

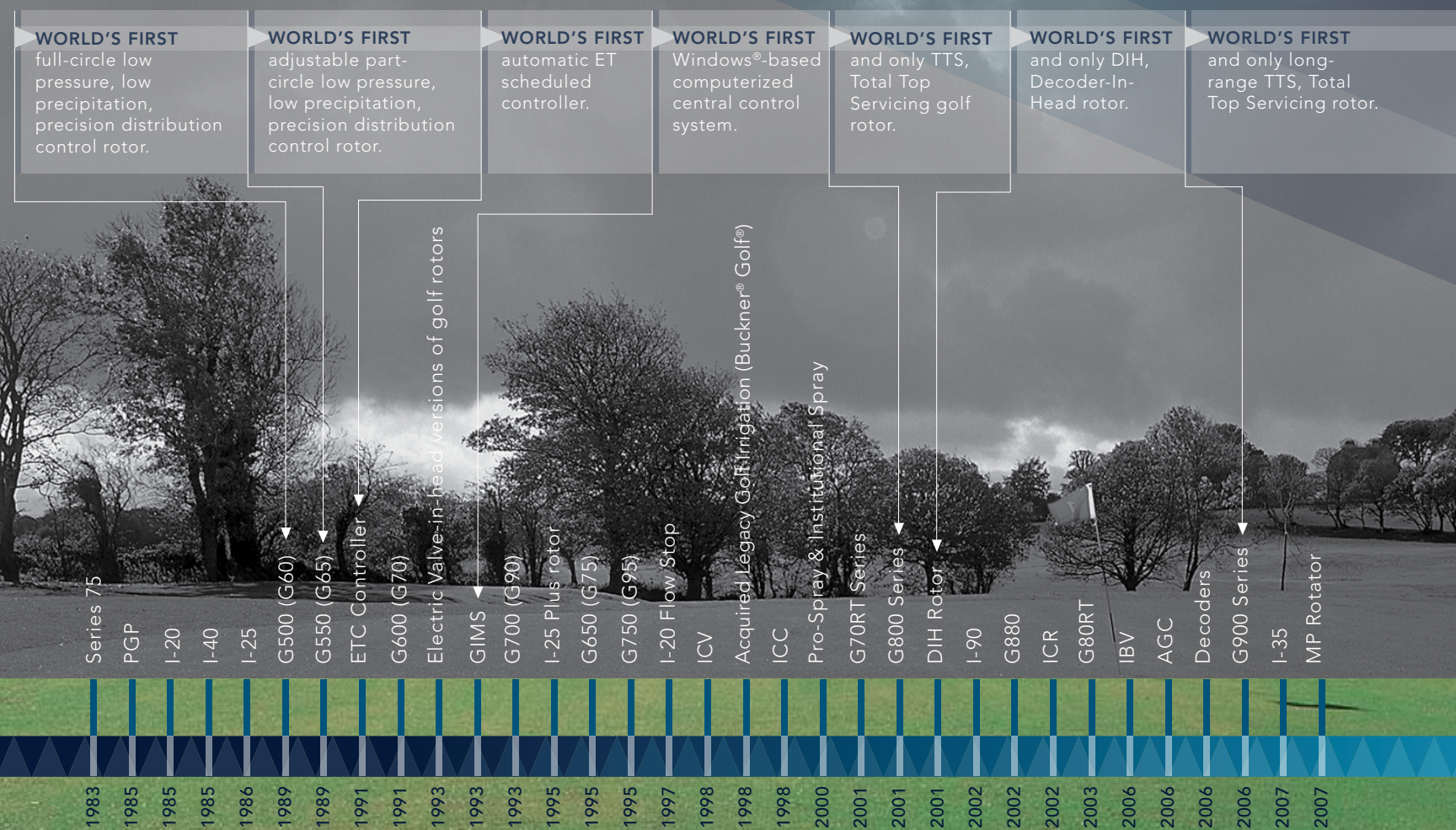
The logo for Hunter GOLF is centered on a dark teal background. The word "Hunter" is in a white, bold, sans-serif font, followed by a registered trademark symbol (®). Below it, the word "GOLF" is in a yellow, bold, sans-serif font. To the left of the text is a large, stylized yellow arrow pointing right, composed of three overlapping triangular shapes.

**Hunter**®  
**GOLF**



# THE HISTORY OF HUNTER

A BRIEF CHRONICLE OF AN IRRIGATION REVOLUTION



## IRRIGATION PIONEER.



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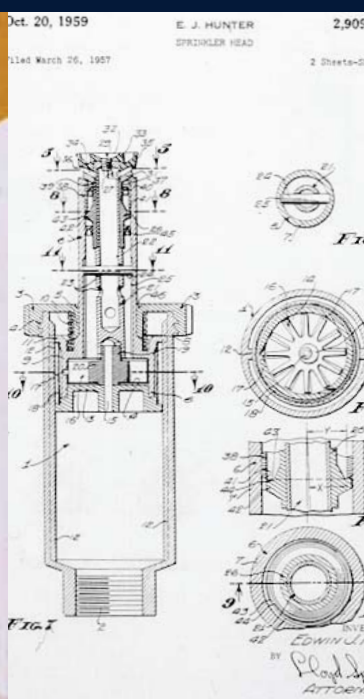
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INDUSTRY MAVERICK.

Some people dream.  
Others perform.  
The lucky few do both.



**Today, his quiet legacy is even more powerful.** For now more than ever, Hunter Industries continues to make its steadily growing mark in golf irrigation. And the industry benefits beyond measure from the man who was, without a doubt, ahead of his time.

Among other firsts, Edwin J. Hunter originated the use of thermoplastics to manufacture irrigation equipment in the mid-twentieth century. Until then, components were

made of machined brass, costly to produce and difficult to hold tight tolerances. Hunter's contributions helped transform the way we irrigate. Among them, the first all-plastic gear-driven sprinklers, electric valve-in-head technology, and the first Windows®-based central control system with course graphics. Along with Total Top Servicing (TTS) rotors, these technologies have helped forever change the golf irrigation industry.



# INNOVATION: THE PROMISE DELIVERED

As early as the 1950s, company founder Edwin J. Hunter, a champion with extraordinary vision and little fanfare, invented numerous golf irrigation technologies. Today, virtually every course in existence uses some form of

Mr. Hunter's technologies – or an imitation. And while many people are lauded in the design and development of a fine course, we must pay homage to a gifted individual who conceived so much of what keeps it green and lush now.



No company becomes a leading manufacturer of golf irrigation equipment by chance. By the time he had founded Hunter Industries in 1981, Edwin J. Hunter, with more than 150 golf and landscape irrigation patents, was an industry legend. As an astute businessman and prolific inventor, Mr. Hunter's stroke of genius paved the way for the company to be the golf irrigation innovator. Today, Hunter is a global company with a worldwide distributor network in

80 countries. We produce the complete spectrum of water efficient irrigation products for golf courses as well as for other commercial and residential projects. Our quest is to be the golf industry professionals' first choice for irrigation products and services. We're well on our way. The company's testing facilities, quality and control standards, and line of products are more than above par. They're in a league of their own.



# ROTORS





# TOTAL TOP SERVICE

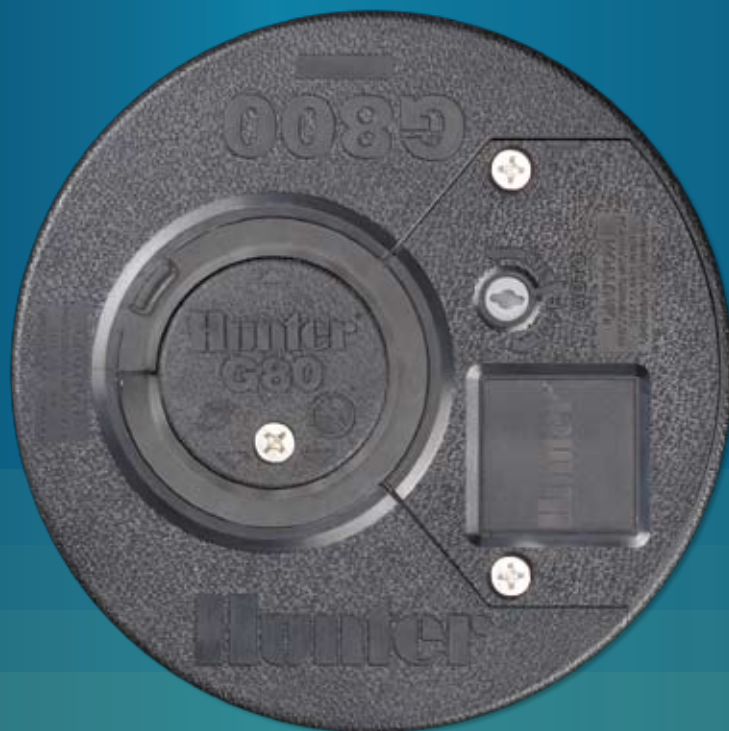
**TTS**  
Rotors

**SUCCESS THAT STARTS AT THE TOP.**

HUNTER INNOVATION STARTS AT THE TOP  
WITH OUR TTS ROTORS. EVERY SERVICEABLE  
COMPONENT CAN BE ACCESSED THROUGH  
THE TOP, NO DIGGING NECESSARY.



SERVICING-EASE  
EFFICIENCY  
DURABILITY





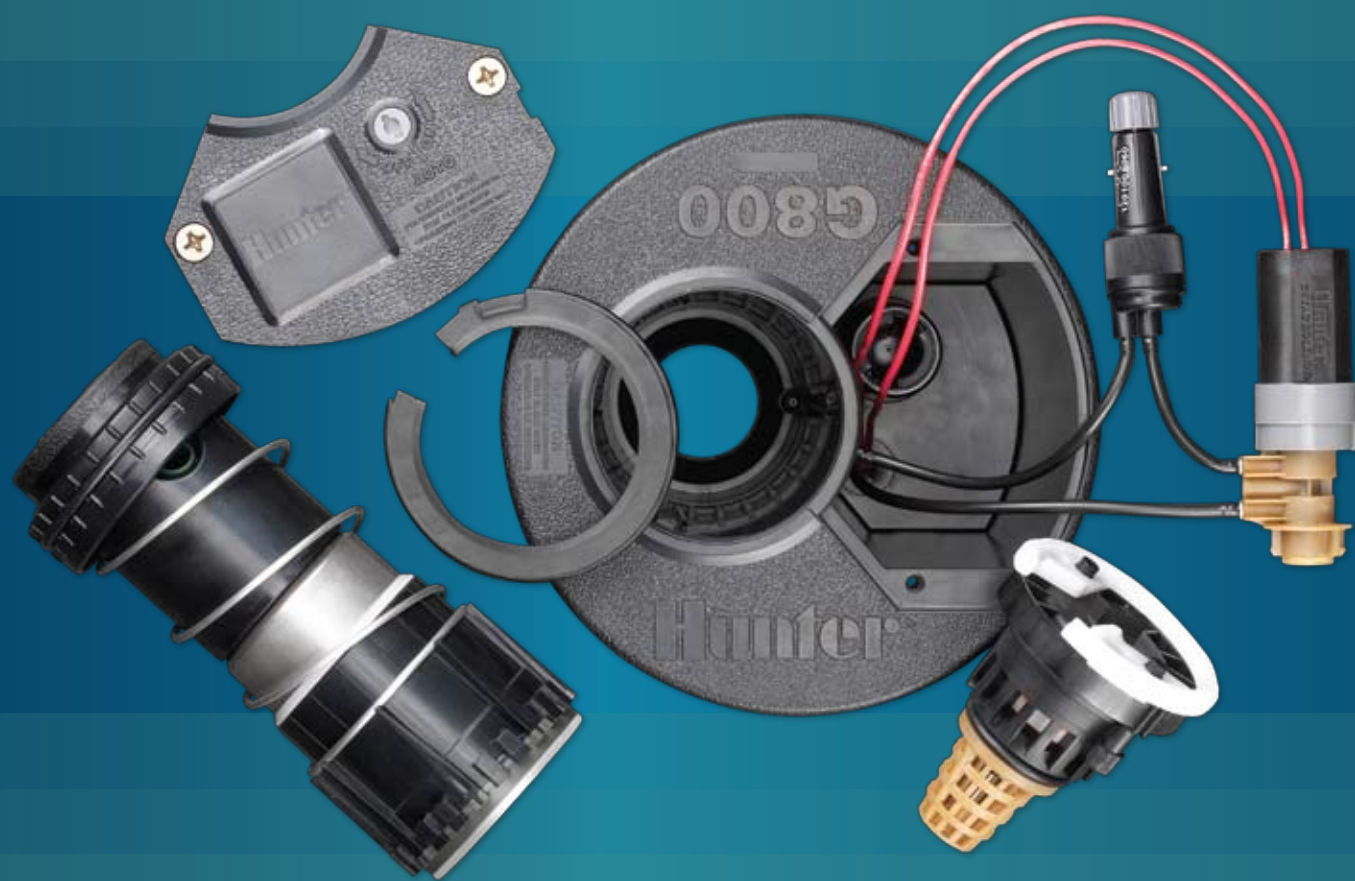
# SERVICE

- ▶ **Exclusive & Unique Total Top Servicing Features:**  
The no-dig solution is appreciated by Golfers, Management and especially the Superintendent.
- ▶ **Unitized Inlet Valve Assembly:** Easy one-step removal of rock screen, valve seat and valve assembly.
- ▶ **Through-the-Top Solenoid Connections:** Keeps wire splices protected in valve-box conditions with easy solenoid servicing.
- ▶ **Large & Flexible Yardage Marker Capabilities:**  
Recessed area for placard markers – optional raised marker for popular engraved & paint-filled markers.
- ▶ **Concealed Adjustable Pressure Regulation:** Stored within the flange compartment, prevents accidental adjustments.
- ▶ **Upper Snap Rings with Integrated Wiper Seal:**  
Protects rotor's riser seal from external contamination such as top-dressing.
- ▶ **Stainless Steel Seat in Pilot Valve:** Durable & corrosion-free, helps prevent slow leaks & weeping in the rotor.
- ▶ **Pilot Valve Freeze Suppression Unit:** Patented technology prevents freeze damage - another TTS exclusive.
- ▶ **Two-Stage Filtration in Valve Circuitry:**  
Anti-contamination filters in pilot valve and inlet valve protect critical valve-in-head passages.
- ▶ **Convenient Circular Flange Design:** Offset riser & compartment allows quick & easy trimming around the rotor with motorized equipment.
- ▶ **Through-the-Top Servicing of On-Off-Auto Selector:**  
Simple & inexpensive to replace, should damage occur.



◀ YARDAGE MARKER OPTIONS









# SERVICE

## **INNOVATION YOU CAN PLAINLY SEE.**

Introducing the world's first Decoder-In-Head (DIH) rotor. With lower installation costs, decoder systems are quickly gaining in popularity. Our new DIH rotors will eliminate hundreds of unsightly decoder enclosures on any course.



**EIGHTEEN HOLES OF NOTHING BUT GREEN.**

TTS eliminates scarring from servicing and keeps the course looking its best.

**DIH**  
Rotors



- ▶ **Includes All TTS Features & Benefits:**  
The ultimate combination of servicing-ease, efficiency and durability.
- ▶ **Ideal for Sites Requiring Wider Spacings:**  
An array of long-distance radius capabilities for golf courses and sports fields.
- ▶ **Patented PressurePort™ Technology:**  
Delivers uniform and consistent water coverage across a wide range of radius & flow capabilities.
- ▶ **Closed-Case Design:** Helps prevent sticking risers and leaking seals caused by contaminants.
- ▶ **Full-Circle and Adjustable Part-Circle Models:** Adjustable anytime; un-installed, installed, or while in operation.

On a golf course that includes hundreds or even thousands of rotors, the last thing the golfer wants to see is the unsightly excavation scars that are common to typical golf rotor maintenance. That's why Hunter's TTS Premium Golf Rotors make so much sense. With their exclusive Total Top Service capabilities, these rotors can help keep your course looking great like nothing else can.

## G900 Series



### NO DIG, NO MESS, NO WORRIES.

SERVICE BEGINS FROM THE TOP DOWN WITH OUR TTS PREMIUM AND LARGE TURF ROTORS. EASY.

#### MODEL SPECIFICATIONS

**G990** - Full Circle

**G995** - Adjustable Arc (40° to 360°)

#### MODEL VARIATIONS

- C** – Check-O-Matic checks up to 25' (8 m) in elevation change and readily converts to Normally Open Hydraulic with through the top connections
- E** – Electric Valve-in-Head with adjustable pressure regulation, on-off-auto selector, 190mA (370mA inrush) solenoid with captive plunger and internal downstream bleed

#### DIMENSIONS

- Pop-up height: 3" (8 cm)
- Female inlet: 1-1/2" ACME
- Flange diameter: 7-1/2" (19 cm)
- Overall height: 13-1/4" (34 cm)

#### OPERATING SPECIFICATIONS\*

##### G990

- Discharge rate: 34.4 to 73.9 GPM (7.81 to 16.79 m³/hr, 130.2 to 297.7 l/min)
- Radius: 76' to 98' (23.2 to 29.9 m)
- Pressure range: 80 to 120 PSI (5.5 to 8.3 bars; 551 to 827 kPa)

##### G995

- Discharge rate: 35.5 to 75.0 GPM (8.06 to 17.04 m³/hr, 134.4 to 283.9 l/min)
- Radius: 68' to 92' (20.7 m to 28 m)
- Pressure range: 80 to 120 PSI (5.5 to 8.3 bars; 551 to 827 kPa)

\* All models pressure rated at 150 psi (10 bars; 1,000 kPa)



G990 Nozzle Performance Data					
Nozzle	Pressure PSI	Radius Feet	Flow GPM	Precip in/hr ■ ▲	
<b>33</b> Gray	80	76'	34.4	0.57	0.66
	90	78'	36.8	0.58	0.67
	100	80'	38.6	0.58	0.67
	110	81'	39.6	0.58	0.67
	120	82'	40.5	0.58	0.67
<b>38</b> Red	80	79'	38.4	0.59	0.68
	90	80'	40.9	0.62	0.71
	100	82'	42.8	0.61	0.71
	110	83'	43.9	0.61	0.71
	120	84'	45.0	0.61	0.71
<b>43</b> Brown	80	82'	43.9	0.63	0.73
	90	83'	46.5	0.65	0.75
	100	84'	48.5	0.66	0.76
	110	85'	49.6	0.66	0.76
	120	86'	51.2	0.67	0.77
<b>48</b> Dk. Green	80	86'	49.6	0.65	0.75
	90	89'	52.5	0.64	0.74
	100	90'	54.8	0.65	0.75
	110	91'	56.0	0.65	0.75
	120	92'	57.3	0.65	0.75
<b>53*</b> Dk. Blue	80	88'	53.5	0.66	0.77
	90	90'	57.4	0.68	0.79
	100	92'	59.5	0.68	0.78
	110	93'	60.7	0.68	0.78
	120	94'	62.1	0.68	0.78
<b>63</b> Black	80	92'	63.2	0.72	0.83
	90	94'	65.9	0.72	0.83
	100	96'	69.4	0.72	0.84
	110	97'	72.0	0.74	0.85
	120	98'	73.9	0.74	0.86

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

G995 Nozzle Performance Data					
Nozzle	Pressure PSI	Radius Feet	Flow GPM	Precip in/hr ■ ▲	
<b>33</b> Gray	80	68'	35.5	0.74	0.85
	90	69'	37.7	0.76	0.88
	100	70'	39.8	0.78	0.90
	110	71'	42.0	0.80	0.93
	120	72'	43.8	0.81	0.94
<b>38</b> Red	80	72'	39.8	0.74	0.85
	90	73'	42.3	0.76	0.88
	100	75'	44.1	0.76	0.87
	110	76'	46.3	0.77	0.89
	120	77'	48.1	0.78	0.90
<b>43</b> Brown	80	74'	44.5	0.78	0.90
	90	74'	47.6	0.84	0.97
	100	75'	48.3	0.83	0.95
	110	77'	50.1	0.81	0.94
	120	78'	52.0	0.82	0.95
<b>48</b> Dk. Green	80	77'	50.2	0.81	0.94
	90	79'	53.3	0.82	0.95
	100	81'	56.0	0.82	0.95
	110	82'	58.9	0.84	0.97
	120	83'	60.5	0.85	0.98
<b>53*</b> Dk. Blue	80	81'	53.4	0.78	0.90
	90	84'	57.0	0.78	0.90
	100	86'	59.1	0.77	0.89
	110	87'	61.5	0.78	0.90
	120	88'	63.9	0.79	0.92
<b>63</b> Black	80	86'	63.8	0.83	0.96
	90	88'	66.5	0.83	0.95
	100	90'	69.8	0.83	0.96
	110	91'	72.9	0.85	0.98
	120	92'	75.0	0.85	0.98

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

G990 Nozzle Performance Data – Metric					
Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr l/min	Precip mm/hr ■ ▲	
<b>33</b> Gray	5.5	551	23.2	7.81	130.2
	6.2	620	23.8	8.36	139.3
	6.9	689	24.4	8.77	146.1
	7.6	758	24.7	9.00	149.9
	8.3	827	25.0	9.20	153.3
<b>38</b> Red	5.5	551	24.1	8.72	145.4
	6.2	620	24.4	9.29	154.8
	6.9	689	25.0	9.72	162.0
	7.6	758	25.3	9.97	166.2
	8.3	827	25.6	10.22	170.3
<b>43</b> Brown	5.5	551	25.0	9.97	166.2
	6.2	620	25.3	10.56	176.0
	6.9	689	25.6	11.02	183.6
	7.6	758	25.9	11.27	187.8
	8.3	827	26.2	11.63	193.8
<b>48</b> Dk. Green	5.5	551	26.2	11.27	187.8
	6.2	620	27.1	11.93	198.7
	6.9	689	27.4	12.45	207.4
	7.6	758	27.7	12.72	212.0
	8.3	827	28.0	13.02	216.9
<b>53*</b> Dk. Blue	5.5	551	26.8	12.15	202.5
	6.2	620	27.4	13.04	217.3
	6.9	689	28.0	13.52	225.2
	7.6	758	28.3	13.79	229.8
	8.3	827	28.7	14.11	235.1
<b>63</b> Black	5.5	551	28.0	14.36	239.2
	6.2	620	28.7	14.97	249.5
	6.9	689	29.3	15.76	262.7
	7.6	758	29.6	16.36	272.5
	8.3	827	29.9	16.79	279.7

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

G995 Nozzle Performance Data – Metric					
Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr l/min	Precip mm/hr ■ ▲	
<b>33</b> Gray	5.5	551	20.7	8.06	134.4
	6.2	620	21.0	8.56	142.7
	6.9	689	21.3	9.04	150.7
	7.6	758	21.6	9.54	159.0
	8.3	827	21.9	9.95	165.8
<b>38</b> Red	5.5	551	21.9	9.04	150.7
	6.2	620	22.3	9.61	160.1
	6.9	689	22.9	10.02	167.0
	7.6	758	23.2	10.52	175.3
	8.3	827	23.5	10.93	182.1
<b>43</b> Brown	5.5	551	22.6	10.11	168.5
	6.2	620	22.6	10.81	180.2
	6.9	689	22.9	10.97	182.8
	7.6	758	23.5	11.38	189.6
	8.3	827	23.8	11.81	196.8
<b>48</b> Dk. Green	5.5	551	23.5	11.40	190.0
	6.2	620	24.1	12.11	201.8
	6.9	689	24.7	12.72	212.0
	7.6	758	25.0	13.38	223.0
	8.3	827	25.3	13.74	229.0
<b>53*</b> Dk. Blue	5.5	551	24.7	12.13	202.1
	6.2	620	25.6	12.95	215.8
	6.9	689	26.2	13.43	223.7
	7.6	758	26.5	13.97	232.8
	8.3	827	26.8	14.52	241.9
<b>63</b> Black	5.5	551	26.2	14.49	241.5
	6.2	620	26.8	15.11	251.7
	6.9	689	27.4	15.86	264.2
	7.6	758	27.7	16.56	276.0
	8.3	827	28.0	17.04	283.9

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

## THE ULTIMATE TTS SOLUTION FOR LONG-RANGE GOLF APPLICATIONS



### SPECIFICATIONBUILDER

MODEL	VALVE OPTIONS	NOZZLE	FEATURES	OPTIONS
G990 = Full Circle	C = Check-O-Matic * E = Electric Valve-In-Head	33 - 63 = Installed G990 Nozzle *	P8 = 80 PSI * P1 = 100 PSI P2 = 120 PSI	S = SSU *
G995 = Adjustable Arc 40-360°	C = Check-O-Matic * E = Electric Valve-In-Head  * Converts to N.O. Hydraulic Valve-In-Head	33 - 63 = Installed G995 Nozzle *  * SSU = 53	* SSU = P8	* Standard Stocking Unit
<b>G995</b>	<b>E</b>	<b>53</b>	<b>P8</b>	<b>S</b>

**G995E - 53 - P8 - S**



# Hunter

## THE ULTIMATE TTS SOLUTION FOR MID-RANGE GOLF APPLICATIONS

The G800 Series rotors are reliable and efficient performers that make easy maintenance a top priority, with every serviceable part accessible from the top without excavation of the surrounding turf. But ease of service isn't all these products provide. They offer unsurpassed distribution uniformity in a mid-range rotor with a wide range of flow and radius capabilities. Manufactured by the world's largest producer of gear-driven rotors - you get performance, reliability and long-life assured.

### G800 Series

#### QUICK, CLEAN AND EASY TO SERVICE.

HUNTER QUALITY AND  
THROUGH-THE-TOP  
SERVICEABILITY MAKE  
THE G800 SERIES ROTORS  
TOUGH TO BEAT.



