



Drip Irrigation

Major Products

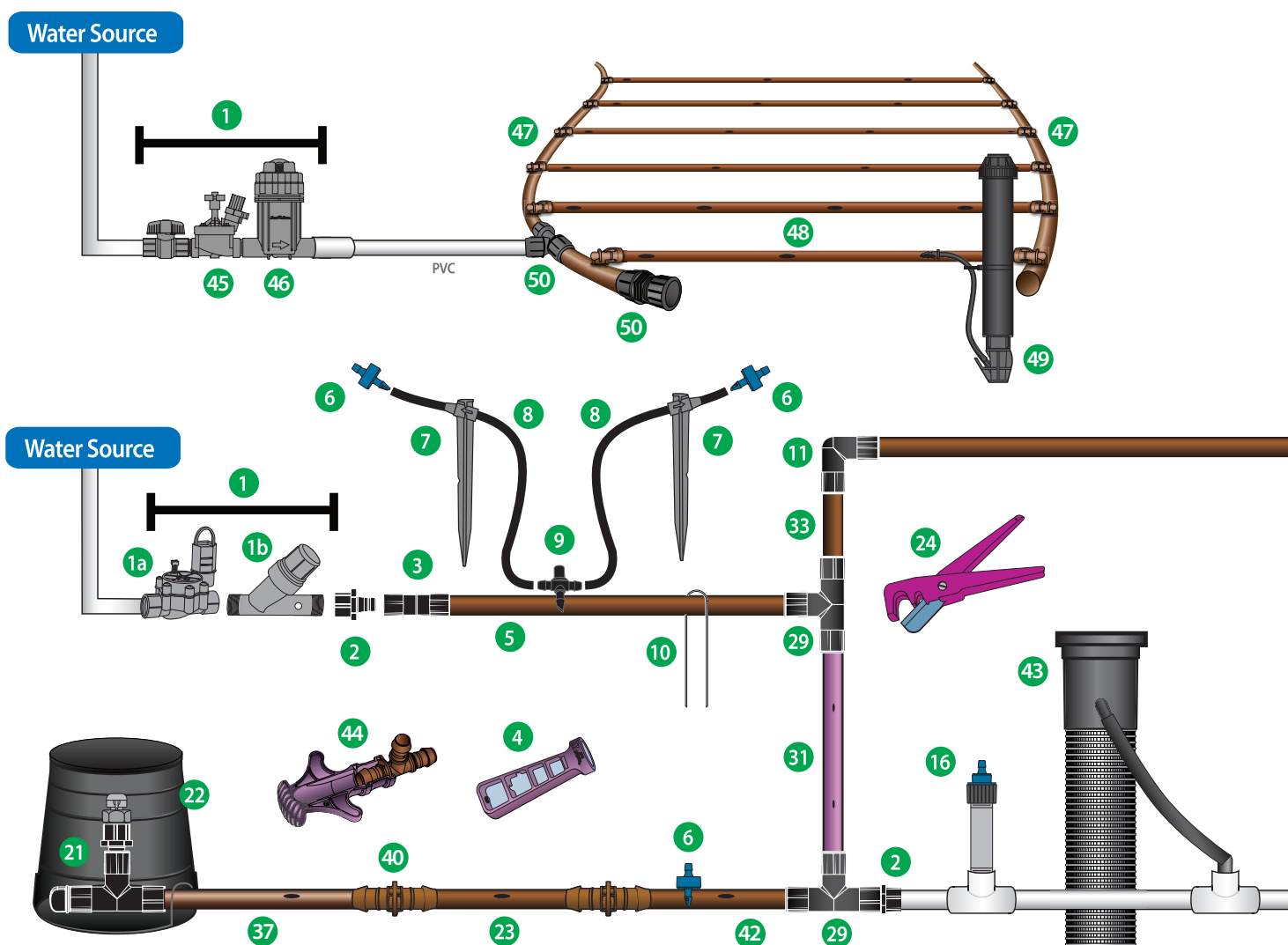
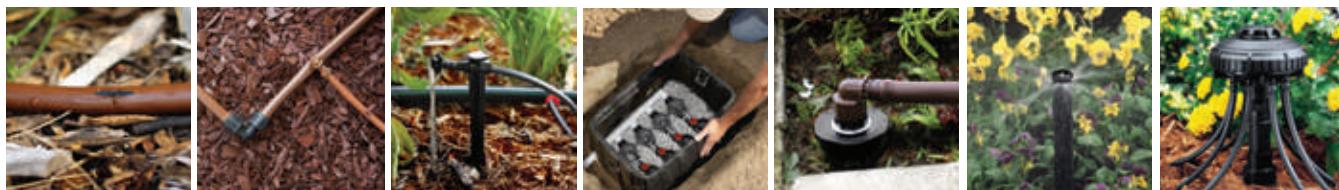
Primary Applications	Single outlet emitter	Multi-outlet emitter	Bubbler emitter	Spray	Inline emitter (Dripline)	RWS
Thick bushes		•	•	•	•	
Single bush	•					
Small trees	•	•			•	•
Large trees	•	•	•			•
Ground cover		•		•	•	
Annuals			•	•	•	
Mixed vegetation	•	•			•	
Potted plants	•		•	•	•	
Hedges	•				•	
Vegetation on slopes	•				•	



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.

Landscape Drip System Overview



- | | | |
|--|---|---|
| 1. Control Zone Kit (pg. 144) | 8. XQ ¼" Distribution Tubing (pg. 142) | 17. ¼" Self-Piercing Barb Connector (pg. 114) |
| 1a. Low Flow Valve (pg. 153) | 9. ¼" Barb Tee (pg. 143) | 18. SQ Series Square Nozzle (pg. 118) |
| 1b. Pressure Regulating Filter (pg. 154) | 10. Tie-Down Stake (pg. 143) | 19. Xeri-Pop (pg. 120) |
| 2. Easy Fit Female Adapter (pg. 138) | 11. Easy Fit Elbow (pg. 138) | 20. Xeri-Bubbler SPYK (pg. 121) |
| 3. Easy Fit Coupling (pg. 138) | 12. Diffuser Bug Cap (pg. 123) | 21. ARV050 Air Relief Valve Kit (pg. 139) |
| 4. Xeriman Tool (pg. 112) | 13. PC Emitter Diffuser Cap (pg. 123) | 22. SEB-7X Emitter Valve Box (pg. 143) |
| 5. XF Series Blank Tubing (pg. 140) | 14. PC Module-1032 (pg. 116) | 23. XFD Dripline (pg. 127) |
| 6. Xeri-Bug Emitter (pg. 112) | 15. PolyFlex Riser Assembly (pg. 124) | 24. Tubing Cutter (pg. 143) |
| 7. ¼" Tubing Stake (pg. 123) | 16. Xeri-Bug Emitter - ½" FPT (pg. 112) | 25. Xeri-Bird 8 (pg. 115) |

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:

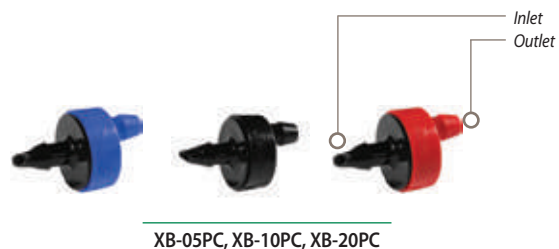
- Water conservation
- Greater efficiency (target each plant)
- Design flexibility; simple construction and easily expandable
- Healthier plants
- Reduced liability (e.g. no overspray, no runoff)
- Minimization of weed growth
- Cost savings

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:

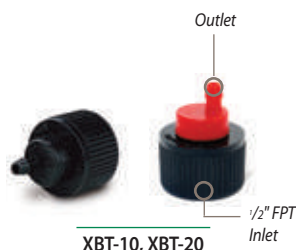
- Flexible XF Series dripline with advanced polymers that provide kink-resistance and reduced coil memory for easier installation
- Compact Control Zones with combined pressure regulator and filter to reduce parts, potential leak problems, and allow for fitting more Control Zones in a valve box
- Precision 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



- 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)



1032-threaded models are specifically designed to be used with PolyFlex Risers, 1032 thread adapters (1032-A), or 1800 Xeri-Bubbler Adapter (XBA-1800)



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



One Step
Xeri-Bug™
Insertion



Xeri-Bug™
Removal



Goof Plug
Insertion

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)

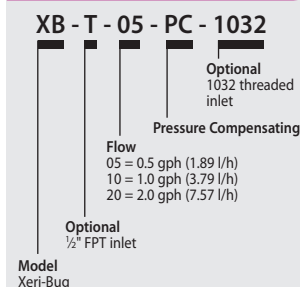
Models: barb inlet x barb outlet

- 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)

Xeri-Bug Emitter Bag Quantities and Models

Flow Rate	Color	Bag Qty.	Model Number
0.5 GPH (1.89 l/h)	Blue	25	XB05PC
		100	XB05PCBULK
		8000	XB05MAXPAK
1.0 GPH (3.79 l/h)	Black	25	XB10PC
		100	XB10PCBULK
		8000	XB10MAXPAK
2.0 GPH (7.57 l/h)	Red	25	XB20PC
		100	XB20PCBULK
		8000	XB20MAXPAK

How to Specify



Xeri-Bug Emitter Specifications and Models

Model	Inlet Type/Color	Nominal Flow gph	Filtration Required mesh
XB-05PC	Barb/Blue	0.5	200
XB-10PC	Barb/Black	1.0	150
XB-20PC	Barb/Red	2.0	150
XB-05PC1032	10-32T/Blue	0.5	200
XB-10PC1032	10-32T/Black	1.0	150
XB-20PC1032	10-32T/Red	2.0	150
XBT-10PC	1/2" FPT/Black	1.0	150
XBT-20PC	1/2" FPT/Black	2.0	150

Xeri-Bug Emitter Specifications and Models

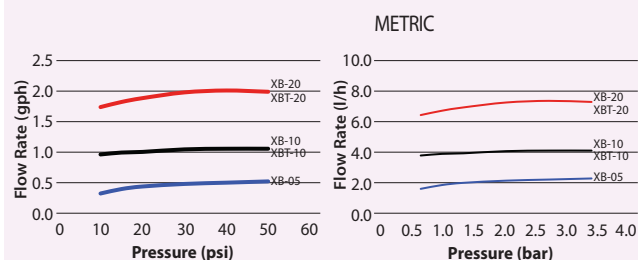
METRIC

Model	Inlet Type/Color	Nominal Flow l/h	Filtration Required micron
XB-05PC	Barb/Blue	1.89	75
XB-10PC	Barb/Black	3.79	100
XB-20PC	Barb/Red	7.57	100
XB-05PC1032	10-32T/Blue	1.89	75
XB-10PC1032	10-32T/Black	3.79	100
XB-20PC1032	10-32T/Red	7.57	100
XBT-10PC	1/2" FPT/Black	3.79	100
XBT-20PC	1/2" FPT/Black	7.57	100



Xeri-Bug™ Emitter, TS025-1/4" stake, and DBC025 Diffuser Bug Cap

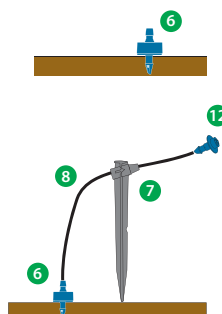
Xeri-Bug Emitter Performance



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

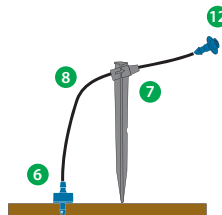
Installation Option 1*

Using a Xeriman Tool, insert an emitter directly into 1/2" or 3/4" drip tubing or between dripline emitters as needed.



