TORO®

GOLF IRRIGATION PRODUCTS

INTERNATIONAL MARKETS

WATER MANAGEMENT **SOLUTIONS.**

100+ YEARS

Focused on Turf

From irrigation to equipment, our portfolio has you covered with a full range of solutions for the jobs you need to do. No matter what the Toro® product, our entire line is designed with input from golf course professionals — and our work is never finished. Our agronomists and engineers continually work on new solutions to increase productivity, conserve water, reduce fuel consumption and improve growing conditions.

The result is a line of water management products built to withstand harsh golf course conditions and offer control, power and precision at your fingertips for consistent water application. Plus, it's all backed by service and support from Toro NSN® and local Toro distributors who are dedicated to helping customers succeed.

Explore the full line of Toro irrigation products and equipment for golf course professionals at **toro.com** and contact your local Toro distributor to learn more.

5000+ Dealers
Worldwide to Serve You

Heritage

For more than 100 years, The Toro Company has focused on making irrigation systems and equipment to maintain golf courses, grounds and landscapes. From productivity to promoting healthy grass to conserving precious resources, our roots are in caring for the land.

Fit for All Types of **Environments**

Toro irrigation and equipment is used on some of the world's finest golf courses and sports fields, but it's also used in all kinds of tough applications — from parks and roadside maintenance to landscape projects and university campuses.

Toro Products
Sold In
125+
Countries

400+ Patents
Toro Innovation Around the World

Listening to the Industry

Continuous improvement always drives us forward. Groups of golf course professionals come to Toro's U.S. headquarters to discuss their needs and experiences with Toro engineers and staff. We take that feedback and use it to develop new features and make our products better.

Training to Support **Golf Course Professionals**

We offer training for your maintenance technicians so they can get the most from their Toro equipment. We stand behind our products with service and support at local distributors. And we support many associations that help advance the industry.

TABLE OF CONTENTS

THE DIFFERENCES **ARE IN THE DETAILS.**

TORO® FIELD CONTROLLERS

	LYNX® Smart Satellite	LYNX Smart Module	LYNX LAC	OSMAC® G4
#01 Maximum Stations Per Controller	64	1000	500 FD / 800 LAC	64
#02 Maximum Simultaneously Operating Stations Per Controller	32	200	40 FD / 60 LAC	16
#03 Stand-alone Programs	64	20	20	24*
#04 Wireline Field Communication	✓	✓	✓	—
#05 Wireless Field Communication	✓	—	—	✓
#06 Upload Field Changes	✓	—	—	—
#07 Field Controller Alerts	✓	✓	✓	—
#08 Downloaded Programs	✓	✓	✓	—
#09 Station Based Flow Management	✓	✓	✓	✓
#10 Station Current Sensing	✓	—	—	—
#11 Station Runtimes In Seconds	✓	✓	✓	✓
#12 Language Capacity	✓	✓	✓	—

** LYNX LSM 200 Stand-alone Gateway*
*** 16 + 16 with an expansion Gateway*

Investing In Research

Toro is committed to investing in product development. Through our Center for Advanced Turf Technology, leading agronomists and engineers continually work on new solutions to increase productivity, conserve water, reduce fuel consumption and improve growing conditions.

CENTRAL CONTROL SYSTEMS - TABLE OF CONTENTS

GOLF'S LEADING **IRRIGATION CONTROL SYSTEM.**

Putting control, power and precision at your fingertips, LYNX® Central Control represents state-of-the-art technology for golf course irrigation. A smart and sophisticated system backed up with expert 24/7 support, it's easy to set-up and use, wherever you are, whenever you need it.

TOTAL CONTROL
Through the LYNX interface and best-in-class map graphics, you can see and control every sprinkler individually or in groups, and program them to water by time, volume or rainfall.

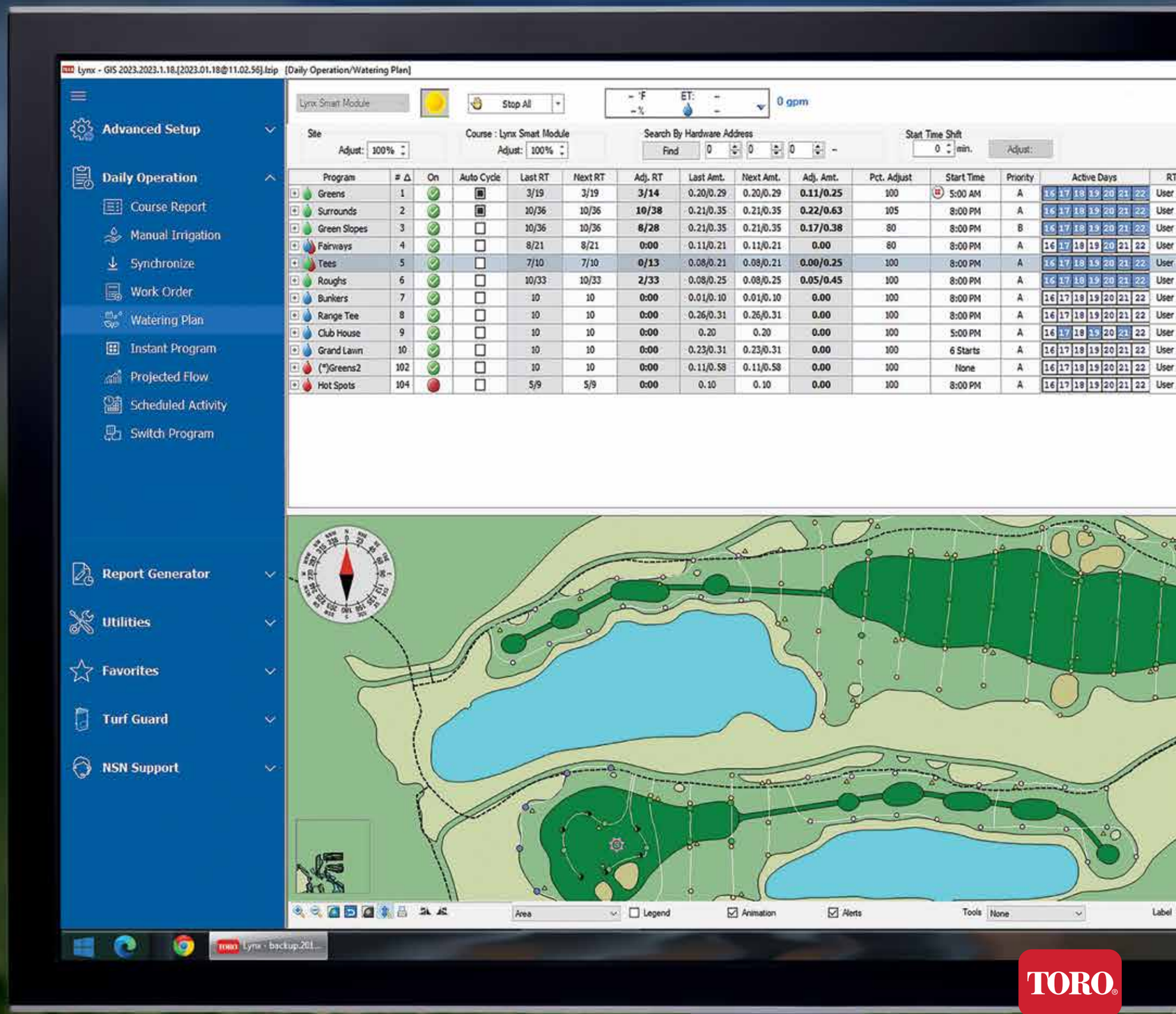
USER-FRIENDLY
LYNX puts the whole course at your fingertips with the industry's most intuitive and user-friendly interface.

FUTURE-PROOFED
Toro technology is designed for easy, free upgrades; so when you invest in LYNX, you also invest in the future.

CLASS-LEADING DIAGNOSTICS
Toro LYNX delivers alerts and information, highlighting issues, accelerating decision-making and reducing maintenance and downtime.

ACCURACY AND PRECISION
LYNX controls sprinkler run-times to within +/- 1 second tolerance, helping optimise turf while reducing the amount of water you use by up to 10%.

LYNX CLOUD
Provides maximum mobility and enables system updates and adjustments to be made from anywhere, via smartphone, tablet or any connected device.



NEW

THE LEADING GOLF **IRRIGATION CONTROL SYSTEM**

LYNX® CENTRAL CONTROL SYSTEM WITH CLOUD-BASED ENHANCEMENTS

FEATURES

Putting control, power and precision at your fingertips, LYNX® Central Control represents state-of-the-art technology for golf course irrigation. A smart and sophisticated system backed up with expert 24/7 support, it's easy to set-up and use, wherever you are, whenever you need it.

LYNX ADDS MORE FLEXIBILITY AND MORE CONTROL

Station Percent Adjust for duration allows you to set temporary adjustments that automatically returns to normal after a set number of days. The new Sequential Instant Program allows you to pick the order stations water automatically. LSM system diagnostics can now be selected by Hole or Area to make pin pointing a problem even easier, and you can now chose to have LYNX automatically upload station changes into the Watering Plan.

LYNX APPS PROVIDE REMOTE CONTROL

LYNX Apps enable you to control your irrigation system from your smart phone or tablet. Available for both iPhone®* and Android™* devices, LYNX Apps offer map and numeric based interfaces for manual irrigation, as well as an easy way to enter or edit LSM module addresses.

* iPhone and the Apple logo are registered trademarks of Apple, Inc. in the U.S. and other countries.

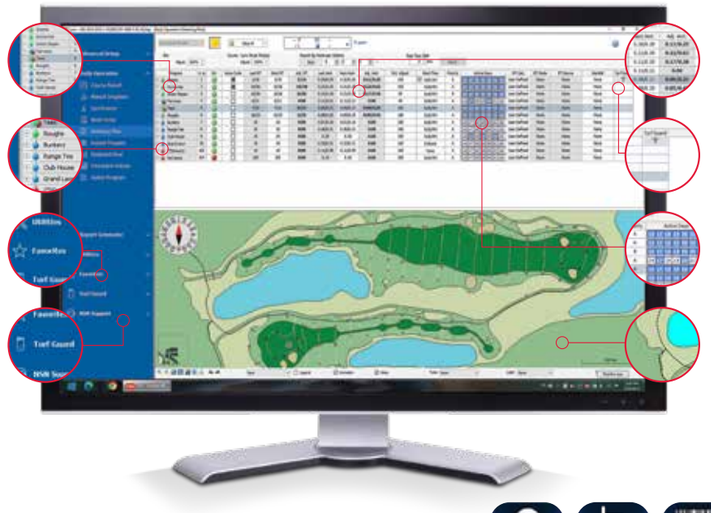
* Android and the Android logo are trademarks or registered trademarks of Google Inc.

Dynamic drilldown for quick overview by area and by hole

Irrigation at a glance
The colour of the water drop tells you if it's going to irrigate or not.

Save the most important pages
All the daily functions can be one mouse-click away

Simple menu
All similar functions are organized into folders



Decide how many **inches/mm/ minutes to water**.

Intelligent irrigation with Turf Guard®
Your Turf Guard sensors help you to decide when to irrigate and how much water to apply.

Decide which **days of the week** you are going to turn on sprinklers.

Easily edit your course map or create **your own interactive map**.

Watch LYNX Smart Module Videos:
youtube.com/ToroCompanyEurope

ADDITIONAL FEATURES

UNSURPASSED PRECISION

No other system gives you exact control over watering times and amounts per sprinkler.

UNMATCHED EASE OF USE

A user-friendly interface means less labor hours, fewer headaches and no disruption to play.

INCOMPARABLE RELIABILITY

Built-in fail-safes, like the ability to run system health checks, help you avoid unforeseen catastrophes.

FUTURE-PROOF

Regular system enhancements give you continual best-in-class control for years to come.

LYNX CLOUD

The new LYNX Cloud, a cloud-based tool now included with each LYNX Central Control System, allows you to enable system updates and adjustments from anywhere using your smartphone or tablet.

Start, stop, add and remove holds from sprinklers or entire areas, directly from the LYNX Cloud map feature. Adjustments can be made indefinitely or for a specified number of days. LYNX Cloud then automatically updates the settings on the LYNX computer.

LYNX Cloud helps to identify which sprinkler requires adjustments on the course. The "Find Me" feature helps locate the closest sprinkler to you on the map at any given moment, ensuring adjustments are made to the correct sprinkler. A course irrigation overview feature is also available with LYNX Cloud, and indicates the current status of each sprinkler.

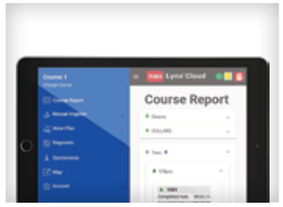
LYNX FUSION™

The new LYNX Fusion allows two types of systems — a LYNX Smart Satellite system and a LYNX Smart Module 2-wire system — to be seamlessly combined and operated from one LYNX Central Control computer. This feature eliminates the need to run two different central control computers while golf courses are undergoing renovation or system upgrades.

ADDITIONAL ENHANCEMENTS

- Automated backup will now save all LYNX settings to your computer and the Cloud on a weekly, biweekly, or monthly basis.
- Alarm notifications can be set up to alert you in several situations, such as when the weather station detects rain. Alarms are customizable and can be sent to different people at different times of day, or days of the week.
- Choose which direction the course map on your LYNX Central Control System faces to best suit your viewing preferences.

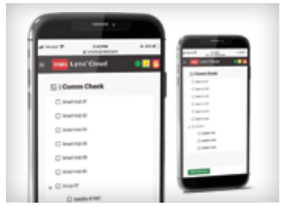
ADDITIONAL LYNX® FEATURES



VIEW SPRINKLER SNAPSHOTS
Know what's running, what ran and what didn't run across your course.

EASILY SAVE COURSE DATA
Schedule automatic backups to your hard drive and to the cloud so you don't have to.

GET ON-THE-GO CONTROL
Make temporary or indefinite adjustments on the fly from anywhere on the course.



TROUBLESHOOT WITH A TAP
Identify issues quickly and perform critical diagnostics from the field.

LYNX® LEVELS COMPARISON

SYSTEM CAPACITY	LYNX CE	LYNX PE	LYNX SE
Satellites	500	500	500
Satellite Stations	32,000	1344	512
LYNX® Smart Module	10,000	1000	500
LYNX® LAC	10,000	1000	500
Weather Stations	10	10	10
Pump Stations	10	3	2
Courses	3	2	1
Holes Per Course	48	48	48
Hydraulic Branches	1024	300	100
HARDWARE SUPPORTED			
LYNX Smart Hub	Yes	Yes	Yes
OSMAC® G4	Yes	Yes	Yes
LYNX Smart Module	Yes	Yes	Yes
LYNX LAC	Yes	Yes	Yes
LYNX Smart Satellite	Yes	Yes*	Yes*
PROGRAMMING			
Current Sensing	Yes	Yes**	Yes**
Station Adjust Upload	Yes	No	No
Site Code Categories	7	3	No
Precip. Mgmt. Groups (PMG)	Yes	Yes	No
Max. Stations/Hole Control	Yes	Yes	No
Instant Program Creation	Yes	Yes	Yes
Program Priority	Yes	Yes	No
Pump Profiling	Yes	Yes	No
Pump Integration	Yes	Yes	Optional
Weather Station Alarms	Yes	Yes	Optional
ET Auto Calc. RT Method	Yes	Yes	Optional

** With activation dedicated option*
*** Only with Smart Satellites*

LYNX CENTRAL CONTROL WITH HARDWARE PLATFORM ADDED INCLUDES:

Runtime Resolution to the minute and second

Standard Diagnostics include Communication, Volts and Amps

Map Selection of stations for Standard Diagnostics

Express Diagnostic includes Communication, Amps and Volts

Station Mapping in the Express method

Synchronization with mapping error detection and automatic remapping

Diagnostic Results color coded and displayed on the map with values

Station Status Report showing volts, amps and line balance

LSM Firmware Update from LYNX computer

LYNX apps support LYNX Smart Module platform

Active Days on Watering Plan includes Interval days control.

Automatic Verification Polling control

Manual Verification Polling control

Threshold Setting for map station labels

Watch LYNX LAC Videos:
youtube.com/ToroCompanyEurope

NSN® Connect V2
Remote access so that you can control irrigation anytime, anywhere from any web enabled device.

SPECIFICATIONS

RUNTIMES
- Runtimes are executed to the second rather than rounding to the whole minute, resulting in more precise irrigation and water savings (LYNX Smart Satellite, LSM, and LYNX LAC only)
- Control your irrigation by setting runtime minutes or application inches and let the system calculate the other. See exactly how much water you will apply and how long you will irrigate each area.
- Runtime synchronization with both LYNX Smart Satellite and LYNX Smart Hub prevents irrigation outages if the central goes off-line.
- Integrated runtime display shows past and planned irrigation activity so you can easily determine what action to take.

VIEWS AND REPORTS
- **Course Report** provides both real time and daily summaries of both scheduled and manual watering events.
- **Area and Hole** orientation allows you to control your irrigation system the same way you think about the course.
- **Instant Program** has simple check-box selection and Dynamic Drilldown so you can instantly create and personalize new irrigation programs
- **Projected Flow View** shows you areas that will be watered and how much will be applied.

LYNX CLOUD
- **LYNX Cloud Status Bar**
  - **Change Course** to easily switch between courses
  - **Rain Hold** to quickly apply a Rain Hold using a connected device
- **Course Report** so you can view what's running, what ran, what didn't run ...from any connected device even when you are away from your maintenance shop
- **% Adjust** areas, holes and individual stations and apply adjustments indefinitely or for a few days
  - Make adjustments from anywhere on the course when you see dry or wet spots and later view all your adjustments in LYNX desktop... No more note taking
- **Synchronize** Save time and Synchronize using LYNX Cloud from anywhere without the need to go back to your maintenance shop
- **Manually start or stop** individual stations, entire areas or holes quickly from the palm of your hand
  - Select stations from programs or based on hardware
  - Start irrigation immediately or add a delay to allow golfers to finish their play
- **Hold or Remove Holds** on individual stations, entire areas or holes quickly from the palm of your hand
  - Apply Hold for some days or Permanently
  - Quickly spot stations that are on hold and duration of hold from the map at LYNX Central Control
- **COMM Check** to verify communication between a Hub or Satellite and LYNX Central Control for quick troubleshooting without going back to the maintenance shop
- **Map Setup** quickly set up a new map from within LYNX Cloud
  - 3 Pins are stored for quicker map updates in the future as new stations are added
- Use **Find Me** option to locate where you are on the course and which stations are adjacent to you from one of two map options
  - Quickly Start, Stop, Hold, Remove Hold on any station(s)
- **Automatic Cloud Backups**
  - Schedule weekly, bi-weekly or monthly backups
  - Database automatically backs up to the PC and to the Cloud so a replacement PC can ship pre-configured with golf course database from NSN

COMMUNICATION
- Current-sensing capabilities notify you of wire cuts and sprinklers unintentionally turned off (LYNX Smart Satellite and LSM only)
- Constant communication with both LYNX Smart Satellite and LYNX Smart Hub lets you take action if a power outage threatens irrigation
- Toro LSM communication and solenoid diagnostics help identify shorts, low voltage and other issues
- Weather station integration and Hand-held Remote Interface support are included as standard features

LYNX® FUSION
- Seamlessly combine a LYNX Smart Satellite (LSS) System with a 2-wire LYNX Smart Module (LSM) system and manage day to day irrigation as one system for:
  - Combining Two Systems
  - Expansions and Upgrades
  - Adding Standalone Smart Satellites
- **Combine Two Systems**
  - Manage all your irrigation from one LYNX Central Control System
- **Expansions and Upgrades**
  - Courses converting a Satellite system to a 2-wire system can easily convert one hole or one station at a time
  - Connect Hub(s) via hardwire or radio for a quick startup
- **Add Smart Satellite to LSM System**
  - Add Standalone Smart Satellite(s) from your driving range, nursery or club house to your LYNX Smart Module Central Control system so you can control all your irrigation from one location
- **Add Standalone Satellites to a 2-wire System**
  - Satellites can be hardwired or connected via radio

OPERATING SYSTEM
- Windows 10

EASE OF ACCESS WITH LYNX APPS
- LYNX Map – GPS location, manual operation, favorites
- LYNX Handheld – All in one command set, command log, last dialed
- LYNX Bar Code – Add or replace, field test of new units

WARRANTY
- One year

LYNX SPECIFYING INFORMATION

LX-0X-X-XX

Type	*Computer Hardware*	*Service*	*Level*
LX	**0X**	**1**	**XX**
LX—LYNX	1—Standard Computer 4—Premium Computer	1—1-year NSN (Standard)	20—SE 30—PE 40—CE

Example: When ordering a LYNX SE Central with a standard computer and one year of NSN, you would order: **LX-01-1-20**

ESSENTIAL SOIL INFORMATION **WHEN YOU NEED IT**

TURF GUARD®
WIRELESS SOIL MONITORING SYSTEM

FEATURES

Stay up to date on your current soil conditions no matter where you are. Get the information you need to make important decisions in real time. Turf Guard sensors instantly track soil moisture, salinity, and temperature, saving you time. Repeaters mount easily inside all Toro LYNX® Smart Satellite, LYNX Smart Hub (LSH) Network LTC™ Plus and E-OSMAC® satellite pedestals.

100% WIRELESS NETWORK

No wires between the repeaters and the sensors, or the sensor and the probes means that sensors can be installed anywhere on the course without disrupting play. Install sensors without having to trench or pull wires.

WEB-BASED OR STAND-ALONE INTERFACE

Graphical course overview displays sensor data at-a-glance. Plus with Toro LYNX® Control System integration you can check course moisture, salinity and temperature readings right from your irrigation control software.

REDUCE WATER USAGE AND IMPROVE PLAYABILITY

Monitor moisture levels and adjust irrigation without risking turf quality. Promote root growth by avoiding over watering. Detect dry areas before they impact the turf's health.

TAKE THE GUESSWORK OUT OF MANAGING SALINITY

Track salt build-up and schedule flushing as needed. Get positive confirmation that your flushing reduced soil salts. Know when and how much water to flush with.

Turf Guard®
Wireless Soil Monitoring System

SPECIFICATIONS

OPERATIONAL
- Two distinct depths in the soil profile – critical root zone level and a second 127 mm (5") lower. Independent measurements from each depth.
- MESH routing technology offers complete coverage even in remote canyon courses.
- Repeater mounts in most Toro irrigation satellite pedestals. An external repeater is available for other models including non-Toro pedestals.
- Supports up to 500 sensors per course
- Expected sensor battery life of 3 years, field replaceable.
- Sensor reading sent every 5 minutes.
- Automatic network configuration and failure recovery.
- Plots trends and compares historical and current readings.
- LYNX® Control System integration

ELECTRICAL
Input Power:
- Repeater: <0,02 A @ 6 VAC
- Base Station: <0,1 A @ 120 VAC, 50/60 Hz
- Ul and CE approved

SENSOR DIMENSIONS:
- Body: 5,1 cm x 9,2 cm x 15,6 cm (2" x 3.6250" x 6.1250")
- Spikes: 4,4 cm x 0,5 cm (1.7500" x 0.1969")
- Installation Hole Diameter: 10,8 cm (4.25")

SENSOR TEMPERATURE:
- Operating: 0°C to 60°C (32°F to 140°F)
- Storage: -30°C to 82°C (-22°F to 180°F).

SENSING:
- 0,1°F Temperature resolution
- 0,1% Volumetric soil moisture content resolution
- 0,1 dS/m Soil conductivity resolution (Salinity)

COMMUNICATION:
- Repeater Range: 610 m (2000') line-of-sight
- Buried Sensor Range: 152 m (500') line-of-sight
- Additional licensing not required

WARRANTY
- Two years

HOW IT WORKS:
- One to three sensors buried in each green at critical root zone levels
- Additional sensors buried in fairways, tee boxes and planters.
- Above-ground radio repeaters installed on or in existing irrigation pedestals
- Wireless MESH networking links all sensors to central control system.
- Moisture, Temperature and Salinity readings displayed in your office

TURF GUARD SPECIFYING INFORMATION

TG-XX-XXX-XX		
Model	*Description*	*Communication*
TG	XX-XXX	XX
TG-Turf Guard	S2-BAT-Sensor Replacement Battery S2-R-Sensor, Replaceable Battery B-Base Station R-EXT-Repeater, External R-INT-Repeater, Internal PS-Power Supply	AU-915.5 to 927.5 MHz Band EX-900 MHz ISM Band EU-869 MHz ISM Band

Note: *Not available in all locations, please check with your Toro representative for availability.*

BRIDGING THE **COMMUNICATION GAP.**

FIELD INTERFACE UNIT (FIU) WITH RADIO FEATURES

FIELD INTERFACE UNIT (FIU) FEATURES

The Field Interface Unit (FIU) with Radio offers you the flexibility to design your irrigation system unconfined by the limitations of distance or terrain. Oversized acreage and natural barriers are not a problem for Network Radio-Link. Communicating where wires can't run, it's the bridge between non-contiguous wire line systems and much more.

- **WIRELESS COMMUNICATION**

To Network satellites

- **NETWORK RADIO-LINK KITS**

For upgrades

- **TRUE 2-WAY COMMUNICATION**
- **MULTI-PORT FIELD INTERFACE**

Allows one radio to be shared among many satellites

- **EASY SATELLITE INSTALLATION**
- **COMPATIBLE WITH**

Network LTC™, LTC Plus, LTC Pro,

Network 8000, LYNX VP®,

LYNX® Smart Satellite and LYNX Smart Hub

WARRANTY

• Two years

Field Interface Unit
The LYNX computer is attached to a Field Interface Unit (FIU) which sends commands to the SmartHubs throughout the golf course. There are two ways for the FIU to communicate with SmartHubs: by Wireline or by radio.

FIELD INTERFACE UNIT (FIU) WITH RADIO SPECIFYING INFORMATION

Model No.	*Description*
FIU-2010	Field Interface Unit with 1 Wire Line
FIU-2011	Field Interface Unit with 1 Wire Line and 1 Radio Line, Radio Not Included
FIU-2011R	Field Interface Unit with 1 Wire Line and 1 Radio Line, Radio Included
FIU-2011DR	Field Interface Unit with 1 Wire Line and 1 Digital Radio, Radio Included
FIU-2020	Field Interface Unit with 2 Wire Lines
FIU-2021	Field Interface Unit with 2 Wire Lines and 1 Radio Line,Radio Not Included
FIU-2021R	Field Interface Unit with 2 Wire Lines and 1 Radio Line, Radio Included
FIU-2021DR	Field Interface Unit with 2 Wire Lines and 1 Digital Radio, Radio Included

Note: FCC license required.

SUPPORTING YOU **24/7/365.**

NATIONAL SUPPORT NETWORK (NSN) EXPERT ADVICE & SUPPORT

NSN FEATURES

All of Toro's technology comes with class-leading warranties and the benefits of world-class support. This includes an extensive team of authorised distributors offering on the ground help across Europe, as well our National Support Network which delivers expert irrigation and technical advice 24/7/365. Wherever you are, whenever you need us we are here to help you keep your golf courses in first-class condition.

- Accessible 24/7/365, our world-class National Support Network (NSN) is always on hand with expert advice.
- We offer live and remote online training, helping you make the most of Toro technology.
- On the ground, Toro support is delivered through the largest and best qualified distributor network in Golf.
- For ongoing reassurance and peace of mind, we provide automatic cloud back up.
- We offer a comprehensive range of manuals, data sheets, advice and support for all Toro equipment at toronsn.com
- Our products come with a minimum of two-year warranty. For sprinklers, it is upgraded to five years if installed with our Toro swing joints.
- We host an extensive portfolio of 'how to' and support videos on NSN YouTube channel.
- With NSN, next business day hardware replacement.

Watch NSN Videos:
youtube.com/ToroCompanyEurope

LYNX APPS

LYNX Map | **LYNX Handheld** | **LYNX Barcode** | **LYNX Cloud** | **NSN® Connect V2**

- Enable you to control your irrigation system from your smart phone or tablet
- Available to current NSN® subscribers
- Receive support 24/7

SIMPLY **INTELLEGENT.**

LYNX® SMART HUB
FIELD CONTROL SYSTEM

FEATURES

LYNX® Smart Hub combines the benefits of satellites and decoders and delivers intelligent simplicity.

This field controller adds the security, programmability and sensing capabilites of a satellite system to the benefits and simplicity of the LYNX® LSM 2-Wire Control System. Also available for LYNX LAC systems.

EASILY EXPANDABLE

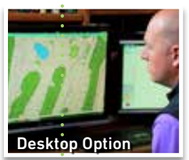
System can be expanded. Adds, moves and changes are easy – just plug and play allowing cost-effective upgrades.

RUNS AUTOMATIC PROGRAMS

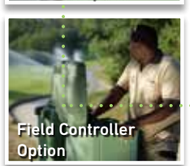
The Smart Hub stores and runs a fully flow-managed irrigation schedule, even if central computer is offline.

TWO-WAY COMMUNICATION

Two-way communication between the central and every sprinkler enables the addition of more SMART features. Creates a convenient connection point for soil, flow and status sensors.



System is Easily Expandable
Adds, moves and changes are easy—just plug and play allowing cost-effective upgrades.



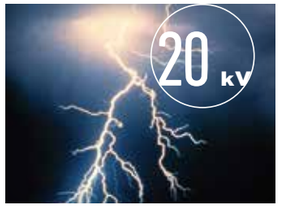
INFINITY *FLEX800*

LYNX LSM *LYNX LAC*

LYNX Smart Hub
The Smart Hub stores and runs a fully flow-managed irrigation schedule, even if central computer is offline.

ADDITIONAL FEATURES

IN-FIELD OPERATION
Operate sprinklers right from the Smart Hub pedestal, with the sprinklers in view on the course. No need to radio or return to the office.



20 KV SURGE PROTECTION
Best in class broadband lightning protection offers more efficient surge protection with all stations operating from a Smart Hub

SIMPLIFIED MAINTENANCE
Simplifies maintenance by segmenting system into manageable areas. Automated diagnostics keep you informed.

LYNX® SMART HUB COMPONENTS

LYNX + *FIU-2011* + *Smart Hub Wall Mount*

or

Smart Hub Pedestal

SPECIFICATIONS

INSTALLATION
- For LSM see pages 17-18
- For LAC see pages 19-20

ELECTRICAL
- Input power:
  - Input Voltage: 100-240 VAC, 50/60 Hz
  - Input current: 1.6 A/1.0 A (115/230)
- Output power:
  - Output voltage: 40 VAC max
  - Output Current: 75 VA max, Class 2, SELV

TEMPERATURE
- Operating temperature: 0°C to 60°C (32°F to 140°F)

WARRANTY
- Two years

LYNX SMART HUB SPECIFYING INFORMATION

GATEWAY OR LYNX SMART HUB

XXC-RSX-1000-XX				
Type	*Configuration*	*Cabinet*	*Station Count*	*Communication Type*
XXC	**RS**	**X**	**1000**	**XX**
DEC LAC	RS—LYNX Smart Hub	no code—Wall mount* P—Green Plastic Pedestal B—Brown Plastic Pedestal** T—Tan Plastic Pedestal**	1000—1000 Stations, LYNX Smart Hub*	M—Wireline DR—Radio (radio option not supported for LAC)
Example: A 1000 station LYNX Smart Hub with green plastic pedestal and wireline communication would be specified as: **DEC-RSP-1000-M**				

**Note: A blank after RS indicates the wall mount cabinet. P, B, and T indicate green, brown, and tan plastic pedestals*
***Note: B and T versions not available with LAC.*

PRECISE **WATER PLACEMENT.**

LYNX® SMART MODULE
2-WIRE CONTROL SYSTEM

FEATURES

The Toro LYNX Smart Module 2-Wire Control System, innovative technology to provide an irrigation solution that is reliable and efficient. Using a 2-wire path to communicate to buried control units, the system reduces the costs associated with traditional valve wire bundles and provides a solution that is vandal resistant, easy to install and easy to expand

- **SPEED**
  Provides information faster than other two-wire brand, reducing test times from minutes to seconds and providing greater visibility into the overall health of the irrigation system.
- **PRECISION**
  Apply water with one-second resolution. The exact amount of water is placed exactly where it's needed.
- **UPGRADEABLE**
  Upgrade remotely with just a click. Innovative new features and benefits are just a click away
- **DURABLE**
  Best in class surge protection to help weather the storm. It works with the LYNX Smart Hub, which protects the flow managed irrigation schedule, even in the event of a central failure if the central is down. Best in class broadband lightning protection.

DIAGNOSTICS
Built-in diagnostics automatically let you know if there are any problems. The wire path check quickly confirms that the whole system is operational.

INTEGRATED SPRINKLER
Toro INFINITY® and FLEX800™ Series sprinkler models have an integrated 2-wire module option.

Watch LYNX Smart Module Videos:
youtube.com/ToroCompanyEurope

SPECIFICATIONS

OPERATIONAL
LYNX® Central:
- Mapping capabilities
- Remote hand-held operation
- Weather station integration
- Pump station integration
- Enhanced diagnostics:
  - Communication
  - Electrical shorts/opens
  - Solenoid check
- No holding power required to operate stations
- 2-wire identification is a unique 6-character address

INSTALLATION
- Maximum number of wire paths: 4 per gateway
- Maximum number of LYNX Smart Hubs: 20 per system
- Maximum number of modules per wire path: 250
- Maximum stations per LYNX Smart Hub: 1000
- Maximum stations per system: 10,000
- Simultaneous stations per output board: 100
- Maximum distance from central to module (if using 2,5 mm wire): 5,4 km (3.4 miles)
- Maximum distance from module to sprinkler (if using 2,5 mm wire): 125 m (410 ft.)
- Solenoids per output: 2 DCLS-P
- Stations per module: 1

ELECTRICAL
- Input power: 88-264 VAC, 50/60 Hz
- Output voltage: 40 VAC max
  - Output power: 75 VA max
  - Class 2, SELV
- ISP 2-wire modules are rated at 20 kV surge protection
- 2-Wire modules wiring: 2,5 mm wire
- Module Protection: IP67

WARRANTY
- Two years

LYNX LSM

LYNX SMART MODULE SPECIFYING INFORMATION

2-WIRE MODULES

LSM-1	
Type	***Configuration***
LSM	**1**
LYNX Smart Module	1—1-station
Example: A 1-station LYNX Smart Module would be specified as: **LSM-1**	

**Refer to sprinkler pages for specifying information on Sprinkler 2-wire Modules*

LYNX SMART HUB

DEC-XXX-1000-XX				
Type	***Configuration***	***Cabinet***	***Station Count***	***Communication Type***
DEC	**XX**	**X**	**1000**	**XX**
DEC	RS—LYNX Smart Hub	No letter: wall mount installation P—Green Plastic Pedestal B—Brown Plastic Pedestal T—Tan Plastic Pedestal	1000—1000 Stations, LYNX Smart Hub*	M—Wireline DR—Radio
Example: A1000 station LYNX Smart Hub with green plastic pedestal and radio communication would be specified as: **DEC-RSP-1000-DR**				

Note: A blank after RS indicates the wall mount cabinet. P, B, and T indicate green, brown, and tan plastic pedestals.

INFINITY OR FLEX800 SERIES SPRINKLERS

XXXXX-XXX-XX							
Type	***Body inlet***	***Arc***	***Nozzle1***	***Nozzle 2***	***Pressure Regulation****	***Activation Type****	***Optional***
XXX	**X**	**X**	**X**	**X**	**X**	**X**	**6**
INF FLX	3 – 1" 5 – 1.5"	4 – Full Circle 5 – Part Circle	3 – 1" 5 – 1.5"	0 - 7* 1 - 9 * 0 only for INF35 or FLX35	6 – 4,5 bar (65 psi) 8 – 5,5 bar (80 psi) 1 – 6,9 bar (100 psi)	6 – LYNX Smart Module w/DCLS	6 – Trujectory* *Only for INF/FLX35 and 55
Example: When ordering and FLX55 Series Sprinkler, #54 nozzle, pressure regulation at 80 psi (5,5 bar), with LYNX Smart module included and Trujectory, you would order: **FLX55-548-66**							

Note: not all combinations nozzle-pressure regulations are available.

NEW

TURN OLD IRRIGATION INTO **TORO INNOVATION**

LYNX® LAC SYSTEM
2-WIRE CONTROL SYSTEM

FEATURES

The LYNX® LAC upgrade system uses modern electronic technology to enable users of older decoder control systems to upgrade to a modern central with new field hardware. New features like remote control from your phone, moisture sensing and sophisticated diagnostics are now available without replacing your entire irrigation system. It offers higher surge protection, more precise run times and 2-way communication compared with older CDS, Rain Bird®* and Hunter®** Systems.

LYNX LAC DECODERS. THE KEY TO EASY MIGRATION.

Designed and manufactured to Toro's high standards, the new LAC decoders provide a low-cost, high quality solution to the challenge of upgrading wired irrigation systems. They are compatible with legacy AC systems for a quick and easy replacement. Depending on which generation decoders are currently in place, they enable either one or two-way communication with LYNX, delivering Toro capability into your hands.

LYNX SMART HUBS, COMBINING THE FLEXIBILITY OF SATELLITE CONTROLLERS WITH THE COST BENEFITS OF A DECODER SYSTEM.

LYNX Smart Hubs enable effective two-way communication with your irrigation system. Controlling individual areas of the course, they can store and run an irrigation schedule for up to 1000 sprinklers – even if connection to the Control System is lost.

INFINITY® SERIES SPRINKLERS. NEXT GENERATION TECHNOLOGY, TODAY AND FOREVER.

The world's most popular sprinkler since 2014, the INFINITY Series incorporates Toro's Smart Access® solution. All critical components can be accessed with a screwdriver, making it easy to add accessories and upgrades without having to dig-up.

Watch LYNX LAC Videos:
youtube.com/ToroCompanyEurope

ADDITIONAL FEATURES

- Retro-compatible with legacy decoders in the ground for easy migration.
- Improved speed and access to functionality including watering by the second.
- Superior and fast system diagnostics with amps volts.
- Reliability—less wire and up to 20 kV surge protection against lightning.
- Future-proofed—simply add new SMART features when they become available. Even the firmware of the LAC module can be upgraded.
- Easy maintenance—above ground technology, plus automated diagnostics.
- Convenient—single connection point for soil sensors at the Smart Hub.
- Built for expansion, not replacement—'no dig' upgrades.
- With TruJectory™, adjustable from 7° to 30° degrees in 1° increments.
- Choice—main, intermediate, inner, back nozzle options for bespoke solutions.
- Robust—components such as stainless-steel valve seats are designed for durability.

SPECIFICATIONS

OPERATIONAL
- Enhanced diagnostics
- Communication
- Electrical shorts/opens
- Voltage
- Amperage
- Module addresses are factory programmed
- Low holding current

INSTALLATION
- Maximum Stations Per Controller: 500 FD / 800 LAC
- Maximum Simultaneously Operating Stations Per Smart Hub: 40 FD / 60 LAC
- Stand-alone Programs: 20
- Maximum stations per wire path: 400 with full LAC modules, 250 for FD decoders. Refer to the manual in case of mixed systems
- Maximum modules per wire path: 400 for LAC modules, 250 for FD modules. Refer to the manual in case of mixed systems
- Maximum number of wire paths: 2 per LYNX Smart Hub

ELECTRICAL
- Input voltage: 100-240 VAC, 50/60 Hz
- Input current: 1.6 A/1.0 A (115/230)
- Output voltage: 42.2 VAC max
- Output current: 1.1 A
- Output power: 75 VA max
- Class 2, SELV
- LAC modules: 10 kV surge protection
- LAC Smart hubs: 20 kV surge protection

TEMPERATURE
- Operating temperature: 0°C to 50°C (32°F to 140°F)
- Storage temperature: -30°C to 60°C (-22°F to 140°F)

WARRANTY
- Two years

	LYNX LAC	CDS	Rain Bird® FD	Hunter® Pilot
Stations Per Wire Path	250 - 400	112	250	250
Devices Per Wire Path	250 - 400	112	250	250
Outputs	1, 2, 4, 6	1, 2, 3, 4	1, 2, 4, 6	1, 2, 4, 6
Maximum 2.1 or 2.5 mm² AWG Wire Path Length	3,000 m	1,600 m	3,000 m	2,438 m
Simultaneous Stations with 2,100 m of 2.1 or 2.5 mm² AWG Cable	20 - 30	2	20	20
Distance from Decoder Module to Solenoid	175 m 1.5 mm² cable	363 m 1.5 mm² cable	67 m	73 m
Solenoids Per Output	2	2	2	2
Surge Protection	10 - 20 kV	6–8 kV	6–8 kV	15 kV
Wire Paths Per LYNX Smart Hub	2	4	2	4
Solenoid Characteristics 24 VAC, 60 Hz	400 mA inrush, 250 mA holding	400 mA inrush, 200 mA holding	400 mA inrush, 250 mA holding	400 mA inrush, 250 mA holding
Holding Current	40 mA	300 mA	20 mA	45 mA
Two-Way Feedback from Decoder Module	Volts, Amps, Distance	No	No	Volts, Amps

LYNX LAC SYSTEM SPECIFYING INFORMATION

LYNX LAC SMART HUB GATEWAY WIRELINE COMMUNICATION

LAC-RSX-1000-M

Type	*Configuration*	*Cabinet*	*Station Count*	*Communication Type*
LAC	**RS**	**X**	**1000**	**M**
LAC	RS—LYNX Smart Hub	no code—Wall mount P—Green Plastic Pedestal	1000—800 Stations, LYNX Smart Hub	M—Wireline

Example: A 800 station LYNX LAC Smart Hub gateway with green plastic pedestal and wireline communication would be specified as: **LAC-RSP-1000-M**

LYNX LAC DECODERS

LAC-X0X

Type	*Configuration*	*Solenoid*
LAC	**X**	**0X**
LAC	1—1-station 2—2-station 4—4-station 6—6-station	01—1 solenoid LYNX LAC Module 02—2 solenoids LYNX LAC Module

Example: A1-station, 1 solenoid LYNX LAC Module would be specified as: **LAC-101**

LYNX LAC SURGE PROTECTORS

LAC-LSP

Type	*Description*
LAC	**LSP**
LAC	Surge protector

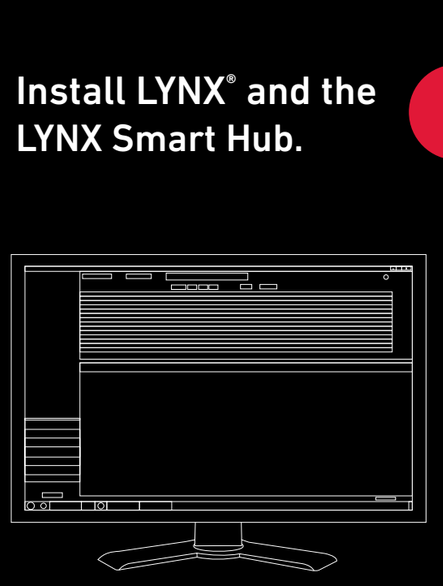
** Rain Bird is a registered trademark of the Rain Bird Corporation.*
*** Hunter is a registered trademark of Hunter Industries*

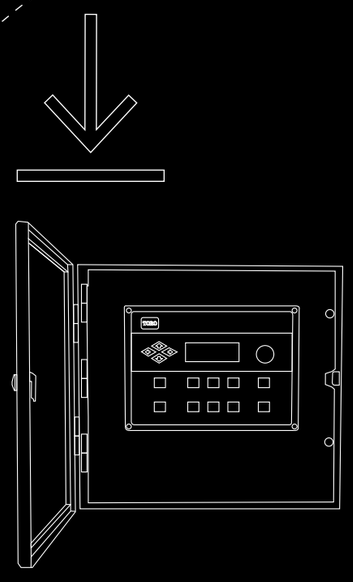
NEW

TRANSFORMING YOUR COURSE IRRIGATION IN **THREE EASY STEPS.**

1

Install LYNX® and the LYNX Smart Hub.



