

# MP ROTATOR<sup>®</sup>

Design Guide

High-Efficiency, Multi-Stream Nozzles

**Hunter**<sup>®</sup>



# A Smarter Way to Water

## Reliable Operation

The patented double-pop nozzle keeps the sprinkler free of external debris.

## Efficient Application

Multiple rotating streams provide even coverage and wind resistance, eliminating dry spots.



## Highly Versatile

With the widest radius range from 5' wide strips up to 35' radius, the MP Rotator Nozzle provides highly efficient irrigation across a diverse range of applications.

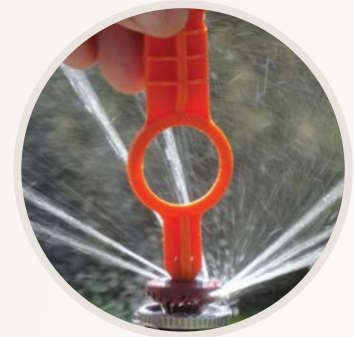
## Pressure Regulation

For best results, use the pressure-regulated Pro-Spray® PRS40 Sprinkler Body.



## Accurate Adjustments

The arc and radius can be adjusted while maintaining matched precipitation. The radius can be reduced up to 25%.

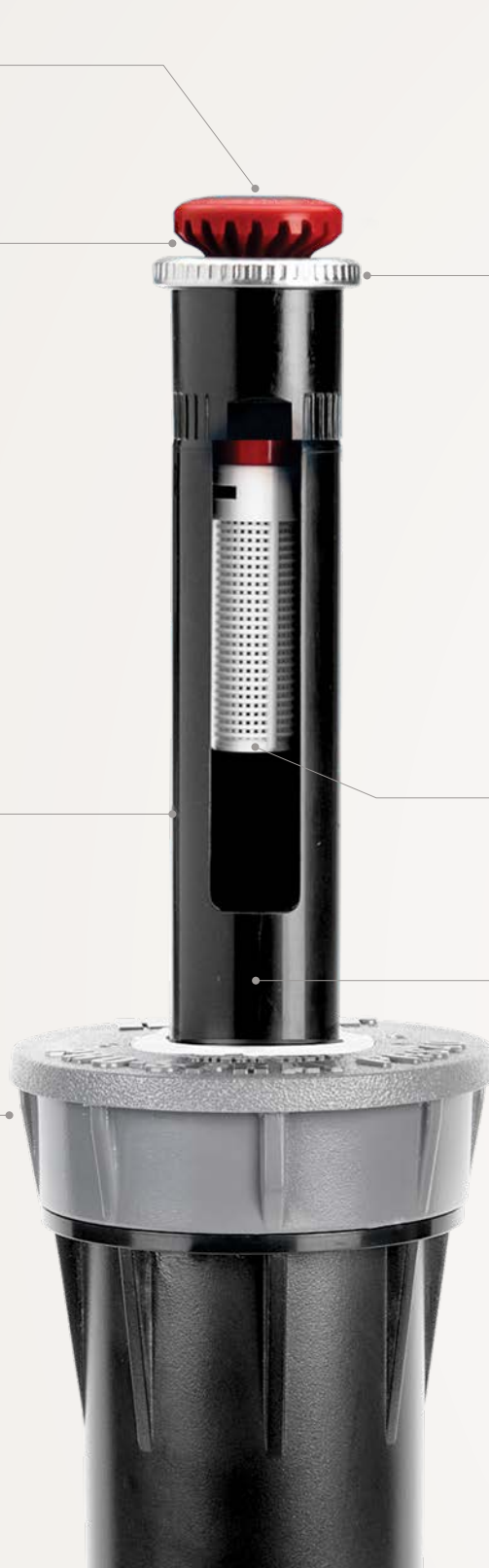


## Durable Design

The removable inlet filter keeps the sprinkler free of internal debris.

## Easy Installation

Compatible with all Hunter spray bodies—perfect for retrofits. Use the MP-HT for female-threaded sprinkler bodies.



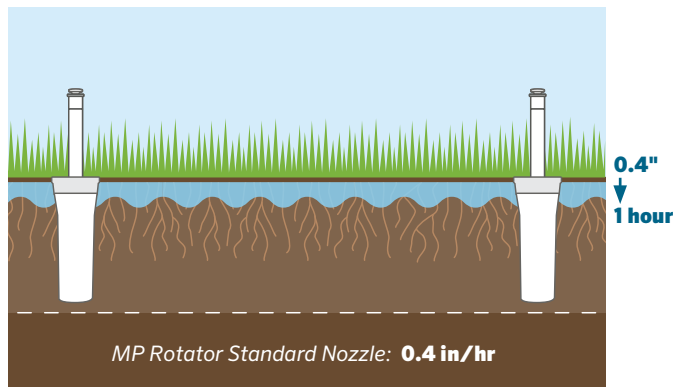
[hunter.info/MPRotatorUS](http://hunter.info/MPRotatorUS)

# MATCHED PRECIPITATION

*MP Rotator Nozzles come in two precipitation rate options to provide maximum flexibility for your irrigation design.*

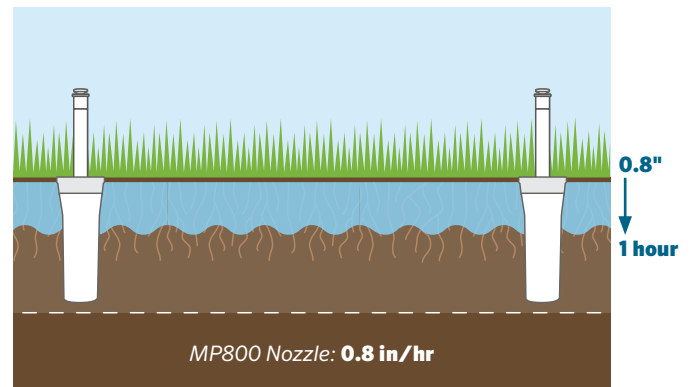
## Standard Nozzle Precipitation Rate

MP Rotator Standard Nozzles have the slowest precipitation rate in the industry at approximately 0.4 in/hr, preventing runoff in the majority of soil applications and allowing for gentle hydration of the landscape.



## MP800 Nozzle Precipitation Rate

MP Rotator MP800 Nozzles have a precipitation rate of approximately 0.8 in/hr, allowing for high-efficiency irrigation of small spaces and medium-grade soils.



