Drip Irrigation

### Major Products

<table>
<thead>
<tr>
<th>Primary Applications</th>
<th>Single outlet emitter</th>
<th>Multi-outlet emitter</th>
<th>Bubbler emitter</th>
<th>Spray</th>
<th>Inline emitter (Dripline)</th>
<th>RWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thick bushes</td>
<td></td>
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<tr>
<td>Single bush</td>
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<tr>
<td>Small trees</td>
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<tr>
<td>Large trees</td>
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<tr>
<td>Ground cover</td>
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<tr>
<td>Annuals</td>
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<td>Mixed vegetation</td>
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<tr>
<td>Potted plants</td>
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<tr>
<td>Hedges</td>
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<td></td>
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<tr>
<td>Vegetation on slopes</td>
<td></td>
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</tr>
</tbody>
</table>

### Water Saving Tips

- Drip products deliver water directly to the root zone. Use dripline for dense plantings where it’s cost effective to distribute low-volume water evenly. Use a system of precise emitter devices for sparse plantings where it’s cost effective to separately irrigate each plant.
- Use drip to eliminate overspray, and you’ll eliminate waste. Eliminate unsightly spray stains on buildings and fences. Eliminate soil erosion, water runoff, and potential litigation. Walkways, roads, and vehicles stay dry.
- Ask your tax advisor about capital depreciation when calculating your return-on-investment for a drip retrofit. Save water, and save money at the same time.

www.rainbird.com
Landscape Drip System Overview

1. Control Zone Kit (pg. 144)
1a. Low Flow Valve (pg. 153)
1b. Pressure Regulating Filter (pg. 154)
2. Easy Fit Female Adapter (pg. 138)
3. Easy Fit Coupling (pg. 138)
4. Xeriman Tool (pg. 112)
5. XF Series Blank Tubing (pg. 140)
6. Xeri-Bug Emitter (pg. 112)
7. ¼" Tubing Stake (pg. 123)
8. XQ ¼" Distribution Tubing (pg. 142)
9. ¼" Barb Tee (pg. 143)
10. Tie-Down Stake (pg. 143)
11. Easy Fit Elbow (pg. 138)
12. Diffuser Bug Cap (pg. 123)
13. PC Emitter Diffuser Cap (pg. 123)
14. PC Module-1032 (pg. 116)
15. PolyFlex Riser Assembly (pg. 124)
16. Xeri-Bug Emitter - ½" FPT (pg. 112)
17. ¼" Self-Piercing Barb Connector (pg. 114)
18. SQ Series Square Nozzle (pg. 118)
19. Xeri-Pop (pg. 120)
20. Xeri-Bubbler SPYK (pg. 121)
21. ARV050 Air Relief Valve Kit (pg. 139)
22. SEB-7X Emitter Valve Box (pg. 143)
23. XFD Dripline (pg. 127)
24. Tubing Cutter (pg. 143)
25. Xeri-Bird 8 (pg. 115)
Targeted Watering with Landscape Drip
Rain Bird Xerigation®/Landscape Drip products are made especially for low-volume irrigation systems. By delivering water at or near the plants’ root zones, Rain Bird 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 runoff)
• 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 adjust to either 2.5’ or 4’ 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” FPT)
• XFS and XFS-CV dripline with Copper Shield Technology™ for use in sub-surface applications under turf or shrub and groundcover areas. The copper chip effectively protects the emitter from root intrusion

26. Retrofit Pressure Regulator (pg. 155)
27. 6 Outlet Manifold (pg. 114)
28. SQ Series Nozzle Adapter (pg. 118)
29. Easy Fit Tee (pg. 138)
30. Easy Fit Flush Cap (pg. 138)
31. Purple XF Dripline (pg. 127)
32. Xeri-Bug Emitter - 1032 (pg. 112)
33. XF Series Blank Tubing (pg. 140)
34. ¼” Barb Connector (pg. 143)
35. Multi-Outlet Xeri-Bug (pg. 114)
36. ¼” Landscape Dripline (pg. 142)
37. XFS-CV Sub-Surface Dripline with Copper Shield Technology (pg. 133)
38. RETRO-1800 Spray-to-Drip Retrofit Kit (pg. 159)
39. XT-025 ½” FPT x Barb Grey Transfer Fitting (pg. 114)
40. XFF Coupling (pg. 137)
41. PCT Bubbler (pg. 116)
42. XFCV Dripline with Heavy-Duty check valve (pg. 129)
43. RWS (Root Watering System) (pg. 125)
44. XF Insertion Tool (pg. 139)
45. PEB Valve (pg. 67)
46. Quick-Check Pressure Regulating Filter (pg. 157)
47. QF Dripline Header (pg. 135)
48. XF Series Dripline (XFD/XFS/XFCV/XFS-CV) (pg. 127-133)
49. Operation Indicator (pg. 139)
50. Twist Lock Fittings (pg. 136)
### Xeri-Bug™ Emitters

Point-Source Low-Flow Emitters for Watering the Root Zones of Plants, Trees, and Container Plants

**Features**
- The only emitters with self-piercing barbs, making them the easiest to install using the Xeriman™ tool
- Widest selection of pressure-compensating emitters, with 3 flow rates and 3 inlet options
- Most compact and unobtrusive emitters
- Flow-rates of 0.5, 1.0 and 2.0 gph (1.89, 3.79 and 7.57 l/h)
- Pressure-compensating design delivers uniform flow throughout a wide pressure range (15 to 50 psi; 1.0 to 3.5 bar)
- Available with 3 different inlets (1.0 and 2.0 models):
  - Self-piercing barb for quick, one-step insertion into 1/2” or 3/4” drip tubing
  - 10-32 threaded inlet that easily threads into a PolyFlex Riser (see page 124), 1032 Thread adapter (page 124) or 1800 Xeri-Bubbler Adapter (page 124)
  - 1/2” FPT inlet that easily threads onto a 1/2” PVC riser (1.0 and 2.0 gph models)
- Outlet barb securely retains 1/4” Distribution Tubing (XQ)
- Design makes installation and maintenance easy
  - Self-flushing action minimizes clogging
  - Robust design made from highly inert materials that are resistant to chemicals
  - Durable plastic construction is UV-resistant
- Color-coded to identify flow rate

**Operating Range**
- Flow: 0.5 to 2.0 gph (1.89 to 7.57 l/h)
- Pressure: 15 to 50 psi (1.0 to 3.5 bar)
- Required filtration: 150 to 200 mesh (75 to 100 micron)

**Models: 10-32 thread inlet x barb outlet**
- XB-05PC-1032: Blue, 0.5 gph (1.89 l/h)
- XB-10PC-1032: Black, 1.0 gph (3.79 l/h)
- XB-20PC-1032: Red, 2.0 gph (7.57 l/h)

**Models: 1/2” FPT inlet x barb outlet**
- XBT-10: Black, 1.0 gph (3.79 l/h)
- XBT-20: Red, 2.0 gph (7.57 l/h)

**Models: barb inlet x barb outlet**
- XB-05PC: Blue, 0.5 gph (1.89 l/h)
- XB-10PC: Black, 1.0 gph (3.79 l/h)
- XB-20PC: Red, 2.0 gph (7.57 l/h)

### Xeriman™ Tool

**Features**
- Provides fast, easy, one-step installation of Xeri-Bug™ emitters and PC Modules directly into 1/2” or 3/4” drip tubing, XF Dripline or Landscape Dripline
- Cuts emitter installation time
- All-in-one tool inserts emitters, removes emitters, inserts 1/4” barbed fittings and installs goof plugs

**Model**
- XM-TOOL

### Xeri-Bug Emitter Bag Quantities and Models

<table>
<thead>
<tr>
<th>Flow Rate</th>
<th>Color</th>
<th>Bag Qty.</th>
<th>Model Number</th>
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</thead>
<tbody>
<tr>
<td>0.5 GPH (1.89 l/h)</td>
<td>Blue</td>
<td>25</td>
<td>XB05PC</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>XB05PCBULK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>XB05MAXPAK</td>
</tr>
<tr>
<td>1.0 GPH (3.79 l/h)</td>
<td>Black</td>
<td>25</td>
<td>XB10PC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>XB10PCBULK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>XB10MAXPAK</td>
</tr>
<tr>
<td>2.0 GPH (7.57 l/h)</td>
<td>Red</td>
<td>25</td>
<td>XB20PC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>XB20PCBULK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>XB20MAXPAK</td>
</tr>
</tbody>
</table>

### How to Specify

- **Flow**
  - 0.5 GPH (1.89 l/h)
  - 1.0 GPH (3.79 l/h)
  - 2.0 GPH (7.57 l/h)
- **Pressure Compensating**
  - Optional 1032 threaded inlet
  - Optional 1/2” FPT inlet
Xeri-Bug Emitter Specifications and Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Inlet Type/Color</th>
<th>Nominal Flow gph</th>
<th>Filtration Required mesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>XB-05PC</td>
<td>Barb/Blue</td>
<td>0.5</td>
<td>200</td>
</tr>
<tr>
<td>XB-10PC</td>
<td>Barb/Black</td>
<td>1.0</td>
<td>150</td>
</tr>
<tr>
<td>XB-20PC</td>
<td>Barb/Red</td>
<td>2.0</td>
<td>150</td>
</tr>
<tr>
<td>XB-05PC1032</td>
<td>10-32T/Blue</td>
<td>0.5</td>
<td>200</td>
</tr>
<tr>
<td>XB-10PC1032</td>
<td>10-32T/Black</td>
<td>1.0</td>
<td>150</td>
</tr>
<tr>
<td>XB-20PC1032</td>
<td>10-32T/Red</td>
<td>2.0</td>
<td>150</td>
</tr>
<tr>
<td>XBT-10PC</td>
<td>1/2&quot; FPT/Black</td>
<td>1.0</td>
<td>150</td>
</tr>
<tr>
<td>XBT-20PC</td>
<td>1/2&quot; FPT/Black</td>
<td>2.0</td>
<td>150</td>
</tr>
</tbody>
</table>

Xeri-Bug Emitter Performance

(For reference numbers below, please see the System Overview page 110)

Installation Option 1*
Using a Xeriman Tool, insert an emitter directly into ½" or ¾" drip tubing or between dripline emitters as needed.

Installation Option 2*
For more precise water placement, use ¼" distribution tubing, a ¼" tubing stake, and a bug cap.

Installation Option 3
For precise water placement, a barbed connector can be punched into distribution tubing. The emitter is then placed at the end of the ¼" distribution tubing. NOTE: should the emitter become dislodged, unregulated flow will occur.

Installation Option 4*
The Xeri-Bird 8 provides a centralized location for up to eight emitters. A mix of Xeri-Bug and/or PC emitters can be used to provide the flow rates needed for different plant materials. Tentacles of ⅛" distribution tubing, ¼" tubing stakes, and bug caps allow for precise water placement.

Installation Option 5
The 6 Outlet Manifold provides a centralized water distribution connection for up to six emission devices. Connect the ¼" distribution tubing to one of the outlets. Use a ¼" tubing stake to ensure precise water placement. The emitter is placed on the end of the ¼" distribution tubing to regulate the water flow. NOTE: should the emitter become dislodged, unregulated flow will occur.

* Preferred installation options, which provide flow regulation at the source.
Multi-Outlet Xeri-Bug™

Features
- Pressure compensating design delivers uniform flow throughout a wide pressure range (15 to 50 psi; 1.0 to 3.5 bar)
- Six-outlet emitter supplied with one outlet opened. Simply clip the outlet tips open with snips or clippers for additional operational ports
- Barbed outlets retain ¼” Distribution Tubing (XQ)
- Self-flushing action minimizes clogging
- Durable, UV-resistant color-coded plastic housing

Operating Range
- Flow: 0.5, 1.0 or 2.0 gph (1.89, 3.79 or 7.57 l/h)
- Pressure: 15 to 50 psi (1.0 to 3.5 bar)
- Filtration: 150-mesh (100-microns)

Models: barb inlet x barb outlet
- XB-05-6: Blue, 0.5 gph (1.89 l/h)
- XB-10-6: Black, 1.0 gph (3.79 l/h)
- XB-20-6: Red, 2.0 gph (7.57 l/h)

Models: ½” FPT inlet x barb outlet
- XBT-05-6: Blue, 0.5 gph (1.89 l/h)
- XBT-10-6: Black, 1.0 gph (3.79 l/h)
- XBT-20-6: Red, 2.0 gph (7.57 l/h)

6 Outlet Manifold - EMT-6XERI

Features
- ½” FPT inlet threads onto ½” riser and provides a manifold with six free-flowing ¼” barb outlets
- Each barb outlet is sealed with a durable plastic cap
- Plastic caps remove easily, allowing for a drip area that can be customized with up to six different emission devices
- Attach ¼” Distribution Tubing (XQ) onto each outlet for use with: Xeri-Bugs, PC Modules, Xeri-Pops, Xeri-Sprays, and Xeri-Bubblers

Operating Range
- Pressure: 15 to 50 psi (1.0 to 3.5 bar)
- Required filtration: 150 mesh (100 microns)

Model
- EMT-6XERI

1/4” Self-Piercing Barb Connector

Features
- Used to connect ¼” Distribution Tubing into ½” or ¾” distribution tubing
- Self-piercing barb inlet is easily inserted into ½” or ¾” distribution tubing using a Xeriman™ Tool (XM-Tool)
- Outlet barb accepts ¼” Distribution Tubing (XQ). Gray outlet barb indicates unit has unrestricted flow

Operating Range
- Pressure: 0 to 50 psi (0 to 3.5 bar)

Model
- SPB-025

½” FPT x Barb Grey Transfer Fitting

Features
- Grey outlet to designate open flow
- ½” FPT inlet can be easily attached to a schedule 80 riser or the top of an 1800 Retro
- Barbed outlet so ¼” distribution tubing or ¼” drip tubing can be easily and securely attached

Operating Range
- Pressure: 0 to 50 psi (0 to 3.5 bar)

Model
- XTO25
Xeri-Bird™ 8-Outlet Emission Device

The Most Flexible and Feature-Rich Multi-Outlet Device on the Market, Ideal for New Projects and Retrofit Applications

Features

• The only multi-outlet device on the market with 8 configurable ports and 10 flow options for each port for maximum flexibility
• XBD-80 and XBD-81 models each contain a built-in filter. Makes retrofitting easy when installed with the optional in-stem pressure regulator (PRS-050 page 155)
• Easy to maintain, because body can be easily removed from riser
• Threads onto any ½” riser and delivers water to multiple locations for increased system flexibility
• Each port accepts a Xeri-Bug™ Emitter or PC Module for independent flows from 0.5 to 24 gph (1.89 to 90.84 l/h) or use a self-piercing Barb connector (SPB-025) for unrestricted flow
• XBD-80 and XBD-81 models each feature an integral 200 mesh (75 micron) filter which is easily serviceable from the top of the unit
• Eight bottom-mounted, sure-grip barbed outlets securely retain ⅛” Distribution Tubing (XQ)
• Unique union base nut allows removal of Xeri-Bird 8 body from riser for easy installation and maintenance
• Emitters must be installed inside the Xeri-Bird to prevent excess back pressure

Operating Range

• Flow: 0.5 to 24 gph (1.89 to 90.84 l/h) per outlet
• Pressure: 15 to 50 psi (1.0 to 3.5 bar)

Models

• XBD-80: Xeri-Bird 8 unit (includes 7 removable port plugs and filter)
• XBD-81: Xeri-Bird 8 unit (includes eight 1 gph (3.79 l/h) Xeri-Bug emitters factory installed, and filter)

Replacement Parts:

• XBD8SCRN: replacement screen and two o-rings

Helpful Hint: Always install emitters with the pointed end (inlet barb) or threaded end up, as shown

* Must be installed second
** Must be installed first
Pressure-Compensating Modules
Point-Source Medium-Flow Emitters for Watering Larger Shrubs and Trees

Features
- The only emitters with self-piercing barbs, making them the easiest to install using the Xeriman™ tool
- Widest selection of pressure-compensating emitters, with 6 flow rates and 3 inlet options
- Most compact and unobtrusive emitters
- Flow rates from 5 to 24 gph (18.93 to 90.84 l/h)
- Pressure-compensating design delivers uniform flow throughout a wide pressure range (10 to 50 psi; 0.7 to 3.5 bar)
- Available with 3 different inlets:
  - Self-piercing barbs for quick one-step emitter insertion into ½" or ¾" drip tubing
  - 10-32 threaded inlet that easily threads into a PolyFlex Riser (see page 124), 1032 Thread adapter (page 124) or 1800 Xeri-Bubbler Adapter (page 124)
  - ½" FPT inlet that easily threads onto a ½" PVC riser
- Robust design - durable plastic construction is UV-resistant and color-coded to identify flow rate

