Golf Irrigation Product Catalogue

GOLF IRRIGATION | *Built on Innovation®*

VOLUME 39

Hunter®

hunterindustries.com/golf

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Our **STORY**

Founded in 1981, Hunter Industries is a family-owned, global manufacturer of best-in-class solutions for residential, commercial, municipal, agricultural, and golf course irrigation systems, as well as the outdoor lighting industry. Headed by CEO Greg Hunter, our Global Operations Team provides leadership for the entire company. The core mission of Hunter Industries will always remain the same: to deliver valued products and services backed by unwavering customer support, grow the company conscientiously, and remain true to the culture that makes our employees proud to work at Hunter. **Learn more at hunterindustries.com.**

Product **HIGHLIGHTS**

WHEN IT COMES TO ENSURING GREEN AND PLAYABLE GOLF COURSES, IRRIGATION SIMPLY MUST BECOME MORE EFFICIENT. Achieving this goal requires more than high-performing golf irrigation products that push the boundaries of innovation. You need a trusted partner, from conception to installation and beyond.

That's why we have redoubled our efforts to deliver best-in-class solutions that meet and exceed golf course irrigation requirements. With premier products like our Pilot Command Center Software and TTS-800 Series Golf Rotors — along with our full golf irrigation product lineup — we have the field-proven tools you need to ensure every course is always ready for play. And it's all backed by comprehensive training and technical support to ensure every product always performs at the highest level.

Course Control: Pilot Command Center Software

With newly enhanced Pilot Command Center Software, you can create hydraulically safe and efficient daily golf course watering plans faster than ever before. Working from one easy-to-navigate screen, you can operate thousands of individually controlled sprinklers and make all watering changes in seconds. **See page 6 for more details.**

Power Play: TTS-800 Series Golf Rotors

Get maximum uniformity and longevity in the field with powerful TTS-800 Series Golf Rotors. They feature high-torque gear drives that are the strongest in the industry and extra-large flange compartments that let you access internal parts quickly and easily. Plus, routine maintenance is a breeze with no-dig Total-Top-Serviceability that provides direct access to all elements from the top. **See page 18 for more details.**

PILOT™ NETWORK

Pilot CCS

Powerful software designed with advanced tools to make irrigation simple and seamless

Pilot IHS

Reliable controllers with modern engineering and next-generation technology

TTS Rotors

Pilot Two-Way Modules with no-dig Total-Top-Serviceability

MAKE LIFE EASIER
WITH A NEW APPROACH TO GOLF IRRIGATION

Pilot CCS
Command Center Software

With next-generation Pilot Command Center Software, you can create hydraulically safe and efficient daily course watering plans faster than ever before. Pilot helps manage thousands of individually controlled sprinklers in seconds. It's the ideal management tool for an Integrated Hub System.

Pilot IHS
Integrated Hub System

Integrated Hub Systems help you save time and money from day one. Compared to a Field Controller System, an Integrated Hub System uses less copper wire and requires fewer splices, valve boxes, and concrete pads. This means lower costs, faster installation, and easier system diagnosis and repair, if needed. You can also easily expand the system if desired.

TTS Rotors
With Pilot Two-Way Modules

Two-Way Module (TWM) technology built into every TTS rotor permits highly efficient control of complex irrigation systems. The rotors are connected to the system via low-voltage, direct-burial communication cable.

ICD-HP PROGRAMMER
Communicate Directly with TWMs

Program and troubleshoot Pilot Two-Way Modules with no digging or wires required. The handy device communicates directly through the plastic without barcodes, saving you time in the field.

PILOT™ COMMAND CENTER SOFTWARE

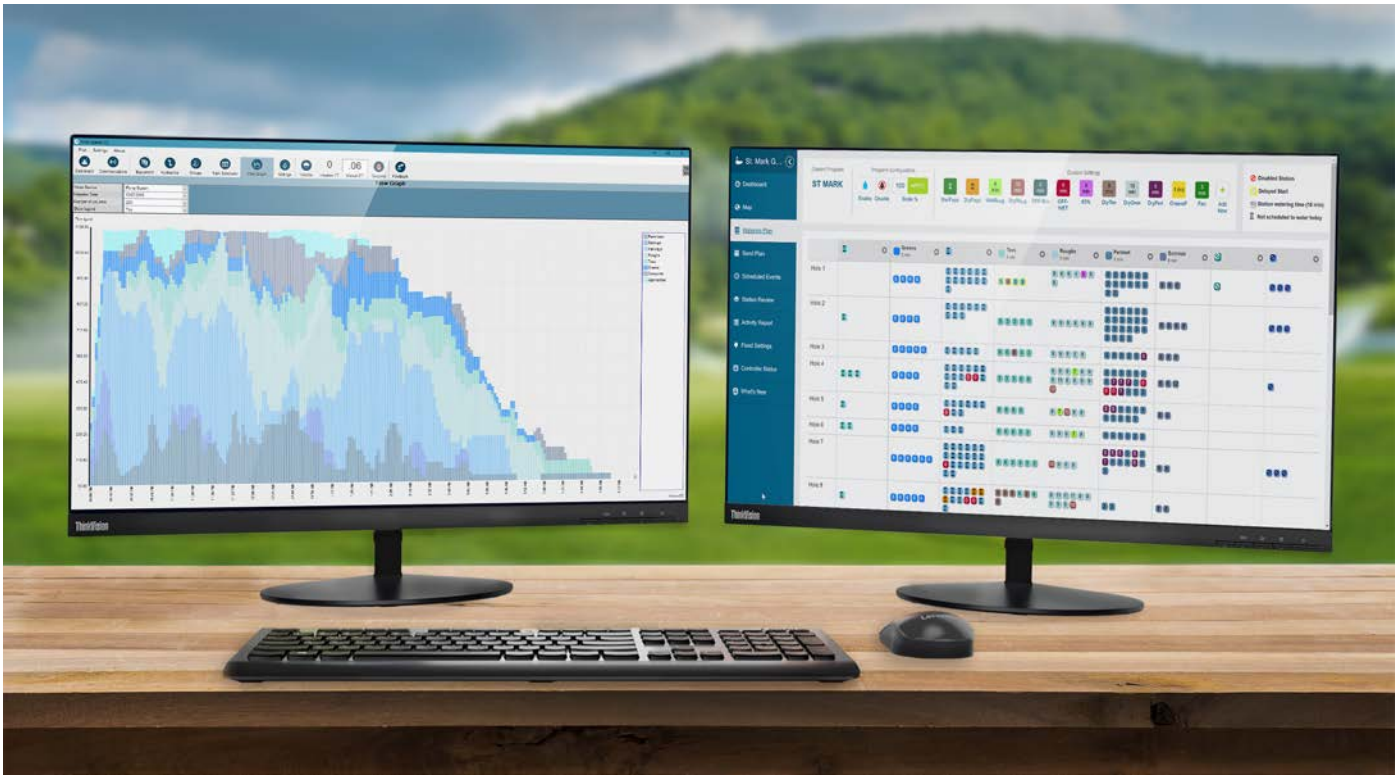
Enjoy simple yet powerful irrigation management and control with revolutionary Pilot CCS.

Pilot Command Center Software (CCS) is easy to use and has all the features you need to reliably and automatically water your course. Run times can be adjusted manually or determined automatically using evapotranspiration (ET). You create watering plans directly in the Command Center — a powerful irrigation planning tool that shows you every sprinkler on the course, organised according to your management style.

PILOT SPECIFICATIONS

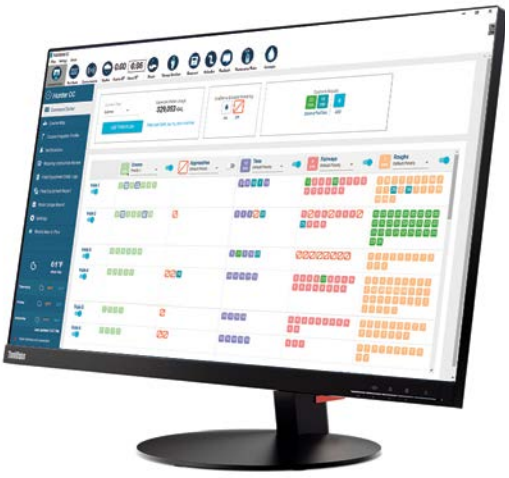
- Operating system: 64-bit Windows®
- Maximum controllers or hubs: about 1,000
- Maximum Two-Way Module stations: about 1 million
- Sprinkler run time options: minutes, millimetres, inches, or ET
- Hydraulic management: fully customisable down to individual stations
- Mapping: interactive and based on scalable vector graphics (SVG)

Pilot Command Center Software



SET SCHEDULES WITH THE COMMAND CENTER

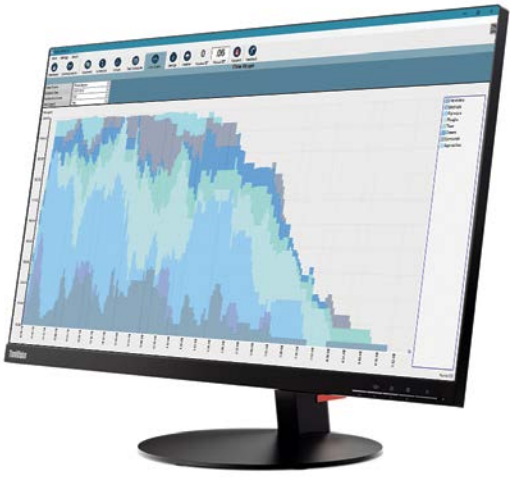
Planning daily watering for your course has never been simpler. The Command Center shows every sprinkler on the course, logically arranged according to your personal management requirements. You can easily make daily adjustments with just a few clicks of the mouse.