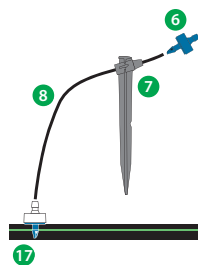
Installation Option 2*

For more precise water placement, use 1/4" distribution tubing, a 1/4" tubing stake, and a bug cap.



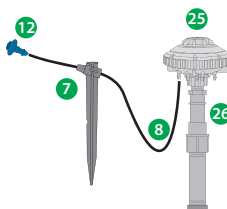
Installation Option 3

For precise water placement, a barbed connector can be punched into distribution tubing. The emitter is then placed at the end of the 1/4" distribution tubing. NOTE: should the emitter become dislodged, unregulated flow will occur.



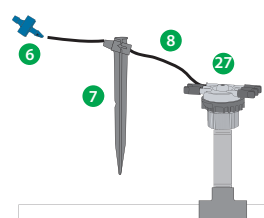
Installation Option 4*

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 1/4" distribution tubing, 1/4" 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 1/4" distribution tubing to one of the outlets. Use a 1/4" tubing stake to ensure precise water placement. The emitter is placed on the end of the 1/4" 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 1/4" 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: 1/2" 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)

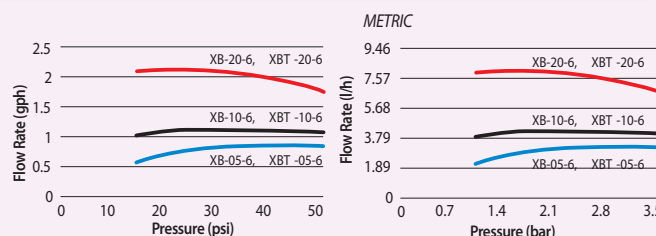


XB-05-6, XB-10-6, XB-20-6



XBT-05-6, XBT-10-6, XBT-20-6

Multi-Outlet Xeri-Bug Emitter Performance



6 Outlet Manifold - EMT-6XERI

Features

- 1/2" FPT inlet threads onto 1/2" riser and provides a manifold with six free-flowing 1/4" 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 1/4" 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



EMT-6XERI

1/4" Self-Piercing Barb Connector

Features

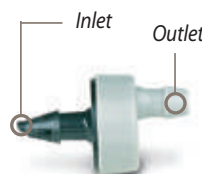
- Used to connect 1/4" Distribution Tubing into 1/2" or 3/4" distribution tubing
- Self-piercing barb inlet is easily inserted into 1/2" or 3/4" distribution tubing using a Xeriman™ Tool (XM-Tool)
- Outlet barb accepts 1/4" Distribution Tubing (XQ). Gray outlet barb indicates unit has unrestricted flow

Operating Range

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

Model

- SPB-025



SPB-025

1/2" FPT x Barb Grey Transfer Fitting

Features

- Grey outlet to designate open flow
- 1/2" FPT inlet can be easily attached to a schedule 80 riser or the top of an 1800 Retro
- Barbed outlet so 1/4" distribution tubing or 1/4" drip tubing can be easily and securely attached

Operating Range

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

Model

- XT025



XT025

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 1/2" 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 1/4" 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

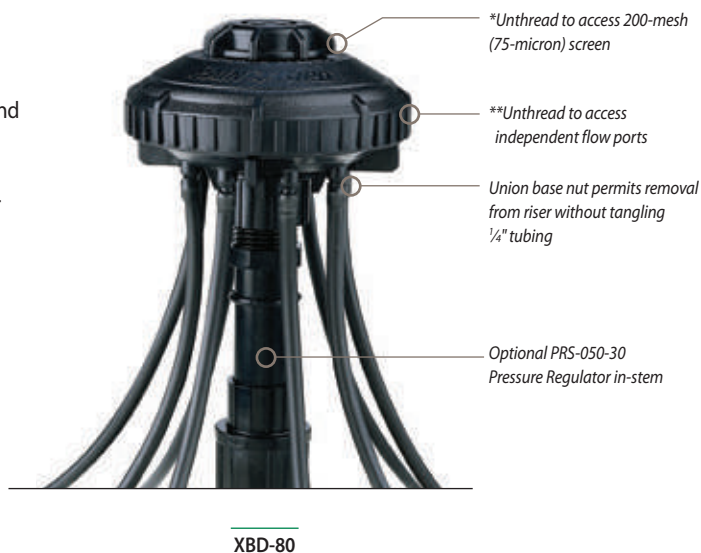
- Flow: 0.5 to 24 gph (1.89 to 90.84 l/h) per outlet
- Pressure: 15 to 50 psi (1.0 to 3.5 bar)

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



Each port can be configured on the Xeri-Bird™ by installing flow controlled emitters. Above shows a combination of 0.5, 1.0, and 2.0 gph Xeri-Bug emitters.



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



PC-05, PC-07, PC-10



PC-12, PC-18, PC-24



PC-05-1032, PC-07-1032, PC-10-1032

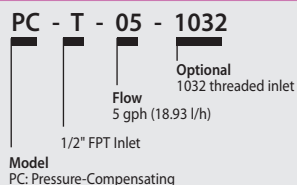
10-32-threaded models are specifically designed to be used with PolyFlex Risers, 10-32 thread adapters (1032-A), or 1800 Xeri-Bubbler Adapter (XBA-1800)



PCT-05, PCT-07, PCT-10

• 1/2" FPT inlet that easily threads onto a 1/2" PVC riser

How to Specify



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 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
- 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 1/4" 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

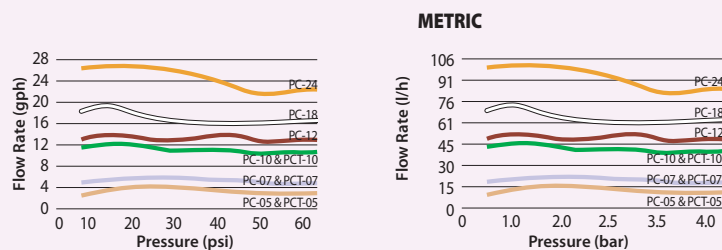
- PCT-05: Light Brown, 5 gph (18.93 l/h)
- PCT-07: Violet, 7 gph (26.50 l/h)
- PCT-10: Green, 10 gph (37.85 l/h)

Pressure-Compensating Modules

Pressure-Compensating Module Models			
Model	Inlet Type/ Outlet/Color	Nominal Flow gph	Filtration Required mesh
PC-05	Barb / light brown	5	100
PC-07	Barb / violet	7	100
PC-10	Barb / green	10	100
PC-12	Barb / dark brown	12	100
PC-18	Barb / white	18	100
PC-24	Barb / orange	24	100
PC-05-1032	10-32T / light brown	5	100
PC-07-1032	10-32T / violet	7	100
PC-10-1032	10-32T / green	10	100
PCT-05	NPT / light brown	5	100
PCT-07	NPT / violet	7	100
PCT-10	NPT / green	10	100

Pressure-Compensating Module Models			METRIC
Model	Inlet Type/ Outlet/Color	Nominal Flow l/h	Filtration Required micron
PC-05	Barb / light brown	18.93	150
PC-07	Barb / violet	26.50	150
PC-10	Barb / green	37.85	150
PC-12	Barb / dark brown	45.42	150
PC-18	Barb / white	68.13	150
PC-24	Barb / orange	90.84	150
PC-05-1032	10-32T / light brown	18.93	150
PC-07-1032	10-32T / violet	26.50	150
PC-10-1032	10-32T / green	37.85	150
PCT-05	NPT / light brown	18.93	150
PCT-07	NPT / violet	26.50	150
PCT-10	NPT / green	37.85	150

Pressure-Compensating Modules & 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

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 Nozzle Installed on PolyFlex Riser
with Nozzle Adapter



SQ Nozzles with Screens

One Nozzle...Two Throws

With a simple turn of the nozzle to the next preset stop, the Rain Bird SQ Nozzle adjusts from a 2.5' (0.8 m) throw to a 4' (1.2 m) throw. It's like having two nozzles in one.



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.



1800® Series
Spray Heads

Xeri-Pop
Spray Heads

Polyflex
Risers

Schedule 80
Risers

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-85 Plastic Shrub Adapter (see page 10) is needed when using an SQ Series Nozzle mounted on a SCH 80 riser.









