

5000 Plus Series Rotors

The Next Evolution in Rotor Performance

The 5000 Plus Series mid-range rotor complements Rain Bird's already strong Top Adjust Rotor Family, by offering greater durability, enhanced Rain Curtain™ Nozzles and the superiority of Stream Control™ Technology. This innovative new rotor has been designed with the needs of the customer in mind, while still conforming to Rain Bird's high quality standards. Whether used in a residential or commercial application, the 5000 Plus Series promises to deliver "The Next Evolution in Rotor Performance".

Features

The 5000 Plus Series Rotor is available in 4", 6", 12", Shrub, and Stainless Steel models.

- Five-year trade warranty
- Stream Control™ Technology (SCT) with Flow Shut-off capabilities
 - Flow Shut-Off device (cone valve™) integrated into the flow path of the rotor assures maximum stream efficiency
 - Flow Path to Nozzle Bore transition radius minimizes pressure loss and assures peak nozzle performance
 - Smoothed Flow Path entrance of the rotor, increases the maximum flow capabilities
- Rain Curtain™ enhanced nozzles
 - Large droplets for consistent performance
 - Effective close-in watering
 - Even distribution over the entire radius
- Tree of nozzles including 8 standard (25° trajectory) and 4 low angle (10° trajectory) provides 25 to 50 (7,6 to 15,2M) distance of throw
- Radius adjustment screw allows up to 25% radius reduction without changing nozzles
- Slip clutch mechanism for vandal resistance
- Top-adjust arc adjustment requiring only a flat-blade screwdriver
- 40- 360° Arc rotation and reversing full circle rotation in one. (A non-reversing full circle only unit is also available)
- True 4" (10 cm) pop-up (measured from the case cover to the nozzle.)
- Pressure-activated multi-function wiper seal protects internals from debris and assures positive pop-up and retraction
- Standard green rubber cover for easy identification and durability in residential or commercial applications
- Additional o-rings and seals for extra protection in "gritty" water
- Heavier-duty retract spring assures positive pop-down
- Water-lubricated gear-drive design for durable, reliable operation

- Reinforced flow path for additional side load strength
- Optional stainless steel riser (4" and 6" only) helps deter vandalism on public turf areas
- Optional Matched Precipitation Rate (MPR) nozzles
- Optional pre-installed Rain Curtain™ nozzle
- Optional Seal-A-Matic (SAM)™ check valve holds up to 7 feet (2,1 m) of elevation change, to prevent puddling and erosion caused by low head drainage
- Optional non-potable purple cover for easy identification of reclaimed water

Operating Range

- Precipitation rate: .20 to 1.01 inches per hour (5 to 26 mm/h)
- Radius: 25 to 50 feet (7,6 to 15,2 m)
- Pressure: 25-65 psi (1,7 to 4,5 bar)
- Optimal nozzle performance at 45 psi
- Flow Rate: .73 to 9.63 gpm (0,17 to 2,19 m³/h)

Specifications

- ¾" (20/27) NPT female bottom threaded inlet
- Reversing full and part circle adjustment 40° – 360°
- Full circle only adjustment 360°

Dimensions

- Pop-up height: Shrub: 4" (10 cm); 4" (10 cm); 6" (15 cm); 12" (30 cm);
- Overall body height: Shrub: 7 ¾" (19,7cm); 4": 7 ¾" (18, 5 cm); 6": 9 ⅝" (24,5 cm); 12": 16 ⅞" (42,9 cm)
- Exposed surface diameter: 1 ⅝" (4,1 cm)

Note: Pop-up height measured from cover to the nozzle. Overall body height is measured popped down.



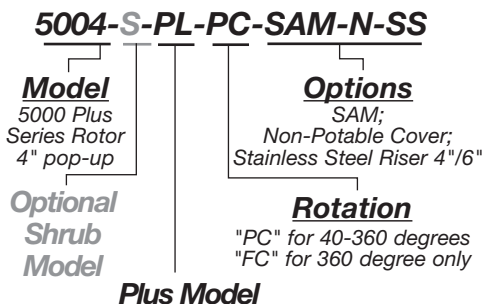
Models

Part circle units (PC) are adjustable from 40 –360 degrees. Full circle units (FC) are 360 degrees only.

