

"On previous projects, I had installed a plastic tube with about a dozen hand-drilled holes and a retrofitted bubbler, but I've never been completely satisfied with this do-it-yourself method. At a recent job we needed to plant 200 valley oak seedlings on a 20-acre site and used the Rain Bird RWS. One year after planting, the trees show extremely good vitality. If you're looking for long-term vitality and healthy trees this is an excellent tool."

Greg Houck
Ad Land Venture

Water Saving \$ Water Saving Tips

Root Watering Series

- RWS is more efficient than above ground bubblers in distributing water to tree and shrub root zones
- Highest efficiency solution for tree irrigation – up to 95% emission uniformity with minimal wind, evaporation, or edge control losses
- RWS' dedicated subsurface irrigation zones reduce stress of trees and shrubs brought on by strict turf watering restrictions

- Introduction
- Spray Bodies
- Spray Nozzles
- Rotors
- Impacts
- Valves
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SA Series

Swing Assemblies Connect Heads to Lateral Pipes

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

Specifications

The operating range of the Rain Bird Swing Assemblies matches or exceeds the operating range for most ½" (1.3 cm) sprays and ¾" (1.9 cm) rotors

- Operating pressure: Up to 80 psi (5.5 bar)
- Surge pressure: Up to 240 psi (16.6 bar)
- Temperature: Up to 110° F (43° C)
- Maximum flow: 8 gpm (0.5 l/sec)
- Pressure loss at 6 gpm (0.38 l/sec) is 2.0 psi (0.14 bar)

Unique Rain Bird system offering:
Swing Assemblies, Saddle Tees,
and Spray Heads



How To Specify

SA 12 5050

Inlet/Outlet
050: ½" x ½"
5050: ½" x ½"
5075: ½" x ¾"
7575: ¾" x ¾"

Length
18"
12"
6"

Model
Swing Assembly



SA Series

SA Series Swing Assemblies Specifications

Model Number	Part Number	Length		Inlet		Outlet	
		US	METRIC	US	METRIC	US	METRIC
SA-6050	A48030	6"	15.2 cm	½"	1.3 cm	½"	1.3 cm
SA-65075	A48055	6"	15.2 cm	½"	1.3 cm	¾"	1.9 cm
SA-125050	A48035	12"	30.5 cm	½"	1.3 cm	½"	1.3 cm
SA-125075	A48045	12"	30.5 cm	½"	1.3 cm	¾"	1.9 cm
SA-127575	A48050	12"	30.5 cm	¾"	1.9 cm	¾"	1.9 cm
SA-185050	A48065	18"	45.7 cm	½"	1.3 cm	½"	1.3 cm

SPX Series Swing Pipe

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

Features and Benefits

• SPX-FLEX100

- Superior flexibility allows pipe to be efficiently routed around hardscape, terraces, and uneven terrain to turn landscape design into reality
- Textured surface makes product easier to handle, contributing to labor efficiency, especially under wet conditions
- Up to 30% more flexible than competitive flexible pipe*
- Enhanced kink resistance
- Quick and easy installation lowers material and labor costs
- Installs quickly leaving time for additional system installations and incremental revenue opportunities

**Based on tests conducted at the Rain Bird Product Research Center. Tests conducted on Rain Bird and principal competitors' swing pipe*

Specifications

- Inside diameter: 0.49" (1.24 cm)
- Operating pressure: Up to 80 psi (5.5 bar)
- Temperature: Up to 110° F (43° C)

Models

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



Up to 30% more flexible than competitors



SPX-FLEX100

SB Series Spiral Barb Fittings

A Natural Product Complement to SPX Series Swing Pipe

Features and Benefits

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



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

Specifications

- Operating pressure: Up to 80 psi (5.5 bar)
- Temperature: Up to 110° F (43° C)