Command Center

SPEND LESS TIME RUNNING YOUR PUMP

Pilot CCS uses your electrical and hydraulic data to efficiently balance sprinkler demand while maintaining flow at safe velocities. To protect your pump station and maintain optimal sprinkler uniformity, you can gradually step up irrigation in safe increments.



Flow Optimisation

WORK FASTER WITH A MAPPED COURSE

Although having a map is not required, adding one allows you to run water by simply clicking the station symbols on the map. With this helpful feature, you can also monitor stations as they are running.

Maps

PILOT™ FIELD CONTROLLER SYSTEMS

The sleek, clean design of Pilot Field Controllers makes them easy to install, use, and maintain.

KEY BENEFITS

- Five languages
- Up to 80 station outputs in 10-station increments
- Up to three Hunter golf Valve-in-Head Technology rotors per station output
- Up to 20 simultaneous Hunter golf Valve-in-Head Technology rotors active per controller
- 32 automatic schedules with eight start times per schedule
- Exclusive Safe-Toggle™ Technology for mechanical on-off-auto station switches
- 1 to 31 day skip-day scheduling
- One-touch rain shutdown up to 30 days or indefinitely
- One-touch Safe-Pause™ Technology with 30-minute safety timer
- 1% to 300% run time seasonal adjustment
- Seasonal start time adjustment is used to quickly change all start times plus or minus 30 minutes
- PilotFCP Utility enables remote scheduling from a computer or tablet for basic course irrigation management

Pilot-FC Plastic Pedestal
Height: 100 cm
Width: 60 cm
Depth: 44 cm
Weight: 32 kg

POWER SUPPLY INPUT

Two voltage settings:

- 120 VAC nominal voltage at 60/50 Hz (100 to 132 VAC)
- 230 VAC nominal voltage at 50/60 Hz (200 to 260 VAC)

Current requirement:

- 1 A under load at 110 VAC
- 0.7 A under load at 230 VAC

For additional information, see electrical data on **page 81**.

Pilot-FI Field Interface
One is required with any Pilot Network system. It is used to link the central computer to the field equipment. For indoor locations only.

Height: 30 cm
Width: 30 cm
Depth: 11 cm
Weight: 2 kg

OUTPUT VOLTAGE

- Station: 1 A at 24 VAC
- Hot post: 0.4 A at 24 VAC
- Capacity: Three standard 24 VAC Hunter golf rotors per output; 20 maximum simultaneously running stations

RADIO SYSTEMS

- UHF radio: 450 to 490 MHz; other UHF frequencies available for selected markets

WIRED SYSTEMS

- GCBL: Two twisted pairs of shielded wire, 0.82 mm^2
- GCBLA: Armoured, shielded two twisted pairs, 0.82 mm^2

PILOT-FI – SPECIFICATION BUILDER: ORDER 1 + 2 + 3

1 Model	2 Standard Features	3 Communication Options	
Pilot-FI	Plastic pedestal (grey)	**HWR**	Hardwire communications
		UHF	UHF radio communications (licence required)
		UHFA	UHF radio (licence required, Australia only)

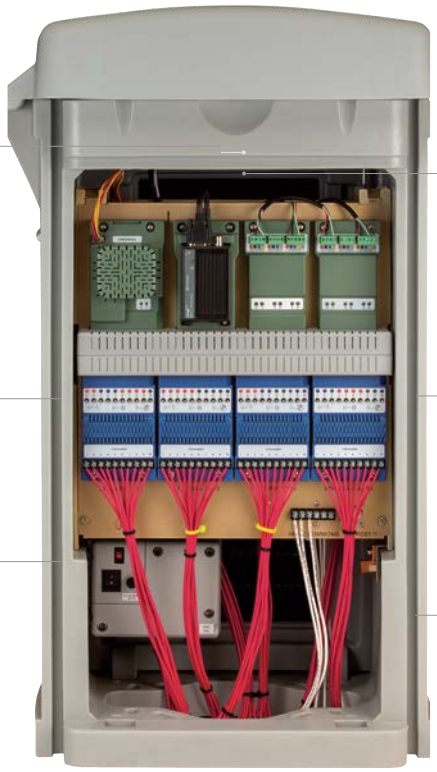
Examples:
Pilot-FI-HWR = Field Interface with hardwire communications
Pilot-FI-UHF = Field Interface with UHF radio communications

THE PILOT FIELD CONTROLLER IS ENGINEERED EXCLUSIVELY FOR GOLF COURSE IRRIGATION MANAGEMENT

Water-Resistant Keypad
Large backlit display with convenient function buttons for the most commonly used features. Built-in system diagnostics make troubleshooting your system a breeze.

Safe-Toggle Station Switches and Diagnostic LED Indicators
Standard for all station outputs, these features provide quick troubleshooting and watering tools.

Conveniently Located Dual-Voltage (120/230 VAC) Junction Box
Features heavy-duty surge protection and even includes a spare fuse.



Easy to Service
The only tool required is a Phillips screwdriver, which is included with every controller.

Modular 10-Station Expansion Boards
Colour-coded modular components have captured screws. This means no more lost screws, which simplifies assembly and troubleshooting.

Spacious Wiring Area
No exposed circuitry or loose wires. All circuit boards are encapsulated in polyurethane to protect them from moisture, insects, and temperature extremes.

PILOT-FC – SPECIFICATION BUILDER: ORDER 1 + 2 + 3

1 Model	2 Standard Features	3 Communication Options	
Pilot-FC20 (20-station)		**S**	Standalone Field Controller with no central communications
Pilot-FC30 (30-station)		**HWR**	Wired communications
Pilot-FC40 (40-station)		**UHF**	UHF radio (licence required)
Pilot-FC50 (50-station)	Plastic pedestal (grey)	**UHFA**	UHF radio (licence required, Australia only)
Pilot-FC60 (60-station)	120/230 VAC, 60/50 Hz dual-voltage transformer		
Pilot-FC70 (70-station)			
Pilot-FC80 (80-station)			

Examples:
Pilot-FC40-S = 40-station, standalone Field Controller with no central communications
Pilot-FC70-HWR = 70-station Field Controller with wired communications

PILOT™ INTEGRATED HUB SYSTEMS

Save money without sacrificing in-field sprinkler control with highly flexible and reliable Pilot Integrated Hub Systems.

Integrated Hub Systems use significantly less wire than conventional systems. This means lower costs, faster installation, and easier system diagnosis and repair if needed. They can be easily expanded — with minimal digging and disruption of turf — by adding more Pilot Two-Way Modules (TWMs) instead of running additional wires.

Pilot Two-Way Modules are available with 1-, 2-, 4-, and 6-station outputs, making it possible to run each head on an entire green with a single device. In all, TWMs let you operate about 1,000 stations up to approximately 2.5 km from a single hub.

Pilot Two-Way Modules include built-in surge suppression, wirelessly programmable station addresses using the ICD-HP Programmer, and two-way communication with confirmation and status indication. Pilot Surge Suppressors are required when the system is installed with integrated TWMs.

The PilotFCP Utility enables remote scheduling from a computer or tablet for basic course irrigation management. It can be directly connected to a Pilot Field Controller, eliminating the need for a Pilot Field Interface and communication module in smaller systems.

TWM Hub

Water-Resistant Keypad
The backlit display and illuminated control panel mean you can easily access the hub, day or night

Diagnostic LED Indicators
For all functions on 250-station output modules

250-Station Output Modules
Enable your Integrated Hub System to expand with your course; start with 250 and grow to 999

Pilot TWMs

1- and 2-station:
Height: 9 cm
Width: 4 cm
Depth: 2.5 cm
Weight: 150 g

4- and 6-station:
Height: 9 cm
Width: 4.5 cm
Depth: 4 cm
Weight: 250 g

The distinct yellow design makes it much easier to find the modules in dark valve boxes or buried in the soil.

