



Precision™ Series Spray Nozzle



Sprays

Male- or Female-threaded Nozzles Fit Toro®, Irritrol®, Rain Bird® and Hunter® Spray Bodies



The Patented H²O Chip
No Moving or Sonic Welded Parts



Assures no variation at the end of the water arc for better edge definition and consistent, reliable performance.

PSN with PCD Performs Under Pressure!

Competitor's High Flow Nozzle:
12H Nozzle at 50 PSI = 1.83GPM
or 2.45"/hr.*

PSN with PCD Nozzle:
12H Nozzle at 50 PSI = 0.74 GPM
or 1"/hr.*

Up To
60% Less
Water!

Toro's Precision™ Series Spray Nozzles are the most complete and efficient spray nozzle line available to help irrigation professionals manage water use, eliminate runoff and reduce customer water bills. The Precision™ Spray nozzles 1"/hr. precipitation rate ensures that water is applied more slowly and evenly without sacrificing landscape health. These nozzles are available in a wide selection of arcs and radii, as well as male and female threads, making them ideal for large scale installations and retrofits. The Precision™ Series Spray Nozzles are now also available in pressure-compensating versions, further enhancing the best-in-class spray nozzle in the industry.

Features & Benefits

Patented H²O Chip Technology

Using patented H²O chip technology – and no moving parts – each Precision Series Spray nozzles creates one or more high frequency oscillating streams to achieve the desired arc and radius with 1/3 less water usage.

Maximize Irrigation Efficiency

Precision Spray nozzles deliver an industry first 1"/hr (25mm/hr) precipitation rate, which better matches soil infiltration rate. This lower precipitation rate, along with high distribution uniformity make this nozzles family the most efficient nozzle from 5'-15' (1,5-4,6m).

Pressure-Compensating Versions Available

Pressure-Compensating Precision™ Series Spray Nozzles maintain 1"/hr (25mm/hr.) precipitation rate and minimizes misting up to inlet pressures to more than 40 PSI, minimizing the need for a regulating head, at fraction of the cost.

Design and Retrofit Effectiveness

The lower flow rate of Precision Series spray nozzles maximizes design efficiency and saves on overall material costs by using fewer valves and less controller stations. In addition, existing systems with low pressure can be fixed with a simple retrofit of the existing high-flow nozzle.

Third-Party Performance Validation

Precision™ Series Spray nozzles (non-Pressure-Compensating versions only) have been tested and validated in the field and at the Center for Irrigation Technology (CIT).

Pressure Compensation Device

The elastomeric PCD disk opens and closes in response to changes in inlet pressure to maintain optimal performance, even when the pressure rises higher than 40 psi. The Pressure-Compensating versions are indicated by the red stamped Toro logo, while the non-Pressure-Compensated versions are indicated by the white stamped Toro logo.

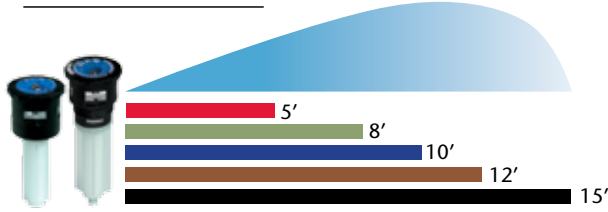


*Based on internal flow rate test data in Riverside, CA.