SQ-QTR




SQ-HLF

SQ-FUL

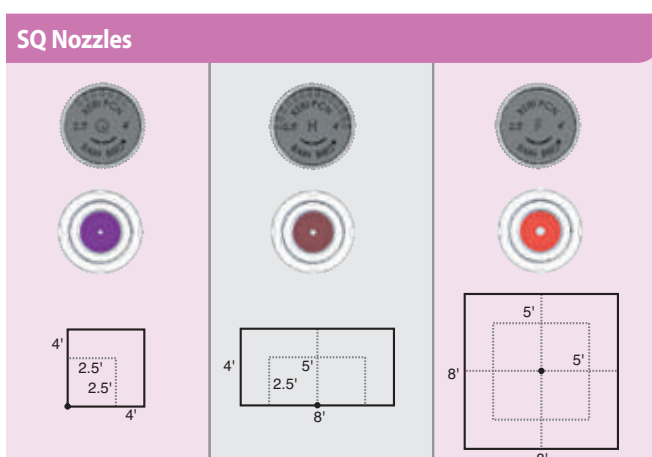
SQ Nozzle Performance					
2.5 feet throw @ 6" height above grade					
Nozzle	Pressure psi	Throw Radius ft.	Flow gph	Flow gpm	Precip.Rate w/no overlap in/h
Q 	20	2.5	6.0	0.10	1.64
	30	2.5	7.0	0.12	1.90
	40	3.0	7.2	0.12	1.32
	50	3.0	7.2	0.12	1.32
H 	20	2.5	10.2	0.17	1.31
	30	2.5	10.7	0.18	1.57
	40	3.0	10.7	0.18	1.22
	50	3.0	10.7	0.18	1.22
F 	20	2.5	20.0	0.33	1.28
	30	2.5	24.2	0.40	1.55
	40	3.0	27.3	0.46	1.22
	50	3.0	27.3	0.46	1.22

SQ Nozzle Performance						METRIC
0.8 m throw @ 0.15 m height above grade						
Nozzle	Pressure bar	Throw Radius m	Flow lph	Flow lpm	Precip.Rate w/no overlap mm/h	
Q 	1.4	0.8	23	0.38	42	
	2.1	0.8	27	0.44	48	
	2.8	0.9	27	0.45	34	
	3.4	0.9	27	0.45	34	
H 	1.4	0.8	39	0.65	33	
	2.1	0.8	41	0.68	40	
	2.8	0.9	41	0.68	31	
	3.4	0.9	41	0.68	31	
F 	1.4	0.8	76	1.27	33	
	2.1	0.8	92	1.53	39	
	2.8	0.9	103	1.72	31	
	3.4	0.9	103	1.72	31	

SQ Nozzle Performance					
4 feet throw @ 6" height above grade					
Nozzle	Pressure psi	Throw Radius ft.	Flow gph	Flow gpm	Precip.Rate w/no overlap in/h
Q 	20	4.0	6.0	0.10	0.64
	30	4.0	7.2	0.12	0.74
	40	4.5	7.2	0.12	0.59
	50	4.5	7.2	0.12	0.59
H 	20	4.0	10.2	0.17	0.51
	30	4.0	10.7	0.18	0.61
	40	4.5	10.7	0.18	0.54
	50	4.5	10.7	0.18	0.54
F 	20	4.0	20.0	0.33	0.50
	30	4.0	24.2	0.40	0.61
	40	4.5	27.3	0.46	0.54
	50	4.5	27.3	0.46	0.54

SQ Nozzle Performance						METRIC
1.2 m throw @ 0.15 m height above grade						
Nozzle	Pressure bar	Throw Radius m	Flow lph	Flow lpm	Precip.Rate w/no overlap mm/h	
Q 	1.4	1.2	23	0.38	16	
	2.1	1.2	27	0.44	19	
	2.8	1.4	27	0.45	15	
	3.4	1.4	27	0.45	15	
H 	1.4	1.2	39	0.65	13	
	2.1	1.2	41	0.68	16	
	2.8	1.4	41	0.68	14	
	3.4	1.4	41	0.68	14	
F 	1.4	1.2	76	1.27	13	
	2.1	1.2	92	1.53	15	
	2.8	1.4	103	1.72	14	
	3.4	1.4	103	1.72	14	

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 1/4" Distribution Tubing (XQ)
- The flexibility of 1/4" 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 1/4" tubing to the outside of the Xeri-Pop case
- The Xeri-Pop's 1/4" Distribution Tubing can readily connect to 1/2" or 3/4" polyethylene tubing or to a multi-outlet manifold (EMT-6XERI). Connections to polyethylene tubing are accomplished with either an SPB-025 1/4" Self-piercing barb Connector or an XBF1CONN 1/4" 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

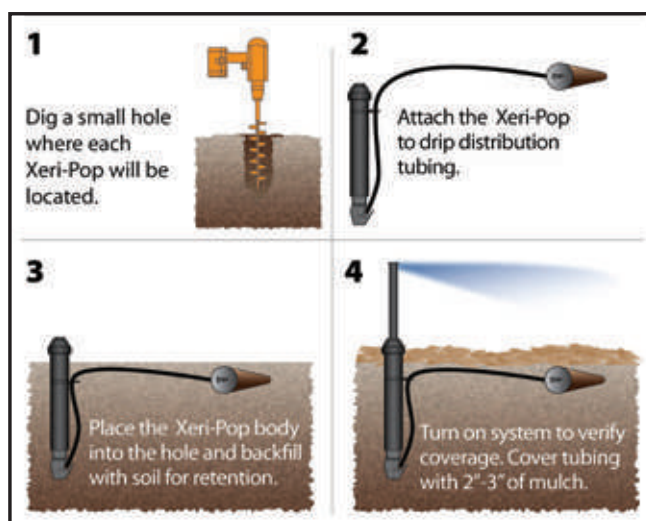
Models

- 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



How to Specify

XP - 600X

Model
Xeri-Pop

Pop-Up Height
400X = 4" Pop-up
600X = 6" Pop-up
1200X = 12" Pop-up

Always install a PCS-010, -020, 030, or -040 Pressure-Compensating Screen whenever a SB Bubbler Nozzle is installed on a Xeri-Pop.

XP-400X



XP-600X

1/4" distribution
tube snap collar

1/4" distribution
tube inlet



XP-1200X



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, 1/4" 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, 1/4" 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, 1/4" 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, 1/4" barb
- UXB-360-SPYK: Full-circle, umbrella, 5" spike includes barb x barb coupler

How to Specify

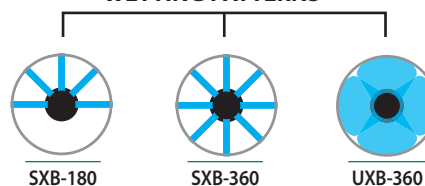
SXB - 180 - 025

Connection
025: 1/4" barb
SPYK: 5" spike

Pattern
180 = Half circle
360 = Full-circle

Model
SXB: Stream Bubbler
UXB: Umbrella Bubbler

WETTING PATTERNS



BARB



10-32 THREADS



SPIKE



Xeri-Bubbler Performance

Pressure		SXB Flow Rate 360° and 180°		SXB 360° Diameter		SXB 180° Radius		UXB 360° Flow Rate		UXB 360° Diameter	
psi	bar	gph	lph	ft.	m.	ft.	m.	gph	lph	ft.	m.
30	2.1	0 - 13	0 - 49	0 - 3	0 - 0.9	0 - 2.2	0 - 0.67	0 - 35	0 - 132	0 - 2	0 - 0.58
20	1.4	0 - 10.5	0 - 40	0 - 2	0 - 0.6	0 - 1.5	0 - 0.46	0 - 30	0 - 113	0 - 1	0 - 0.30
15	1	0 - 8.5	0 - 32	0 - 1.2	0 - 0.4	0 - 1.2	0 - 0.38	0 - 27	0 - 98	0 - 0.7	0 - 0.21

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

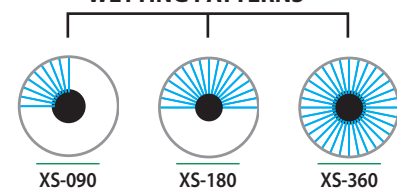
Operating Range

- 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

WETTING PATTERNS



XS-090

XS-180

XS-360



XS-090

XS-180

XS-360

X360 ADJMST

WETTING PATTERN



XS-360TS



XS-360TS-025

XS-360TS

XS-360TS-SPYK

Xeri-Sprays™ and Misters Performance

Pressure		Flow		XS-90 Radius of throw		XS-180 Radius of throw		XS-360 Radius of throw		360 Mister Radius of throw	
psi	bar	gph	l/h	ft.	m.	ft.	m.	ft.	m.	ft.	m.
10	0.7	0 - 16.7	0 - 63.21	0 - 6.4	0 - 2.0	0 - 6.7	0 - 2.0	0 - 9.2	0 - 2.8	0 - 1.5	0 - 0.46
15	1.0	0 - 21.0	0 - 79.49	0 - 8.1	0 - 2.5	0 - 8.1	0 - 2.5	0 - 11.3	0 - 3.4	0 - 1.3	0 - 0.40
20	1.4	0 - 24.5	0 - 92.73	0 - 9.4	0 - 2.9	0 - 9.5	0 - 2.9	0 - 12.9	0 - 3.9	0 - 1.5	0 - 0.44
25	1.7	0 - 28.0	0 - 105.98	0 - 9.8	0 - 3.0	0 - 10.1	0 - 3.1	0 - 13.2	0 - 4.0	0 - 1.4	0 - 0.43
30	2.1	0 - 31.0	0 - 117.34	0 - 10.3	0 - 3.1	0 - 10.6	0 - 3.2	0 - 13.4	0 - 4.1	0 - 1.3	0 - 0.40

Diffuser Bug Cap

Features

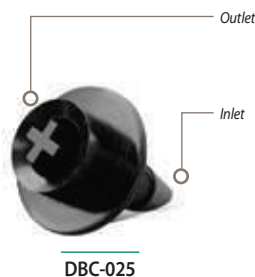
- Prevents bugs and other debris from clogging 1/4" Distribution Tubing
- Barbed inlet fits into 1/4" Distribution Tubing (XQ)
- Flanged shield diffuses water to minimize soil erosion at emission point

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 bubbler 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



Suggested Applications



A. 1/4" tubing, 1/4" stake, PC Module, Diffuser Bug Cap. Used for runs greater than 5 feet from main line

B. 1/4" tubing, 1/4" stake, Diffuser Bug Cap. Used for runs up to 5 feet from main line

(Drip emitter not shown – installed directly into lateral line)

Universal 1/4" Tubing Stake

Features

- Holds 1/4" 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' 1/4" 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



1/4" Tubing Stake with Cap

Features

- Locking cap holds tubing in place
- Used for holding 1/4" Distribution Tubing (XQ) in place at the plant root zone
- Accepts 1/4" Distribution Tubing from 0.19 O.D. to 0.256 O.D.
- Bug cap included
- Constructed of UV-resistant plastic material

Model

- TS-025WCAP



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

PFR-12



PolyFlex Riser and Adapter Assemblies

Features

- 12" or 24" riser that is pre-assembled with a 1/2" 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 1/2" 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

PFR-FRA



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: 12" (30.5 cm) PolyFlex Riser and 7" (17.8 cm) stake

PFR-RS



Riser Stake-Threaded

Features

- Rugged 5" (12.7 cm) stake for use with PolyFlex Risers
- Constructed of UV-resistant plastic material
- Barbed side inlet accepts 1/4" Distribution Tubing (XQ)
- 10-32 threaded outlet permits easy threading of 12" (30.5 cm) PolyFlex Riser (PFR-12)

Operating Range

- Pressure: 15 to 50 psi (1.0 to 3.5 bar)

Model

- RS-025T

RS-025T



10-32 Thread Adapter

Features

- Inlet: 1/2" FPT that screws onto any 1/2" 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