Operating Range*
- Flow: 5 to 24 gph (18.93 to 90.84 l/h)
- Pressure: 10 to 50 psi (0.7 to 3.5 bar)
- Required filtration: 100 mesh (150 micron)

* IMPORTANT NOTE: Use a PC Diffuser Cap to eliminate squirting water when using a PC Module staked at the end of ¼" Distribution Tubing (XQ) or on a PolyFlex Riser (PFR/FRA)

Models: barb inlet x barb outlet
- PC-05: Light brown, 5 gph (18.93 l/h)
- PC-07: Violet, 7 gph (26.50 l/h)
- PC-10: Green, 10 gph (37.85 l/h)
- PC-12: Dark brown, 12 gph (45.42 l/h)
- PC-18: White, 18 gph (68.13 l/h)
- PC-24: Orange, 24 gph (90.84 l/h)

Models: 10-32 thread inlet x barb outlet
- PC-05-1032: Light brown, 5 gph (18.93 l/h)
- PC-07-1032: Violet, 7 gph (26.50 l/h)
- PC-10-1032: Green, 10 gph (37.85 l/h)

Models: 1/2" FPT thread Inlet
- PCT-05: Light Brown, 5 gph (18.93 l/h)
- PCT-07: Violet, 7 gph (26.50 l/h)
- PCT-10: Green, 10 gph (37.85 l/h)
### Pressure-Compensating Modules

#### Pressure-Compensating Module Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Inlet Type/Outlet/Color</th>
<th>Nominal Flow gph</th>
<th>Filtration Required mesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-05</td>
<td>Barb / light brown</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>PC-07</td>
<td>Barb / violet</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>PC-10</td>
<td>Barb / green</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>PC-12</td>
<td>Barb / dark brown</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>PC-18</td>
<td>Barb / white</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>PC-24</td>
<td>Barb / orange</td>
<td>24</td>
<td>100</td>
</tr>
<tr>
<td>PC-05-1032</td>
<td>10-32T / light brown</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>PC-07-1032</td>
<td>10-32T / violet</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>PC-10-1032</td>
<td>10-32T / green</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>PCT-05</td>
<td>NPT / light brown</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>PCT-07</td>
<td>NPT / violet</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>PCT-10</td>
<td>NPT / green</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

#### Pressure-Compensating Module Models & Bubblers Performance


### PC Diffuser Caps

**PC Diffuser Caps** are designed to fit onto outlet of pressure-compensating drip modules.

**Models:** (see page 123 for complete information)
- PC-DIFFUSER: Black
- PC-DIFF-PPL: Purple, to designate non-potable water

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PC Module (PC-10-1032) with PC Diffuser Cap (PC-DIFFUSER) on PolyFlex Riser (PFR-PFA) (PolyFlex Risers available in 12" and 24" models - p. 124)
SQ Series, Square Pattern Nozzles
The Most Precise and Efficient, Low-Volume Spray Solution for Irrigation of Small Areas with Dense Plantings

Features
- Square spray pattern and pressure compensation offer increased efficiency and control, reducing overspray, property damage and liability
- Simplify design and installation with the flexibility of applications: one nozzle throws 2.5’ or 4’ (0.8 m or 1.2 m) and can be used on a variety of spray heads and risers
- Meets micro irrigation system requirement for less than 26 gph flow rate at 30 psi
- Square spray pattern with edge-to-edge coverage allows you to easily design and install in small spaces
- Pressure compensation design delivers uniform flow over the pressure range
- Available in 3 models—quarter, half and full patterns with matched precipitation rate
  - Virtually no-mist performance from 20 psi to 50 psi
  - Two throw distances in each nozzle. One simple click adjusts to 2.5’ or 4’ (0.8 m or 1.2 m)
  - Shipped with blue filter screen (0.02” x 0.02”) to maintain precise distance of flow, and to prevent clogging
- Compatible with all 1800 Sprays, Xeri-Pops, New PolyFlex Riser Adapter, UNI-Spray and SCH 80 risers

Operating Range
- Pressure: 20 to 50 psi (1.4 to 3.5 bar)
- Flow rates: 6, 12 and 24 gph (22.7, 45.4 and 90.8 l/h)
- Required filtration: 40 mesh

Models
- SQ-QTR: SQ Nozzle, quarter pattern (Purple)
- SQ-HLF: SQ Nozzle, half pattern (Brown)
- SQ-FUL: SQ Nozzle, full pattern (Red)
- SQ-ADP: SQ PolyFlex Riser Adapter only
- SQ-ADP12: SQ Nozzle Adapter with 12” PolyFlex Riser
- SQ-ADP24: SQ Nozzle Adapter with 24” PolyFlex Riser

*Note: A PA-8S Plastic Shrub Adapter (see page 10) is needed when using an SQ Series Nozzle mounted on a SCH 80 riser.

Can be used on…
The SQ Nozzle is an ideal solution for a wide range of difficult-to-design areas, thanks to its compatibility with popular irrigation products.
### SQ Nozzle Performance

**2.5 feet throw @ 6" height above grade**

<table>
<thead>
<tr>
<th>Nozzle</th>
<th>Pressure psi</th>
<th>Throw Radius ft.</th>
<th>Flow gph</th>
<th>Flow gpm</th>
<th>Precip. Rate w/ no overlap in/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>20</td>
<td>2.5</td>
<td>6.0</td>
<td>0.10</td>
<td>1.64</td>
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<td>30</td>
<td>2.5</td>
<td>7.0</td>
<td>0.12</td>
<td>1.90</td>
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**4 feet throw @ 6" height above grade**

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**0.8 m throw @ 0.15 m height above grade**

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<th>Throw Radius m</th>
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<th>Flow lpm</th>
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**1.2 m throw @ 0.15 m height above grade**

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<th>Flow lpm</th>
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<td>1.4</td>
<td>103</td>
<td>1.72</td>
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**SQ Nozzles**

Performance data taken in zero wind conditions
Xeri-Pop™ Micro-Spray
The Xeri-Pop™ Micro-Spray Makes It Easy to Integrate a Durable Micro-Spray into a Low-Volume Irrigation Design

Features
- The only pop-up spray that works in low-volume low-pressure application, and this is the perfect solution to vandal-prone areas
- Xeri-Pops can be installed and located in nearly any location and are ideal for small, odd-shaped planting beds; the 12” version is perfect for annual flower beds
- Xeri-Pops work with Rain Bird 5’ and 8’ MPR nozzles and SQ Series Nozzles — nozzles with square spray patterns and adjustable throws of 2.5’ and 4’
- The Xeri-Pop can operate with 20 to 50 psi base pressure when water is supplied via ¼” Distribution Tubing (XQ)
- The flexibility of ¼” tubing allows the Xeri-Pop to be easily located and relocated as planting conditions dictate
- A durable, plastic snap-collar on 4” and 6” models secures the ¼” tubing to the outside of the Xeri-Pop case
- The Xeri-Pop’s ¼” Distribution Tubing can readily connect to ½” or ⅜” polyethylene tubing or to a multi-outlet manifold (EMT-6XERI). Connections to polyethylene tubing are accomplished with either an SPB-025 ¼” Self-piercing barb Connector or an XBF1CONN ¼” barb Connector
- External parts are UV-resistant and available in 4”, 6” and 12” pop up heights

Operating Range
- Pressure: 20 to 50 psi (1.4 to 3.5 bar)
- Filtration: Depends on nozzle used with Xeri-Pop

Models
- XP-400X: 4-inch pop-up
- XP-600X: 6-inch pop-up
- XP-1200X: 12-inch pop-up

Nozzle Options
- SQ Series Nozzles (page 118)
- 5 Series MPR Nozzle (all configurations)
- 5 Series Plastic Bubbler
- 8 Series MPR Nozzle (8H, 8T and 8Q)

Installing the Xeri-Pop in 4 Easy Steps
Xeri-Bubblers™
Ideal for Shrub Plantings, Trees, Containers, and Flower Beds

**Features**
- Adjust flow and radius by turning outer cap
- Clean by completely unscrewing cap from base unit
- Three convenient installation connections available for design flexibility: 10-32 self-tapping thread, ¼" barb, and 5" spike

**Operating Range**
- • Pressure: 15 to 30 psi (1.0 to 2.1 bar)
  - SXB Series flow:
    - 0 to 13 gph (0 to 49.21 l/h) at 30 psi (2.1 bar)
    - 0 to 8.5 gph (0 to 30 l/h) at 15 psi (1 bar)
  - UXB Series flow:
    - 0 to 35 gph (0 to 132.48 l/h) at 30 psi (2.1 bar)
    - 0 to 26 gph (0 to 98 l/h) at 15 psi (1 bar)
- Max flow varies with inlet pressure

**Models**
- SXB-180: Half-circle, 5 streams, 10-32 thread
- SXB-180-025: Half-circle, 5 streams, ¼" barb
- SXB-180-SPYK: Half-circle, 5 streams, 5" spike; includes barb x barb coupler
- SXB-360: Full-circle, 8 streams, 10-32 thread
- SXB-360-025: Full-circle, 8 streams, ¼" barb
- SXB-360-SPYK: Full-circle, 8 streams, 5" spike includes barb x barb coupler
- UXB-360: Full-circle, umbrella, 10-32 thread
- UXB-360-025: Full-circle, umbrella, ¼" barb
- UXB-360-SPYK: Full-circle, umbrella, 5" spike includes barb x barb coupler

**How to Specify**

**Xeri-Bubbler Performance**

<table>
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<tr>
<th>Pressure</th>
<th>SXB Flow Rate 360° and 180°</th>
<th>SXB 360° Diameter</th>
<th>SXB 180° Radius</th>
<th>UXB 360° Flow Rate</th>
<th>UXB 360° Diameter</th>
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<td>psi</td>
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<td>lph</td>
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<td>m.</td>
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<td>0 - 49</td>
<td>0 - 3</td>
<td>0 - 0.9</td>
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<td>1</td>
<td>0 - 8.5</td>
<td>0 - 32</td>
<td>0 - 1.2</td>
<td>0 - 0.4</td>
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Xeri-Sprays™ and Misters
Ideal for Ground Cover, Mass Plantings, Annual Flower Beds, and Containers

Features
- Adjust flow/radius by turning integral ball valve
- Uniform emission pattern provides excellent distribution
- 10-32 self-tapping threads fit into ½” x 10-32 adapter (10-32A); 1800 Xeri-Bubbler™ adapter (XBA-1800); and PolyFlex Riser (PFR-12)

Operating Range
- Flow: 0 to 31 gph (0 to 117.34 l/h)
- Pressure: 10 to 30 psi (0.75 to 2.1 bar)
- Radius: 0 to 13.4 feet (0 to 4.1 m) full-circle; 0 to 10.6 feet (0 to 3.2 m) quarter- and half-circle

Models
- XS-090: Quarter-circle, spray
- XS-180: Half-circle, spray
- XS-360: Full-circle, stream spray
- X360 ADJMST: Full-circle, mist

Xeri-Spray™ 360° True Spray
Ideal for Mass Plantings, Ground Cover, Annual Flower Beds and Containers

Features
- True micro-spray with full-circle fan spray pattern
- Adjust flow/radius by turning outer cap
- Three convenient installation connections for design flexibility: 10-32 self-tapping thread, ¼” barb and 5” spike
- Easily cleaned by completely unscrewing cap from base unit

Operating Range
- Flow: 0 to 24.5 gph (0 to 92.7 l/h) at 30 psi (200 kPa)
- Flow: 0 to 17 gph (0 to 64 l/h) at 15 psi (100 kPa)
- Pressure: 15 to 30 psi (1.0 to 2.1 bar)
- Radius: 0 to 6.7 feet (0 to 2.0 m)

Models
- XS-360TS: 10-32 threads
- XS-360TS-025: ¼” barb
- XS-360TS-SPYK: 5” spike; includes barb x barb coupler
**Diffuser Bug Cap**

**Features**
- Prevents bugs and other debris from clogging ¼" Distribution Tubing
- Barbed inlet fits into ¼" Distribution Tubing (XQ)
- Flanged shield diffuses water to minimize soil erosion at emission point

**Operating Range**
- Pressure: 0 to 50 psi (0 to 3.5 bar)

**Models**
- DBC-025: Black

---

**PC Diffuser Cap**

**Features**
- Cap snaps securely onto the PC Module and XB emitter outlet to create bubbling effect and prevent wash out
- Designed for quick and easy installation
- Made of UV-resistant polyethylene material

**Models**
- PC-DIFFUSER: Black
- PC-DIFF-PPL: Purple to designate non-potable water

---

**Universal ¼" Tubing Stake**

**Features**
- Holds ¼" Distribution Tubing and emitter or Diffuser Bug Cap firmly in place at the root zone of the plant
- Designed to securely hold Rain Bird and other manufacturers’ ¼" Distribution Tubing — 0.16" to 0.18" I.D. and 0.22" to 0.25" O.D.
- Rigid stake featuring a flat enlarged head designed to withstand hammering into tough soil

**Note:** If emitter is installed at inlet to distribution tubing, use a Diffuser Bug Cap (DBC-025) at outlet of tubing to prevent bugs from clogging tubing and to help hold tubing in place.

**Model**
- TS-025

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**¼" Tubing Stake with Cap**

**Features**
- Locking cap holds tubing in place
- Used for holding ¼" Distribution Tubing (XQ) in place at the plant root zone
- Accepts ¼" Distribution Tubing from 0.19 O.D. to 0.256 O.D.
- Bug cap included
- Constructed of UV-resistant plastic material

**Model**
- TS-025WCAP

---

**Suggested Applications**

A. ¼" tubing, ¼" stake, PC Module, Diffuser Bug Cap. Used for runs greater than 5 feet from main line

B. ¼" tubing, ¼" stake, Diffuser Bug Cap. Used for runs up to 5 feet from main line

(Drip emitter not shown—installed directly into lateral line)
12" PolyFlex Riser

Features
• 12" riser that is used with any 10-32 threaded emission device to deliver water directly to a plant. These include Xeri-Bugs, PC Modules, Xeri-Bubblers and Xeri-Sprays
• Extremely rugged and reliable – constructed of thick-walled, high-density polyethylene
• Can be used with a riser-stake (RS-025T)

Operating Range
• Pressure: 15 to 50 psi (1.0 to 3.5 bar)

Model
• PFR-12

PolyFlex Riser and Adapter Assemblies

Features
• 12" or 24" riser that is pre-assembled with a ½" male threaded base that simplifies installation
• Use with any 10-32 threaded emission device to deliver water directly to a plant. These include Xeri-Bugs, PC Modules, Xeri-Bubblers and Xeri-Sprays
• Newly-designed adapter with larger tabs makes installation quicker and easier; can be used on PVC laterals, or with any ½" female threaded adapter
• Adapter made of heavy-duty Marlex®, which requires no Teflon® tape, saving time during installation
• Extremely rugged and reliable PolyFlex Riser constructed of thick-walled, high-density polyethylene

Operating Range
• Pressure: 15 to 50 psi (1.0 to 3.5 bar)

Models
• PFR-FRA: 12" (30.5 cm) PolyFlex Riser and adapter
• PFR-FRA24: 24" (61.0 cm) PolyFlex Riser and adapter

PolyFlex Riser and Stake Assembly

Features
• 12" riser that is pre-assembled with a 7" (17.8 cm) stake
• Use with any 10-32 threaded emission device to deliver water directly to a plant. These include Xeri-Bugs, PC Modules, Xeri-Bubblers and Xeri-Sprays
• Saves time and money when installing a low-volume irrigation system
• Extremely rugged and reliable PolyFlex Riser constructed of thick-walled, high-density polyethylene

Operating Range
• Pressure: 15 to 50 psi (1.0 to 3.5 bar)

Model
• PFR-RS

10-32 Thread Adapter

Features
• Inlet: ½" FPT that screws onto any ½" MPT riser
• Outlet: 10-32 threads that accept Xeri-Bugs, PC Modules, Xeri-Bubblers and Xeri-Sprays with 10-32 threads
• Constructed of UV-resistant plastic material

Operating Range
• Pressure: 15 to 50 psi (1.0 to 3.5 bar)

Model
• 10-32A

1800 Xeri-Bubbler Adapter

Features
• Inlet: ½" female threads that screw onto a Rain Bird 1800 series or UNI-Spray or shrub adapter
• Outlet: 10-32 threads that accept any emission device with 10-32 threads including Xeri-Bugs, PC Modules, Xeri-Bubblers and Xeri-Sprays
• Sits at grade when installed on a spray head for a robust installation

Operating Range
• Pressure: 15 to 50 psi (1.0 to 3.5 bar)

Model
• XBA-1800
**RWS (Root Watering System)**

Root Watering System promotes deep root growth, healthy tree development, and accelerated growth.