- 5000-S
- 5004
- 5004-2.0 or 3.0†
- 5006
- 5012

† Pre-installed nozzle

How to Specify/Order:

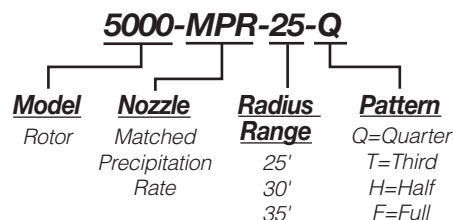


5000/5000 Plus MPR Nozzles

Achieve Matched Precipitation Rate Between 25' and 35'

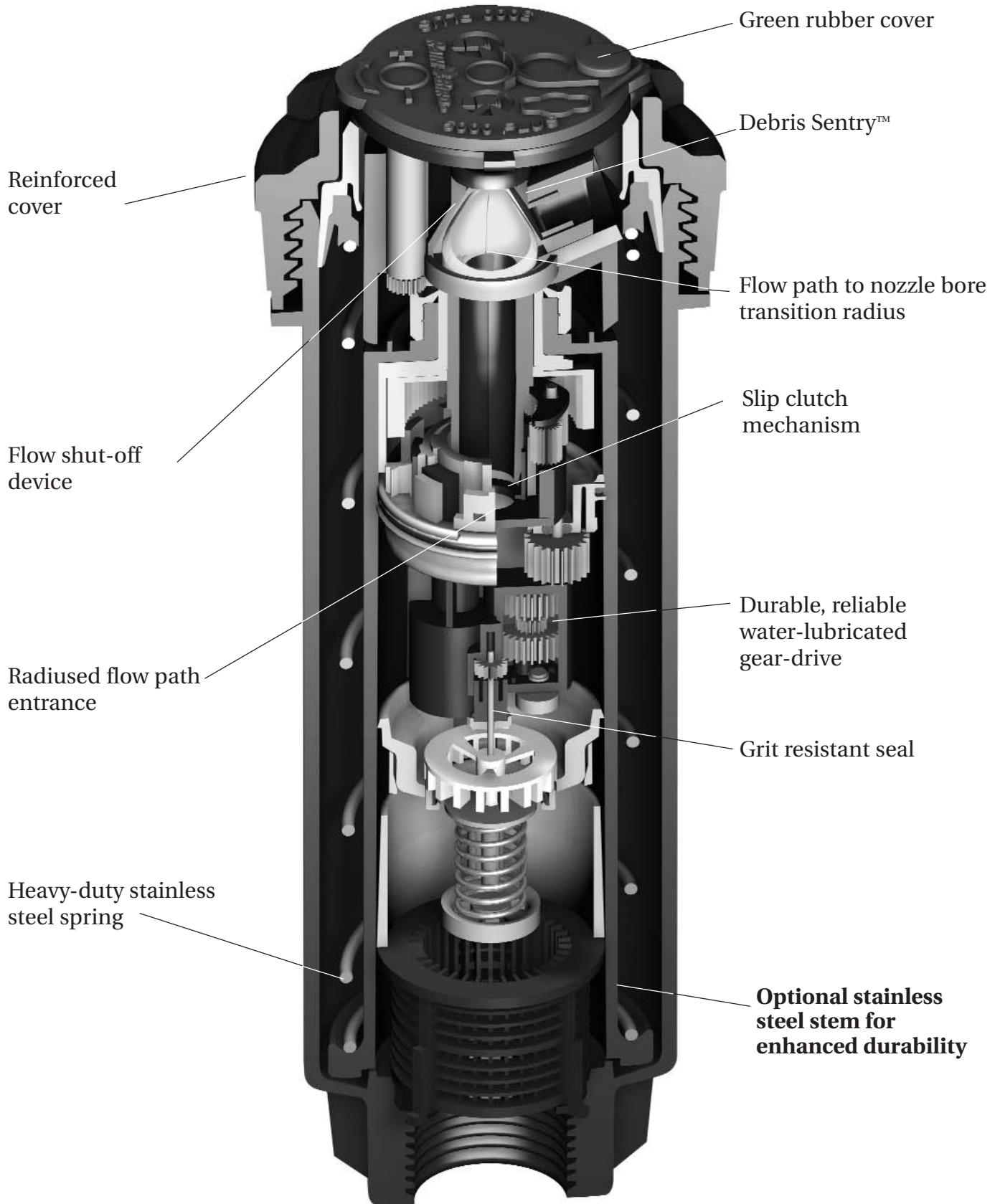
Rain Bird 5000/5000 Plus MPR Nozzles simplify both the design process and the installation of rotors, because they reliably deliver matched precipitation rates within and between rotor radii from 25' to 35'. Without having to use fixed arc plates, designers and installers can achieve matched precipitation rates. Superior flexibility in arc adjustment minimizes the risks of over- or under-watering.