10-32A



1800 Xeri-Bubbler Adapter

Features

- Inlet: 1/2" 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

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

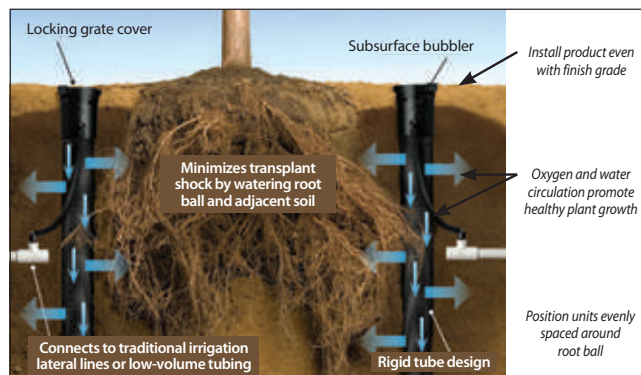
For the RWS - Mini:

- 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

Model	Bubbler	Check Valve*	Swing Assembly w/ ½" (15/21) M NPT inlet	Spiral Barb Elbow w/ ½" (15/21) M NPT inlet
Root Watering System (with 4" (10.2 cm) vandal-resistant locking grate)				
RWS	Ideal for ¼" drip tubing or customer provided hardware	—	—	—
RWS-B-C-1401	0.25 gpm (0.95 l/m)	✓ (36")	✓	—
RWS-B-1401	0.25 gpm (0.95 l/m)	—	✓	—
RWS-B-X-1401	0.25 gpm (0.95 l/m)	—	✓ (18" with no elbow)	—
RWS-B-C-1402	0.50 gpm (1.9 l/m)	✓ (36")	✓	—
RWS-B-1402	0.50 gpm (1.9 l/m)	—	✓	—
RWS-B-C-1404	1.00 gpm (3.8 l/m)	✓ (36")	✓	—
Root Watering System - Mini (with 4" (10.2 cm) vandal-resistant locking grate)				
RWS-M	Ideal for ¼" drip tubing or customer provided hardware	—	—	—
RWS-M-B-C-1401	0.25 gpm (0.95 l/m)	✓ (18")	—	✓
RWS-M-B-1401	0.25 gpm (0.95 l/m)	—	—	✓
RWS-M-B-C-1402	0.50 gpm (1.9 l/m)	✓ (18")	—	✓
RWS-M-B-1402	0.50 gpm (1.9 l/m)	—	—	✓
Root Watering System - Supplemental (with 2" (5.1 cm) snap-on cap and base)				
RWS-S-B-C-PCT5	5.0 gph (19 l/m)	✓ (10")	—	✓
RWS-S-B-C-1401	0.25 gpm (0.95 l/m)	✓ (10")	—	✓
RWS-S-B-1401	0.25 gpm (0.95 l/m)	—	—	✓
Root Watering - Accessories				
RWS-SOCK (Root Watering Sock)				
RWS- GRATE-P (Root Watering System Purple Grate for RWS and RWS Mini)				

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

Tubing	Application	Compatible Fittings	Flow Rates	Emitter Spacing	Coil Lengths	Tubing Diameter	Tube Colors	Special Notes
DRIPLINE								
1/4" Landscape Dripline 	Pots and Planter Boxes; Container and Vegetable Gardens; Shrubs; Flowers	   XBF1CONN XBF2EL XBF3TEE	0.8 gph	6" 12"	100'	OD: 0.250" ID: 0.170"		Flexible tubing with clog-resistant built-in filtration
XFD On-Surface Dripline 	On-surface; Shrubs; Flowers	  XF Dripline Insert Fittings Easy Fit Compression Fittings	0.6 gph 0.9 gph	12" 18"	100' 250' 500'	OD: 0.634" ID: 0.536"		Extra flexible tubing with clog resistant self-flushing emitter
XFCV; Check Valve; Dripline 	On-Surface; Elevation Changes; Shrubs and Flowers	  XF Dripline Insert Fittings Easy Fit Compression Fittings	0.6 gph 0.9 gph	12" 18"	100' 250' 500'	OD: 0.634" ID: 0.536"		Built-in Emitter Check Valves
XFS Sub-Surface Dripline 	Sub-Surface; Narrow Planting Areas; Turf and Beds	 XF Dripline Insert Fittings	0.4 gph 0.6 gph 0.9 gph	12" 18"	100' 500'	OD: 0.634" ID: 0.536"		Copper Shield™ protects emitters from root intrusion
XFS-CV; Sub-Surface; Check Valve; Dripline 	Sub-Surface; Elevation Changes; Turf and Beds	 XF Dripline Insert Fittings	0.4 gph 0.6 gph 0.9 gph	12" 18"	100' 250' 500'	OD: 0.634" ID: 0.536"		Copper Shield™ protects emitters from root intrusion 10' Emitter Check Valves
BLANK TUBING								
XQ 1/4" Distribution Tubing 	Extend emitter outlets to desired location	   XBF1CONN XBF2EL XBF3TEE	—	—	100' 1,000' 1,000' (in bucket)	OD: 0.250" ID: 0.170"		Flexibility of Vinyl with hold of Poly
XBS Black Stripe Tubing 	Five Color Stripe Choices Shrubs Flowers	  1/2": Twist Lock Fittings – 600 Series 3/4": Twist Lock Fittings – 800 Series	—	—	100' 500'	1/2" OD: 0.700" 1/2" ID: 0.600" 1/2" OD: 0.705" 1/2" ID: 0.615" 3/4" OD: 0.940" 3/4" ID: 0.820"		Black tube with colored stripes to differentiate zones
XT-700 Distribution Tubing 	Thick-walled but Flexible Shrubs Flowers	 1/2": Twist Lock Fittings – 600 Series	—	—	100' 500'	OD: 0.700" ID: 0.580"		Thick-walled, flexible tubing resists kinks
XF Series Blank Tubing 	Shrubs Flowers	  XF Dripline Insert Fittings Easy Fit Compression Fittings	—	—	100' 250' 500'	OD: 0.634" ID: 0.536"		Extra Flexible
QF Dripline Header 	Pre-fabricated header for dripline installations	  Twist Lock Fittings - 800 Series (For QF Header - 3/4") Twist Lock Fittings - 1000 Series (For QF Header - 1")	—	Elbow Spacing: 12" 18"	100'	3/4" OD: 0.940" 3/4" ID: 0.820" 1" OD: 1.200" 1" ID: 1.060"		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/Vaccum 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



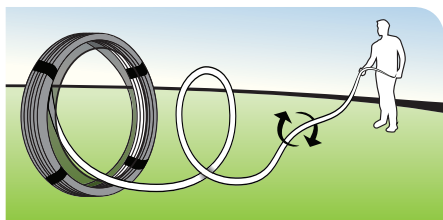
XFD Dripline



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.



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



XFD Dripline

How to Specify

XFD - P - 09 - 12 - 100

Model XFD Dripline	Length of Tubing 100 = 100' (30.5 m) 250 = 250' (76.2 m) 500 = 500' (152.4 m)
Optional Purple	Emitter Spacing 12 = 12" (30.5 cm) 18 = 18" (45.7 cm)
Flow Rate 06 = .61 gph (2.3 l/h) 09 = .92 gph (3.5 l/h)	

Compatible Fittings



XF Dripline Insert Fittings (pg. 137)



Easy Fit Compression Fittings (pg. 138)

XFD On-Surface Dripline Models

Model	Flow gph	Spacing in.	Coil Length ft.
XFD-06-12-100	0.60	12	100
XFD-06-12-250	0.60	12	250
XFD-06-12-500	0.60	12	500
XFD-06-18-100	0.60	18	100
XFD-06-18-250	0.60	18	250
XFD-06-18-500	0.60	18	500
XFD-09-12-100	0.90	12	100
XFD-09-12-250	0.90	12	250
XFD-09-12-500	0.90	12	500
XFD-09-18-100	0.90	18	100
XFD-09-18-250	0.90	18	250
XFD-09-18-500	0.90	18	500
XFDP-06-12-500 (Purple)	0.60	12	500
XFDP-06-18-500 (Purple)	0.60	18	500
XFDP-09-12-500 (Purple)	0.90	12	500
XFDP-09-18-500 (Purple)	0.90	18	500

XFD On-Surface Dripline Models

METRIC

Model	Flow l/h	Spacing cm	Coil Length m
XFD-06-12-100	2.30	30.5	30.5
XFD-06-12-250	2.30	30.5	76.5
XFD-06-12-500	2.30	30.5	152.4
XFD-06-18-100	2.30	45.7	30.5
XFD-06-18-250	2.30	45.7	76.5
XFD-06-18-500	2.30	45.7	152.4
XFD-09-12-100	3.40	30.5	30.5
XFD-09-12-250	3.40	30.5	76.5
XFD-09-12-500	3.40	30.5	152.4
XFD-09-18-100	3.40	45.7	30.5
XFD-09-18-250	3.40	45.7	76.5
XFD-09-18-500	3.40	45.7	152.4
XFDP-06-12-500 (Purple)	2.30	30.5	152.4
XFDP-06-18-500 (Purple)	2.30	45.7	152.4
XFDP-09-12-500 (Purple)	3.40	30.5	152.4
XFDP-09-18-500 (Purple)	3.40	45.7	152.4

For dripline applications requiring 0.4 gpm flow rate, use XF Series Dripline, page 131.

XFD On-Surface Dripline Maximum Lateral Lengths (Feet)

Inlet Pressure psi	Maximum Lateral Length (feet)			
	12" Spacing		18" Spacing	
	Nominal Flow (gph):		Nominal Flow (gph):	
	0.6	0.9	0.6	0.9
15	273	155	314	250
20	318	169	353	294
30	360	230	413	350
40	395	255	465	402
50	417	285	528	420
60	460	290	596	455

XFD On-Surface Dripline Maximum Lateral Lengths (meters)

Inlet Pressure bar	Maximum Lateral Length (meters)			
	30.5 cm		45.7 cm	
	Nominal Flow (l/h):		Nominal Flow (l/h):	
	2.3	3.4	2.3	3.4
1.0	83.2	47.2	95.7	76.2
1.4	96.9	51.5	107.6	89.6
2.1	109.7	70.1	125.9	106.7
2.8	120.4	77.7	141.7	122.5
3.5	127.1	86.9	160.9	128.0
4.1	140.2	88.4	181.7	138.7

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

Emitter Spacing	0.6 gph Emitter		0.9 gph Emitter	
12"	61.0 gph	1.02 gpm	92.0 gph	1.53 gpm
18"	41.0 gph	0.68 gpm	61.0 gph	1.02 gpm
24"	31.0 gph	0.51 gpm	46.0 gph	0.77 gpm

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

Emitter Spacing	2.3 l/h Emitter		3.4 l/h Emitter	
0.30 meter	757.9 l/h	12.6 l/m	1136.7 l/h	18.9 l/m
0.46 meter	502.2 l/h	8.4 l/m	741.3 l/h	12.4 l/m
0.61 meter	378.7 l/h	6.3 l/m	559.0 l/h	9.3 l/m