**Features and Benefits**
- Subsurface aeration and irrigation prevents tree and shrub transplant shock
- Highest efficiency solution for tree irrigation - up to 95% emission uniformity with minimal wind, evaporation, or edge control losses
- 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

**For the RWS Model:**
- 4" (10.2 cm) retaining cap and vandal resistant locking grate tops a 36" (91.4 cm) semi-rigid mesh tube
- Factory installed swing assemblies (excluding RWS) with a 1401 (0.25 gpm; 0.95 l/m), 1402 (0.5 gpm; 1.9 l/m), or 1404 (1.00 gpm; 3.8 l/m) bubbler on a fixed riser makes connecting to lateral lines easy
- Options: Check valve to keep lines from draining Sand sock for use in fine soils

**For the RWS - Mini:**
- 4" (10.2 cm) retaining cap and vandal resistant locking grate tops a 18" (45.7 cm) semi-rigid mesh tube
- Factory installed ½" spiral barb elbow with a 1401 or 1402 bubbler makes connecting to lateral lines easy
- Options: Check valve to keep lines from draining Sand sock for use in fine soils

**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 PCT or 1401 bubbler makes connecting to lateral lines easy
- Options: Check valve to keep lines from draining Sand sock for use in fine soils

---

**Models /Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Bubbler</th>
<th>Check Valve*</th>
<th>Swing Assembly w/ 1/2&quot; (15/21) M NPT inlet</th>
<th>Spiral Barb Elbow w/ 1/2&quot; (15/21) M NPT inlet</th>
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<tr>
<td>RWS</td>
<td>Ideal for ¼&quot; drip tubing or customer provided hardware</td>
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<td>–</td>
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<tr>
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<td>RWS-B-C-1402</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>RWS-M</td>
<td>Ideal for ¼&quot; drip tubing or customer provided hardware</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>RWS-M-B-C-1401</td>
<td>0.25 gpm (0.95 l/m)</td>
<td>✓ (18&quot;)</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td>RWS-M-B-1401</td>
<td>0.25 gpm (0.95 l/m)</td>
<td>–</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td>RWS-M-B-C-1402</td>
<td>0.50 gpm (1.9 l/m)</td>
<td>✓ (18&quot;)</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td>RWS-M-B-1402</td>
<td>0.50 gpm (1.9 l/m)</td>
<td>–</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Root Watering System - Supplemental (with 2&quot; (5.1 cm) snap-on cap and base)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWS-S-B-C-PCT5</td>
<td>5.0 gph (19 l/m)</td>
<td>✓ (10&quot;)</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td>RWS-S-B-C-1401</td>
<td>0.25 gpm (0.95 l/m)</td>
<td>✓ (10&quot;)</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td>RWS-S-B-1401</td>
<td>0.25 gpm (0.95 l/m)</td>
<td>–</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Root Watering - Accessories</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWS- SOCK (Root Watering Sock)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWS- GRATE-P (Root Watering System Purple Grate for RWS and RWS Mini)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Check Valve is 14 ft. of holdback, or 6 PSI
### Drip Irrigation

**Landscape Dripline**

- **Applicaiton:** Pots and Planter Boxes; Container and Vegetable Gardens; Shrubs; Flowers
- **Flow Rates:** 0.8 gph
- **Emitter Spacing:** 6' 12''
- **Coil Lengths:** 100'
- **Tubing Diameter:** OD: 0.250'' ID: 0.170''
- **Special Notes:** Flexible tubing with clog-resistant built-in filtration

**XFD On-Surface Dripline**

- **Application:** On-surface; Shrubs; Flowers
- **Flow Rates:** 0.6 gph 0.9 gph
- **Emitter Spacing:** 12'' 18''
- **Coil Lengths:** 100' 250' 500'
- **Tubing Diameter:** OD: 0.634'' ID: 0.536''
- **Special Notes:** Reclaimed Water

**XFCV; Check Valve; Dripline**

- **Application:** On-Surface; Elevation Changes; Shrubs and Flowers
- **Flow Rates:** 0.6 gph 0.9 gph
- **Emitter Spacing:** 12'' 18''
- **Coil Lengths:** 100' 250' 500'
- **Tubing Diameter:** OD: 0.634'' ID: 0.536''
- **Special Notes:** Built-in Emitter Check Valves

**XFS Sub-Surface Dripline**

- **Application:** Sub-Surface; Narrow Planting Areas; Turf and Beds
- **Flow Rates:** 0.4 gph 0.6 gph 0.9 gph
- **Emitter Spacing:** 12'' 18''
- **Coil Lengths:** 100' 250' 500'
- **Tubing Diameter:** OD: 0.634'' ID: 0.536''
- **Special Notes:** Copper Shield™ protects emitters from root intrusion

**XFS-CV; Sub-Surface; Check Valve; Dripline**

- **Application:** Sub-Surface; Elevation Changes; Turf and Beds
- **Flow Rates:** 0.4 gph 0.6 gph 0.9 gph
- **Emitter Spacing:** 12'' 18''
- **Coil Lengths:** 100' 250' 500'
- **Tubing Diameter:** OD: 0.634'' ID: 0.536''
- **Special Notes:** Copper Shield™ protects emitters from root intrusion 10’ Emitter Check Valves

### Blank Tubing

**XQ ¼” Distribution Tubing**

- **Application:** Extend emitter outlets to desired location
- **Flow Rates:** —
- **Emitter Spacing:** —
- **Coil Lengths:** 100' 1,000' (in bucket)
- **Tubing Diameter:** OD: 0.250'' ID: 0.170''
- **Special Notes:** Flexibility of Vinyl with hold of Poly

**XBS Black Stripe Tubing**

- **Application:** Five Color Stripe Choices Shrubs Flowers
- **Flow Rates:** —
- **Emitter Spacing:** —
- **Coil Lengths:** 100' 500'
- **Tubing Diameter:** OD: 0.700'' ¼” ID: 0.600'' ½” OD: 0.705’’ ½” ID: 0.615’’ ¾” OD: 0.940’’ ¾” ID: 0.820’’
- **Special Notes:** Black tube with colored stripes to differentiate zones

**XT-700 Distribution Tubing**

- **Application:** Thick-walled but Flexible Shrubs Flowers
- **Flow Rates:** —
- **Emitter Spacing:** —
- **Coil Lengths:** 100' 500'
- **Tubing Diameter:** OD: 0.700'' ID: 0.580''
- **Special Notes:** Thick-walled, flexible tubing resists kinks

**XF Series Blank Tubing**

- **Application:** Shrubs Flowers
- **Flow Rates:** —
- **Emitter Spacing:** —
- **Coil Lengths:** 100' 250' 500'
- **Tubing Diameter:** OD: 0.634'' ID: 0.536''
- **Special Notes:** Extra Flexible

**QF Dripline Header**

- **Application:** Pre-fabricated header for dripline installations
- **Flow Rates:** —
- **Emitter Spacing:** Elbow Spacing: 12'' 18''
- **Coil Lengths:** 100'
- **Tubing Diameter:** 3/4” OD: 0.940’’ 3/4” ID: 0.820’’ 1” OD: 1.200’’ 1” ID: 1.060’’
- **Special Notes:** Elbows rotate 360° and incorporate a protective ring
**XFD On-Surface Dripline**

The Most Flexible, Pressure-Compensating In-line Emitter Tubing Available to Irrigate Ground Cover, Dense Plantings, Hedge Rows and More

**Features**
- Extra flexible tubing for fast, easy installation
- Dual-layered tubing (brown over black or purple over black) provides unmatched resistance to chemicals, UV damage and algae growth
- Patent pending emitter design provides for increased reliability
- Longer lateral runs than competition
- Unique material offers significantly greater flexibility, allowing tighter turns with fewer elbows for easier installation
- Choice of flow rates, spacing and coil lengths provides design flexibility for a variety of non-turfgrass applications
- Use an Air/Vacuum Relief Valve Kit when installation is below soil (pg 139)

**Operating Range**
- Pressure: 8.5 to 60 psi (0.58 to 4.1 bar)
- Flow rates: 0.6 gph and 0.9 gph (2.3 l/h and 3.5 l/h)
- Temperature: Water up to 100° F (37.8C); Ambient up to 125° F (51.7C)
- Required filtration: 120 mesh

**Specifications**
- Outside diameter: 0.634" (16.1 mm)
- Inside diameter: 0.536" (13.6 mm)
- Wall thickness: 0.049" (1.2 mm)
- Spacing: 12" or 18"
- Lengths: 100', 250', and 500' coils
- Use with XF Dripline Insert Fittings or Rain Bird Easy Fit Compression Fittings

**How to Specify**

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFD</td>
<td>09 - 12 - 100</td>
</tr>
</tbody>
</table>

- Flow Rate: 06 = 0.6 gph (2.3 l/h)
- 09 = 0.9 gph (3.5 l/h)

Self-Dispensing Coil Reduces Layout Time and Improves Ease of Installation

Available in Purple for Non-Potable water

XFD Dripline Offers Improved Flexibility for Kink Resistance and Easy Installation. The Dripline Can Bend Down to a 3” Radius Without Kinking.
### XFD On-Surface Dripline Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow gph</th>
<th>Spacing in.</th>
<th>Coil Length ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFD-06-12-100</td>
<td>0.60</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>XFD-06-12-250</td>
<td>0.60</td>
<td>12</td>
<td>250</td>
</tr>
<tr>
<td>XFD-06-12-500</td>
<td>0.60</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFD-06-18-100</td>
<td>0.60</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>XFD-06-18-250</td>
<td>0.60</td>
<td>18</td>
<td>250</td>
</tr>
<tr>
<td>XFD-06-18-500</td>
<td>0.60</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFD-09-12-100</td>
<td>0.90</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>XFD-09-12-250</td>
<td>0.90</td>
<td>12</td>
<td>250</td>
</tr>
<tr>
<td>XFD-09-12-500</td>
<td>0.90</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFD-09-18-100</td>
<td>0.90</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>XFD-09-18-250</td>
<td>0.90</td>
<td>18</td>
<td>250</td>
</tr>
<tr>
<td>XFD-09-18-500</td>
<td>0.90</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFDP-06-12-500 (Purple)</td>
<td>0.60</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFDP-06-18-500 (Purple)</td>
<td>0.60</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFDP-09-12-500 (Purple)</td>
<td>0.90</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFDP-09-18-500 (Purple)</td>
<td>0.90</td>
<td>18</td>
<td>500</td>
</tr>
</tbody>
</table>

### XFD On-Surface Dripline Maximum Lateral Lengths (Feet)

<table>
<thead>
<tr>
<th>Inlet Pressure psi</th>
<th>12&quot; Spacing</th>
<th>Maximum Lateral Length (feet)</th>
<th>18&quot; Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>273</td>
<td>314</td>
<td>155</td>
</tr>
<tr>
<td>20</td>
<td>273</td>
<td>314</td>
<td>155</td>
</tr>
<tr>
<td>30</td>
<td>273</td>
<td>314</td>
<td>155</td>
</tr>
<tr>
<td>40</td>
<td>273</td>
<td>314</td>
<td>155</td>
</tr>
<tr>
<td>50</td>
<td>273</td>
<td>314</td>
<td>155</td>
</tr>
<tr>
<td>60</td>
<td>273</td>
<td>314</td>
<td>155</td>
</tr>
</tbody>
</table>

### XFD On-Surface Dripline Flow (per 100 Feet of Tubing)

<table>
<thead>
<tr>
<th>Emitter Spacing</th>
<th>0.6 gph Emitter</th>
<th>0.9 gph Emitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>61.0 gph</td>
<td>1.02 gpm</td>
</tr>
<tr>
<td>18&quot;</td>
<td>41.0 gph</td>
<td>0.68 gpm</td>
</tr>
<tr>
<td>24&quot;</td>
<td>31.0 gph</td>
<td>0.51 gpm</td>
</tr>
</tbody>
</table>

### XFD On-Surface Dripline Flow (per 100 meters of Tubing)

<table>
<thead>
<tr>
<th>Emitter Spacing</th>
<th>2.3 l/h Emitter</th>
<th>3.4 l/h Emitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.30 meter</td>
<td>757.9 l/h</td>
<td>1136.7 l/h</td>
</tr>
<tr>
<td>0.46 meter</td>
<td>502.2 l/h</td>
<td>741.3 l/h</td>
</tr>
<tr>
<td>0.61 meter</td>
<td>378.7 l/h</td>
<td>559.0 l/h</td>
</tr>
</tbody>
</table>
XFCV Dripline with Check Valve

Rain Bird® XFCV Dripline with a heavy-duty 3.5 psi check valve for on-surface applications adds a valuable member to the Rain Bird XF Series of Dripline. The XFCV is the most effective dripline in the industry and is ideal for areas where no other dripline will work. When used in applications where elevation changes exist, the patent-pending check valve keeps the dripline charged, holding 8 feet of hold back. Rain Bird’s XFCV offers better uniformity and helps to prevent over-watering at the low-point in the zone, avoiding puddling and water draining from the dripline.

It accepts Rain Bird Easy Fit Compression Fittings, XF Dripline Barbed Insert Fittings and other 17 mm barbed insert fittings.

Features

Simple
- Rain Bird’s patent-pending 3.5 psi check valve technology keeps the dripline charged with water at all times, increasing uniformity of watering, and conserves water by eliminating the need to recharge the line at the beginning of each watering cycle
- Through the use of a proprietary tubing material, the XFCV Dripline with heavy-duty check valve is the most flexible dripline tubing in the industry, making it the easiest dripline to design with and install
- Rain Bird’s low-profile emitter design reduces in-line pressure loss, allowing longer lateral runs, simplifying design and reducing installation time
- Variety of emitter flow rates, emitter spacing and coil lengths provide design flexibility for on-surface areas with or without elevation changes

Made with Recycled Content
- All Rain Bird XF Dripline (XFD, XFS, XFCV, XFS-CV) qualify for LEED credit 4.2 because they contain at least 20% Polyethylene post consumer recycled material by cost. These come in an assortment of coil sizes, flow rates and emitter spacing

Reliable
- The pressure-compensating emitter design provides a consistent flow over the entire lateral length ensuring higher uniformity for increased reliability in the pressure range of 20 to 60 psi

Durable
- Dual-layered tubing (brown over black) provides unmatched resistance to chemicals, algae growth and UV damage

Grit Tolerant
- Rain Bird’s proprietary emitter design resists clogging by use of an extra wide flow path combined with a self-flushing action

With XFCV’s built-in 3.5 check valve, all lines are kept charged and up to 8 feet of water is held back

How to Specify

<table>
<thead>
<tr>
<th>Model</th>
<th>XFCV Dripline with Heavy-Duty Check Valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Rate</td>
<td>06 = 0.61 gph (2.3 l/h) 09 = 0.92 gph (3.5 l/h)</td>
</tr>
<tr>
<td>Emitter Spacing</td>
<td>12 = 12&quot; (30.5 cm) 18 = 18&quot; (45.7 cm)</td>
</tr>
<tr>
<td>Length of Tubing</td>
<td>100 = 100’ (30.5 m) 500 = 500’ (152.4 m)</td>
</tr>
</tbody>
</table>

www.rainbird.com
Operating Range
- Opening Pressure: 14.5 psi
- Pressure: 20 to 60 psi (1.38 to 4.14 bar)
- Flow rates: 0.6 and 0.9 gph (2.3 l/hr and 3.5 l/hr)
- Temperature:
  - Water: Up to 100°F (37.8°C)
  - Ambient: Up to 125°F (51.7°C)
- Required Filtration: 120 mesh

Specifications
- Dimensions:
  - OD: 0.634” (16mm)
  - ID: 0.536” (13.6mm);
- Thickness: 0.049” (1.2mm)
- 12” & 18” (30.5 cm, 45.7 cm) spacing
- Available in 100’ and 500’ (30.5 m and 152.4 m) coils
- Coil Color: Brown
- Use with XF Dripline Insert Fittings or Rain Bird Easy Fit Compression Fittings

Compatible Fittings

---

**XFCV Dripline Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow gph</th>
<th>Spacing in.</th>
<th>Coil Length ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFCV-06-12-100</td>
<td>0.60</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>XFCV-06-12-500</td>
<td>0.60</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFCV-06-18-100</td>
<td>0.60</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>XFCV-06-18-500</td>
<td>0.60</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFCV-09-12-100</td>
<td>0.90</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>XFCV-09-12-500</td>
<td>0.90</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFCV-09-18-100</td>
<td>0.90</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>XFCV-09-18-500</td>
<td>0.90</td>
<td>18</td>
<td>500</td>
</tr>
</tbody>
</table>

