R.= (in/hr)	$\frac{34650 \times \text{GPM (for any arc)}}{\text{Degrees of Arc} \times \text{Head spacing} \times \text{Row Spacing}}$	P.R.= (mm/hr)	$\frac{\text{m}^3/\text{hr (for any arc)} \times 1000}{\text{Degrees of Arc} \times \text{Head spacing} \times \text{Row Spacing}}$
<b>Horsepower</b>	H.P.=	$\frac{\text{GPM} \times \text{Ft of Head}}{3,960 \times \text{Pump Efficiency}}$ (expressed as a decimal)		
<b>Station Run Time</b>	S.R.T.= (min/wk)	$\frac{\text{Total Weekly Req'd (inch/wk)} \times 60 \text{ (min/hr)}}{\text{Precipitation Rate (in/hr)}}$	S.R.T.= (min/wk)	$\frac{\text{Total Weekly Req'd (mm/wk)} \times 60 \text{ (min/hr)}}{\text{Precipitation Rate (mm/hr)}}$
<b>Pipe Velocity</b>	V= (ft/sec)	$\frac{0.4085 \times \text{Flow (GPM)}}{(\text{Inside Pipe Diameter in Inches})^2}$	V= (m/sec)	$\frac{1273.24 \times \text{Flow (l/sec)}}{(\text{Inside Pipe Diameter in Millimeters})^2}$
<b>Scheduling Coefficient</b>	S.C.=	$\frac{\text{Average Precipitation Rate (in/hr)}}{\text{Lowest Precipitation Rate (in/hr)}}$	S.C.=	$\frac{\text{Average Precipitation Rate (mm/hr)}}{\text{Lowest Precipitation Rate (mm/hr)}}$
<b>Slope</b>	S=	$\frac{\text{Rise (measure of Length)}}{\text{Run (Measure of Length)}}$		

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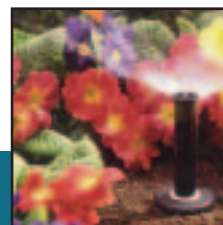
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