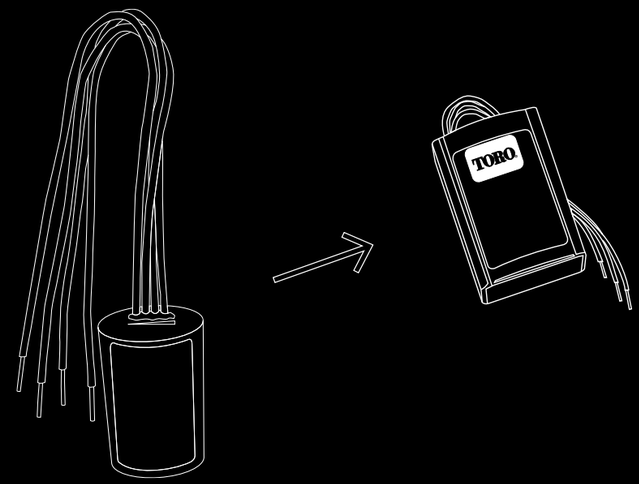


WHEN MIGRATING FROM A FIRST-GENERATION DECODER SYSTEM, all you need to do is install LYNX, and you are good to go! You can change the decoders later on, at your own pace. It's a lot easier, and cheaper, than redoing the entire irrigation system.

Ask your distributor for an appraisal.

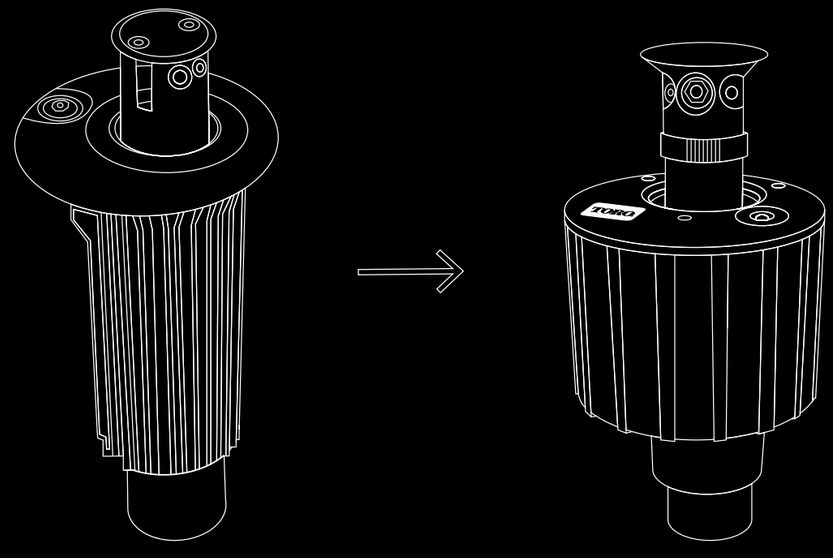
2

The choice is yours: keep your old decoders or replace them with the new LYNX LAC decoders, at your own pace. The new decoders are faster, more resilient, have better diagnostics and more capacity to expand.



3

Migrate to more advanced Toro sprinklers at your own pace.



SMART DESIGN. **SMART FEATURES.**

LYNX® SMART SATELLITE
FIELD CONTROL SYSTEM

FEATURES

The LYNX Smart Satellite sports a familiar look but is designed to improve performance and reliability. Picking up where the accomplished Network VP®/Network VP®e left off, the LYNX Smart Satellite adds enhanced communications with the LYNX Central Control System and integration with field sensors to further complement your decision making. LYNX Smart Satellite is also fully compatible with Network VP/Network VPe and Network 8000® systems as an addition or replacement.

UPDATED USER INTERFACE

Familiar arrow buttons and selector knob navigate the menu options in a larger back-lit six-line display. Manual and diagnostic operations are easy, productive, and intuitive.

ENHANCED WIRELESS COMMUNICATIONS

New digital radio with an integrated modem provides improved communication signal integrity, new diagnostic information, and control options.

OPTIONAL SENSOR INPUT KIT

Designed to integrate with the new Sensor Input Kit, allowing either local or LYNX Central response to information from anywhere on the course.

PLUS ALL THE GREAT FEATURES OF THE NETWORK VP

Station-Based Flow Management, current sensing and alarm response, runtimes to the second, Group Multi-Manual operation, Basic/Advanced/Grow-In programs, language support.

DESIGNED FOR PERFORMANCE

Faster microprocessor and increased memory for high performance today and the capacity for future enhancements tomorrow.

DESIGNED FOR RELIABILITY

Fewer cables and connectors, corrosion-resistant metals, vented circuit board covers, and simplified power distribution contribute to greater reliability.

Sturdy plastic pedestals available in choice of three custom pedestal color options to help satellites blend into their natural surroundings. (Desert Sand, Tree Bark or Green.)

ADDITIONAL FEATURES

LYNX SMART SATELLITE INTERIOR VIEW

- Clear Vented Covers on Circuit Boards: protection from pests and corrosion
- Stainless Steel and Plated Metal Parts: additional corrosion resistance
- LED Indicators: confirmation of normal function and diagnostic information to assist with troubleshooting
- Shielded Connectors: secure and reliable connections between components

UPDATED USER INTERFACE

- High-Contrast Backlit Display
- Intuitive Navigation
- Processor and Memory for High Performance and Future Enhancements

ACCESSORIES

SENSOR INPUT KIT

SMRT-SEN-BRD-KIT

Pressure, Flow Rate, Rain, Status, and Temperature Includes 8 station outputs and 7 sensor inputs

SPECIFICATIONS

OPERATIONAL
- Functions as a stand-alone controller or under the management of a central computer operating LYNX or SitePro Central Control System
  - Supports wireline or radio communications
  - Completely bi-directional
- Runtime to the second
- Support in 7 languages: English, Spanish, French, Italian, Chinese, Korean and Japanese
- 64 irrigation programs
- Basic, Advanced and Grow-In programs
- Station Autocycle
- Percent Adjustment from 1% to 900%
- Each output can be defined as an irrigation station or general application switch
- Nonvolatile memory retains program information and satellite settings during power-off conditions; battery backup retains the date and time
- 16-64 stations in 16 station increments; individual station control and the ability to run up to 32 stations simultaneously
- Backward compatible with SitePro/Network VP and SitePro/Network VPe satellite systems, also backward compatible with:
  - SitePro
  - Network 8000

ELECTRICAL SPECIFICATIONS
- UL and CEE Listed
- Input Power
  - 108 VAC to 132 VAC, 60 Hz
  - 0.20 amps (no load) 115 VAC
  - 1.2 amps (max. load) 115 VAC
  - 216 VAC to 264 VAC, 50 Hz
  - 0.10 amps (no load) 230 VAC
  - 0.60 amps (max. load) 230 VAC
- Output Power
- 24 VAC: 3.0 amps (max. total load)

DIMENSIONS
- Plastic Cabinet:
  - 43,2cm W x 101,6cm H x 40,6cm D (17"W x 40"H x 16"D)

TEMPERATURE/HUMIDITY
- Operating Temperature: -9°C to 60°C (15°F to 140°F)
- Storage Temperature: -30°C to 65°C (-22°F to 149°F)
- Humidity: 0% to 95% RH(noncondensing)

OPTIONS
- Surge Protection
- Sensor Input Kit

WARRANTY
- Two years

LYNX SMART SATELLITE SPECIFYING INFORMATION

NETWORK LTC PLUS TO NETWORK VP UPGRADE KIT

118-0038
Kit Contains
Network VP Faceplate, Enhanced Timing Module, Power Distribution Board, Cable and Hardware

LYNX® SMART SATELLITE

300-0XXY6ZSA					
Description	***Configuration***	***Cabinet***	***Output***	***Communication***	***Options***
300	**XX**	**Y**	**6**	**Z**	**S**
300—LYNX Smart Satellite	16—16 Stations 32—32 Stations 48—48 Stations 64—64 Stations	P—Plastic, Green T—Desert Sand B—Tree Bark	6—24 VAC Electric	M—2-Way Wire Modem R—Radio System H—Radio and Wire Combined	3—Large-capacity Terminal Block & Switches 4—Large-capacity Terminal Block w/Additional Surge & Switches

Example: When ordering a 48-station, 2-way wire modem-equipped, LYNX Smart Satellite with large-capacity terminal block, additional surge and switches, specify: **300-048P6M4A**

FUTURE PROOF **UPGRADES**

LTC® PRO
SATELLITE

FEATURES

Why LTC Pro? LTC Pro is the upgrade of LTC Plus. The LTC Pro Satellite provides modular flexibility, fewer electrical connectors and superior surge protection for added reliability in lightening prone areas. The intuitive user interface simplifies faceplate functions for ease of use and increased programmability in a single controller. Once a system has been upgraded to LTC Pro completely, the firmware can be upgraded and the system can move from SitePro to LYNX.

LTC® Pro Satellite. Do you want to change and upgrade some satellites and have them ready for LYNX? Choose this package and your satellites will be future proof. Available as complete satellites or an upgrade kit for existing LTC Plus satellites.

THE LTC PRO UPGRADE KIT

Facilitates a step-by-step upgrade to the LYNX Central Control System

ENHANCED MANUAL OPERATIONS

Runtime to the second, stackable multi-manuals, and Start/Pause/Stop

BACKWARDS COMPATIBLE WITH SITEPRO®

It will keep working with your existing SitePro Central until you are ready to move to LYNX.

ENHANCED DIAGNOSTICS

Link monitor, System monitor, sequence station and station test.

LTC® Pro Satellite

ADDITIONAL FEATURES

INTUITIVE USER INTERFACE

Simplifies faceplate functions

LTC® PRO UPGRADE KIT 118- 4838 CONTENTS INCLUDE:

- LTC Pro Timing Module: large six-line backlit display, modern electronics, enhanced manual control and diagnostic information
- LTC Pro Power Distribution Board with cable and hardware

LTC® PLUS TO NETWORK VP UPGRADE KIT 118- 0038 CONTENTS INCLUDE:

- Network VP Enhanced Timing Module: large six-line backlit display, modern electronics, enhanced manual control and diagnostic information
- LTC Plus to Network VP Power Distribution Board with cable and hardware

SPECIFICATIONS

OPERATIONAL
- 16 to 64 stations in 8 station increments
- Field programmable for future upgrades
- Does not require EPROM(s) replacement
- Operates as a stand-alone controller or under the management of a central computer
- Supports wireline or radio communications with the central computer
- Supports hybrid communication (wireline and radio) for increased flexibility and cost effectiveness
- 16 irrigation programs
- Independent stand-alone and central operation
- Multi-Manual, Program Start and Syringe manual operations
- Operates up to 6 stations simultaneously

ELECTRICAL SPECIFICATIONS
- Input Power
- 230 to 240 VAC, 50 Hz:
- 0.21 amps (no load) 115-120 VAC
- 0.91 amps (maximum load) 115-120 VAC

OUTPUT POWER
- 24 VAC:
- 3.0 amps (max. total load)

TEMPERATURE
- Operating Temperature:
  - -10°C to 60°C (14°F to 140°F)
- Storage Temperature:
  - -30°C to 65°C (-22°F to 149°F)

WARRANTY
- Two years

LTC PRO SPECIFYING INFORMATION

LTC PRO SATELLITES

LTCRXXX6XX					
Description	*Configuration*	*Cabinet*	*Output*	*Communication*	*Options*
LTCR	**XX**	**X**	**6**	**X**	**X**
LTCR - LTC Pro	16 – 16 Stations 40 – 40 Stations 64—64 Stations	P – Plastic Green	6 – 24VAC	M – Wire R – Radio	4 – Large Terminal Block, Switches, Premium Surge
Example: When specifying a 40-station, wire communication satellite, you would specify: **LTCR40P6M4**					

LTC PRO UPGRADE KIT

118-4838
Kit Contains
LTC Pro Faceplate, Power Distribution Board, Cable and Hardware

LTC PLUS TO NETWORK VP UPGRADE KIT

118-0038
Kit Contains
Network VP Faceplate, Enhanced Timing Module, Power Distribution Board, Cable and Hardware

SAVES VALUABLE TIME & **WATER RESOURCES**

SENSOR INPUT KITS FOR SATELLITE CONTROLLERS

FEATURES

The Sensor Input Kits for LYNX Smart Satellite and Network VP deliver important field data to the superintendent's office. Relevant data is the foundation of informed decision making, whether the decision is made by a human or a computer. A satellite controller equipped with either of the two Sensor Input Kits can receive data from up to seven sensors. The satellite collects, stores, and delivers the data to LYNX, where it can be accessed by the superintendent on the Sensor Dashboard. LYNX also can respond automatically to changes to the irrigation system and changes in weather conditions. A Sensor Input Kit can help save the valuable resources of time and water, and help keep course conditions at their best.

SENSOR ALARMS AND RESPONSES

Sensor alarms can be easily configured in LYNX with numerous options for responses to alarm conditions.

Pressure Sensor: Set alarm conditions and appropriate responses for high and/or low pressure values

- A text notification or email can be sent if measured pressure falls below a specified value.

Rain Gauge: Prevent, suspend or adjust irrigation in the event of a measurable rain event

- LYNX will account for measured rain on an hourly or daily basis and automatically apply a Rain Hold or adjust scheduled activity to account for the rain fall received.

Temperature Gauge: Set alarm conditions and appropriate responses for high and/or low air temperature

Activate greens fans through a satellite switch output when air temperature exceeds the alarm value for a set duration

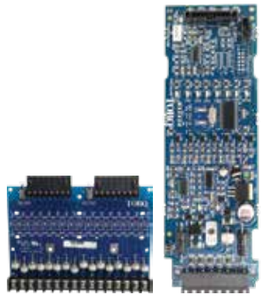
- Suspend irrigation when air temperature is near freezing.

Switch Status: Set alarm conditions and appropriate responses for changes in switch state

- Control pond or tank water level using level switches to trigger a pump or valve to transfer water, maintaining water level within a set range.

Flow Meter: Set alarm conditions and appropriate responses for high and/or low flow rate values

- A satellite switch can be closed if a flow out of tolerance is observed, signaling the pump station to shut down.



SENSOR INPUT KIT FOR NETWORK VP®
VP-SEN-BRD-KIT
Sensor Board & Terminal Board

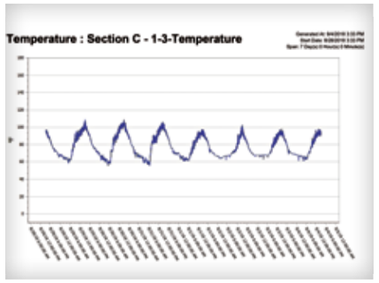
SENSOR INPUT KIT FOR LYNX® SMART SATELLITE
SMRT-SEN-BRD-KIT

VP-SEN-BUNDLE
118-5487SK
VP Timing Module – Sensor Compatible

ADDITIONAL FEATURES

LYNX SENSOR DASHBOARD PRESENTS THE REAL-TIME STATUS OF SENSORS ON THE COURSE

At-a-glance understanding of the condition of the course irrigation system and weather inputs enhance decision-making.



LYNX REPORT GENERATOR PRESENTS LOGGED SENSOR DATA IN TABULAR OR GRAPHICAL FORMAT

Display trends over time for a complete understanding of the weather and irrigation system.

AUTOMATICALLY SAFEGUARD YOUR COURSE, ELIMINATE WATER WASTE, AND ENSURE EFFICIENT IRRIGATION

A flow out-of-tolerance condition, manageable with a sensor input kit, flow meter, and automatic alarm response in LYNX®.

SPECIFICATIONS

SENSOR
The Sensor Input Kits can accept up to seven sensors; they are compatible with the following sensors:

- (1) Pressure sensor
- (1) Temperature sensor

Satellites equipped with Sensor Input Kits can accommodate up to 56 station outputs:

- The Sensor Input Kit for Network VP includes a sensor input board that takes the place of an eight station output board
- The Sensor Input Kit for LYNX Smart Satellite is a module that contains eight station outputs and seven sensor inputs. It takes the place of a sixteen station output board.
- LYNX version 5.0 or later is required for interaction with the Sensor Input Kits
- The Sensor Input Kit for Network VP includes a new Timing Module with faster processor, larger display, and expanded memory

SENSOR INPUT KIT FOR NETWORK VP
Model: VP-SEN-BUNDLE

- 118-5487SK: VP Timing Module, Sensor compatible
- VP-SEN-BRD-KIT: Sensor Board and Level 4 Terminal Board

SENSOR INPUT KIT FOR LYNX SMART SATELLITE
Model: SMRT-SEN-BRD-KIT

TORO PRESSURE SENSOR KIT
Model: PRESS200-SEN-KIT

- 0 – 200 psi
- ¼" – 18 NPT male thread

TORO TEMPERATURE SENSOR KIT
Model: TEMP-SEN-KIT
Recommended accessory: Radiation Shield Davis #7714

RAIN GAUGE
Recommended Model: Texas Electronics TR525I

FLOW METER
Recommended Models: Data Industrial 200 Series or Bermad 900M Series, reed switch signal

WARRANTY
Two years

TORO® SENSORS

PRESSURE SENSOR
*Approved Model: **PRESS200-SEN-KIT***
*Toro Pressure Sensor Kit: **0 – 200 psi***

TEMPERATURE SENSOR
*Approved Model: **TEMP-SEN-KIT***
Toro Temperature Sensor Kit

OTHER RECOMMENDED SENSORS

RADIATION SHIELD FOR TEMPERATURE SENSOR
*Recommended Model: **Davis® #7714***

RAIN GAUGE – TIPPING BUCKET
*Recommended Model: **Texas Electronics TR 525I***

FLOW METER
*Recommended Models: **Data Industrial® Series 200** or **Bermad® 900 M Series***

EASY TO INSTALL. **EASY TO MAINTAIN.**

OSMAC® G4
SATELLITE

FEATURES

The OSMAC G4 satellite combines value and reliability in one controller. Wireless communications, easy installation and setup, and compatibility with existing OSMAC systems make the OSMAC G4 an ideal choice for a control system upgrade or retrofit. As part of a LYNX® Central Control system, the OSMAC G4 will run flow-managed programs using station run times executed to the second for precise water application. An upgrade kit is available for E-OSMAC satellites, adding new functionality, including program storage for stand-alone function and a user interface for performing manual irrigation or diagnostic activity.

RELIABLE DESIGN
Designed for reliability, featuring a limited number of cables and connectors, corrosion-resistant metals, vented circuit board covers, and simple parallel power and signal distribution.

ENHANCED WIRELESS COMMUNICATION
Equipped with a high-performance receiver with integrated modem, providing industry-leading communication signal integrity, reliability, and signal strength indication. Wireless communication also allows easy system expansion.

OSMAC COMPATIBLE
Compatible with any narrowband OSMAC system equipped with an OSMAC Base Station or Radio Interface Unit (RIU). Able to retrofit with OSMAC RDR and E-OSMAC satellites.

PRODUCTIVE AND PRECISE
Operates up to 32 stations simultaneously with run times executed to the second for productive and precise water application.

OSMAC G4 UPGRADE KIT FOR E-OSMAC
Upgrade E-OSMAC satellites with the OSMAC G4 Upgrade Kit

- Add a point of operation at the satellite controller for performing manual irrigation or referencing diagnostic information, including communications details through Page History.
- Add backup program storage for stand-alone operations when in Local mode.
- Upgrade receiver hardware to a high-performance receiver radio for improved reliability and for signal strength indication.

OSMAC® G4 SATELLITE

ADDITIONAL FEATURES

INFORMATION AND CONTROL:

RECEIVED MESSAGES
Received messages are logged with signal strength indication
A useful reference of recent activity and valuable diagnostic detail

STAND-ALONE CAPABILITIES
Stand-alone capabilities enable running enable running scheduled irrigation programs. A convenient backup option and useful during course construction.

MANUAL OPERATION CAPABILITIES
Manual operation capabilities include program start, station multi-manual, and syringe cycles.
A trusted point of control on the course

DIAGNOSTIC INFORMATION
Diagnostic information is available in the display menus and through LED lights. Confirmation of normal function and information to guide troubleshooting

CAPABLE OF REMOTE OPERATION WITH HAND-HELD RADIO AND LYNX APPS
Flexible control options, on and off the course

SPECIFICATIONS

OPERATIONAL
Functions under the management of a central computer operating LYNX®, or SitePro®, Central Control System, or as a stand-alone controller.
Stations: 16 to 64 in 16 station increments

- Up to 32 stations may operate simultaneously
- Station run times received from LYNX Central are executed to the second, from 1 second to 8 hours and 59 minutes
- Station run times programmed in Local mode are executed to the minute, from 1 minute to 59 minutes
- Any station can be configured as a switch. Switch operation will ignore rain hold and does not activate the pump/master valve circuit
- Local Mode Operations
- 12 independent local programs
- 14 day calendar or 1 to 30 day interval scheduling
- Up to 24 start times per program
- Simultaneous station operation defined independently per program
- Program percent adjust from 10 to 250%
- Non-volatile memory saves program data for up to 10 years without power

Manual Operations

- Multi-Manual station start up to 32 stations
- Program start
- Program syringe

ELECTRICAL
Input power: 120/240 VAC, 50/60 Hz
OSMAC G4:

- 0.20 amps, 110-120 VAC, 60 Hz (no load)
- 0.96 amps, 110-120 VAC, 60 Hz (max load)
- 0.10 amps, 220-240 VAC, 50/60 Hz (no load)
- 0.47 amps, 220-240 VAC, 50/60 Hz (max load)

DIMENSIONS
Plastic Cabinet: 17" W x 40" H x 16" D

OPTIONS
Surge protection

WARRANTY
Two years

OSMAC G4 SATELLITE SPECIFYING INFORMATION

OSMAC G4 SATELLITES

G4-XXX6RX					
Description	*Configuration*	*Cabinet*	*Output*	*Communication*	*Options*
G4	**XX**	**X**	**6**	**R**	**X**
G4 – OSMAC G4 Satellite	16 – 16 Stations 32 – 32 Stations 48 – 48 Stations 64 – 64 Stations	P – Plastic Green B – Plastic Tree Bark T – Plastic Desert Sand	6A – 24VAC	R – Narrowband Radio	3 – Large Terminal Blocks, Switches 4 – Large Terminal Blocks, Switches, Premium Surge
Example: When specifying a 48-station, satellite in a green plastic cabinet with large terminal block, switches and premium surge you would specify: **G4-48P6R4**					

OSMAC G4 UPGRADE KIT

118-2987
Kit Contains
OSMAC G4 Timing Module, Interface Cable and Hardware

FLEXIBLE & **FUTUREPROOF.**

Our golf sprinklers have you covered with a full range of solutions. Several are equiped with the innovative TruJectory™ feature which provides an adjustable angle of nozzle trajectory as well as enhanced water distribution control for consistent water application even in the toughest conditions. Our INFINITY® Series golf course sprinklers with Smart Access® are designed to provide easy access to critical components and upgrades to the sprinkler system without digging. The Toro LYNX® Central Control system connects your irrigation system to features like moisture sensing, sophisticated diagnostics, higher surge protection, and more precise run times — to the second. 2-way communication and remote control from your phone, smart pad, or desktop, simply and economically allow you control, power, and precision at your fingertips.

Reducing the Runtime of Sprinklers by **30 seconds** Can Save Up to **3,000,000 Litres** of Water a Year*.

*BASED ON 1000 SPRINKLER HEADS OR 23 TIMES PER WEEK ON AN 18-HOLE COURSE.

GOLF SPRINKLERS - TABLE OF CONTENTS

FOR DEMANDING AREAS | FOR MODERATE AREAS | FOR PLAIN AREAS

	INF35-6/INF55-6	FLX35-6/FLX55-6	INF35/INF55	FLX35/FLX55	INF34/INF54	FLX34/FLX54
						
Radius	13–30 m (42'–100')	13–30 m (42'–100')	13–28 m (43'–92')	13–28 m (43'–92')	16–30 m (52'–99')	16–30 m (52'–99')
Short Radius (mainless)	10,5–16 m (35'–52')	10,5–16 m (35'–52')	10,4–15 m (34'–49')	10,4–15 m (34'–49')		
Radius Reduction Screw			✓	Optional	✓	Optional
Back Nozzle Capable	✓	✓	✓	✓	✓	✓
Inlet size	1" and 1.5", ACME	1" and 1.5", ACME	1" and 1.5", ACME	1" and 1.5", ACME	1" and 1.5", ACME	1" and 1.5", ACME
Below Grade Capable	Stealth-T		Stealth-D		Stealth-D	
Flow Range	27–231 LPM (7.1–61.1 gpm)	27–231 LPM (7.1–61.1 gpm)	31–232 LPM (8.2–61.3 gpm)	31–232 LPM (8.2–61.3 gpm)	49–234 LPM (13.0–61.8 gpm)	49–234 LPM (13.0–61.8 gpm)
Recommended Operating Pressure	4,5–5,5 bar (65–80 psi)	4,5–5,5 bar (65–80 psi)	4,5–5,5 bar (65–80 psi)	4,5–5,5 bar (65–80 psi)	4,5–5,5 bar (65–80 psi)	4,5–5,5 bar (65–80 psi)
High Wind	✓	✓	✓	✓	✓	✓
Block system (No Pilot Valve)						
Low Pressure						
LSM 2-wire Systems	✓	✓	✓	✓	✓	✓
Normally Open Hydraulic System		✓		✓		✓
Spike Guard™ Solenoid	✓	✓	✓	✓	✓	✓
Full Circle	✓	✓	✓	✓	✓	✓
Part-circle Adjustable	✓	✓	✓	✓		
Part/Full Circle In One	40°–330° and 360°	40°–330° and 360°	40°–330° and 360°	40°–330° and 360°		
Ratcheting Riser	✓	✓	✓	✓		
Check Valve		✓		✓		✓
Smart-Arc Memory						
Trajectory Adjustment	7°–30°	7°–30°	25° & 15°	25° & 15°	25° & 15°	25° & 15°
Nozzle Base Clutching	✓	✓	✓	✓		
SMART ACCESS Compartment	✓		✓		✓	
SMART ACCESS Cover	✓		✓		✓	
Removable Marker	✓		✓		✓	
Pilot Valve Serviceable Under Pressure	✓		✓		✓	
Warranty	2 Years/5 Years*	2 Years/5 Years*	2 Years/5 Years*	2 Years/5 Years*	2 Years/5 Years*	2 Years/5 Years*

FOR TEES AND THEIR SURROUNDINGS | FOR HARSH GOLF COURSE CONDITIONS | FOR BALANCED PRECIPITATION

	FLEX800 B Series	T7 Rotor	T5 Rotor	590GF	690
					
13-29 m (42'–95')		Low-flow: 11,6–16,2 m (38'–53') High-flow: 14,0-25,3 m (46'–83')	Low Angle: 7,6–11 m (25'–36') Std Angle: 10–15,2 m (33'–50')	0,6–7,9 m (2'–26')	27–33 m (87'–108')
10,5–16m 35'–52'		✓	✓	✓	
Optional		✓	✓	✓	
✓					
1" NPT, BSP, ACME		1" ACME	0.75" NPT	0.5" NPT	1.5" NPT
✓					
27–213 LPM (7.1–56.3 gpm)		Low-flow: 6,4–48,1 LPM (1.7–12.7 gpm) High-flow: 25,8–115,5 LPM (6.8–30.5 gpm)	Low Angle: 2,8–14 LPM (0.74–3.7 gpm) Std Angle: 4,4–36,7 LPM (1.15–9.7 gpm)	0,19–17,0 LPM (.05–4.5 gpm)	193–311 LPM (51.0–82.2 gpm)
3,5–6,9 bar (50–100 psi)		2,8–6,9 bar (40–100 psi)	1,7–4,5 bar (25–65 psi)	1,4–3,4 bar (20–50 psi)	5,5–6,9 bar (80–100 psi)
✓					✓
✓		✓	✓		
		✓	✓	✓	
					✓
✓		✓	✓	✓	1 and 2 Speed
✓		✓	✓	✓	
				✓	90° and 180°
40°-330° and 360°		45°-360°	40°-360°		
FLX35-6B/FLX35B				✓	
✓		✓	Optional Model	Optional Model	Optional Model
		✓			
7°-30°/25° & 15°			Std tree - 25° Low angle tree - 10°		
✓					
2 Years/5 Years*		2 Years/5 Years*	2 Years/5 Years*	2 Years/5 Years*	2 Years/5 Years*

When purchased and installed with Toro Swing Joints.

THE SPRINKLERS YOU'D BUILD **IF YOU BUILT SPRINKLERS.**

One of our greatest areas of expertise is golf course irrigation. A Toro® sprinkler is always packed with ideas. Make your work count over and over with the sensational INFINITY® sprinkler family with Smart Access®.

Wide Nozzle Selection

Benefit from infinite flexibility on both front and back nozzles.

Stealth Turf Cap Kits (Optional)

Grown turf enhances the pitch appearance and improves labour efficiency.

LSM Communication Lights

Diagnostic visible from the cover through the LSM spyhole.

Check Flow™ Pilot Valve

Simply turn the sprinkler on and off at the top.

Soft Synthetic Material

Lowers the risk of injuries and allows easy access, to make adjustments from the top.

LSM 2-Wire Module

Get superior diagnostics, precision of watering by the second and much more.

Versatile Trajectory Adjustment

Perfectly adapt the sprinkler to any terrain and wind conditions.

Ratcheting Riser

Define the arc of the sprinkler with a simple hand gesture.

Protective Enclosure

All parts and wire connections are safe from the elements.

Nozzle Base Clutching

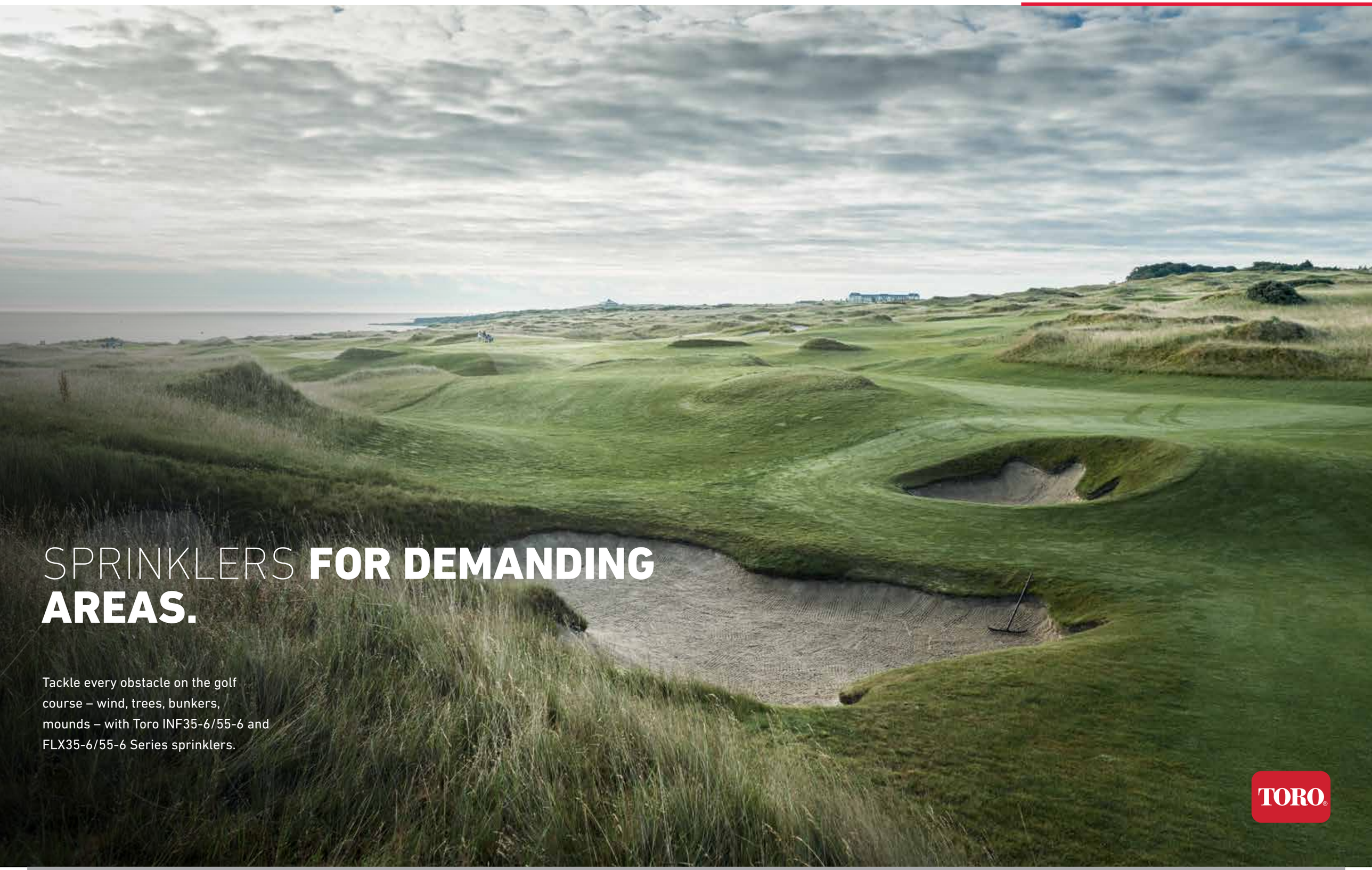
Turn, hold and shoot to put down as much water as needed on a hot spot.

Smart Access®

Solenoid, pilot valve and module all within hand's reach, no digging required.

Watch INFINITY Videos:
youtube.com/ToroCompanyEurope

	INFINITY® 35-6/55-6 35/55	INFINITY® 34/54	FLEX800™ 35-6/55-6 35/55	FLEX800™ 34/54	B-Series 35-6B/55-6B 35/55	B-Series 34/54
#01 Smart Access®	✓	✓	○	○	○	○
#02 Trajectory Adjustment	✓	✓	✓	✓	✓	✓
#03 Easy Arc Adjustment	✓	○	✓	○	✓	○
#04 Ratcheting Riser	✓	○	✓	○	✓	○
#05 Largest Nozzle Selection	✓	✓	✓	✓	✓	✓
#06 Sturdy Construction	✓	✓	✓	✓	✓	✓
#07 Nozzle Base Clutching	✓	○	✓	○	✓	○



SPRINKLERS **FOR DEMANDING AREAS.**

Tackle every obstacle on the golf course – wind, trees, bunkers, mounds – with Toro INF35-6/55-6 and FLX35-6/55-6 Series sprinklers.

TRUJECTORY™ – PRECISION WATER PLACEMENT

INFINITY® SERIES GOLF ROTORS INF35-6/INF55-6 SPRINKLERS

FEATURES

INFINITY 35-6/55-6 Series: Part/Full Circle with Smart Access® and TruJectory™

With the industry's largest selection of high performance nozzles and TruJectory adjustment, the INFINITY 35-6/55-6 Series with Smart Access allows you to put water precisely where you want it for maximum distribution uniformity. And the part/full circle drive allows you to simply and economically adjust the area of coverage to match your seasonal watering needs or meet water rationing mandates in seconds with no disassembly or additional parts required.

- **TruJectory – 24 Positions**
  From 7° - 30° in 1° increments put water where you want it. Adjust from the top of the sprinkler in seconds, wet or dry. This flexibility lets you tackle every obstacle on the course; wind, trees, bunkers, mounds and more.
- **Nozzle Base Chutching - Hot Spot Watering**
  Nozzle base can be turned in either direction and held to put down as much water as needed, precisely where you want it. Standard on all Toro part circle golf rotors!
- **True Part and Full-Circle in One – 40° - 330° Part Circle and 360° Full Circle**
  These sprinklers can be 360° full circle today and part circle tomorrow allowing you to simply and economically adjust the area of coverage to match your seasonal needs or meet water rationing mandates.

INFINITY® 35-6 with TruJectory™ and 40°-330° circle. Smart Access®

INFINITY® 55-6 with TruJectory™ and 40°-330° circle. Smart Access®

Watch INFINITY Videos:
youtube.com/ToroCompanyEurope

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION

Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

STAINLESS STEEL VALVE SEAT

Eliminates body damage from rocks and debris. This indestructible stainless steel seat is molded to the body and virtually eliminates body replacements due to seat damage. Standard on all Toro Golf rotors!

20,000 VOLT LIGHTNING RATING

The Spike Guard™ solenoid has virtually eliminated the need for solenoid replacement in high lightning environments.

SMART ACCESS

Provides top accessibility to all critical components and room to grow for whatever the future holds.

Curious about the overall performance of this system?
Take a look at page 45.

ACCESSORIES AND UPGRADES

INFINITY® SERIES DISTANCE MARKERS
*White (**118-6234**) and Yellow (**118-6235**) color options provide excellent visibility*

INF35-6 CONVERSION UPGRADES
INF35-6-3134
INF35-6-3537

INF55-6 CONVERSION UPGRADES
INF55-6-5154
INF55-6-5558
INF55-6-59

STEALTH™ KIT
STEALTH-T
Kit attaches to INFINITY Series sprinklers with TruJectory™ style, 24-position main nozzle adjustment capability

TACKLE ANY OBSTACLE **WITH TRUJECTORY™**

FLEX800™ SERIES GOLF ROTORS FLX35-6/FLX55-6
SPRINKLER KITS

FEATURES

FLEX800™ 35-6/55-6 with TruJectory™ and true Part and Full-Circle in One

The FLEX800™ 35-6/55-6 Series allows you to put water precisely where you want it for maximum distribution uniformity. The part/full circle drive allows you to simply and economically adjust the area of coverage to match your seasonal watering needs or meet water rationing mandates in seconds with no disassembly or additional parts required.

- **TruJectory™ adjustment of the main nozzle – 24 Positions from 7° - 30°**
  This patented feature puts water where you want it. Adjust from the top of the sprinkler in seconds, wet or dry. This flexibility lets you tackle every obstacle on the course; wind, trees, bunkers, mounds and more.
- **Nozzle Base Chutching - Hot Spot Watering**
  Nozzle base can be turned in either direction and held to put down as much water as needed, precisely where you want it. Standard on all Toro part circle golf rotors!
- **True Part and Full-Circle in One – 40° - 330° Part Circle and 360° Full Circle**
  These sprinklers can be 360° full circle today and part circle tomorrow allowing you to simply and economically adjust the area of coverage to match your seasonal needs or meet water rationing mandates.

FLEX800™ 35-6
Part/Full Circle with TruJectory

FLEX800™ 55-6
Part/Full Circle with TruJectory

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION

Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

STAINLESS STEEL VALVE SEAT

Eliminates body damage from rocks and debris. This indestructible stainless steel seat is molded to the body and virtually eliminates body replacements due to seat damage. Standard on all Toro Golf rotors!

NOZZLE BASE CLUTCHING – HOT SPOT WATERING

Nozzle base can be turned in either direction and held to put down as much water as needed, precisely where you want it. Standard on all Toro part circle golf rotors!