#### SPECIFICATION BUILDER

MODEL	VALVE OPTIONS	NOZZLE	PRESSURE REGULATION*	OPTIONS
G870 = Full Circle G880 = Full Circle	C = Check-O-Matic * E = Electric Valve-In-Head	15 - 28 = Installed G870 Nozzle * 25 - 53 = Installed G880 Nozzle **	P5 = 50 PSI P6 = 65 PSI P8 = 80 PSI	S = SSU *
G875 = Adjustable Arc 40-360°	C = Check-O-Matic * E = Electric Valve-In-Head  * Converts to N.O. Hydraulic Valve-In-Head	15 - 28 = Installed G875 Nozzle *  * SSU = # 23/P6, # 25/P8 ** SSU = # 48/P8	P6 = 65 PSI P8 = 80 PSI  * SSU = P6/# 23 or P8/# 25 (G870/G875) * SSU = P8/# 48 (G880)	S = SSU *  * Standard Stocking Unit
<b>G870</b>	<b>E</b>	<b>23</b>	<b>P6</b>	<b>S</b>

**G870E - 23 - P6 - S**



- **Includes All TTS Features & Benefits:** The ultimate combination of servicing-ease, efficiency and durability.
- **Ideal For Sites Requiring Mid-Range Spacing:** An array of mid-distance radius capabilities for golf courses and sports fields.
- **Patented PressurePort™ Technology:** Delivers uniform and consistent water coverage across a wide range of radius & flow capabilities.
- **Closed-Case Design:** Helps prevent sticking risers and leaking seals caused by contaminants.
- **Full-Circle and Adjustable Part-Circle Models:** Adjustable anytime; un-installed, installed, or while in operation.



#### MODEL SPECIFICATIONS

**G870** – Full Circle

**G875** – Adjustable Arc (40° to 360°)

**G880** – Full Circle

#### MODEL VARIATIONS

**C** – Check-O-Matic checks up to 25' (8 m) in elevation change and readily converts to Normally Open Hydraulic with through the top connections

**E** – Electric Valve-in-Head with adjustable pressure regulation, on-off-auto selector, 190 mA (370 mA inrush) solenoid with captive plunger and internal downstream bleed

#### DIMENSIONS

- Pop-up height: 3" (8 cm)
- Female inlet: 1-1/2" ACME
- Flange diameter: 7-1/4" (18 cm)
- Overall height: 11-3/4" (30 cm)

#### OPERATING SPECIFICATIONS\*

##### G870

- Discharge rate: 13 to 33.7 GPM (2.95 to 7.66 m³/hr, 49.2 to 127.6 l/min)
- Radius: 53' to 75' (16.2 to 22.9 m)
- Pressure range: 50 to 100 PSI (3.4 to 6.9 bars; 344 to 689 kPa)

##### G875

- Discharge rate: 13.4 to 32.3 GPM (3.04 to 7.34 m³/hr, 50.7 to 122.3 l/min)
- Radius: 57' to 71' (17.4 to 21.6 m)
- Pressure range: 50 to 100 PSI (3.4 to 6.9 bars; 344 to 689 kPa)

##### G880

- Discharge rate: 22.5 to 57.9 GPM (5.11 to 13.15 m³/hr, 85.2 to 219.2 l/min)
- Radius: 67' to 88' (20.4 to 26.8 m)
- Pressure range: 65 to 100 PSI (4.5 to 6.9 bars; 450 to 689 kPa)

\* All models pressure rated at 150 psi (10 bars; 1,000 kPa)

Nozzle	Pressure PSI	Radius Feet	Flow GPM	Precip in/hr	Precip mm/hr
<b>15</b> Gray	50	53'	13.0	0.45	0.51
	60	54'	14.1	0.47	0.54
	65	55'	14.8	0.47	0.54
	70	56'	15.5	0.48	0.55
<b>18</b> Red	80	58'	16.3	0.47	0.54
	50	58'	14.2	0.41	0.47
	60	59'	15.9	0.44	0.51
	65	60'	16.3	0.44	0.50
<b>20</b> Brown	70	60'	16.9	0.45	0.52
	80	61'	17.8	0.46	0.53
	60	61'	18.8	0.49	0.56
	65	62'	19.6	0.49	0.57
<b>23*</b> Dk. Green	70	63'	20.5	0.50	0.57
	80	64'	22.0	0.52	0.60
	90	64'	23.4	0.55	0.63
	60	63'	20.1	0.49	0.56
<b>25*</b> Dk. Blue	65	65'	21.0	0.48	0.55
	70	65'	21.9	0.50	0.58
	80	66'	23.4	0.52	0.60
	90	67'	24.9	0.53	0.62
<b>28</b> Black	60	65'	21.8	0.50	0.57
	65	67'	22.5	0.48	0.56
	70	67'	23.6	0.51	0.58
	80	69'	25.3	0.51	0.59
	90	71'	26.9	0.51	0.59
	70	71'	28.1	0.54	0.62
	80	71'	29.9	0.57	0.66
	90	73'	31.8	0.57	0.66
	100	75'	33.7	0.58	0.67

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

Nozzle	Pressure PSI	Radius Feet	Flow GPM	Precip in/hr	Precip mm/hr
<b>15</b> Gray	50	57'	13.4	0.40	0.46
	60	58'	14.3	0.41	0.47
	65	59'	14.8	0.41	0.47
	70	59'	15.3	0.42	0.49
<b>18</b> Red	80	60'	16.4	0.44	0.51
	50	60'	14.5	0.39	0.45
	60	61'	15.7	0.41	0.47
	65	61'	16.3	0.42	0.49
<b>20</b> Brown	70	62'	16.9	0.42	0.49
	80	63'	18.2	0.44	0.51
	60	62'	17.8	0.45	0.51
	65	62'	18.2	0.46	0.53
<b>23*</b> Dk. Green	70	63'	19.2	0.47	0.54
	80	64'	20.5	0.48	0.56
	90	65'	21.8	0.50	0.57
	60	64'	21.9	0.51	0.59
<b>25*</b> Dk. Blue	65	65'	21.4	0.49	0.56
	70	65'	23.6	0.54	0.62
	80	66'	25.6	0.57	0.65
	90	67'	27.0	0.58	0.67
<b>28</b> Black	60	65'	23.5	0.54	0.62
	65	65'	24.8	0.56	0.65
	70	67'	25.6	0.55	0.63
	80	69'	27.3	0.55	0.64
	90	71'	29.0	0.55	0.64
	70	66'	26.9	0.59	0.69
	80	68'	28.9	0.60	0.69
	90	70'	30.6	0.60	0.69
	100	71'	32.3	0.62	0.71

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

Nozzle	Pressure PSI	Radius Feet	Flow GPM	Precip in/hr	Precip mm/hr
<b>25</b> Lt. Blue	65	67'	22.5	0.48	0.56
	70	69'	23.9	0.48	0.56
	80	71'	26.0	0.50	0.57
	90	72'	27.9	0.52	0.60
<b>33</b> Gray	100	73'	29.8	0.54	0.62
	65	73'	31.0	0.56	0.65
	70	74'	32.2	0.57	0.65
	80	76'	34.7	0.58	0.67
<b>38</b> Red	90	77'	37.0	0.60	0.69
	100	78'	38.8	0.61	0.71
	65	76'	35.1	0.58	0.68
	70	77'	36.3	0.59	0.68
<b>43</b> Brown	80	79'	38.5	0.59	0.69
	90	80'	40.5	0.61	0.70
	100	81'	42.9	0.63	0.73
	65	78'	39.2	0.62	0.72
<b>48*</b> Dk. Green	70	79'	40.8	0.63	0.73
	80	82'	43.7	0.63	0.72
	90	83'	46.5	0.65	0.75
	100	84'	48.8	0.67	0.77
<b>53*</b> Dk. Blue	65	82'	43.8	0.63	0.72
	70	83'	46.3	0.65	0.75
	80	85'	49.0	0.65	0.75
	90	86'	51.9	0.68	0.78
	100	87'	54.4	0.69	0.80
	65	83'	46.9	0.66	0.76
	70	84'	49.1	0.67	0.77
	80	87'	52.6	0.67	0.77
	90	88'	54.8	0.68	0.79
	100	88'	57.9	0.72	0.83

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

Nozzle	Pressure Bars	Radius m	Flow l/min	Precip mm/hr	Precip mm/hr
<b>15</b> Gray	3.4	344	16.2	2.95	49.2
	4.1	413	16.5	3.20	53.4
	4.5	450	16.8	3.36	56.0
	4.8	482	17.1	3.52	58.7
<b>18</b> Red	5.5	551	17.7	3.70	61.7
	3.4	344	17.7	3.23	53.8
	4.1	413	18.0	3.61	60.2
	4.5	450	18.3	3.70	61.7
<b>20</b> Brown	4.8	482	18.3	3.84	64.0
	5.5	551	18.6	4.04	67.4
	4.1	413	18.6	4.27	71.2
	4.5	450	18.9	4.45	74.2
<b>23*</b> Dk. Green	4.8	482	19.2	4.66	77.6
	5.5	551	19.5	5.00	83.3
	6.2	620	19.5	5.32	88.6
	4.1	413	19.2	4.57	76.1
<b>25*</b> Dk. Blue	4.5	450	19.8	4.77	79.5
	4.8	482	19.8	4.97	82.9
	5.5	551	20.1	5.32	88.6
	6.2	620	20.4	5.66	94.3
<b>28</b> Black	4.1	413	19.8	4.95	82.5
	4.5	450	20.4	5.11	85.2
	4.8	482	20.4	5.36	89.3
	5.5	551	21.0	5.75	95.8
	6.2	620	21.6	6.11	101.8
	4.8	482	21.6	6.38	106.4
	5.5	551	21.6	6.79	113.2
	6.2	620	22.3	7.22	120.4
	6.9	689	22.9	7.66	127.6

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

Nozzle	Pressure Bars	Radius m	Flow l/min	Precip mm/hr	Precip mm/hr
<b>15</b> Gray	3.4	344	17.4	3.04	50.7
	4.1	413	17.7	3.25	54.1
	4.5	450	18.0	3.36	56.0
	4.8	482	18.0	3.48	57.9
<b>18</b> Red	5.5	551	18.3	3.73	62.1
	3.4	344	18.3	3.29	54.9
	4.1	413	18.6	3.57	59.4
	4.5	450	18.6	3.70	61.7
<b>20</b> Brown	4.8	482	18.9	3.84	64.0
	5.5	551	19.2	4.13	68.9
	4.1	413	18.9	4.04	67.4
	4.5	450	18.9	4.13	68.9
<b>23*</b> Dk. Green	4.8	482	19.2	4.36	72.7
	5.5	551	19.5	4.66	77.6
	6.2	620	19.8	4.95	82.5
	4.1	413	19.5	4.97	82.9
<b>25*</b> Dk. Blue	4.5	450	19.8	4.86	81.0
	4.8	482	19.8	5.36	89.3
	5.5	551	20.1	5.82	96.9
	6.2	620	20.4	6.13	102.2
<b>28</b> Black	4.1	413	19.8	5.34	89.0
	4.5	450	20.4	5.63	93.9
	4.8	482	20.4	5.82	96.9
	5.5	551	21.0	6.20	103.3
	6.2	620	21.6	6.59	109.8
	4.8	482	20.1	6.11	101.8
	5.5	551	20.7	6.56	109.4
	6.2	620	21.3	6.95	115.8
	6.9	689	21.6	7.34	122.3

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

G880 Nozzle Performance Data – Metric						
Nozzle	Pressure Bars	kPa	Radius m	Flow m³/h	l/min	Precip mm/h ▲
25 Lt. Blue	4.5	450	20.4	5.11	85.2	12
	4.8	482	21.0	5.43	90.5	12
	5.5	551	21.6	5.91	98.4	13
	6.2	620	21.9	6.34	105.6	13
	6.9	689	22.3	6.77	112.8	15
33 Gray	4.5	450	22.3	7.04	117.3	14
	4.8	482	22.6	7.31	121.9	14
	5.5	551	23.2	7.88	131.4	15
	6.2	620	23.5	8.40	140.1	15
	6.9	689	23.8	8.81	146.9	16
38 Red	4.5	450	23.2	7.97	132.9	15
	4.8	482	23.5	8.25	137.4	15
	5.5	551	24.1	8.75	145.7	15
	6.2	620	24.4	9.20	153.3	16
	6.9	689	24.7	9.75	162.4	16
43 Brown	4.5	450	23.8	8.90	148.4	16
	4.8	482	24.1	9.27	154.4	16
	5.5	551	25.0	9.93	165.4	16
	6.2	620	25.3	10.56	176.0	17
	6.9	689	25.6	11.09	184.7	17
48* Dk. Green	4.5	450	25.0	9.95	165.8	16
	4.8	482	25.3	10.52	175.3	16
	5.5	551	25.9	11.13	185.5	17
	6.2	620	26.2	11.79	196.5	17
	6.9	689	26.5	12.36	205.9	18
53* Dk. Blue	4.5	450	25.3	10.65	177.5	17
	4.8	482	25.6	11.15	185.9	17
	5.5	551	26.5	11.95	199.1	17
	6.2	620	26.8	12.45	207.4	17
	6.9	689	26.8	13.15	219.2	18

## SPECIFICATION BUILDER

MODEL	NOZZLES	OPTIONS
<b>G70B</b> = Full-Circle with Check Valve	<b>25</b> = Installed G70B Nozzle *	<b>S</b> = SSU*
<b>G75B</b> = Adjustable-Arc (40-360°) with Check Valve	<b>25</b> = Installed G75B Nozzle * * Includes nozzle pack	<b>S</b> = SSU* * Standard Stocking Unit
<b>G70B</b>	<b>25</b>	<b>S</b>

**G70B - 25 - S**

## G70B/G75B THE PERFECT TTS CHOICE FOR THE BUDGET-MINDED CONSUMER.

### B Series

Easy to adjust and maintain, Hunter's G70B/G75B golf and large turf rotors are also the ideal choice for the customer on a budget. The B Series rotors provide all the standard features you want for mid-distance coverage: A time-tested gear drive, superior filtration, convenient through-the-top servicing, and a sturdy, impact-resistant flanged body. Plus Hunter's patented, precision-engineered PressurePort™ nozzling system reduces velocity and pressure to the secondary

nozzles while increasing droplet size. The result: they deliver uniform distribution every time. With both the full-circle G70B and the 40° to 360° adjustable arc G75B, you'll find a complete range of interchangeable, color-coded nozzles to meet your needs. And as an added bonus, these rotors are retro-compatible with virtually any existing block system that covers a radius from 47' to 75' (14 m - 23 m). For great play and results you can see, the B Series is your pick.

#### FEATURES & BENEFITS

- ▶ **Exclusive PressurePort™ Nozzling:** Improves distribution uniformity.
- ▶ **Color-Coded Nozzles:** Truly uniform coverage and fast identification.
- ▶ **Through-the-Top Serviceability:** Enables easy access to gear-drive, filter screen and check valve.
- ▶ **Closed-Case Rotor:** Absolute protection from dirt and debris.
- ▶ **Proven, Heavy-Duty Gear Drive:** Enduring reliability.
- ▶ **Impact-Resistant Flanged Body:** Provides stability and protection from heavy equipment damage.
- ▶ **Water-Activated Riser Seal:** Clean flushing action and positive retraction.
- ▶ **Yardage Marker Recessed Area:** Provides protected location for yardage marker plaque.





#### G70 Nozzle Performance Data

Nozzle	Pressure PSI	Radius Feet	Flow GPM	Precip in/hr	Precip in/hr
<b>15</b> Gray	50	53'	13.0	0.45	0.51
	60	54'	14.1	0.47	0.54
	70	56'	15.5	0.48	0.55
	80	58'	16.3	0.47	0.54
<b>18</b> Red	50	58'	14.2	0.41	0.47
	60	59'	15.9	0.44	0.51
	70	60'	16.9	0.45	0.52
	80	61'	17.8	0.46	0.53
<b>20</b> Brown	60	61'	18.8	0.49	0.56
	70	63'	20.5	0.50	0.57
	80	64'	22.0	0.52	0.60
	90	64'	23.4	0.55	0.63
<b>23</b> Dk. Green	60	63'	20.1	0.49	0.56
	70	65'	21.9	0.50	0.58
	80	66'	23.4	0.52	0.60
	90	67'	24.9	0.53	0.62
<b>25*</b> Dk. Blue	60	65'	21.8	0.50	0.57
	70	67'	23.6	0.51	0.58
	80	69'	25.3	0.51	0.59
	90	71'	26.9	0.51	0.59
<b>28</b> Black	60	71'	28.1	0.54	0.62
	70	71'	29.9	0.57	0.66
	80	73'	31.8	0.57	0.66
	90	75'	33.7	0.58	0.67

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

#### G75 Nozzle Performance Data

Nozzle	Pressure PSI	Radius Feet	Flow GPM	Precip in/hr	Precip in/hr
<b>8</b> Lt. Brown	40	47'	7 .7	0.34	0.39
	50	49'	8 .3	0.33	0.38
	60	50'	9 .2	0.35	0.41
	70	51'	9 .9	0.37	0.42
<b>10</b> Lt. Green	50	53'	10.9	0.37	0.43
	60	54'	12.0	0.40	0.46
	70	55'	13.1	0.42	0.48
	80	56'	14.3	0.44	0.51
<b>13</b> Lt. Blue	50	55'	11.2	0.36	0.41
	60	56'	12.3	0.38	0.44
	70	57'	13.3	0.39	0.45
	80	57'	14.3	0.42	0.49
<b>15</b> Gray	50	57'	13.4	0.40	0.46
	60	58'	14.3	0.41	0.47
	70	59'	15.3	0.42	0.49
	80	60'	16.4	0.44	0.51
<b>18</b> Red	50	60'	14.5	0.39	0.45
	60	61'	15.7	0.41	0.47
	70	62'	16.9	0.42	0.49
	80	63'	18.2	0.44	0.51
<b>20</b> Brown	60	62'	17.8	0.45	0.51
	70	63'	19.2	0.47	0.54
	80	64'	20.5	0.48	0.56
	90	65'	21.8	0.50	0.57
<b>23</b> Dk. Green	60	64'	21.9	0.51	0.59
	70	65'	23.6	0.54	0.62
	80	66'	25.6	0.57	0.65
	90	67'	27.0	0.58	0.67
<b>25*</b> Dk. Blue	60	65'	23.5	0.54	0.62
	70	67'	25.6	0.55	0.63
	80	69'	27.3	0.55	0.64
	90	71'	29.0	0.55	0.64
<b>28</b> Black	60	66'	26.9	0.59	0.69
	70	68'	28.9	0.60	0.69
	80	70'	30.6	0.60	0.69
	90	71'	32.3	0.62	0.71

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

#### G70 Nozzle Performance Data – Metric

Nozzle	Pressure Bars	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr	Precip mm/hr
<b>15</b> Gray	3.4	344	16.2	2.95	49.2	11
	4.1	413	16.5	3.20	53.4	12
	4.8	450	17.1	3.52	58.7	12
	5.5	482	17.7	3.70	61.7	12
<b>18</b> Red	3.4	344	17.7	3.23	53.8	10
	4.1	413	18.0	3.61	60.2	11
	4.8	450	18.3	3.84	64.0	12
	5.5	482	18.6	4.04	67.4	12
<b>20</b> Brown	4.1	413	18.6	4.27	71.2	12
	4.8	482	19.2	4.66	77.6	13
	5.5	551	19.5	5.00	83.3	13
	6.2	620	19.5	5.32	88.6	14
<b>23</b> Dk. Green	4.1	413	19.2	4.57	76.1	12
	4.8	482	19.8	4.97	82.9	13
	5.5	551	20.1	5.32	88.6	13
	6.2	620	20.4	5.66	94.3	14
<b>25*</b> Dk. Blue	4.1	413	19.8	4.95	82.5	13
	4.8	482	20.4	5.36	89.3	13
	5.5	551	21.0	5.75	95.8	13
	6.2	620	21.6	6.11	101.8	13
<b>28</b> Black	4.8	482	21.6	6.38	106.4	14
	5.5	551	21.6	6.79	113.2	15
	6.2	620	22.3	7.22	120.4	15
	6.9	689	22.9	7.66	127.6	15

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

#### G75 Nozzle Performance Data – Metric

Nozzle	Pressure Bars	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr	Precip mm/hr
<b>8</b> Lt. Brown	2.8	275	14.3	1.75	29.1	9
	3.4	344	14.9	1.89	31.4	9
	4.1	413	15.2	2.09	34.8	9
	4.8	482	15.5	2.25	37.5	9
<b>10</b> Lt. Green	3.4	344	16.2	2.48	41.3	10
	4.1	413	16.5	2.73	45.4	10
	4.8	482	16.8	2.98	49.6	11
	5.5	551	17.1	3.25	54.1	11
<b>13</b> Lt. Blue	3.4	344	16.8	2.54	42.4	9
	4.1	413	17.1	2.79	46.6	10
	4.8	482	17.4	3.02	50.3	10
	5.5	551	17.4	3.25	54.1	11
<b>15</b> Gray	3.4	344	17.4	3.04	50.7	10
	4.1	413	17.7	3.25	54.1	10
	4.8	482	18.0	3.48	57.9	11
	5.5	551	18.3	3.73	62.1	11
<b>18</b> Red	3.4	344	18.3	3.29	54.9	10
	4.1	413	18.6	3.57	59.4	10
	4.8	482	18.9	3.84	64.0	11
	5.5	551	19.2	4.13	68.9	11
<b>20</b> Brown	4.1	413	18.9	4.04	67.4	11
	4.8	482	19.2	4.36	72.7	12
	5.5	551	19.5	4.66	77.6	12
	6.2	620	19.8	4.95	82.5	13
<b>23</b> Dk. Green	4.1	413	19.5	4.97	82.9	13
	4.8	482	19.8	5.36	89.3	14
	5.5	551	20.1	5.82	96.9	14
	6.2	620	20.4	6.13	102.2	15
<b>25*</b> Dk. Blue	4.1	413	19.8	5.34	89.0	14
	4.8	482	20.4	5.82	96.9	14
	5.5	551	21.0	6.20	103.3	14
	6.2	620	21.6	6.59	109.8	14
<b>28</b> Black	4.8	482	20.1	6.11	101.8	15
	5.5	551	20.7	6.56	109.4	15
	6.2	620	21.3	6.95	115.8	15
	6.9	689	21.6	7.34	122.3	16

\*Denotes nozzle installed in standard stocking unit (SSU).

**Note:** All precipitation rates calculated for 360 degree operation. All triangular rates are equilateral.

#### MODEL SPECIFICATIONS

**G70B** – Full circle

**G75B** – Adjustable arc (40°-360°)

#### MODEL VARIATIONS

**G70B/G75B** – Block checks up to 10' (3 m) in elevation change

#### DIMENSIONS

- Pop-up height: 3" (8 cm)
- Female inlet: 1-1/4" ACME
- Flange diameter: 4-3/4" (12 cm)
- Overall height: 9" (23 cm)

#### OPERATING SPECIFICATIONS

##### G70B

- Discharge rate: 13 to 33.7 GPM (2.95 to 7.66 m³/hr, 49.2 to 127.6 l/min)
- Radius: 53' to 75' (16.2 to 22.9 m)
- Pressure range: 50 to 100 PSI (3.4 to 6.9 bars; 344 to 689 kPa)

##### G75B

- Discharge rate: 7.7 to 32.3 GPM (1.75 to 7.34 m³/hr, 29.1 to 122.3 l/min)
- Radius: 47' to 71' (14.3 to 21.6 m)
- Pressure range: 40 to 100 PSI (2.8 to 6.9 bars; 275 to 689 kPa)

This is the smart, low cost solution that extends the life of your aging Toro® irrigation system. Hunter's RT Series gives you the latest rotor technology, quickly and easily. Designed specifically to retrofit Toro® 1" and 1.5" inlet golf rotors, the RT is a simple conversion kit that replaces the "heart" of your old sprinklers for years of value-added service. The RT converts your sprinkler into a closed-case rotor to resist external contamination. Even more, with a 3" (8 cm) pop-up,

the nozzle stream clears the turf to minimize wet spots around the head. They can be installed in mere minutes with instant results and improved coverage. Three RT models are available with a selection of water efficient nozzles ready to meet your specific course conditions. Upgrade your golf irrigation system without removing a single piece of turf. The no-dig RT conversion offers great performance, season after season, for many years to come.

## UPDATE YOUR OLD TORO® SYSTEM.

THE RETRO TORO® IS THE BEST UPGRADE IN TOWN.

**RT**  
Series



### FEATURES & BENEFITS

- **Sprinkler Conversion:** Converts current sprinklers into closed-case rotors.
- **Low Cost, Reliable and Efficient:** The RT upgrade extends the life of existing irrigation systems.
- **Adaptable:** Works with all 1in (2.5 cm) and 1-1/2" (4 cm) inlet Toro® golf rotors (except 800 and 690 Series).
- **Quick-N-Easy:** Upgrade takes less than 5 minutes.
- **Three Models to Choose from:** Two full-circles and one adjustable part-circle.
- **Performance, Reliability and Long life:** What you'd expect from Hunter, the world leader in gear-driven rotors.

### PRODUCT EXPLANATION

#### MODEL

**G70RT** = Full-Circle Riser With Nozzle Set

**G75RT** = Adjustable Arc Riser With Nozzle Set

**G80RT** = Full-Circle Riser With Nozzle Set



OLD BECOMES

NEW AGAIN



G70RT Retro Risers			
To Replace:	Use Hunter Model/Nozzle:		
TORO® Model	Nozzle	G70RT full circle	G75RT part circle
<b>630</b>	31	15	15
	32	18	18
	33	20	20
	34	28	
<b>660</b>	62	15	15
	63	18	18
	64	25	25
	65	28	
<b>730</b>	31	15	15
	32	18	18
	33	20	20
	34	23	23
	35	28	
<b>760</b>	62	15	15
	63	18	18
	64	20	23
	65	25	25
	66	28	

G80RT Retro Risers		
To Replace:	Use Hunter Model/Nozzle:	
TORO® Model	Nozzle	G80RT full circle
<b>650</b>	56	25
	57	33
	58	33
	59	38
<b>670</b>	70	43
	71	48
	72	48
<b>680</b>	84	25
	85	33
	86	33
	87	43
	88	48
<b>750</b>	54	25
	55	33
	56	38
	57	43
	58	48
<b>780</b>	84	25
	85	25
	86	33
	87	38
	88	43
	89	48



# I-90



## GO THE DISTANCE.

GET THE HEAVY-DUTY INSTITUTIONAL SERIES ROTOR WITH LONG-RANGE CAPABILITIES.

