

LANDSCAPE SOLUTIONS



Properly maintained clubhouse grounds and landscapes enhance the environment upon which the game is played, and create positive impressions that encourage repeat rounds or an increase in memberships. Rain Bird offers a number of landscape irrigation solutions — from sprays and nozzles to low-volume drip and root watering systems — that manage water responsibly, while promoting the growth of healthy, stress-free plants and grass areas. For a complete listing of landscape products, please consult the Rain Bird 2009–2010 Landscape Product catalog.



1800®-PRS Series

4", 6", 12" (10.2 cm, 15.2 cm, 30.5 cm)

- PRS pressure regulator built into the stem. No parts to be installed at the site. Saves time and money.
- Maintains constant outlet pressure at 30 psi (2.1 bar). Spray bodies and nozzles perform best at 30 psi. Ensures maximum spray body and nozzle performance, even with varying inlet pressures. Maintains constant pressure regardless of nozzle used.
- Ends misting and fogging caused by high pressure. Stops water waste. Ensures necessary watering occurs in high pressure or wind conditions.

FEATURES

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

1800®-SAM-PRS Series

4", 6", 12" (10.2 cm, 15.2 cm, 30.5 cm)

- Incorporates all the 1800 SAM and PRS features.
- Built-in Seal-A-Matic™ (SAM) check valve. Eliminates the need for under-the-head check valves.
- Traps water in lateral pipes in elevation changes of up to 14' (4.2 m). Reduces wear on system components by minimizing water hammer during start-up.
- Meets the needs of all spray areas, regardless of changing elevation.

FEATURES

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

OPERATING RANGE

Spacing: 2.5 to 24 feet (0.8 to 7.3 m)

Pressure:

PRS: 15 to 70 psi (1.0 to 4.8 bar)
PRS-SAM: 25 to 70 psi (1.7 to 4.8 bar)

SPECIFICATIONS

Flow-by: 0 at 8 psi (0.6 bar) or greater;
0.10 gpm (0.02 m³/h; 0.36 l/m) otherwise

Nozzle Pressure Regulation:

PRS/SAM-PRS Capability: Average 30 psi (2.1 bar) with inlet pressures of up to 70 psi (5.0 bar) (see graph)

SAM-PRS Capability: Holds up to 14 feet (4.2 m) of head; 6 psi (0.3 bar)

Installation:

PRS: Side or bottom inlet

Side inlet installation not recommended in freezing climates.

SAM-PRS: Bottom inlet only

Dimensions:

Inlet Threads: ½" (1.3 cm) (15/21) NPT female threaded inlets

Body height:

1804 PRS/SAM-PRS: 6" (15.2 cm)
1806 PRS/SAM-PRS: 9 ¾" (23.8 cm)
1812 PRS/SAM-PRS: 16" (40.6 cm)

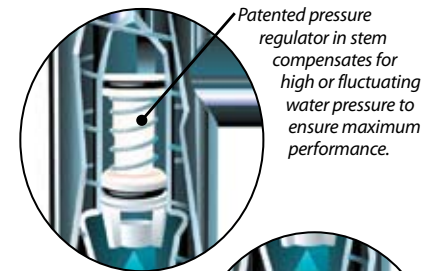
Exposed Surface Diameter: 2¼" (5.7 cm)

Models:

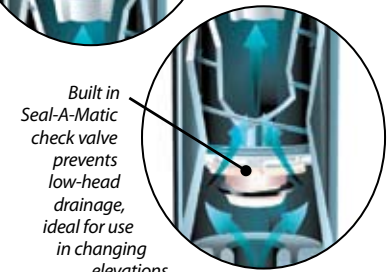
1804 PRS/SAM-PRS: 4" pop-up height (10.2 cm)
1806 PRS/SAM-PRS: 6" pop-up height (15.2 cm)
1812 PRS/SAM-PRS: 12" pop-up height (30.5 cm)



● 1800-PRS and 1800-SAM-PRS Series



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



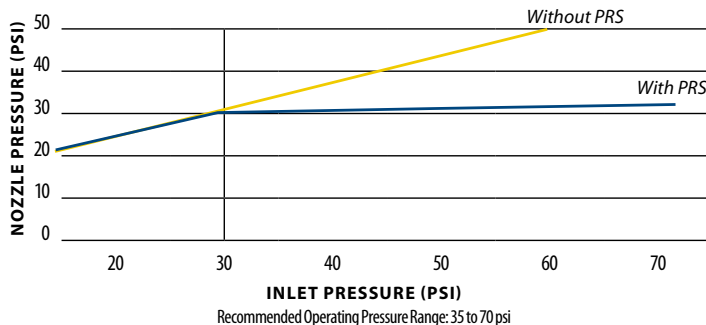
Built in Seal-A-Matic check valve prevents low-head drainage, ideal for use in changing elevations



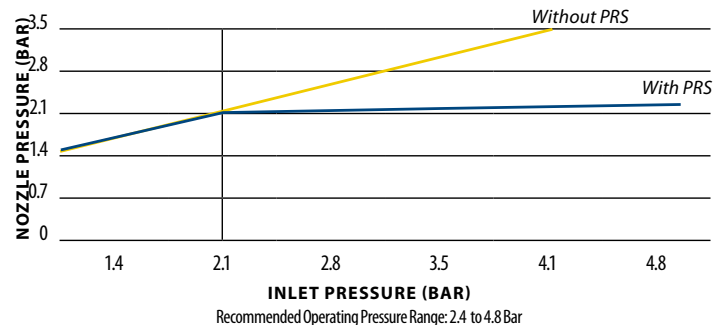
HOW TO SPECIFY

Model	Optional Feature	Nozzle Series/Pattern
1804	PRS	5F, H, T, Q
1806	SAM-PRS	8F, H, T, Q
1812		10F, H, T, Q
		12F, H, T, Q
		15F, TQ, H, T, Q

1800®-PRS PERFORMANCE — U.S.



1800®-PRS PERFORMANCE — METRIC



Performance data derived from tests that conform with ASAE Standards; ASAE S398.1, Procedure for Sprinkler Testing and Performance Reporting.

Variable Arc Nozzles

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

FEATURES

- Captured screw slot prevents screwdriver stripping.
- No special tools required.
- Stainless steel adjustment screw to adjust flow and radius.
- Tactile left edge indicator.
- Ideal for watering odd-shaped areas.
- Shipped with blue filter screen (0.02" x 0.02"; 0.05 cm x 0.05 cm) to maintain precise radius adjustment and prevent clogging.

