



700 Series

Golf Sprinklers



700 Series Sprinklers

Dependability. Durability. Lower operation cost.

Dependability.

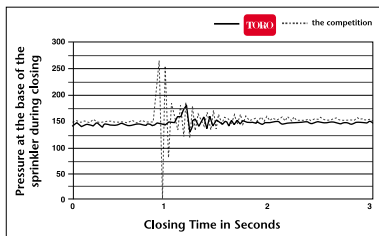
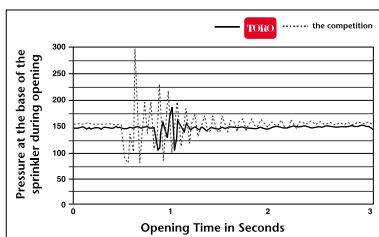
Simply, these gear drives keep going. With 35 years of experience, 700 Series sprinklers are built with proven toughness and durability. Their longevity proves their dependability, time and time again.

More reliability can be found within the long-standing 700 Series pilot valves. Pilot valves regulate pressure for accurate and continued performance. And, the pressure regulation is fixed — the pressure you want at purchase, is the pressure you can expect for the life of the sprinkler.

Durability.

With 700 Series sprinklers, there's no need to worry about the damage that heavy maintenance equipment can cause. These tough sprinkler bodies protect their important internal assemblies.

The construction of the internal components prolongs sprinkler life too. They operate such that the valve opening and closing is gradual, thus reducing stress and surges on the system. This not only protects the sprinkler, but the piping as well.



Lower Operation Cost.

Lower operation cost is an added bonus. The simplicity of design, shared components and lower maintenance requirements result in sprinklers that are not only economical to purchase, but also cost-efficient throughout the life cycle.

With Toro's sprinkler conversion assemblies, upgrading to the latest technology is a snap — you get all the features of our newest sprinklers with an easy retrofit.

Features

- Arc pattern
 - 730/750 models: Full-circle arc for total coverage
 - 760/780 models: Adjustable part-circle: 30°-330° for more efficient coverage (full-circle models available)
- Vented for precise regulation over a wide range of pressures
- Low flush at activation for efficient operation at low pressures
- Time-proven planetary gear-drive design for long life
- Four factory-set pressure settings prevent tampering: 50 PSI, 65 PSI, 80 PSI and 100 PSI (electric)
- Color-coded nozzles by radius and gallonage
- 3 styles/activation types to fit any application:
 - Electric Valve-In-Head
 - Normally Open Hydraulic
 - Check-O-Matic
- Check-O-Matic design prevents draining at elevation differentials of up to 15'
- Manual control at the sprinkler, On-Off-Auto (electric)
- Internal components are serviceable from the top of the sprinkler
- Pilot valve is protected by a rugged body
- Pops up to 3" to clear tall grasses
- The lowest valve-in-head friction loss in the industry
- 3 body threads available:
 - ACME
 - NPT
 - BSP
- Effluent indicators available:
 - Marker (Part No. 89-4719)
 - Yardage Marker (Part No. 89-4736)
 - 730 Cap (Part No. 89-8289)
 - 750 Cap (Part No. 89-8290)
 - 760 Cap (Part No. 89-8287)
 - 780 Cap (Part No. 89-8288)

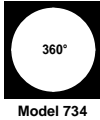


Simple to use.

This valve removal tool, valve insertion tool and VIH snap ring pliers — available from Toro — are all you need for quick, easy installation and removal of drive and valve assemblies from body.



Nozzle Performance Data — 730/750 Series



	Nozzle Set 31		Nozzle Set 32		Nozzle Set 33		Nozzle Set 34		Nozzle Set 35		Nozzle Set 36		Nozzle Set 37	
	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM
50	52	11.0	55	13.3	60	16.8	62	19.8	66	25.0	68	26.5	69	29.3
55	53	12.0	56	14.1	61	17.2	63	20.6	67	25.8	69	27.9	70	30.7
60	54	13.0	57	14.9	62	17.5	64	21.4	68	26.6	71	29.2	72	32.1
65	55	14.0	58	15.7	63	17.9	65	22.2	69	27.4	72	30.6	74	33.5
70	56	14.5	59	16.3	64	18.6	66	22.8	70	28.1	73	31.4	76	34.8
75	56	15.0	59	16.9	64	19.3	66	23.4	70	28.8	75	32.2	78	36.1
80	57	15.5	60	17.5	65	20.0	67	24.0	71	29.5	76	33.0	80	37.4
85	58	15.9	61	17.8	66	21.0	68	25.0	72	31.0	77	34.3	81	38.2
90	59	16.3	61	18.1	67	21.9	70	26.1	73	32.5	78	35.5	82	39.3
95	59	16.6	62	18.4	67	22.9	71	27.1	74	34.0	79	36.8	82	40.2
100	60	17.0	62	18.7	68	23.8	72	28.1	75	35.5	80	38.0	83	41.2

