CONTROLLER COMPARISON

All Controllers Backed By A 5-Year Warranty



	Junior DC™	KD2™	Rain Dial®-R
On Page#	3	5	7
Stations	1, 4	4, 6, 9	6, 9, 12
Programs	2	3	3
Start Times	6	9	9
Indoor Location	●	●	●
Outdoor Location	●	●	●
Water Budgeting	●	●	●
Electronic Circuit Breaker		●	●
Automatic, ET-Based		Climate Logic®	Climate Logic
App-Based Control		SMRT Logic®	SMRT Logic
Remote Ready		●	●
Climate Logic Compatible		●	●

PRONLY

Commercial Controllers




	Total Control®-R	MC-E "Blue"	Eagle™	Eagle Plus
On Page#	9	11	13	15
ET-Based Water Savings	Climate Logic	Climate Logic	●	●
Central Control Compatible	SMRT Logic	SMRT Logic	i-Central™	i-Central
Weather Station Interface	Climate Logic	Climate Logic	Weather Center™	Weather Center
Maximum Stations	48	48	36	200*
Number Of Programs	4	8	4	16*
Number Of Start Times	16	64	20	128*
Mximum Station Runtime	10 hrs	10 hrs	9:59 hh:mm	23:59 hh:mm
Inter-Station Delay Time	●	●	1-255 Sec	1-1199 Sec
Odd/Even Day Watering	●	●	●	●
Water Budget (%)	0-200%	0-255%	0-300%	0-300%
Cycle & Soak Programming			●	●
Skip Day Program Option	●	●	●	●
Programmable Rain Delay	1-14 Days	1-14 Days	1-7 Days	1-14 Days
Rain/Freeze Sensor Input	●	●	●	●
Audible Malfunction Alert		●	●	●
Station High Flow Monitoring	●	●	●	●
Main Line Flow Monitoring	●	●	●	●
Station No Flow Alert				
Rain Sensor By Program			●	●
Built-In Remote Interface			●	●
TWICE-2 Wire Compatible				●

JUNIOR DC™ SERIES

1 & 4 STATION OUTDOOR/INDOOR

Key Features

- Battery operated (9v not included)
- Waterproof tested (IP68)
- Compatible with wired RainSensor™ (RS500)
- 1-station and 4-station models
- Valve-mount and wall-mount brackets included
- Program stacking (prevents overlapping operations)
- Program erase and total erase functions
- "Off" setting for rainy weather
- Low battery indicator

Models

Model	Description
JRDC-1	1-station
JRDC-4	4-station

Specifying Information

JRDC – X

MODEL	CONNECTION
JRDC - Junior DC	**1** - 1 station **4** - 4 station
Example: A 4 station Junior DC controller = **JRDC-4**	

KD2™ SERIES

4, 6, & 9 STATION OUTDOOR/INDOOR

Certified by ICC-ES*

Key Features

- Compatible with SMRT Logic® for 2-way cloud control through SMRTscape™ (page. 25)
- Simple & familiar dial-based programming
- Large LCD displays status of programs scheduled to run each day
- Non-volatile memory maintains programming information in the absence of AC power
- Priced for value as a professional-quality residential controller
- Locking (outdoor models)

Models

Model	Description
KD400-EXT	4-Station Outdoor
KD600-EXT	6-Station Outdoor
KD900-EXT	9-Station Outdoor
KD400-INT	4-Station Indoor
KD600-INT	6-Station Indoor
KD900-INT	9-Station Indoor

Outdoor Model

Indoor Model

SMRT LOGIC COMPATIBLE
For 2-Way Programmability
See Page 25

Specifying Information

KD – XXX – XXX

MODEL	NUMBER OF STATIONS	CONFIGURATION
KD - KD2 Seires	**400** -4 Station **600** - 6 Station **900** - 9 Station	**EXT** - Outdoor **INT** - Indoor
Example: A KD2 9 station, outdoor model = **KD900-EXT**		

*EPA WaterSense® Certified when used with Irritrol® Climate Logic®

Irritrol

SPECIFICATIONS

1. Any-day-of-the-week watering
2. Odd/Even day watering
3. Day interval watering from 1-31 days
4. Up to 3-starts per day per program

Operating Specifications

- (3) independent programs
- Station run times: 1-240 minutes (4 hours) in 1-minute increments
- (3) start times per program

Programming features:

- Automatic, semi-automatic (manual program) & manual station(s) operation
- Programmable "Rain Off" up to seven days
- "All stations" test program
- Water budgeting program (0-200% in 10% increments)

Electrical Specifications

- Transformer input: 120 V AC, 60HZ (220/240 V AC, 50 Hz)
- Transformer output: 24 V AC, 1.250 amps
- Maximum output per station: 24 V AC, .4 amp
- Maximum total output: 24 V AC, .8 amp (including master valve)
- Battery backup for "armchair" programming and keeping current time and date: 9-volt alkaline *(not included)*
- Capacity: (1) station valve plus a master valve (or 24 V AC pump start relay) on at a time
- UL and CUL listed

Dimensions

- Outdoor/Indoor: H: 8", W: 6", D: 4 ½"

Optional Accessories

- A **SMRT Logic Bundle** (SMRT-CLMR-KIT)
- B **Wireless RainSensor** (R[F]S1000)
- C **Wired RainSensor** (RS500)
- D **CRR Remote Series** (R-100-KIT)
- E **Climate Logic** (CL-100-Wireless)
- F **SR-1 Pump Start Relay**

RAIN DIAL®-R SERIES

6, 9 & 12 STATION OUTDOOR/INDOOR

Certified by ICC-ES*

Key Features

- 365-Day calendar
- Water budgeting
- Programmable delay between stations
- Global functions
- Compatible with SMRT Logic® for 2-way cloud control through SMRTscape™ (page. 25)

Models

Model	Description
RD600-EXT-R	6-Station, Outdoor
RD900-EXT-R	9-Station, Outdoor
RD1200-EXT-R	12-Station, Outdoor
RD600-INT-R	6-Station, Indoor
RD900-INT-R	9-Station, Indoor
RD1200-INT-R	12-Station, Indoor
RD6-MOD-R	Module assembly, 6-Station
RD9-MOD-R	Module assembly, 9-Station
RD12-MOD-R	Module assembly, 12-Station

"The Rain Dial® is user friendly–Easy to program and hand off to my clients Easy to explain if a client has a question over the phone"

–K. Derby

Pacific Sun Pool & Spa - San Diego, CA

SMRT LOGIC COMPATIBLE
For 2-Way Programmability
See Page 25

Specifying Information

RD – XXXX – XXX – R

MODEL	NUMBER OF STATIONS	CONFIGURATION	
RD - RAIN DIAL	**600** - 6 Station **900** - 9 Station **1200** - 12 Station	**EXT** - Outdoor **INT** - Indoor **MOD** - Module	**R** - Rain sensor ready

Example: A Rain Dial 6 station, outdoor model = **RD600-EXT-R**

*EPA WaterSense® Certified when used with Irritrol® Climate Logic®

SPECIFICATIONS

Operating Specifications

- (3) independent programs
- (3) start times per program
- Multiple watering day options
- Station run times: 1-59 minutes in 1-minute increments or 1-5.9 hours in .1-hour (6 minute) increments

Programming features:

- Watering schedules per program:
  - Days of the week
  - Skip Days (Internal)
  - Odd/Even by date

Electrical Specifications

- Transformer input: 120V AC, 60Hz (220/240V AC, 50Hz available internationally)
- Transformer output: 24V AC, 1.25 amps
- Maximum output per station: 24V AC, .5 amps
- Maximum output to valves: 24V AC, 1.0 amps (including master valve/pump start circuit)
- Battery backup for "armchair" programming and keeping current time and date: 9-volt alkaline *(not included)*
- UL and CSA listed

Dimensions

Outdoor/Indoor: H: 7 ¾", W: 10 ¾", D: 4"

Optional Accessories

- A **SMRT Logic Bundle** (SMRT-CLMR-KIT)
- B **Wireless RainSensor** (R[F]S1000)
- C **Wired RainSensor** (RS500)
- D **CRR Remote Series** (R-100-KIT)
- E **Climate Logic** (CL-100-Wireless)
- F **SR-1 Pump Start Relay**

TOTAL CONTROL®-R SERIES

6, 9, 12, 15, 18, 24, 36 & 48 STATION OUTDOOR/INDOOR*

Key Features

- User-friendly, 10-position programming dial and large, easy-to-read display
- Start time stacking within each program
- Industrial surge protection (on both input & output lines)
- Self-diagnostic circuit breaker
- Automatic, semi-auto, manual & timed-manual operation
- Sensor hookup with bypass switch
- Non-volatile memory

Models

Model	Description
TC-6EX-R	6-Station Outdoor
TC-9EX-R	9-Station Outdoor
TC-12EX-R	12-Station Outdoor
TC-15EX-R	15-Station Outdoor
TC-18EX-R	18-Station Outdoor
TC-24EX-R	24-Station Outdoor
TC-12EXM-R	12-Station Outdoor (MC)
TC-18EXM-R	18-Station Outdoor (MC)
TC-24EXM-R	24-Station Outdoor (MC)
TC-36EXM-R	36-Station Outdoor (MC)
TC-48EXM-R	48-Station Outdoor (MC)
TC-6IN-R	6-Station Indoor
TC-9IN-R	9-Station Indoor
TC-12IN-R	12-Station Indoor
TC-6MOD-R	Module Assembly, 6-Station
TC-9MOD-R	Module Assembly, 9-Station
TC-12MOD-R	Module Assembly, 12-Station
TC-15MOD-R	Module Assembly, 15-Station
TC-18MOD-R	Module Assembly, 18-Station
TC-24MOD-R	Module Assembly, 24-Station
TC-36MOD-R	Module Assembly, 36-Station
TC-48MOD-R	Module Assembly, 48-Station

MC= Metal Cabinet

Certified by ICC-ES*

12, 18, 24, 36 & 48 Station Models Available In Metal Cabinets

SMRT LOGIC COMPATIBLE
For Remote Programmability
See Page 25

Specifying Information

TC – XX – XXX – R

MODEL	STATIONS	CONFIGURATION	
TC - TOTAL CONTROL	**6** - 6 Station **9** - 9 Station **12** - 12 Station **15** - 15 Station **18** - 18 Station **24** - 24 Station **36** - 36 Station **48** - 48 Station	**EX** - Outdoor **IN** - Indoor **MOD** - Module **EXM** - Outdoor, metal cabinet	**R** - Remote control ready

Example: A Total Control 12 station, outdoor model = **TC-12EX-R**

*EPA WaterSense® Certified when used with Irritrol® Climate Logic®

SPECIFICATIONS

Operating Specifications

- (4) independent programs
- (16) start times assignable to any program
- Station run times: 1 minute to 10 hours in 1-minute increments
- Water budgeting: 10-200% in 10% increments

Programming features:

- (7) day calendar, odd/even day watering or day-interval options from one to (30) days
- Programmable master valve
- Excluded-day function, when used with the odd/even date option, allows selection of specific day(s) not to water

Dimensions

Outdoor/Indoor: H: 8½", W: 10 ½", D: 5"

Metal: (12, 18 & 24-station)
H: 10¾", W: 9¾", D: 5¾"

Metal: (36 & 48-station)
H: 15 ¾", W: 10 ¾", D: 5 ¾"

Electrical Specifications

Outdoor/Indoor

- Transformer input: 120 V AC, 60 Hz (220/240 V AC, 50 Hz)
- Transformer output: 24 V AC, 1.67 amps

Electrical Specifications

- Electronic circuit breaker: 1.25 amps (Min. hold)
- Maximum output per station: 24 V AC, .5 amp
- Maximum output to valves: 24 V AC, 1.25 amps (including master valve)
- Battery backup: 9-volt alkaline battery
- UL & CSA listed (All models up to 18-stations)
- UL & CUL listed (24, 36, & 48-station models)

Optional Accessories

- **A** **SMRT Logic Bundle** (SMRT-CLMR-KIT)
- **B** **Wireless RainSensor** (R[F]S1000)
- **C** **Wired RainSensor** (RS500)
- **D** **CRR Remote Series** (R-100-KIT)
- **E** **Climate Logic** (CL-100-Wireless)
- **F** **SR-1 Pump Start Relay**