**XFCV Dripline Maximum Lateral Lengths (Feet)**

<table>
<thead>
<tr>
<th>Inlet Pressure psi</th>
<th>12” Spacing</th>
<th>18” Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>192</td>
<td>136</td>
</tr>
<tr>
<td>30</td>
<td>289</td>
<td>205</td>
</tr>
<tr>
<td>40</td>
<td>350</td>
<td>248</td>
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<tr>
<td>50</td>
<td>397</td>
<td>281</td>
</tr>
<tr>
<td>60</td>
<td>436</td>
<td>309</td>
</tr>
</tbody>
</table>

**XFCV Dripline Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow l/h</th>
<th>Spacing cm</th>
<th>Coil Length m</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFCV-06-12-100</td>
<td>2.30</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>XFCV-06-12-500</td>
<td>2.30</td>
<td>30.5</td>
<td>152.4</td>
</tr>
<tr>
<td>XFCV-06-18-100</td>
<td>2.30</td>
<td>45.7</td>
<td>30.5</td>
</tr>
<tr>
<td>XFCV-06-18-500</td>
<td>2.30</td>
<td>45.7</td>
<td>152.4</td>
</tr>
<tr>
<td>XFCV-09-12-100</td>
<td>3.40</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>XFCV-09-12-500</td>
<td>3.40</td>
<td>30.5</td>
<td>152.4</td>
</tr>
<tr>
<td>XFCV-09-18-100</td>
<td>3.40</td>
<td>45.7</td>
<td>30.5</td>
</tr>
<tr>
<td>XFCV-09-18-500</td>
<td>3.40</td>
<td>45.7</td>
<td>152.4</td>
</tr>
</tbody>
</table>

**XFCV Dripline Maximum Lateral Lengths (Meters)**

<table>
<thead>
<tr>
<th>Inlet Pressure bar</th>
<th>30.5 cm</th>
<th>45.7 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>2.1</td>
<td>88</td>
<td>63</td>
</tr>
<tr>
<td>2.8</td>
<td>107</td>
<td>76</td>
</tr>
<tr>
<td>3.5</td>
<td>121</td>
<td>86</td>
</tr>
<tr>
<td>4.1</td>
<td>133</td>
<td>94</td>
</tr>
</tbody>
</table>

---
XFS Sub-Surface Dripline with Copper Shield™ Technology

Sub-Surface Drip Irrigation (SDI) perfect for small, narrow and tight planting areas, switchbacks, as well as all turf landscapes.

Rain Bird® XFS Sub-Surface Copper-Colored Dripline with Copper Shield™ Technology is the latest innovation in the Rain Bird Landscape Drip Family. Rain Bird’s patent-pending Copper Shield Technology protects the emitter from root intrusion, creating a long-lasting, low maintenance sub-surface drip irrigation system for use under turf grass or shrub and groundcover areas.

A proprietary tubing material makes the XFS Sub-Surface Dripline with Copper Shield the most flexible tubing in the industry, and the easiest sub-surface dripline to design with and install.

Features

Simple
- Rain Bird's low-profile emitter design reduces in-line pressure loss, allowing longer lateral runs, simplifying design and reducing installation time
- Variety of emitter flow rates, emitter spacing and coil lengths provide design flexibility for either sub-surface turf or sub-surface shrub and groundcover applications

Reliable
- XFS Sub-Surface Dripline emitters are protected from root intrusion by Rain Bird's patent-pending Copper Shield™ Technology resulting in a system that does not require maintenance or replacement of chemicals to prevent root intrusion
- The pressure-compensating emitter design provides a consistent flow over the entire lateral length ensuring higher uniformity for increased reliability in the pressure range of 8.5 to 60 psi

Durable
- Dual-layered tubing (copper over black) provides unmatched resistance to chemicals, algae growth and UV damage
- Grit Tolerant: Rain Bird's proprietary emitter design resists clogging by use of an extra-wide flow path combined with a self-flushing action

Operating Range
- Pressure: 8.5 to 60 psi (0.58 to 4.14 bar)
- Flow rates: 0.4 gph, 0.6, and 0.9 gph (1.6 l/h, 2.3 l/hr and 3.5 l/hr)
- Temperature:
  - Water: Up to 100°F (37.8° C)
  - Ambient: Up to 125°F (51.7° C)
- Required Filtration: 120 mesh

Specifications
- Dimensions: OD: 0.634" (16mm); ID: 0.536" (13.6mm);
  Thickness: 0.049" (1.2mm)
- 12" and 18" (30.5 cm and 45.7 cm) spacing
- Available in 100' and 500' (30.5 m and 152.4 m) coils
- Coil Color: Copper
- Use with XF Dripline Insert Fittings
### XF Dripline Insert Fittings

XF Dripline Insert Fittings offer a unique barb design to reduce insertion force and still retain a secure fit (p. 137).

We recommend using the XF Insertion Tool (FITINS-TOOL) which lowers the effort required to insert each fitting by 50% (p. 139).

### XF Sub-Surface Dripline Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow (gph)</th>
<th>Spacing (in.)</th>
<th>Coil Length (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFS-04-12-100</td>
<td>0.42</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>XFS-04-12-500</td>
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</tr>
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<td>XFS-04-18-100</td>
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<td>XFS-06-12-100</td>
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<td>XFS-06-18-100</td>
<td>0.60</td>
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<td>100</td>
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<tr>
<td>XFS-06-18-500</td>
<td>0.60</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFS-09-12-100</td>
<td>0.90</td>
<td>12</td>
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<tr>
<td>XFS-09-12-500</td>
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<td>500</td>
</tr>
<tr>
<td>XFS-09-18-100</td>
<td>0.90</td>
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<tr>
<td>XFS-09-18-500</td>
<td>0.90</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFSP-04-12-500 (Purple)</td>
<td>0.42</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFSP-04-18-500 (Purple)</td>
<td>0.42</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFSP-06-12-500 (Purple)</td>
<td>0.60</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFSP-06-18-500 (Purple)</td>
<td>0.60</td>
<td>18</td>
<td>500</td>
</tr>
<tr>
<td>XFSP-09-12-500 (Purple)</td>
<td>0.90</td>
<td>12</td>
<td>500</td>
</tr>
<tr>
<td>XFSP-09-18-500 (Purple)</td>
<td>0.90</td>
<td>18</td>
<td>500</td>
</tr>
</tbody>
</table>

### XF Sub-Surface Dripline Models (METRIC)

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow (l/h)</th>
<th>Spacing (cm)</th>
<th>Coil Length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFS-04-12-100</td>
<td>1.60</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>XFS-04-12-500</td>
<td>1.60</td>
<td>30.5</td>
<td>152.4</td>
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<td>XFS-04-18-100</td>
<td>1.60</td>
<td>45.7</td>
<td>30.5</td>
</tr>
<tr>
<td>XFS-04-18-500</td>
<td>1.60</td>
<td>45.7</td>
<td>152.4</td>
</tr>
<tr>
<td>XFS-06-12-100</td>
<td>2.30</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>XFS-06-12-500</td>
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<td>152.4</td>
</tr>
<tr>
<td>XFS-06-18-100</td>
<td>2.30</td>
<td>45.7</td>
<td>30.5</td>
</tr>
<tr>
<td>XFS-06-18-500</td>
<td>2.30</td>
<td>45.7</td>
<td>152.4</td>
</tr>
<tr>
<td>XFS-09-12-100</td>
<td>3.50</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>XFS-09-12-500</td>
<td>3.50</td>
<td>30.5</td>
<td>152.4</td>
</tr>
<tr>
<td>XFS-09-18-100</td>
<td>3.50</td>
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<td>30.5</td>
</tr>
<tr>
<td>XFS-09-18-500</td>
<td>3.50</td>
<td>45.7</td>
<td>152.4</td>
</tr>
<tr>
<td>XFSP-04-12-500 (Purple)</td>
<td>1.60</td>
<td>30.5</td>
<td>152.4</td>
</tr>
<tr>
<td>XFSP-04-18-500 (Purple)</td>
<td>1.60</td>
<td>45.7</td>
<td>152.4</td>
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<tr>
<td>XFSP-06-12-500 (Purple)</td>
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<td>30.5</td>
<td>152.4</td>
</tr>
<tr>
<td>XFSP-06-18-500 (Purple)</td>
<td>2.30</td>
<td>45.7</td>
<td>152.4</td>
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<tr>
<td>XFSP-09-12-500 (Purple)</td>
<td>3.50</td>
<td>30.5</td>
<td>152.4</td>
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<tr>
<td>XFSP-09-18-500 (Purple)</td>
<td>3.50</td>
<td>45.7</td>
<td>152.4</td>
</tr>
</tbody>
</table>

### XF Sub-Surface Dripline Maximum Lateral Lengths (Feet)

<table>
<thead>
<tr>
<th>Inlet Pressure (psi)</th>
<th>12&quot; Spacing</th>
<th>18&quot; Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal Flow (gph):</td>
<td>Nominal Flow (gph):</td>
</tr>
<tr>
<td></td>
<td>0.42</td>
<td>0.6</td>
</tr>
<tr>
<td>15</td>
<td>352</td>
<td>273</td>
</tr>
<tr>
<td>20</td>
<td>399</td>
<td>318</td>
</tr>
<tr>
<td>30</td>
<td>447</td>
<td>360</td>
</tr>
<tr>
<td>40</td>
<td>488</td>
<td>395</td>
</tr>
<tr>
<td>50</td>
<td>505</td>
<td>417</td>
</tr>
<tr>
<td>60</td>
<td>573</td>
<td>460</td>
</tr>
</tbody>
</table>

### XF Sub-Surface Dripline Maximum Lateral Lengths (meters)

<table>
<thead>
<tr>
<th>Inlet Pressure (bar)</th>
<th>30.5 cm</th>
<th>45.7 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal Flow (l/h):</td>
<td>Nominal Flow (l/h):</td>
</tr>
<tr>
<td></td>
<td>1.6</td>
<td>2.3</td>
</tr>
<tr>
<td>1.0</td>
<td>107.2</td>
<td>83.2</td>
</tr>
<tr>
<td>1.4</td>
<td>121.6</td>
<td>96.9</td>
</tr>
<tr>
<td>2.1</td>
<td>136.2</td>
<td>109.7</td>
</tr>
<tr>
<td>2.8</td>
<td>148.7</td>
<td>120.4</td>
</tr>
<tr>
<td>3.5</td>
<td>153.9</td>
<td>127.1</td>
</tr>
<tr>
<td>4.1</td>
<td>174.6</td>
<td>140.2</td>
</tr>
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</table>

### XF Sub-Surface Dripline Flow (per 100 Feet of Tubing)

<table>
<thead>
<tr>
<th>Model</th>
<th>Spacing (in.)</th>
<th>Flow (gph)</th>
<th>Emitter Spacing</th>
<th>Flow (gph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFS-04-12-100</td>
<td>12</td>
<td>0.42</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-04-18-100</td>
<td>18</td>
<td>0.42</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-06-12-100</td>
<td>12</td>
<td>0.60</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-06-18-100</td>
<td>18</td>
<td>0.60</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-09-12-100</td>
<td>12</td>
<td>0.90</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-09-18-100</td>
<td>18</td>
<td>0.90</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-06-12-500</td>
<td>12</td>
<td>0.60</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-06-18-500</td>
<td>18</td>
<td>0.60</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-09-12-500</td>
<td>12</td>
<td>0.90</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-09-18-500</td>
<td>18</td>
<td>0.90</td>
<td>0.6</td>
<td>0.9</td>
</tr>
</tbody>
</table>

### XF Sub-Surface Dripline Flow (per 100 Meters of Tubing)

<table>
<thead>
<tr>
<th>Model</th>
<th>Spacing (cm)</th>
<th>Flow (l/h)</th>
<th>Emitter Spacing</th>
<th>Flow (l/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XFS-04-12-100</td>
<td>531.1</td>
<td>0.30</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>XFS-04-18-100</td>
<td>551.8</td>
<td>0.46</td>
<td>0.6</td>
<td>0.9</td>
</tr>
</tbody>
</table>
XFS-CV Dripline with Heavy-Duty Check Valve

Rain Bird® XFS-CV Dripline with an improved 4.3 psi check valve delivers 10 feet of hold-back – the highest in the industry.

With pure copper chips in every emitter to protect against emitter root intrusion, XFS-CV dripline is an all-in-one dripline suitable for any application – on-surface, sub-surface, sloped or level-grade. When used in applications where elevation changes exist, the patent-pending check valve keeps the dripline charged with water, delivering better irrigation uniformity while preventing over-watering and puddling at the low-point in the zone.

It accepts Rain Bird XF Dripline Barbed Insert Fittings, RB 600 Series Twist Lock Fittings, and other 17 mm barbed insert fittings.

A proprietary tubing material makes the XFS Sub-Surface Dripline with Copper Shield the most flexible tubing in the industry, and the easiest sub-surface dripline to design with and install.

Features

Simple

• Rain Bird’s patent-pending 4.3 psi check valve technology keeps the dripline charged with water at all times, increasing uniformity of watering, and conserves water by eliminating the need to recharge the line at the beginning of each watering cycle

• XFS-CV Sub-Surface Dripline emitters are protected from root intrusion by Rain Bird’s patent-pending Copper Shield™ Technology resulting in a system that does not require maintenance or replacement of chemicals to prevent root intrusion. Through the use of a proprietary tubing material, the XFS-CV Dripline with heavy-duty check valve is the most flexible dripline tubing in the industry, making it the easiest dripline to design with and install

• Rain Bird’s low-profile emitter design reduces in-line pressure loss, allowing longer lateral runs, simplifying design and reducing installation time

• Variety of standard emitter flow rates, emitter spacing and coil lengths provide design flexibility for sub-surface and on-surface areas with or without elevation changes

Made with Recycled Content

• All Rain Bird XF Dripline (XFD, XFS, XFCV, XFS-CV) qualify for LEED credit 4.2 because they contain at least 20% Polyethylene post consumer recycled material by cost. These come in an assortment of coil sizes, flow rates and emitter spacing

Reliable

• The pressure-compensating emitter design provides a consistent flow over the entire lateral length ensuring higher uniformity for increased reliability in the pressure range of 20 to 60 psi

Durable

• Dual-layered tubing (copper over black) provides unmatched resistance to chemicals, algae growth and UV damage

Grit Tolerant

• Rain Bird’s proprietary emitter design resists clogging by use of an extra wide flow path combined with a self-flushing action

How to Specify

<table>
<thead>
<tr>
<th>Model</th>
<th>XFS-CV with Heavy-Duty Check Valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Rate</td>
<td></td>
</tr>
<tr>
<td>04 = .42 gph (1.6 l/h)</td>
<td></td>
</tr>
<tr>
<td>06 = .61 gph (2.3 l/h)</td>
<td></td>
</tr>
<tr>
<td>09 = .92 gph (3.5 l/h)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of Tubing</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 = 100’ (30.5 m)</td>
</tr>
<tr>
<td>250 = 250’ (76.2 m)</td>
</tr>
<tr>
<td>500 = 500’ (152.4 m)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emitter Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 = 12” (30.5 cm)</td>
</tr>
<tr>
<td>18 = 18” (45.7 cm)</td>
</tr>
</tbody>
</table>

With XFS-CV’s built-in 4.3 check valve, all lines are kept charged and up to 10 feet of water is held back.
XFS-CV Dripline with Heavy-Duty Check Valve (cont.)