Models

- SBE-050: 1/2" M NPT x 1/2" barb elbow
- SBE-050B: 1/2" M NPT x 1/2" barb elbow - bulk package
- SBE-075: 3/4" M NPT x 1/2" barb elbow
- SBE-075B: 3/4" M NPT x 1/2" barb elbow - bulk package
- SBA-050: 1/2" M NPT x 1/2" barb adapter
- SBA-075: 3/4" M NPT x 1/2" barb adapter
- SB-TEE: 1/2" barb x 1/2" barb x 1/2" barb tee
- SB-CPLG: 1/2" barb x 1/2" barb coupling
- SBFE-050: 1/2" F NPT x 1/2" barb elbow
- SB-NPT-TEE: 1/2" M NPT x 1/2" barb x 1/2" spiral barb tee



RWS-B-1401

RWS-M-B-1401

RWS-S-B-1401



RWS-Sock

Designed to fit over the RWS and RWS-Mini units. Ideal for use in sandy soil, it will deter fine soil from infiltrating into the RWS canister

RWS Series

Root Watering Series promotes deep root growth and healthy tree development

- Subsurface aeration and irrigation prevents tree and shrub transplant shock
- Subsurface deep root watering and aeration ensures tree health and promotes accelerated growth
- Highest efficiency solution for tree irrigation - up to 95% emission uniformity with minimal wind, evaporation, or edge control losses

Features and Benefits

- Aesthetically designed subsurface bubbler contributes to a landscape's natural appearance
- Locking grate at grade deters vandals
- Helps prevent shallow root growth and hardscape damage
- Aesthetically attractive below grade installation
- Self-contained and factory assembled units for assured reliability
- Variety of models available to accommodate design flexibility:

For the RWS Model:

- 4" (10.2 cm) retaining cap and vandal resistant locking grate tops a 36" semi-rigid mesh tube
- Factory installed swing assemblies (excluding RWS-BGX) with a 1401 (0.25 gpm; 1.2 l/m), 1402 (0.5 gpm; 1.8 l/m), or 1404 (1.00 gpm; 3.6 l/m) bubbler on a fixed riser makes connecting to lateral lines easy
- Optional sand sock is ideal for use in sandy soil

For the RWS - Mini:

- 4" (10.2 cm) retaining cap and vandal resistant locking grate tops a 18" semi-rigid mesh tube
- Factory installed ½" spiral barb elbow with a 1401 or 1402 bubbler makes connecting to lateral lines easy
- Optional sand sock is ideal for use in sandy soil

For the RWS - Supplemental:

- 2" (5.1 cm) snap-on cap and base cap enclose a 10" (25.4 cm) semi-rigid mesh tube
- Factory installed ½" spiral barb elbow with 1401 bubbler makes connecting to lateral lines easy
- Right size for shrubs

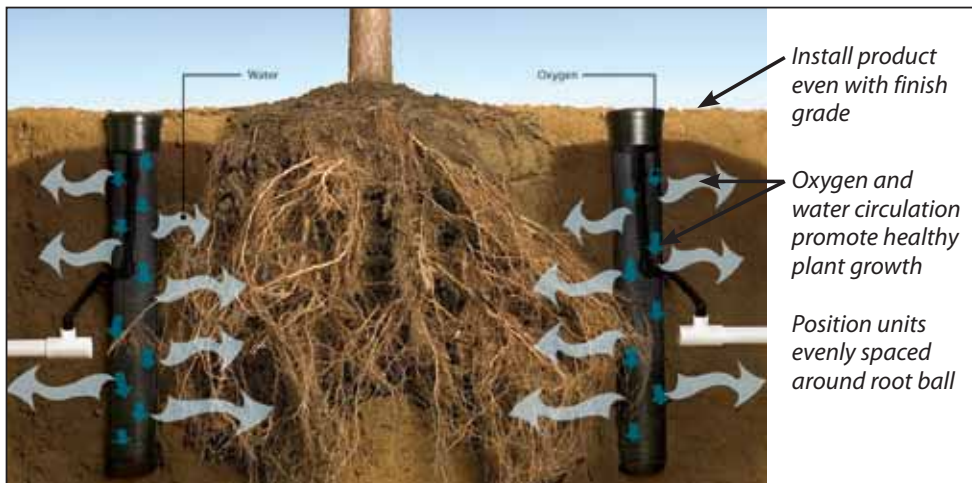


RWS integrated collar and locking grate retainer

Dimensions

- Root Watering: 4" (10.2 cm) diameter x 36" (91.5 cm) length
- Root Watering – Mini: 4" (10.2 cm) diameter x 18" (45.7 cm) length
- Root Watering – Supplemental: 2" (5.1 cm) diameter x 10" (25.4 cm) length