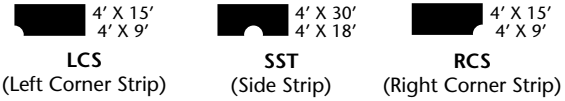


Precision™ Series Spray Nozzle

5 Radii Available In
Male & Female Threads



9 Arcs Plus Side and Corner Strips Available



* Not available with Pressure-Compensation

Performance Data Pressure-Compensating Precision™ Series Spray Nozzles

Arc	PSI	GPM	Radius	Precip. Rate (in./hr.)	Precip. Rate ▲ (in./hr.)
5Q	40	0.06	4.6	1.0	1.2
	50	0.08	5.1	1.2	1.4
	60	0.09	5.6	1.3	1.5
	70	0.11	6.2	1.5	1.7
5T	40	0.07	4.4	1.0	1.1
	50	0.11	4.9	1.3	1.5
	70	0.19	6.0	2.0	2.4
5H	40	0.10	4.4	1.0	1.2
	50	0.13	4.9	1.1	1.3
	70	0.19	6.0	1.4	1.6
5TT	40	0.14	4.3	1.1	1.3
	50	0.20	4.9	1.3	1.5
	60	0.25	5.4	1.4	1.7
	70	0.31	6.0	1.6	1.8
5TQ	40	0.15	4.3	1.0	1.2
	50	0.21	4.9	1.2	1.4
	60	0.26	5.6	1.4	1.6
	70	0.32	6.2	1.5	1.7
5F	40	0.17	4.0	1.0	1.2
	50	0.24	4.8	1.1	1.3
	60	0.31	5.5	1.2	1.4
	70	0.38	6.3	1.3	1.5

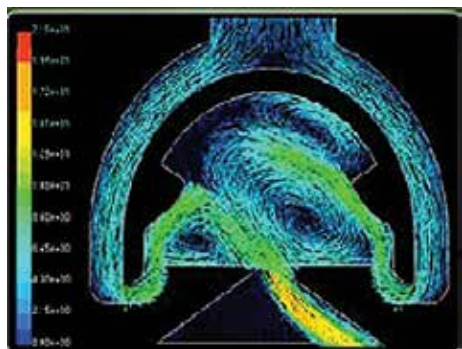
Arc	PSI	GPM	Radius	Precip. Rate (in./hr.)	Precip. Rate ▲ (in./hr.)
8Q	40	0.14	7.0	1.1	1.3
	50	0.17	7.7	1.2	1.3
	60	0.20	8.4	1.2	1.4
	70	0.23	9.1	1.3	1.4
8T	40	0.20	7.6	1.0	1.2
	50	0.24	8.0	1.1	1.3
	60	0.27	8.5	1.2	1.4
	70	0.31	8.9	1.3	1.5
8H	40	0.26	7.0	1.0	1.2
	50	0.33	7.6	1.1	1.3
	60	0.39	8.1	1.2	1.4
	70	0.46	8.7	1.3	1.4
8TT	40	0.34	7.0	1.0	1.1
	50	0.43	7.8	1.1	1.2
	60	0.52	8.5	1.2	1.4
	70	0.61	9.3	1.3	1.5
8TQ	40	0.41	7.2	1.0	1.1
	50	0.48	7.9	1.1	1.2
	60	0.55	8.6	1.1	1.3
	70	0.62	9.3	1.2	1.4
8F	40	0.55	7.0	1.1	1.2
	50	0.65	7.5	1.1	1.2
	60	0.74	8.0	1.1	1.3
	70	0.84	8.5	1.1	1.3

Arc	PSI	GPM	Radius	Precip. Rate (in./hr.)	Precip. Rate ▲ (in./hr.)
10Q	40	0.26	9.5	1.0	1.1
	50	0.28	10.0	1.1	1.2
	60	0.29	10.5	1.1	1.3
	70	0.31	11.1	1.2	1.4
10T	40	0.31	9.5	1.0	1.1
	50	0.36	10.0	1.1	1.2
	60	0.41	10.5	1.2	1.4
	70	0.46	11.0	1.3	1.5
10H	40	0.48	9.7	1.0	1.1
	50	0.53	10.1	1.1	1.2
	60	0.57	10.4	1.1	1.3
	70	0.62	10.8	1.2	1.4
10TT	40	0.63	9.6	1.0	1.1
	50	0.70	9.9	1.1	1.2
	60	0.77	10.3	1.1	1.3
	70	0.84	10.6	1.2	1.4
10TQ	40	0.71	9.5	1.0	1.1
	50	0.77	9.9	1.0	1.2
	60	0.82	10.3	1.1	1.2
	70	0.88	10.7	1.1	1.3
10F	40	0.95	9.6	1.0	1.1
	50	1.06	10.0	1.1	1.2
	60	1.16	10.5	1.1	1.3
	70	1.27	10.9	1.2	1.4

