TORO. Count on it.

Precision™ Series Rotating Nozzle

Sprays

Based off the design of the world's leading gear-driven rotor for golf applications, the Precision Series Rotating Nozzle powered by its proven planetary gear drive delivers wind-resistant, multi-stream, multi-trajectory patterns. Both the full circle and adjustable arc models deliver a radius range of 14 to 26 feet with exceptional uniformity and outstanding close-in watering, preventing the need to extend irrigation cycles to compensate for brown spots. The consistent matched precipitation rate of 0.55 inches per hour helps meet the needs of tight water windows.

Features & Benefits

Gear-Driven

Precision Series Rotating Nozzles utilize a proven planetary gear drive, variable stator and turbine to rotate the nozzle. The entire gear package is contained in the area beneath the fine mesh filter screen. Particles large enough to enter through the filter will exit out of the nozzle plate through the multi-streams.

Fewer Models

Precision Series Rotating Nozzles reduce the number of models that need to be carried in inventory. Two male-threaded nozzles and two female-threaded nozzles are all that are required to cover radius range from 14-26 feet and 45-360°.

Matched Precipitation Rate of 0.55"/hr.

These nozzles deliver water more slowly and evenly than standard spray nozzles. The precipitation rate of 0.55"/hr helps prevent the need to increase irrigation run time so much that it is tough to apply all the water needed for a given water window.

Consistent Speed of Rotation

The Precision Series Rotating nozzle is not dependent on system pressure like competitive models. The gear drive mechanism delivers a consistent speed of rotation regardless of system pressure and prevents product stalling at low pressure. In addition, the gear drive allows for a wider operating pressure range of 20-75 PSI.

Higher Output Torque

The gear drive develops an output power that is 10 times stronger than the output torque of competitive units. This ensures positive rotation with no slowing caused by environmental factors such as blades of grass or small debris pushing up against the nozzle.

EZ ARC™ Adjustment Tool

Precision™ Series Rotating Nozzle

Performance Data—Precision™ Series Rotating Nozzles—US

Arc	PSI	GPM	Radius	Precip.Rate ■ (in./hr.)	Precip. Rate ▲ (in./hr.)
45°	20	0.17	14.0	0.67	0.77
	30	0.19	15.0	0.65	0.75
	40	0.25	17.0	0.67	0.77
	50	0.31	18.5	0.70	0.81
	60	0.35	19.5	0.71	0.82
	75	0.43	22.0	0.68	0.79
90°	20	0.43	16.0	0.65	0.75
	30	0.49	17.5	0.62	0.71
	40	0.62	20.5	0.57	0.66
	50	0.75	22.5	0.57	0.66
	60	0.82	23.5	0.57	0.66
	75	0.92	25.0	0.57	0.65
120°	20	0.48	16.4	0.69	0.79
	30	0.57	17.5	0.72	0.83
	40	0.78	20.2	0.55	0.64
	50	0.97	22.5	0.55	0.64
	60	1.07	23.5	0.56	0.65
	75	1.18	25.0	0.55	0.63
180°	20	0.83	15.0	0.71	0.82
	30	0.94	17.0	0.63	0.72
	40	1.22	20.5	0.56	0.65
	50	1.46	22.5	0.56	0.64
	60	1.61	24.0	0.54	0.62
	75	1.81	26.0	0.52	0.60
240°	20	1.12	15.0	0.72	0.83
	30	1.27	17.0	0.63	0.73
	40	1.56	20.0	0.56	0.65
	50	1.80	21.5	0.56	0.65
	60	1.95	22.5	0.56	0.64
	75	2.20	24.0	0.55	0.64
270°	20	1.08	14.0	0.71	0.81
	30	1.23	16.0	0.62	0.71
	40	1.62	19.0	0.57	0.66
	50	2.00	21.5	0.55	0.64
	60	2.26	23.0	0.55	0.63
	75	2.60	25.0	0.53	0.61
360°	20	1.81	15.0	0.77	0.89
	30	2.00	17.2	0.65	0.75
	40	2.56	20.9	0.56	0.65
	50	3.09	22.9	0.57	0.65
	60	3.34	23.8	0.57	0.66
	75	3.68	25.6	0.54	0.62

Nozzle data subject to change.

Specifications

Operating Specifications

- Radius: 14'-26'
- Operating pressure range: 20-75 psi
- Recommended Pressure: 40-50 psi
- Flow Rate: 0.17-3.68 GPM

Additional Features

- 15 unique streams with different trajectories
- Maximum height of 20° trajectory to fight through wind
- Threads onto nearly all sprayheads and shrub adapters (male or female)
- Pre-attached screen for easy installation
- Radius reduction up to 25% by turning set screw 90°
- Color coded to identify adjustable or full circle
- Precipitation rate = 0.55"/hr. on square spacing plans
- Maintains precipitation rate as radius is reduced
- Matched precipitation from 14-26 feet
- Matched precipitation from 20-75 psi
- Adjustable by hand or with included tool
- Consistent speed of rotation not affected by pressure

Warranty

- Five years

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EZ ARC™ Visual Arc Adjustment

The unique adjustment method allows for pre-setting of arc by hand or tool before the nozzle is installed. Visual indicators allow the user to quickly adjust the arc pattern to the desired arc from 45-270°. The adjustment band can be adjusted by hand or with the pre-included tool.