CONTROLLER ENHANCEMENT COMPARISON

	RAIN SENSOR	RAIN SENSOR	RAIN & FREEZE SENSOR	WEATHER SENSOR
	 25' Wire			
	RS500	RS1000	RFS1000	Climate Logic®
On Page#	21	21	21	23
Transmission Range (line-of-sight)	N/A	Up To 500'	Up To 500'	1000'
Rainfall Adjustment (⅛" - ¾")	●	●	●	●
Wireless		●	●	●
Auto Resetting Bypass		●	●	
Power Failure Protection		●	●	●
Digital Freeze Sensor			●	●
Replaceable Battery		●	●	●
Signal Strength Indicator		●	●	●
5-Year Warranty	●	●	●	●
Versatile Mounting Options	●	●	●	●
Solar Sensor				●
Adjustable Dry-out rate for reset delay	●	●	●	●
Weather-following by site location				●
Works w/all 24V Controllers	●	●	●	
Communicates w/multiple receivers		●	●	●
Optional Remote Control				●

	DECODER	CONNECTED HUB	REMOTE	PUMP START RELAY
				
	AC 2-Wire Decoder	SMRT Logic®	PRO MAX™	SR-1
	Pg. 17	Pg. 25	Pg. 27	Pg. 28
	AC 2-Wire Decoder	SMRT Logic for wireless connectivity to KD2™ & Rain Dial® Contollers	PROMAX Remote	SR-1 Pump Start Relay

RAINSENSOR™ SERIES

RAIN & FREEZE SENSORS

Key Features

- Constant communication between transmitter & receiver
- Versatile mounting options
- Smart Bypass™ for easy system override
- Fully adjustable shutoff points
- Dry-out rate adjustment for reset delay
- Compatible with virtually all Irritrol® & competitive controllers
- Rain & freeze sensors fully integrated into one unit

Additional Features

Wireless Models

- Replaceable battery
- Signal strength indicator
- Visual sensor status and alert indicators verify consistent operation
- Patented RF technology
- Slide/snap-on cover provides additional protection to weather-proof receiver from the elements
- Power failure memory protection
- Highly accurate 41°F digital activation point

Wired Models

- 25-foot cable (UV-resistant, white jacket included) provides installation flexibility
- Easy conversion to normally open operation

RFS1000 RS1000 RS500

Models

Model	Description
RS1000	Wireless RainSensor
RFS1000	Wireless rain/freeze sensor
RS500	Wired RainSensor

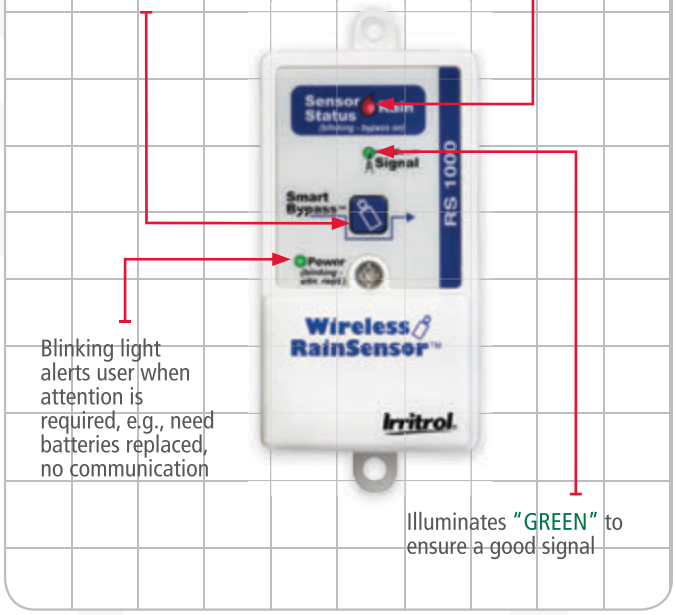
Specifying Information

RXX – XXXX

MODEL	CONNECTION
RS - Rain Sensor **RFS** - Rain/Freeze Sensor (wireless only)	**500** - Wired **1000** - Wireless
Example: A wireless rain/freeze sensor = **RFS1000**	

SPECIFICATIONS

Patented Wireless Technology



Operating Specifications

- Sensor type: industry-standard hygroscopic discs
- Rain sensitivity: adjustable nominal ⅛ to ¾"
- Operating temperature: -20°F to 120°F
- Housing material: UV-resistant engineered polymer
- Wireless only features:
  - Transmission range: up to 500' line-of-sight
  - Battery: Two CR2032 3V cells, 5-year life (typical)
  - Frequency: 418MHz

Electrical Specifications

- Receiver power: 22-28 V AC/V dc, 100mA (to be used with Class 2, UL-approved transformer)
- Load rating: Normally open or normally closed – 3A @ 24 V AC
- UL Listed, FCC, CE, IC

Dimensions

- Transmitter: H: 1 ½", W: 1 ¾", D: 3 ¾"
- Receiver: H: 1 ½", W: 1", D: 3"

Versatile Mounting Options:

(All In One SKU)

Gutter mount

Surface mount

Pole mount

CLIMATE LOGIC® SYSTEM

WIRELESS WEATHER SENSING KIT & MAINTENANCE REMOTE

Key Features

- Built-in radio
- Temperature sensor
- Built-in RainSensor™
- Solar sensor
- Receiver Module:
  - Connects to the controller with a single plug-in cord.
  - Converts historical and today's data from the weather sensor to percent of the hottest month's watering time to apply
  - Proportionately alters the controller's water budget
- Weather SD card with local, 40-year average historical weather information, insert the set-up card into the Climate Logic module (included).

CL-M1 receiver module

CL-W1 Weather sensor/transmitter

Models

Model	Description
CL-100-Wireless	Wireless weather sensor & module kit
CL-W1	Wireless weather sensor
CL-R1	Remote control (transmitter only)
CL-M1	Wireless receiver module
R-100-KIT	Remote control & mini receiver (complete kit)

CL-R1

CL-MR

Specifying Information

CL – XXX – WIRELESS

MODEL	CONNECTION
CL - Climate Logic	**100 -** Receiver & transmitter kit **R1 -** Remote transmitter only **MR** - Mini Receiver
Example: a wireless system with sensor & module = **CL-100-Wireless**	

*One CL-W1 weather sensor/transmitter can communicate with several CL-M1 receiver modules and their controllers.

Irritrol

SMRT LOGIC®

CLOUD BASED HUB FOR LANDSCAPES

Key Features

- One-stop mobile control of irrigation & lighting
- Proprietary RF Communication
- SMRTscape™ web/mobile interface
- Control up to 10 controllers with a single SMRT Logic®
- Up to 3 times the range of standard Wi-Fi controllers*
- Compatible with any Climate Logic® equipped controller
- SMRT-CLMR-KIT connects controllers without Climate Logic
- Mobile picture upload to SMRTscape.com
- Encrypted and secure
- No need to use or provide Wifi password

**Internal benchmark testing*

SMRT LOGIC
A SMRTSCAPE.COM DEVICE

Gateway to connect & control irrigation, lighting, outdoor entertainment, pumps, water features & much more!

SMRTscape.com & SMRTscape mobile app enables wireless control of your irrigation controller our outdoor space from any internet connected device

Models

Model	Description
SMRT-CLMR-KIT	Irritrol® SMRT Logic + CL Mini Receiver

Specifying Information

SMRT CLMR

MODEL	BRAND
SMRT - SMRT Logic	**CLMR-KIT** - Mini receiver bundle

Irritrol

SPECIFICATIONS

Operating Specifications
- Input: 120 VAC, 60 Hz
- Output: 5 VDC, 1 amp

Electrical Specifications
- Input: 5VDC 1 amp
- FCC

Dimensions
- 4.5" W x 5.5" H x 4.5" D
  (antenna installed in typical orientation)
- Weight: 0.6 lbs.

SMRTSCAPE.COM

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Application & Website

SMRTSCAPE.COM

SMRT-CLMR-KIT

SMRT LOGIC

Full 2-Way Programmability

Irritrol® Controllers

Rain-Dial®-R

KD2™

Irritrol Controllers

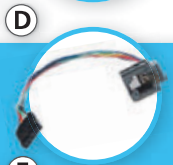
Total Control®-R

MC-E [Blue]

Remote Functionality

Easy to setup, easy to use
- Connect the SMRT Logic® Internet Gateway (Ethernet)
- Register at www.SMRTscape.com
- Configure Locations, Controllers and Relays

Optional Accessories



- **A** **CRR Remote Kit** (R-100-KIT)
- **B** **Cable Adapter** (CMR-ADP)*
- **C** **Climate Logic® Receiver** (CL-M1)
- **D** **Wireless Auxiliary Relay** (EVO-AR)

*Required for interface to MC-E "Blue" & KwikDial

RAIN MASTER®

PRO MAX™ SERIES

LONG RANGE UHF MAINTENANCE REMOTE

Key Features

- Up to 1 mile range (line-of-sight)
- Addresses up to 999 individual controllers
- Remote controls up to 200 stations
- Quick connection port
- Independent control of master valve and/or pump
- Single or multi-station ON capability (for testing)
- Timed station operation selectable from 1 to 60 minutes
- Program functionality (Rain Master controllers)
- Detects (provides an audible alert) and protects against field wiring short circuits
- Built-in safety default to automatically turn station off after 60 minutes
- Audible feedback and warnings
- No fuses required
- Limited two-year warranty
- Utilizes three mechanisms to ensure reliable, interference-free communications:
  - **A.** Digital filters
  - **B.** Factory set remote access codes
  - **C.** Frequency modulation

Models

Model	Description
PROMAX	Complete remote kit for Rain Master
PROMAX-UA	Complete remote kit for any manufacturer's 24V AC controller

SPECIFICATIONS

Operating Specifications

PRO MAX Receiver

- Operating frequency: 154.6 MHz
- Sensitivity: 0.4 microvolt typical
- Operating temperature range: 32 to 140 degrees F°
- Storage temperature range: -4 to 158 degrees F°
- Humidity range: 0 to 90% non-condensing

PRO MAX Transmitter

- Operating frequency: 154.6 MHz
- Modulation type: frequency modulation
- Frequency stability: 5%
- Operating temperature range: 32 to 148 degrees F°
- Storage temperature range: -4 to 158 degrees F°
- Humidity range: 0 to 90% non-condensing

Electrical Specifications

PRO MAX Receiver

- Power source: 22–32 V AC 50/60 Hz

PRO MAX Transmitter

- Battery: CR-P2 lithium 6V (user replaceable)
- Battery life expectancy: 1 season (typical)

Dimensions

- Transmitter: H: 1½", W: 1 ¾", D: 3 ¾"
- Receiver: H: 1 ½", W: 1", D: 3"

The PROMAX-UA Kit Includes:

- **Transmitter**
- **Receiver**
- **Adapter**
- **Connector Cables***
- **Carrying case**
- **Antennas**

*For any 24V controller up to 32 stations not included in standard Pro Max

Irritrol

SR-1

PUMP START RELAY

Key Features

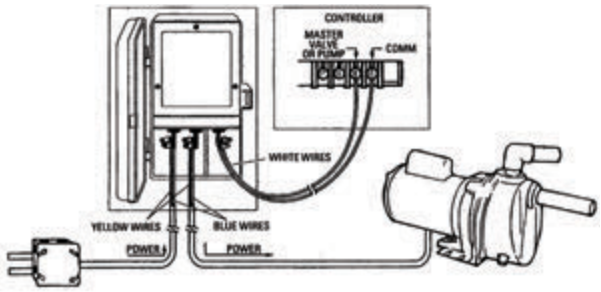
- Electrical relays for both low voltage (24V AC control switching and high voltage 120V AC or 240V AC) main power contacts
- Highly efficient 0.1 amp operating requirement
- Can also be used with irrigation control system for switching control of low voltage landscape lighting

Models

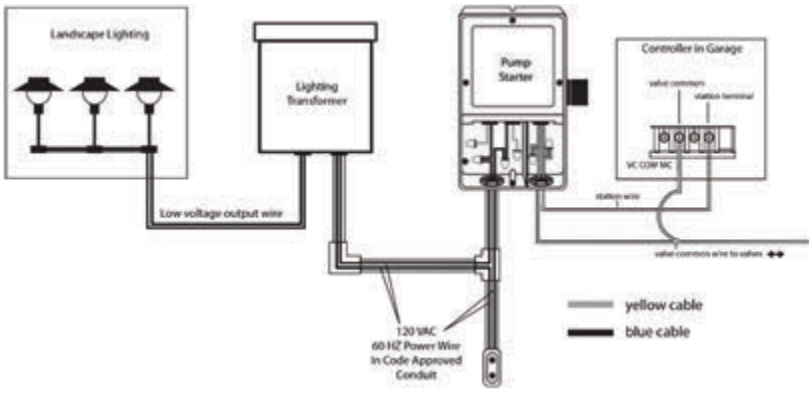
Model	Description
SR-1	Pump Start Relay

Wiring Diagrams

SR-1 as a pump start relay



SR-1 as a landscape lighting relay



Electrical Specifications

- Contacts: Up to 1 HP at 120V AC, 1 Phase Up to 2 HP at 250V AC, 1 Phase (20A at 250V AC)
- Coil: 24V AC, 3VA (19V AC Min, 30V AC Max)
- Coil Draw: 0.1 Amp

*Note: 2HP at 120V ac will exceed maximum amp rating

Dimensions

- H: 9 ½", W: 6 ¼", D: 3 ¾"

FLOW SENSORS

Key Features

Plastic Flow Sensor Adapter:

- T-Type PVC Flow Sensors available in 1.5" thru 4" diameters. Flow ranges from 0.6 GPM to 500 GPM rated up to 240 PSI.
- Saddle Type Flow Sensor Adapters available in 3", 4", and 6" diameters. Flow ranges from 2 GPM to 1,100 rated up to 400 PSI.
- Available in Schedule 40 and Schedule 80 PVC depending on size requirements.

