

MPR Plus Spray Nozzles



All spray head applications

Radius: 0.05–4.58 GPM

Pressure: 20–50 psi

Matched precipitation

Application: These MPR Plus nozzles fit any Toro spray body offering excellent performance with lower precipitation rates.

Specifications

Flow rate:

0.05–4.58 GPM (0.2–17 LPM)

Recommended operating pressure range:

20–50 psi (1.4–3.5 Bar)

Maximum operating pressure range:

75 psi (5.2 Bar)

Nozzle Screens

White	Red	Red and Metal
15' (4,6m) Series	8' (2,4m) Series	5' (1,5m) Series
12' (3,7m) Series	4' x 30' SST (1,2 x 9,1m)	2' x 6' (0,6 x 1,8m) SST
10' (3m) Series	4' x 18' SST (1,2 x 5,5m)	10° Stream Spray Series
4' x 30' (1,2 x 9,1m) CST Stream Bubblers		35° Stream Spray Series Flood Bubbler Series
Flat-Spray (Non-MPR)		Flat-spray, Low Gallonage (Non-MPR)
4' x 30' (1,2 x 9,1m) EST		
9' x 18' (2,7 x 5,5m) SST		

Note: Screens provided with nozzle.

Refer to current Parts Breakout Book, (Form No. 490-3043) for more information.

Apex at 30 psi (2 Bar)

Nozzle Series	Maximum Height of Spray				
	27°	23°	12°	5°	0°
15' (6m)	4' 8" (1,4m)				
12' (3,7m)		3' 7" (1,1m)			
10' (3m)			2' 4" (0,7m)		
8' (2,4m)				2' 2" (0,66m)	
5' (1,5m)					1' 6" (0,46m)

570 Series Flat Spray

Low Gallonage—Non-MPR

Pattern	Desc.	psi	GPM	Radius	Prec. Rate	
					△	□
90°	FSQ-LG	20	0.38	6	4.07	4.70
		30	0.47	6	5.03	5.81
		40	0.51	7	4.01	4.63
		50	0.58	7	4.56	5.27
		FSQ-LG-PC	40-50	0.41	6	4.39
		60-70	0.50	7	3.93	4.54
180°	FSH-LG	20	0.37	5	2.85	3.29
		30	0.46	5	3.54	4.09
		40	0.53	6	2.84	3.27
		50	0.60	7	2.36	2.72
		FSH-LG-PC	40-50	0.44	6	2.35
		60-70	0.50	6	2.68	3.09
360°	FSF-LG	20	0.91	6	2.43	2.81
		30	1.14	6	3.05	3.52
		40	1.34	7	2.63	3.04
		50	1.50	7	2.95	3.40
		FSF-LG-PC	40-50	1.19	7	2.34
		60-70	1.33	7	2.61	3.02

Note: Performance is based on 6" above finished grade.

*△ Precipitation rates are for triangular spacing, shown in inches per hour, calculated at 50% of diameter.

□ Precipitation rates are for square spacing, shown in inches per hour, calculated at 50% of diameter.

Radius shown in feet.

Operational Features

- Matched precipitation rates ensure all nozzles (every arc within a family) apply water at approximately the same rate
- Low-flow rates allow for more sprinklers to be placed on the same zone
- Pre-installed PCDs eliminate fogging, conserve water and provide precise flow rates (also available without PCDs)
- Standard and special spray patterns for varying applications
- Customized screens developed for each nozzle for better filtration
- Patterns for small areas: full set of arcs for 10' (3m), 8' (2,4m) and 5' (1,5m) radius nozzles
- 4' x 18' (1,2 x 5,5m) side strip ideal for medians

- 2' x 6' (0,6 x 1,8m) for small planter beds and other narrow areas
- Fine-mesh, snap-in filter screens, prevent clogging of lower gallonage nozzles
- Two-year warranty

Installation Features

- Complete selection of arcs for all radius options—full, ¾, ½, ¼ and 1/8
- Five levels of trajectory
- Convenient nozzle packaging—nozzles and screens packed separately in attached bags
- Adjustment screw allows up to 25% reduction in radius and complete shutoff

Specifying Information

Radius	Arc	Optional
5—5' (1,5m)	Q—90°	F—360°
8—8' (2,4m)	T—120°	EST—End Strip
10—10' (3,0m)	H—180°	CST—Center Strip
12—12' (3,7m)	TT—240°	SST—Side Strip
15—15' (4,6m)	TQ—270°	
		PC—Pressure Compensation

Example: A 570 MPR Plus Nozzle with a spray of 10' (3m), 180° arc and pressure compensation, would be specified as: **10-H-PC**

Note: To specify an MPR Plus nozzle with a 570Z sprinkler body, attach the body specification (pg. 9) before the above nozzle specification.