## Matching Soil Intake Rates

Matching your precipitation rate to your soil intake rate will eliminate the hazards of runoff and help conserve water. With two different precipitation rate options available for the MP Rotator, you can now choose the best high-efficiency rotary nozzle for your plant material, soil type, and slope.

- MP Rotator Standard Nozzles deliver water slowly at a rate that most soils and slopes can effectively absorb.
- MP800 Nozzles deliver water at half the rate of a spray nozzle, better matching typical soil intake rates.
- Standard spray nozzles apply water at a rate much higher than most soils can absorb, causing runoff in most soil types.

## INFILTRATION RATES BY SOIL TYPE

	SLOPE PERCENTAGE			
	0-5%	5-8%	8-12%	>12%
<b>COARSE SAND</b>	●●●	●●●	●●●	●
<b>FINE SAND</b>	●●●	●●●	●	-
<b>SANDY LOAM</b>	●●●	●	●	-
<b>FINE SANDY LOAM</b>	●●●	●	-	-
<b>LOAM/SILT LOAM</b>	●	●	-	-
<b>CLAY/CLAY LOAM</b>	●	-	-	-

Water infiltration into the soil is less than:

■ 1.5 in/hr ■ 1 in/hr □ 0.5 in/hr

□ Cycle and Soak required to avoid runoff

# MP ROTATOR DESIGN GUIDE

## Application

### 1 MP Rotator Application

Specify the MP Rotator as the desired nozzle in a spray head body.

Retrofit spray systems by installing the MP Rotator onto any conventional spray head or shrub adapter.

### 2 Radius Adjustment

All MP Rotator models allow for easy radius adjustment of up to 25% while maintaining automatic matched precipitation.

Turn the nozzle adjustment screw clockwise to reduce the radius or counterclockwise to increase the radius. Four full rotations will maximize the effect. Additional rotations will not affect the performance of the nozzle.

### 3 Arc Setting

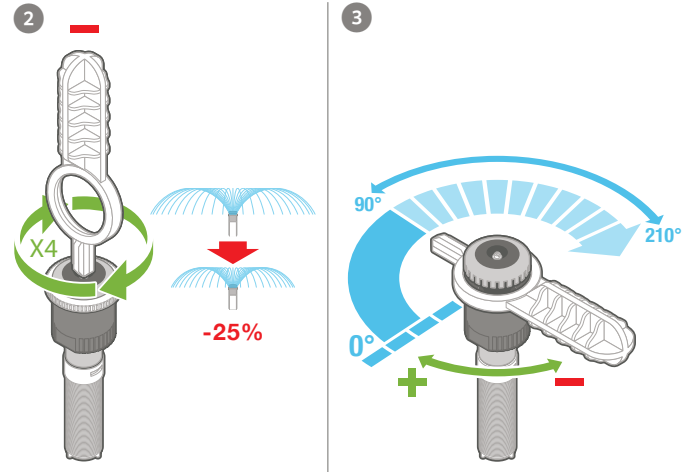
The MP Rotator has a fixed left edge on all 90° to 210° models and 210° to 270° models. Turn the adjustment ring clockwise to increase the arc or counterclockwise to decrease the arc.

### 4 Pressure

Optimal performance and uniformity are reached at an operating pressure of 40 PSI. Use the Pro-Spray PRS40 Sprinkler Body to achieve pressure regulation of 40 PSI.

To reach the minimum radius, use the Pro-Spray PRS30 Sprinkler Body for pressure regulation to 30 PSI.

To achieve the maximum radius, increase the pressure over 40 PSI.



#### MP ROTATOR NOZZLE FACTORY SETTINGS

MP Rotator Nozzles are shipped from the factory at the maximum radius setting and with the following arc settings:

MP ROTATOR MODEL	FACTORY-SET ARC
90° to 210°	180°
210° to 270°	210°
360°	Full-circle
MP Corner	45°
MP Side Strip	180°
MP Left Corner Strip	90°
MP Right Corner Strip	90°

#### MP ROTATOR NOZZLE HEIGHT AND TRAJECTORY

Nozzle No.	Pressure (PSI)	Degrees of Trajectory	Max. Height of Spray
MP-800SR	40	18°	18"
MP-815	40	15°	12"
MP-820	40	16°	32"
MP-1000	40	20°	20"
MP-2000	40	26°	45"
MP-3000	40	26°	79"
MP-3500	40	26°	79"
MP Corner	40	14°	14"
MP Side Strip	40	16°	19"
MP Left Corner Strip	40	16°	18"
MP Right Corner Strip	40	16°	18"

# MP ROTATOR DESIGN GUIDE

## Layout and Placement

### Run Times

Because MP Rotator Nozzles apply less water with increased uniformity, simply doubling the run time used for traditional spray nozzles may supply sufficient water to the landscape while using less water overall.

You can also calculate the run time based on the lower precipitation rate.

Visit [hunterindustries.com/tools/runtime](http://hunterindustries.com/tools/runtime) for more information on run time calculations.

### Precipitation Rate Calculations

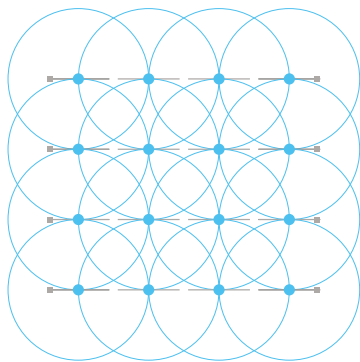
MP Rotator Nozzles are recommended for use with head-to-head coverage in either square or triangular layouts.