How to Specify



The full 5000/5000 Plus MPR Nozzles tech spec (D39541) is also available on request.

5000 Plus Series Rotor



Standard Angle Rain Curtain Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow (GPM)	■	▲
				Precip. (in/h) Square	Precip. (in/h) Triangular
25	1.5	33	1.12	0.20	0.23
	2.0	35	1.50	0.24	0.27
	2.5	35	1.81	0.28	0.33
	3.0	36	2.26	0.34	0.39
	4.0	37	2.91	0.41	0.47
	5.0	39	3.72	0.47	0.54
	6.0	39	4.25	0.54	0.62
	8.0	36	5.90	0.88	1.01
35	1.5	34	1.35	0.22	0.26
	2.0	36	1.81	0.27	0.31
	2.5	37	2.17	0.31	0.35
	3.0	38	2.71	0.36	0.41
	4.0	40	3.50	0.42	0.49
	5.0	41	4.47	0.51	0.59
	6.0	43	5.23	0.54	0.63
	8.0	43	7.06	0.74	0.85
45	1.5	35	1.54	0.24	0.28
	2.0	37	2.07	0.29	0.34
	2.5	37	2.51	0.35	0.41
	3.0	40	3.09	0.37	0.43
	4.0	42	4.01	0.44	0.51
	5.0	45	5.09	0.48	0.56
	6.0	46	6.01	0.55	0.63
	8.0	47	8.03	0.70	0.81
55	1.5	35	1.71	0.27	0.31
	2.0	37	2.30	0.32	0.37
	2.5	37	2.76	0.39	0.45
	3.0	40	3.47	0.42	0.48
	4.0	42	4.44	0.48	0.56
	5.0	45	5.66	0.54	0.62
	6.0	47	6.63	0.58	0.67
	8.0	50	8.86	0.68	0.79
65	1.5	34	1.86	0.31	0.36
	2.0	35	2.52	0.40	0.46
	2.5	37	3.01	0.42	0.49
	3.0	40	3.78	0.45	0.53
	4.0	42	4.83	0.53	0.61
	5.0	45	6.16	0.59	0.68
	6.0	48	7.22	0.60	0.70
	8.0	50	9.63	0.74	0.86

Low Angle Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow (GPM)	■	▲
				Precip. (in/h) Square	Precip. (in/h) Triangular
25	1.0 LA	25	0.76	0.22	0.26
	1.5 LA	27	1.15	0.30	0.35
	2.0 LA	29	1.47	0.34	0.39
	3.0 LA	29	2.23	0.51	0.59
35	1.0 LA	28	0.92	0.21	0.25
	1.5 LA	30	1.38	0.30	0.34
	2.0 LA	31	1.77	0.35	0.41
	3.0 LA	33	2.68	0.47	0.55
45	1.0 LA	29	1.05	0.23	0.26
	1.5 LA	31	1.58	0.32	0.37
	2.0 LA	32	2.02	0.38	0.44
	3.0 LA	35	3.07	0.48	0.56
55	1.0 LA	29	1.17	0.25	0.29
	1.5 LA	31	1.76	0.35	0.41
	2.0 LA	33	2.24	0.40	0.46
	3.0 LA	36	3.41	0.51	0.58
65	1.0 LA	29	1.27	0.27	0.32
	1.5 LA	31	1.92	0.38	0.44
	2.0 LA	33	2.45	0.43	0.50
	3.0 LA	36	3.72	0.55	0.64

