

MPR Spray Nozzles

Matched Precipitation Rate Nozzles

Features

- Matched precipitation rates across sets and patterns in 5 Series, 8 Series, 10 Series, 12 Series, and 15 Series for even water distribution and design flexibility
- MPR Nozzles are installed by more contractors than all other brands combined
- Quickly identify radius and arc with Top Color-coded™ nozzles even when system is not operating
- Three year trade warranty

Operating Range

- Spacing: 3 to 15 feet (0.9 to 4.6 m)¹
- Pressure: 15 to 30 psi (1 to 2.1 bar)
- Optimum pressure: 30 psi (2.1 bar)²

Models

- 5 Series: Quarter, Half, Full Nozzles
- 5 Series: Bubbler Nozzles
- 8 Series: Quarter, Half, Full Nozzles
- 8 FLT Series: Designed for lower trajectory applications, such as windy areas
- 10 Series Nozzles
- 12 Series Nozzles
- 15 Series: Quarter, Half, Full Nozzles
- 15 Strip Series Nozzles

¹ These ranges are based on proper pressure at nozzle.

² Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.



MPR Nozzle and Screen

How to Specify

5 F

Pattern

F: Full

H: Half

Q: Quarter

MPR Radius Range

5: 3-5 feet (1.1-1.5 m)

8: 5-8 feet (1.7-2.4 m)

10: 7-10 feet (2.1-3.1)

12: 9-12 feet (2.7-3.7 m)

15: 11-15 feet (3.4-4.6 m)

For Optimum Performance, Use
Rain Bird 1800 30 PSI Regulated or
RD1800 30 PSI Regulated Spray Bodies



Rain Bird® MPR Nozzles, The Industry Standard

5 Series MPR					
5° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h	Precip In/h
5F 	15	3	0.29	3.10	3.58
	20	4	0.33	1.99	2.29
	25	4	0.37	2.23	2.57
	30	5	0.41	1.58	1.83
5H 	15	3	0.14	3.00	3.46
	20	4	0.16	1.93	2.22
	25	4	0.18	2.17	2.50
	30	5	0.20	1.54	1.78
5Q 	15	3	0.07	3.00	3.46
	20	4	0.08	1.93	2.22
	25	4	0.09	2.17	2.50
	30	5	0.10	1.54	1.78

5 Series MPR						METRIC
5° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
5F 	1.0	1.1	0.06	1.1	79	91
	1.5	1.3	0.08	1.4	51	58
	2.0	1.5	0.09	1.6	57	65
	2.1	1.5	0.09	1.6	40	46
5H 	1.0	1.1	0.03	0.5	76	88
	1.5	1.3	0.04	0.7	49	56
	2.0	1.5	0.04	0.7	55	64
	2.1	1.5	0.05	0.9	39	45
5Q 	1.0	1.1	0.02	0.4	76	88
	1.5	1.3	0.02	0.4	49	56
	2.0	1.5	0.02	0.4	55	64
	2.1	1.5	0.02	0.4	39	45

8 Series MPR					
10° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h	Precip In/h
8F 	15	5	0.74	2.85	3.29
	20	6	0.86	2.30	2.66
	25	7	0.96	1.89	2.18
	30	8	1.05	1.58	1.82
8H 	15	5	0.37	2.85	3.29
	20	6	0.42	2.25	2.59
	25	7	0.47	1.85	2.13
	30	8	0.52	1.56	1.81
8Q 	15	5	0.18	2.77	3.20
	20	6	0.21	2.25	2.59
	25	7	0.24	1.89	2.18
	30	8	0.26	1.56	1.81

8 Series MPR						METRIC
10° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
8F 	1.0	1.7	0.16	2.8	72	84
	1.5	2.1	0.20	3.4	58	68
	2.0	2.4	0.23	3.9	48	55
	2.1	2.4	0.24	4.0	40	46
8H 	1.0	1.7	0.08	1.4	72	84
	1.5	2.1	0.10	1.7	57	66
	2.0	2.4	0.12	1.9	47	54
	2.1	2.4	0.12	2.0	40	46
8Q 	1.0	1.7	0.04	0.7	70	81
	1.5	2.1	0.05	0.8	57	66
	2.0	2.4	0.06	1.0	48	55
	2.1	2.4	0.06	1.0	40	46

Note: All MPR 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

Performance data taken in zero wind conditions
Note: Radius reduction over 25% of the normal throw of the nozzle is not recommended