RATCHETING RISER

For fine-tuning arc adjustment after installation.

Curious about the overall efficiency of this system?
Take a look at page 45.

ACCESSORIES AND UPGRADES

FLX35-6 CONVERSION UPGRADES

FLX35-6-3134
FLX35-6-3537

FLX55-6 CONVERSION UPGRADES - RIBBED BODY

FLX55-6-5154
FLX55-6-5558
FLX55-6-59

FLX55-6 CONVERSION UPGRADES - RIBLESS BODY

FLX55-6-5154R
FLX55-6-5558R
FLX55-6-59R

FLEX800 TURF CUP

FLX50-RING w/ FLXINF-TURFCAP

ACCESSORIES AND UPGRADES INF35-6/INF55-6 & FLX35-6/FLX55-6

INF35-6 Conversion Upgrades

Models	Description
INF35-6-3134	INF35-6 w/31–34 Nozzles (33 Nozzle Installed)
INF35-6-3537	INF35-6 w/35–37 Nozzles (35 Nozzle Installed)

INF55-6 Conversion Upgrades

Models	Description
INF55-6-5154	INF55-6 w/51–54 Nozzles (53 Nozzle Installed)
INF55-6-5558	INF55-6 w/55–58 Nozzles (55 Nozzle Installed)
INF55-6-59	INF55-6 w/59 Nozzle installed

FLX35-6 Conversion Upgrades

Models	Description
FLX35-6-3134	FLX35-6 w/31–34 Nozzles (#33 Nozzle Installed)
FLX35-6-3537	FLX35-6 w/35–37 Nozzles (#35 Nozzle Installed)

FLX55-6 Conversion Upgrades—(Ribbed Body)

Models	Description
FLX55-6-5154	FLX55-6 w/51–54 Nozzles (#53 Nozzle Installed)
FLX55-6-5558	FLX55-6 w/55–58 Nozzles (#55 Nozzle Installed)
FLX55-6-59	FLX55-6 w/59 Nozzle

FLX55-6 Conversion Upgrades—(Ribless Body)

Models	Description
FLX55-6-5154R	FLX55-6 w/51–54 Nozzles (#53 Nozzle Installed)
FLX55-6-5558R	FLX55-6 w/55–58 Nozzles (#55 Nozzle Installed)
FLX55-6-59R	FLX55-6 w/59 Nozzle

INFINITY® SERIES DISTANCE MARKERS

Set your course apart with Toro's unique, customizable distance markers

- *White (118-6234) and Yellow (118-6235) color options provide excellent visibility*
- *Customizable with any graphic image*
- *Multiple number and orientation options available*
- *Any font style*
- *Easy snap-in installation into any INFINITY golf sprinkler*

INFINITY/FLEX800 Cap Kit Models

Eliminates sprinkler interference and enhances course appearance

FLXINF-TURFCAP – Infinity Turf Cup (for the riser cover)
INF21-RING – INFINITY Turf Ring (for the body cover)
FLX30-RING – Artificial grass cover ring/body 1.5"
FLX50-RING – Artificial grass cover ring/body 1.5"

STEALTH™ Kits

Eliminates sprinkler interference and enhances course appearance.

STEALTH™ Kit Models

STEALTH-T – Kit attaches to INFINITY Series sprinklers with TruJectory™ style, 24-position main nozzle adjustment capability
STEALTH-D – Kit attaches to INFINITY Series sprinklers with dual trajectory main nozzle adjustment capability

SPECIFICATIONS INF35-6/INF55-6 & FLX35-6/FLX55-6

OPERATING SPECIFICATIONS

Inlet:
- **INF/FLX35-6:** 25mm (1") ACME
- **INF/FLX55-6:** 40mm (1.5") ACME

Radius:
- **INF/FLX35-6:** 12,8 – 28,0m (42' – 92')
- **INF/FLX55-6:** 15,9 – 30,5m (52' – 100')

Flow Rate:
- **INF/FLX35-6:** 26,9-171,5 LPM (7.1 – 45.3 gpm)
- **INF/FLX55-6:** 52,6-231,3 LPM (13.9 – 61.1 gpm)

Precipitation Rates:
- **INF/FLX35-6:** Minimum: 9,8mm/hr (0.39"/hr); Maximum: 16,3mm/hr (0.64"/hr)
- **INF/FLX55-6:** Minimum: 11,1mm/hr (0.44"/hr); Maximum: 17,5mm/hr (0.69"/hr)

Pilot Valve:
Selectable at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi)

Recommended Operating Pressure Range:
- 4,5-6,9 bar (65-100 psi)
- Maximum: 10,3 bar (150 psi)
- Minimum: 2,8 bar (40 psi)

Activation Type
- Standard Solenoid:
  - 24 VAC, 50/60 Hz
  - Inrush: 0.30 A
  - Holding 0.20 A
- Spike Guard Solenoid:
  - 24 VAC, 50/60 Hz
  - Inrush: 0.12 A
  - Holding 0.10 A
- Nickel-Plated Spike Guard Solenoid:
  - 24 VAC, 50/60 Hz
  - Inrush: 0.12 A
  - Holding 0.10 A
- DC Latching Solenoid (DCLS)
  - Momentary low voltage pulse
- LYNX Smart Module with DCLS
  - Momentary low voltage pulse

NOZZLE SELECTION
- **INF/FLX35-6** has eight nozzle variations (30, 31, 32, 33, 34, 35, 36 and 37)
- **INF/FLX55-6** has nine nozzle variations (51, 52, 53, 54, 55, 56, 57, 58 and 59)
- Four in-line nozzles, rotating stream pattern
- One back nozzle position
- Stator variations **INF35-6/INF55-6**: 3

DIMENSIONS

INF: SMART ACCESS™ Cover and Compartment Diameter/FLX: Body Diameter
- **INF35-6:** 19 cm (7.5") / **FLX35-6:** 16,5 cm (6.5")
- **INF55-6:** 19 cm (7.5") / **FLX55-6:** 19 cm (7.5")
- Body height:
  - **INF/FLX35-6:** 25 cm (10")
  - **INF/FLX55-6:** 29 cm (11.38")
- Weight:
  - **INF35-6:** 1,95 kg (4.31 lb) / **FLX35-6:** 1,35 kg (2.98 lb)
  - **INF55-6:** 2,33 kg (5.13 lb) / **FLX55-6:** 1,68 kg (3.70 lb)
- Weight integrated with LYNX Smart Module:
  - **INF35-6:** 2,27kg (5.00 lb)

FLX35-6: 1,64kg (3.63 lb)
- **INF55-6:** 2,63kg (5.82 lb)

FLX55-6: 1,95kg (4.30 lb)

WARRANTY

Two years; Five years when installed with Toro® Swing Joints

INF35-6/INF55-6 & FLX35-6/FLX55-6 SPECIFYING INFORMATION

INF35-6 & INF55-6

INFX5-XXX-X6

Body Inlet	Arc	Nozzle	Pressure Regulation*	Activation Type	Trajectory
INFX	**5**	XX	X	X	**6**
3—1" 5—1 1/2"	5—Part-circle and Full-circle in One	INF35—30, 31, 32, 33, 34, 35, 36, 37 INF55—51, 52, 53, 54, 55, 56, 57, 58, 59	6— 4,5 bar (65 psi) 8— 5,5 bar (80 psi) 1— 6,9 bar (100 psi)	1—Standard Solenoid 2—Spike Guard™ Solenoid 3—Nickel-plated Spike Guard Solenoid 4—DC Latching Solenoid (DCLS) 6—Integrated LYNX Smart Module w/DCLS	6—24-position TruJectory

Example: When specifying an INF35-6 Series Sprinkler with #34 nozzle, pressure regulation at 4,5 bar (65 psi) and Spike Guard you would specify: **INF35-346-26**

** All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).*
Note: *Not all models available.*

FLX35-6 & FLX55-6

FLXX5-XXX-X6

Body Inlet	Arc	Nozzle	Pressure Regulation*	Activation Type	Trajectory
FLXX	X	XX	X	X	**6**
3— 25mm (1") 5— 40mm (1.5")	5—Part-circle and Full-circle In One	FLX35 - 30, 31, 32, 33, 34, 35, 36, 37 FLX55 - 51, 52, 53, 54, 55, 56, 57, 58, 59	6— 4,5 bar (65 psi) 8— 5,5 bar (80 psi) 1— 6,9 bar (100 psi)	1—Standard Solenoid 2—Spike Guard™ Solenoid 3—Nickel-plated Spike Guard Solenoid 4—DC Latching Solenoid (DCLS) 6—IntegratedLLYNX Smart Module w/DCLS	6—24-position TruJectory

Example: When specifying an FLX35-6 Series Sprinkler with Spike GuardTM Solenoid, #34 nozzle, an electric valve and pressure regulation at 4,5 bar (65 psi) you would specify: **FLX35–346-26**

** Electric models only. All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).*
Note: *Not all models available. Nickel-plated, corrosion-resistant models are available upon request.*

INF35-6/INF55-6 & FLX35-6/FLX55-6 PERFORMANCE DATA - METRIC

INF35-6/55-6 & FLX35-6/55-6 Trajectory Performance—(Metric)

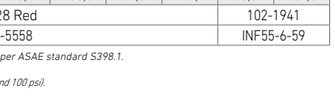
Nozzle/bar/LPM	#31/51 Nozzle @ 4,5 bar												#32/52 Nozzle @ 4,5 bar											
Trajectory	7°		10°		15°		20°		25°		30°		7°		10°		15°		20°		25°		30°	
"A" Radius	14,0	14,0	14,0	14,0	15,2	15,5	16,2	16,2	16,5	16,5	15,2	15,2	14,0	14,9	14,9	15,2	15,5	15,5	16,8	16,8	19,2	19,5	16,5	19,8
"B" Spray Height	1,2	1,2	1,2	1,2	1,5	1,8	2,4	3,0	3,4	4,0	4,0	4,6	0,9	1,2	1,2	1,2	1,8	1,8	2,7	2,7	3,7	3,4	4,6	4,0
"C" Distance from Head	7,6	7,9	7,6	8,2	7,9	9,8	10,1	11,6	10,1	12,2	10,1	12,4	6,1	6,7	7,3	7,9	8,5	9,4	10,4	10,7	10,4	10,4	10,4	9,1

Nozzle/bar/LPM	#33/53 Nozzle @ 4,5 bar												#34/54 Nozzle @ 4,5 bar											
Trajectory	7°		10°		15°		20°		25°		30°		7°		10°		15°		20°		25°		30°	
"A" Radius	16,5	16,5	17,1	17,1	18,0	18,0	18,9	18,9	20,1	20,7	18,6	18,6	17,7	17,7	18,3	18,3	19,2	19,2	20,4	20,4	22,6	22,6	21,3	21,3
"B" Spray Height	1,2	1,5	1,5	1,8	2,1	2,1	2,7	2,7	4,0	4,0	4,6	4,6	1,2	1,5	1,2	1,8	1,8	2,4	3,4	3,0	4,3	4,3	5,2	5,2
"C" Distance from Head	7,0	9,1	8,5	10,1	9,8	9,8	10,4	10,7	10,7	11,3	10,7	11,3	7,3	9,4	7,9	10,4	10,7	12,2	11,9	12,5	11,9	11,9	11,9	12,8

Nozzle/bar/LPM	#35/55 Nozzle @ 4,5 bar												#36/56 Nozzle @ 5,5 bar											
Trajectory	7°		10°		15°		20°		25°		30°		7°		10°		15°		20°		25°		30°	
"A" Radius	18,0	18,0	18,6	18,9	19,5	20,1	21,3	21,3	23,2	23,2	22,6	23,5	19,5	21,9	20,7	22,2	23,2	22,9	24,4	25,0	25,6	25,9	25,0	25,0
"B" Spray Height	1,2	1,8	1,5	1,8	2,1	2,7	3,4	3,4	4,6	4,6	5,2	5,2	1,5	1,5	2,1	2,1	2,7	2,7	4,3	4,3	5,2	5,2	6,7	6,7
"C" Distance from Head	9,1	10,4	9,8	11,0	11,0	13,1	13,1	13,7	13,1	13,7	13,1	13,7	7,6	7,6	11,6	11,6	12,2	12,2	13,7	13,7	14,9	14,9	13,7	13,7

Nozzle/bar/LPM	#37/57 Nozzle @ 5,5 bar												#58 Nozzle @ 5,5 bar					
Trajectory	7°		10°		15°		20°		25°		30°		7°	10°	15°	20°	25°	30°
"A" Radius	19,8	21,9	21,0	22,6	23,8	23,5	25,0	25,3	26,2	27,1	25,6	25,9	22,9	23,5	25,3	26,5	28,0	26,8
"B" Spray Height	1,5	1,5	2,1	1,5	2,7	1,5	4,3	1,5	5,5	1,5	6,7	1,5	1,8	2,1	3,0	4,6	5,5	6,7
"C" Distance from Head	9,1	9,1	11,9	9,1	12,5	9,1	14,0	9,1	15,2	9,1	14,0	9,1	11,6	12,2	13,1	14,3	15,8	14,6

Nozzle/bar/LPM	#59 Nozzle @ 5,5 bar					
Trajectory	7°	10°	15°	20°	25°	30°
"A" Radius	23,5	23,8	25,6	27,1	29,3	28,0
"B" Spray Height	2,1	2,4	3,4	4,9	6,4	7,6
"C" Distance from Head	12,8	13,4	13,7	14,3	16,2	14,9



Information is for reference only, Actual results may vary.

INF35-6/FLX35-6 Series Performance Chart—(Metric)

Front Nozzle Position			Nozzle Set 30 White 102-2208		Nozzle Set 31 Yellow 102-4587		Nozzle Set 32 Blue 102-4588		Nozzle Set 33 Brown 102-4589		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-0729		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261	
			Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Red 102-2928	Gray 102-2910	Orange 102-2926	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Orange 102-2926	Gray 102-2910
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	12,8	26,9	15,9	51,9	18,6	64,7	19,5	76,5	21,0	103,7	—	—	—	—	—	—
4,5	450	4,59	13,7	32,9	16,5	58,7	19,2	77,6	20,1	86,7	22,6	113,6	23,2	122,6	24,4	128,7	—	—
5,5	550	5,61	14,0	36,3	17,4	64,3	20,4	85,5	21,4	95,8	23,5	125,7	24,1	135,5	25,6	141,9	26,2	154,4
6,9	690	7,04	14,6	42,4	18,0	71,5	22,0	95,4	22,6	106,7	24,4	140,0	25,6	151,0	26,8	160,9	28,1	171,5
Stator			102-6929 Blue		102-1939 White								118-7828 Red					
Conversions					INF35-6-3134								INF35-6-3537					

■ *Not recommended at these pressures. Radius shown in meters. Toro recommends the use of a 1¼" (30mm) swing joint at flows over 25-gpm (95-LPM).*
Sprinkler radius of throw per ASAE standard S398.1.

INF55-6/FLX55-6 Series Performance Chart—(Metric)

Front Nozzle Position			Nozzle Set 51 Yellow 102-4587		Nozzle Set 52 Blue 102-4588		Nozzle Set 53 Brown 102-4589		Nozzle Set 54 Orange 102-0728		Nozzle Set 55 Green 102-0729		Nozzle Set 56 Gray 102-0730		Nozzle Set 57 Black 102-4261		Nozzle Set 58 Red 102-4260		Nozzle Set 59 Beige 102-4259	
			Blue 102-2925	Gray 102-2910	Red 102-2928	Gray 102-2910	Orange 102-2926	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	15,9	52,6	18,9	65,9	20,1	78,3	21,0	108,3	—	—	—	—	—	—	—	—	—	—
4,5	450	4,59	16,5	59,4	19,5	78,3	20,7	88,6	22,6	113,1	23,2	127,9	24,7	135,1	—	—	—	—	—	—
5,5	550	5,61	17,4	65,1	20,7	86,7	22,0	97,7	23,5	130,2	24,1	140,8	25,9	149,1	27,1	165,0	28,1	179,8	29,3	215,7
6,9	690	7,04	18,0	72,3	22,3	96,5	23,2	108,6	24,4	144,6	25,6	156,3	27,1	165,4	28,7	183,6	29,0	194,9	30,5	231,3
Stator			102-1939 White								118-7828 Red								102-1941	
Conversions			INF55-6-5154								INF55-6-5558								INF55-6-59	

■ *Not recommended at these pressures. Radius shown in meters. Toro recommends the use of a 1¼" (30mm) swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.*
Toro recommends the use of a 1¼" 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 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF35-6/INF55-6 & FLX35-6/FLX55-6 PERFORMANCE DATA - U.S. IMPERIAL

INF35-6/55-6 & FLX35-6/55-6 Trajectory Performance—(U.S.)

Nozzle/psi/gpm	#31/51 Nozzle @ 65 psi												#32/52 Nozzle @ 65 psi											
Trajectory	7°		10°		15°		20°		25°		30°		7°		10°		15°		20°		25°		30°	
"A" Radius	46'	46'	46'	46'	50'	51'	53'	53'	54'	54'	50'	50'	46'	49'	49'	50'	51'	51'	55'	55'	63'	64'	54'	65'
"B" Spray Height	4'	4'	4'	4'	5'	6'	8'	10'	11'	13'	13'	15'	3'	4'	4'	4'	6'	6'	9'	9'	12'	11'	15'	13'
"C" Distance from Head	25'	26'	25'	27'	26'	32'	33'	38'	33'	40'	33'	41'	20'	22'	24'	26'	28'	31'	34'	35'	35'	35'	34'	30'

Nozzle/psi/gpm	#33/53 Nozzle @ 65 psi												#34/54 Nozzle @ 65 psi											
Trajectory	7°		10°		15°		20°		25°		30°		7°		10°		15°		20°		25°		30°	
"A" Radius	54'	54'	56'	56'	59'	59'	62'	62'	66'	68'	61'	61'	58'	58'	60'	60'	63'	63'	67'	67'	74'	74'	70'	70'
"B" Spray Height	4'	5'	5'	6'	7'	7'	9'	9'	13'	13'	15'	15'	4'	5'	4'	6'	6'	8'	11'	10'	14'	14'	17'	17'
"C" Distance from Head	23'	30'	28'	33'	32'	32'	34'	35'	35'	37'	35'	37'	24'	31'	26'	34'	35'	40'	39'	41'	39'	39'	39'	42'

Nozzle/psi/gpm	#35/55 Nozzle @ 65 psi												#36/56 Nozzle @ 80 psi											
Trajectory	7°		10°		15°		20°		25°		30°		7°		10°		15°		20°		25°		30°	
"A" Radius	59'	59'	61'	62'	64'	66'	70'	70'	76'	76'	74'	74'	64'	72'	68'	73'	76'	75'	80'	82'	84'	85'	82'	82'
"B" Spray Height	4'	6'	5'	6'	7'	9'	11'	11'	15'	15'	17'	77'	5'	5'	7'	7'	9'	9'	14'	14'	17'	17'	22'	22'
"C" Distance from Head	30'	34'	32'	36'	36'	43'	43'	45'	43'	45'	43'	45'	25'	25'	38'	38'	40'	40'	45'	45'	49'	49'	45'	45'

Nozzle/psi/gpm	#37/57 Nozzle @ 80 psi												#58 Nozzle @ 80 psi					
Trajectory	7°		10°		15°		20°		25°		30°		7°	10°	15°	20°	25°	30°
"A" Radius	65'	72'	69'	74'	78'	77'	82'	83'	86'	89'	84'	85'	75'	77'	83'	87'	92'	88'
"B" Spray Height	5'	5'	7'	7'	9'	9'	14'	14'	18'	18'	22'	22'	6'	7'	10'	15'	18'	22'
"C" Distance from Head	30'	30'	39'	39'	41'	41'	46'	46'	50'	50'	46'	46'	38'	40'	43'	47'	52'	48'

Nozzle/psi/gpm	#59 Nozzle @ 80 psi					
Trajectory	7°	10°	15°	20°	25°	30°
"A" Radius	77'	78'	84'	89'	96'	92'
"B" Spray Height	7'	8'	11'	16'	21'	25'
"C" Distance from Head	42'	44'	45'	47'	53'	49'

Information is for reference only. Actual results may vary.

INF35-6/FLX35-6 Series Performance Chart—(U.S.)

Front Nozzle Position			Nozzle Set 30 White 102-2208		Nozzle Set 31 Yellow 102-4587		Nozzle Set 32 Blue 102-4588		Nozzle Set 33 Brown 102-4589		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-0729		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261	
			Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Red 102-2928	Gray 102-2910	Orange 102-2926	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Orange 102-2926	Gray 102-2910
psi			Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50			42	7.1	52	13.7	61	17.1	64	20.2	69	27.4	—	—	—	—	—	—
65			45	8.7	54	15.5	63	20.5	66	22.9	74	30.0	76	32.4	80	34.0	—	—
80			46	9.6	57	17.0	67	22.6	70	25.3	77	33.2	79	35.8	84	37.5	86	40.8
100			48	11.2	59	18.9	72	25.2	74	28.2	80	37.0	84	39.9	88	42.5	92	45.3
Stator			102-6929 Blue		102-1939 White								118-7828 Red					
Conversions					INF35-6-3134								INF35-6-3537					

■ *Not recommended at these pressures. Radius shown in feet.*
Toro recommends the use of a 1¼" 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.

INF55-6/FLX55-6 Series Performance Chart—(U.S.)

Front Nozzle Position			Nozzle Set 51 Yellow 102-4587		Nozzle Set 52 Blue 102-4588		Nozzle Set 53 Brown 102-4589		Nozzle Set 54 Orange 102-0728		Nozzle Set 55 Green 102-0729		Nozzle Set 56 Gray 102-0730		Nozzle Set 57 Black 102-4261		Nozzle Set 58 Red 102-4260		Nozzle Set 59 Beige 102-4259	
			Blue 102-2925	Gray 102-2910	Red 102-2928	Gray 102-2910	Orange 102-2926	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910
psi			Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50			52	13.9	62	17.4	66	20.7	69	28.6	—	—	—	—	—	—	—	—	—	—
65			54	15.7	64	20.8	68	23.4	74	31.2	76	33.8	81	35.7	—	—	—	—	—	—
80			57	17.2	68	22.9	72	25.8	77	34.4	79	37.2	85	39.4	89	43.6	92	47.5	96	57.0
100			59	19.1	73	25.5	76	28.7	80	38.2	84	41.3	89	43.7	94	48.5	95	51.1	100	61.1
Stator			102-1939 White								118-7828 Red								102-1941	
Conversions			INF55-6-5154								INF55-6-5558								INF55-6-59	

■ *Not recommended at these pressures. Radius shown in feet.*
Toro recommends the use of a 1¼" 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 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

SPRINKLERS **FOR PLAIN AREAS.**

Apply water to exactly the right spot at exactly the right angle; don't be limited by slopes or branches – with Toro INF35/55 and FLX35/55 Series sprinklers.

DUAL TRAJECTORY PROVIDES **EXCEPTIONAL NOZZLE PERFORMANCE**

INFINITY® SERIES GOLF ROTORS INF35/INF55
SPRINKLERS

FEATURES

The INFINITY 35/55 Series: Part/Full Circle with Smart Access® and Dual Trajectory

The INFINITY 35/55 Series features a dual trajectory main nozzle that provides exceptional nozzle performance at the 25° standard angle position and great performance in windy applications at the 15° low angle position. And the part/full circle drive allows you to adjust the area of coverage to match your seasonal watering needs or meet water rationing mandates in seconds with no additional parts required.

- **Ratcheting Riser**
  Align part circle quickly and easily or adjust watering locations to suit seasonal needs.
- **Hot Spot Watering**
  Nozzle base can be turned in either direction and held to put down as much water as needed, precisely where you want it. Standard on all Toro Part circle Golf rotors!
- **True Part and Full-Circle in One – 40° - 330° Part Circle and 360° Full Circle**
  These sprinklers can be 360° full circle today and part circle tomorrow allowing you to simply and economically adjust the area of coverage to match your seasonal needs or meet water rationing mandates.
- **Dual Trajectory – 2 positions – 15°or 25°**
  The 25° setting provides maximum distance of throw and the 15° setting provides improved wind performance, radius reduction and obstacle avoidance.

INFINITY® 35 with Dual Trajectory and a 40°-330° circle with Smart Access®

INFINITY® 55 with Dual Trajectory and a 40°-330° circle with Smart Access®

Watch INFINITY Videos:
youtube.com/ToroCompanyEurope

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION

Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

STAINLESS STEEL VALVE SEAT

Eliminates body damage from rocks and debris. This indestructible stainless steel seat is molded to the body and virtually eliminates body replacements due to seat damage. Standard on all Toro Golf rotors!

RADIUS REDUCTION SCREW

Allows for fine tuning the radius to exactly the distance you need. In combination with main nozzle sizing and trajectory adjustment the radius reduction screw can effectively reduce the sprinkler throw down to 9,1 m (30 ft).

SMART ACCESS

Provides top accessibility to all critical components and room to grow for whatever the future holds.

Curious about the overall efficiency of this system?
Take a look at page 55.

ACCESSORIES AND UPGRADES

INFINITY® SERIES DISTANCE MARKERS
*White **(118-6234)** and Yellow **(118-6235)** color options provide excellent visibility*

INF35 CONVERSION UPGRADES
INF35-3134
INF35-3537

INF55 CONVERSION UPGRADES
INF55-5154
INF55-5558
INF55-59

STEALTH™ KIT
STEALTH-D
Kit attaches to INFINITY Series sprinklers with dual trajectory main nozzle adjustment capability

SIMPLY AND ECONOMICALLY ADJUST **THE AREA OF COVERAGE**

FLEX800™ SERIES GOLF ROTORS FLX35/FLX55
SPRINKLER KITS

FEATURES

The FLEX800 35/55 Series: Part/ Full Circle with Dual Trajectory

The FLEX800 35/55 Series features a dual trajectory main nozzle that provides exceptional nozzle performance at the 25° standard angle position and great performance in windy applications at the 15° low angle position. The Part- and Full-circle drive and ratcheting riser allow you to adjust the area of coverage to match your watering needs or meet water-rationing mandates in seconds, with no additional parts required.

- **Ratcheting Riser**
  Align part circle quickly and easily or adjust watering locations to suit seasonal needs.
- **Hot Spot Watering**
  Nozzle base can be turned in either direction and held to put down as much water as needed, precisely where you want it. Standard on all Toro Part circle Golf rotors!
- **True Part and Full-Circle in One – 40° - 330° Part Circle and 360° Full Circle**
  These sprinklers can be 360° full circle today and part circle tomorrow allowing you to simply and economically adjust the area of coverage to match your seasonal needs or meet water rationing mandates.
- **Dual Trajectory – 2 positions – 15°or 25°**
  The 25° setting provides maximum distance of throw and the 15° setting provides improved wind performance, radius reduction and obstacle avoidance.

FLEX800™ 35 with Dual Trajectory and 40°-330° circle

FLEX800™ 55 with Dual Trajectory and 40°-330° circle

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION
Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

STAINLESS STEEL VALVE SEAT
Eliminates body damage from rocks and debris. This indestructible stainless steel seat is molded to the body and virtually eliminates body replacements due to seat damage. Standard on all Toro golf rotors!

RADIUS REDUCTION SCREW
Allows for fine tuning the radius to exactly the distance you need. In combination with main nozzle sizing and trajectory adjustment the radius reduction screw can effectively reduce the sprinkler throw down to 9,1 m (30 ft).

NOZZLE BASE CLUTCHING – HOT SPOT WATERING
Nozzle base can be turned in either direction and held to put down as much water as needed, precisely where you want it. Standard on all Toro part circle golf rotors!

Curious about the overall efficiency of this system?
Take a look at page 55.

ACCESSORIES AND UPGRADES

FLX35 CONVERSION UPGRADES
FLX35-3134
FLX35-3537

FLX55 CONVERSION UPGRADES - RIBBED
FLX55-5154
FLX55-5558
FLX55-59

FLX55 CONVERSION UPGRADES - RIBLESS
FLX55-5154
FLX55-5558
FLX55-59

FLEX800 TURF CUP
FLX50-RING w/ FLXINF-TURFCAP

ACCESSORIES AND UPGRADES INF35/INF55 & FLX35/FLX55

INF35 Conversion Upgrades

Models	Description
INF35-3134	INF35 w/31–34 Nozzles (#33 Nozz Installed)
INF35-3537	INF35 w/35–37 Nozzles (#35 Nozz Installed)

INF55 Conversion Upgrades

Models	Description
INF55-5154	INF55 w/51–54 Nozzles (#53 Nozz Installed)
INF55-5558	INF55 w/55–58 Nozzles (#55 Nozz Installed)
INF55-59	INF55 w/59 Nozzle

FLX35 Conversion Upgrades

Models	Description
FLX35-3134	FLX35 w/31–34 Nozzles (#33 Noz
FLX35-3537	FLX35 w/35–37 Nozzles (#35 No

FLX55 Conversion Upgrades (Ribbed Body)

Models	Description
FLX55-5154	FLX55 w/51–54 Nozzles (#53 No
FLX55-5558	FLX55 w/55–58 Nozzles (#55 No
FLX55-59	FLX55 w/59 Nozzle

FLX55 Conversion Upgrades (Ribless Body)

Models	Description
FLX55-5154R	FLX55 w/51–54 Nozzles (#53 Noz
FLX55-5558R	FLX55 w/55–58 Nozzles (#55 Nozzle)
FLX55-59R	FLX55 w/59 Nozzle

INFINITY® SERIES DISTANCE MARKERS

Set your course apart with Toro's unique, customizable distance markers

- *White (118-6234) and Yellow (118-6235) color options provide excellent visibility*
- *Customizable with any graphic image*
- *Multiple number and orientation options available*
- *Any font style*
- *Easy snap-in installation into any INFINITY golf sprinkler*

INFINITY/FLEX800 Cap Kit Models

Eliminates sprinkler interference and enhances course appearance

FLXINF-TURFCAP – Infinity Turf Cup (for the riser cover)
INF21-RING – INFINITY Turf Ring (for the body cover)
FLX30-RING – Artificial grass cover ring/body 1.5"
FLX50-RING – Artificial grass cover ring/body 1.5"

STEALTH™ Kits

Eliminates sprinkler interference and enhances course appearance.

STEALTH™ Kit Models

STEALTH-T – Kit attaches to INFINITY Series sprinklers with TruJectory™ style, 24-position main nozzle adjustment capability
STEALTH-D – Kit attaches to INFINITY Series sprinklers with dual trajectory main nozzle adjustment capability

SPECIFICATIONS INF35/INF55 & FLX35/FLX55

OPERATING SPECIFICATIONS

Inlet:
- **INF35/FLX35:** 25mm (1") ACME
- **INF55/FLX55:** 40mm (1.5") ACME

Radius:
- **INF35/FLX35:** 12,8 – 25,3m (43' – 83')
- **INF55/FLX55:** 16,7 – 28,0m (55' – 92')

Flow Rate:
- **INF35/FLX35:** 31,0 – 177,9 LPM (8.2 – 47 gpm)
- **INF55/FLX55:** 53,0 – 232,0 LPM (14.1 – 61.3 gpm)

Precipitation Rates:
- **INF35/FLX35:**

Minimum: 10,8 mm/hr (0.43"/hr); Maximum: 19,4 mm/hr (0.76"/hr)
- **INF55/FLX55:**

Minimum: 11,4 mm/hr (0.45"/hr); Maximum: 20,5 mm/hr (0.81"/hr)

Pilot Valve: Selectable at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi)

Recommended Operating Pressure Range:
- 4,5-6,9 bar (65-100 psi)
- Maximum: 10,3 bar (150 psi)
- Minimum: 2,8 bar (40 psi)

Trajectory: 25° & 15°

Activation Type
- Standard Solenoid
- Spike Guard Solenoid
- Nickel-plated Spike Guard Solenoid
- DC Latching Solenoid (DCLS) - Momentary low voltage pulse
- LYNX Smart Module with DCLS - Momentary low voltage pulse

NOZZLE SELECTION
- **INF35/FLX35** has eight nozzle variations (30, 31, 32, 33, 34, 35, 36 & 37)
- **INF55/FLX55** has nine nozzle variations (51, 52, 53, 54, 55, 56, 57, 58 & 59)
- Three in-line nozzles, rotating stream pattern
- Two back nozzle positions
- Stator variations: 3
- Radius reduction screw 363-4839 for fine tuning

DIMENSIONS:

SMART ACCESS® Cover And Compartment Diameter:
- **INF35:** 19,3cm (7.6")
- **INF55:** 19,3cm (7.6")

Body height:
- **INF35/FLX35:** 25cm (10")
- **INF55/FLX55:** 29cm (11⅜")

Pop-up height to nozzle: 8,25cm (3¼")

Weight:
- **INF35:** 1,93kg (4.26 lb)
- **FLX35:** 1,35kg (2.98 lb)
- **INF55:** 2,30kg (5.08 lb)
- **FLX55:** 1,68kg (3.70 lb)

Weight – Intergrated with LYNX Smart Module:
- **INF35:** 2,24kg (4.95 lb)
- **FLX35:** 1,62kg (3.58 lbs.)
- **INF55:** 2.59kg (5.71 lb)
- **FLX55:** 1,93kg (4.26 lbs.)

WARRANTY

Two years; Five years when installed with Toro Swing Joints

INF35/INF55 & FLX35/FLX55 SPECIFYING INFORMATION

INF35 & INF55

INFX5-XXX-X

Body Inlet	*Arc*	*Nozzle*	*Pressure Regulation**	*Activation Type*
INFX	**5**	XX	X	X
3—1" 5—1½"	5—Part-circle and Full-circle In One	INF35—30, 31, 32, 33, 34, 35, 36, 37 INF55—51, 52, 53, 54, 55, 56, 57, 58, 59	6— 4,5 bar (65 psi) 8— 5,5 bar (80 psi) 1— 6,9 bar (100 psi)	1—Standard Solenoid 2—Spike Guard™ Solenoid 3—Nickel-plated Spike Guard Solenoid 4—DC Latching Solenoid (DCLS) 6—Integrated LYNX Smart Module w/DCLS

Example: When specifying an INF35 Series Sprinkler with #34 nozzle, pressure regulation at 4,5 bar (65 psi) and Spike Guard you would specify: **INF35–346–2**

** All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).*
Note: Not all models available.

FLX35 & FLX55

FLXX5-XXX-X

Body Inlet	*Arc*	*Nozzle*	*Pressure Regulation**	*Activation Type*
FLXX	**5**	XX	X	X
3—25mm (1") 5—40mm (1½")	5—Part-circle and Full-circle In One	FLX35—30, 31, 32, 33 , 34, 35, 36, 37 FLX55—51, 52, 53, 54, 55, 56, 57, 58, 59	6— 4,5 bar (65 psi) 8— 5,5 bar (80 psi) 1— 6,9 bar (100 psi)	1—Standard Solenoid 2—Spike Guard™ Solenoid 3—Nickel-plated Spike Guard Solenoid 4—DC Latching Solenoid (DCLS) 6—Integrated LYNX Smart Module w/DCLS

Example: When specifying an FLX35 Series Sprinkler with #34 nozzle, pressure regulation at 4,5 bar (65 psi) and Spike Guard you would specify: **FLX35–346–2**

** All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).*
Note: *Not all models available. Nickel-plated, corrosion-resistant models are available upon request.*

toro.com

INF35/INF55 & FLX35/FLX55 PERFORMANCE DATA - METRIC

INF35/FLX35 Performance Data—25° – (Metric)

Front Nozzle Positions			Nozzle Set 30 White Plug 102-2208		Nozzle Set 31 Yellow 102-6906		Nozzle Set 32 Blue 102-0726		Nozzle Set 33 Brown 102-6907		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-6955		Nozzle Set 36 Gray 102-6935		Nozzle Set 37 Black 102-6936	
			Yellow 102-5670	Beige 102-6942	Yellow 102-5670	Brown 102-5671	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885
Back Nozzle Positions			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
bar	kPa	kg/cm2	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	13,1	31,0	16,2	52,2	17,1	69,3	18,6	82,1	—	—	—	—	—	—	—	—
4,5	450	4,59	13,7	37,9	16,2	58,7	18,0	77,6	19,5	92,4	20,7	106,7	22,0	129,1	—	—	—	—
5,5	550	5,61	14,0	43,5	17,4	65,5	18,9	85,9	20,4	102,6	21,7	117,7	22,9	143,1	23,8	152,5	24,4	166,5
6,9	690	7,04	14,3	50,7	18,0	72,3	19,8	94,2	21,4	112,8	22,6	129,1	24,1	154,8	24,7	165,8	25,3	179,0

INF35 Series Performance Chart—15°

bar	kPa	kg/cm2	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	13,1	31,0	15,9	51,5	17,7	68,5	18,6	81,4	—	—	—	—	—	—	—	—
4,5	450	4,59	13,7	37,9	16,5	57,9	18,3	76,8	19,5	91,6	19,8	103,3	21,0	125,3	—	—	—	—
5,5	550	5,61	14,0	43,5	17,7	65,1	19,5	85,5	21,0	101,4	21,0	114,3	22,9	139,3	23,2	150,3	23,2	162,4
6,9	690	7,04	14,3	50,7	18,3	71,9	20,1	93,5	21,7	111,7	22,0	124,5	23,8	149,5	25,0	161,2	25,0	174,5
Stator			102-6929 Blue		102-1939 White								118-7828 Red					
Conversions			INF35-3134										INF35-3537					

Not recommended at these pressures. Radius shown in meters
Toro recommends the use of a 1¼" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF55/FLX55 Performance Data—25° – (Metric)

Front Nozzle Positions			Nozzle Set 51 Yellow 102-6906		Nozzle Set 52 Blue 102-0726		Nozzle Set 53 Brown 102-6907		Nozzle Set 54 Orange 102-0728		Nozzle Set 55 Green 102-6955		Nozzle Set 56 Gray 102-6935		Nozzle Set 57 Black 102-6936		Nozzle Set 58 Red 102-6909		Nozzle Set 59 Beige 102-4259	
			Yellow 102-5670	Brown 102-5671	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885
Back Nozzle Positions			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	16,7	53,4	17,3	70,0	18,9	84,4	20,1	97,6	—	—	—	—	—	—	—	—	—	—
4,5	450	4,59	17,4	59,8	18,2	79,1	19,8	95,0	21,0	108,6	22,3	135,8	—	—	—	—	—	—	—	—
5,5	550	5,61	18,0	66,2	18,5	87,4	20,7	105,2	21,9	119,9	23,1	150,3	24,4	163,2	25,2	182,5	25,9	189,3	27,1	217,6
6,9	690	7,04	18,6	73	19,2	95,7	21,7	114,7	22,8	130,6	24,4	164,6	25,2	185,5	26,8	194,9	27,4	204,0	28,0	232,0

INF55 Series Performance Chart—15°

bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	16,7	53,0	17,9	62,5	18,9	84,0	19,2	96,9	—	—	—	—	—	—	—	—	—	—
4,5	450	4,59	17,1	59,0	18,8	78,3	19,8	94,6	20,1	107,9	22,8	133,6	—	—	—	—	—	—	—	—
5,5	550	5,61	18,0	65,9	20,1	87,1	21,0	104,8	21,4	119,2	23,1	147,6	23,7	160,5	24,0	177,5	24,0	187,4	25,0	216,5
6,9	690	7,04	18,2	72,7	20,7	95,0	21,7	114,3	22,0	129,8	24,4	158,6	24,6	184,3	25,3	192,2	25,3	202,1	25,9	230,1
Stator			102-1939 White								118-7828 Red								102-1941 Red	
Conversions			INF55-5154								INF55-5558								INF55-59	

Not recommended at these pressures. Radius shown in meters
Toro recommends the use of a 1¼" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF35/FLX35 Nozzle Apex—(Metric)

Pressure	Nozzle	Apex at 15°	Apex at 25°
4,5 bar	31	1,8m @ 15,5m	4m @ 16,4m
	32	1,8m @ 15,5m	3,4m @ 19,5m
	33	2,1m @ 18m	4m @ 20,7m
	34	2,4m @ 19m	4,6m @ 22,6m
	35	2,7m @ 20m	4,6m @ 23m
5,5 bar	36	2,4m @ 22,9m	5,5m @ 25,3m
	37	2,7m @ 22,5m	5,8m @ 25m

INF55/FLX55 Nozzle Apex—(Metric)

Pressure	Nozzle	Apex at 15°	Apex at 25°
4,5 bar	51	1,8m @ 15,5m	4m @ 16,4m
	52	1,8m @ 15,5m	3,4m @ 19,5m
	53	2,1m @ 18m	4m @ 20,7m
	54	2,4m @ 19m	4,6m @ 22,6m
	55	2,7m @ 20m	4,6m @ 23m
5,5 bar	56	2,4m @ 22,9m	5,5m @ 25,3m
	57	2,7m @ 22,5m	5,8m @ 25m
	58	3m @ 25m	5,5m @ 26,5m
	59	3,4m @ 24,6m	6,4m @ 27,7m

INF35/INF55 & FLX35/FLX55 PERFORMANCE DATA - U.S. IMPERIAL

INF35/FLX35 Performance Data—25° – (U.S.)

