



Residential & Commercial Irrigation

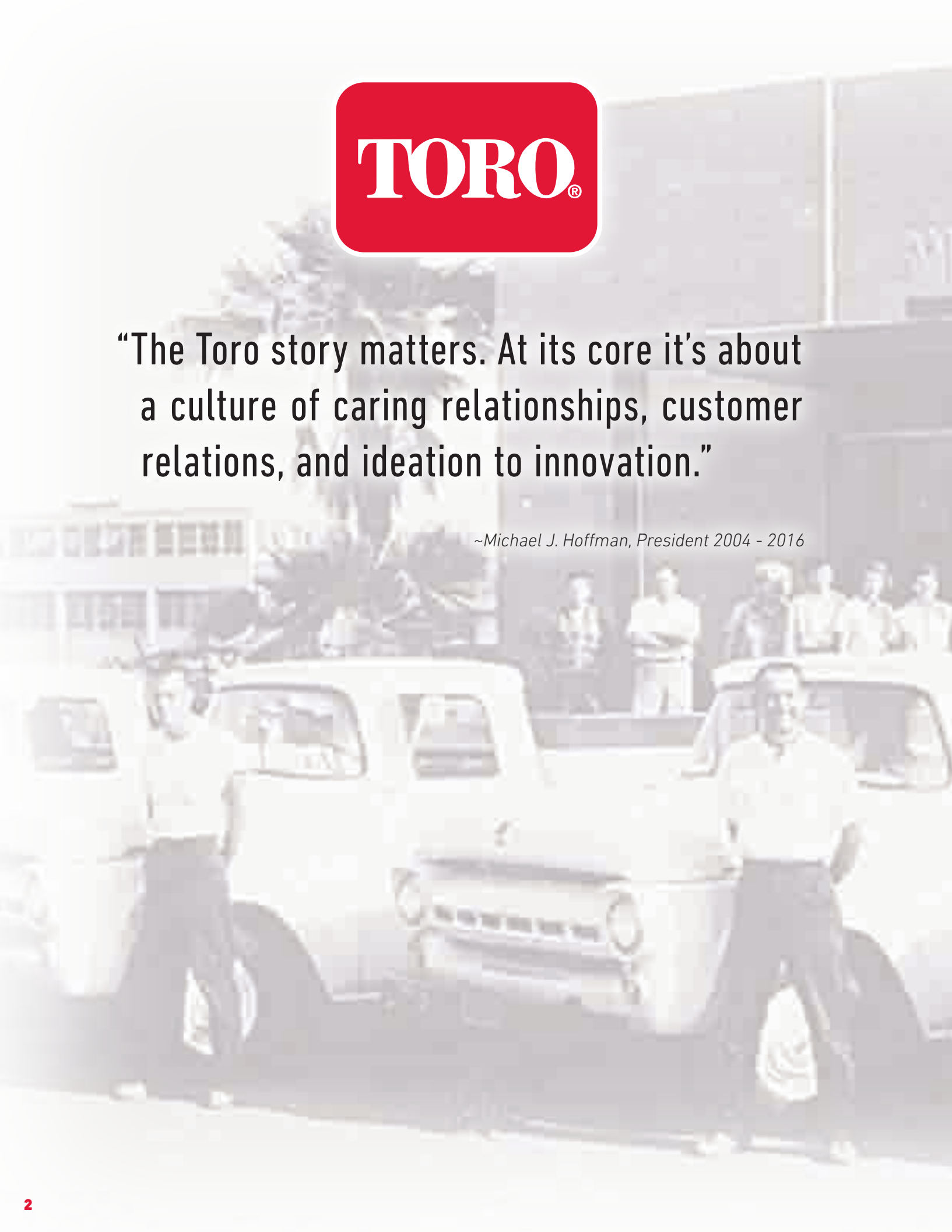
Specification Catalog 2020/2021





“The Toro story matters. At its core it’s about a culture of caring relationships, customer relations, and ideation to innovation.”

~Michael J. Hoffman, President 2004 - 2016



CUSTOMER CARE YOU CAN COUNT ON



Toro Technical Support

Our technical support staff is truly extraordinary at what they do. They have over 100 years of combined irrigation experience that you can depend on. For an excellent support experience, call: **1-877-345-TORO (8676)** or email: irrigation.support@toro.com.

For more helpful tips, visit our YouTube site at www.youtube.com/toro.



Toro Controller Repair

Did you know that with Toro's Board Exchange Program you can get the replacement controller boards you need immediately? Through your distributor, controller repair provides controller boards ready for immediate board exchange to assure that controller downtime is minimal and your landscape and reputation stay protected. For immediate assistance call **1-877-345-TORO (8676), Monday – Friday, 6:00 AM – 3:30 PM PST**.

Visit our Controller Repair website at www.toro.com/controller-repair.



Toro Training

Toro offers its customers training and education on new product technology, water management best practices, and provides world-class business skills training for professional contractors to help them increase productivity and improve their bottom line. To learn more about other educational opportunities in your area and nationwide, call **1-877-345-TORO (8676)**.



Toro National Support Network (NSN®)

Toro's National Support Network (NSN) is a team of A+ certified technicians and licensed irrigators dedicated to the daily operations and maintenance of computerized central control systems. Every new Toro computerized central irrigation control system includes Toro NSN support, as well as convenient classroom, web and computer-based training.

For assistance call: **1-888-676-TORO (8676)** or visit www.toronsn.com.



Toro Online Information

We offer a complete listing of all irrigation products at (www.toro.com/irrigation) along with links to Distributor locator and product literature. Specialty sites for Specifiers (www.specifier.toro.com) and water management highlights (www.watersmart.toro.com) are full of great information at your fingertips.