Brass:

- T-Type Brass Flow Sensors available in 1" thru 2.5" diameters. Flow ranges from 0.6 GPM to 160 GPM rated up to 400 PSI.

Flow Sensors Selection Chart:

FLOW SENSOR MODEL	PIPE CONNEC-TION SIZE	SUGGESTED OPERATING RANGE	MAXIMUM WATER PRESSURE	K VALUE	OFFSET VALUE	BODY MATERIAL	CONNECTION TYPE
FS-B100	1"	2-40 GPM	400 psi	109	27	Brass	NPT female
FS-B125	1 ¼"	3-60 GPM	400 psi	209	32	Brass	NPT female
FS-B150	1 ½"	4-80 GPM	400 psi	291	24	Brass	NPT female
FS-B200	2"	10-100 GPM	200 psi	750	0	Brass	NTP female with copper male adapter
FS-B250	2 ½"	16-160 GPM	200 psi	1021	370	Brass	NTP female
FS-150	1 ½"	5-100 GPM	100 psi @ 68F	457	0	PVC	Slip
FS-200	2"	10-200 GPM	100 psi @ 68F	776	104	PVC	Slip
FS-300	3"	20-300 GPM	100 psi @ 68F	2268	483	PVC	Slip
FS-400	4"	40-500 GPM	100 psi @ 68F	3752	834	PVC	Slip
FS-10*	1"	.86 - 52 GPM	240 PSI	87	6	PVC	SOCKET
FS-B15*	1 1/2"	3 -90 GPM	250 PSI	208	34	Brass	FPT
FS-15*	1 1/2"	1.8 -108 GPM	240 PSI	177	205	PVC	SOCKET
FS-20*	2"	2.8 -170 GPM	240 PSI	325	256	PVC	SOCKET
RM-S30*	3"	6 - 288 GPM	150 PSI	751	431	PVC	SADDLE
RM-S40*	4"	10 - 480 GPM	150 PSI	1237	303	PVC	SADDLE
RM-S60*	F	45 - 1080 GPM	150 PSI	2839	903	PVC	SADDLE
FS-INSERT-B*	3 to 40 inches	Varies, call factory	400 psi	Varies, call factory		Requires pipe saddle with 2" female NPT	

*Only compatible with noted models

VALVES

5-YEAR WARRANTY

PVC & Glass-Filled Nylon

Link to vlaves page

Irritrol®

SOLENOIDS

Standard 24v Solenoid

R811-24VACG

- Captive hex plunger feature
- 24 V AC, .40 amp inrush, .20 amp holding

RW60-KIT

- Purple solenoid with purple warning tag
- Captive hex plunger feature

For Battery-Powered (DC) Controllers

DCL SOLENOID

- DC latching solenoid for Hardie, Richdel® & Irritrol® valves used with IBOC® & IBOC™ Plus Series controllers

VALVE COMPARISON

Residential Valves






		2400/2600 Series	205 Series	2500 Series	2700 Series	311A Series	Adapters
Operation	On Page#	33	35	37	39	41	43
	Manual	2600 Only			●		
	Electric	●	●	●	●	●	●
Available Size	3/4"				●	●	●
	1"	●	●	●	●	●	●
Configuration	Angle	2600 Only					Brass Valve Adapters
	Globe	2400 Only	●	●			
	H-Body				●	●	
Inlet/Outlet	Threaded	●	●	●	●	●	
	Slip	●	●	●			
	Male X Male	●					
	Male X Barb	●					
Flow Control	Standard	2400 Only			●	●	●
	Optional	2400 Only	●	●			
Construction	PVC	●	●	●	●	●	2623 Only
	Glass-Filled Nylon					●	300 Only
Anti-Siphon					●	●	
OMNIREG® Compatible						●	300 Only
Internal Bleed				●	●	●	●
External Bleed (Flush)		●	●	●	●	●	●

PRONLY Commercial Valves





		200B Series	700 Series	100 Series	100-S Series	102 Series Anti-Contamination
Operation	On Page#	45	47	49	51	49
	Manual					
	Electric	●	●	●	●	●
Available Size	3/4"		●			
	1"	●	●	●	●	●
	1 ½"	●	●	●	●	●
	2"	●	●	●	●	●
	3"			●	●	●
Configuration	Angle	●		●	●	●
	Globe	●	●	●	●	●
Inlet/Outlet	Threaded	●	●	●	●	●
Manual Flow Control	Standard	●	Except ¾"	●	●	●
	Optional					
Material	PVC	●				
	Glass-Filled Nylon		●	●	●	●
OMNIREG® Compatible		●	●	●	●	
Internal Bleed		●	●	●	●	●
External Bleed (Flush)		●		●	●	●
Field Configuration NC/NO						●
Continuous Scrubbing Feature					●	

2400|2600 SERIES

ELECTRIC GLOBE/ANGLE 1" RESIDENTIAL VALVES (PVC)

Key Features

- Threaded bonnet design
- Rugged, double-beaded diaphragm
- Internal and external bleed (flush mode)
- Full stainless-steel metering system
- Heavy-duty, corrosion and UV-resistant PVC, glass-filled polypropylene and stainless steel construction
- Buna-N valve seat seal
- Floating bleed tube allows thermal expansion without affecting performance
- Encapsulated injection-molded solenoid with a captive hex plunger
- Optional flow control

Models

Model	Description
2400S	1" globe slip connection valve
2400SF	1" globe slip connection w/flow control
2400T	1" globe NPT threaded connection
2400TF	1" globe NPT threaded connection w/flow control
2400T-B	1" globe male x barb connection
2400TF-B	1" globe male x barb connection w/flow control
2400T-M	1" globe male x male connection
2400TF-M	1" globe male x male connection w/flow control
2600T	1" angle NPT threaded connection
2600TF	1" angle NPT threaded connection w/flow control

Specifying Information

2400 — X — F — X

MODEL	CONFIGURATION	FEATURE	BODY OPTIONS
2400 - 2400 globe valve	**S** - Slip Connection **T** - NPT Threads	**F** - Flow Control	**B** - Male x Barb **M** - Male x Male
Example: A 2400 globe valve with slip connection and flow control = **2400SF**			

2600 — T — F

MODEL	CONFIGURATION	FEATURE
2600 - 2600 angle valve	**T** - NPT Threads	**F** - Flow Control
Example: A 2600 angle valve with NPT threads and flow control = **2600TF**		

SPECIFICATIONS

Pressure Loss Data

Flow Rate - GPM

Model	Size	.25	2	5	10	15	20	30
2400 Series	1"	5.00	4.60	3.50	4.00	2.97	3.26	6.20
2600 Series	1"	5.00	4.60	3.34	2.15	1.78	1.90	3.85

1) Pressure loss data derived from valves independently tested by CIT (Fresno, CA)

2) See pressure loss charts on pages 79 through 86 for details.

Valve Servicing Made Easy

- Threaded jar-top design allows for removal of cap over the solenoid for easy in-ground maintenance
- Internal component swap-out can be done in minutes
- A double-beaded diaphragm ensures a leak-proof seal

Operating Specifications

- Flow range: .25-30 GPM
- Pressure range: 10-150 psi

Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

Dimensions

- 2400: H: 5 ⅛", W: 3", L: 4"
- 2600: H: 6 ½", W: 3", L: 3 ¾"

Optional Accessories

- **A** Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag
- **B** DC latching solenoid (DCL)
  Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.
- **C** Threaded bonnet wrench (2400-45)

** Optional accessories are field-installable. Must specify separately if required.*

205 SERIES

ELECTRIC GLOBE 1" VALVES (PVC)

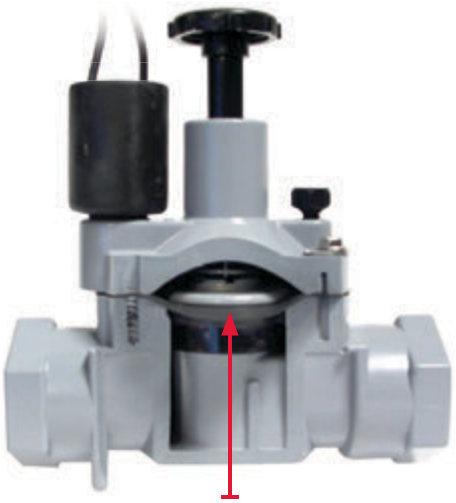
Key Features

- Heavy-duty, corrosion and UV-resistant PVC construction
- High-flow, low friction loss design
- Rugged, nylon-reinforced Buna-N diaphragm
- Available in female NPT or slip configurations (no male pipe adapter required)
- Optional flow control
- Buna-N valve seat seal
- Full stainless steel metering system and floating bleed tube
- Encapsulated injection-molded solenoid with a captive hex plunger

Models

Model	Description
205S	1" slip connection
205SF	1" slip connection with flow control
205T	1" NPT threaded connection
205TF	1" NPT threaded connection with flow control

Over 50 years of dependability



A flat fiber washer diaphragm allows the 205 to work in a wide flow range as well as easily handle debris

Specifying Information

205 - X - F

MODEL	CONFIGURATION	FEATURE
205 - 205 globe valve	**S** - Slip Connection **T** - NPT Threads	**F** - Flow Control

Example: A 205 globe valve with NPT threads and flow control = **205TF**

SPECIFICATIONS

Pressure Loss Data

Flow Rate - GPM

Model	Size	.25	2	5	10	15	20	30
205 Series	1"	5.40	3.82	3.00	2.20	1.90	3.10	5.10

1) Pressure loss data derived from valves independently tested by CIT (Fresno, CA)

2) See pressure loss charts on pages 79 through 86 for details.

"We started using the 205 in 1976, so it's been 40 years. It is the only 1" valve we use because it was right from the start and Irritrol has left it alone. It's been several colors and brand names over the years but it hasn't changed."

–P. Covell

Owner of Covell Sprinklers - San Antonio, TX.