### FEATURES&BENEFITS

**Unique, long-range performer:** For block designed irrigation systems, nothing surpasses our I-90. It's one of the industry's longest distance rotary sprinklers. Designed with a radius of 70' to 96' (21 m - 29 m), the I-90 comes in two models: a full-circle opposing nozzle version or one with an adjustable arc. Both have color-coded nozzles you can easily identify and change on-site.

- ▶ **Extra Thick Heavy-Duty Rubber Cover:** Helps keep playing surfaces safe.
- ▶ **6 Color-Coded Primary Nozzles:** Uniform coverage and fast identification.
- ▶ **Easy Jar Top Access:** Quickly get to the screen and the adjustable stator.
- ▶ **Closed-Case Rotor:** 100% protection from dirt.
- ▶ **Heavy-Duty Gear Drive:** Proven to perform, time after time.
- ▶ **Pressure-Activated Riser Seal:** Clean flushing action and positive retraction.
- ▶ **Heavy-Duty Stainless Steel Spring:** Promises positive retraction, every time.

## SPECIFICATIONBUILDER

MODEL	FEATURES	OPTIONS
I-90 = 3" (8 cm) Pop-up	ADV, 36V, ARV, 3RV	33 - 63 = Factory-Installed Nozzle Number *  B = BSP Thread  * Nozzle pack is supplied when no pre-installed nozzle has been specified.
I-90	36V	53

EXAMPLE

**KEY TO FEATURES:**  
 ADV = Adjustable Arc with Check Valve  
 36V = Full-Circle with Check Valve  
 ARV = Adjustable Arc, Reclaimed Water ID with Check Valve  
 3RV = Full-Circle, Reclaimed Water ID with Check Valve

I-90 - 36V - 53



## MODELS

**I-90 36V** – Full circle

**I-90 ADV** – Adjustable arc (40°–360°)

## DIMENSIONS

- Pop-up height: 3" (8 cm)
- Female inlet: 1-1/2" (4 cm) NPT or BSP
- Exposed diameter: 3-1/2" (9 cm)
- Overall height: 11" (28 cm)

## OPERATING SPECIFICATIONS

### I-90 36V

- Discharge rate: 29.8 to 69.4 GPM (6.77 to 15.76 m<sup>3</sup>/hr, 113 to 263 l/min)
- Radius: 71' to 96' (21 to 29.3 m)
- Recommended pressure range: 60 to 100 PSI (4.1 to 6.9 bars; 275 to 689 kPa)
- Operating pressure range: 50 to 100 PSI (3.4 to 6.9 bars; 344 to 689 kPa)

### I-90 ADV

- Discharge rate: 30.7 to 69.8 GPM (6.97 to 15.85 m<sup>3</sup>/hr, 116 to 264 l/min)
- Radius: 67' to 90' (20.4 to 27.4 m)
- Recommended pressure range: 60 to 100 PSI (4.1 to 6.9 bars; 275 to 689 kPa)
- Operating pressure range: 50 to 100 PSI (3.4 to 6.9 bars; 344 to 689 kPa)

## OPTIONS AVAILABLE

- Reclaimed water identification
- Factory-installed nozzles
- Turf Cup Kit (part # 467955)



◀ TURF CUP KIT

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	Precip mm/hr
<b>33</b> Gray	60	67'	30.7	1.32	1.52
	70	67'	33.1	1.42	1.64
	80	68'	35.5	1.48	1.71
	90	69'	37.7	1.52	1.76
	100	70'	39.8	1.56	1.81
<b>38</b> Red	60	69'	34.0	1.37	1.59
	70	70'	36.9	1.45	1.67
	80	72'	39.8	1.48	1.71
	90	73'	42.3	1.53	1.76
	100	75'	44.1	1.51	1.74
<b>43</b> Brown	60	70'	38.7	1.52	1.76
	70	71'	42.0	1.60	1.85
	80	72'	44.5	1.65	1.91
	90	73'	47.6	1.72	1.99
	100	73'	48.3	1.74	2.01
<b>48</b> Dk. Green	70	75'	47.0	1.61	1.86
	80	77'	50.2	1.63	1.88
	90	79'	53.3	1.64	1.90
	100	81'	56.0	1.64	1.90
<b>53*</b> Dk. Blue	70	79'	48.5	1.50	1.73
	80	81'	53.4	1.57	1.81
	90	85'	57.0	1.52	1.75
	100	86'	59.5	1.55	1.79
<b>63</b> Black	70	84'	60.9	1.66	1.92
	80	86'	63.8	1.66	1.92
	90	88'	66.5	1.65	1.91
	100	90'	69.8	1.66	1.92

\* Factory-installed nozzle

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360-degree sprinkler, divide by 2.

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	Precip mm/hr
<b>33</b> Gray	60	71'	29.8	0.57	0.66
	70	74'	32.2	0.57	0.65
	80	76'	34.4	0.57	0.66
	90	78'	36.8	0.58	0.67
	100	80'	38.6	0.58	0.67
<b>38</b> Red	60	74'	33.3	0.59	0.68
	70	77'	36.1	0.59	0.68
	80	79'	38.4	0.59	0.68
	90	80'	40.9	0.62	0.71
	100	82'	42.8	0.61	0.71
<b>43</b> Brown	60	77'	38.1	0.62	0.71
	70	79'	40.9	0.63	0.73
	80	82'	43.9	0.63	0.73
	90	83'	46.5	0.65	0.75
	100	84'	48.5	0.66	0.76
<b>48</b> Dk. Green	70	82'	46.3	0.66	0.77
	80	86'	49.6	0.65	0.75
	90	89'	52.5	0.64	0.74
	100	90'	54.8	0.65	0.75
<b>53*</b> Dk. Blue	70	85'	50.5	0.67	0.78
	80	88'	53.5	0.66	0.77
	90	90'	57.4	0.68	0.79
	100	92'	59.5	0.68	0.78
<b>63</b> Black	70	90'	60.6	0.72	0.83
	80	92'	63.2	0.72	0.83
	90	94'	65.9	0.72	0.83
	100	96'	69.4	0.72	0.84

\* Factory-installed nozzle

**Note:** All precipitation rates are calculated for 360-degree operation.

Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr	Precip mm/hr
<b>33</b> Gray	4.0	400	20.1	6.84	114.1	34
	4.5	450	20.4	7.25	120.9	35
	5.0	500	20.4	7.64	127.4	37
	5.5	550	20.7	8.06	134.4	38
	6.0	600	20.7	8.42	140.3	39
	6.5	650	21.0	8.75	145.9	40
	7.0	700	21.3	9.08	151.3	40
<b>38</b> Red	4.0	400	20.7	7.61	126.8	35
	4.5	450	21.0	8.07	134.5	37
	5.0	500	21.3	8.51	141.9	37
	5.5	550	21.9	8.99	149.8	37
	6.0	600	22.3	9.39	156.5	38
	6.5	650	22.6	9.77	162.9	38
	7.0	700	22.9	10.14	169.0	39
<b>43</b> Brown	4.0	400	21.0	8.72	145.4	39
	4.5	450	21.3	9.18	153.0	40
	5.0	500	21.6	9.62	160.2	41
	5.5	550	21.9	10.08	168.0	42
	6.0	600	21.9	10.47	174.5	43
	6.5	650	22.3	10.84	180.7	44
	7.0	700	22.3	11.20	186.6	45
<b>48</b> Dk. Green	4.0	400	21.6	9.73	162.2	42
	4.5	450	22.3	10.29	171.6	42
	5.0	500	22.9	10.83	180.4	41
	5.5	550	23.5	11.41	190.1	41
	6.0	600	23.8	11.89	198.1	42
	6.5	650	24.1	12.35	205.8	43
	7.0	700	24.7	12.79	213.2	42
<b>53*</b> Dk. Blue	4.0	400	22.6	9.97	166.2	39
	4.5	450	23.2	10.65	177.5	40
	5.0	500	24.1	11.29	188.2	39
	5.5	550	24.7	12.00	200.0	39
	6.0	600	25.6	12.59	209.9	38
	6.5	650	26.2	13.17	219.4	38
	7.0	700	26.2	13.72	228.7	40
<b>63</b> Black	4.0	400	23.2	12.85	241.2	48
	4.5	450	24.4	13.42	223.6	45
	5.0	500	25.6	13.95	232.5	43
	5.5	550	26.2	14.52	241.9	42
	6.0	600	26.5	14.98	249.7	43
	6.5	650	26.8	15.43	257.1	43
	7.0	700	27.4	15.85	264.2	42

\* Factory-installed nozzle

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360-degree sprinkler, divide by 2.

Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr	Precip mm/hr
<b>33</b> Gray	4.0	400	21.3	6.65	110.8	15
	4.5	450	21.9	7.05	117.4	15
	5.0	500	22.6	7.43	123.7	15
	5.5	550	23.2	7.84	130.6	15
	6.0	600	23.5	8.18	136.3	15
	6.5	650	23.8	8.51	141.8	15
	7.0	700	24.4	8.83	147.1	15
<b>38</b> Red	4.0	400	22.3	7.45	124.2	15
	4.5	450	22.9	7.89	131.4	15
	5.0	500	23.8	8.29	138.2	15
	5.5	550	24.1	8.74	145.6	15
	6.0	600	24.1	9.10	151.7	16
	6.5	650	24.4	9.46	157.6	16
	7.0	700	25.0	9.80	163.3	16
<b>43</b> Brown	4.0	400	23.2	8.51	141.9	16
	4.5	450	23.8	8.99	149.9	16
	5.0	500	24.1	9.45	157.4	16
	5.5	550	25.0	9.94	165.6	16
	6.0	600	25.0	10.35	172.4	17
	6.5	650	25.3	10.74	178.9	17
	7.0	700	25.6	11.11	185.2	17
<b>48</b> Dk. Green	4.0	400	22.6	9.64	160.7	19
	4.5	450	23.8	10.18	169.7	18
	5.0	500	25.0	10.69	178.1	17
	5.5	550	26.2	11.24	187.2	16
	6.0	600	26.8	11.69	194.9	16
	6.5	650	27.1	12.13	202.1	16
	7.0	700	27.4	12.55	209.2	17
<b>53*</b> Dk. Blue	4.0	400	23.5	10.49	174.8	19
	4.5	450	24.7	11.07	184.5	18
	5.0	500	25.9	11.62	193.6	17
	5.5	550	26.8	12.21	203.6	17
	6.0	600	27.1	12.71	211.8	17
	6.5	650	27.7	13.19	219.7	17
	7.0	700	28.0	13.64	227.4	17
<b>63</b> Black	4.0	400	25.0	12.77	212.8	20
	4.5	450	26.2	13.33	222.1	19
	5.0	500	27.4	13.85	230.8	18
	5.5	550	28.0	14.41	240.2	18
	6.0	600	28.3	14.87	247.9	19
	6.5	650	28.7	15.31	255.2	19
	7.0	700	29.3	15.73	262.2	18

\* Factory-installed nozzle

**Note:** All precipitation rates are calculated for 360-degree operation.

## SPECIFICATION BUILDER

MODEL	FEATURES	OPTIONS
I-60 = 3" Pop-up	ADS, 36S, ARS, 3RS	7 - 20 = Factory-Installed Nozzle Number *
		B = BSP Thread
		* Nozzle pack is supplied when no pre-installed nozzle has been specified.
I-60	ADS	13

### KEY TO FEATURES:

- ADS = Adjustable Arc with Check Valve and Stainless Riser  
 36S = Full-Circle with Check Valve and Stainless Riser  
 ARS = Adjustable Arc with Check Valve, Reclaimed Water ID and Stainless Riser  
 3RS = Full-Circle with Check Valve, Reclaimed Water and Stainless Riser

**I-60 - ADS - 13**

# I-60



- **Patented Precision Distribution Control™:** Creates even coverage at low pressures with no booster pump.
- **6 Color-Coded Nozzles:** Uniform coverage and easy identification.
- **Stainless Steel Riser:** Protects from abrasive soil conditions, ensuring long-term positive retraction.
- **Easy Arc Adjustment (40° - 360°):** Up, down, wet or dry with through-the-top access.
- **Built-In Check Valve that Provides for up to 10' (3.0 m) Elevation Change:** Conserves water, reduces liability.

FEATURES & BENEFITS

### SINGLE-MINDED.

THE I-60 ROTOR'S PATENTED SINGLE NOZZLE DESIGN SAVES WATER AND REDUCES OPERATING COSTS.

### Low pressure can be good.

Imagine reaching a radius of 65' (19.8 m) with only 40 to 60 PSI (2.75 - 4 bars). This large turf rotor creates efficient water performance as it minimizes runoff and waste. Plus, with a lower water requirement, you don't need larger pipe, so you reap even more savings.



## MODELS

**I-60 ADS** – Adjustable arc (40°–360°)

**I-60 36S** – Full circle

## DIMENSIONS

- Pop-up height: 3" (8 cm)
- Overall height: 8-3/8" (21 cm)
- Female inlet: 1" NPT or BSP
- Exposed diameter: 1-3/4" (4.45 cm)

## OPERATING SPECIFICATIONS

### I-60 ADS

- Discharge rate: 6.5 to 20.4 GPM (1.48 to 4.63 m<sup>3</sup>/hr; 24.6 to 77.2 l/min)
- Radius: 50' to 66' (15.2 to 20.1 m)
- Recommended pressure range: 40 to 60 PSI (2.8 to 4.1 bars; 275 to 413 kPa)
- Precipitation rates: approximately .29" to .52" (7 to 13 mm) per hour
- Nozzle trajectory: 25°

### I-60 36S

- Discharge rate: 6.5 to 20.8 GPM (1.48 to 4.72 m<sup>3</sup>/hr; 24.6 to 78.7 l/min)
- Radius: 51' to 67' (15.5 to 20.4 m)
- Recommended pressure range: 40 to 60 PSI (2.8 to 4.1 bars; 275 to 413 kPa)
- Precipitation rates: approximately .25" to .55" (6 to 14 mm) per hour
- Nozzle trajectory: 25°

## OPTIONS AVAILABLE

- Reclaimed water cover
- Factory-installed nozzles

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr
<b>7</b> Orange	40	50'	6.5	0.50
	50	52'	7.1	0.51
	60	54'	7.7	0.51
<b>10</b> Lt. Green	40	53'	8.5	0.58
	50	56'	9.5	0.58
	60	58'	10.2	0.58
<b>13*</b> Lt. Blue	40	56'	10.5	0.64
	50	58'	12.1	0.69
	60	60'	13.0	0.70
<b>15</b> Gray	40	58'	12.5	0.72
	50	60'	13.9	0.74
	60	62'	15.1	0.76
<b>18</b> Red	40	59'	15.6	0.86
	50	62'	17.5	0.88
	60	65'	18.6	0.85
<b>20</b> Brown	40	62'	17.5	0.88
	50	64'	19.1	0.90
	60	66'	20.4	0.90

\* Factory-installed nozzle

**Note:** All precipitation rates calculated for 180-degree operation. For the precipitation rate for a 360-degree sprinkler, divide by 2.

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr
<b>7</b> Orange	40	51'	6.5	0.24
	50	54'	7.5	0.25
	60	56'	8.0	0.25
<b>10</b> Lt. Green	40	53'	8.5	0.29
	50	56'	9.5	0.29
	60	58'	10.2	0.29
<b>13*</b> Lt. Blue	40	56'	10.5	0.32
	50	58'	12.4	0.35
	60	60'	13.0	0.35
<b>15</b> Gray	40	58'	12.5	0.36
	50	60'	14.0	0.37
	60	62'	15.1	0.38
<b>18</b> Red	40	59'	15.6	0.43
	50	62'	17.7	0.44
	60	65'	18.9	0.43
<b>20</b> Brown	40	62'	17.5	0.44
	50	64'	19.1	0.45
	60	67'	20.8	0.45

\* Factory-installed nozzle

**Note:** All precipitation rates calculated for 360-degree operation.

Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr	Precip mm/hr
<b>7</b> Orange	2.5	14.9	1.41	13
	3.0	15.5	1.53	13
	3.5	15.8	1.63	13
	4.0	16.5	1.72	13
	4.5	16.5	1.80	13
<b>10</b> Lt. Green	2.5	15.8	1.85	15
	3.0	16.5	2.02	15
	3.5	17.1	2.16	15
	4.0	17.7	2.29	15
	4.5	17.7	2.41	15
<b>13*</b> Lt. Blue	2.5	16.8	2.27	16
	3.0	17.4	2.53	17
	3.5	17.7	2.73	17
	4.0	18.3	2.93	17
	4.5	18.3	3.11	17
<b>15</b> Gray	2.5	17.4	2.70	18
	3.0	18.0	2.97	18
	3.5	18.3	3.18	19
	4.0	18.6	3.38	20
	4.5	18.9	3.56	20
<b>18</b> Red	2.5	17.7	3.40	22
	3.0	18.3	3.71	22
	3.5	18.9	3.96	22
	4.0	19.5	4.19	22
	4.5	19.8	4.40	22
<b>20</b> Brown	2.5	18.6	3.82	22
	3.0	19.2	4.12	22
	3.5	19.5	4.36	23
	4.0	19.8	4.58	23
	4.5	20.1	4.78	24

\* Factory-installed nozzle

**Note:** All precipitation rates calculated for 180-degree operation. For the precipitation rate for a 360-degree sprinkler, divide by 2.

Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr	Precip mm/hr
<b>7</b> Orange	2.5	15.2	1.41	6
	3.0	15.8	1.56	6
	3.5	16.5	1.69	6
	4.0	16.8	1.80	6
	4.5	17.4	1.91	6
<b>10</b> Lt. Green	2.5	15.8	1.85	7
	3.0	16.5	2.02	7
	3.5	17.1	2.16	7
	4.0	17.4	2.29	8
	4.5	18.0	2.41	7
<b>13*</b> Lt. Blue	2.5	16.8	2.29	8
	3.0	17.1	2.55	9
	3.5	17.7	2.76	9
	4.0	18.0	2.95	9
	4.5	18.6	3.14	9
<b>15</b> Gray	2.5	17.4	2.71	9
	3.0	17.7	2.98	10
	3.5	18.3	3.19	10
	4.0	18.6	3.39	10
	4.5	18.9	3.57	10
<b>18</b> Red	2.5	17.7	3.39	11
	3.0	18.0	3.73	12
	3.5	18.9	4.00	11
	4.0	19.5	4.26	11
	4.5	19.8	4.49	11
<b>20</b> Brown	2.5	18.6	3.79	11
	3.0	18.9	4.13	12
	3.5	19.5	4.40	12
	4.0	19.8	4.64	12
	4.5	20.4	4.87	12

\* Factory-installed nozzle

**Note:** All precipitation rates calculated for 360-degree operation.



6 COLOR-CODED NOZZLES

I-40 Ultra Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	
40	40	45'	7.0	0.67	0.77
	50	46'	8.0	0.73	0.84
	60	46'	8.5	0.77	0.89
41	50	50'	10.2	0.79	0.91
	60	51'	11.1	0.82	0.95
	70	52'	12.1	0.86	0.99
	80	53'	13.0	0.89	1.03
42	50	51'	11.0	0.81	0.94
	60	53'	12.3	0.84	0.97
	70	55'	13.1	0.83	0.96
	80	56'	13.9	0.85	0.99
43	50	56'	13.5	0.83	0.96
	60	57'	15.1	0.89	1.03
	70	59'	16.1	0.89	1.03
	80	61'	17.5	0.91	1.05
44	60	63'	20.0	0.97	1.12
	70	65'	21.8	0.99	1.15
	80	66'	23.4	1.03	1.19
	90	67'	24.9	1.07	1.23
45	60	66'	22.7	1.00	1.16
	70	68'	24.7	1.03	1.19
	80	69'	26.4	1.07	1.23
	90	70'	28.2	1.11	1.28

Note: All precipitation rates are calculated for 180 degree operation.  
For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-40 Ultra High Speed Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	
40	40	41'	7.0	0.80	0.93
	50	42'	8.0	0.87	1.01
	60	42'	8.5	0.93	1.07
41	50	44'	10.2	1.01	1.17
	60	44'	11.1	1.10	1.27
	70	45'	12.1	1.15	1.33
	80	46'	13.0	1.18	1.37
42	50	46'	11.0	1.00	1.16
	60	47'	12.3	1.07	1.24
	70	49'	13.1	1.05	1.21
	80	50'	13.9	1.07	1.24
43	50	51'	13.5	1.00	1.15
	60	52'	15.1	1.07	1.24
	70	52'	16.1	1.15	1.32
	80	53'	17.5	1.20	1.38
44	60	58'	20.0	1.14	1.32
	70	58'	21.8	1.25	1.44
	80	60'	23.4	1.25	1.44
	90	60'	24.9	1.33	1.54
45	60	60'	22.7	1.21	1.40
	70	62'	24.7	1.24	1.43
	80	64'	26.4	1.24	1.43
	90	65'	28.2	1.28	1.48

Note: All precipitation rates are calculated for 180 degree operation.  
For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-40 Ultra Dual Opposing Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	
15 Gray	50	52'	13.0	0.46	0.53
	60	54'	13.2	0.44	0.50
	70	56'	14.4	0.44	0.51
	80	57'	15.5	0.46	0.53
18 Red	50	58'	13.7	0.39	0.45
	60	59'	15.2	0.42	0.49
	70	60'	16.6	0.44	0.51
	80	62'	17.8	0.45	0.51
20 Brown	60	63'	19.1	0.46	0.53
	70	64'	20.9	0.49	0.57
	80	66'	22.3	0.49	0.57
	90	66'	23.9	0.53	0.61
23 Dk. Green	60	65'	20.4	0.46	0.54
	70	66'	22.3	0.49	0.57
	80	67'	24.0	0.51	0.59
	90	68'	25.6	0.53	0.62
25* Dk. Blue	60	66'	22.0	0.49	0.56
	70	68'	24.0	0.50	0.58
	80	69'	25.9	0.52	0.60
	90	70'	27.2	0.53	0.62
28 Black	70	70'	28.9	0.57	0.66
	80	72'	30.9	0.57	0.66
	90	74'	32.9	0.58	0.67
	100	76'	33.7	0.56	0.65

\* Factory-installed nozzle

Note: All precipitation rates calculated for 360 degree operation.

Get the rotor that delivers with accuracy at watering distances up to 70' (21 m). Whether your course is manicured or links, you'll get exactly what you need with the I-40 Ultra.

GET A GRIP.

ON THE NUMBER ONE CHOICE OF ROTORS IN ITS CLASS.

I-40  
Ultra

FEATURES & BENEFITS

- **Full and Part-Circle Operation in a Single Rotor:** Helps reduce stock.
- **ProTech™ Safety System:** Small heavy-duty rubber cover and boot protect playing areas.
- **Primary Nozzle System has Six Interchangeable Nozzles:** Consistent coverage with a radius from 45' to 70' (13.5 m - 21 m).
- **Dual Opposing Nozzle Full-Circle Option:** Superior coverage for maximum efficiency.
- **4" (10 cm) and 6" (15 cm) Riser:** For all types of turf applications.
- **Easy Arc Adjustment (50° - 360°):** Up, down, wet or dry with through-the-top convenience.
- **Stainless Steel Riser and Ultra Strong Spring:** Gives you long term positive retraction.
- **Automatic Arc Return:** Goes back to original arc wherever turret is turned.
- **Non-Strippable Drive Mechanism:** Can turn turret without causing damage.
- **Drain Check Valve for up to 15' (4.5 m) of Elevation Change:** Conserves water, reduces liability.