#### Square Spacing Application Rate

$$\frac{96.25 \times \text{GPM of } 360^\circ \text{ Sprinkler}}{(\text{Head Spacing} \times \text{Row Spacing})}$$

Example:

$$\frac{96.25 \times 1.48 \text{ GPM}}{(19' \times 19')} = \frac{142.45}{361} = 0.39 \text{ in/hr}$$



#### 19' Square Spacing

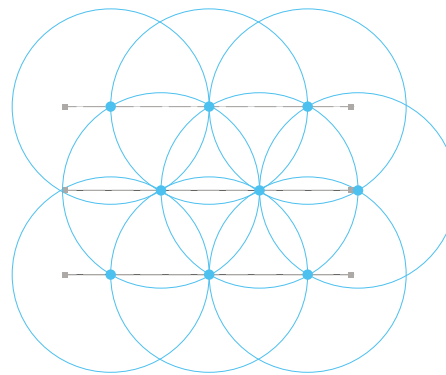
MP-2000-360  
40 PSI  
19' Radius  
1.48 GPM  
19' Head x 19' Row  
Square Spacing

#### Equilateral Triangular Spacing Application Rate

$$\frac{96.25 \times \text{GPM of } 360^\circ \text{ Sprinkler}}{(\text{Head Spacing} \times \text{Row Spacing}) 0.866}$$

Example:

$$\frac{96.25 \times 3.64 \text{ GPM}}{(30' \times 30') 0.866} = \frac{350.35}{(900) 0.866} = \frac{350.35}{779.4} = 0.45 \text{ in/hr}$$



#### 30' Triangular Spacing

MP-3000-360  
40 PSI  
30' Radius  
3.64 GPM  
30' Head x 26' Row  
Triangular Spacing

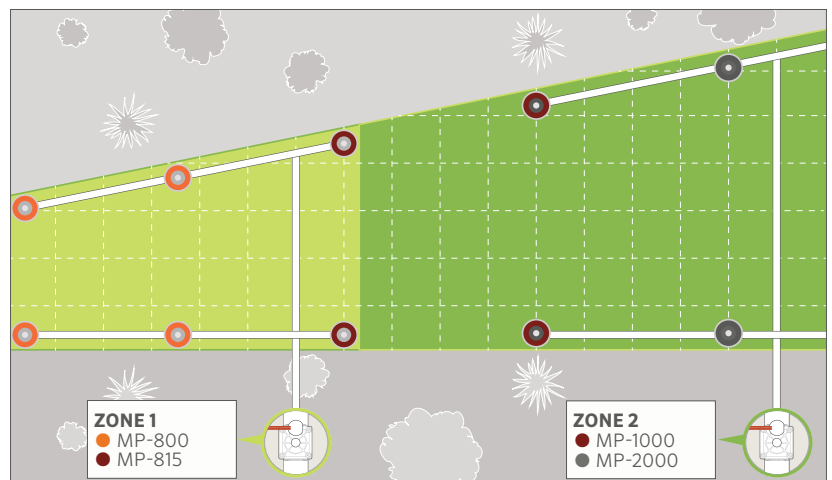
Note: Equilateral triangular spacing has a higher application rate than square spacing due to less area per sprinkler.

### Zoning with MP Rotator Nozzles

MP Rotator Standard Nozzles have a matched precipitation rate of approximately 0.4 in/hr. This means any standard MP Rotator at any arc or radius can be placed on the same zone.

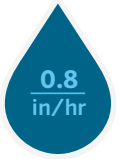
MP800 Nozzles can be configured to work well in head-to-head coverage in either square or triangular layouts. When square spacing is used, the resulting precipitation rate will be approximately 0.8 in/hr.

Since this precipitation rate differs from MP Rotator Standard Nozzles, you should zone the MP800 Family separately to maintain matched precipitation within each zone.



# MP ROTATOR DESIGN GUIDE












## MP Rotator MP800 Nozzles



### Matched Precipitation

Maximize water savings for tight spaces with the MP800. This highly efficient nozzle offers the benefits of multi-stream, multi-trajectory technology in smaller areas than ever before. The MP800 delivers water to distances as short as 6' at a matched precipitation rate of approximately **0.8 in/hr** —less than half the rate of traditional spray nozzles.

### Radius

	Arc		
	 90° to 210°	 210° to 270°	 360°
<b>MP-800SR</b>	 <b>MP-800SR-90</b>		 <b>MP-800SR-360</b>
<b>MP-815</b>	 <b>MP-815-90</b>	 <b>MP-815-210</b>	 <b>MP-815-360</b>
<b>MP-820</b>	 <b>MP-820-90</b>	 <b>MP-820-210</b>	 <b>MP-820-360</b>

### Pressure Ratings

Like the MP Rotator Standard Nozzle Family, the MP800 Family prefers 40 PSI for optimal performance. This pressure yields optimal results for coverage and distribution uniformity. **However, to achieve the lowest radius setting of 6', you must regulate the inlet pressure to 30 PSI.** Use a Pro-Spray PRS30 Sprinkler Body to achieve a consistent inlet pressure of 30 PSI.

#### Pro-Spray PRS30

Pair the MP Rotator Nozzle with a Pro-Spray PRS30 Sprinkler Body to achieve the minimum radius.





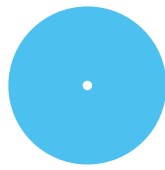








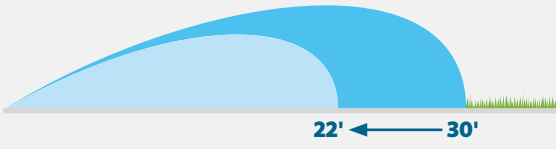



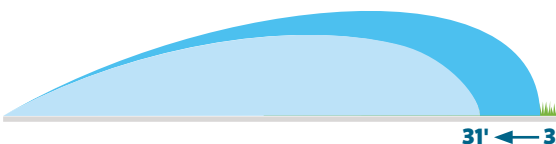

#### Pro-Spray PRS40

Pair the MP Rotator Nozzle with a Pro-Spray PRS40 Sprinkler Body for peak performance.



**Matched Precipitation**

All MP Rotator Standard Nozzles have a matched precipitation rate of approximately **0.4 in/hr** across a radius range of 8' to 35'.

