

# **TECH SPECS**

# **EAGLE**<sup>™</sup> **351B Rotor Series**The first golf-quality short-throw irrigation rotor

Residential-grade landscaping rotors eventually crack under the pressure of golf course irrigation systems, but the EAGLE 351B is more durable than any other short-throw rotor, and it has a five-year warranty (when installed with a Rain Bird® swing joint) to back up that performance pledge. With an ideal adjustable range for tee boxes, small greens and other limited irrigation areas, the EAGLE 351B uses a nozzle technology that exceeds all other brands, specifically designed for efficient water distribution. Control the arc with a flathead screwdriver, without turning the case, for precision coverage in small spaces. Sturdy, accurate, made just for golf course irrigation systems — the EAGLE 351B is the short solution to a long-time need, guaranteed.

#### **Features and Benefits**

- As requested by superintendents, the radius of throw is a versatile 18' to 55' (5,5 m to 16,8 m), for irrigating tight areas.
- Both full- and part-circle operation are incorporated into each unit, requiring only one head for all irrigation needs.
- Built to withstand golf course irrigation system water pressure; operates at pressure from 60 to 90 psi (4,1-6,2 bars), and can sustain up to 100 psi (6,9 bars).
- Adjustable left and right side trips allow for easy installation, without turning the case.
- The Rain Bird Memory Arc® feature returns the rotor to its original arc setting when it has been forcibly turned beyond the trip points of the set arc.
- Nozzle pop-up height of 3.25" (8,3 cm) from top of the case to the center of the nozzle clears the taller grasses.
- Fully top serviceable, eliminating the need to dig in order to perform maintenance.
- Water-lubricated gear drive eliminates loss of lubrication and water contamination due to leakage.
- Self-adjusting turbine stator allows for nozzle replacement without other adjustment requirements.
- High and low flow nozzles available that can be used together as Matched Precipitation Rate (MPR) nozzle sets.

# **Model Specifications**

The full- or part-circle sprinkler shall be a water-lubricated gear-driven rotor, capable of covering a \_\_\_\_\_\_ (units) radius at a base pressure of \_\_\_\_\_\_ (units) and a discharge rate of \_\_\_\_\_ (units). The rotor shall be installed with a number \_\_\_\_\_ nozzle that shall be \_\_\_\_\_ in color for ease of identification.

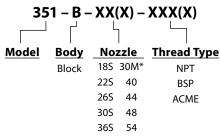
The sprinkler shall be capable of both full-circle and part-circle rotation in the same unit. The mode of operation shall be selected by inserting a flat-blade screwdriver in the top of the rubber cap and by turning a selector approximately 45°. The sprinkler shall not reverse direction during continuous operation in full-circle mode. The sprinkler shall have adjustable arc coverage of 50° to 330° in part-circle mode. Arc adjustment can be performed with or without the rotor in operation and shall require only a flat-blade screwdriver. In part-circle mode, the rotor shall rotate 180° in 1½ minutes or less. Rotation through 360° shall be 3 minutes or less in full-circle sprinkler mode. The arc adjustment can be performed both in the right and the left trip location of the sprinkler.

The sprinkler shall be fully serviceable from the top without requiring special tools and shall be a fully closed-case design. The internal assembly shall be retained in the case by a one-piece plastic snap cover. The rotor shall have a bearing guide that allows water to flush around the riser stem as it pops up and seals against the riser when it is fully raised. The portion of the riser stem that is in contact with the wiper seal shall be non-rotating. The pop-up height shall be 3.25" (8,3 cm) to the center of the nozzle. The retracting spring shall be of stainless steel and of sufficient force for positive closure.

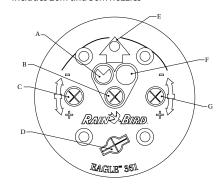
The nozzle housing cover of the rotor shall indicate the model and have an arrow to indicate the position of the nozzle and shall provide a positive seal against debris when the rotor in not in operation. The housing shall be installed with one of the 13 color-coded nozzles. The nozzles shall be tested as per ASAE S398.1. High and low flow nozzles shall be available for shorter ranges to allow for Matched Precipitation Rate (MPR) configurations.



# **How To Specify/Order:**



\* Includes 26M and 36M nozzles



A = Part-Circle Icon
B = Full/Part-Circle
Adjustment Slot
C = Left Edge Arc
Adjustment Slot
D = Pull-up Tool Slot

E = Nozzle Retainer Screw F = Full-Circle Icon

G = Right Edge Arc Adjustment Slot



The rotor shall be manufactured by Rain Bird Corporation, Glendora, California, U.S.A.