I-40 Ultra Nozzle Performance Data – Metric							
Nozzle	Pressure Bars	Pressure kPa	Radius m	Flow m³/hr l/min	Precip mm/hr	mm/hr ▲	
40	2.5	250	13.4	1.52	25.4	17	20
	3.0	300	13.7	1.68	28.0	18	21
	3.5	350	14.0	1.80	30.0	18	21
	4.0	400	14.0	1.92	32.0	20	23
	4.5	450	14.0	2.03	33.8	21	24
	5.0	500	14.3	2.13	35.5	21	24
41	3.0	300	14.9	2.16	36.0	19	22
	3.5	350	15.2	2.33	38.9	20	23
	4.0	400	15.5	2.49	41.5	21	24
	4.5	450	15.5	2.64	44.1	22	25
	5.0	500	15.8	2.79	46.5	22	26
	5.5	550	16.2	2.95	49.1	23	26
42	3.0	300	15.2	2.37	39.4	20	24
	3.5	350	15.5	2.54	42.4	21	24
	4.0	400	16.2	2.71	45.2	21	24
	4.5	450	16.5	2.87	47.8	21	24
	5.0	500	16.8	3.01	50.2	21	25
	5.5	550	17.1	3.17	52.9	22	25
43	3.0	300	16.8	2.87	47.9	20	24
	3.5	350	17.1	3.11	51.8	21	25
	4.0	400	17.4	3.33	55.6	22	26
	4.5	450	17.7	3.55	59.1	23	26
	5.0	500	18.0	3.75	62.4	23	27
	5.5	550	18.6	3.97	66.1	23	26
44	4.0	400	19.2	4.47	74.4	24	28
	4.5	450	19.5	4.75	79.1	25	29
	5.0	500	19.8	5.02	83.6	26	30
	5.5	550	20.1	5.31	88.5	26	30
	6.0	600	20.1	5.56	92.6	27	32
	6.5	650	20.4	5.80	96.6	28	32
45	4.0	400	20.1	5.07	84.4	25	29
	4.5	450	20.4	5.38	89.7	26	30
	5.0	500	20.7	5.68	94.7	26	31
	5.5	550	21.0	6.01	100.2	27	31
	6.0	600	21.3	6.28	104.7	28	32
	6.5	650	21.6	6.55	109.1	28	33

**Note:** All precipitation rates are calculated for 180 degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-40 Ultra High Speed Nozzle Performance Data – Metric						
Nozzle	Pressure Bars	Pressure kPa	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr
						■ ▲
40	2.5	250	12.2	1.52	25.4	20
	3.0	300	12.5	1.68	28.0	21
	3.5	350	12.8	1.80	30.0	22
	4.0	400	12.8	1.92	32.0	23
	4.5	450	13.1	2.03	33.8	24
41	3.0	300	13.1	2.16	36.0	25
	3.5	350	13.4	2.33	38.9	26
	4.0	400	13.4	2.49	41.5	28
	4.5	450	13.4	2.64	44.1	29
	5.0	500	13.7	2.79	46.5	30
42	5.5	550	14.0	2.95	49.1	30
	3.0	300	13.7	2.37	39.4	25
	3.5	350	14.0	2.54	42.4	26
	4.0	400	14.3	2.71	45.2	26
	4.5	450	14.6	2.87	47.8	27
43	5.0	500	14.9	3.01	50.2	27
	5.5	550	15.2	3.17	52.9	27
	3.0	300	14.9	2.87	47.9	26
	3.5	350	15.5	3.11	51.8	26
	4.0	400	15.8	3.33	55.6	27
44	4.5	450	15.8	3.55	59.1	28
	5.0	500	15.8	3.75	62.4	30
	5.5	550	16.2	3.97	66.1	30
	4.0	400	17.7	4.47	74.4	29
	4.5	450	17.7	4.75	79.1	30
45	5.0	500	17.7	5.02	83.6	32
	5.5	550	18.3	5.31	88.5	32
	6.0	600	18.3	5.56	92.6	33
	6.5	650	18.3	5.80	96.6	36
	4.0	400	18.3	5.07	84.4	30

**Note:** All precipitation rates are calculated for 180 degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-40 Ultra Dual Opposing Nozzle Performance Data – Metric						
Nozzle	Pressure Bars	Pressure kPa	Radius m	Flow m <sup>3</sup> /hr	l/min	Precip mm/hr
						■ ▲
15 Gray	3.0	300	15.2	2.75	45.8	12 14
	3.5	350	15.8	2.91	48.5	12 13
	4.0	400	16.2	3.06	51.0	12 14
	4.5	450	16.8	3.20	53.3	11 13
	5.0	500	17.1	3.32	55.4	11 13
	5.5	550	17.4	3.46	57.7	11 13
18 Red	3.0	300	17.4	2.90	48.3	10 11
	3.5	350	17.7	3.15	52.5	10 12
	4.0	400	18.0	3.38	56.4	10 12
	4.5	450	18.0	3.61	60.1	11 13
	5.0	500	18.3	3.82	63.7	11 13
	5.5	550	18.9	4.05	67.5	11 13
20 Brown	4.0	400	18.9	4.26	71.1	12 14
	4.5	450	19.2	4.54	75.6	12 14
	5.0	500	19.5	4.80	80.0	13 15
	5.5	550	20.1	5.08	84.7	13 15
	6.0	600	19.8	5.32	88.7	14 16
	6.5	650	20.1	5.55	92.5	14 16
23 Dk. Green	4.0	400	19.5	4.55	75.8	12 14
	4.5	450	19.8	4.85	80.8	12 14
	5.0	500	20.1	5.14	85.6	13 15
	5.5	550	20.4	5.45	90.8	13 15
	6.0	600	20.7	5.71	95.1	13 15
	6.5	650	20.7	5.96	99.4	14 16
25* Dk. Blue	4.0	400	20.1	4.92	82.1	12 14
	4.5	450	20.4	5.23	87.2	13 14
	5.0	500	20.7	5.52	92.0	13 15
	5.5	550	21.0	5.84	97.3	13 15
	6.0	600	21.3	6.10	101.7	13 15
	6.5	650	21.3	6.36	106.0	14 16
28 Black	4.5	500	21.0	6.38	106.4	14 17
	5.0	500	21.3	6.68	111.3	15 17
	5.5	550	21.9	7.00	116.7	15 17
	6.0	600	22.3	7.27	121.1	15 17
	6.5	650	22.6	7.52	125.3	15 17
	7.0	700	23.2	7.76	129.4	14 17

\* Factory-installed nozzle

**Note:** All precipitation rates calculated for 360 degree operation.

## SPECIFICATIONBUILDER

MODEL	FEATURES	OPTIONS
I-40-04 = 4" (10 cm) Pop-up	SS, SS-R, SS-ON, SS-ON-R, SS-HS, SS-HS-R	40 – 45 = Factory Installed * Nozzle Number **
I-40-06 = 5-1/2" (14 cm) Pop-up		
I-40-06		
	SS	43

EXAMPLE

### KEY TO FEATURES:

- SS** = Adjustable Arc, 50-360 degrees, Stainless Riser with Check Valve
- SS-R** = Adjustable Arc, 50-360 degrees, Stainless Riser with Check Valve and reclaimed water ID
- SS-ON** = Full-circle, with opposing nozzles, Stainless Riser with Check Valve
- SS-ON-R** = Full-Circle, with opposing nozzles, Stainless Riser with Check Valve and reclaimed water ID
- SS-HS** = High Speed, ADJ arc, 50-360 degrees, Stainless Riser with Check Valve
- SS-HS-R** = High Speed, ADJ arc, 50-360 degrees, Stainless Riser with Check Valve and reclaimed water ID

**I-40-06 - SS - 43**

### MODELS

- I-40-04** – 4" (10 cm) Heavy-duty rotor
- I-40-04-SS-HS** – 4" (10 cm) High-speed heavy-duty rotor
- I-40-06-SS** – 5- 1/2" (14 cm) Heavy-duty rotor
- I-40-06-SS-HS** – 5- 1/2" (14 cm) High-speed heavy-duty rotor

### DIMENSIONS

- I-40-04-SS**  
Overall height: 7-7/8" (20 cm)
- I-40-06-SS**  
Overall height: 10-1/4" (26 cm)
- Female inlet: 1" = NPT or BSP
- Exposed diameter: 2" (5 cm)

### OPERATING SPECIFICATIONS

- Discharge rate: 7.0 to 28.2 GPM (1.59 to 6.4 m<sup>3</sup>/hr; 26.5 to 106.7 l/min)
- Radius for I-40-04, I-40-06: 45' to 70' (13.7 - 21.3 m)
- Radius for High Speed I-40-04-HS, I-40-06-HS: 41' to 65' (12.5 - 19.8 m)
- Recommended pressure range: 40 to 100 PSI (2.8 to 6.9 bars; 275 to 689 kPa)
- Operating pressure range: 40 to 100 PSI (2.8 to 6.9 bars; 275 to 689 kPa)
- Precipitation rates: approximately .33" to .48" (8 to 12 mm) per hour
- Nozzle trajectory: 25°

### OPTIONS AVAILABLE

- The turf cup kit (part # 460000) for the I-40 sprinkler allows the addition of a plug of living sod to the top of the riser. Perfect for areas where an invisible sprinkler is required.
- High-speed version
- Dual opposing nozzle (full-circle version)
- Reclaimed water cover
- Factory-installed nozzles



- ▶ **Full and Part-Circle Operation in a Single Rotor:** Helps reduce stock.
- ▶ **Automatic Arc Return:** Goes back to original arc wherever turret is turned.
- ▶ **FloStop™ Valve:** Lets you turn water on and off at the head; lets you fine-tune rate of flow in between.
- ▶ **Three Port Nozzle:** Combines three levels of precise watering.
- ▶ **Non-Strippable Drive Mechanism:** Can turn turret without causing damage.
- ▶ **Standard 6" (15 cm) Riser:** Clears tall turf.
- ▶ **Easy Arc Adjustment (50° - 360°):** Up, down, wet or dry with through-the-top convenience.

Discover the height of performance with the I-35 Sierra. It meets the demand of watering a 50' to 70' (15 m - 21 m) area on your course with no problem. The all-in-one head is streaming with benefits: Patented FloStop™ technology, triple port nozzle design that combines three levels of watering accuracy, and easy adjustment. Great for both close-in and long-range watering.

# I-35 Sierra



## THINK BIG.

THE I-35 SIERRA DELIVERS MAXIMUM STRENGTH TO ELEVATE PERFORMANCE TO A NEW LEVEL.

### MODELS

- I-35-06** – 5-1/2" (14 cm) Plastic riser, Commercial duty rotor
- I-35-06-SS** – 5-1/2" (14 cm) Stainless steel riser, Commercial duty rotor

### DIMENSIONS

- Overall height: I-35, I-35-SS, I-35-HS – 10-3/8" (26 cm)
- Female inlet: 1" NPT or BSP
- Exposed diameter: 1-7/8" (5 cm)

### OPERATING SPECIFICATIONS

- Discharge rate: 7.7 to 31.5 GPM (1.65 to 7.24 m³/hr; 27.5 to 120.7 l/min)
- Radius for I-35: 47' to 71' (14.0 to 21.6 m)
- Radius for I-35-HS: 42' to 67' (12.5 to 20.4 m)
- Recommended pressure range: 40 to 100 PSI (2.5 to 7.0 bars; 248 to 696 kPa)
- Operating pressure range: 40 to 100 PSI (2.5 to 7.0 bars; 248 to 696 kPa)
- Precipitation rates: approximately .67" to 1.2" (17 to 31 mm) per hour
- Nozzle trajectory: 25°
- Drain Check Valve for up to 10' (3 m) of elevation change

### OPTIONS AVAILABLE



- High-speed version
- Reclaimed water cover
- Factory-installed nozzles



I-35 Nozzle Performance Data						
Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr		
<b>9</b> Lt. Brown	40	47'	7.7	0.67	0.77	
	50	49'	8.3	0.67	0.77	
	60	50'	9.2	0.71	0.82	
	70	50'	9.9	0.73	0.85	
<b>12</b> Lt. Blue	50	53'	11.2	0.77	0.89	
	60	54'	12.3	0.81	0.94	
	70	55'	13.3	0.85	0.98	
	80	55'	14.3	0.91	1.05	
<b>15</b> Gray	50	56'	13.4	0.82	0.95	
	60	57'	14.3	0.85	0.98	
	70	57'	15.2	0.90	1.04	
	80	58'	16.4	0.94	1.08	
<b>18</b> Red	50	58'	14.5	0.83	0.96	
	60	59'	15.7	0.87	1.00	
	70	62'	16.9	0.85	0.98	
	80	63'	18.2	0.88	1.02	
<b>21</b> Brown	60	62'	17.8	0.89	1.03	
	70	63'	19.2	0.93	1.08	
	80	64'	20.5	0.96	1.11	
	90	65'	21.8	0.99	1.15	
<b>24</b> Dk. Green	60	64'	21.9	1.03	1.19	
	70	65'	23.6	1.08	1.24	
	80	66'	25.6	1.13	1.31	
	90	67'	27.0	1.16	1.34	
<b>27</b> Dk. Blue	60	66'	23.5	1.04	1.20	
	70	68'	25.5	1.06	1.23	
	80	69'	28.0	1.13	1.31	
	90	70'	29.5	1.16	1.34	
<b>30</b> Black	70	68'	26.9	1.12	1.29	
	80	70'	28.7	1.13	1.30	
	90	71'	30.6	1.17	1.35	
	100	71'	31.5	1.20	1.39	

I-35 High-Speed Nozzle Performance Data						
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr		
<b>9</b> Lt. Brown	40	42'	7.7	0.84		
	50	43'	8.3	0.86		
	60	44'	9.2	0.91		
	70	45'	9.9	0.94		
<b>12</b> Lt. Blue	50	48'	11.2	0.94		
	60	49'	12.3	0.99		
	70	51'	13.3	0.98		
	80	51'	14.3	1.06		
<b>15</b> Gray	50	49'	13.4	1.07		
	60	51'	14.3	1.06		
	70	53'	15.2	1.04		
	80	54'	16.4	1.08		
<b>18</b> Red	50	50'	14.5	1.12		
	60	53'	15.7	1.08		
	70	55'	16.9	1.08		
	80	57'	18.2	1.08		
<b>21</b> Brown	60	53'	17.8	1.22		
	70	56'	19.2	1.18		
	80	58'	20.5	1.17		
	90	59'	21.8	1.21		
<b>24</b> Dk. Green	60	56'	21.9	1.34		
	70	58'	23.6	1.35		
	80	60'	25.6	1.37		
	90	61'	27.0	1.40		
<b>27</b> Dk. Blue	60	58'	23.5	1.34		
	70	62'	25.5	1.28		
	80	64'	28.0	1.32		
	90	66'	29.5	1.30		
<b>30</b> Black	70	60'	26.9	1.44		
	80	62'	28.7	1.44		
	90	65'	30.6	1.39		
	100	67'	31.5	1.35		

I-35 Nozzle Performance Data – Metric											
Nozzle	Pressure Bars	kPa	Radius m	Flow m <sup>3</sup> /hr	l/min	Precip mm/hr					
<b>9</b> Lt. Brown	2.5	250	14.0	1.65	27.5	17	19				
	3.0	300	14.3	1.81	30.1	18	20				
	3.5	350	14.9	1.94	32.3	17	20				
	4.0	400	15.2	2.05	34.2	18	20				
	4.5	450	15.2	2.16	36.0	19	22				
	5.0	500	15.5	2.27	37.8	19	22				
<b>12</b> Lt. Blue	3.0	300	15.8	2.38	39.6	19	22				
	3.5	350	16.2	2.57	42.8	20	23				
	4.0	400	16.5	2.75	45.7	20	23				
	4.5	450	16.5	2.91	48.5	21	25				
	5.0	500	16.8	3.07	51.2	22	25				
	5.5	550	16.8	3.24	54.0	23	27				
<b>15</b> Gray	3.0	300	16.8	2.86	47.7	20	24				
	3.5	350	17.1	3.05	50.8	21	24				
	4.0	400	17.4	3.22	53.7	21	25				
	4.5	450	17.4	3.38	56.3	22	26				
	5.0	500	17.4	3.53	58.8	23	27				
	5.5	550	17.7	3.69	61.5	24	27				
<b>18</b> Red	3.0	300	17.4	3.08	51.4	20	24				
	3.5	350	17.7	3.31	55.2	21	24				
	4.0	400	18.0	3.52	58.7	22	25				
	4.5	450	18.3	3.72	62.0	22	26				
	5.0	500	18.9	3.91	65.2	22	25				
	5.5	550	19.2	4.11	68.5	22	26				
<b>21</b> Brown	4.0	400	18.6	3.97	66.2	23	27				
	4.5	450	18.9	4.20	70.1	24	27				
	5.0	500	19.2	4.42	73.7	24	28				
	5.5	550	19.5	4.66	77.7	25	28				
	6.0	600	19.8	4.86	81.0	25	29				
	6.5	650	20.1	5.05	84.2	25	29				
<b>24</b> Dk. Green	4.0	400	19.2	4.88	81.3	26	31				
	4.5	450	19.5	5.18	86.3	27	31				
	5.0	500	19.8	5.47	91.1	28	32				
	5.5	550	20.1	5.78	96.3	29	33				
	6.0	600	20.1	6.04	100.6	30	34				
	6.5	650	20.4	6.29	104.8	30	35				
<b>27</b> Dk. Blue	4.0	400	19.8	5.23	87.1	27	31				
	4.5	450	20.1	5.58	93.1	28	32				
	5.0	500	20.4	5.29	98.7	28	33				
	5.5	550	21.0	6.29	104.9	28	33				
	6.0	600	21.0	6.60	110.0	30	34				
	6.5	650	21.3	6.90	115.1	30	35				
<b>30</b> Black	4.5	450	20.1	5.93	98.8	29	34				
	5.0	500	20.7	6.21	103.5	29	33				
	5.5	550	21.3	6.52	108.6	29	33				
	6.0	600	21.3	6.77	112.8	30	34				
	6.5	650	21.6	7.01	116.9	30	35				
	7.0	700	21.6	7.24	120.7	31	36				

I-35 High-Speed Nozzle Performance Data – Metric								
Nozzle	Pressure Bars	kPa	Radius m	Flow m <sup>3</sup> /hr	l/min	Precip  mm/hr	 mm/hr	
<b>9</b> Lt. Brown	2.5	250	12.5	1.65	27.5	17	24	
	3.0	300	12.8	1.81	30.1	18	25	
	3.5	350	13.1	1.94	32.3	17	26	
	4.0	400	13.4	2.05	34.2	18	26	
	4.5	450	13.4	2.16	36.0	19	28	
	5.0	500	13.7	2.27	37.8	19	28	
<b>12</b> Lt. Blue	3.0	300	14.3	2.38	39.6	23	27	
	3.5	350	14.6	2.57	42.8	24	28	
	4.0	400	14.9	2.75	45.7	25	28	
	4.5	450	15.2	2.91	48.5	25	29	
	5.0	500	15.5	3.07	51.2	25	29	
	5.5	550	15.5	3.24	54.0	27	31	
<b>15</b> Gray	3.0	300	14.6	2.86	47.7	27	31	
	3.5	350	14.9	3.05	50.8	27	32	
	4.0	400	15.2	3.22	53.7	28	32	
	4.5	450	15.5	3.38	56.3	28	32	
	5.0	500	16.2	3.53	58.8	27	31	
	5.5	550	16.5	3.69	61.5	27	31	
<b>18</b> Red	3.5	300	14.9	3.08	51.4	28	32	
	4.0	350	15.2	3.31	55.2	29	33	
	4.5	400	15.5	3.52	58.7	29	34	
	4.5	450	16.2	3.72	62.0	29	33	
	5.0	500	16.8	3.91	65.2	28	32	
	5.5	550	17.4	4.11	68.5	27	31	
<b>21</b> Brown	4.0	400	16.2	3.97	66.2	30	35	
	4.5	450	16.5	4.20	70.1	31	36	
	5.0	500	17.1	4.42	73.7	30	35	
	5.5	550	17.7	4.66	77.7	30	34	
	6.0	600	17.7	4.86	81.1	31	36	
	6.5	650	18.0	5.05	84.2	31	36	
<b>24</b> Dk. Green	4.0	400	17.1	4.88	81.3	33	39	
	4.5	450	17.4	5.18	86.3	34	40	
	5.0	500	17.7	5.47	91.1	35	40	
	5.5	550	18.3	5.78	96.3	35	40	
	6.0	600	18.3	6.04	100.6	36	42	
	6.5	650	18.6	6.29	104.8	36	42	
<b>27</b> Dk. Blue	4.0	400	17.7	5.23	87.1	33	39	
	4.5	450	18.3	5.58	93.1	33	39	
	5.0	500	18.9	5.29	98.7	33	38	
	5.5	550	19.5	6.29	104.9	33	38	
	6.0	600	19.8	6.60	110.0	34	39	
	6.5	650	20.1	6.90	115.1	34	39	
<b>30</b> Black	4.5	450	18.0	5.93	98.8	37	42	
	5.0	500	18.3	6.21	103.5	37	43	
	5.5	550	18.9	6.52	108.6	36	42	
	6.0	600	19.5	6.77	112.8	36	41	
	6.5	650	19.8	7.01	116.9	36	41	
	7.0	700	20.4	7.24	120.7	35	40	



# I-25 Ultra

## A SMART CHOICE.

DISCOVER A ROTOR AS COST-EFFECTIVE AS IT IS EFFICIENT. A TIME-TESTED PROVEN PERFORMER.

### FEATURES & BENEFITS

## Takes care of business

and puts money back in your budget. This 1" (2.5 cm) rotor hits a radius of 30' to 67' (9 m - 20.5 m). For medium areas that require good coverage, the I-25 Ultra delivers. Its compact, built-to-last construction comes with an optional stainless steel riser for super-tough strength.

- **Full and Part-Circle Operation in a Single Rotor:** Helps reduce stock.
- **ProTech™ Safety System:** Small heavy-duty rubber cover and boot protect playing areas.
- **12 Color-Coded Nozzles:** Easy to identify, great distribution uniformity.
- **Optional Stainless Steel Riser:** Protects from abrasive soil conditions, ensuring long-term positive retraction.
- **Heavy-Duty Ribbed Cap and Body:** Handles heavy traffic, easy servicing.
- **Automatic Arc Return:** Goes back to original arc wherever turret is turned.
- **Non-Strippable Drive Mechanism:** Can turn turret without causing damage.
- **Drain Check Valve for up to 10' (3 m) of Elevation Change:** Conserves water, reduces liability.

## SPECIFICATION BUILDER

MODEL	FEATURES	OPTIONS
I-25-04 = 4" (10 cm) Pop-up I-25-06 = 6" (15 cm) Pop-up	XX, XX-R, SS, SS-R, SS-HS, SS-HS-R	04 - 28 = Factory-Installed Nozzle Number *
		B = BSP Inlet
		* Nozzle pack is supplied when no pre-installed nozzle has been specified.
I-25-06	SS	25


EXAMPLE

### KEY TO FEATURES:

XX = Adjustable Arc, 50-360 degrees, Plastic Riser with Check Valve  
 XX-R = Adjustable Arc, 50-360 degrees, Plastic Riser with Check Valve and Reclaimed Water ID  
 SS = Stainless Riser with Check Valve  
 SS-R = Stainless Riser with Check Valve  
 SS-HS = Stainless Riser with Check Valve High Speed, ADJ arc, 50-360 degrees  
 SS-HS-R = Stainless Riser with Check Valve High Speed, ADJ arc, 50-360 degrees, Stainless  
 SS-HS-R = Riser with Check Valve and Reclaimed Water ID


**I-25-06 - SS - 25**



I-25 Ultra Nozzle Performance Data						I-25 Ultra Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr		Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	
 Yellow	40	40'	3.8	0.46	0.53	15 Grey	50	56'	13.4	0.82	0.95
	50	41'	4.3	0.49	0.57		60	57'	14.3	0.85	0.98
	60	42'	4.7	0.51	0.59		70	57'	15.2	0.90	1.04
	70	43'	5.1	0.53	0.61		80	58'	16.4	0.94	1.08
5 White	40	43'	4.4	0.46	0.53	18 Red	50	58'	14.5	0.83	0.96
	50	44'	4.8	0.48	0.55		60	59'	15.7	0.87	1.00
	60	45'	5.3	0.50	0.58		70	62'	16.9	0.85	0.98
	70	46'	5.6	0.51	0.59		80	63'	18.2	0.88	1.02
7* Orange	40	45'	6.6	0.63	0.72	20* Lt. Brown	60	62'	17.8	0.89	1.03
	50	47'	7.0	0.61	0.70		70	63'	19.2	0.93	1.08
	60	48'	7.5	0.63	0.72		80	64'	20.5	0.96	1.11
	70	49'	7.9	0.63	0.73		90	65'	21.8	0.99	1.15
8 Lt. Brown	40	47'	7.7	0.67	0.77	23 Dk. Green	60	64'	21.9	1.03	1.19
	50	49'	8.3	0.67	0.77		70	65'	23.6	1.08	1.24
	60	50'	9.2	0.71	0.82		80	66'	25.6	1.13	1.31
	70	51'	9.9	0.73	0.85		90	67'	27.0	1.16	1.34
10* Lt. Green	50	51'	10.1	0.75	0.86	25* Dk. Blue	60	66'	23.5	1.04	1.20
	60	52'	11.1	0.79	0.91		70	68'	25.5	1.06	1.23
	70	53'	12.1	0.83	0.96		80	69'	28.0	1.13	1.31
	80	54'	12.9	0.85	0.98		90	70'	29.5	1.16	1.34
13 Lt. Blue	50	53'	11.2	0.77	0.89	28 Black	70	68'	26.9	1.12	1.29
	60	54'	12.3	0.81	0.94		80	70'	28.7	1.13	1.30
	70	55'	13.3	0.85	0.98		90	71'	30.6	1.17	1.35
	80	55'	14.3	0.91	1.05		100	71'	31.5	1.20	1.39













\* 5 standard nozzles included with each sprinkler.

**Note:** All precipitation rates calculated for 180 degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-25 Ultra High-Speed Nozzle Performance Data						I-25 Ultra Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr		Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	
 Yellow	40	37'	3.8	0.53	0.62	15 Grey	50	49'	13.4	1.07	1.24
	50	38'	4.3	0.57	0.66		60	51'	14.3	1.06	1.22
	60	38'	4.7	0.63	0.72		70	53'	15.2	1.04	1.20
	70	39'	5.2	0.66	0.76		80	54'	16.4	1.08	1.25
5 White	40	38'	4.4	0.59	0.68	18 Red	50	50'	14.5	1.12	1.29
	50	39'	4.8	0.61	0.70		60	53'	15.7	1.08	1.24
	60	40'	5.5	0.66	0.76		70	55'	16.9	1.08	1.24
	70	41'	6.0	0.69	0.79		80	57'	18.2	1.08	1.25
7* Orange	40	40'	6.1	0.73	0.85	20* Lt. Brown	60	53'	17.8	1.22	1.41
	50	41'	6.9	0.79	0.91		70	56'	19.2	1.18	1.36
	60	42'	7.5	0.82	0.95		80	58'	20.5	1.17	1.35
	70	44'	8.1	0.81	0.93		90	59'	21.8	1.21	1.39
8 Lt. Brown	40	42'	7.2	0.79	0.91	23 Dk. Green	60	56'	21.9	1.34	1.55
	50	43'	8.1	0.84	0.97		70	58'	23.6	1.35	1.56
	60	44'	8.9	0.88	1.02		80	60'	25.6	1.37	1.58
	70	45'	9.8	0.93	1.08		90	61'	27.0	1.40	1.61
10* Lt. Green	50	46'	10.1	0.92	1.06	25* Dk. Blue	60	58'	23.5	1.34	1.55
	60	48'	11.1	0.93	1.07		70	62'	25.5	1.28	1.47
	70	49'	12.1	0.97	1.12		80	64'	28.0	1.32	1.52
	80	50'	12.9	0.99	1.15		90	66'	29.5	1.30	1.51
13 Lt. Blue	50	48'	11.2	0.94	1.08	28 Black	70	60'	26.9	1.44	1.66
	60	49'	12.3	0.99	1.14		80	62'	28.7	1.44	1.66
	70	51'	13.3	0.98	1.14		90	65'	30.6	1.39	1.61
	80	51'	14.3	1.03	1.22		100	67'	31.5	1.35	1.56

\* 5 standard nozzles included with each sprinkler.