Models /Specifications				
Model	Bubbler	Check Valve	Swing Assembly w/ ½" (15/21) M NPT inlet	Spiral Barb Elbow w/ ½" (15/21) M NPT inlet
Root Watering (with 4" (10.2 cm) vandal-resistant locking grate)				
RWS	Ideal for ¼" drip tubing or customer provided hardware	-	-	-
RWS-B-C-1401	0.25 gpm (1.2 l/m)	✓	✓	-
RWS-B-1401	0.25 gpm (1.2 l/m)	-	✓	-
RWS-B-X-1401	0.25 gpm (1.2 l/m)	-	✓ (18")	-
RWS-B-C-1402	0.50 gpm (1.8 l/m)	✓	✓	-
RWS-B-1402	0.50 gpm (1.8 l/m)	-	✓	-
RWS-B-C-1404	1.00 gpm (3.6 l/m)	✓	✓	-
Root Watering - Mini (with 4" (10.2 cm) vandal-resistant locking grate)				
RWS-M	Ideal for ¼" drip tubing or customer provided hardware	-	-	-
RWS-M-B-C-1401	0.25 gpm (1.2 l/m)	✓	-	✓
RWS-M-B-1401	0.25 gpm (1.2 l/m)	-	-	✓
RWS-M-B-C-1402	0.50 gpm (1.8 l/m)	✓	-	✓
RWS-M-B-1402	0.50 gpm (1.8 l/m)	-	-	✓
Root Watering - Supplemental (with 2" (5.1 cm) snap-on cap and base)				
RWS-S-B-C-1401	0.25 gpm (1.2 l/m)	✓	-	✓
RWS-S-B-1401	0.25 gpm (1.2 l/m)	-	-	✓
Root Watering - Accessories				
RWS-SOCK (Root Watering Sand Sock)				
RWS- GRATE-P (Root Watering Series Purple Grate for RWS and RWS Mini)				



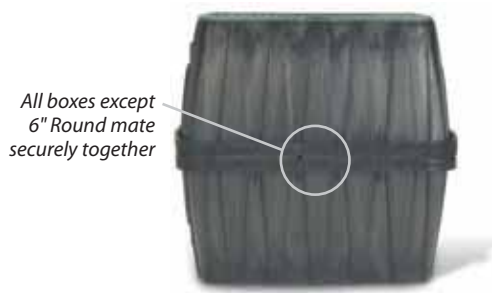
How To Specify

RWS - x - x - x - xxx

- Bubbler Model: 1401, 1402, 1404
- Optional: C: Check Valve
- Bubbler: B: Bubbler pre-installed
- Other Size: M: RWS-Mini (4" (10.2 cm) x 18" (45.7 cm)), S: RWS-Supplemental (2" (5.1 cm) x 10" (25.4 cm))
- Model: RWS Root Watering Series

Accessories

A variety of valve box sizes and shapes makes it easy to choose the right box for the job. Black bodies and lids are made of 100% recycled materials



Interlocking Bottoms for Deep Installations



International non-potable symbol and language

VB Series Valve Boxes

Valve Boxes provide superior box strength for better valve protection

- Wide flange with corrugated structure provides superior box strength for better valve protection
- Unique shovel access slot provides superior accessibility for service
- Lids with no holes reduce danger from bees, spiders, and snakes
- Earth-friendly LEED-compliant material made of 100% recycled materials (black boxes only)

Features and Benefits

These features apply to the **Standard, Jumbo, Super Jumbo, Maxi Jumbo, and 10" Round** Valve Boxes:

- Unique bolt hole knock-out design in lid keeps hazardous insects and pests out of the box
- Shovel access on body allows for easy lid removal
- Knock-out retainers securely hold removed knock-outs above the pipe, keeping dirt out during backfill
- Beveled lid edges help prevent damage to lids from lawn equipment
- Interlocking bottoms allow boxes to mate securely together bottom-to-bottom for deep installations
- Lid marking area provides dedicated location for identification

