

Tech Spec

3500 Series Rotors

The 3500 Series Rotor is an easy to use short to mid-range 1/2" gear-drive rotor, offering value and convenience for smaller turf areas and densely planted landscapes. Utilizing a simple flat-bladed screwdriver, the 3500's arc adjustment is quick and easy.

This versatile rotor offers an attachable nozzle tree with six superior performing Rain Curtain nozzles and the convenience of reversing full and part circle operation (up to 360 degrees) in one unit. Plus, a nozzle removal feature and easily removable filter screen makes maintenance a breeze.

All of this, an affordable price and a 3-year factory warranty makes the 3500 Series one rotor that is easy to use, easy to buy and tough to beat!

Features

- Arc adjustment requires only a flat bladed screwdriver
- Three-year trade warranty
- Water-lubricated gear-drive design for durable, reliable operation
- 40- 360° part circle arc rotation and reversing full circle rotation in one
- An attachable nozzle tree of six Rain Curtain nozzles.
- Optimized for short to mid-range distances
- True 4" (10.2 cm) pop-up (measured from center of nozzle)
- Quick Check Arc/Fast Forward
- Dual action, positive stop wiper seal protects internals from debris and assures positive pop-up and retraction
- Easily removable filter screen for maintenance purposes
- Arc setting factory preset at 180° for installation convenience
- Non-potable models available for easy identification of reclaim water
- Seal-A-Matic[™] (SAM) check valve models hold back up to 7' (2.1 m) of elevation change, to prevent puddling and erosion caused by low head drainage
- Standard rubber cover
- Self-cleaning arc-adjustment screw
- Three-year trade warranty

Operating Range

- Precipitation rate: .37 to .83 inches per hour (9 to 21 mm/h)
- Radius: 15' to 35' (4.6 to 10.7 m)
- Radius may be reduced up to 35% with Radius Reduction Screw
- Pressure: 25 to 55 psi (1.7 to 3.8 bar)
- Flow Rate: .54 to 4.6 gpm (2.0 to 17.4 l/m)

Specifications

- 1/2" (20/27) NPT female bottom threaded inlet
- Full and part circle adjustment 40° 360°

Dimensions

- Pop up height: 4" (10.2 cm)
- Overall body height: Shrub: 7" (17.8 cm);
- 4": 6.6" (16.8 cm)
- Exposed surface diameter: 1.16" (2.9 cm)

Note: Pop-up height measured from cover to center of nozzle. Overall body height is measured popped down.

Models

Part circle units (PC) are adjustable from 40 - 360 degrees.

- 3504-PC
- 3504-PC-SAM
- 3504-PC-SAM-NP
- 3500-S-PC-SAM
- 3500-S-PC-SAM-NP



How To Specify 3504 - S - PC - SAM-N Optional Feature SAM: Seal-A-Matic™ N: Non-Potable Cover Rotation PC: Part Circle



Rain Bird 3500 Series Rotors

3500 Series Nozzle Performance									
Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip In/h	A Precip In/h				
25	0.75	15	0.54	0.46	0.53				
	1.0	20	0.77	0.37	0.43				
	1.5	23	1.06	0.39	0.45				
	2.0	27	1.40	0.37	0.43				
	3.0	29	2.17	0.50	0.57				
	4.0	31	2.97	0.59	0.69				
35	0.75	17	0.67	0.45	0.52				
	1.0	21	0.92	0.40	0.46				
	1.5	23	1.28	0.47	0.54				
	2.0	27	1.69	0.45	0.52				
	3.0	31	2.60	0.52	0.60				
	4.0	33	3.58	0.63	0.73				
45	0.75	17	0.77	0.51	0.59				
	1.0	21	1.06	0.46	0.53				
	1.5	24	1.48	0.49	0.57				
	2.0	27	1.93	0.51	0.59				
	3.0	31	3.00	0.60	0.69				
	4.0	35	4.13	0.65	0.75				
55	0.75	18	0.85	0.51	0.58				
	1.0	22	1.18	0.47	0.54				
	1.5	24	1.65	0.55	0.64				
	2.0	28	2.15	0.53	0.61				
	3.0	32	3.25	0.61	0.71				
	4.0	35	4.60	0.72	0.83				

Precipitation rates based on half-circle operation

Square spacing based on 50% diameter of throw

▲ Triangular spacing based on 50% diameter of throw

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASAE Standards; ASAE S398.1.