Performance Data—U.S.

MPR Plus Spray Nozzles

MPR Plus Nozzles

5' Series with 0° Trajectory

Pattern	Desc.	psi	GPM	Radius	Prec. Rate*	
					△	□
90°	5-Q	20	0.05	4	1.40	1.21
		30	0.09	5	1.61	1.40
		40	0.12	6	1.78	1.54
5-Q-PC	30-40	0.09	5	1.61	1.40	
		0.10	5	1.79	1.55	
		40-75	0.10	5	1.79	1.55
120°	5-T	20	0.07	4	1.47	1.27
		30	0.12	5	1.61	1.40
		40	0.16	6	1.78	1.54
5-T-PC	30-40	0.12	5	1.61	1.40	
		0.13	5	1.79	1.55	
		40-75	0.13	5	1.79	1.55
180°	5-H	20	0.10	4	1.40	1.21
		30	0.19	5	1.70	1.47
		40	0.23	6	1.70	1.47
5-H-PC	30-40	0.18	5	1.61	1.40	
		0.20	5	1.79	1.55	
		40-75	0.20	5	1.79	1.55
240°	5-TT	20	0.15	4	1.57	1.36
		30	0.25	5	1.68	1.45
		40	0.30	6	1.66	1.44
5-TT-PC	30-40	0.23	5	1.54	1.34	
		0.27	5	1.81	1.57	
		40-75	0.27	5	1.81	1.57
270°	5-TQ	20	0.20	4	1.86	1.61
		30	0.29	5	1.73	1.50
		40	0.34	6	1.68	1.45
5-TQ-PC	30-40	0.26	5	1.55	1.34	
		0.29	5	1.73	1.50	
		40-75	0.29	5	1.73	1.50
360°	5-F	20	0.25	4	1.75	1.51
		30	0.38	5	1.70	1.47
		40	0.45	6	1.66	1.44
5-F-PC	30-40	0.35	5	1.57	1.36	
		0.39	5	1.75	1.51	
		40-75	0.39	5	1.75	1.51

8' Series with 5° Trajectory

Pattern	Desc.	psi	GPM	Radius	Prec. Rate*	
					△	□
90°	8-Q	20	0.17	7	1.55	1.34
		30	0.24	8	1.68	1.45
		40	0.26	9	1.61	1.39
8-Q-PC	30-40	0.22	8	1.54	1.33	
		0.25	8	1.75	1.51	
		40-75	0.25	8	1.75	1.51
120°	8-T	20	0.23	7	1.58	1.36
		30	0.30	8	1.57	1.36
		40	0.36	9	1.67	1.45
8-T-PC	30-40	0.29	8	1.52	1.32	
		0.35	8	1.84	1.59	
		40-75	0.35	8	1.84	1.59
180°	8-H	20	0.37	8	1.47	1.27
		30	0.50	8	1.75	1.51
		40	0.58	9	1.80	1.56
8-H-PC	30-40	0.44	8	1.54	1.33	
		0.50	8	1.75	1.51	
		40-75	0.50	8	1.75	1.51
240°	8-TT	20	0.56	7	1.92	1.66
		30	0.70	8	1.84	1.59
		40	0.80	9	1.86	1.61
8-TT-PC	30-40	0.59	8	1.55	1.34	
		0.70	8	1.84	1.59	
		40-75	0.70	8	1.84	1.59
270°	8-TQ	20	0.63	7	1.92	1.66
		30	0.76	8	1.77	1.53
		40	0.86	9	1.78	1.54
8-TQ-PC	30-40	0.64	8	1.49	1.29	
		0.70	8	1.63	1.41	
		40-75	0.70	8	1.63	1.41
360°	8-F	20	0.74	7	1.69	1.46
		30	1.00	8	1.75	1.51
		40	1.16	9	1.80	1.56
8-F-PC	30-40	0.85	8	1.49	1.29	
		1.00	8	1.75	1.51	
		40-75	1.00	8	1.75	1.51