Operating Range
- Opening Pressure: 14.5 psi
- Pressure: 20 to 60 psi (1.38 to 4.14 bar)
- Flow rates: 0.6 and 0.9 gph (2.3 l/hr and 3.5 l/hr)
- Temperature:
  - Water: Up to 100°F (37.8° C)
  - Ambient: Up to 125°F (51.7° C)
- Required Filtration: 120 mesh

Specifications
- Dimensions:
  - OD: 0.634” (16mm)
  - ID: 0.536” (13.6mm);
- Thickness: 0.049” (1.2mm)
- 12” & 18” (30.5 cm, 45.7 cm) spacing
- Available in 100’, 250’ and 500’ (30.5 m, 76.2 m and 152.4 m) coils
- Coil Colors: Copper, purple, purple stripe
- Use with XF Dripline Insert Fittings

XF Dripline Insert Fittings

XF Dripline Insert Fittings offer a unique barb design to reduce insertion force and still retain a secure fit (p. 137)

We recommend using the XF Insertion Tool (FITINS-TOOL) which lowers the effort required to insert each fitting by 50% (p. 139)

<table>
<thead>
<tr>
<th>Inlet Pressure psi</th>
<th>12” Spacing Nominal Flow (gph): 0.6</th>
<th>18” Spacing Nominal Flow (gph): 0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>192</td>
<td>136</td>
</tr>
<tr>
<td>30</td>
<td>289</td>
<td>205</td>
</tr>
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<td>40</td>
<td>350</td>
<td>248</td>
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<tr>
<td>50</td>
<td>397</td>
<td>281</td>
</tr>
<tr>
<td>60</td>
<td>436</td>
<td>309</td>
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</table>

<table>
<thead>
<tr>
<th>Inlet Pressure bar</th>
<th>Nominal Flow (l/h): 2.3</th>
<th>Nominal Flow (l/h): 3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>2.1</td>
<td>88</td>
<td>63</td>
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<tr>
<td>2.8</td>
<td>107</td>
<td>76</td>
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<tr>
<td>3.5</td>
<td>121</td>
<td>86</td>
</tr>
<tr>
<td>4.1</td>
<td>133</td>
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<table>
<thead>
<tr>
<th>Inlet Pressure bar</th>
<th>Nominal Flow (l/h): 2.3</th>
<th>Nominal Flow (l/h): 3.4</th>
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</thead>
<tbody>
<tr>
<td>1.4</td>
<td>59</td>
<td>41</td>
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<tr>
<td>2.1</td>
<td>88</td>
<td>63</td>
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<tr>
<td>2.8</td>
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<td>76</td>
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<tr>
<td>3.5</td>
<td>121</td>
<td>86</td>
</tr>
<tr>
<td>4.1</td>
<td>133</td>
<td>94</td>
</tr>
</tbody>
</table>
QF Dripline Header
A Quick and Flexible Solution to Dripline Headers

The QF Dripline Header is a patent pending product that is the landscape industry’s first pre-fabricated header for dripline installations. A Quick and Flexible replacement for a site-built header, the QF Dripline Header saves time and labor expense. Using a proprietary blend of polyethylene, similar to Rain Bird’s XF Series Dripline, the QF Dripline header allows installers to simply roll out the header and attach the dripline at guaranteed 12” or 18” spacing. Eliminating the need for measuring, cutting, gluing and taping, the QF Dripline Header saves time and money, making projects more profitable.

Features
• The QF Dripline Header elbows rotate 360º and incorporate a protective ring — preventing damage and ensuring a proper seal.
• The ring also provides leverage to make attaching the dripline easier.
• The rotating barb manages trenching misalignment. Move left or right to accommodate the dripline – no need to re-trench.
• Elbows utilize the same design as Rain Bird’s popular XFF Fitting requiring 50% less insertion force, and are compatible with the XFF Fittings Tool.

Specifications

<table>
<thead>
<tr>
<th>QF Header - 3/4”</th>
<th>QF Header - 1”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside Diameter:</td>
<td>0.940” (23.9mm)</td>
</tr>
<tr>
<td>Inside Diameter:</td>
<td>0.820” (20.8mm)</td>
</tr>
<tr>
<td>Wall Thickness:</td>
<td>0.060” (1.5mm)</td>
</tr>
</tbody>
</table>

Models
• XQF7512100: XQF 3/4” Dripline Header (12” Spacing 100’ Coil)
• XQF7518100: XQF 3/4” Dripline Header (18” Spacing 100’ Coil)
• XQF1012100: XQF 1” Dripline Header (12” Spacing 100’ Coil)
• XQF1018100: XQF 1” Dripline Header (18” Spacing 100’ Coil)
• XQF101210P: XQF 1” Dripline Header (12” Spacing 100’ Coil) Purple
• XQF101810P: XQF 1” Dripline Header (18” Spacing 100’ Coil) Purple

Compatible Fittings
- Twist Lock Fittings 800 Series (pg. 136) (For QF Header - 3/4”)
- Twist Lock Fittings 1000 Series (pg. 136) (For QF Header - 1”)

How to Specify
- XQF - 75 - 12 - 100
  - Coil Length: 100 = 100’ (30.5 m)
  - 10P = 100’ Purple
  - Emitter Spacing: 12 = 12” (30.5 cm)
  - 18 = 18” (45.7 cm)
  - Model: XQF: Xerigation® Quick Flexible
Twist Lock Fittings
Durable and Reliable. Rain Bird’s NEW Twist Lock Fittings

- Complete line of Twist Lock Fittings to simplify installation of QF Header and Blank Distribution Tubing
- Fittings provide an even tighter seal on tubing by using high quality barbs and twist locking nuts
- Unique barb design reduces insertion force while maintaining a secure fit

Operating Range
- Pressure: 0 to 60 psi (0 to 4.1 bar)

Models
600 SERIES (½”):
- TLF-CUPL-0600: Twist Lock Fitting ½” Coupler
- TLF-TEE-0600: Twist Lock Fitting ½” Tee
- TLF-ELBW-0600: Twist Lock Fitting ½” Elbow
- TLF-MPT6-0600: Twist Lock Fitting ½” NPT to ½” Adaptor
- TLF-MPT8-0600: Twist Lock Fitting ¾” NPT to ½” Adaptor

800 SERIES (¾”):
- TLF-CUPL-0800: Twist Lock Fitting ¾” Coupler
- TLF-TEE-0800: Twist Lock Fitting ¾” Tee
- TLF-ELBW-0800: Twist Lock Fitting ¾” Elbow
- TLF-MPT8-0800: Twist Lock Fitting ¾” NPT Adaptor
- TLF-CAP-0800: Twist Lock Fitting ¾” Cap

1000 SERIES (1”):
- TLF-CUPL-1000: Twist Lock Fitting 1” Coupler
- TLF-TEE-1000: Twist Lock Fitting 1” Tee
- TLF-ELBW-1000: Twist Lock Fitting 1” Elbow
- TLF-MPT8-1000: Twist Lock Fitting 1” NPT Adaptor

<table>
<thead>
<tr>
<th>Models</th>
<th>600 Series</th>
<th>800 Series</th>
<th>1000 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Internal Diameter</td>
<td>Inches</td>
<td>mm</td>
<td>Inches</td>
</tr>
<tr>
<td>0.590 to 0.630</td>
<td>15 to 16</td>
<td>0.790 to 0.845</td>
<td>20.0 to 21.5</td>
</tr>
<tr>
<td>Acceptable Wall Thickness</td>
<td>Inches</td>
<td>mm</td>
<td>Inches</td>
</tr>
<tr>
<td>0.025 to 0.050</td>
<td>0.64 to 1.27</td>
<td>0.045 to 0.065</td>
<td>1.14 to 1.65</td>
</tr>
<tr>
<td>Compatible Tubing</td>
<td>XFD, XT700, ½” XBS</td>
<td>¾” XBS, ¼” QF Header</td>
<td>1” QF Header</td>
</tr>
</tbody>
</table>
XF Dripline Insert Fittings

Features
- Complete line of 17mm insert fittings to simplify installation of XF Series Dripline
- High quality barbs grab tubing for a secure fit
- Unique barb design to reduce insertion force and still retain a secure fit
- Non-obtrusive colored fittings to compliment natural earth tones

Operating Range
- Pressure: 0 to 50 psi (1.0 to 3.5 bar) if using 60 psi (4.1 bar) clamps will be required

Models
- XFF-COUP: 17mm Barb x Barb Coupling
- XFF-ELBOW: 17mm Barb x Barb Elbow
- XFF-MA-050: 17mm Barb x 1/2” MPT Male Adapter
- XFF-TEE: 17mm Barb x Barb x Barb Tee
- XFF-TMA-050: 17mm Barb x 1/2” MPT x 17mm Barb Tee Male Adapter
- XFF-MA-075: 17mm Barb x 3/4” MPT Male Adapter
- XFF-FA-050: Low profile barb elbow female adapter 17mm x 1/2” FPT
- XFF-TFA-050: Low profile barb tee female adapter 17mm x 1/2” FPT x 17mm
- XFD-CROSS: Barb cross 17mm x 17mm x 17mm x 17mm
- XFD-TFA-075: Barb tee female adapter 17mm x 3/4”FPT x 17mm
- LD16STK: 7 ¾” barbed tubing plastic stake
- FITINS-TOOL: XF Fitting Insertion Tool. Compatible with XFF-COUP, XFF-ELBOW, XFF-TEE, and QF Dripline Header
Easy Fit Compression Fitting System
Complete system of compression fittings and adapters for all tubing connection needs in a low-volume system

Features
- Reduces inventory costs: Multi-diameter compression fittings work with a wide range of 16mm - 17mm tubing or dripline
- Saves time and effort: 50% less force is required to connect tubing and fittings versus competitive compression fittings. Adapters swivel for easy installation
- Provides increased flexibility: Just three Easy Fit Fittings and five Easy Fit Adapters are needed to make over 160 combinations of connections, accommodating countless installation and maintenance situations
- Works with all 16-17mm dripline and blank tubing
- Patented fittings and adapters are molded from UV-resistant and durable ABS materials
- Removable flush caps can be used to flush end of line and temporarily cap off lines for later expansion
  - Not recommended with subsurface irrigation

Operating Range
- Pressure: 0 to 60 psi (0 to 4.1 bar)
- Accepts tubing with an O.D. of 0.630" to 0.669" (16-17mm)
- Recommended for use above surface only

Models
- Easy Fit Fittings
  - MDCF-COUP: Coupling
  - MDCF-EL: Elbow
  - MDCF-TEE: Tee
- Easy Fit Adapters
  - MDCF-50MPT: ½” Male Pipe Thread Adapter
  - MDCF-75MPT: ¾” Male Pipe Thread Adapter
  - MDCF-50FPT: ½” Female Pipe Thread Adapter
  - MDCF-75FPT: ¾” Female Pipe Thread Adapter
  - MDCF-75FHT: ¾” Female Hose Thread Adapter
  - MDCF-CAP: Removable Flush Cap For Easy Fit Fittings (Black)
  - MDCF-PCAP: Removable Flush Cap For Easy Fit Fittings (Purple, to designate non-potable water)

Note: Easy Fit Adapters are not barbed fittings. They are to be used only with Easy Fit Compression Fittings.

Friction Loss per Fitting

<table>
<thead>
<tr>
<th>Flow gpm</th>
<th>Loss psi</th>
<th>Flow l/h</th>
<th>Loss bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>1.00</td>
<td>0.3</td>
<td>227.1</td>
<td>0.03</td>
</tr>
<tr>
<td>2.00</td>
<td>0.64</td>
<td>454.3</td>
<td>0.04</td>
</tr>
<tr>
<td>3.00</td>
<td>0.82</td>
<td>681.4</td>
<td>0.06</td>
</tr>
<tr>
<td>4.00</td>
<td>1.45</td>
<td>908.5</td>
<td>0.10</td>
</tr>
<tr>
<td>5.00</td>
<td>1.90</td>
<td>1135.6</td>
<td>0.13</td>
</tr>
<tr>
<td>6.00</td>
<td>2.57</td>
<td>1362.8</td>
<td>0.18</td>
</tr>
</tbody>
</table>
**XF Insertion Tool**

The XF Insertion Tool reduces the effort required to insert the fittings into the tube by 50%.

**Features**
- 50% Less effort required to install fittings than without a tool
- Firmly locks fittings into place while inserting Dripline
- Tool helps widen the dripline opening to make the fitting insertion easier
- Solid grip and comfortable fit in hand

**Model**
- FITINS-TOOL

---

**Air/Vacuum Relief Valve Kit**

**Features**
- Use with Rain Bird XF-Series or Landscape Dripline inline emitter tubing when installation is below soil*
- Made of quality rust-proof materials
- Fits inside an SEB 7XB emitter box

*Rain Bird recommends XF5 dripline with Copper Shield™ for subsurface installations, including installations under turf grass.

**Model**
- ARV050: ½” Air Relief Valve

---

**Drip System Operation Indicator**

**Features**
- Stem rises 6” for clear visibility
- When stem is extended, drip system is charged to a minimum of 20 psi
- VAN Nozzle is tightened to no flow but can be opened to observe wetting pattern
- Includes 16” of ¼” distribution tubing with connection fitting pre-installed

**Model**
- OPERIND

---

**Install Air/Vacuum Relief Valves correctly by:**

Locate at the highest point(s) of the dripline zone. Install the valve in an exhaust header or a line that runs perpendicular to the lateral rows to ensure all rows of the dripline can take advantage of the air/vacuum relief valve.

---

**Maximum Length of Dripline Useable with the ARV**

**1/2” ARV**

<table>
<thead>
<tr>
<th>Emitter Spacing</th>
<th>0.6 GPH</th>
<th>0.9 GPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>12”</td>
<td>639’</td>
<td>424’</td>
</tr>
<tr>
<td>18”</td>
<td>958’</td>
<td>636’</td>
</tr>
<tr>
<td>24”</td>
<td>1278’</td>
<td>848’</td>
</tr>
</tbody>
</table>

**ARV Capacity**

- Total Flow (GPM): 6.5
- Total Flow (GPH): 390

---

**Maximum Length of Dripline Useable with the ARV**

**1/2” ARV**

<table>
<thead>
<tr>
<th>Emitter Spacing</th>
<th>2.3 l/h</th>
<th>3.4 l/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.30 m</td>
<td>195</td>
<td>129</td>
</tr>
<tr>
<td>0.46 m</td>
<td>292</td>
<td>194</td>
</tr>
<tr>
<td>0.61 m</td>
<td>390</td>
<td>258</td>
</tr>
</tbody>
</table>

**ARV Capacity**

- Total Flow (l/m): 24.6
- Total Flow (l/h): 1476
XF Series Blank Tubing

Features:
- Greater flexibility is easier to install and saves time
- Brown color matches landscape and blends with mulch. Matches XF Series Dripline inline emitter tubing
- Compatible with XF Series Dripline (0.536” I.D. x 0.634” O.D.)
- Accepts Rain Bird Easy Fit Compression Fittings, XF Dripline Insert Fittings, and 17mm insert fittings
- Not compatible with 16 mm fittings

Specifications
- Outside Diameter: 0.634” (16.1mm)
- Inside Diameter: 0.536” (13.6mm)
- Wall Thickness: 0.049” (1.2mm)

Models:
- XFD100: 100 ft. coil (30m)
- XFD250: 250 ft. coil (76m)
- XFD500: 500 ft. coil (152m)

XT-700 Distribution Tubing

Durable, thick-walled distribution tubing stands up to harsh conditions and performs well in all climates

Features:
- Thick-walled, flexible tubing resists kinks and damage caused by routine landscape maintenance activities
- Extruded from UV-resistant polyethylene resin materials

Operating Range
- Pressure: 0 to 60 psi (0 to 4.1 bar)

Specifications
- Outside diameter: 0.700” (18 mm)
- Inside diameter: 0.580” (15 mm)
- Wall thickness: 0.06” (1.5 mm)

Models:
- XT-700-100: 100-foot coil (30 m)
- XT-700-500: 500-foot coil (152 m)

Note: For both water conservation and appearance, it is recommended that a 2” to 3” (5 to 8 cm) mulch cover be placed on top of the tubing.
XBS - Black Stripe Tubing

High quality, flexible tubing for use in any low-volume irrigation system

**Features**
- 1/2” & 3/4” blank tubing extruded from polyethylene resin materials for consistent durability
- 1/2” tubing is now available in two different sizes: 0.600” I.D. X 0.700” O.D. and 0.615” I.D. X 0.705” O.D.
- Available in five color stripes to differentiate zones
- UV-resistant for installations at or below grade
- Compact coils for easy storage and shipping

**Operating Range**
- Pressure: 0 to 60 psi (0 to 4.1 bar)

**Models**

**XBS 700 - ½” Tubing Models - 600-700**
- Outside diameter: 0.700” (17.8 mm)
- Inside diameter: 0.600” (15.2 mm)
- Wall thickness: 0.050” (1.3 mm)
- Available in five color stripes to differentiate zones
- UV-resistant for installations at or below grade
- Compact coils for easy storage and shipping

**XBS - ½” Tubing Models**
- Outside diameter: 0.705” (18 mm)
- Inside diameter: 0.615” (15.6 mm)
- Wall thickness: 0.045” (1.2 mm)

**XBS 940 - ¾” Tubing Models**
- Outside diameter: 0.940” (24 mm)
- Inside diameter: 0.820” (21 mm)
- Wall thickness: 0.060” (1.5 mm)