Operating Specifications

- Flow range: .25-30 GPM
- Pressure range: 10-150 psi

Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

Dimensions

- H: 5 ⅛", W: 2¾", L: 5"

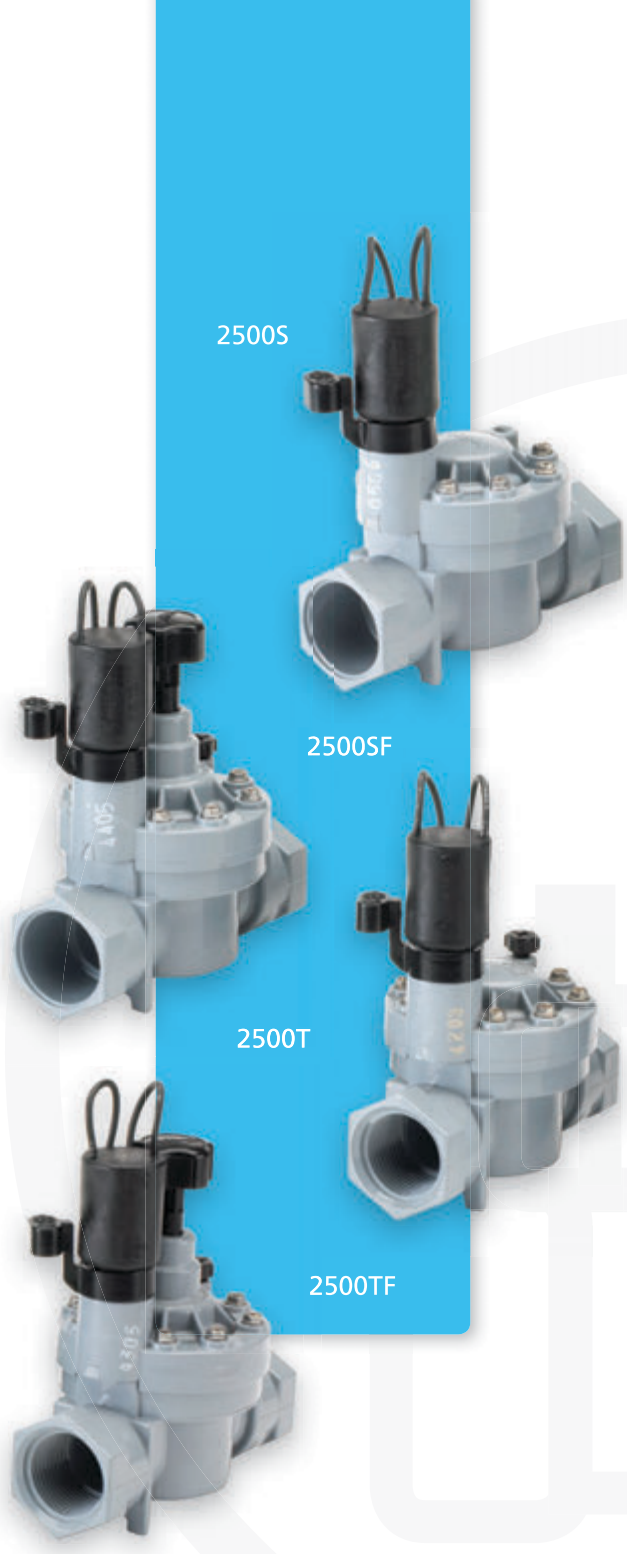
Optional Accessories

- **A** Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag
- **B** DC latching solenoid (DCL)
  Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.
- **C** R205KIT
- **D** R205TFKIT

* *Optional accessories are field-installable. Must specify separately if required.*

2500 SERIES

ELECTRIC GLOBE ¾" & 1" VALVES (PVC)



Key Features

- Patented "floating" stainless-steel metering system
- High-flow, low friction loss design combined with low-flow capability
- Rugged, double-beaded EPDM diaphragm
- Internal and external bleed (flush mode)
- Heavy-duty, corrosion and UV-resistant PVC and stainless steel construction
- Available in female NPT or slip configurations (no male pipe adapter required)
- Buna-N valve seat seal
- Floating bleed tube allows thermal expansion without affecting performance
- Encapsulated injection-molded solenoid with a captive hex plunger

Models

Model	Description
2500S	1" slip connection
2500SF	1" slip connection with flow control
2500T	1" NPT threaded connection
2500TF	1" NPT threaded connection with flow control
2507TF	¾" NPT threaded connection with flow control

Specifying Information

2500 X F

MODEL	CONFIGURATION	FEATURE
2500 - 2500 globe valve	**S** - Slip Connection **T** - NPT Threads	**F** - Flow Control

Example: A 2500 globe valve with NPT threads and flow control = **2500TF**

2507 T F

MODEL	CONFIGURATION	FEATURE
2507 - 2507 globe valve	**T** - NPT Threads	**F** - Flow Control

Example: A ¾" 2507 globe valve with NPT threads and flow control = **2507TF**

SPECIFICATIONS

Pressure Loss Data

Flow Rate - GPM

Model	Size	.25	2	5	10	15	20	30
2500 Series	1"	5.40	3.82	3.00	2.20	1.90	3.10	5.10
2507 Series	¾"	2.75	3.40	3.85	4.00	2.40	3.98	6.19

1) Pressure loss data derived from valves independently tested by CIT (Fresno, CA)

2) See pressure loss charts on pages 79 through 86 for details.

Operating Specifications

- Flow range: .25-30 GPM
- Pressure range: 10-150 psi

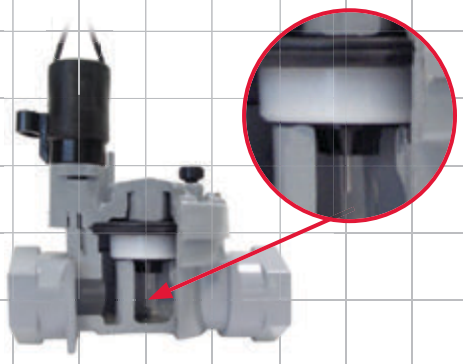
Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

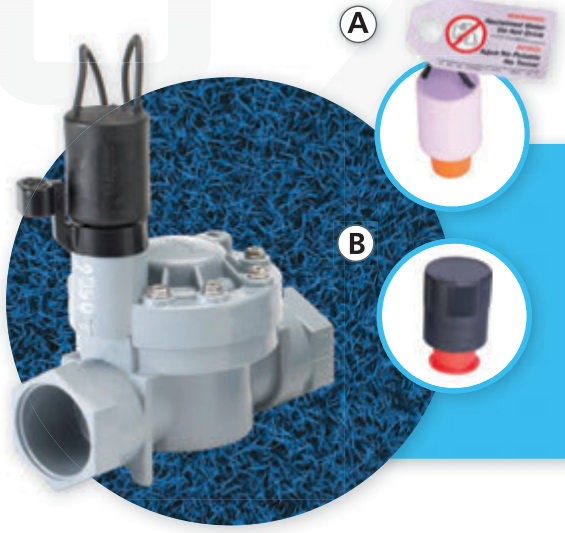
Dimensions

- 2500: H: 5⅛", W: 2 ¾", L: 5"
- 2507: H: 5⅛", W: 2 ¾", L: 5"

Ideal For Dirty Water Applications



Debris-tolerant, patented "floating metering system" makes this valve ideal for wells & dirty water applications



Optional Accessories

A Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag

B DC latching solenoid (DCL)

Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.

** Optional accessories are field-installable. Must specify separately if required.*

200B SERIES COMMERCIAL VALVES

ELECTRIC GLOBE/ANGLE 1", 1½" & 2" (PVC)

PRONLY


214B


216B


217B

Key Features

- Heavy-duty, corrosion- and UV-resistant PVC construction with stainless steel spring and hardware
- Slow-closing design
- Rugged, double-beaded diaphragm
- Internal and external bleed (flush mode)
- Accepts OmniReg® modular pressure regulator
- High-strength ribbed bonnet and bottom inlet
- Flow control allows precise adjustment and manual shutoff
- Buna-N valve seat seal
- Unique threaded inlet plug O-ring seal prevents leaks
- Encapsulated injection-molded solenoid with a captive hex plunger

Models

Model	Description
214B	1" NPT threads, flow control
216B	1½" NPT threads, flow control
217B	2" NPT threads, flow control

Specifying Information

21 XB

MODEL	SIZE
21 - 200B Series electric valve	**4** - 1" size **B** **6** - 1½" size **7** - 2" size
Example: A 200B Series 1" electric valve = **214B**	

SPECIFICATIONS

Pressure Loss Data

Flow Rate - GPM

Model	Size	Globe Angle	5	10	15	20	30	40	50	60	80	100	120
214B	1"	G	3.36	2.60	1.82	2.35	5.40						
		A	3.09	2.20	1.48	1.98	4.00						
216B	1½"	G				3.04	2.66	2.33	2.97	4.14	5.62		
		A				2.76	2.24	1.99	2.30	3.10	4.42		
217B	2"	G				2.00	1.93	1.73	1.55	1.68	2.99	4.85	6.31
		A				2.00	1.93	1.73	1.55	1.59	2.15	3.27	4.88

1) Pressure loss data derived from valves independently tested by CIT (Fresno, CA)

2) See pressure loss charts on pages 79 through 86 for details.

Operating Specifications

- Flow range: 5-120 GPM
- Pressure range: 20-150 psi

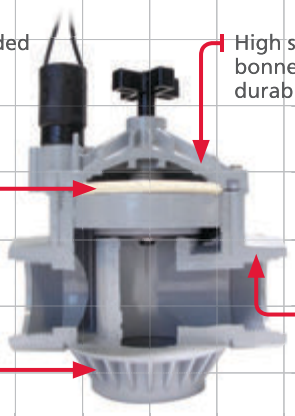
Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

Dimensions

- 214B: H: 6 ½", W: 2 ½", L: 4 ½"
- 216B: H: 7¾", W: 4¼", L: 5½"
- 217B: H: 8¾", W: 5⅜", L: 6¼"

Durable Heavy-Duty Construction



Optional Accessories

A Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag

B DC latching solenoid (DCL)
Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.

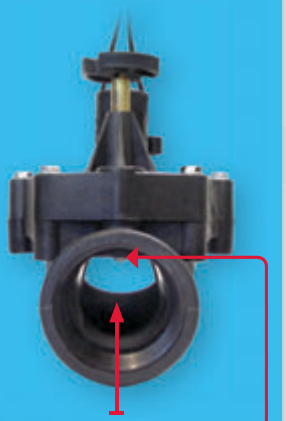
C OmniReg® regulator (OMR-30)
Note: Available on 300 Series only

** Optional accessories are field-installable. Must specify separately if required.*

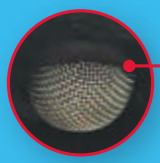
700 SERIES ULTRAFLOW® COMMERCIAL VALVES

ELECTRIC GLOBE ¾", 1", 1½" & 2"
(GLASS-FILLED NYLON)

PRONLY



Straight-through flow path provides a wide flow range with minimal friction loss



Self-flushing, 150 mesh stainless steel filter screen provides consistent operation

Key Features

- Unique straight-through flow path
- Heavy-duty, corrosion and UV-resistant construction with stainless steel spring and hardware
- Ideal for chemical resistance (tested)
- Slow-closing design
- Rugged, double-beaded diaphragm
- Internal and external bleed (flush mode)
- Accepts OmniReg® modular pressure regulator
- High-strength ribbed bonnet and bottom inlet
- Wide flow range
- EPDM valve seat seal
- Unique threaded inlet plug O-ring seal prevents leaks
- Encapsulated injection-molded solenoid with a captive hex plunger
- Female threaded connections only

Models

Model	Description
700B-.75	¾" internal bleed flow control
700-1	1" internal bleed flow control
700-1.5	1½" internal bleed flow control
700-2	2" internal bleed flow control

700-2 700-1.5 700-1 700-.75

"The Irritrol 700 Series valve has been our firm's preferred valve for over twenty years. With the straight flow-through path providing less friction loss you're able to achieve higher flows with smaller valves, saving your client money. I can't think of one instance where a client or maintenance entity has complained about the valve not doing the job."

–Y. Hooper

Principal, Van Dyke Landscape Architecture - San Diego, CA

Specifying Information

700 – XXX

MODEL	SIZE
700 - 700 UltraFlow electric valve	**B-.75** - ¾" size **1** - 1" size **1.5** - 1½" size **2** - 2" size
Example: A 700 UltraFlow electric 1" valve = **700-1**	

SPECIFICATIONS

Pressure Loss Data

Flow Rate - GPM

Model	Size	0.1	2	5	10	15	20	30	40	50
700B-.75	¾"	0.38	0.38	0.86	1.22	2.03	3.27	6.75		
700-1	1"	2.20	1.59	1.80	2.41	2.23	1.84	3.22	5.58	8.59

Flow Rate - GPM

Model	Size	15	20	30	40	50	60	80	100	120	140	160	180
700-1.5	1 ½"	0.19	0.36	0.69	1.13	1.49	2.13	3.85	6.06	8.72	11.89		
700-2	2"			0.64	0.83	0.98	1.17	2.07	3.06	3.96	5.21	6.50	8.23

1) Pressure loss data derived from valves independently tested by CIT (Fresno, CA)

2) See pressure loss charts on pages 79 through 86 for details.