Radius	Arc		
	 90° to 210°	 210° to 270°	 360°
<p>MP-1000</p> 	 MP-1000-90	 MP-1000-210	 MP-1000-360
<p>MP-2000</p> 	 MP-2000-90	 MP-2000-210	 MP-2000-360
<p>MP-3000</p> 	 MP-3000-90	 MP-3000-210	 MP-3000-360
<p>MP-3500</p> 	 MP-3500-90		

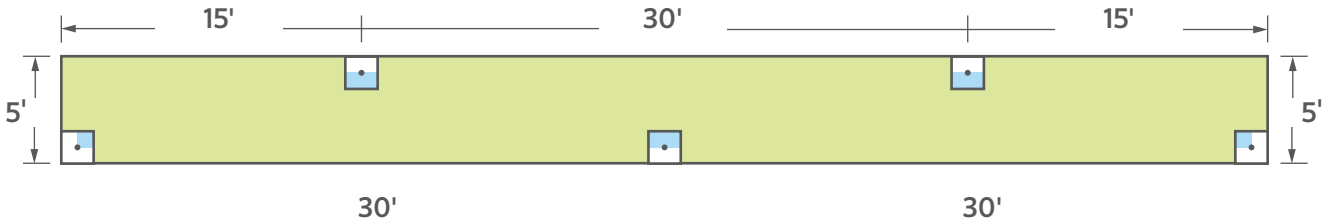
# MP ROTATOR DESIGN GUIDE

## Side Strip and Corner Models



### Side Strip Precipitation Example

The precipitation rate of the MP Rotator Strip Nozzles is dependent on the layout of the system. The following is an example of a potential design and associated precipitation rate:



### Precipitation Rate Using the Total Area Method

$$P = \frac{96.25 \times \text{Total Flow (GPM)}}{\text{Total Area (ft)}} \\ P = \frac{96.25 \times (0.19 + 0.38 + 0.38 + 0.38 + 0.19)}{5' \times 60'}$$

$$P = 0.49 \text{ in/hr}$$



**MP-LCS-515**  
(Left Strip)



**MP-SS-530**  
(Side Strip)



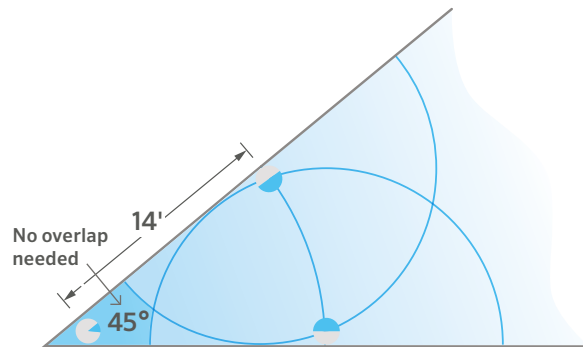
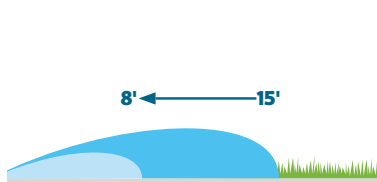
**MP-RCS-515**  
(Right Strip)

### MP Rotator Corner Nozzle

The MP Corner is specially designed to provide extra coverage in tight corners so that neighboring heads do not need to reach into the corner to provide head-to-head coverage, avoiding unnecessary overspray onto non-target areas.



**MP-CORNER**





# MP ROTATOR DESIGN GUIDE

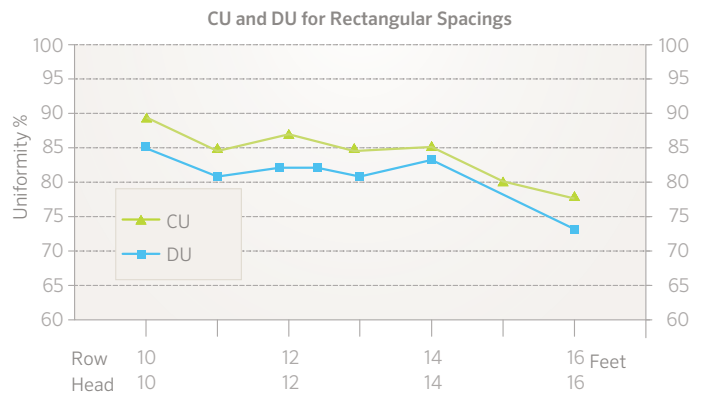
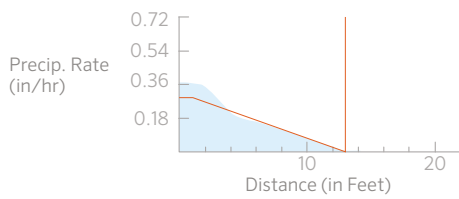
## Uniformity

### Uniformity Samples

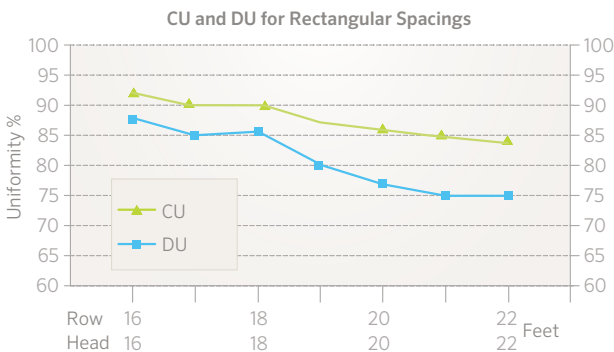
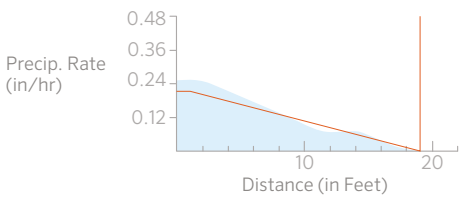
The various streams of the MP Rotator Nozzle allow it to target all areas of the landscape evenly when properly installed, yielding superior uniformity over traditional spray nozzles. Several independent studies demonstrate this difference and other efficiency benefits of the MP Rotator Nozzle. Read more at [hunterindustries.com/site-studies](http://hunterindustries.com/site-studies).

Below is a sampling of MP Rotator profiles and associated uniformities. These uniformity examples result from tests performed indoors in controlled conditions. On-site conditions will affect actual uniformity, and the uniformity data may change due to continuing product development.