10' Series with 12° Trajectory

Pattern	Desc.	psi	GPM	Radius	Prec. Rate*	
					△	□
90°	10-Q	20	0.30	9	1.66	1.44
		30	0.40	10	1.79	1.55
		40	0.50	11	1.85	1.60
10-Q-PC	30-40	0.33	10	1.48	1.28	
		0.37	10	1.66	1.43	
		40-75	0.37	10	1.66	1.43
120°	10-T	20	0.42	9	1.74	1.51
		30	0.52	10	1.75	1.51
		40	0.65	11	1.80	1.56
10-T-PC	30-40	0.44	10	1.48	1.28	
		0.50	10	1.68	1.45	
		40-75	0.50	10	1.68	1.45
180°	10-H	20	0.60	9	1.66	1.44
		30	0.71	10	1.59	1.38
		40	0.85	11	1.57	1.36
10-H-PC	30-40	0.66	10	1.48	1.28	
		0.75	10	1.68	1.45	
		40-75	0.75	10	1.68	1.45
240°	10-TT	20	0.71	9	1.47	1.27
		30	0.97	10	1.63	1.41
		40	1.10	11	1.67	1.45
10-TT-PC	30-40	0.89	10	1.49	1.29	
		1.00	10	1.68	1.45	
		40-75	1.00	10	1.68	1.45
270°	10-TQ	20	0.82	9	1.51	1.31
		30	1.04	10	1.55	1.34
		40	1.20	11	1.62	1.41
10-TQ-PC	30-40	0.99	10	1.48	1.28	
		1.09	10	1.63	1.41	
		40-75	1.09	10	1.63	1.41
360°	10-F	20	1.11	9	1.72	1.49
		30	1.49	10	1.67	1.44
		40	1.61	11	1.63	1.42
10-F-PC	30-40	1.33	10	1.49	1.29	
		1.51	10	1.69	1.46	
		40-75	1.51	10	1.69	1.46

12' Series with 23° Trajectory

Pattern	Desc.	psi	GPM	Radius	Prec. Rate*	
					△	□
90°	12-Q	20	0.40	11	1.48	1.28
		30	0.50	12	1.55	1.35
		40	0.60	13	1.64	1.42
12-Q-PC	30-40	0.48	12	1.49	1.29	
		0.53	12	1.65	1.43	
		40-75	0.53	12	1.65	1.43
120°	12-T	20	0.57	11	1.58	1.37
		30	0.72	12	1.68	1.45
		40	0.87	13	1.87	1.62
12-T-PC	30-40	0.64	12	1.49	1.29	
		0.70	12	1.63	1.41	
		40-75	0.70	12	1.63	1.41
180°	12-H	20	0.95	11	1.76	1.52
		30	1.09	12	1.69	1.47
		40	1.30	13	1.72	1.49
12-H-PC	30-40	0.96	12	1.49	1.29	
		1.05	12	1.63	1.41	
		40-75	1.05	12	1.63	1.41
240°	12-TT	20	1.12	11	1.55	1.35
		30	1.45	12	1.69	1.46
		40	1.63	13	1.75	1.52
12-TT-PC	30-40	1.28	12	1.49	1.29	
		1.40	12	1.63	1.41	
		40-75	1.40	12	1.63	1.41
270°	12-TQ	20	1.05	11	1.42	1.23
		30	1.55	12	1.61	1.39
		40	1.65	13	1.58	1.36
12-TQ-PC	30-40	1.44	12	1.49	1.29	
		1.60	12	1.66	1.44	
		40-75	1.60	12	1.66	1.44
360°	12-F	20	1.67	11	1.54	1.34
		30	2.19	12	1.70	1.47
		40	2.35	13	1.68	1.46
12-F-PC	30-40	1.92	12	1.49	1.29	
		2.10	12	1.63	1.41	
		40-75	2.10	12	1.63	1.41