Radius* shown in feet
 = Shaded areas represent nozzles not recommended at this pressure
 = Shaded areas represent standard pressure regulation at 50, 65, 80 & 100 PSI
 Toro recommends the use of a 1 1/4" (30mm) swing joint at flows over 25 GPM (95 LPM)

	Nozzle Set 31		Nozzle Set 32		Nozzle Set 33		Nozzle Set 34		Nozzle Set 35		Nozzle Set 36		Nozzle Set 37			
	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM		
3,4	340	3,47	15,8	41,6	16,8	50,3	18,3	63,6	18,9	75,0	20,1	95	20,7	100	21,0	111
4,0	400	4,08	16,3	47,7	17,3	55,2	18,8	65,8	19,4	79,8	20,6	99	21,4	109	21,7	119
4,5	450	4,59	16,8	53,0	17,7	59,4	19,2	67,8	19,8	84,0	21,0	104	21,9	116	22,6	127
5,0	500	5,10	17,1	55,8	18,0	62,8	19,5	71,7	20,1	87,4	21,3	108	22,6	120	23,5	134
5,5	550	5,61	17,4	58,7	18,3	66,2	19,8	75,7	20,4	90,8	21,6	112	23,2	125	24,4	142
6,0	600	6,12	17,8	60,8	18,6	67,8	20,2	80,9	21,0	96,3	22,1	120	23,6	132	24,8	146
6,5	650	6,63	18,0	62,7	18,9	69,5	20,4	86,1	21,6	102	22,5	128	24,0	139	25,0	152
6,9	690	7,04	18,3	64,4	18,9	70,8	20,7	90,1	21,9	106	22,9	134	24,4	144	25,3	156

Radius* shown in meters
 = Shaded areas represent nozzles not recommended at this pressure
 = Shaded areas represent standard pressure regulation at 3,4, 4,5, 5,5 and 6,9 Bar
 Toro recommends the use of a 30mm (1 1/4") swing joint at flows over 95 LPM (25 GPM)

	Nozzle Set 52		Nozzle Set 53		Nozzle Set 54		Nozzle Set 55		Nozzle Set 56		Nozzle Set 57		Nozzle Set 58		Nozzle Set 59	
	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM
50	56	13.0	61	16.8	65	20.0	67	25.3	68	30.0	70	32.5	73	37.4	78	40.1
55	57	13.5	62	17.6	66	20.9	68	26.5	69	31.5	73	33.6	76	38.9	81	41.6
60	57	14.0	62	18.2	68	21.8	69	27.7	71	33.0	77	34.7	68	40.4	84	43.1
65	78	14.5	63	19.1	69	22.8	70	28.9	72	34.6	80	35.8	81	41.9	87	44.5
70	79	15.0	65	19.8	72	23.6	73	29.9	75	36.0	81	37.3	83	43.7	89	46.4
75	79	15.6	66	20.4	72	24.5	73	30.9	75	37.4	83	38.8	84	45.5	90	48.3
80	60	16.1	68	21.1	74	25.3	75	32.0	77	38.9	84	40.3	86	47.4	92	50.2
85	62	17.4	69	22.2	75	26.8	76	33.4	78	39.9	86	41.7	88	50.2	94	52.7
90	63	18.7	70	23.4	76	28.4	78	34.8	80	41.0	87	43.1	89	53.0	96	53.0
95	65	19.9	71	24.5	76	29.9	79	36.2	81	42.0	89	44.4	91	55.7	98	55.7
100	66	21.2	72	25.6	77	31.4	80	37.6	82	43.0	90	46.8	92	58.6	98	60.1

Radius* shown in feet
 = Shaded areas represent nozzles not recommended at this pressure
 = Shaded areas represent standard pressure regulation at 50, 65, 80 & 100 PSI

