Rotors

Major Products	Closed Case Rotors				Open Case Rotor	
Primary Applications	3504 Series	5000 Series	8005 Series	Falcon™ 6504 Series	2045A Maxi-Paw™ Series	XLR Water Jet Series
Turfgrass 15' to 30'	●	●				
Turfgrass 25' to 50'		●	●	●	●	
Turfgrass more than 50'			●	●		●
Residential	●	●			●	
Commercial		●	●	●	●	●
Vandalism/Damage Prone Areas			●			
Slopes	●	●	●	●	●	●
Ground Cover/Shrubs	●	●				
Athletic Fields			●	●		●
Pressure Regulating		●				
High Wind Areas	●	●	●	●	●	●
Taller Turfgrass		●	●			●
Non-Potable Water	●	●	●	●	●	●

Water Saving Tips

- Rain Curtain™ nozzle technology is the standard in water-saving nozzle performance. Rain Curtain™ performance is available in all Rain Bird Rotors.
- 5000 Series Rotors with PRS reduce water waste from 15%-45%. By eliminating pressure variation and/or over pressurization, you'll save water and deliver greener results.
- All rotors with Seal-a-Matic™ (SAM) check valves prevent drainage from heads at lower elevations, stop water waste and eliminate landscape damage due to flooding and/or erosion.

3500 Series

Compact Residential Rotor. Big on Value and Convenience

Features

- Rain Curtain™ nozzles deliver even distribution over the entire radius including large wind resistant droplets and gentle close-in watering resulting in greener turf using less water
- Oversized wiper seal prevents leaks and protects internals from debris
- Arc adjustment through the top of the rotor requiring only a flat-blade screwdriver
- 3 year trade warranty

Options

- SAM Seal-A-Matic check valve
- Purple Cover (NP) for non-potable water

Operating Specifications

- Precipitation rate: 0.37 to 0.83 inches per hour (9 to 21 mm/h)
- Radius: 15 to 35 feet (4.6 to 10.7 m)
- Radius may be reduced up to 25% with radius reduction screw
- Pressure: 25 to 55 psi (1.7 to 3.8 bar)
- Flow rate: 0.54 to 4.6 gpm (2.0 to 17.4 l/m)
- ½" NPT female bottom threaded inlet
- Reversing full- and part-circle adjustment 40° - 360°
- Optional SAM check valve holds up to 7 feet (2 m) of elevation change
- Nozzle trajectory of 25

Models

- 3504-PC: 4" part/reverse full circle
- 3504-PC-SAM: 4" part/reverse full circle with SAM
- 3504-PC-SAM-NP: 4" part/reverse full circle with SAM and NP cover
- 3500-S-PC-SAM: 4" part/reverse full circle shrub model with SAM

3504-PC

0.37 to 0.83 in/hr
(9 to 21 mm/h)

25 to 55 psi
(1.7 to 3.8 bar)

0.54 to 4.6 gpm
(2.0 to 17.4 l/m)
(0.12 to 1.04 m³/h)

4" (10.2 cm)
Shrub: 7" (17.8 cm)
4": 6 5/8" (16.8 cm)
½" NPT

How to Specify

3500 - S - PC - SAM — Shrub Models

3504 - PC - SAM - NP — 4" Models

- **Model** 3500 Series 4" pop-up
- **Model** Shrub
- **Rotation** PC: Reversing Part Circle
- **Options** SAM
- **Options** NP: Non-potable cover

Superior Distribution Uniformity

The 3500 Series Rotors with Rain Curtain™ Technology are engineered to deliver a uniform spray pattern, giving you a consistently green lawn throughout.

3504 Series Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip ■ In/h	Precip ▲ In/h
25	0.75	15	0.54	0.46	0.53
	1.0	20	0.77	0.37	0.43
	1.5	23	1.06	0.39	0.45
	2.0	27	1.40	0.37	0.43
	3.0	29	2.17	0.50	0.57
	4.0	31	2.97	0.59	0.69
35	0.75	17	0.67	0.45	0.52
	1.0	21	0.92	0.40	0.46
	1.5	23	1.28	0.47	0.54
	2.0	27	1.69	0.45	0.52
	3.0	31	2.60	0.52	0.60
	4.0	33	3.58	0.63	0.73
45	0.75	17	0.77	0.51	0.59
	1.0	21	1.06	0.46	0.53
	1.5	24	1.48	0.49	0.57
	2.0	27	1.93	0.51	0.59
	3.0	31	3.00	0.60	0.69
	4.0	35	4.13	0.65	0.75
55	0.75	18	0.85	0.51	0.58
	1.0	22	1.18	0.47	0.54
	1.5	24	1.65	0.55	0.64
	2.0	28	2.15	0.53	0.61
	3.0	32	3.25	0.61	0.71
	4.0	35	4.60	0.72	0.83

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

3504 Series Nozzle Performance METRIC

Pressure bar	Nozzle	Radius m	Flow m^3/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
1.7	0.75	4.6	0.12	2.04	12	14
	1.0	6.1	0.17	2.91	9	11
	1.5	7.0	0.24	4.01	10	11
	2.0	8.2	0.32	5.30	9	11
	3.0	8.8	0.49	8.21	13	15
	4.0	9.4	0.67	11.24	15	17
2.0	0.75	4.8	0.13	2.24	12	13
	1.0	6.2	0.19	3.14	10	11
	1.5	7.0	0.26	4.35	11	12
	2.0	8.2	0.34	5.74	10	12
	3.0	9.1	0.53	8.87	13	15
	4.0	9.7	0.73	12.17	16	18
2.5	0.75	5.2	0.16	2.58	12	13
	1.0	6.4	0.21	3.55	10	12
	1.5	7.0	0.30	4.94	12	14
	2.0	8.2	0.39	6.51	12	13
	3.0	9.4	0.60	10.03	13	16
	4.0	10.1	0.83	13.82	16	19
3.0	0.75	5.2	0.17	2.86	13	15
	1.0	6.4	0.24	3.93	12	13
	1.5	7.3	0.33	5.49	12	14
	2.0	8.2	0.43	7.17	13	15
	3.0	9.4	0.67	11.13	15	17
	4.0	10.6	0.92	15.32	16	19
3.5	0.75	5.4	0.19	3.09	13	15
	1.0	6.6	0.26	4.27	12	14
	1.5	7.3	0.36	5.97	13	15
	2.0	8.4	0.47	7.79	13	15
	3.0	9.6	0.71	11.90	15	18
	4.0	10.7	1.00	16.66	18	20
3.8	0.75	5.5	0.19	3.22	13	15
	1.0	6.7	0.27	4.47	12	14
	1.5	7.3	0.37	6.25	14	16
	2.0	8.5	0.49	8.14	13	15
	3.0	9.8	0.74	12.30	16	18
	4.0	10.7	1.04	17.41	18	21

5000 Series

Engineered to be the Industry's Most Reliable and Best Performing Rotor

Features

- Oversized wiper seal prevents leaks and protects internals from debris
- Rain Curtain™ nozzles deliver even distribution over the entire radius including large wind resistant droplets and gentle close-in watering resulting in greener turf using less water
- A history of proven performance and reliability tested in millions of installations
- Self-flushing arc adjustment port that prevents buildup of debris
- 5 year trade warranty

Operating Specifications

- Precipitation rate: 0.20 to 1.50 in/hr (5 to 38 mm/h)
- Radius: 25 to 50 feet (7.6 to 15.2 m)
- Radius may be reduced up to 25% with radius reduction screw
- Pressure: 25 to 65 psi (1.7 to 4.5 bar)
- Flow Rate: 0.76 to 9.63 gpm (3.0 to 36.6 l/m; 0.17 to 2.19 m^3/h)
- Optional SAM check valve holds up to 7 feet (2 m) of elevation change
- Reversing full- and part-circle adjustment from 40° - 360°
- Standard nozzle trajectory of 25°. Low angle nozzle trajectory of 10°. MPR nozzles varied nozzle trajectory between 12-25°.

Optional Features

- All features of the 5000 Series plus:
  - **Plus (+) Flow shutoff** – "The Green Top." Reduce downtime on jobs by flushing and nozzling rotors without running back and forth to the controller or valves
  - **PRS (R)** with flow optimizer technology. The 45 psi pressure regulator lowers water bills, provides exact flow of each rotor, equalizes lateral lines, and eliminates misting and fogging
  - **SAM Seal-A-Matic** check valve
  - **Stainless steel (SS) riser** helps deter vandalism on public turf areas (available on 4 and 6" models)
  - **Purple cover (NP)** for non-potable systems

5000 Series

0.20 to 1.50 in/hr
(5 to 37 mm/h)

25 to 65 psi
(1.7 to 4.5 bar)

0.76 to 9.63 gpm
(3.0 to 36.6 l/m)
(0.17 to 2.19 m^3/h)

Shrub: 4" (10.2 cm)
6" (15.2 cm)
12" (30.5 cm)

Shrub: 7 3/4" (19.7cm)
4": 7 3/8" (18.5 cm)
6": 9 5/8" (24.5 cm)
12": 16 7/8" (42.9 cm)

3/4" (20/27) NPT

How to Specify

5004-+-S-PC-SAM-R-NP-SS

Options
SAM
R: PRS
NP: Non-potable cover
SS: Stainless Steel

Rotation
PC: Reversing Part Circle
FC: Full Circle

Model
Shrub

Model
Plus (+)

Model
5004: 4" pop-up
5006: 6" pop-up
5012: 12" pop-up

Note: Certain specifications not available for some rotor series.

5000 Series (cont.)

S Shrub Model
+ Flow Shut-off
PC Part Circle & Reversing Full Circle
FC Non-Reversing Full Circle
SAM Check valve
R Pressure Regulation
SS Stainless Steel
NP Non-Potable Cover

Models

Part-circle units (PC) are adjustable from 40 –350 degrees.
Full-circle units (FC) are 360 degrees only.