15' Series with 27° Trajectory

Pattern	Desc.	psi	GPM	Radius	Prec. Rate*	
					△	□
90°	15-Q	20	0.68	14	1.55	1.34
		30	0.85	15	1.69	1.46
		40	1.04	16	1.82	1.57
15-Q-PC	30-40	0.75	15	1.49	1.29	
		0.81	15	1.61	1.40	
		40-75	0.81	15	1.61	1.40
120°	15-T	20	0.95	14	1.75	1.52
		30	1.10	15	1.64	1.42
		40	1.30	16	1.82	1.57
15-T-PC	30-40	1.00	15	1.49	1.29	
		1.10	15	1.64	1.42	
		40-75	1.10	15	1.64	1.42
180°	15-H	20	1.37	13	1.79	1.55
		30	1.65	15	1.66	1.44
		40	2.02	16	1.77	1.53
15-H-PC	30-40	1.50	15	1.49	1.29	
		1.65	15	1.64	1.42	
		40-75	1.65	15	1.64	1.42
240°	15-TT	20	1.78	14	1.59	1.38
		30	2.20	15	1.64	1.42
		40	2.66	16	1.74	1.51
15-TT-PC	30-40	2.00	15	1.49	1.29	
		2.20	15	1.64	1.42	
		40-75	2.20	15	1.64	1.42
270°	15-TQ	20	2.10	13	1.85	1.61
		30	2.60	15	1.72	1.49
		40	3.00	16	1.86	1.61
15-TQ-PC	30-40	2.30	15	1.53	1.32	
		2.50	15	1.66	1.44	
		40-75	2.50	15	1.66	1.44
360°	15-F	20	2.85	13	1.89	1.63
		30	3.60	15	1.79	

Performance Data—Metric

MPR Plus Spray Nozzles

5 Series with 0° Trajectory

Pattern	Desc.	Pres. Bar	Pres. kPa	Pres. Kg/cm ²	Flow LPM	Radius m
1/4	5-Q	1,5	150	1,53	0,22	1,3
		2,0	200	2,04	0,33	1,5
		2,5	250	2,55	0,41	1,6
		3,0	300	3,06	0,49	1,7
		3,5	350	3,57	0,58	1,8
5-Q-PC		2,07-2,76	207-276	2,11-2,82	0,34	1,5
		2,76-5,18	276-518	2,82-5,28	0,38	1,5
1/3	5-T	1,5	150	1,53	0,30	1,3
		2,0	200	2,04	0,44	1,5
		2,5	250	2,55	0,55	1,6
		3,0	300	3,06	0,66	1,7
		3,5	350	3,57	0,77	1,8
5-T-PC		2,07-2,76	207-276	2,11-2,82	0,45	1,5
		2,76-5,18	276-518	2,82-5,28	0,49	1,5
1/2	5-H	1,5	150	1,53	0,44	1,3
		2,0	200	2,04	0,69	1,5
		2,5	250	2,55	0,81	1,6
		3,0	300	3,06	0,92	1,7
		3,5	350	3,57	1,03	1,8
5-H-PC		2,07-2,76	207-276	2,11-2,82	0,68	1,5
		2,76-5,18	276-518	2,82-5,28	0,76	1,5
2/3	5-TT	1,5	150	1,53	0,63	1,3
		2,0	200	2,04	0,91	1,5
		2,5	250	2,55	1,06	1,6
		3,0	300	3,06	1,20	1,7
		3,5	350	3,57	1,34	1,8
5-TT-PC		2,07-2,76	207-276	2,11-2,82	0,87	1,5
		2,76-5,18	276-518	2,82-5,28	1,02	1,5
3/4	5-TQ	1,5	150	1,53	0,82	1,3
		2,0	200	2,04	1,06	1,5
		2,5	250	2,55	1,22	1,6
		3,0	300	3,06	1,37	1,7
		3,5	350	3,57	1,53	1,8
5-TQ-PC		2,07-2,76	207-276	2,11-2,82	0,98	1,5
		2,76-5,18	276-518	2,82-5,28	1,10	1,5
360°	5-F	1,5	150	1,53	1,03	1,3
		2,0	200	2,04	1,39	1,5
		2,5	250	2,55	1,60	1,6
		3,0	300	3,06	1,81	1,7
		3,5	350	3,57	2,03	1,8
5-F-PC		2,07-2,76	207-276	2,11-2,82	1,33	1,5
		2,76-5,18	276-518	2,82-5,28	1,48	1,5