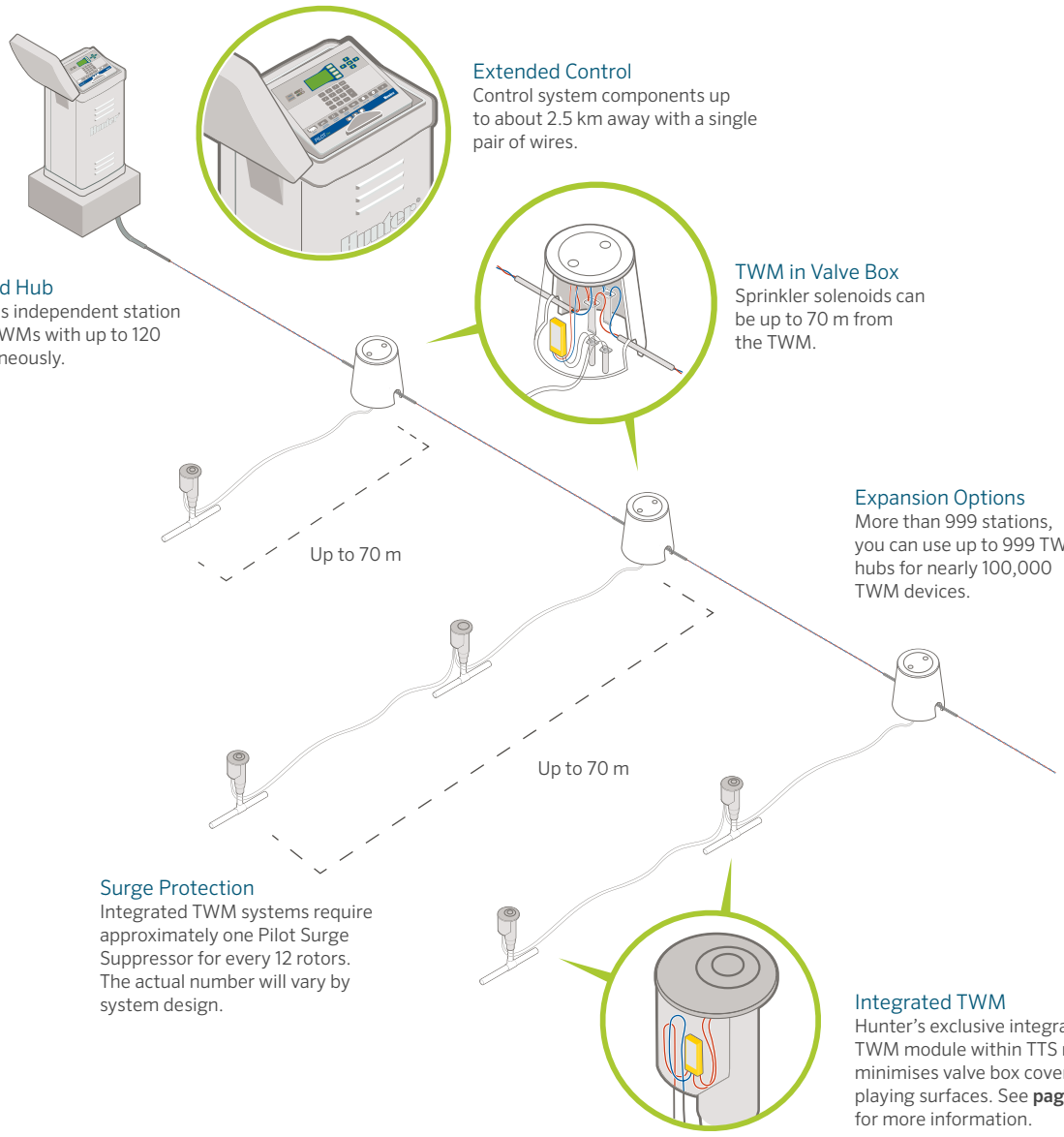
Pilot Surge Suppressor

All integrated TWM rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. Integrated TWM systems require grounding with Pilot Surge Suppressors coupled to an appropriate grounding plate or rod. Hunter recommends a minimum of one Pilot Surge Suppressor for every 12 installed rotors or as per project specification.

PILOT-DH – SPECIFICATION BUILDER: ORDER 1 + 2 + 3

1 Model	2 Standard Features	3 Communication Options	
Pilot-DH250 (250-station)		**S**	Standalone TWM hub with no central communications
Pilot-DH500 (500-station)	Plastic pedestal (grey)	**HWR**	Wired communications
Pilot-DH750 (750-station)	120/230 VAC, 60/50 Hz switching transformer	**UHF**	UHF radio (licence required)
Pilot-DH999 (999-station)		**UHFA**	UHF radio (licence required, Australia only)

Examples:
Pilot-DH250-S = 250-station, standalone TWM hub with no central communications
Pilot-DH999-HWR = 999-station TWM hub with wired communications



TWM – SPECIFICATION BUILDER: ORDER 1

1 Model		2 Standard Features
Pilot-100	1-station TWM	Built-in surge suppressor
Pilot-200	2-station TWM	Waterproof DBRY-6 Splice Connectors included
Pilot-400	4-station TWM	
Pilot-600	6-station TWM	
Pilot-SG	Inline surge suppression (for integrated TWM rotor systems)	

Example:
Pilot-100 = 1-station TWM

Wireless Programming

The ICD-HP Programmer is used to test, troubleshoot, and program integrated TWMs. It allows you to wirelessly link directly to TWMs without removing the TTS cover. You can also use it to update the coding inside the TWM's microprocessor.

See the ICD-HP Programmer on **page 13**.

WEATHER STATION

Achieve and maintain the highest-quality playing surface with consistent, local weather data.

KEY BENEFITS

- Includes built-in 60-day data logger with onboard evapotranspiration (ET) calculation (modified Penman-Monteith equation for turfgrass)
- Wireless package uses 2.4 GHz licence-free technology
  - 2.4 GHz radio systems can reach up to 3 km
  - In rural areas, try the licence-free, 900 MHz radio for links up to 800 m
- Wired systems use Hunter GCBL, direct-bury cable with a range of 1.25 km (dedicated nine-pin serial computer port required)
- Optional Solar Panel Kit provides wireless power
  - Simple installation and versatile mounting with onboard 800 mAh rechargeable gel cell battery with 18 VDC transformer and 7 m power cable
- Weatherproof construction: With UV-stabilised enclosure, weatherproof external connectors, and long-life coated circuit boards
- UL, cUL, and CE certifications

TurfWeather® Station
Height: 61 cm
Width: 40.5 cm
Depth: 38 cm
Weight: 6 kg

COMPLETE PACKAGES INCLUDE HUNTER WEATHER SOFTWARE	
Model	**Description**
TWHW	Wired communications to central computer (GCBL cable required)
TW24	2.4 GHz licence-free radio communication to central computer
TW916	916 MHz licence-free radio communication to central computer
TWSUN	Optional Solar Panel Kit for all TurfWeather models

Turfweather is a trademark of Campbell Scientific Inc.

MAINTENANCE RADIO

Save time and money with seamlessly integrated remote radio control.

KEY BENEFITS

- Hunter's innovative StraightTalk™ Technology enables wireless remote control at ranges up to 3.5 km whether or not the central computer is turned on
- Instant control of stations, blocks, and programs
- Instant audio confirmation of commands
- 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 W, UHF (450 to 490 MHz)*

* Licence required

TRNR Radio
Height: 10.25 cm
Width: 5.25 cm
Depth: 3 cm
Weight: 200 g

ICD-HP PROGRAMMER

Gain wireless, handheld programming and diagnostic capabilities for Pilot Two-Way Modules.

KEY BENEFITS

- Wirelessly program TWM addresses
- Program TWM station numbers in any order or skip stations for future expansion
- Turn stations on and view solenoid status, current in milliamps, and more
- Built-in voltmeter for testing communication path
- Communicates with TWMs directly through plastic case; wireless electromagnetic induction saves waterproof connectors
- Communicates through the top of integrated TWM rotor cases; no cover removal required

ICD-HP Programmer
Height: 21 cm
Width: 9 cm
Depth: 5 cm

Packaged in an outdoor carrying case, this complete kit includes probes, an induction cup, cable, a USB power cable for bench use, and four AA batteries for fieldwork.

