

Rotary Nozzles

0.60 in/hr precipitation rate from 13 to 24 feet

Designed to fit on Rain Bird® spray heads, Rotary Nozzles provide unsurpassed design flexibility and highly efficient water distribution from 13' to 24'.

Features

- Low precipitation rate – 0.60 in/hr (15,2mm/hr) – reduces run-off and erosion.
- Multiple, rotating streams uniformly distribute water throughout the radius range.
- Matched precipitation rate across radii and pattern simplify the design process.
- Matched precipitation rate with Rain Bird's R-VAN Adjustable Rotary Nozzles and 5000/5000 Plus MPR Rotor Nozzles allow MPR irrigation designs from 13' to 35'.
- With approximately 60% less flow than conventional spray nozzles, Rotary Nozzles allow more heads per zone, reducing overall system complexity and cost.
- Maintains highly efficient performance throughout the 20-55 psi pressure range, with no misting or fogging at high pressures.
- Stainless steel radius reduction screw allow reduction down to 13' on the R13-18 and to 17' on the R17-24.
- Designed for use on Rain Bird spray heads.
- Three-year trade warranty.
- Color coded radius reduction plugs allow easy identification of fixed arc pattern

Pattern	Color
Quarter	Yellow
Half	Orange
Full	Blue

Operating Range

- Pressure range: 20-55 psi (1,4 to 3,8 bars)
- Spacing: 13' to 24' (4,0m to 7,3m)



How To Specify




R13-18 Q

Radius Range
 13'-18' (4.0-5.5 m)
 17'-24' (5.2-7.3 m)




Model
 Rotary Nozzle

Pattern
 F=Full
 H=Half
 Q=Quarter

Note: Installation on Rain Bird 1800®- SAM Spray Bodies recommended in sandy environments

R13-18 Series (Black)					
Arc	Pressure psi	Radius* ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
	20	13	1.31	0.75	0.86
	25	14	1.46	0.67	0.77
	30	16	1.60	0.61	0.70
	35	16	1.73	0.61	0.70
	40	17	1.85	0.61	0.70
	45	18	1.96	0.61	0.70
	50	18	2.07	0.61	0.70
55	18	2.17	0.61	0.70	
	20	13	0.65	0.75	0.86
	25	14	0.73	0.67	0.77
	30	16	0.80	0.61	0.70
	35	16	0.86	0.61	0.70
	40	17	0.92	0.61	0.70
	45	18	0.98	0.61	0.70
	50	18	1.03	0.61	0.70
55	18	1.08	0.61	0.70	
	20	13	0.33	0.75	0.86
	25	14	0.37	0.67	0.77
	30	16	0.40	0.61	0.70
	35	16	0.43	0.61	0.70
	40	17	0.46	0.61	0.70
	45	18	0.49	0.61	0.70
	50	18	0.52	0.61	0.70
55	18	0.54	0.61	0.70	

Note: All Rotary nozzles tested on 4" (10.2 cm) pop-ups
 ■ Square spacing based on 50% diameter of throw
 ▲ Triangular spacing based on 50% diameter of throw




R13-18 Series (Black)						METRIC
Arc	Pressure bar	Radius* m	Flow l/m	■ Precip mm/h	▲ Precip mm/h	
	1.4	4.0	4.95	19	22	
	1.7	4.3	5.53	18	21	
	2.1	4.8	6.06	15	18	
	2.4	5.0	6.54	15	18	
	2.8	5.2	6.99	15	18	
	3.1	5.4	7.42	15	18	
	3.4	5.5	7.82	15	18	
3.8	5.6	8.20	15	18		
	1.4	4.0	2.47	19	22	
	1.7	4.3	2.76	18	21	
	2.1	4.8	3.03	15	18	
	2.4	5.0	3.27	15	18	
	2.8	5.2	3.50	15	18	
	3.1	5.4	3.71	15	18	
	3.4	5.5	3.91	15	18	
3.8	5.6	4.10	15	18		
	1.4	4.0	1.24	19	22	
	1.7	4.3	1.38	18	21	
	2.1	4.8	1.51	15	18	
	2.4	5.0	1.64	15	18	
	2.8	5.2	1.75	15	18	
	3.1	5.4	1.85	15	18	
	3.4	5.5	1.95	15	18	
3.8	5.6	2.05	15	18		

Performance data taken in zero wind conditions




Note: Radius reduction over 25% of the normal throw of the nozzle is not recommended