3500 Seri	м	METRIC				
Pressure bar	Nozzle	Radius m	Flow m³⁄h	Flow I/m	Precip mm/h	A Precip mm/h
1.7	0.75	4.6	0.12	2.04	12	14
	1.0	6.1	0.17	2.91	9	11
	1.5	7.0	0.24	4.01	10	11
	2.0	8.2	0.32	5.30	9	11
	3.0	8.8	0.49	8.21	13	15
	4.0	9.4	0.67	11.24	15	17
2.0	0.75	4.8	0.13	2.24	12	13
	1.0	6.2	0.19	3.14	10	11
	1.5	7.0	0.26	4.35	11	12
	2.0	8.2	0.34	5.74	10	12
	3.0	9.1	0.53	8.87	13	15
	4.0	9.7	0.73	12.17	16	18
2.5	0.75	5.2	0.16	2.58	12	13
	1.0	6.4	0.21	3.55	10	12
	1.5	7.0	0.30	4.94	12	14
	2.0	8.2	0.39	6.51	12	13
	3.0	9.4	0.60	10.03	13	16
	4.0	10.1	0.83	13.82	16	19
3.0	0.75	5.2	0.17	2.86	13	15
	1.0	6.4	0.24	3.93	12	13
	1.5	7.3	0.33	5.49	12	14
	2.0	8.2	0.43	7.17	13	15
	3.0	9.4	0.67	11.13	15	17
	4.0	10.6	0.92	15.32	16	19
3.5	0.75	5.4	0.19	3.09	13	15
	1.0	6.6	0.26	4.27	12	14
	1.5	7.3	0.36	5.97	13	15
	2.0	8.4	0.47	7.79	13	15
	3.0	9.6	0.71	11.90	15	18
	4.0	10.7	1.00	16.66	18	20
3.8	0.75	5.5	0.19	3.22	13	15
	1.0	6.7	0.27	4.47	12	14
	1.5	7.3	0.37	6.25	14	16
	2.0	8.5	0.49	8.14	13	15
	3.0	9.8	0.74	12.30	16	18
	4.0	10.7	1.04	17.41	18	21



Specifications

Model: 3504-PC, Part and Reversing Full Circle Sprinkler

The part and reversing full circle sprinkler shall be a single stream, water-lubricated, gear-drive type capable of covering a _____ radius at _____ pounds per square inch with a discharge rate of _____ gallons per minute (gpm). The sprinkler shall have an adjustable arc coverage of 40 to 360 degrees. Arc adjustment shall be performed with or without the sprinkler in operation and shall require only a flat-blade screwdriver.

The sprinkler shall have a pressure activated, multi-function wiper seal that positively seals against the pop-up stem to keep debris out of the rotor and to clean debris from the pop-up stem as it retracts.

The wiper seal shall prevent the sprinkler from sticking up, and be capable of sealing the sprinkler cap to sprinkler body under normal operating pressures. The sprinkler shall have a screen installed in the pop-up stem to filter inlet water, protect the drive from clogging, and to simplify removal for cleaning and flushing of the system. The sprinkler shall have a 1/2" (FNPT) bottom inlet.

The sprinkler shall have a strong stainless steel retract spring for positive pop-down. Pop-up height as measured from the top of the cap, at normal installation, to the middle of the nozzle shall be 4" inches (10, 2cm). The rotor's overall height shall be 6.6 inches (16.8 cm).

The sprinkler shall have six interchangeable Rain Curtain nozzles for superior close in watering. The angle of trajectory of the nozzle bore shall be no more than 25 degrees and no less than 10 degrees. The stainless steel adjusting screw is capable of reducing the radius up to 35%.

The sprinkler shall have a rubber cover and a self-cleaning arc-adjustment screw.

The sprinkler shall be as manufactured by Rain Bird Corporation, Glendora, California.

3500 Series Shrub Model Part and Reversing Full Circle Sprinkler (SAM)

When so indicated on the design, the shrub model shall contain all of the specifications of the standard 3500 series rotor plus a locking screw to fasten the shrub unit to the riser. Additionally, the shrub base unit will feature Secure Ribs[™] that are designed to assist in the staking of the shrub model if so specified on the design. When the Seal-A-Matic[™] (SAM) model is indicated on the design, the device shall hold back at least 7' (2.1 m) of elevation change to prevent puddling, run-off and erosion caused by low head drainage. As well the SAM unit shall experience no pressure loss during normal operation.

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