Arc	PSI	GPM	Radius	Precip. Rate (in./hr.)	Precip. Rate ▲ (in./hr.)
12Q	40	0.34	12.0	1.0	1.2
	50	0.39	12.2	1.1	1.3
	60	0.43	12.5	1.2	1.3
	70	0.48	12.7	1.2	1.4
12T	40	0.46	11.5	1.0	1.2
	50	0.50	11.8	1.0	1.2
	70	0.58	12.3	1.1	1.3
12H	40	0.70	11.5	1.0	1.2
	50	0.75	11.8	1.0	1.2
	70	0.85	12.5	1.1	1.2
12TT	40	0.90	11.4	1.0	1.2
	50	1.03	11.5	1.1	1.3
	70	1.29	11.6	1.2	1.4
12TQ	40	1.05	11.4	1.0	1.2
	50	1.14	11.7	1.0	1.2
	60	1.23	12.0	1.1	1.3
	70	1.32	12.3	1.1	1.3
12F	40	1.35	11.5	1.0	1.1
	50	1.49	11.8	1.0	1.2
	60	1.63	12.2	1.1	1.3
	70	1.77	12.5	1.1	1.3

Arc	PSI	GPM	Radius	Precip. Rate (in./hr.)	Precip. Rate ▲ (in./hr.)
15Q	40	0.53	14.2	1.0	1.2
	50	0.59	14.5	1.1	1.2
	60	0.64	14.8	1.1	1.3
	70	0.70	15.1	1.2	1.3
15T	40	0.72	14.3	1.0	1.2
	50	0.77	14.8	1.0	1.2
	60	0.82	15.2	1.1	1.2
	70	0.87	15.7	1.1	1.2
15H	40	1.10	14.5	1.0	1.2
	50	1.20	14.3	1.1	1.2
	60	1.29	14.0	1.1	1.3
	70	1.39	13.8	1.2	1.3
15TT	40	1.45	14.5	1.0	1.2
	50	1.57	14.8	1.0	1.2
	60	1.68	15.0	1.1	1.2
	70	1.80	15.3	1.1	1.3
15TQ	40	1.60	14.0	0.9	1.0
	50	1.70	14.4	1.0	1.1
	60	1.80	14.8	1.0	1.2
	70	1.90	15.1	1.1	1.2
15F	40	2.20	14.5	1.0	1.2
	50	2.36	14.8	1.0	1.2
	60	2.52	15.1	1.1	1.2
	70	2.68	15.4	1.1	1.3

Arc	PSI	GPM	Radius	Precip. Rate (in./hr.)	Precip. Rate ▲ (in./hr.)
4X30 SST	40	0.62	4x30	1.0	1.1
	50	0.65	4x30	1.0	1.2
	60	0.67	4x30	1.1	1.3
	70	0.70	4x30	1.1	1.3
4X15 LCS	40	0.32	4x15	1.0	1.2
	50	0.33	4x15	1.1	1.2
	60	0.34	4x15	1.1	1.3
	70	0.35	4x15	1.2	1.3
4X15 RCS	40	0.32	4x15	1.0	1.2
	50	0.33	4x15	1.1	1.2
	60	0.34	4x15	1.1	1.3
	70	0.35	4x15	1.2	1.3
4X18 SST	40	0.36	4X18	1.0	1.1
	50	0.37	4X18	1.0	1.2
	60	0.38	4X18	1.0	1.2
	70	0.39	4X18	1.0	1.2
4X9 LCS	40	0.18	4X9	1.0	1.1
	50	0.19	4X9	1.1	1.2
	60	0.20	4X9	1.1	1.2
	70	0.21	4X9	1.2	1.3
4X9 RCS	40	0.18	4X9	1.0	1.2
	50	0.19	4X9	1.1	1.2
	60	0.20	4X9	1.1	1.2
	70	0.21	4X9	1.2	1.3



Water expands and collapses inside the H²O Chip created high-frequency oscillating streams which allow for distance of throw using 1/3 less flow.