Operating Specifications

- Flow range: 0.1-180 GPM
  (700B-.75 & 700-1 can operate at .1 GPM)
  (700-1.5 not recommended under 25 psi)
- Pressure range: 10-150 psI
  (700-2 not recommended under 25 psi)

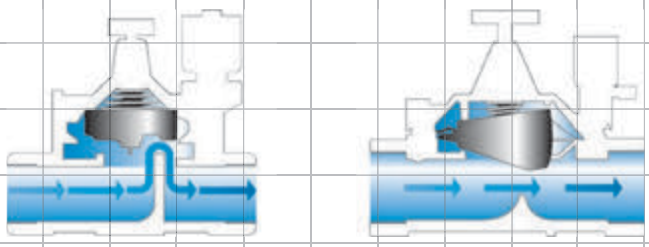
Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

Dimensions

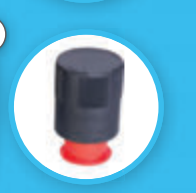
- 700B-.75: H: 4 ½", W: 1 9/10", D: 3 2/5"
- 700-1: H: 4 ½", W: 3", D: 4 3/8"
- 700-1.5: H: 5 ½", W: 4 3/8", D: 6 ¼"
- 700-2: H: 7", W: 5 ½", D: 8"

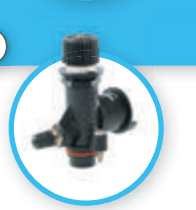
UltraFlow® Technology



Conventional flow path

The UltraFlow Series straight-through flow path





Optional Accessories

A Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag

B DC latching solenoid (DCL)
Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.

C OmniReg® regulator (OMR-30)
Note: Available on 300 Series only

** Optional accessories are field-installable. Must specify separately if required.*

100 SERIES COMMERCIAL VALVES

CENTURY PLUS & ANTI-CONTAMINATION (102 SERIES) ELECTRIC GLOBE/ANGLE 1", 1½, 2", & 3" (GLASS-FILLED NYLON)

PRONLY

Master Valve Tip: configure on-the-fly NC or NO

Key Features

- Tough, glass-reinforced nylon, stainless steel and brass construction
- 220 psi pressure rating
- Internal and external bleed (flush mode)
- Externally removable self-cleaning metering system
- Accepts OmniReg® modular pressure regulator
- EPDM valve seat seal
- Brass flow control stem on 2- and 3-inch models
- Positive O-ring seal on inlet plug prevents leaks without damaging seal threads

102 Anti-Contamination Models*

- 150-mesh external control water filter and three-way solenoid
- Selectable normally open or normally closed mode (factory set at normally closed)
- Control water filter
- Female threaded connections only

102 Series Anti-Contamination Valve

100P3 100P2 100P1.5 100P1

Models

Model	Description
100P1	1" internal bleed, flow control
100P1.5	½" internal bleed, flow control
100P2	2" internal bleed, flow control
100P3	3" internal bleed, flow control
102P1	1" anti-contamination filter
102P1.5	1½" anti-contamination filter
102P2	2" anti-contamination filter
102P3	3" anti-contamination filter

Specifying Information

10XP — XX

MODEL	SIZE
100P - 100 internal bleed and flow control valve **102P** - 102 anti-contamination filter valve	**1** - 1" size **1.5** - 1½" size **2** - 2" size **3** - 3" size
Example: A 100P 1" valve with internal bleed and flow control = **100P1**	

SPECIFICATIONS

Pressure Loss Data

Flow Rate - GPM

Model	Size	Globe Angle	5	10	20	30	40	50
100P1	1"	G	6.30	4.20	3.20	4.10	7.20	10.90
102P1		A	6.30	4.20	3.10	2.70	4.80	7.90

Flow Rate - GPM

Model	Size	Globe Angle	30	40	50	60	70	80	90	100	110
100P1.5	1.5"	G	1.60	2.30	3.60	5.20	7.00	9.20	11.70	14.40	17.50
102P1.5		A	1.30	1.60	2.80	4.00	5.50	7.10	9.00	11.00	13.30

Flow Rate - GPM

Model	Size	Globe Angle	80	90	100	110	120	130	140	150	175
100P2	2"	G	2.10	2.70	3.30	4.00	4.80	5.60	6.50	7.50	8.60
102P2		A	1.20	1.60	2.00	2.40	2.80	3.30	3.90	4.40	5.00

Flow Rate - GPM

Model	Size	Globe Angle	150	175	200	225	250	275	300
100P3/102P3	3"	G	2.50	3.00	4.10	5.30	6.70	8.30	10.10
		A	1.90	2.40	3.30	4.30	5.50	6.90	8.50

1) Pressure loss data derived from valves independently tested by CIT (Fresno, CA)

2) See pressure loss charts on pages 79 through 86 for details.

Operating Specifications

- Flow range: 5-300 GPM
- Pressure range: 20-220 psi
  20-100 psi (102 models)

Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

Dimensions

- 100P1: H: 6 ¾", W: 3 5/8", D: 4 ¾"
- 102P1: H: 7 ½", W: 5", D: 4 ¾
- 100P1.5: H: 7 ¼", W: 3", D: 4 ¾"
- 102P1.5: H: 7 ½", W: 5", D: 4 ¾"
- 100P2: H: 9 ½", W: 6 1/8", D: 7 ¾"
- 102P2: H: 10 ¼", W: 7 ½", D: 7 ¾"
- 100P3: H: 10 ¾", W: 6 1/8", D: 8 ¼"
- 102P3: H: 11 ½", W: 7 ½", D: 8 ½"

Optional Accessories

- **A** Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag
- **B** DC latching solenoid (DCL)
  Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.
- **C** OmniReg® regulator (OMR-30)
  Note: Available on 300 Series only
- **D** Scrubber diaphragm assembly (100P-S-KIT)
- **E** Richdel® Century valve repair kit (R100PX)
- **F** IW series repair kit (SPK-100-X)

Optional accessories are field-installable. Must specify separately if required.

100-S SERIES

CENTURY PLUS SCRUBBER VALVE ELECTRIC GLOBE/ANGLE 1", 1½ , 2", & 3"

(GLASS-FILLED NYLON)

Key Features

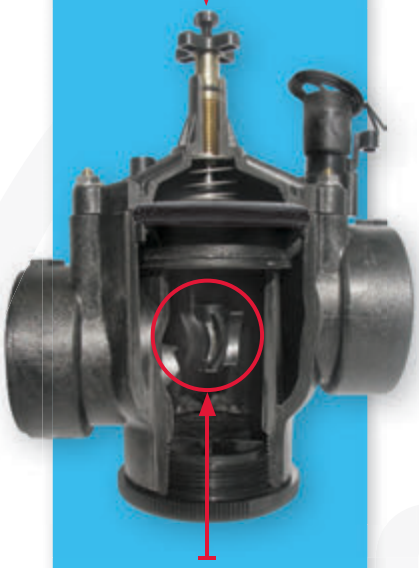
- Upper body and air-vent cap constructed of glass-filled nylon
- Heavy-duty, corrosion- and UV-resistant glass-filled nylon construction with stainless steel spring and hardware
- Slow-closing design
- Rugged, double-beaded diaphragm
- Internal and external bleed (flush mode)
- Accepts OmniReg® modular pressure regulator
- Unique three-way stainless steel Bonnet
- EPDM valve seat seal
- Brass flow control stem on 2- and 3-inch models
- Positive O-ring seal on inlet plug prevents leaks without damaging seal threads

Models

Model	Description
100P1-S	1" internal bleed, scrubber valve
100P1.5-S	1½" internal bleed, scrubber valve
100P2-S	2" internal bleed, scrubber valve
100P3-S	3" internal bleed, scrubber valve
100P1-S-KIT	1" scrubber diaphragm kit
100P1.5-S-KIT	1½" scrubber diaphragm kit
100P2-S-KIT	2" scrubber diaphragm kit
100P3-S-KIT	3" scrubber diaphragm kit

PRONLY

Self-cleaning–each cycle cleans internal orifices. All parts are easily accessible without removing the valve from the system



Continuous scrubbing turbine actively cleans the metering device for consistent valve operation in dirty water applications

100P3-S 100P2-S 100P1.5-S 100P1-S

Specifying Information

100P - X-S - KIT

MODEL	SIZE	KIT
100P - 100 internal bleed and flow control valve	**1** - 1" size **1.5** - 1½" size **2** - 2" size **3** - 3" size	KIT

Example: A 100P 2" scrubber valve with internal bleed and flow control = **100P2-S**

Irritrol

SPECIFICATIONS

Pressure Loss Data

Flow Rate - GPM

Model	Size	Globe Angle	5	10	20	25	30	40	50
100P1-S	1"	A	4.35	4.97	2.51	3.61	5.21	9.06	13.49
		G	1.90	2.40	3.30	4.30	5.50	6.90	8.50

Flow Rate - GPM

Model	Size	Globe Angle	20	30	40	50	60	70	80	90	100	110
100P1.5-S	1.5"	A	0.92	1.33	2.33	5.53	4.93	6.64	8.99	11.20	13.50	16.62
		G	0.95	1.35	2.65	3.99	5.84	7.89	10.22	13.03	16.12	19.82

Flow Rate - GPM

Model	Size	Globe Angle	80	90	100	110	120	130	140	150	175
100P2-S	2"	A	2.80	3.80	4.50	5.50	6.30	7.60	8.70	10.30	13.10
		G	3.54	4.45	5.40	6.68	8.04	9,26	10.95	12,21	15.65

Flow Rate - GPM

Model	Size	Globe Angle	150	175	200	225	250	275	300
100P3-S	3"	A	2.55	3.10	4.50	5.40	7.10	8.40	10.15
		G	2.97	4.04	5.37	6.35	7.99	9.35	11.26

1) Pressure loss data derived from valves independently tested by CIT (Fresno, CA)

2) See pressure loss charts on pages 79 through 86 for details.

Operating Specifications

- Flow range: 5-300 GPM
- Pressure range: 20-220 psi
  20-100 psi (102 models)

Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

Dimensions

- 100P1-S: H: 6 ¾", W: 3 ⅝", D: 4 ¾"
- 100P1.5-S: H: 7 ¼", W: 3 ⅝", D: 4 ¾ "
- 100P2-S: H: 9 ½", W: 6 ⅛", D: 7 ¾"
- 100P3-S: H: 10 ¾", W: 6 ⅛", D: 8 ¼ "

Optional Accessories

A Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag

B DC latching solenoid (DCL)
Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.

C OmniReg® regulator (OMR-30)
Note: Available on 300 Series only

D Scrubber diaphragm assembly (100P-S-KIT)

** Optional accessories are field-installable. Must specify separately if required.*

DRIP ZONE VALVE KITS

ELECTRIC ¾" & 1"

Key Features

- Includes Irritrol control valve
- Irritrol Y-filter with a 150 mesh stainless steel filter screen
- Pressure regulator
- Available in 11 valve configurations (¾" & 1")

MODELS

Model	Description
700DK-1-LF	1" 700 UltraFlow® Inline Valve, Filter, Low Flow Regulator & Fittings
700DK-1-MF	1" 700 UltraFlow Inline Valve, Filter, Medium Flow Regulator & Fittings
700DK-075-LF	¾" 700 UltraFlow Inline Valve, Filter, Low Flow Regulator & Fittings
2500DK-1-LF	1" 2500 Valve, Filter, Low Flow Regulator & Fittings
2500DK-1-MF	1" 2500 Valve, Filter, Medium Flow Regulator & Fittings
2507DK-LF	¾" 2507 Valve, Filter, Low Flow Regulator and Fittings
2507DK-MF	¾" 2507 Valve, Filter, Medium Flow Regulator and Fittings
2711APRDK-LF	¾" 2711APR Valve, AVB, Filter, Low Flow Regulator & Fittings
2711APRDK-MF	¾" 2711APR Valve, AVB, Filter, Medium Flow Regulator & Fittings
2713APRDK-LF	1" 2713APR Valve, AVB, Filter, Low Flow Regulator & Fittings
2713APRDK-MF	1" 2713APR Valve, AVB, Filter, Medium Flow Regulator & Fittings
DK-LV-LF	Low Flow Kit Less Valve
DK-LV-MF	Medium Flow Kit Less Valve

Specifying Information

XXXXXXX – DK – XXX – XX

MODEL	KIT	VALVE SIZE	FLOW RATE
700 - 700 Series Valve **2500** - 2500 Series Valve **2507** - 2507 Series Valve **2711APR** - 2711 Series Valve **2713APR** - 2713 Series Valve	**DK** - Drip Zone Kit	**1** - 1" **075** - ¾"	**LF** - Low Flow **MF** - Medium Flow

Example: A drip zone kit with a 700 Series UltraFlow, 1" commercial valve (0.1-8 gpm) = **700DK-1-LF**

DK – LV – XX

MODEL	LESS VALVE	FLOW RATE
DK - Drip Zone Kit	**LV** - Less Valve	**LF** - Low Flow **MF** - Medium Flow