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



XFCV Dripline for Elevated Applications

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



Drip Irrigation

How to Specify

XFCV - 06 - 12 - 100

Model XFCV Dripline with Heavy-Duty Check Valve	Length of Tubing 100 = 100' (30.5 m) 500 = 500' (152.4 m)
	Emitter Spacing 12 = 12" (30.5 cm) 18 = 18" (45.7 cm)
Flow Rate 06 = .61 gph (2.3 l/h) 09 = .92 gph (3.5 l/h)	

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



XF Dripline Insert Fittings (pg. 137)



Easy Fit Compression Fittings (pg. 138)

XFCV Dripline Models

Model	Flow gph	Spacing in.	Coil Length ft.
XFCV-06-12-100	0.60	12	100
XFCV-06-12-500	0.60	12	500
XFCV-06-18-100	0.60	18	100
XFCV-06-18-500	0.60	18	500
XFCV-09-12-100	0.90	12	100
XFCV-09-12-500	0.90	12	500
XFCV-09-18-100	0.90	18	100
XFCV-09-18-500	0.90	18	500

XFCV Dripline Models

METRIC

Model	Flow l/h	Spacing cm	Coil Length m
XFCV-06-12-100	2.30	30.5	30.5
XFCV-06-12-500	2.30	30.5	152.4
XFCV-06-18-100	2.30	45.7	30.5
XFCV-06-18-500	2.30	45.7	152.4
XFCV-09-12-100	3.40	30.5	30.5
XFCV-09-12-500	3.40	30.5	152.4
XFCV-09-18-100	3.40	45.7	30.5
XFCV-09-18-500	3.40	45.7	152.4

XFCV Dripline Maximum Lateral Lengths (Feet)

Inlet Pressure psi	Maximum Lateral Length (feet)			
	12" Spacing		18" Spacing	
	Nominal Flow (gph):		Nominal Flow (gph):	
	0.6	0.9	0.6	0.9
20	192	136	254	215
30	289	205	402	337
40	350	248	498	416
50	397	281	573	477
60	436	309	637	529

XFCV Dripline Maximum Lateral Lengths (Meters)

METRIC

Inlet Pressure bar	Maximum Lateral Length (meters)			
	30.5 cm		45.7 cm	
	Nominal Flow (l/h):		Nominal Flow (l/h):	
	2.3	3.4	2.3	3.4
1.4	59	41	77	66
2.1	88	63	123	103
2.8	107	76	152	127
3.5	121	86	175	145
4.1	133	94	194	161

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

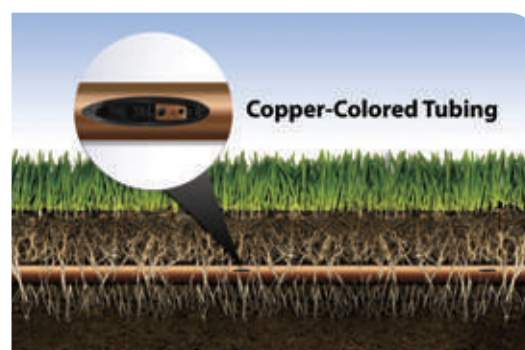
- Dimensions: OD: 0.634" (16mm); ID: 0.536" (13.6mm); Thickness: 0.049" (1.2mm)
- 12" and 18" (30.5 cm and 45.7 cm) spacing
- Available in 100' and 500' (30.5 m and 152.4 m) coils
- Coil Color: Copper
- Use with XF Dripline Insert Fittings



XFS Sub-Surface Dripline



Irrigation
Association
Show Winner



XFS Sub-Surface Dripline with
Copper Shield™ Technology



XFS Dripline offers increased
flexibility for easy installation

How to Specify

XFS - P - 09 - 12 - 100		
Model XFS Sub-Surface Dripline	Optional P = Purple over black	Length of Tubing 100 = 100' (30.5 m) 500 = 500' (152.4 m)
	Emitter Spacing 12 = 12" (30.5 cm) 18 = 18" (45.7 cm) 24 = 24" (61.0 cm)	
	Flow Rate 04 = .42 gph (1.6 l/h) 06 = .61 gph (2.3 l/h) 09 = .92 gph (3.5 l/h)	

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)



XF Dripline Insert Fittings (pg. 137)

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



FITINS-TOOL

XFS Sub-Surface Dripline Models

Model	Flow gph	Spacing in.	Coil Length ft.
XFS-04-12-100	0.42	12	100
XFS-04-12-500	0.42	12	500
XFS-04-18-100	0.42	18	100
XFS-04-18-500	0.42	18	500
XFS-06-12-100	0.60	12	100
XFS-06-12-500	0.60	12	500
XFS-06-18-100	0.60	18	100
XFS-06-18-500	0.60	18	500
XFS-09-12-100	0.90	12	100
XFS-09-12-500	0.90	12	500
XFS-09-18-100	0.90	18	100
XFS-09-18-500	0.90	18	500
XFSP-04-12-500 (Purple)	0.42	12	500
XFSP-04-18-500 (Purple)	0.42	18	500
XFSP-06-12-500 (Purple)	0.60	12	500
XFSP-06-18-500 (Purple)	0.60	18	500
XFSP-09-12-500 (Purple)	0.90	12	500
XFSP-09-18-500 (Purple)	0.90	18	500

XFS Sub-Surface Dripline Models

METRIC

Model	Flow l/h	Spacing cm	Coil Length m
XFS-04-12-100	1.60	30.5	30.5
XFS-04-12-500	1.60	30.5	152.4
XFS-04-18-100	1.60	45.7	30.5
XFS-04-18-500	1.60	45.7	152.4
XFS-06-12-100	2.30	30.5	30.5
XFS-06-12-500	2.30	30.5	152.4
XFS-06-18-100	2.30	45.7	30.5
XFS-06-18-500	2.30	45.7	152.4
XFS-09-12-100	3.50	30.5	30.5
XFS-09-12-500	3.50	30.5	152.4
XFS-09-18-100	3.50	45.7	30.5
XFS-09-18-500	3.50	45.7	152.4
XFSP-04-12-500 (Purple)	1.60	30.5	152.4
XFSP-04-18-500 (Purple)	1.60	45.7	152.4
XFSP-06-12-500 (Purple)	2.30	30.5	152.4
XFSP-06-18-500 (Purple)	2.30	45.7	152.4
XFSP-09-12-500 (Purple)	3.50	30.5	152.4
XFSP-09-18-500 (Purple)	3.50	45.7	152.4

XFS Sub-Surface Dripline Maximum Lateral Lengths (Feet)

Inlet Pressure psi	Maximum Lateral Length (feet)					
	12" Spacing			18" Spacing		
	Nominal Flow (gph):			Nominal Flow (gph):		
	0.42	0.6	0.9	0.42	0.6	0.9
15	352	273	155	374	314	250
20	399	318	169	417	353	294
30	447	360	230	481	413	350
40	488	395	255	530	465	402
50	505	417	285	610	528	420
60	573	460	290	734	596	455

XFS Sub-Surface Dripline Maximum Lateral Lengths (meters)

Inlet Pressure bar	Maximum Lateral Length (meters)					
	30.5 cm			45.7 cm		
	Nominal Flow (l/h):			Nominal Flow (l/h):		
	1.6	2.3	3.4	1.6	2.3	3.4
1.0	107.2	83.2	47.2	114	95.7	76.2
1.4	121.6	96.9	51.5	127.1	107.6	89.6
2.1	136.2	109.7	70.1	146.6	125.9	106.7
2.8	148.7	120.4	77.7	161.5	141.7	122.5
3.5	153.9	127.1	86.9	185.9	160.9	128.0
4.1	174.6	140.2	88.4	223.7	181.7	138.7

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

Emitter Spacing	0.42 gph Emitter		0.6 gph Emitter		0.9 Emitter	
	gph	gpm	gph	gpm	gph	gpm
12"	42.0 gph	0.70 gpm	61.0 gph	1.02 gpm	92.0 gph	1.53 gpm
18"	28.0 gph	0.47 gpm	41.0 gph	0.68 gpm	61.0 gph	1.02 gpm

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

Emitter Spacing	1.6 l/h Emitter		2.3 l/h Emitter		3.4 l/h Emitter	
	l/h	l/m	l/h	l/m	l/h	l/m
0.30 meter	531.1 l/h	8.85 l/m	757.9 l/h	12.6 l/m	1136.7 l/h	18.9 l/m
0.46 meter	351.8 l/h	5.86 l/m	502.2 l/h	8.4 l/m	741.3 l/h	12.4 l/m

XFS-CV Dripline with Heavy-Duty Check Valve

NEW

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

LOOK FOR
THE
COPPER-COLORED
TUBING



XFS-CV Dripline for Elevated Applications

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



Drip Irrigation



How to Specify

XFS-CV - 06 - 12 - 100

Model XFS-CV Dripline with Heavy-Duty Check Valve	Length of Tubing	
	100 = 100' (30.5 m)	
	250 = 250' (76.2 m)	
	Emitter Spacing	
	12 = 12" (30.5 cm)	
	18 = 18" (45.7 cm)	
	Flow Rate	
	04 = .42 gph (1.6 l/h)	
	06 = .61 gph (2.3 l/h)	
	09 = .92 gph (3.5 l/h)	

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 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)



XF Dripline Insert Fittings (pg. 137)

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



FITINS-TOOL

XFS-CV Dripline Maximum Lateral Lengths (Feet)

Inlet Pressure psi	Maximum Lateral Length (feet)			
	12" Spacing		18" Spacing	
	Nominal Flow (gph): 0.6	Nominal Flow (gph): 0.9	Nominal Flow (gph): 0.6	Nominal Flow (gph): 0.9
20	192	136	254	215
30	289	205	402	337
40	350	248	498	416
50	397	281	573	477
60	436	309	637	529

XFS-CV Dripline Maximum Lateral Lengths (Meters)

Inlet Pressure bar	Maximum Lateral Length (meters)			
	30.5 cm		45.7 cm	
	Nominal Flow (l/h): 2.3	Nominal Flow (l/h): 3.4	Nominal Flow (l/h): 2.3	Nominal Flow (l/h): 3.4
1.4	59	41	77	66
2.1	88	63	123	103
2.8	107	76	152	127
3.5	121	86	175	145
4.1	133	94	194	161



QF Dripline Header

A Quick and Flexible Solution to Dripline Headers

NEW

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 360° 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

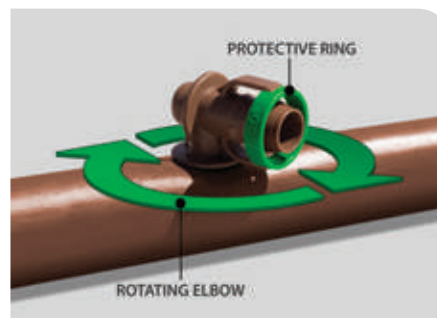
	QF Header - 3/4"	QF Header - 1"
• Outside Diameter:	0.940" (23.9mm)	1.200" (30.5mm)
• Inside Diameter:	0.820" (20.8mm)	1.060" (26.9mm)
• Wall Thickness:	0.060" (1.5mm)	0.070" (1.8mm)

