



## TECH SPECS

### 3000 Series Rain Guns Two Inch, Full and Part Circle

#### ***Longer life, improved performance, better value***

The new 3000 Series Rain Guns® bring Rain Bird back to the forefront of quality, performance, and technology. This next generation incorporates the highest standards of manufacturing along with the latest technological improvements to create a superior gun with better performance, less maintenance and longer life than ever before.

#### ***SR3003 and F3002 Features***

- 23° body trajectory
- Laser cut, spring loaded, stainless steel arm
- Improved spoon design
- Set of 6 metric, taper bore nozzles included - 14, 16, 18, 20, 22, & 24mm (.55, .63, .71, .79, .87, .94 inches)
- Integral straightening vanes
- Stronger body assembly
- Reinforced linkage assemblies
- Self-adjusting brake mechanism
- Sealed lube-for-life bearing
- Improved trip-collar adjustments
- DN 80 (3") 6 hole, flange mount standard
- NPT and BSP flange adapters
- Counterweight available for slopped conditions
- 3 year warranty

#### ***The Highest Standards***

Rain Bird guns are manufactured to the highest standards in a factory which is ISO9002 certified. Each gun is water tested for adherence to strict specifications well above and below our published pressure ratings to ensure that no matter what the conditions, a Rain Bird Rain Gun will always be your best choice. This is why we back each Rain Gun with an unprecedented three year warranty in agricultural applications.



*SR3003 Slow Reverse Rain Gun*

#### ***Lower Maintenance***

Rain Bird Rain Guns are designed to work right out of the box, without adjustments, and to keep working for years with minimal maintenance. Most guns require grease on a regular schedule. Many of our competitors pack their bearings less than 30% full. This unfilled space allows for condensation and water build-up which can lead to an eventual breakdown of the grease, corrosion, and bearing failure. This is why all Rain Gun bearings are permanently sealed and packed a minimum 80% full with a durable, wide temperature range, water resistant silicone grease.

The braking system is also maintenance free. The spring loaded clutch self-adjusts to keep consistent rotation times through the life of the gun. All trip mechanisms are reinforced with stainless steel washers and cotter pins. Straightening vanes are molded directly into the body to cut down on water turbulence and to add strength and distance of throw.

#### ***Part Numbers***

##### **SR3003**

Slow Reverse,  
Part Circle Rain Gun

##### **F3002**

Full Circle Rain Gun

#### ***How to Order:***

##### **SR - 3003 - NPT**

##### **Arc Settings**

SR=Slow Reverse  
F=Full Circle

##### **Model**

##### **(optional) Female Flange Adapter**

NPT=Standard  
Pipe Thread  
BSP=Metric  
Pipe Thread

## Lower Maintenance *continued*

All body joints are bonded together using a chemical process that is rated for up to 2 tons of pressure. The trip collars are easily adjustable and stay in place without the use of tools or time consuming adjustments. The bearing assembly is marked every 10° to make arc adjustments easier.

Even with all these features, the 3000 series guns are constructed using less than 50 components. Fewer components mean fewer problems so you can rest easy – confident in your decision to choose Rain Bird.

## The Best Value

Rain Guns offer a wide variety of features and benefits that come together to create an exceptional value. We include all the accessories you will need right in the box. Each gun comes with a standard 2mm (.08") neoprene gasket and bolt kit, and a set of 6 taper bore nozzles - 14, 16, 18, 20, 22, & 24mm (.55, .63, .71, .79, .87, .94 inches) - at no extra charge. Rain Guns

can be mounted to a standard three inch DN 80, six hole flange, or flange adapters can be ordered in either NPT or BSP thread patterns. When ordered together, the adapter will be shipped in the box with the gun.

## Outstanding Performance

The 3000 Series Rain Guns are built to perform and to last. The all new arm is laser cut from a solid sheet of stainless steel to provide maximum strength, durability and corrosion resistance. The spoon is molded from chemical and impact resistant Delryn®. A stainless steel spring absorbs excess shock from the arm which allows for a much smoother arm stroke, and the removal of excess counterweights. With the counterweights out of the way, the arm can be centered directly over the body of the gun, distributing weight evenly. By reducing the weight of the gun and bringing it into balance, excess vibration and wear are reduced which dramatically improves the performance and life of the gun.