8 Series with 5° Trajectory

Pattern	Desc.	Pres. Bar	Pres. kPa	Pres. Kg/cm ²	Flow LPM	Radius m
1/4	8-Q	1,5	150	1,53	0,69	2,2
		2,0	200	2,04	0,88	2,4
		2,5	250	2,55	0,96	2,5
		3,0	300	3,06	1,02	2,6
		3,5	350	3,57	1,11	2,8
8-Q-PC		2,07-2,76	207-276	2,11-2,82	0,83	2,4
		2,76-5,18	276-518	2,82-5,28	0,95	2,4
1/3	8-T	1,5	150	1,53	0,92	2,2
		2,0	200	2,04	1,11	2,4
		2,5	250	2,55	1,28	2,5
		3,0	300	3,06	1,42	2,6
		3,5	350	3,57	1,53	2,8
8-T-PC		2,07-2,76	207-276	2,11-2,82	1,10	2,4
		2,76-5,18	276-518	2,82-5,28	1,33	2,4
1/2	8-H	1,5	150	1,53	1,49	2,3
		2,0	200	2,04	1,84	2,4
		2,5	250	2,55	2,08	2,5
		3,0	300	3,06	2,29	2,6
		3,5	350	3,57	2,48	2,8
8-H-PC		2,07-2,76	207-276	2,11-2,82	1,67	2,4
		2,76-5,18	276-518	2,82-5,28	1,89	2,4
2/3	8-TT	1,5	150	1,53	2,21	2,2
		2,0	200	2,04	2,60	2,4
		2,5	250	2,55	2,89	2,5
		3,0	300	3,06	3,13	2,6
		3,5	350	3,57	3,35	2,8
8-TT-PC		2,07-2,76	207-276	2,11-2,82	2,23	2,4
		2,76-5,18	276-518	2,82-5,28	2,65	2,4
3/4	8-TQ	1,5	150	1,53	2,47	2,2
		2,0	200	2,04	2,83	2,4
		2,5	250	2,55	3,11	2,5
		3,0	300	3,06	3,35	2,6
		3,5	350	3,57	3,54	2,8
8-TQ-PC		2,07-2,76	207-276	2,11-2,82	2,42	2,4
		2,76-5,18	276-518	2,82-5,28	2,65	2,4
360°	8-F	1,5	150	1,53	2,97	2,2
		2,0	200	2,04	3,69	2,4
		2,5	250	2,55	4,16	2,5
		3,0	300	3,06	4,58	2,6
		3,5	350	3,57	4,96	2,8
8-F-PC		2,07-2,76	207-276	2,11-2,82	3,22	2,4
		2,76-5,18	276-518	2,82-5,28	3,79	2,4

10 Series with 12° Trajectory

Pattern	Desc.	Pres. Bar	Pres. kPa	Pres. Kg/cm ²	Flow LPM	Radius m
1/4	10-Q	1,5	150	1,53	1,20	2,8
		2,0	200	2,04	1,48	3,0
		2,5	250	2,55	1,75	3,2
		3,0	300	3,06	2,03	3,5
		3,5	350	3,57	2,30	3,7
10-Q-PC		2,07-2,76	207-276	2,11-2,82	1,25	3,0
		2,76-5,18	276-518	2,82-5,28	1,40	3,0
1/3	10-T	1,5	150	1,53	1,66	2,8
		2,0	200	2,04	1,93	3,0
		2,5	250	2,55	2,28	3,2
		3,0	300	3,06	2,59	3,5
		3,5	350	3,57	2,87	3,7
10-T-PC		2,07-2,76	207-276	2,11-2,82	1,67	3,0
		2,76-5,18	276-518	2,82-5,28	1,89	3,0
1/2	10-H	1,5	150	1,53	2,34	2,8
		2,0	200	2,04	2,65	3,0
		2,5	250	2,55	3,02	3,2
		3,0	300	3,06	3,40	3,4
		3,5	350	3,57	3,79	3,5
10-H-PC		2,07-2,76	207-276	2,11-2,82	2,50	3,0
		2,76-5,18	276-518	2,82-5,28	2,84	3,0
2/3	10-TT	1,5	150	1,53	2,86	2,8
		2,0	200	2,04	3,57	3,0
		2,5	250	2,55	3,98	3,1
		3,0	300	3,06	4,28	3,3
		3,5	350	3,57	4,53	3,4
10-TT-PC		2,07-2,76	207-276	2,11-2,82	3,40	3,0
		2,76-5,18	276-518	2,82-5,28	3,79	3,0
3/4	10-TQ	1,5	150	1,53	3,25	2,8
		2,0	200	2,04	3,85	3,0
		2,5	250	2,55	4,32	3,1
		3,0	300	3,06	4,74	3,3
		3,5	350	3,57	5,15	3,4
10-TQ-PC		2,07-2,76	207-276	2,11-2,82	3,75	3,0
		2,76-5,18	276-518	2,82-5,28	4,13	3,0
360°	10-F	1,5	150	1,53	4,45	2,7
		2,0	200	2,04	5,50	3,0
		2,5	250	2,55	5,92	3,1
		3,0	300	3,06	6,41	3,3
		3,5	350	3,57	7,07	3,4
10-FQ-PC		2,07-2,76	207-276	2,11-2,82	5,04	3,0
		2,76-5,18	276-518	2,82-5,28	5,72	3,0