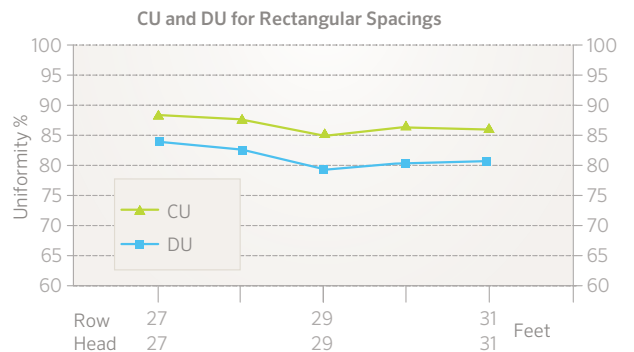
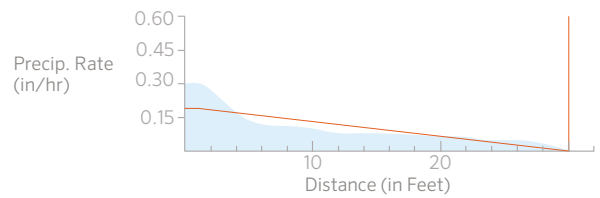
#### MP-1000-90 180° at 40 PSI



#### MP-2000-90 180° at 40 PSI



#### MP-3000-90 180° at 40 PSI



# MP ROTATOR DESIGN GUIDE

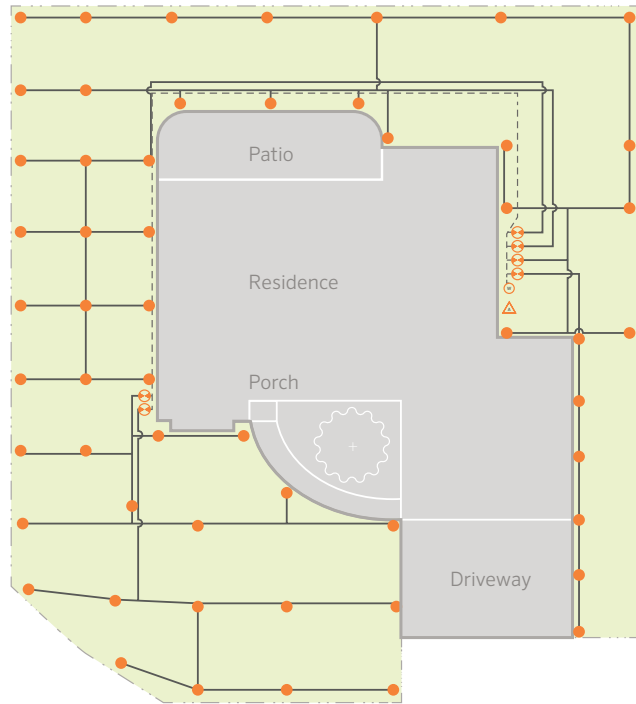
## Cost and Water Savings

### Lower System Cost

A design with MP Rotator Nozzles uses far less material and equipment than a traditional spray design, resulting in an overall reduced project cost. Due to the lower flow rates, more heads can be run at once, reducing the number of valves needed.

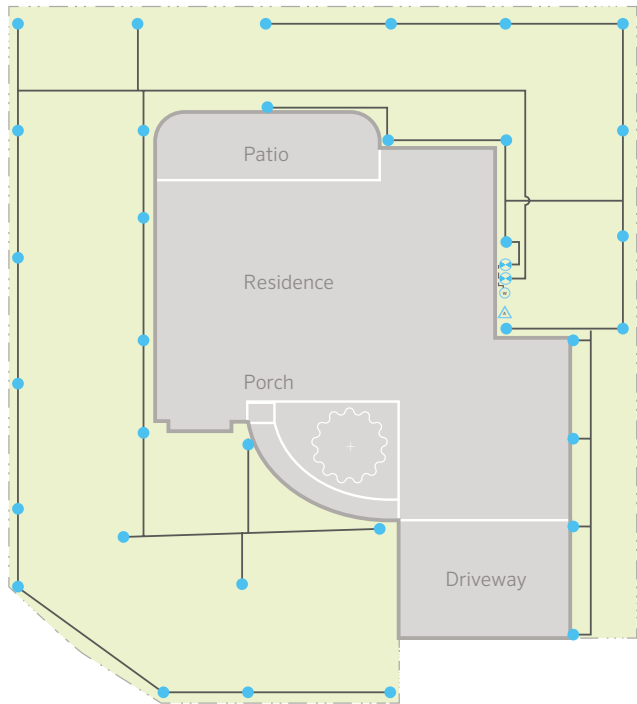
Learn more about how the MP Rotator Nozzle provides material and labor savings in this residential site study: [hunter.info/MPsavings](http://hunter.info/MPsavings).

### Design Using Traditional Spray Nozzles



IRRIGATION SYSTEM COST COMPARISON	
Materials Needed	With Spray Nozzles
Valves	6
Mainline	150'
Laterals	800'
Sprinklers	55
Controller	6-Station
Wire	175'
<b>SPRAY COST</b>	<b>\$\$\$\$</b>

### Design Using MP Rotator Nozzles



IRRIGATION SYSTEM COST COMPARISON	
Materials Needed	With MP Rotator Nozzles
Valves	2
Mainline	15'
Laterals	600'
Sprinklers	34
Controller	4-Station
Wire	20'
<b>MP ROTATOR COST</b>	<b>\$\$</b>

# MP ROTATOR DESIGN GUIDE

## Filtration Recommendations and Wastewater Applications

### Filtration Guidelines

You should use primary filtration when operating with dirty water.

A general rule is to use primary filtration that is five times the mesh rating of the nozzle filter. For example, if the nozzle filter is 20 mesh, the primary filter should be 100 mesh.

Field testing has shown that the MP-800SR runs well in dirty water conditions with the use of a 120-mesh primary filtration system.

### HY-100, HY-100-75, HY-075

Height: 6"

Width: 3"

Depth: 5"



Hunter's HY Filters with 150-mesh size are a great solution for zone-specific MP-800SR arrangements.

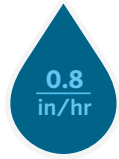
NOZZLE FILTER SIZES			
Nozzle	Screen size (mesh)	Description	Part #
MP-800SR-90	60	Very Fine (gray)	MP8SCREENSP
MP-800SR-360	40	Fine (white)	MPFSCREENSP
MP-815			
MP-1000			
MP-2000			
MP Corner			
MP Strips			
MP-820	20	Coarse (tan)	MPCSCREENSP
MP-3000			
MP-3500			

### Reclaimed Wastewater

The MP Rotator Nozzle is an excellent choice when using reclaimed wastewater. The materials used in the MP Rotator are chemical-resistant polypropylene, polyurethane, acetal plastics, stainless steel, and EPDM rubber. These materials are designed to withstand the chemicals and conditions commonly used in wastewater irrigation.