- 5000SPCSAM: 5000S Shrub Part Circle SAM
- 5000+SPCSAM: 5000S Shrub Plus Part Circle SAM
- 5000+SPCSAMNP: 5000S Shrub Plus Part Circle SAM Non Potable
- 5000+SPCSAMR: 5000S Shrub Plus PRS Part Circle SAM
- 5000S+PCSR: 5000S Plus Shrub PRS PC SAM NP
- 5004PC: 5004 Part Circle
- 5004PC20: 5004 Part Circle w/2.0 Nozzle
- 5004PC30: 5004 Part Circle w/3.0 Nozzle
- 5004PCSAM: 5004 Part Circle SAM
- 5004PCSAM20: 5004 Part Circle SAM w/2.0 Nozzle
- 5004PCSAM30: 5004 Part Circle SAM w/3.0 Nozzle
- 5004PCNP: 5004 Part Circle Non Potable
- 5004PCR: 5004 Part Circle PRS
- 5004PCR20: 5004 Part Circle PRS w/ 2.0 Nozzle
- 5004PCR30: 5004 Part Circle PRS w/ 3.0 Nozzle
- 5004+PC: 5004 Plus Part Circle
- 5004+PC20: 5004 Plus Part Circle w/2.0 Nozzle
- 5004+PC30: 5004 Plus Part Circle w/3.0 Nozzle
- 5004+PCSAM: 5004 Plus Part Circle SAM
- 5004+PCR 5004: Plus Part Circle PRS
- 5004+PCSAMR: 5004 Plus Part Circle SAM PRS
- 5004+PCSAMR20: 5004 Plus Part Circle SAM PRS w/2.0 Nozzle
- 5004+PCSAMR30: 5004 Plus Part Circle SAM PRS w/3.0 Nozzle
- 5004+PCSAMRNP: 5004 Plus Part Circle SAM PRS Non Potable
- 5004+PCSAMRSS: 5004 Plus Part Circle SAM PRS Stainless Steel
- 5004+PCSAMRNS: 5004 Plus Part Circle SAM PRS Stainless Steel Non Potable
- 5004FC 5004: Full Circle
- 5004+FC 5004: Plus Full Circle
- 5004+FCSAM: 5004 Plus Full Circle SAM
- 5004+FCSAMR: 5004 Plus Full Circle SAM PRS
- 5004+FCSAMRSS: 5004 Plus Full Circle Stainless Steel SAM PRS
- 5006PC: 5006 Part Circle
- 5006PC30: 5006 Part Circle w/ 3.0 Nozzle
- 5006+PC: 5006 Plus Part Circle
- 5006+PCSAM: 5006 Plus Part Circle SAM
- 5006+PCSAMNP: 5006 Plus Part Circle SAM Non Potable
- 5006+PCSAMR: 5006 Plus Part Circle SAM PRS
- 5006+PCSAMRNP: 5006 Plus Part Circle SAM PRS Non Potable
- 5006+PCSAMRSS: 5006 Plus Part Circle SAM PRS Stainless Steel
- 5006+PCSAMRNS: 5006 Plus Part Circle SAM PRS Stainless Steel Non Potable
- 5012+PCSAMR: 5012 Plus Part Circle SAM PRS
- 5012+PCSAMRNP: 5012 Plus Part Circle SAM PRS Non Potable
- 5000+SPCSAMRN: 5000S PLUS SHRUB PRS PC SAM NP

Three steps to specification:

1. Choose your rotor model and size.
2. Choose arc setting PC/FC.
3. Add available options or pre-installed nozzles.

	Model/Size *(Choose 1)*	Part or Full Circle *(Choose 1)*	Available Options *(Optional Choices)*	Pre-Installed nozzles *(Optional Choices)*	Specification Notes
Closed Case Rotors	3500S 3504	PC	SAM NP		*Part circle / reversing full circle*
	5000S 5004 5006 5000+S 5004+ 5006+ 5012+	PC FC	SAM R SS NP	20 30	*PC only on 5000, 5006 and 5012 models. 2.0 or 3.0 nozzles.*
	6504	PC FC	SS NP HS		*SAM standard.*
	8005		SS NP		*Part circle and non-reversing full circle in one head. SAM standard.*
Open Case Rotors	Maxi-Paw		SAM NP		*Part circle and non-reversing full circle in one head.*

5000 Series Std. Angle Rain Curtain™ Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip ■ In/h	Precip ▲ In/h
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	36	2.91	0.43	0.49
	5.0	37	3.72	0.52	0.60
	6.0	37	4.25	0.60	0.69
	8.0	33	5.90	1.26	1.50
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	0.42
	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	41	7.06	0.94	1.10
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	39	3.09	0.37	0.43
	4.0	42	4.01	0.44	0.51
	5.0	43	5.09	0.48	0.56
	6.0	44	6.01	0.59	0.69
	8.0	44	8.03	0.92	1.06
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	50	6.63	0.51	0.59
	8.0	47	8.86	0.80	0.93
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	50	7.22	0.55	0.64
	8.0	48	9.63	0.84	0.97

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

5000 Series Std. Angle Rain Curtain™ Nozzle Performance METRIC

Pressure bar	Nozzle	Radius m	Flow m^3/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
2.0	1.5	10.2	0.28	4.8	5	6
	2.0	10.8	0.36	6.0	6	7
	2.5	10.9	0.44	7.2	7	9
	3.0	11.2	0.55	9.0	9	10
	4.0	11.6	0.71	12.0	11	12
	5.0	12.1	0.91	15.0	13	15
	6.0	12.4	1.05	17.4	15	17
	8.0	11.8	1.45	24.0	32	37
2.5	1.5	10.4	0.31	5.4	6	7
	2.0	11.0	0.41	6.6	7	8
	2.5	11.3	0.50	8.4	8	9
	3.0	11.2	0.62	10.2	9	11
	4.0	12.3	0.81	13.2	11	13
	5.0	12.7	1.03	17.4	13	15
	6.0	13.2	1.21	20.4	14	16
	8.0	13.3	1.63	27.0	24	28
3.0	1.5	10.6	0.34	6.0	6	7
	2.0	11.2	0.45	7.8	7	8
	2.5	11.3	0.56	9.6	9	10
	3.0	12.1	0.69	11.4	9	11
	4.0	12.7	0.89	15.0	11	13
	5.0	13.5	1.13	18.6	12	14
	6.0	13.4	1.34	22.2	13	17
	8.0	13.4	1.79	30.0	23	27
3.5	1.5	10.7	0.37	6.0	7	8
	2.0	11.3	0.49	8.4	8	9
	2.5	11.3	0.60	10.2	9	11
	3.0	12.2	0.74	12.6	10	12
	4.0	12.8	0.97	16.2	12	14
	5.0	13.7	1.23	20.4	13	15
	6.0	14.2	1.45	24.0	13	15
	8.0	14.9	1.93	32.4	20	24
4.0	1.5	10.6	0.40	6.6	7	8
	2.0	11.1	0.52	9.0	8	10
	2.5	11.3	0.64	10.8	10	12
	3.0	12.2	0.80	13.2	11	12
	4.0	12.8	1.04	17.4	13	15
	5.0	13.7	1.32	22.2	14	16
	6.0	14.9	1.55	25.8	14	16
	8.0	15.2	2.06	34.2	21	25
4.5	1.5	10.4	0.42	7.2	8	9
	2.0	10.7	0.55	9.0	10	11
	2.5	11.3	0.68	11.4	11	12
	3.0	12.2	0.84	13.8	11	13
	4.0	12.8	1.10	18.0	13	15
	5.0	13.7	1.40	23.4	15	17
	6.0	14.6	1.64	28.2	15	18
	8.0	15.2	2.19	36.6	19	22

5000 Series Low Angle Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip In/h ■	Precip In/h ▲
25	1.0 LA	25	0.76	0.23	0.27
	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	0.23	0.26
	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	0.24	0.28
	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	0.27	0.31
	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	0.29	0.34
	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 based on half-circle operation
■ *Square spacing based on 50% diameter of throw*
▲ *Triangular spacing based on 50% diameter of throw*
Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

5000 Series Low Angle Nozzle Performance METRIC

Pressure bar	Nozzle	Radius m	Flow m^3/h	Flow l/m	Precip mm/h ■	Precip mm/h ▲
1.7	1.0 LA	7.6	0.17	3.0	6	7
	1.5 LA	8.2	0.26	4.2	8	9
	2.0 LA	8.8	0.33	5.4	9	10
	3.0 LA	8.8	0.51	8.4	13	15
2.0	1.0 LA	8.0	0.18	3.0	6	6
	1.5 LA	8.6	0.28	4.8	8	9
	2.0 LA	9.1	0.36	6.0	9	10
	3.0 LA	9.3	0.55	9.0	13	15
2.5	1.0 LA	8.6	0.20	3.6	5	6
	1.5 LA	9.2	0.32	5.4	8	9
	2.0 LA	9.5	0.41	6.6	9	10
	3.0 LA	10.1	0.62	10.2	12	14
3.0	1.0 LA	8.8	0.22	3.6	6	7
	1.5 LA	9.4	0.35	6.0	8	9
	2.0 LA	9.7	0.45	7.8	10	11
	3.0 LA	10.6	0.68	11.4	12	14
3.5	1.0 LA	8.8	0.24	4.2	6	7
	1.5 LA	9.4	0.38	6.6	9	10
	2.0 LA	9.9	0.49	8.4	10	11
	3.0 LA	10.8	0.74	12.6	13	15
4.0	1.0 LA	8.8	0.26	4.2	7	8
	1.5 LA	9.4	0.41	6.6	9	11
	2.0 LA	10.1	0.52	9.0	10	12
	3.0 LA	11.0	0.80	13.2	13	15
4.5	1.0 LA	8.8	0.27	4.8	7	8
	1.5 LA	9.4	0.44	7.2	10	11
	2.0 LA	10.1	0.56	9.0	11	13
	3.0 LA	11.0	0.84	13.8	14	16

Tools

Holdup Tool with Bubble Level

Features

- Combination holdup tool/bubble level makes proper installation easier
- Works with 5000, Falcon® 6504, and 8005

Model

- HOLDUPTOOL

HOLDUPTOOL

Rotor Tool

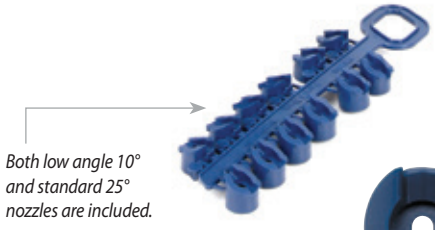
Features

- Flat blade screwdriver and pull-up tool all in one

Model

- ROTORTOOL

ROTORTOOL



Both low angle 10° and standard 25° nozzles are included.

All nozzles are numbered in gallons per minute and keyed for easy installation.