	Nozzle Set 52		Nozzle Set 53		Nozzle Set 54		Nozzle Set 55		Nozzle Set 56		Nozzle Set 57		Nozzle Set 58		Nozzle Set 59			
	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM		
3,4	340	3,47	17,1	49,2	18,6	63,6	19,8	75,7	20,4	95,8	20,7	114	21,3	123	22,3	142	23,8	152
4,0	400	4,08	17,4	52,2	18,9	68,2	20,5	81,2	20,9	103	21,4	123	23,0	130	23,5	151	25,2	161
4,5	450	4,59	17,7	54,9	19,2	72,3	21,0	86,3	21,3	109	21,9	131	24,4	136	24,7	159	26,5	168
5,0	500	5,10	18,0	57,9	20,0	76,1	21,9	91,0	22,3	115	22,9	139	25,0	144	25,5	169	27,3	179
5,5	550	5,61	18,3	60,9	20,7	79,9	22,6	95,8	22,9	121	23,5	147	25,6	153	26,2	179	28,0	190
6,0	600	6,12	19,0	67,8	21,2	85,9	23,0	104	23,4	129	24,0	153	26,3	160	26,9	194	28,9	200
6,5	650	6,63	19,7	74,6	21,6	92,1	23,2	112	24,0	136	24,6	158	27,0	167	27,6	209	29,8	209
6,9	690	7,04	20,1	80,3	21,9	96,9	23,5	119	24,4	142	25,0	163	27,4	177	28,0	222	29,9	228

Radius* shown in meters
 = Shaded areas represent nozzles not recommended at this pressure
 = Shaded areas represent standard pressure regulation at 3,4, 4,5, 5,5 and 6,9 Bar

*Sprinkler radius of throw per ASAE standard S398.7

Attention

600 Series

Conversion Assembly

- Lower cost
- Higher pop-up
- Easier to adjust arc
- Easier to service

Quickly upgrades existing Toro technology to provide all the features

730 Conversion Assembly



For upgrades to existing 630 and 660 Series Sprinklers

750 Conversion Assembly



For upgrades to existing 650 and 680 Series Sprinklers

ation:
es Users

Nozzle Performance Data — 760/780 Series

PSI	Nozzle Set 62		Nozzle Set 63		Nozzle Set 64		Nozzle Set 65		Nozzle Set 66		Nozzle Set 67		Nozzle Set 68	
	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM
50	55	11.7	58	13.2	61	16.8	63	20.2	65	23.0	67	26.8	68	28.6
55	56	12.3	60	13.7	63	17.5	65	21.2	67	24.2	69	28.1	70	30.1
60	57	12.8	62	14.3	64	18.1	66	22.1	69	25.4	70	29.4	71	31.5
65	58	13.4	64	14.8	66	18.8	68	23.1	71	26.6	72	30.7	73	33.0
70	59	13.9	64	15.3	67	19.6	69	23.9	72	27.5	73	31.9	74	34.2
75	60	14.4	65	15.9	68	20.3	71	24.8	73	28.4	74	33.1	75	35.3
80	61	14.9	65	16.4	69	21.1	72	25.6	74	29.4	75	34.4	76	36.5
85	62	15.3	65	17.0	69	21.8	73	26.3	75	30.3	76	35.4	77	37.7
90	62	15.6	66	17.5	70	22.6	73	27.0	75	31.2	76	36.4	77	38.9
95	63	16.0	66	18.1	70	23.3	74	27.6	76	32.0	77	37.4	78	40.0
100	63	16.3	66	18.6	70	24.0	74	28.3	76	32.9	77	38.4	78	41.2



Model 764



Model 765

Shaded areas represent standard pressure regulation at 50, 65, 80 & 100 PSI
Radius* shown in feet

			Nozzle Set 62		Nozzle Set 63		Nozzle Set 64		Nozzle Set 65		Nozzle Set 66		Nozzle Set 67		Nozzle Set 68	
Bar	kPa	Kg/cm ²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	16,8	44,3	17,7	50,0	18,6	63,6	19,2	76,5	19,8	87,1	20,4	101	20,7	108
4,0	400	4,08	17,3	47,7	18,7	53,2	19,4	67,6	20,0	82,3	20,8	94,3	21,2	109	21,5	117
4,5	450	4,59	17,7	50,7	19,5	56,0	20,1	71,2	20,7	87,4	21,6	101	21,9	116	22,3	125
5,0	500	5,10	18,1	53,6	19,7	59,1	20,6	75,5	21,3	92,2	22,1	106	22,4	123	22,7	132
5,5	550	5,61	18,6	56,4	19,8	62,1	21,0	79,9	21,9	96,9	22,6	111	22,9	130	23,2	138
6,0	600	6,12	18,9	58,4	19,9	65,1	21,2	83,7	22,3	101	22,9	116	23,2	136	23,5	145
6,5	650	6,63	19,2	60,3	20,1	68,2	21,3	87,8	22,5	104	23,1	121	23,4	141	23,7	151
6,9	690	7,04	19,2	61,7	20,1	70,4	21,3	90,8	22,6	107	23,2	125	23,5	145	23,8	156