OPERATING RANGE

Radius:*

- 4-VAN: 3 to 4 feet (0.9 to 1.2 m)
- 6-VAN: 4 to 6 feet (1.2 to 1.8 m)
- 8-VAN: 6 to 8 feet (1.8 to 2.4 m)
- 10-VAN: 8 to 10 feet (2.4 to 3.0 m)
- 12-VAN: 10 to 12 feet (3.0 to 3.7 m)
- 15-VAN: 12 to 15 feet (3.7 to 4.6 m)
- 18-VAN: 14 to 18 feet (4.3 to 5.5 m)

Models:

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

Pressure: 15 to 30 psi (1.0 to 2.1 bar)

Optimum Pressure: 30 psi (2.1 bar)**



* These ranges are based on proper pressure at nozzle. ** Rain Bird recommends using 1800° PRS spray heads to maintain optimum nozzle performance in higher pressure situations.

12 SERIES VAN — U.S.					
15° TRAJECTORY					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	Precip (in/hr)	Precip (in/hr)
	15	9	1.56	1.86	2.14
	20	10	1.86	1.79	2.06
	25	11	2.12	1.68	1.95
	30	12	2.36	1.58	1.82
	15	9	1.17	1.86	2.14
	20	10	1.39	1.79	2.06
	25	11	1.59	1.68	1.94
	15	9	0.78	1.86	2.14
	20	10	0.93	1.79	2.06
	25	11	1.06	1.68	1.95
	15	9	0.39	1.86	2.14
	20	10	0.46	1.79	2.06
	25	11	0.53	1.68	1.95
	30	12	0.59	1.58	1.82

15 SERIES VAN — U.S.					
23° TRAJECTORY					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	Precip (in/hr)	Precip (in/hr)
	15	11	2.60	2.07	2.39
	20	12	3.00	2.01	2.32
	25	14	3.30	1.62	1.87
	30	15	3.70	1.58	1.83
	15	11	1.95	2.07	2.39
	20	12	2.25	2.01	2.32
	25	14	2.48	1.62	1.87
	15	11	1.30	2.07	2.39
	20	12	1.50	2.01	2.32
	25	14	1.65	1.62	1.87
	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.82	1.62	1.87
	30	15	0.92	1.58	1.83

18 SERIES VAN — U.S.					
26° TRAJECTORY					
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	Precip (in/hr)	Precip (in/hr)
	15	14	4.21	2.07	2.39
	20	15	4.70	2.01	2.32
	25	17	4.86	1.62	1.87
	30	18	5.32	1.58	1.83
	15	14	3.16	2.07	2.39
	20	15	3.52	2.01	2.32
	25	17	3.65	1.62	1.87
	15	14	2.11	2.07	2.39
	20	15	2.35	2.01	2.32
	25	17	2.43	1.62	1.87
	15	14	1.05	2.07	2.39
	20	15	1.17	2.01	2.32
	25	17	1.22	1.62	1.87
	30	18	1.33	1.58	1.83

12 SERIES VAN — METRIC						
15° TRAJECTORY						
Nozzle	Pressure (Bar)	Radius (m)	Flow (m³/h)	Flow (l/m)	Precip (mm/h)	Precip (mm/h)
	1.0	2.7	0.35	5.80	48	55
	1.5	3.2	0.44	7.37	43	50
	2.0	3.6	0.52	8.75	41	47
	2.1	3.7	0.54	9.02	40	46
	1.0	2.7	0.26	4.35	48	55
	1.5	3.2	0.33	5.53	43	50
	2.0	3.6	0.39	6.56	41	47
	1.0	2.7	0.17	2.90	48	55
	1.5	3.2	0.22	3.69	43	50
	2.0	3.6	0.26	4.37	41	47
	1.0	2.7	0.09	1.45	48	55
	1.5	3.2	0.11	1.84	43	50
	2.0	3.6	0.13	2.19	41	47
	2.1	3.7	0.14	2.25	40	46

15 SERIES VAN — METRIC						
23° TRAJECTORY						
Nozzle	Pressure (Bar)	Radius (m)	Flow (m³/h)	Flow (l/m)	Precip (mm/h)	Precip (mm/h)
	1.0	3.4	0.60	9.8	52	60
	1.5	3.9	0.72	11.8	47	55
	2.0	4.5	0.84	13.7	41	48
	2.1	4.6	0.84	14.0	40	46
	1.0	3.4	0.45	7.4	52	60
	1.5	3.9	0.54	8.8	47	55
	2.0	4.5	0.63	10.3	41	48
	1.0	3.4	0.30	4.9	52	60
	1.5	3.9	0.36	5.9	47	55
	2.0	4.5	0.42	6.9	41	48
	1.0	3.4	0.15	2.5	52	60
	1.5	3.9	0.18	2.9	47	55
	2.0	4.5	0.21	3.4	41	48
	2.1	4.6	0.21	3.5	40	46

18 SERIES VAN — METRIC						
26° TRAJECTORY						
Nozzle	Pressure (Bar)	Radius (m)	Flow (m³/h)	Flow (l/m)	Precip (mm/h)	Precip (mm/h)
	1.0	4.3	0.96	15.9	52	60
	1.5	4.8	1.07	18.0	47	55
	2.0	5.4	1.20	19.8	41	48
	2.1	5.5	1.21	20.1	40	46
	1.0	4.3	0.72	12.0	52	60
	1.5	4.8	0.80	13.5	47	55
	2.0	5.4	0.90	14.8	41	48
	1.0	4.3	0.48	8.0	52	60
	1.5	4.8	0.54	9.0	47	55
	2.0	5.4	0.60	9.9	41	48
	1.0	4.3	0.24	4.0	52	60
	1.5	4.8	0.27	4.5	47	55
	2.0	5.4	0.30	5.0	41	48
	2.1	5.5	0.30	5.0	40	46

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

■ Square spacing based on 50% diameter of throw. ▲ Triangular spacing based on 50% diameter of throw. Performance data taken in zero wind conditions.