Rotary Nozzles

R17-24 Series (Yellow)					
Arc	Pressure psi	Radius* ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
	20	17	2.45	0.79	0.92
	25	19	2.74	0.71	0.82
	30	21	3.00	0.65	0.75
	35	22	3.24	0.65	0.75
	40	23	3.46	0.65	0.75
	45	23	3.67	0.65	0.75
	50	24	3.87	0.65	0.75
55	24	4.06	0.65	0.75	
	20	17	1.22	0.79	0.92
	25	19	1.37	0.71	0.82
	30	21	1.50	0.65	0.75
	35	22	1.62	0.65	0.75
	40	23	1.73	0.65	0.75
	45	23	1.84	0.65	0.75
	50	24	1.94	0.65	0.75
55	24	2.03	0.65	0.75	
	20	17	0.61	0.79	0.92
	25	19	0.68	0.71	0.82
	30	21	0.75	0.65	0.75
	35	22	0.81	0.65	0.75
	40	23	0.87	0.65	0.75
	45	23	0.92	0.65	0.75
	50	24	0.97	0.65	0.75
55	24	1.02	0.65	0.75	

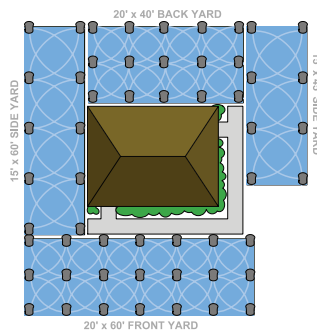
Note: All Rotary nozzles tested on 4" (10.2 cm) pop-ups
 ■ Square spacing based on 50% diameter of throw
 ▲ Triangular spacing based on 50% diameter of throw

R17-24 Series (Yellow) METRIC					
Arc	Pressure bar	Radius* m	Flow l/m	■ Precip mm/h	▲ Precip mm/h
	1.4	5.2	9.27	20	23
	1.7	5.8	10.37	18	21
	2.1	6.4	11.36	16	19
	2.4	6.7	12.26	16	19
	2.8	6.9	13.10	16	19
	3.1	7.1	13.89	16	19
	3.4	7.3	14.65	16	19
3.8	7.4	15.37	16	19	
	1.4	5.2	4.62	20	23
	1.7	5.8	5.19	18	21
	2.1	6.4	5.68	16	19
	2.4	6.7	6.17	16	19
	2.8	6.9	6.55	16	19
	3.1	7.1	6.97	16	19
	3.4	7.3	7.34	16	19
3.8	7.4	7.68	16	19	
	1.4	5.2	2.31	20	23
	1.7	5.8	2.57	18	21
	2.1	6.4	2.84	16	19
	2.4	6.7	3.07	16	19
	2.8	6.9	3.29	16	19
	3.1	7.1	3.48	16	19
	3.4	7.3	3.67	16	19
3.8	7.4	3.86	16	19	

Performance data taken in zero wind conditions

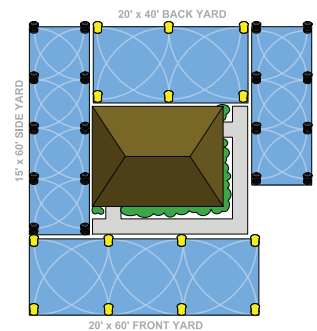
Note: Radius reduction over 25% of the normal throw of the nozzle is not recommended

With Conventional Spray Nozzles



- Total 58 gpm
- 6 zones required

With Rotary Nozzles



- Total 26 gpm
- 3 zones required

Specifications

The Rotary Nozzle shall have a fixed arc of ____degrees (____circle) and shall be capable of covering a ____feet radius (FT.RAD.)/ (meter) at ____pounds per square inch (psi)/ (bars) with a discharge rate of ____gallons per minute, (GPM)/(m³/h,l/s). The angle of the trajectory shall vary from 1 to 30 degrees.

The Rotary Nozzle shall have multiple arced streams and have a matched precipitation rate of 0.60 in/hr.

The Rotary Nozzle shall be constructed of UV-resistant plastic. The radius adjustment screw shall be of stainless steel.

The Rotary Nozzles shall include a removable .02 x .02 mesh screen to protect the nozzle against clogging.

The Rotary Nozzle shall have a precipitation rate matched with Rain Bird's R-VAN Adjustable Rotary Nozzles, and 5000/5000 Plus MPR Rotor Nozzles.

Rain Bird Corporation

6991 E. Southpoint Road
Tucson, AZ 85756
Phone: (520) 741-6100
Fax: (520) 741-6522

Rain Bird Technical Services

(800) RAINBIRD (1-800-724-6247)
(U.S. and Canada)

Rain Bird Corporation

970 West Sierra Madre Avenue
Azusa, CA 91702
Phone: (626) 812-3400
Fax: (626) 812-3411

Specification Hotline

800-458-3005 (U.S. and Canada)

Rain Bird International, Inc.

1000 West Sierra Madre Ave.
Azusa, CA 91702
Phone: (626) 963-9311
Fax: (626) 852-7343

The Intelligent Use of Water™

www.rainbird.com