ICD-HP PROGRAMMER

ROTOR SOLUTIONS
FOR EVERY GOLF COURSE

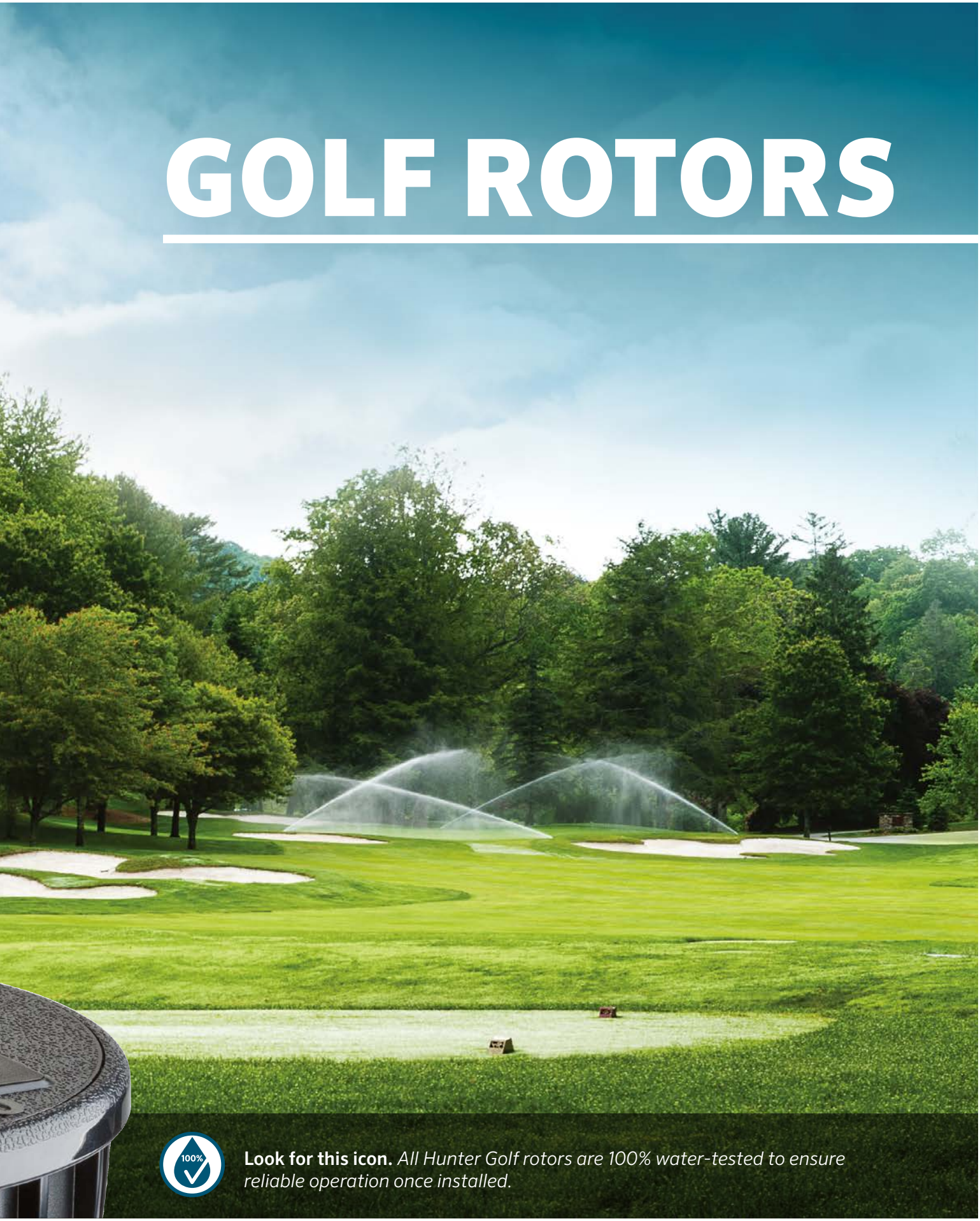
TTS-800 SERIES: THE MOST ADVANCED ROTORS IN THE GOLF INDUSTRY

Over the last four decades, Hunter Industries has built a longstanding reputation for innovation in the golf industry. Some of our revolutionary inventions include the first Windows-based central control system, the first Total-Top-Service (TTS) rotors, the first Decoder-in-Head (DIH) rotors with integrated Pilot Two-Way Modules, and the powerful and water-efficient G-85 Gear Drives.

Our newest products in this groundbreaking lineup are the TTS-800 Series Golf Rotors — the most innovative and technologically advanced rotors in the industry. Combining accuracy and power, they provide maximum uniformity and longevity in the field. They also reduce the challenges of reclaimed water use or poor water quality, thanks to their high-torque gear drives. The fast-access flange compartment is the golf sector's largest, and it can accommodate full-sized DBRY-6 Splice Connectors. Even routine maintenance is a breeze with Total-Top-Serviceability, which allows solenoid and pressure regulator servicing without mainline depressurisation.

Whether your golf rotor needs fall into our budget-conscious B Series, the advanced G-800 Series, or our top-of-the-line TTS-800 Series, Hunter Industries offers a full range of solutions that will exceed your expectations and ensure beautiful, playable courses for years to come.

GOLF ROTORS



Look for this icon. *All Hunter Golf rotors are 100% water-tested to ensure reliable operation once installed.*

UNIFORMITY **YOU CAN COUNT ON**

Playability and water efficiency go hand-in-hand when it comes to golf course management. This means great distribution uniformity and proper irrigation scheduling are crucial to ensuring world-class performance and beautiful results.

Healthy, playable turf starts with top-level irrigation products — like Hunter's ultra-reliable TTS-800 Series Golf Rotors with their superior distribution uniformity. Couple this with the best support team in the business, and Hunter's golf solutions are second to none.

At Hunter Golf, we pride ourselves on providing products that set the standard in efficiency. Each year, we work directly with golf course superintendents worldwide to conduct comprehensive irrigation system audits that maximise water savings, reduce operating costs, and enhance the golf experience for players and course managers alike.

Choose Hunter Golf irrigation products for best-in-class performance and enhanced playability.

BEST-IN-CLASS GEAR DRIVES THAT SET THE STANDARD FOR PLAYABILITY

TTS-800 Series Golf Rotors

GT-880

GT-884

GT-885

LEADING THE WAY WITH POWER, PERFORMANCE, AND VERSATILITY

We've spent decades of research and millions of dollars to develop the best gear drives in the golf industry. When we introduced the G-85 Gear Drive, it quickly earned the respect of golf superintendents for its powerful performance and unmatched reliability. It also became known for its exceptional versatility, which boosted its popularity even more. That's because the adjustable arc drive with triple forward-facing nozzles can be adjusted not only to a non-reversing, full-circle rotation. It also can be configured at the factory as a G-84 Gear Drive in an opposing-nozzle, full-circle configuration.

But we didn't stop there. Next, we added the direct-drive G-80 — a hybrid version that blends the G-85's outstanding platform with the proven G-80 Gearbox to create the best full-circle drive for the golf sector. Today, this revolutionary gear drive technology powers our full range of TTS-800 Series, G-800 Series, and B Series Golf Rotors. No matter which rotor is best for your golf irrigation needs, you can rest assured knowing that the most powerful gear drives in the industry will deliver long-lasting performance in every application.

GREATER FLEXIBILITY WITH DUAL-TRAJECTORY NOZZLES

Standard Nozzles

Low-Angle Nozzles

To ensure precise distribution uniformity, we created a dedicated set of short- and mid-range nozzles to complement our gear drives. When combined with the primary nozzles that the G-80, G-84, and G-85 share, they deliver precise targeting for any application.

Choose from a wide assortment of wind-fighting 22.5° standard trajectory nozzles or 15° low-angle trajectory nozzles. For maximum throw, uniform distribution, and reliable performance under any condition, Hunter gear drives offer everything you need.