**Note:** XBS 940 is also available in 100’ coils

---

### XBS 700 - 1/2” Tubing Friction Loss Characteristics

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Velocity (fps)</th>
<th>Loss (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50</td>
<td>0.57</td>
<td>0.16</td>
</tr>
<tr>
<td>1.00</td>
<td>1.14</td>
<td>0.58</td>
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<td>1.70</td>
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<td>2.08</td>
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<tr>
<td>2.50</td>
<td>2.84</td>
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<td>4.41</td>
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<td>5.50</td>
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<td>15.92</td>
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</table>

---

### XBS - Tubing Friction Loss Characteristics

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Velocity (fps)</th>
<th>Loss (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50</td>
<td>0.54</td>
<td>0.14</td>
</tr>
<tr>
<td>1.00</td>
<td>1.08</td>
<td>0.51</td>
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<td>1.62</td>
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<tr>
<td>2.50</td>
<td>2.70</td>
<td>2.79</td>
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<td>3.00</td>
<td>3.24</td>
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<tr>
<td>3.50</td>
<td>3.78</td>
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### XBS 940 - ¾” Tubing Friction Loss Characteristics

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Velocity (fps)</th>
<th>Loss (psi)</th>
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</thead>
<tbody>
<tr>
<td>0.50</td>
<td>0.30</td>
<td>0.03</td>
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<td>0.61</td>
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<td>0.91</td>
<td>0.27</td>
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<td>1.52</td>
<td>0.69</td>
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<td>5.50</td>
<td>3.34</td>
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<td>6.00</td>
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<td>7.00</td>
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<td>8.00</td>
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<td>5.93</td>
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<tr>
<td>8.50</td>
<td>5.17</td>
<td>6.64</td>
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<td>9.00</td>
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<td>9.50</td>
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</tr>
<tr>
<td>10.00</td>
<td>6.08</td>
<td>8.97</td>
</tr>
</tbody>
</table>

---

**Note:** Use of tubing at flows shown in dark shaded area is not recommended, as velocities exceed 5 ft/sec (1.5 m/s)
XQ ¼” Distribution Tubing
The strongest and most flexible ¼” Distribution Tubing available to extend emitter outlets to desirable discharge locations

Features
- Unique blend of polymers that give it the flexibility of vinyl with hold of poly
- New textured finish improves handling
- Self extracting coiling feature makes it easy to use, store and eliminates waste
- Fits over barbed outlet ports and all Xerigation® emission devices and ¼” transfer fittings
- Extruded from UV-resistant polyethylene resin materials

Specifications
- Outside Diameter: 0.25” (6.3 mm)
- Inside Diameter: 0.17” (4.3 mm)
- Wall Thickness: .04” (1.0 mm)
- Lengths: 100’ and 1000’ coils

Operating Range
- Pressure: 0 to 60 psi (0 to 4.1 bar)

Models
- XQ-100: 100-foot (30m) coil ¼” distribution tubing
- XQ-1000: 1000-foot (305m) coil ¼” distribution tubing
- XQ-1000-B: 1000-foot (305m) coil ¼” distribution tubing in a bucket

XQ ¼” Distribution Tubing Friction Loss Characteristics

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Velocity (fps)</th>
<th>Loss (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow (l/h)</td>
<td>Flow (l/h)</td>
<td>Velocity (m/s)</td>
</tr>
<tr>
<td>1</td>
<td>0.27</td>
<td>0.16</td>
</tr>
<tr>
<td>3</td>
<td>0.80</td>
<td>1.24</td>
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<tr>
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<td>7</td>
<td>1.86</td>
<td>3.57</td>
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<td>17</td>
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<td>18</td>
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<tr>
<td>19</td>
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<td>25</td>
<td>6.64</td>
<td>12.24</td>
</tr>
<tr>
<td>30</td>
<td>7.97</td>
<td>12.57</td>
</tr>
</tbody>
</table>

Psi Loss Per 100 Feet of tubing; C=150  Bar Loss per 100 Meters of tubing

Note: Use of tubing at flows shown in dark shaded area is not recommended, as velocities exceed 5 ft/sec (1.5 m/s)

1/4” Landscape Dripline
Rain Bird ¼” Dripline is a perfect choice for small-sized areas such as planter boxes, container gardens, loops around trees, vegetable gardens and shrubs

Features
- Simple to use, as the flexible tubing makes watering pots and container gardens easy
  - Clog resistance through built-in filtration and two outlet holes, 180 degrees apart
- Brown tubing complements Rain Bird XF Dripline
- Works with Rain Bird ¼” barbed Fittings

Operating Range
- Pressure: 0 to 40 psi (0 to 2.7 bar)
- Flow rate at 30 psi (2.0 bar): 0.8gph (3.0 l/h)
- Required filtration: 200 mesh (75 micron)

Specifications
- Outside diameter: 0.250” (6 mm)
- Inside diameter: 0.170” (4 mm)
- Wall thickness: 0.040” (1 mm)
- Spacing: 6” or 12” (15.25 cm and 30.5 cm)
- Length: 100’ (30.5 m) coils

Models
- LDQ0806100
- LDQ0812100

Flow Characteristics

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow at 30 psi (gph)</th>
<th>Spacing (in.)</th>
<th>Coil Length (ft.)</th>
<th>Coil Length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDQ0806100</td>
<td>0.8</td>
<td>6</td>
<td>15.25</td>
<td>30.50</td>
</tr>
<tr>
<td>LDQ0812100</td>
<td>0.8</td>
<td>12</td>
<td>30.50</td>
<td>100</td>
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</table>

1/4” Landscape Dripline Performance

<table>
<thead>
<tr>
<th>Pressure (psi)</th>
<th>Flow Rate (gph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>1</td>
<td>0.2</td>
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<tr>
<td>2</td>
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<td>4</td>
<td>0.8</td>
</tr>
<tr>
<td>5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Maximum Length of Run (Feet)

<table>
<thead>
<tr>
<th>Emitter Spacing</th>
<th>Maximum Length of Run</th>
<th>Flow per Ft. @ 15 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>6”</td>
<td>19 feet</td>
<td>1 gph/ft.</td>
</tr>
<tr>
<td>12”</td>
<td>33 feet</td>
<td>0.5 gph/ft.</td>
</tr>
</tbody>
</table>
**1⁄4” Barb Transfer Fittings**

**Features**
- Used to connect 1⁄4” Distribution Tubing (XQ) in different configurations or attach 1⁄4” tubing to 1⁄2” or 3⁄4” tubing
- Newly designed connectors have self-piercing barbs that easily puncture 1⁄2” or 3⁄4” tubing
- Stem on fittings allows simple, quick installation using Xeriman™ Tool (XM-TOOL)
- Rugged plastic construction

**Operating Range**
- Pressure: 0 to 50 psi (0 to 3.5 bar)
  *with polyethylene tubing*

**Models**
- XBF1CONN: 1⁄4” barb connector
- XBF2EL: 1⁄4” barb x barb elbow
- XBF3TEE: 1⁄4” barb x barb x barb tee

---

**Subterranean Emitter Box**

**Features**
- Provides convenient access to subsurface emitter while protecting against vandalism. Ideal for multi-outlet devices (such as Xeri-Bird 8) and Air Vacuum Relief Valve Kit
- New larger body allows more room for components and distribution tubing
- Rugged, UV-resistant thermoplastic construction
- Available with black top

**Dimensions**
- Height: 9.0” (22.9 cm)
- Top Diameter: 6.4” (16.3 cm)
- Base Diameter: 9.8” (24.9 cm)

**Model**
- SEB 7XB

---

**Galvanized Tie-Down Stake**

9-gauge galvanized steel stake to secure distribution tubing, XF Dripline or XBS Tubing to finished grade.

**Features**
- **Durability**: Sturdy 9 gauge galvanized steel provides long-lasting and corrosion resistant hold strength for distribution tubing.
- **Easy installation**: Sharp tips provide easy insertion into all soil types
- **Convenience**: Robust packaging options provide ease of transportation and storage

**Specifications:**
- Size: 6 inches
- Material: galvanized steel
- Thickness: 9 gauge

**Models**
- TDS-6050: 6 in. galvanized tie down stake (50 piece)
- TDS-6500: 6 in. galvanized tie down stake (500 pieces, pail)

---

**Tubing Goof Plug**

**Features**
- Used to plug unwanted holes in tubing
- New design works with Xeriman™ Tool (XM-TOOL) for a quick, easy installation

**Model**
- EMA-GPX

---

**Tubing Cutter**

**Features**
- Re-designed Xerigation® Tubing Cutter allows for easier and cleaner cuts of all low-volume tubing
- Unique design provides two different-sized wells (one for 1⁄2” - 3⁄4” tubing and one for 1⁄4” tubing), giving more leverage so less force is needed to cut any tubing
- Tubing Cutter is lightweight with stainless steel blades. Replacement blades available (PPC-200XBLD)

**Models**
- PPC-200X: Tubing cutter
- PPC-200XBLD: Replacement blades
Control Zone Kit Selection Guide

**Commercial High Flow: 15 - 62 gpm**

- **XCZ-100-PRB-COM**
  - Flow: 0.3 - 20 gpm

- **XCZ-100-PRBR**
  - Flow: 0.3 - 20 gpm

- **XCZ-150-PRB-COM**
  - Flow: 15 - 40 gpm

**Commercial Wide Flow: 0.3 - 20 gpm**

- **XCZ-100-LCS**
  - Flow: 0.3 - 20 gpm

- **XCZ-100-LC**
  - Flow: 0.3 - 20 gpm

- **XCZ-150-LC**
  - Flow: 0.3 - 20 gpm

**Residential Medium Flow: 3 - 15 gpm**

- **XCZPGA-100-PRF**
  - Flow: 3 - 15 gpm

- **XCZ-100-PRF**
  - Flow: 3 - 15 gpm

- **XACZ-100-PRF**
  - Flow: 3 - 15 gpm

**Residential Low Flow: 0.2 - 10 gpm**

- **XCZLF-100-PRF**
  - Flow: 0.2 - 10 gpm

- **XCZ-075-PRF**
  - Flow: 0.2 - 5 gpm

- **XACZ-075-PRF**
  - Flow: 0.2 - 5 gpm

**Residential Low Flow: Flow: 0.2 - 5 gpm**

**Online Control Zone Kit Selection Guide**

Rain Bird Control Zone Kits provide all of the components necessary for on/off control, filtration and pressure regulation of a low-volume irrigation zone, making the kits simple to order and easy to install.

This quick selection tool will help you find the appropriate control zone kit for your application. By answering a few simple questions, the selection guide will provide recommended control zone kits best suited for your application. Simply click on the kit image for detailed information and specifications.

**Features**

- Includes detailed drawings and specifications for each kit
- Available at www.rainbird.com/CZK
Control Zone Kits

Rain Bird Control Zone Kits provide all of the components necessary for on/off control, filtration, and pressure regulation in a single package, making them simple to order and easy to install.

- Most reliable kits, and contain revolutionary products such as the Low Flow Valve and Quick Check Basket Filter
- All kits in every category use the innovative PR Filter which combines the filter and pressure regulator into one unit.

Use the chart below to identify the most appropriate kit or see pages 146 - 151 for specific detailed information on these kits and their individual components. Also available is the interactive Control Zone Kit Pyramid Selection Guide for selection and detailed specification information; found at www.rainbird.com/professionals/products/drip-control

Control Zone Selection Chart

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate</th>
<th>Flow rate capability (9 gph dripline with 12” emitter spacing)</th>
<th>Valve Type</th>
<th>2-Wire Compatible</th>
<th>Filtration Type</th>
<th>Pressure Regulator</th>
<th>Inlet/Outlet Size</th>
<th>Size</th>
<th>Minimal Valve Box Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Control Zone Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XCZ-150-LCS</td>
<td>15-62 GPM</td>
<td>1000 to 4000 feet of dripline</td>
<td>150-PEB Yes</td>
<td>120 Mesh Disc Filter (130 Micron)</td>
<td>40 psi</td>
<td>1.5” x 1.5”</td>
<td>20.5” Length</td>
<td>Jumbo Rectangular</td>
<td></td>
</tr>
<tr>
<td>XCZ-150-PRB-COM</td>
<td>15-40 GPM</td>
<td>1000 to 2500 feet of dripline</td>
<td>150-PESB Yes</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XCZ-100-PRB-COM</td>
<td>0.3-20 GPM</td>
<td>20 to 1300 feet of dripline</td>
<td>100-PESB Yes</td>
<td>1” x 1”</td>
<td></td>
<td></td>
<td>17.5” or 11” Length</td>
<td>Mini- Standard Rectangular</td>
<td></td>
</tr>
<tr>
<td>XCZ-100-PRB-LC</td>
<td>100-PESB Yes</td>
<td>1” x 1”</td>
<td>12” Length</td>
<td>Mini- Standard Rectangular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Control Zone Kits for Reclaimed Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XCZ-150-LCDR</td>
<td>15-62 GPM</td>
<td>1000 to 4000 feet of dripline</td>
<td>150-PESBR Yes</td>
<td>120 Mesh Disc Filter (130 Micron)</td>
<td>40 psi</td>
<td>1.5” x 1.5”</td>
<td>23.5” Length</td>
<td>Jumbo Rectangular</td>
<td></td>
</tr>
<tr>
<td>XCZ-100-PRBR</td>
<td>0.3-20 GPM</td>
<td>20 to 1300 feet of dripline</td>
<td>100-PESBR Yes</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td>40 psi</td>
<td>1” x 1”</td>
<td>10.5” Length</td>
<td>Mini- Standard Rectangular</td>
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<tr>
<td>Residential Control Zone Kits</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>XCZPGA-100-PRF</td>
<td>3-15 GPM</td>
<td>200 to 1000 feet of dripline</td>
<td>100-PGA Yes</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td>40 psi</td>
<td>1” x 1”</td>
<td>11” Length</td>
<td>Mini- Standard or 10” Round</td>
<td></td>
</tr>
<tr>
<td>XCZ-100-PRF</td>
<td>3-15 GPM</td>
<td>200 to 1000 feet of dripline</td>
<td>100-DV No</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td>30 psi</td>
<td>3/4” x 3/4”</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>XCZLF-100-PRF</td>
<td>0.2-10 GPM</td>
<td>13 to 650 feet of dripline</td>
<td>LFV-100 No</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td>30 psi</td>
<td>3/4” x 3/4”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XCZ-075-PRF</td>
<td>0.2-5 GPM</td>
<td>13 to 300 feet of dripline</td>
<td>LFV-075 No</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td>30 psi</td>
<td>3/4” x 3/4”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Control Zone Kits with Anti-Siphon</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>XACZ-100-PRF</td>
<td>3-15 GPM</td>
<td>200 to 1000 feet of dripline</td>
<td>100-ASV No</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td>40 psi</td>
<td>1” x 1”</td>
<td>14” Height</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>XACZ-075-PRF</td>
<td>0.2-5 GPM</td>
<td>13 to 300 feet of dripline</td>
<td>ASV-LFV-075 No</td>
<td>200 Mesh Stainless Steel (75 Micron)</td>
<td>30 psi</td>
<td>3/4” x 3/4”</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Combine a Xerigation® Control Zone Kit with a Rain Bird controller product to precisely regulate zone watering times.
Low Flow Control Zone Kits with PR Filter

- Reliable Control Zone Kits that include the Low Flow Valve, the only valve on the market that can handle low flows (below 3 gpm) without weeping
- Shorter kits with only two components (valve plus pressure-regulating filter) mean that you can fit more Control Zone Kits in a valve box, saving time and money
- These PR Filter kits provide on/off control, filtration, and pressure regulation with fewer components; so there is less chance of leakage at the connections, both at installation and over the life of the system

**Operating Range**
- Flow: 0.20 to 10 gpm (0.8 to 37.85 l/m)
- Inlet pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Regulated pressure: 30 psi (2.1 bar)
- Filtration: 200 mesh stainless steel screen (75 micron)

**Models**
- XCZ-075-PRF: ¾” Low Flow Valve with ¾” PR RBY Filter (Assembled)
  - Flow: 0.2 to 5.0 gpm (0.8 to 18.91 l/m)
- XCZLF-100-PRF: 1” Low Flow Valve with 1” PR RBY Filter (Assembled)
  - Flow: 0.2 to 10.0 gpm (0.8 to 37.85 l/m)

