













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
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 m³/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: 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 m³/h	Flow l/m	Precip mm/h	Precip mm/h
5F-B 	1.0	1.5	0.35	5.7	52	60
	1.5	1.5	0.35	5.7	47	55
	2.0	1.5	0.35	5.7	41	48
	2.1	1.5	0.35	5.7	40	46
5H-B 	1.0	1.5	0.23	3.8	52	60
	1.5	1.5	0.23	3.8	47	55
	2.0	1.5	0.23	3.8	41	48
	2.1	1.5	0.23	3.8	40	46
5Q-B 	1.0	1.5	0.12	1.9	52	60
	1.5	1.5	0.12	1.9	47	55
	2.0	1.5	0.12	1.9	41	48
	2.1	1.5	0.12	1.9	40	46
5CST-B 	1.0	1.5	0.12	1.9	52	60
	1.5	1.5	0.12	1.9	47	55
	2.0	1.5	0.12	1.9	41	48
	2.1	1.5	0.12	1.9	40	46

15 Strip Series			
30° Trajectory			
Nozzle	Pressure psi	W x L ft.	Flow gpm
 15EST	15	4 x 13	0.45
	20	4 x 14	0.50
	25	4 x 14	0.56
	30	4 x 15	0.61
 15CST	15	4 x 26	0.89
	20	4 x 28	1.00
	25	4 x 28	1.11
	30	4 x 30	1.21
 15RCS	15	3 x 11	0.35
	20	3 x 12	0.40
	25	4 x 14	0.45
	30	4 x 15	0.49
 15LCS	15	3 x 11	0.35
	20	3 x 12	0.40
	25	4 x 14	0.45
	30	4 x 15	0.49
 15SST	15	4 x 26	0.89
	20	4 x 28	1.00
	25	4 x 28	1.11
	30	4 x 30	1.21
 9SST	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 m ³ /h	Flow l/m	
 15EST	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	
 15CST	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	
 15RCS	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	
 15LCS	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	
 15SST	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	
 9SST	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
 8H-FLT	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
 8Q-FLT	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 ³ /h	Flow l/m	Precip mm/h	Precip mm/h	
 8H-FLT	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	
 8Q-FLT	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