TTS-800 SERIES GOLF ROTORS
ADVANCED FEATURES

With Total-Top-Service (TTS) Technology

Access Everything Through the Top

This no-dig solution is appreciated by golfers, management, and especially the superintendent

Large and Flexible Yardage Marker Capabilities

Oversized marker plates with standard black or red, white, blue, and purple options

Largest Flange VIH Compartment in the Industry

Spacious cavity with enough room for full-sized DBRY-6 Splice Connectors

Unitised Inlet Valve Design Includes Serviceable Components

Contamination damage is quickly resolved with replaceable valve seat and seat seal

Easy Access and Servicing of Solenoid and Pressure Regulators

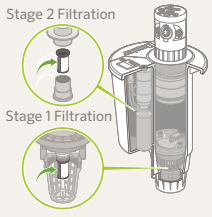
Colour-coded components are removed and replaced without mainline depressurisation

Exclusive Inlet Valve Includes Self-Cleaning Capabilities

Proprietary Filter Sentry™ Mechanism wipes debris from the stainless steel screen with every activation

Single-Point Fast-Access to Flange Compartment

Extra-thick compartment lid is retained with stainless steel ¼-turn fastener



Two-Stage Serviceable Filtration in Valve Circuitry

Oversized stainless steel screens at inlet valve and pilot valve are easily cleaned or replaced

Heavy-Duty Flanged and Ribbed Body Design

Impact-resistant and ultra-durable design includes extra-strength PVC Acme inlet

Three Cable Entry Ports at Base of Flange Compartment

Makes splice and cable connections fast, easy, and organised

Low-Bounce Rubber Cover Kit

Impact-absorbing design reduces ball ricochet around the greens

No-Bounce Turf Cup Kit

Recessed turf cup design is aesthetically clean and eliminates ball ricochet

Access Everything, Including Two-Way Modules, Through the Top

This no-dig solution is appreciated by golfers, management, and especially the superintendent

Largest Flange DIH Compartment in the Industry

Spacious cavity with enough room for Pilot® Two-Way Modules and full-sized DBRY-6 Splice Connectors

Two-Way Modules Are Housed in the DIH Rotor's Spacious Flange Compartment

Improves playability and eliminates unsightly enclosures around the course

Programming Two-Way Modules Wirelessly From the Surface with No Disassembly

Quick and easy to program and perform diagnostics before or after installation with ICD-HP Programmer

TTS-800 SERIES GOLF ROTORS
ADVANCED FEATURES

With Integrated Two-Way Modules

Individual Two-Way Module and Solenoid Components Within Flange Compartment

Isolated/separated configuration minimises yearly maintenance costs

Two-Station DIH Rotor Option

Perfect cost-effective solution for back-to-back heads around greens

State-of-the-Art Surge Suppression

Earth grounding is easily added with the Pilot Surge Suppressor

DIH Rotors Include All the Unique Features and Benefits of TTS Rotors

Makes splice and cable connections fast, easy, and clean

Seamless, No-Splice Connection Between Two-Way Module and Solenoid

Maintains ongoing electrical continuity with no connectors required

Durability, Efficiency, and Reliability from the Makers of the Industry's First TTS and DIH Rotors

Peace of mind from the world's leading producer of gear-driven rotors

TTS-800 SERIES

These rotors have Total-Top-Serviceability, powerful high-torque gear drives, and the largest flange compartment in the industry to accommodate all Pilot® Two-Way Module components.

KEY BENEFITS

- Dedicated, true full-circle model distinguished by a black collar
- Extra-large, fast access flange compartment to accommodate full-size DBRY-6 Splice Connectors and an integrated Pilot Two-Way Module
- Solenoid and pressure regulator are serviceable without system depressurisation
- Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
- High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle
- All TTS-800 Series Golf Rotors advanced features listed on **pages 18 to 21**

GT-880
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

OPERATING SPECIFICATIONS

- Radius: 14.9 to 29.6 m
- Flow: 3.23 to 13.29 m³/hr; 53.8 to 221.4 l/min
- Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 15 to 53
  - 10 standard trajectory (22.5°) nozzles
  - 9 low-angle trajectory (15°) nozzles

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

GT-880 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
GT-880 = Full-circle	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**15 to 53** = Installed G-880 nozzle	**P5** = 50 PSI; 3.4 bar; 340 kPa (nozzles 15 to 18) **P6** = 65 PSI; 4.5 bar; 450 kPa (nozzles 18 to 25) **P8** = 80 PSI; 5.5 bar; 550 kPa (nozzles 25 to 53)

Example:
GT-880-E-48-P8 = GT-880 full-circle electric Valve-in-Head Technology, installed 48 nozzle, 80 PSI; 5.5 bar; 550 kPa regulation

GT-880 NOZZLE PERFORMANCE DATA*

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
● Tan		● Grey	3.4	344	14.9	3.23	53.8	14.5	16.7
			4.1	413	15.5	3.57	59.4	14.8	17.0
	15		4.5	450	15.9	3.73	62.1	14.8	17.1
			4.8	482	16.2	3.86	64.4	14.8	17.1
803611	White	315317	5.5	551	16.8	4.13	68.9	14.7	17.0
● Tan		● Grey	3.4	344	17.1	3.91	65.1	13.4	15.5
			4.1	413	17.7	4.28	71.3	13.7	15.8
	18		4.5	450	18.0	4.48	74.6	13.8	16.0
			4.8	482	18.3	4.54	75.7	13.6	15.7
803611	Orange	315317	5.5	551	18.6	4.82	80.3	13.9	16.1
● Tan		● Grey	3.4	344	17.4	4.18	69.7	13.8	16.0
			4.1	413	18.0	4.61	76.8	14.3	16.5
	20		4.5	450	18.6	4.86	81.0	14.1	16.2
			4.8	482	19.2	4.91	81.8	13.3	15.4
803611	Brown	315317	5.5	551	19.5	5.16	85.9	13.5	15.6
● Tan		● Lt. Blue	3.4	344	19.2	4.91	81.8	13.3	15.4
			4.1	413	19.8	5.22	87.1	13.3	15.4
	23		4.5	450	20.1	5.45	90.8	13.5	15.6
			4.8	482	20.4	5.66	94.3	13.6	15.7
803611	Green	315311	5.5	551	20.7	6.04	100.7	14.1	16.2
● Tan		● Lt. Blue	4.5	450	21.6	6.50	108.3	13.9	16.0
			4.8	482	22.3	6.75	112.5	13.6	15.7
	25		5.5	551	22.6	7.19	119.8	14.1	16.3
			6.2	620	22.9	7.65	127.5	14.6	16.9
803611	Blue	315311	6.9	689	23.5	8.12	135.3	14.7	17.0
● Tan		● Lt. Blue	4.5	450	22.6	7.02	117.0	13.8	15.9
			4.8	482	22.9	7.27	121.1	13.9	16.1
	33		5.5	551	23.5	7.77	129.5	14.1	16.3
			6.2	620	24.1	8.22	137.0	14.2	16.4
803611	Grey	315311	6.9	689	24.7	8.68	144.6	14.2	16.4
● Tan		● Lt. Blue	4.5	450	23.5	7.97	132.9	14.5	16.7
			4.8	482	24.1	8.31	138.5	14.3	16.6
	38		5.5	551	25.0	8.84	147.3	14.1	16.3
			6.2	620	25.6	9.38	156.3	14.3	16.5
803611	Red	315311	6.9	689	26.5	9.90	165.0	14.1	16.3
● Tan		● Blue	-	-	-	-	-	-	-
			4.8	482	25.3	9.38	156.3	14.7	16.9
	43		5.5	551	25.9	9.90	165.0	14.8	17.0
			6.2	620	26.5	10.52	175.3	15.0	17.3
803611	Dk. Brown	315300	6.9	689	27.1	11.09	184.7	15.1	17.4
● Dk. Brown		● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.4	10.65	177.5	14.2	16.3
	48		5.5	551	28.0	11.11	185.1	14.1	16.3
			6.2	620	28.7	11.46	191.0	14.0	16.1
803610	Dk. Green	833500	6.9	689	29.3	12.15	202.5	14.2	16.4
● Dk. Brown		● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.7	11.31	188.5	14.7	17.0
	53		5.5	551	28.3	11.86	197.7	14.8	17.0
			6.2	620	29.0	12.61	210.1	15.0	17.4
803610	Dk. Blue	833500	6.9	689	29.6	13.29	221.4	15.2	17.6

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

GT-880 STANDARD NOZZLES

GT-880 LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.

Easy-Access Servicing

An extra-thick compartment lid is retained with a ¼-turn, stainless steel, single-point fastener.

Spacious Flange Compartment

The largest and deepest compartment in the industry offers plenty of room for full-sized DBRY-6 Splice Connectors.

TTS-800 SERIES

These rotors have Total-Top-Serviceability, powerful high-torque gear drives, and the largest flange compartment in the industry to accommodate all Pilot® Two-Way Module components.

