

TECH SPECS

2000 Series Rain Guns Three Inch, Full and Part Circle

Longer life, improved performance, better value

The Rain Bird family of three inch Rain Guns[®] has been updated to include a number of new and improved features. This next generation incorporates the highest standards of manufacturing along with the latest technological improvements to create a family of superior guns with better performance, less maintenance and longer life than ever before.

SR2005 and F2004 Features

- 23° body trajectory
- Dual spring loaded, cast aluminum arms
- Adjustable aluminum spoon design
- Set of 6 taper bore nozzles included .8, .9, 1.0, 1.1, 1.2, & 1.3 inches (20, 23, 25, 28, 31, 33mm)
- Ring orifice nozzles available .87, .99, 1.1, 1.2, 1.29, & 1.38 inches (22, 25, 28, 30, 33, 35mm)
- Integral straightening vanes
- Stronger body assembly
- Improved trip assembly
- 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.

The Lowest 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 infiltration which can lead to an eventual breakdown of the grease, corrosion, and bearing failure. This is why F2004 and SR2005 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 on these models is also maintenance free. The spring

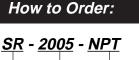
Part Numbers

SR2005

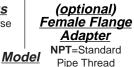
Slow Reverse, Full/Part Circle Rain Gun

F2004

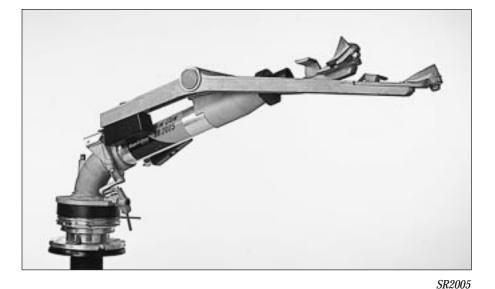
Full Circle Rain Gun



Arc Settings SR=Slow Reverse F=Full Circle



Pipe Thread BSP=Metric Pipe Thread





Lower Maintenance continued

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.

All body joints are bonded together through 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.

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 (.03") neoprene gasket and bolt kit, and a set of 6 taper bore nozzles -.8, .9, 1.0, 1.1, 1.2, & 1.3 inches (20, 23, 25, 28, 31, 33mm) is included 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.

Outstanding Performance

Rain Bird Rain Guns are built to perform and to last. The dual arm design of our part circle guns provides better distribution and uniformity than single arm designs. The cast aluminum spoons are adjustable to provide greater control of the rotation speed. Stainless steel springs are used to absorb excess shock from the arms which allows for a much smoother arm stroke, and the removal of excess counterweights.

Performance Data - U.S. Units

SR2005/F2004 - GNS-2005T Taper Bore Nozzles

PSI	Nozzle .8"		Nozzle .9"		1.	Nozzle 1.0"		Nozzle 1.1"		Nozzle 1.2"		zle 3"
	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM
60	145	144	154	188	164	230	172	277	179	328	193	390
70	152	154	163	199	172	245	182	296	191	355	200	420
80	158	165	169	214	179	262	189	318	198	379	208	451
90	163	175	173	227	184	279	195	337	204	403	214	477
100	168	186	179	238	189	293	200	356	210	423	220	502
110	172	193	183	249	193	306	205	371	215	443	225	528

SR2005/F2004 - GNS-2005O Ring Orifice Nozzles

PSI	Nozzle .87"		Nozzle .99"		Nozzle 1.10"		Nozzle 1.20"		Nozzle 1.29"		Nozzle 1.38"	
	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM	Rad.	GPM
60	133	110	143	142	151	181	160	224	167	274	177	326
70	138	120	148	154	157	199	167	245	175	296	184	352
80	143	129	154	165	163	216	174	262	183	318	192	378
90	148	136	159	175	169	227	180	278	189	337	199	401
100	153	143	163	184	174	238	186	293	196	356	205	424
110	157	150	167	193	179	249	191	306	201	371	210	441