**Note:** All precipitation rates calculated for 180 degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-25 Ultra Nozzle Performance Data – Metric							I-25 Ultra Nozzle Performance Data – Metric								
Nozzle	Pressure kPa	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr	▲	Nozzle	Pressure kPa	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr	▲		
 Yellow	2.5	250	11.9	0.82	13.6	12	13	 15 Grey	3.0	300	16.8	2.86	47.7	20	24
	3.0	300	12.2	0.91	15.2	12	14		3.5	350	17.1	3.05	50.8	21	24
	3.5	350	12.5	0.98	16.4	13	15		4.0	400	17.4	3.22	53.7	21	25
	4.0	400	12.5	1.05	17.5	13	16		4.5	450	17.4	3.38	56.3	22	26
	4.5	450	12.8	1.11	18.6	14	16		5.0	500	17.4	3.53	58.8	23	27
	5.0	500	13.1	1.18	19.6	14	16		5.5	550	17.7	3.69	61.5	24	27
 5 White	2.5	250	12.8	0.95	15.9	12	13	 18 Red	3.0	300	17.4	3.08	51.4	20	24
	3.0	300	13.1	1.04	17.3	12	14		3.5	350	17.7	3.31	55.2	21	24
	3.5	350	13.4	1.11	18.5	12	14		4.0	400	18.0	3.52	58.7	22	25
	4.0	400	13.4	1.17	19.6	13	15		4.5	450	18.3	3.72	62.0	22	26
	4.5	450	13.7	1.24	20.6	13	15		5.0	500	18.9	3.91	65.2	22	25
	5.0	500	14.0	1.29	21.5	13	15		5.5	550	19.2	4.11	68.5	22	26
 7* Orange	2.5	250	13.4	1.44	24.0	16	19	 20* Lt. Brown	4.0	400	18.6	3.97	66.2	23	27
	3.0	300	14.0	1.54	25.6	16	18		4.5	450	18.9	4.20	70.1	24	27
	3.5	350	14.3	1.61	26.9	16	18		5.0	500	19.2	4.42	73.7	24	28
	4.0	400	14.3	1.68	28.0	16	19		5.5	550	19.5	4.66	77.7	25	28
	4.5	450	14.6	1.75	29.1	16	19		6.0	600	19.8	4.86	81.0	25	29
	5.0	500	14.9	1.81	30.1	16	19		6.5	650	20.1	5.05	84.2	25	29
 8 Lt. Brown	2.5	250	14.0	1.65	27.5	17	19	 23 Dk. Green	4.0	400	19.2	4.88	81.3	26	31
	3.0	300	14.3	1.81	30.1	18	20		4.5	450	19.5	5.18	86.3	27	31
	3.5	350	14.9	1.94	32.3	17	20		5.0	500	19.8	5.47	91.1	28	32
	4.0	400	15.2	2.05	34.2	18	20		5.5	550	20.1	5.78	96.3	29	33
	4.5	450	15.2	2.16	36.0	19	22		6.0	600	20.1	6.04	100.6	30	34
	5.0	500	15.5	2.27	37.8	19	22		6.5	650	20.4	6.29	104.8	30	35
 10* Lt. Green	3.0	300	15.2	2.15	35.8	18	21	 25* Dk. Blue	4.0	400	19.8	5.23	87.1	27	31
	3.5	350	15.5	2.32	38.6	19	22		4.5	450	20.1	5.58	93.1	28	32
	4.0	400	15.8	2.48	41.3	20	23		5.0	500	20.4	5.92	98.7	28	33
	4.5	450	16.2	2.63	43.9	20	23		5.5	550	21.0	6.29	104.9	28	33
	5.0	500	16.2	2.78	46.3	21	25		6.0	600	21.0	6.60	110.0	30	34
	5.5	550	16.5	2.94	48.9	22	25		6.5	650	21.3	6.90	115.1	30	35
 13 Lt. Blue	3.0	300	15.8	2.38	39.6	19	22	 28 Black	4.5	450	20.1	5.93	98.8	29	34
	3.5	350	16.2	2.57	42.8	20	23		5.0	500	20.7	6.21	103.5	29	33
	4.0	400	16.5	2.75	45.7	20	23		5.5	550	21.3	6.52	108.6	29	33
	4.5	450	16.5	2.91	48.5	21	25		6.0	600	21.3	6.77	112.8	30	34
	5.0	500	16.8	3.07	51.2	22	25		6.5	650	21.6	7.01	116.9	30	35
	5.5	550	16.8	3.24	54.0	23	27		7.0	700	21.6	7.24	120.7	31	36

## MODELS

- I-10** – Shrub
- I-20** – 4" (10 cm) Pop-up
- I-20-6P** – 6" (15 cm) Pop-up
- I-20-HP** – 12" (30 cm) Pop-up

## DIMENSIONS

- Overall height:
  - I-10** – 7-3/4" (20 cm)
  - I-20** – 7-3/8" (19 cm)
  - I-20-6P** – 9-7/8" (25 cm)
  - I-20-HP** – 17" (43 cm)
- 3/4" female inlet NPT
- Exposed diameter: 1-3/4" (4 cm)

## OPERATING SPECIFICATIONS

- Discharge rate: .9 to 14.8 GPM (0.20 to 3.36 m³/hr; 3.4 to 56.0 l/min)
- Radius: 17' to 47' (5.2 - 14.3 m)
- Recommended pressure range: 30 to 70 PSI (2.1 to 4.8 bars; 206 to 482 kPa)
- Operating pressure range: 20 to 100 PSI (1.4 to 6.9 bars; 137 to 689 kPa)
- Precipitation rates: approximately .4" (10 mm) per hour at 50 PSI (3.4 bars; 344 kPa) for spacing from 18' to 45' (5.5 - 13.7 m)
- Nozzle trajectory: standard – 25°; low angle – 13°
- Drain check valve for up to 10' (3.0 m) of elevation change

## OPTIONS AVAILABLE

- Reclaimed water cover
- Stainless steel riser - 4" & 6" (10 & 15 cm)
- Factory-installed nozzles (Standard and LA only)

## SPECIFICATION BUILDER

MODEL	FEATURES	OPTIONS
<b>I-10</b> = Shrub	ADV, 36V, ARV, 3RV	<b>1.0 – 8.0</b> = Factory-Installed Standard Nozzles *  <b>2.0 LA – 4.5 LA</b> = Factory-Installed Low Angle Nozzles *  * Nozzle pack is supplied when no pre-installed nozzle has been specified.
<b>I-20</b> = 4" (10 cm) Pop-up	ADV, 36V, ADS, 36S, ARV, 3RV, ARS, 3RS, ADJ, 360	
<b>I-20-6P</b> = 6" (15 cm) Pop-up	ADV, 36V, ADS, 36S, ARV, 3RV, ARS, 3RS	
<b>I-20-6P</b> = 12" (30.5 cm) Pop-up	ADV, 36V, ARV, 3RV	
<b>I-20</b>	<b>ADS</b>	<b>3.0</b>

### KEY TO FEATURES:

- ADV** = Adjustable Arc with Check Valve
- 36V** = Full-Circle with Check Valve
- ADS** = Adjustable Arc, Stainless Steel Riser, with Check Valve
- 36S** = Full-Circle, Stainless Steel Riser, with Check Valve
- ARV** = Adjustable Arc, Reclaimed Water, with Check Valve
- 3RV** = Full-Circle, Reclaimed Water, with Check Valve
- ARS** = Adjustable Arc, Reclaimed Water, Stainless Steel Riser, with Check Valve
- 3RS** = Full-Circle, Reclaimed Water, Stainless Steel Riser, with Check Valve
- ADJ** = Adjustable Arc without Check Valve
- 360** = Full-Circle without Check Valve

**I-20 - ADS - 3.0**

**I-20**  
Ultra

HEAVY-DUTY COMMERCIAL GRADE FEATURES GIVE YOU  
**ONE TOUGH ROTOR.**



## FEATURES & BENEFITS

- Integral Rubber Cover:** Stays in place, keeps play areas safe.
- 30 Nozzles and Counting:** You can custom fit sprinkler to all spacings from 17' to 47' (5 m - 14 m).
- FloStop® Control:** Lets you stop flow through a single head while the rest of the system runs. Perfect for changing nozzles.
- Easy Arc Adjustment (40° - 360°):** Right at the top of the sprinkler.
- Consistently Improved, Water-Lubricated Gear Drive:** 20 years of field-proven performance.
- Extra Strong Spring:** Ensures long-term positive retraction.
- Drain Check Valve for up to 10' (3 m) of Elevation Change:** Saves water, reduces liability.



I-20 Ultra Standard Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr ■ ▲	
<b>1.0</b>	30	30"	0.9	0.19	0.22
	40	31"	1.0	0.20	0.23
	50	31"	1.2	0.24	0.28
	60	32"	1.3	0.24	0.28
<b>1.5</b>	30	32"	1.2	0.23	0.26
	40	33"	1.4	0.25	0.29
	50	34"	1.6	0.27	0.31
	60	34"	1.8	0.30	0.35
<b>2.0</b>	30	32"	1.6	0.30	0.35
	40	34"	1.8	0.30	0.35
	50	36"	2.0	0.30	0.34
	60	36"	2.2	0.33	0.38
<b>3.0</b>	30	34"	2.0	0.33	0.38
	40	36"	2.4	0.36	0.41
	50	38"	2.7	0.36	0.42
	60	38"	2.9	0.39	0.45
<b>3.5</b>	30	34"	2.6	0.43	0.52
	40	38"	3.0	0.40	0.46
	50	40"	3.4	0.41	0.47
	60	40"	3.7	0.45	0.51
<b>4.0</b>	30	37"	3.2	0.45	0.52
	40	39"	3.7	0.47	0.54
	50	41"	4.2	0.48	0.56
	60	42"	4.6	0.50	0.58
<b>6.0</b>	30	35"	4.2	0.66	0.76
	40	40"	4.9	0.59	0.68
	50	43"	5.5	0.57	0.66
	60	44"	6.0	0.60	0.69
<b>8.0</b>	40	41"	6.0	0.69	0.79
	50	44"	6.8	0.68	0.78
	60	45"	7.6	0.72	0.83
	70	47"	8.2	0.71	0.83

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-20 Ultra Standard Nozzle Performance Data – Metric					
Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr ■ ▲
<b>1.0</b>	2.0	200	9.1	0.20	3.3
	2.5	250	9.4	0.22	3.7
	3.0	300	9.4	0.25	4.1
	3.5	350	9.4	0.27	4.5
	4.0	400	9.8	0.29	4.8
<b>1.5</b>	2.0	200	9.8	0.27	4.4
	2.5	250	9.8	0.30	5.0
	3.0	300	10.1	0.34	5.6
	3.5	350	10.4	0.37	6.2
	4.0	400	10.4	0.40	6.6
<b>2.0</b>	2.0	200	10.4	0.43	7.1
	2.5	250	9.8	0.36	5.9
	3.0	300	10.4	0.39	6.5
	3.5	350	11.0	0.46	7.7
	4.0	400	11.0	0.49	8.1
<b>3.0</b>	2.0	200	10.4	0.51	8.6
	2.5	250	10.4	0.51	8.5
	3.0	300	11.0	0.57	9.4
	3.5	350	11.6	0.61	10.2
	4.0	400	11.6	0.66	10.9
<b>3.5</b>	2.0	200	10.4	0.58	9.7
	2.5	250	11.0	0.65	10.8
	3.0	300	11.3	0.72	12.0
	3.5	350	11.6	0.78	12.9
	4.0	400	11.6	0.83	13.8
<b>4.0</b>	2.0	200	11.3	0.71	11.9
	2.5	250	11.6	0.80	13.3
	3.0	300	11.9	0.89	14.8
	3.5	350	12.5	0.96	16.0
	4.0	400	12.5	1.03	17.1
<b>6.0</b>	2.0	200	12.8	1.09	18.2
	2.5	250	11.3	0.94	15.7
	3.0	300	11.9	1.17	19.4
	3.5	350	13.1	1.26	21.0
	4.0	400	13.1	1.34	22.4
<b>8.0</b>	2.0	200	13.4	1.43	23.8
	2.5	250	12.5	1.29	21.4
	3.0	300	13.1	1.44	24.0
	3.5	350	13.4	1.56	26.1
	4.0	400	13.7	1.68	28.0

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-20 Ultra 18' Short Radius Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr ■ ▲	
<b>.50 SR</b>	30	17'	0.36	0.24	0.28
	40	17'	0.43	0.29	0.33
	50	18'	0.50	0.30	0.34
	60	19'	0.57	0.30	0.35
<b>1.0 SR</b>	30	17'	0.78	0.52	0.60
	40	17'	0.90	0.60	0.69
	50	18'	1.0	0.59	0.69
	60	19'	1.1	0.59	0.68
<b>2.0 SR</b>	30	17'	1.4	0.93	1.08
	40	17'	1.7	1.13	1.31
	50	18'	2.0	1.19	1.37
	60	19'	2.2	1.17	1.35

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-20 Ultra 25' Short Radius Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr ■ ▲	
<b>.75 SR</b>	30	23'	0.58	0.21	0.24
	40	24'	0.68	0.23	0.26
	50	25'	0.75	0.23	0.27
	60	26'	0.83	0.24	0.27
<b>1.5 SR</b>	30	23'	1.1	0.40	0.46
	40	24'	1.3	0.43	0.50
	50	25'	1.5	0.46	0.53
	60	26'	1.6	0.46	0.53
<b>3.0 SR</b>	30	23'	2.5	0.91	1.05
	40	24'	2.7	0.90	1.04
	50	25'	3.0	0.92	1.07
	60	26'	3.1	0.88	1.02

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-20 Ultra 5.5 m Short Radius Nozzle Performance Data – Metric					
Nozzle	Pressure kPa	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr ■ ▲
<b>.50 SR</b>	2.0	200	5.2	0.08	1.3
	2.5	250	5.2	0.09	1.5
	3.0	300	5.2	0.10	1.7
	3.5	350	5.5	0.12	1.9
	4.0	400	5.5	0.13	2.1
<b>1.0 SR</b>	2.0	200	5.2	0.17	2.9
	2.5	250	5.2	0.19	3.2
	3.0	300	5.2	0.21	3.6
	3.5	350	5.5	0.23	3.8
	4.0	400	5.5	0.25	4.1
<b>2.0 SR</b>	2.0	200	5.2	0.26	4.3
	2.5	250	5.2	0.36	6.0
	3.0	300	5.2	0.41	6.9
	3.5	350	5.5	0.45	7.6
	4.0	400	5.5	0.49	8.2

I-20 Ultra 7.6 m Short Radius Nozzle Performance Data – Metric					
Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr ■ ▲
<b>.75 SR</b>	2.0	200	7.0	0.13	2.2
	2.5	250	7.0	0.15	2.4
	3.0	300	7.3	0.16	2.7
	3.5	350	7.6	0.17	2.9
	4.0	400	7.6	0.19	3.1
<b>1.5 SR</b>	2.0	200	7.0	0.25	4.1
	2.5	250	7.0	0.28	4.6
	3.0	300	7.3	0.31	5.2
	3.5	350	7.6	0.34	5.6
	4.0	400	7.6	0.36	6.0
<b>3.0 SR</b>	2.0	200	7.0	0.56	9.3
	2.5	250	7.0	0.60	10.0
	3.0	300	7.3	0.64	10.7
	3.5	350	7.6	0.67	11.2
	4.0	400	7.6	0.70	11.7

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-20 Ultra Low Angle Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr ■ ▲	
<b>2.0 LA</b>	30	25'	1.6	0.49	0.57
	40	27'	1.9	0.50	0.58
	50	28'	2.1	0.52	0.60
	60	30'	2.3	0.49	0.57
<b>2.5 LA</b>	30	27'	2.1	0.55	0.64
	40	30'	2.5	0.53	0.62
	50	33'	2.8	0.49	0.57
	60	35'	3.0	0.47	0.54
<b>3.5 LA</b>	30	29'	2.8	0.64	0.74
	40	32'	3.1	0.58	0.67
	50	35'	3.5	0.55	0.64
	60	37'	3.8	0.53	0.62
<b>4.5 LA</b>	30	29'	3.4	0.78	0.90
	40	32'	3.9	0.73	0.85
	50	35'	4.4	0.69	0.80
	60	37'	4.7	0.66	0.76

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

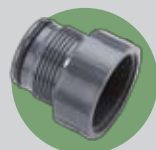
I-20 Ultra Low Angle Nozzle Performance Data – Metric					
Nozzle	Pressure Bars	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr ■ ▲
<b>2.0 LA</b>	2.0	200	7.6	0.36	6.0
	2.5	250	7.9	0.40	6.7
	3.0	300	8.2	0.45	7.4
	3.5	350	8.5	0.48	8.0
	4.0	400	8.8	0.52	8.6
<b>2.5 LA</b>	2.0	200	8.2	0.47	7.9
	2.5	250	8.8	0.53	8.8
	3.0	300	9.4	0.59	9.8
	3.5	350	10.1	0.64	10.6
	4.0	400	10.4	0.68	11.3
<b>3.5 LA</b>	2.0	200	8.8	0.62	10.3
	2.5	250	9.1	0.68	11.4
	3.0	300	10.1	0.75	12.5
	3.5	350	10.7	0.80	13.3
	4.0	400	11.0	0.85	14.1
<b>4.5 LA</b>	2.0	200	8.8	0.87	14.8
	2.5	250	9.1	0.84	14.1
	3.0	300	10.1	0.93	15.5
	3.5	350	10.7	1.00	16.6
	4.0	400	11.0	1.06	17.6

I-20 Ultra High Flow Standard Nozzle Performance Data					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr ■ ▲	
<b>10</b>	40	42"	8.4	0.92	1.06
	50	43"	9.5	0.99	1.14
	60	45"	10.5	1.00	1.15
	70	47"	11.4	0.99	1.15
<b>13</b>	40	43"	10.9	1.13	1.31
	50	44"	12.3	1.22	1.41
	60	45"	13.6	1.29	1.49
	70	47"	14.8	1.29	1.49

**Note:** All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

I-20 Ultra High Flow Standard Nozzle						
Performance Data – Metric						
Nozzle	Pressure Bars	Pressure kPa	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr ■ ▲
10	2.0	200	11.9	1.60	26.7	23 26
	2.5	250	12.5	1.80	30.0	23 27
	3.0	300	12.8	2.01	33.5	25 28
	3.5	350	13.1	2.18	36.3	25 29
	4.0	400	13.7	2.34	39.0	25 29
	4.5	450	14.0	2.49	41.5	25 29
13	2.0	200	12.2	2.08	34.6	28 32
	2.5	250	12.8	2.34	38.9	29 33
	3.0	300	13.1	2.61	43.4	30 35
	3.5	350	13.4	2.83	47.1	31 36
	4.0	400	13.7	3.03	50.5	32 37
	4.5	450	14.0	3.23	53.8	32 38

## ADAPTERS



Bushing, Adapter, 1" male ACME x 1" female NPT	Model # 106831
Bushing, Adapter, 1" male ACME x 1" female BSP	Model # 108376
Bushing, Adapter, 1-1/4" male ACME x 1" female NPT	Model # 109325
Bushing, Adapter, 1-1/4" male ACME x 1" female BSP	Model # 105329
Bushing, Adapter, 1-1/4" male ACME x 1-1/4" female NPT	Model # 474800
Bushing, Adapter, 1-1/4" male ACME x 1-1/4" female BSP	Model # 474900
Bushing, Adapter, 1-1/4" male ACME x 1-1/2" female NPT	Model # 104153
Bushing, Adapter, 1-1/4" male ACME x 1-1/2" female BSP	Model # 107262
Bushing, Adapter, 1-1/2" male ACME x 1" female NPT	Model # 475400
Bushing, Adapter, 1-1/2" male ACME x 1" female BSP	Model # 475500
Bushing, Adapter, 1-1/2" male ACME x 1-1/4" female NPT	Model # 475200
Bushing, Adapter, 1-1/2" male ACME x 1-1/4" female BSP	Model # 475300
Bushing, Adapter, 1-1/2" male ACME x 1-1/2" female NPT	Model # 475000
Bushing, Adapter, 1-1/2" male ACME x 1-1/2" female BSP	Model # 475100

## Tools & Accessories

### AT YOUR SERVICE.

KEEP ALL THE ROTOR TOOLS AND ACCESSORIES YOU'RE LIKELY TO NEED CLOSE AT HAND.



Hose swivel adapter for G90 and G900 Series (fits 3/4" and 1" hose)	Model # G90HS100
Hose swivel adapter for G800 Series (fits 3/4" and 1" hose)	Model # G800HS100



SpotShot adjustable hose-end nozzle, 3/4" hose threads	Model # 160700
SpotShot adjustable hose-end nozzle, 1" hose threads	Model # 160705



G90 rubber cover kit	Model # 463672
G95 rubber cover kit	Model # 463679
G990 rubber cover kit	Model # 473800
G995 rubber cover kit	Model # 473900



Valve insertion/removal tool - G60/G70 Series (excluding B Series)	Model # 470500	
<i>For easy servicing of inlet valve assembly.</i>		
Valve insertion/removal tool - G800 Series (new)	Model # 604000	
<i>For easy servicing of inlet valve assembly.</i>		
Valve insertion/removal tool - G900/G90 Series	Model # 280500	
<i>For easy servicing of inlet valve assembly.</i>		
Valve & snap ring insertion/removal pliers - G800 Series (original)	Model # 475600	
<i>For easy servicing of inlet valve assembly.</i>		
Valve flushing tool - G800/G900 Series	Model # 609400	
<i>For cleaning debris from inlet valve assembly.</i>		
Snap ring removal tool (all models)	Model # 251000	
<i>For access to internal riser and valve assemblies.</i>		
"T" handle tool	Model # 319100	
<i>On-Off auto selector, lift-up &amp; arc adjustment tool for most rotors.</i>		
Hand pump	Model # 319100	
<i>For extracting water from rotor body.</i>		
Pitot gauge	Model # 280100	
<i>For testing dynamic water pressure at the nozzle.</i>		

# MP ROTATOR





## SPECIFICATION **BUILDER**

MODEL	POP-UP HEIGHT	OPTIONS
<b>MPR40</b> = MPR40 (Includes factory-installed 40 PSI pressure regulator)  <b>MPR40</b>	<b>00</b> = Shrub <b>04</b> = 4" (10 cm) Pop-up <b>06</b> = 6" (15 cm) Pop-up <b>12</b> = 12" (30 cm) Pop-up  <b>CV</b> = Factory-installed check valve (Pop-up models only)  <b>04-CV</b>	<b>MP ROTATORS</b> See MP Rotator Specification Builder for details  <b>MP200090</b>

**Note:** MPR40 and MP Rotators are sold separately.

**MPR40 - 04-CV - MP200090**

Everyone's talking about the MP Rotator. It's a powerful sprinkler, water conservation device and valuable design tool. A multi-stream rotor that fits any conventional spray head body or shrub adapter, it converts each one into a high uniformity, low precipitation rate sprinkler. The MP Rotator supplies matched precipitation with any arc, any radius. Water applies slowly and evenly to dramatically reduce runoff and waste, using up to 30 percent less water. Here's the truly amazing news for golf courses: The MP Rotator is specifically tailored to be used in bunkers, bunker faces and bunker surrounds.

Nobody wants excess water there, and with the low precipitation rate, especially on slopes, the slower application prevents runoff. Install it on tee boxes as well as any slope within rough areas. Even more, its strength gives you superior wind resistance with tight, high-energy streams that stay the course in all weather. Further, you'll triple the area covered per zone: the system uses fewer valves and control stations, and less pipe, wire and labor. After two decades of tested use in harsh agricultural environments, this solution is a ground-breaking newcomer to the golf irrigation industry. The proof is in the bunker, and everywhere else.

**MP**  
Rotator

**YOU SAY  
YOU WANT A  
REVOLUTION.**

THE MP ROTATOR WILL  
ENHANCE YOUR IRRIGATION  
PROGRAM IN WAYS YOU  
CAN'T IMAGINE.