# MP ROTATOR DESIGN GUIDE

## MP Rotator MP800 Nozzles



MP ROTATOR PERFORMANCE DATA																			
		MP-800SR Radius: 6' to 12' Adjustable Arc and Full-Circle ● Orange and Gray: 90° to 210° ● Lime Green and Gray: 360°				MP-815 Radius: 8' to 16' Adjustable Arc and Full-Circle ● Maroon and Gray: 90° to 210° ● Lt. Blue and Gray: 210° to 270° ● Olive and Gray: 360°				MP-820 Radius: 15' to 24' Adjustable Arc and Full-Circle ● Black and Gray: 90° to 210° ● Green and Gray: 210° to 270° ● Red and Gray: 360°									
Arc	Pressure PSI	MIN RADIUS		MAX RADIUS				Radius ft	Flow GPM	Precip in/hr		Radius ft	Flow GPM	Precip in/hr		Radius ft	Flow GPM	Precip in/hr	
		Radius ft	Flow GPM	Radius ft	Flow GPM	■	▲			Radius ft	Flow GPM			■	▲			Radius ft	Flow GPM
90° 	30	8	6	0.13	8	0.17	0.90	1.04	14	0.42	0.83	0.95	20	0.85	0.82	0.94			
	35		7	0.15	9	0.21	0.89	1.03		15	0.46	0.79		0.91	21	0.93	0.81	0.94	
	<b>40</b>		<b>8</b>	<b>0.16</b>	<b>10</b>	<b>0.23</b>	<b>0.83</b>	<b>0.96</b>		<b>15</b>	<b>0.49</b>	<b>0.84</b>		<b>0.97</b>	<b>22</b>	<b>0.97</b>	<b>0.77</b>	<b>0.89</b>	
	45		8	0.18	11	0.25	0.80	0.92		16	0.52	0.78		0.90	23	1.06	0.77	0.89	
	50		9	0.19	11	0.27	0.79	0.92		16	0.55	0.83		0.96	24	1.11	0.74	0.85	
180° 	30	8	6	0.26	8	0.33	0.88	1.02	13	0.75	0.85	0.99	20	1.72	0.83	0.96			
	35		7	0.29	9	0.38	0.85	0.99		14	0.86	0.84		0.98	21	1.82	0.79	0.91	
	<b>40</b>		<b>8</b>	<b>0.32</b>	<b>10</b>	<b>0.42</b>	<b>0.81</b>	<b>0.93</b>		<b>15</b>	<b>0.93</b>	<b>0.80</b>		<b>0.92</b>	<b>22</b>	<b>2.01</b>	<b>0.80</b>	<b>0.92</b>	
	45		8	0.36	11	0.46	0.77	0.88		15	0.96	0.82		0.95	22	2.06	0.82	0.95	
	50		9	0.38	11	0.48	0.76	0.88		16	1.06	0.80		0.92	23	2.21	0.80	0.93	
210° 	30	8	6	0.30	8	0.35	0.80	0.93	13	0.88	0.86	0.99	20	1.94	0.80	0.92			
	35		7	0.34	9	0.38	0.77	0.89		14	0.96	0.81		0.93	21	2.10	0.78	0.91	
	<b>40</b>		<b>8</b>	<b>0.37</b>	<b>10</b>	<b>0.43</b>	<b>0.81</b>	<b>0.91</b>		<b>15</b>	<b>1.10</b>	<b>0.81</b>		<b>0.93</b>	<b>22</b>	<b>2.36</b>	<b>0.81</b>	<b>0.93</b>	
	45		8	0.42	10	0.45	0.82	0.95		15	1.16	0.85		0.98	22	2.39	0.81	0.94	
	50		9	0.44	11	0.49	0.73	0.85		16	1.24	0.80		0.92	23	2.52	0.79	0.91	
270° 	30	8							13	1.14	0.87	1.00	20	2.53	0.81	0.94			
	35									14	1.24	0.81		0.94	21	2.74	0.80	0.92	
	<b>40</b>									<b>15</b>	<b>1.40</b>	<b>0.80</b>		<b>0.92</b>	<b>22</b>	<b>3.00</b>	<b>0.80</b>	<b>0.92</b>	
	45									15	1.47	0.84		0.97	22	3.12	0.83	0.95	
	50										16	1.54		0.77	0.89	23	3.30	0.80	0.93
360° 	30	8	6	0.47	8	0.66	0.89	1.03	13	1.52	0.87	1.00	20	3.40	0.82	0.94			
	35		7	0.52	9	0.71	0.80	0.92		14	1.70	0.83		0.96	21	3.68	0.80	0.93	
	<b>40</b>		<b>8</b>	<b>0.56</b>	<b>10</b>	<b>0.78</b>	<b>0.79</b>	<b>0.91</b>		<b>15</b>	<b>1.87</b>	<b>0.80</b>		<b>0.92</b>	<b>22</b>	<b>3.97</b>	<b>0.79</b>	<b>0.91</b>	
	45		8	0.59	10	0.85	0.78	0.90		15	2.00	0.86		0.99	22	4.08	0.81	0.94	
	50		9	0.63	11	0.88	0.73	0.85		16	2.13	0.80		0.92	23	4.30	0.78	0.90	
55	10	0.70	12	0.98	0.70	0.81		16	2.26	0.85	0.98	24	4.53	0.76	0.87				

Due to its precipitation rate of approximately 0.8 in/hr, we strongly recommend zoning the MP800 Nozzles separately from MP Rotator Standard Nozzles.

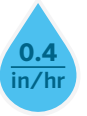
### PERFORMANCE DATA NOTE FOR ALL CHARTS:

**Bold** = Recommended Pressure

The MP Rotator Nozzle is designed to maintain matched precipitation after radius adjustment. Optimal pressure for the MP Rotator is 40 PSI. This can be achieved easily by using the MP Rotator with the Pro-Spray PRS40 Sprinkler Body, pressure regulated at 40 PSI.