U-Series Nozzles

- Dual orifice spray nozzles that use 30% less water.¹
- Additional orifice for close-in watering. Minimizes brown spots around spray heads.
- Low scheduling coefficient for efficient watering. Use up to 30% less water.²
- Matched precipitation rate between sets and matched flow (gpm, m³/h and l/m) and precipitation rates with Rain Bird MPR Nozzles.

FEATURES

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

OPERATING RANGE

Spacing: 5 to 15 feet (1.8 to 4.6 m)

Pressure: 15 to 30 psi (1.0 to 2.1 bar)

Optimum Pressure: 30 psi (2.1 bar)³

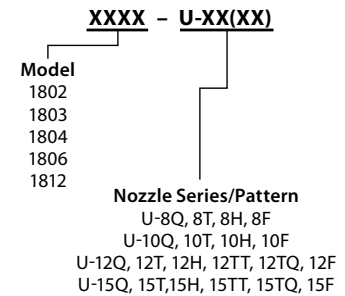
MODELS

- U-8Q:** 8-foot quarter-circle pattern nozzle
- U-8T:** 8-foot one-third-circle pattern nozzle
- U-8H:** 8-foot half-circle pattern nozzle
- U-8F:** 8-foot full-circle pattern nozzle
- U-10Q:** 10-foot quarter-circle pattern nozzle
- U-10T:** 10-foot one-third-circle pattern nozzle
- U-10H:** 10-foot half-circle pattern nozzle
- U-10F:** 10-foot full-circle pattern nozzle
- U-12Q:** 12-foot quarter-circle pattern nozzle
- U-12T:** 12-foot one-third-circle pattern nozzle
- U-12H:** 12-foot half-circle pattern nozzle
- U-12TT:** 12-foot two-thirds-circle pattern nozzle
- U-12TQ:** 12-foot three-quarter-circle pattern nozzle
- U-12F:** 12-foot full-circle pattern nozzle
- U-15Q:** 15-foot quarter-circle pattern nozzle
- U-15T:** 15-foot one-third-circle pattern nozzle
- U-15H:** 15-foot half-circle pattern nozzle
- U-15TT:** 15-foot two-thirds-circle pattern nozzle
- U-15TQ:** 15-foot three-quarter-circle pattern nozzle
- U-15F:** 15-foot full-circle pattern nozzle



U-Series Nozzles

HOW TO SPECIFY



¹When U-Series dual-orifice nozzles are installed instead of standard nozzles on every spray head in the zone. Results may vary based on site-specific conditions such as sprinkler spacing, wind, temperature, soil and grass type.

²Scheduling Coefficient (SC) measures the efficiency of spray heads. SC measures how much more you must water your ENTIRE area for the driest sections to receive sufficient water. The lower the SC, the better the spray heads distribute water.

³Rain Bird recommends using 1800° PRS spray heads to maintain optimum nozzle performance in higher pressure situations.

U-12 SERIES											
U.S.						METRIC					
23° TRAJECTORY											
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	Precip (in/hr)	Precip (in/hr)	Pressure (bar)	Radius (m)	Flow (m ³ /h)	Flow (l/m)	Precip (mm/h)	Precip (mm/h)
U-12F	15	9	1.80	2.14	2.47	1.0	2.7	0.40	6.8	55	63
	20	10	2.10	2.02	2.34	1.5	3.2	0.48	8.3	47	54
	25	11	2.40	1.91	2.21	2.0	3.6	0.59	9.7	46	53
	30	12	2.60	1.74	2.01	2.1	3.7	0.60	9.8	44	51
U-12TQ	15	9	1.35	2.14	2.47	1.0	2.7	0.30	5.1	55	63
	20	10	1.58	2.02	2.34	1.5	3.2	0.36	6.3	47	54
	25	11	1.80	1.91	2.21	2.0	3.6	0.45	7.3	46	53
	30	12	1.95	1.74	2.01	2.1	3.7	0.45	7.4	44	51
U-12TT	15	9	1.20	2.14	2.47	1.0	2.7	0.26	4.5	55	63
	20	10	1.40	2.02	2.34	1.5	3.2	0.32	5.6	47	54
	25	11	1.60	1.91	2.21	2.0	3.6	0.40	6.5	46	53
	30	12	1.74	1.74	2.01	2.1	3.7	0.40	6.6	44	51
U-12H	15	9	0.90	2.14	2.47	1.0	2.7	0.20	3.4	55	63
	20	10	1.05	2.02	2.34	1.5	3.2	0.24	4.2	47	54
	25	11	1.20	1.91	2.21	2.0	3.6	0.30	4.8	46	53
	30	12	1.30	1.74	2.01	2.1	3.7	0.30	4.9	44	51
U-12T	15	9	0.60	2.14	2.47	1.0	2.7	0.13	2.3	55	63
	20	10	0.70	2.02	2.34	1.5	3.2	0.16	2.8	47	54
	25	11	0.80	1.91	2.21	2.0	3.6	0.20	3.2	46	53
	30	12	0.87	1.74	2.01	2.1	3.7	0.20	3.3	55	51
U-12Q	15	9	0.45	2.14	2.47	1.0	2.7	0.10	1.7	55	63
	20	10	0.53	2.02	2.34	1.5	3.2	0.12	2.1	47	54
	25	11	0.60	1.91	2.21	2.0	3.6	0.15	2.4	46	53
	30	12	0.65	1.74	2.01	2.1	3.7	0.15	2.5	55	51