Front View

5000 PRS Std. Angle Rain Curtain™ Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip ■ In/h	Precip ▲ In/h
25	1.5	33	1.12	0.2	0.23
	2.0	35	1.5	0.24	0.27
	2.5	35	1.81	0.28	0.33
	3.0	36	2.26	0.34	0.39
	4.0	36	2.91	0.43	0.49
	5.0	37	3.72	0.52	0.66
	6.0	37	4.25	0.60	0.69
	8.0	33	5.9	1.26	1.5
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	3.5	0.42	0.49
	5.0	41	4.47	0.51	0.59
	6.0	43	5.23	0.54	0.63
	8.0	41	7.06	0.94	1.1
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	39	3.09	0.37	0.43
	4.0	42	4.01	0.44	0.51
	5.0	43	5.09	0.48	0.56
	6.0	44	6.01	0.55	0.63
	8.0	44	8.03	0.92	1.06
55 – 75	1.5	35	1.59	0.25	0.29
	2.0	37	2.14	0.3	0.35
	2.5	37	2.6	0.37	0.42
	3.0	39	3.2	0.39	0.44
	4.0	42	4.15	0.45	0.52
	5.0	43	5.27	0.5	0.58
	6.0	44	6.22	0.57	0.65
	8.0	44	8.31	0.72	0.84

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

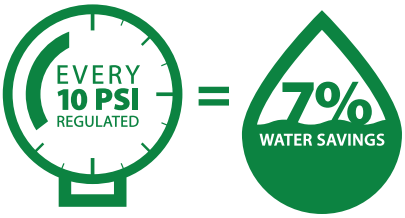
▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

5000 PRS Std. Angle Rain Curtain™ Nozzle Performance METRIC

Pressure bar	Nozzle	Radius m	Flow m^3/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
1.7	1.5	10.1	0.25	4.2	5	6
	2.0	10.7	0.34	5.4	6	7
	2.5	10.7	0.41	6.6	7	8
	3.0	11.0	0.51	8.4	8	10
	4.0	11.3	0.66	10.8	10	12
	5.0	11.9	0.84	13.8	12	14
	6.0	11.9	0.97	16.2	14	16
	8.0	11.0	1.34	22.2	22	26
2.0	1.5	10.2	0.28	4.8	5	6
	2.0	10.8	0.36	6.0	6	7
	2.5	10.9	0.44	7.2	7	9
	3.0	11.2	0.55	9.0	9	10
	4.0	11.6	0.71	12.0	11	12.6
	5.0	12.1	0.91	15.0	13	15
	6.0	12.4	1.05	17.4	15	17
	8.0	11.8	1.45	24.0	32	37
2.5	1.5	10.4	0.31	5.4	6	7
	2.0	11.0	0.41	6.6	7	8
	2.5	11.3	0.50	8.4	8	9
	3.0	11.2	0.62	10.2	9	11
	4.0	12.3	0.81	13.2	11	13
	5.0	12.7	1.03	17.4	13	15
	6.0	13.2	1.21	20.4	14	16
	8.0	13.3	1.63	27.0	24	18
3.0	1.5	10.6	0.34	6.0	6	7
	2.0	11.2	0.45	7.8	7	8
	2.5	11.3	0.56	9.6	9	10
	3.0	12.1	0.69	11.4	9	11
	4.0	12.7	0.89	16.8	11	13
	5.0	13.5	1.13	18.6	12	14
	6.0	13.9	1.34	22.2	14	16
	8.0	14.1	1.79	30.0	23	27
3.5 – 5.2	1.5	10.6	0.35	6.0	6	7
	2.0	11.2	0.47	7.8	8	9
	2.5	11.3	0.58	10.2	9	11
	3.0	12.1	0.71	12.0	10	11
	4.0	12.7	0.92	15.6	12	13
	5.0	13.5	1.17	19.2	13	15
	6.0	13.9	1.39	22.8	14	17
	8.0	14.1	1.85	31.2	18	21



5000 PRS Low Angle Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip In/h ■	Precip In/h ▲
25	1.0 LA	25	0.76	0.22	0.26
	1.5 LA	27	1.15	0.3	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	0.3	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 – 75	1.0 LA	29	1.09	0.25	0.29
	1.5 LA	31	1.64	0.33	0.38
	2.0 LA	32	2.09	0.39	0.45
	3.0 LA	35	3.18	0.5	0.58

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

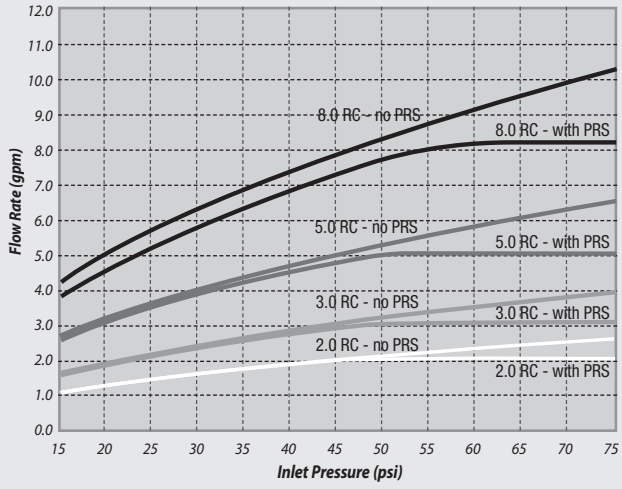
Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

5000 PRS Low Angle Nozzle Performance METRIC

Pressure bar	Nozzle	Radius m	Flow m^3/h	Flow l/m	Precip mm/h ■	Precip mm/h ▲
1.7	1.0 LA	7.6	0.17	3.0	6	7
	1.5 LA	8.2	0.26	4.2	8	9
	2.0 LA	8.8	0.33	5.4	9	10
	3.0 LA	8.8	0.51	8.4	13	15
2.0	1.0 LA	8.0	0.18	3.0	6	6
	1.5 LA	8.6	0.28	4.8	8	9
	2.0 LA	9.1	0.36	6.0	9	10
	3.0 LA	9.3	0.55	9.0	13	15
2.5	1.0 LA	8.6	0.20	3.6	5	6
	1.5 LA	9.2	0.32	5.4	8	9
	2.0 LA	9.5	0.41	6.6	9	10
	3.0 LA	10.1	0.62	10.2	12	14
3.0	1.0 LA	8.8	0.22	3.6	6	7
	1.5 LA	9.4	0.35	6.0	8	9
	2.0 LA	9.7	0.45	7.8	10	11
	3.0 LA	10.6	0.68	11.4	12	14
3.5 – 5.2	1.0 LA	8.8	0.23	3.6	6	7
	1.5 LA	9.4	0.36	6.0	8	10
	2.0 LA	9.7	0.47	7.8	10	12
	3.0 LA	10.6	0.70	12.0	13	15

Flow Rate vs. Inlet Pressure – Rain Curtain™ Nozzles



How much water can you save each minute using Rain Bird® 5000 PRS Rotors with Flow Optimizer Technology?

Flow GPM	45	50	55	60	65	70	75	80
6	0	0.33	0.66	0.96	1.25	1.54	1.81	2.06
8	0	0.43	0.85	1.24	1.62	1.98	2.33	2.67
10	0	0.55	1.07	1.57	2.05	2.52	2.96	3.39
12	0	0.66	1.27	1.86	2.43	2.97	3.50	4.01
14	0	0.77	1.49	2.18	2.84	3.48	4.10	4.70
16	0	0.87	1.69	2.48	3.24	3.97	4.67	5.35
18	0	0.98	1.90	2.79	3.64	4.46	5.25	6.01
20	0	1.10	2.12	3.10	4.05	4.96	5.83	6.68
22	0	1.21	2.33	3.42	4.46	5.47	6.44	7.37
24	0	1.30	2.54	3.72	4.85	5.94	7.00	8.01
26	0	1.41	2.76	4.04	5.27	6.45	7.60	8.70
28	0	1.53	2.96	4.34	5.66	6.93	8.16	9.35
30	0	1.63	3.17	4.65	6.07	7.43	8.74	10.02

Total Zone Flow in GPM

Total gallons of water saved per minute of run time

Ex: At 70 psi a zone with 20 gpm of flow would save 4.96 gallons a minute with 5000 PRS

5000 Series MPR Nozzles

Perfectly Balanced Coverage with the 5000 Series Rotor

Features

- Rain Curtain™ nozzles deliver even distribution over the entire radius including large wind resistant droplets and gentle close-in watering resulting in greener turf using less water
- Precipitation rate is automatically matched with a uniform radius that does not require stream deflection
- Matched 0.6"/hour precipitation rates enable large and small turf areas to be zoned together by mixing rotors and Rain Bird R-VAN or R-Series rotary nozzles

Models

- 5000MPRMPK: 5000/5000 Plus Series MPR nozzle tree multi pack- 25', 30', 35' radius in Quarter, Third, Half, Full arc

5000 Series MPR Nozzles

How to Specify

5000 - MPR - 25 - Q

- **Model** Rotor
- **Nozzle** Matched Precipitation rate
- **Radius Range** 25' 30' 35'
- **Pattern** Q=Quarter T=Third H=Half F=Full

5000-MPR-25 (Red)

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h ■	Precip In/h ▲
Quarter	25	23	0.74	0.54	0.62
	35	24	0.88	0.59	0.68
	45	25	1.00	0.62	0.71
	55	25	1.11	0.68	0.79
	65	25	1.21	0.75	0.86
Third	25	23	1.00	0.55	0.63
	35	24	1.21	0.61	0.70
	45	25	1.38	0.64	0.74
	55	25	1.53	0.71	0.82
	65	25	1.67	0.77	0.89
Half	25	23	1.44	0.52	0.61
	35	24	1.73	0.58	0.67
	45	25	1.98	0.61	0.70
	55	25	2.21	0.68	0.79
	65	25	2.41	0.74	0.86
Full	25	23	2.78	0.51	0.58
	35	24	3.34	0.56	0.64
	45	25	3.82	0.59	0.68
	55	25	4.25	0.65	0.76
	65	25	4.63	0.71	0.82

5000-MPR-25 (Red) METRIC

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	Precip mm/h ■	Precip mm/h ▲
Quarter	1.7	7.0	0.17	3.0	13.7	15.8
	2.4	7.3	0.20	3.6	14.9	17.3
	3.1	7.6	0.23	3.6	15.6	18.1
	3.8	7.6	0.25	4.2	17.4	20.1
	4.5	7.6	0.27	4.8	18.9	21.9
Third	1.7	7.0	0.23	3.6	13.9	16.0
	2.4	7.3	0.27	4.8	15.4	17.8
	3.1	7.6	0.31	5.4	16.2	18.7
	3.8	7.6	0.35	6.0	18.0	20.7
	4.5	7.6	0.38	6.6	19.6	22.6
Half	1.7	7.0	0.33	5.4	13.3	15.4
	2.4	7.3	0.39	6.6	14.7	17.0
	3.1	7.6	0.45	7.2	15.5	17.9
	3.8	7.6	0.50	8.4	17.3	20.0
	4.5	7.6	0.55	9.0	18.9	21.8
Full	1.7	7.0	0.63	10.8	12.8	14.8
	2.4	7.3	0.76	12.6	14.2	16.4
	3.1	7.6	0.87	14.4	14.9	17.3
	3.8	7.6	0.97	16.2	16.6	19.2
	4.5	7.6	1.05	17.4	18.1	20.9

