

**TS170 SERIES LARGE COMMERICAL ROTOR 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 the manufacturer and/or distributor prior to installation.**

The full-circle or combination full- and part-circle sprinkler shall be a piston-driven rotary type. The combination full- and part-circle model shall be infinitely adjustable between 30 and 360 degrees. The sprinkler shall be configured as a block style or with a built-in electrically powered solenoid (VIH) and be capable of being specified with one of three nozzle sizes ranging in radius capability from 111-177 feet (34,0-68,89 m). The nozzle design features a combination main orifice, one short range orifice, and two mid-range orifices within the same nozzle base; the nozzles will exhibit a fixed stream trajectory of 25 degrees. The sprinkler shall have a pop-up height of approximately 3” (75 mm) when measured from the grade to the opening of the main nozzle orifice. The installed nozzle can be specified as 16, 20 or 24 mm sizes. The flow rates vary from 113 to 302 gpm (23 to 65 cubic meters per hour), and the sprinkler operating pressure range shall be 60 to 115 psi (4,0 to 8,0 bars).

The VIH models shall come standard with a factory-installed 24V ac electrically-actuated solenoid. The sprinkler shall also be capable of being manually actuated by means of an integrated dial located on the outer collar of the sprinkler body. To prevent operation of the sprinkler by untrained or unauthorized personnel, this feature must be capable of being disabled by means of installing a permanent brass plug over the slotted dial.

The solenoid subassembly shall be located on the underside of the sprinkler collar and protected from backfill or other debris by a protective, molded plastic cover. The solenoid shall be serviceable by removing two top-mounted fasteners located in the outer collar of the sprinkler, which allows the entire sub-assembly to drop down, making the solenoid accessible.

The sprinkler’s rotation shall be facilitated through a water-lubricated piston drive. The sprinkler’s rotation speed shall be manually adjustable to enable the user to match rotation speeds across sprinklers irrigating at different arc patterns.

The sprinkler’s main body and plastic components shall be constructed from Ultraform® Acetal (POM) and reinforced Moplen Polypropylene. The inlet configuration shall be a 2” female National Pipe Thread (NPT) cut from red-brass and co-molded with the body of the sprinkler. The inlet connection point shall present itself at a 90-degree angle from the centerline of the sprinkler’s body. The sprinkler shall measure 13.75” (242 mm) in diameter at its widest point; approximately 27” (686 mm) tall when configured as VIH, and 21” (533 mm) when configured as block style. The sprinkler shall have an overall weight of 26 pounds (VIH) or 23 pounds (Block Style).

The opening speed of the sprinkler head, when operating within the recommended operating pressure range shall be between 2-3 seconds, and the closing speed shall be approximately 6-8 seconds (this can vary based on nozzle selection and operating pressure).

The sprinkler shall be a model number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and shall be manufactured by The Toro Company, Irrigation Division, based in Riverside, California, USA.

**END OF SECTION**