

640 Series Performance Data—Metric

Nozzle	Bar	kPa	Kg/cm ²	LPM	Radius
40	3,0	300	3,06	23,6	14,6
	3,5	350	3,57	25,5	15,3
	4,0	400	4,08	27,2	15,7
	4,5	450	4,59	29,0	16,0
	5,0	500	5,10	30,9	16,2
	5,5	550	5,61	32,5	16,5
	6,0	600	6,12	34,1	16,7
41	3,0	300	3,06	36,9	15,2
	3,5	350	3,57	38,8	16,2
	4,0	400	4,08	41,0	16,4
	4,5	450	4,59	43,4	16,6
	5,0	500	5,10	45,8	16,8
	5,5	550	5,61	48,0	17,1
	6,0	600	6,12	49,9	17,3
42	3,0	300	3,06	46,6	16,2
	3,5	350	3,57	49,1	16,8
	4,0	400	4,08	52,2	17,0
	4,5	450	4,59	54,4	17,2
	5,0	500	5,10	56,7	17,5
	5,5	550	5,61	59,7	17,7
	6,0	600	6,12	62,5	17,7
43	3,0	300	3,06	51,7	17,4
	3,5	350	3,57	55,2	18,0
	4,0	400	4,08	58,5	18,0
	4,5	450	4,59	62,0	18,3
	5,0	500	5,10	65,6	18,7
	5,5	550	5,61	69,1	19,2
	6,0	600	6,12	72,2	19,4
44	3,0	300	3,06	65,7	17,3
	3,5	350	3,57	70,8	18,3
	4,0	400	4,08	74,3	18,5
	4,5	450	4,59	79,3	18,9
	5,0	500	5,10	84,3	19,4
	5,5	550	5,61	88,4	19,8
	6,0	600	6,12	92,8	20,2

All performance specifications are based on the stated working pressure available at the base of the sprinkler. Radius shown in meters.

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to the



Stadium



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TORO

Count on it.

640 Series

S P R I N K L E R S

COMMERCIAL

The 640 Series is the reliable, proven veteran rotor for athletic fields and other commercial applications. Perfect for the playing field, 640 Series can be buried ½" below grade and comes standard with a rubber cover for safety.

In addition, once it goes in the ground, it stays there. 640 Series' track record is solid and goes back nearly 35 years. It's durable and well built with a stainless steel-encased drive assembly, gear-drive design, and durable engineering plastic, brass and stainless steel construction. To top it off, the 640 Series rotor is backed with a five-year warranty, giving you further confidence.



640 Series Sprinklers

47'-67' (14-20m) Radius

Features

- Selection of five nozzles and 12 arcs
- Valve-In-Head (normally open hydraulic models)
- Adjustment screw allows up to 25% radius reduction
- Standard rubber cover
- Check valve prevents low-head drainage, keeping laterals charged with water
- Up to ½" (13mm) below-grade installation
- Vandal-resistant cap with locking set screw
- Small exposed surface diameter
- Stainless steel-encased nozzle and drive assembly

- Gear-drive design for longer life
- Basket filter screen to prevent clogging
- Stainless steel retraction spring
- Durable engineering plastic, brass and stainless steel construction
- Recycled water models available
- Capable of faster rotation—fast speed performance data available
- Five-year warranty

Specifications

- Flow rate: 6.0–25.0 GPM (23–95 LPM)
- Recommended operating pressure: 40–90 psi (2,8–6,2 Bar)
- Trajectory: 27°
- Maximum operating pressure: 100 psi (7 Bar)
- Pop-up to nozzle: 2¾" (60mm)
- 1" (25mm) female-threaded inlet, BSP threads available



640 Series Sprinklers Apex @ 50 psi (3,5 Bar)

Nozzle	27°	
	Max. Height of Spray	
40	11' 6"	(3,5m)
41	13' 10"	(4,1m)
42	13' 5"	(4,0m)

640 Series Sprinklers Apex @ 60 psi (4,2 Bar)

Nozzle	27°	
	Max. Height of Spray	
43	18' 8"	(5,7m)

640 Series Sprinklers Apex @ 75 psi (5,0 Bar)

Nozzle	27°	
	Max. Height of Spray	
44	19' 6"	(6,0m)

- Dimensions:
 - Exposed surface diameter when buried ½" below grade: 1¾" (44mm)
 - Body diameter: 2½" (65mm)
 - Cap diameter: 3¼" (83mm)
 - Body height:
 - Check-O-Matic: 9" (230mm)
 - Valve-In-Head: 10½" (267mm)
- Check-O-Matic maintains up to 15' (4,6m) elevation change

Note: Specifications subject to change without notice.

For more information, contact your local Toro distributor.