10 Series MPR					
15° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h	Precip In/h
10F 	15	7	1.16	2.28	2.63
	20	8	1.30	1.96	2.26
	25	9	1.44	1.71	1.98
	30	10	1.58	1.52	1.75
10H 	15	7	0.58	2.28	2.63
	20	8	0.65	1.96	2.26
	25	9	0.72	1.71	1.98
	30	10	0.79	1.52	1.75
10Q 	15	7	0.29	2.28	2.63
	20	8	0.33	1.96	2.26
	25	9	0.36	1.71	1.98
	30	10	0.39	1.52	1.75

10 Series MPR						METRIC
15° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
10F 	1.0	2.1	0.26	4.2	58	67
	1.5	2.4	0.29	4.8	50	58
	2.0	3.0	0.35	6.0	39	45
	2.1	3.1	0.36	6.0	37	43
10H 	1.0	2.1	0.13	2.4	58	67
	1.5	2.4	0.14	2.4	50	58
	2.0	3.0	0.18	3.0	39	45
	2.1	3.1	0.18	3.0	37	43
10Q 	1.0	2.1	0.06	1.2	58	67
	1.5	2.4	0.07	1.2	50	58
	2.0	3.0	0.09	1.2	39	45
	2.1	3.1	0.09	1.2	37	43

12 Series MPR					
30° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h	Precip In/h
12F 	15	9	1.80	2.14	2.47
	20	10	2.10	2.02	2.34
	25	11	2.40	1.91	2.21
	30	12	2.60	1.74	2.01
12H 	15	9	0.90	2.14	2.47
	20	10	1.05	2.02	2.34
	25	11	1.20	1.91	2.21
	30	12	1.30	1.74	2.01
12Q 	15	9	0.45	2.14	2.47
	20	10	0.53	2.02	2.34
	25	11	0.60	1.91	2.21
	30	12	0.65	1.74	2.01

12 Series MPR						METRIC
30° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
12F 	1.0	2.7	0.40	6.8	55	63
	1.5	3.2	0.48	8.3	47	54
	2.0	3.6	0.59	9.7	46	53
	2.1	3.7	0.60	9.8	44	51
12H 	1.0	2.7	0.20	3.4	55	63
	1.5	3.2	0.24	4.2	47	54
	2.0	3.6	0.30	4.9	46	53
	2.1	3.7	0.30	4.9	44	51
12Q 	1.0	2.7	0.10	1.7	55	63
	1.5	3.2	0.12	2.1	47	54
	2.0	3.6	0.15	2.4	46	53
	2.1	3.7	0.15	2.5	44	51

Note: All MPR 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

Performance data taken in zero wind conditions
Note: Radius reduction over 25% of the normal throw of the nozzle is not recommended

15 Series MPR					
30° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h	Precip In/h
	15	11	2.60	2.07	2.39
	20	12	3.00	2.01	2.32
	25	14	3.30	1.62	1.87
	30	15	3.70	1.58	1.83
	15	11	1.30	2.07	2.39
	20	12	1.50	2.01	2.32
	25	14	1.65	1.62	1.87
	30	15	1.85	1.58	1.83
	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.82	1.62	1.87
	30	15	0.92	1.58	1.83

Note: All MPR 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

15 Series MPR						METRIC
30° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h
	1.0	3.4	0.60	9.8	52	60
	1.5	3.9	0.72	11.8	47	55
	2.0	4.5	0.84	13.7	41	48
	2.1	4.6	0.84	14.0	40	46
	1.0	3.4	0.30	4.9	52	60
	1.5	3.9	0.36	5.9	47	55
	2.0	4.5	0.42	6.8	41	48
	2.1	4.6	0.42	7.0	40	46
	1.0	3.4	0.15	2.5	52	60
	1.5	3.9	0.18	2.9	47	55
	2.0	4.5	0.21	3.4	41	48
	2.1	4.6	0.21	3.5	40	46

Performance data taken in zero wind conditions
Note: Radius reduction over 25% of the normal throw of the nozzle is not recommended

5 Series MPR Stream Bubbler Nozzles			
0° Trajectory			
Nozzle	Pressure psi	Radius ft.	Flow gpm
	15	5	1.50
	20	5	1.50
	25	5	1.50
	30	5	1.50
	15	5	1.00
	20	5	1.00
	25	5	1.00
	30	5	1.00
	15	5	0.50
	20	5	0.50
	25	5	0.50
	30	5	0.50
	15	5	0.50
	20	5	0.50
	25	5	0.50
	30	5	0.50

Note: Indicates adjusted radius at psi shown
Note: Flow at adjusted radius of 5 feet (1.5 m)

