

TECH SPECS

Xeri-Pops[™] They Pop Up to Water...Then Pop Down Flush!

Full Featured Family

Rain Bird, the world leader in spray head technology, introduces the first, full-featured line of micro-spray pop-ups: The XP Series. The XP Series Xeri-Pops currently accept the new patent pending Multi-Port Nozzles or any Rain Bird 5- and 8- Series MPR nozzle with a flow rate of 45 GPH (.75 GPM) or less. They pop down completely, out of sight, when they're not in operation. Not only is a potential maintenance head- ache eliminated, but true MPR performance is now ensured on your micro-spray system.

1/4" Tubing Supplies Water

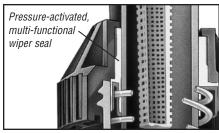
Available in 4", 6" and 12" pop-up heights, Xeri-Pops connect to the water supply via $\frac{1}{4}$ " distribution tubing instead of threading onto conventional $\frac{1}{2}$ " fittings. To improve long-term reliability, Rain Bird has even added a protective flange to the bottom of the head to help protect the barb from possible damage.



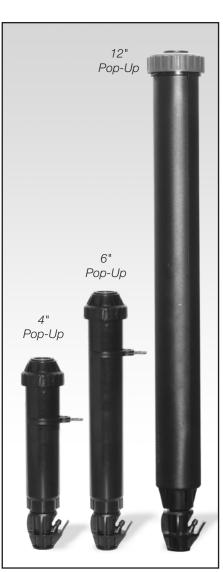
Integral flange protects inlet barb which accepts all brands of $\frac{1}{4}$ " tubing.

Unique Wiper Seal

Rain Bird's unique wiper seal makes reliable pop-up and pop-down possible between 20 and 50 psi. The precision-designed wiper seal combined with a molded cover and body, put Rain Bird Xeri-Pops in a class by themselves.



Unique wiper seal assures long-term pop-up and pop-down reliability, even at microspray flows and pressures.



Choose between three different pop-up heights.

Note: When specifying the XP Series Xeri-Pop units, make sure to specify the Rain Bird SPB-025 '/<" connectors and '/<" distribution tubing. Specification of these Rain Bird tested ancillary products will assure that your XP Series design meets the performance characteristics indicated in this publication. Use of other '/<" connectors may compromise the performance of the XP Series units because other '/<" connectors have been found to have lower flow rates.

Flush Retract

When a Multi-Port, 5B*, 5- or 8-Series MPR nozzle is installed on an XP Series pop-up, the unit pops up to water, then pops down flush once the system has been shut down. This eliminates unsightly black poly risers in the landscape. It also eliminates the maintenance hassles caused when conventional microsprays with small diameter threads snap off adapters, resulting in mini-geysers.



MPR nozzle pops up to water.



MPR nozzle retracts flush for reliable microspray performance.

How to Specify/Order				
<u>x</u>	<u>P-600X</u>			
Model	Pop-Up Height			
XP = Xeri-Pop	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 5B Bubbler Nozzle is installed on a Xeri-Pop.



Micro-Spray Maintenance Problems Eliminated

The new XP Series Xeri-Pops solve both aesthetic and maintenance complaints quickly and easily without increasing installation time. They use Rain Bird Multi-Port, 5B**, 5- and 8-Series MPR nozzles. When the head pops down, the nozzle retracts flush to the cap. No more un-sightly polyethylene risers and no more maintenance complaints about micro-sprays that have snapped off and resulted in mini-geysers.



Conventional micro-spray system with black, polyethylene risers throughout the landscape.

Winterizing a Xeri-Pop Zone

In freezing climates, where it's customary to winterize a sprinkler system, it's important to choose one of the following options when winterizing a Xeri-Pop zone. 1) Open the valve controlling the Xeri-Pop zone at the same time that compressed air is applied to an adjacent, open valve operating spray heads or rotors. Or, 2) When applying compressed air directly to the Xeri-Pop zone, never exceed 50 psi. Otherwise, the 1/4" tubing may blow off of the SPB 025. Or, 3) Install the poly drip tubing lateral that supplies water to the Xeri-Pops at a depth lower than the lowest installed Xeri-Pop. This will assure that all water in the Xeri-Pops drain into the lateral after watering. Then the end closure on the lateral can be opened and the water drained from the lateral.

Xeri-Pop Features

- The Rain Bird Xeri-Pop operates at 20 to 50 psi base pressure when water is supplied by 1/4" distribution tubing.
- For optimum performance use a 40 psi pressure regulator.
- Self-flushing, pressure-activated wiper seal assures reliable pop-up and pop-down.
- Barb inlet accepts 1/4" distribution tubing.
- Ribbed/flanged design of inlet assembly stabilizes the Rain Bird Xeri-Pop at installation and protects the ¹/₄" barb from possible damage.
- A durable, plastic snap-collar secures ¹/₄" distribution tubing to the outside of the Rain Bird Xeri-Pop case on the 4" and 6" models.
- All plastic parts in the Xeri-Pop are impact resistant. All external parts are UV resistant.
- Rugged 1800 technology in 12" model.

