# TORO TS90 SERIES ROTORS



For big open spaces, the Toro<sup>™</sup> TS90 provides unparalleled features and performance into a fully adjustable rotor. Designed for large turf areas, its radius of 53' to 95' is ideal for parks, sports fields, synthetic turf athletic fields and horse arenas. In addition, Toro patented Trujectory<sup>™</sup> allows for the fine tuning of nozzle spray height from 7-30° to ensure wind resistance and head-to head spacing. The TS90 is also available in a TurfCup<sup>™</sup> version for seamless on-field installation.

# **FEATURES** & BENEFITS

# TruJectory™ Adjustment from 7° to 30°

Fine tunes nozzle spray height, helps provide true head-to-head coverage, and compensates for windy conditions.

## Part- and Full-Circle in One Sprinkler

No need to inventory multiple models or service parts

#### **Back Nozzle Capable**

Perfect for perimeter of sports fields. Provides the flexibility for fine-tuning any watering requirement.

### **Ratcheting Riser**

Allows you to adjust the riser position in the body without disassembling. Simply pull up the riser and ratchet it to the precise position you want to water.

### **Three Nozzle Configuration**

Provides better distribution uniformity, nozzle flexibility and system efficiency.

## **Constant-Velocity Drive**

Provides reliable rotation speed – from sprinkler to sprinkler.

#### **TurfCup for Sports Fields**

The optional TurfCup version seamlessly integrates into either natural grass or artificial turf sports fields, enhancing player safety, surface playability and field aesthetics.



#### **Additional Features**

- ✓ Full set of color-coded nozzles that thread directly into the nozzle port
- Rubber cover and below grade installation
- ✓ Check Valve standard maintains up to 10' elevation
- ✓ Nozzle options: nine main, three intermediate, one inner

#### **TS90 SERIES MODEL LIST**

Model	Description					
TS90TP-02-14	#3 Main Nozzle and Yellow Stator pre-installed (includes #1, #2, and #4 Main nozzles)					
TS90TP-02-58	#6 Main Nozzle and White Stator pre-installed (includes #5, #7, and #8 Main nozzles)					
TS90TP-02TC	#8 Main Nozzle, White Stator, and TurfCup pre- installed (includes #5, #6, and #7 Main nozzles)					

## **SPECIFICATIONS**

#### **Operational**

- Flow Rate: 14.0-61.5 gpm

- Precipitation Rate: 0.6" per hour
   Arc: Full- and Part-circle in one
   Full-circle: 360° unidirectional rotation
- Part-circle: 40°-330°

- Operating pressure range: 40-100 psi

## **Dimensions**

- Body Height: 10"
  Overall Height: 12<sup>1</sup>/<sub>2</sub>"
- Retracted Height: 81/2"
- Pop-Up Height: 4'
- Exposed Cap Diameter: 2 1/4"

#### **Options Available**

- Nozzle, #9 Main (102-4259)
- Effluent Cap Marker (118-0063)
- tool (995-105)

## Warranty

#### **NOZZLE PERFORMACE DATA**

Nozzle Set (30 to 33)			Nozzle Set 32		Nozzle Set 33		Nozzle Set 34		Nozzle Set 35		Nozzle Set 36		Nozzle Set 37		Nozzle Set 59		
	0		(3)						*		*		*		**		
Color	(Yellow)		(Blue)		(Brown)		(Orange)		(Green)		(Gray)		(Black)		(Beige)		
Part #	102-2208		102-0725		102-0726		102-7002		102-7002		102-0729		102-0730		102-4259		
Stator #	102-1939 White							118-7282 Red, Pink					118-7281 Red, Black (Spoke)				
Front		(\$)	30,	(s)	30,	(8)	30	30		30		38)	(3)	30		3,0	
Color	(Black)	(Green)	(Black)	(Dark Red)	(Black)	(Dark Red)	(Black)	(Dark Red)	(White)	(Purple)	(White)	(Lt. Blue)	(White)	(Lt. Blue)	(Black)	(Red)	
Part #	102-6941	118-6697	102-6941	118-6698	102-6941	118-6698	102-6941	118-6698	102-6940	118-6699	102-6940	118-6700	102-6940	118-6700	102-6941	118-6944	
Back Nozzle Positions																	
Color	(Red)		(Red)		(Red)		(Red)		(Red)		(Red)		(Red)		(Red)		
Part #	102-4335		102-4335		102-	-4335	335 102-4335		102-4335		102-4335		102-	102-4335		102-4335	
	Part Circle TruJectory 35-6																
Pressure (PSI)	Radius (FT)	Flow (GPM)	Radius (FT)	Flow (GPM)	Radius (FT)	Flow (GPM)	Radius (FT)	Flow (GPM)	Radius (FT)	Flow (GPM)	Radius (FT)	Flow (GPM)	Radius (FT)	Flow (GPM)	Radius (FT)	Flow (GPM)	
50	53	13.9	58	19.4													
65	55	15.9	60	22.3	65	24.3	70	26.2	75	34.6							
80	59	17.6	64	24.5	69	26.8	73	28.6	79	38.6	79	38.6	80	41.5	95	60.1	
100	61	19.5	68	27.3	73	30.0	76	32.0	84	43.1	84	43.1	85	46.5	100	66.3	

Not recommended at these pressures. Radius shown in feet.

Toro" recommends the use of a  $1^{1}$ %" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius data collected in Toro's zero wind test facility per ASAE standard S398.1. Actual site conditions must be considered when selecting the appropriate nozzle. All sprinklers are equipped with the selectable pilot valve that allows settings at 50, 65, 80 and 100 psi.

## Specifying Information—TS90 Series

TS90TP-02-XX									
Arc	Threads	Configuration	TurfCup™ <b>TC</b>						
ТЅ90ТР	02	х							
TS90TP— TS90TP 1" Rotor with TruJectory™	02—NPT	14–Yellow Stator 58–White Stator	TC—TurfCup option						
Example: A TS90 Series sprinkler with TruJectory, NPT threads, and with an 82' radius would be specified as: TS90TP-02-58									