Dimensions and Additional Features by Model

STANDARD RECTANGULAR SERIES (VB-STD)

- Dimensions: 21.8" L x 16.6" W x 12.0" H (55.4 cm x 42.2 cm x 30.5 cm)
- Two large center knock-outs accommodate up to 3½" (8.9 cm) diameter pipe and eleven knock-outs accommodate up to 2" (5.0 cm) diameter pipe
- VB-STD: Black body and green lid
- VB-STDP: Black body and purple lid with bilingual non-potable warning
- VB-STD-B: Black body only
- VB-STD-L: Green lid
- VB-STDP-L: Purple lid with bilingual non-potable warning
- VB-STDBKL: Black lid
- VB-STD-H: Black body and green lid with locking hex bolt

Standard 6" extension dimensions: 20.0" L x 14.75" W x 6.75" H (50.8 cm x 37.5 cm x 17.1 cm)

- VB-STD-6EXT: 6" standard extension black body and green lid
- VB-STD-6EXT-B: 6" standard extension black body only

JUMBO RECTANGULAR SERIES (VB-JMB)

- Dimensions: 26.3" L x 19.8" W x 12.1" H (66.8 cm x 50.3 cm x 30.7 cm)
- Two large center knock-outs accommodate up to 3½" (8.9 cm) diameter pipe. (Extension does not have knock-outs)
- VB-JMB: Black body and green lid
- VB-JMBP: Black body and purple lid with bilingual non-potable warning
- VB-JMB-B: Black body only
- VB-JMB-L: Green lid
- VB-JMBP-L: Purple lid with bilingual non-potable warning
- VB-JMBBKL: Black lid
- VB-JMB-H: Black body and green lid with locking hex bolt
- Jumbo 6" extension dimensions: 24.4" L x 17.9" W x 6.75" H (62.0 cm x 45.5 cm x 17.1 cm)
- VB-JMB-6EXT: 6" jumbo extension black body and green lid
- VB-JMB-6EXT-B: 6" jumbo extension black body only

SUPER JUMBO RECTANGULAR SERIES (VB-SPR)

- Dimensions: 33.1" L x 23.8" W x 15.0" H (84.1 cm x 60.5 cm x 38.1 cm)
- Fourteen knock-outs accommodate up to 3½" (8.9 cm) diameter pipe
- Includes two stainless steel bolts and clips to securely fasten the lid to the body
- VB-SPR-H: Black body and green lid with 2 locking hex bolts
- VB-SPR-L: Green lid
- VB-SPR-PL: Purple Lid - only fits VB-SPR valve boxes which have the following dimensions: 33.1" L x 23.8" W x 15.0" H (84.1 cm x 60.5 cm x 38.1 cm)

MAXI JUMBO RECTANGULAR SERIES (VB-MAX)

- Dimensions: 40.3" L x 27.1" W x 18.0" H (102.4 cm x 68.8 cm x 45.7 cm)
- Eighteen knock-outs accommodate up to 3½" (8.9 cm) diameter pipe
- Includes two stainless steel bolts and clips to securely fasten the lid to the body
- VB-MAX-H: Black body and green lid with 2 locking hex bolts
- VB-MAX-L: Green lid
- VB-MAX-PL: Purple Lid - only fits VB-MAX valve boxes which have the following dimensions: 40.3" L x 27.1" W x 18.0" H (102.4 cm x 68.8 cm x 45.7 cm)



Accessories

VB Series Valve Boxes (cont.)

10" ROUND SERIES (VB-10RND)

- Dimensions: 10.25" Top D x 10.0" H x 13.75" Bottom D (26.0 cm x 25.4 cm x 34.9 cm)
- Four equally spaced knock-outs accommodate up to 2" (5.0 cm) diameter pipe. (Extension does not have knock-outs)
- VB-10RND: Black body and green lid
- VB-10RND-B: Black body only
- VB-10RND-L: Green lid
- VB-10RNDP-L: Purple lid with bilingual non-potable warning
- VB-10RND-BKL: Black lid
- VB-10RND-H: Black body and green lid with locking hex bolt