**MP ROTATOR®**



## MODELS

MPR40-00 – Shrub  
MPR40-04-CV – 4" (10 cm) Pop-up  
MPR40-06-CV – 6" (15 cm) Pop-up  
MPR40-12-CV – 12" (30 cm) Pop-up

## DIMENSIONS




- Overall height:  
MPR40-04-CV – 5-7/8" (15.5 cm)  
MPR40-06-CV – 8-3/4" (22.5 cm)  
MPR40-12-CV – 16-1/8" (41 cm)
- 1/2" female inlet NPT
- Exposed diameter: 2-1/4" (5.7 cm)




## OPERATING SPECIFICATIONS

- Recommended pressure range:  
15 to 100 PSI  
(1.0 to 6.9 bars; 103 to 689 kPa)
- Flow-by: 0 at 10 PSI  
(.7 bars; 68 kPa) or greater; .1 GPM (0.02 m³/hr; 0.4 l/min) otherwise
- Precipitation rates: approximately 0.4" (10 mm) per hour with MP Rotators
- Factory-installed drain check valve for up to 14' (4.3 m) of elevation change; "Check Valve" stamped on cap for easy identification




## OPTIONS AVAILABLE




- Field-installed drain check valve (part # 437400)
- Field-installed black rubber cover (part # 469805)
- Field-installed reclaimed water identification snap-on cover (part # PROSRCCAP)
- Replacement check valve (part # 437400)

MP Rotator Performance Data – Metric						
				MP Corner		
				Radius: 2.4 to 4.6 m		
				Adjustable Arc		
				Color Code: Turquoise		
Arc	Pressure Bars	kPa	Color	Radius m	Flow LPH	LPM
 45°	1.75	175	Turquoise = 45° to 105°	---	---	---
	2.00	200		3.5	36	0.61
	2.25	225		3.8	38	0.63
	2.50	250		4.0	41	0.68
	2.75	275		4.1	42	0.70
	3.00	300		4.3	44	0.73
	3.25	325		4.3	45	0.75
	3.50	350		4.4	47	0.78
3.75	375	4.5		49	0.81	
 90°	1.75	175		3.2	69	1.15
	2.00	200		3.5	76	1.27
	2.25	225		3.8	79	1.31
	2.50	250		4.0	84	1.40
	2.75	275		4.1	86	1.44
	3.00	300		4.3	94	1.57
	3.25	325		4.3	98	1.63
	3.50	350		4.4	100	1.67
3.75	375	4.5		104	1.73	
 105°	1.75	175		3.2	80	1.34
	2.00	200		3.5	89	1.48
	2.25	225		3.8	92	1.53
	2.50	250		4.0	98	1.63
	2.75	275		4.1	102	1.70
	3.00	300		4.3	110	1.83
	3.25	325		4.3	113	1.88
	3.50	350		4.4	117	1.94
3.75	375	4.5		120	2.00	

MP Rotator Performance Data – Metric						
MPLCS515 MPRCS515 MPSS530						
Nozzle Model	Pressure Bars	kPa	Color	Unadjusted Radius LPH	Reduced Radius LPH	Precip Rate mm/hr
 MP Left Strip	2.00	200	Ivory	43	30	12
	2.25	225		45	33	12
	2.50	250		48	35	12
	2.75	275		50	36	12
	3.00	300		52	38	12
	3.25	325		54	40	12
	3.50	350		56	41	12
	3.75	375		58	43	12
 MP Right Strip	2.00	200	Copper	43	60	12
	2.25	225		45	66	12
	2.50	250		48	69	12
	2.75	275		50	73	12
	3.00	300		52	76	12
	3.25	325		54	79	12
	3.50	350		56	83	12
	3.75	375		58	86	12
 MP Side Strip	2.00	200	Brown	85	30	12
	2.25	225		90	33	12
	2.50	250		95	35	12
	2.75	275		100	36	12
	3.00	300		104	38	12
	3.25	325		108	40	12
	3.50	350		113	41	12
	3.75	375		117	43	12

**Note:** Strip pattern radius can be adjusted by 25%. MP Rotator is designed to maintain matched precipitation after radius adjustment.

MP Rotator Performance Data					
<b>MP Corner</b> Radius: 8' to 15' Adjustable Arc Color Code: Turquoise					
Arc	Pressure PSI	Color	Radius ft.	Flow GPM	Flow GPH
 45°	25	Turquoise = 45° to 105°	—	—	—
	30		12'	0.17	10.2
	35		13'	0.18	10.8
	40		14'	0.19	11.4
	45		14'	0.21	12.6
	50		14'	0.22	13.2
 90°	55		15'	0.23	13.8
	25		11'	0.31	18.6
	30		12'	0.34	20.4
	35		13'	0.36	21.6
	40		14'	0.39	23.4
	45		14'	0.41	24.6
 105°	50		15'	0.43	25.8
	55		15'	0.46	27.6
	25		11'	0.36	21.6
	30		12'	0.39	23.4
	35		13'	0.42	25.2
	40		14'	0.45	27
	45		14'	0.48	28.8
	50		15'	0.51	30.6
	55		15'	0.53	31.8

MP Rotator Performance Data					
<b>MPLCS515</b> <b>MPRCS515</b> <b>MPSS530</b>					
Nozzle Model	Pressure PSI	Color	Width x Length	Flow GPM	Flow GPH
 MP Left Strip	30	Ivory	4' x 14'	0.19	11.4
	35		5' x 15'	0.21	12.6
	40		5' x 15'	0.22	13.2
	45		5' x 15'	0.23	13.8
	50		6' x 16'	0.25	15
	55		6' x 16'	0.26	15.6
 MP Right Strip	30	Copper	4' x 14'	0.19	11.4
	35		5' x 15'	0.21	12.6
	40		5' x 15'	0.22	13.2
	45		5' x 15'	0.23	13.8
	50		6' x 16'	0.25	15
	55		6' x 16'	0.26	15.6
 MP Side Strip	30	Brown	4' x 28'	0.38	22.8
	35		5' x 30'	0.41	24.6
	40		5' x 30'	0.44	26.4
	45		5' x 30'	0.47	28.2
	50		6' x 32'	0.49	29.4
	55		6' x 32'	0.51	30.6

**Note:** Strip pattern radius can be adjusted by 25%. MP Rotator is designed to maintain matched precipitation after radius adjustment.

- Multiple Streams:** Work together to promote uniformly green turf and healthier plants.
- Matched Application Rates:** Work with any arc, any radius.
- Wind-Resistant, Multi-Trajectory Streams:** Apply water more slowly and uniformly than conventional sprays; use 30 percent less water and greatly reduce runoff.
- Patented "Double-Pop" Design:** Flushes on start-up and shut-down to keep sprinkler free from debris.
- Radius/Arc Adjustment:** Quick, easy arc and radius adjustments. No nozzles to change.
- No Diffuser Screw:** Won't cause stream distortion.
- Color-Coded System:** Easy identification for all models.
- Two Parallel Lines with 12 Models Each:** Female threaded line for conventional male threaded risers. Male threaded line to fit existing female threaded bodies.
- Removable Inlet Filter:** Protects sprinkler from internal debris.
- Options from a 4' Strip to a 30' Radius (1 m - 9 m):** Offer balanced system with utmost design flexibility.





# MPR40

THE PARTNERSHIP THAT PERFORMS

# BUNKERS AND SLOPES? NO PROBLEM.

## THE MP ROTATOR AND THE MPR40: THE PARTNERSHIP THAT PERFORMS

From our work with the revolutionary MP Rotator, evolved the origins of a great idea. To maximize the results of this multi-stream rotor, we pursued the next logical step: the MPR40, a sprinkler body that maintains a constant 40 PSI (2.75 bars). After in-depth research, we confirmed 40 PSI is the pressure that makes the MP Rotator perform most efficiently, so it works optimally when used with the MPR40. Together, the two are a true blend of technology and performance. **Paired with the MP Rotator, it's a partnership that'll improve your irrigation score.**





MODEL	ADJUSTABLE ARC
<b>MP1000</b> <b>MP2000</b> <b>MP3000</b>  <b>MPCORNER</b>  <b>MPLCS515</b> <b>MPRCS515</b> <b>MPSS530</b>	<b>90</b> = 90° to 210° <b>210</b> = 210° to 270° <b>360</b> = 360°

**MP2000\* - 90**  
\* Add "HT" to specify male thread



**MPR40**



**Hunter**<sup>®</sup>  
GOLF

A close-up photograph of green grass with dew drops, serving as the background for the top half of the page. A semi-transparent green band is overlaid across the middle.

# SPRAYS



# G-SPRAY



## FEATURES & BENEFITS

- ▶ **Ultra-Strong Retraction Spring:** For positive pop-down of riser under any conditions, including bunker walls and tees.
- ▶ **In-Stem 40 psi (2.75 bars) Pressure Regulation:** Maximum nozzle efficiency regardless of inlet pressure. Also suitable for use with MP Rotator nozzles.
- ▶ **Factory-Installed Drain Check Valve for up to 25' (8 m) of Elevation Change:** Eliminates landscape damage from flooding and erosion.
- ▶ **Heavy-Duty Body and Cap Construction:** Multi-thread buttress design withstands the harshest environments.
- ▶ **Pressure Activated, Multi-Function, No-Flow-Wiper Seal:** Easy to remove and clean; treated with UV inhibitors to ensure long life.
- ▶ **Compatible with all Female Threaded Nozzles:** Accepts adjustable, fixed, and specialty nozzles from Hunter and all major brands.
- ▶ **Ratcheting Riser for Quick Arc Adjustment:** Adjusts easily while sprinkler is operating.
- ▶ **Innovative "Pull-Ring" Flush Plug Design:** Allows limited flow permitting controlled directional flushing.

## EXCEPTIONAL STRENGTH.

INNOVATIVE FEATURES AND, BETTER STILL, A SUPER-DUTY RETRACTION SPRING THAT ENSURES POSITIVE POP-DOWN EVEN IN 100% SAND CONDITIONS.

## SPECIFICATION BUILDER

MODEL	POP-UP HEIGHT	OPTIONS	NOZZLE SERIES	PATTERN
<b>GINST</b> = Golf Spray Head (includes Factory-Installed Pressure Regulator)	<b>06</b> = 6" (15 cm) Pop-up	<b>CV</b> = Factory-Installed Drain Check Valve Standard	<b>8</b> = 8 Series <b>10</b> = 10 Series <b>12</b> = 12 Series <b>15</b> = 15 Series <b>17</b> = 17 Series  <b>MP Rotator</b>	<b>A</b> = Adjustable <b>T</b> = Third-Circle <b>Q</b> = Quarter-Circle <b>H</b> = Half-Circle <b>TT</b> = Two-Thirds-Circle <b>TQ</b> = Three-Quarter-Circle <b>F</b> = Full-Circle
<b>GINST</b>	<b>06</b>	<b>CV</b>	<b>15</b>	<b>H</b>

**Note:** Bodies and nozzles sold separately. Also compatible with Hunter's MP Rotator, bubbler and specialty nozzles.  
 \*17 Series available in Adjustable, Quarter, and Half-Circle patterns only.

**GINST - 06 - CV - 15H**

### MODELS

**GINST-06** – 6" (15 cm) Pop-up

### DIMENSIONS

- Overall height: 8-3/4" (22.5 cm)
- Inlet: 1/2" female NPT
- Exposed diameter: 2-1/4" (5.7 cm)

### OPERATING SPECIFICATIONS

- Recommended pressure range: 15 to 100 PSI (1.0 to 6.9 bars; 103 to 689 kPa)
- Flow-by: 0 at 10 PSI (.7 bars; 68 kPa) or greater; .1 GPM (0.02 m³/hr; 0.4 l/min) otherwise
- Precipitation rates: approximately 1-1/2" (38 mm) per hour

### OPTIONS AVAILABLE

- Field-installed black rubber cover (part # 469805)
- Field-installed reclaimed water identification snap-on cover (part # 469800)
- Field-installed reclaimed water identification body cap (part # 458530), with "Check Valve" stamped on top for easy ID (part # 458535)
- Field-installed vandal-proof cap (part # INST-VPC)



# SUPER-DUTY RETRACTION CAPABILITIES.

THE G-SPRAY PUTS POWER RIGHT WHERE THE SAND DEMANDS IT.





## KEEP IT GREEN YEAR-ROUND.

WATER-CONSERVING SPRINKLERS MADE FOR CLUBHOUSES AND GREENSPACE.

I-SPRAY I-SPRAY I-SPRAY I-SPRAY I-SPRAY

## I-SPRAY



### FEATURES & BENEFITS

- ▶ **In-stem 30 PSI (2 bars) Pressure Regulation:** Maximum nozzle efficiency whatever the inlet pressure.
- ▶ **Tough-As-Nails Body and Body Cap Construction:** Buttress threads for harsh conditions.
- ▶ **Pressure-Activated, Multi-Function, No-Flow-By Wiper Seal:** Tired of the sun trashing your wiper seals? Not a concern for years to come.
- ▶ **Works With All Female Threaded Nozzles:** Like our new adjustable nozzles and fixed arc nozzles.
- ▶ **Install Check Valves from the Factory or in the Field When Needed:** Saves money and prevents low-head drainage.
- ▶ **Ratcheting Riser for Quick Arc Adjustment:** Adjusts easily while sprinkler operates.
- ▶ **Heavy-Duty Spring:** Guaranteed retraction under any conditions.
- ▶ **Innovative Flush Plug Design:** Enables directional flushing, keeping water away from streets, structures and people.



## SPECIFICATIONBUILDER

EXAMPLE

MODEL	POP-UP HEIGHT	OPTIONS	NOZZLE SERIES	PATTERN
<b>INST</b> = Institutional Spray (Includes Factory-Installed Pressure Regulator)	<b>00</b> = Shrub <b>04</b> = 4" (10 cm) Pop-up <b>06</b> = 6" (15 cm) Pop-up <b>12</b> = 12" (30 cm) Pop-up	<b>CV</b> = Factory-Installed Drain Check Valve (Pop-up Models Only)  <b>CV-R</b> = Factory Installed Reclaimed Body Cap	<b>5</b> = 5' (1.5 m) Series <b>8</b> = 8' (2.4 m) Series <b>10</b> = 10' (3 m) Series <b>12</b> = 12' (3.6 m) Series <b>15</b> = 15' (4.5 m) Series <b>17</b> = 17' (5 m) Series*	<b>A</b> = Adjustable <b>T</b> = Third-Circle <b>Q</b> = Quarter-Circle <b>H</b> = Half-Circle <b>TT</b> = Two-Thirds-Circle <b>TQ</b> = Three-Quarter-Circle <b>F</b> = Full-Circle
<b>INST</b>	<b>06</b>	<b>CV</b>	<b>15</b>	<b>H</b>

**INST - 06 - CV - 15H**

I-SPRAY

**It's best of the best in its category,** with ultra exceptional water-conserving features that make it ideal for today's environment. It's a given: high traffic areas demand a product that reduces water waste with hard-working pressure

regulation under a wide range of conditions. The built-in pressure regulator provides an optimum 30 PSI (2 bars) to the nozzle. It also has the toughest spring in its class. When it comes to the I-Spray, the benefits are clear.

### MODELS

**INST-00** – Shrub  
**INST-04** – 4" (10 cm) Pop-up  
**INST-06** – 6" (15 cm) Pop-up  
**INST-12** – 12" (30 cm) Pop-up

### DIMENSIONS

- Overall height:  
**INST-04** – 5-7/8" (15.5 cm)  
**INST-06** – 8-3/4" (22.5 cm)  
**INST-12** – 16-1/8" (41 cm)
- 1/2" female inlet NPT
- Exposed diameter: 2-1/4" (5.7 cm)

### OPERATING SPECIFICATIONS

- Recommended pressure range: 15 to 100 PSI (1.0 to 6.9 bars; 103 to 689 kPa)
- Flow-by: 0 at 10 PSI (.7 bars; 68 kPa) or greater; .1 GPM (0.02 m³/hr; 0.4 l/min) otherwise
- Precipitation rates: approximately 1-1/2" (38 mm) per hour

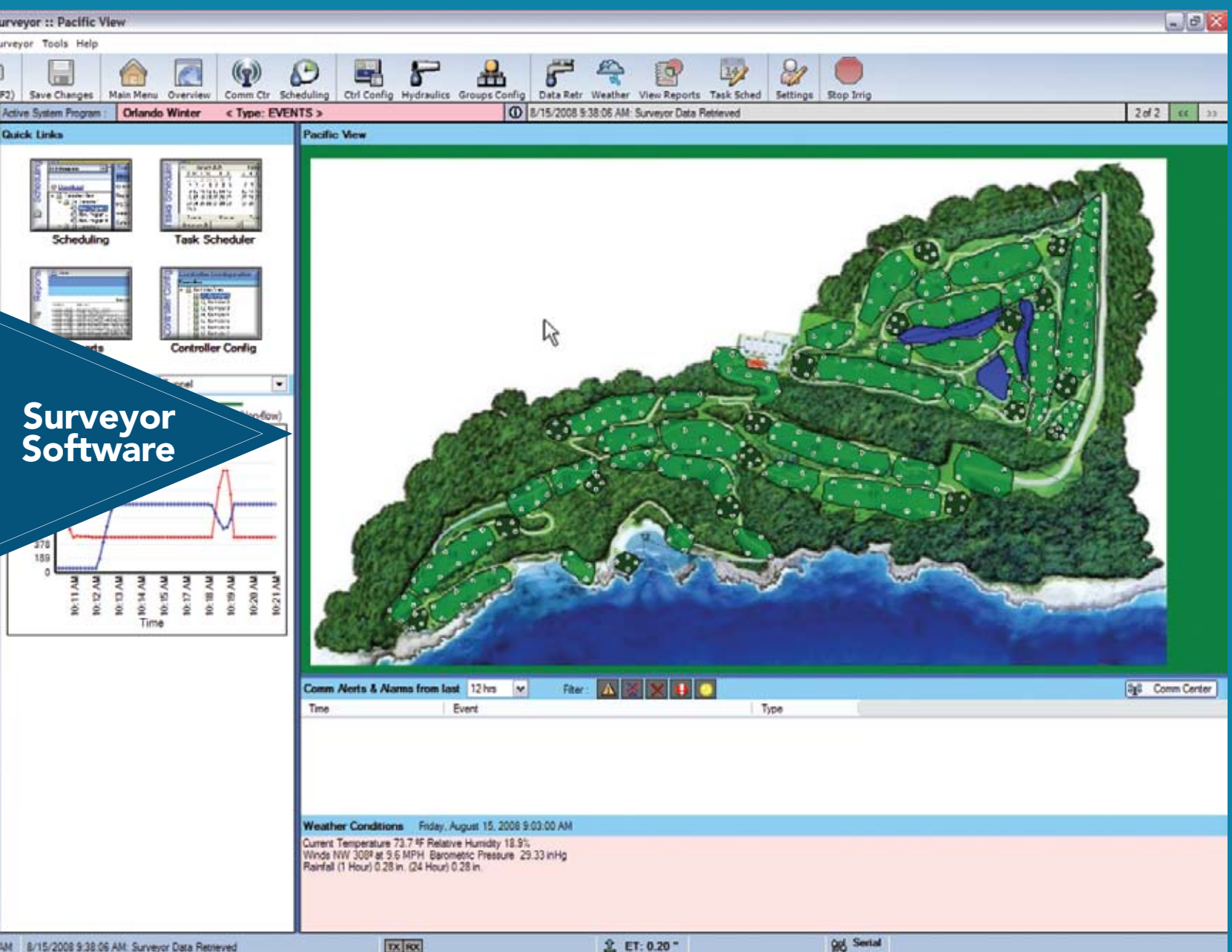
### OPTIONS AVAILABLE

- Factory-installed drain check valve for up to 14' (4.3 m) of elevation change; "Check Valve" stamped on cap for easy identification
- Field-installed drain check valve (part # 437400)
- Field-installed black rubber cover (part # 469805)
- Field-installed reclaimed water identification snap-on cover (part # PROSRCCAP)
- Field-installed reclaimed water identification body cap (part # 458530), with "Check Valve" stamped on top for easy ID (part # 458535)
- Field-installed vandal-proof cap (part # INST-VPC)
- Field-installed check valve (part # 437400)



# CENTRAL CONTROLS

# A GOLF MAINTENANCE PROFESSIONAL'S DREAM SYSTEM



ACCESS CONTROLLERS, PROGRAMS AND INDIVIDUAL STATIONS WITH SURVEYOR'S ADVANCED GRAPHICS TOOLS... DRAWN ON SCANS OR AERIAL PHOTOS OF YOUR COURSE.

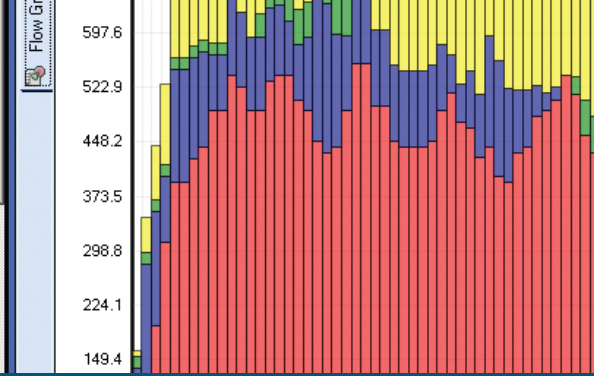




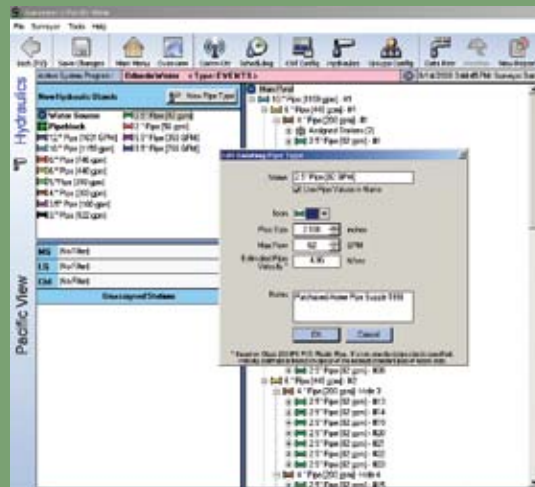


## Pacific View

- Hole 10 Fairways
- Hole 11 Fairways
- Hole 13 Fairways
- Hole 14 Fairways
- Hole 15 Fairways
- Hole 16 Fairways [25 minutes]
- Hole 17 Fairways
- Hole 18 Fairways
- Greens [15 minutes]
- Hole 01 Greens
- Hole 02 Greens
- Hole 03 Greens [10 minutes]
- Hole 04 Greens
- Hole 05 Greens
- Hole 06 Greens [15 minutes]
- Hole 07 Greens



KNOW WHAT HAPPENED...  
AND WHAT'S HAPPENING NOW

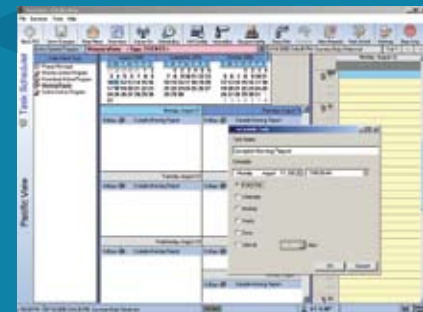


## HYDRAULIC MODELING

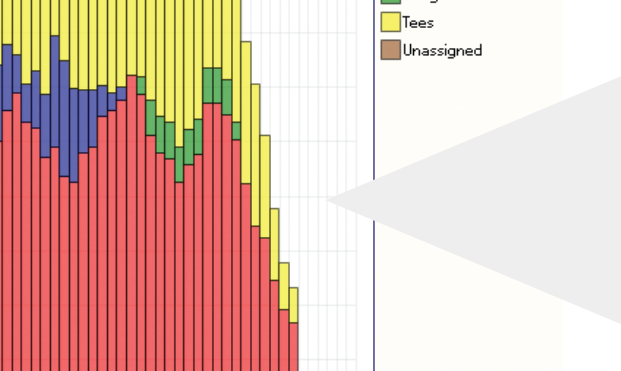
Extend equipment life and meet shorter water windows with Surveyor's™ easy-to-use Hydraulic setup screen. This setup is not required for basic irrigation, but it unlocks the true power of individual head control by maximizing system flow at safe velocities, across the entire pipe grid. A customizable library of common pipe types and characteristics uses your hydraulic map to determine the fastest, safest way to schedule each day's irrigation with your water sources.

## AN INVISIBLE ASSISTANT ON YOUR STAFF

Surveyor's incredible Task Manager can be programmed in advance to perform timed tasks throughout the year. Anything from a simple pop-up reminder window (fertilization schedules, tournament events), to scheduled downloads of named programs on a future day. Task Manager can be set to check the weather station, get and apply the ET, monitor the sensors, and even to suspend irrigation for important events in the future. Best of all, you don't have to be at the office to change schedules. Just tell Task Manager to change and the switch will be made according to your pre-programmed instructions.







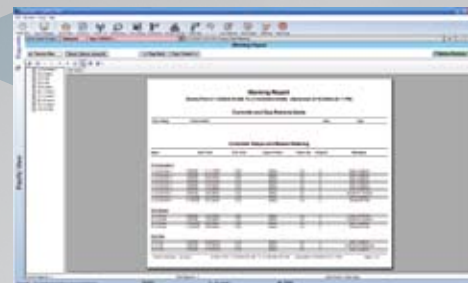
## GO WITH THE FLOW

Surveyor™ combines sophisticated flow optimization and superior reporting tools to provide a wealth of information to the superintendent. The interactive, color-coded flow graph shows calculated water use throughout the irrigation water

window (click anywhere in the graph for printable details). Surveyor uses your hydraulic data to balance flow at safe velocities, and shows you how much water is going where, and when. Irrigation can be stepped up to optimum flow in safe increments, or stages.

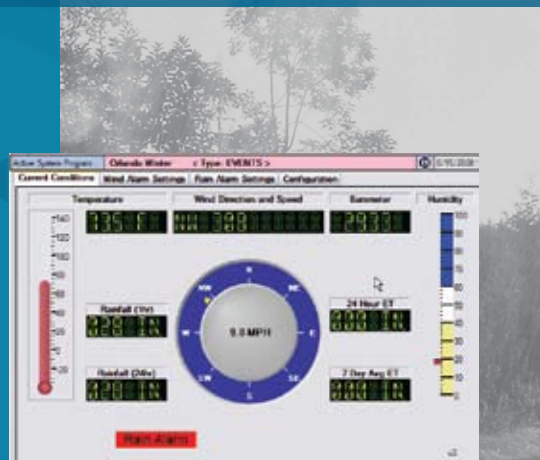
An attractive, readable, and printable account after each irrigation period, Surveyor's innovative Morning Report can be customized for the items that matter most. Itemize each irrigation event over the water window or just note exceptions and alarms for immediate attention. Measure flow, keep an eye on the wind, and prevent wasteful irrigation

during the rain with Surveyor's Data Retrieval module that collects information from sensors in the field, while the computer stands by to issue any protective shutdown commands. And use the color-coded Flow Graph to show how much water is going where. Graph irrigation scenarios in advance, track what happened while you were gone, or view in real time what is flowing right now.