5000-MPR-30 (Green)

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip ■ In/h	Precip ▲ In/h
Quarter	25	29	1.03	0.47	0.54
	35	30	1.23	0.53	0.61
	45	30	1.40	0.60	0.69
	55	30	1.56	0.67	0.77
	65	30	1.69	0.72	0.83
Third	25	29	1.34	0.46	0.53
	35	30	1.62	0.52	0.60
	45	30	1.85	0.59	0.69
	55	30	2.06	0.66	0.76
	65	30	2.24	0.72	0.83
Half	25	29	2.15	0.49	0.57
	35	30	2.59	0.55	0.64
	45	30	2.96	0.63	0.73
	55	30	3.30	0.71	0.82
	65	30	3.60	0.77	0.89
Full	25	29	4.24	0.49	0.56
	35	30	5.08	0.54	0.63
	45	30	5.78	0.62	0.71
	55	30	6.39	0.68	0.79
	65	30	6.92	0.74	0.85

5000-MPR-30 (Green) METRIC

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
Quarter	1.7	8.8	0.23	3.6	12.0	13.8
	2.4	9.1	0.28	4.8	13.4	15.4
	3.1	9.1	0.32	5.4	15.2	17.6
	3.8	9.1	0.35	6.0	17.0	19.6
	4.5	9.1	0.38	6.6	18.4	21.2
Third	1.7	8.8	0.30	4.8	11.7	13.5
	2.4	9.1	0.37	6.0	13.2	15.2
	3.1	9.1	0.42	7.2	15.1	17.4
	3.8	9.1	0.47	7.8	16.8	19.4
	4.5	9.1	0.51	8.4	18.3	21.1
Half	1.7	8.8	0.49	8.4	12.5	14.4
	2.4	9.1	0.59	9.6	14.1	16.2
	3.1	9.1	0.67	11.4	16.1	18.6
	3.8	9.1	0.75	12.6	17.9	20.7
	4.5	9.1	0.82	13.8	19.6	22.6
Full	1.7	8.8	0.96	16.2	12.3	14.2
	2.4	9.1	1.15	19.2	13.8	15.9
	3.1	9.1	1.31	21.6	15.7	18.1
	3.8	9.1	1.45	24.0	17.4	20.0
	4.5	9.1	1.57	26.4	18.8	21.7

5000-MPR-35 (Beige)

Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip ■ In/h	Precip ▲ In/h
Quarter	25	32	1.40	0.53	0.61
	35	34	1.67	0.56	0.64
	45	35	1.92	0.60	0.70
	55	35	2.13	0.67	0.77
	65	35	2.31	0.73	0.84
Third	25	32	1.77	0.50	0.58
	35	34	2.15	0.54	0.62
	45	35	2.46	0.58	0.67
	55	35	2.74	0.65	0.75
	65	35	2.99	0.70	0.81
Half	25	32	2.75	0.52	0.60
	35	34	3.33	0.55	0.64
	45	35	3.81	0.60	0.69
	55	35	4.23	0.66	0.77
	65	35	4.62	0.73	0.84
Full	25	32	5.36	0.50	0.58
	35	34	6.62	0.55	0.64
	45	35	7.58	0.60	0.69
	55	35	8.43	0.66	0.76
	65	35	9.18	0.72	0.83

5000-MPR-35 (Beige) METRIC

Nozzle	Pressure bar	Radius m	Flow m^3/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
Quarter	1.7	9.8	0.32	5.4	13.4	15.4
	2.4	10.4	0.38	6.6	14.1	16.3
	3.1	10.7	0.44	7.2	15.3	17.7
	3.8	10.7	0.48	7.8	17.0	19.6
	4.5	10.7	0.52	9.0	18.4	21.3
Third	1.7	9.8	0.40	6.6	12.7	14.6
	2.4	10.4	0.49	8.4	13.6	15.8
	3.1	10.7	0.56	9.6	14.7	17.0
	3.8	10.7	0.62	10.2	16.4	18.9
	4.5	10.7	0.68	11.4	17.9	20.7
Half	1.7	9.8	0.62	10.2	13.1	15.2
	2.4	10.4	0.76	12.6	14.1	16.3
	3.1	10.7	0.87	14.4	15.2	17.6
	3.8	10.7	0.96	16.2	16.9	19.5
	4.5	10.7	1.05	17.4	18.4	21.3
Full	1.7	9.8	1.22	20.4	12.8	14.8
	2.4	10.4	1.50	25.2	14.0	16.2
	3.1	10.7	1.72	28.8	15.1	17.5
	3.8	10.7	1.91	31.8	16.8	19.4
	4.5	10.7	2.09	34.8	18.3	21.2

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

Falcon® 6504 Series

Reliable and Economical

Features

- Ratcheting stem just like standard spray bodies
- 3-port, color-coded Rain Curtain nozzles for optimal long range,mic range, and close-in watering
- SAM Seal-A-Matic check valve
- Self-adjusting stator does not require replacement when changing nozzles
- Heavy-duty, stainless steel retract spring ensures positive pop-dow
- 5 year warranty

Options

- **Stainless steel (SS) riser** helps deter vandalism on public turf areas
- **Purple cover (NP)** for non-potable systems
- **High Speed (HS) "Tan Top"** version for dust suppression

Operating Specifications

- Precipitation rate: 0.37 to 1.26 inches per hour (9 to 32 mm/h)
- Radius: 37 to 65 feet (11.3 to 19.8 m)
- Pressure: 30 to 90 psi (2.1 to 6.2 bar)
- Flow: 2.9 to 21.7 gpm (0.66 to 4.93 m^3/h; 10.8 to 82.2 l/m)
- 1" (26/34) female NPT or BSP threaded inlet
- SAM check device holds up to 10 feet (3.1 m) of elevation change
- Rain Curtain™ Nozzles: Included with rotor, other sizes available upon request; 10-grey, 12-beige, 14-light green, 16-dark brown, 18-dark blue
- Nozzle outlet trajectory is 25°

Models

- 6504-FC: Full-circle
- 6504-PC: Part-circle
- 6504-FC-NP: Full-circle, non-potable cover
- 6504-PC-NP: Part-circle, non-potable cover
- 6504-FC-SS: Full-circle, stainless steel
- 6504-PC-SS: Part-circle, stainless steel
- 6504-FC-SS-HS: Full-circle, stainless steel, high speed rotation
- 6504-PC-SS-HS: Part-circle, stainless steel, high speed rotation
- 6504-FC-SS-NP: Full-circle, stainless steel, non-potable cover
- 6504-PC-SS-NP: Part-circle, stainless steel, non-potable cover

Note: *All models available with BSP threads*

Falcon® 6504 Series

0.37 to 1.26 in/hr
(9 to 32 mm/h)

30 to 90 psi
(2.1 to 6.2 bar)

2.9 to 21.7 gpm
(10.8 to 82.2 l/m)
(0.66 to 4.93 m^3/h)

4" (10.2 cm)

8½" (21.6 cm)

1" (26/34) NPT
or BSP

How to Specify

6504 - PC - SS - NP or HS

Model
6504: Falcon

Rotation
PC: Part-circle
FC: Full-circle

Optional Feature
SS: Stainless steel

Optional Features
NP: Non-potable cover
HS: High speed rotor

Note: For non-U.S. applications, it is necessary to specify NPT or BSP thread type.

Falcon® 6504 Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip In/h ■	Precip In/h ▲
30	4	39	2.9	0.37	0.42
	6	43	4.2	0.44	0.50
40	4	41	3.3	0.38	0.44
	6	45	4.9	0.47	0.54
	8	49	6.6	0.53	0.61
	10	51	8.1	0.60	0.69
	12	53	9.7	0.66	0.77
	14	55	11.3	0.72	0.83
	16	55	12.6	0.80	0.93
	18	59	13.7	0.76	0.87
50	4	41	3.7	0.42	0.49
	6	47	5.5	0.44	0.51
	8	51	7.4	0.55	0.63
	10	53	9.1	0.62	0.72
	12	55	11.0	0.70	0.81
	14	59	12.7	0.70	0.81
	16	61	14.3	0.74	0.85
	18	59	15.4	0.85	0.98
60	4	41	4.0	0.46	0.53
	6	47	6.0	0.52	0.60
	8	51	8.2	0.61	0.70
	10	55	10.0	0.64	0.73
	12	57	12.2	0.72	0.83
	14	61	14.0	0.72	0.84
	16	63	15.7	0.76	0.88
	18	63	17.1	0.83	0.96
70	4	41	4.4	0.50	0.58
	6	49	6.3	0.51	0.58
	8	51	8.9	0.66	0.76
	10	57	10.8	0.64	0.74
	12	59	13.2	0.73	0.84
	14	61	15.2	0.79	0.91
	16	63	16.9	0.82	0.95
	18	65	18.3	0.83	0.96
80	4	43	4.6	0.48	0.55
	6	49	6.9	0.55	0.64
	8	53	9.4	0.64	0.74
	10	55	11.6	0.74	0.85
	12	61	14.0	0.72	0.84
	14	61	16.2	0.84	0.97
	16	63	18.1	0.88	1.01
	18	65	19.6	0.89	1.03
90	18	65	21.7	0.99	1.14

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

High-Speed Falcon® 6504 Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip In/h ■	Precip In/h ▲
30	4	37	3.0	0.42	0.49
	6	39	4.3	0.54	0.63
40	4	41	3.5	0.40	0.46
	6	43	6.0	0.62	0.72
	8	47	6.6	0.58	0.66
	10	47	8.1	0.71	0.82
	12	49	9.9	0.79	0.92
	14	53	11.4	0.78	0.90
	16	51	12.6	0.93	1.08
	18	53	13.9	0.95	1.10
50	4	41	3.7	0.42	0.49
	6	45	5.6	0.53	0.62
	8	49	7.5	0.60	0.69
	10	49	9.2	0.74	0.85
	12	53	11.2	0.77	0.89
	14	53	12.9	0.88	1.02
	16	53	14.3	0.98	1.13
	18	55	15.6	0.99	1.15
60	4	41	4.2	0.48	0.56
	6	45	6.2	0.59	0.68
	8	47	8.3	0.72	0.84
	10	49	10.2	0.82	0.94
	12	53	12.4	0.85	0.98
	14	53	14.2	0.97	1.12
	16	55	15.7	1.00	1.15
	18	59	17.2	0.95	1.10
70	4	41	4.6	0.53	0.61
	6	43	6.7	0.70	0.81
	8	49	9.0	0.72	0.83
	10	51	11.1	0.82	0.95
	12	55	13.5	0.86	0.99
	14	53	15.3	1.05	1.21
	16	57	17.1	1.01	1.17
	18	59	18.6	1.03	1.19
80	4	39	4.9	0.62	0.72
	6	43	7.1	0.74	0.85
	8	51	9.7	0.72	0.83
	10	49	11.9	0.95	1.10
	12	55	14.4	0.92	1.06
	14	53	16.5	1.13	1.31
	16	59	18.4	1.02	1.18
	18	59	20.0	1.11	1.28
90	18	61	21.3	1.10	1.27

