















5 Series MPR					
5° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
5F 	15	3	0.29	2.07	2.39
	20	4	0.33	2.01	2.32
	25	4	0.37	1.62	1.87
	30	5	0.41	1.58	1.83
5H 	15	3	0.14	2.07	2.39
	20	4	0.16	2.01	2.32
	25	4	0.18	1.62	1.87
	30	5	0.20	1.58	1.83
5Q 	15	3	0.07	2.07	2.39
	20	4	0.08	2.01	2.32
	25	4	0.09	1.62	1.87
	30	5	0.10	1.58	1.83

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	52	60
	1.5	1.3	0.08	1.4	47	55
	2.0	1.5	0.09	1.6	41	48
	2.1	1.5	0.09	1.6	40	46
5H 	1.0	1.1	0.03	0.5	52	60
	1.5	1.3	0.04	0.7	47	55
	2.0	1.5	0.04	0.7	41	48
	2.1	1.5	0.05	0.9	40	46
5Q 	1.0	1.1	0.02	0.4	52	60
	1.5	1.3	0.02	0.4	47	55
	2.0	1.5	0.02	0.4	41	48
	2.1	1.5	0.02	0.4	40	46

8 Series MPR					
10° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
8F 	15	5	0.74	1.11	1.29
	20	6	0.86	1.29	1.49
	25	7	0.96	1.44	1.67
	30	8	1.05	1.58	1.82
8H 	15	5	0.37	1.11	1.29
	20	6	0.42	1.26	1.46
	25	7	0.47	1.41	1.63
	30	8	0.52	1.56	1.81
8T 	15	5	0.25	1.13	1.30
	20	6	0.29	1.31	1.51
	25	7	0.32	1.44	1.67
	30	8	0.35	1.58	1.82
8Q 	15	5	0.18	1.08	1.25
	20	6	0.21	1.26	1.46
	25	7	0.24	1.44	1.67
	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	28.28	32.66
	1.5	2.1	0.20	3.4	32.87	37.95
	2.0	2.4	0.23	3.9	36.69	42.37
	2.1	2.4	0.24	4.0	40.13	46.34
8H 	1.0	1.7	0.08	1.4	28.28	32.66
	1.5	2.1	0.10	1.7	32.10	37.07
	2.0	2.4	0.12	1.9	35.93	41.48
	2.1	2.4	0.12	2.0	39.75	45.90
8T 	1.0	1.7	0.05	1.0	28.66	33.10
	1.5	2.1	0.07	1.1	33.25	38.40
	2.0	2.4	0.08	1.3	36.69	42.37
	2.1	2.4	0.08	1.3	40.13	46.34
8Q 	1.0	1.7	0.04	0.7	27.52	31.78
	1.5	2.1	0.05	0.8	32.10	37.07
	2.0	2.4	0.06	1.0	36.69	42.37
	2.1	2.4	0.06	1.0	39.75	45.90

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

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	
10T 	15	7	0.39	2.28	2.63	
	20	8	0.43	1.96	2.26	
	25	9	0.48	1.71	1.98	
	30	10	0.53	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	
10T 	1.0	2.1	0.09	1.2	58	67	
	1.5	2.4	0.10	1.8	50	58	
	2.0	3.0	0.12	1.8	39	45	
	2.1	3.1	0.12	1.8	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	
12TQ 	15	9	1.35	2.14	2.47	
	20	10	1.58	2.02	2.34	
	25	11	1.80	1.91	2.21	
	30	12	1.95	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	
12T 	15	9	0.60	2.14	2.47	
	20	10	0.70	2.02	2.34	
	25	11	0.80	1.91	2.21	
	30	12	0.87	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	
12TQ 	1.0	2.7	0.30	5.1	55	63	
	1.5	3.2	0.36	6.3	47	54	
	2.0	3.6	0.45	7.3	46	53	
	2.1	3.7	0.45	7.4	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	
12T 	1.0	2.7	0.13	2.3	55	63	
	1.5	3.2	0.16	2.8	47	54	
	2.0	3.6	0.20	3.2	46	53	
	2.1	3.7	0.20	3.3	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







Spray Nozzles

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	
15TQ 	15	11	1.95	2.07	2.39	
	20	12	2.25	2.01	2.32	
	25	14	2.48	1.62	1.87	
	30	15	2.78	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	
15T 	15	11	0.87	2.07	2.39	
	20	12	1.00	2.01	2.32	
	25	14	1.10	1.62	1.87	
	30	15	1.23	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	

15 Series MPR						METRIC	
30° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m ³ /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	
15TQ 	1.0	3.4	0.45	7.4	52	60	
	1.5	3.9	0.54	8.8	47	55	
	2.0	4.5	0.63	10.3	41	48	
	2.1	4.6	0.63	10.5	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	
15T 	1.0	3.4	0.20	3.3	52	60	
	1.5	3.9	0.24	3.9	47	55	
	2.0	4.5	0.28	4.6	41	48	
	2.1	4.6	0.28	4.7	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	

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 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

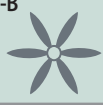



W = Width of coverage pattern L = Length of coverage pattern





Note: 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 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



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

5 Series MPR Stream Bubbler Nozzles				METRIC
0° Trajectory				
Nozzle	Pressure bar	Radius m	Flow m³/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

Note: Indicates adjusted radius at psi shown

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

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

8 FLT Series MPR						METRIC
5° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m³/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

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