KEY BENEFITS

- Adjustable model distinguished by a grey collar that comes factory set in a true full-circle configuration
- Extra-large, fast access flange compartment to accommodate full-size DBRY-6 Splice Connectors and an integrated Pilot Two-Way Module
- Solenoid and pressure regulator are serviceable without system depressurisation
- Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
- High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle
- All TTS-800 Series Golf Rotors advanced features listed on **pages 18 to 21**

GT-884
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

OPERATING SPECIFICATIONS

- Radius: 14.9 to 29.6 m
- Flow: 3.23 to 13.29 m³/hr; 53.8 to 221.4 l/min
- Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 15 to 53
  - 10 standard trajectory (22.5°) nozzles
  - 9 low-angle trajectory (15°) nozzles

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

GT-884 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
GT-884 = Full-circle (convertible to forward-facing adjustable arc rotor)	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology ** Converts to N.O. hydraulic Valve-in-Head Technology*	**15 to 53** = Installed G-880 nozzle	**P5** = 50 PSI; 3.4 bar; 340 kPa (nozzles 15 to 18) **P6** = 65 PSI; 4.5 bar; 450 kPa (nozzles 18 to 25) **P8** = 80 PSI; 5.5 bar; 550 kPa (nozzles 25 to 53)

Example:
GT-884-E-48-P8 = GT-884 full-circle electric Valve-in-Head Technology, installed 48 nozzle, 80 PSI; 5.5 bar; 550 kPa regulation

GT-884 NOZZLE PERFORMANCE DATA*

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
● Tan		● Grey	3.4	344	14.9	3.23	53.8	14.5	16.7
			4.1	413	15.5	3.57	59.4	14.8	17.0
	15		4.5	450	15.9	3.73	62.1	14.8	17.1
			4.8	482	16.2	3.86	64.4	14.8	17.1
803611	White	315317	5.5	551	16.8	4.13	68.9	14.7	17.0
● Tan		● Grey	3.4	344	17.1	3.91	65.1	13.4	15.5
			4.1	413	17.7	4.28	71.3	13.7	15.8
	18		4.5	450	18.0	4.48	74.6	13.8	16.0
			4.8	482	18.3	4.54	75.7	13.6	15.7
803611	Orange	315317	5.5	551	18.6	4.82	80.3	13.9	16.1
● Tan		● Grey	3.4	344	17.4	4.18	69.7	13.8	16.0
			4.1	413	18.0	4.61	76.8	14.3	16.5
	20		4.5	450	18.6	4.86	81.0	14.1	16.2
			4.8	482	19.2	4.91	81.8	13.3	15.4
803611	Brown	315317	5.5	551	19.5	5.16	85.9	13.5	15.6
● Tan		● Lt. Blue	3.4	344	19.2	4.91	81.8	13.3	15.4
			4.1	413	19.8	5.22	87.1	13.3	15.4
	23		4.5	450	20.1	5.45	90.8	13.5	15.6
			4.8	482	20.4	5.66	94.3	13.6	15.7
803611	Green	315311	5.5	551	20.7	6.04	100.7	14.1	16.2
● Tan		● Lt. Blue	4.5	450	21.6	6.50	108.3	13.9	16.0
			4.8	482	22.3	6.75	112.5	13.6	15.7
	25		5.5	551	22.6	7.19	119.8	14.1	16.3
			6.2	620	22.9	7.65	127.5	14.6	16.9
803611	Blue	315311	6.9	689	23.5	8.12	135.3	14.7	17.0
● Tan		● Lt. Blue	4.5	450	22.6	7.02	117.0	13.8	15.9
			4.8	482	22.9	7.27	121.1	13.9	16.1
	33		5.5	551	23.5	7.77	129.5	14.1	16.3
			6.2	620	24.1	8.22	137.0	14.2	16.4
803611	Grey	315311	6.9	689	24.7	8.68	144.6	14.2	16.4
● Tan		● Lt. Blue	4.5	450	23.5	7.97	132.9	14.5	16.7
			4.8	482	24.1	8.31	138.5	14.3	16.6
	38		5.5	551	25.0	8.84	147.3	14.1	16.3
			6.2	620	25.6	9.38	156.3	14.3	16.5
803611	Red	315311	6.9	689	26.5	9.90	165.0	14.1	16.3
● Tan		● Blue	-	-	-	-	-	-	-
			4.8	482	25.3	9.38	156.3	14.7	16.9
	43		5.5	551	25.9	9.90	165.0	14.8	17.0
			6.2	620	26.5	10.52	175.3	15.0	17.3
803611	Dk. Brown	315300	6.9	689	27.1	11.09	184.7	15.1	17.4
● Dk. Brown		● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.4	10.65	177.5	14.2	16.3
	48		5.5	551	28.0	11.11	185.1	14.1	16.3
			6.2	620	28.7	11.46	191.0	14.0	16.1
803610	Dk. Green	833500	6.9	689	29.3	12.15	202.5	14.2	16.4
● Dk. Brown		● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.7	11.31	188.5	14.7	17.0
	53		5.5	551	28.3	11.86	197.7	14.8	17.0
			6.2	620	29.0	12.61	210.1	15.0	17.4
803610	Dk. Blue	833500	6.9	689	29.6	13.29	221.4	15.2	17.6

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

GT-884 STANDARD NOZZLES

GT-884 LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.

Room to Spare

Adding a Pilot® Two-Way Module does not reduce flange compartment space. The exclusive configuration provides extra room for full-sized DBRY-6 Splice Connectors and multiple cables.

TTS-800 SERIES

These rotors have Total-Top-Serviceability, powerful high-torque gear drives, and the largest flange compartment in the industry to accommodate all Pilot® Two-Way Module components.

KEY BENEFITS

- Adjustable model distinguished by a grey collar that comes factory set in a part-circle configuration (60° to 360°)
- Extra-large, fast access flange compartment to accommodate full-size DBRY-6 Splice Connectors and an integrated Pilot Two-Way Module
- Solenoid and pressure regulator are serviceable without system depressurisation
- Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
- High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle
- All TTS-800 Series Golf Rotors advanced features listed on **pages 18 to 21**

GT-885
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

OPERATING SPECIFICATIONS

- Radius: 11.3 to 28.7 m
- Flow: 2.02 to 13.54 m^3/hr; 33.7 to 225.6 l/min
- Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 10 to 53
  - 12 standard trajectory (22.5°) nozzles
  - 9 low-angle trajectory (15°) nozzles

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

GT-885 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
GT-885 = Full/part-circle, 60° to 360° arc range	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**10 to 53** = Installed G-885 nozzle	**P5** = 50 PSI; 3.4 bar; 340 kPa (nozzles 10 to 18) **P6** = 65 PSI; 4.5 bar; 450 kPa (nozzles 18 to 25) **P8** = 80 PSI; 5.5 bar; 550 kPa (nozzles 25 to 53)

Example:
GT-885-E-48-P8 = GT-885 full/part-circle electric Valve-in-Head Technology, installed 48 nozzle, 80 PSI; 5.5 bar; 550 kPa regulation

GT-885 NOZZLE PERFORMANCE DATA*

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
Orange	10	Dk. Green	3.4	344	11.3	2.02	33.7	15.9	18.4
			4.1	413	11.9	2.23	37.1	15.8	18.2
803603		315312	4.5	450	12.5	2.32	38.6	14.8	17.1
●	Lt. Green	●	-	-	-	-	-	-	-
Orange	13	White	3.4	344	14.3	2.59	43.2	12.6	14.6
			4.1	413	14.6	2.79	46.6	13.1	15.1
803603		315314	4.5	450	14.9	2.93	48.8	13.1	15.2
●	Lt. Blue	●	-	-	-	-	-	-	-
Orange	15	White	3.4	344	15.9	2.93	48.8	11.7	13.5
			4.1	413	15.9	3.29	54.9	13.1	15.1
803603		315314	4.5	450	16.2	3.38	56.4	13.0	15.0
●	White	●	4.8	482	16.2	3.52	58.7	13.5	15.6
			5.5	551	16.5	3.75	62.5	13.8	16.0
Orange	18	Lt. Green	3.4	344	17.4	3.77	62.8	12.5	14.4
			4.1	413	17.7	4.04	67.4	12.9	14.9
803603		315313	4.5	450	18.0	4.23	70.4	13.1	15.1
●	Orange	●	4.8	482	18.3	4.41	73.4	13.2	15.2
			5.5	551	18.6	4.66	77.6	13.5	15.6
Orange	20	Lt. Green	3.4	344	18.0	4.07	67.8	12.6	14.5
			4.1	413	18.6	4.43	73.8	12.8	14.8
803603		315313	4.5	450	18.9	4.50	75.0	12.6	14.5
●	Tan	●	4.8	482	19.2	4.68	78.0	12.7	14.7
			5.5	551	19.5	5.02	83.7	13.2	15.2
Orange	23	Lt. Green	3.4	344	19.8	4.59	76.5	11.7	13.5
			4.1	413	20.1	5.02	83.7	12.4	14.3
803603		315313	4.5	450	20.4	5.43	90.5	13.0	15.0
●	Green	●	4.8	482	20.4	5.50	91.6	13.2	15.2
			5.5	551	21.0	5.88	98.0	13.3	15.4
Red	25	Green	4.5	450	21.6	6.43	107.1	13.7	15.8
			4.8	482	21.9	6.66	110.9	13.8	16.0
803602		315310	5.5	551	22.3	7.16	119.2	14.5	16.7
●	Blue	●	6.2	620	22.6	7.59	126.4	14.9	17.2
			6.9	689	22.9	8.04	134.0	15.4	17.8
Red	33	Green	4.5	450	21.9	6.95	115.8	14.4	16.7
			4.8	482	22.3	7.18	119.6	14.5	16.7
803602		315310	5.5	551	22.9	7.70	128.3	14.7	17.0
●	Grey	●	6.2	620	23.5	8.13	135.5	14.8	17.0
			6.9	689	24.1	8.61	143.5	14.8	17.1
Red	38	Green	4.5	450	23.2	7.93	132.1	14.8	17.1
			4.8	482	23.8	8.22	137.0	14.5	16.8
803602		315310	5.5	551	24.4	8.88	148.0	14.9	17.2
●	Red	●	6.2	620	25.0	9.36	156.0	15.0	17.3
			6.9	689	25.6	9.88	164.7	15.1	17.4
Red	43	Green	-	-	-	-	-	-	-
			4.8	482	24.7	9.36	156.0	15.4	17.7
803602		315310	5.5	551	25.3	9.88	164.7	15.4	17.8
●	Dk. Brown	●	6.2	620	26.2	10.49	174.9	15.3	17.6
			6.9	689	27.1	11.06	184.3	15.0	17.4
Dk. Red	48	Dk. Green	-	-	-	-	-	-	-
			4.8	482	25.3	10.52	175.3	16.4	19.0
803601		315312	5.5	551	25.9	10.99	183.2	16.4	18.9
●	Dk. Green	●	6.2	620	27.1	11.74	195.7	16.0	18.4
			6.9	689	27.7	12.38	206.3	16.1	18.6
Dk. Red	53	Dk. Green	-	-	-	-	-	-	-
			4.8	482	26.5	11.52	191.9	16.4	18.9
803601		315312	5.5	551	27.1	12.06	201.0	16.4	18.9
●	Dk. Blue	●	6.2	620	28.0	12.81	213.5	16.3	18.8
			6.9	689	28.7	13.54	225.6	16.5	19.0