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

Falcon® 6504 Nozzle Performance — METRIC

Pressure bar	Nozzle	Radius m	Flow m³/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
2.1	4	11.9	0.66	10.98	9	11
	6	13.1	0.95	15.90	11	13
2.5	4	12.3	0.72	11.92	10	11
	6	13.5	1.05	17.56	12	13
	8	14.9	1.50	25.20	13	16
	10	15.5	1.84	30.60	15	18
	12	16.2	2.20	36.60	17	19
	14	16.8	2.57	42.60	18	21
	16	16.8	2.86	47.40	20	24
	18	18.0	3.11	51.60	19	22
3.0	4	12.5	0.78	13.02	10	12
	6	14.1	1.16	19.34	12	13
	8	15.1	1.56	26.04	14	16
	10	15.8	1.92	31.99	15	18
	12	16.4	2.31	38.44	17	20
	14	17.2	2.68	44.63	18	21
	16	17.4	3.00	49.95	20	23
	18	18.0	3.25	54.11	20	23
3.5	4	12.5	0.85	14.09	11	13
	6	14.9	1.26	20.96	11	13
	8	15.5	1.69	28.24	14	16
	10	16.2	2.08	34.70	16	18
	12	16.8	2.52	41.98	18	21
	14	18.0	2.91	48.45	18	21
	16	18.6	3.27	54.53	19	22
	18	18.1	3.53	58.78	22	25
4.0	4	12.5	0.89	14.91	11	13
	6	14.4	1.34	22.33	13	15
	8	15.5	1.83	30.44	15	17
	10	16.6	2.23	37.17	16	19
	12	17.3	2.72	45.28	18	21
	14	18.5	3.12	52.01	18	21
	16	19.1	3.50	58.37	19	22
	18	19.0	3.81	63.45	21	24
4.5	4	12.5	0.96	15.94	12	14
	6	14.6	1.40	23.33	13	15
	8	15.5	1.95	32.43	16	19
	10	17.1	2.37	39.44	16	19
	12	17.7	2.89	48.17	18	21
	14	18.6	3.32	55.38	19	22
	16	19.2	3.71	61.82	20	23
	18	19.5	4.03	67.12	21	24
5.0	4	12.7	1.01	16.84	13	15
	6	14.9	1.47	24.50	13	15
	8	15.7	2.05	34.16	17	19
	10	17.2	2.50	41.64	17	19
	12	18.1	3.04	50.72	19	21
	14	18.6	3.51	58.49	20	23
	16	19.2	3.91	65.11	21	24
	18	19.8	4.23	70.51	22	25
5.5	4	13.1	1.04	17.39	12	14
	6	14.9	1.56	25.79	14	16
	8	16.1	2.13	35.54	16	19
	10	16.8	2.63	43.84	19	22
	12	18.6	3.18	52.92	18	21
	14	18.6	3.67	61.23	21	25
	16	19.2	4.10	68.40	22	26
	18	19.8	4.44	74.07	23	26
6.0	18	19.8	4.79	79.77	24	28
6.2	18	19.8	4.93	82.13	25	29

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

Falcon® 6504 Rain Curtain™ Nozzles

High-Speed Falcon® 6504 Nozzle Performance — METRIC

Pressure bar	Nozzle	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
2.1	● 4	11.3	0.68	11.35	11	12
	● 6	11.9	0.98	15.90	14	16
2.5	● 4	12.0	0.75	12.54	10	12
	● 6	12.7	1.22	20.16	15	18
	● 8	14.2	1.49	25.20	15	17
	● 10	14.2	1.83	30.60	18	21
	● 12	14.8	2.24	37.20	20	24
	● 14	16.0	2.58	43.20	20	23
	● 16	15.4	2.85	47.40	24	28
	● 18	16.0	3.15	52.80	24	28
3.0	● 4	12.5	0.81	13.51	10	12
	● 6	13.3	1.33	22.18	15	17
	● 8	14.5	1.57	26.18	15	17
	● 10	14.5	1.93	32.12	18	21
	● 12	15.4	2.35	39.20	20	23
	● 14	16.2	2.71	48.09	21	24
	● 16	15.8	3.00	49.95	24	28
	● 18	16.4	3.29	54.87	25	28
3.5	● 4	12.5	0.85	14.15	11	13
	● 6	13.7	1.28	21.37	14	16
	● 8	14.9	1.72	28.62	16	18
	● 10	14.9	2.11	35.11	19	22
	● 12	16.2	2.56	42.74	20	23
	● 14	16.2	2.95	49.20	23	26
	● 16	16.2	3.27	54.53	25	29
	● 18	16.9	3.57	59.51	25	29
4.0	● 4	12.5	0.93	15.52	12	14
	● 6	13.7	1.38	23.02	15	17
	● 8	14.4	1.85	30.81	18	21
	● 10	14.9	2.27	37.86	20	24
	● 12	16.2	2.76	46.03	21	24
	● 14	16.2	3.17	52.77	24	28
	● 16	16.6	3.50	58.37	25	29
	● 18	17.7	3.83	63.90	24	28
4.5	● 4	12.5	1.00	16.69	13	15
	● 6	13.4	1.48	24.46	16	19
	● 8	14.6	1.97	32.81	18	21
	● 10	15.3	2.42	40.40	21	24
	● 12	16.5	2.95	49.13	22	25
	● 14	16.2	3.36	55.94	26	30
	● 16	17.1	3.73	62.22	26	30
	● 18	18.0	4.07	67.89	25	29
5.0	● 4	12.3	1.06	17.70	14	16
	● 6	13.1	1.56	25.74	18	21
	● 8	15.1	2.08	34.73	18	21
	● 10	15.4	2.57	42.78	22	25
	● 12	16.8	3.12	51.96	22	26
	● 14	16.2	3.54	59.06	27	31
	● 16	17.5	3.96	65.96	26	30
	● 18	18.0	4.30	71.74	27	31
5.5	● 4	11.9	1.11	18.52	16	18
	● 6	13.1	1.61	26.84	19	22
	● 8	15.5	2.20	36.65	18	21
	● 10	14.9	2.70	44.97	24	28
	● 12	16.8	3.27	54.43	23	27
	● 14	16.2	3.74	62.35	29	33
	● 16	18.0	4.17	69.53	26	30
	● 18	18.0	4.53	75.58	28	32
6.0	● 18	18.4	4.75	79.16	28	32
6.2	● 18	18.6	4.84	80.62	28	32

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

8005 Series

Protect Your Turf with High Performance, Vandal and Abuse Resistant Rotors from 39' to 81'

Features

- Vandal resistance, brass reinforced turret for increased side impact durability
- Memory Arc® returns the rotor to its original arc setting
- Non-strippable drive mechanism prevents damage from vandals
- Easy, wet, dry arc adjustment with slotted screwdriver through top of rotor from 50° to 330° part-circle, 360° non-reversing full-circle. Full and part circle operation in one unit
- Left and right side trips adjustable for ease of installation without turning the case and loosening the pipe connection
- SAM Seal-A-Matic check valve
- 3-port, color-coded Rain Curtain nozzles for optimal long-range, mid-range, and close-in watering
- 5 year warranty

Options

- **Stainless steel (SS) riser** helps deter vandalism on public turf areas
- **Purple cover (NP)** for non-potable systems
- Optional Sod Cup

Operating Specifications

- Radius: 39 to 81 feet (11.9 to 24.7 m)
- Precipitation rate: 0.48 to 1.23 inches per hour (12 to 31 mm/h)
- Pressure: 50 to 100 psi (3.5 to 6.9 bar)
- Flow: 3.8 to 36.3 gpm (0.86 to 8.24 m3/h; 14.4 to 137.4 l/m)
- 1" (26/34) NPT or BSP female threaded inlet
- SAM check device holds up to 10 feet (3.1 m) of elevation change
- Nozzle outlet trajectory is 25º
- Rain Curtain™ Nozzles: Included with rotor, other sizes available upon request; 10-grey, 12-beige, 14-light green, 16-dark brown, 18-dark blue

Models

- 8005: 1" NPT female threaded inlet
- 8005-NP: 1" NPT female threaded inlet; non-potable cover
- 8005-SS: 1" NPT female threaded inlet; stainless steel
- 8005-SS-NP: 1" NPT female threaded inlet; stainless steel and non-potable cover

Note: *All models available with BSP threads*

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

8005 Series

0.48 to 1.23 in/hr
(12 to 31 mm/h)

50 to 100 psi
(3.5 to 6.9 bar)

3.8 to 36.3 gpm
(14.4 to 137.4 l/m)
(0.86 to 8.24 m^3/h)

5" (12.7 cm)

10 1/8" (25.7 cm)

1" (26/34) NPT
or BSP

How to Specify

8005 - SS - NP - 16

- **Model** 8005 Series
- **Optional Feature** SS: Stainless steel
- **Optional Feature** NP: Non-potable cover
- **Nozzle Size** 16

Note: For non-U.S. applications, it is necessary to specify NPT or BSP thread type.