Front Nozzle Positions		Nozzle Set 30 White Plug 102-2208		Nozzle Set 31 Yellow 102-6906		Nozzle Set 32 Blue 102-0726		Nozzle Set 33 Brown 102-6907		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-6955		Nozzle Set 36 Gray 102-6935		Nozzle Set 37 Black 102-6936	
		Yellow 102-5670	Beige 102-6942	Yellow 102-5670	Brown 102-5671	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885
Back Nozzle Positions		Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
psi		Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50		43	8.2	53	13.8	56	18.3	61	21.7	65	25.3	—	—	—	—	—	—
65		45	10.0	53	15.5	59	20.5	64	24.4	68	28.2	72	34.1	—	—	—	—
80		46	11.5	57	17.3	62	22.7	67	27.1	71	31.1	75	37.8	78	40.3	80	44.0
100		47	13.4	59	19.1	65	24.9	70	29.8	74	34.1	79	40.9	81	43.8	83	47.3

INF35/FLX35 Series Performance Chart—15°

psi	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50	43	8.2	52	13.6	58	18.1	61	21.5	62	25.6	—	—	—	—	—	—
65	45	10.0	54	15.3	60	20.3	64	24.2	65	27.3	69	33.1	—	—	—	—
80	46	11.5	58	17.2	64	22.6	69	26.8	69	30.2	75	36.8	76	39.7	76	42.9
100	47	13.4	60	19.0	66	24.7	71	29.5	72	32.9	78	39.5	82	42.6	82	46.1
Stator	102-6929 Blue		102-1939 White								118-7828 Red					
Conversions	INF35-3134										INF35-3537					

Not recommended at these pressures. Radius shown in meters
Toro recommends the use of a 1¼" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF55/FLX55 Performance Data—25° – (U.S.)

Front Nozzle Positions		Nozzle Set 51 Yellow 102-6906		Nozzle Set 52 Blue 102-0726		Nozzle Set 53 Brown 102-6907		Nozzle Set 54 Orange 102-0728		Nozzle Set 55 Green 102-6955		Nozzle Set 56 Gray 102-6935		Nozzle Set 57 Black 102-6936		Nozzle Set 58 Red 102-6909		Nozzle Set 59 Beige 102-4259	
		Yellow 102-5670	Brown 102-5671	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885
Back Nozzle Positions		Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
psi		Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50		55	14.1	57	18.5	62	22.3	66	25.8	—	—	—	—	—	—	—	—	—	—
65		57	15.8	60	20.9	65	25.1	69	28.7	73	35.9	—	—	—	—	—	—	—	—
80		59	17.5	61	23.1	68	27.8	72	31.7	76	39.7	80	43.1	83	48.2	85	50.0	89	57.5
100		61	19.3	63	25.3	71	30.3	75	34.5	80	43.5	83	49.0	88	51.5	90	53.9	92	61.3

INF55 Series Performance Chart—15°

psi	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50	55	14.0	59	16.5	62	22.2	63	25.6	—	—	—	—	—	—	—	—	—	—
65	56	15.6	62	20.7	65	25.0	66	28.5	75	35.3	—	—	—	—	—	—	—	—
80	59	17.4	66	23.0	69	27.7	70	31.5	78	39.0	78	42.4	79	46.9	79	49.5	82	57.2
100	60	19.2	68	25.1	71	30.2	72	34.3	80	41.9	81	47.2	83	52.1	83	53.4	85	60.8
Stator	102-1939 White								118-7828 Red								102-1941 Red	
Conversions	INF55-5154								INF55-5558								INF55-59	

Not recommended at these pressures. Radius shown in feet
Toro recommends the use of a 1¼" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF35/FLX35 Nozzle Apex—(U.S.)

Pressure	Nozzle	Apex at 15°	Apex at 25°
65 psi	31	6' @ 51'	13' @ 54'
	32	6' @ 51'	11' @ 64'
	33	7' @ 59'	13' @ 68'
	34	8' @ 63'	15' @ 74'
	35	9' @ 66'	15' @ 76'
80 psi	36	8' @ 75'	18' @ 83'
	37	9' @ 74'	19' @ 82'

INF55/FLX55 Nozzle Apex—(U.S.)

Pressure	Nozzle	Apex at 15°	Apex at 25°
65 psi	51	6' @ 51'	13' @ 54'
	52	6' @ 51'	11' @ 64'
	53	7' @ 59'	13' @ 68'
	54	8' @ 63'	15' @ 74'
	55	9' @ 66'	15' @ 76'
80 psi	56	8' @ 75'	18' @ 83'
	57	9' @ 74'	19' @ 82'
	58	10' @ 82'	18' @ 87'
	59	11' @ 81'	21' @ 91'

SPRINKLERS **FOR PLAIN AREAS.**

Where a consistent and reliable full-circle water supply is needed, these sprinklers do an outstanding job. – with Toro INF34/54 and FLX34/54 Series sprinklers.

FULL CIRCLE DRIVE FOR GREAT PERFORMANCE **IN WINDY CONDITIONS**

INFINITY® SERIES GOLF ROTORS INF34/INF54
SPRINKLERS

FEATURES

The INFINITY 34/54: Full-circle with Smart Access® and Dual Trajectory.

The INFINITY 34/54 is the Toro Premium full-circle golf sprinkler. The dual trajectory main nozzle provides exceptional nozzle performance at the 25° standard angle position and great performance in windy applications at the 15° low angle position. And the consistency of the constant velocity full circle drive ensures even water application across the coverage area every time you water.

- **Constant Velocity Full Circle Drive**
  Ensures consistent rotation speeds when matched with station run times for even water application across the coverage area every time you water.
- **Radius Reduction Screw**
  Allows for fine tuning the radius to exactly the distance you need. In combination with main nozzle sizing and trajectory adjustment the radius reduction screw can effectively reduce the sprinkler throw down to 30'.
- **Five Activation types**
  - Standard solenoid
  - Spike Guard™ solenoid
  - Nickel plated Spike Guard solenoid
  - DC Latching solenoid (DCLS)
  - Integrated LYNX Smart module w/ DCLS

  Available on all INFINITY models!

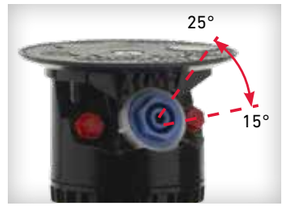
INFINITY® 54 with Dual Trajectory and Full-circle with Smart Access®

Watch INFINITY Videos:
youtube.com/ToroCompanyEurope

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION
Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

STAINLESS STEEL VALVE SEAT
Eliminates body damage from rocks and debris. This indestructible stainless steel seat is molded to the body and virtually eliminates body replacements due to seat damage. Standard on all Toro Golf rotors!



DUAL TRAJECTORY - 25° OR 15°
Provides two selections for the main nozzle trajectory; the 25 degree setting provides maximum distance of throw and the 15 degree setting provides improved wind performance, radius reduction and obstacle avoidance.

SMART ACCESS
Provides top accessibility to all critical components and room to grow for whatever the future holds.

Curious about the overall efficiency of this system?
Take a look at page 65.

ACCESSORIES AND UPGRADES

INFINITY® SERIES DISTANCE MARKERS
*White **(118-6234)** and Yellow **(118-6235)** color options provide excellent visibility*

INF34 CONVERSION UPGRADES
INF34-3134
INF34-3537

INF54 CONVERSION UPGRADES
INF54-5154 / INF54-5154E
INF54-5558 / INF54-5558E
INF54-59 / INF54-59E

STEALTH™ KIT
STEALTH-D
Kit attaches to INFINITY Series sprinklers with dual trajectory main nozzle adjustment capability

ADJUST THE COVERAGE **TO MATCH SEASONAL WATERING NEEDS**

FLEX800® SERIES GOLF ROTORS FLX34/FLX54
SPRINKLERS

FEATURES

The FLEX34/54: Full Circle with Dual Trajectory

The FLEX800™ 34/54 is the Toro® premium full-circle golf sprinkler series. The dual trajectory main nozzle provides exceptional nozzle performance at the 25° standard angle position and great performance in windy applications at the 15° low angle position. The consistency of the constant velocity Full-circle drive ensures even water application across the coverage area each time you water.

- **Five Activation types**
  - Standard solenoid
  - Spike Guard™ solenoid
  - Nickel plated Spike Guard solenoid
  - DC Latching solenoid (DCLS)
  - Integrated LYNX Smart module w/ DCLS

  Available on all INFINITY models!
- **Constant Velocity Full Circle Drive**
  Ensures consistent rotation speeds when matched with station run times for even water application across the coverage area every time you water.
- **Radius Reduction Screw**
  Allows for fine tuning the radius to exactly the distance you need. In combination with main nozzle sizing and trajectory adjustment the radius reduction screw can effectively reduce the sprinkler throw down to 30'.

FLEX800™ 34 with Dual Trajectory and Full-circle

FLEX800™ 54 with Dual Trajectory and Full-circle

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION

Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

STAINLESS STEEL VALVE SEAT

Eliminates body damage from rocks and debris. This indestructible stainless steel seat is molded to the body and virtually eliminates body replacements due to seat damage. Standard on all Toro Golf rotors!

DUAL TRAJECTORY - 25° OR 15°

Provides two selections for the main nozzle trajectory; the 25 degree setting provides maximum distance of throw and the 15 degree setting provides improved wind performance, radius reduction and obstacle avoidance.

Curious about the overall efficiency of this system?
Take a look at page 65.

ACCESSORIES AND UPGRADES

FLX34 CONVERSION UPGRADES

FLX34-3134
FLX34-3537

FLX54 CONVERSION UPGRADES

FLX54-5154 / FLX54-5154E
FLX54-5558 / FLX54-5558E
FLX54-59 / FLX54-59E

FLEX800 TURF CUP

FLX50-RING w/ FLXINF-TURFCAP

ACCESSORIES AND UPGRADES - INF34/INF54 & FLX34/FLX54

INF34 Conversion Upgrades

Models	Description
INF34-3134	INF34 w/31–34 Nozzles (#33 Nozzle Installed) INF34 w/35–37 Nozzles (#35 Nozzle Installed)
INF34-3537	

INF54 Conversion Upgrades

Models	Description
INF54-5154	INF54 w/51–54 Nozzles (#53 Nozzle Installed) INF54 w/55–58 Nozzles (#55 Nozzle Installed)
INF54-5558	INF54 w/ 59 Nozzle installed INF54 w/51–54 Nozzles
INF54-59	

FLX34 Conversion Upgrades

Models	Description
FLX34-3134	FLX34 w/31–34 Nozzles (#33 Nozzle Installed) FLX34 w/35–37 Nozzles (#35 Nozzle Installed)
FLX34-3537	

FLX54 Conversion Upgrades

Models	Description
FLX54-5154	FLX54 w/51–54 Nozzles (#53 Nozzle Installed) FLX54 w/55–58 Nozzles (#55 Nozzle Installed)
FLX54-5558	FLX54 w/59 Nozzle
FLX54-59	

102-5011	690 Adapter allows you to upgrade any 690 with FLX54 conversions
102-0950	Required to upgrade all 1.5" Series Sprinklers (650, 670, 680, 750, and 780)

INFINITY® SERIES DISTANCE MARKERS

Set your course apart with Toro's unique, customizable distance markers

- *White (118-6234) and Yellow (118-6235) color options provide excellent visibility*
- *Customizable with any graphic image*
- *Multiple number and orientation options available*
- *Any font style*
- *Easy snap-in installation into any INFINITY golf sprinkler*

INFINITY/FLEX800 Cap Kit Models

Eliminates sprinkler interference and enhances course appearance

FLXINF-TURFCAP – Infinity Turf Cup (for the riser cover)
INF21-RING – INFINITY Turf Ring (for the body cover)
FLX30-RING – Artificial grass cover ring/body 1.5"
FLX50-RING – Artificial grass cover ring/body 1.5"

STEALTH™ Kits

Eliminates sprinkler interference and enhances course appearance.

STEALTH™ Kit Models

STEALTH-T – Kit attaches to INFINITY Series sprinklers with TruJectory™ style, 24-position main nozzle adjustment capability
STEALTH-D – Kit attaches to INFINITY Series sprinklers with dual trajectory main nozzle adjustment capability

SPECIFICATIONS - INF34/INF54 & FLX34/FLX54

OPERATING SPECIFICATIONS

Inlet:
- **INF34/FLX34:** 25mm (1") ACME
- **INF54/FLX54:** 40mm (1.5") ACME

Radius:
- **INF34/FLX34:** 15,9 – 27,8m (52' – 91')
- **INF54/FLX54:** 15,9 – 30,2m (52' – 99')

Flow Rate:
- **INF34/FLX34:**
- 49,2-177,5 LPM (13.0 – 46.9 gpm)
- **INF54/FLX54:**
- 50,0-233,9 LPM (13.2 – 61.8 gpm)

Precipitation Rates:
- **INF34/FLX34:**
  - Minimum: 9,8 mm/hr (0.39"/hr)
  - Maximum: 16,2 mm/hr (0.60"/hr)
- **INF54/FLX54:**
  - Minimum: 9,6 mm/hr (0.38"/hr)
  - Maximum: 17,8 mm/hr (0.70"/hr)

Pilot Valve: Selectable at 3,5; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi)

Recommended Operating Pressure Range:
- 4,5-6,9 bar (65-100 psi)
- Maximum: 10,3 bar (150 psi)
- Minimum: 2,8 bar (40 psi)

Activation Type
- Standard Solenoid
- Spike Guard Solenoid
- Nickel-plated Spike Guard Solenoid
- DC Latching Solenoid (DCLS)

- Momentary low voltage pulse
- LYNX Smart Module with DCLS

- Momentary low voltage pulse

Trajectory: 25° or 15°

NOZZLE SELECTION
- **FLX34** has seven nozzle variation (31, 32, 33, 34, 35, 36 and 37)
- **FLX54** has nine nozzle variations (51, 52, 53, 54, 55, 56, 57, 58 and 59)
- Three opposing nozzles, rotating stream pattern
- Two additional front nozzle positions

DIMENSIONS

SMART ACCESS® Cover And Compartment Diameter:
- **INF34:** 19cm (7.5")
- **FLX34:** 16,5cm (6.5")
- **INF54:** 19cm (7.5")
- **FLX54:** 19,1cm (7.5")

Body height:
- **INF34:** 25cm (10")
- **FLX34:** 25,4cm (10")
- **INF54:** 29cm (11.38")
- **FLX54:** 28,9cm (11.375"

Weight:
- **INF34:** 1,91kg (4.22 lbs.)
- **FLX34:** 1,35kg (2.98 lbs.)
- **INF54:** 2,28kg (5.04 lbs.)
- **FLX54:** 1,68kg (3.70 lbs.)

Weight integrated with LYNX Smart Module:
- **INF34:** 2,24kg (4.95 lbs.)
- **FLX34:** 1,61kg (3.65 lbs.)
- **INF54:** 2,59kg (5.71 lbs.)
- **FLX54:** 1,92kg (4.24 lbs.)

Pop-up height to nozzle: 8,25cm (3.25")

WARRANTY

Two years; Five years when installed with Toro Swing Joints

INF34/INF54 & FLX34/FLX54 SPECIFYING INFORMATION

INF34 & INF54

INFX4-XXX-XX

Body Inlet	Arc	Nozzle	Pressure Regulation*	Activation Type
INFX	4	XX	X	X
3—1" 5—1½"	4—Full Circle	INF34—31, 32, 33, 34, 35, 36, 37 INF54—51, 52, 53, 54, 55, 56, 57, 58, 59	6— 4,5 bar (65 psi) 8— 5,5 bar (80 psi) 1— 6,9 bar (100 psi)	1—Standard Solenoid 2—Spike Guard™ Solenoid 3—Nickel-plated Spike Guard Solenoid 4—DC Latching Solenoid (DCLS) 6—Integrated LYNX Smart Module w/DCLS

Example: When specifying an INF34 Series Sprinkler with #34 nozzle, pressure regulation at 4,5 bar (65 psi) and Spike Guard Solenoid you would specify: **INF34-346-2**

** All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).*
Note: *Not all models available.*

FLX34 & FLX54

FLXX4-XXX-X

Body Inlet	Arc	Nozzle	Pressure Regulation*	Activation Type
FLXX	4	XX	X	X
3— 25mm (1") 5— 40mm (1½")	4—Full Circle	FLX34—31, 32, 33 , 34, 35, 36, 37 FLX54—51, 52, 53, 54, 55, 56, 57, 58, 59	6— 4,5 bar (65 psi) 8— 5,5 bar (80 psi) 1— 6,9 bar (100 psi)	1—Standard Solenoid 2—Spike Guard™ Solenoid 3—Nickel-plated Spike Guard Solenoid 4—DC Latching Solenoid (DCLS) 6—Integrated LYNX Smart Module w/DCLS

Example: When specifying a FLX34 Series Sprinkler with #34 nozzle, pressure regulation at 4,5 bar (65 psi), and Spike Guard Solenoid you would specify: **FLX34-346-2**

** Electric models only. All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).*
Note: *Not all models available. Nickel-plated, corrosion-resistant models are available upon request.*

INF34/INF54 & FLX34/FLX54 PERFORMANCE DATA - METRIC

INF34/FLX34 Series Performance Chart—25° (Metric)

Front Nozzle Positions			Nozzle Set 31 Yellow 102-0725		Nozzle Set 32 Blue 102-7001		Nozzle Set 33 Brown 102-0727		Nozzle Set 34 Orange 102-7002		Nozzle Set 35 Green 102-6908		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261	
			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Brown 102-6883
Back Nozzle Positions			Yellow 102-6937	Blue 102-2925	Yellow 102-6937	Orange 102-2926	Yellow 102-6937	Red 102-2928	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Red 102-6944	Yellow 102-6937	Gray 102-6945
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	17,4	49,2	17,7	58,7	19,5	82,9	20,7	92,4	—	—	—	—	—	—
4,5	450	4,59	17,7	55,3	18,3	68,1	20,7	92,4	22,0	106,4	23,2	121,9	—	—	—	—
5,5	550	5,61	18,3	61,3	19,2	77,6	22,0	101,8	23,2	117,7	24,4	134,7	25,3	144,6	25,9	157,1
6,9	690	7,04	18,9	67,8	20,1	88,6	22,9	112,8	24,1	132,1	25,6	148,8	26,8	164,3	27,8	177,5

INF34 Series Performance Chart—15°

bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	15,9	48,8	16,2	59,0	18,3	82,1	18,9	96,5	—	—	—	—	—	—
4,5	450	4,59	16,2	54,5	16,5	64,7	18,6	91,6	19,5	106,0	20,4	121,5	—	—	—	—
5,5	550	5,61	17,1	60,6	17,4	71,9	19,8	100,7	21,0	117,3	22,3	134,4	23,2	143,8	23,5	156,3
6,9	690	7,04	17,4	66,2	18,0	77,6	20,4	111,7	21,7	128,3	22,9	145,3	24,4	163,1	24,7	177,1
Stator Conversions			102-6929 Blue INF34-3134								118-7828 Red INF34-3537					

Not recommended at these pressures. Radius shown in meters
Toro recommends the use of a 1¼" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF54/FLX54 Series Performance Chart—25° (Metric)

Front Nozzle Positions			Nozzle Set 51 Yellow 102-0725		Nozzle Set 52 Blue 102-7001		Nozzle Set 53 Brown 102-0727		Nozzle Set 54 Orange 102-7002		Nozzle Set 55 Green 102-6908		Nozzle Set 56 Gray 102-0730		Nozzle Set 57 Black 102-4261		Nozzle Set 58 Red 102-4260		Nozzle Set 59 Beige 102-4259	
			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Brown 102-6883	Red Plug 102-4335	Brown 102-6883	Red Plug 102-4335	Red Plug 102-4335
Back Nozzle Positions			Yellow 102-6937	Blue 102-2925	Yellow 102-6937	Orange 102-2926	Yellow 102-6937	Red 102-2928	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Red 102-6944	Yellow 102-6937	Gray 102-6945	Yellow 102-6937	Gray 102-6945	Yellow 102-6937	Gray 102-6945
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	17,7	50,0	18,0	59,4	19,5	83,3	21,4	99,2	-	-	-	-	-	-	-	-	-	-
4,5	450	4,59	18,3	56,0	18,6	66,2	20,7	93,9	22,6	110,9	24,1	129,4	-	-	-	-	-	-	-	-
5,5	550	5,61	18,6	62,1	19,5	75,7	22,0	104,5	23,8	123,4	25,3	143,8	25,9	154,0	26,5	169,9	27,8	190,0	29,3	210,4
6,9	690	7,04	19,2	68,5	20,4	89,3	22,9	115,1	24,7	138,9	26,5	160,9	27,5	173,4	28,4	190,0	29,0	209,7	30,2	233,9

INF54 Series Performance Chart—15°

bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,4	340	3,47	15,9	50,0	16,2	59,8	18,6	83,3	19,8	98,4	-	-	-	-	-	-	-	-	-	-
4,5	450	4,59	16,2	56,0	16,5	65,9	19,2	93,9	20,4	110,5	21,0	129,1	-	-	-	-	-	-	-	-
5,5	550	5,61	17,1	62,1	17,7	73,4	20,7	104,5	22,0	123,0	22,9	143,1	24,1	152,9	24,7	168,8	25,9	188,9	26,5	209,3
6,9	690	7,04	17,7	68,5	18,3	79,9	21,7	115,1	22,9	137,8	24,1	160,1	25,6	172,2	26,5	188,9	27,1	208,6	28,7	232,8
Stator Conversions			102-6929 Blue INF54-5154								118-7828 Red INF54-5558								102-1941 Red INF54-59	

Not recommended at these pressures. Radius shown in meters
Toro recommends the use of a 1¼" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF34/FLX34 Nozzle Apex—(Metric)

Pressure	Nozzle	Apex at 15°	Apex at 25°
4,5 bar	31	1,8 @ 15,6	4,0 @ 16,5
	32	1,8 @ 15,6	3,4 @ 19,5
	33	2,1 @ 18,0	4,0 @ 20,7
	34	2,4 @ 19,2	4,6 @ 22,6
	35	2,7 @ 20,1	4,6 @ 23,2
5,5 bar	36	2,4 @ 22,9	5,5 @ 25,3
	37	2,7 @ 22,6	5,8 @ 25,0

INF54/FLX54 Nozzle Apex—(Metric)

Pressure	Nozzle	Apex at 15°	Apex at 25°
4,5 bar	51	1,8 @ 15,6	4,0 @ 16,5
	52	1,8 @ 15,6	3,4 @ 19,5
	53	2,1 @ 18,0	4,0 @ 20,7
	54	2,4 @ 19,2	4,6 @ 22,6
	55	2,7 @ 20,1	4,6 @ 23,2
5,5 bar	56	2,4 @ 22,9	5,5 @ 25,3
	57	2,7 @ 22,6	5,8 @ 25,0
	58	3,0 @ 25,0	5,5 @ 26,5
	59	3,4 @ 24,7	6,4 @ 27,1

INF34/INF54 & FLX34/FLX54 PERFORMANCE DATA - U.S. IMPERIAL

INF34/FLX34 Series Performance Chart—25° (U.S.)

Front Nozzle Positions			Nozzle Set 31 Yellow 102-0725		Nozzle Set 32 Blue 102-7001		Nozzle Set 33 Brown 102-0727		Nozzle Set 34 Orange 102-7002		Nozzle Set 35 Green 102-6908		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261	
			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Brown 102-6883
Back Nozzle Positions			Yellow 102-6937	Blue 102-2925	Yellow 102-6937	Orange 102-2926	Yellow 102-6937	Red 102-2928	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Red 102-6944	Yellow 102-6937	Gray 102-6945
psi			Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50			57	13.0	58	15.5	64	21.9	68	24.4	—	—	—	—	—	—
65			58	14.6	60	18.0	68	24.4	72	28.1	76	32.2	—	—	—	—
80			60	16.2	63	20.5	72	26.9	76	31.1	80	35.6	83	38.2	85	41.5
100			62	17.9	66	23.4	75	29.8	79	34.9	84	39.3	88	43.4	91	46.9

INF34 Series Performance Chart—15°

psi			Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50			52	12.9	53	15.6	60	21.7	62	25.5	—	—	—	—	—	—
65			53	14.4	54	17.1	61	24.2	64	28.0	67	32.1	—	—	—	—
80			56	16.0	57	19.0	65	26.6	69	31.0	73	35.5	76	38.0	77	41.3
100			57	17.5	59	20.5	67	29.5	71	33.9	75	38.4	80	43.1	81	46.8
Stator Conversions			102-6929 Blue INF34-3134								118-7828 Red INF34-3537					

Not recommended at these pressures. Radius shown in feet.
Toro recommends the use of a 1¼" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF54/FLX54 Series Performance Chart—25° (U.S.)

Front Nozzle Positions			Nozzle Set 51 Yellow 102-0725		Nozzle Set 52 Blue 102-7001		Nozzle Set 53 Brown 102-0727		Nozzle Set 54 Orange 102-7002		Nozzle Set 55 Green 102-6908		Nozzle Set 56 Gray 102-0730		Nozzle Set 57 Black 102-4261		Nozzle Set 58 Red 102-4260		Nozzle Set 59 Beige 102-4259	
			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Brown 102-6883	Red Plug 102-4335	Brown 102-6883	Red Plug 102-4335	Red Plug 102-4335
Back Nozzle Positions			Yellow 102-6937	Blue 102-2925	Yellow 102-6937	Orange 102-2926	Yellow 102-6937	Red 102-2928	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Red 102-6944	Yellow 102-6937	Gray 102-6945	Yellow 102-6937	Gray 102-6945	Yellow 102-6937	Gray 102-6945
psi			Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50			58	13.2	59	15.7	64	22.0	70	26.2	—	—	—	—	—	—	—	—	—	—
65			60	14.8	61	17.5	68	24.8	74	29.3	79	34.2	—	—	—	—	—	—	—	—
80			61	16.4	64	20.0	72	27.6	78	32.6	83	38.0	85	40.7	87	44.9	91	50.2	96	55.6
100			63	18.1	67	23.6	75	30.4	81	36.7	87	42.5	90	45.8	93	50.2	95	55.4	99	61.8

INF54 Series Performance Chart—15°

psi			Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50			52	13.2	53	15.8	61	22.0	65	26.0	—	—	—	—	—	—	—	—	—	—
65			53	14.8	54	17.4	63	24.8	67	29.2	69	34.1	—	—	—	—	—	—	—	—
80			56	16.4	58	19.4	68	27.6	72	32.5	75	37.8	79	40.4	81	44.6	85	49.9	87	55.3
100			58	18.1	60	21.1	71	30.4	75	36.4	79	42.3	84	45.5	87	49.9	89	55.1	94	61.5
Stator Conversions			102-6929 Blue INF54-5154								118-7828 Red INF54-5558								102-1941 Red INF54-59	

Not recommended at these pressures. Radius shown in feet.
Toro recommends the use of a 11/4" swing joint at flows over 25-gpm (95-LPM). Sprinkler radius of throw per ASAE standard S398.1.
All sprinklers are equipped with the selectable pilot valve that allows settings at 3,4; 4,5; 5,5; and 6,9 bar (50, 65, 80 and 100 psi).

INF34/FLX34 Nozzle Apex—(U.S.)

Pressure	Nozzle	Apex at 15°	Apex at 25°
65 psi	31	6' @ 51'	13' @ 54'
	32	6' @ 51'	11' @ 64'
	33	7' @ 59'	13' @ 68'
	34	8' @ 63'	15' @ 74'
	35	9' @ 66'	15' @ 76'
80 psi	36	8' @ 75'	18' @ 83'
	37	9' @ 74'	19' @ 82'

INF54/FLX54 Nozzle Apex—(U.S.)

Pressure	Nozzle	Apex at 15°	Apex at 25°
65 psi	51	6' @ 51'	13' @ 54'
	52	6' @ 51'	11' @ 64'
	53	7' @ 59'	13' @ 68'
	54	8' @ 63'	15' @ 74'
	55	9' @ 66'	15' @ 76'
80 psi	56	8' @ 75'	18' @ 83'
	57	9' @ 74'	19' @ 82'
	58	10' @ 82'	18' @ 87'
	59	11' @ 81'	21' @ 91'

ENHANCE **COURSE APPEARANCE**

INFINITY RAZOR KIT
SPRINKLER KITS & ACCESSORIES

For more details see installation instructions 373-1015

FEATURES

Toro® INFINITY Razor kits.

Extend the frequency of digging up and leveling sprinklers with the Toro® INFINITY Razor kits.

Over time the application of topdressing and settling can result in the sprinkler being in a depression below grade level. This can interfere in the natural roll of the ball, create trip hazards and take away from the natural beauty of the course. The Razor kits are designed to raise the top of the sprinkler in 1/2" increments up to 11/2" (3 stages) without digging!!

- **Eliminates Sprinkler Interference**
- **Eliminates Trip Hazards**
- **Enhances Course Appearance**
- **Huge Labor Savings – No Digging Required!**
- **Retention Features – Hardware Never Gets Lost**
- **Smart Access® Compartment**
  Enables access to pilot valve, LYNX® Smart Module, wire splices and more

WARRANTY
Two years

Each **RAZOR™ kit** consists of 3 stages

INFINITY Razor Kits

1" Models

1.5" Models

INFINITY Razor Kits	
Model	**Description**
RAZOR-10-1	Razor Kit, 1" INFINITY, Stage 1 with 1.5" screws and pilot valve stacker
RAZOR-10-2	Razor Kit, 1" INFINITY, Stage 2 with 2" screws and pilot valve stacker
RAZOR-10-3	Razor Kit, 1" INFINITY, Stage 3 with 2.5" screws and pilot valve stacker
RAZOR-15-1	Razor Kit, 1.5" INFINITY, Stage 1 with 1.5" screws and pilot valve stacker
RAZOR-15-2	Razor Kit, 1.5" INFINITY, Stage 2 with 2" screws and pilot valve stacker
RAZOR-15-3	Razor Kit, 1.5" INFINITY, Stage 3 with 2.5" screws and pilot valve stacker

CREATE A SEAMLESS **TURF APPEARANCE**

INFINITY® STEALTH™ KITS
SPRINKLER KITS & ACCESSORIES

INFINITY® STEALTH™ CAP KIT FEATURES

Toro® INFINITY Stealth Cap kits.

Natural turf to eliminate sprinkler interference.

Eliminate sprinkler interference with the outcome of the game forever! Toro's INFINITY Stealth Kits can be installed onto any INFINITY sprinkler allowing turf growth directly atop the sprinkler to eliminate the hard surface bounce should a golf ball hit it.

The seamless turf appearance adds to the beauty of the course and improves labor efficiency by minimizing trimming efforts around the sprinklers.

- **Eliminates Sprinkler Interference**
- **Enhances Course Appearance**
- **Natural Turf Atop Sprinkler**
- **Kit Fits Existing INFINITY Sprinklers**
- **Easy Access**
  To arc adjustment, snap rings, riser removal assembly, valve and rock screen
- **Smart Access® Compartment**
  Enables access to pilot valve, LYNX® Smart Module, wire splices and more
- **Access to Manual Selector and TruJectory™ Adjuster**
  With minimal turf/soil displacement
- **Turf Cap Grass Can Be Grown in a Nursery**
  Prior to being installed onto the sprinkler

WARRANTY
Two years

The **Stealth® Cap** consists of 4 parts

INFINITY Stealth Kits

INFINITY® Stealth™ Cap Kit	
Model	**Description**
STEALTH-T	Kit, Stealth, for INFINITY with Trujectory
STEALTH-D	Kit, Stealth, Dual Trajectory

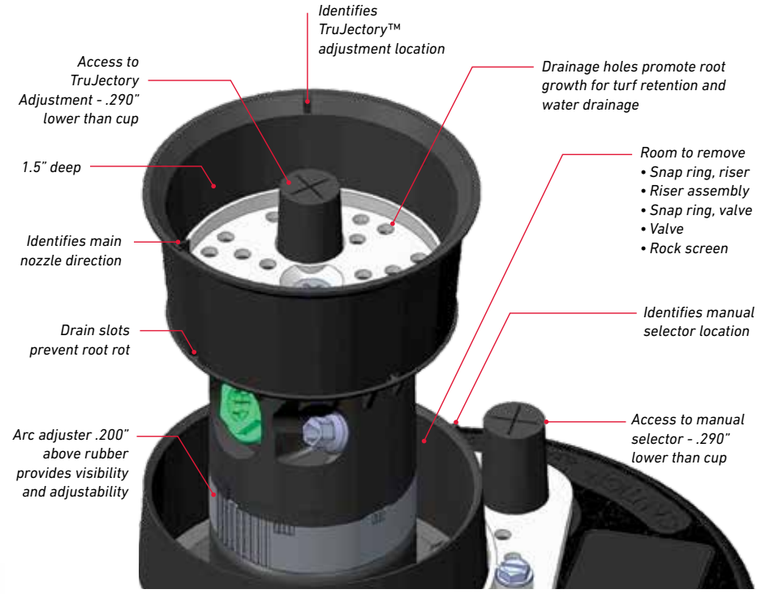
INFINITY® & FLEX TURF COVER KIT FEATURES

INFINITY and FLEX800 turf covers.

Artificial turf eliminating sprinkler interference.

The FLXINF-TURFCAP can be installed onto an INFINITY or FLEX sprinkler head with just one screw. The INF21-RING perfectly matches INFINITY sprinkler bodies, the FLX50-RING is suited for 1.5" FLEX sprinklers.

The synthetic turf offers the same rebound properties as real grass and does not interfere in the natural roll of the ball.

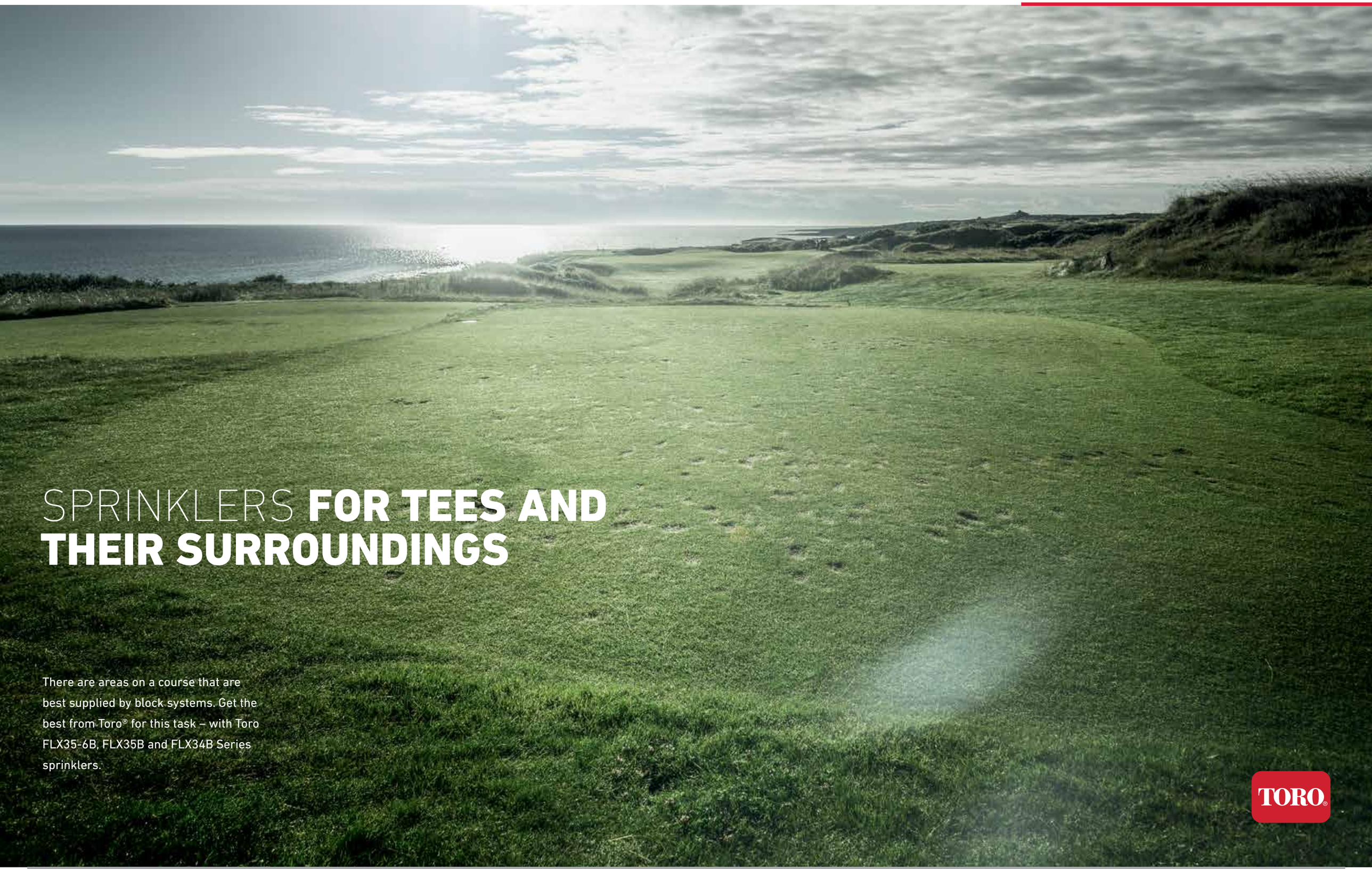


INFINITY and FLX800 Turf Cover Kits

INF21-RING w/ FLXINF-TURFCAP

FLX50-RING w/ FLXINF-TURFCAP

INFINITY® & FLEX800 Turf Cover Kits	
Model	**Description**
FLXINF-TURFCAP	INFINITY Turf Cup (for the riser cover)
INF21-RING	INFINITY Turf Ring (for the riser cover)
FLX30-RING	Artificial grass cover ring/body 1.5"
FLX50-RING	Artificial grass cover ring/body 1.5"



SPRINKLERS **FOR TEES AND THEIR SURROUNDINGS**

There are areas on a course that are best supplied by block systems. Get the best from Toro® for this task – with Toro FLX35-6B, FLX35B and FLX34B Series sprinklers.

RUGGED DESIGN FOR **HIGH TRAFFIC AREAS**

FLEX800™ B SERIES
GOLF ROTORS

FEATURES

The B-Series is specifically designed for block systems. With their small exposed diameters, these sprinklers are not visible on the course. Yet they are equipped with all the functionality Toro® sprinklers have to offer while being subtly hidden on the turf. The B-Series is perfect for high traffic areas like tees, greens and surrounds.

FLEX800™ B-Series FLX35-6B

True Part and Full-Circle in One with TruJectory™

This patented feature puts water exactly where you want it. Adjust from the top of the sprinkler in seconds, wet or dry. This flexibility lets you tackle every obstacle on the course – wind, trees, bunkers, mounds and more.

FLEX800™ B-Series FLX35B

True Part and Full-Circle in One with Dual Trajectory

These sprinklers can be full circle today and part circle tomorrow allowing you to adjust the area of coverage to match your seasonal needs or meet water rationing mandates.

FLEX800™ B-Series FLX34B

Constant Velocity Full-Circle Drive with Dual Trajectory

Ensures consistent rotation speeds for even water application across the coverage area. This sprinkler is the correct choice for plain areas where a reliable water supply is needed.

LEX800™ B-Series FLX35-6B with TruJectory™ and 40°-330° circle

FLEX800™ B-Series FLX35B with Dual Trajectory and 40°-330° circle

FLEX800™ B-Series FLX34B with Dual Trajectory and Full-circle

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION

Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

TRUJECTORY™ PROVIDES UNMATCHED PERFORMANCE

FLX35-6B with TruJectory™ adjustment from 7°-30° in 1° increments. This patented feature puts water exactly where you want it. Adjust from the top of the sprinkler in seconds, wet or dry. This flexibility lets you tackle every obstacle on the course – wind, trees, bunkers, mounds and more.

NOZZLE TRAJECTORY PROVIDES UNMATCHED PERFORMANCE

FLX35-6B with TruJectory™ adjustment from 7°-30° in 1° increments and FLX35/FLX34 models with dual trajectory settings of 25° or 15° provide improved wind performance, obstacle avoidance and radius adjustment.

SPECIFICATIONS

OPERATING SPECIFICATIONS
Inlet:
- 25mm (1") NPT, BSP or ACME

Radius:
- **FLX35-6B**: 9m – 29m (29'– 95')
- **FLX35B**: 9m – 27m (29'– 90')
- **FLX34B**: 17m – 29m (57'– 95')

Flow Rate:
- **FLX35-6B**: 26,8 – 198,7 LPM (7.1 – 52.5 gpm)
- **FLX35B**: 31,0 – 213,1 LPM (8.2 – 56.3 gpm)
- **FLX34**B: 49,2 – 209,7 LPM (13.0 – 55.4 gpm)

Precipitation Rates:
- **FLX35-6B**: 9,8 – 16,3mm/hr (.39 – .64"/hr)
- **FLX35B: 10,8** – 19,4mm/hr (.43 – .76"/hr)
- **FLX34B**: 9,8 – 16,2mm/hr (.39 – .64"/hr)
- Recommended Operating Pressure
- 4,4 – 6,9 bar (65-100 psi)

TRAJECTORY:
- FLX35-6B – 7°-30° in 1° increments; 24 positions
- **FLX35B** - 15° or 25° - 2 positions
- **FLX34B** - 15° or 25° - 2 positions

CHECK-O-MATIC
feature prevents low head drainage up to 10' of elevation change

NOZZLE SELECTION
Nozzle variations
- **FLX35-6B** - Nine variations (30, 31, 32, 33, 34, 35, 36, 37 & 38)
- **FLX35B** - Nine variations (30, 31, 32, 33, 34, 35, 36, 37 & 38)
- **FLX34B** – Eight variations (31, 32, 33, 34, 35, 36, 37 & 38)
- Back nozzle capability on part circle models standard
- **FLX35-6B** – one position available
- **FLX35B** – two positions available
- **FLX34B** – two additional front nozzle positions
- Main-less capability for short radius applications

Stator variations:
- **FLX35-6B, FLX35**: 3
- **FLX34**: 2

Radius reduction screw for fine tuning the radius (363-4839).
- Standard on FLX35B
- Optional on FLX34B
- Not available on FLX35-6B

DIMENSIONS
- Body diameter: 15,2cm (6")
- Body height: 21,6cm (8.5")
- Weight:
- **FLX35-6B**: 0,9kg (1.99 lbs)
- **FLX35B**: 0,9kg (2 lbs)
- **FLX34B**: 0,89kg (1.97 lbs)
- Pop-up height to nozzle: 8,25cm (3.25")

WARRANTY
- Two years; Five years when installed with Toro Swing Joints

Curious about the overall efficiency of this system?
Take a look at page 65.