U-15 SERIES											
U.S.						METRIC					
23° TRAJECTORY											
Nozzle	Pressure (psi)	Radius (ft)	Flow (gpm)	Precip (in/hr)	Precip (in/hr)	Pressure (bar)	Radius (m)	Flow (m ³ /h)	Flow (l/m)	Precip (mm/h)	Precip (mm/h)
U-15F	15	11	2.60	2.07	2.39	1.0	3.4	0.60	9.8	52	60
	20	12	3.00	2.01	2.32	1.5	3.9	0.72	11.8	47	55
	25	14	3.30	1.62	1.87	2.0	4.5	0.84	13.7	41	48
	30	15	3.70	1.58	1.83	2.1	4.6	0.84	14.0	40	46
U-15TQ	15	11	1.95	2.07	2.39	1.0	3.4	0.45	7.4	52	60
	20	12	2.25	2.01	2.32	1.5	3.9	0.54	8.8	47	55
	25	14	2.48	1.62	1.87	2.0	4.5	0.63	10.3	41	48
	30	15	2.78	1.58	1.83	2.1	4.6	0.63	10.5	40	46
U-15TT	15	11	1.74	2.07	2.39	1.0	3.4	0.40	6.6	52	60
	20	12	2.01	2.01	2.32	1.5	3.9	0.48	7.9	47	55
	25	14	2.21	1.62	1.87	2.0	4.5	0.55	9.2	41	48
	30	15	2.48	1.58	1.83	2.1	4.6	0.56	9.4	40	46
U-15H	15	11	1.30	2.07	2.39	1.0	3.4	0.30	4.9	52	60
	20	12	1.50	2.01	2.32	1.5	3.9	0.36	5.9	47	55
	25	14	1.65	1.62	1.87	2.0	4.5	0.42	6.9	41	48
	30	15	1.85	1.58	1.83	2.1	4.6	0.42	7.0	40	46
U-15T	15	11	0.87	2.07	2.39	1.0	3.4	0.20	3.3	52	60
	20	12	1.00	2.01	2.32	1.5	3.9	0.24	3.9	47	55
	25	14	1.10	1.62	1.87	2.0	4.5	0.28	4.6	41	48
	30	15	1.23	1.58	1.83	2.1	4.6	0.28	4.7	40	46
U-15Q	15	11	0.65	2.07	2.39	1.0	3.4	0.15	2.5	52	60
	20	12	0.75	2.01	2.32	1.5	3.9	0.18	2.9	47	55
	25	14	0.82	1.62	1.87	2.0	4.5	0.21	3.4	41	48
	30	15	0.92	1.58	1.83	2.1	4.6	0.21	3.5	40	46

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

■ Square spacing based on 50% diameter of throw. ▲ Triangular spacing based on 50% diameter of throw. Performance data taken in zero wind conditions.

Rotary Nozzles

- Low precipitation rate of 0.60 in/hr (15.2 mm/hr) reduces run-off and erosion.
- With approximately 60% less flow than conventional spray nozzles, Rotary Nozzles allow more heads per zone, reducing overall system complexity and cost.
- Multiple, rotating streams uniformly distribute water throughout the 13' to 24' radius range.

FEATURES

A Spray Nozzle with Rain Curtain Performance

- Large droplets for consistent performance.
- Effective close-in watering.
- Even distribution over the entire radius.

Installation and Maintenance

- Designed for use on Rain Bird® Spray bodies.
- Color-coded radius reduction screws for easy identification.
- Stainless steel radius reduction screw allows reduction down to 13' on the R13-18 and to 17' on the R17-24 to accommodate varying landscape needs.
- Maintains highly efficient performance throughout the 20–55 psi pressure range, with no misting or fogging at high pressures.

Design Solutions

- Matched precipitation rate across radii and pattern simplify the design process.
- Matched precipitation rate with Rain Bird 5000/5000 Plus MPR Rotor Nozzles allow MPR irrigation designs from 13' to 35'.
- Maintains highly efficient performance throughout the 20 to 55 psi pressure range, with no misting or fogging at high pressures.

Durability

- Rubber collar keeps out large debris particles while enabling small ones to exit easily to keep deflector clean and clear of debris.
- Screen mesh size prevents large debris from entering nozzle through spray.
- Three-year trade warranty.

OPERATING RANGE

Pressure range: 20-55 psi (1.4 to 3.8 bar)

Spacing: 13' to 24' (4.0 m to 7.3 m)

Above spacing based on zero wind conditions.

Recommend spacing 13' – 22' (4.0 m to 6.8 m).

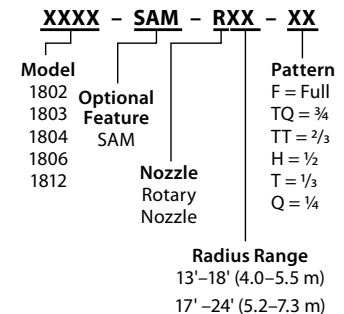
MODELS

- There are six different patterns available which are available in two radius* ranges:
 - » 13' to 18' (4.0 m to 5.5 m)
 - » 17' to 24' (5.2 m to 7.3 m)



Rotary Nozzle

HOW TO SPECIFY



Note: Specify sprinkler bodies and nozzles separately. Installation on Rain Bird 1800®-SAM Spray Heads recommended in sandy environments.

R13-18 SERIES (BLACK)										
U.S.						METRIC				
Arc	Pressure (psi)	Radius (ft)	Flow (gpm)	Precip (in/hr)	Precip (in/hr)	Pressure (bar)	Radius (m)	Flow (l/m)	Precip (mm/h)	Precip (mm/h)
	20	13	1.31	0.75	0.86	1.4	4.0	4.95	19	22
	25	14	1.46	0.67	0.77	1.7	4.3	5.53	18	21
	30	16	1.60	0.61	0.70	2.1	4.8	6.06	15	18
	20	13	0.98	0.75	0.86	1.4	4.0	3.71	19	22
	25	14	1.10	0.67	0.77	1.7	4.3	4.15	18	21
	30	16	1.20	0.61	0.70	2.1	4.8	4.54	15	18
	20	13	0.87	0.75	0.86	1.4	4.0	3.30	19	22
	25	14	0.97	0.67	0.77	1.7	4.3	3.69	18	21
	30	16	1.07	0.61	0.70	2.1	4.8	4.04	15	18
	20	13	0.65	0.75	0.86	1.4	4.0	2.47	19	22
	25	14	0.73	0.67	0.77	1.7	4.3	2.76	18	21
	30	16	0.80	0.61	0.70	2.1	4.8	3.03	15	18
	20	13	0.44	0.75	0.86	1.4	4.0	1.65	19	22
	25	14	0.49	0.67	0.77	1.7	4.3	1.84	18	21
	30	16	0.53	0.61	0.70	2.1	4.8	2.02	15	18
	20	13	0.33	0.75	0.86	1.4	4.0	1.24	19	22
	25	14	0.37	0.67	0.77	1.7	4.3	1.38	18	21
	30	16	0.40	0.61	0.70	2.1	4.8	1.51	15	18