Step-Up™ Technology

Step-Up™ Technology is designed to deliver high uniformity with matched precipitation for in-close watering all the way out to the furthest radius point. The unique "steps" create 15 streams, each designed to cover an area of the pattern.

Water Management Highlight

Precision Series Rotating Nozzles supply matched precipitation with any arc, any radius from 14 to 26 feet. Water applies slowly and evenly to reduce runoff and wasted water.

Precision Series Rotating Nozzle Model List	
Male-Threaded	Description
• PRN-TA • PRN-TF	Toro Threaded, 14-26 feet, Adjustable from 45°-270° Toro Threaded, 14-26 feet, Full-Circle
Female-Threaded	Description
• PRN-A • PRN-F	Threaded, 14-26 feet, Adjustable from 45°-270° Threaded, 14-26 feet, Full-Circle

Specifying Information—Precision Series Rotating Nozzle

PRN-XX		
Model	**Thread**	**Model**
PRN	**X**	**X**
PRN—Precision Rotating Nozzle	T—Male Thread Blank—Female Thread	A—Adjustable arc F— Full-circle

Example: A male threaded Precision Series Rotating nozzle with a 24' radius and a 180° arc would be specified as: **PRN-TA**
A female threaded Precision Series Rotating nozzle with a 20' radius and 360° arc would be specified as: **PRN-F**

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SPRAY NOZZLES

Precision™ Series Spray Nozzles

Powered by H²O Chip Technology

Toro's new Precision Series Spray Nozzles deliver increased efficiency over standard spray head installations. Lowering the standard precipitation rate* to 1" per hour – or less, these nozzles are designed to use less water and reduce run off.

Precision™ Series Spray Nozzles

PATENTED H²O CHIP TECHNOLOGY

H² = Hyper-streams of oscillating water at Hyper-frequencies which move back and forth within a specially designed chamber and continue upon exit. "O" Stands for "One" inch per hour precipitation rate.

EFFICIENCY

Increased performance characteristics and lower precipitation rates now yield the same run time using less water.*

PRACTICAL

On new installs or retrofit projects, Precision Series Spray Nozzles work just like conventional spray nozzles but offer greater arc selection and maintain their precipitation rate - even when the radius is reduced.

*Versus comparable spray nozzles

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SPECIFICATIONS

Precision™ Series Spray Nozzles
With H²O Chip Technology

High velocity streams of water achieve the desired radius with less water.

The H²O Chip drives the Precision Series Spray Nozzle performance

Operating Specifications

- Radius: 5'-15'
- Operating pressure range: 20-50 psi (maximum – 75 psi)
- Flow Rate: 0.038 - 2.4 GPM

Additional Features

- Specialty Arcs available
- Radius adjustment 25% maximum
- Color coded for radius on top of the nozzle
- Precipitation rate ≤ 1"/hour (square spacing)
- Maintains precipitation rate as radius reduced up to max of 25%
- Max trajectory 27°
- Matched precipitation rate within radius families
- Screen attached to nozzle for easy insertion into the spray body
- Works on all 570 body sizes and types

Warranty

Two years

Features and Benefits

H²O Chip Technology
- A patented nozzling system that distributes water more efficiently and reaches the desired radii with less flow
- Expanded selection of arc choices for precise distribution

Lower Precipitation Rate* – One Inch Per hour (or less)
- Uses 1/3 less flow to reach a radius of a conventional spray nozzle yet achieves higher irrigation efficiency

No Moving or Sonic Welded Parts
- Assures no variation at the end of the water arc for better edge definition
- Consistent, reliable performance

Uniform Droplet Size
- The H²O Chip generates a larger, more uniform droplet size – resulting in consistency across the irrigated arc
- Increased wind resistance
- Minimizes unintentional watering of hardscape features and run-off

Greater Operating Pressure Range
- Consistent performance from 20 to 50 PSI
- No wasteful misting or fogging

Male & Female Threaded Models
- Available in:
  - 5 Radii between 5' and 15'
  - 9 Different arcs between 60° and 360°
  - 3 Specialty arcs – right corner, left corner & center strips

*Versus comparable spray nozzles

Specifying Information

O-X-XXXX-XXX

Nozzle	Thread	Radius	Arc	Body
O	X	XXXX	XXX	
O—Oscillating Nozzle	T—Toro Male Threaded Nozzle Blank—Female Threaded Nozzle	5—5' 8—8' 10—10' 12—12' 15—15' 2X3—2'X3' 2X6—2'X6' 4X15—4'X15' 4X30—4'X30' 4X9—4'X9' 4X18—4'X18'	60—60° Q—90° T—120° 150—150° H—180° 210—210° TT—240° TQ—270° 360—Full-circle LCS—Left Corner RCS—Right Corner SST—Side Strip	Call out body as required

Example: A 570 Precision Series Nozzle with a spray of 10' and a 180° arc would be specified as: **O-T-10-H**

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