FLEX800 B-SERIES SPECIFYING INFORMATION

FLEX800 B-SERIES

FLX3XB-X2-XXXXX					
Series	*Arc*	*System*	*Thread Type*	*Valve Type*	*Nozzle*
FLX3	X	**B**	X	**2**	XXXX
FLX3—FLEX800 B Series	4—Full-Circle (DT only) 5—Part-/Full-Circle 5-6--Part-/Full-Circle with TruJectory	B—Block	0—NPT 4—ACME 5—BSP	Check-O-Matic	3134— Includes nozzles #31, 32, 33 & 34 3538— Includes nozzles #35, 36, 37 & 38
Example: When specifying a FLEX800 B Series Sprinkler with full circle - NPT threads, #34 nozzle, you would specify: **FLX34B–02–3134**					

FLEX800 B-SERIES PERFORMANCE DATA - METRIC

FLX35-6B Series Performance Chart—25° (Metric)

Front Nozzle Positions			Nozzle Set 30 White 102-2208		Nozzle Set 31 Yellow 102-4587		Nozzle Set 32 Blue 102-4588		Nozzle Set 33 Brown 102-4589		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-0729		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261		Nozzle Set 38 Red 102-6909	
			Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Red 102-2928	Gray 102-2910	Orange 102-2926	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910
Back Nozzle Positions			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
3,5	345	3,52	13	26,9	16	53,0	18	68,1	—	—	—	—	—	—	—	—	—	—	—	—
4,1	414	4,22	13	30,0	16	57,5	18	73,9	20	82,9	—	—	—	—	—	—	—	—	—	—
4,8	483	4,92	14	33,1	17	62,1	19	79,6	21	89,3	23	123,8	23	133,2	—	—	—	—	—	—
5,5	552	5,63	14	36,3	17	65,9	20	85,5	21	95,8	23	132,9	24	142,7	26	149,9	26	164,3	27	179,8
6,2	621	6,33	14	39,4	18	70,0	21	90,5	22	101,2	24	140,0	25	151,0	26	158,6	27	173,7	28	189,3
6,9	689	7,03	15	42,4	18	73,4	21	95,4	23	106,7	24	147,2	26	158,2	27	166,9	27	183,2	29	198,7
Stator			102-6929 Blue		102-1939 White								118-7282 Red							
Conversions					INF35-6-3134 (Requires screen replacement)								INF35-6-3537 (Requires screen replacement)							

FLX35B Series Performance Chart—25° (Metric)

Front Nozzle Positions			Nozzle Set 30 White Plug 102-2208		Nozzle Set 31 Yellow 102-6906		Nozzle Set 32 Blue 102-0726		Nozzle Set 33 Brown 102-6907		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-6955		Nozzle Set 36 Gray 102-6935		Nozzle Set 37 Black 102-6936		Nozzle Set 38 Red 102-6909	
			Yellow 102-5670	Beige 102-6942	Yellow 102-5670	Brown 102-5671	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885
Back Nozzle Positions			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
bar	kPa	kg/cm²	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
3,5	345	3,52	13	31,0	17	51,5	17	69,3	—	—	—	—	—	—	—	—	—	—	—	—
4,1	414	4,22	13	35,2	17	56,8	18	76,1	19	91,6	—	—	—	—	—	—	—	—	—	—
4,8	483	4,92	14	39,3	18	61,3	18	82,5	20	99,5	21	113,6	22	140,0	—	—	—	—	—	—
5,5	552	5,63	14	43,5	18	65,5	19	88,2	20	106,0	22	121,5	23	149,9	24	162,4	24	184,0	26	191,5
6,2	621	6,33	14	47,1	18	69,6	19	93,5	21	112,8	22	129,4	23	159,0	24	171,8	25	194,9	27	202,9
6,9	689	7,03	14	50,7	19	73,1	20	98,4	21	118,8	23	135,9	24	167,3	25	184,7	25	205,1	27	213,1
Stator			102-6929 Blue		102-1939 White								118-7282 Red							
Conversions					FLX35-3134 (Requires screen replacement)								FLX35-3537 (Requires screen replacement)							

FLX34B Series Performance Chart—25° (Metric)

Front Nozzle Positions			Nozzle Set 31 Yellow 102-0725		Nozzle Set 32 Blue 102-7001		Nozzle Set 33 Brown 102-0727		Nozzle Set 34 Orange 102-7002		Nozzle Set 35 Green 102-6908		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261		Nozzle Set 38 Red 102-4260	
			Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
Back Nozzle Positions			Yellow 102-6937	Blue 102-2925	Yellow 102-6937	Orange 102-2926	Yellow 102-6937	Red 102-2928	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Red 102-6944	Yellow 102-6937	Gray 102-6945	Yellow 102-6937	Gray 102-6945
bar	kPa	kg/cm²	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
3,5	345	3,52	17	49,2	18	58,7	—	—	—	—	—	—	—	—	—	—	—	—
4,1	414	4,22	18	53,2	18	64,9	20	89,3	—	—	—	—	—	—	—	—	—	—
4,8	483	4,92	18	58,7	19	68,9	21	99,2	22	113,6	24	135,1	—	—	—	—	—	—
5,5	552	5,63	18	61,3	19	77,6	22	105,6	23	121,5	24	144,6	25	154,8	26	159,3	28	190,0
6,2	621	6,33	19	66,2	20	83,1	22	112,2	24	128,9	25	153,1	26	164,1	27	168,4	28	199,8
6,9	689	7,03	19	71,2	20	88,6	23	118,8	24	136,3	26	161,6	27	173,4	28	177,5	29	209,7
Stator			102-6929 Blue								118-7828 Red							
Conversions			FLX34-3134 (Requires screen replacement)								FLX34-3537 (Requires screen replacement)							

Not recommended at these pressures. Radius shown in meter.
Toro recommends the use of a 30mm swing joint at flows over 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 3,4; 4,5; 5,5; and 6,9 bar.

FLEX800 B-SERIES PERFORMANCE DATA - U.S. IMPERIAL

FLX35-6B Series Performance Chart—25° (U.S.)

Front Nozzle Positions		Nozzle Set 30 White 102-2208		Nozzle Set 31 Yellow 102-4587		Nozzle Set 32 Blue 102-4588		Nozzle Set 33 Brown 102-4589		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-0729		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261		Nozzle Set 38 Red 102-6909	
		Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Red 102-2928	Gray 102-2910	Orange 102-2926	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910	Blue 102-2925	Gray 102-2910	Orange 102-2926	Gray 102-2910	Blue 102-2925	Gray 102-2910
Back Nozzle Positions		Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
psi		Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50		42	7.1	52	14.0	58	18.0	—	—	—	—	—	—	—	—	—	—	—	—
60		43	7.9	54	15.2	60	19.5	66	21.9	—	—	—	—	—	—	—	—	—	—
70		45	8.8	55	16.4	63	21.0	68	23.6	74	32.7	77	35.2	—	—	—	—	—	—
80		46	9.6	57	17.4	65	22.6	70	25.3	77	35.1	79	37.7	84	39.6	86	43.4	90	47.5
90		47	10.4	58	18.5	68	23.9	72	26.8	79	37.0	82	39.9	86	41.9	88	45.9	93	50.0
100		48	11.2	59	19.4	70	25.2	74	28.2	80	38.9	84	41.8	88	44.1	90	48.4	95	52.5
Stator		**102-6929 Blue**		102-1939 White								118-7282 Red							
Conversions				INF35-6-3134 (Requires screen replacement)								INF35-6-3537 (Requires screen replacement)							

FLX35B Series Performance Chart—25° (U.S.)

Front Nozzle Positions		Nozzle Set 30 White Plug 102-2208		Nozzle Set 31 Yellow 102-6906		Nozzle Set 32 Blue 102-0726		Nozzle Set 33 Brown 102-6907		Nozzle Set 34 Orange 102-0728		Nozzle Set 35 Green 102-6955		Nozzle Set 36 Gray 102-6935		Nozzle Set 37 Black 102-6936		Nozzle Set 38 Red 102-6909	
		Yellow 102-5670	Beige 102-6942	Yellow 102-5670	Brown 102-5671	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Yellow 102-5670	Yellow 102-6884	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885	Green 102-6531	Green 102-6885
Back Nozzle Positions		Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
psi		Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50		43	8.2	55	13.6	56	18.3	—	—	—	—	—	—	—	—	—	—	—	—
60		44	9.3	56	15.0	58	20.1	63	24.2	—	—	—	—	—	—	—	—	—	—
70		45	10.4	58	16.2	60	21.8	65	26.3	69	30.0	73	37.0	—	—	—	—	—	—
80		46	11.5	59	17.3	62	23.3	67	28.0	71	32.1	75	39.6	78	42.9	80	48.6	85	50.6
90		47	12.5	60	18.4	64	24.7	69	29.8	73	34.2	77	42.0	80	45.4	82	51.5	88	53.6
100		47	13.4	61	19.3	65	26.0	70	31.4	74	35.9	79	44.2	81	48.8	83	54.2	90	56.3
Stator		102-6929 Blue		102-1939 White								118-7282 Red							
Conversions				FLX35-3134 (Requires screen replacement)								FLX35-3537 (Requires screen replacement)							

FLX34B Series Performance Chart—25° (U.S.)

Front Nozzle Positions		Nozzle Set 31 Yellow 102-0725		Nozzle Set 32 Blue 102-7001		Nozzle Set 33 Brown 102-0727		Nozzle Set 34 Orange 102-7002		Nozzle Set 35 Green 102-6908		Nozzle Set 36 Gray 102-0730		Nozzle Set 37 Black 102-4261		Nozzle Set 38 Red 102-4260	
		Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335	Red Plug 102-4335
Back Nozzle Positions		Yellow 102-6937	Blue 102-2925	Yellow 102-6937	Orange 102-2926	Yellow 102-6937	Red 102-2928	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Beige 102-2929	Yellow 102-6937	Red 102-6944	Yellow 102-6937	Gray 102-6945	Yellow 102-6937	Gray 102-6945
psi		Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
50		57	13.0	58	15.5	—	—	—	—	—	—	—	—	—	—	—	—
60		58	14.1	60	17.2	67	23.6	—	—	—	—	—	—	—	—	—	—
70		59	15.5	61	18.2	69	26.2	73	30.0	78	35.7	—	—	—	—	—	—
80		60	16.2	63	20.5	72	27.9	76	32.1	80	38.2	83	40.9	85	42.1	91	50.2
90		61	17.5	65	22.0	74	29.7	78	34.1	82	40.5	86	43.4	88	44.5	93	52.8
100		62	18.8	66	23.4	75	31.4	79	36.0	84	42.7	88	45.8	91	46.9	95	55.4
Stator		102-6929 Blue								118-7828 Red							
Conversions		FLX34-3134 (Requires screen replacement)								FLX34-3537 (Requires screen replacement)							

Not recommended at these pressures. Radius shown in feet.
Toro recommends the use of a 1.25" swing joint at flows over 25-gpm. 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.

Intermediate Nozzle Performance Charts

102-2929 Beige		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	30,7	8.1	17.4	53	17.1	52	16.4	50	15.7	48	14.8	45	13.8	42
60	4,1	33,7	8.9	18.7	57	18.4	56	17.4	53	16.7	51	15.4	47	14.8	45
65	4,5	35,2	9.3	19.0	58	18.4	56	17.7	54	16.7	51	16.1	49	15.1	46
70	4,8	36,3	9.6	19.4	59	18.7	57	18.4	56	17.4	53	16.4	50	15.7	48
80	5,5	39,0	10.3	20.0	61	19.7	60	19.0	58	18.4	56	17.4	53	16.4	50
90	6,2	41,3	10.9	20.7	63	20.0	61	19.4	59	18.7	57	17.7	54	16.7	51
100	6,9	43,5	11.5	21.3	65	20.7	63	19.7	60	19.0	58	18.0	55	16.7	51

102-2928 Red		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	23,8	6.3	17.4	53	16.7	51	15.7	48	15.1	46	14.1	43	13.1	40
60	4,1	26,5	7.0	18.0	55	17.4	53	16.4	50	15.7	48	14.8	45	13.8	42
65	4,5	27,3	7.2	18.4	56	17.7	54	17.1	52	16.1	49	15.4	47	14.4	44
70	4,8	28,4	7.5	18.7	57	18.0	55	17.4	53	16.7	51	16.1	49	15.1	46
80	5,5	30,3	8.0	19.4	59	19.0	58	18.4	56	17.7	54	17.1	52	16.1	49
90	6,2	32,2	8.5	19.7	60	19.0	58	18.7	57	18.0	55	17.4	53	16.4	50
100	6,9	34,1	9.0	20.0	61	19.4	59	18.7	57	18.0	55	17.4	53	16.4	50

102-2927 Gray		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	18,9	5.0	16.4	50	15.7	48	15.1	46	14.4	44	13.5	41	12.5	38
60	4,1	20,8	5.5	17.1	52	16.4	50	15.7	48	15.1	46	14.1	43	13.1	40
65	4,5	21,6	5.7	17.4	53	16.7	51	16.1	49	15.1	46	14.4	44	13.5	41
70	4,8	22,3	5.9	17.4	53	16.7	51	16.1	49	15.4	47	14.8	45	13.8	42
80	5,5	23,8	6.3	17.7	54	17.1	52	16.4	50	15.7	48	15.1	46	14.1	43
90	6,2	25,4	6.7	18.0	55	17.4	53	17.1	52	16.4	50	15.7	48	14.8	45
100	6,9	26,9	7.1	18.0	55	17.7	54	17.4	53	17.1	52	16.4	50	15.1	46

102-2926 Orange		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	16,3	4.3	15.7	48	15.1	46	14.4	44	13.8	42	12.8	39	11.5	35
60	4,1	17,8	4.7	16.4	50	15.7	48	15.1	46	14.4	44	13.5	41	12.5	38
65	4,5	18,5	4.9	16.7	51	16.1	49	15.4	47	14.8	45	13.8	42	12.8	39
70	4,8	19,3	5.1	16.7	51	16.4	50	15.7	48	15.1	46	14.1	43	13.1	40
80	5,5	20,4	5.4	17.1	52	16.7	51	16.4	50	15.7	48	14.8	45	13.8	42
90	6,2	22,0	5.8	17.4	53	17.1	52	16.7	51	16.1	49	15.4	47	14.4	44
100	6,9	23,1	6.1	17.7	54	17.4	53	17.1	52	16.4	50	15.7	48	14.8	45

102-2925 Blue		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	10,2	2.7	13.8	42	13.5	41	12.8	39	12.5	38	11.8	36	11.2	34
60	4,1	11,4	3.0	14.1	43	13.8	42	13.1	40	12.8	39	12.1	37	11.5	35
65	4,5	12,1	3.2	14.1	43	13.8	42	13.1	40	12.8	39	12.1	37	11.5	35
70	4,8	12,5	3.3	14.4	44	13.8	42	13.5	41	12.8	39	12.5	38	11.8	36
80	5,5	13,2	3.5	14.4	44	14.1	43	13.5	41	13.1	40	12.5	38	11.8	36
90	6,2	14,0	3.7	14.8	45	14.4	44	13.8	42	13.5	41	12.8	39	12.1	37
100	6,9	14,8	3.9	14.8	45	14.4	44	14.1	43	13.8	42	13.1	40	12.5	38

102-6885 Green		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	20,4	5.4	16.7	51	16.4	50	15.7	48	14.8	45	13.8	42	12.8	39
60	4,1	22,3	5.9	17.1	52	16.7	51	16.1	49	15.1	46	14.1	43	13.5	41
65	4,5	23,1	6.1	17.1	52	16.7	51	16.4	50	15.4	47	14.4	44	13.8	42
70	4,8	23,8	6.3	17.4	53	17.1	52	16.4	50	15.4	47	14.4	44	13.8	42
80	5,5	25,4	6.7	17.4	53	17.1	52	16.7	51	15.7	48	14.8	45	14.1	43
90	6,2	26,9	7.1	17.7	54	17.4	53	17.1	52	16.4	50	15.4	47	14.8	45
100	6,9	28,0	7.4	18.0	55	18.0	55	17.7	54	17.1	52	16.1	49	15.4	47

102-6884 Yellow		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	15,5	4.1	15.7	48	15.4	47	14.8	45	13.5	41	12.5	38	11.5	35
60	4,1	17,0	4.5	16.1	49	15.7	48	15.4	47	14.4	44	13.5	41	12.5	38
65	4,5	17,8	4.7	16.4	50	16.1	49	15.7	48	14.8	45	13.8	42	12.8	39
70	4,8	18,2	4.8	16.4	50	16.1	49	15.7	48	14.8	45	14.1	43	13.1	40
80	5,5	19,3	5.1	16.7	51	16.4	50	16.1	49	15.4	47	14.4	44	13.5	41
90	6,2	20,4	5.4	17.4	53	17.1	52	16.4	50	15.7	48	14.8	45	13.8	42
100	6,9	22,0	5.8	17.7	54	17.4	53	16.7	51	16.1	49	15.1	46	14.1	43

102-6883 Brown		Trajectory		30°		25°		20°		15°		10°		7°	
Pressure		Flow		Radius		Radius		Radius		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	9,1	2.4	13.5	41	13.1	40	12.5	38	11.8	36	10.8	33	9.8	30
60	4,1	9,8	2.6	14.1	43	13.8	42	13.1	40	12.5	38	11.8	36	10.8	33
65	4,5	10,2	2.7	14.4	44	13.8	42	13.5	41	12.8	39	12.1	37	11.2	34
70	4,8	10,6	2.8	14.8	45	14.1	43	13.8	42	13.1	40	12.5	38	11.5	35
80	5,5	11,4	3.0	15.1	46	14.8	45	14.1	43	13.5	41	13.1	40	11.8	36
90	6,2	12,1	3.2	15.1	46	14.8	45	14.4	44	13.8	42	13.5	41	12.1	37
100	6,9	12,9	3.4	15.1	46	14.8	45	14.4	44	14.1	43	13.5	41	12.5	38

Inner Nozzle Performance Charts*

102-6937 Yellow		Trajectory		30°		25°		20°	
Pressure		Flow		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	14,0	3.7	8.5	26	7.9	24	6.6	20
60	4,1	15,1	4.0	9.2	28	8.2	25	7.2	22
65	4,5	15,9	4.2	9.2	28	8.2	25	7.2	22
70	4,8	16,7	4.4	9.2	28	8.5	26	7.5	23
80	5,5	17,8	4.7	9.2	28	8.5	26	7.9	24
90	6,2	18,9	5.0	9.5	29	8.9	27	8.2	25
100	6,9	19,7	5.2	9.8	30	9.5	29	8.9	27

102-6531 Green		Trajectory		30°		25°		20°	
Pressure		Flow		Radius		Radius		Radius	
psi	bar	LPM	gpm	Meters	Feet	Meters	Feet	Meters	Feet
50	3,4	15,1	4.0	10.5	32	9.8	30	8.5	26
60	4,1	16,3	4.3	11.2	34	10.2	31	8.9	27
65	4,5	17,0	4.5	11.2	34	10.2	31	8.9	27
70	4,8	17,8	4.7	11.2	34	10.2	31	9.2	28
80	5,5	18,9	5.0	11.2	34	10.5	32	9.5	29
90	6,2	20,1	5.3	11.2	34	10.5	32	9.5	29
100	6,9	21,2	5.6	11.5	35	10.8	33	9.8	30

** Not recommended below 20°*

Main Nozzle Adaptor
P/N 118-1521

UPGRADE TO TORO'S INDUSTRY LEADING SPRINKLER TECHNOLOGY

FLEX800™ R SERIES
CONVERSION UPGRADES

FEATURES

The Toro® FLEX800™ R Series Conversion Upgrades enable customers with existing Rain Bird® Eagle™ 900 and 1100 Series sprinklers to upgrade to Toro's industry leading sprinkler technology. The benefits of upgrading include the patented TruJectory™ adjustment, full and part circle in the same sprinkler, the ability to ratchet the riser and clutch the nozzle base, and an extra 3,81cm (1.5") pop-up height.

- **Ratcheting riser**
  Align part circle quickly and easily or adjust watering locations to suit seasonal needs. (only FLX55-6RB and FLX55RB).
- **Dual Trajectory**
  The 25° setting provides maximum distance of throw and the 15° setting provides improved wind performance, radius reduction and obstacle avoidance (FLX54RB & FLX55RB).
- **True Part and Full-Circle in One – 40° - 330° Part Circle and 360° Full Circle**
  These sprinklers can be 360° full circle today and part circle tomorrow allowing you to simply and economically adjust the area of coverage to match your seasonal needs or meet water rationing mandates (FLX55-6RB & FLX55RB).

FLX55-6RB *FLX55RB* *FLX54RB*

ADDITIONAL FEATURES

INDUSTRY'S LARGEST NOZZLE SELECTION
Nozzles from 12,8m - 30,5m (42' to 100') radius plus a wide assortment of back nozzles lets you put the precise amount of water exactly where you need it. All nozzles threaded in from the front.

20,000 VOLT LIGHTNING RATING
The Spike Guard™ solenoid has virtually eliminated the need for solenoid replacement in high lightning environments.

DUAL TRAJECTORY - 25° OR 15°
Provides two selections for the main nozzle trajectory; the 25 degree setting provides maximum distance of throw and the 15 degree setting provides improved wind performance, radius reduction and obstacle avoidance.

UPGRADE TO TORO'S INDUSTRY LEADING SPRINKLER TECHNOLOGY.
The Toro® FLEX800™ R Series Conversion Upgrades enable customers with existing Rain Bird® Eagle™ 900 and 1100 Series sprinklers to upgrade to Toro's industry leading sprinkler technology.

Curious about the overall efficiency of this system?
Take a look at page 81.

SPECIFICATIONS

OPERATIONAL
- Ratcheting riser allows riser positioning without riser removal.
- Recommended Operating Pressure Range: 4,1 6,9 bar (60-100 psi) (maximum – 10,3 bar (150 psi) and minimum – 2,7 bar (40 psi)
- Radius reduction screw for radius refinement
- Riser pull-up feature simplifies servicing
- Yardage marker capable
- 8,26cm (3.25") pop-up clears tall grasses

NOZZLES
- 4 main nozzle combinations included provides a wide range of radius and flow capabilities.
- Back nozzle capable (FLX55-6RB & FLX55RB)
- Two additional front nozzle positions (FLX54RB only)
- Nozzle base clutching (FLX55-6RB & FLX55RB) allows nozzle base movement by hand
- All nozzles threaded from the front with no disassembly required.

WARRANTY
- Two years

FLEX800 R SERIES CONVERSION UPGRADES SPECIFYING INFORMATION

R SERIES CONVERSION ASSEMBLIES

Model Number	Description
FLX55-6RB-5154	R Series Conversion with FLX55-6 riser assembly and low flow nozzle set #51 - #54
FLX55-6RB-5558	R Series Conversion with FLX55-6 riser assembly and high flow nozzle set #55 - #58
FLX55RB-5154	R Series Conversion with FLX55 riser assembly and low flow nozzle set #51 - #54
FLX55RB-5558	R Series Conversion with FLX55 riser assembly and high flow nozzle set #55 - #58
FLX54RB-5154	R Series Conversion with FLX54 riser assembly and low flow nozzle set #51 - #54
FLX54RB-5558	R Series Conversion with FLX54 riser assembly and high flow nozzle set #55 - #58

R SERIES SOLENOID ADAPTERS

Model Number	Description
SPIKEGUARD-RB	Toro solenoid adapter with Spike Guard™ solenoid for Rain Bird Eagle 700, 900 or 1100 Series sprinklers

MAIN NOZZLE PERFORMANCE DATA - METRIC

FLX55-6RB-5154 Performance Chart—(Metric)

Front Nozzle Positions	Nozzle Set 51		Nozzle Set 52		Nozzle Set 53		Nozzle Set 54	
	Yellow		Blue		Brown		Orange	
	102-4587		102-4588		102-4589		102-0728	
	Blue	Gray	Red	Gray	Orange	Gray	Orange	Gray
	102-2925	102-2910	102-2928	102-2910	102-2926	102-2910	102-2926	102-2910
Back Nozzle Positions	Red Plug 102-4335							

bar	kPa	kg/cm²	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
4,1	414	4,22	16,8	60,9	19,2	76,8	21,0	88,6	22,9	118,5
4,8	483	4,92	17,1	65,9	20,1	82,5	21,3	95,8	23,2	127,9
5,5	552	5,63	17,4	70,0	20,7	88,2	21,9	102,2	23,5	136,3
6,2	621	6,33	17,7	73,4	21,3	92,7	22,9	107,9	24,1	144,2
6,9	689	7,03	18,0	77,6	21,9	98,0	23,2	113,6	24,4	152,2
Stator			102-1939 White							
Conversion			FLX55-6RB-5154							

FLX55-6RB-5558 Performance Chart—(Metric)

Front Nozzle Positions	Nozzle Set 55		Nozzle Set 56		Nozzle Set 57		Nozzle Set 58	
	Green		Gray		Black		Red	
	102-0729		102-0730		102-4261		102-4260	
	Blue	Gray	Blue	Gray	Orange	Gray	Blue	Gray
	102-2925	102-2910	102-2925	102-2910	102-2926	102-2910	102-2925	102-2910

rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
24,4	148,0	25,9	155,2	26,8	171,9	28,0	188,1
25,3	157,1	26,5	164,7	27,7	182,5	28,6	199,9
26,2	165,4	27,4	173,0	28,6	191,5	29,3	209,3
118-7282 Red							
FLX55-6RB-5558							

FLX55RB-5154 Performance Chart—(Metric)

Front Nozzle Positions	Nozzle Set 51		Nozzle Set 52		Nozzle Set 53		Nozzle Set 54	
	Yellow		Blue		Brown		Orange	
	102-6906		102-0726		102-6907		102-0728	
	Yellow	Brown	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	102-5670	102-5671	102-5670	102-6884	102-5670	102-6884	102-5670	102-6884
Back Nozzle Positions	Red Plug 102-4335							

bar	kPa	kg/cm²	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
4,1	414	4,22	17,1	57,5	17,4	76,1	20,1	92,0	20,7	106,0
4,8	483	4,92	17,7	62,5	18,3	82,1	20,4	99,2	21,6	115,1
5,5	552	5,63	18,0	66,2	18,9	87,4	20,7	105,2	21,9	120,0
6,2	621	6,33	18,3	69,7	19,5	92,7	21,6	109,0	22,6	130,6
6,9	689	7,03	18,6	73,1	20,1	95,8	21,9	114,7	22,9	138,2
Conversion			FLX55RB-5154							

FLX55RB-5558 Performance Chart—(Metric)

Front Nozzle Positions	Nozzle Set 55		Nozzle Set 56		5Nozzle Set 57		Nozzle Set 58	
	Green		Gray		Black		Red	
	102-6955		102-6935		102-6936		102-6909	
	Yellow	Green	Green	Green	Green	Green	Green	Green
	102-5670	102-6885	102-6531	102-6885	102-6531	102-6885	102-6531	102-6885

rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
23,2	150,3	24,4	163,2	25,3	182,5	25,9	200,6
23,8	163,2	24,7	170,7	26,2	193,8	26,5	212,0
24,4	172,2	25,0	185,5	27,4	206,3	27,1	223,3
118-7282 Red							
FLX55RB-5558							

FLX54RB-5154 Performance Chart—(Metric)

Front Nozzle Positions	Nozzle Set 51		Nozzle Set 52		Nozzle Set 53		Nozzle Set 54	
	Yellow		Blue		Brown		Orange	
	102-0725		102-7001		102-0727		102-7002	
	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug
	102-4335	102-4335	102-4335	102-4335	102-4335	102-4335	102-4335	102-4335
Back Nozzle Positions	Yellow	Blue	Yellow	Orange	Yellow	Red	Yellow	Beige
	102-6937	102-2925	102-6937	102-2926	102-6937	102-2928	102-6937	102-2929

bar	kPa	kg/cm²	rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
4,1	414	4,22	18,0	55,3	18,9	65,9	20,7	92,0	21,6	106,7
4,8	483	4,92	18,3	59,4	19,2	71,2	21,3	99,6	22,9	115,8
5,5	552	5,63	18,6	62,1	19,5	75,7	21,9	104,5	23,8	123,4
6,2	621	6,33	18,9	67,4	20,1	80,6	22,6	113,2	24,4	131,4
6,9	689	7,03	19,2	68,5	20,4	89,3	22,9	115,1	24,7	138,9
Stator			102-6929 Blue							
Conversion			FLX54RB-5154							

FLX54RB-5558 Performance Chart—(Metric)

Front Nozzle Positions	Nozzle Set 55		Nozzle Set 56		Nozzle Set 57		Nozzle Set 58	
	Green		Gray		Black		Red	
	102-6908		102-0730		102-4261		102-4260	
	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Brown	Red Plug	Brown
	102-4335	102-4335	102-4335	102-4335	102-4335	102-6883	102-4335	102-6883
Back Nozzle Positions	Yellow	Beige	Yellow	Red	Yellow	Gray	Yellow	Gray
	102-6937	102-2929	102-6937	102-2928	102-6937	102-4965	102-6937	102-4965

rad/m	lpm	rad/m	lpm	rad/m	lpm	rad/m	lpm
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
25,3	149,5	25,9	161,6	26,5	173,8	27,7	190,0
25,9	157,5	26,8	170,0	27,4	183,6	28,3	199,9
26,5	165,4	27,4	177,2	28,3	193,8	29,0	209,7
118-7828 Red							
FLX54RB-5558							

Not recommended at these pressures. Radius shown in metres.
Toro recommends the use of a 3,18cm (1.25") swing joint at flows over 95-LPM (25-gpm). 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.

MAIN NOZZLE PERFORMANCE DATA - U.S. IMPERIAL

FLX55-6RB-5154 Performance Chart—(U.S.)

Front Nozzle Positions	Nozzle Set 51		Nozzle Set 52		Nozzle Set 53		Nozzle Set 54	
	Yellow		Blue		Brown		Orange	
	102-4587		102-4588		102-4589		102-0728	
	Blue	Gray	Red	Gray	Orange	Gray	Orange	Gray
	102-2925	102-2910	102-2928	102-2910	102-2926	102-2910	102-2926	102-2910
Back Nozzle Positions	Red Plug 102-4335							

psi	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm
60	55	16.1	63	20.3	69	23.4	75	31.3
70	56	17.4	66	21.8	70	25.3	76	33.8
80	57	18.5	68	23.3	72	27.0	77	36.0
90	58	19.4	70	24.5	75	28.5	79	38.1
100	59	20.5	72	25.9	76	30.0	80	40.2
Stator	102-1939 White							
Conversion	FLX55-6RB-5154							

FLX55-6RB-5558 Performance Chart—(U.S.)

Front Nozzle Positions	Nozzle Set 55		Nozzle Set 56		Nozzle Set 57		Nozzle Set 58	
	Green		Gray		Black		Red	
	102-0729		102-0730		102-4261		102-4260	
	Blue	Gray	Blue	Gray	Orange	Gray	Blue	Gray
	102-2925	102-2910	102-2925	102-2910	102-2926	102-2910	102-2925	102-2910

rad/ft	gpm	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
80	39.1	85	41.0	88	45.4	92	49.7
83	41.5	87	43.5	91	48.2	94	52.8
86	43.7	90	45.7	94	50.6	96	55.3
118-7282 Red							
FLX55-6RB-5558							

FLX55RB-5154 Performance Chart—(U.S.)

Front Nozzle Positions	Nozzle Set 51		Nozzle Set 52		Nozzle Set 53		Nozzle Set 54	
	Yellow		Blue		Brown		Orange	
	102-6906		102-0726		102-6907		102-0728	
	Yellow	Brown	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	102-5670	102-5671	102-5670	102-6884	102-5670	102-6884	102-5670	102-6884
Back Nozzle Positions	Red Plug 102-4335							

psi	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm
60	56	15.2	57	20.1	66	24.3	68	28.0
70	58	16.5	60	21.7	67	26.2	71	30.4
80	59	17.5	62	23.1	68	27.8	72	31.7
90	60	18.4	64	24.5	71	28.8	74	34.5
100	61	19.3	66	25.3	72	30.3	75	36.5
Conversion	FLX55RB-5154							

FLX55RB-5558 Performance Chart—(U.S.)

Front Nozzle Positions	Nozzle Set 55		Nozzle Set 56		5Nozzle Set 57		Nozzle Set 58	
	Green		Gray		Black		Red	
	102-6955		102-6935		102-6936		102-6909	
	Yellow	Green	Green	Green	Green	Green	Green	Green
	102-5670	102-6885	102-6531	102-6885	102-6531	102-6885	102-6531	102-6885

rad/ft	gpm	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
76	39.7	80	43.1	83	48.2	85	53.0
78	43.1	81	45.1	86	51.2	87	56.0
80	45.5	82	49.0	90	54.5	89	59.0
118-7828 Red							
FLX55RB-5558							

FLX54RB-5154 Performance Chart—(U.S.)

Front Nozzle Positions	Nozzle Set 51		Nozzle Set 52		Nozzle Set 53		Nozzle Set 54	
	Yellow		Blue		Brown		Orange	
	102-0725		102-7001		102-0727		102-7002	
	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug
	102-4335	102-4335	102-4335	102-4335	102-4335	102-4335	102-4335	102-4335
Back Nozzle Positions	Yellow	Blue	Yellow	Orange	Yellow	Red	Yellow	Beige
	102-6937	102-2925	102-6937	102-2926	102-6937	102-2928	102-6937	102-2929

psi	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm
60	59	14.6	62	17.4	68	24.3	71	28.2
70	60	15.7	63	18.8	70	26.3	75	30.6
80	61	16.4	64	20.0	72	27.6	78	32.6
90	62	17.8	66	21.3	74	29.9	80	34.7
100	63	18.1	67	23.6	75	30.4	81	36.7
Stator	102-6929 Blue							
Conversion	FLX54RB-5154							

FLX54RB-5558 Performance Chart—(U.S.)

Front Nozzle Positions	Nozzle Set 55		Nozzle Set 56		Nozzle Set 57		Nozzle Set 58	
	Green		Gray		Black		Red	
	102-6908		102-0730		102-4261		102-4260	
	Red Plug	Red Plug	Red Plug	Red Plug	Red Plug	Brown	Red Plug	Brown
	102-4335	102-4335	102-4335	102-4335	102-4335	102-6883	102-4335	102-6883
Back Nozzle Positions	Yellow	Beige	Yellow	Red	Yellow	Gray	Yellow	Gray
	102-6937	102-2929	102-6937	102-2928	102-6937	102-4965	102-6937	102-4965

rad/ft	gpm	rad/ft	gpm	rad/ft	gpm	rad/ft	gpm
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
83	39.5	85	42.7	87	45.9	91	50.2
85	41.6	88	44.9	90	48.5	93	52.8
87	43.7	90	46.8	93	51.2	95	55.4
118-7828 Red							
FLX54RB-5558							

Not recommended at these pressures. Radius shown in feet.
Toro recommends the use of a 3,18cm (1.25") 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.