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



QF Dripline Header



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

Model	Coil Length
XQF: Xerigation®	100 = 100' (30.5 m)
Quick Flexible	10P = 100' Purple
	Emitter Spacing
	12 = 12" (30.5 cm)
	18 = 18" (45.7 cm)
	Dripline Diameter:
	75 = 3/4"
	10 = 1"

Twist Lock Fittings

Durable and Reliable. Rain Bird's NEW Twist Lock Fittings

NEW

- 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)

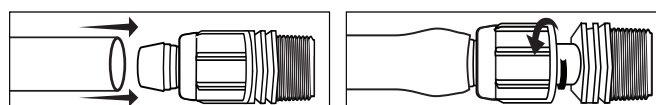
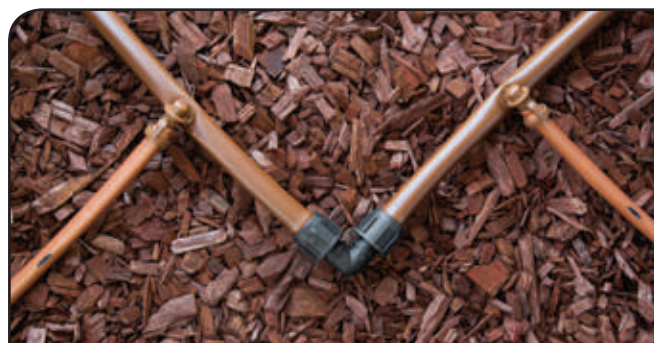
Models

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



2 Step Installation

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

	600 Series		800 Series		1000 Series	
	Inches	mm	Inches	mm	Inches	mm
Acceptable Internal Diameter	0.590 to 0.630	15 to 16	0.790 to 0.845	20.0 to 21.5	1.025 to 1.085	26.0 to 27.6
Acceptable Wall Thickness	0.025 to 0.050	0.64 to 1.27	0.045 to 0.065	1.14 to 1.65	0.045 to 0.065	1.14 to 1.65
Compatible Tubing	XFD, XT700, ½" XBS		¾" XBS, ¾" QF Header		1" QF Header	



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

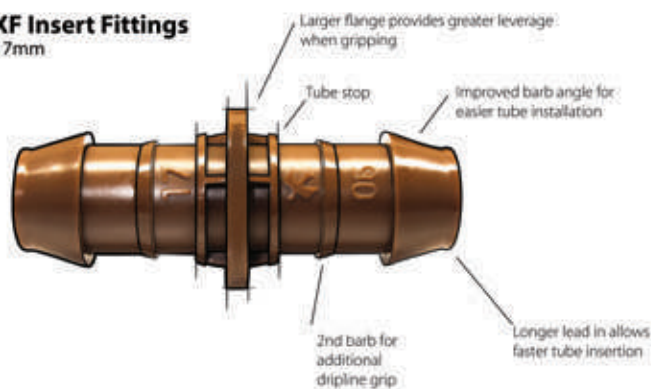
- Pressure: 0 to 50 psi (1.0 to 3.5 bar) if using 60 psi (4.1 bar) clamps will be required

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 3/4" barbed tubing plastic stake
- FITINS-TOOL: XF Fitting Insertion Tool. Compatible with XFF-COUP, XFF-ELBOW, XFF-TEE, and QF Dripline Header



XF Insert Fittings 17mm



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



FITINS-TOOL

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: 1/2" Male Pipe Thread Adapter
- MDCF-75MPT: 3/4" Male Pipe Thread Adapter
- MDCF-50FPT: 1/2" Female Pipe Thread Adapter
- MDCF-75FPT: 3/4" Female Pipe Thread Adapter
- MDCF-75FHT: 3/4" 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

Flow gpm	Loss psi	METRIC	
		Flow l/h	Loss bar
0.00	0.00	0.00	0.00
1.00	0.3	227.1	0.03
2.00	0.64	454.3	0.04
3.00	0.82	681.4	0.06
4.00	1.45	908.5	0.10
5.00	1.90	1135.6	0.13
6.00	2.57	1362.8	0.18



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



FITINS-TOOL



The XF Insertion Tool securely locks fittings into place to make inserting dripline easier.



The tool also has a sloped valley to allow room for the dripline when inserting a fitting onto the second side.

The XF Insertion Tool works with the following XF Fittings:



XFF-COUP



XFF-ELBOW



XFF-TEE

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 XFS dripline with Copper Shield™ for subsurface installations, including installations under turf grass.*

Model

- ARV050: 1/2" Air Relief Valve



ARV050

Maximum Length of Dripline Useable with the ARV

1/2" ARV		
Emitter Spacing	0.6 GPH	0.9 GPH
12"	639'	424'
18"	958'	636'
24"	1278'	848'
ARV Capacity		
Total Flow (GPM)	6.5	
Total Flow (GPH)	390	

Maximum Length of Dripline Useable with the ARV METRIC

1/2" ARV		
Emitter Spacing	2.3 l/h	3.4 l/h
0.30 m	195	129
0.46 m	292	194
0.61 m	390	258
ARV Capacity		
Total Flow (l/m)	24.6	
Total Flow (l/h)	1476	

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

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 1/4" distribution tubing with connection fitting pre-installed

Model

- OPERIND



OPERIND

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)

XFD100

XF Blank Tubing Friction Loss Characteristics

O.D. .634" I.D. .536"			O.D. 16.1mm I.D. 13.6mm			METRIC
Flow gpm	Velocity fps	Loss psi	Flow l/h	Velocity m/s	Loss bar	
0.50	0.70	0.27	113.56	0.21	0.06	
1.00	1.40	0.97	227.12	0.43	0.22	
1.50	2.10	2.06	340.69	0.64	0.46	
2.00	2.80	3.50	454.25	0.85	0.79	
2.50	3.50	5.29	567.81	1.07	1.20	
3.00	4.20	7.42	681.37	1.28	1.68	
3.50	4.90	9.87	794.94	1.49	2.23	
4.00	5.60	12.64	908.50	1.71	2.86	
4.50	6.30	15.72	1022.06	1.92	3.56	
5.00	7.00	19.11	1135.62	2.13	4.32	
5.50	7.70	22.80	1249.19	2.35	5.16	
6.00	8.40	26.78	1362.75	2.56	6.06	

Psi Loss Per 100 Feet of Pipe (psi/100ft.)

bar Loss per 100 Meters of Pipe (bar/100m)

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

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)



XT-700-100

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

XT-700 Tubing Friction Loss Characteristics

O.D. .700" I.D. .580"			O.D. 18 mm I.D. 15 mm			METRIC
Flow gpm	Velocity fps	Loss psi	Flow m³/h	Flow l/h	Velocity m/s	Loss bar
0.50	0.61	0.19	0.11	0.03	0.19	0.01
1.00	1.21	0.69	0.23	0.06	0.37	0.05
1.50	1.82	1.45	0.34	0.09	0.56	0.10
2.00	2.43	2.47	0.45	0.13	0.74	0.17
2.50	3.03	3.74	0.57	0.16	0.92	0.26
3.00	3.64	5.24	0.68	0.19	1.11	0.36
3.50	4.24	6.97	0.79	0.22	1.29	0.48
4.00	4.85	8.93	0.91	0.25	1.48	0.62
4.50	5.46	11.10	1.02	0.28	1.67	0.77
5.00	6.06	13.50	1.14	0.32	1.85	0.93
5.50	6.67	16.10	1.25	0.35	2.03	1.11
6.00	7.28	18.92	1.36	0.38	2.22	1.31

Psi Loss per 100 Feet of Pipe (psi/100ft.) bar Loss per 100 Meters of Pipe (bar/100m)

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

Compatible Fittings



Twist Lock Fittings
600 Series (pg. 136)
XT-700 & ½" XBS



Twist Lock Fittings
800 Series (pg. 136)
¾" XBS

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 - 1/2" Tubing Models - 600-700

NEW

- Outside diameter: 0.700" (17.8 mm)
- Inside diameter: 0.600" (15.2 mm)
- Wall thickness: 0.050" (1.3 mm)
- XBS700G100: 1/2" tubing, 100 foot (30 m) coil with green striping
- XBS700G500: 1/2" tubing, 500 foot (152 m) coil with green striping
- XBS700P100: 1/2" tubing, 100 foot (30 m) coil with purple striping
- XBS700P500: 1/2" tubing, 500 foot (152 m) coil with purple striping

XBS - 1/2" Tubing Models

- Outside diameter: 0.705" (18 mm)
- Inside diameter: 0.615" (15.6 mm)
- Wall thickness: 0.045" (1.2 mm)
- XBS100: 1/2" tubing, 100 foot (30 m) coil with green striping
- XBS500: 1/2" tubing, 500 foot (152 m) coil with green striping
- XBS500B: 1/2" tubing, 500 foot (152 m) coil with black striping
- XBS500R: 1/2" tubing, 500 foot (152 m) coil with red striping
- XBS500Y: 1/2" tubing, 500 foot (152 m) coil with yellow striping
- XBS500P: 1/2" tubing, 500 foot (152 m) coil with purple striping

XBS 940 - 3/4" Tubing Models

- Outside diameter: 0.940" (24 mm)
- Inside diameter: 0.820" (21 mm)
- Wall thickness: 0.060" (1.5 mm)
- XBS940G500: 3/4" tubing, 500 foot (152 m) coil with green striping
- XBS940P500: 3/4" tubing, 500 foot (152 m) coil with purple striping

Note: XBS 940 is also available in 100' coils



Black Stripe Tubing

XBS 700 - 1/2" Tubing Friction Loss Characteristics

NEW

O.D. .700" I.D. .600"			O.D. 17.8mm I.D. 15.2mm			METRIC
Flow gpm	Velocity fps	Loss psi	Flow l/h	Velocity m/s	Loss bar	
0.50	0.57	0.16	1.89	0.17	0.04	
1.00	1.14	0.58	3.79	0.35	0.13	
1.50	1.70	1.22	5.68	0.52	0.27	
2.00	2.27	2.08	7.57	0.69	0.46	
2.50	2.84	3.15	9.46	0.87	0.70	
3.00	3.41	4.41	11.36	1.04	0.98	
3.50	3.97	5.87	13.25	1.21	1.30	
4.00	4.54	7.52	15.14	1.38	1.67	
4.50	5.11	9.35	17.03	1.56	2.07	
5.00	5.68	11.36	18.93	1.73	2.16	
5.50	6.24	13.55	20.82	1.90	3.01	
6.00	6.81	15.92	22.71	2.08	3.53	