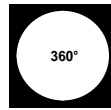
Shaded areas represent standard pressure regulation at 3,4, 4,5, 5,5 and 6,9 Bar
Radius* shown in meters

780 Conversion Assembly for Non-Ribbed Bodies



For 650s built prior to 1993

PSI	Nozzle Set 82		Nozzle Set 83		Nozzle Set 84		Nozzle Set 85		Nozzle Set 86		Nozzle Set 87		Nozzle Set 88		Nozzle Set 89	
	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM	Radius	GPM
50	55	12.3	58	13.2	61	17.2	63	20.8	65	24.4	69	28.8	72	32.2	74	35.7
55	57	12.7	60	13.8	63	18.1	65	21.7	67	25.6	70	30.2	73	33.7	75	37.3
60	58	13.0	62	14.4	65	18.9	66	22.6	69	26.8	72	31.5	74	35.2	76	38.9
65	60	13.4	64	15.0	67	19.8	68	23.6	71	28.1	73	32.9	75	36.8	77	40.6
70	61	13.9	65	15.5	68	20.6	70	24.4	73	29.0	75	34.2	77	38.3	79	42.1
75	63	14.4	67	15.9	70	21.3	72	25.1	76	29.9	78	35.5	79	39.8	81	43.6
80	64	14.9	68	16.4	71	22.1	74	25.9	78	30.9	80	36.9	81	41.4	82	45.2
85	65	15.4	68	17.0	71	22.7	75	26.8	79	31.8	81	37.9	82	42.4	83	46.4
90	66	15.6	69	17.5	72	23.3	75	27.7	79	32.7	82	38.9	84	43.4	85	47.7
95	66	16.0	69	18.1	72	23.9	76	28.5	80	33.6	83	39.9	85	44.4	86	48.9
100	67	16.3	69	18.6	72	24.5	76	29.4	80	34.5	84	40.9	86	45.4	87	50.1



Model 784



Model 785

Shaded areas represent standard pressure regulation at 50, 65, 80 & 100 PSI
Radius* shown in feet

			Nozzle Set 82		Nozzle Set 83		Nozzle Set 84		Nozzle Set 85		Nozzle Set 86		Nozzle Set 87		Nozzle Set 88		Nozzle Set 89	
Bar	kPa	Kg/cm ²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	16,8	46,6	17,7	50,0	18,6	65,1	19,2	78,7	19,8	92,4	21,0	109	21,9	122	22,6	135
4,0	400	4,08	17,6	48,8	18,7	53,6	19,6	70,3	20,0	84,2	20,8	99,6	21,7	117	22,4	131	23,0	145
4,5	450	4,59	18,3	50,7	19,5	56,8	20,4	75,0	20,7	89,3	21,6	106	22,3	125	22,9	139	23,5	154
5,0	500	5,10	18,9	53,6	20,1	59,4	21,0	79,3	21,6	93,7	22,7	111	23,3	132	23,8	148	24,2	162
5,5	550	5,61	19,5	56,4	20,7	62,1	21,6	83,7	22,6	98,0	23,8	117	24,4	140	24,7	157	25,0	171
6,0	600	6,12	19,9	58,6	20,8	65,1	21,8	86,8	22,9	103	24,1	122	24,8	145	25,2	162	25,5	178
6,5	650	6,63	20,1	60,3	21,0	68,2	21,9	90,1	23,1	107	24,3	127	25,3	150	25,9	168	26,2	184
6,9	690	7,04	20,4	61,7	21,0	70,4	21,9	92,7	23,2	111	24,4	131	25,6	155	26,2	172	26,5	190

Shaded areas represent standard pressure regulation at 3,4, 4,5, 5,5 and 6,9 Bar
Radius* shown in meters

780 Conversion Assembly for Ribbed Bodies



For 650s built since 1993

*Sprinkler radius of throw per ASAE standard S398.1

730 Specifications

- Radius: 52'-83'
- Flow Rate: 11.0–41.2 GPM
- 1" NPT female-threaded inlet, BSP and ACME threads available
- Full-circle models
- Pop-up height: 3"

750 Specifications

- Radius: 56'-98'
- Flow Rate: 13.0–60.1 GPM
- 1½" NPT female-threaded inlet, BSP and ACME threads available
- Full-circle models
- Pop-up height: 3"