Specifying Information






Arc	Valve Type	Nozzle	Special Arc	Optional
0—Special Arc	1—Normally Open	40	045° 148°	E—Effluent Model
1—90°	Valve-In-Head	41	060° 173°	
2—180°	2—Check-O-Matic	42	108° 192°	
3—270°		43	127° 238°	
4—360°		44		

Example: A 640 Series Sprinkler with a 108° arc, #43 nozzle and a check valve, would be specified as: **640-02-43-108**

Most 640 sprinklers are available in component parts only. Consult the Res/Com Finished Goods Price List (490-2843) for a complete list of sprinklers available as finished goods.

640 Series Performance Data—U.S.

Nozzle	psi	GPM	Radius												
				△*	□*	△	□	△	□	△	□	△	□	△	□
40	40	6.0	47	0.30	0.26	0.40	0.35	0.46	0.39	0.57	0.49	0.60	0.52	0.63	0.54
	50	6.7	50	0.30	0.26	0.40	0.34	0.45	0.39	0.56	0.49	0.60	0.52	0.62	0.54
	60	7.3	52	0.30	0.26	0.40	0.35	0.45	0.39	0.56	0.49	0.60	0.52	0.62	0.54
	70	8.0	53	0.32	0.27	0.42	0.36	0.48	0.41	0.60	0.52	0.63	0.55	0.66	0.57
	80	8.6	54	0.33	0.28	0.44	0.38	0.50	0.43	0.62	0.53	0.66	0.57	0.68	0.59
90	9.2	55	0.34	0.29	0.45	0.39	0.51	0.44	0.64	0.55	0.68	0.59	0.70	0.61	
41	40	9.5	48	0.46	0.40	0.61	0.53	0.69	0.60	0.86	0.75	0.92	0.79	0.95	0.83
	50	10.2	53	0.40	0.35	0.54	0.47	0.61	0.58	0.76	0.60	0.81	0.70	0.84	0.73
	60	11.0	54	0.42	0.36	0.56	0.48	0.63	0.55	0.79	0.68	0.84	0.73	0.87	0.76
	70	11.9	55	0.44	0.38	0.58	0.50	0.66	0.57	0.82	0.71	0.87	0.76	0.91	0.79
	80	12.7	56	0.45	0.39	0.60	0.52	0.68	0.59	0.85	0.73	0.90	0.78	0.94	0.81
90	13.4	57	0.46	0.40	0.61	0.53	0.69	0.60	0.86	0.74	0.92	0.79	0.95	0.83	
42	40	12.0	52	0.49	0.43	0.66	0.57	0.75	0.65	0.93	0.80	0.99	0.85	1.03	0.89
	50	12.9	55	0.47	0.41	0.63	0.55	0.72	0.62	0.89	0.77	0.95	0.82	0.99	0.85
	60	14.0	56	0.50	0.43	0.66	0.57	0.75	0.65	0.93	0.81	0.99	0.86	1.03	0.89
	70	14.7	57	0.50	0.44	0.67	0.58	0.76	0.66	0.95	0.82	1.01	0.87	1.05	0.91
	80	15.8	58	0.52	0.45	0.69	0.60	0.79	0.68	0.98	0.85	1.04	0.90	1.09	0.94
90	16.8	58	0.56	0.48	0.74	0.64	0.84	0.73	1.04	0.90	1.11	0.96	1.16	1.00	
43	40	13.2	56	0.47	0.41	0.62	0.54	0.71	0.61	0.88	0.76	0.94	0.81	0.97	0.84
	50	14.5	59	0.46	0.40	0.62	0.53	0.70	0.61	0.87	0.75	0.93	0.80	0.96	0.83
	60	15.7	59	0.50	0.43	0.67	0.58	0.76	0.66	0.94	0.82	1.00	0.87	1.04	0.83
	70	17.0	61	0.51	0.44	0.68	0.59	0.77	0.67	0.96	0.83	1.02	0.88	1.06	0.92
	80	18.3	63	0.51	0.44	0.68	0.59	0.77	0.67	0.96	0.83	1.03	0.89	1.07	0.92
90	19.4	64	0.53	0.46	0.70	0.61	0.80	0.69	0.99	0.86	1.05	0.91	1.10	0.95	
44	40	16.7	55	0.61	0.53	0.82	0.71	0.93	0.80	1.15	1.00	1.23	1.06	1.28	1.11
	50	18.6	60	0.57	0.50	0.76	0.66	0.87	0.75	1.08	0.94	1.15	1.00	1.20	1.03
	60	19.9	61	0.59	0.52	0.79	0.68	0.90	0.78	1.12	0.97	1.19	1.03	1.24	1.07
	70	21.9	63	0.61	0.53	0.82	0.71	0.93	0.80	1.15	1.00	1.23	1.06	1.28	1.11
	80	23.4	65	0.62	0.53	0.82	0.71	0.93	0.81	1.16	1.00	1.23	1.07	1.28	1.11
90	25.0	67	0.62	0.54	0.82	0.71	0.94	0.81	1.16	1.01	1.24	1.07	1.29	1.12	