TORO® CONVERSION UPGRADE CHARTS DATA - METRIC

CROSS REFERENCE GUIDE—(METRIC)					MODELS BEING REPLACED										
New Model	Arc	Trajectory	Radius - m	Flow - lpm	634	664	734	764	765	864S	865S	834S	835S	DT34	DT35
FLX34-3134	Full Circle	25° or 15°	15,9 - 24,1	48,8 – 132,1	X	X	X	X	X	X	X	X	X	X	X
FLX34-3537	Full Circle	25° or 15°	20,4 - 27,8	121,5 – 177,5	X	X	X	X	X	X	X	X	X	X	X
FLX35-3134	Part/Full Circle	25° or 15°	15,9 - 22,6	51,5 – 129,1			1	X	X	X	X	X	X	X	X
FLX35-3537	Part/Full Circle	25° or 15°	21,0 - 25,3	125,3 – 179,0			1	X	X	X	X	X	X	X	X
FLX35-6-3134	Part/Full Circle	30° - 7°	14,0 - 24,4	58,7 – 140,0			1	X	X	X	X	X	X	X	X
FLX35-6-3537	Part/Full Circle	30° - 7°	18,0 - 28,1	71,5 – 171,5			1	X	X	X	X	X	X	X	X

1. Must have ribbed bodies manufactured after 1992 to use Part/Full circles.

CROSS REFERENCE GUIDE—(METRIC)					MODELS BEING REPLACED											
New Model	Arc	Trajectory	Radius - m	Flow - lpm	654	655	670	684	690	754	784	785	884S	885S	854S	855S	DT54	DT55
FLX54-5154	Full Circle	25° or 15°	17,7 - 24,7	50,0 – 138,9	2	2	2	2	4	2	2	2	X	X	X	X	X	X
FLX54-5558	Full Circle	25° or 15°	24,1 - 29,0	129,4 – 209,7	2	2	2	2	4	2	2	2	X	X	X	X	X	X
FLX54-59	Full Circle	25° or 15°	29,3 – 30,2	210,4 – 233,9	2	2	2	2	4	2	2	2	X	X	X	X	X	X
FLX55-5154	Part/Full Circle	25° or 15°	16,7 – 22,8	53,4 – 130,6					4	2	2	2	X	X	X	X	X	X
FLX55-5558	Part/Full Circle	25° or 15°	22,3 – 27,4	135,8 – 204,0					4	2	2	2	X	X	X	X	X	X
FLX55-59	Part/Full Circle	25° or 15°	27,1 – 28,0	217,6 – 232,0					4	2	2	2	X	X	X	X	X	X
FLX55-6-5154	Part/Full Circle	30° - 7°	14,0 - 24,4	36,3 – 144,6					4	2	2	2	X	X	X	X	X	X
FLX55-6-5558	Part/Full Circle	30° - 7°	18,0 - 29,0	72,3 – 194,9					4	2	2	2	X	X	X	X	X	X
FLX55-6-59	Part/Full Circle	30° - 7°	23,5 – 30,5	130,2 – 231,3					4	2	2	2	X	X	X	X	X	X
FLX55-5154R	Part/Full Circle	25° or 15°	16,7 – 22,8	53,4 – 130,6	3	3	3	3		3								
FLX55-5558R	Part/Full Circle	25° or 15°	22,3 – 27,4	135,8 – 204,0	3	3	3	3		3								
FLX55-59R	Part/Full Circle	25° or 15°	27,1 – 28,0	217,6 – 232,0	3	3	3	3		3								
FLX55-6-5154R	Part/Full Circle	30° - 7°	14,0 - 24,4	36,3 – 144,6	3	3	3	3		3								
FLX55-6-5558R	Part/Full Circle	30° - 7°	18,0 - 29,0	72,3 – 194,9	3	3	3	3		3								
FLX55-6-59R	Part/Full Circle	30° - 7°	23,5 – 30,5	130,2 – 231,3	3	3	3	3		3								

2 - Requires the separate purchase and use of 102-0950 conversion adapter
3 - Use the "R" Series (Ribless body) conversion for bodies dated prior to 1992.
4 - Requires the separate purchase and use of 102-5011 690 conversion adapter

TORO® CONVERSION UPGRADE CHARTS DATA - U.S. IMPERIAL

CROSS REFERENCE GUIDE —(U.S.)					MODELS BEING REPLACED										
New Model	Arc	Trajectory	Radius - Ft	Flow - gpm	634	664	734	764	765	864S	865S	834S	835S	DT34	DT35
FLX34-3134	Full Circle	25° or 15°	52' - 79'	12.9 - 34.9	X	X	X	X	X	X	X	X	X	X	X
FLX34-3537	Full Circle	25° or 15°	67' - 91'	32.1 - 46.9	X	X	X	X	X	X	X	X	X	X	X
FLX35-3134	Part/Full Circle	25° or 15°	52' - 74'	13.6 - 34.1			1	X	X	X	X	X	X	X	X
FLX35-3537	Part/Full Circle	25° or 15°	69' - 83'	33.1 - 47.3			1	X	X	X	X	X	X	X	X
FLX35-6-3134	Part/Full Circle	30° - 7°	46' - 80'	15.5 - 37.0			1	X	X	X	X	X	X	X	X
FLX35-6-3537	Part/Full Circle	30° - 7°	59' - 92'	32.4 - 45.3			1	X	X	X	X	X	X	X	X

1. Must have ribbed bodies manufactured after 1992 to use Part/Full circles.

CROSS REFERENCE GUIDE—(U.S.)					MODELS BEING REPLACED											
New Model	Arc	Trajectory	Radius - Ft	Flow - gpm	654	655	670	684	690	754	784	785	884S	885S	854S	855S	DT54	DT55
FLX54-5154	Full Circle	25° or 15°	58' - 81'	13.2 - 36.7	2	2	2	2	4	2	2	2	X	X	X	X	X	X
FLX54-5558	Full Circle	25° or 15°	79' - 95'	34.2 - 55.4	2	2	2	2	4	2	2	2	X	X	X	X	X	X
FLX54-59	Full Circle	25° or 15°	96' - 99'	55.6 - 61.8	2	2	2	2	4	2	2	2	X	X	X	X	X	X
FLX55-5154	Part/Full Circle	25° or 15°	55' - 75'	14.0 - 34.5					4	2	2	2	X	X	X	X	X	X
FLX55-5558	Part/Full Circle	25° or 15°	73' - 90'	35.3 - 53.9					4	2	2	2	X	X	X	X	X	X
FLX55-59	Part/Full Circle	25° or 15°	82' - 92'	57.2 - 61.3					4	2	2	2	X	X	X	X	X	X
FLX55-6-5154	Part/Full Circle	30° - 7°	46' - 80'	13.9 - 38.2					4	2	2	2	X	X	X	X	X	X
FLX55-6-5558	Part/Full Circle	30° - 7°	59' - 95'	33.8 - 51.1					4	2	2	2	X	X	X	X	X	X
FLX55-6-59	Part/Full Circle	30° - 7°	77' - 100'	57.0 - 61.1					4	2	2	2	X	X	X	X	X	X
FLX55-5154R	Part/Full Circle	25° or 15°	55' - 75'	14.0 - 34.5	3	3	3	3		3								
FLX55-5558R	Part/Full Circle	25° or 15°	73' - 90'	35.3 - 53.9	3	3	3	3		3								
FLX55-59R	Part/Full Circle	25° or 15°	82' - 92'	57.2 - 61.3	3	3	3	3		3								
FLX55-6-5154R	Part/Full Circle	30° - 7°	46' - 80'	13.9 - 38.2	3	3	3	3		3								
FLX55-6-5558R	Part/Full Circle	30° - 7°	59' - 95'	33.8 - 51.1	3	3	3	3		3								
FLX55-6-59R	Part/Full Circle	30° - 7°	77' - 100'	57.0 - 61.1	3	3	3	3		3								

2 - Requires the separate purchase and use of 102-0950 conversion adapter
3 - Use the "R" Series (Ribless body) conversion for bodies dated prior to 1992.
4 - Requires the separate purchase and use of 102-5011 690 conversion adapter

MAINLESS AND BACK NOZZLE DATA - METRIC

FLX55-6RB Series Mainless Nozzle Performance Data—(Metric)

			Blue - Plug - Gray 102-2925 - 102-2208 - 102-2910		Orange - Plug - Gray 102-2926 - 102-2208 - 102-2910		Red - Plug - Gray 102-2928 - 102-2208 - 102-2910		Gray - Plug - Gray 102-2910 - 102-2208 - 102-2910		Gray - Plug - Gray 102-2930 - 102-2208 - 102-2910	
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
4,5	448	4,6	14,0	32,9	14,0	39,4	15,2	46,9	12,8	38,6	14,3	52,6
SOR			5:02		4:16		3:36		4:19		4:06	
5,5	552,	5,6	14,0	36,3	14,3	43,5	16,2	51,9	13,4	42,4	15,5	57,9
SOR			4:22		3:40		3:03		3:53		3:40	

FLX55RB Mainless Nozzle Performance Data—(Metric)

			Green - Plug - Grey 102-6531 - 102-2208 - 102-2910		Green - Plug - Green 102-6531 - 102-2208 - 102-6885		Green - Plug - Red 102-6531 - 102-2208 - 102-2928		Green - Plug - Beige 102-6531 - 102-2208 - 102-2929	
bar	kPa	kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM	Radius	LPM
4,5	448	4,6	10,4	39,4	13,4	38,6	14,6	43,5	15,2	51,1
SOR			3:40		3:50		3:25		2:40	
5,5	552	5,6	11,3	43,9	13,4	43,2	14,6	48,8	15,2	56,8
SOR			3:15		3:25		3:00		2:30	

Requires the low-flow stator 102-6929 for indicated rotation speeds.
SOR: Speed of rotation

Back Nozzle Performance Data—(Metric)

Nozzles			4,5 bar 448 kPa 4,6 kg/cm2		5,5 bar 552 kPa 5,6 kg/cm2		
Part #	Description	Color	Radius - m	LPM	Radius - m	LPM	Profile
102-6937	Inner Nozzle with Yellow Restrictor	Yellow/Yellow	8,8	14,0	9,2	15,5	
102-6531	Inner Nozzle with White Restrictor	Green/White	9,5	16,3	10,1	17,4	
102-2135	Inner Nozzle with White Restrictor	White/White	7,6	15,5	7,9	17,0	
102-2136	7/16" Hex Inner Nozzle Assy w/ Yellow Restrictor	Yellow/Yellow	7,3	14,4	7,6	15,5	
102-6883	Intermediate Nozzle	Brown	11,6	10,6	11,6	10,6	
102-6884	Intermediate Nozzle	Yellow	12,5	15,5	13,1	17,0	
102-6885	Intermediate Nozzle	Green	12,8	20,4	13,7	22,7	
102-2925	Intermediate Nozzle	Blue	12,2	10,6	12,8	12,1	
102-2926	Intermediate Nozzle	Orange	13,4	16,3	13,7	18,2	
102-2927	Intermediate Nozzle	Gray	14,0	19,3	14,3	20,4	
102-2928	Intermediate Nozzle	Red	14,6	24,6	15,3	26,5	
102-2929	Intermediate Nozzle	Beige	15,6	30,7	16,2	34,4	

MAINLESS AND BACK NOZZLE DATA - U.S. IMPERIAL

FLX55-6RB Series Mainless Nozzle Performance Data—(U.S.)

	Blue - Plug - Gray 102-2925 - 102-2208 - 102-2910		Orange - Plug - Gray 102-2926 - 102-2208 - 102-2910		Red - Plug - Gray 102-2928 - 102-2208 - 102-2910		Gray - Plug - Gray 102-2910 - 102-2208 - 102-2910		Gray - Plug - Gray 102-2930 - 102-2208 - 102-2910	
psi	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
65	46	8.7	46	10.4	50	12.4	42	10.2	47	13.9
SOR	5:02		4:16		3:36		4:19		4:06	
80	46	9.6	47	11.5	53	13.7	44	11.2	51	15.3
SOR	4:22		3:40		3:03		3:53		3:40	

FLX55RB Mainless Nozzle Performance Data—(U.S>)

	Green - Plug - Grey 102-6531 - 102-2208 - 102-2910		Green - Plug - Green 102-6531 - 102-2208 - 102-6885		Green - Plug - Red 102-6531 - 102-2208 - 102-2928		Green - Plug - Beige 102-6531 - 102-2208 - 102-2929	
psi	Radius	gpm	Radius	gpm	Radius	gpm	Radius	gpm
65	34	10.4	44	10.2	48	11.5	50	13.5
SOR	3:40		3:50		3:25		2:40	
80	37	11.6	44	11.4	48	12.9	50	15.0
SOR	3:15		3:25		3:00		2:30	

Requires the low-flow stator 102-6929 for indicated rotation speeds.
SOR: Speed of rotation

Back Nozzle Performance Data—(U.S.)

Nozzles			65 psi		80 psi		
Part #	Description	Color	Radius	gpm	Radius	gpm	Profile
102-6937	Inner Nozzle w/ Yellow Restrictor	Yellow/Yellow	29	3.7	30	4.1	
102-6531	Inner Nozzle w/ White Restrictor	Green/White	31	4.3	33	4.6	
102-6883	Intermediate Nozzle	Brown	38	2.8	38	2.8	
102-6884	Intermediate Nozzle	Yellow	41	4.1	43	4.5	
102-6885	Intermediate Nozzle	Green	42	5.4	45	6.0	
102-2925	Intermediate Nozzle	Blue	40	2.8	42	3.2	
102-2926	Intermediate Nozzle	Orange	44	4.3	45	4.8	
102-2927	Intermediate Nozzle	Gray	46	5.1	47	5.4	
102-2928	Intermediate Nozzle	Red	48	6.5	50	7.0	
102-2929	Intermediate Nozzle	Beige	51	8.1	53	9.1	

BUILT RUGGED TO WITHSTAND **HARSH CONDITIONS**

T7 SERIES
ROTORS

FEATURES

The T7 Series sprinkler is built rugged to withstand the harsh golf course conditions. The low-flow version is perfect for shorter-radius golf course applications like tee tops, surrounds and perimeters. The T7 has been designed and tested to ensure the high reliability demanded by the market.

- **Water is Evenly Distributed**
  High efficiency nozzles with single port design ensure water is evenly distributed across the pattern.
- **Versatility**
  Available in standard and low-flow models to meet your application needs.
- **Vandal and Abuse Resistant**
  The Smart Arc memory safely returns the sprinkler to previously set arc even when turned beyond arc borders.
- **Clears Tall Grasses**
  The 14,61cm (5.75") pop-up ensures proper spray pattern and nozzle distribution uniformity even in taller grasses.
- **Standard check valve**
- **Radius reduction screw – up to 25%**
- **Threaded cap-retained riser assembly**
- **Variable reversing stator**
- **Slip clutch**
- **Riser pull-up feature**
  Adjustment/pull-up tool supplied
- **Locking cap screw**

T7 SERIES Rotors

ADDITIONAL FEATURES

MODEL CHOICES

There are several model choices available for the T7 Series sprinklers:

- Plastic or stainless steel
- Low-Flow or High-Flow models
- Effluent water indicator models

TOP ARC INDICATION

Arc setting indicator on top of the rotor allows for easy wet or dry adjustments. Part or full-circle from 45° to 360°.

Curious about the overall efficiency of this system?
Take a look at page 89.

SPECIFICATIONS

OPERATING SPECIFICATIONS

- Precipitation rate: 5,6-36,1mm (.22-1.42") per hour
- Radius: Low-flow models: 11,9-17,1m (39'-56')

High-flow models: 14,0-22,9m (46'-75');

- Flow rate: Low-flow models: 6,4-48,5 LPM (1.7-12.8 gpm)

High-flow models: 25-115,8 LPM (6.6-30.6 gpm)

- Operating pressure range: 2,8-7,0 bar (40-100 psi)
- Inlet size: 25mm (1") threaded NPT or 25mm (1") BSP
- Nozzle trajectory: 25°
- Arc adjustment: 45°-335° and 360° (unidirectional at 360°)

ADDITIONAL FEATURES

- Two nozzle trees:
- Low flow: 6 nozzles (2, 3, 4.5, 6, 7.5 and 9)
- High flow: 7 nozzles (7, 9, 12, 16, 20, 24 and 27)
- Nozzle support/breakup screw

OPTIONS AVAILABLE

- Stainless steel riser

DIMENSIONS

- Pop-up height to nozzle: 127mm (5")
- Body height: 222mm (8.75")
- Rubber cover diameter: 57mm (2.25")
- Body diameter: 70mm (2.75")

WARRANTY

- Two years; Five years when installed with Toro Swing Joints

T7 SPORTS ROTOR SPECIFYING INFORMATION

T7 SPRINKLER

T7PXX-XXXX			
Description	*Optional*	*Thread*	*Optional*
T7P	XX	XX	L
T7P—Sports Rotor	SS—Stainless Steel Riser 00—Plastic Riser (ResCom)	02—NPT Thread 42—ACME 52—BSP	L—Low Flow
Example: A low flow T7P sprinkler with a stainless steel riser and ACME threads would be specified as **T7PSS-42L**			

T7 SPORTS ROTOR NOZZLE PERFORMANCE DATA - METRIC

T7 Sports Rotor Nozzle Performance Data - Low Flow—Metric

Nozzle	Pressure (bar)	Radius (m)	Flow (LPM)	Precip mm/hr ■	Precip mm/hr ▲
2.0	2,8	11,9	6,4	6,4	5,6
	3,4	11,9	7,6	7,4	6,4
	4,1	12,2	8,3	7,6	6,6
	4,8	12,2	9,1	8,4	7,1
	5,5	12,2	9,8	8,9	7,9
	6,2	12,5	10,2	9,1	7,9
	6,9	12,5	11,0	9,7	8,4
3.0*	2,8	11,9	9,1	9,1	7,9
	3,4	12,2	10,6	9,9	8,4
	4,1	12,5	11,7	10,4	9,1
	4,8	12,5	12,9	11,4	9,9
	5,5	12,8	13,6	11,7	10,2
	6,2	12,8	14,8	11,9	10,4
	6,9	13,1	15,5	12,4	10,7
4.5	2,8	11,6	15,5	16,0	13,7
	3,4	12,5	17,8	15,7	13,5
	4,1	12,5	19,7	17,3	15,0
	4,8	12,8	21,6	18,0	15,7
	5,5	12,8	23,1	19,6	16,8
	6,2	13,1	24,6	19,8	17,3
	6,9	13,1	26,1	21,1	18,3
6.0	2,8	13,1	18,9	15,0	13,0
	3,4	14,0	21,6	15,0	13,0
	4,1	14,6	23,8	15,5	13,2
	4,8	14,9	26,5	16,5	14,5
	5,5	14,9	28,0	17,3	15,0
	6,2	15,2	29,9	17,8	15,5
	6,9	15,2	31,8	18,8	16,3
7.5	2,8	13,4	22,0	16,8	14,7
	3,4	14,0	25,4	17,8	15,2
	4,1	14,6	28,0	18,0	15,7
	4,8	14,9	30,3	19,1	16,5
	5,5	15,2	33,3	19,8	17,0
	6,2	15,2	36,0	21,3	18,5
	6,9	15,8	37,9	20,6	17,8
9.0	2,8	13,7	28,0	20,6	17,8
	3,4	14,9	32,2	19,8	17,3
	4,1	15,5	35,6	20,3	17,8
	4,8	16,2	39,4	21,1	18,3
	5,5	16,8	42,8	21,1	18,3
	6,2	16,8	45,4	22,6	19,6
	6,9	17,1	48,5	22,9	19,8

** Pre-installed nozzle*
Radius shown in meters, Data based on 180°,

T7 Sports Rotor Nozzle Performance Data - High Flow—Metric

Nozzle	Pressure (bar)	Radius (m)	Flow (LPM)	Precip mm/hr ■	Precip mm/hr ▲
7.0	2,8	14,0	25,0	18,3	15,7
	3,4	14,3	28,0	19,1	16,5
	4,1	14,6	30,7	19,8	17,3
	4,8	14,9	33,3	20,8	18,0
	5,5	15,5	35,6	21,1	18,3
	6,2	15,8	39,0	21,6	18,5
	6,9	16,5	40,5	21,1	18,3
9.0	2,8	14,3	28,0	19,3	16,8
	3,4	15,2	31,4	18,5	16,3
	4,1	15,5	32,9	19,3	16,8
	4,8	15,8	35,6	20,6	17,8
	5,5	16,5	37,5	20,3	17,5
	6,2	16,8	41,3	20,8	18,0
	6,9	17,1	43,5	21,3	18,5
12.0*	2,8	15,2	36,0	22,6	19,6
	3,4	15,5	43,9	22,9	19,8
	4,1	16,2	48,1	23,1	20,1
	4,8	16,5	52,2	24,4	21,1
	5,5	16,8	55,6	25,1	21,8
	6,2	17,1	59,1	25,9	22,4
	6,9	17,4	62,5	26,4	22,9
16.0	2,8	16,2	49,2	26,9	23,4
	3,4	17,1	57,2	26,9	23,4
	4,1	17,7	61,3	26,4	22,9
	4,8	18,0	66,2	27,7	24,1
	5,5	18,6	71,2	27,9	24,1
	6,2	18,9	75,7	29,0	24,9
	6,9	19,2	79,9	29,7	25,7
20.0	2,8	16,2	60,6	32,5	27,9
	3,4	17,7	66,2	31,0	26,7
	4,1	18,3	73,8	30,7	26,7
	4,8	18,6	78,0	32,0	27,7
	5,5	19,8	84,0	30,2	26,2
	6,2	20,1	89,3	31,2	26,9
	6,9	20,4	93,9	31,8	27,7
24.0	2,8	15,8	59,8	32,3	27,9
	3,4	18,3	66,2	27,7	24,1
	4,1	19,2	73,1	28,2	24,4
	4,8	19,8	78,4	29,0	25,1
	5,5	20,4	84,4	29,2	25,4
	6,2	20,7	90,1	30,5	26,4
	6,9	21,6	95,8	29,5	25,7
27.0	2,8	16,8	70,8	36,1	31,2
	3,4	19,8	88,6	29,5	25,4
	4,1	21,6	89,3	26,7	23,1
	4,8	21,9	97,7	27,9	24,1
	5,5	22,3	103,7	29,0	25,1
	6,2	22,6	110,2	30,0	25,9
	6,9	22,9	115,8	30,7	26,7

** Pre-installed nozzle*
Radius shown in meters, Data based on 180°,

T7 SPORTS ROTOR NOZZLE PERFORMANCE DATA - U.S. IMPERIAL

T7 Sports Rotor Nozzle Performance Data - Low Flow—U.S.

Nozzle	Pressure (psi)	Radius (ft)	gpm	Precip (in/hr) ▲	Precip (in/hr) ■
2.0	40	39	1.7	0.25	0.22
	50	39	2.0	0.29	0.25
	60	40	2.2	0.3	0.26
	70	40	2.4	0.33	0.28
	80	40	2.6	0.35	0.31
	90	41	2.7	0.36	0.31
	100	41	2.9	0.38	0.33
3.0*	40	39	2.4	0.36	0.31
	50	40	2.8	0.39	0.33
	60	41	3.1	0.41	0.36
	70	41	3.4	0.45	0.39
	80	42	3.6	0.46	0.4
	90	42	3.9	0.47	0.41
	100	43	4.1	0.49	0.42
4.5	40	38	4.1	0.63	0.54
	50	41	4.7	0.62	0.53
	60	41	5.2	0.68	0.59
	70	42	5.7	0.71	0.62
	80	42	6.1	0.77	0.66
	90	43	6.5	0.78	0.68
	100	43	6.9	0.83	0.72
6.0	40	43	5	0.59	0.51
	50	46	5.7	0.59	0.51
	60	48	6.3	0.61	0.52
	70	49	7	0.65	0.57
	80	49	7.4	0.68	0.59
	90	50	7.9	0.7	0.61
	100	50	8.4	0.74	0.64
7.5	40	44	5.8	0.66	0.58
	50	46	6.7	0.7	0.6
	60	48	7.4	0.71	0.62
	70	49	8	0.75	0.65
	80	50	8.8	0.78	0.67
	90	50	9.5	0.84	0.73
	100	52	10	0.81	0.7
9.0	40	45	7.4	0.81	0.7
	50	49	8.5	0.78	0.68
	60	51	9.4	0.8	0.7
	70	53	10.4	0.83	0.72
	80	55	11.3	0.83	0.72
	90	55	12	0.89	0.77
	100	56	12.8	0.9	0.78

** Pre-installed nozzle*
Radius shown in feet. Data based on 180°

T7 Sports Rotor Nozzle Performance Data - High Flow—U.S.

Nozzle	Pressure (psi)	Radius (FT)	Flow (gpm)	Precip (in/hr) ▲	Precip (in/hr) ■
7.0	40	46	6.6	0.72	0.62
	50	47	7.4	0.75	0.65
	60	48	8.1	0.78	0.68
	70	49	8.8	0.82	0.71
	80	51	9.4	0.83	0.72
	90	52	10.3	0.85	0.73
	100	54	10.7	0.83	0.72
9.0	40	47	7.4	0.76	0.66
	50	50	8.3	0.73	0.64
	60	51	8.7	0.76	0.66
	70	52	9.4	0.81	0.7
	80	54	9.9	0.8	0.69
	90	55	10.9	0.82	0.71
	100	56	11.5	0.84	0.73
12.0*	40	50	9.5	0.89	0.77
	50	51	11.6	0.9	0.78
	60	53	12.7	0.91	0.79
	70	54	13.8	0.96	0.83
	80	55	14.7	0.99	0.86
	90	56	15.6	1.02	0.88
	100	57	16.5	1.04	0.9
16.0	40	53	13	1.06	0.92
	50	56	15.1	1.06	0.92
	60	58	16.2	1.04	0.9
	70	59	17.5	1.09	0.95
	80	61	18.8	1.1	0.95
	90	62	20	1.14	0.98
	100	63	21.1	1.17	1.01
20.0	40	53	16	1.28	1.1
	50	58	17.5	1.22	1.05
	60	60	19.5	1.21	1.05
	70	61	20.6	1.26	1.09
	80	65	22.2	1.19	1.03
	90	66	23.6	1.23	1.06
	100	67	24.8	1.25	1.09
24.0	40	52	15.8	1.27	1.1
	50	60	17.5	1.09	0.95
	60	63	19.3	1.11	0.96
	70	65	20.7	1.14	0.99
	80	67	22.3	1.15	1
	90	68	23.8	1.2	1.04
	100	71	25.3	1.16	1.01
27.0	40	55	18.7	1.42	1.23
	50	65	23.4	1.16	1
	60	71	23.6	1.05	0.91
	70	72	25.8	1.1	0.95
	80	73	27.4	1.14	0.99
	90	74	29.1	1.18	1.02
	100	75	30.6	1.21	1.05

** Pre-installed nozzle*
Radius shown in feet. Data based on 180°

EASY ARC ADJUSTMENTS— **WITH NO TOOLS**

T5 RAPIDSET® SERIES
ROTORS

FEATURES

The Toro® T5 RapidSet® Series Rotor

With all the features to satisfy all your basic irrigation needs while surprising you with a few extras, the T5 offers an extra inch of pop-up height compared to most competitive units. All lawn models are now available with the optional RapidSet® feature, a quick and easy way to make arc adjustments—with NO TOOLS. The stainless steel riser and nozzle base of the T5 RapidSet® Stainless Steel rotor not only add strength, but help protect the rotor from damage and excessive wear due to vandalism or abrasive sandy soils which can cause scoring of a plastic riser. Over time, this can lead to leaks at the wiper seal or an inability for the riser to fully retract.

- **127mm (5") Pop-Up**
  Easily replaces many competitive 100mm (4') units in the same footprint but delivers an extra inch of pop-up.
- **Standard Rubber Cover**
  The top of the sprinkler is covered with a heavy duty rubber cover to minimize impact injuries and reduce liability.
- **Airfoil™ Technology Nozzles**
  The T5 RapidSet rotor comes with a full set of 8 standard nozzles (25° trajectory) and 4 low angle (10° trajectory) nozzles that utilize patent pending Airfoil technology, which creates a zone of low pressure just below the main stream to gently guide water downward for unmatched uniformity without forcefully washing out newly-laid seeds.
- **Top Adjust Arc Set**
  The T5 can be set between a minimum arc set of 40° and a full circle set of 360°. Arc changes are made from the top of the sprinkler while popped up or down by using a small slotted screwdriver.
- **Commercial-grade 304 Stainless Steel Riser and Nozzle Base Sleeves**
  Helps prevent 'stick ups' and eliminates scoring of riser caused by coarse and sandy soils
- **Heavy-duty Construction**
  Protects riser and nozzle base from damage caused by vandalism

T5 Rapidset SERIES Rotors

Watch T5 RapidSet Series Rotors Videos:
youtube.com/ToroCompanyEurope

ADDITIONAL FEATURES

AIRFOIL™ TECHNOLOGY NOZZLES

Stream straighteners align the water flow behind the nozzle.

Nozzles
Geometry on the face of the nozzle creates breakup.

RAPIDSET® ARC ADJUSTMENT REQUIRES NO TOOLS!

Easy tool-free arc adjustment, without any risk to overtorque and damage the interior of the rotor.

OPTIONAL CHECK VALVE

Available with a hold back strength of 2,1m (7') of elevation change.

SPECIFICATIONS

Dimensions

	Lawn Pop	Shrub	HP	Stainless Steel
Body Diameter	57 mm (2¼")	57 mm (2¼")	57 mm (2¼")	57 mm (2¼")
Cap Diameter	67 mm (258")	N/A	67 mm (258")	67 mm (258")
Height	190 mm (7½")	196 mm (7¾")	429 mm (16?8")	190 mm (7½")

OPERATING SPECIFICATIONS
- Radius: 7,6-15,2m (25'-50')
- Arc Set: 40–360°
- Flow Rate: 2,8-36,5 LPM (0.76 – 9.63 gpm)
- Operating Pressure Range: 1,7-4,8 bar (25-70 psi)
- Trajectory: 25° standard, 10° low angle
- Pop-up to nozzle: 127mm (5")
- Inlet: ¾"
- Factory installed with a #3.0 nozzle

OPTIONS AVAILABLE
- Check valve
- RapidSet® Arc Adjustment

WARRANTY
- Five years

Curious about the overall efficiency of this system?
Take a look at page 93.

T5 RAPIDSET SERIES MODEL LIST

T5 Series	
Model	**Description**
T5P-RS	127mm (5") Lawn Pop-up w/o check valve
T5PCK-RS	127mm (5") Lawn Pop-up w/ check valve
T5PE-RS	127mm (5") Lawn Pop-up w/o checkvalve, Effluent
T5S-RS	Shrub
T5SE-RS	Shrub, Effluent
T5HP-RS	305mm (12") High Pop-up
T5HPE-RS	305mm (12") High Pop-up, Effluent

T5 RapidSet® Stainless Steel Series	
Model	**Description**
T5PSS-RS	T5 RapidSet Stainless Steel Rotor
T5PSSE-RS	T5 RapidSet Stainless Steel Rotor with Effluent cover
T5PCKSS-RS	T5 RapidSet Stainless Steel Rotor with pre-installed COM*
TP5CKSSE-RS	T5 RapidSet Stainless Steel Rotor with pre-installed COM* and Effluent cover
T5PCKSS1.5-RS	T5 RapidSet Stainless Steel Rotor with pre-installed COM* and #1.5 nozzle
T5PCKSS2.0-RS	T5 RapidSet Stainless Steel Rotor with pre-installed COM* and #2.0 nozzle
T5PCKSS2.5-RS	T5 RapidSet Stainless Steel Rotor with pre-installed COM* and #2.5 nozzle

** COM: Check-O-Matic Check Valve*

T5 RAPIDSET SERIES NOZZLE PERFORMANCE DATA - METRIC

T5 Nozzle Performance Data—Metric

Nozzle	Pressure bar	Radius m	Flow m³/hr	Flow L/m	Precipitation Rate ■ (mm/hr)	▲ (mm/hr)
1.5	1,7	10,06	0,26	4,4	5,16	5,96
	2,0	10,18	0,28	4,7	5,44	6,29
	2,5	10,40	0,32	5,3	5,90	6,82
	3,0	10,62	0,35	5,9	6,27	7,25
	3,5	10,67	0,38	6,3	6,69	7,73
	4,0	10,76	0,40	6,7	6,99	8,07
	4,5	10,97	0,43	7,1	7,09	8,19
2.0	1,7	10,67	0,33	5,5	5,79	6,68
	2,0	10,79	0,36	6,0	6,20	7,16
	2,5	11,01	0,42	7,0	6,89	7,96
	3,0	11,23	0,47	7,8	7,46	8,62
	3,5	11,28	0,51	8,4	7,94	9,17
	4,0	11,28	0,54	9,0	8,52	9,83
	4,5	11,28	0,59	9,8	9,21	10,64
2.5	1,7	10,67	0,40	6,6	6,98	8,07
	2,0	10,79	0,44	7,3	7,53	8,70
	2,5	11,01	0,51	8,5	8,41	9,71
	3,0	11,23	0,57	9,5	8,99	10,39
	3,5	11,28	0,61	10,2	9,62	11,11
	4,0	11,28	0,65	10,9	10,27	11,86
	4,5	11,28	0,69	11,5	10,89	12,58
3.0	1,7	10,97	0,50	8,3	8,30	9,58
	2,0	11,22	0,54	8,9	8,52	9,84
	2,5	11,66	0,60	10,1	8,88	10,25
	3,0	12,10	0,68	11,3	9,25	10,68
	3,5	12,19	0,75	12,6	10,15	11,72
	4,0	12,19	0,82	13,6	11,01	12,72
	4,5	12,19	0,86	14,4	11,61	13,41
4.0	1,7	11,28	0,67	11,2	10,54	12,17
	2,0	11,64	0,72	12,1	10,69	12,34
	2,5	12,27	0,82	13,7	10,92	12,61
	3,0	12,71	0,91	15,2	11,30	13,04
	3,5	12,80	0,98	16,3	11,92	13,77
	4,0	12,89	1,04	17,3	12,49	14,42
	4,5	13,11	1,10	18,4	12,83	14,81
5.0	1,7	11,89	0,85	14,2	12,05	13,92
	2,0	12,13	0,92	15,3	12,50	14,44
	2,5	12,57	1,04	17,3	13,15	15,18
	3,0	13,02	1,14	19,0	13,44	15,51
	3,5	13,46	1,24	20,7	13,73	15,86
	4,0	13,72	1,33	22,2	14,14	16,33
	4,5	13,72	1,39	23,1	14,73	17,01
6.0	1,7	11,89	0,95	15,9	13,50	15,59
	2,0	12,38	1,04	17,4	13,65	15,76
	2,5	13,22	1,21	20,1	13,79	15,92
	3,0	13,88	1,35	22,4	13,96	16,12
	3,5	14,20	1,45	24,2	14,42	16,65
	4,0	14,42	1,55	25,9	14,93	17,24
	4,5	14,63	1,65	27,4	15,39	17,77
8.0	1,7	10,97	1,31	21,8	21,69	25,05
	2,0	11,83	1,43	23,8	20,43	23,59
	2,5	13,26	1,64	27,3	18,65	21,54
	3,0	14,14	1,80	29,9	17,96	20,74
	3,5	14,50	1,95	32,4	18,51	21,37
	4,0	14,81	2,08	34,7	18,99	21,93
	4,5	15,24	2,20	36,7	18,97	21,91

1. Precipitation rates based on half-circle operation
2. ■ square spacing based on 50% diameter of throw
3. ▲ triangular spacing based on 50% diameter of throw

T5 Low Angle Nozzle Performance Data—Metric

Nozzle	Pressure bar	Radius m	Flow m³/hr	Flow L/m	Precipitation Rate ■ (mm/hr	▲ (mm/hr
1.0 LA	1,7	7,62	0,17	2,8	5,79	6,68
	2,0	7,99	0,19	3,1	5,84	6,74
	2,5	8,53	0,22	3,6	5,93	6,84
	3,0	8,53	0,23	3,8	6,29	7,26
	3,5	8,71	0,25	4,1	6,52	7,53
	4,0	8,84	0,27	4,4	6,82	7,88
	4,5	8,84	0,28	4,7	7,27	8,39
1.5 LA	1,7	8,23	0,25	4,2	7,38	8,52
	2,0	8,60	0,27	4,5	7,38	8,52
	2,5	9,18	0,31	5,2	7,39	8,53
	3,0	9,40	0,34	5,7	7,68	8,87
	3,5	9,45	0,38	6,3	8,41	9,71
	4,0	9,45	0,41	6,8	9,13	10,55
	4,5	9,45	0,43	7,2	9,67	11,16
2.0 LA	1,7	8,84	0,32	5,3	8,14	9,40
	2,0	9,08	0,35	5,8	8,41	9,72
	2,5	9,49	0,40	6,7	8,89	10,27
	3,0	9,71	0,45	7,6	9,64	11,14
	3,5	9,93	0,49	8,2	9,98	11,52
	4,0	10,06	0,52	8,7	10,37	11,98
	4,5	10,06	0,56	9,3	11,00	12,70
3.0 LA	1,7	8,84	0,50	8,3	12,79	14,77
	2,0	9,33	0,54	8,9	12,32	14,23
	2,5	10,10	0,60	10,1	11,84	13,67
	3,0	10,32	0,68	11,3	12,73	14,70
	3,5	10,71	0,74	12,3	12,87	14,86
	4,0	10,97	0,79	13,2	13,17	15,21
	4,5	10,97	0,84	14,0	13,96	16,12

1. Precipitation rates based on half-circle operation
2. ■ square spacing based on 50% diameter of throw
3. ▲ triangular spacing based on 50% diameter of throw

T5 RAPIDSET SERIES NOZZLE PERFORMANCE DATA - U.S. IMPERIAL

T5 Nozzle Performance Data—US

Nozzle	psi	Radius	gpm	Precipitation Rate ■ (in/hr)	▲ (in/hr)
1.5	25	33	1.15	0.23	0.20
	35	34	1.38	0.27	0.23
	45	35	1.59	0.29	0.25
	55	35	1.74	0.32	0.27
	65	36	1.88	0.32	0.28
2.0	25	35	1.45	0.26	0.23
	35	36	1.80	0.31	0.27
	45	37	2.12	0.34	0.30
	55	37	2.30	0.37	0.32
	65	37	2.58	0.42	0.36
2.5	25	35	1.75	0.32	0.28
	35	36	2.20	0.38	0.33
	45	37	2.55	0.41	0.36
	55	37	2.80	0.45	0.39
	65	37	3.05	0.50	0.43
3.0*	25	36	2.20	0.38	0.33
	35	38	2.60	0.40	0.35
	45	40	3.05	0.42	0.37
	55	40	3.52	0.49	0.42
	65	40	3.80	0.53	0.46
4.0	25	37	2.95	0.48	0.41
	35	40	3.55	0.49	0.43
	45	42	4.10	0.52	0.45
	55	42	4.45	0.56	0.49
	65	43	4.85	0.58	0.50
5.0	25	39	3.75	0.55	0.47
	35	41	4.50	0.60	0.52
	45	43	5.10	0.61	0.53
	55	45	5.75	0.63	0.55
	65	45	6.10	0.67	0.58
6.0	25	39	4.20	0.61	0.53
	35	43	5.20	0.63	0.54
	45	46	6.05	0.64	0.55
	55	47	6.65	0.67	0.58
	65	48	7.25	0.70	0.61
8.0	25	36	5.75	0.99	0.85
	35	43	7.10	0.85	0.74
	45	47	8.05	0.81	0.70
	55	48	8.95	0.86	0.75
	65	50	9.70	0.86	0.75

1. Precipitation rates based on half-circle operation
2. ■ square spacing based on 50% diameter of throw
3. ▲ triangular spacing based on 50% diameter of throw

T5 Low Angle Nozzle Performance Data—US

Nozzle	psi	Radius	gpm	Precipitation Rate ■ (in/hr)	▲ (in/hr)
1.0LA	25	25	0.74	0.26	0.23
	35	28	0.94	0.27	0.23
	45	28	1.02	0.29	0.25
	55	29	1.14	0.30	0.26
	65	29	1.25	0.33	0.29
1.5LA	25	27	1.10	0.34	0.29
	35	30	1.35	0.33	0.29
	45	31	1.52	0.35	0.30
	55	31	1.75	0.40	0.35
	65	31	1.90	0.44	0.38
2.0LA	25	29	1.40	0.37	0.32
	35	31	1.72	0.40	0.34
	45	32	2.05	0.45	0.39
	55	33	2.25	0.46	0.40
	65	33	2.45	0.50	0.43
3.0LA	25	29	2.20	0.58	0.50
	35	33	2.60	0.53	0.46
	45	34	3.05	0.59	0.51
	55	36	3.40	0.58	0.51
	65	36	3.70	0.63	0.55

1. Precipitation rates based on half-circle operation
2. ■ square spacing based on 50% diameter of throw
3. ▲ triangular spacing based on 50% diameter of throw

SPECIFYING INFORMATION

T5 RAPIDSET SPRINKLER

T5PXX SS X.XX-RS

Description	*Optional*	*Stainless Steel Riser*	*Custom Nozzles*	*Optional*	
T5	XX	**SS**	X.X	E	**-RS**
T5P— T5 RapidSet Series Rotor	CK— Check-O-Matic*	Stainless Steel	15—5,9 LPM (1.5 gpm) 20—7,8 LPM (2.0 gpm) 25—9,5 LPM (2.5 gpm)	E—Effluent	RapidSet

Example: A T5 RapidSet Stainless Steel Rotor with a 2.5 nozzle and COM, would be specified as: **T5P2.5-RS**

T5 SPRINKLER

T5X-XXXX-XX-X

Description	*Body*	*Nozzle*			*Optional*	*Optional*
T5	**P**	XXXX			XX	E
T5— T5	P—Lawn Pop-up S—Shrub HP—High Pop	15—5,9 LPM (1.5 gpm) 20—7,8 LPM (2.0 gpm) 25—9,5 LPM (2.5 gpm) 30—11,3 LPM (3.0 gpm)	40—15,2 LPM (4.0 gpm) 50—19,0 LPM (5.0 gpm) 60—22,4 LPM (6.0 gpm) 80—29,9 LPM (8.0 gpm)	Low Angle Nozzle 10LA—3,8 LPM (1.0 gpm) 15LA—5,7 LPM (1.5 gpm) 20LA—7,6 LPM (2.0 gpm) 30LA—11,3 LPM (3.0 gpm)	CK— Check-O-Matic* RS— RapidSet (w/Lawn Pop-up only)	E—Effluent

Example: A T5 Lawn Pop-up sprinkler with a 2.5 nozzle, would be specified as: **T5P-25**

THE STANDARD FOR **DURABILITY AND RELIABILITY**

690 SERIES
ROTORS

FEATURES

For nearly 50 years the 690 Series has set the standard for durability and reliability in golf applications. Two 2-speed models provide a slower speed in the non-overlap areas and a faster speed in the overlap areas to provide a more balanced precipitation rate than traditional full circle sprinklers in these application which lowers system costs.

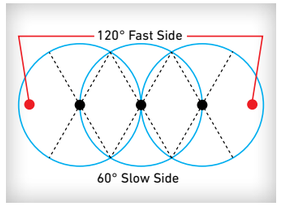
- **696 2-Speed Models**
  Used in single row applications these sprinklers operate at a slower speed over the 60 degree non-overlap area and a faster speed over the 120 degree overlapped areas to provide a balanced application rate.
- **698 2-Speed Models**
  Used in double row applications these sprinklers operate at a slower speed over the 180 degree non-overlap area and a faster speed over the 180 degree overlapped areas to provide a balanced application rate.
- **Artificial Playing Surfaces**
  Radius and flow capabilities are perfect for cooling and rinsing artificial playing surfaces.
- **Electric Valve In Head Models**
  Electric valve in head models provide individual head control that ensures run times can match differing soil, turf and terrain watering requirements, pressure regulation to ensure all nozzles perform at the same pressure and manual ON-OFF-Auto control at the head.

690 SERIES Rotors

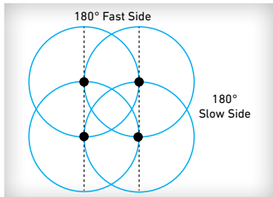
ACCESSORIES AND UPGRADES

102-5011	690 Adapter allows you to upgrade any 690 with FLX54 conversions
102-0950	Required to upgrade all 1.5" Series Sprinklers (650, 670, 680, 750, and 780)

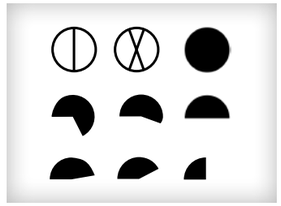
ADDITIONAL FEATURES



696 2-SPEED MODELS
Used in single row applications to provide a balanced application rate.



698 2-SPEED MODELS
Used in double row applications to provide a balanced application rate.



NINE FIXED ARC DRIVE ASSEMBLIES
Ensure positive retention of the coverage area with no arc drift.

SPECIFICATIONS

OPERATING SPECIFICATIONS
- Inlet: 3,8cm (1.5") NPT
- Radius: 26,5 – 32,9m (87' – 108')
- Flow Rate: 193,0 – 311,2 LPM (51,0 – 82,2 gpm)
- Recommended Operating Pressure Range:
  - 5,5 – 7,0 bar (80 – 100 psi)
  - Maximum pressure: 10,3 bar (150 psi)
  - Minimum pressure: 2,8 bar (40 psi)
- Electric Valve-In-Head Solenoid: 24VAC, 50/60 Hz
  - Inrush: 60 Hz; 0,30 Amps
  - Holding: 60 Hz; 0,20 Amps
- Check-O-Matic: Maintains 11,2m (37') of elevation

ADDITIONAL FEATURES
- Manual control at the sprinkler, On-Off-Auto (electric)
- Time-proven, gear-drive design
- All internal components serviceable from the top of the sprinkler
- Durable engineering plastic and stainless steel construction
- Nine arc selections

DIMENSIONS
- Body diameter: 25,4cm (10")
- Body height: 40,5cm (16")
- Weight: 2,5 kg (5.6 lbs)
- Pop-up height to nozzle: 20mm (0.75")

WARRANTY
- Two years; Five years when installed with Toro Swing Joints

PERFORMANCE DATA

690 Series Performance Chart—(Metric)

Base Pressure			Nozzle Set 90		Nozzle Set 91		Nozzle Set 92	
bar	kPa	Kg/cm²	Radius	LPM	Radius	LPM	Radius	LPM
5,5	550	5,61	26,5	193,0	29,3	231,3	30,5	280,1
6,9	690	7,04	27,4	216,1	30,5	278,2	32,9	311,2

Radius shown in meters.
Sprinkler radius of throw per ASAE standard S398.1.

