

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 4,3m-7,9m (14-26') 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 14mm/hour (0.55"/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 4,3m-7,9m (14-26') and 45-360°.

Matched Precipitation Rate of 14mm/hour (0.55"/hour).

These nozzles deliver water more slowly and evenly than standard spray nozzles. The precipitation rate of 14mm/hour (0.55"/hour) 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 1,4-5,2 Bar (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.



Female-threaded PRN-A

Male-threaded PRN-TA



PRN-F

Male-threaded PRN-TF







Precision™ Series Rotating Nozzle

Performance Data—Precision™ Series Rotating Nozzles - Metric

Arc	Bar	LPM	Radius	Precip Rate ☐ (mm/hr)	Precip Rate △(mm/hr)	Rotation
7 0				` ' '	` ' /	
	1,7	0,64	4,3	17,0 20,0	19,59	19,0
	2,1	0,87	4,6		23,09	17,0 16,0
150	2,4		4,9	16,0	18,53	
45° 90°	3,1	1,06	5,5	16,9	19,52	15,0
	3,8	1,25	5,8	17,9	20,65	14,0
	4,5	1,48	6,7	15,8	18,20	14,0
	5,2	1,63	6,7	17,4	20,07	13,0
	1,7	1,63	4,9	16,4	18,97	14,0
	2,1	1,70	5,2	15,2	17,58	13,0
	2,4	2,04	5,8	14,6	16,89	13,0
	3,1	2,65	6,7	14,1	16,33	13,0
	3,8	2,99	7,0	14,6	16,87	13,0
	4,5	3,22	7,6	13,3	15,36	12,0
	5,2	3,48	7,6	14,4	16,62	12,0
	1,7	1,82	5,0	13,1	15,12	14,0
}	2,1	2,23	5,2	15,0	17,29	12,0
120°	2,4	2,38	5,6	13,5	15,59	12,0
	3,1	3,48	6,7	13,9	16,10	12,0
	3,8	3,86	7,0	14,1	16,33	11,0
-	4,5	4,20	7,3	14,1	16,32	11,0
	5,2	4,47	7,6	13,8	15,99	11,0
	1,7	3,14	4,6	18,0	20,83	12,0
	2,1	3,44	5,2	15,4	17,78	12,0
1000	2,4	4,01	5,8	14,4	16,58	12,0
180°	3,1	5,22	6,7	13,9	16,10	12,0
	3,8	5,83	7,0	14,2	16,44	11,0
	4,5	6,36	7,6	13,1	15,18	11,0
	5,2	6,85	7,9	13,1	15,12	10,0
ļ	1,7	4,24	4,6	18,3	21,08	12,0
	2,1	4,58	4,9	17,3	20,02	12,0
240°	2,4	5,38	5,8	14,4	16,66	12,0
	3,1	6,47	6,4	14,2	16,42	12,0
	3,8	7,15	6,7	14,3	16,54	12,0
	4,5	7,61	7,0	13,9	16,09	11,0
	5,2	8,33	7,3	14,0	16,18	10,0
270°	1,7	4,09	4,3	17,9	20,69	11,0
	2,1	4,88	4,6	18,6	21,53	11,0
	2,4	5,19	5,5	13,7	15,88	11,0
	3,1	7,08	6,4	13,8	15,92	10,0
	3,8	8,06	6,7	14,3	16,52	10,0
	4,5	8,90	7,3	13,3	15,32	10,0
	5,2	9,84	7,6	13,5	15,62	10,0
360°	1,7	6,85	4,6	19,7	22,71	13,0
	2,1	8,18	5,5	16,3	18,82	13,0
	2,4	8,25	5,9	14,2	16,35	13,0
	3,1	11,13	6,8	14,3	16,54	13,0
	3,8	12,26	7,1	14,6	16,85	11,0
	4,5	13,17	7,4	14,4	16,64	11,0
	5,2	13,93	7,8	13,7	15,85	11,0

Nozzle data subject to change.

Specifications

Male Threaded

- PRN-TA: Toro Threaded, 4,3m-7,9m (14-26'), Adjustable from 45°-270°
- PRN-TF: Toro Threaded, 4,3m-7,9m (14-26'), Full-Circle

Female Threaded

- PRN-A: Threaded, 4,3m-7,9m (14-26'), Adjustable from 45°-270°
- PRN-F: Threaded, 4,3m-7,9m (14-26'), Full-Circle

Operating Specifications

- Radius: 4,3m-7,9m (14'-26')
- Operating pressure range: 1,4-3,8 bar (20-55 psi) maximum: 5,2 bar (75 psi)
- Flow Rate: 0,6-13,9 LPM (0.4-3.8 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 and female)
- Pre-attached screen for easy installation
- Radius adjustment of 25% by turning set screw 60°
- Color coded to identify adjustable or full circle
- Precipitation rate = 14mm/hr (0.55"/hr) on square spacing plans
- Maintains precipitation rate as radius is reduced
- Matched precipitation from 4,3m-7,9m (14-26')
- Matched precipitation from 1,4-5,2 bar (20-75 psi)
- Adjustable by hand or with included tool (one per bag)
- Consistent speed of rotation not affected by pressure

Warranty

Five years

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-UpTM 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.



Precision Series Rotating Nozzles supply matched precipitation with any arc, any radius from 4,3m-7,9m (14-26'). Water applies slowly and evenly to reduce runoff and wasted water.

Specifying Information— Precision Series Rotating Nozzle

PRN-XX						
Model	Thread	Model				
PRN	<u>X</u>	<u>X</u>				
PRN—Precision	T—Male Thread	A—Adjustable arc				
Rotating Nozzle	Blank—Female Thread	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

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

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