## **Operational Feature**

Block configuration (e.g., 351B). The sprinkler shall have a spring-loaded SEAL-A-MATIC™ holdback device in the base of the case and shall be used with a pressure regulating in-line electrically actuated valve. The device shall hold back at least 10' (3,1m) of elevation.

The rotor case shall have a top diameter of 4.25" (10,8 cm) and an overall height of 9.6" (24,5 cm). The case shall have a 1" (2,5 cm) NPT, BSP or ACME threaded inlet.

# **Specifications**

Models:

**EAGLE 351B:** SEAL-A-MATIC<sup>™</sup> device

Arc:

**EAGLE 351B:** 360° in full-circle mode,

adjustable from 50° to 330° in part-circle mode

Maximum Inlet Pressure: Model 351B: 100 psi (6,9 bar)

**Recommended Operating Pressure:** 

60 psi (4,1 bar), 70 psi (4,8 bar),

80 psi (5.5 bar)

Radius:

18 to 55 feet (5,5 to 16,8 m)

Flow:

**Full-Circle Mode:** 360° ≤ 180 seconds;

120 seconds nominally

**Part-Circle Mode:** 180° ≤ 90 seconds;

60 seconds nominally

Inlet Threads: 1" (2,5 cm) (26/36) NPT,

BSP or ACME

Holdback: 10' (3,1 m) of elevation Nozzle Trajectory: 17° and 25° Maximum Stream Height: 13' (4,0 m)

**Dimensions:** 

**Body Height:** 9.6" (24,5 cm) **Top Diameter:** 4.25" (10,8 cm)

Pop-Up Height: 3.25" (8,3 cm) from top of the

case to the center of the nozzle

EAGLE 351B Performance Data — U.S.											
	60 psi		70 psi		80 psi		90 psi				
	Flow (gpm)	Range (ft)	Flow (gpm)	Range (ft)	Flow (gpm)	Range (ft)	Flow (gpm)	Range (ft)			
Low Flow											
<u>18S</u>	1.8	18	1.9	20	2.0	20	2.2	22			
22S	2.2	22	2.4	22	2.5	24	2.7	26			
22S 26S	2.6	24	2.8	24	3.1	26	3.2	26			
30S	3.0	30	3.1	30	3.2	32	3.4	32			
36S	3.6	34	3.8	34	4.2	34	4.4	36			
High Flow											
18M	4.0	20	4.2	22	4.4	22	4.7	24			
26M	5.6	24	6.0	24	6.5	26	6.9	26			
30M	5.7	30	6.2	30	6.6	32	7.1	32			
36M	7.1	34	7.8	34	8.4	34	8.9	36			
Long Throw											
40	2.1	40	2.3	40	2.4	42	2.5	42			
44	3.5	44	3.6	46	4.1	46	4.3	46			
48	5.8	48	6.4	48	6.8	48	7.0	48			
54	12.4	50	13.5	54	14.6	56	15.5	56			

EAGLE 351B Performance Data — Metric												
	4.1 bar		4.8 bar		5.5 bar		6.2 bar					
	Flow (I/s)	Range (m)	Flow (I/s)	Range (m)	Flow (I/s)	Range (m)	Flow (I/s)	Range (m)				
Low Flow												
18S	0.1	5.5	0.1	6.1	0.1	6.1	0.1	6.7				
22S	0.1	6.7	0.2	6.7	0.2	7.3	0.2	7.9				
22S 26S	0.2	7.3	0.2	7.3	0.2	7.9	0.2	7.9				
30S	0.2	9.1	0.2	9.1	0.2	9.8	0.2	9.8				
36S	0.2	10.4	0.2	10.4	0.3	10.4	0.3	11.0				
High Flow												
18M	0.3	6.1	0.3	6.7	0.3	6.7	0.3	7.3				
26M	0.4	7.3	0.4	7.3	0.4	7.9	0.4	7.9				
30M	0.4	9.1	0.4	9.1	0.4	9.8	0.4	9.8				
36M	0.4	10.4	0.5	10.4	0.5	10.4	0.6	11.0				
Long Throw												
40	0.1	12.2	0.1	12.2	0.2	12.8	0.2	12.8				
44	0.2	13.4	0.2	14.0	0.3	14.0	0.3	14.0				
48	0.4	14.6	0.4	14.6	0.4	14.6	0.4	14.6				
54	0.8	15.2	0.9	16.5	0.9	17.1	1.0	17.1				

#### **Rain Bird Corporation**

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