

TORO

Count on it.

835S/855S Series

GOLF ROTORS

The worlds #1 selling golf sprinklers developed to maximize your valuable resources; *water, time and money*. Flexible features that allow you to quickly and economically customize your watering application to save water and adjust the watering pattern with no disassembly or additional parts saves you time and money. Toro's 835S and 855S Series sprinklers - *Flexibility redefined!*



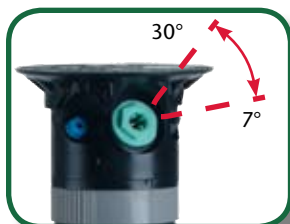
Water Management Highlight

With the industry's largest selection of high performance nozzles and Tru-jectory adjustment the 835S/855S Series allows you to put water precisely where you want it for maximum distribution uniformity. And the part/full circle drive allows you to simply and economically adjust the area of coverage to match your seasonal watering needs or meet water rationing mandates in seconds with no disassembly or additional parts required.



835S

855S



Features & Benefits

TRUJECTORY ADJUSTMENT OF THE MAIN NOZZLE – 24 POSITIONS

From 7° - 30° this patented feature in 1° increments puts water where you want it for maximum distribution uniformity. Adjust from the top of the sprinkler in seconds, wet or dry. This flexibility lets you tackle every obstacle on the course; wind, trees, bunkers, mounds and more.



NOZZLE FLEXIBILITY

The industries largest selection of precision nozzles from 20' to 90' radius applications. From the main-less configurations for short radius applications to 90' radius requirements we've got you covered. A wide assortment of back nozzles lets you water those hard to reach areas directly behind the part circle sprinklers and all nozzles are color coded for easy flow and radius identification and threaded in from the front for ease of servicing.



SPIKE-GUARD SOLENOID

With its 20,000 volt lightning rating, the industries highest, the Spike Guard solenoid has virtually eliminated the need for solenoid replacements in high lightning environments. And with half the amperage draw of traditional solenoids you can run twice as many sprinklers simultaneously, reduce the cost of wire during initial installation or increase the distance from controller to sprinkler.



ARC ADJUSTMENT – 40-330° AND TRUE FULL-CIRCLE IN ONE

One sprinkler for every location on the course. These unique sprinklers can be a full circle today and part circle tomorrow allowing you to simply and economically adjust the area of coverage to match your seasonal needs or meet water rationing mandates in seconds with no disassembly or additional parts required.

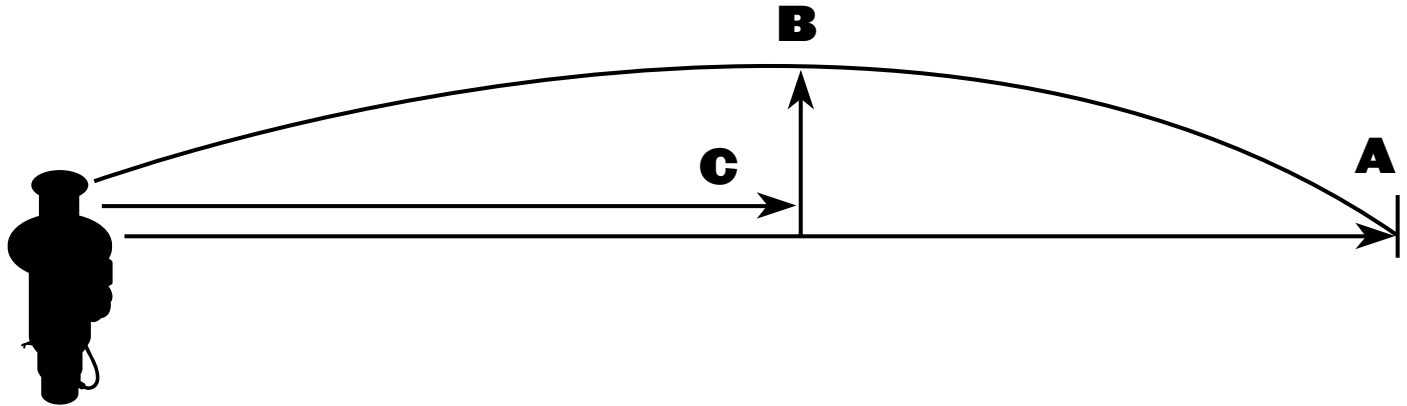


RATCHETING RISER ALLOWS ADJUSTMENT WITH NO DISASSEMBLY

Another Toro exclusive, simply pull up the riser and ratchet it to the precise position you want to water. With one sprinkler you can water only the greens today then only the surrounds tomorrow or only the fairways today then only the roughs tomorrow. Adjusted in seconds with no disassembly or additional parts required.