XBS - Tubing Friction Loss Characteristics

O.D. .705" I.D. .615"			O.D. 18 mm I.D. 15.6 mm			METRIC
Flow gpm	Velocity fps	Loss psi	Flow l/h	Velocity m/s	Loss bar	
0.50	0.54	0.14	1.89	0.16	0.03	
1.00	1.08	0.51	3.79	0.33	0.11	
1.50	1.62	1.08	5.68	0.49	0.24	
2.00	2.16	1.85	7.57	0.66	0.41	
2.50	2.70	2.79	9.46	0.82	0.62	
3.00	3.24	3.91	11.36	0.99	0.87	
3.50	3.78	5.20	13.25	1.15	1.15	
4.00	4.32	6.66	15.14	1.32	1.48	
4.50	4.86	8.29	17.03	1.48	1.84	
5.00	5.40	10.08	18.93	1.65	2.23	
5.50	5.94	12.02	20.82	1.81	2.67	
6.00	6.48	14.12	22.71	1.98	3.13	

XBS 940 - 3/4" Tubing Friction Loss Characteristics

O.D. .940" I.D. .820"			O.D. 23.9mm I.D. 20.8mm			METRIC
Flow gpm	Velocity fps	Loss psi	Flow l/h	Velocity m/s	Loss bar	
0.50	0.30	0.03	1.89	0.09	0.01	
1.00	0.61	0.13	3.79	0.19	0.03	
1.50	0.91	0.27	5.68	0.28	0.06	
2.00	1.22	0.46	7.57	0.37	0.10	
2.50	1.52	0.69	9.46	0.46	0.15	
3.00	1.82	0.96	11.36	0.55	0.21	
3.50	2.13	1.28	13.25	0.65	0.28	
4.00	2.43	1.64	15.14	0.74	0.36	
4.50	2.74	2.04	17.03	0.84	0.45	
5.00	3.04	2.49	18.93	0.93	0.55	
5.50	3.34	2.96	20.82	1.02	0.66	
6.00	3.65	3.48	22.71	1.11	0.77	
6.50	3.95	4.04	24.61	1.20	0.90	
7.00	4.25	4.63	26.50	1.30	1.03	
7.50	4.56	5.27	28.39	1.39	1.17	
8.00	4.86	5.93	30.28	1.48	1.32	
8.50	5.17	6.64	32.18	1.58	1.47	
9.00	5.47	7.38	34.07	1.67	1.64	
9.50	5.77	8.16	35.96	1.76	1.81	
10.00	6.08	8.97	37.85	1.85	1.99	

Psi Loss Per 100 Feet of Pipe (psi/100ft.)

Bar Loss per 100 Meters of Pipe (bar/100m)

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 1/4" Distribution Tubing

The strongest and most flexible 1/4" 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 1/4" transfer fittings
- Extruded from UV-resistant polyethylene resin materials

Specifications

- Outside Diameter: 0.25" (6.3 mm)
- Wall Thickness: .04" (1.0 mm)
- Inside Diameter: 0.17" (4.3 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 1/4" distribution tubing
- XQ-1000: 1000-foot (305m) coil 1/4" distribution tubing
- XQ-1000-B: 1000-foot (305m) coil 1/4" distribution tubing in a bucket

XQ 1/4" Distribution Tubing Friction Loss Characteristics

O.D. .25" I.D. .17"			O.D. 6.3mm I.D. 4.3mm			METRIC
Flow gpm	Velocity fps	Loss psi	Flow m³/h	Flow l/h	Velocity m/s	Loss bar
1	0.27	0.16	0.00	3.79	0.08	0.01
3	0.80	1.24	0.01	11.6	0.24	0.09
5	1.33	3.20	0.02	18.92	0.41	0.22
7	1.86	5.97	0.03	26.50	0.57	0.41
9	2.39	9.50	0.03	34.07	0.73	0.66
11	2.92	13.79	0.04	41.64	0.89	0.95
13	3.45	18.75	0.05	49.21	1.05	1.29
15	3.98	24.43	0.06	56.78	1.21	1.69
17	4.52	30.80	0.06	64.35	1.38	2.13
18	4.78	34.23	0.07	68.13	1.46	2.36
19	5.05	37.83	0.07	71.92	1.54	2.61
20	5.31	41.60	0.08	75.70	1.62	2.87
25	6.64	62.86	0.09	94.63	2.03	4.34
30	7.97	88.08	0.11	113.55	2.43	6.08

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)



XQ-100 and XQ-1000 1/4" Tubing



XQ-1000-B 1/4" Tubing

1/4" Landscape Dripline

Rain Bird 1/4" 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 1/4" barbed Fittings

Operating Range

- 10 to 40 psi (0.7 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

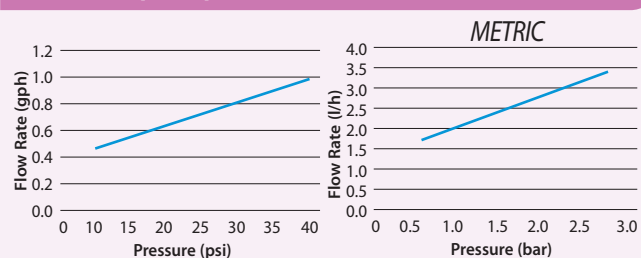


LDQ-08-06-100

Flow Characteristics

Model	Flow at 30 psi gph l/h		Spacing in. cm		Coil Length ft. m	
LDQ0806100	0.8	3.0	6	15.25	100	30.50
LDQ0812100	0.8	3.0	12	30.5	100	30.5

1/4" Landscape Dripline Performance



Maximum Length of Run (Feet)

Emitter Spacing	Maximum Length of Run	Flow per Ft. @ 15 psi
6"	19 feet	1 gph/ft.
12"	33 feet	0.5 gph/ft.

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



XBF1CONN



XBF2EL



XBF3TEE

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



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)



TDS-6050



TDS-6500

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



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



PPC-200X

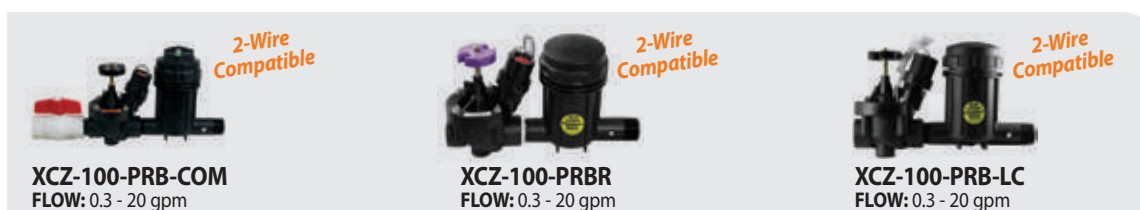
Improved Dual-well
Design Allows for
Clean Cuts

Control Zone Kit Selection Guide



Commercial High Flow: 15 - 62 gpm

Pages
151 - 152



Commercial Wide Flow: 0.3 - 20 gpm

Pages
149 - 150



Residential Medium Flow: 3 - 15 gpm

Pages
147 - 148



Residential Low Flow: Flow: 0.2 - 10 gpm

Residential Low Flow: Flow: 0.2 - 5 gpm

Pages
146 - 147

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.

- Rain Bird offers the most complete line of Control Zone Kits, giving contractors and specifiers the flexibility to meet every need from 0.2 to 40 gpm. Choose from:
- $\frac{3}{4}$ ", 1" or 1 $\frac{1}{2}$ " inlet opening
- Low Flow Valve, Anti-Siphon Valve, DV Valve, or PESB Valve
- Pressure Regulating RBY Filter, Pressure Regulating Quick Check Basket Filter, or Quick Check Basket Filter

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

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



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

		XCZ-075-PRF	
Flow (gpm)	Flow (l/m)	Pressure (psi)	Pressure (bar)
0.2	0.8	34.4	2.4
1.0	3.8	36.1	2.5
3.0	11.4	38.1	2.6
5.0	18.9	43.4	3.0

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

		XCZLF-100-PRF	
Flow (gpm)	Flow (l/m)	Pressure (psi)	Pressure (bar)
0.2	0.8	44.4	3.1
1.0	3.8	44.4	3.1
3.0	11.4	45.0	3.1
5.0	18.9	46.2	3.2
10.0	37.9	52.2	3.6



Four Control Zone Kits in a Standard Valve Box



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: 3/4" Low Flow Anti-Siphon Valve with 3/4" PR RBY Filter

Replacement Screen

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



XACZ-075-PRF

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

Flow gpm	l/m	Inlet Pressure	
		psi	bar
0.2	0.8	37.4	2.6
1.0	3.8	39.1	2.7
3.0	11.4	40.0	2.8
5.0	18.9	49.7	3.4

XACZ-075-PRF

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)



XACZ-100-PRF

Minimum Inlet Pressure for 40 psi Outlet Pressure

Flow gpm	l/m	Inlet Pressure	
		psi	bar
3.0	11.4	43.3	3.0
5.0	18.9	44.7	3.1
7.0	26.5	46.2	3.2
9.0	34.1	47.3	3.3
11.0	41.6	50.8	3.5
13.0	49.2	55.4	3.8
15.0	56.8	59.7	4.1

XACZ-100-PRF

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)



XCZPGA-100-PRF

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)



XCZ-100-PRF

Minimum Inlet Pressure for 40 psi outlet pressure

Flow gpm	Inlet Pressure (psi) XCZPGA-100-PRF	Inlet Pressure (psi) XCZ-100-PRF
3.0	45.8	42.9
5.0	47.0	44.1
10.0	50.7	48.5
15.0	57.6	55.5

Minimum Inlet Pressure for 2.8 bar outlet pressure

Flow l/m	Inlet Pressure (bar) XCZPGA-100-PRF	Inlet Pressure (bar) XCZ-100-PRF
11.4	3.2	3.0
18.9	3.2	3.0
37.9	3.5	3.3
56.8	4.0	3.8

Wide Flow Commercial Control Zone Kit with Pressure Regulating, Basket Filter

UPDATED

- 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

Flow Rate gpm	l/m	Inlet Pressure	
		psi	bar
0.3	1.14	41.0	2.82
1.0	3.78	41.5	2.86
5.0	18.9	43.0	2.9
10.0	37.9	48.0	3.3
15.0	56.8	56.0	3.8
20.0	75.7	65.0	4.5



XCZ-100-PRB-LC

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

Minimum Inlet Pressure for 40 psi outlet pressure

Flow gpm	Inlet Pressure (psi) XCZ-100-PRB-COM	Inlet Pressure (psi) XCZ-100-PRBR
0.3	41.0	41.0
1.0	41.5	41.5
3.0	42.0	42.0
5.0	44.0	45.0
10.0	47.3	49.0
15.0	53.0	57.0
20.0	62.5	62.5