8005 Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
50	● 04	39	3.8	0.48	0.56
	● 06	45	5.6	0.53	0.62
	● 08	49	6.6	0.53	0.61
	● 10	53	9.3	0.64	0.74
	● 12	57	11.1	0.66	0.76
	● 14	59	12.6	0.70	0.81
	● 16	61	14.3	0.74	0.85
	● 18	63	16.1	0.78	0.90
	● 20	65	18.6	0.85	0.98
	● 22	65	20.7	0.94	1.09
	● 24	63	22.3	1.08	1.25
	○ 26	65	24.3	1.11	1.28
60	● 04	39	3.8	0.48	0.56
	● 06	45	6.1	0.58	0.67
	● 08	49	8.4	0.67	0.78
	● 10	53	10.1	0.69	0.80
	● 12	59	12.0	0.66	0.77
	● 14	61	14.3	0.74	0.85
	● 16	65	15.9	0.72	0.84
	● 18	65	17.8	0.81	0.94
	● 20	67	20.1	0.86	1.00
	● 22	71	23.2	0.89	1.02
	● 24	69	24.7	1.00	1.15
	○ 26	73	26.7	0.96	1.11
70	● 04	39	4.7	0.60	0.69
	● 06	45	6.7	0.64	0.74
	● 08	49	9.0	0.72	0.83
	● 10	55	11.1	0.71	0.82
	● 12	59	13.2	0.73	0.84
	● 14	63	15.3	0.74	0.86
	● 16	67	17.2	0.74	0.85
	● 18	67	19.3	0.83	0.96
	● 20	71	22.0	0.84	0.97
	● 22	73	25.2	0.91	1.05
	● 24	75	27.0	0.92	1.07
	○ 26	75	29.4	1.01	1.16
80	● 04	39	5.0	0.63	0.73
	● 06	45	7.1	0.68	0.78
	● 08	49	9.8	0.79	0.91
	● 10	55	11.8	0.75	0.87
	● 12	61	14.2	0.73	0.85
	● 14	63	16.4	0.80	0.92
	● 16	67	18.6	0.80	0.92
	● 18	69	20.9	0.85	0.98
	● 20	71	23.9	0.91	1.05
	● 22	75	27.3	0.93	1.08
	● 24	77	29.2	0.95	1.10
	○ 26	79	31.5	0.97	1.12
90	● 12	61	14.7	0.76	0.88
	● 14	65	17.9	0.82	0.94
	● 16	69	20.0	0.81	0.93
	● 18	71	22.2	0.85	0.98
	● 20	73	25.3	0.91	1.06
	● 22	75	29.1	1.00	1.15
	● 24	79	31.0	0.96	1.10
	○ 26	79	33.7	1.04	1.20
100	● 20	75	26.8	0.85	0.97
	● 22	77	30.7	1.00	1.15
	● 24	79	32.8	1.01	1.17
	○ 26	81	36.3	1.07	1.23

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

8005 Cutaway

Sod Cup for 8005

8005 Nozzle Performance — METRIC

Pressure bar	Nozzle	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
3.5	4	11.9	0.86	14.38	12	14
	6	13.7	1.28	21.34	14	16
	8	14.9	1.59	25.50	14	16
	10	16.1	2.10	35.43	16	19
	12	17.5	2.52	42.27	16	19
	14	18.0	2.89	48.18	18	21
	16	18.7	3.28	54.59	19	22
	18	19.2	3.69	61.43	20	23
	20	19.9	4.25	70.83	21	25
	22	20.0	5.08	79.07	25	29
	24	19.3	5.11	85.10	27	32
	26	20.0	5.57	92.67	28	32
4.0	4	11.9	0.93	14.38	13	15
	6	13.7	1.37	22.71	15	17
	8	14.9	1.75	30.44	16	18
	10	16.3	2.30	37.63	17	20
	12	17.7	2.70	44.74	17	20
	14	18.5	3.17	52.85	19	21
	16	19.6	3.54	58.98	18	21
	18	19.7	3.97	66.10	20	24
	20	20.3	4.50	74.95	22	25
	22	21.3	5.23	85.94	23	27
	24	20.7	5.50	91.69	26	30
	26	21.8	6.01	99.26	25	29
4.5	4	11.9	1.00	16.18	14	16
	6	13.7	1.45	24.28	15	18
	8	14.9	1.92	32.99	17	20
	10	16.5	2.40	40.22	18	20
	12	18.0	2.87	47.81	18	20
	14	18.9	3.37	56.12	19	22
	16	20.1	3.77	62.77	19	22
	18	20.1	4.22	70.36	21	24
	20	21.1	4.79	79.87	22	25
	22	22.0	5.51	91.80	23	26
	24	22.0	5.88	98.08	24	28
	26	22.6	6.42	106.44	25	29
5.0	4	11.9	1.06	18.08	15	17
	6	13.7	1.54	25.74	16	19
	8	14.9	2.09	34.83	19	22
	10	16.7	2.50	42.68	18	21
	12	18.3	3.05	50.92	18	21
	14	19.2	3.54	58.96	19	22
	16	20.4	3.99	66.44	19	22
	18	20.6	4.47	74.58	21	24
	20	21.6	5.11	85.08	22	25
	22	22.4	5.84	97.39	23	27
	24	23.0	6.26	104.29	24	27
	26	23.2	6.80	113.28	25	29
5.5	4	11.9	1.13	18.90	16	18
	6	13.7	1.62	26.84	17	20
	8	14.9	2.25	37.02	20	23
	10	16.8	2.70	44.60	19	22
	12	18.5	3.23	53.66	19	22
	14	19.2	3.72	61.98	20	23
	16	20.4	4.22	70.28	20	23
	18	21.0	4.74	78.97	21	25
	20	21.6	5.42	90.30	23	27
	22	22.8	6.19	103.15	24	28
	24	23.5	6.62	110.33	24	28
	26	24.1	7.14	119.05	25	28
6.0	12	18.6	3.30	55.07	19	22
	14	19.6	3.96	66.06	21	24
	16	20.9	4.45	74.12	20	24
	18	21.5	4.95	82.56	21	25
	20	22.1	5.65	94.18	23	27
	22	22.9	6.71	108.12	26	30
	24	23.9	6.92	115.31	24	28
	26	24.1	7.50	125.08	26	30
6.2	14	19.8	4.06	67.75	21	24
	16	21.0	4.54	75.70	21	24
	18	21.7	5.04	84.02	21	25
6.5	20	22.5	5.89	98.19	23	27
	22	23.4	6.84	112.73	25	29
	24	24.1	7.22	120.25	25	29
	26	24.3	7.91	131.76	27	31
6.9	20	22.9	6.09	101.43	23	27
	22	23.5	6.97	116.19	25	29
	24	24.1	7.45	124.14	26	30
	26	24.7	8.24	137.39	27	31

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

8005 Rain Curtain™ Nozzles

Optional High-flow Nozzles for 8005 Series Rotors

Rain Curtain™ Nozzle Cross Reference Guide
Hunter® vs. Rain Bird

Hunter vs. Rain Bird – 3/4" Rotors

If replacing:	Use Rain Bird Nozzle	
	By Flow	By Radius
PGP	5000 Series	5000 Series
1	-	-
2	-	-
3	-	-
4	1.5	1.5
5	2.0	2.0
6	2.5	2.5
7	3.0	3.0
8	4.0	4.0
9	5.0	5.0
10	8.0	6.0
11	-	8.0
12	-	8.0

Hunter vs. Rain Bird – 3/4" Rotors

If replacing:	Use Rain Bird Nozzle			
	By Flow		By Radius	
I-20	5000 Series	5500	5000 Series	5500
0.5 SR	-	-	-	18S
1.0 SR	-	-	-	18S
2.0 SR	-	18S	-	18S
0.75 SR	-	-	-	22S
1.5 SR	-	22S	-	22S
3.0 SR	-	26S	-	22S
1.0	1.5	-	1.5	30S
1.5	1.5	2	1.5	30S
2.0	2.0	2	2.0	2
3.0	2.5	3	2.5	2
3.5	**3.0**	4	3.0	3
4.0	4.0	5	4.0	3
6.0	5.0	6	5.0	4
8.0	6.0	8	6.0	8

Hunter vs. Rain Bird – 1" Rotors

If replacing:	Use Rain Bird Nozzle			
	By Flow		By Radius	
I-25	6504	8005	6504	8005
4	4	4	4	4
5	6	6	6	6
7	8	8	6	8
8	10	10	8	8
10	12	12	10	10
13	12	12	12	12
15	14	14	14	12
18	16	16	16	14
20	18	18	18	14
23	-	22	-	16
25	-	24	-	20
28	-	26	-	22
I-40	**6504**	**8005**	**6504**	**8005**
40	8	8	6	8
41	12	12	10	10
42	12	12	10	12
43	16	16	14	14
44	18	20	18	16
45	-	22	-	20
I-35	**6504**	**8005**	**6504**	**8005**
9	8	8	8	8
12	12	12	10	10
15	14	14	12	12
18	16	16	14	14
21	18	18	14	14
24	-	22	16	16
27	-	24	16	16
30	-	26	-	20

Rain Curtain™ Nozzle Cross Reference Guide
Toro® vs. Rain Bird

Toro vs. Rain Bird – 3/4" Rotors

If replacing:	Use Rain Bird Nozzle	
	By Flow	By Radius
Super 800	5000 Series	5000 Series
0.5	-	-
0.75	-	-
1.0	1.5	1.5
2.0	2.5	2.0
2.5	3.0	2.5
3.0	4.0	2.5
4.0	5.0	3.0
6.0	6.0	4.0
8.0	8.0	5.0

Toro vs. Rain Bird – 3/4" Rotors

If replacing:	Use Rain Bird Nozzle			
	By Flow		By Radius	
TR50	5000 Series	5505	5000 Series	5505
1.0	-	-	-	-
1.5	1.5	2	1.5	2
2.0	2.0	2	2.0	3
3.0	3.0	3	3.0	3
4.5	4.0	5	4.0	3
6.0	5.0	6	4.0	4
7.5	6.0	8	4.0	4
9.0	8.0	10	5.0	4

Toro vs. Rain Bird – 1" Rotors

If replacing:	Use Rain Bird Nozzle			
	By Flow		By Radius	
Toro 2001	6504	8005	6504	8005
9	10	10	10	10
12	12	12	12	12
15	16	16	14	14
18	18	20	18	16
24	-	22	-	20
TR70	**6504**	**8005**	**6504**	**8005**
7	8	8	-	6
9	8	8	8	8
12	12	12	10	10
16	16	16	14	12
20	-	20	14	14
24	-	20	16	14
27	-	20	18	16
Toro 640	**6504**	**8005**	**6504**	**8005**
40	8	8	8	10
41	10	12	10	10
42	14	14	12	12
43	16	16	14	14
44	18	20	16	14

2045A Maxi-Paw™ and 2045-PJ Maxi-Bird™

Dirty Water Applications - Spacing Up to 45 Feet (13.7 m)

Features

- Proven impact drive with straight-through flow for superior performance in dirty water
- Five standard trajectory and two low angle (LA) color-coded nozzles for matched precipitation and in a wide range of applications
- 360° full-circle OR arc adjustable from 20° to 340°
- Side and combination ½" or ¾" bottom inlet for design flexibility (Maxi-Paw)
- 3 year warranty