7" ROUND SERIES (VB-7RND)

- Dimensions: 6.4" Top D x 9.0" H x 9.8" Bottom D (16.3 cm x 22.9 cm x 24.9 cm)
- Two pre-molded side openings accommodate up to 2" (5.0 cm) diameter pipe
- VB-7RND: Black body and green lid
- VB-7RNDP: Black body and purple lid
- VB-7RND-BK: Black Body and black lid

6" ROUND SERIES (VB-6RND)

- Dimensions: 6.1" Top D x 9.0" H x 8.3" Bottom D (15.5 cm x 22.9 cm x 21.1 cm)
- Two pre-molded side openings accommodate up to 2" (5.0 cm) diameter pipe
- VB-6RND: Green body and green lid

LOCKING SYSTEMS VANDAL RESISTANT

- VB-LOCK-H: Hex head $\frac{3}{8}$ " x $2\frac{1}{4}$ " (1.0 x 5.7 cm) bolt, washer, and clip
- VB-LOCK-P: Penta head $\frac{3}{8}$ " x $2\frac{1}{4}$ " (1.0 x 5.7 cm) bolt, washer, and clip



Purple Valve Box Lids
to Identify Non-potable
Irrigation Systems

16A-FDV / 16A-FDV-075

Drain Valves Evacuate Lateral Lines After Each Irrigation Cycle to Reduce Damage Caused by Freezing

Features and Benefits

- Automatically drains water lines to prevent freezing
- Plastic perforated cap screens out large particles
- Dispersion pad filters out small particles

Specifications

- Pressure: Up to 125 psi (8.5 bar)
- Flow: 1 gpm (0.23 m³/h; 0.06 l/s) maximum rate before sealing
- Average opening pressure when installed vertically: 2.5 psi (0.2 bar)
- Average closing pressure when installed vertically: 5.5 psi (0.4 bar)
- Diameter: 1 3/8" (3.5 cm), Length: 1" (2.5 cm)

Models

- 16A-FDV: 1/2" (15/21) male threaded inlet
- 16A-FDV-075: 3/4" (20/27) male threaded inlet



16A-FDV

Facts About Rain Bird's Commitment to Support Water Conservation Efforts

Rain Bird has hosted 12 Intelligent Use of Water™ Summits since 2004



- Summits convene water, environmental and green industry experts from around the world to discuss strategies and initiatives in outdoor water conservation
- Past Summit locations: California; Arizona; Washington, DC; France; Spain; Australia
- View past Summit proceedings (via video and PDFs) at: <http://www.rainbird.com/corporate/IUOW/summits.htm>

Rain Bird presents The Intelligent Use of Water Film Competition



- Filmmakers and green industry professionals are invited to share their thoughts on responsible water use through the powerful medium of film
- The top short film submissions (1-10 minutes in length) are shown at a special screening event in LA
- Winners receive cash prizes
- To see past winning entries, go to: <http://www.iuowfilm.com>

Rain Bird educates our industry and our communities on water conservation



- Rain Bird has published four white papers that examine the global water crisis and explore potential solutions
- White papers available for free at: <http://www.rainbird.com/corporate/IUOW/whitepapers.htm>
- Rain Bird has published two educational curricula for elementary students and their teachers on water conservation
- Curricula available for free at: <http://www.rainbird.com/corporate/IUOW/education.htm>

Rain Bird sponsors National Public Gardens Day



- In partnership with the American Public Gardens Assoc. (APGA), Rain Bird seeks to raise awareness of the role botanic gardens, arboreta, conservatories and zoological gardens play as stewards of the environment
- National spokesperson Paul James (host of HGTV's Gardening by the Yard) conducts interviews with print, TV, radio and online outlets from across the country and hosts TV and radio public service announcements focusing on public gardens' educational activities in plant management and water conservation
- Celebrated the Friday before Mother's Day
- Visit <http://nationalpublicgardensday.org> to learn more

Rain Bird's Intelligent Use of Water Awards provide grants to promote outdoor water conservation



- The interactive grant program awards funds to water conservation and environmental sustainability projects that promote water conservation and green spaces in communities around the world.
- Visit <http://IUOWAwards.com> to learn more