Stainless steel arm with Delrin® spoon



Set of 6 taper bore nozzles

## Performance Data - U.S. Units

PSI	Nozzle .55"		Nozzle .63"		Nozzle .71"		Nozzle .79"		Nozzle .87"		Nozzle .94"	
	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM
40	99	53	103	68	104	85	108	105	110	126	111	152
50	104	58	112	77	113	96	122	118	125	141	128	170
60	108	63	120	84	120	105	133	130	137	158	141	187
70	113	69	127	90	130	114	138	140	143	168	148	213
80	121	73	131	97	134	122	143	149	148	181	154	218
90	127	77	135	103	137	129	147	160	152	192	158	230
100	129	82	136	107	139	135	149	167	157	202	161	242

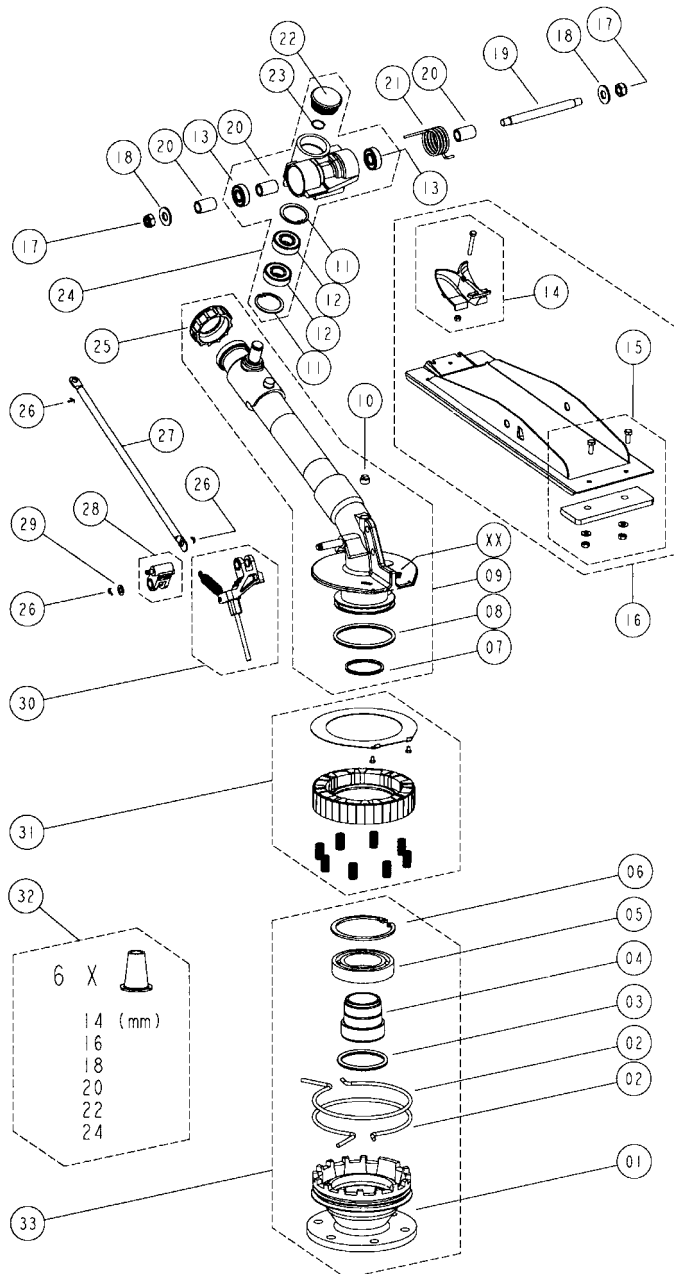
## Performance Data - Metric Units

Bar	Nozzle 14 mm		Nozzle 16 mm		Nozzle 18 mm		Nozzle 20 mm		Nozzle 22 mm		Nozzle 24 mm	
	Rad.m	Flow m3/h	Rad.m	Flow m3/h	Rad.m	Flow m3/h	Rad.m	Flow m3/h	Rad.m	Flow m3/h	Rad.m	Flow m3/h
2,5	29,0	12,1	30,3	14,7	30,0	18,4	31,0	22,7	31,5	27,3	31,5	32,8
3,0	31,0	12,2	32,5	16,2	33,0	20,2	34,5	25,0	35,5	29,8	36,0	36,0
3,5	31,8	13,2	34,3	17,5	34,5	21,8	37,3	27,0	38,5	32,4	39,3	39,0
4,0	32,5	14,1	36,0	18,7	36,0	23,4	40,0	29,0	41,5	35,0	42,5	41,9
4,5	33,8	14,9	37,5	19,8	38,0	24,8	41,3	30,7	42,8	37,0	44,1	44,5
5,0	35,0	15,8	39,0	20,8	40,0	26,2	42,5	32,4	44,0	39,0	45,6	47,0
5,5	36,8	16,5	39,9	21,9	40,8	27,8	43,5	34,0	45,0	40,9	46,8	49,3
6,0	38,5	17,3	40,8	23,0	41,5	28,9	44,5	35,5	46,0	42,7	48,0	51,5
6,5	39,0	18,0	41,2	23,8	42,0	30,0	45,0	36,9	47,0	44,5	48,5	53,6
7,0	39,5	18,6	41,5	24,5	42,5	31,1	45,5	38,2	48,0	46,2	49,0	55,6