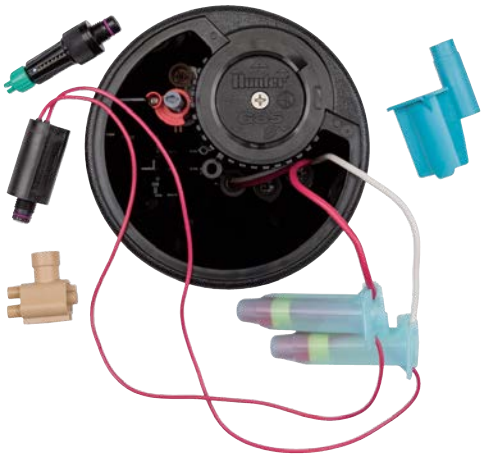
● = Nozzle plug P/N 315300 installed in the back side of the nozzle housing.

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

GT-885 STANDARD NOZZLES

GT-885 LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.



Reduced Downtime

There is no need to depressurise the mainline for solenoid and pressure regulator servicing.

Total-Top-Service Solution

From the originators of TTS Technology, Hunter's no-dig TTS-800 Series Golf Rotors provide total-top-servicing of every serviceable component.

TTS-800 SERIES

These rotors have Total-Top-Serviceability, shorter-radius, lower-flow internals, and the largest flange compartment in the industry to accommodate all Pilot® Two-Way Module components.

KEY BENEFITS

- Adjustable, shorter-radius model (50° to 360°)
- Extra-large, fast access flange compartment to accommodate full-size DBRY-6 Splice Connectors and an integrated Pilot Two-Way Module
- Solenoid and pressure regulator are serviceable without system depressurisation
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle
- All TTS-800 Series Golf Rotors advanced features listed on **pages 18 to 21**

OPERATING SPECIFICATIONS

- Radius: 5.5 to 15.2 m
- Flow: 0.43 to 2.91 m^3/hr; 7.2 to 48.5 l/min
- Pressure range: 2.8 to 4.5 bar; 280 to 450 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 2 to 12

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

GT-835
Pop-up height: 8 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

GT-835 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
GT-835 = Full/part-circle, 50° to 360°	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**6** = Installed G-835 nozzle (includes 8-nozzle rack)	**P5** = 50 PSI; 3.4 bar; 340 kPa (nozzles 18 to 25) **P6** = 65 PSI; 4.5 bar; 450 kPa (nozzles 18 to 25)

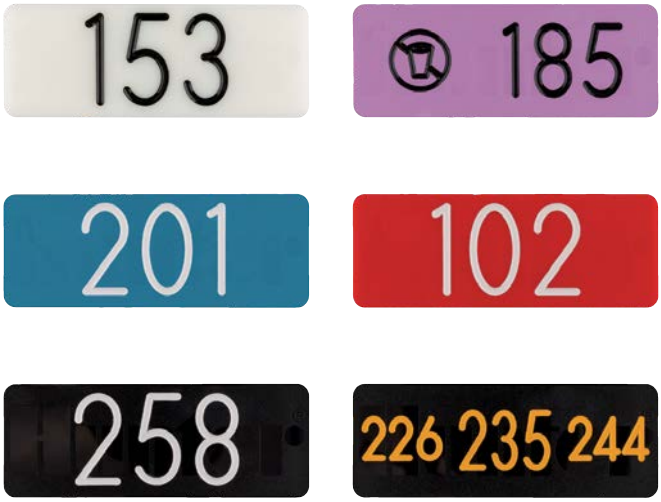
Example:
GT-835-6-P5 = GT-835 full/part-circle electric Valve-in-Head Technology, installed 6 nozzle, 50 PSI; 3.4 bar; 340 kPa regulation

GT-835 NOZZLE PERFORMANCE DATA*

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
2 Yellow	2.8	280	5.5	0.43	7.2	14.3	16.6
	3.4	340	6.1	0.48	7.9	12.8	14.8
	4.1	410	6.7	0.55	9.1	12.1	14.0
	4.5	450	7.0	0.59	9.8	12.0	13.9
3 Yellow	2.8	280	7.0	0.68	11.4	13.9	16.0
	3.4	340	7.6	0.73	21.1	12.5	14.5
	4.1	410	8.2	0.80	13.2	11.7	13.6
	4.5	450	8.5	0.82	13.6	11.2	13.0
4 Yellow	2.8	280	7.6	0.89	14.8	15.3	17.6
	3.4	340	8.5	0.93	15.5	12.8	14.8
	4.1	410	9.1	1.00	16.7	12.0	13.8
	4.5	450	9.4	1.04	17.4	11.7	13.5
5 Yellow	2.8	280	8.8	1.07	17.8	13.7	15.8
	3.4	340	9.8	1.14	18.9	11.9	13.8
	4.1	410	10.1	1.20	20.1	11.9	13.7
	4.5	450	10.7	1.23	20.4	10.8	12.4
6 Yellow	2.8	280	9.8	1.36	22.7	14.3	16.5
	3.4	340	10.7	1.43	23.8	12.6	14.5
	4.1	410	11.3	1.50	25.0	11.8	13.6
	4.5	450	11.9	1.54	25.7	10.9	12.6
8 Yellow	2.8	280	11.0	1.77	29.5	14.7	17.0
	3.4	340	11.9	1.82	30.3	12.9	14.8
	4.1	410	12.8	1.89	31.4	11.5	13.3
	4.5	450	13.1	1.93	32.2	11.2	13.0
10 Yellow	2.8	280	11.9	2.20	36.7	15.6	18.0
	3.4	340	13.1	2.29	38.2	13.4	15.4
	4.1	410	13.7	2.34	39.0	12.4	14.4
	4.5	450	14.3	2.39	39.7	11.6	13.4
12 Yellow	2.8	280	13.4	2.73	45.4	15.2	17.5
	3.4	340	14.3	2.77	46.2	13.5	15.6
	4.1	410	14.6	2.84	47.3	13.3	15.3
	4.5	450	15.2	2.91	48.5	12.5	14.5

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

GT-835 NOZZLES



Optional Yardage Marker Colours

Extra-large, snap-in marker plates are available in standard black as well as optional red, white, and blue to meet every golf course preference. Or choose the purple plate for identification when courses are using reclaimed water.

Low-Bounce Rubber Cover Kit - P/N 987200SP

Reduce the incoming bounce from balls hitting rotors that are surrounding the greens.

No-Bounce Turf Cup Kit - P/N 987100SP

Eliminate errant bounces from balls hitting greens surrounding rotors with this subsurface rotor-mounting solution.

G-800 SERIES

These rotors feature convenient no-dig Total-Top-Serviceability and a powerful, high-torque gear drive.