**Replacement Screen**
- RBY-200SSMX (200 mesh stainless steel screen)

---

**Minimum Inlet Pressure for 30psi (2.1 bar) outlet pressure**

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Flow (l/m)</th>
<th>Pressure (psi)</th>
<th>Pressure (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>0.8</td>
<td>34.4</td>
<td>2.4</td>
</tr>
<tr>
<td>1.0</td>
<td>3.8</td>
<td>36.1</td>
<td>2.5</td>
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<tr>
<td>3.0</td>
<td>11.4</td>
<td>38.1</td>
<td>2.6</td>
</tr>
<tr>
<td>5.0</td>
<td>18.9</td>
<td>43.4</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Minimum Inlet Pressure for 40psi (2.8 bar) outlet pressure**

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Flow (l/m)</th>
<th>Pressure (psi)</th>
<th>Pressure (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>0.8</td>
<td>44.4</td>
<td>3.1</td>
</tr>
<tr>
<td>1.0</td>
<td>3.8</td>
<td>44.4</td>
<td>3.1</td>
</tr>
<tr>
<td>3.0</td>
<td>11.4</td>
<td>45.0</td>
<td>3.1</td>
</tr>
<tr>
<td>5.0</td>
<td>18.9</td>
<td>46.2</td>
<td>3.2</td>
</tr>
<tr>
<td>10.0</td>
<td>37.9</td>
<td>52.2</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Low Flow Control Zone Kits with Anti-Siphon Valve and PR Filter

- Reliable Control Zone Kits that include the Low Flow Valve, the only valve on the market that can handle low flows (below 3 gpm) without weeping
- Complete, two-piece Control Zone Kits include the field-proven Low Flow Anti-Siphon Valve that has an atmospheric vacuum breaker for backflow prevention and an IAPMO rating
- These PR Filter kits provide on/off control, filtration, and pressure regulation with only two parts; so there is less chance of leakage at the connections, both at installation and over the life of the system

**Operating Range**
- Flow: 0.20 to 5.0 gpm (0.8 to 18.9 l/m)
- Inlet pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Filtration: 200 mesh stainless steel screen (75 micron)
- Regulated pressure: 30 psi (2.1 bar)

**Models**
- XACZ-075-PRF: ¾” Low Flow Anti-Siphon Valve with ¾” PR RBY Filter

**Replacement Screen**
- RBY-200SSMX (200 mesh stainless steel screen)

Medium Flow Control Zone Kits with Anti-Siphon Valve and PR Filter

- Complete, two-piece Control Zone Kits include the field-proven ASVF valve which has an atmospheric vacuum breaker for backflow prevention and an IAPMO rating
- These PR Filter kits provide on/off control, filtration, and pressure regulation with only two parts; so there is less chance of leakage at the connections, both at installation and over the life of the system

**Operating Range**
- Flow: 3.0 to 15.0 gpm (11.4 to 56.8 l/m)
- Inlet pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Filtration: 200 mesh stainless steel screen (75 micron)
- Regulated pressure: 40 psi (2.8 bar)

**Models**
- XACZ-100-PRF: 1” ASVF with 1” PR RBY Filter

**Replacement Screen**
- RBY-200SSMX (200 mesh stainless steel screen)

---

**Minimum Inlet Pressure for 30psi (2.1 bar) outlet pressure**

<table>
<thead>
<tr>
<th>Flow gpm</th>
<th>l/m</th>
<th>Inlet Pressure psi</th>
<th>bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>0.8</td>
<td>37.4</td>
<td>2.6</td>
</tr>
<tr>
<td>1.0</td>
<td>3.8</td>
<td>39.1</td>
<td>2.7</td>
</tr>
<tr>
<td>3.0</td>
<td>11.4</td>
<td>40.0</td>
<td>2.8</td>
</tr>
<tr>
<td>5.0</td>
<td>18.9</td>
<td>49.7</td>
<td>3.4</td>
</tr>
</tbody>
</table>

**Minimum Inlet Pressure for 40 psi Outlet Pressure**

<table>
<thead>
<tr>
<th>Flow gpm</th>
<th>l/m</th>
<th>Inlet Pressure psi</th>
<th>bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>11.4</td>
<td>43.3</td>
<td>3.0</td>
</tr>
<tr>
<td>5.0</td>
<td>18.9</td>
<td>44.7</td>
<td>3.1</td>
</tr>
<tr>
<td>7.0</td>
<td>26.5</td>
<td>46.2</td>
<td>3.2</td>
</tr>
<tr>
<td>9.0</td>
<td>34.1</td>
<td>47.3</td>
<td>3.3</td>
</tr>
<tr>
<td>11.0</td>
<td>41.6</td>
<td>50.8</td>
<td>3.5</td>
</tr>
<tr>
<td>13.0</td>
<td>49.2</td>
<td>55.4</td>
<td>3.8</td>
</tr>
<tr>
<td>15.0</td>
<td>56.8</td>
<td>59.7</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Medium Flow Control Zone Kits with PR Filter

- Reliable Control Zone Kit that includes an extra durable PGA valve
- These PR Filter kits provide on/off control, filtration, and pressure regulation with only two parts; so there is less chance of leakage at the connections, both at installation and over the life of the system
- 2-wire compatible residential Control Zone Kit

**Operating Range**
- Flow: 3 to 15 gpm (11.4 to 56.8 l/m)
- Inlet pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Filtration: 200 mesh stainless steel screen (75 micron)
- Regulated pressure: 40 psi (2.8 bar)

**Models**
- XCZPGA-100-PRF: 1" PGA Valve with 1" PR Filter

**Replacement Screen**
- RBY-200SSMX (200 mesh stainless steel screen)

---

**Minimum Inlet Pressure for 40 psi outlet pressure**

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Inlet Pressure (psi) XCZPGA-100-PRF</th>
<th>Inlet Pressure (psi) XCZ-100-PRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>45.8</td>
<td>42.9</td>
</tr>
<tr>
<td>5.0</td>
<td>47.0</td>
<td>44.1</td>
</tr>
<tr>
<td>10.0</td>
<td>50.7</td>
<td>48.5</td>
</tr>
<tr>
<td>15.0</td>
<td>57.6</td>
<td>55.5</td>
</tr>
</tbody>
</table>

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**Minimum Inlet Pressure for 2.8 bar outlet pressure**

<table>
<thead>
<tr>
<th>Flow (l/m)</th>
<th>Inlet Pressure (bar) XCZPGA-100-PRF</th>
<th>Inlet Pressure (bar) XCZ-100-PRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.4</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>18.9</td>
<td>3.2</td>
<td>3.0</td>
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<tr>
<td>37.9</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td>56.8</td>
<td>4.0</td>
<td>3.8</td>
</tr>
</tbody>
</table>

---

Medium Flow Control Zone Kits with PR Filter

- Shorter kits with only two components (valve plus pressure-regulating filter) mean that you can fit more Control Zone Kits in a valve box, saving time and money
- These PR Filter kits provide on/off control, filtration, and pressure regulation with only two parts; so there is less chance of leakage at the connections, both at installation and over the life of the system

**Operating Range**
- Flow: 3 to 15 gpm (11.4 to 56.8 l/m)
- Inlet pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Filtration: 200 mesh stainless steel screen (75 micron)
- Regulated pressure: 40 psi (2.8 bar)

**Models**
- XCZ-100-PRF: 1" DV Valve with 1" PR Filter (Assembled)*
  * Available with BSP threads

**Replacement Screen**
- RBY-200SSMX (200 mesh stainless steel screen)
Wide Flow Commercial
Control Zone Kit with Pressure
Regulating, Basket Filter

- Industry wide flow range between 0.3 and 20 gpm (1.13 to 75.71 l/m) leading enables single SKU purchase for large projects
- Updated with the reliable, flexible and proven PEB valve with the rugged pressure regulating basket filter
- This PR Filter kit provides on/off control, filtration, and pressure regulation with only two parts; so there is less chance of leakage at the connections, both at installation and over the life of the system
- The “No Spill” feature of the basket filter ensures dirt does not fall back into the filter during cleanup operation. The threaded filter top with O-ring makes it easy to remove and clean that stainless steel filter screen

Operating Range
- Flow: 0.3 to 20 gpm (1.13 to 75.71 l/m)*
- Inlet Pressure: 15 to 150 psi (1.0 to 10.3 bar)
- Regulating Pressure: 40 psi (2.7 bar)
- Filtration: 200 mesh (75 micron) stainless steel
- Temperature: Up to 150 degree F (66 degree C)

Model
- XCZ-100-PRB-LC: 1” PEB Valve with 1” Pressure Regulating (40 psi), Basket Filter
- XCZ-100-PRB-MC: 1” PESB Valve with 1” Pressure Regulating (40 psi), Basket Filter

Replacement Filter Screens
- QKCHK-100M: 100 mesh stainless steel screen, red
- QKCHK-200M: 200 mesh stainless steel screen, white

Replacement Cap
- BFCAP (Complete cap with body o-ring)

*For flows below 5gpm Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm

Minimum Inlet Pressure for 40 psi (2.8 bar) Outlet Pressure

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Inlet Pressure (psi)</th>
<th>Inlet Pressure (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3</td>
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<tr>
<td>10.0</td>
<td>37.9</td>
<td>48.0</td>
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<tr>
<td>15.0</td>
<td>56.8</td>
<td>56.0</td>
</tr>
<tr>
<td>20.0</td>
<td>75.7</td>
<td>65.0</td>
</tr>
</tbody>
</table>
Wide Flow Commercial Control Zone Kit with Scrubber Valve & Pressure Regulating, Basket Filter

- Complete kit is the simplest, smallest and most reliable Control Zone Kit for commercial applications between 0.3 and 20 gpm (1.13 and 76 l/m)
- Includes the reliable, proven PESB Valve which provides patented scrubbing action, making this kit ideal for commercial dirty water applications
- Includes the Pressure Regulating, Quick-Check Basket Filter that has a clear indicator which goes from green to red, telling you when to clean the filter. This reduces maintenance and takes the guesswork out of cleaning the filter. In addition, the threaded top makes it easy to remove and clean the stainless steel screen
- Basket Filter and Pressure Regulator have been combined for one smaller Pressure Regulating, Quick-Check Basket filter that is 24% smaller than the previous unit

Operating Range
- **Flow**: 0.3 to 20.0 gpm (1.13 to 75.7 l/m)*
- **Inlet Pressure**: 15 to 150 psi (1,0 to 10,3 bar)
- **Regulating Pressure**: 40 psi (2.7 bar)
- **Filtration**: 200 mesh (75 micron) stainless steel
- **Temperature**: Up to 150º F (66º C)

Model
- **XCZ-100-PRB-COM**: 1” Ball Valve with 1” PESB Valve and 1” Pressure Regulating (40 psi), Quick-Check Basket Filter
- **XCZ-100-PRBR**: 1” PESBR Valve and 1” Pressure Regulating (40psi) Basket Filter

Replacement Screen
- QKCHK100M (100 mesh stainless steel screen)
- QKCHK200M (200 mesh stainless steel screen)

Replacement Cap
- QKCHKCAP (Complete cap with body o-ring)

* For flows below 5gpm Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm
High Flow Commercial Control Zone Kit with 2 Pressure Regulating, Basket Filters

- Highest flow Control Zone Kit on the market for large, commercial drip zones 15.0 to 40.0 gpm (56.8 to 151.4 l/m)
- Includes the reliable, proven 1 ½" PESB Valve which provides patented scrubbing action, making this kit ideal for commercial dirty water applications
- Includes 2 Pressure Regulating, Quick-Check Basket Filter that have a clear indicator which goes from green to red, telling you when to clean the filter. This reduces maintenance and takes the guesswork out of cleaning the filter. In addition, the threaded top makes it easy to remove and clean the stainless steel screen
- Basket Filter and Pressure Regulator have been combined for one smaller Pressure Regulating, Quick-Check Basket filter that is 22% smaller than the previous unit
- Comes partially assembled for convenience and ease of installation

Operating Range
- Flow: 15.0 to 40.0 gpm (56.8 to 151.4 l/m)
- Inlet Pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Regulating Pressure: 40 psi (2.7 bar)
- Filtration: 200 mesh (75 micron) stainless steel
- Temperature: Up to 150º F (66º C)

Models
- XCZ-150-PRB-COM: 1 1/2" PESB Valve with two 1" Pressure Regulating (40 psi), Quick-Check Basket Filters

Replacement Screen
- QKCHK100M (100 mesh stainless steel screen)
- QKCHK200M (200 mesh stainless steel screen)

Replacement Cap
- QKCHKCAP (Complete cap with body o-ring)
1.5" Inline Commercial Control Zone Kit

Run Up to 62 gpm for Large Zones

- High Flow Range: Allows for larger drip zone coverage with one control zone kit, saving labor cost, material cost and installation hassle.
- Low Friction Loss: Allows usage in zones with lower head pressure.
- Fully Assembled: Saves installation labor cost by ensuring all key components are included and that the direction of flow in individual components is assembled properly.
- Inline Configuration: Fewer connection points, which fits two kits instead of just one in a jumbo valve box. Also provides more access for maintenance and components.

Operating Range
- Flow Range: 15 to 62 gpm (56.8 l/min to 234.69 l/min)
- Inlet Pressure: 15 to 115 psi (1.03 to 7.9 bar)
- Regulated Pressure: 40 psi (2.8 bar)
- Filtration: 120 mesh (130 micron)
- Water Temperature: 33° F up to 110° F (0.5° C to 43° C)
- Ambient Temperature: 33° F up to 125° F (0.5° C to 52° C)

Specifications

Dimensions
- XCZ-150-LCS: 20 3/4" L x 5 3/4" W x 9½" H
- XCZ-150-LCDR: 23½" L x 5 3/4" W x 9½" H

Filtration
- XCZ-150-LCS: 1½" (3.81 cm) Stainless Steel Screen Filter, 120 Mesh (130 Micron); Surface Area: 42 in² (270 cm²)
- XCZ-150-LCDR: 1½" (3.81 cm) Disc Filter, 120 Mesh (130 Micron); Surface Area: 48 in² (310 cm²)

Valve Type
- XCZ-150-LCS: 1.5" PEB
- XCZ-150-LCDR: 1.5" PESB-R
- Power: 24 VAC 50/60 Hz (cycles/sec) solenoid
- Inrush Current: 0.41A (9.84 VA) at 60Hz
- Holding Current: 0.14A (3.43VA) at 60Hz
- Coil Resistance: 30-39 Ohms
- Two-wire compatible with ESP-LXD Decoders

Models
- XCZ-150-LCS
- XCZ-150-LCDR

Replacement Filters
Disc
- LGFC120MD
Screen
- LGFC120MS

Pressure Loss Characteristics

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>XCZ-150-LCS</th>
<th>XCZ-150-LCDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>3</td>
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<tr>
<td>30</td>
<td>5</td>
<td>3</td>
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<td>40</td>
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<td>15</td>
<td>8</td>
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<tr>
<td>70</td>
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<td>8</td>
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Pressure Loss Characteristics METRIC

<table>
<thead>
<tr>
<th>Flow Rate (l/m)</th>
<th>XCZ-150-LCS</th>
<th>XCZ-150-LCDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.9</td>
<td>0.21</td>
<td>0.14</td>
</tr>
<tr>
<td>75.7</td>
<td>0.21</td>
<td>0.14</td>
</tr>
<tr>
<td>94.6</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>113.5</td>
<td>0.34</td>
<td>0.21</td>
</tr>
<tr>
<td>151.4</td>
<td>0.41</td>
<td>0.41</td>
</tr>
<tr>
<td>189.3</td>
<td>0.76</td>
<td>0.55</td>
</tr>
<tr>
<td>227.1</td>
<td>1.03</td>
<td>0.55</td>
</tr>
<tr>
<td>264.9</td>
<td>1.10</td>
<td>0.55</td>
</tr>
</tbody>
</table>
Low Flow Valves
Valves designed exclusively for the low flow rates of a drip irrigation system (0.2 - 10.0 gpm; 0.6 to 37.8 l/m)

Features
- The only valves in the industry made specifically for drip irrigation systems, making these the only valves that can effectively handle particles at low flow rates – patented design
- These valves contain all of the features of reliable Rain Bird DV valves, coupled with a unique diaphragm design that allows particles to pass through at extremely low flow rates, thereby preventing weeping of the valve
- Allows the filter to be safely placed downstream of the valve since these valves handle all sizes of particles
- Unique “double-knife” diaphragm coupled with ½” diameter seat for flawless operation at low flow rates
- Low Flow Valve is available in ¾” In-line model
- Double-filtered pilot flow design for maximum reliability
- External bleed to manually flush the system of dirt and debris during installation and system start-up
- Internal bleed for spray-free manual operation.