12 Series with 23° Trajectory

Pattern	Desc.	Pres. Bar	Pres. kPa	Pres. Kg/cm ²	Flow LPM	Radius m
1/4	12-Q	1,5	150	1,53	1,58	3,4
		2,0	200	2,04	1,85	3,6
		2,5	250	2,55	2,13	3,8
		3,0	300	3,06	2,31	4,0
		3,5	350	3,57	2,39	4,0
12-Q-PC		2,07-2,76	207-276	2,11-2,82	1,82	3,7
		2,76-5,18	276-518	2,82-5,28	2,01	3,7
1/3	12-T	1,5	150	1,53	2,26	3,4
		2,0	200	2,04	2,67	3,6
		2,5	250	2,55	3,08	3,8
		3,0	300	3,06	3,43	3,9
		3,5	350	3,57	3,70	4,0
12-T-PC		2,07-2,76	207-276	2,11-2,82	2,42	3,7
		2,76-5,18	276-518	2,82-5,28	2,65	3,7
1/2	12-H	1,5	150	1,53	3,69	3,4
		2,0	200	2,04	4,07	3,6
		2,5	250	2,55	4,62	3,8
		3,0	300	3,06	5,25	4,1
		3,5	350	3,57	5,94	4,3
12-H-PC		2,07-2,76	207-276	2,11-2,82	3,63	3,7
		2,76-5,18	276-518	2,82-5,28	4,00	3,7
2/3	12-TT	1,5	150	1,53	4,46	3,4
		2,0	200	2,04	5,36	3,6
		2,5	250	2,55	5,91	3,8
		3,0	300	3,06	6,40	3,9
		3,5	350	3,57	6,86	4,0
12-TT-PC		2,07-2,76	207-276	2,11-2,82	4,85	3,7
		2,76-5,18	276-518	2,82-5,28	5,30	3,7
3/4	12-TQ	1,5	150	1,53	4,31	3,3
		2,0	200	2,04	5,68	3,6
		2,5	250	2,55	6,10	3,8
		3,0	300	3,06	6,44	3,9
		3,5	350	3,57	6,86	4,0
12-TQ-PC		2,07-2,76	207-276	2,11-2,82	5,45	3,7
		2,76-5,18	276-518	2,82-5,28	6,06	3,7
360°	12-F	1,5	150	1,53	6,67	3,4
		2,0	200	2,04	8,09	3,6
		2,5	250	2,55	8,67	3,8
		3,0	300	3,06	9,36	3,9
		3,5	350	3,57	10,32	4,0
12-F-PC		2,07-2,76	207-276	2,11-2,82	7,27	3,7
		2,76-5,18	276-518	2,82-5,28	7,95	3,7

15 Series with 27° Trajectory

Pattern	Desc.	Pres. Bar	Pres. kPa	Pres. Kg/cm ²	Flow LPM	Radius m
1/4	15-Q	1,5	150	1,53	2,69	4,3
		2,0	200	2,04	3,15	4,5
		2,5	250	2,55	3,67	4,8
		3,0	300	3,06	4,19	4,9
		3,5	350	3,57	4,71	4,9
15-Q-PC		2,07-2,76	207-276	2,11-2,82	2,84	4,6
		2,76-5,18	276-518	2,82-5,28	3,07	4,6
1/3	15-T	1,5	150			