Arm pivot housing

## Parts Diagram and Description



Ref.	Part Description	Part Numbers
01	Bearing Sleeve	71-P50417
02	Friction Collar (2 required)	71-P50116
03	Lower Bearing O-Ring Seal	included in A and 33
04	Lock Nut	71-110105
05	Ball Bearing	71-P50544
06	Snap Ring	71-P50463
07	Lock Nut O-Ring Seal	included in A and 09
08	Upper Bearing O-Ring Seal	included in A and 09
09	Elbow/Range Tube Assembly	71-P50471
10	Elbow Plug	included in B and 09
11	Pivot Snap Ring (2 required)	71-P50197
12	Pivot Ball Bearing (2 required)	71-P00324
13	Arm Ball Bearing (2 required)	71-P50060
14	Spoon Kit	71-P50584
15	Counterweight Kit	71-P50585
16	Arm Assembly	71-P50472
17	Arm Nut (2 required)	included in C
18	Arm Washer (2 required)	included in C
19	Arm Shaft	included in C
20	Spacer (3 required)	71-P50420
21	Arm Spring	71-P50424
22	Pivot Cap	included in A and 24
23	Snap Ring	included in B and 24
24	Pivot Assembly	71-P50586
25	Nozzle Retainer	71-105943
26	Cotter Pin (3 required)	included in B
27	Trip Rod	71-P50478
28	Trip Link Assembly	71-P50539
29	Elbow Shaft Washer	included in B
30	Trip Lever Assembly	71-P50538
31	Brake Kit	71-P50587
32*	GNS-3003-T Nozzle Set	L003003
33	Bearing Assembly	71-P50588
XX	Date Code	

\* Consult current Agriculture Equipment Price List

### SPARE PART KITS

A	Seal Kit	71-P50589
B	Misc. Kit	71-P50590
C	Arm Shaft Kit	71-P50591



## **Specifications**

The full circle or part circle impulse drive sprinkler shall be a single nozzle type, capable of covering \_\_\_\_\_ (feet/meters) radius, at \_\_\_\_\_ (PSI/bars) with a discharge rate of \_\_\_\_\_ (GPM/M3H). The sprinkler body and bearing sleeve shall be of heat treated, cast aluminum.

Straightening vanes shall be integral to the body. The sprinkler arm, springs, fulcrum shafts, and trip mechanisms shall be stainless steel. All trip mechanisms shall be reinforced with stainless steel washers and cotter pins. The drive nozzle trajectory shall be 23 degrees from horizontal.

The rotation of the sprinkler shall be accomplished by a spring loaded, stainless steel vertical oscillating arm, actuated by the outlet water stream. The part circle models shall have a slow-reverse feature for reduced vibration and greater safety.

The nozzle and spoon assembly shall be durable, chemically resistant plastic and shall be easily replaceable. A set of six metric sized, taper bore nozzles shall be included with the gun - 14, 16, 18, 20, 22, & 24mm (.55, .63, .71, .79, .87, .94 inches). The nozzle size shall be molded into the plastic for easy identification.

The bearing assembly shall be permanently sealed and packed a

minimum of 80% with a wide temperature range, water resistant silicone grease. The brake mechanism will be spring loaded and self-adjusting.

On part circle models, adjustable friction collars will be supplied to set arc adjustments without the use of tools, and the bearing assembly will be marked in ten degree increments to facilitate adjustments.

The F3002 shall be for full circle operation only. The SR3003 shall have adjustable part circle or full circle operation.

The sprinkler shall have DN 80, six hole flange inlets, and a 2mm (.08") neoprene gasket and bolt kit shall be supplied with the gun.

An optional (NPT/BSP) flange adapter will be supplied to adapt the flange inlet to a (2"/50mm) female inlet.

The sprinkler shall carry a three year warranty against original defects in material or workmanship in agricultural applications. The sprinkler shall be supplied by Rain Bird Sprinkler Mfg. Corp., Glendora, California.

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