Nozzle	psi	GPM	Radius												
				△	□	△	□	△	□	△	□	△	□	△	□
40	40	6.0	47	0.73	0.64	0.85	0.74	1.01	0.87	1.21	1.05	1.81	1.57	2.42	2.09
	50	6.7	50	0.72	0.63	0.84	0.73	0.99	0.86	1.19	1.03	1.79	1.55	2.38	2.06
	60	7.3	52	0.73	0.63	0.85	0.74	1.00	0.75	1.20	1.04	1.80	1.56	2.40	2.08
	70	8.0	53	0.77	0.67	0.90	0.78	1.05	0.91	1.27	1.10	1.90	1.65	2.53	2.19
	80	8.6	54	0.80	0.69	0.93	0.80	1.09	0.95	1.31	1.14	1.97	1.70	2.62	2.27
90	9.2	55	0.82	0.71	0.96	0.83	1.13	0.98	1.35	1.17	2.03	1.76	2.71	2.34	
41	40	9.5	48	1.11	0.96	1.30	1.12	1.53	1.32	1.83	1.59	2.75	2.38	3.67	3.18
	50	10.2	53	0.98	0.85	1.14	0.99	1.34	1.16	1.62	1.40	2.42	2.10	3.23	2.80
	60	11.0	54	1.02	0.88	1.19	1.03	1.40	1.21	1.68	1.45	2.52	2.18	3.36	2.91
	70	11.9	55	1.06	0.92	1.24	1.07	1.46	1.26	1.75	1.52	2.62	2.27	3.50	3.03
	80	12.7	56	1.09	0.95	1.27	1.10	1.50	1.30	1.80	1.56	2.70	2.34	3.60	3.12
90	13.4	57	1.11	0.97	1.30	1.12	1.53	1.32	1.83	1.59	2.75	2.38	3.67	3.18	
42	40	12.0	52	1.20	1.04	1.40	1.21	1.64	1.42	1.97	1.71	2.96	2.56	3.95	3.42
	50	12.9	55	1.15	1.00	1.34	1.16	1.58	1.37	1.90	1.64	2.85	2.46	3.79	3.29
	60	14.0	56	1.21	1.05	1.40	1.22	1.65	1.43	1.99	1.72	2.98	2.58	3.97	3.44
	70	14.7	57	1.22	1.06	1.42	1.23	1.68	1.445	2.01	1.74	3.02	2.61	4.03	3.49
	80	15.8	58	1.27	1.10	1.48	1.28	1.74	1.51	2.09	1.81	3.13	2.71	4.18	3.62
90	16.8	58	1.35	1.17	1.57	1.36	1.85	1.60	2.22	1.92	3.33	2.89	4.44	3.85	
43	40	13.2	56	1.14	0.98	1.32	1.15	1.56	1.35	1.87	1.62	2.81	2.43	3.74	3.24
	50	14.5	59	1.13	0.97	1.31	1.14	1.54	1.34	1.85	1.60	2.78	2.41	3.71	3.21
	60	15.7	59	1.22	1.06	1.42	1.23	1.67	1.45	2.01	1.74	3.01	2.61	4.01	3.47
	70	17.0	61	1.23	1.07	1.44	1.25	1.69	1.47	2.03	1.76	3.05	2.64	4.06	3.52
	80	18.3	63	1.25	1.08	1.45	1.25	1.71	1.48	2.05	1.78	3.08	2.66	4.10	3.55
90	19.4	64	1.28	1.11	1.49	1.29	1.75	1.52	2.11	1.82	3.16	2.74	4.21	3.65	
44	40	16.7	55	1.49	1.29	1.74	1.50	2.04	1.77	2.46	2.13	3.68	3.19	4.91	4.25
	50	18.6	60	1.40	1.21	1.63	1.41	1.91	1.66	2.30	1.99	3.45	2.99	4.60	3.98
	60	19.9	61	1.45	1.25	1.68	1.46	1.98	1.71	2.38	2.06	3.57	3.09	4.76	4.12
	70	21.9	63	1.49	1.29	1.74	1.53	2.04	1.84	2.45	2.76	3.68	3.68	4.91	4.25
	80	23.4	65	1.50	1.30	1.74	1.51	2.05	1.78	2.46	2.13	3.70	3.20	4.93	4.27
90	25.0	67	1.50	1.30	1.75	1.52	2.06	1.79	2.48	2.15	3.72	3.22	4.95	4.29	

*△ Precipitation rates are for triangular spacing, shown in inches per hour, calculated at 50% of diameter.
 *□ Precipitation rates are for square spacing, shown in inches per hour, calculated at 50% of diameter.
 All performance specifications are based on the stated working pressure available at the base of the sprinkler.
 Radius shown in feet.
Note: For the 640, differing arcs cannot be valved together.