Electrical Specifications

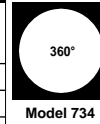
- 24 V a.c., 50/60 Hz
- Inrush:
 - 50 Hz: 0.47 Amps (11.3 VA)
 - 60 Hz: 0.40 Amps (9.6 VA)
- Holding:
 - 50 Hz: 0.32 Amps (7.7 VA)
 - 60 Hz: 0.30 Amps (7.2 VA)



730 SERIES NOZZLE ORDERING MATRIX

Nozzle Set							Press. Reg. Settings
31	32	33	34	35	36	37	
X	X	•	•	•	•	n/a	5—50 PSI
•	•	X	X	X	X	•	6—65 PSI
•	•	•	•	•	•	X	8—80 PSI
•	•	•	•	•	•	•	1—100 PSI

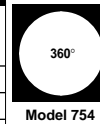
X—Optimum performance •—Available n/a—Not available



750 SERIES NOZZLE ORDERING MATRIX

Nozzle Set							Press. Reg. Settings	
52	53	54	55	56	57	58		59
X	•	•	•	•	•	•	•	5—50 PSI
•	X	X	X	X	•	•	•	6—65 PSI
•	•	•	•	•	X	X	X	8—80 PSI
•	•	•	•	•	•	•	•	1—100 PSI

X—Optimum performance •—Available



Ordering Information — 730 & 750 Series Sprinklers

Body Inlet	Body Threads	Valve-In-Head Type	Nozzle				Pressure Regulation*
<u>730</u> 3—1"	0—NPT 4—ACME 5—BSP	1—Normally Open Hydraulic 2—Check-O-Matic 6—Electric	<u>730</u>		<u>750</u>		5—50 PSI 6—65 PSI 8—80 PSI 1—100 PSI
<u>750</u> 5—1½"			31 32 33 34	35 36 37	52 53 54 55	56 57 58 59	

For Example:

When ordering a 750 Series Sprinkler with a 360° arc, NPT threads, #52 nozzle, electric valve-in-head and pressure regulation at 50 PSI, you would order:

754-06-525

*Electric models only.

760 Specifications

- Radius: 55'-78'
- Flow Rate: 11.7–41.2 GPM
- 1" NPT female-threaded inlet, BSP and ACME threads available
- Adjustable part-circle (30°-330° and full-circle models)
- Pop-up height: 3"



780 Specifications

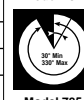
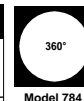
- Radius: 55'-87'
- Flow Rate: 12.3–50.1 GPM
- 1½" NPT female-threaded inlet, BSP and ACME threads available
- Adjustable part-circle (30°-330° and full-circle models)
- Pop-up height: 3"

760 SERIES NOZZLE SPECIFYING MATRIX							
Nozzle Set							Press. Reg. Settings
62	63	64	65	66	67	68	
X	•	•	•	•	•	•	5—50 PSI
•	X	X	X	X	•	•	6—65 PSI
•	•	•	•	•	X	X	8—80 PSI
•	•	•	•	•	•	•	1—100 PSI



X—Optimum performance •—Available

780 SERIES NOZZLE SPECIFYING MATRIX								
Nozzle Set							Press. Reg. Settings	
82	83	84	85	86	87	88		89
X	•	•	•	•	•	•	•	5—50 PSI
•	X	X	X	X	•	•	•	6—65 PSI
•	•	•	•	•	X	X	X	8—80 PSI
•	•	•	•	•	•	•	•	1—100 PSI



X—Optimum performance •—Available

Electrical Specifications

- 24 V a.c., 50/60 Hz
- Inrush:
 - 50 Hz: 0.47 Amps (11.3 VA)
 - 60 Hz: 0.40 Amps (9.6 VA)
- Holding:
 - 50 Hz: 0.32 Amps (7.7 VA)
 - 60 Hz: 0.30 Amps (7.2 VA)

Specifying Information — 760 & 780 Series Sprinklers

Body Inlet	Arc	Body Threads	Valve-In-Head Type	Nozzle	Pressure Regulation*
760 6—1"	4—Full-Circle 5—Adjustable Part-Circle	0—NPT 4—ACME 5—BSP	1—Normally Open Hydraulic 2—Check-O-Matic 6—Electric	760 62 63 64 65 66 67 68	5—50 PSI 6—65 PSI 8—80 PSI 1—100 PSI
780 8—1½"				780 82 83 84 85 86 87 88 89	

For Example:
When specifying a 780 Series Sprinkler with a 360° arc, NPT threads, #86 nozzle, electric valve-in-head and pressure regulation at 80 PSI, you would specify:

784-06-868

* Electric models only.

A Tradition of Dependability



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