# MP ROTATOR DESIGN GUIDE

## MP Rotator Standard Nozzles



MP ROTATOR PERFORMANCE DATA																
MP-1000							MP-2000					MP-3000				
Radius: 8' to 15'							Radius: 13' to 21'					Radius: 22' to 30'				
Adjustable Arc and Full-Circle							Adjustable Arc and Full-Circle					Adjustable Arc and Full-Circle				
● Maroon: 90° to 210°							● Black: 90° to 210°					● Blue: 90° to 210°				
● Lt. Blue: 210° to 270°							● Green: 210° to 270°					● Yellow: 210° to 270°				
● Olive: 360°							● Red: 360°					● Gray: 360°				
Arc	Pressure PSI	Radius ft	Flow GPM	Flow GPH	Precip in/hr		Radius ft	Flow GPM	Flow GPH	Precip in/hr		Radius ft	Flow GPM	Flow GPH	Precip in/hr	
					■	▲				■	▲				■	▲
90°	30	12	0.17	10.2	0.45	0.52	18	0.38	22.8	0.45	0.52	27	0.76	45.6	0.40	0.46
	35	13	0.19	11.4	0.43	0.50	19	0.40	24.0	0.43	0.49	28	0.82	49.2	0.40	0.46
	<b>40</b>	<b>14</b>	<b>0.21</b>	<b>12.6</b>	<b>0.41</b>	<b>0.48</b>	<b>20</b>	<b>0.43</b>	<b>25.8</b>	<b>0.41</b>	<b>0.48</b>	<b>30</b>	<b>0.86</b>	<b>51.6</b>	<b>0.37</b>	<b>0.42</b>
	45	14	0.23	13.8	0.45	0.52	21	0.46	27.6	0.40	0.46	30	0.90	54.0	0.39	0.44
	50	15	0.25	15.0	0.43	0.49	21	0.47	28.2	0.41	0.47	30	0.95	57.0	0.41	0.47
180°	30	12	0.34	20.4	0.45	0.52	17	0.64	38.4	0.43	0.49	27	1.58	94.8	0.42	0.48
	35	13	0.38	22.8	0.43	0.50	18	0.71	42.6	0.42	0.49	28	1.70	102.0	0.42	0.48
	<b>40</b>	<b>14</b>	<b>0.42</b>	<b>25.2</b>	<b>0.41</b>	<b>0.48</b>	<b>19</b>	<b>0.77</b>	<b>46.2</b>	<b>0.41</b>	<b>0.47</b>	<b>30</b>	<b>1.82</b>	<b>109.2</b>	<b>0.39</b>	<b>0.45</b>
	45	14	0.44	26.4	0.43	0.50	20	0.85	51.0	0.41	0.47	30	1.93	115.8	0.41	0.48
	50	15	0.50	30.0	0.43	0.49	21	0.91	54.6	0.40	0.46	30	2.04	122.4	0.44	0.50
210°	30	12	0.40	24.0	0.46	0.53	17	0.75	45.0	0.43	0.49	27	1.84	110.4	0.42	0.48
	35	13	0.45	27.0	0.44	0.51	18	0.81	48.6	0.41	0.48	28	1.99	119.4	0.42	0.48
	<b>40</b>	<b>14</b>	<b>0.49</b>	<b>29.4</b>	<b>0.41</b>	<b>0.48</b>	<b>19</b>	<b>0.86</b>	<b>51.6</b>	<b>0.39</b>	<b>0.45</b>	<b>30</b>	<b>2.12</b>	<b>127.2</b>	<b>0.39</b>	<b>0.45</b>
	45	14	0.51	30.6	0.43	0.50	20	0.91	54.6	0.38	0.43	30	2.25	135.0	0.41	0.48
	50	15	0.57	34.2	0.42	0.48	21	0.98	58.8	0.37	0.42	30	2.37	142.2	0.43	0.50
270°	30	12	0.48	28.8	0.43	0.49	17	0.95	57.0	0.42	0.49	27	2.37	142.2	0.42	0.48
	35	13	0.53	31.8	0.40	0.46	18	1.03	61.8	0.41	0.47	28	2.55	153.0	0.42	0.48
	<b>40</b>	<b>14</b>	<b>0.63</b>	<b>37.8</b>	<b>0.41</b>	<b>0.48</b>	<b>19</b>	<b>1.10</b>	<b>66.0</b>	<b>0.39</b>	<b>0.45</b>	<b>30</b>	<b>2.73</b>	<b>163.8</b>	<b>0.39</b>	<b>0.45</b>
	45	14	0.67	40.2	0.44	0.51	20	1.17	70.2	0.38	0.43	30	2.89	173.4	0.41	0.48
	50	15	0.72	43.2	0.41	0.47	21	1.23	73.8	0.36	0.41	30	3.06	183.6	0.44	0.50
360°	30	12	0.69	41.4	0.46	0.53	17	1.28	76.8	0.43	0.49	27	3.15	189.0	0.42	0.48
	35	13	0.77	46.2	0.44	0.51	18	1.37	82.2	0.41	0.47	28	3.40	204.0	0.42	0.48
	<b>40</b>	<b>14</b>	<b>0.84</b>	<b>50.4</b>	<b>0.41</b>	<b>0.48</b>	<b>19</b>	<b>1.48</b>	<b>88.8</b>	<b>0.39</b>	<b>0.46</b>	<b>30</b>	<b>3.64</b>	<b>218.4</b>	<b>0.39</b>	<b>0.45</b>
	45	14	0.88	52.8	0.43	0.50	20	1.57	94.2	0.38	0.44	30	3.86	231.6	0.41	0.48
	50	15	0.98	58.8	0.42	0.48	21	1.68	100.8	0.37	0.42	30	4.07	244.2	0.44	0.50
55	15	1.01	60.6	0.43	0.50	21	1.74	104.4	0.38	0.44	30	4.27	256.2	0.46	0.53	