Minimum Inlet Pressure for 2.8 bar Outlet Pressure

Flow l/m	Inlet Pressure (bar) XCZ-100-PRB-COM	Inlet Pressure (bar) XCZ-100-PRBR
1.136	2.82	2.82
3.78	2.86	2.86
11.4	2.9	2.9
18.9	3.0	3.1
37.9	3.3	3.4
56.8	3.6	3.9
75.7	4.3	4.3

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 150° F (66° 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



XCZ-100-PRBR



XCZ-100-PRB-COM

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 150° F (66° 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)

Minimum Inlet Pressure for 40 psi outlet pressure

Flow gpm	Inlet Pressure (psi) XCZ-150-PRB-COM
15.0	40.0
20.0	49.0
25.0	50.2
30.0	53.5
35.0	56.1
40.0	60.7

Minimum Inlet Pressure for 2.8 bar Outlet Pressure

Flow l/m	Inlet Pressure (bar) XCZ-150-PRB-COM
56.8	2.8
75.7	3.4
94.7	3.5
113.6	3.7
132.5	3.9
151.4	4.2



1.5" Inline Commercial Control Zone Kit NEW

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 9 1/2" H
- XCZ-150-LCDR: 23 1/2" L x 5 3/4" W x 9 1/2" H

Filtration

- XCZ-150-LCS: 1 1/2" (3.81 cm) Stainless Steel Screen Filter, 120 Mesh (130 Micron); Surface Area: 42 in² (270 cm²)
- XCZ-150-LCDR: 1 1/2" (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

Flow Rate (gpm)	XCZ-150-LCS	XCZ-150-LCDR
15	3	2
20	3	2
25	3	3
30	5	3
40	6	6
50	11	8
60	15	8
70	16	8

Pressure Loss Characteristics

METRIC

Flow Rate (l/m)	XCZ-150-LCS	XCZ-150-LCDR
56.9	0.21	0.14
75.7	0.21	0.14
94.6	0.21	0.21
113.5	0.34	0.21
151.4	0.41	0.41
189.3	0.76	0.55
227.1	1.03	0.55
264.9	1.10	0.55



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 $\frac{1}{2}$ " diameter seat for flawless operation at low flow rates
- Low Flow Valve is available in $\frac{3}{4}$ " 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: $\frac{3}{4}$ " Low Flow DV Valve
- LFV-100*: 1" Low Flow DV Valve

**Available with BSP threads*

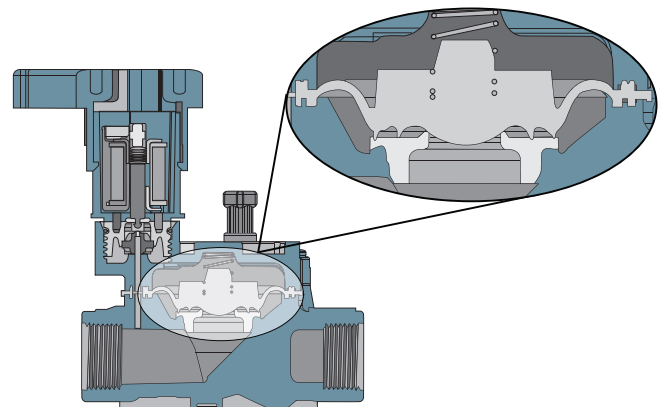
Pressure Loss Characteristics

Flow gpm	LFV-075 psi	LFV-100 psi
0.2	3.0	3.0
1.0	3.2	3.4
2.0	3.3	3.8
4.0	3.6	5.0
6.0	4.2	6.4
8.0	5.1	7.5

Pressure Loss Characteristics

Flow l/m	LFV-075 bar	LFV-100 bar
0.6	0.21	0.21
3.6	0.22	0.23
7.8	0.23	0.26
15.0	0.25	0.34
22.8	0.28	0.44
30.0	0.35	0.52

METRIC



Unique Diaphragm Design



LFV-075

*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)



RBY075MPTX

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)

Components
of Control Zone
Kits Found on
pg. 146-158

Stainless
Steel
Screen



PRF-075-RBY and PRF-100-RBY

Pressure Loss Characteristics

Flow Rate		RBY075MPTX		RBY100MPTX	
gpm	l/m	psi	bar	psi	bar
1.00	0.8	0.1	0.00	0.1	0.00
3.00	3.8	0.4	0.01	0.3	0.01
5.0	11.4	1.1	0.03	0.5	0.02
7.0	18.9	1.6	0.08	0.8	0.03
9.0	26.5	2.7	0.11	1.4	0.06
12.0	34.1	4.5	0.19	2.2	0.10
14.0	45.4	—	0.31	3.0	0.15
16.0	53.0	—	—	3.8	0.21
18.0	60.6	—	—	4.7	0.26
	68.1	—	—	—	0.32

Note: Pressure loss for 200 mesh filter screen

Pressure Loss Characteristics

Flow Rate		PRF-075-RBY		PRF-100-RBY	
gpm	l/m	psi	bar	psi	bar
0.2	0.8	3.0	0.21	N/A	N/A
1.0	3.8	4.0	0.28	N/A	N/A
3.0	11.4	6.1	0.42	0.8	0.06
5.0	18.9	10.0	0.69	2.0	0.14
8.0	30.3	N/A	N/A	3.8	0.26
10.0	37.9	N/A	N/A	5.2	0.36
15.0	56.8	N/A	N/A	12.0	0.83

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

Pressure Loss Characteristics - QKCHK-100

Flow Rate gpm	l/m	100 mesh screen		200 mesh screen	
		psi	bar	psi	bar
3	11.4	0.1	0.0	0.0	0.0
5	18.9	0.2	0.0	0.0	0.0
7	26.5	0.4	0.0	0.4	0.0
9	34.1	0.7	0.0	0.7	0.0
11	41.6	0.9	0.1	1.1	0.1
14	53.0	1.3	0.1	1.6	0.1
20	75.7	2.9	0.2	3.2	0.2

Note: Pressure loss for 200 mesh filter screen

Replacement Filter Screens

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

Replacement Cap

- QKCHKAP (Complete cap with body o-ring)

QKCHK-100



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)
- 3/4" 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: 3/4" 30 psi (2.1 bar) regulator for low flow (red label)
- PSI-M30X-075: 3/4" 30 psi (2.1 bar) regulator for medium flow (yellow label)
- PSI-M40X-075: 3/4" 40 psi (2.8 bar) regulator for medium flow (yellow label)



PSI-L30X-075,
PSI-M30X-075
PSI-M40X-075

Retrofit Pressure Regulators

Features

- Provides convenient 30 psi (2.1 bar) pressure regulation at the riser for any 1/2" 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

- 1/2" female-threaded inlet
- Height: 4" (10 cm)

Model

- PRS-050-30

PRS-050-30



1" & 1½" High Flow Inline Pressure Regulators NEW

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 Regulators flow range: 0.5-35 gpm (1.9 to 132.5 l/min)
 - 1½" 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: 1½" Female NPT X 1½" 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



1" & 1½" High Flow Inline Pressure Regulators

How to Specify

PSI - H XX X - 100		
		
Model Pressure Regulator		Inlet/Outlet Size 100 = 1 in (2.5 cm) 150 = 1½ in (3.8 cm)
Pre-Set Pressure Regulation 40 = 40 psi (2.8 bar) 50 = 50 psi (3.5 bar)		
Flow Range Capacity H = High Flow (up to 70 gpm; 265 l/m)		

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 O-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)

Components
of Control Zone
Kits Found on
pg. 146-158

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

- QKCHKAP (Complete cap with body o-ring)

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

Flow Rate gpm	l/m	Inlet Pressure PRB-100 / PRB-QKCHK-100		Inlet Pressure PRB-QKCHK-200	
		psi	bar	psi	bar
3	11.4	41	2.8	43	2.9
5	18.9	42	2.9	48	3.3
10	37.9	48	3.3	52	3.6
15	56.8	52	3.6	54	3.7
20	75.7	64	4.4	66	4.5



PRB-100

Stainless
Steel
Screen



PRB-QKCHK-100



QKCHK-100M



QKCHK-200M

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): 42 in² (270 cm²)
- 2" Models: Maximum flow: Up to 110 gpm (25 m³/hr)
 - Filtering surface (disc): 81 in² (525 cm²)
 - Filtering surface (screen): 75 in² (485 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

NEW



LCRBY200D



Disc & Screen Filters

Pressure Loss Characteristics - Disc Filter

Flow Rate		1" Filter		1.5" Filter		2" Filter	
gpm	l/m	psi	bar	psi	bar	psi	bar
5	18.93	0.60	0.04	0.08	0.01	0.10	0.01
11	41.67	1.16	0.08	0.18	0.01	0.10	0.01
22	83.33	2.61	0.18	0.40	0.03	0.10	0.01
33	125.0	4.35	0.30	0.73	0.05	0.24	0.02
44	166.67	—	—	1.05	0.07	0.40	0.03
55	208.33	—	—	1.50	0.10	0.60	0.04
66	250.00	—	—	2.18	0.15	0.82	0.06
77	291.67	—	—	3.10	0.21	1.10	0.08
88	333.33	—	—	3.95	0.27	1.60	0.11
99	375.00	—	—	—	—	2.03	0.14
110	416.67	—	—	—	—	2.47	0.17

Pressure Loss Characteristics - Screen Filter

Flow Rate		1" Filter		1.5" Filter		2" Filter	
gpm	l/m	psi	bar	psi	bar	psi	bar
5	18.93	0.80	0.06	0.00	0.00	0.00	0.00
11	41.67	1.74	0.12	0.00	0.00	0.00	0.00
22	83.33	2.90	0.20	0.50	0.03	0.20	0.01
33	125.0	4.06	0.28	0.95	0.07	0.25	0.02
44	166.67	—	—	1.45	0.10	0.44	0.03
55	208.33	—	—	1.89	0.13	0.60	0.04
66	250.00	—	—	2.32	0.16	0.87	0.06
77	291.67	—	—	2.76	0.19	1.16	0.08
88	333.33	—	—	3.19	0.22	1.45	0.10
99	375.00	—	—	—	—	1.89	0.13
110	416.67	—	—	—	—	2.32	0.16

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)



Model# 1800XC
Can be used to cap off unused Rain Bird 1800 Series spray bodies. (Sold separately)



Model# XCHPS
Can be used to cap off unused Hunter Spray bodies. (Sold separately)



Model# XCT570
Can be used to cap off unused Toro Spray bodies. (Sold separately)



Spray-to-Drip Conversion Steps



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.