835S/855S Series



835S Trajectory Performance

Nozzle/PSI/GPM	#31 Nozzle @ 65 psi, 15.5 GPM						#32 Nozzle @ 65 psi, 20.5 GPM						#33 Nozzle @ 65 psi, 22.9 GPM					
Trajectory	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°
"A" Radius	46'	46'	50'	53'	54'	50'	46'	49'	51'	55'	63'	54'	54'	56'	59'	62'	66'	61'
"B" Spray Height	4'	4'	5'	8'	11'	13'	3'	4'	6'	9'	12'	15'	4'	5'	7'	9'	13'	15'
"C" Distance from Head	25'	25'	26'	33'	33'	33'	20'	24'	28'	34'	34'	34'	23'	28'	32'	34'	35'	35'

Nozzle/PSI/GPM	#34 Nozzle @ 65 psi, 30.0 GPM						#35 Nozzle @ 65 psi, 32.4 GPM						#36 Nozzle @ 80 psi, 34.0 GPM					
Trajectory	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°
"A" Radius	58'	60'	63'	67'	74'	70'	59'	61'	64'	70'	76'	74'	64'	68'	76'	80'	84'	82'
"B" Spray Height	4'	4'	6'	11'	14'	17'	4'	5'	7'	11'	15'	17'	5'	7'	9'	14'	17'	22'
"C" Distance from Head	24'	26'	35'	39'	39'	39'	30'	32'	36'	43'	43'	43'	25'	38'	40'	45'	49'	45'

Nozzle/PSI/GPM	#37 Nozzle @ 80 psi, 39.8 GPM					
Trajectory	7°	10°	15°	20°	25°	30°
"A" Radius	65'	69'	78'	82'	86'	84'
"B" Spray Height	5'	7'	9'	14'	18'	22'
"C" Distance from Head	30'	39'	41'	46'	50'	46'

855S Trajectory Performance

























Nozzle/PSI/GPM	#51 Nozzle @ 65 psi, 15.7 GPM						#52 Nozzle @ 65 psi, 20.8 GPM						#53 Nozzle @ 65 psi, 23.4 GPM					
Trajectory	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°
"A" Radius	46'	46'	51'	53'	54'	50'	49'	50'	51'	55'	64'	65'	54'	56'	59'	62'	68'	61'
"B" Spray Height	4'	4'	6'	10'	13'	15'	4'	4'	6'	9'	11'	13'	5'	6'	7'	9'	13'	15'
"C" Distance from Head	26'	27'	32'	38'	40'	41'	22'	26'	31'	35'	34'	30'	30'	33'	32'	35'	37'	37'

Nozzle/PSI/GPM	#54 Nozzle @ 65 psi, 31.2 GPM						#55 Nozzle @ 65 psi, 33.8 GPM						#56 Nozzle @ 80 psi, 35.7 GPM					
Trajectory	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°
"A" Radius	58'	60'	63'	67'	74'	70'	59'	62'	66'	70'	76'	77'	72'	73'	75'	82'	85'	82'
"B" Spray Height	5'	6'	8'	10'	15'	17'	6'	6'	9'	11'	15'	17'	5'	7'	9'	14'	17'	22'
"C" Distance from Head	31'	34'	40'	41'	41'	42'	34'	36'	43'	45'	45'	45'	25'	38'	40'	45'	49'	45'




























Nozzle/PSI/GPM	#57 Nozzle @ 80 psi, 41.9 GPM						#58 Nozzle @ 80 psi, 46.2 GPM						#59 Nozzle @ 80 psi, 53.3 GPM					
Trajectory	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°	7°	10°	15°	20°	25°	30°
"A" Radius	72'	74'	77'	83'	89'	85'	75'	77'	83'	87'	92'	88'	77'	78'	84'	89'	96'	92'
"B" Spray Height	5'	7'	9'	14'	18'	22'	6'	7'	10'	15'	18'	22'	7'	8'	11'	16'	21'	25'
"C" Distance from Head	30'	39'	41'	46'	50'	46'	38'	40'	43'	47'	52'	48'	42'	44'	45'	47'	53'	49'

Information is for reference only. Actual results may vary.