SPECIFICATIONS

Operating Specifications

- Flow range: 5-300 GPM
- Pressure range: 20-220 psi
  20-100 psi (102 models)

Electrical Specifications

- Solenoid: 24 V AC
- Inrush volt-amp: 24 V AC-9.6 VA
- Inrush current: .4 amp
- Holding volt-amp: 24 V AC-4.8 VA
- Holding current: .2 amp

Pressure Loss Data

Flow Rate - GPM

Model	GPM (Flow)	0.25	5	8	15	20
2711APRDK-LF	Pressure loss (psi)	3	5	5	n/a	n/a
	Min. Inlet (psi)	30	32	32	34	39
2711APRDK-MF	Pressure loss (psi)	3	5	5	7	13
	Min. Inlet (psi)	30	32	32	34	39
2713APRDK-LF	Pressure loss (psi)	3	5	5	n/a	n/a
	Min. Inlet (psi)	30	32	32	34	39
2713APRDK-MF	Pressure loss (psi)	3	5	5	5	8
	Min. Inlet (psi)	30	32	32	32	35
2500DK-1-LF	Pressure loss (psi)	3	3	3	n/a	n/a
	Min. Inlet (psi)	30	30	30	32	34
2500DK-1-MF	Pressure loss (psi)	3	3	3	4.5	7
	Min. Inlet (psi)	30	30	30	32	34
2507DK-LF	Pressure loss (psi)	3	5	5	n/a	n/a
	Min. Inlet (psi)	30	32	32	34	39
2507DK-MF	Pressure loss (psi)	3	5	5	7	13
	Min. Inlet (psi)	30	32	32	34	39
700DK-1-LF	Pressure loss (psi)	3	3	3	n/a	n/a
	Min. Inlet (psi)	30	30	30	32	34
700DK-1-MF	Pressure loss (psi)	3	3	3	4.5	7
	Min. Inlet (psi)	30	30	30	32	34
700DK-075-LF	Pressure loss (psi)	3	3	3	n/a	n/a
	Min. Inlet (psi)	30	30	30	32	34

Optional Accessories

- Recycled-water solenoid kit (RW60-KIT); purple solenoid with purple warning tag
- DC latching solenoid (DCL)
  Note: Maximum pressure for a valve that utilizes latching solenoid is 120 psi.
- OmniReg® regulator (OMR-30)
  Note: Available on 300 Series only

** Optional accessories are field-installable. Must specify separately if required.*

Model	2711APRDK-LF	2711APRDK-MF	2713APRDK-LF	2713APRDK-MF	2500DK-1-LF	2500DK-1-MF	2507DK-LF	2507DK-MF	700DK-1-LF	700DK-1-MF	700DK-075-LF
Connection Size	¾"	¾"	1"	1"	1"	1"	¾"	¾"	1"	1"	¾"
Control Valve Solenoid	24V AC, Inrush: 0.4 amps, 11.5 V a, Holding 0.20 amps, 5.75 V a										
Minimum Flow Rate	0.25 GPM	2 GPM	0.25 GPM	2 GPM	0.1 GPM	2 GPM	0.25 GPM	2 GPM	0.1 GPM	2 GPM	0.25 GPM
Maximum Flow Rate	8 GPM	20 GPM	8 GPM	20 GPM	8 GPM	20 GPM	8 GPM	20 GPM	8 GPM	20 GPM	8 GPM
Maximum Pressure	150 psi	150 psi	150 psi	150 psi	150 psi	150 psi	150 psi	150 psi	150 psi	150 psi	150 psi
Y-Filter Degree of Filtration	150 mesh	150 mesh	150 mesh	150 mesh	150 mesh	150 mesh	150 mesh	150 mesh	150 mesh	150 mesh	150 mesh
Regulator-Preset Pressure	25 psi	25 psi	25 psi	25 psi	25 psi	25 psi	25 psi	25 psi	25 psi	25 psi	25 psi
Thread Connection-Upstream	Female NPT	Female NPT	Female NPT	Female NPT	Female NPT	Female NPT	Female NPT	Female NPT	Female NPT	Female NPT	Female NPT
Thread Connection-Downstream	Female NPT	Female NPT	Male NPT	Female NPT	Male NPT	Female NPT	Female NPT	Female NPT	Male NPT	Female NPT	Female NPT
Minimum Number of Emitters: 0.5 GPH 1 GPH 2 GPH	 30 15 8	 240 120 60	 30 15 8	 240 120 60	 12 6 3	 240 120 60	 30 15 8	 240 120 60	 12 6 3	 240 120 60	 30 15 8
Maximum Number of Emitters: 0.5 GPH 1 GPH 2 GPH	 960 490 240	 2400 1200 600	 960 490 240	 2400 1200 600	 960 490 240	 2400 1200 600	 960 490 240	 2400 1200 600	 960 490 240	 2400 1200 600	 960 490 240

Note: Consult your local plumbing code for backflow prevention requirements.
** AVB = Atmospheric Vacuum Breaker (Anti-siphon Valve)*

VALVE SERVICE KITS

SPK-HR1

- Pre-packaged repair kit includes diaphragm assembly, O-ring, metering rod and fasteners (bulk 24 per)

R205KIT

- Pre-packaged repair kit for 205 Series non-flow control valves. Includes diaphragm assembly, bonnet assembly, fasteners and spring

R205TFKIT

- Pre-packaged repair kit for 205TF flow control valves. Includes diaphragm assembly, bonnet assembly, fasteners and spring

R936XX1

- Pre-packaged repair kit for Century Series. Includes complete bonnet assembly and diaphragm for retrofiting old Century Heries valves from Richdale®, Hardie and Hydro-Rain®

SPK-700-X

- Pre-packaged repair kit for UltraFlow® Series valves includes diaphragm assembly, support ring, seat seal, O-rings & fasteners (bulk 24 per; repair instructions & parts breakdown included)

SPK-100-X

- Pre-packaged repair kit for Century Series valves includes diaphragm assembly, O-ring, metering rod and fasteners (bulk 24 per; repair instructions and parts breakdown included)

R1000PX (Richdel®)

- Pre-packaged repair kit for Century Series valves includes diaphragm assembly, O-rings, metering rod and fastening nuts (bulk 24 per; repair instructions and parts breakdown included)

100P-S-KIT

- 100 Century Series Scrubber valve diaphragm assembly kit. Complete with scrubbing turbine, EPDM diaphragm, EPDM seat seal & 316SS filter. Available in fully assembled & ready to drop in a Century Series valve.

SPK-700X — XX

MODEL	SIZE
SPK-700B	0.75"
SPK-700	1"
SPK-700	1.5"
SPK-700	2"

SPK-100 — XX

MODEL	SIZE
SPK-100	1"
SPK-100	1.5"
SPK-100	2"
SPK-100	3"

R100P XX

MODEL	SIZE
R100P	1"
R100P	1.5"
R100P	2"
R100P	3"

100P – X – S-KIT

MODEL	SIZE
100P	1"
100P	1.5"
100P	2"
100P	3"

ROTOR COMPARISON

Residential Applications		 430R	 TITAN	 550R
Application	On Page#	59	60	61
	Turf	●	●	●
	Shrubs/Ground Cover			●
	Slopes		●	●
	Rubber Cover For Athletic Fields			●
Features	Full/Partial Circle	●	●	●
	Radius	20'-35'	32'-45'	25'-50'
	Inlet Size	1/2"	1/2" or 3/4"	3/4"
	Pressure Rating	30-50 psi	30-50 psi	25-65 psi
	Stainless Steel Riser			●
	Check Valve			●
	Recycled Water Option			●
	Pre-Installed Nozzle	1.5	3.0	3.0
	Shrub			●
	High Pop			●
	Automatic Return			
	Pop-Up Height	4"	3"	5"

430R SERIES

5-YEAR WARRANTY

GEAR-DRIVEN POP-UP ROTOR – ½"

Key Features

- Familiar top adjustment, wet or dry
- Reversing full- & part-circle operation
- Pressure-activated wiper seal
- Positive left and right stops (fixed right stop)
- Stainless steel adjustment screw
- Ratcheting riser

Models

Model	Description
430R	½" inlet with 4" pop-up

OPERATING SPECIFICATIONS

- Inlet: ½" female-threaded NPT
- Adjustable arc range: 40° to 360°
- Flow range: .8 – 3.4 GPM
- Recommended operating pressure: 30 – 50 psi
- Maximum operating pressure: 60 psi
- Radius: 20' to 35'
- Standard nozzle trajectory: 25°
- 5 interchangeable nozzles

Performance Data

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
0.75	30	20	0.80	0.39	0.44
	40	21	0.90	0.39	0.45
	50	22	1.00	0.40	0.46
1.0	30	26	1.00	0.28	0.33
	40	27	1.10	0.29	0.34
	50	28	1.30	0.32	0.37
1.5	30	29	1.30	0.30	0.34
	40	30	1.50	0.32	0.37
	50	31	1.70	0.34	0.39
2.0	30	30	1.70	0.36	0.42
	40	31	2.00	0.40	0.46
	50	31	2.30	0.46	0.53
3.0	30	34	2.60	0.43	0.50
	40	35	3.00	0.47	0.54
	50	35	3.40	0.53	0.65

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
   Note: Data collected in zero wind conditions

No Special Tools Required
All arc adjustments made from the top with a standard screwdriver reduces set up time

Nozzle tree

Tool

Specifying Information

430R

MODEL	INLET
430R - Gear-driven rotor	½" Female Threaded NPT

Example: 430R rotor, ½" female threaded, 4" height = **430R**

Irritrol

TITAN™

IMPACT ROTOR – COMBINATION ½" OR ¾"

Key Features

- Double-weighted spray guide arm
- 5 interchangeable, color-coded MPR nozzles
- Heavy-duty, high impact case
- Pressure-activated wiper seal
- Radius reduction screw
- Unique lip case design
- Replaces competitive sprinklers
- Straight flow-through path

Models

Model	Description
TITAN	Impact Rotor
TITAN-NP	Impact Rotor w/non-potable cover

OPERATING SPECIFICATIONS

- Full- & part-circle adjustable from 20° to 360°
- Radius: 32′ - 45′
- Flow rate: 1.50–7.50 GPM
- Recommended operating pressure range: 30–50 psi
- Maximum operating pressure: 60 psi
- Recommended spacing: 22′ to 45′
- Trajectory: 18°
- Combination ½" or ¾" female-threaded inlet

Dimensions

- Body diameter: 2½"–5"
- Cap diameter: 5"
- Height: 9 3/10"

Performance Data

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
1.5 (Orange)	30	32	1.5	0.16	0.14
	40	35	1.8	0.16	0.14
	50	36	2.3	0.20	0.17
2.0 (Red)	30	33	2.0	0.20	0.18
	40	37	2.2	0.18	0.15
	50	40	2.5	0.17	0.15
3.0 (Black)	30	35	2.9	0.26	0.23
	40	39	3.6	0.26	0.23
	50	41	5.0	0.26	0.23
4.0 (Blue)	30	38	3.8	0.29	0.25
	40	41	4.2	0.28	0.24
	50	42	5.1	0.32	0.28
6.0 (Green)	30	39	5.8	0.42	0.37
	40	43	6.5	0.39	0.34
	50	45	7.5	0.41	0.36

Specifying Information

TITAN — XX

MODEL	TYPE
TITAN - Impact rotor	NP-Non Potable

550R SERIES

GEAR-DRIVEN POP-UP ROTOR – ¾"

Key Features

- Familiar top adjustment, wet or dry
- Reversing full and part-circle operation
- Non-flushing wiper seal
- All adjustments made with a standard screwdriver
- Standard rubber cover
- Wide selection of nozzles
- Positive left & right stops (fixed left stop)
- Optional stainless steel riser
- Optional check valve holds up to 7' of elevation change
- Full 5" pop-up

550RS 550R 550R-SS-SC 550RHP

Models

Model	Description
550R	¾" inlet, 5" lawn pop-up
550R-CV	¾" inlet, 5" lawn pop-up w/check valve
550R-SC	¾" inlet, 5" lawn pop-up & slip clutch
550R-CV-SC	¾" inlet, 5" lawn pop-up w/check valve & slip clutch
550R-SS-SC	¾" inlet, 5" lawn pop-up w/sst riser & slip clutch
550RS	¾" inlet, shrub
550RHP	¾" inlet, 12" high-pop

No Special Tools Required

All arc adjustments made from the top with a standard screwdriver reduces set up time