5 Series MPR Stream Bubbler Nozzles					METRIC
0° Trajectory					
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	
	1.0	1.5	0.35	5.7	
	1.5	1.5	0.35	5.7	
	2.0	1.5	0.35	5.7	
	2.1	1.5	0.35	5.7	
	1.0	1.5	0.23	3.8	
	1.5	1.5	0.23	3.8	
	2.0	1.5	0.23	3.8	
	2.1	1.5	0.23	3.8	
	1.0	1.5	0.12	1.9	
	1.5	1.5	0.12	1.9	
	2.0	1.5	0.12	1.9	
	2.1	1.5	0.12	1.9	
	1.0	1.5	0.12	1.9	
	1.5	1.5	0.12	1.9	
	2.0	1.5	0.12	1.9	
	2.1	1.5	0.12	1.9	

15 Strip Series				
30° Trajectory				
Nozzle	Pressure psi	W x L ft.	Flow gpm	
	15	4 x 13	0.45	
	20	4 x 14	0.50	
	25	4 x 14	0.56	
	30	4 x 15	0.61	
	15	4 x 26	0.89	
	20	4 x 28	1.00	
	25	4 x 28	1.11	
	30	4 x 30	1.21	
	15	3 x 11	0.35	
	20	3 x 12	0.40	
	25	4 x 14	0.45	
	30	4 x 15	0.49	
	15	3 x 11	0.35	
	20	3 x 12	0.40	
	25	4 x 14	0.45	
	30	4 x 15	0.49	
	15	4 x 26	0.89	
	20	4 x 28	1.00	
	25	4 x 28	1.11	
	30	4 x 30	1.21	
	15	9 x 15	1.34	
	20	9 x 16	1.47	
	25	9 x 18	1.60	
	30	9 x 18	1.73	

W = Width of coverage pattern L = Length of coverage pattern

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

15 Strip Series					METRIC
30° Trajectory					
Nozzle	Pressure bar	W x L m	Flow m³/h	Flow l/m	
	1.0	1.2 x 4.0	0.10	1.7	
	1.5	1.2 x 4.3	0.11	2.0	
	2.0	1.2 x 4.3	0.13	2.3	
	2.1	1.2 x 4.6	0.14	2.3	
	1.0	1.2 x 7.9	0.20	3.4	
	1.5	1.2 x 8.5	0.23	4.0	
	2.0	1.2 x 8.5	0.25	4.5	
	2.1	1.2 x 9.2	0.27	4.6	
	1.0	0.8 x 3.2	0.08	1.3	
	1.5	1.0 x 3.9	0.09	1.6	
	2.0	1.2 x 4.5	0.11	1.8	
	2.1	1.2 x 4.6	0.11	1.9	
	1.0	0.8 x 3.2	0.08	1.3	
	1.5	1.0 x 3.9	0.09	1.6	
	2.0	1.2 x 4.5	0.11	1.8	
	2.1	1.2 x 4.6	0.11	1.9	
	1.0	1.2 x 7.9	0.20	3.4	
	1.5	1.2 x 8.5	0.23	4.0	
	2.0	1.2 x 8.5	0.25	4.5	
	2.1	1.2 x 9.2	0.27	4.6	
	1.0	2.7 x 4.6	0.30	5.1	
	1.5	2.7 x 4.9	0.33	5.8	
	2.0	2.7 x 5.5	0.36	6.5	
	2.1	2.7 x 5.5	0.39	6.5	

Performance data taken in zero wind conditions

8 FLT Series MPR						
5° Trajectory						
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h	Precip In/h	
	15	6	0.56	3.36	3.88	
	20	7	0.65	2.91	3.36	
	25	7	0.72	2.60	3.01	
	30	8	0.79	2.38	2.75	
	15	6	0.28	3.32	3.83	
	20	7	0.32	2.87	3.32	
	25	7	0.36	2.57	2.97	
	30	8	0.39	2.35	2.71	

Note: All MPR 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

8 FLT Series MPR							METRIC
5° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h	
	1.0	1.7	0.12	2.1	87	101	
	1.5	2.1	0.15	2.6	71	82	
	2.0	2.4	0.18	2.9	62	71	
	2.1	2.4	0.18	3.0	60	70	
	1.0	1.7	0.06	1.1	86	100	
	1.5	2.1	0.07	1.3	71	81	
	2.0	2.4	0.09	1.4	61	71	
	2.1	2.4	0.09	1.5	60	69	

Performance data taken in zero wind conditions

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