Precipitation rates calculated at 50% diameter head to head spacing, half circle operation.

Standard Angle Rain Curtain Nozzle Performance

Metric						■	▲
Pressure bar	Nozzle	Radius m	Flow m ³ /h	Flow l/s	Precip. (mm/h) Square	Precip. (mm/h) Triangular	
1,7	1,5	10,1	0,25	0,07	5	6	
	2,0	10,7	0,34	0,09	6	7	
	2,5	10,7	0,41	0,11	7	8	
	3,0	11,0	0,51	0,14	8	10	
	4,0	11,3	0,66	0,18	10	12	
	5,0	11,9	0,84	0,23	12	14	
	6,0	11,9	0,97	0,27	14	16	
	8,0	11,0	1,34	0,37	22	26	
2,0	1,5	10,2	0,28	0,08	5	6	
	2,0	10,8	0,36	0,10	6	7	
	2,5	10,9	0,44	0,12	7	9	
	3,0	11,2	0,55	0,15	9	10	
	4,0	11,6	0,71	0,20	11	12	
	5,0	12,1	0,91	0,25	12	14	
	6,0	12,4	1,05	0,29	14	16	
	8,0	11,8	1,45	0,40	21	24	
2,5	1,5	10,4	0,31	0,09	6	7	
	2,0	11,0	0,41	0,11	7	8	
	2,5	11,3	0,50	0,14	8	9	
	3,0	11,2	0,62	0,17	9	11	
	4,0	12,3	0,81	0,22	11	13	
	5,0	12,7	1,03	0,29	13	15	
	6,0	13,2	1,21	0,34	14	16	
	8,0	13,3	1,63	0,45	19	21	
3,0	1,5	10,6	0,34	0,10	6	7	
	2,0	11,2	0,45	0,13	7	8	
	2,5	11,3	0,56	0,16	9	10	
	3,0	12,1	0,69	0,19	9	11	
	4,0	12,7	0,89	0,25	11	13	
	5,0	13,5	1,13	0,31	12	14	
	6,0	13,9	1,34	0,37	14	16	
	8,0	14,1	1,79	0,50	18	21	
3,5	1,5	10,7	0,37	0,10	7	8	
	2,0	11,3	0,49	0,14	8	9	
	2,5	11,3	0,60	0,17	9	11	
	3,0	12,2	0,74	0,21	10	12	
	4,0	12,8	0,97	0,27	12	14	
	5,0	13,7	1,23	0,34	13	15	
	6,0	14,2	1,45	0,40	14	17	
	8,0	14,9	1,93	0,54	18	20	
4,0	1,5	10,6	0,40	0,11	7	8	
	2,0	11,1	0,52	0,15	8	10	
	2,5	11,3	0,64	0,18	10	12	
	3,0	12,2	0,80	0,22	11	12	
	4,0	12,8	1,04	0,29	13	15	
	5,0	13,7	1,32	0,37	14	16	
	6,0	14,9	1,55	0,43	15	17	
	8,0	15,2	2,06	0,57	18	21	
4,5	1,5	10,4	0,42	0,12	8	9	
	2,0	10,7	0,55	0,15	10	11	
	2,5	11,3	0,68	0,19	11	12	
	3,0	12,2	0,84	0,23	11	13	
	4,0	12,8	1,10	0,30	13	15	
	5,0	13,7	1,40	0,39	15	17	
	6,0	14,6	1,64	0,47	15	18	
	8,0	15,2	2,19	0,61	19	22	