Operating Specifications

- Precipitation rate: 0.28 to 1.21 inches per hour (7 to 31 mm/h)
- Spacing: 22 to 45 feet (6.7 to 13.7 m)
- Flow rate: 1.5 to 8.4 gpm (0.34 to 1.91 m^3/h; 0.9 to 0.53 l/s)
- Radius: 22 to 45 feet (6.7 to 13.7 m); 18 feet (5.4 m) with Radius Reduction Screw
- Pressure: 25 to 60 psi (1.7 to 4.1 bar)
- Combination ½" or ¾" female bottom inlet (Maxi-Paw)
- ½" FPT side inlet (Maxi-Paw)
- ½" (15/21) Riser-Mounted (Maxi-Bird)

Models

- 2045A Maxi-Paw
- 2045A Maxi-Paw-SAM
- 2045A Maxi-Paw-SAM-NP
- 42064: Maxi-Paw Wrench - for removing internal assembly from case
- 2045-PJ Maxi-Bird

2045A Maxi-Paw

2045-PJ Maxi-Bird

42064

How to Specify

2045A- SAM-10- LA

- **Model** 2045A Maxi-Paw
- **Optional Feature** SAM
- **Nozzle Size** 10
- **Optional Feature** Low Angle Nozzle

Maxi-Paw and Maxi-Bird Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip ■ In/h	Precip ▲ In/h
25	06	-	-	-	-
	07 LA	22	1.5	0.60	0.69
	07	32	2.2	0.41	0.48
	08	35	2.8	0.44	0.51
	10 LA	25	3.4	1.05	1.21
	10	38	4.2	0.56	0.65
	12	39	5.5	0.70	0.80
35	06	37	2.0	0.28	0.32
	07 LA	23	1.9	0.69	0.80
	07	37	2.7	0.38	0.44
	08	38	3.3	0.44	0.51
	10 LA	29	4.0	0.92	1.06
	10	41	4.8	0.55	0.64
	12	42	6.3	0.69	0.79
45	06	38	2.3	0.31	0.35
	07 LA	25	2.1	0.65	0.75
	07	39	3.0	0.38	0.44
	08	40	3.7	0.45	0.51
	10 LA	31	4.5	0.90	1.04
	10	42	5.4	0.59	0.68
	12	44	7.1	0.71	0.82
55	06	38	2.5	0.33	0.39
	07 LA	25	2.3	0.71	0.82
	07	41	3.3	0.38	0.44
	08	41	4.1	0.47	0.54
	10 LA	32	5.0	0.94	1.09
	10	43	6.0	0.62	0.72
	12	45	7.9	0.75	0.87
60	06	38	2.6	0.35	0.40
	07 LA	25	2.4	0.74	0.85
	07	41	3.5	0.40	0.46
	08	42	4.2	0.46	0.53
	10 LA	32	5.4	1.02	1.17
	10	44	6.4	0.64	0.74
	12	45	8.4	0.80	0.92

LA = Low Angle

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Maxi-Paw and Maxi-Bird Nozzle Performance METRIC

Pressure bar	Nozzle	Radius m	Flow m^3/h	Flow l/m	Precip ■ mm/h	Precip ▲ mm/h
2.0	6	-	-	-	-	-
	07 LA	6.8	0.38	6.0	16	19
	7	10.4	0.55	9.0	10	12
	8	11.0	0.68	11.4	11	13
	10 LA	8.1	0.83	13.8	25	29
	10	11.9	1.01	16.8	14	16
	12	12.3	1.32	22.2	18	20
2.5	6	11.3	0.46	7.8	7	8
	07 LA	7.1	0.44	7.2	17	20
	7	11.4	0.62	10.2	10	11
	8	11.7	0.76	12.6	11	13
	10 LA	8.9	0.92	15.6	23	27
	10	12.5	1.11	18.6	14	16
	12	12.9	1.45	24.0	18	20
3.0	6	11.5	0.51	8.4	8	9
	07 LA	7.5	0.47	7.8	17	19
	7	11.8	0.67	11.4	10	11
	8	12.1	0.83	13.8	11	13
	10 LA	9.4	1.01	16.8	23	27
	10	12.8	1.21	20.4	15	17
	12	13.3	1.59	26.4	18	21
3.5	6	11.6	0.55	9.0	8	9
	07 LA	7.6	0.50	8.4	17	20
	7	12.2	0.72	12.0	10	11
	8	12.4	0.89	15.0	12	13
	10 LA	9.6	1.09	18.0	23	27
	10	13.0	1.30	21.6	15	18
	12	13.6	1.72	28.8	19	21
4.0	6	11.6	0.58	9.6	9	10
	07 LA	7.6	0.54	9.0	18	21
	7	12.5	0.78	13.2	10	11
	8	12.7	0.94	15.6	12	14
	10 LA	9.8	1.19	19.8	25	29
	10	13.3	1.42	23.4	16	19
	12	13.7	1.86	31.2	20	23

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASABE Standards; ASABE S398.1.
See page 186 for complete ASABE Test Certification Statement.

206592-06 *206592-07* *206592-08*

206592-10 *206592-12*

2045A Maxi-Paw and 2045-PJ Standard Angle Nozzles

115902-07 *115902-10*

2045A Maxi-Paw and 2045-PJ Low Angle Nozzles

XLR Series Water Jets

The World's Most Advanced Long-Range Rotor

NEW

Features

- Constant speed independent of operating pressure and flow rate
- Water deflector distributes water uniformly for entire throw distance
- Barrel and nozzle design optimized to maximize throw
- Nozzle is 54% larger than competition
- Innovative material selection maximize efficiency of movement
- Full- and part-circle (20-340°) in one unit
- Adjustable trajectory model provides ultimate in adaptability
- Optional Jet-Breaker for improved distribution uniformity
- 9 nozzles options (sold separately)
- Only 2 field serviceable components – built to last reliably
- One-year trade warranty

Operating Specifications

- Radius: 81 – 177 feet (25.6 – 57.3 m)
- Pressure: 30 to 120 psi (2.1 to 8.3 bar)
- Flow: 35 to 379 gpm (7.9 to 86.1 m^3/h)
- Inlet: 2" NPT, 2" BSP or 2" flange
- Nozzle trajectory: 24° fixed, 44° fixed or adjustable (15° to 45°)
- Nozzles (sold separately):
  - 0.47 (12 mm)
  - 0.55 (14 mm)
  - 0.63 (16 mm)
  - 0.71 (18 mm)
  - 0.70 (20 mm)
  - 0.87 (22 mm)
  - 0.94 (24 mm)
  - 1.02 (26 mm)
  - 1.10 (28 mm)
- Nozzle tool available (sold separately)

Models

- 2XLR24: 24° fixed trajectory XLR Water Jet
- XLR44: 44° fixed trajectory XLR Water Jet
- XLRADJ: Adjustable trajectory (15 – 45°) XLR Water Jet

XLR24

XLR44

XLRADJ

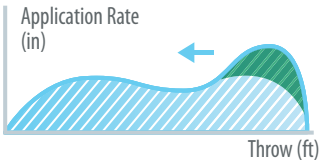
How to Specify

XLR 44 – NPT – XLRJETKIT

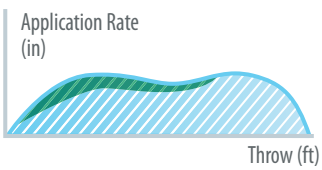
- **Model** XLR
- **Model** 24: 24° 44: 44° ADJ: Adjustable
- **Mounting** NPT BSP Blank: Flange
- **Optional Feature*** XLRJETKIT: Jet Breaker Kit

Order Separately

Low pressure water distribution profile



Improved distribution uniformity with Dynamic Jet-Breaker in low pressure condition and Solid-Set systems



XLR 24 Nozzle Throw Range | Fixed 24° Trajectory

	0.47"		0.55"		0.63"		0.71"		0.79"		0.87"		0.94"		1.02"		1.10"	
Pressure psi	Flow gpm	Radius ft.	Flow gpm	Radius ft.	Flow gpm	Radius ft.	Flow gpm	Radius ft.	Flow gpm	Radius ft.	Flow gpm	Radius ft.	Flow gpm	Radius ft.	Flow gpm	Radius ft.	Flow gpm	Radius ft.
30	35	81	48	88	62	96	78	98	97	99	117	101	139	102	164	103	189	104
40	40	93	55	100	71	107	90	114	112	120	135	122	161	125	190	127	219	130
50	45	103	62	110	80	117	101	125	125	133	151	137	180	141	212	146	245	151
60	50	109	67	117	87	124	111	133	137	141	165	147	197	152	232	159	268	166
70	54	113	73	121	94	129	119	138	148	147	178	154	212	160	251	168	289	176
80	57	118	78	126	101	135	128	144	158	153	191	160	227	167	268	176	309	185
90	61	122	83	131	107	141	135	150	168	158	202	166	241	174	284	184	328	193
100	64	125	87	135	113	145	143	154	177	163	213	171	254	180	300	189	346	198
110	67	128	91	138	118	148	150	157	186	166	224	175	266	184	314	193	363	202

XLR 24 Nozzle Throw Range | Fixed 24° Trajectory — METRIC

	12 mm		14 mm		16 mm		18 mm		20 mm		22 mm		24 mm		26 mm		28 mm	
Pressure bar	Flow l/m	Radius m	Flow l/m	Radius m	Flow l/m	Radius m	Flow l/m	Radius m	Flow l/m	Radius m	Flow l/m	Radius m	Flow l/m	Radius m	Flow l/m	Radius m	Flow l/m	Radius m
2.0	7.8	24.2	10.6	26.5	13.8	28.9	17.5	29.1	21.7	29.4	26.1	29.8	31.1	30.2	36.7	30.6	42.3	30.9
2.5	8.7	26.8	11.9	29.0	15.4	31.3	19.5	32.5	24.2	33.8	29.2	34.4	34.7	35.1	41.0	35.8	47.3	36.5
3.0	9.6	29.4	13.0	31.6	16.9	33.7	21.4	35.9	26.5	38.2	31.9	39.1	38.0	39.9	44.9	41.0	51.8	42.1
3.5	10.3	31.2	14.1	33.3	18.2	35.5	23.1	37.9	28.7	40.4	34.5	41.6	41.1	42.9	48.5	44.4	56.0	45.9
4.0	11.1	32.9	15.1	35.1	19.5	37.3	24.7	39.9	30.7	42.5	36.9	44.2	43.9	45.8	51.8	47.8	59.8	49.7
4.5	11.7	33.9	16.0	36.2	20.7	38.6	26.2	41.2	32.5	43.9	39.1	45.7	46.6	47.6	55.0	49.8	63.5	52.0
5.0	12.4	34.8	16.8	37.3	21.8	39.8	27.6	42.5	34.3	45.2	41.2	47.3	49.1	49.3	58.0	51.8	66.9	54.3
5.5	13.0	35.7	17.7	38.4	22.9	41.1	29.0	43.8	35.9	46.5	43.2	48.7	51.5	50.9	60.8	53.5	70.2	56.2
6.0	13.5	36.6	18.4	39.5	23.9	42.4	30.3	45.0	37.5	47.7	45.2	50.1	53.8	52.5	63.5	55.3	73.3	58.1
6.5	14.1	37.4	19.2	40.4	24.9	43.3	31.5	46.0	39.1	48.7	47.0	51.2	56.0	53.7	66.1	56.5	76.3	59.3
7.0	14.6	38.2	19.9	41.2	25.8	44.2	32.7	46.9	40.6	49.7	48.8	52.3	58.1	54.9	68.6	57.7	79.2	60.6