690 Series Performance Chart—(U.S.)

Base Pressure	Nozzle Set 90		Nozzle Set 91		Nozzle Set 92	
psi	Radius	gpm	Radius	gpm	Radius	gpm
80	87	51.0	96	61.2	100	74.0
100	90	57.1	100	73.5	108	82.2

Radius shown in feet.
Sprinkler radius of throw per ASAE standard S398.1.

690 SERIES SPECIFYING INFORMATION

690 SERIES

69X-0X-XXX

Arc	*Valve-In-Head Type*	*Nozzle*	*Pressure Regulation**
69X	**0X**	**XX**	**X**
1—90° 2—180° 4—Full-circle 6—Full-circle, 2-speed (60°–120°) 8—Full-circle, 2-speed (180°–180°) A—150° B—165° C—195° D—210°	1—Normally Open Hydraulic 2—Check-O-Matic 6—Electric	90 91 92	8—5,5 bar (80 psi) 1—6,9 bar (100 psi)

Example: When specifying a 690 Series Sprinkler with a 180° arc, electric valve-in-head, #91 nozzle, and pressure regulation at 5,5 bar (80 psi), you would specify: **692-06-918**

**Electric models only.*

BUILT FOR **TOUGH GOLF COURSE ENVIRONMENTS**

590GF SERIES
SPRAYS

FEATURES

The Toro 590GF Series is the first spray head designed specifically for golf course irrigation with enhanced water management capabilities. The 590GF is built for the tough golf course environment, including harsh debris situations like top-dressing and sand, high water pressures, and daily mower and foot traffic. The 590GF is perfect around bunkers, on small tee boxes, and around the clubhouse. And with its patented X-Flow technology, the 590GF has a built-in shutoff device should a nozzle be damaged or removed and it's standard check valve feature minimizes low head drainage.

Nozzle Options
In additional to the full line of Toro MPR, T-VAN and specialty nozzles the 590GF accepts the revolutionary Precision™ Spray and Precision™ Rotating Series nozzles with optimized distribution uniformity that provides exceptional turf conditions with minimal water usage.

Designed Flush Rate
Sprinkler flushes during pop-up and retraction clearing debris from around the riser to eliminate stick-ups and ensure positive sealing and retraction.

X-Flow® Shut Off Device
The X-Flow shut off feature stops the flow of water if the nozzle is damaged or removed to eliminate flooding, water waste and soil erosion.

Prevent Low Head Drainage
The standard check valve prevents low head drainage with up to 3 m (10') of elevation change minimizing soil erosion and water waste.

590GF SERIES SPRAYS

590GF-4 **590GF-6** **590GF-12**

ADDITIONAL FEATURES

FLANGED CAP
Flanged cap installs below grade to stabilize the body position and maintain optimum nozzle performance.

WITH X-FLOW
X-Flow eliminates water waste, soil erosion and flooding

WITHOUT X-FLOW
Water waste, soil erosion and flooding occur

SPECIFICATIONS

OPERATING SPECIFICATIONS
- Radius: 0,6 – 7,9m (2' – 26')
- Recommended pressure range: 1,7 – 3,4 bar (25-50 psi)
  maximum – 5,2 bar (75 psi)
- Flow rate: 0,15 – 17,8LPM (0.04 – 4.71 gpm)
- 2 gpm flush rate

ADDITIONAL FEATURES
- Stainless steel retraction spring
- All bodies shipped with flush plug in place
- Ratcheting riser feature for arc adjustment

DIMENSIONS
- Body diameter:
  - 34,9mm (1.375") on 4P and 6P
  - 41,275mm (1.625") on 12P
- Cap diameter: 50,8mm (2")
- Inlet: 12,7mm (0.5") female-threaded

WARRANTY
- Two years; Five years when installed with Toro Swing Joints

ACCESSORIES AND UPGRADES

Risers and Extenders

570-6X
- Male-inlet threads install onto any 590GF sprinkler or to provide a 15,2cm (6") extension
- Maximum pressure: 5,2 bar (75 psi)

570SR-6 and 570SR-18 Risers
- 12,7mm (0.5") male-threaded inlet for installation on pipe fittings
- Maximum pressure: 5,2 bar (75 psi)
- Height: 15,2cm and 45,7 (6" and 18")

590G SERIES SPECIFYING INFORMATION

590GF SERIES SPRAYS

590GF-XX	
Model Number	*Description*
590GF-4 590GF-6 590GF-12	10,2cm (4") Pop-Up 15,2cm (6") Pop-Up 30,5cm (12") Pop-Up

STABLE COMMUNICATION, **WITH TORO CABLES**

IRRIGATION COMMUNICATION CABLE

FEATURES

Paige® Electric manufactures and supplies irrigation communication cable for Toro® LYNX® LAC, LYNX Satellites and LYNX Smart Hub systems. Irrigation communication cable is designed to transmit and receive signals between irrigation satellites, central computers, weather stations and sensors while minimizing electrical, magnetic and radio frequency interferences.

TSW16AWG Toro® Irrigation Communication Cable

TSW16AWG is irrigation communication cable for Toro LYNX Satellites and LYNX Smart Hub systems. It is designed to transmit and receive signals between irrigation satellites, central computers, weather stations and sensors while minimizing electrical, magnetic and radio frequency interferences.

SPECIFICATIONS

DESCRIPTION
- Irrigation communication cable
  - Direct burial
  - Two conductor, 16 AWG, stranded copper
  - Shielded with an aluminum shield and drain wire

CONSTRUCTION
- Conductor
  - Stranded (7 strands) 16 AWG soft annealed tin coated copper conforming to ASTM-B-3 and B-8.
- Insulation
  - PVC; yellow and gray; 0.406 mm (0.016") thick
- Shield
  - 2 mil aluminum backed polyester shielding with a 16 AWG solid tinned copper drain wire in contact with the aluminum side with a 25% minimum overlap
- Jacket
  - Black Polyethylene; 1.143 mm (0.045") thick, sunlight and moisture resistant; 7.62 mm (0.300") O.D.
- Cable assembly
  - Insulated conductors and drain wire are twisted together with a 7.62 cm (3") maximum lay. Nonhydroscopic fillers inserted in the valleys to insure roundness
- Print legend
  - "PAIGE ELECTRIC P7162D listing agency and number 16 AWG 1PR SHIELDED 30V SPRINKLER SYSTEMS WIRE AND/OR UNDERGROUND LOW ENERGY CIRCUIT CABLE RoHS country of origin" printed every 2 feet

AGENCY LISTING
- Listed by UL, ETL or CSA to UL Standard 1493

TSW16AWG CABLE is offered in two spool sizes: 500 m or 1,000 m.

TSW16AWG – Part Numbers

Part No	Description	Jacket Color	Spool size (meters)
TSW16AWG-500	1 Pair Satellite and Smart Hub Communication Cable, Shielded DB, w/ Drain Wire	Black	500
TSW16AWG-1000	1 Pair Satellite and Smart Hub Communication Cable, Shielded DB, w/ Drain Wire	Black	1000

TSW16AWG – Packaging

	Spool Dimensions (mm)				Weights (Kg)		
Spool size	Flange Diameter	Height	Core Diameter	Arbor Hole	Spool	Cable Only	Total Shipping
500m	520	230	200	68	4.55	18.45	23
1000m	550	300	200	68	6	36.9	45

SPECIFYING INFORMATION

TSW16AWG

TSW16AWG-XXXX	
Cable	*Spool Size*
TSW16AWG	XXXX
TSW16AWG— 1 Pair Satellite and Smart Hub Communication Cable, Shielded DB, w/ Drain Wire	500—500 meters 1000—1000 meters
Example: 1 Pair Satellite and Smart Hub Communication Cable, Shielded DB, w/ Drain Wire would be specified as: **TSW16AWG-1000**	

1.5 & 2.5 MM2, 2 CORE CABLES - FEATURES

Irrigation Control Cables - 1.5 & 2.5 mm², 2 CORE

These cables were designed, and are manufactured and tested, based upon specifications provided by TORO® (Form No.: LUK200-AACA ©2005.)

SPECIFICATIONS

CONSTRUCTION
- Conductor
  - Single core, round, solid bare copper, and soft annealed for maximum flexibility. Nominal diameters: 1.36 mm for 1.5 mm2 and 1.76 for 2.5 mm2.
- Insulation
  - 0.7 mm wall thickness, polyethylene for high cut-through resistance and tensile strength.

Colors: Black & White.
Nominal conductor diameters: 2.80 mm for 1.5 mm2 and 3.16 mm for 2.5 mm2.

- Inner Filler Core
- Extruded non-hydroscopic polyvinylchloride, white. Minimum inner cover thickness of 0.5 mm. Diameter: 6.52 mm for 1.5 mm2 and 7.50 mm for 2.5 mm2.
- Outer Sheath
  - Red High Density Polyethylene for high abrasion resistance, cut-through resistance and tensile strength. Nominal wall thickness of 1.8mm. Nominal overall cable diameters: 10.2mm for 1.5mm2 and 11.1mm for 2.5mm2

PRINT LEGEND
- TORO 2 CORE CABLE 2*_ _MM2 ***METER, where _ _ is 1.5 or 2.5 and *** is sequential random meters.

Printed every meter

2.5 MM CABLE
- Available in 4 colours for easy installment and troubleshooting:

- red
- black
- green
- white

Electrical & Mechanical Design Details

	1.5 mm²	2.5 mm²
Maximum current, buried* (Amperes)	42	48
Maximum current, open air* (Amperes)	32	36
Maximum DC current at 20 °C (Ohms/km)	12	7.21
Maximum conductor temperature	90 °C	
Maximum short circuit conductor temperature	250 °C	

Based on ambient temperature of 30 °C for cable in the open air, and based on 15°C (British standard ground temperature at 0.5 meters) for buried cable.

Packaging Details

Put-Up		Spool Dimensions - mm (inches)					Weights Kg (lbs)		
m	ft	Cable Size (mm²)	Flange Diameter	Height	Core	Arbor Hole	Cable Only	Spool Only	Total
500	1,640	1,5	500 (19.7)	400 (15.7)	160 (6,3)	42 (1.7)	59 (23.2)	6 (2,4)	65 (25.6)
1,000	3,280		600 (23.6)	500 (19.7)		42 (1.7)	118 (46.4)		124 (48.8)
500	1,640	2,5	500 (19.7)	400 (15.7)		42 (1.7)	76 (29.9)		82 (32.3)
1,000	3,280		600 (23.6)	500 (19.7)		42 (1.7)	152 (59.8)		158 (62.2)

SPECIFYING INFORMATION

T D W 2 5 M

TDWXXM-XXXXX			
Cable	*Cable Size*	*Spool Size*	*Colour*
TDW	**XXM**	XXXX	X
TDW— Toro Wire Decoder	15—1,5 mm² 25—2,5 mm²	500—500 meters 1000—1000 meters	empty—coat red B—coat black G—coat green W—coat white
Example: When specifying a red coated 2,5 mm² Toro Wire Decoder of 1000 meters, you would order: **TDW25M-1000**			

TDW0221T-1000 TORO® JACKETED DECODER WIRE - FEATURES

TDW0221T-1000 Toro® Jacketed Decoder Wire

DIRECT BURIAL. SIZES: 14 or 2.1 mm, SOLID COPPER, 2-CONDUCTOR, P7350D 1.0 SCOPE
This specification covers jacketed cables containing two listed Golf Course Sprinkler wires, single conductor, suitable for direct burial, for operation up to 600 volts, and temperatures up to 60 °C.

SPECIFICATIONS

CONSTRUCTION
- Inner Conductors
  - Soft drawn bare copper meeting the requirements of ASTM specification B-3 or B-8. Insulation shall be low density high molecular weight polyethylene and a thickness of 0.045", per Paige Electric specification P7079D. The two conductors (black and white) shall be twisted with a minimum lay of 4".
- An optional Mylar tape may be used over the conductors.
- A rip cord shall be placed directly below the outer jacket.
- Overall jacket
  - Red, high density polyethylene with a thickness of 0.035". Available with optional identification stripe colors as listed in the table below. Stripe to be integrally extruded into and through the complete wall of the jacket w ith an approximate width of 1/8". The jacket shall be sufficiently round, and loose, to facilitate its removal when being stripped. Minimum inner diameters of the outer jacket.

SURFACE PRINT:
- Inner Conductors
  - "Paige Electric P7079D 14 or 12 AWG or 2.1 mm PE Listing file Number 600V Sprinkler System Wire Direct Burial"
- Outer Jacket
  - "Paige Electric, P7350D, 14 or 12 AWG or 2.1 mm PE 600V Sprinkler System Wire Direct Burial Only for Toro Decoder Systems RoHS"

TEMPERATURE RATING
- -55 °C to +60 °C

PUT-UPS
- 1800m and some odd lengths.

SPLICING RECOMMENDATIONS
- Wire splices are the weak link of any electrical circuit. It is especially important to make proper joints in irrigation systems because the joints are exposed to wet and damp environments that can cause corrosion of the copper conductor, and premature failure. Paige Electric recommends the strict use of Model DBR/Y-6, as manufactured by the 3M Company (Paige specification P7364D) for 14 AWG 2 or 3 conductors. For 12 AWG and splices of 4 to 6 conductors, Paige Electric recommends its Re-enterable connectors (Paige Specification P7408D).

Construction	*Inches*	*mm*
14 AWG/2c - 2.1 mm	0.358	9.1

A "T" drill bit, whose diameter is 0.358", shall be used to measure the minimum inner diameter of 14 AWG/2c cables.

A "W" drill bit, whose diameter is 0.386", shall be used to measure the minimum inner diameter of 12 AWG/2c cables.

SPECIFYING INFORMATION

T D W 0 2 2 1 T - 1 0 0 0

TDWXXM-XXXXX			
Toro Part No.	*Size*	*Jacket Color*	*Shipping Weight (kg/ 1,000 m)*
TDW0221T-1000	14 AWG 2 Cond.	Red	96.72

BARE COPPER WIRE - FEATURES

Bare Copper Wire (refer to Grounding Guidlines for installation)

- Soft-Annealed, uncoated copper, 18AWG - 1/0AWG.
- 250, 500, and 1,000 foot spools. Custom lengths possible.
- Solid or stranded.

Note: Paige part numbers

SPECIFICATIONS

Wire Size (AWG)

	18	16	14	12	10	8	6	4	2	I/O
Solid	160120	160137	160248	160364	160465	160629	160635	160678	160738	–
Stranded	-	-	-	160365	160466	160630	160636	160679	160739	160074

Grounding, Bonding And Shielding Products
Copper Ground Plates

Paige® Part #	Toro® Part #	Ground Plate	Thickness	Wire AWG	Wire Feet
182199IC		4" x 96"	0.060" Minimum	6	25
182201IC	182201PW	4" x 36"	0.060" Minimum	10	10

Copper-Clad Ground Rods

Part #	Description
182000	5/8" x 8'
182007	5/8" x 10'

Ground Rod Clamps, Cast Bronze
For 5/8" Diameter ground rods. Paige part number 182005

Copper-Clad Ground Rods With Welded Insulated Conductor

Part #	Ground Rod	Wire AWG	Wire Feet
182000IC10	5/8" x 8'	10	15
182000IC6	5/8" x 8'	6	15
182007IC6	5/8" x 10'	6	25

Toro Part No.: 182201PW same as Paige Part No.: 182201IC

CADWELD PLUS "ONE-SHOT" - FEATURES

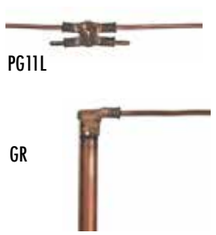
Cadweld Plus "One-Shot"

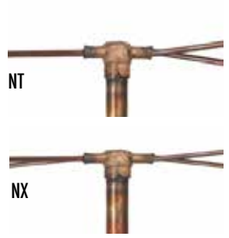
- Permanently welds multiple bare copper wires together or bare copper wire to 5/8" diameter ground rods, so the connection doesn't loosen or corrode
- UL® listed. Exothermic reaction welding process meets National Electrical Code® requirements

SPECIFICATIONS

Cadweld Connections

Wire Sizes (AWG)	No. of Connections	Cadweld Part No.	Paige Part No.
6 & 8	1	GR1161GPLUS	1820037P
6 & 8	2	GT1161GPLUS	1820039P
6 & 8	3	NT1161GPLUS	1820038P
6 & 8	4	NX1161GPLUS	1820060P
4	1	GR1161LPLUS	1820043P
4	2	GT1161LPLUS	1820053P
4	3	NT1161LPLUS	1820054P
4	4	NX1161LPLUS	1820061P
6 & 8	4	PG11LPLUS	1820074P
PLUSCU Battery Control Unit			1820040CU





TORO® DBRY-100 - 3M™ DIRECT BURY SPLICE KIT - DBO/B-6 AND DBR/Y-6

Toro® DBRY-100 - 3M™ Direct Bury Splice Kit - DBO/B-6 and DBR/Y-6

The 3M™ Direct Bury Splice Kits are used to electrically connect two or more pre–stripped copper wires and moisture seal the connection for direct burial. It includes the 3M "Performance Plus" Electrical Spring Connector and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant gel. They are ideal for splicing wires and cables in irrigation and Low Voltage Lighting systems. For residential, commercial, golf, and other green industry applications.

Water Proof and Sunlight Resistant

- The DBRY-100 may be installed above or below ground, inside a "valve box" or buried next to a valve-in-head sprinkler or light fixture, or submerged in water
- Meets European Standard EN 61984
  - Applicable ratings under this standard: IP68, Pollution Degree 3

Strain relief

The gel-filled tube includes a lid that compresses the wire insulation when closed. This applies a pressure, known as "strain relief" that keeps the connection inside the tube when the wires are pulled-upon. The connector tube includes channels for three sets of wires.

Made in the USA by the 3M Company

Unquestioned quality by a name you can trust.

The "Performance Plus" connectors have an aggressive quick-bite: It makes a fast and reliable mechanical connection over a wide temperature range. The R/Y+ connector locks in place when inserted into the gel-filled tube. It accepts a multitude of direct burial copper wire combinations, as listed in the Table below.

GROUND ENHANCEMENT MATERIALS - FEATURES

Ground Enhancement Materials/ Earth Contact Backfills

Superior conductive material

Improves the effectiveness of ground rods/plates

- **Permanently reduces resistance-to-ground** Regardless of soil conditions
- **Ideal for use in dry conditions, rocky ground and sandy soils**
- **50 pound bags**
- **PowerSet™ hardens when wetted**

Can be used in any application

Paige part number 1820058

PowerFill™ is non-hardening

Must be used in non-porous soils.

Paige part number 1820059.

Non-flammable

Safe to use while igniting CADWELDs and in storage

Toro Part No.:
18200059

TORO® DBRY-100 - 3M™ DIRECT BURY SPLICE KIT - SPECIFICATIONS

REDUCES INVENTORY AND SKUS
- Replaces the following 3M connectors: DBY, DBR, DBY-6, DBR-6, DBR/Y, DBY-Kit, DBRKit,
- DBY-6-Kit, DBR-6-Kit, DBR/Y-Kit.

RATED FOR 600 VOLTS:
- Two connectors for most connections required in irrigation (conventional and decoder types) and landscape lighting systems. Listed under UL486D for USA and Canada, File E102356. Meets Directive 2006/95/EC and IEC standards EN61984:2009, EN60998- 1:2004, and EN60998-2-4:2005.

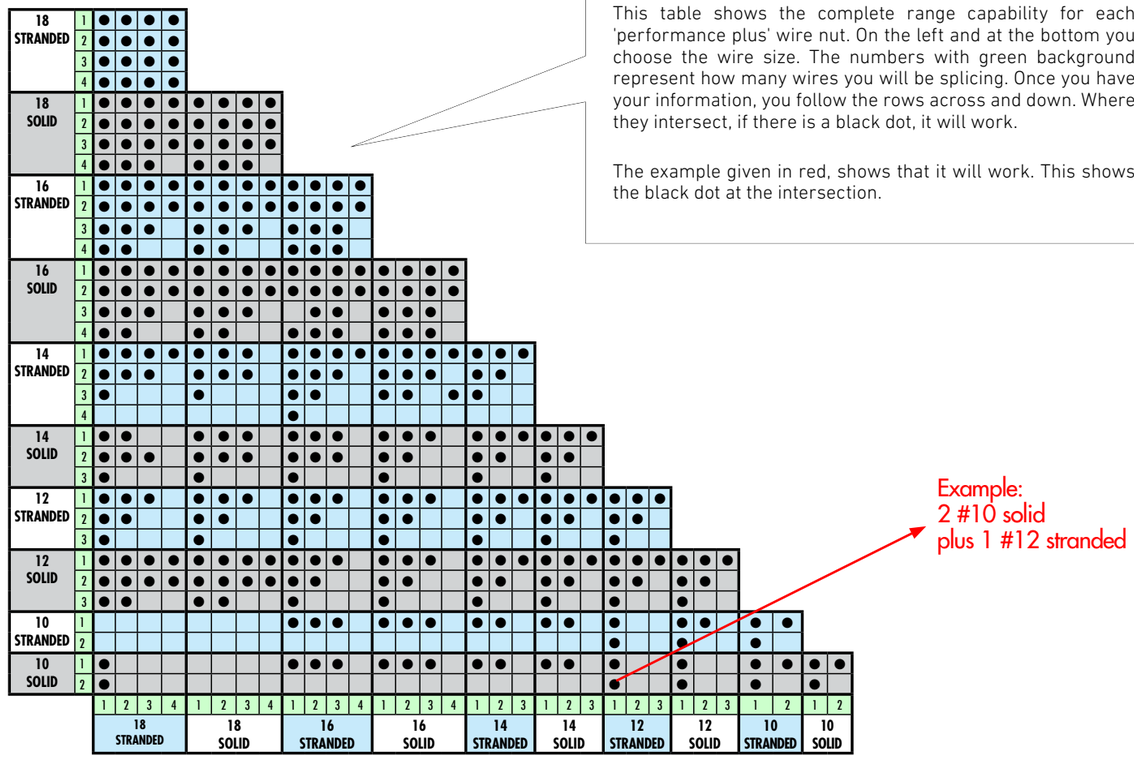
BULK OR KITS-OF-TWO CONNECTORS:
- Each waterproof connector includes the "Performance Plus" twist-on connector (wire nut*), and a gel-filled tube

OPERATING TEMPERATURE:
- -40 °F to 221 °F (-40°C to 105 °C)

Metric Wire Combination	
	Quantity
Size (mm^2)	DBR/Y-6
0,5	5-8
0,75	3-7
1,0	2-8
1,5	2-7
2,5	2-5
4,0	2-4
6,0	2

* Only AWG wire combinations are UL listed or CSA certified.

Paige Part Number		270672
3M Part Number		DBR/Y-6 Bulk
Toro Part Number		**DBRY-100**
Description		Bulk pack of 100 each gel-filled tubes and twiston connectors.
Case Data	Weight lb (Kg)	5.1 (2.3)
	Dimensions inch (cm)	14.25 x 7.625 x 7.5 (36 x 19 x 19)
Pallet Data	Quantities	75 cases
		7,500 tubes
	Weights lb (Kg)	402 (183)
	Dimensions inch (cm)	48 x 42 x 43 (122 x 107 x 109)
	Volume, ft^3 (m^3)	50.2 (1.42)



This table shows the complete range capability for each 'performance plus' wire nut. On the left and at the bottom you choose the wire size. The numbers with green background represent how many wires you will be splicing. Once you have your information, you follow the rows across and down. Where they intersect, if there is a black dot, it will work.

The example given in red, shows that it will work. This shows the black dot at the intersection.

FULL LINE OF **SWING JOINTS**

TORO
SWING JOINTS

FEATURES

Toro swing joints cover all golf sprinkler thread types. Swing joints provide the flexibility to align the sprinkler to proper grade and level positioning to ensure optimum water use through maximum nozzle distribution uniformity.

Minimize Friction Loss
2,54 3,18 and 3,81cm (1", 1.25" and 1.5") models are available to cover flows exceeding 80 gpm, and minimize friction loss to ensure optimum pressure is available at each sprinkler.

Saddle And Glue Tee Models
Two swing joint types are available with 2" service tees included; glue tees for PVC piping applications and saddle tees for HDPE piping applications. Both tee styles are available with 2,54 3,18 and 3,81cm (1", 1.25" and 1.5") double o-ring sealing outlets.

Standard 2X90 And Ultra 4X90 Outlet Configurations
The standard 2x90 models provide two 90's at the outlet for alignment in two directions and the Ultra 4x90 models provide four 90's at the outlet for maximum alignment flexibility in four directions.

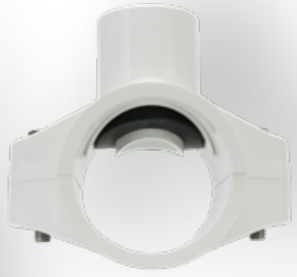
Quick Coupler Models
All swing joint styles are available with a quick coupler outlet that includes both an anti-rotation and position stabilizing feature to ensure the quick coupling valve stays secure during key installation and removal.

1", 1¼" and 1½"

Standard 2 x 90 and Ultra 4 x 90

Quick Coupler

Glue tees, Saddle tees



DIN Saddle
Standard 63 mm Saddle

Toro Tool Tip:
Use a 1¼" hole saw for the 1" Saddle Tee.
Use a 1½" hole saw for the 1¼" and 1½" Saddles.

ADDITIONAL FEATURES

1¼" FEMALE ACME X 1" MALE ACME ADAPTER
Allows you to upgrade existing Rain Bird® Eagle™* 700 1¼" sprinklers to any Toro 800S or DT Series Sprinkler. P/N TA36-132

DURABILITY AND RELIABILITY
Constructed from schedule 80 PVC for durability and provides double o-ring seals on all swing fittings to ensure a lifetime of reliability and leak free performance.

SPECIFICATIONS

- Schedule 80 PVC construction
- Double o-ring swivel joints
- Low friction loss characteristics
- **Pressure Rating:** 15 psi
- **Burst Pressure Safety Rating:** 800 psi
- **Standard models** with 2 x 90 outlet configuration
- **Ultra models** with 4 x 90 outlet for maximum alignment flexibility
- **3 inlet fittings styles:** ACME, male thread and 4" spigot
- **2 outlet fitting styles:** ACME and male thread
- **Lay Lengths:** 8", 12" and 18"
- **Saddle Tee models:** 2" and 63 mm tees with 1", 1¼" or 1½" outlet
- **Glue Tee models:** 2" tee with 1", 1¼" or 1½" outlet
- **Glue 90°models:** 2" 90° with 1", 1¼" or 1½" outlet
- **Quick coupler models** with Dura-lock anti-rotation feature
- Compatible with all brands of service and saddle tees

Warranty
- Five years
- Toro Golf sprinkler warranty extended to five years when purchased and installed with a Toro Swing Joint.

TORO SWING JOINTS SPECIFYING INFORMATION

TORO SWING JOINT

TSJ-ABCDEFG-HI-J-KLMN

Description	*Inlet Size*	*Inlet Type*	*Size*	*Lay Length*	*Number of Elbows*	*Outlet Size*	*Outlet Type*
TSJ	**AB**	**CDE**	**FG**	**HI**	**J**	**KL**	**MN**
TSJ—Toro Swing Joint	10—1" (2.54 cm) 12—1.25" (3.18 cm) 15— 1.5" (3.8 cm) 50— 0.5" (1.25 cm) 75— 0.75" (1.9 cm)	A—ACME thread ST—Saddle Tee B—BSP DST—DIN Saddle M—MIPTS	Blank—same as inlet size 10— 1" (2.54 cm) 12— 1.25" (3.18 cm) 15— 1.5" (3.8 cm)	4—4" (10.16 cm) 8— 8" (20.32 cm) 12— 12" (30.48 cm) 16— 16" (40.64 cm) 18— 18" (45.72 cm)	3—Standard Unibody 4—Standard Unibody for Saddle Tees 5—Ultra Unibody 6—Ultra Unibody for Saddle Tees	10—1" (2.54 cm) 15— 1.5" (3.8 cm)	M—MIPT (Male pipe thread) A—ACME thread Q—Quick Coupler, inlet size and size are different QC—Quick Coupler inlet size and size are the same B—BSP

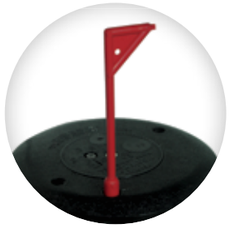
Example: A Toro 1.25" (3.18 cm) Swing Joint with an 1.25" (3.18 cm) ACME inlet, 12" (30.48 cm) lay length, 3 elbows (standard unibody) and 1" (2.54 cm) ACME outlet fitting would be specified as: **TSJ-12A-12-3-10A**

**Rain Bird is a registered trademark of Rain Bird Corporation. Eagle is a trademark of Rain Bird Corporation.*

SPRINKLER **PERFORMANCE.**

SPRINKLER
TOOLS & ACCESSORIES

TOOLS AND ACCESSORIES



SELECTOR TOOL FOR ALL ELECTRIC GOLF SPRINKLERS

995-15

Allows user to manually turn the sprinkler "ON", turn or leave it "OFF" or place it into the "AUTO" position awaiting a command from the controller

MULTI PURPOSE TOOL FOR ALL GOLF SPRINKLERS

995-83

Riser pull up for INFINITY®, FLEX800, DT and 800S Series. Lower snap ring remover on all models.

ARC ADJUSTMENT TOOL 3/32" ALLEN WRENCH

995-82

765, 785, 865S, 885S Arc adjustment of the part circle drives INFINITY®, FLEX800, DT and 800S Series. Adjustment of the radius reduction screw

NUT DRIVERS

995-105

5/16" INFINITY®, FLEX800, DT and 800S Series
TruJectory adjustment on INFX5-6/ FLX5-6 models
Inner, intermediate and back nozzle removal on all DT and 800S models

995-99

5/8"
Dual trajectory selection
Main nozzle removal on all models

995-79

7/16" 834S/854S pre August 2007
Inner, intermediate and back nozzle removal
650/760/780/860S/880S Inner, intermediate and back nozzle removal

995-81

9/16" 760/780 Series Main 995-80
1/2" 760/780/860S/880S
Nozzle base jam nut removal

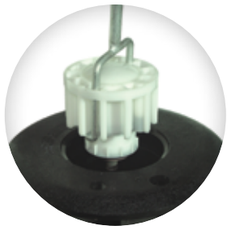
995-53

3/8" 660/680 Cap nut removal

RISER REMOVAL TOOLS

995-85

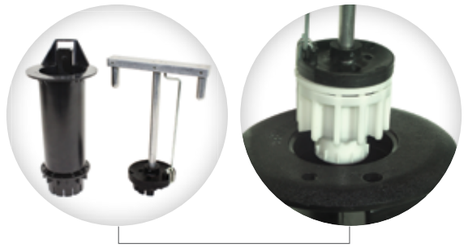
Drive assembly extraction tool 730, 760, 780, 860S,880S
Threads onto the drive output shaft and allows removal of the drive from the body



VALVE REMOVAL TOOLS

995-08

All 1" golf models and 640
995-09
All 1.5" models and 690



VALVE INSERTION TOOLS

Aligns and Installs Valve into the Body
995-35
640 VIH body
995-76
All 1" golf models (Except INFINITY®)
995-101
All 1.5" golf models (Except INFINITY®)
995-12
690 body
118-1843
INFINITY® 1.5" models
118-1844
INFINITY® 1" models

VALVE SNAP RING PLIERS WITH SCREEN REMOVER

995-100

All Golf sprinklers lower snap ring removal on all models
Rock screen removal on all INFINITY®, FLEX800, DT and 800S Series
Valve removal on all models

RISER HOLD UP TOOLS

Allow for Nozzle Servicing
118-0954 *Riser hold up tool, red*
995-55 *All 700 models*
995-102 *Universal hold up tool, all 700, 800S, DT, INFINITY® and FLEX800 models*

ADJUSTMENT TOOL FOR PRECISION™ SERIES ROTATING NOZZLES

PRNTOOL

Adjusts arc and radius

RISER PULL UP TOOL

PNOZZTOOL

Used on 590GF sprays

T7 ROTOR ADJUSTMENT TOOL

102-6527

RISER HOLD UP TOOL

118-0954

ENSURING MAXIMUM **EFFICIENCY & UNIFORMITY.**

Simply put, pressure regulated system in valves regulate the water pressure flowing to the sprinkler so that it is consistent across the entire system.

A pressure regulator ensures that water pressure consistently falls within recommended psi range regardless of the water pressure before it reaches the valves. Sprinklers operating at optimal pressure last longer, save water by reducing misting and fogging and contribute to healthier lawns due to consistent water application.

TORO® GOLF VALVES

Model		P220G Series	P220G Scrubber Series
#01 Flow Range		19-681 LPM (5.0-180 gpm)	19-568 LPM (5.0-150 gpm)
#02 Operating Pressure		0,7-15,2 bar (10-220 psi Max)	0,7-15,2 bar (10-220 psi Max)
#03 Conditions	Electrically Activated Systems	✓	✓
	Pressure Regulated Systems	✓	✓
#04 Sizes	25 mm (1")	✓	✓
	40 mm (1.5")	✓	✓
	50 mm (2")	✓	✓
#05 Configurations	Angle	✓	✓
	Inline/Globe	✓	✓
#06 Inlet/Outlet	Threaded (Female)	✓	✓
#07 Features	Manual Flow Control	✓	✓
	Pressure Regulation	✓	✓
	Internal Manual Bleed	✓	✓
	External Manual Bleed (Flush)	✓	✓
	ACT™ SYSTEM		✓
#08 Body Construction	Glass-filled Nylon	✓	✓
#09 Warranty		2 Years	2 Years

VALVES - TABLE OF CONTENTS

DELIVER OPTIMUM **PRESSURE AND FLOW.**

P220G AND P220GS SERIES
VALVES

FEATURES

The P220G and P220GS Series provide a full family of plastic valves that can deliver the water to meet the challenging needs of today's courses. With precise pressure regulation these valves deliver the optimum pressure and flow requirements to every sprinkler on the zone ensuring maximum uniformity of the water to the turf.

- **EZReg® Pressure Regulating System**
  Can be adjusted from 0,3-6,9 bar (5-100 psi) to deliver the optimum pressure for every need.
- **Spike Guard™ Solenoid**
  With its 20,000 volt lightning rating, it virtually eliminates the need for solenoid replacements in high lightning environments.
- **Internal Manual Bleed**
  Ensures the optimum pressure of the system even when being operated manually.
- **Double-beaded Fabric Reinforced Diaphragm**
  Provides superior performance and extended life without tearing in high-pressure golf applications.

P220G-27-04
25mm (1")

P220G-27-06
40mm (1.5")

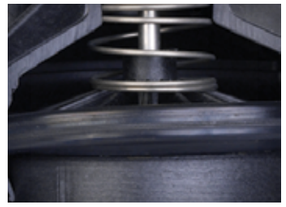
P220G-27-08
50mm (2")

ADDITIONAL FEATURES

SELF CLEANING METERING PIN
A self-cleaning feature that operates two times during every valve cycle ensuring smooth positive opening and closing.

EZREG® PRESSURE REGULATING SYSTEM

INTERNAL MANUAL BLEED HANDLE



DOUBLE-BEADED FABRIC REINFORCED DIAPHRAGM
Provides superior performance and extended life.

ACT™ SYSTEM
Patent-pending Active Cleansing Technology – in which the turbine is constantly rotating to clean the metering/filtration area. This ensures that dirt, algae, chlorines, chloramines and water treated with ozone will not impede valve performance (P220GS only).

P220G AND P220GS SERIES SPECIFYING INFORMATION

P220GX-XX-0XYY			
Type	*Body Style*	*Size*	*Optional*
P220GX	**XX**	**X**	**YY**
P220G—P220G Series Plastic Valve P220GS—P220GS Plastic Scrubber Valve	27—NPT, Pressure-regulated 0,3-6,9 bar (5–100 psi) 24—BSP, Pressure Regulated 0,3-6,9 bar (5-100 psi)	4—25mm (1") 6—40mm (1.5") 8—50mm (2")	DL—DC Latching Solenoid
Example: A 25mm (1") P220G Series plastic electric, pressure-regulating valve with a 60 Hz solenoid, would be specified as: P220G-27-04			

P220G AND P220GS SERIES SPECIFICATIONS

OPERATING SPECIFICATIONS

- Flow Range:
  - 25mm (1"): 18,9-189,3 LPM (5-50 gpm)
  - 40mm (1.5"): 113,6 - 416,4 LPM (30 - 110 gpm)
  - 50mm (2"): 302,8 - 681,4 LPM (80 - 180 gpm)
- Operating Pressure: 15,2 bar (220 psi) maximum pressure rating
  - Electric: 0,7 - 15,2 bar (10 - 220 psi)
- Pressure regulating:
  - Outlet: 0,3 - 6,9 bar (5 - 100 psi ± 3 psi)
  - Inlet: 0,7 - 15,2 bar (10 - 220 psi)
- Minimum pressure differential (between inlet and outlet) for pressure regulation: 0,7 bar (10 psi)
- Burst pressure safety rating: 51,7 bar (750 psi)
- Body styles:
  - Globe/Angle: 25mm, 40mm, and 50mm (1", 1.5", 2") female threads
- Spike Guard™ Solenoid: 24 VAC (50/60 Hz) Standard
  - Inrush: 60 Hz; 0,12 amps
  - Holding: 60 Hz; 0,1 amps

ADDITIONAL FEATURES

- Glass-filled nylon and stainless steel construction
- Internal and External bleed
- No external tubing
- Standard, built-in Schrader-type valve for downstream
- pressure verification
- Flow control independent of solenoid
- Self-aligning bonnet to ensure correct installation
- Self-cleaning, stainless steel metering rod
- Low-flow capability down to 5 gpm
- Low-power requirement for longer wire runs

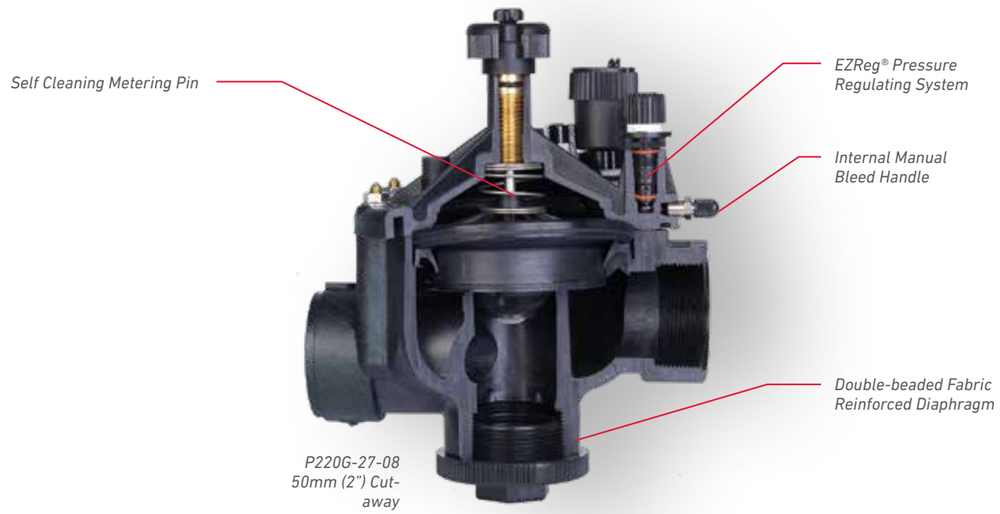
DIMENSIONS

- 25mm (1"): 146 x 127mm (5.75" H x 5" W)
- 40mm (1.5"): 165 x 152mm (6.5" H x 6" W)
- 50mm (2"): 191 x 178mm (7.25" H x 7" W)

WARRANTY

- Two years

P220G AND P220GS SERIES VALVE CUT-AWAY



P220G-27-08 50mm (2") Cut-away

P220G AND P220GS SERIES VALVE WIRE SIZING

*Maximum One-way Distance (in meters) Between Controller and Valve Using Spike-Guard™ Solenoid**

Ground Wire	Control Wire						
	18	16	14	12	10	8	6
18	622	768	896	1000	1079	1134	1177
16	768	993	1219	1420	1591	1713	1804
14	896	1219	1579	1939	2262	2530	2731
12	1000	1420	1939	2512	3078	3597	4017
10	1079	1591	2262	3078	4017	4895	5721
8	1134	1603	2530	3597	4895	6340	7785
6	1122	1817	2731	4017	5700	7785	10083

* Solenoid Model: 24 VAC
Pressure: 10,3 bar (150 psi)
Voltage Drop: 4 V
Minimum Operating Voltage: 20 V
Amperage (peak) 0.12 A

P220G AND P220GS SERIES FRICTION LOSS DATA - METRIC

P220G Series Friction Loss Data—(Metric)

Size	Configuration	LPM Flow																
		25	50	75	100	125	150	200	250	300	350	400	450	500	600	700	800	900
25mm (1")	Globe	0,28	0,29	0,22	0,28	0,50												
	Angle	0,28	0,29	0,21	0,19	0,33												
40mm (1.5")	Globe				0,11	0,16	0,25	0,36	0,48	0,63	0,77	0,94	1,13					
	Angle				0,09	0,11	0,19	0,28	0,36	0,49	0,61	0,75	0,93					
50mm (2")	Globe									0,14	0,19	0,23	0,28	0,33	0,39	0,45	0,52	0,60
	Angle									0,08	0,11	0,14	0,17	0,19	0,23	0,27	0,30	0,36

Notes: *For optimum performance when designing a system, calculate total friction loss to ensure sufficient downstream pressure.*
For optimum regulation performance, size regulating valves toward the higher flow ranges.
Flow rates are recommended not to exceed 0,3 bar loss. Values shown in bar.