Low Angle Nozzle Performance

Metric						■	▲
Pressure bar	Nozzle	Radius m	Flow m ³ /h	Flow l/s	Precip. (mm/h) Square	Precip. (mm/h) Triangular	
1,7	1,0 LA	7,6	0,17	0,05	6	7	
	1,5 LA	8,2	0,26	0,07	8	9	
	2,0 LA	8,8	0,33	0,09	9	10	
	3,0 LA	8,8	0,51	0,14	13	15	
2,0	1,0 LA	8,0	0,18	0,05	6	6	
	1,5 LA	8,6	0,28	0,08	8	9	
	2,0 LA	9,1	0,36	0,10	9	10	
	3,0 LA	9,3	0,55	0,15	13	15	
2,5	1,0 LA	8,6	0,20	0,06	5	6	
	1,5 LA	9,2	0,32	0,09	8	9	
	2,0 LA	9,5	0,41	0,11	9	10	
	3,0 LA	10,1	0,62	0,17	12	14	
3,0	1,0 LA	8,8	0,22	0,06	6	7	
	1,5 LA	9,4	0,35	0,10	8	9	
	2,0 LA	9,7	0,45	0,13	10	11	
	3,0 LA	10,6	0,68	0,19	12	14	
3,5	1,0 LA	8,8	0,24	0,07	6	7	
	1,5 LA	9,4	0,38	0,11	9	10	
	2,0 LA	9,9	0,49	0,14	10	11	
	3,0 LA	10,8	0,74	0,21	13	15	
4,0	1,0 LA	8,8	0,26	0,07	7	8	
	1,5 LA	9,4	0,41	0,11	9	11	
	2,0 LA	10,1	0,52	0,15	10	12	
	3,0 LA	11,0	0,80	0,22	13	15	
4,5	1,0 LA	8,8	0,27	0,08	7	8	
	1,5 LA	9,4	0,44	0,12	10	11	
	2,0 LA	10,1	0,56	0,15	11	13	
	3,0 LA	11,0	0,84	0,23	14	16	



5000 Plus Series Rotor Technical Specification

5000 Plus Series Full and Reversing Full/Part Circle Sprinkler

The full and/or part circle sprinkler shall be a single-stream, water-lubricated, gear-drive type capable of covering a ___ foot (xx meter) at ___ pounds per square inch (psi) or (bar) with a discharge rate of ___ gallons per minute (___ gpm) (___ m³/h). The sprinkler shall have a flow shut-off device that is integrated into the flow path of the rotor as well as adjustable arc coverage of 40 to 360 degrees. Arc adjustment can be performed with or without the sprinkler in operation and shall require only a flat-blade screwdriver.

The Sprinkler shall have a smoothed flow path entrance to enhance the flow characteristics of the rotor. In addition, the sprinkler shall feature a flow path to nozzle bore transition radius to minimize pressure loss and assure peak nozzle radius is achieved.

The sprinkler shall have a pressure activated, multi-function wiper seal that positively seals against the pop-up stem to keep debris out of the rotor and to clean debris from the pop-up stem as it retracts.

This wiper seal shall prevent sprinkler from sticking up, and be capable of sealing the sprinkler cap to sprinkler body under normal operating pressures.

The sprinkler shall have a screen installed in the pop-up stem to filter inlet water, protect the drive from clogging and simplify its removal for cleaning and flushing of the system. It shall have a 3/4" (FNPT) bottom inlet.

The sprinkler shall have a standard green rubber cover and a strong stainless steel retract spring for positive pop down. Pop-up height as measured from the top of the cap, at normal installation, to the middle of the nozzle orifice shall be ___ inches or ___ cm.

The rotor's overall height shall be ___ inches (___ cm), with an exposed surface diameter of 1 5/8" (4,1 cm).