XLR 44 Nozzle Throw Range / Fixed 44° Trajectory

	0.47"			0.55"			0.63"			0.71"			0.79"			0.87"			0.94"			1.02"			1.10"		
Pressure psi	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.	Flow gpm	Radius ft.	Height ft.
40	40	82	37	55	90	37	71	98	38	90	105	38	112	113	39	135	117	39	161	121	40	190	125	40	219	128	41
50	45	91	43	62	99	44	80	108	45	101	116	46	125	125	47	151	130	48	180	135	48	212	140	49	245	144	50
60	50	97	48	67	107	49	87	116	51	111	126	52	137	135	54	165	140	55	197	146	56	232	151	57	268	157	58
70	54	102	51	73	112	53	94	122	55	119	132	57	148	142	59	178	148	61	212	154	62	251	160	64	289	165	66
80	57	107	54	78	117	57	101	127	59	128	138	61	158	148	64	191	154	66	227	160	68	268	166	70	309	172	72
90	61	110	56	83	121	59	107	132	62	135	142	65	168	153	68	202	159	70	241	165	72	284	171	75	328	177	77
100	64	113	58	87	124	61	113	135	65	143	146	68	177	157	71	213	163	73	254	169	76	300	176	79	346	182	82
110	67	115	60	91	126	63	118	137	66	150	148	70	186	160	73	224	166	76	266	172	79	314	179	82	363	185	85
120	70	116	61	95	127	64	124	139	68	156	150	72	194	161	75	234	168	78	278	175	81	328	181	84	379	188	87

XLR 44 Nozzle Throw Range / Fixed 44° Trajectory — METRIC

	12 mm			14 mm			16 mm			18 mm			20 mm			22 mm			24 mm			26 mm			28 mm		
Pressure bar	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m	Flow l/m	Radius m	Height m
3.0	9.6	26.1	11.9	13.0	28.5	12.1	16.9	31.0	12.3	21.4	33.5	12.5	26.5	35.9	12.7	31.9	37.2	12.9	38.0	38.5	13.1	44.9	39.7	13.3	51.8	41.0	13.4
3.5	10.3	27.7	13.1	14.1	30.3	13.4	18.2	33.0	13.7	23.1	35.6	14.0	28.7	38.2	14.4	34.5	39.7	14.6	41.1	41.1	14.9	48.5	42.6	15.1	56.0	44.0	15.3
4.0	11.1	29.3	14.3	15.1	32.1	14.7	19.5	34.9	15.1	24.7	37.8	15.6	30.7	40.6	16.0	36.9	42.2	16.3	43.9	43.8	16.6	51.8	45.5	17.0	59.8	47.1	17.3
4.5	11.7	30.4	15.1	16.0	33.4	15.6	20.7	36.3	16.1	26.2	39.3	16.7	32.5	42.2	17.2	39.1	43.9	17.6	46.6	45.6	18.1	55.0	47.3	18.5	63.5	49.0	18.9
5.0	12.4	31.5	15.9	16.8	34.6	16.5	21.8	37.7	17.1	27.6	40.8	17.8	34.3	43.9	18.4	41.2	45.7	19.0	49.1	47.4	19.5	58.0	49.2	20.0	66.9	51.0	20.5
5.5	13.0	32.4	16.4	17.7	35.6	17.2	22.9	38.7	17.9	29.0	41.9	18.6	35.9	45.1	19.4	43.2	46.9	20.0	51.5	48.7	20.6	60.8	50.5	21.2	70.2	52.3	21.8
6.0	13.5	33.3	17.0	18.4	36.5	17.8	23.9	39.8	18.7	30.3	43.0	19.5	37.5	46.3	20.3	45.2	48.1	21.0	53.8	50.0	21.7	63.5	51.8	22.3	73.3	53.6	23.0
6.5	14.1	33.9	17.4	19.2	37.2	18.3	24.9	40.5	19.2	31.5	43.8	20.1	39.1	47.1	21.0	47.0	49.0	21.8	56.0	50.9	22.5	66.1	52.7	23.3	76.3	54.6	24.1
7.0	14.6	34.5	17.9	19.9	37.8	18.8	25.8	41.2	19.8	32.7	44.6	20.7	40.6	48.0	21.7	48.8	49.9	22.5	58.1	51.8	23.4	68.6	53.7	24.2	79.2	55.6	25.1
7.5	15.1	34.8	18.1	20.6	38.2	19.1	26.7	41.7	20.2	33.8	45.1	21.2	42.0	48.5	22.2	50.5	50.4	23.1	60.1	52.4	24.0	71.0	54.3	24.9	82.0	56.3	25.8
8.0	15.6	35.2	18.4	21.3	38.7	19.5	27.6	42.1	20.6	34.9	45.5	21.6	43.4	49.0	22.7	52.2	51.0	23.6	62.1	53.0	24.6	73.3	55.0	25.5	84.6	57.0	26.4

The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. A lowered trajectory angle improves the irrigation efficiency in windy conditions. For every 3° drop of the trajectory angle the throw is reduced by aprrox. 3 to 4% Radius = radius of throw in feet. Nozzle at 5 feet above ground level. Height = maximum stream height in meters above nozzle.

XLR ADJ Nozzle Throw Range | Adjustable Trajectory

- ***For every 3° drop of the trajectory angle, the throw is reduced by approximately 3 to 4%.***
- ***Use the XLR 24 Nozzle Throw Range Table for your pressure and nozzle diameter.***

TSJ/TSJ-PRS Series

Swing Joints Connect ¾" (1.9 cm) and 1" (2.5 cm) Rotors or Quick Coupler Valves to Lateral Pipes

Features

- Preassembled units save the contractor time and reduce installation costs
- Excellent structural integrity from the swept elbow design reduces the costs associated with fatigue related failures
- Double O Ring provides extra protection against leaks and keeps threads clean of debris making hand tightening easy
- The TSJ-PRS combines the great flow characteristics of the Rain Bird turf swing joint with an inline pressure regulating outlet elbow for controlling and maintaining constant pressure right at the rotor inlet

TSJ-100-PRS

TSJ-12075, TSJ-12

Operating Specifications

- Pressure rating: 315 psi at 73º F (21.7 bar at 22.8º C) (per ASTM D3139)
- ¾" joint pressure loss: 0.3 psi at 6 gpm (0.02 bar at 0.4 l/s)
- 1 " joint pressure loss: 1.5 psi at 18 gpm; 2.5 psi at 23 gpm (0.1 bar at 1,1 l/s; 0.2 bar at 1.5 l/s)
- TSJ-PRS maximum flow: 22 gpm (1.41 l/s)

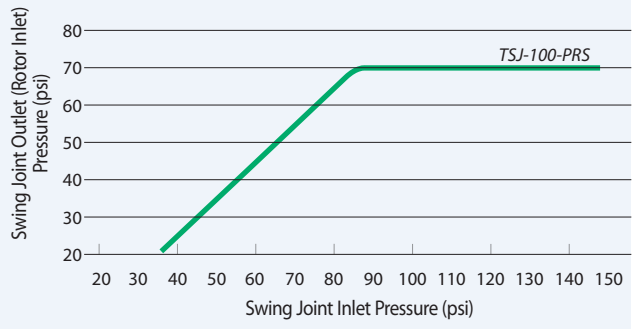
TSJ-PRS Application Information

- The TSJ-PRS is not recommended for use in systems where the pressure in the lateral lines is equal to or less than the nominal regulation pressure, as the increased pressure drop may adversely affect the performance of such systems
- To reduce the effects of water hammer, Rain Bird recommends flow rates in the supply line not exceed 5 ft/sec (1.5 m/s). The TSJ-PRS is not intended to function as a water hammer prevention device
- There are no user-serviceable parts inside. The internal spring is under compression. Do not open the PRS unit under any circumstances

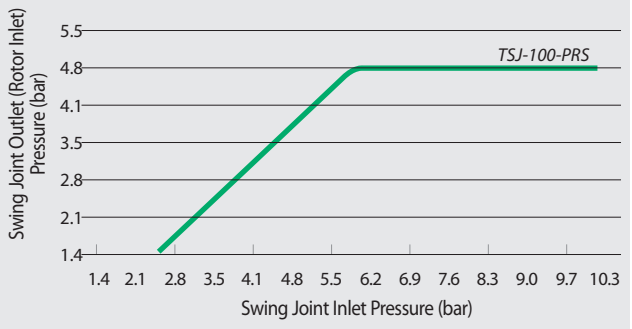
Models

- TSJ-12075: 12" (30.5 cm) long, ¾" (20/27) M x M NPT swing joint
- TSJ-12: 12" (30.5 cm) long, 1" (26/34) M x M NPT swing joint
- TSJ-100-PRS: 1" swing joint with 70 psi pressure regulator, 12" (30.5 cm) long, 1" (26/34) M x M NPT inlet and outlet

TSJ-PRS Pressure Regulation



TSJ-PRS Pressure Regulation METRIC



Swing Joint Specifications

Model Number	Length		Inlet		Outlet		Thread	Pressure Regulation	
	US	METRIC	US	METRIC	US	METRIC		US	METRIC
TSJ-12075	12"	30.5 cm	¾" M	20/27 M	¾" M	20/27 M	NPT	n/a	n/a
TSJ-12	12"	30.5 cm	1" M	26/34 M	1" M	26/34 M	NPT	n/a	n/a
TSJ-100-PRS	12"	30.5 cm	1" M	26/34 M	1" M	26/34 M	NPT	70 psi	4.8 bar