835S Series Performance Chart










Base Pressure	Nozzle Set 30  (White)		Nozzle Set 31  (Yellow)		Nozzle Set 32  (Blue)		Nozzle Set 33  (Brown)		Nozzle Set 34  (Orange)		Nozzle Set 35  (Green)		Nozzle Set 36  (Gray)		Nozzle Set 37  (Black)	
	102-2208		102-4587		102-4588		102-4589		102-0728		102-0729		102-0730		102-4261	
																
	Blue	Gray	Blue	Gray	Red	Gray	Orange	Gray	Orange	Gray	Blue	Gray	Blue	Gray	Orange	Gray
102-2925	102-2910	102-2925	102-2910	102-2928	102-2910	102-2926	102-2910	102-2926	102-2910	102-2925	102-2910	102-2925	102-2910	102-2926	102-2910	
psi	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM
50	42	7.1	52	13.7	61	17.1	64	20.2	69	27.4	—	—	—	—	—	—
65	45	8.7	54	15.5	63	20.5	66	22.9	74	30.0	76	32.4	80	34.0	—	—
80	46	9.6	57	17.0	67	22.6	70	25.3	77	33.2	79	35.8	84	37.5	86	40.8
100	48	11.2	59	18.9	72	25.2	74	28.2	80	37.0	84	39.9	88	42.5	92	45.3
Stator	102-6929 Blue				102-1939 Yellow						102-1940 White					
Conversions					835S-3134						835S-3537					

855S Series Performance Chart






Base Pressure	Nozzle Set 51  (Yellow)		Nozzle Set 52  (Blue)		Nozzle Set 53  (Brown)		Nozzle Set 54  (Orange)		Nozzle Set 55  (Green)		Nozzle Set 56  (Gray)		Nozzle Set 57  (Black)		Nozzle Set 58  (Red)		Nozzle Set 59  (Beige)	
	102-4587		102-4588		102-4589		102-0728		102-0729		102-0730		102-4261		102-4260		102-4259	
																		
	Blue	Gray	Red	Gray	Orange	Gray	Orange	Gray	Blue	Gray	Blue	Gray	Orange	Gray	Blue	Gray	Blue	Gray
102-2925	102-2910	102-2928	102-2910	102-2926	102-2910	102-2926	102-2910	102-2925	102-2910	102-2925	102-2910	102-2926	102-2910	102-2925	102-2910	102-2925	102-2910	
psi	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM
50	52	13.9	62	17.4	66	20.7	69	28.6	—	—	—	—	—	—	—	—	—	—
65	54	15.7	64	20.8	68	23.4	74	31.2	76	33.8	81	35.7	—	—	—	—	—	—
80	57	17.2	68	22.9	72	25.8	77	34.4	79	37.2	85	39.4	89	43.6	92	47.5	96	57.0
100	59	19.1	73	25.5	76	28.7	80	38.2	84	41.3	89	43.7	94	48.5	95	51.1	100	61.1
Stator	102-1939 Yellow						102-1940 White						102-1941					
Conver.	855S-5154						855S-5558						855S-59					

Not recommended at these pressures. Radius shown in feet.
 Toro recommends the use of a 1 1/4" swing joint at flows over 25-GPM (95-LPM). Sprinkler radius data collected in Toro's zero wind test facility per ASAE standard S398.1.
 Actual site conditions must be considered when selecting the appropriate nozzle.
 All sprinklers are equipped with the selectable pilot valve that allows settings at 50, 65, 80 and 100 psi.

Back Nozzle Performance Data

Nozzles			65 PSI		80 PSI		Profile
Part #	Description	Color	Radius	GPM	Radius	GPM	
102-6937	Inner Nozzle w/ Yellow Restrictor	Yel/Yel	29	3.7	30	4.1	
102-6531	Inner Nozzle w/ White Restrictor	Grn/Wht	31	4.3	33	4.6	
102-6883	Intermediate Nozzle	Brown	38	2.8	38	2.8	
102-6884	Intermediate Nozzle	Yellow	41	4.1	43	4.5	
102-6885	Intermediate Nozzle	Green	42	5.4	45	6.0	
102-2925	Intermediate Nozzle	Blue	40	2.8	42	3.2	
102-2926	Intermediate Nozzle	Orange	44	4.3	45	4.8	
102-2927	Intermediate Nozzle	Gray	46	5.1	47	5.4	
102-2928	Intermediate Nozzle	Red	48	6.5	50	7.0	
102-2929	Intermediate Nozzle	Beige	51	8.1	53	9.1	

Mainless Nozzle Performance Data

Pressure										
	102-2925	102-2208	102-2926	102-2208	102-2928	102-2208	102-2910	102-2208	102-2910	102-2930
PSI	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM
65	46	8.7	46	10.4	50	12.4	42	10.2	47	13.9
SOR	5:02		4:16		3:36		4:19		4:06	
80	46	9.6	47	11.5	53	13.7	44	11.2	51	15.3
SOR	4:22		3:40		3:03		3:53		3:40	

Requires the low-flow stator 102-6929 for indicated rotation speeds.
 SOR: Speed of rotation