P220GS Scrubber Valve Series Friction Loss Data*—(Metric)

Size	Configuration	gpm Flow																
		5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
1"	Globe	0,32	0,33	0,21	0,42	0,74												
	Angle	0,29	0,32	0,18	0,38	0,65												
1½"	Globe			0,08	0,11	0,20	0,30	0,43	0,59	0,77	0,97	1,19	1,41					
	Angle			0,07	0,10	0,16	0,25	0,36	0,48	0,64	0,81	1,01	1,20					
2"	Globe									0,25	0,32	0,37	0,47	0,57	0,62	0,72	0,80	
	Angle									0,19	0,24	0,30	0,39	0,44	0,51	0,61	0,65	

Note: *For optimum performance when designing a system, be sure to calculate total friction loss to ensure sufficient downstream pressure.*
For optimum regulation performance, size regulating valves toward the higher flow ranges.
Flow rates are recommended not to exceed 0,3 bar loss. Values shown in bar.

P220G AND P220GS SERIES FRICTION LOSS DATA - U.S. IMPERIAL

P220G Series Friction Loss Data*—(U.S.)

Size	Configuration	gpm Flow																
		5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	180
25mm (1")	Globe	4.00	4.20	3.20	4.10	7.20												
	Angle	4.00	4.20	3.10	2.70	4.80												
40mm (1.5")	Globe				1.60	2.30	3.60	5.20	7.00	9.20	11.20	13.60	16.40					
	Angle				1.30	1.60	2.80	4.00	5.50	7.10	8.90	10.90	13.50					
50mm (2")	Globe									2.10	2.70	3.30	4.00	4.80	5.60	6.50	7.50	8.70
	Angle									1.20	1.60	2.00	2.40	2.80	3.30	3.90	4.40	5.20

Note: *For optimum performance when designing a system, be sure to calculate total friction loss to ensure sufficient downstream pressure.*
For optimum regulation performance, size regulating valves toward the higher flow ranges.
Flow rates are recommended not to exceed 5 psi loss. Values shown in psi.

P220GS Scrubber Valve Series Friction Loss Data*—(U.S.)

Size	Configuration	gpm Flow															
		5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
1"	Globe	4.63	4.74	3.10	6.05	10.75											
	Angle	4.14	4.64	2.54	5.53	9.46											
1½"	Globe			1.14	1.56	2.85	4.36	6.28	8.57	11.20	14.03	17.20	20.46				
	Angle			0.95	1.51	2.28	3.69	5.29	6.97	9.26	11.80	14.60	17.40				
2"	Globe									3.57	4.62	5.33	6.80	8.20	9.02	10.46	11.61
	Angle									2.79	3.50	4.41	5.62	6.39	7.35	8.81	9.37

Note: *For optimum performance when designing a system, be sure to calculate total friction loss to ensure sufficient downstream pressure.*
For optimum regulation performance, size regulating valves toward the higher flow ranges.
Flow rates are recommended not to exceed 5 psi loss. Values shown in psi.

ALWAYS READY FOR **INSTALLATION.**

GOLF ZONE KITS

FEATURES

Pre-packaged and ready for installation – Toro® Golf Zone Kits are specially designed for low-volume drip applications and provide everything you need for drip zone automation. With no need to specify or purchase separate parts, Toro Golf Zone Kits are sure to meet your landscape drip irrigation needs.

- **Filtration and Pressure Regulation Provided**
  Each kit includes a Y filter with 150 mesh/100 micron stainless steel screen filter to prevent debris contamination and a 25 psi fixed regulator to eliminate damage from high pressure spikes.
- **Flush Valve**
  Provides a momentary high velocity in the tubing to move debris out of the piping system to eliminate emitter clogging every time the zone is activated.
- **Pressure Regulator**
  Prevents emitter blow-outs.
- **Constructed Of Highest Quality Plastics**
  For durability and corrosion resistance.

Flush Valve

Golf Zone Kit with P220G Series Valves

Y-Filter

Pressure Regulator

ADDITIONAL FEATURES

F-SERIES PLASTIC FILTER

Y FILTER

Toro's Y-Filter offers superior performance with a 150 mesh stainless steel screen filter to assure clog-free operation.

GOLF ZONE KITS WITH P220G SERIES VALVES

Kits with the popular P220G Series Valves provide the rugged durability required for larger golf course applications.

GOLF ZONE KITS WITH P220GS SCRUBBER SERIES VALVES

Ensure that dirt, algae, chlorines, chloramines and water treated with ozone will not impede valve performance.

SPECIFICATIONS

LOW-FLOW MODELS
- Nominal outlet pressure: 1.7 bar (25 psi)
- Minimum Flow: 0.4 lpm (0.1 gpm)
- Maximum Flow: 30.3 lpm (8 gpm)
- Thread Size: 1" NPT
- Filtration Size: 150 mesh

MEDIUM-FLOW MODELS
- Nominal outlet pressure: XX bar (40 psi)*
- Minimum Flow: 7.6 lpm (2 gpm)*
- Maximum Flow: 75.6 lpm (20 gpm)*
- Thread Size: 1" NPT
- Filtration Size: 150 mesh

WARRANTY
- Two years

GOLF ZONE KITS SPECIFYING INFORMATION

Model	Description
GZK-25-LF-DCL	P220G valve with DC latching solenoid, 25 psi reg, low flow .1-8 gpm, 150 mesh SS filter
GZK-25-LF-SG	P220G valve with SPIKE GUARD™ solenoid, 25 psi reg, low flow .1-8 gpm, 150 mesh SS filter
GZK-25-MF-DCL	P220G valve with DC latching solenoid, 25 psi reg, medium flow 2-20 gpm, 150 mesh SS filter
GZK-25-MF-SG	P220G valve with SPIKE GUARD solenoid, 25 psi reg, medium flow 2-20 gpm, 150 mesh SS filter
GZK-40-MF-DCL	P220G valve with DC latching solenoid, 40 psi reg, medium flow 2-20 gpm, 150 mesh SS filter
GZK-40-MF-SG	P220G valve with SPIKE GUARD solenoid, 40 psi reg, medium flow 2-20 gpm, 150 mesh SS filter

PRACTICAL, AESTHETIC AND **DURABLE.**

TORO®
VALVE BOXES

FEATURES

Valve Boxes are used for practical, aesthetic and security reasons wherever valves or off-fairway LYNX® LAC modules need to be installed below grade but remain accessible for monitoring or service. Toro offers a full line of round and rectangular valve boxes that will fit valves up to 10,2cm (4") and 1-, 2- and 4- station LYNX LAC modules.

- **T-lip Lid Design**
  The T-lip lid design keeps dirt out to prevent jamming and provides improved grip for lid removal and easy access to the equipment inside. The secure snap fit and bolt retention ensure that only authorized personnel will have access.
- **Wide Range Of Sizes**
  Toro offers a wide range of round and rectangular boxes to meet every need. We offer round boxes in 6", 7" and 10" and rectangular boxes in 12" x 17" and 15" x 21" sizes.
  Rectangular boxes are available with 12" standard and 6" shallow depth. With the reverse stack capability and rectangular 6" extensions tackling deeper installations can be easily accomplished.

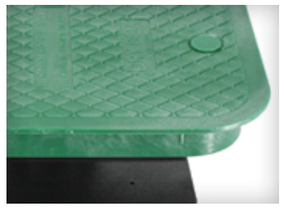
ADDITIONAL FEATURES

VARIETY OF COLORS
Green, gray (electrical), tan, purple (effluent), black and brown.

REVERSE STACK
Allows for deeper installations in an initial 30,5cm (12") then 70cm (24") increments.

RECTANGULAR EXTENSION BOXES
Rectangular extensions allow for deeper installation in 15,2cm (6") increments

DURABLE CONSTRUCTION
Valve boxes are constructed of H.D.P.E. (High-Density Polyethylene) with heavy-duty wall sections designed to provide a secure enclosure to protect your equipment investment.



T-LIP LID DESIGN
The T-Lip lid design keeps dirt out, while the snap fit and bolt retention for security.

TORO VALVE BOXES ORDERING INFORMATION

ROUND VALVE BOXES

TVB-XXRND-XX

Type	Size	Color Description
TVB	XXRND	XX
TVB—Toro Valve Box	6—15,2cm (6") Round 7—17,8cm (7") Round 10—25,4cm (10") Round	Blank— Green lid and black box G—Green lid and box GY—Gray lid and box (electrical) T—Tan lid and box E—Purple lid and box (effluent) BK—Black lid and box BR—Brown lid w/black box

Example - A Toro 17,8cm (7") round valve box for effluent water applications would be specified as: TVB-7RND-E

Description	A Length	B Width	C Height	Weight kg (lbs)
15,2cm (6")	16,0cm (6.3")	20,6cm (8.1")	22,9cm (9.0")	0,52 kg (1.15 lbs)
17,8cm (7")	17,3cm (6.8"	23,6cm (9.3")	22,9cm (9.0")	0,82 kg (1.80 lbs)
25,4cm (10")	25,1cm (9.9")	33,0cm (13.0")	26,2cm (10.3")	1,54 kg (3.39 lbs)

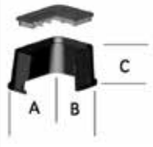
RECTANGULAR VALVE BOXES

TVB-XXXX-XX-XX

Type	Size	Height	Color Description
TVB	XXXX	XX	XX
TVB—Toro Valve Box	1217—30,5X43,2cm (12"X17") 1521—38,1X53,3cm (15"X21")	6—15,2cm (6") High 12—30,5cm (12") High	Blank— Green lid and black box G—Green lid and box GY—Gray lid and box (elect.) T—Tan lid and box E—Purple lid and box (effluent) BK—Black lid and box BR—Brown lid w/black box

Example - A Toro 30,5x43,2x15,2 (12x17x6) rectangular valve box for effluent water applications would be specified as: TVB-1217-6-E

Description	A Length	B Width	C Height	Weight kg (lbs)
30,5x43,2x15,2 (12x17x6)	47,8cm (18.8")	35,0cm (13.8")	17,3cm (6.8")	2,98 kgm (6.56 lbs)
30,5x43,2x30,5 (12x17x12)	53,3cm (21.0")	40,6cm (16.0")	31,2cm (12.3")	4,11 kg (9.05 lbs)
38,1x53,3x15,2 (15x21x6)	61,7cm (24.3")	47,8cm (18.8")	18,3cm (7.2")	3,97 kg (8.75 lbs)
38,1x53,3x30,5 (15x21x12)	65,3cm (25.7")	48,5cmm 19.1"	31,2cm (12.3")	5,49 kg (12.11 lbs)



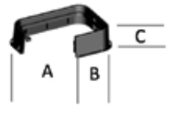
RECTANGULAR EXTENSIONS

TVB-XXXX-EXT6BOX-XX

Type	Size	Height	Color Description
TVB	XXXX	EXT6BOX	XX
TVB—Toro Valve Box	1217—30,5X43,2cm (12"X17") 1521—38,1X53,3cm (15"X21")	EXT6BOX—15,2cm(6") High	Blank— Black box G—Green box GY—Gray box (elect.) T—Tan box E—Purple box (effluent)

Example - A Toro 15,2cm (6") extension for a 30,5x43,2cm (12"x17") tan valve box would be specified as: TVB-1217-EXT6BOX-T

Description	A Length	B Width	C Height	Weight (lb)
30,5x43,2x15,2 (12x17x6)	47,8cm (18.8")	35,0cm (13.8")	17,3cm (6.8")	3,04 kg (6.71 lbs)
38,1x53,3x15,2 (15x21x6)	61,7cm (24.3")	45,2cm (17.8")	17,5cm (6.9")	4,03 kg (8.89 lbs)



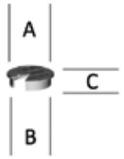
ROUND VALVE BOX SEPARATES

TVB-XXXXX-XX

Type	Size Box or Lid	Color Description
TVB	XXXXX	XX
TVB—Toro Valve Box	6LID—15,2cm(6") Round lid 7LID—17,8cm(7") Round lid 10LID—25,4cm(10") Round lid BOX6—15,2cm(6") Box (black only) BOX7—17,8cm(7") Box (black only) BOX10—25,4cm(10") Box (black only)	G—Green lid GY—Gray lid (electrical) T—Tan lid E—Purple lid (effluent) BK—Black lid BR—Brown lid

Example - A Toro 17,8cm(7") round valve box lid for effluent water applications would be specified as: TVB-7LID-E

Description	A Length	B Width	C Height	Weight kg (lbs)
15,2cm (6") Lid	16,0cm (6.3")	20,6cm (8.1")	3,0cm (1.2")	0,14 kg (.31 lbs)
17,8cm (7") Lid	17,3cm (6.8")	23,6cm (9.3")	4,3cm (1.7")	0,24kg (.52 lbs)
25,4cm (10") Lid	25,1cm (9.9")	33,0cm (13.0")	5,3cm (2.1")	0,51 (1.13 lbs)



Description	A Length	B Width	C Height	Weight kg (lbs)
15,2cm (6") Box	16,0cm (6.3")	20,6cm (8.1")	22,9cm (9.0")	0,35 kg (.77 lbs)
17,8cm (7") Box	17,3cm (6.8")	23,6cm (9.3")	22,9cm (9.0")	0,54 kg (1.19 lbs)
25,4cm (10") Box	25,1cm (9.9")	33,0cm (13.0")	26,2cm (10.3")	1,02 kg (2.26 lbs)

RECTANGULAR VALVE BOX SEPARATES

TVB-XXXX-LID-XX

Type	Size	Height	Color Description
TVB	XXXX	LID	XX
TVB—Toro Valve Box	1217—30,5X43,2cm (12"X17") 1521—38,1X53,3cm (15"X21")	LID—Lid	Blank— Green lid G—Green lid GY—Gray lid (elect.) T—Tan lid E—Purple lid (effluent) BK—Black lid BR—Brown lid

Example - A Toro 30,5x43,2cm (12x17) rectangular valve box lid for effluent water applications would be specified as: TVB-1217-LID-E

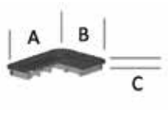
HIGH VALVE BOX

TVB-XXXX-XXXXX

Type	Size	Height
TVB	XXXX	XX
TVB—Toro Valve Box	1217—30,5X43,2cm (12"X17") 1521—38,1X53,3cm (15"X21")	6BOX—15,2cm(6") High valve box 12BOX—30,5cm(12") High valve box

Example - A Toro 30,5x43,2x15,2(12x17x6) rectangular valve box would be specified as: TVB-1217-6BOX-BK

Description	A Length	B Width	C Height	Weight (lb)
30,5x43,2cm (12"x17") lid	42,9cm (16.9")	30,0cm (11.8")	5,1cm (2.0")	1,24 kg (2.73 lbs)
38,1x53,3cm (15"x21") lid	54,1cm (21.3")	37,8cm (14.9")	4,8cm (1.9")	1,47 kg (3.23 lbs)
30,5x43,2x15,2cm (12"x17"x6") box	47,8cm (18.8")	35,1cm (13.8")	17,3cm (6.8")	1,74 kg (3.83 lbs)
30,5x43,2x30,5cm (12"x17"x12") box	53,3cm (21")	40,6cm (16")	31,2cm (12.3")	2,87 kg (6.32 lbs)
38,1x53,3x15,2cm (15"x21"x6") box	61,7cm (24.3")	45,2cm (17.8")	17,5cm (6.9")	2,57 kg (5.66 lbs)
38,1x53,3x30,5cm (15"x21"x12") box	65,3cm (25.7")	48,5cm (19.1")	31,2cm (12.3")	4,02 kg (8.88 lbs)



TORO DRY BOXES ORDERING INFORMATION AND SPECIFICATIONS

A DUAL BOLT RETENTION COVERS
Ensures proper sealing and vandal resistance.

B HEAVY DUTY LID
Construction moulded from High Density Polyethylene (H.D.P.E), available in Green, Tan, Purple, Black, Gray and Brown.

C ACCESSORY PLATE (OPTIONAL)
Attaches directly to the lid and allows attachments of various components like LAC modules, elect/hyd converters, battery operated controllers and more.

D DUAL SEAL LID
Keeps water and critters from creeping in from the top.

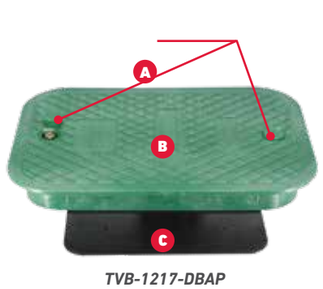
E HEAVY DUTY BOX
Construction molded from High Density Polyethylene (H.D.P.E), available in Green, Tan, Purple, Black, Gray and Brown.

F DIRT SKIRT (OPTIONAL)
Attaches directly to the bottom of the valve box and provides an outer seal to prevent intrusion from burrowing rodents, water and critters.

STATIC VERTICAL LOAD RATING:
SCTE - Light Duty, Pedestrian

Properties of Base Material	ASTM Test Method	HDPE
Tensile Strength	D-638	186,16 - 303,37 bar (2700-4,400 psi) (Typical Range)
Flexural Modulus	D-790	Minimum 14,000 not to exceed 24,000 psi
Notched Izod Impact Strength	D-256	0.5 - 3.0 (Typical Range)
Deflection Temperature @ 66psi	D-648	65,56 - 93,33 C (150-200 F) (Typical Range)
Density	D-792	Minimum 0.95 not to exceed 0.965
Electrical Dielectric Strength	D-149	400-600 V/mil (Typical Range)
Chemical Resistance	D-543	Very Resistant
Water Absorption	D-570	Less than 1% weight change

WARRANTY
- One year



TVB-1217-DBAP
Accessory plate

TVB-1217-DB
Dry Box

TVB-12RND-DB
Round Dry Box

DRY BOX VALVE BOXES

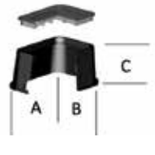
TVB-1217-12DB-XX

Type	Size	Height	Color Description
TVB	1217	12DB	XX
TVB—Toro Valve Box	1217—30,5X43,2 12"X17"	12DB—30,5 (12") High Dry Box	Blank— Green lid and black box G—Green lid and box GY—Gray lid and box (elect.) T—Tan lid and box E—Purple lid and box (effluent) BK—Black lid and box BR—Brown lid w/black box

Example - A Toro 30,5x43,2x30,5cm (12"x17"x12") valve box for electrical applications would be specified as: TVB-1217-12DB-GY

Description	A Length	B Width	C Height	Weight (lb)
12DB	53,3cm (21.0")	40,6cm (16.0")	31,2cm (12.3")	4,45 kg (9.8 lbs)

Description	A Length	B Width	C Height	Weight (lb)
DBAP	29,2cm (11.5")	21,6cm (8.5")	0,5cm (.2")	0,45 kg (0.99 lbs)
DBDS	50,3cm (19.8")	36,8cm (14.5")	3,3cm (1.3")	1,27 kg (2.8 lbs)



DRY BOX VALVE BOXES

TVB-12RND-DB-XX

Type	Size	Height	Color Description
TVB	12RND	DB	XX
TVB—Toro Valve Box	30 cm (12") Round	Dry Box	G—Green GY—Gray (electrical) T—Tan E—Purple (effluent) BK—Black BR—Brown

Example: A Toro 12" round Dry Box for effluent water applications would be specified as: TVB-12RND-DB-E

Description	A Length	B Width	C Height	Weight (lbs)
DB	29cm (11.5")	36,8cm (14.5")	32,38cm (12.75")	3.23 kg (7.12 lbs)

Accessories	
TVB-1217-DBAP	DRY BOX Accessory Plate
TVB-1217-DBDS	DRY BOX Dirt Skirt

MULTI PURPOSE MAIN WATER SOURCE **VALVES AND ACCESSORIES.**

470 QUICK COUPLER
VALVES

FEATURES

470 Quick Coupler Valves

Whether it's for hand watering the hot spots, fertilizer wash in, washing down equipment or filling the sprayer and lakes the 400 Series provides a full family of quick coupling valves and accessories that connect you directly to the main water source to fill all your hand watering needs.

- **Full range of flows from 0 to 100 gallons per minute**
- **1,9, 2,5 and 3,8cm (0.75", 1" and 1.5") one- and two-piece single-lug models** including ACME thread key connections to meet a variety of installation requirements
- **Hose swivel provides 360° movement** without hose tangling for ease of use
- **A variety of sizes meet various applications**
- **Metal and vinyl locking and non-locking covers**
- **Effluent (lavender-colored) locking cover**

Warranty
- Two years

FRICTION LOSS DATA - METRIC/U.S. IMPERIAL

470 Series Friction Loss Data—(Metric)

	LPM Flow										
	35	50	75	100	125	150	175	225	275	325	375
Model 473	1,0	0,2	0,4	0,6							
Model 474			0,1	0,2	0,3	0,5					
Model 475				0,1	0,2	0,2	0,4	0,6			
Model 476						0,1	0,1	0,2	0,3	0,4	0,6

Note: For optimum sprinkler performance when designing a system, be sure to calculate total friction loss to ensure sufficient downstream pressure. Flow rates are recommended not to exceed 0,3 bar loss. Values listed in bar. For kPa values, multiply tabular values by 100. For Kg/cm2 values, multiply tabular values by 1,02.

470 Series Friction Loss Data—(U.S.)

	gpm Flow											
	10	15	20	25	30	35	40	50	60	70	85	100
Model 473	1.5	3.1	5.3	8.5								
Model 474			1.1	2.2	3.6	5.7	8.0					
Model 475				1.0	1.8	2.7	3.6	6.4	9.8			
Model 476							1.0	1.7	2.6	3.6	5.6	8.8

Note: For optimum sprinkler performance when designing a system, be sure to calculate total friction loss to ensure sufficient downstream pressure. Flow rates are recommended not to exceed 5 psi loss. Values listed in psi.

470 QUICK COUPLER SPECIFYING INFORMATION

Toro Model Number	*Description*	*Inlet Size NPT Threads*	*Body Type*	*Outlet Key Size*	*Corresponding Key(s)*	*Valve Cover Type*	*Corresponding Swivel(s)**		
							477-00	477-01	477-02
473-00	QCV 19,1(0.75), SS CVR	19,1mm(.75")	1 Piece	19,1mm(.75")	463-01	Stainless Steel	A	B	B
474-00	QCV 25,4(1), SS CVR	25,4mm(1")	1 Piece	25,4mm(1")	464-01/464-02	Stainless Steel	B	B	A
474-01	QCV 25,4(1), VYL CVR	25,4mm(1")	1 Piece	25,4mm(1")	464-01/464-02	Yellow Vinyl, Spring Loaded	B	B	A
474-03	QCV 25,4(1), VYL CVR, W/LK	25,4mm(1")	1 Piece	25,4mm(1")	464-01/464-02	Yellow Vinyl, Locking, Spring Loaded	B	B	A
474-04	QCV 25,4(1), LAV VYL CVR	25,4mm(1")	1 Piece	25,4mm(1")	464-01/464-02	Lavender Vinyl, Locking, Spring Loaded	B	B	A
474-21	QCV 25,4(1), VYL CVR, 2PC	25,4mm(1")	2 Piece	25,4mm(1")	464-01/464-02	Yellow Vinyl, Spring Loaded	B	B	A
474-24	QCV 25,4(1), LAV VYL CVR, 2PC	25,4mm(1")	2 Piece	25,4mm(1")	464-01/464-02	Lavender Vinyl, Locking, Spring Loaded	B	B	A
474-40	QCV 25,4(1), SS CVR, ACME	25,4mm(1")	1 Piece	25,4mm(1")	464-03	Stainless Steel	B	A	A
474-41	QCV 25,4(1), VYL CVR, ACME	25,4mm(1")	1 Piece	25,4mm(1")	464-03	Yellow Vinyl, Spring Loaded	B	A	A
474-44	QCV25,4(1),LAVVYLCVR,W/LK,ACME	25,4mm(1")	1 Piece	25,4mm(1")	464-03	Lavender Vinyl, Locking, Spring Loaded	B	A	A
475-00	QCV 31,8(1.25), SS CVR	25,4mm(1")	1 Piece	31,8mm(1.25")	465-01	Stainless Steel	B	B	B
475-01	QCV 31,8(1.25), VYL CVR	25,4mm(1")	1 Piece	31,8mm(1.25")	465-01	Yellow Vinyl	B	B	B
476-00	QCV 38,1(1.5), SS CVR	38,1mm(1.5")	1 Piece	38,1mm(1.5")	466-01	Stainless Steel	B	B	B
476-01	QCV 38,1(1.5), VYL CVR	38,1mm(1.5")	1 Piece	38,1mm(1.5")	466-01	Yellow Vinyl, Spring Loaded	B	B	B
476-04	QCV 38,1(1.5), LAV VYL CVR	38,1mm(1.5")	1 Piece	38,1mm(1.5")	466-01	Lavender Vinyl, Locking, Spring Loaded	B	B	B

* A – Attaches directly to the quick coupler key. B – Requires additional fittings to be used with the quick coupler key.

QUICK COUPLER VALVE ACCESSORIES

Order Number	*Description*	*Order Number*	*Description*
463-01	12,7mm(0.5") Female, 19,1mm(0.75") Male, Single-lug Coupler Key	477-00	19,1mm(0.75") NPT x 19,1mm(0.75") MHT Hose Swivel
464-01	19,1mm(0.75") Female, 25,4mm(1") Male, Single-lug Coupler Key	477-01	25,4mm(1") NPT x 19,1mm(0.75") MHT Hose Swivel
464-02	25,4mm(1") Female, Single-lug Coupler Key	477-02	25,4mm(1") NPT x 25,4mm(1") MHT Hose Swivel
464-03	25,4mm(1") ACME Thread Coupler Key		
465-01	31,8mm(1.25") Inlet, 19,1mm(0.75") Female, 25,4mm(1") Male, Single-lug Coupler Key	LK	Key for Locking Cover
466-01	31,8mm(1.25") Female, 38,1mm(1.5") Male, Single-lug Coupler Key		

THE TEAM **BEHIND THE SCENES.**

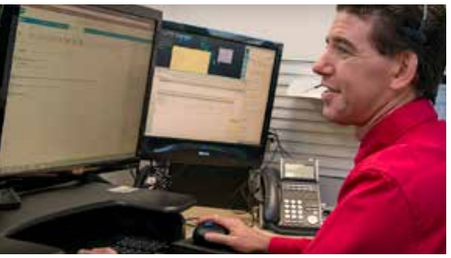
Toro is dedicated to support you in every possible way. Worldwide services make sure you can keep your irrigation system in top operating condition.

Toro NSN® is the best support for any LYNX system. Toro NSN offers a 24-hour, 7-day, 365 assistance worldwide. The Toro National Support Network is always available to answer your questions, troubleshoot your system and solve your issues to protect your Toro investment in the long-term. It even offers direct communication with the factory and product engineers and a 24-hour turnaround on hardware replacement with a pre-configured system, tailored to your needs.

PRODUCT SUPPORT AND TECHNICAL DATA - TABLE OF CONTENTS

Your True Partner

Our goal is to be more than a supplier. We want to be the partner you go to for solutions your golf course needs. From day one, Toro has been a company built on treating customers with fairness and respect. Simply put, relationships matter to us.



Toro® Technical Support

Our technical support team is highly skilled at what they do. From helping superintendents, program controllers, to troubleshooting complex system issues with consultants, the support team provides years of irrigation experience that you can count on. For technical support, please refer to the list of NSN International contact numbers on: https://www.toro.com/en/irrigation/nsn/contact-us

Toro Controller Repair

Did you know that with the Toro 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 golf course and reputation stays protected.
For immediate assistance call: 1-877-345-TORO.
(Visit Controller Repair website at www.toro.com/controller-repair)

Toro Distributor Support

Our distributors have been our partners for an average of 40 years (10 to 88 years) and we consider them an extension of us.

Toro Field Service

With some of the most knowledgeable and helpful field service staff in the industry, and our extensive training and support programs; Toro field service personnel are always there to assist—before, during, and well after a sale.

Genuine Toro Parts

From the smallest sprinkler part to complete control systems, Toro Service Parts support can deliver most replacement parts to our distributors within hours.
In fact, Toro offers its customers the highest parts order completion rate in the industry: 98%!

Toro National Support Network (NSN)

A team of support technicians dedicated to the daily operations and maintenance of computerized central control systems for customers worldwide (see page 14 for more information).

VALVE SPECIFICATIONS

CONTROL SYSTEMS

Type of System	*Maximum Distance From Controller to Valve*	*Elevation Restrictions*
Pin Type£ (00) Hydraulic* with 4,8mm (0.19") Control Tubing	30,5m (100')	
Pin Type£ (00) Hydraulic* with 6,4mm(0.25") Control Tubing	61,0m (200')	
Normally Open (01) with 4,8mm(0.19") Control Tubing	152,4m (500')	Valve elevation should not exceed 7.6m (25') ABOVE or 21.3 (70') BELOW controller elevation.
Normally Closed (08) Hydraulic with 4,8mm(0.19") Control Tubing	152,4m (500')	Valve elevation should not exceed 0m (0') ABOVE or 21.3 (70') BELOW controller elevation.
Normally Open (01) with 6,4mm(0.25") Control Tubing	304,8m (1000')	Valve elevation should not exceed 7.6m (25') ABOVE or 21.3 (70') BELOW controller elevation.
Normally Closed (08) Hydraulic with 6,4mm(0.25") Control Tubing	304,8m (1000')	Valve elevation should not exceed 7.6m (25') ABOVE or 21.3 (70') BELOW controller elevation.
Electric (06)	Depends on variables • Voltage available • Wire size	NONE

** - All hydraulic connections on Toro valves are 1/4" insert type.*
- Control line pressure must be equal to or greater than mainline pressure.
- Control line pressure range is 40 to 150 psi.
*** Minimum solenoid voltage required for reliable electric VIH operation is 19.5VAC*
£ - Maximum of one (1) valve per station on pin type systems.

CONVERSION INFORMATION

- All gallons per minute are shown in U.S.
- To convert to imperial gallons per minute, multiply by 0.833
- To convert to liters per minute, multiply by 3.78
- To convert pounds per square inch (psi) to atmospheres, divide by 14.7
- To convert pounds per square inch (psi) to kilograms per square centimeter (kg/cm^2), divide by 14.22
- To convert feet to meters, divide by 3.28

WINTERIZING SPECIFICATIONS

In freezing climates, valves should be properly winterized to prevent freeze-related damage.

SPRINKLER SPACING

The Toro Company does not recommend designing for zero (0) mph wind conditions.

■Square Spacing

No wind - 55% of diameter
4 mph wind - 50% of diameter
6,4 kph wind - 50% of diameter
8 mph wind - 45% of diameter
12,8 kph - 45% of diameter

■Triangular Spacing

No wind - 60% of diameter
4 mph wind - 55% of diameter
6,4 kph wind - 55% of diameter
8 mph wind - 50% of diameter
12,8 kph - 50% of diameter

■Single Row Spacing

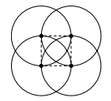
No wind - 50% of diameter
4 mph wind - 50% of diameter
6,4 kph wind - 50% of diameter
8 mph wind - 45% of diameter
12,8 kph - 45% of diameter

Design in consideration of the worst wind conditions.

PRECIPITATION RATE FORMULAS

■Square-spaced sprinklers in pattern:

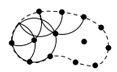
$$\frac{\text{gpm of full-circle} \times 96.3}{(\text{Spacing})^2}$$



■ Triangular-spaced sprinklers in pattern:

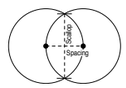
$$\frac{\text{gpm of full-circle} \times 96.3}{(\text{Spacing})^2 \ (0.866)}$$

■ Area and flow:



$$\frac{\text{Total gpm of zone} \times 96.3}{\text{Total irrigated square feet of zone}}$$

■ Single row:



$$\frac{\text{gpm of full-circle} \times 96.3}{(\text{Spacing}) \ (\text{Scallop})}$$

Valve-In-Head Activation Types

ELECTRIC
- Pressure regulation feature at the same pressure—regardless of elevation changes
- Manual On-Off-Auto control at the sprinkler
- Individual sprinkler control for more precise watering

NORMALLY OPEN
- Individual sprinkler control for more precise watering
- Hydraulic control capability with sophisticated electronic/electric control systems
- Ideal for all dirty water applications—irrigation water is not used for control
- Lightning resistant

CHECK-O-MATIC
- Maintains 11,3m (37') elevation change
- Eliminates low-head drainage
- Requires separate remote control valve

CURRENT DRAW (AMPERAGE)

Standard Wattage Solenoid

Product	Solenoids	Assumes 24 VAC, 50/60 Hz Output			
		120 VAC, 60 Hz		240 VAC, 50 Hz	
		Inrush	Holding	Inrush	Holding
LYNX® Smart Satellite, VP and VPE Satellite	0	—	0,20	—	0,19
	1	0,26	0,25	0,30	0,22
	2	0,35	0,30	0,34	0,25
	3	0,40	0,34	0,36	0,28
	4	0,46	0,39	0,39	0,30
	5	0,50	0,43	0,42	0,33
	6	0,64	0,48	0,44	0,36
	7	0,70	0,52	0,46	0,38
	8	0,73	0,56	0,50	0,41
	9	0,77	0,61	0,53	0,43
	10	0,80	0,65	0,57	0,46
	11	0,85	0,69	0,57	0,48
	12	0,91	0,73	0,57	0,51
	13	1,00	0,77	0,61	0,53
	14	1,03	0,81	0,62	0,55
	15	1,05	0,85	0,63	0,58
	16	1,14	0,88	0,66	0,60
Network LTC Satellite	0	0,15	0,15	0,14	0,14
	1	0,23	0,21	0,18	0,17
	2	0,31	0,27	0,21	0,20
	3	0,39	0,33	0,24	0,23
	4	0,47	0,39	0,26	0,25
	5	0,55	0,45	0,29	0,28
	6	0,63	0,51	0,32	0,30
	7	0,71	0,57	0,34	0,33
	8	0,79	0,63	0,37	0,35
	9	0,87	0,69	0,40	0,38
	10	0,95	0,75	0,42	0,40
	11	1,03	0,81	0,45	0,43
	12	1,11	0,87	0,48	0,46
E-Series OSMAC Satellite	0	0,05	0,05	0,03	0,03
	1	0,13	0,11	0,07	0,06
	2	0,21	0,17	0,12	0,09
	3	0,29	0,23	0,17	0,12
	4	0,37	0,29	0,21	0,15
	5	0,45	0,35	0,26	0,19
	6	0,53	0,41	0,31	0,22
	7	0,61	0,47	0,35	0,25
	8	0,69	0,53	0,40	0,28
	9	0,77	0,59	0,45	0,31
	10	0,85	0,65	0,50	0,35
	11	0,93	0,71	0,54	0,38
	12	1,01	0,77	0,59	0,41
	13	1,09	0,83	0,64	0,44
	14	1,17	0,89	0,68	0,47
	15	1,25	0,95	0,73	0,51
	16	1,33	1,01	0,81	0,54

Spike Guard™ Low Wattage Solenoid

Product	Solenoids	Assumes 24 VAC, 50/60 Hz Output			
		120 VAC, 60 Hz		240 VAC, 50 Hz	
		Inrush	Holding	Inrush	Holding
LYNX® Smart Satellite, VP and VPE Satellite	0	—	0,20	0,21	0,20
	1	0,24	0,22	0,22	0,21
	2	0,26	0,24	0,23	0,22
	3	0,29	0,27	0,24	0,23
	4	0,31	0,29	0,25	0,24
	5	0,33	0,31	0,26	0,26
	6	0,35	0,33	0,28	0,27
	7	0,39	0,37	0,29	0,28
	8	0,41	0,39	0,30	0,30
	9	0,43	0,41	0,32	0,31
	10	0,46	0,44	0,34	0,33
	11	0,47	0,46	0,35	0,35
	12	0,49	0,48	0,36	0,36
	13	0,52	0,50	0,37	0,38
	14	0,54	0,52	0,38	0,39
	15	0,56	0,54	0,40	0,40
	16	0,58	0,56	0,43	0,42
	17	0,60	0,58	0,44	0,43
	18	0,61	0,60	0,46	0,45
	19	0,63	0,62	0,47	0,46
	20	0,66	0,64	0,49	0,48
	21	0,68	0,66	0,50	0,49
	22	0,70	0,68	0,51	0,50
	23	0,74	0,70	0,53	0,52
	24	0,76	0,72	0,54	0,53
	25	0,79	0,74	0,55	0,54
	26	0,80	0,75	0,57	0,56
	27	0,85	0,77	0,58	0,57
	28	0,90	0,79	0,59	0,58
	29	0,93	0,81	0,60	0,59
	30	0,96	0,82	0,61	0,60
	31	1,01	0,84	0,62	0,61
	32	1,04	0,86	0,64	0,62
Network LTC Satellite and Network LTC Plus Satellite	0	0,15	0,15	0,14	0,14
	1	0,17	0,17	0,16	0,15
	2	0,20	0,19	0,18	0,17
	3	0,22	0,21	0,20	0,19
	4	0,25	0,23	0,21	0,20
	5	0,27	0,25	0,23	0,22
	6	0,29	0,27	0,25	0,24
	7	0,32	0,29	0,27	0,25
	8	0,34	0,31	0,28	0,27
	9	0,37	0,33	0,30	0,29
	10	0,39	0,35	0,32	0,30
	11	0,41	0,37	0,33	0,31
	12	0,44	0,39	0,34	0,33
E-OSMAC SATELLITE	0	0,05	0,05	0,03	0,03
	1	0,07	0,07	0,05	0,05
	2	0,10	0,09	0,06	0,06
	3	0,12	0,11	0,08	0,08
	4	0,15	0,13	0,10	0,09
	5	0,17	0,15	0,12	0,11
	6	0,19	0,17	0,13	0,12
	7	0,22	0,19	0,15	0,14
	8	0,24	0,21	0,17	0,15
	9	0,27	0,23	0,18	0,17
	10	0,29	0,25	0,20	0,18
	11	0,31	0,27	0,22	0,20
	12	0,34	0,29	0,23	0,21
	13	0,36	0,31	0,25	0,23
	14	0,39	0,33	0,27	0,24
	15	0,41	0,35	0,29	0,26
	16	0,44	0,37	0,30	0,27

THE TORO LIMITED WARRANTY FOR GOLF IRRIGATION EQUIPMENT

The Toro Company and its affiliate, **The Toro Warranty Company**, pursuant to an agreement between them, jointly warrants to the owner, each new piece of irrigation equipment (featured in the current catalog at date of installation) against defects in material and workmanship for a period described below, provided they are used for irrigation purposes under manufacturer's recommended specifications and instructions.

During the warranty period, we will repair or replace, at our option, any part found

to be defective. Your remedy is limited solely to the replacement or repair of defective parts.

This warranty does not apply (i) to Acts of God (e.g., lightning, flooding, etc.); or (ii) to products not manufactured by Toro when used in conjunction with Toro products; or (iii) where equipment is used, or installation is performed in any manner contrary to Toro's specifications and instructions, or where equipment is altered or modified.

Return the defective part to your irrigation contractor or installer, or your local Golf Irrigation Distributor, or contact your Toro sales manager.

Toro nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of equipment, including but not limited to: vegetation loss, the cost of substitute equipment or services required during periods of malfunction or resulting non-use, property damage or personal injury resulting from installer's actions, whether negligent or otherwise.

Some states or countries do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

All implied warranties, including those of merchantability and fitness for a particular purpose, are limited to the duration of this express warranty.

Some states or countries do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights and you may have other rights which vary from state to state or country to country. Proof of installation date required for any warranty claim and for any product covered by this warranty.

LYNX® Smart Satellite
LYNX Smart Satellite is covered by this warranty for two years from the date of installation.

Golf Sprinklers
All Toro golf sprinklers and conversion assemblies are covered by this warranty for two years from the date of installation.

All Toro golf sprinklers purchased and installed with a Toro swing joint will be covered by a five year warranty*. Proof of simultaneous installation required for any warranty claim.

INFINITY® Series add-on accessories will be covered by a one year warranty.

** Excludes 590GF Series and sprinkler conversion assemblies.*

Swing Joints
Toro swing joints are covered by this warranty for five years from the date of installation. Warranty covers defects in manufacturing and excludes damage resulting from natural phenomenas such as frost heave.

Valves
P-220G Series, P-220GS Series and 470 Series Quick Coupler Valves are covered by this warranty for two years from date of installation.

DL2000™ Subsurface Drip Irrigation
Toro DL2000™ Subsurface Drip Irrigation products are covered by this warranty for two years from date of installation.

Control Systems, Turf Guard®, LYNX LAC, Valve Boxes, and Dry Boxes
All Toro golf control systems (central controls, Turf Guard, LYNX LAC, field satellite controllers, and sensor input kits), valve boxes and dry boxes, unless covered by a Toro NSN® Support Plan, are covered by this warranty for two years from date of installation.

LYNX Smart Module
LYNX Smart Module is covered by this warranty for two years from the date of installation. This includes modules that are purchased as a component of an INFINITY or FLEX800™ Series sprinkler. If those sprinklers are purchased and installed with a Toro swing joint, the LYNX Smart Module is covered for five years.

Toro is always there to help you care for your landscapes the way you want, when you want, better than anyone else.

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