R17-24 SERIES (YELLOW)										
U.S.						METRIC				
Arc	Pressure (psi)	Radius (ft)	Flow (gpm)	Precip (in/hr)	Precip (in/hr)	Pressure (bar)	Radius (m)	Flow (l/m)	Precip (mm/h)	Precip (mm/h)
	20	17	2.45	0.79	0.92	1.4	5.2	9.27	20	23
	25	19	2.74	0.71	0.82	1.7	5.8	10.37	18	21
	30	21	3.00	0.65	0.75	2.1	6.4	11.36	16	19
	20	17	1.84	0.79	0.92	1.4	5.2	6.95	20	23
	25	19	2.05	0.71	0.82	1.7	5.8	7.78	18	21
	30	21	2.25	0.65	0.75	2.1	6.4	7.57	16	19
	20	17	1.63	0.79	0.92	1.4	5.2	6.18	20	23
	25	19	1.83	0.71	0.82	1.7	5.8	6.91	18	21
	30	21	2.00	0.65	0.75	2.1	6.4	7.57	16	19
	20	17	1.22	0.79	0.92	1.4	5.2	4.62	20	23
	25	19	1.37	0.71	0.82	1.7	5.8	5.19	18	21
	30	21	1.50	0.65	0.75	2.1	6.4	5.68	16	19
	20	17	0.82	0.79	0.92	1.4	5.2	3.09	20	23
	25	19	0.91	0.71	0.82	1.7	5.8	3.46	18	21
	30	21	1.00	0.65	0.75	2.1	6.4	3.79	16	19
	20	17	0.61	0.79	0.92	1.4	5.2	2.31	20	23
	25	19	0.68	0.71	0.82	1.7	5.8	2.57	18	21
	30	21	0.75	0.65	0.75	2.1	6.4	2.84	16	19

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

■ Square spacing based on 50% diameter of throw. ▲ Triangular spacing based on 50% diameter of throw. Performance data taken in zero wind conditions.

Xerigation® / Landscape Drip System Overview

TARGETED WATERING WITH XERIGATION®/LANDSCAPE DRIP

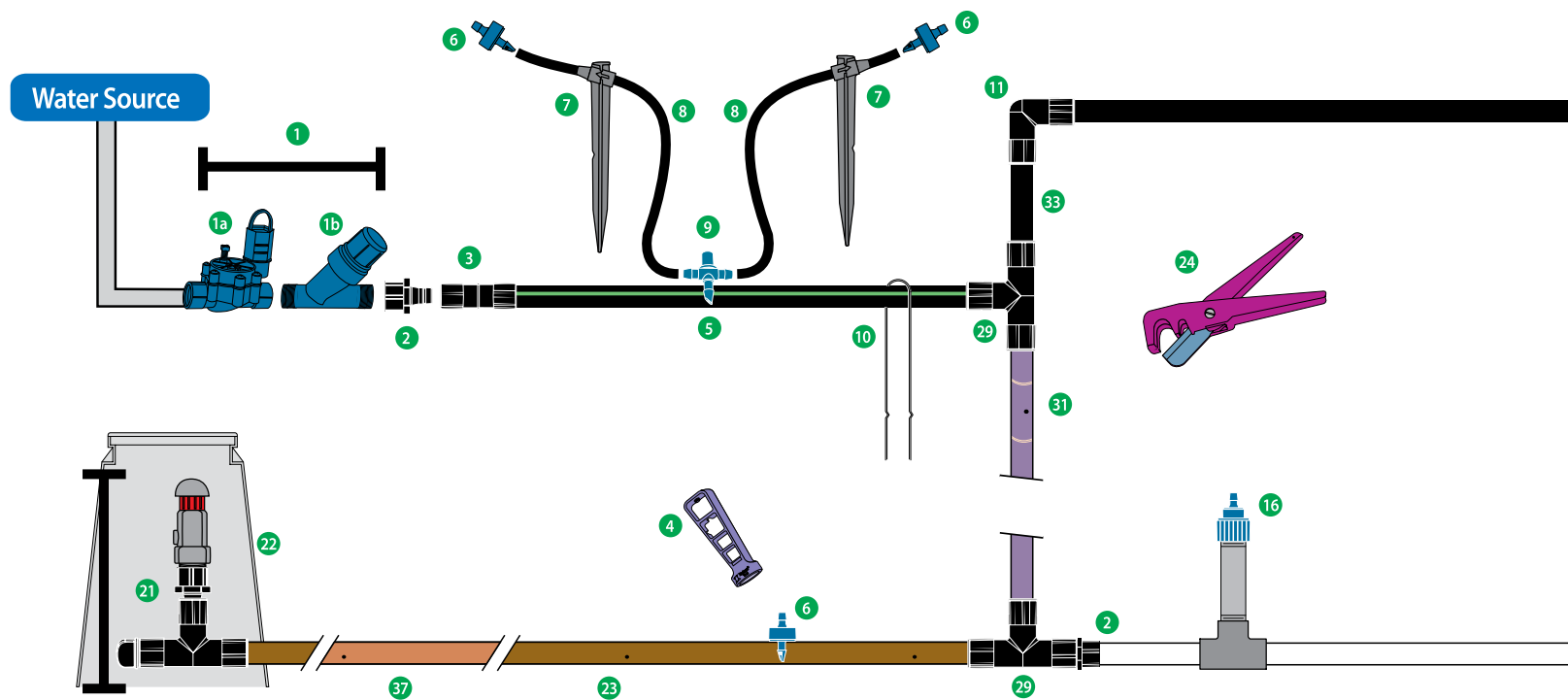
Rain Bird's® Xerigation®/Landscape Drip products are made especially for low-volume irrigation systems. By delivering water at or near the plants' root zones, Rain Bird's Xerigation products offer targeted watering with the following advantages:

- Water conservation
- Greater efficiency (target each plant)
- Design flexibility; simple construction and easily expandable
- Healthier plants
- Reduced liability (e.g. no overspray, no run-off)
- Minimization of weed growth
- Cost savings

BROADEST PRODUCT LINE IN THE INDUSTRY

With over 150 products, Rain Bird has the products needed for your application. Systems can be designed to meet any site requirements and offer many exclusive Rain Bird advances including:

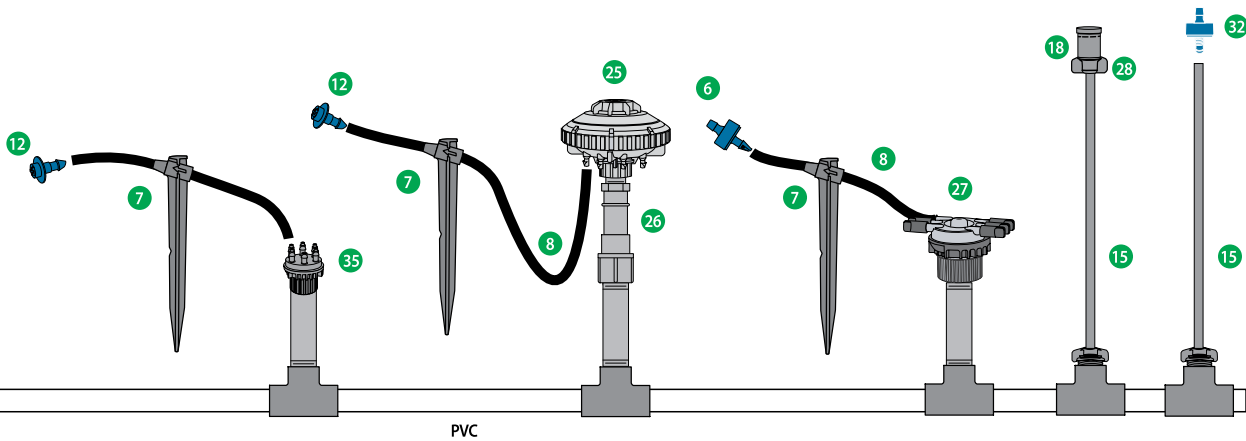
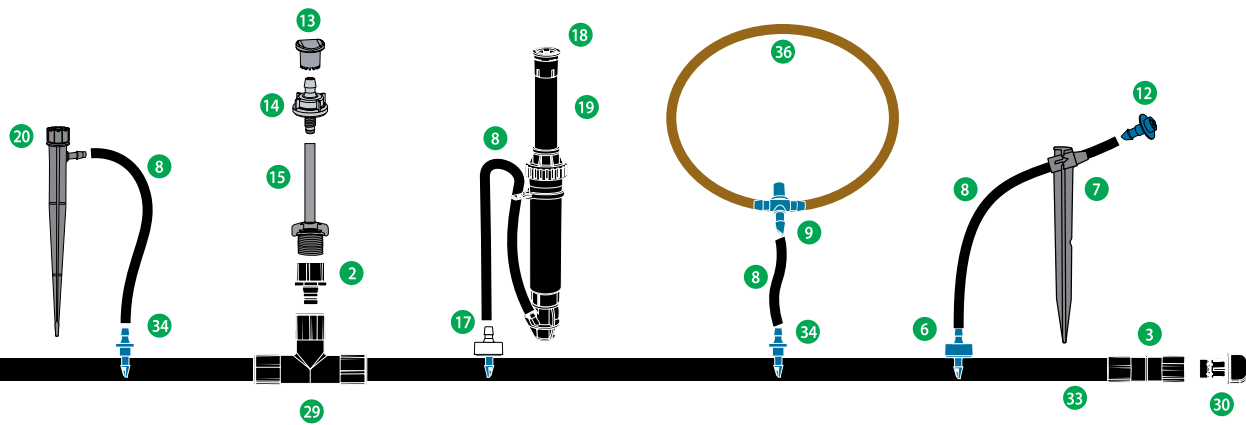
- Flexible XF Series dripline with advanced polymers that provide kink resistance and reduced coil memory for easier installation.
- Compact Control Zones with combined pressure regulator and filter to reduce parts, potential leak problems and allow for fitting more Control Zones in a valve box.
- Precision low volume SQ spray nozzles that offer a square wetting pattern and adjusts to either 2.5' or 4' (0.7 m or 1.2 m) throw distances.
- Point source emitters that provide pressure compensation with a wide selection of flow rates and three inlet options (barb, 1032 threaded and ½" (1.3 cm) FPT).
- XF-SDI Series dripline with Copper Shield™ Technology for use in sub-surface applications under turf or shrub and groundcover areas. Copper Shield Technology effectively protects the emitter from root intrusion.



1. Control Zone Kit
 - 1a. Low Flow Valve
 - 1b. Pressure Regulating Filter
2. Easy Fit Female Adapter
3. Easy Fit Coupling
4. Xeriman Tool

5. Xeri-Black Stripe Tubing
6. Xeri-Bug Emitter
7. ¼" Tubing Stake
8. XQ ¼" Distribution Tubing
9. ¼" Barb Tee
10. Tie-Down Stake

11. Easy Fit Elbow
12. Diffuser Bug Cap
13. PC Emitter Diffuser Cap
14. PC Module – 1032
15. PolyFlex Riser Assembly
16. Xeri-Bug Emitter – ½" FPT



- 17. 1/4" Self-Piercing Barb Connector
- 18. SQ Series Nozzle (formerly XPCN)
- 19. Xeri-Pop
- 20. Xeri-Bubbler SPYK
- 21. Air Relief Valve Kit
- 22. SEB-7X Emitter Valve Box
- 23. XF Dripline
- 24. Tubing Cutter

- 25. Xeri-Bird 8
- 26. Inline Pressure Regulator
- 27. 6 Outlet Manifold
- 28. SQ Series Nozzle Adapter
- 29. Easy Fit Tee
- 30. Easy Fit Flush Cap
- 31. Purple XF Dripline
- 32. Xeri-Bug Emitter – 1032

- 33. XT-700 Distribution Tubing
- 34. 1/4" Barb Connector
- 35. Multi-Outlet Xeri-Bug
- 36. 1/4" Landscape Dripline
- 37. XF-SDI Sub-surface Dripline with Copper Shield Technology

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.
- Self-contained and factory assembled units for assured reliability.
- Variety of models available to accommodate design flexibility.

For the RWS Model:

- 4" (10 cm) retaining cap and vandal-resistant locking grate tops a 36" (91 cm) semi-rigid mesh tube.
- Factory installed swing assemblies (excluding RWS-BGX) with a 1401 (0.25 gpm; 0.95 lpm), 1402 (0.5 gpm; 1.9 lpm), 1404 (1.00 gpm; 3.8 lpm) or 1408 (2.00 gpm; 7.6 lpm) bubbler on a riser makes connecting to lateral lines easy.
- Optional sand sock is ideal for use in sandy soil.

