

EAGLE™ 900/950 Rotor Series

For fairways and the rough, the EAGLE™ 900/950 Rotor Series provides superior coverage.

- The EAGLE 900 has a radius of 63' to 91' (19,2-29,6 m).
- The EAGLE 950 has a radius of 70' to 92' (21,3-28,0 m).
- Easily handles pressures from 60 to 100 psi (4,1 to 6,9 bars).
- The EAGLE 900 is a full-circle 360° rotor.
- The part-circle EAGLE 950 offers a 40° to 345° turning range.
- Both versions are available in electric, hydraulic and Stopmatic (SAM) models.
- Electric models have a heavy-duty, two-piece solenoid for easy serviceability and superior life.
- Nozzle pop-up height to mid-nozzle 2.25" (5,7 cm).
- Thread options include BSP and ACME 1.5" (3,8 cm).
- Maximum stream height 20' (6,1 m).
- Top-Serviceable Rock Screen™ and Replaceable Valve Seat standard on all EAGLE 900 models.



900E

New high-performance nozzles provide excellent uniformity, especially in larger double-row systems. Distribution is forgiving in stretched spacing and high-wind environments.

2.25" (5,7 cm) pop-up height raises stream above surrounding turf.

One-piece snap cover locks assembly firmly in place.

Top-adjustable pressure regulator offers convenient access to controls.

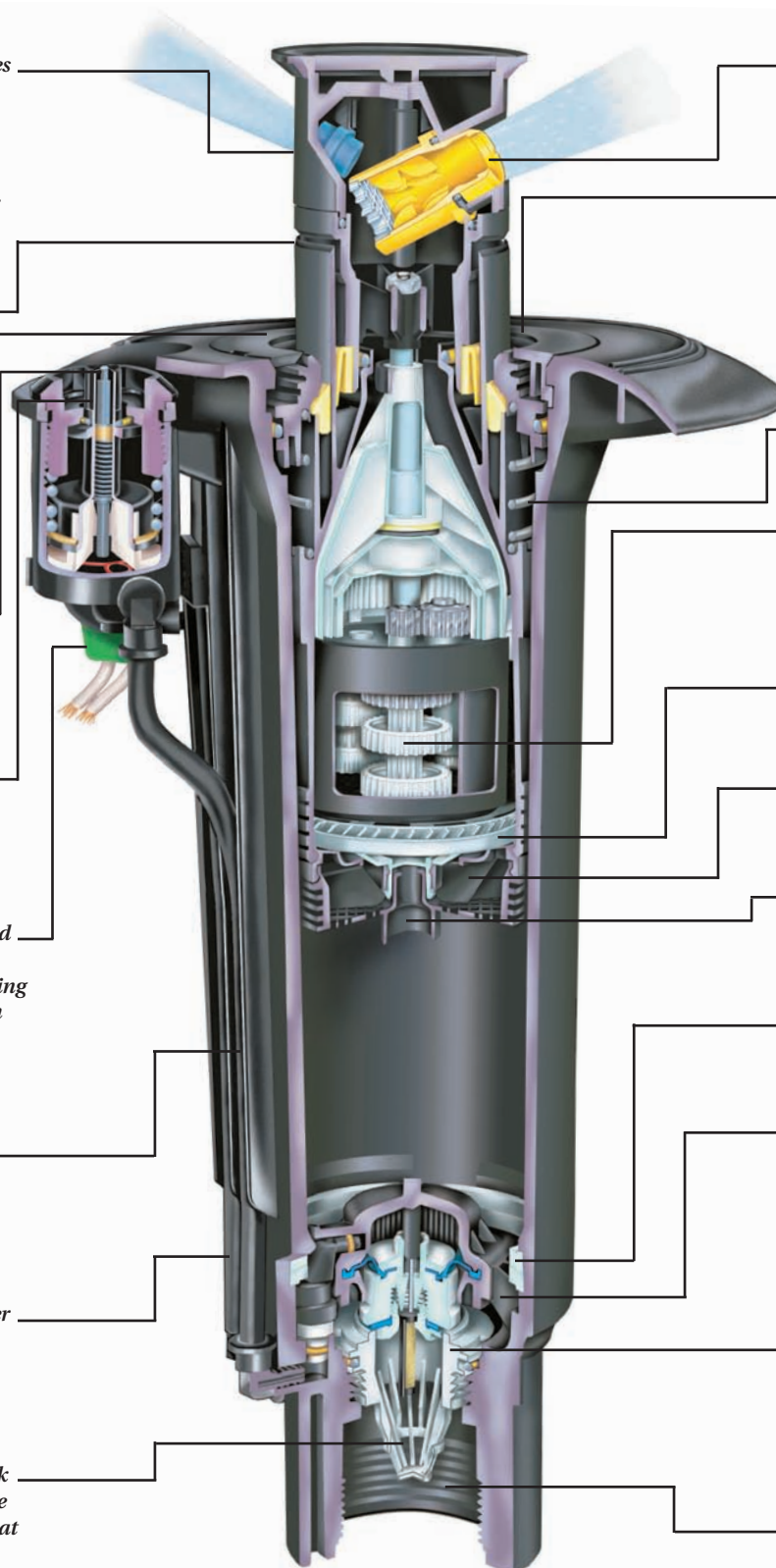
Manual operation selector provides convenient on-the-spot on and off ability.

