

T7 SERIES ROTORS BIDDING SPECIFICATIONS

Note: These specifications were current at the time of publication but are subject to change at any time without notice. Please confirm the accuracy of these specifications with TORO and/or the distributor prior to installation.

This sprinkler shall be capable of full- and part-circle operation and be a gear-driven rotary type. The sprinkler shall be of a pop-up design with an overall height of 8.8 inches (223,5 mm), a cap diameter of 2.2 inches (55,8 mm) and a pop-up height of 5 inches (127 mm). The sprinkler shall have a 1 inch (25,4 mm) NPT or BSP female-threaded inlet. The sprinkler shall be capable of covering ____ feet radius at ____ pounds per square inch (psi) pressure with a discharge rate of ____ gallons per minute.

Water distribution shall be via a single pressed-in nozzle mounted in a 1.95 inches (49,5 mm) diameter plastic nozzle turret and retained by the nozzle retention/radius reduction screw. There shall be two flow range models available: a standard model that provides a seven-nozzle tree capable of 46'-75' (14,0-22,8 m) radii and a flow range of 6.6-30.6 gallons per minute (25-115,8 liters per minute); and a low flow model that comes with a six-nozzle tree capable of 39'-56' (11,8-17 m) radii and a flow range of 1.7-13.0 gallons per minute (6,4-49,2 liters per minute). Both models shall have a pop-up height of five (5) inches (127 mm) when measured from the top of the cover to the nozzle opening. All of the sprinkler nozzles shall be permanently marked for easy identification of radius and flow performance capabilities. A stainless steel radius reduction screw shall be provided for fine tuning the radius up to a 25 percent reduction. All nozzles shall be sized to allow any particle capable of passing through the riser screen to pass through the nozzle.

The arc of the sprinkler shall be top-adjustable with the provided tool, wet or dry, and graphically illustrated to identify the arc setting. The sprinkler shall be adjustable from a minimum of 45 degrees to a maximum of 335 degrees as a part circle, and a true uni-directional full circle at 360 degrees. The left arc position shall be fixed and identified by a molded arrow on the cap. The right arc shall be the adjustable position where all arc adjustments occur.

The sprinkler shall incorporate Smart Arc^{TM} , a memory arc feature that allows the nozzle base to be turned beyond the arc borders without damage to the sprinkler and returns to the original arc setting once released. The sprinkler shall include a nozzle base slip clutch feature that enables the user to rotate the nozzle base in either direction (wet or dry) and hold in one position (during operation) for spot watering without the risk of breaking the rotor's gears.

The date of manufacture shall be stamped onto the sprinkler cap in the Julian calendar format.

Rotation shall be accomplished by a water-lubricated planetary gear drive. The drive assembly shall be driven by a spring-loaded, poppet-type, variable reversing stator designed to provide an approximate 3-minute, full-circle rotation speed throughout the pressure and flow range. The drive and stator assemblies shall be constructed of non-corrosive plastic and stainless steel materials.

The body and cap of the sprinkler shall be constructed from injection-molded ABS (Acrylonitrile butadiene styrene), a heavy-duty corrosion-proof, impact and UV resistant engineering-grade plastic material. The nozzle base cover shall incorporate a pull-up feature that provides serviceability of the nozzles and riser assembly. The sprinkler shall have a plastic filter screen in the base of the riser that prevents the entry of foreign material into the nozzle.

All internal components shall be serviceable from the top of the sprinkler without disturbing the body installation. The sprinkler shall have a riser/body seal assembly that regulates flushing during pop-up and retraction to clear any debris from around the riser, and a heavy-duty, stainless steel spring to ensure positive retraction. Sprinkler flush rate shall not exceed eight (8) gallons (30,2 liters).

The rubber cover shall be constructed from pliable, injection-molded Santoprene thermoplastic elastomer, intended to prevent potential injury from contact. The rubber cover shall be available in a lavender color to identify the use of non-potable water (effluent).

The sprinkler shall provide a Check-O-Matic (COM) seal feature that prevents low head drainage, soil erosion and water waste while maintaining water in the piping system up to four (4) feet (1,2 m) of elevation difference. The check valve shall be reversible allowing full pipe drainage, if desired.

The sprinkler shall be developed and manufactured by an ISO 9001-certified facility. The sprinkler shall be model number _____ and shall be manufactured by The Toro Company, Irrigation Division.

Recommended Installation Procedures

The T7 Series rotor sprinkler is designed specifically for turf areas requiring _____ coverage. These products offer the most economical method of irrigation where flows and system pressures are available to support a short- to medium-range radius.

The T7 Series rotor sprinkler should be specified for installation on a swing joint. The swing joint should be specified as a triple-swing type, allowing movement up, down, laterally, and at an angle to grade. The sprinkler should be installed with the top of the cap at finished grade.

T7 Series sprinklers are engineered to provide a smooth, consistent curtain of water across the arc, with provision made for head-to-head coverage. For proper spacing, ensure the system design and installation accounts for prevailing wind conditions.

It is recommended that sprinklers are installed no fewer than two (2) inches (5 cm) from hardscapes and 6-12 inches (15,2-30,5 cm) from buildings or other vertical impediments to minimize overspray onto the structures' surfaces and allow clearance for normal maintenance procedures. Where possible, sprinklers should be installed in a manner that will minimize nozzle stream contact with trees, controller enclosures, shrubbery or other obstructions.

END OF SECTION