Operating Specifications

- Inlet:
 - 835S: 1" NPT, BSP or ACME
 - 855S: 1 1/2" NPT, BSP or ACME
- Radius:
 - 835S: 42' - 92'
 - 855S: 52' - 100'
- Flow Rate:
 - 835S: 7.1 - 45.3 GPM
 - 855S: 13.9 - 61.1 GPM
- Precipitation Rates:
 - 835S: Minimum - .37"/hr; Maximum - .53"/hr
 - 855S: Minimum - .43"/hr; Maximum - .60"/hr
- Pilot Valve: Selectable at 50, 65, 80 and 100 psi
- Recommended Operating Pressure Range: 65-100 psi (maximum -150 psi and minimum - 40 psi)
- Electric Valve-in-Head Solenoid: 24V ac, 50/60 Hz
 - Inrush: 50 Hz, 0.17 Amps; 60 Hz, 0.12 Amps
 - Holding: 50 Hz, 0.15 Amps; 60 Hz, 0.10 Amps
- Trajectory: 24 positions from 7° - 30° in 1° increments
- Check-O-Matic maintains up to 37' elevation

Additional Features

- 835S has eight nozzle variations (30, 31, 32, 33, 34, 35, 36 and 37)
- 855S has nine nozzle variations (51, 52, 53, 54, 55, 56, 57, 58 and 59)
- Four in-line nozzles, rotating stream pattern
- One back nozzle position
- Stator variations: 835S - 3 and 855S - 3

Dimensions

- Body diameter:
 - 835S: 6 1/2"
 - 855S: 7 1/2"
- Body height:
 - 835S: 10"
 - 855S: 11 3/8"
- Weight:
 - 835S: 2.98 lbs.
 - 855S: 3.70 lbs.
- Pop-up height to nozzle: 3 1/4"

Warranty

- Three years
- Five years when installed with Toro Swing Joints

Toro® Swing Joints



www.toro.com • The Toro Company • Irrigation Division • 5825 Jasmine St. Riverside, CA 92504 • 877.345.TORO (8676) P/N 09-5022-IG Specifications subject to change without notice. For more information, contact your local Toro distributor. ©2009 The Toro Company. All rights reserved.

835S Conversion Assemblies

Models	Description
• 835S-3134	835S w/31-34 Nozzles (#3 Nozzle Installed)
• 835S-3537	835S w/35-37 Nozzles (#5 Nozzle Installed)
• 835S-3134E	835S w/31-34 Nozzles (#3 Nozzle Installed), Effluent
• 835S-3537E	835S w/35-37 Nozzles (#5 Nozzle Installed), Effluent



855S Conversion Assemblies—(Ribbed Body)

Models	Description
• 855S-5154	855S w/51-54 Nozzles (#3 Nozzle Installed)
• 855S-5558	855S w/55-58 Nozzles (#5 Nozzle Installed)
• 855S-59	No.9 Nozzle installed
• 855S-5154E	855S w/51-54 Nozzles (#3 Nozzle Installed), Effluent
• 855S-5558E	855S w/55-58 Nozzles (#5 Nozzle Installed), Effluent
• 855S-59E	(#9 Nozzle installed), Effluent
• 102-5011	690 Adapter allows you to upgrade any 690 with 855S conversions



855S Conversion Assemblies—(Ribless Body)

Models	Description
• 855S-5154R	855S w/51-54 Nozzles (#3 Nozzle Installed)
• 855S-5558R	855S w/55-58 Nozzles (#5 Nozzle Installed)
• 855S-59R	#9 Nozzle Installed
• 855S-5154RE	855S w/51-54 Nozzles (#3 Nozzle Installed), Effluent
• 855S-5558RE	855S w/55-58 Nozzles (#5 Nozzle Installed), Effluent
• 855S-59RE	#9 nozzle installed, Effluent



Specifying Information—835S & 855S

8X5S-XX-XXXXX						
Body Inlet	Arc	Body Threads	Valve Type	Nozzle	Pressure Regulation*	Optional
8X5S	5	X	X	XX	X	XX
3—1" 5—1 1/2"	5—Part-circle and Full-circle in one	0—NPT 4—ACME 5—BSP	1—Normally Open Hydraulic 2—Check-O-Matic 6—Electric	835S 30 31 32 33 34 35 36 37 855S 51 52 53 54 55 56 57 58 59	6—65 psi 8—80 psi	E—Effluent Model DL—Decoder Model N—Nickel plated Model
Example: When specifying an 835S Series Sprinkler with NPT threads, #34 nozzle, an electric valve and pressure regulation at 65 psi you would specify: 835S-06-346						

* Electric models only. All sprinklers are equipped with the selectable pilot valve that allows settings at 50, 65, 80 and 100 psi.
Note: Not all models available. Nickel-plated, corrosion-resistant models are available upon request.