Specifications

Operating Specifications

- Radius: 5'-15' (1,5-4,6m)
- Operating pressure range: 20-75 psi (1,4-5,2 Bar)
- Recommended Pressure: non-Pressure-Compensating—30 psi (2,1 Bars), Pressure Compensating—50 psi (3,4 Bars)
- Flow Rate: 0.04-2.4 GPM (0,1-9,4 LPM)
- Nozzle trajectory:
 - 5': 5°
 - 8': 10°
 - 10': 15°
 - 12': 20°
 - 15': 27°
 - Corner and Side Strips: 20°

Additional Features

- Specialty Arcs available (60°, 120°, 150°, 210°, 240°)
- Radius reduction 25% maximum
- Color coded for radius on top of the nozzle
- Precipitation rate ≤ 1"/hour (≤ 25mm/hour)
- Maintains precipitation rate as radius is reduced up to max of 25%
- Matched precipitation rate within radius families
- Matched precipitation rates between radius families
- Screen attached to nozzle for easy insertion into the spray body
- Works on all spray bodies

Warranty

- Two years

*Not available with Pressure-Compensation.

Precision™ Series Spray Nozzle Model List					
5' "O" Nozzle (Red)			8' "O" Nozzle (Green)		
Male	Female	Descrip.	Male	Female	Descrip.
O-T-5-60	O-5-60	60° Arc	O-T-8-60	O-8-60	60° Arc
O-T-5-Q	O-5-Q	90° Arc	O-T-8-Q	O-8-Q	90° Arc
O-T-5-T	O-5-T	120° Arc	O-T-8-T	O-8-T	120° Arc
O-T-5-150	O-5-150	150° Arc	O-T-8-150	O-8-150	150° Arc
O-T-5-H	O-5-H	180° Arc	O-T-8-H	O-8-H	180° Arc
O-T-5-210	O-5-210	210° Arc	O-T-8-210	O-8-210	210° Arc
O-T-5-TT	O-5-TT	240° Arc	O-T-8-TT	O-8-TT	240° Arc
O-T-5-TQ	O-5-TQ	270° Arc	O-T-8-TQ	O-8-TQ	270° Arc
O-T-5-F	O-5-F	360° Arc	O-T-8-F	O-8-F	360° Arc
10' "O" Nozzle (Blue)			12' "O" Nozzle (Brown)		
O-T-10-60	O-10-60	60° Arc	O-T-12-60	O-12-60	60° Arc
O-T-10-Q	O-10-Q	90° Arc	O-T-12-Q	O-12-Q	90° Arc
O-T-10-T	O-10-T	120° Arc	O-T-12-T	O-12-T	120° Arc
O-T-10-150	O-10-150	150° Arc	O-T-12-150	O-12-150	150° Arc
O-T-10-H	O-10-H	180° Arc	O-T-12-H	O-12-H	180° Arc
O-T-10-210	O-10-210	210° Arc	O-T-12-210	O-12-210	210° Arc
O-T-10-TT	O-10-TT	240° Arc	O-T-12-TT	O-12-TT	240° Arc
O-T-10-TQ	O-10-TQ	270° Arc	O-T-12-TQ	O-12-TQ	270° Arc
O-T-10-F	O-10-F	360° Arc	O-T-12-F	O-12-F	360° Arc
15' "O" Nozzle (Black)			Special Patterns (Grey)		
O-T-15-60	O-15-60	60° Arc	Male	Female	
O-T-15-Q	O-15-Q	90° Arc	O-T-4X9-RCS	O-4X9-RCS	Right Corner
O-T-15-T	O-15-T	120° Arc	O-T-4X9-LCS	O-4X9-LCS	Left Corner
O-T-15-150	O-15-150	150° Arc	O-T-4X18-SST	O-4X18-SST	Side Strip
O-T-15-H	O-15-H	180° Arc	O-T-4X15-RCS	O-4X15-RCS	Right Corner
O-T-15-210	O-15-210	210° Arc	O-T-4X15-LCS	O-4X15-LCS	Left Corner