Heavy-duty, two-piece solenoid offers superior life and can be removed without contaminating the pressure regulation system with dirt.

Reinforced polypropylene case provides protection against damage.

Internal bleed port saves water and eliminates puddling around the head.

Patented Top-Serviceable Rock Screen™ and Replaceable Valve Seat allow for debris removal at installation or due to buildup over time.



Color-coded interchangeable nozzles add convenience and flexibility.

Closed-case design with self-flushing action protects internal assembly from debris, allows rotor to be set at grade during installation and ensures performance in all soil conditions.

Heavy-duty stainless steel spring ensures positive retraction.

Water-lubricated gear-drive is environmentally friendly and offers proven, trouble-free performance.

Turbine efficiently powers gear-drive mechanism.

Stator ensures consistent rotation speed.

Fine mesh screen keeps debris from entering internal assembly.

Dual snap-rings lock valve in place, adds margin of safety if system is pressurized.

High-performance diaphragm valve offers reliable performance with little long-term wear. Rubber valve seal can be easily changed if nicked from debris.

Buttress thread of Top-Serviceable Rock Screen prevents misthreading and pushes out any remaining debris during installation.

1.5" (3,8 cm) molded-in BSP and ACME threads allow for easy installation.



EAGLE™ 900 and 950 Rotors

Model Specifications

The full- or part-circle sprinkler shall be a water-lubricated gear-drive 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 part-circle sprinkler shall have adjustable arc coverage of 40° to 345°. Arc adjustment can be performed with or without the rotor in operation and shall require only a flat-blade screwdriver. The part-circle rotor shall rotate through a 180° arc in 2 minutes or less. Rotation through 360° shall be 4 minutes or less for the full-circle sprinkler.

The sprinkler shall be fully serviceable from the top without requiring special tools. The internal assembly shall be retained in the case by a plastic snap ring. The Rock Screen and Valve Seat shall be serviceable from the top. 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 pop-up height shall be 2.25" (5,7 cm). Pop-up height is measured from the flange to the middle of the nozzle. The retract spring shall be of stainless steel and of sufficient force for positive pop-down.

The nozzle housing cover of the rotor shall indicate the model, identify the installed nozzle and have an arrow to indicate the position of the nozzle, and shall provide a positive seal against debris when the rotor is not in operation. The housing shall be installed with one of eight interchangeable color-coded nozzles. The nozzle shall be tested per ASAE S398.1 and be verified to deliver scheduling coefficient of 1.2 or less and a Christiansen coefficient of uniformity of 90% or greater at the specified spacing.

The rotor body shall be molded of engineering-grade plastic and shall have a double-wall construction female (BSP or ACME) bottom inlet.

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

Optional Feature—Electric Valve in Head (e.g., 900E or 950E). The sprinkler shall have a 24 VAC 50 or 60 cycle solenoid actuated normally closed control valve in the base of the case. The rotor shall have a pressure regulator which is adjustable from the top using a small flat-blade screwdriver. The rotor shall have a top-serviceable selector that allows the unit to be operated manually, in automatic mode or shut off entirely.