Specifying Information

550 – XXX – XX – XX – XX

MODEL	POP-UP TYPE	OPTIONS
550 - ¾" rotor	**R** - lawn pop-up **RS** - shrub **RHP** - high-pop	**CV** - Check Valve **NP** - Non-Potable **SS** - Stainless Steel Riser **SC** - Slip Clutch

Example: 550R rotor, ¾" female threaded, with stainless steel riser, non-potable cover, and slip clutch = **550R-SS-NP-SC**

SPECIFICATIONS

Operating Specifications

- Inlet: ¾" female-threaded NPT
- Adjustable arc range: 40° to 360°
- Flow range: .74 – 9.70 gpm
- Recommended operating pressure: 45 psi
- Precipitation rate: .20 – .99 inches per hour
- Overall height (retracted): 7 3/8"
- Radius: 25' – 50'
- Pressure range: 25 to 70 psi
- Standard nozzle trajectory: 25°
- Low angle nozzle trajectory: 12°
- 8 standard and 4 low angle nozzles included (unit comes with 3.0 nozzle pre-installed)
- Riser height: 5"

Pressure Loss Data

550R –Standard Nozzle

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
1.5	25	33	1.15	0.20	0.23
	35	34	1.38	0.23	0.27
	45	35	1.59	0.25	0.29
	55	35	1.74	0.27	0.32
	65	36	1.88	0.28	0.32
2.0	25	35	1.45	0.23	0.26
	35	36	1.80	0.27	0.31
	45	37	2.12	0.30	0.34
	55	37	2.30	0.32	0.37
	65	37	2.58	0.36	0.42
2.5	25	35	1.75	0.28	0.32
	35	36	2.20	0.33	0.38
	45	37	2.55	0.36	0.41
	55	37	2.80	0.39	0.45
	65	37	3.05	0.43	0.50
3.0	25	36	2.20	0.33	0.38
	35	38	2.60	0.35	0.40
	45	40	3.05	0.37	0.42
	55	40	3.52	0.42	0.49
	65	40	3.80	0.46	0.53
4.0	25	37	2.95	0.41	0.48
	35	40	3.55	0.43	0.49
	45	42	4.10	0.45	0.52
	55	42	4.45	0.49	0.56
	65	43	4.85	0.50	0.58
5.0	25	39	3.75	0.47	0.55
	35	41	4.50	0.52	0.60
	45	43	5.10	0.53	0.61
	55	45	5.75	0.55	0.63
	65	45	6.10	0.58	0.67
6.0	25	39	4.20	0.53	0.61
	35	43	5.20	0.55	0.63
	45	46	6.05	0.60	0.69
	55	47	6.65	0.58	0.67
	65	48	7.25	0.61	0.70
8.0	25	36	5.75	0.85	0.99
	35	43	7.10	0.74	0.85
	45	47	8.05	0.70	0.81
	55	48	8.95	0.75	0.86
	65	50	9.70	0.75	0.86

550R – Low Angle Nozzle

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

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

Note: Data collected in zero wind conditions

SPRAY COMPARISON

I-Pro™ Bodies

	I-Pro Series 3"	I-Pro Series 4"	I-Pro Series 6"	I-Pro Series 12"
On Page#	65	65	65	65
Side Inlet			●	●
Check Valve Option	●	●	●	●
Pressure Regulator Option		●	●	●
Non-Potable Water Option	●	●		●

Nozzles

	I-Pro Nozzles	Specialty Nozzles	Pro-Van Nozzles
On Page#	67	67	69
Radius	5', 8', 10', 12', 15'	Specialty	8', 10', 12', 15', 17'
Arc	1/4, 1/3, 1/2, 2/3, 3/4, Full*	9-EST, 9-CST, 9-SST, 15-EST, 15-CST, 15-SST	8', 10', 12', 15', 17'
Flow Range	.06-4.75 GPM	.41-1.35 GPM	.53-4.60GPM
Recommended Operating Pressure	20-50 psi	20-40 psi	20-50 psi

* 2/3" and 3/4" arcs not available in 5', 8' and 10' nozzles

I-PRO™ SERIES

POP-UP SPRAY

Key Features

- Pressure-activated seal with lubricant additive
- Pre-installed in-riser pressure regulator (optional)
- Pre-installed check valve (optional)
- Retrofittable riser
- Sturdy & robust, textured body
- Side and bottom inlets on 6" & 12" models (6" also available without side inlet)
- Heavy-duty, stainless steel retraction spring
- Male-threaded riser
- Pre-installed flush plug
- Ratcheting riser

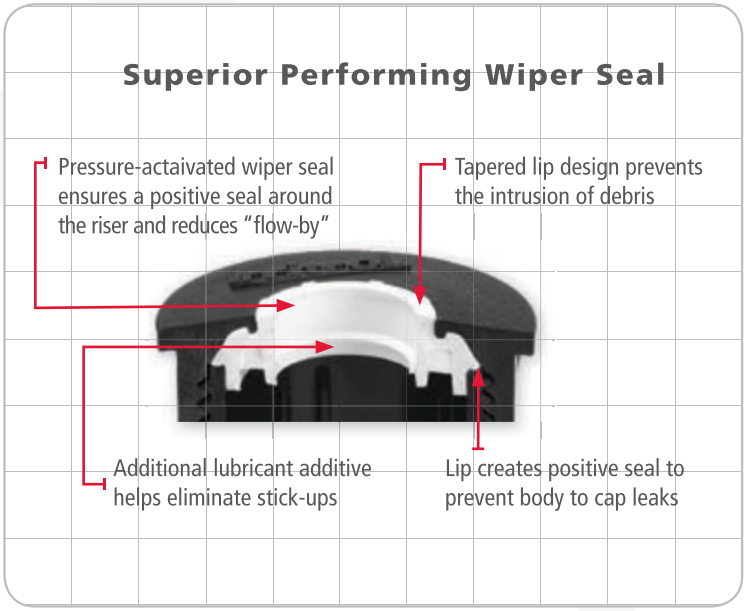
Specifying Information

I-PRO – XXXXX – XX – XXXX

MODEL	HEIGHT	SIDE INLET	OPTIONS
I-PRO - I-PRO pop-up spray head series	**300** -3" **400** - 4" **400R** - 4", less body **600** - 6" **600R** - 6", less body **1200** - 12" **1200R** - 12", less body	**SI** - Side inlet	**CV** - Pre-installed check valve **PR** - Pre-installed pressure regulator **PR-CV** - Pre-installed pressure regulator and check valve

Example: An I-PRO Series sprinkler with a 6" pop-up height, side inlet, pressure regulation option and check valve = **I-PRO600-SI-PR-CV**

Superior Performing Wiper Seal



Operating Specifications

- Inlet size: ½" female NPT threads
- Exposed diameter: 2 ¼"
- Body diameter: 1 ⅝"
- Body height:
  - I-PRO300: 4 ⅞"
  - I-PRO400: 5 ¾"
  - I-PRO600: 9 ¼"
  - I-PRO1200: 16"
- Side inlet: 4 ⅜" from center of side inlet to top of cap
- Recommended operating pressure:
  - Standard: 20-50 psi (max 75 psi)
  - CV: 25-50 psi (max 75 psi)
  - PR: 30-70 psi (max 75 psi)
- Precipitation rate: 1.62-3.08 $^{in}/_{hr}$
  - Spacing: 4' – 15'
  - Flow-by: 0 at 10 psi or greater; .1 GPM otherwise

I-PRO™ SERIES SPRAY HEADS

Models

Model	Description
I-PRO300	3" I-PRO Spray Head
I-PRO400	4" I-PRO Spray Head
I-PRO400-CV	4" I-PRO Spray Head w/Check Valve
I-PRO400-NP	4" I-PRO Spray Head w/Lavender Cap Non-Potable
I-PRO400-PR	4" I-PRO Spray Head w/Pressure Regulator
I-PRO400-PR-CV	4" I-PRO Spray Head w/Pressure Regulator & Check Valve
I-PRO600	6" I-PRO Spray Head
I-PRO600-CV	6" I-PRO Spray Head w/Check Valve
I-PRO600-NP	6" I-PRO Spray Head w/Lavender Cap Non-Potable
I-PRO600-PR	6" I-PRO Spray Head w/Pressure Regulator
I-PRO600-PR-CV	6" I-PRO Spray Head w/Pressure Regulator & Check Valve
I-PRO600-SI	6" I-PRO Spray Head w/Side Inlet
I-PRO600-SI-PR	6" I-PRO Spray Head w/Side Inlet & Pressure Regulator
I-PRO1200-SI	12" I-PRO Spray Head w/Side Inlet
I-PRO1200-SI-CV	12" I-PRO Spray Head w/Side Inlet & Check Valve
I-PRO1200-NP	12" I-PRO Spray Head w/Lavender Cap Non-Potable
I-PRO1200-SI-PR	12" I-PRO Spray Head w/Side Inlet & Pressure Regulator
I-PRO1200-SI-PR-CV	12" I-PRO Spray Head w/Side Inlet, Pressure Regulator & Check Valve

I-PRO™ NOZZLE SERIES

MPR NOZZLES

Key Features

- Matched precipitation rates
- Low-flow rates
- Color-coded top
- Female-threaded
- Ribbed-edge design
- Stainless steel radius adjustment screw allows for up to 25% in-field reduction

Models

Model	Description
IPN-5F	360° Arc
IPN-5H	180° Arc
IPN-5T	120° Arc
IPN-5Q	90° Arc
IPN-8F	360° Arc
IPN-8H	180° Arc
IPN-8T	120° Arc
IPN-8Q	90° Arc
IPN-10F	360° Arc
IPN-10H	180° Arc
IPN-10T	120° Arc
IPN-10Q	90° Arc
IPN-12F	360° Arc
IPN-12TQ	270° Arc
IPN-12TT	240° Arc

Model	Description
IPN-12H	180° Arc
IPN-12T	120° Arc
IPN-12Q	90° Arc
IPN-15F	360° Arc
IPN-15TQ	270° Arc
IPN-15TT	240° Arc
IPN-15H	180° Arc
IPN-15T	120° Arc
IPN-15Q	90° Arc
IPN-9EST	End strip, 4′ x 9′
IPN-9CST	Center strip, 4′ x 18′
IPN-9SST	Side strip, 4′ x 18′
IPN-15EST	End strip, 4′ x 15′
IPN-15CST	Center strip, 4′ x 30′
IPN-15SST	Side strip, 4′ x 18′

Specifying Information

IPN – XX – XXX

MODEL	RADIUS	ARC
IPN - I-PRO Nozzles Series	**5** -5′ **8** - 8′ **9** - 9′ * **10** - 10′ **12** - 12′ **15** - 15′	**Q** - 90° **T** - 120° **H** - 180° **TT** - 240° **TQ** - 270° **F** - 360° **EST** - end strip **CST** - center strip **SST** - side strip

Example: An I-PRO Series nozzle with a spray of 15′, 180° arc = **IPN-15H**

Note: *5′, 8′ and 10′ nozzles are not available in TT and TQ arc settings.* * *Specialty only*

SPRAY ACCESSORIES

I-PRO-NPC (Recycled-Water Cap)
- Threads onto all I-PRO Series spray head bodies & Rain Bird®* 1800®* Series bodies
- UV-resistant
- Heavy-duty ABS material

I-PRO-CV (I-PRO Check Valve)
- For use in I-Pro series spray head
- Ideal solution for protection against low-head drainage
- Reduce water waste & erosion

HS100 (Shrub Adapter)
- Threads directly onto riser
- UV-treated
- Heavy-duty ABS
- Accepts all Irritrol® & any other female-threaded nozzle

*Rain Bird and 1800 are registered trademarks of Rain Bird Corporation in the U.S. and other countries.

