

640 Series

Radius: 47'–67'

Flow rate: 6.0–25.0 GPM

Pressure: 40–90 psi

Specifications

Nozzle Performance:

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

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

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

Nozzle	27°	
	Max. Ht. of Spray	
44	19' 8"	(6,0m)

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

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

Radius:

47'–67' (14,3–20,4m)

Flow rate:

6.0–25.0 GPM (23–95 LPM)

Recommended operating pressure range:

40–90 psi (2,8–6,2 Bar)

Maximum operating pressure:

100 psi (7 Bar)

Inlet:

1" (25mm) female-threaded

Below-grade installation:

Up to ½" (13mm)

Exposed surface when buried: 1¾" (44mm)

Dimensions:

– Pop-up to nozzle: 2¾" (60mm)

– 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

Specifying Information—640 Series

64X-0X-4X-XXX-E

Arc	Valve Type	Nozzle	Special Arc	Optional
64X	0X	4X	XXX	E
0—Special Arc	1—Normally Open	0	045° 148°	E—Effluent Model
1—90°	Valve-In-Head	1	060° 173°	
2—180°	2—Check-O-Matic	2	108° 192°	
3—270°		3	127° 238°	
4—360°		4		

Example: A 640 Series Sprinkler with a 90° arc, 40 nozzle and a check valve, would be specified as: **641–02–40**

Most 640 sprinklers are available in component parts only. Consult Res/Corn Finished Goods Price List (Form No. 8-1000-IRC) for a complete list of sprinklers available as finished goods.



Operational Features

- Up to ½" (13mm) below-grade installation keeps rotor out of sight and prevents damage
- Durable stainless steel, engineering plastic and brass construction for reliable performance
- Optional valve-in-head—unique single-head control and hydraulic activation
- Selection of five nozzles and 12 arcs for versatility
- Adjustment screw allows up to 25% radius reduction
- Standard rubber cover minimizes impact damage

- Standard check valve prevents low-head drainage and keeps laterals charged with water (standard on all models)
- Vandal-resistant cap with locking set screw







Installation Features






- Small exposed surface diameter
- Stainless steel-encased nozzle and drive assembly
- Gear-drive design for longer life
- Basket filter screen
- Stainless steel retraction spring
- Recycled water models available

640 Series Performance Data—Metric

Nozzle	Base Pressure			LPM	Radius	Precip. Rate*	
	Bar	kPa	kg/cm ²			△	□
40	3,0	300	3,06	23,6	14,6	7,7	6,6
	3,5	350	3,57	25,5	15,3	7,5	6,5
	4,0	400	4,08	27,2	15,7	7,6	6,6
	4,5	450	4,59	29,0	16,0	7,8	6,8
	5,0	500	5,10	30,9	16,2	8,1	7,1
	5,5	550	5,61	32,5	16,5	8,3	7,2
41	6,0	600	6,12	34,1	16,7	8,5	7,3
	3,0	300	3,06	36,9	15,2	11,0	9,6
	3,5	350	3,57	38,8	16,2	10,2	9,6
	4,0	400	4,08	41,0	16,4	10,5	9,1
	4,5	450	4,59	43,4	16,6	10,9	9,4
	5,0	500	5,10	45,8	16,8	11,2	9,7
42	5,5	550	5,61	48,0	17,1	11,4	9,8
	6,0	600	6,12	49,9	17,3	11,5	10,0
	3,0	300	3,06	46,6	16,2	12,3	10,6
	3,5	350	3,57	49,1	16,8	12,0	10,4
	4,0	400	4,08	52,2	17,0	12,5	10,8
	4,5	450	4,59	54,4	17,2	12,7	11,0
43	5,0	500	5,10	56,7	17,5	12,8	11,1
	5,5	550	5,61	59,7	17,7	13,2	11,4
	6,0	600	6,12	62,5	17,7	13,8	11,9
	3,0	300	3,06	51,7	17,4	11,8	10,2
	3,5	350	3,57	55,2	18,0	11,8	10,2
	4,0	400	4,08	58,5	18,0	12,5	10,8
44	4,5	450	4,59	62,0	18,3	12,8	11,1
	5,0	500	5,10	65,6	18,7	13,0	11,2
	5,5	550	5,61	69,1	19,2	13,0	11,2
	6,0	600	6,12	72,2	19,4	13,3	11,5
	3,0	300	3,06	65,7	17,3	15,2	13,1
	3,5	350	3,57	70,8	18,3	14,6	12,7
44	4,0	400	4,08	74,3	18,5	15,0	13,0
	4,5	450	4,59	79,3	18,9	15,4	13,3
	5,0	500	5,10	84,3	19,4	15,5	13,4
	5,5	550	5,61	88,4	19,8	15,6	13,5
	6,0	600	6,12	92,8	20,2	15,7	13,6

640 Series Performance Data—U.S.

Nozzle	psi	GPM	Radius	360° 		270° 		238° 		192° 		180° 		173° 	
				△	□	△	□	△	□	△	□	△	□	△	□
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	148° 		127° 		108° 		90° 		60° 		45°	
				△	□	△	□	△	□	△	□	△	□	△	□
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. Data based on 360°.
 Note: For the 640, differing arcs cannot be valved together.