The sprinkler shall have 12 interchangeable nozzles: 8 Rain Curtain nozzles for superior coverage and, 4 Low Angle nozzles for reduced radius of throw and superior wind resistance with all nozzles containing Micro-Ramp™ for superior close-in watering. The angle of trajectory shall be 25 degrees for the Rain Curtain nozzles and 10 degrees for the low angle nozzles. The sprinkler shall come with a stainless steel adjusting screw capable of reducing the radius up to 25%.

The sprinkler shall be as manufactured by Rain Bird Corporation, Glendora, California.

Optional Feature Specification

5000 Plus Series SAM, Full and Reversing Full/Part Circle Sprinkler SAM unit

When so indicated on the design, the sprinkler shall have a spring-loaded Seal-A-Matic™ (SAM) device in the base of the case. The device shall hold back at least 7' (2, 13m) of elevation change to prevent puddling, run-off and erosion caused by low-head drainage.

5000 Plus Series Full and Reversing Full/Part Circle Non-Potable

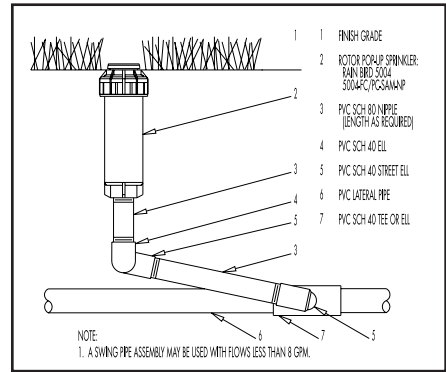
When so indicated on the design, the sprinkler shall have a purple rubber cover to indicate to the user that non-potable water is being used. There shall be no difference between the black and the purple covers, except for the color.

The sprinkler shall be as manufactured by Rain Bird Corporation, Glendora, California.

5000 Plus Series Shrub Model

Full and Reversing Full/Part Circle Sprinkler (SAM)

When so indicated on the design, the shrub model shall contain all of the specifications of the standard 5000 Plus series rotor plus a locking screw to fasten the shrub unit to the riser. Additionally, the shrub base unit will feature Secure Ribs™ that are designed to assist in the staking of the shrub model if so



specified on the design. When the Seal-A-Matic™ (SAM) model is indicated on the design, the device shall hold back at least 7' (2,13m) of elevation change to prevent puddling, run-off and erosion caused by low head drainage. As well the SAM unit shall experience no pressure loss during normal operation.

5000 Plus Series Stainless Steel

When so indicated on the design, the rotor shall have a stainless steel covered nozzle turret and riser stem. This riser stem shall be tapered and conform to the standard plastic riser in all other ways.

5000 MPR Nozzle Specification

The MPR Nozzle shall be capable of covering a ___ foot radius (FT.RAD.)/(meter) at ___ pounds per square inch (psi)/(Bars) with a discharge rate of ___ gallons per minute (GPM)/(m³/h, l/s).

The MPR Nozzle shall have a matched precipitation rate of 0.6 in/hr (15 mm/h) at 45 psi (3,1 bar).

The MPR Nozzle shall be color-coded by radius. The MPR Nozzle shall contain Micro Ramp™ technology for superior close-in watering.

The MPR Nozzle shall be manufactured by Rain Bird Corporation, Azusa, California.

Rain Bird Corporation

Contractor Division
970 West Sierra Madre Avenue, Azusa, CA 91702
Phone: (626) 963-9311 Fax: (626) 812-3411

Rain Bird Corporation

Commercial Division
6991 East Southpoint Road, Tucson, AZ 85706
Phone: (520) 741-6100 Fax: (520) 741-6522

Rain Bird International, Inc.

145 North Grand Avenue, Glendora, CA 91741
Phone: (626) 963-9311 Fax: (626) 963-4287

Rain Bird Technical Service

(800) 247-3782 (U.S. only)

www.rainbird.com

Rain Bird. Conserving More Than Water.

® Registered trademark of Rain Bird Corporation.
© 2004 Rain Bird Corporation 4/04

D39447B