The rotor case shall have a top diameter of 7" (17,8 cm) and an overall height of 13.4" (34,0 cm). The case shall have a 1.5" (3,8 cm) BSP or ACME threaded inlet.

Optional Feature—Normally Open Hydraulic Valve in Head (e.g., 900H or 950H). The sprinkler shall have a normally open hydraulic control valve in the base of the case.

The rotor case shall have a top diameter of 7" (17,8 cm) and an overall height of 13.4" (34,0 cm). The case shall have a 1.5" (3,8 cm) BSP or ACME threaded inlet.

Optional Feature—Stopamatic Valve in Head (e.g., 900S or 950S). The sprinkler shall have a Stopamatic Valve in the base of the case. The valve shall hold back at least 15' (4,6 m) of elevation.

The rotor case shall have a top diameter of 7" (17,8 cm) and an overall height of 13.4" (34,0 cm). The case shall have a 1.5" (3,8 cm) BSP or ACME threaded inlet.

Specifications

Models:

Full-Circle:

EAGLE 900E: Electric
EAGLE 900H: Hydraulic (N.O.)*
EAGLE 900S: Stopamatic (SAM)

Part-Circle:

EAGLE 950E: Electric
EAGLE 950H: Hydraulic (N.O.)*
EAGLE 950S: Stopamatic (SAM)

Arc:

EAGLE 900: Full-circle, 360°
EAGLE 950: Part-circle, 40° to 345°

Maximum Inlet Pressure:

Models 900E: 150 psi (10,3 bars)
Models 900S, 900H: 100 psi (6,9 bars)

Pressure Regulation Range: 60 to 100 psi (4,1 to 6,9 bars)

Factory Pressure Settings:

900E/950E available in 60, 70, 80 psi and wide open (4,1; 4,8; 5,5 bars and wide open)

Rotation Time:

EAGLE 900: 360° in ≤ 240 seconds;
210 seconds nominally
EAGLE 950: 180° in ≤ 120 seconds;
105 seconds nominally

Inlet Threads: 1.5" (3,8 cm) (15/21)
BSP or ACME female threaded

Holdback: 900S/950S 15' (4,6 m) elevation

Nozzle Trajectory: 25°

Maximum Stream Height: 20' (6,1 m)

Dimensions:

Body Height: 13.4" (34,0 cm)
Top Diameter: 7" (17,8 cm)
Pop-Up Height to Mid-Nozzle: 2.25" (5,7 cm)

Solenoid:

24 VAC solenoid power requirement—
0.41 amp inrush current (9.8 VA)
60 cycle—0.25 amp holding current (6.0 VA)
50 cycle—0.32 amp holding current (7.7 VA)

Top-Serviceable Rock Screen™ and Replaceable Valve Seat:

All 900 models.

All data is generated from tests conducted in accordance with ASAE Standard S398.1 for at least 30 minutes in zero-wind conditions.

Rain-Bird recommends the use of SPACE for Windows, equivalent program or derived performance data to optimize nozzle selection.

* N.O.—Normally open



EAGLE™ 900 Performance Data – U.S.

HIGH PERFORMANCE NOZZLES

Base Pressure (psi)	#44 BLUE		#48 YELLOW		#52 ORANGE		#56 GREEN		#60 BLACK	
	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)
60	63	21.4	73	28.9	75	31.9	—	—	—	—
70	67	23.5	73	31.0	79	34.6	83	40.7	87	43.2
80	71	24.7	75	34.1	81	37.1	85	43.5	91	46.4
90	71	26.5	77	35.0	81	39.5	87	46.4	91	49.5
100	73	27.9	77	36.2	83	41.8	89	49.1	91	52.2

Data reflects no pressure regulation.