Irritrol

SPECIFICATIONS

5′ 8′ 10′ 12′ 15′

*5′, 8′ and 10′ nozzles are not available in TT and TQ arc settings

Operating Specifications

- Flow rate: .06-4.75 GPM
- Recommended operating pressure range: 20-50 psi
- Maximum operating pressure: 75 psi

Performance Data

5' Series with 0° Trajectory

Nozzle	Pressure psi	Radius ft.	GPM	Precip. ■ in/h	Precip. ▲ in/h
IPN-5F	20	4	0.27	1.62	1.87
	30	5	0.41	1.58	1.82
	40	6	0.49	1.30	1.50
	50	6	0.57	1.53	1.77
IPN-5H	20	4	0.11	1.27	1.46
	30	5	0.20	1.54	1.78
	40	6	0.24	1.29	1.49
	50	6	0.28	1.52	1.75
IPN-5T	20	4	0.08	1.37	1.58
	30	5	0.13	1.50	1.73
	40	6	0.17	1.39	1.61
	50	6	0.22	1.74	2.01
IPN-5Q	20	4	0.06	1.34	1.54
	30	5	0.10	1.54	1.78
	40	6	0.13	1.43	1.65
	50	6	0.17	1.78	2.06

8' Series with 5° Trajectory

Nozzle	Pressure psi	Radius ft.	GPM	Precip. ■ in/h	Precip. ▲ in/h
IPN-8F	20	7	0.77	1.51	1.75
	30	8	1.04	1.56	1.81
	40	9	1.21	1.43	1.66
	50	9	1.35	1.61	1.86
IPN-8H	20	7	0.38	1.51	1.75
	30	8	0.52	1.56	1.81
	40	9	0.60	1.43	1.66
	50	9	0.68	1.61	1.86
IPN-8T	20	7	0.26	1.54	1.77
	30	8	0.34	1.53	1.77
	40	9	0.41	1.45	1.68
	50	9	0.45	1.62	1.87
IPN-8Q	20	7	0.18	1.45	1.67
	30	8	0.26	1.56	1.81
	40	9	0.28	1.34	1.55
	50	9	0.31	1.49	1.72

10' Series with 12° Trajectory

Nozzle	pressure psi	Radius ft.	GPM	Precip. ■ in/h	Precip. ▲ in/h
IPN-10F	20	9	1.22	1.45	1.68
	30	10	1.64	1.58	1.82
	40	11	1.77	1.41	1.63
	50	12	2.04	1.36	1.57
IPN-10H	20	9	0.68	1.63	1.88
	30	10	0.81	1.56	1.80
	40	11	0.97	1.54	1.78
	50	12	1.13	1.51	1.74
IPN-10T	20	9	0.43	1.53	1.76
	30	10	0.53	1.53	1.77
	40	11	0.66	1.58	1.83
	50	12	0.76	1.53	1.77
IPN-10Q	20	9	0.30	1.43	1.65
	30	10	0.40	1.54	1.78
	40	11	0.50	1.59	1.84
	50	12	0.60	1.60	1.85

12' Series with 23° Trajectory

Nozzle	Pressure psi	Radius ft.	GPM	Precip. ■ in/h	Precip. ▲ in/h
IPN-12F	20	11	1.74	1.38	1.60
	30	12	2.28	1.52	1.76
	40	13	2.45	1.39	1.61
	50	13	2.81	1.60	1.85
IPN-12TQ	20	11	1.17	1.23	1.42
	30	12	1.72	1.53	1.77
	40	13	1.83	1.39	1.60
	50	13	2.00	1.51	1.75
IPN-12TT	20	11	1.20	1.43	1.65
	30	12	1.55	1.55	1.79
	40	13	1.74	1.49	1.72
	50	13	1.92	1.64	1.90
IPN-12H	20	11	1.00	1.59	1.84
	30	12	1.15	1.54	1.78
	40	13	1.37	1.56	1.80
	50	13	1.64	1.86	2.15
IPN-12T	20	11	0.59	1.42	1.64
	30	12	0.75	1.50	1.74
	40	13	0.91	1.55	1.79
	50	13	1.01	1.73	1.99
IPN-12Q	20	11	0.46	1.45	1.68
	30	12	0.57	1.52	1.76
	40	13	0.68	1.56	1.80
	50	13	0.72	1.64	1.89

15' Series with 27° Trajectory

Nozzle	Pressure psi	Radius ft.	GPM	Precip. ■ in/h	Precip.▲ in/h
IPN-15F	20	14	2.95	1.45	1.67
	30	15	3.73	1.60	1.84
	40	16	4.35	1.64	1.89
	50	16	4.75	1.78	2.06
IPN-15TQ	20	14	2.23	1.46	1.68
	30	15	2.76	1.57	1.81
	40	16	3.18	1.59	1.84
	50	16	3.61	1.80	2.08
IPN-15TT	20	14	1.95	1.44	1.66
	30	15	2.41	1.55	1.79
	40	16	2.91	1.64	1.90
	50	16	3.11	1.75	2.03
IPN-15H	20	14	1.51	1.48	1.71
	30	15	1.82	1.56	1.80
	40	16	2.23	1.68	1.93
	50	16	2.36	1.77	2.05
IPN-15T	20	14	1.03	1.51	1.75
	30	15	1.19	1.53	1.76
	40	16	1.41	1.59	1.83
	50	16	1.57	1.77	2.04
IPN-15Q	20	14	0.73	1.43	1.65
	30	15	0.91	1.56	1.80
	40	16	1.11	1.67	1.93
	50	16	1.32	1.98	2.29

■ Square spacing based on 50% diameter of throw

▲ Triangle spacing based on 50% diameter of throw

Specialty Nozzles

9' Series with 20° Trajectory

Nozzle	Pressure psi	W x L ft.	Flow GPM
IPN-9EST	20	3 x 8	0.41
	30	4 x 9	0.45
	40	5 x 10	0.48
IPN-9CST	20	3 x 16	0.85
	30	4 x 18	0.90
	40	5 x 20	0.97
IPN-9SST	20	3 x 16	0.85
	30	4 x 18	0.90
	40	5 x 20	0.97

15' Series with 21° Trajectory

Nozzle	Pressure psi	W x L ft.	Flow GPM
IPN-15EST	20	3 x 14	0.52
	30	4 x 15	0.61
	40	5 x 17	0.70
IPN-15CST	20	3 x 28	1.10
	30	4 x 30	1.21
	40	5 x 32	1.35
IPN-15SST	20	3 x 28	1.10
	30	4 x 30	1.21
	40	5 x 32	1.35

PRO-VAN SERIES

VARIABLE ARC

Key Features

- Fully adjustable arc – from 0° to 360°
- Precision adjustment
- Exclusive "Smart Grip" head design
- Compatible with any male-threaded riser in the industry
- Visible LEFT-stop arrow on top of nozzle
- Color-coded for easy radius identification
- Pre-assembled at 0°
- Stainless steel radius adjustment screw allows for up to 25% radius reduction

Models

Model	Description
PRO-VAN8	8′ variable arc pattern
PRO-VAN10	10′ variable arc pattern
PRO-VAN12	12′ variable arc pattern
PRO-VAN15	15′ variable arc pattern
PRO-VAN17	17′ variable arc pattern

Specifying Information

PRO – VAN – XX

MODEL	ARC	RADIUS
PRO - PRO-VAN Series	**VAN** – Variable arc	**8** - 8′ **10** - 10′ **12** - 12′ **15** - 15′ **17** - 17′

Example: A Pro-VAN Series nozzle with a 12′ radius = **PRO-VAN12**

SPECIFICATIONS

8’ 10’ 12’ 15’ 17’

Operating Specifications

- Flow rate: .06-4.75 GPM
- Recommended operating pressure range: 20-50 psi
- Maximum operating pressure: 75 psi

Performance Data

8' Series with 5° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
360°	20	8	1.72	2.59	2.99
	30	**8**	**2.13**	**3.20**	**3.70**
	40	9	2.48	3.73	4.31
	50	9	2.78	4.18	4.83
270°	20	8	1.36	2.73	3.15
	30	**9**	**1.65**	**3.31**	**3.82**
	40	9	1.89	3.79	4.38
	50	9	2.13	4.27	4.93
180°	20	9	0.87	2.62	3.02
	30	**9**	**1.07**	**3.22**	**3.72**
	40	9	1.23	3.70	4.27
	50	9	1.38	4.15	4.79
90°	20	9	0.53	3.19	3.68
	30	**10**	**0.64**	**3.85**	**4.45**
	40	10	0.72	4.33	5.00
	50	10	0.78	4.69	5.42

10' Series with 10° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
360°	20	10	1.98	1.91	2.20
	30	**10**	**2.41**	**2.32**	**2.68**
	40	11	3.19	3.07	3.55
	50	12	3.59	3.46	3.99
270°	20	10	1.60	2.05	2.37
	30	**11**	**1.95**	**2.50**	**2.88**
	40	12	2.26	2.89	3.34
	50	12	2.52	3.23	3.73
180°	20	10	1.13	2.18	2.51
	30	**11**	**1.38**	**2.66**	**3.07**
	40	12	1.58	3.04	3.51
	50	12	1.77	3.41	3.93
90°	20	11	0.62	2.39	2.76
	30	**12**	**0.77**	**2.96**	**3.42**
	40	12	0.89	3.43	3.96
	50	13	1.00	3.85	4.45

12' Series with 15° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
360°	20	11	2.26	1.51	1.74
	30	**12**	**2.79**	**1.86**	**2.15**
	40	13	3.20	2.14	2.47
	50	13	3.62	2.42	2.79
270°	20	11	1.85	1.65	1.90
	30	**12**	**2.29**	**2.04**	**2.36**
	40	13	2.64	2.35	2.72
	50	13	2.98	2.66	3.07
180°	20	11	1.33	1.78	2.05
	30	**12**	**1.63**	**2.18**	**2.52**
	40	13	1.89	2.53	2.92
	50	14	2.12	2.83	3.27
90°	20	12	0.75	2.01	2.32
	30	**13**	**0.93**	**2.49**	**2.87**
	40	14	1.06	2.83	3.27
	50	14	1.21	3.24	3.74

15' Series with 20° Trajectory

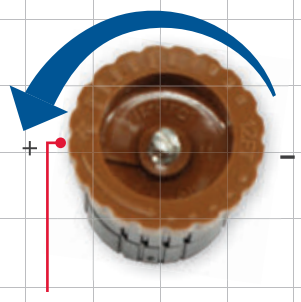
Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
360°	20	14	2.76	1.18	1.36
	30	**15**	**3.35**	**1.43**	**1.65**
	40	15	3.87	1.66	1.91
	50	16	4.31	1.84	2.13
270°	20	14	2.36	1.35	1.55
	30	**15**	**2.89**	**1.65**	**1.90**
	40	16	3.30	1.88	2.17
	50	16	3.37	2.13	2.46
180°	20	15	1.70	1.45	1.68
	30	**16**	**2.09**	**1.79**	**2.06**
	40	16	2.42	2.07	2.39
	50	17	2.71	2.32	2.68
90°	20	15	0.99	1.69	1.96
	30	**16**	**1.20**	**2.05**	**2.37**
	40	17	1.40	2.40	2.77
	50	17	1.56	2.67	3.08

17' Series with 26° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow GPM	Precip. ■ in/h	Precip. ▲ in/h
360°	20	14	2.90	0.97	1.12
	30	**16**	**3.60**	**1.20**	**1.38**
	40	17	4.10	1.37	1.58
	50	17	4.60	1.53	1.77
270°	20	14	2.50	1.11	1.28
	30	**16**	**3.10**	**1.38**	**1.59**
	40	17	3.60	1.60	1.85
	50	17	4.00	1.78	2.05
180°	20	15	1.90	1.27	1.46
	30	**17**	**2.40**	**1.60**	**1.85**
	40	17	2.70	1.80	2.08
	50	18	3.00	2.00	2.31
90°	20	15	1.20	1.60	1.85
	30	**17**	**1.50**	**2.00**	**2.31**
	40	18	1.70	2.26	2.62
	50	18	1.90	2.53	2.92

■ Square spacing based on 50% diameter of throw

▲ Triangle spacing based on 50% diameter of throw



Top-visible arrow quickly indicates left edge of arc setting when adjusted

533 BUBBLER SERIES

Key Features

- Simple twist top flow adjustment
- True zero flow shut-off
- Fully adjustable arc and flow rate
- Heavy-duty ABS material
- Non-potable option

Performance Data

	90° Adjustment	180° Adjustment	270° Adjustment	360° Adjustment
psi	GPM	GPM	GPM	GPM
15	1.36	2.37	2.85	2.97
20	1.56	2.75	3.31	3.45
25	1.77	3.04	3.71	3.86
30	1.93	3.36	4.05	4.32
35	2.01	3.59	4.37	5.51
40	2.25	3.84	4.70	5.90

533NP Bubbler

533 Bubbler

Operating Specifications

- Recommended working pressure: 20-40 psi
- Flow rate: 1.36-5.90 GPM
- Maximum operation pressure: 75 psi
- Inlet size: 1⁄2" female NPT threads

Dimensions

- H: 1 1⁄8"
- Top diameter: 1 1⁄16"