Performance Data - Metric Units

SR2005/F2004 - GNS-2005T Taper Bore Nozzles

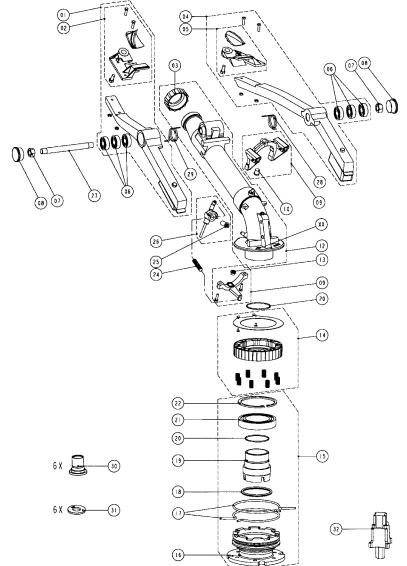
Bar	Nozzle 22.12 mm		Nozzle 25.15 mm		Nozzle 27.94 mm		Nozzle 30,48 mm		Nozzle 32.77 mm		Nozzle 35,05 mm	
		Flow m3/h	Rad.m	Flow m3/h	Rad.m	Flow m3/h	Rad.m	Flow m3/h	- /	Flow m3/h	Rad.m	Flow m3/h
4.0	40,2	24,8	43,2	32,1	45,6	40,6	48,4	50,2	51,0	61,3	53,6	73,1
4.5	41,0	25,9	44,1	33,6	46,8	43,7	49,5	53,3	52,2	75,5	54,9	76,7
5.0	42,4	27,5	45,5	35,7	48,4	46,3	51,3	56,5	54,0	68,6	56,7	81,5
5.5	43,6	29,0	46,7	37,6	49,7	48,6	52,8	59,5	55,7	72,2	58,4	85,8
6.0	44,8	30,3	47,9	39,3	51,0	50,8	54,3	62,2	57,1	75,5	59,9	89,8
6.5	45,8	31,6	48,9	40,9	52,2	52,7	55,6	64,7	58,5	78,5	61,3	93,4
7.0	46,8	32,7	49,9	42,4	53,2	54,6	56,8	67,0	59,8	81,4	62,6	96,8
7.5	47,7	33,8	50,8	43,7	54,2	56,2	57,9	69,2	61,0	84,0	63,8	100,0

SR2005/F2004 - GNS-2005O Ring Orifice Nozzles

		zzle		zzle		zzle		ozzle		zzle		zzle
Bar	20,3	2 mm	22,8	6 mm	25,4	0 mm	27,9	94 mm	30,7	'8 mm	33,0	2 mm
	Rad.m	Flow m3/h										
4.0	43,5	32,5	46,2	42,4	49,4	51,8	51,5	62,2	53,6	73,5	-	-
4.5	45,5	33,6	48,6	43,6	51,5	53,4	54,2	64,5	57,0	77,4	59,9	91,7
5.0	46,8	35,7	50,1	46,2	53,0	56,7	55,9	68,6	58,8	82,1	61,6	92,7
5.5	48,1	37,6	51,3	48,6	54,4	59,6	57,4	72,2	60,3	86,3	63,2	102,2
6.0	49,2	39,4	52,5	50,7	55,6	62,3	58,8	75,5	61,7	90,2	64,7	106,8
6.5	50,2	41,0	53,3	52,7	56,7	64,8	60,1	78,5	63,1	93,7	66,0	111,1
7.0	51,2	42,4	54,6	54,6	57,7	67,0	61,2	81,4	64,3	97,0	67,2	114,9
7.5	52,1	43,8	55,6	56,3	58,7	69,2	62,3	84,0	65,4	100,0	-	-



Parts Diagram and Description



Ref.	Part Description	Part Numbers
01	Reverse Arm Assembly	71-P50333
02	Reverse Spoon Bracket Assembly	71-P00382
03	Nozzle Retainer	71-P50302
04	Forward Arm Assembly	71-P50332
05	Forward Spoon Bracket Assembly	71-P00364
06	Ball Bearing	71-P00324
07	Arm Nut (2)	Included in Kit B
08	Arm Cap (2)	Included in Kit B
09	Trip Yoke Assembly	71-P50215
10	Upper Bushing	Included in Kit A
12	Elbow/Range Tube Assy	71-P50308
13	Lower Bushing	Included in Kit A
14	Brake Kit	71-P50599
15	Bearing Assembly	71-P50600
16	Bearing Sleeve	71-P50287
17	Friction Collar	71-P50116
18	Lower Bearing Seal	Included in Kit A
19	Lock Nut	71-P50288
20	Lock Nut Seal	Included in Kit A
21	Ball Bearing	71-P50549
22	Snap Ring	71-P50344
23	Upper Bearing Seal	Included in Kit A
24	Trip Spring	71-P00359
25	Trip lever Bushing	Included in Kit A
26	Trip Lever Assembly	71-P50331
27	Arm Shaft	Included in Kit B
28	Forward Spring	71-P50295
29	Reverse Spring	71-P50296
30*	GNS-2005T Taper Bore Nozzle (6)	
31*	GNS-2005T Ring Nozzle (6) Set	
32	Bearing Wrench	71-P50360
	* Consult current Agricultural Equipr	ment Price List
	SPARE PARTS KIT	74 050004
A	Maintenance Kit	71-P50364
В	Arm Shaft Kit	71-P50365



F2004 and SR2005 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. The drive nozzle trajectory shall be 23 degrees from horizontal.

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

The nozzle shall be of durable, chemically resistant plastic and shall be easily replaceable. A set of six taper bore nozzles shall be included with the gun - .8, .9, 1.0, 1.1, 1.2, & 1.3 inches (20, 23, 25, 28, 31, 33mm). 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 selfadjusting.

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 F2004 shall be for full circle operation only. The SR2005 shall have adjustable part circle or full circle operation.

The sprinkler shall have a DN 80, six hole flange inlet, 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 (3"/76mm) 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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Rain Bird International, Inc.

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