TORO WATERSMART® SYSTEM SOLUTIONS

All the parts of an irrigation system (controller, valves, sprinklers) work together to ensure your customer's landscape is watered properly. Toro WaterSmart® products can be retrofitted or added to any system to provide more efficient use of water while maintaining healthy landscapes. Incorporate WaterSmart solutions throughout the whole system to ensure optimum water savings.





WHAT'S NEW IN IRRIGATION PRODUCTS



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TS120 Series Impact Sprinklers

The TS120 Series Impact Sprinkler is capable of achieving long-range throws of up to 125 feet, making it well suited to meet the needs of both synthetic and natural turf sports fields. Available in Part Circle and Full Circle models, the TS120 can be configured with a factory-installed 4" TurfCup™ that helps to seamlessly blend the sprinkler into natural turf surfaces and preserve field aesthetics.



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TS170 Series Rotors

The piston-driven Toro TS170 Series long radius rotor is the irrigation solution of choice for the cooling and washing down of large synthetic turf fields. Capable of achieving a throw of 177 feet, the TS170 Series Rotor can be installed along the outer perimeter of the playing surface, which helps preserve player safety and maintain field aesthetics.



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P2 Series Sprinklers

The lightweight and versatile P2 Series Sprinklers are capable of achieving radii of up to 226 feet, making them well suited for a wide range of applications, including dust suppression and control, cooling and washdown of synthetic turf, and the distribution of reclaimed water.



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RollcarT™ Traveling Sprinkler

The Toro RollcarT™ offers a cost-effective, easy-to-setup solution for irrigating sports fields, golf course roughs, and other large, open turf areas where an underground irrigation system is not installed or impractical.

640 SERIES ROTORS

FEATURES & BENEFITS

Normally Open Valve-In-Head Body

Allows individual head control - the only commercial grade Toro rotor available with this feature.

Standard Check Valve

Prevents low head drainage and keeps laterals charged with water.

Additional Features

- ✓ Standard rubber cover
- ✓ Vandal-resistant cap with locking set screw
- ✓ Small exposed surface diameter
- ✓ Basket filter screen



Effluent
Options
Available



Check
Valve
Options
Available

640 SERIES PERFORMANCE DATA

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	2.16	3.68	3.19	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.

SPECIFICATIONS

Operational

- Radius: 47' – 67'
- Flow Rate: 6 – 25 gpm
- Operating Pressure Range: 40–90 psi
- Trajectory: 27°
- Pop-up to nozzle: 2 3/8"
- Inlet: 1" female-threaded
- Below-grade installation: up to 1/2"
- Check-O-Matic maintains up to 15' in elevation change
- Selection of five nozzles and 12 arcs
- Adjustment screw allows up to 25% radius reduction

Dimensions

- Body diameter: 2 1/2"
- Cap diameter: 3 1/4"
- Body height:
 - Check-O-Matic – 9"
 - Valve-In-head – 10 1/2"
- Exposed surface diameter when buried 1/2" below grade: 1 3/4"

Options Available

- Valve-In-Head Snap Ring Pliers (995-100)
- Valve Removal Tool (995-08)
- #41 Fast Rotating Stator (35-0579)

Warranty

- Five years

640 SERIES MODEL LIST

Model	Description
ASSEMBLED ROTORS	
641-02-40	90°Arc with #40 Nozzle
641-02-41	90°Arc with #41 Nozzle
641-02-42	90°Arc with #42 Nozzle
641-02-43	90°Arc with #43 Nozzle
641-02-44	90°Arc with #44 Nozzle
642-02-40	180°Arc with #40 Nozzle
642-02-41	180°Arc with #41 Nozzle
642-02-42	180°Arc with #42 Nozzle
642-02-43	180°Arc with #43 Nozzle
642-02-44	180°Arc with #44 Nozzle
644-02-40	360°Arc with #40 Nozzle
644-02-41	360°Arc with #41 Nozzle
644-02-42	360°Arc with #42 Nozzle
644-02-43	360°Arc with #43 Nozzle
644-02-44	360°Arc with #44 Nozzle
BODY PACKAGE	
640-10	640 Body Package, VIH Check-O-Matic
640-20	641 Body Package,

Model	Description
DRIVE ASSEMBLY	
640-0045	640 Drive Assembly, 45 degrees
640-0060	640 Drive Assembly, 60 degrees
640-0090	640 Drive Assembly, 90 degrees
640-0108	640 Drive Assembly, 108 degrees
640-0127	640 Drive Assembly, 127 degrees
640-0148	640 Drive Assembly, 148 degrees
640-0173	640 Drive Assembly, 173 degrees
640-0180	640 Drive Assembly, 180 degrees
640-0192	640 Drive Assembly, 192 degrees
640-0238	640 Drive Assembly, 238 degrees
640-0270	640 Drive Assembly, 270 degrees
640-0360	640 Drive Assembly, 360 degrees
NOZZLE/STATOR SET	
640-40	#40 Nozzle and Stator
640-41	#41 Nozzle and Stator
640-42	#42 Nozzle and Stator
640-43	#43 Nozzle and Stator
640-44	#44 Nozzle and Stator

Specifying Information—640 Series Rotors (Assembled Rotors)

64X-XX-XX				
Arc	Thread	Valve Type	Nozzle	Optional
64X	X	X	XX	E
0—Special Arc 1—90° 2—180° 3—270° 4—360°	0—NPT Thread 5—BSP Thread	1—Normally Open Valve-In-Head 2—Check-O-Matic	41 - #41 Nozzle 42 - #42 Nozzle 43 - #43 Nozzle 44 - #44 Nozzle	E—Effluent Model

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/Com Finished Goods Price List for a complete list of sprinklers available as finished goods.