Maximum Head Count*

Maximum Head Count When Installing XP Series Micro-Pops with LD Blank Tubing and using 40 psi Regulator

Nozzle Pattern			
Full	Half	Third	Qtr
6	18	N/A	38
22	46	70	85
N/A	8	17	22
	6 22	Full Half 6 18 22 46	Full Half Third 6 18 N/A 22 46 70

Maximum Head Count When Installing XP Series Micro-Pops with XBS Tubing and using 40 psi Regulator

		Nozzle Pattern		
MPR Nozzle	Full	Half	Third	Qtr
MP Series	8	22	N/A	47
5 Series	26	56	85	100
8 Series	N/A	10	20	26

5B Bubbler Nozzles with PCS Screens**

Nozzle	PCS-010 Radius (ft.)	PCS-020 Radius (ft.)	PCS-030 Radius (ft.)	PCS-040 Radius (ft.)
5Q-B	0.4'	2'	4'	5'
5CST-B	Flood	1'	3'	5'
5H-B	Flood	0.4'	1'	2'
5F-B	Flood	Flood	0.3'	1'

*The above calculations (based on frictional losses) are based on a typical installation using 100' of '/." tubing and a maximum length of 10' of '/." tubing to ensure that the Xeri-Pop receives 20 psi to the head. The maximum number of heads decreases for installations where the heads are at a higher elevation than the valve.

**Always install a PCS-010, -020, -030 or -040 Pressure-Compensating Screen whenever a 5B Bubbler Nozzle is installed on a Xeri-Pop.



Multi-Port Nozzle

Nozzle	Pressure psi	Radius ft.	Flow GPM
	15	4	0.40
	20	4	0.47
	25	5	0.54
	30	5	0.60
	15	4	0.20
	20	4	0.23
 j	25	5	0.26
	30	5	0.30
	15	4	0.10
_	20	4	0.12
	25	5	0.13
	30	5	0.15

Multi-Port Stream Nozzle

8-Series MPR

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip In/h	Precip In/h
FULL	15	1.25	0.24	14.54	16.79
	20	1.50	0.28	11.81	13.63
	25	1.75	0.30	9.55	11.03
	30	2.00	0.33	7.99	9.22
HALF	15	1.25	0.12	14.54	16.79
	20	1.50	0.14	11.81	13.63
<u></u>	25	1.75	0.15	9.55	11.03
	30	2.00	0.17	7.99	9.22
QUARTE	R 15	1.25	0.05	14.54	16.79
_	20	1.50	0.06	11.81	13.63
	25	1.75	0.07	9.55	11.03
	30	2.00	0.08	7.99	9.22

5-Series MPR 5° Trajectory Nozzle Precip Precip Pressure Radius Flow GPM psi ft. In/h In/h 5F 15 2 0.09 2.07 2.39 20 З 0.19 2.01 2.32 25 4 0.27 1.62 1.87 30 5 0.41 1.58 1.83 5H 15 2 0.04 2.07 2.39 3 20 0.09 2.01 2.32 25 4 0.13 1.62 1.87 30 1.58 5 0.20 1.83 5T 15 2 0.03 2.07 2.39 20 3 0.06 2.01 2.32 25 4 0.09 1.62 1.87 30 5 0.13 1.58 1.83 5Q 15 2 0.02 2.07 2.39 20 З 0.05 2.01 2.32 25 4 0.07 1.62 1.87 30 5 0.10 1.58 1.83

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip In/h	Precip In/h
8H	15	5	0.27	2.07	2.39
	20	6	0.38	2.01	2.32
_ ,	25	7	0.41	1.62	1.87
	30	8	0.52	1.58	1.83
8T	15	5	0.18	2.07	2.39
	20	6	0.25	2.01	2.32
	25	7	0.27	1.62	1.87
	30	8	0.35	1.58	1.83
8Q	15	5	0.13	2.07	2.39
-	20	6	0.19	2.01	2.32
	25	7	0.21	1.62	1.87
	30	8	0.26	1.58	1.8

The Xeri-Pop microspray shall be capable of covering ____feet radius (m) at ____ pounds per square inch (Bars) with a discharge rate of _____gallons per minute (m³/h; l/s). The Xeri-Pop shall have a pop up height of _____".

The sprinkler body, stem and base shall be constructed of heavy-duty, ultraviolet resistant plastic. It shall have a heavy-duty stainless steel retracting spring for positive pop-down and it shall have a ratcheting system for easy alignment of the pattern. The Xeri-Pop shall have a soft elastomer pressureactivated wiper seal for cleaning debris from the pop-up stem as it retracts into the case to prevent the Xeri-Pop from sticking up to minimize "flow-by".

The Xeri-Pop shall have a Pop-Top Flush Plug pre-installed. The plug shall prevent debris from clogging the Xeri-Pop during installation and allow for the system to be flushed before nozzeling. The plug shall be bright orange and constructed of polypropylene material.

The Xeri-Pop shall have a bottom inlet barb to accept ¼" distribution tubing and shall operate between 20 and 50 psi. The 4" and 6" models shall have a snap collar to secure the ¼"distribution tubing to the body.

The Xeri-Pop shall be manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, California.

Note: The '/." inlet of the Xeri-Pop limits the amount of flow available to the nozzle. Exceeding a flow of .60 GPM may cause too much frictional pressure loss. Use of higher flow MPR nozzles than listed above, or exceeding the maximum recommended head count, may cause units to fail to pop up.

Square spacing based on 50% diameter of throw.

▲ Triangular spacing based on 50% diameter of throw.



Intelligent Use of Water™

At Rain Bird, we believe it is our responsibility to develop products and technologies that use water efficiently. Our commitment also extends to education, training and services for our industry and our communities.

The need to conserve water has never been greater. We want to do even more, and with your help, we can. Visit **www.rainbird.com** for more information about The Intelligent Use of Water.[™]

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