O-T-15-TT	O-15-TT	240° Arc	O-T-4X30-SST	O-4X30-SST	Side Strip
O-T-15-TQ	O-15-TQ	270° Arc			
O-T-15-F	O-15-F	360° Arc			
Pressure-Compensating Precision™ Series Spray Nozzle Model List					
5' "O" Nozzle (Red)			8' "O" Nozzle (Green)		
Male	Female	Descrip.	Male	Female	Descrip.
O-T-5-QP	O-5-QP	90° Arc	O-T-8-QP	O-8-QP	90° Arc
O-T-5-TP	O-5-TP	120° Arc	O-T-8-TP	O-8-TP	120° Arc
O-T-5-HP	O-5-HP	180° Arc	O-T-8-HP	O-8-HP	180° Arc
O-T-5-TTP	O-5-TTP	240° Arc	O-T-8-TTP	O-8-TTP	240° Arc
O-T-5-TQP	O-5-TQP	270° Arc	O-T-8-TQP	O-8-TQP	270° Arc
O-T-5-FP	O-5-FP	360° Arc	O-T-8-FP	O-8-FP	360° Arc
10' "O" Nozzle (Blue)			12' "O" Nozzle (Brown)		
O-T-10-QP	O-10-QP	90° Arc	O-T-12-QP	O-12-QP	90° Arc
O-T-10-TP	O-10-TP	120° Arc	O-T-12-TP	O-12-TP	120° Arc
O-T-10-HP	O-10-HP	180° Arc	O-T-12-HP	O-12-HP	180° Arc
O-T-10-TTP	O-10-TTP	240° Arc	O-T-12-TTP	O-12-TTP	240° Arc
O-T-10-TQP	O-10-TQP	270° Arc	O-T-12-TQ	O-12-TQP	270° Arc
O-T-10-FP	O-10-FP	360° Arc	O-T-12-FP	O-12-FP	360° Arc
15' "O" Nozzle (Black)			Special Patterns (Grey)		
O-T-15-QP	O-15-QP	90° Arc	Male	Female	
O-T-15-TP	O-15-TP	120° Arc	O-T-4X9-RCSP	O-4X9-RCSP	Right Corner
O-T-15-HP	O-15-HP	180° Arc	O-T-4X9-LCSP	O-4X9-LCSP	Left Corner
O-T-15-TTP	O-15-TTP	240° Arc	O-T-4X18-SSTP	O-4X18-SSTP	Side Strip
O-T-15-TQP	O-15-TQP	270° Arc	O-T-4X15-RCSP	O-4X15-RCSP	Right Corner
O-T-15-FP	O-15-FP	360° Arc	O-T-4X15-LCSP	O-4X15-LCSP	Left Corner
			O-T-4X30-SSTP	O-4X30-SSTP	Side Strip

Specifying Information

O-X-XXXX-XXXX				
Nozzle	Thread	Radius	Arc	Body
O	X	XXXX	XXXX	
O—1" Per Hour	T—Toro Male Threaded Nozzle Blank—Female Threaded Nozzle	5—5' (1,5m) 8—8' (2,4m) 10—10' (3,0m) 12—12' (3,7m) 15—15' (4,6m) (4X15—4'X15)* (1,2mX4,6m) 4X30—4'X30* (1,2mX9,1m) 4X9—4'X9' (1,2mX2,7m) 4X18—4'X18' (1,2mX5,5m)	60—60° Q—90° T—120° 150—150° H—180° 210—210° TT—240° TQ—270° F-360—Full-circle LCS—Left Corner RCS—Right Corner SST—Side Strip* P—Pressure-Compensating	Call out body as required
Example: A female threaded Precision™ Series Spray with a spray radius of 12' (3,7m) and a 90° arc would be specified as: O-12-Q				
Example 2: A male threaded Pressure-Compensating Precision™ Series Spray with a spray radius of 10' (3,0m) and a 180° arc would be specified as O-T-10-HP				



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Specifications subject to change without notice. For more information, contact your local Toro distributor.

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