## TIE YOUR IRRIGATION TO THE WEATHER

Progressive water saving and climate-sensitive automation features, including weather tracking and automatic evapotranspiration (ET) calculations, provide the ultimate in scientific turf management. The multi-functional weather interface displays the (optional) weather station's sensor readings on demand, with historical recording. You can apply the weather conditions to the next irrigation application automatically, in any proportions you like. Surveyor can schedule irrigation in run times, application amounts, or percentages of ET (by plant type or course area).



### SURVEYOR SOFTWARE SPECIFICATIONS

- Operating Systems: Windows XP®, or 32-bit Vista Business® or Home Premium® Editions
- Max System Programs: Unlimited
- Stored, named adjustments: Unlimited
- Contingency Programs: Unlimited
- Maximum Field Controllers: 999
- Maximum stations: 102,897
- Scheduling: Manually entered or ET-based
- Flow Management: To station level; automated and graphed
- Graphics: Custom; raster (scan, photo) or vector or both
- Full functionality without graphics
- Unlimited selectable Layers with toggled visibility
- Built-in Map Editor with customizable Drawing Objects
- Built-in Task Scheduler: 100-year + advanced scheduling with pop-up notification
- Stored Historical Reports: 5 years minimum

Windows® is a registered trademark of The Microsoft Corporation.



The VSX™ Field Controller is a premium heavy-duty irrigation controller, with up to 64 programs stored in its non-volatile memory, enabling it to water massive irrigation schedules without direction from the central computer. VSX Field Controllers include user-defined presets for one-touch triggering of common functions, such as syringing and trouble-spot watering.

Once a central control package is installed, the VSX then functions as the local memory center for computer-generated schedules, while retaining its powerful stand-alone capabilities. These powerful, intelligent controllers also create and store reports on-board, which can be reviewed on-site or back at the central computer.

**TRISEND™ CENTRAL INTERFACE:**

- Communications: Radio, Hardwire, & Modem (can be mixed in system)
- Enclosure: Powder-coated steel (outdoor/indoor)
- Connection: DB-9 Serial port
- Primary Input: 105-125 VAC, 0.5 A max
- SV Versions: 205-230 VAC, .25 A max

**VSX**

**NOT YOUR EVERYDAY  
CONTROLLER.**

THE VSX FIELD CONTROLLER  
ENSURES THAT YOUR COURSE WILL  
BE IRRIGATED WITHOUT DEPENDING  
ON A CENTRAL COMPUTER OR  
COMMUNICATIONS LINKS.





**Ultra-Low Profile  
Stealth Antenna:**

Resists weather and projectile damage for reliable communications (radio controllers only).

**Water-Resistant Keypad:**

Illuminated display permits editing and operation in the field, where the plants are.

**Modular 10-Station  
Expansion Boards:**

Enables your controllers to grow with your course. Start with 20, grow to 60.

**Diagnostic LED  
Indicators:**

For all functions on communications boards.

**Field-Selectable Dual-Voltage Transformer (115V/230V):**

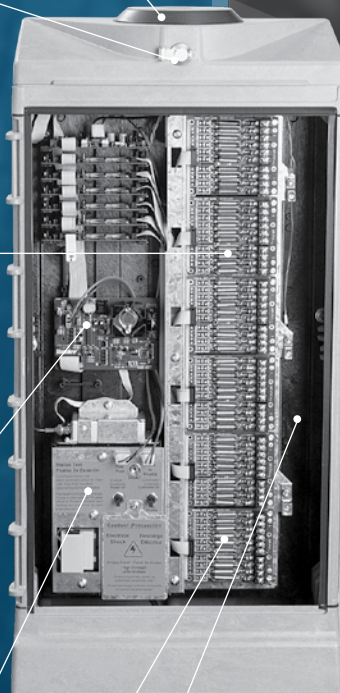
Features heavy-duty surge protection with double fuses and test terminal.

**Spark Gap PLUS:**

Induction coil surge suppression on every output.

**Spacious Wiring Area and Multiple Ground Lugs:**

Allows neat installation and easy service.



**FEATURES & BENEFITS**

- ▶ **64 Programs, Manual and Semi-Auto Functions, Multiple Cycles, and Cycle Delays:** Provides program flexibility for the most demanding schedules.
- ▶ **Up to 60-Station Units, with Optional Manual On-Off-Auto Switches:** High capacity, expandable controllers reduce cost.
- ▶ **Non-Volatile Field Resident Memory:** Prevents lost irrigation in event of power or communication failure.
- ▶ **Heavy Duty Surge and Lightning Protection:** Insures long life and reliable operation.
- ▶ **Automatic Current Overload Protection:** Protects controller from field solenoid malfunctions.
- ▶ **User-Defined Presets & Blocks:** Automate common functions (syrring, etc.) for instant recall & activation.
- ▶ **Modular Communications Options:** Permits communications upgrades at any time.

**DIMENSIONS:**

- Stainless Steel Pedestal:  
36" (92 cm) tall x 13.5" (35 cm) wide x 10" (26 cm) deep
- Plastic Pedestal:  
35" (89 cm) tall x 17.5" (45 cm) wide x 10.5" (27 cm) deep
- Average weight: 56 lbs (25.5 kilos) Stainless and Plastic Wall-Mount enclosures available upon request

**ELECTRICAL SPECIFICATIONS:**

- Primary (Input): 105-125 VAC, 60 Hz 1A maximum
- Primary (Input) SV Version : 205-230 VAC, 50 Hz, .62 A max.
- Secondary (Output): \*24 VAC, 50/60 Hz 1 A max. per station  
3 A total output 1.67 A communications output

\* **NOTE:** Pump output 1 Amp max. if connected

**SIGNAL OUTPUT:**

- Radio: 2 Watts, UHF (450-470 MHz)
- Hardwire: 4 - 20 mA loop

**COMMUNICATIONS WIRING (HARDWARE):**

- GCBL: Shielded 2 twisted pair, 18 AWG
- GCBLA: Armored, shielded 2 twisted pair, 18 AWG (for direct burial applications)

**OPTIONS AND ACCESSORIES:**

- SW: On-Off-Auto switches for each station
- SV: 230 VAC versions (50/60 Hz, selectable)
- TRNR: Handheld Radio for Maintenance Radio communications
- TRIRAD2KT: Maintenance Radio capability for hardwire systems (through the Central Interface, does not include TRNR)



The AGC controller brings a fresh new approach to the traditional golf field controller – an information-packed, video-like display with powerful backlighting, as well as a user-friendly dial that walks you through programs, records, manual operations, and diagnostics. Plus, it's completely programmable from a convenient, removable facepack.

Completely self-sufficient, the AGC is never dependent on distant objects for instructions. But in unison with a central computer and Surveyor software's flow-optimized true independent station control, its capability is maximized.

# AGC

## Hunter®

### AGC HUB™ CENTRAL INTERFACE:

- Communications: Radio, Hardwire, and Modem (can be mixed in system)
- Enclosure: Powder-coated steel (outdoor/indoor)
- Connection: USB 2.0
- Primary Input: 105-125 VAC, 0.5 A max., or 205-230 VAC, .25 A max.



### Press the Info Button:

Receive a screen full of tips, instructions, and even records for any dial position.



### Add Communications with Snap-In Modules:

They have their own display and buttons for setup and testing. Requires only a screwdriver to install.



### Field-Selectable Dual-Voltage Transformer (115/230 V):

Features heavy-duty surge protection with double fuses and test terminal.



**Name Programs, Stations, Even Our Unique SSGs (Simultaneous Station Groups):** You'll never need a "cheat sheet" just to water the grass.



### Choose Your Remote:

From our maintenance radio remote control (UHF-based, no computer required) with StraightTalk™ technology, to our low cost, license-free ICR remote (up to 2 mile (3.2 km) range).



### Spark Gap PLUS:

Induction coil surge suppression on every output.



### 2-Wire Decoder:

(See fold-out)





## AN UNCONVENTIONAL APPROACH TO CONVENTIONAL CONTROL.

### GENERAL CONTROLLER:

- Memory: non-volatile RAM (internal lithium battery for real time clock only)
- Battery: 9 VDC (for remote programming only)
- Display: backlit, high temperature
- 6 Automatic programs, with 4 Custom Manual (auxiliary) programs
- Up to 10 Start Times per automatic program
- System Event buffer for flow optimized downloads
- Programmable Overlap or SmartStack™ by Program
- Up to 20 Simultaneous Station Groups (SSGs) of up to 4 stations each
- % adjustments, either by Program or by controller, 0 to 300% in 1% increments
- Station run times up to 6 hours (in 1 second increments) with programmable delay between stations (up to 6 hours)
- Programmable Automatic Cycle and Soak, by station
- Non-volatile memory and 366-day calendar
- Self-diagnostic circuit breaker skips shorted stations and continues watering
- On-board event recorder
- SmartPort® equipped for wireless remote control
- Flash programmable for field updates
- Dual Pump/Master Valve outputs programmable by station (NO or NC selectable)
- Internal local flow meter connection and up to 4 Klik™-type sensor inputs (programmable to Program level)
- Dual-wall outdoor plastic pedestal with key locks

### DIMENSIONS:

Height: 40" (101 cm) Width: 22" (56 cm)  
Depth: 16" (41 cm) Weight: 50 lb (22.5 kg)

### ELECTRICAL SPECIFICATIONS, CONTROLLERS

- Transformer Input: 120/230 VAC, 50/60 Hz, 2 A max. at 120 V, 1 A max. at 230 V
- Transformer output: 24 VAC, 4 A, at 120 VAC
- UL, c-UL, CE, and C-tick listings and approvals

### SIGNAL OUTPUT:

- Hardware: 4 – 20 mA loop
- Radio: 2 watts UHF (450-470 MHz), narrow band

### COMMUNICATIONS WIRING (HARDWARE):

- Hardware, 4-20 mA loop up to 10,000 ft /3 km between each device via GCBL cable
- GCBL: Shielded 2 twisted pair, 18 AWG (armored Cable available)
- Hardware, radio, conventional, and decoder may be mixed within same system

### OPTIONS & ACCESSORIES:

- RA5M: Base Antenna
- TW Series weather stations with optional wireless or hardwired communications and solar power
- ICR no-license remote control (via integrated SmartPort®)
- TRNR: Handheld Radio for or StraightTalk™ communications
- Hardwire Versions: Up to 10,000 m/3,000' to first field controller, up to 10,000 m/3,000' between each additional field controller

Decoder installations continue to be one of the fastest growing forms of technology in irrigation control. A key advantage over conventional systems is that decoders use less wire for an overall irrigation system. That in turn means lower cost as well as quicker installation time and easier system diagnosis and repair if needed. Systems can be easily expanded – with minimal digging and disruption of landscaping – by adding in more decoders rather than running additional wires.

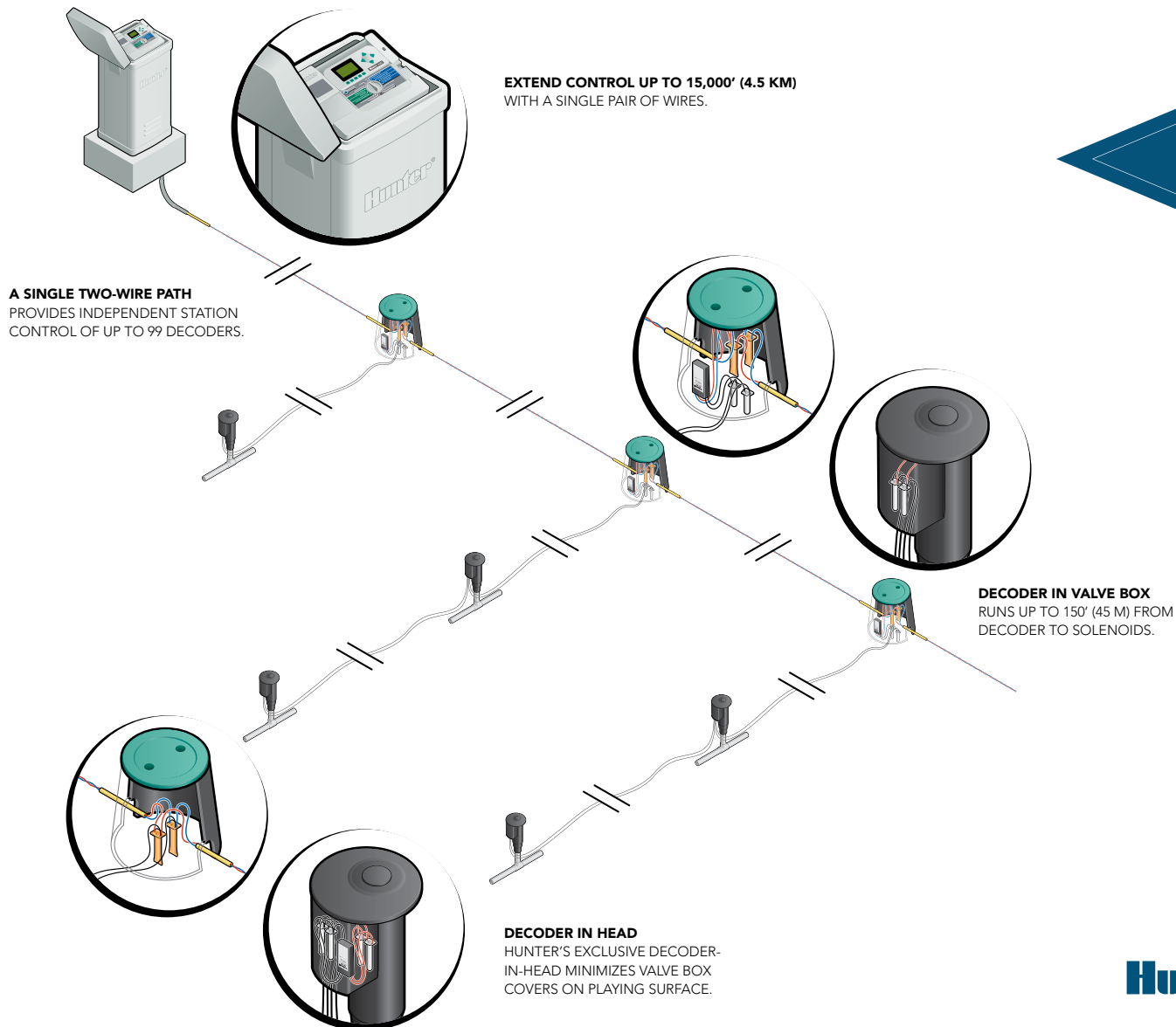
Surveyor™ and AGC enable you to take advantage of this cost-efficient approach with the two-wire decoder version of the controller. The new Institutional Commercial Decoder (ICD) Series is available in a choice of 1, 2, 4, or 6-station outputs, making it possible to run each head on an entire green

with a single decoder. In all, decoders let you operate up to 99 stations out to 15,000' (4.5 km) from a single controller, with reduced costs and only two wires to troubleshoot. Plus, you can even mix decoder controllers in with your conventional controllers, so they're ideal for retrofit or partial re-dos.

AGC decoders include built-in surge suppression, color-coded wire connections, true independent station control, integrated earth grounding, programmable station addresses, two-way feedback to the controller with confirmation and status indication, and internal thermal circuit breakers. There's even a two-way sensor decoder (ICD-SEN) that permits remote monitoring of distant rain, and other sensors over the two-wire path.

THE BENEFITS OF LOCAL SATELLITE CONTROL, WITH THE LOW-COST SIMPLICITY OF TWO-WIRE DECODER CONTROL.

# AGC Decoders





COMPLETE PACKAGES INCLUDE HUNTER WEATHER SOFTWARE

MODEL	DESCRIPTION
TWHW	TurfWeather with AC adaptor & HW communications (add GCBL)
TW24	TurfWeather with AC adaptor & 2.4 GHz wireless communications
TW916	TurfWeather with AC adaptor & 916 MHz wireless communications
TW922A	TurfWeather with AC adaptor & 922 MHz wireless communications
TWSUN	Solar power kit for any TurfWeather package



**TW**  
Weather  
Station

Central Control  
**Accessories**

**REALLY, REALLY COOL.**  
EVEN WHEN IT'S HOT OUTSIDE.

**FEATURES & BENEFITS**

- ▶ **Includes Built-in 60-Day Data Logger:** With onboard evapo-transpiration (ET) calculation (modified Penman-Monteith equation for turf grass).
- ▶ **Wireless Package Uses 2.4 GHz Spread-Spectrum Technology:** For line-of-sight communications up to 1/4 mile (400 m). In rural areas, try the 900 MHz spread spectrum links for 1/2 mile (800 m) range.
- ▶ **Hardwired Installation Uses Our Same Reliable, Direct Burial GCBL Cable:** Up to 4000' (1219.2 m) (dedicated computer port required).
- ▶ **Optional Solar Panel Kit Provides Wireless Power:** For astonishing ease of installation and versatile mounting. On-board 800 mah rechargeable gel cell battery with 18VDC transformer and 20' (7 m) power cable.
- ▶ **Weatherproof Construction:** With UV stabilized enclosure, weather-proof external connectors, & long-life coated circuit boards.
- ▶ **UL and c-UL Listed, CE Approved:** One-year warranty.

# ICR



## KEEP IT SIMPLE.

THE ICR REMOTE CONTROL IS THE PERFECT BALANCE OF HIGH-TECH CONTROL AND USER-FRIENDLINESS.

- ▶ **Over 1/2 Mile (400 m) Typical Range:** Control sprinklers, valves and pumps from any within-range location.
- ▶ **128 Different Programmable Addresses:** Makes maintaining several properties in the same area easy.
- ▶ **Plug & Play:** Designed to work with Hunter AGC through a built-in SmartPort® connection.
- ▶ **Operates on 4 AA Batteries:** Screen display shows remaining battery life.
- ▶ **Large LCD Display, Push-Button Operation:** User-friendly features make the remote easy to use.
- ▶ **No License Required in Most Countries.**

FEATURES&BENEFITS

**PUT IT IN YOUR LONG-RANGE PLANS.** OUR HIGH-POWERED MAINTENANCE RADIO REMOTE HAS LONG-DISTANCE REACH.

- ▶ **Instant Control of Stations, Blocks and Programs.**
- ▶ **Fewer Buttons to Push.**
- ▶ **Instant Audio Confirmation of Commands.**
- ▶ **Hunter's Famous StraightTalk™ Technology:** Enables wireless remote control at ranges up to 2 miles (3.6 km) whether or not the computer central is turned on.
- ▶ **Easy Commands that Show in Display Before Sending.**
- ▶ **Compact Size, Industrial Construction.**
- ▶ **Suitable for Two-Way Voice Communication with Crews and Office.**
- ▶ **High Signal Output: 2 Watts, UHF (450 - 470 MHz).\***



# TRNR

Radio

FEATURES&BENEFITS

*\*License required in most countries.*

CARTS





## Data Retrieval Unit

### COME RAIN OR COME SHINE.

DATA RETRIEVAL DELIVERS WITH MAXIMUM EFFICIENCY.

Data Retrieval connects the real world to your central system, with the ability to monitor flow and other key conditions out on the course. Serving as the ideal complement to the Central Control System, a Data Retrieval Unit can be connected with up to 6 sensors — including flow, wind speed and direction, rain, and contact closures in order to provide updated input for system status, custom reports, and alarm monitoring. A Central system can include up to 16 separate Data Retrieval Units, each of which can alert the system's central software, via two-way radio or hardwire, to automatically shut down all, or a portion of, the irrigation system if alarm conditions are encountered. Data Retrieval may be added to a system\* at any time, and can be located near the source of the data for remote reporting with minimum wiring.

\* Data Retrieval Unit for use exclusively with Hunter's VSX™ Controller.

- ▶ **Up to 6 Sensors per Unit, 16 Units per System:**  
Monitors micro-climate conditions in large systems.
- ▶ **Flexible Sensor Ports Fit Different Individual Needs:**  
Combines flow, wind, rain and other sensors as needed.
- ▶ **Powerful Software Functions in Surveyor™ for Custom Alarm Reporting Capabilities:** Enables simple record-keeping and alarm monitoring.
- ▶ **Ability to Shut Down Based on Adjustable Wind Speed and Direction Parameters:** Ideal for irrigating near homes or public thoroughfares.
- ▶ **"Resume When Clear" Option Notes Return to Normal Conditions:** Minimizes lost irrigation due to rain and wind.
- ▶ **Key-Locking, All-Weather Metal Cabinet:** Mounts wherever sensors are, for lowest cost installation.
- ▶ **Data Monitored Live, or Stored in Non-Volatile Memory:** Downloadable histories are retained if power fails.

#### DIMENSIONS

- 16" (40.6 cm) tall x 12½" (31.1 cm) wide x 4¾" (12.1 cm) deep

#### ELECTRICAL SPECIFICATIONS

- Primary (Input):  
105-125 VAC, 60 Hz, .5 A max.
- Primary (Input) SV version:  
205-230 VAC, 50 Hz, .5 A max.

#### SIGNAL OUTPUT

- Radio: 2 Watts, UHF (450-470 MHz)
- Hardwire: 4 - 20 mA loop
- Use RASREM remote antenna with Radio Data Retrieval units, supplied separately

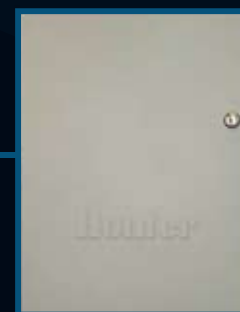
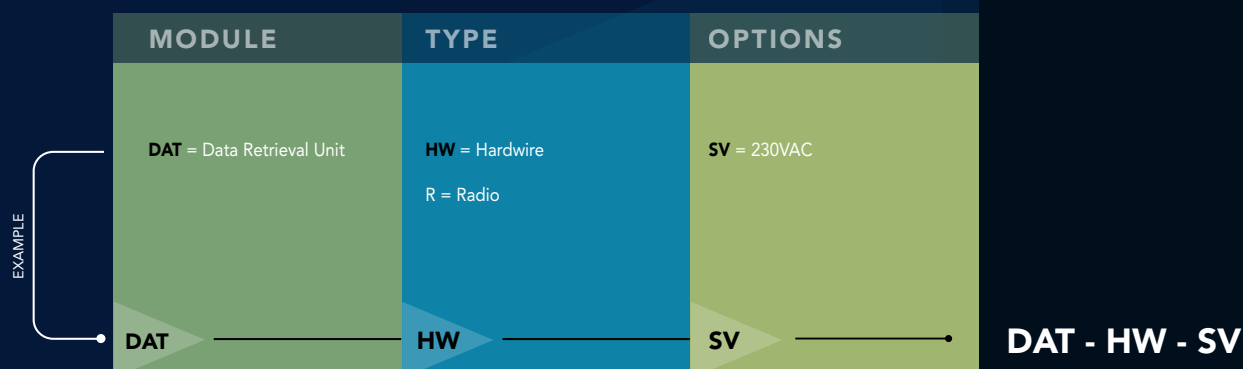
#### OPTIONS

- SV: 230 VAC, 50 Hz versions

#### SENSORS

- DAT = Wind Speed & Direction
- DATFL = Flow Sensor
- DATRC = Rain Gauge
- Mini-Click = Rain Sensor
- Wind-Click = Wind Sensor
- Freeze-Click = Freeze Sensor
- MWS = Mini-Weather Station (Combines Mini, Wind & Freeze-Clicks)

## SPECIFICATIONBUILDER



FLOW SENSOR

WIND SENSOR

RAIN GAUGE

DATA RETRIEVAL UNIT



# VALUES



ICV Pressure Loss in PSI					
GPM	1"	1-1/2"	2"	3"	
				Globe	Angle
0.1	2.0				
0.5	2.0				
1.0	2.0				
5.0	4.0				
10.0	3.0				
15.0	3.0				
20.0	3.0	1.5			
30.0	4.0	1.5			
40.0	7.0	1.7	0.8		
50.0		2.2	1.2		
60.0		3.0	1.7		
75.0		3.9	2.4		
90.0		5.5	3.2		
100.0		7.0	4.2		
120.0		10.9	6.5		
135.0		12.7	7.9		
150.0		16.2	9.8	2.5	1.9
175.0			13.3	3.0	2.4
200.0			17.7	4.1	3.3
225.0				5.3	4.3
250.0				6.7	5.5
275.0				8.3	6.9
300.0				10.1	8.5

Charts based on full-open flow control position.