MP-3500							90°					180°					210°				
Radius: 31' to 35'							Radius: 31' to 35'					Radius: 31' to 35'					Radius: 31' to 35'				
Adjustable Arc							Adjustable Arc					Adjustable Arc					Adjustable Arc				
● Light Brown: 90° to 210°							● Light Brown: 90° to 210°					● Light Brown: 90° to 210°					● Light Brown: 90° to 210°				
Pressure PSI	Radius ft	Flow GPM	Flow GPH	Precip in/hr		Radius ft	Flow GPM	Flow GPH	Precip in/hr		Radius ft	Flow GPM	Flow GPH	Precip in/hr							
				■	▲				■	▲				■	▲						
30	34	1.13	67.8	0.38	0.43	34	2.24	134.4	0.37	0.43	34	2.84	170.4	0.41	0.47						
35	34	1.21	72.6	0.40	0.47	34	2.65	159.0	0.44	0.51	34	3.08	184.8	0.44	0.51						
<b>40</b>	<b>35</b>	<b>1.28</b>	<b>76.8</b>	<b>0.40</b>	<b>0.46</b>	<b>35</b>	<b>2.86</b>	<b>171.6</b>	<b>0.45</b>	<b>0.52</b>	<b>35</b>	<b>3.29</b>	<b>197.4</b>	<b>0.44</b>	<b>0.51</b>						
45	35	1.38	82.8	0.43	0.50	35	3.10	186.0	0.49	0.56	35	3.54	212.4	0.48	0.55						
50	35	1.43	85.8	0.45	0.52	35	3.21	192.6	0.50	0.58	35	3.76	225.6	0.51	0.59						
55	35	1.50	90.0	0.47	0.54	35	3.28	196.8	0.52	0.60	35	3.94	236.4	0.53	0.61						

# MP ROTATOR DESIGN GUIDE

## MP Rotator Specialty Nozzles






### MP ROTATOR PERFORMANCE DATA

#### MP Corner

Radius: 8' to 15'  
Adjustable Arc

● Turquoise: 45° to 105°

Arc	Pressure PSI	Radius ft	Flow GPM	Flow GPH
45° 	30	12	0.17	10.2
	35	13	0.18	10.8
	<b>40</b>	<b>14</b>	<b>0.19</b>	<b>11.4</b>
	45	14	0.21	12.6
	50	14	0.22	13.2
90° 	30	12	0.34	20.4
	35	13	0.36	21.6
	<b>40</b>	<b>14</b>	<b>0.39</b>	<b>23.4</b>
	45	14	0.41	24.6
105° 	30	12	0.39	23.4
	35	13	0.42	25.2
	<b>40</b>	<b>14</b>	<b>0.45</b>	<b>27.0</b>
	45	14	0.48	28.8
	50	15	0.51	30.6
55	15	0.53	31.8	



### MP ROTATOR PERFORMANCE DATA

- **MP-LCS-515:** Ivory, MP Left Corner Strip
- **MP-RCS-515:** Copper, MP Right Corner Strip
- **MP-SS-530:** Brown, MP Side Strip

	Pressure PSI	Radius ft	Flow GPM	Flow GPH	Precip. in/hr	
					■	▲
<b>MP Left Corner Strip</b> 	30	14 x 4	0.17	10.2	1.17	0.58
	35	15 x 5	0.18	10.8	0.92	0.46
	<b>40</b>	<b>15 x 5</b>	<b>0.19</b>	<b>11.4</b>	<b>0.98</b>	<b>0.49</b>
	45	15 x 5	0.21	12.6	1.08	0.54
	50	16 x 5	0.23	13.8	1.11	0.55
<b>MP Right Corner Strip</b> 	30	14 x 4	0.17	10.2	1.17	0.58
	35	15 x 5	0.18	10.8	0.92	0.46
	<b>40</b>	<b>15 x 5</b>	<b>0.19</b>	<b>11.4</b>	<b>0.98</b>	<b>0.49</b>
	45	15 x 5	0.21	12.6	1.08	0.54
	50	16 x 5	0.23	13.8	1.11	0.55
<b>MP Side Strip</b> 	30	28 x 4	0.33	19.8	1.13	0.57
	35	29 x 5	0.36	21.6	0.96	0.48
	<b>40</b>	<b>30 x 5</b>	<b>0.38</b>	<b>22.8</b>	<b>0.98</b>	<b>0.49</b>
	45	31 x 5	0.41	24.6	1.02	0.51
	50	32 x 6	0.44	26.4	0.88	0.44
55	33 x 6	0.47	28.4	0.92	0.46	

MP Rotator Strip Nozzles can be used with both the MP Rotator Standard and MP800 Nozzles, depending on the layout.

#### PERFORMANCE DATA NOTE FOR ALL CHARTS:

**Bold** = Recommended Pressure

The MP Rotator Nozzle is designed to maintain matched precipitation after radius adjustment. Optimal pressure for the MP Rotator is 40 PSI. This can be achieved easily by using the MP Rotator with the Pro-Spray PRS40, pressure regulated at 40 PSI.

# MP ROTATOR DESIGN GUIDE

## Field Identification

MP Rotator Nozzles are color-coded for easy field identification.

0.4  
in/hr

### MP Rotator Standard Nozzles

Radius	8' to 15'	13' to 21'	22' to 30'	31' to 35'	
Arc					
90° to 210°	<b>MP-1000-90</b>	<b>MP-2000-90</b>	<b>MP-3000-90</b>	<b>MP-3500-90</b>	
					
210° to 270°	<b>MP-1000-210</b>	<b>MP-2000-210</b>	<b>MP-3000-210</b>		
					
360°	<b>MP-1000-360</b>	<b>MP-2000-360</b>	<b>MP-3000-360</b>		

### MP Rotator MP800 Nozzles

0.8  
in/hr

Radius	6' to 12'	8' to 16'	15' to 24'	
Arc				
90° to 210°	<b>MP-800SR-90</b> Short Radius	<b>MP-815-90</b>	<b>MP-820-90</b>	
				
210° to 270°		<b>MP-815-210</b>	<b>MP-820-210</b>	
				
360°	<b>MP-800SR-360</b> Short Radius	<b>MP-815-360</b>	<b>MP-820-360</b>	

### MP Strip Nozzles

Shape



**MP-LCS-515**  
5' x 15' Left Corner



**MP-RCS-515**  
5' x 15' Right Corner



**MP-SS-530**  
5' x 30' Side Strip

### MP Corner Nozzles

0.4  
in/hr

Arc



45° to 105° **MP-CORNER**  
8' x 15'

### MP Rotator Male-Threaded

Available in all MP Rotator models, except MP-1000-210, MP-3500-90, and MP800 Family



**MP-HT**  
Male-Threaded



Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.

A white, handwritten signature of Gregory R. Hunter.

Gregory R. Hunter, CEO of Hunter Industries

A white, handwritten signature of Denise Mullikin.

Denise Mullikin, President, Landscape Irrigation and Outdoor Lighting

**Website** [hunterindustries.com](https://hunterindustries.com) | **Customer Support** 1-800-383-4747