EAGLE™ 900 Performance Data – Metric

HIGH PERFORMANCE NOZZLES

Base Pressure (bars)	#44 BLUE			#48 YELLOW			#52 ORANGE			#56 GREEN			#60 BLACK		
	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)
4,1	19,2	1,35	4,85	22,3	1,82	6,56	22,9	2,01	7,25	—	—	—	—	—	—
4,5	19,8	1,42	5,11	22,3	1,89	6,81	23,5	2,10	7,57	25,0	2,48	8,94	26,2	2,63	9,47
5,0	20,7	1,50	5,40	22,4	2,00	7,22	24,2	2,22	8,00	25,5	2,61	9,40	26,8	2,78	10,00
5,5	21,6	1,55	5,59	22,8	2,14	7,72	24,7	2,34	8,41	25,9	2,74	9,87	27,7	2,92	10,52
6,0	21,6	1,64	5,90	23,3	2,19	7,88	24,7	2,45	8,81	26,3	2,87	10,34	27,7	3,06	11,03
6,5	21,9	1,71	6,16	23,5	2,24	8,06	24,9	2,55	9,19	26,8	3,00	10,80	27,7	3,20	11,86
6,9	22,3	1,76	6,35	23,5	2,28	8,22	25,3	2,64	9,49	27,1	3,10	11,15	27,7	3,29	11,86

Data reflects no pressure regulation.

EAGLE™ 950 Performance Data – U.S.

NOZZLES

Base Pressure (psi)	#18 WHITE-C		#20 GRAY-C		#22 BLUE-C		#24 YELLOW-C		#26 ORANGE		#28 GREEN		#30 BLACK		#32 BROWN	
	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)	Radius (ft)	Flow (gpm)
60	70	19.5	72	23.0	74	26.5	76	30.8	78	36	—	—	—	—	—	—
70	72	21.3	74	25.1	76	28.8	80	33.5	82	38.7	84	42.9	84	47.3	84	50.4
80	74	22.9	76	27.0	80	30.9	84	36.0	84	41.5	86	47.3	86	50.4	85	53.1
90	75	24.4	78	28.7	82	32.9	88	38.4	86	43.4	89	48.5	90	52.9	88	55.6
100	76	25.8	80	30.5	84	34.6	90	40.5	88	46.7	91	52.2	92	55.8	92	59.4

Data reflects no pressure regulation.

EAGLE™ 950 Performance Data – Metric

NOZZLES

Base Pressure (bars)	#18 WHITE-C			#20 GRAY-C			#22 BLUE-C			#24 YELLOW-C			#26 ORANGE			#28 GREEN			#30 BLACK			#32 BROWN		
	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)	Radius (m)	Flow (l/s)	Flow (m³/h)
4,1	21,3	1,23	4,43	21,9	1,45	5,22	22,6	1,67	6,02	23,2	1,94	7,00	23,8	2,27	8,18	—	—	—	—	—	—	—	—	—
4,5	21,7	1,29	4,64	22,3	1,52	5,48	22,9	1,75	6,29	23,8	2,03	7,32	24,4	2,36	8,50	25,2	2,62	9,44	25,2	2,90	10,44	25,3	3,10	11,17
5,0	22,1	1,37	4,93	22,7	1,61	5,81	23,5	1,85	6,66	24,7	2,15	7,75	25,1	2,49	8,95	25,8	2,78	10,00	25,8	3,03	10,92	25,7	3,22	11,60
5,5	22,5	1,44	5,19	23,2	1,70	6,12	24,4	1,95	7,01	25,6	2,27	8,16	25,6	2,61	9,41	26,2	2,98	10,72	26,2	3,18	11,43	25,9	3,35	12,05
6,0	22,8	1,51	5,44	23,6	1,78	6,40	24,8	2,04	7,34	26,5	2,38	8,56	26,0	2,70	9,73	26,9	3,04	10,93	27,1	3,29	11,85	26,6	3,46	12,46
6,5	23,0	1,58	5,68	24,0	1,86	6,69	25,3	2,12	7,64	27,1	2,48	8,93	26,5	2,83	10,18	27,4	3,16	11,37	27,7	3,42	12,30	27,3	3,61	13,00
6,9	23,2	1,63	5,86	24,4	1,92	6,93	25,6	2,18	7,86	27,4	2,56	9,20	26,8	2,95	10,61	27,7	3,29	11,86	28,0	3,52	12,67	28,0	3,75	13,49

Data reflects no pressure regulation.