For the RWS-Mini:

- 4" (10 cm) retaining cap and vandal resistant locking grate tops a 18" (46 cm) semi-rigid mesh tube.
- Factory-installed ½" (1 cm) 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 cm) snap-on cap and base cap enclose a 10" (25 cm) semi-rigid mesh tube.
- Factory installed ½" (1 cm) spiral barb elbow with 1401 bubbler makes connecting to lateral lines easy.
- Right size for shrubs, hedges or small ornamental planting.



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 the RWS canister.

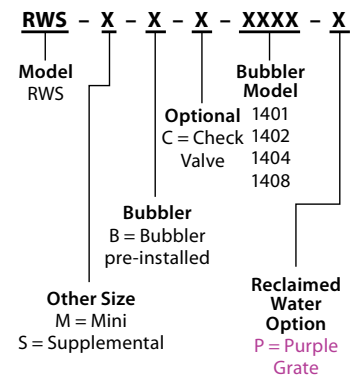
RWS purple grate for non-potable water



RWS integrated collar and locking grate retainer.

● Root Watering System

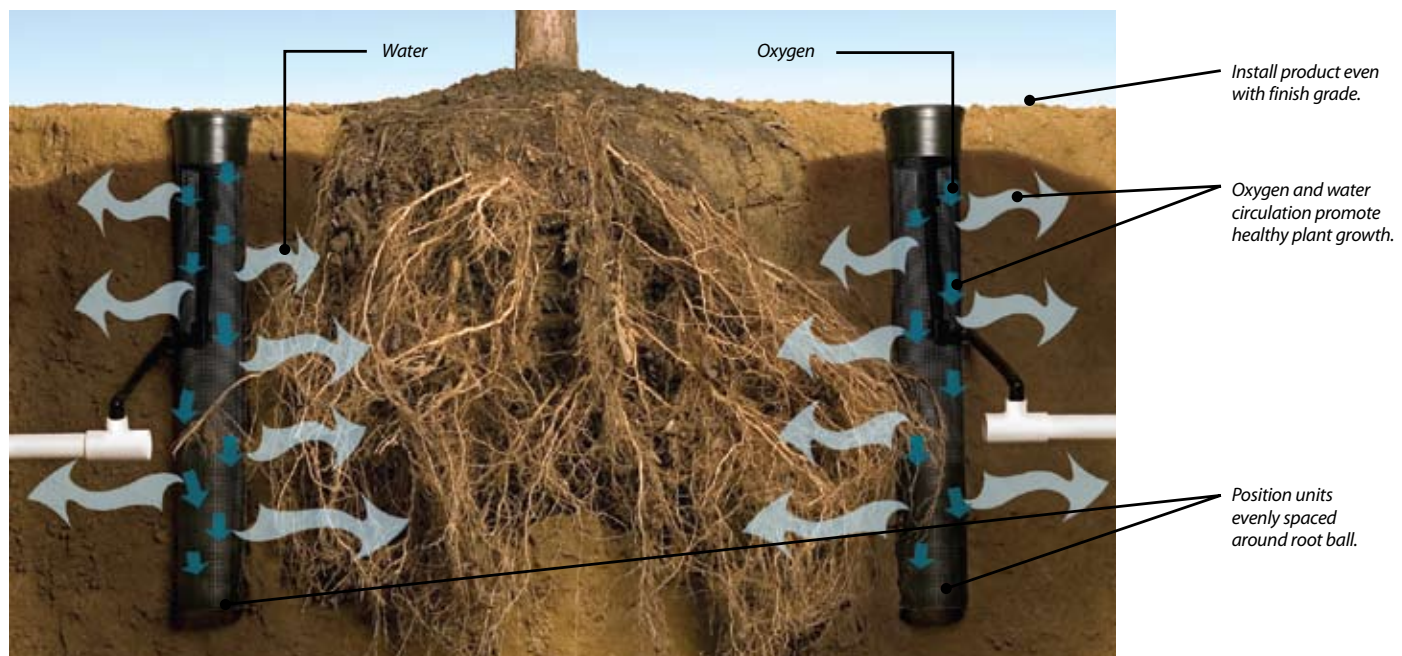
HOW TO SPECIFY



DIMENSIONS

- **Root Watering:** 4" (10 cm) diameter x 36" (91 cm) length
- **Root Watering-Mini:** 4" (10 cm) diameter x 18" (46 cm) length
- **Root Watering-Supplemental:** 2" (5 cm) diameter x 10" (25 cm) length

RWS MODELS/SPECIFICATIONS				
MODEL	BUBBLER	CHECK VALVE	SWING ASSEMBLY with ½" (1.3 cm) (15/21) M NPT Inlet	SPIRAL BARB ELBOW with ½" (1.3 cm) (15/21) M NPT Inlet
ROOT WATERING (36" (91 cm) length with 4" (10 cm) vandal-resistant locking grate)				
RWS	Ideal for ¼" (0.6 cm) drip tubing or customer-provided hardware	–	–	–
RWS-B-C-1401	0.25 gpm (0.95 lpm)	Yes	Yes	–
RWS-B-1401	0.25 gpm (0.95 lpm)	–	Yes	–
RWS-B-X-1401	0.25 gpm (0.95 lpm)	–	Yes (18")	–
RWS-B-C-1402	0.50 gpm (1.90 lpm)	Yes	Yes	–
RWS-B-1402	0.50 gpm (1.90 lpm)	–	Yes	–
RWS-B-C-1404	1.00 gpm (3.80 lpm)	Yes	Yes	–
RWS-B-C-1408	2.00 gpm (7.60 lpm)	Yes	Yes	–
ROOT WATERING-MINI (18" (46 cm) length with 4" (10 cm) vandal-resistant locking grate)				
RWS-M	Ideal for ¼" (0.6 cm) drip tubing or customer-provided hardware	–	–	–
RWS-M-B-C-1041	0.25 gpm (0.95 lpm)	Yes	–	Yes
RWS-M-B-1401	0.25 gpm (0.95 lpm)	–	–	Yes
RWS-M-B-C-1402	0.50 gpm (1.90 lpm)	Yes	–	Yes
RWS-M-B-1402	0.50 gpm (1.90 lpm)	–	–	Yes
ROOT WATERING-SUPPLEMENTAL (10" (25 cm) length with 2" (5 cm) snap-on cap and base)				
RWS-S-B-C-1401	0.25 gpm (0.95 lpm)	Yes	–	Yes
RWS-S-B-1401	0.25 gpm (0.95 lpm)	–	–	Yes
ROOT WATERING-ACCESSORIES				
RWS-SOCK (Root Watering Sand Sock) (6 per bag)				
RWS-GRATE-P (Root Watering Series Purple Grate for RWS and RWS-M)				