Operating Range
- Flow: 0.20 to 10.0 gpm (0.6 to 37.8 l/m)
- Pressure: 15 to 150 psi (1.0 to 10.3 bar)

Electrical Specifications
- 24 VAC 50/60 Hz (cycles/sec) solenoid
- Inrush current: 0.30 (7.2 VA) at 60 Hz
- Holding current: 0.19 A (4.56 VA)

Models
- LFV-075: ¾” Low Flow DV Valve
- LFV-100*: 1” Low Flow DV Valve
  *Available with BSP threads

<table>
<thead>
<tr>
<th>Flow gpm</th>
<th>LFV-075 psi</th>
<th>LFV-100 psi</th>
</tr>
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<tbody>
<tr>
<td>0.2</td>
<td>3.0</td>
<td>3.0</td>
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<td>6.4</td>
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<td>8.0</td>
<td>5.1</td>
<td>7.5</td>
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<table>
<thead>
<tr>
<th>Flow l/m</th>
<th>LFV-075 bar</th>
<th>LFV-100 bar</th>
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<td>0.6</td>
<td>0.21</td>
<td>0.21</td>
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<tr>
<td>3.6</td>
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<td>15.0</td>
<td>0.25</td>
<td>0.34</td>
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<tr>
<td>30.0</td>
<td>0.35</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Note: Also available as part of XCZLF-100-PRF (p. 146)
**Inline RBY Filter**
Static filter helps prevent plugging in a drip irrigation system

**Features**
- A simple and reliable filter for low-volume irrigation systems
- Simple to clean, as cap has a sealing O-ring and unthreads to provide access to the stainless steel filter element
- Strong and reliable due to its robust design and glass-filled polypropylene construction
- Male x Male threaded connections for direct connection to valves and pressure regulators
- Replacement stainless steel elements are available in 200 mesh (75 micron)

**Operating Range**
- Flow:
  - 3/4" units: 0.20 to 12.0 gpm (0.8 to 45.4 l/m)
  - 1" units: 0.20 to 18.0 gpm (0.8 to 68.1 l/m)
- Pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Filtration: 200 mesh (75 micron)

**Models**
- RBY075MPTX: 3/4" Inline RBY Filter with 200 Mesh Screen
- RBY100MPTX: 1" Inline RBY Filter with 200 Mesh Screen

**Replacement screen:**
- RBY-200SSMX (200 mesh stainless steel screen)

**Pressure-Regulating Filter (RBY)**
Unique, compact unit that works with all valves to create a simple, efficient control zone. Combines filtration and pressure regulation in one piece for protection of downstream components in a low-volume irrigation system

**Features**
- Reduces the number of components in a control zone, making it smaller and easier to install. More control zones can fit in one valve box!
- Combination unit comes with 200 mesh (75 micron) stainless steel reduces the number of connections, making installation easier and faster
- Static RBY filter regulates pressure to a nominal 30 or 40 psi (2.0 or 2.8 bar) - PR RBY Filter Cap has sealing O-ring and unthreads to provide access to the filter element for easy cleaning
- 30 or 40 psi pressure regulator is integrated into the filter body
- Robust body and cap are made of glass-filled polypropylene and provide 150 psi (10.3 bar) pressure rating

**Operating Range**
- Flow - 3/4" units: 0.20 to 5.0 gpm (0.8 to 18.9 l/m)
  - 1" units: 3.0 to 15.0 gpm (11.4 to 56.8 l/m)
- Inlet pressure: 20 to 150 psi (1.4 to 10.3 bar)
- Regulated pressure: - 3/4" units: 30 psi (2.1 bar)
  - 1" units: 40 psi (2.8 bar)

**Models**
- PRF-075-RBY: 3/4" PR RBY Filter
- PRF-100-RBY: 1" PR RBY Filter

**Replacement Screen**
- RBY-200SSMX (200 mesh stainless steel screen)

---

### Pressure Loss Characteristics

<table>
<thead>
<tr>
<th>Flow Rate gpm</th>
<th>RBY075MPTX psi</th>
<th>RBY075MPTX bar</th>
<th>RBY100MPTX psi</th>
<th>RBY100MPTX bar</th>
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<tr>
<td>1.00</td>
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<td>0.1</td>
<td>0.00</td>
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<td>3.00</td>
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<td>0.32</td>
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**Note:** Pressure loss for 200 mesh filter screen

---

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<th>PRF-075-RBY bar</th>
<th>PRF-100-RBY psi</th>
<th>PRF-100-RBY bar</th>
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<td>0.83</td>
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</table>

**Note:** Pressure loss for 200 mesh filter screen
**Quick-Check Basket Filter**
The only commercial-grade filter with a clean/dirty indicator for low-volume irrigation zones

**Features**
- Reduces maintenance and labor costs — the indicator tells you when to clean the filter, taking the guesswork out of cleaning the filter
- Provides increased reliability — "No-spill" feature ensures dirt does not fall back into the filter during cleanup operation
- Simplifies installation and maintenance - threaded top with O-ring makes it easy to remove and clean the screen
- Available in 1" model
- Comes pre-assembled with 200 mesh (75 micron) stainless steel screen (other screen sizes available)

**Operating Range**
- Flow: 3.0 to 20.0 gpm (11.4 to 75.7 l/m)
- Pressure: 0-150 psi (0 to 10.3 bar)

**Models**
- QKCHK-100*: 1" Basket Filter with 200 mesh stainless steel screen
  *Available with BSP threads

---

**Inline Pressure Regulators**

**Features**
- Can be installed above or below grade
- Preset outlet pressure: 30 psi (2.0 bar) and 40 psi (2.8 bar)
- ¾" NPT female-threaded inlet and outlet

**Operating Range**
- Flow
  - PSI-L30X-075: 0.20 to 5.0 gpm; 12 to 300 gph (0.8 to 18.9 l/m)
  - PSI-M30X-075, PSI-M40X-075: 2.0 to 10.0 gpm; 120 to 600 gph (7.8 to 37.9 l/m)
- Inlet Pressure: 10-150 psi (0.7 to 10.3 bar)

**Models**
- PSI-L30X-075: ¾" 30 psi (2.1 bar) regulator for low flow (red label)
- PSI-M30X-075: ¾" 30 psi (2.1 bar) regulator for medium flow (yellow label)
- PSI-M40X-075: ¾" 40 psi (2.8 bar) regulator for medium flow (yellow label)

---

**Retrofit Pressure Regulators**

**Features**
- Provides convenient 30 psi (2.1 bar) pressure regulation at the riser for any ½" FPT emission device or compression adapter
- Can be installed above or below grade
- Can be used with Xeri-bird™ 8 Multi-Outlet Emission Device (see page 115)

**Operating Range**
- Flow: 0.50 to 4.00 gpm; 30 to 240 gph (1.9 to 15.1 l/m)
- Inlet Pressure: 15 to 70 psi (1.0 to 4.8 bar)

**Dimensions**
- ½" female-threaded inlet
- Height: 4" (10 cm)

**Model**
- PRS-050-30

---

**Pressure Loss Characteristics - QKCHK-100**

<table>
<thead>
<tr>
<th>Flow Rate gpm</th>
<th>100 mesh screen l/m</th>
<th>psi</th>
<th>bar</th>
<th>200 mesh screen psi</th>
<th>bar</th>
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<tbody>
<tr>
<td>3</td>
<td>11.4</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5</td>
<td>18.9</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
<tr>
<td>7</td>
<td>26.5</td>
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<td>0.0</td>
<td>0.4</td>
<td>0.0</td>
</tr>
<tr>
<td>9</td>
<td>34.1</td>
<td>0.7</td>
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<td>0.7</td>
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<td>1.6</td>
<td>1.3</td>
<td>0.1</td>
</tr>
<tr>
<td>20</td>
<td>75.7</td>
<td>2.9</td>
<td>3.2</td>
<td>2.9</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*Note: Pressure loss for 200 mesh filter screen*
1” & 1½ " High Flow Inline Pressure Regulators

High flow Pressure Regulator family that delivers pre-set regulation for a wide flow range (0.5 -70 gpm) providing a solution for most irrigation applications.

Features

Flexibility

- Its high flow range (0.5 gpm to 70 gpm) capacity allows usage in a wide range of applications, making it ideal for drip or spray applications. It can be installed above or below grade.
  - 1” Pressure Regulator flow range: 0.5-35 gpm (1.9 to 132.5 l/min)
  - 1 ½” Pressure Regulator flow range: 15-70 gpm (56.8 to 265.0 l/min)

Reliable Performance:

- Pre-set outlet pressure regulation at either 40 psi (2.8 bar) or 50 psi (3.4 bar) provides worry-free protection for your irrigation installations.

Durability:

- Tested to meet Rain Bird’s high-quality standards. High Strength ABS construction and stainless steel springs provide the durability to withstand any job.

Operating Range

- Pressure Regulation:
  - PSI-H40X-100: 40 psi (2.8 bar)
  - PSI-H50X-100: 50 psi (3.4 bar)
  - PSI-H40X-150: 40 psi (2.8 bar)

- Flow Range:
  - PSI-H40X-100 & PSI-H50X-100: 0.5 gpm (1.9 l/min) to 35 gpm (132.5 l/min)
  - PSI-H40X-150: 15 gpm (56.8 l/min) to 70 gpm (265.0 l/min)

- Inlet pressure: 15 psi (1.0 bar) to 150 psi (10.3 bar)

Specifications

- PSI-H40X-100 & PSI-H50X-100: 1” Female NPT X 1” Female NPT
- PSI-H40X-150: 1 ½” Female NPT X 1 ½” Female NPT

Dimensions:

- PSI-H40X-100 & PSI-H50X-100: 5.8”(14.7 cm) in Length x 2.7”(6.8 cm) in Width
- PSI-H40X-150: 6.3”(16.0 cm) in Length x 3.3”(8.4 cm) in Width

Models

- PSI-H40X-100: 1” 40 psi inline Pressure Regulator
- PSI-H50X-100: 1” 50 psi inline Pressure Regulator
- PSI-H40X-150: 1½” 40 psi inline Pressure Regulator

How to Specify

<table>
<thead>
<tr>
<th>PSI - H XX X - 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Pressure Regulator</td>
</tr>
<tr>
<td>Inlet/Outlet Size</td>
</tr>
<tr>
<td>100 = 1 in (2.5 cm)</td>
</tr>
<tr>
<td>150 = 1½ in (3.8 cm)</td>
</tr>
<tr>
<td>Pre-Set Pressure Regulation</td>
</tr>
<tr>
<td>40 = 40 psi (2.8 bar)</td>
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<tr>
<td>50 = 50 psi (3.5 bar)</td>
</tr>
<tr>
<td>Flow Range Capacity</td>
</tr>
<tr>
<td>H = High Flow (up to 70 gpm; 265 l/min)</td>
</tr>
</tbody>
</table>
Pressure Regulating, and Quick-Check Pressure Regulating Basket Filters

The only commercial-grade filter with built in pressure regulator for low-volume irrigation zones. Also available with a clean/dirty indicator.

Features

- Reduces maintenance and labor costs - 40% larger filter surface than standard filters means less frequent cleaning
- Provides increased reliability – “No Spill” feature ensures dirt does not fall back into the filter during cleanup operation
- Simplifies installation and maintenance – threaded top with 0-ring makes it easy to remove and clean that stainless steel filter screen
- Efficient design – combines filtration and pressure regulation in one compact unit with fewer connections
- Available in 1” model
- Comes pre-assembled with 200 mesh (75 micron) stainless steel screen (other screen sizes available)
- Built-in 40 psi (2.7 bar) pressure regulator
- Also available in Light Commercial Control Zone Kits:
  - XCZ-100-PRBR (without Quick-Check feature)
  - XCZ-100-PRB-LC (without Quick-Check feature)
  - XCZ-PRB-100-COM (with Quick-Check)
  - XCZ-PRB-150-COM (with Quick-Check)

Operating Range

- Flow: 5.0 to 20 gpm (18.9 to 75.7 l/m)
- Inlet Pressure: 15 to 150 psi (1.0 to 10.3 bar)
- Regulating Pressure: 40 psi (2.7 bar)
- Filtration: 200 mesh (75 micron) stainless steel
- Temperature: Up to 150 degree F (66 degree C)

Models

- PRB-100: 1" Basket Filter with built-in Pressure Regulator (40 psi) and 200 mesh (75 micron) stainless steel screen
- PRB-QKCHK-100: 1" Basket Filter with built-in Pressure Regulator (40 psi) and 200 mesh (75 micron) stainless steel screen

Replacement Filter Screens

- QKCHK-100M: 100 mesh stainless steel screen, red
- QKCHK-200M: 200 mesh stainless steel screen, white

Replacement Cap

- QKCHKCAP (Complete cap with body o-ring)
Large-Capacity Filters

Large-Capacity high flow and low maintenance with a solid build

Features
- Provides extra large filtration capacity for residential, commercial, and municipal applications
- Durable filters can be easily removed for cleaning, significantly reducing cleaning time
- Disc filters can decompress for easy cleaning
- Auxiliary connection with a threaded cap can be drilled to allow draining or depressurization

Operating Range
- 1” Model: Maximum flow: Up to 26 gpm (6 m³/hr)
  - Filtering surface (disc): 28 in² (180 cm²)
- 1.5” Models: Maximum flow: Up to 62 gpm (14 m³/hr)
  - Filtering surface (disc): 48 in² (310 cm²)
  - Filtering surface (screen): 75 in² (485 cm²)
- 2” Models: Maximum flow: Up to 110 gpm (25 m³/hr)
  - Filtering surface (disc): 81 in² (525 cm²)
  - Filtering surface (screen): 90 in² (570 cm²)
- Maximum Pressure: 116 psi (8 bar)
- Maximum Temperature: Up to 140° F (60° C)

Models
- LCRBY100D - 1” Large-Capacity Disc Filter
- LCRBY150S - 1.5” Large-Capacity Screen Filter
- LCRBY150D - 1.5” Large-Capacity Disc Filter
- LCRBY200S - 2” Large-Capacity Screen Filter
- LCRBY200D - 2” Large-Capacity Disc Filter

Specifications
- Inlet / Outlet Size:
  - 1” Models: 1” NPT
  - 1.5” Models: 1.5” NPT
  - 2” Models: 2” NPT

Filtration
- Stainless Steel Screen Filter: 120 Mesh (130 Micron)*
- Plastic Filter Discs: 120 Mesh (130 Micron)
  
* Screen not available in 1” model

Replacement Filters
Disc
- LGFC120MD

Screen
- LGFC120MS

<table>
<thead>
<tr>
<th>Flow Rate</th>
<th>1” Filter l/m</th>
<th>1.5” Filter psi</th>
<th>1.5” Filter bar</th>
<th>2” Filter psi</th>
<th>2” Filter bar</th>
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Pressure Loss Characteristics - Disc Filter

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<th>Flow Rate</th>
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<th>1.5” Filter bar</th>
<th>2” Filter psi</th>
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</table>

Note: Body dimensions are available on the Rain Bird website.

Note: Filter should be installed downstream of the valve, to prevent the filter from being under constant pressure.
Spray-to-Drip Retrofit Kit

Simple kit that easily converts a conventional spray zone to a low-volume irrigation zone.

Features
- Permits convenient conversion to drip tubing when used with barbed adapter.
- Provides 30 psi (2.0 Bars) pressure regulation and a 200-mesh (75 micron) screen that is easily accessible.
- Supports flow rates of 0.5 to 6 gpm.
- Internal assembly drops into 1804 spray head bodies to easily retrofit existing system to Xerigation® products.
- Comes with 1 low profile Barb Tee and 1 Elbow Fitting.
- Includes (1) ½” FPT x Elbow Fitting and (1) ½” FPT x Tee Fitting for easy connection to drip tubing.

Operating Range
- Flow: 0.5 to 6 gpm (0.11 to 1.36 l/m)
- Inlet pressure: 15 to 70 psi (1.0 to 4.8 bar)
- Regulated pressure: 30 psi (2.1 bar)
- Filtration: 200 mesh (75 micron)

Model
- 1800-RETRO

Dimensions
- ½” (15/21) female-threaded inlet
- ½” (15/21) male-threaded swivel outlet
- Width:
  - Cap: 2.25” (5.70 cm)
  - Body: 1.5” (3.80cm)

Replacement Screen
- RBY-200SSMX (200 mesh stainless steel screen)

Replacement Screen
- RBY-200SSMX (200 mesh stainless steel screen)

Spray-to-Drip Conversion Steps

1. Spray-to-Drip Retrofit Kit
2. Simple kit that easily converts a conventional spray zone to a low-volume irrigation zone.
3. Designed specifically for areas with water restrictions, our Spray-to-Drip Retrofit Kit allows use of existing 1800 Series Spray Bodies as drip irrigation connection points.