

## Plastic MPR 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)<sup>1</sup>
- Pressure: 15 to 30 psi (1 to 2.1 bar)
- Optimum pressure: 30 psi (2.1 bar)<sup>2</sup>



Rain Bird® MPR Nozzles, The Industry Standard

### 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

<sup>1</sup> These ranges are based on proper pressure at nozzle.

<sup>2</sup> 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: 5 feet (1.5 m)  
8: 8 feet (2.4 m)  
12: 12 feet (3.7 m)  
15: 15 feet (4.6 m)

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	

**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

5 Series MPR							METRIC	
5° Trajectory								
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /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		

Performance data taken in zero wind conditions

**Note:** Specify spray body and nozzles separately.

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

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	

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:** Specify spray body and nozzles separately.  
**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
15F 	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
15H 	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
15Q 	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 m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h
15F 	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
15H 	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
15Q 	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:** Specify spray body and nozzles separately.  
**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
5F-B 	15	5	1.50
	20	5	1.50
	25	5	1.50
	30	5	1.50
5H-B 	15	5	1.00
	20	5	1.00
	25	5	1.00
	30	5	1.00
5Q-B 	15	5	0.50
	20	5	0.50
	25	5	0.50
	30	5	0.50
5CST-B 	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 m <sup>3</sup> /h	Flow l/m	
5F-B 	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	
5H-B 	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	
5Q-B 	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	
5CST-B 	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: Specify spray body and nozzles separately.

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 m <sup>3</sup> /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
	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
	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
	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
	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
	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
	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 m <sup>3</sup> /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
	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
	2.1	2.4	0.09	1.5	60	69

Performance data taken in zero wind conditions

Note: Specify spray body and nozzles separately.

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