ICV Pressure Loss in kPa					
l/min	1"	1-1/2"	2"	3"	
				Globe	Angle
1.0	13.7				
2.0	13.7				
4.0	13.7				
20.0	17.2				
40.0	20.1				
60.0	20.1				
75.0	20.1	9.6			
115.0	29.2	10.1			
150.0	48.0	11.6	4.9		
190.0		14.6	7.0		
225.0		18.1	9.3		
280.0		25.8	14.0		
340.0		36.9	20.4		
380.0		45.8	25.5		
450.0		64.7	36.0		
510.0		83.9	46.5		
565.0		104.1	57.4	16.1	12.0
660.0			79.2	22.2	17.0
750.0			103.1	29.0	22.5
850.0				37.6	29.7
950.0				47.4	38.0
1050.0				58.4	47.4
1135.0				68.7	56.3

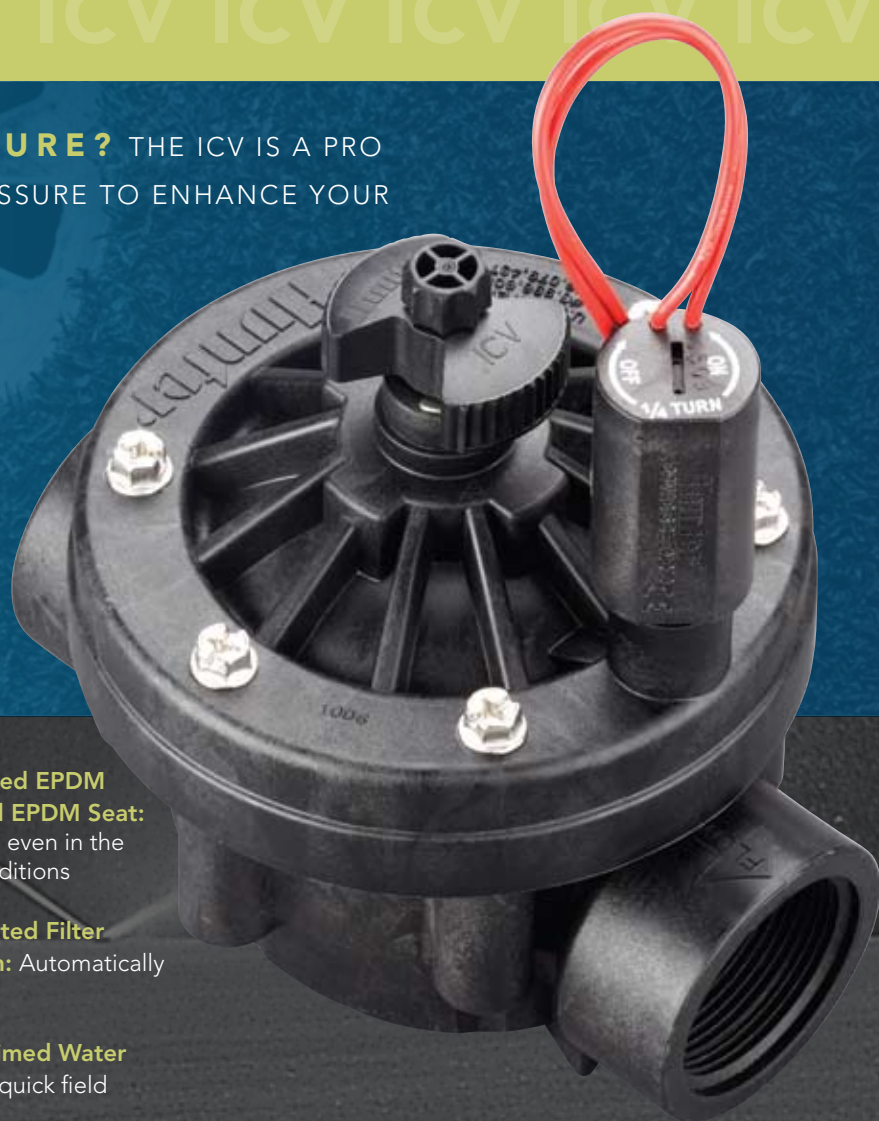
Charts based on full-open flow control position.

ICV Pressure Loss in Bars					
m <sup>3</sup> /hr	1"	1-1/2"	2"	3"	
				Globe	Angle
0.05	0.14				
0.10	0.14				
0.25	0.14				
1.00	0.17				
2.50	0.19				
3.50	0.21				
4.50	0.24	0.10			
7.00	0.33	0.11			
9.00	0.45	0.12	0.05		
11.00		0.15	0.07		
13.50		0.20	0.10		
17.00		0.29	0.15		
20.50		0.42	0.22		
23.00		0.52	0.28		
27.00		0.72	0.39		
30.50		0.93	0.50		
34.00		1.16	0.63	0.15	0.13
40.00			0.88	0.20	0.16
45.50			1.15	0.26	0.23
51.00				0.34	0.30
57.00				0.43	0.38
62.50				0.53	0.48
68.00				0.64	0.59

Charts based on full-open flow control position.

# ICV

**OFF-THE-CHART HIGH PRESSURE?** THE ICV IS A PRO THAT DELIVERS, FUNCTIONING UNDER PRESSURE TO ENHANCE YOUR COURSE'S PLAYABILITY.



## FEATURES & BENEFITS

- ▶ **Glass-Filled Nylon Construction:** 220 PSI (15 bars) rated for maximum strength.
- ▶ **Fabric-Reinforced EPDM Diaphragm and EPDM Seat:** Great operation even in the worst water conditions
- ▶ **Internal and External Manual Bleed:** Two choices for manual operation.
- ▶ **Optional Patented Filter Sentry™ System:** Automatically cleans the filter.
- ▶ **Captive Solenoid Plunger:** No lost parts when servicing.
- ▶ **Optional Reclaimed Water ID Handle:** For quick field identification.
- ▶ **Captive Bonnet Bolts with Matching Brass Body Inserts:** Ease of service, no lost parts.
- ▶ **Available in 4 Sizes.**



## SPECIFICATIONBUILDER

MODEL	FEATURES	OPTIONS	OPTIONS
		FACTORY INSTALLED	USER INSTALLED
ICV	101G = 1" (25 mm) Globe Valve 151G = 1-1/2" (40 mm) Globe Valve 201G = 2" (50 mm) Globe Valve 301 = 3" (80 mm) Globe/Angle Valve	FS = Filter Sentry™ B = BSP Threads DC = DC Latching Solenoid	AS = Accu-Set™ Pressure Regulator R = Reclaimed Water Identification CC = Conduit
EXAMPLE ICV	201G	FS (or leave blank)	AS (or leave blank)

**ICV - 201G - FS - AS**



**SET IT AND FORGET IT.** THE ACCU-SET™ OPTION ALLOWS YOU TO ADJUST AND REGULATE PRESSURES ANYWHERE FROM 20 TO 100 PSI (1.5 - 7 BARS). FIELD-INSTALL IT TO ANY ICV OR IBV VALVE IN SECONDS, NO TOOLS NEEDED.

Designed to handle any site conditions (and we mean any), this premier quality valve gives you top-notch performance every time. What makes it special? Well, for starters, it's easy to service. It's also ideal for reclaimed water. The ICV includes both



fabric-reinforced diaphragm and flow control as standard. It withstands pressures of up to 220 PSI (15 bars) as it effortlessly handles relentless water hammer. And with the Accu-Set option as a pressure regulator, it maintains the safest, most constant water pressure level.

### MODELS

- ICV-101G** – 1" (2.5 cm) plastic globe valve
  - ICV-151G** – 1-1/2" (3.8 cm) plastic globe valve
  - ICV-201G** – 2" (5 cm) plastic globe valve
  - ICV-301** – 3" (7.6 cm) plastic globe/angle valve
- Accu-Set Pressure Regulator

### DIMENSIONS

- **ICV-101G:**  
5-1/2" H x 4-3/4" L x 4" W  
(14 cm H x 12 cm L x 10.2 cm W)
- **ICV-151G:**  
7-1/8" H x 6-7/8" L x 5-1/2" W  
(18 cm h x 17.5 cm L x 14 cm W)
- **ICV-201G:**  
7-1/8" H x 6-7/8" L x 5-1/2" W  
(18 cm H x 17.5 cm L x 14 cm W)
- **ICV-301:**  
10-3/4" H x 9-1/4" L x 7-3/8" W  
(27.3 cm H x 23.5 cm L x 18.7 cm W)
- Female inlet/outlet: 1", 1-1/2", 2" & 3"  
(2.5 cm, 3.8 cm, 5 cm, 7.6 cm) NPT or BSP

### OPERATING SPECIFICATIONS

- Flow: 0.10 to 300 GPM  
(0.06 to 68.10 m³/hr; 0.9 to 1,135.5 l/min)
- Pressure: 20 to 220 PSI  
(1.4 to 15.0 bars; 138 to 1500 kPa)
- Ambient temperature: up to 150°F (66°C)
- Heavy-duty solenoid: 24 VAC, 370mA inrush current, 190 mA holding current, 60 cycles; 475 mA inrush current, 230 mA holding current, 50 cycles
- Accu-Set: 20 PSI (1.4 bars, 138 kPa) minimum operating pressure. Regulates from 20 to 100 PSI (1.4 to 7.0 bars; 138 to 689 kPa)

### OPTIONS AVAILABLE

- Accu-Set pressure regulator
- Reclaimed water ID  
part # 561205 - 1", 1-1/2", & 2" (2.5 cm, 3.8 cm, 5 cm)  
part # 515005 - 3" (7.6 cm)
- DC latching solenoid (part # 458200)
- Solenoid conduit (part # 464322)
- Drip Irrigation Valve Kit (part # ICZ101)



# IBV

ENGINEERED WITH SOLID BRASS, THIS HIGH-END VALVE WILL CONFRONT THE RIGORS OF **ANY COURSE, ANY CONDITIONS.**

## FEATURES & BENEFITS

### Custom-designed

for the most brutal course conditions, the IBV's brass external body and bonnet can manage up to 220 PSI (15 bars). As with other Hunter products, you'll find high-end features such as a mega-strong solenoid, fabric-reinforced EPDM diaphragm and seat, and hefty stainless steel flow control stem. When you add both the optional Accu-Set™ pressure regulator and Filter Sentry™ self cleaning system, it's virtually indestructible.

- ▶ **Fabric-Reinforced EPDM Diaphragm and EPDM Seat:** Best material choice for all water conditions, especially recycled or chlorinated water.
- ▶ **Stainless Steel Flow Control Stem:** Maximum strength and stability.
- ▶ **Internal and External Manual Bleed:** Two choices for manual operation.
- ▶ **Heavy-Duty Hunter Solenoid:** Enables consistent operation, long life.
- ▶ **Compatible with Hunter Battery-Powered Systems:** Gives you maximum flexibility.
- ▶ **Accu-Set™ Pressure Regulator:** Easy to install and use.
- ▶ **Patented Filter Sentry™ System:** Automatically cleans the filter.
- ▶ **Available in 4 Sizes.**

## SPECIFICATION BUILDER

MODEL	FEATURES	OPTIONS	OPTIONS
		FACTORY INSTALLED	USER INSTALLED
IBV	<b>101G</b> = 1" (25 mm) Globe Valve <b>151G</b> = 1-1/2" (40 mm) Globe Valve <b>201G</b> = 2" (50 mm) Globe Valve <b>301G</b> = 3" (80 mm) Globe Valve	<b>FS</b> = Filter Sentry™ <b>B</b> = BSP Threads <b>DC</b> = DC Latching Solenoid	<b>AS</b> = Accu-Set™ Pressure Regulator <b>R</b> = Reclaimed Water Identification <b>CC</b> = Conduit
IBV	<b>201G</b>	<b>FS</b> (or leave blank)	<b>AS</b> (or leave blank)

IBV - 201G - FS - AS



## MODELS

**IBV-101G** – 1" (2.5 cm) brass globe valve

**IBV-151G** – 1-1/2" (3.8 cm) brass globe valve

**IBV-201G** – 2" (5 cm) brass globe valve

**IBV-301G** – 3" (7.6 cm) brass globe valve

## DIMENSIONS

### • IBV-101G

4-1/2" H x 3-3/4" L x 5-1/4" W  
(11.4 cm H x 9.3 cm L x 13.1 cm W)

### • IBV-151G

6-1/4" H x 5-1/4" L x 6-1/8" W  
(15.7 cm H x 13.2 cm L x 16.3 cm W)

### • IBV-201G

6-1/16" H x 5-1/4" L x 6-15/16" W  
(15.4 cm H x 13.2 cm L x 17.6 cm W)

### • IBV-301G

9-5/16" H x 7-1/4" L x 9-1/8" W  
(23.6 cm H x 18.3 cm L x 23 cm W)

• Female inlet/outlet: 1", 1-1/2", 2" & 3"  
(2.5 cm, 3.8 cm, 5 cm, & 7.6 cm) NPT or BSP

## OPERATING SPECIFICATIONS

- Flow: 0.10 to 300 GPM (0.06 to 68.10 m<sup>3</sup>/hr; 0.9 to 1,135.5 l/min)
- Pressure: 20 to 220 PSI (1.4 to 15.0 bars; 138 to 1500 kPa)
- Temperature: up to 150°F (66°C)
- Heavy-duty solenoid: 24 VAC, 370 mA inrush current, 190 mA holding current, 60 cycles; 475 mA inrush current, 230 mA holding current, 50 cycles
- Accu-Set™: 20 PSI (1.4 bars, 138 kPa) minimum operating pressure. Regulates from 20 to 100 PSI (1.4 to 7.0 bars; 138 to 689 kPa)

## OPTIONS AVAILABLE

- Accu-Set pressure regulator
- Reclaimed water ID  
part # 561205 - 1", 1-1/2", & 2" (2.5 cm, 3.8 cm, 5 cm)  
part # 515005 - 3" (7.6 cm)
- DC latching solenoid (part # 458200)
- Solenoid conduit (part # 464322)
- Reclaimed Water ID Tag (part # 700392)

## IBV Pressure Loss in PSI

GPM	1"	1-1/2"	2"	3"
0.1	2.0			
0.5	2.0			
1.0	2.0			
5.0	4.0			
10.0	3.0			
15.0	3.0			
20.0	3.0	1.5		
30.0	4.0	1.5		
40.0	7.0	1.7	0.8	
50.0		2.2	1.2	
60.0		3.0	1.7	
75.0		3.9	2.4	
90.0		5.5	3.2	
100.0		7.0	4.2	
120.0		10.9	6.5	
135.0		12.7	7.9	
150.0		16.2	9.8	2.5
175.0			13.3	3.0
200.0			17.7	4.1
225.0				5.3
250.0				6.7
275.0				8.3
300.0				10.1

Charts based on full-open flow control position.

## IBV Pressure Loss in kPa

l/min	1"	1-1/2"	2"	3"
1.0	13.7			
2.0	13.7			
4.0	13.7			
20.0	17.2			
40.0	20.1			
60.0	20.1			
75.0	20.1	9.6		
115.0	29.2	10.1		
150.0	48.0	11.6	4.9	
190.0		14.6	7.0	
225.0		18.1	9.3	
280.0		25.8	14.0	
340.0		36.9	20.4	
380.0		45.8	25.5	
450.0		64.7	36.0	
510.0		83.9	46.5	
565.0		104.1	57.4	16.1
660.0			79.2	22.2
750.0			103.1	29.0
850.0				37.6
950.0				47.4
1050.0				58.4
1135.0				68.7

Charts based on full-open flow control position.

## IBV Pressure Loss in Bars

m <sup>3</sup> /hr	1"	1-1/2"	2"	3"
0.05	0.14			
0.10	0.14			
0.25	0.14			
1.00	0.17			
2.50	0.19			
3.50	0.21			
4.50	0.24	0.10		
7.00	0.33	0.11		
9.00	0.45	0.12	0.05	
11.00		0.15	0.07	
13.50		0.20	0.10	
17.00		0.29	0.15	
20.50		0.42	0.22	
23.00		0.52	0.28	
27.00		0.72	0.39	
30.50		0.93	0.50	
34.00		1.16	0.63	0.15
40.00			0.88	0.20
45.50			1.15	0.26
51.00				0.34
57.00				0.43
62.50				0.53
68.00				0.64

Charts based on full-open flow control position.



- ▶ **100% Interchangeable with Rain Bird®, Toro®, and Buckner®:** Protects your investment and simplifies ease of use.
- ▶ **Red Brass and Stainless Steel Construction:** Heavy-duty construction for long life and rugged performance.
- ▶ **TuffTop™ Thermoplastic Locking and Non-Locking Covers:** Safety and durability over the years to come.
- ▶ **WingThing™ Stabilization and Acme Key Connection:** Unique anti-rotation model also includes adjustable flow control.
- ▶ **Stainless Steel Lug on 1" and 1-1/4" Keys:** Non-wearing lug offers easy engagement and smooth operation.
- ▶ **Spring-Loaded Covers with Stainless Steel Springs:** Positive closing and protection for valve's sealing components.

HQ Quick-Coupling Valves are value-added products designed for projects requiring quick water access while maintaining in-ground durability and vandal resistance. Features include Tuff-Top™ spring-loaded covers and WingThing™ models with anti-rotation stabilizers. Comes in one and two-piece models, the latter enabling field maintenance of valve's upper seal without depressurizing the irrigation system.



HQ



QUICK COUPLERS WITH ULTRA  
STURDY RED BRASS AND  
STAINLESS STEEL CONSTRUCTION  
**ADD VALUE TO ANY PROJECT.**

Rain Bird® is a registered trademark of Rain Bird Corporation.  
Toro® is a registered trademark of The Toro Company.  
Buckner® is a registered trademark of Storm Manufacturing Group, Inc.

MODEL	INLET THREADS	SLOTS	BODY	COLOR *	LOCKING	KEY	SWIVELS
HQ-3RC	3/4" NPT	2	1 - Piece	Yellow	No	HK-33	HS-0
HQ-33DRC	3/4" NPT	2	2 - Piece	Yellow	No	HK-33	HS-0
HQ-33DLRC	3/4" NPT	2	2 - Piece	Yellow	Yes	HK-33	HS-0
HQ-44RC	1" NPT	1	2 - Piece	Yellow	No	HK-44	HS-1 or HS-2
HQ-44LRC	1" NPT	1	2 - Piece	Yellow	Yes	HK-44	HS-1 or HS-2
HQ-44RC-AW	1" NPT	Acme	2 - Piece Wing **	Yellow	No	HK-44A	HS-1 or HS-2
HQ-44LRC-AW	1" NPT	Acme	2 - Piece Wing **	Yellow	Yes	HK-44A	HS-1 or HS-2
HQ-5RC	1" NPT	2	1 - Piece	Yellow	No	HK-55	HS-1 or HS-2
HQ-5LRC	1" NPT	2	1 - Piece	Yellow	Yes	HK-55	HS-1 or HS-2
HQ-5RC-B	1" BSP	2	1 - Piece	Yellow	No	HK-55	HS-1-B or HS-2-B
HQ-5LRC-B	1" BSP	2	1 - Piece	Yellow	Yes	HK-55	HS-1-B or HS-2-B

\* All locking cover models are available with purple covers for reclaimed water applications.  
\*\* Anti-rotation stabilization wings.





## SPECIFICATIONBUILDER

EXAMPLE

MODEL	BODY	COVER	OPTIONS	KEY TO FEATURES:
HQ = Quick Coupler	3, 33D, 44, 5	RC = Rubber cover LRC = Locking rubber cover	AW = Acme key with anti-rotation wings* B = BSP threads** R = Purple locking cover (for reclaimed water sites)***	<b>VALVES</b> 3 = 3/4" inlet, 1-piece body 33D = 3/4" inlet, 2-piece body 44 = 1" inlet, 2-piece body 5 = 1" inlet, 1-piece body <b>KEYS</b> 33 = 3/4" valve, 3/4" key inlet 44 = 1" valve, 1" key inlet 44A = 1" valve, Acme key inlet 55 = 1" valve, 1-1/4" key inlet <b>SWIVELS</b> 0 = 3/4" inlet x 3/4" hose outlet 1 = 1" inlet x 3/4" hose outlet 2 = 1" inlet x 1" hose outlet 1B = 1" inlet x 3/4" BSP outlet 2B = 1" inlet x 1" BSP outlet
HK = Coupler Key	33, 44, 44A, 55			
HS = Hose Swivel	0, 1, 2, 1B, 2B		* only available in body 44 ** only available in body 5 *** only available LRC Models	
HQ	44	LRC	AW	<b>HQ - 44 - LRC - AW</b>

## RECLAIMED WATER PRODUCTS

### ROTORS-FACTORY INSTALLED ID CAP

#### MPR40:

- MPR40-00
- MPR40-04
- MPR40-06
- MPR40-12

#### PGJ:

- PGJ-00-R
- PGJ-04-R
- PGJ-06-R
- PGJ-12-R

#### PGP:

- PGS-ARV
- PGS-3RV
- PGP-ARV
- PGP-3RV
- PGH-ARV
- PGH-3RV

#### I-10/20 Ultra:

- I-10-ARV
- I-10-3RV
- I-20-ARV
- I-20-3RV
- I-20-ARS
- I-20-3RS
- I-20-6P-ARV
- I-20-6P-3RV
- I-20-6P-ARS
- I-20-6P-3RS
- I-20-HP-ARV
- I-20-HP-3RV

#### I-25 Plus:

- I-25-ARV
- I-25-3RV
- I-25-ARS
- I-25-3RS
- I-25-6P-ARV
- I-25-6P-3RV
- I-25-6P-ARS
- I-25-6P-3RS

#### I-35:

- I-35
- I-35-SS-R

#### I-40:

- I-40-ARS
- I-40-3RS
- I-40-3RS-ON
- I-40-6P-ARS
- I-40-6P-3RS
- I-40-6P-3RS-ON

#### I-60:

- I-60-ARS
- I-60-3RS

#### I-90:

- I-90-ARV
- I-90-3RV

### SPRAYS

#### PS:

- Identification ring field-install part # 461844

#### SRs:

- Reclaimed water identification cap field-install part # 349800

#### Pro-Spray®:

##### Factory Installed:

- PRO-00-R - shrub adapter
- PRO-04-CV-R
- PRO-06-CV-R
- PRO-12-CV-R

##### Field Installed:

- Reclaimed water identification snap-on cover part # 469800
- Reclaimed water thread-on body cap part # 458520
- Reclaimed water thread-on body cap, Pro-Spray with Check Valve ID part # 458525

#### Institutional Spray:

##### Factory Installed:

- INST-00-R - shrub adapter
- INST-04-CV-R
- INST-06-CV-R
- INST-12-CV-R

##### Field Installed:

- Reclaimed water identification snap-on cover part # 469805
- Reclaimed water thread-on body cap part # 458530
- Reclaimed water thread-on body cap, Institutional Spray with Check Valve ID part # 458535

### VALVES

#### 1" PGV, SRV, HPV & PRO-ASV:

- Reclaimed water identification handle field-install part # 269205

#### PGV-151 & PGV-201:

- Reclaimed water identification handle field-install part # 412705

#### ICV-101, ICV-151 & ICV-201:

- Reclaimed water identification handle field-install part # 561205

#### ICV-301:

- Reclaimed water identification handle field-install part # 515005

#### IBV-101G, IBV-151G,

#### IBV-201G & IBV-301G:

- Reclaimed water identification tag part # 700392

#### QUICK COUPLERS:

##### Factory Installed:

- HQ-33DLRCR
- HQ-44LRCR
- HQ-44LRC-AWR
- HQ-5LRCR
- HQ-5LRC-BR

### GOLF ROTORS

#### G70B/G75B:

- Identification snap ring field-installed part # 470600

#### G870/G875:

- Identification snap ring field-installed part # 610105

#### G880:

- Identification snap ring field-installed part # 450105

#### G990:

- Identification logo cap field-installed part # 664005

#### G995:

- Identification logo cap field-installed part # 664105

# HUNTER WARRANTY STATEMENT



## Warranty

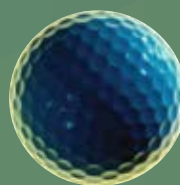
Hunter will unconditionally repair, replace or repurchase, at its sole discretion, any defective Golf Product Components listed below by category, returned freight prepaid, within a period of:

- a. Golf Rotor Products - three (3) years component\* warranty from the date of manufacture.
- b. Golf Controller Products - one (1) year component\* warranty from the date of manufacture.
- c. IBV & HQ Valve Products - five (5) years component\* warranty from the date of manufacture.
- d. I-Series Rotor and Valve Products - five (5) years warranty from the date of manufacture
- e. I-Series and G-Series Spray Products - five (5) years warranty from the date of manufacture.
- f. MP Rotator Nozzles - two (2) years warranty from the date of manufacture.
- g. Computers, Printers and Accessories - equipment manufacturer's warranty (no Hunter warranty).
- h. Maintenance Radio and Battery - equipment manufacturer's warranty (no Hunter warranty).

Hunter's warranty applies only to Products installed as specified and used as intended for irrigation purposes. Hunter's warranty shall be limited to defects in materials and workmanship during the warranty period, and shall not extend to situations in which the Product was subjected to improper design, installation, operation, maintenance, application, abuse, improper electrical current, grounding, service other than by Hunter authorized agents, operating conditions other than that for which it was designed, or in systems using water containing corrosive chemicals, electrolytes, sand, dirt, silt, rust or agents that otherwise attack and degrade plastics. Hunter's warranty does not cover component failures caused by lightning strikes, electrical power surges or unconditioned power supplies. If Products are repurchased, the price to Distributor for such Products in effect at the time of return will apply.

HUNTER'S OBLIGATION TO REPAIR, REPLACE OR REPURCHASE ITS PRODUCTS OR PRODUCT COMPONENTS AS SET FORTH ABOVE IS THE SOLE AND EXCLUSIVE WARRANTY EXTENDED BY HUNTER. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. HUNTER WILL NOT BE LIABLE TO A DISTRIBUTOR OR TO ANY OTHER PARTY IN STRICT LIABILITY, TORT, CONTRACT OR ANY OTHER MANNER FOR ANY DAMAGES CAUSED OR CLAIMED TO BE CAUSED AS A RESULT OF ANY DESIGN OF OR DEFECT IN HUNTER'S PRODUCTS, OR FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

\* Warranty covers repair, replacement or repurchase of individual defective component assemblies contained within the product. Returns of complete finished goods are not allowed under warranty without prior approval from the Hunter Product Manager.



At Hunter, our commitment to the environment does not stop at water conservation. This catalog utilizes a unique method in which pages may be added, removed, or rearranged as updates to the catalog are created. Now, in lieu of reprinting an entire catalog, single pages may be replaced, and resources are not wasted.



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# Hunter®

## GOLF

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