VB SERIES VALVE BOXES

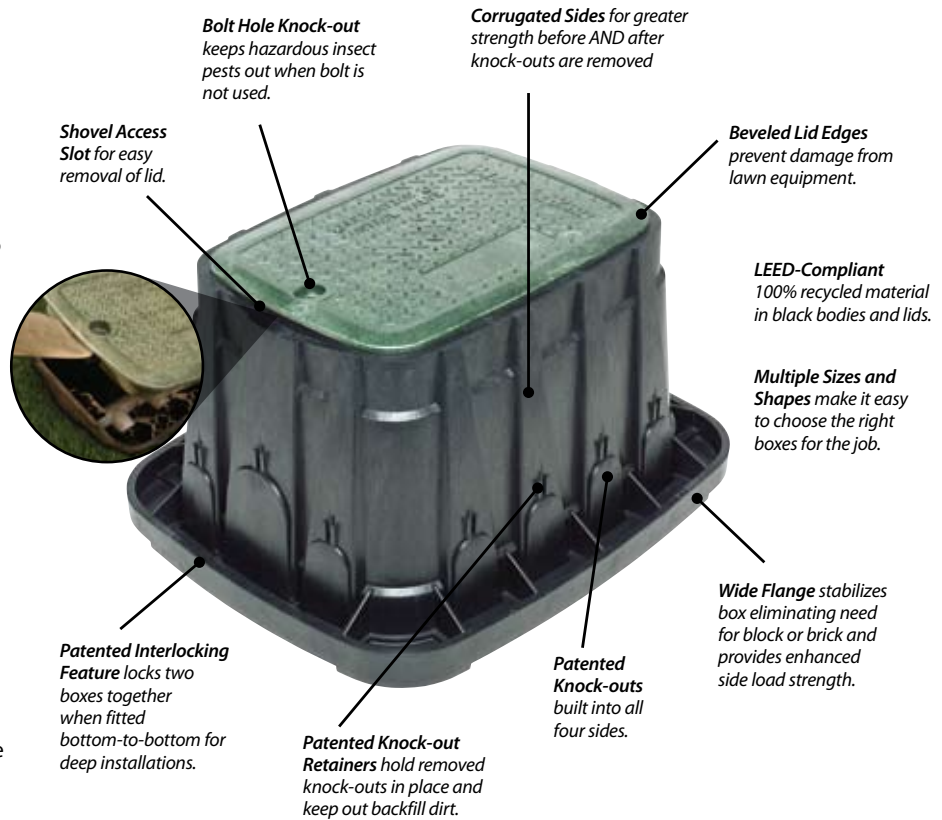
Valve boxes provide superior box strength for better valve protection.

- Wide flange with corrugated structure provides superior box strength for better valve protection.
- Unique shovel access slot provides superior accessibility for service.
- Earth-friendly LEED-compliant material made of 100% recycled materials (black boxes and black lids only).
- Unique pipe hole knockout provides faster and easier installation.

FEATURES AND BENEFITS

These features apply to the Standard, Jumbo, Super Jumbo, and 10" (25.4 cm) Round Valve Boxes:

- Unique bolt hole knock-out design in lid keeps hazardous insect pest 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 valve identification.



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

DIMENSIONS AND ACCOMMODATIONS

VB VALVE BOXES	6" ROUND SERIES (VB-6RND)	7" ROUND SERIES (VB-7RND)	10" ROUND SERIES (VB-10RND)	STANDARD RECTANGULAR SERIES (VB-STD)	JUMBO RECTANGULAR SERIES (VB-JMB)	SUPER JUMBO RECTANGULAR SERIES (VB-SPR)	MAXI JUMBO RECTANGULAR SERIES (VB-MAX)
EXTERNAL DIMENSIONS	6.1" Top Diam x 9.0" H x 8.3" Bottom Diam (15.5 cm x 22.9 cm x 21.1 cm)	6.4" Top Diam x 9.0" H x 9.8" Bottom Diam (16.3 cm x 22.9 cm x 24.9 cm)	10.25" Top Diam x 10.0" H x 13.75" Bottom Diam (26.0 cm x 25.4 cm x 34.9 cm)	21.8" L x 16.6" W x 12.0" H (55.4 cm x 42.2 cm x 30.5 cm)	26.3" L x 19.8" W x 12.1" H (66.8 cm x 50.3 cm x 30.7 cm)	31.1" L x 23.8" W x 15.0" H (84.1 cm x 60.5 cm x 38.1 cm)	40.3" L x 27.1" W x 18.0" H (102.4 cm x 68.8 cm x 45.7 cm)
ACCOMMODATIONS	Two pre-molded side openings accommodate up to a 2" (5.0 cm) diameter pipe.	Four equally spaced knock-outs accommodate up to a 2" (5.0 cm) diameter pipe.	Four equally spaced knock-outs accommodate up to a 2" (5.0 cm) diameter pipe. (Extension does not have knock-outs.)	Two large center knock-outs accommodate up to a 3 1/2" (8.9 cm) diameter pipe and twelve knock-outs accommodate up to 2" (5.0 cm) diameter pipe.	Two large center knock-outs accommodate up to a 3 1/2" (8.9 cm) diameter pipe.	Sixteen knock-outs accommodate up to a 3 1/2" (8.9 cm) diameter pipe. Includes two stainless steel bolts and clips to securely fasten the lid to the body.	Sixteen knock-outs accommodate up to a 3 1/2" (8.9 cm) diameter pipe. Includes two stainless steel bolts and clips to securely fasten the lid to the body.

VALVE BOX EXTENSIONS	STANDARD 6" (VB-STD-6EXT)	JUMBO 6" (VB-JMB-6EXT)
EXTERNAL DIMENSIONS	20.0" L x 14.75" W x 6.75" H (50.8 cm x 37.5 cm x 17.1 cm)	24.4" L x 17.9" W x 6.75" H (62.0 cm x 45.5 cm x 17.1 cm)