KEY BENEFITS

- Dedicated, true full-circle model distinguished by a black collar
- Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
- High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle

OPERATING SPECIFICATIONS

- Radius: 14.9 to 29.6 m
- Flow: 3.23 to 13.29 m³/hr; 53.8 to 221.4 l/min
- Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 15 to 53
  - 10 standard trajectory (22.5°) nozzles
  - 9 low-angle trajectory (15°) nozzles

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all “E” specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all “E” specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

G-880C
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-880E
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-880 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
G-880 = Full-circle	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**15 to 53** = Installed G-880 nozzle	**P5** = 50 PSI; 3.4 bar; 340 kPa (nozzles 15 to 18) **P6** = 65 PSI; 4.5 bar; 450 kPa (nozzles 18 to 25) **P8** = 80 PSI; 5.5 bar; 550 kPa (nozzles 25 to 53)

Example:
G-880-E-33-P8 = G-880 full-circle electric Valve-in-Head Technology, installed 33 nozzle, 80 PSI; 5.5 bar; 550 kPa regulation

G-880 NOZZLE PERFORMANCE DATA*

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
● Tan		● Grey	3.4	344	14.9	3.23	53.8	14.5	16.7
			4.1	413	15.5	3.57	59.4	14.8	17.0
	15		4.5	450	15.9	3.73	62.1	14.8	17.1
			4.8	482	16.2	3.86	64.4	14.8	17.1
803611	White	315317	5.5	551	16.8	4.13	68.9	14.7	17.0
● Tan		● Grey	3.4	344	17.1	3.91	65.1	13.4	15.5
			4.1	413	17.7	4.28	71.3	13.7	15.8
	18		4.5	450	18.0	4.48	74.6	13.8	16.0
			4.8	482	18.3	4.54	75.7	13.6	15.7
803611	Orange	315317	5.5	551	18.6	4.82	80.3	13.9	16.1
● Tan		● Grey	3.4	344	17.4	4.18	69.7	13.8	16.0
			4.1	413	18.0	4.61	76.8	14.3	16.5
	20		4.5	450	18.6	4.86	81.0	14.1	16.2
			4.8	482	19.2	4.91	81.8	13.3	15.4
803611	Brown	315317	5.5	551	19.5	5.16	85.9	13.5	15.6
● Tan		● Lt. Blue	3.4	344	19.2	4.91	81.8	13.3	15.4
			4.1	413	19.8	5.22	87.1	13.3	15.4
	23		4.5	450	20.1	5.45	90.8	13.5	15.6
			4.8	482	20.4	5.66	94.3	13.6	15.7
803611	Green	315311	5.5	551	20.7	6.04	100.7	14.1	16.2
● Tan		● Lt. Blue	4.5	450	21.6	6.50	108.3	13.9	16.0
			4.8	482	22.3	6.75	112.5	13.6	15.7
	25		5.5	551	22.6	7.19	119.8	14.1	16.3
			6.2	620	22.9	7.65	127.5	14.6	16.9
803611	Blue	315311	6.9	689	23.5	8.12	135.3	14.7	17.0
● Tan		● Lt. Blue	4.5	450	22.6	7.02	117.0	13.8	15.9
			4.8	482	22.9	7.27	121.1	13.9	16.1
	33		5.5	551	23.5	7.77	129.5	14.1	16.3
			6.2	620	24.1	8.22	137.0	14.2	16.4
803611	Grey	315311	6.9	689	24.7	8.68	144.6	14.2	16.4
● Tan		● Lt. Blue	4.5	450	23.5	7.97	132.9	14.5	16.7
			4.8	482	24.1	8.31	138.5	14.3	16.6
	38		5.5	551	25.0	8.84	147.3	14.1	16.3
			6.2	620	25.6	9.38	156.3	14.3	16.5
803611	Red	315311	6.9	689	26.5	9.90	165.0	14.1	16.3
● Tan		● Blue	-	-	-	-	-	-	-
			4.8	482	25.3	9.38	156.3	14.7	16.9
	43		5.5	551	25.9	9.90	165.0	14.8	17.0
			6.2	620	26.5	10.52	175.3	15.0	17.3
803611	Dk. Brown	315300	6.9	689	27.1	11.09	184.7	15.1	17.4
● Dk. Brown		● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.4	10.65	177.5	14.2	16.3
	48		5.5	551	28.0	11.11	185.1	14.1	16.3
			6.2	620	28.7	11.46	191.0	14.0	16.1
803610	Dk. Green	833500	6.9	689	29.3	12.15	202.5	14.2	16.4
● Dk. Brown		● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.7	11.31	188.5	14.7	17.0
	53		5.5	551	28.3	11.86	197.7	14.8	17.0
			6.2	620	29.0	12.61	210.1	15.0	17.4
803610	Dk. Blue	833500	6.9	689	29.6	13.29	221.4	15.2	17.6

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

G-880 STANDARD NOZZLES

G-880 LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.

TTS Means Convenience and Versatility

With TTS Technology, every serviceable component of the rotor can be easily accessed anytime with no servicing mess.

G-800 SERIES

These rotors feature convenient no-dig Total-Top-Serviceability and a powerful, high-torque gear drive.

KEY BENEFITS

- Adjustable model distinguished by a grey collar that comes factory set in a true full-circle configuration
- Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
- High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle

OPERATING SPECIFICATIONS

- Radius: 14.9 to 29.6 m
- Flow: 3.23 to 13.29 m^3/hr; 53.8 to 221.4 l/min
- Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 15 to 53
  - 10 standard trajectory (22.5°) nozzles
  - 9 low-angle trajectory (15°) nozzles

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

G-884C
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-884E
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-884 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
G-884 = Full-circle (convertible to forward-facing adjustable arc rotor)	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**15 to 53** = Installed G-880 nozzle	**P5** = 50 PSI; 3.4 bar; 340 kPa (nozzles 15 to 18) **P6** = 65 PSI; 4.5 bar; 450 kPa (nozzles 18 to 25) **P8** = 80 PSI; 5.5 bar; 550 kPa (nozzles 25 to 53)

Example:
G-884-E-33-P8 = G-884 full-circle electric Valve-in-Head Technology, installed 33 nozzle, 80 PSI; 5.5 bar; 550 kPa regulation

G-884 NOZZLE PERFORMANCE DATA*

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
Tan	15	Grey	3.4	344	14.9	3.23	53.8	14.5	16.7
			4.1	413	15.5	3.57	59.4	14.8	17.0
			4.5	450	15.9	3.73	62.1	14.8	17.1
			4.8	482	16.2	3.86	64.4	14.8	17.1
803611	White	315317	5.5	551	16.8	4.13	68.9	14.7	17.0
Tan	18	Grey	3.4	344	17.1	3.91	65.1	13.4	15.5
			4.1	413	17.7	4.28	71.3	13.7	15.8
			4.5	450	18.0	4.48	74.6	13.8	16.0
			4.8	482	18.3	4.54	75.7	13.6	15.7
803611	Orange	315317	5.5	551	18.6	4.82	80.3	13.9	16.1
Tan	20	Grey	3.4	344	17.4	4.18	69.7	13.8	16.0
			4.1	413	18.0	4.61	76.8	14.3	16.5
			4.5	450	18.6	4.86	81.0	14.1	16.2
			4.8	482	19.2	4.91	81.8	13.3	15.4
803611	Brown	315317	5.5	551	19.5	5.16	85.9	13.5	15.6
Tan	23	Lt. Blue	3.4	344	19.2	4.91	81.8	13.3	15.4
			4.1	413	19.8	5.22	87.1	13.3	15.4
			4.5	450	20.1	5.45	90.8	13.5	15.6
			4.8	482	20.4	5.66	94.3	13.6	15.7
803611	Green	315311	5.5	551	20.7	6.04	100.7	14.1	16.2
Tan	25	Lt. Blue	4.5	450	21.6	6.50	108.3	13.9	16.0
			4.8	482	22.3	6.75	112.5	13.6	15.7
			5.5	551	22.6	7.19	119.8	14.1	16.3
			6.2	620	22.9	7.65	127.5	14.6	16.9
803611	Blue	315311	6.9	689	23.5	8.12	135.3	14.7	17.0
Tan	33	Lt. Blue	4.5	450	22.6	7.02	117.0	13.8	15.9
			4.8	482	22.9	7.27	121.1	13.9	16.1
			5.5	551	23.5	7.77	129.5	14.1	16.3
			6.2	620	24.1	8.22	137.0	14.2	16.4
803611	Grey	315311	6.9	689	24.7	8.68	144.6	14.2	16.4
Tan	38	Lt. Blue	4.5	450	23.5	7.97	132.9	14.5	16.7
			4.8	482	24.1	8.31	138.5	14.3	16.6
			5.5	551	25.0	8.84	147.3	14.1	16.3
			6.2	620	25.6	9.38	156.3	14.3	16.5
803611	Red	315311	6.9	689	26.5	9.90	165.0	14.1	16.3
Tan	43	Blue	-	-	-	-	-	-	-
			4.8	482	25.3	9.38	156.3	14.7	16.9
			5.5	551	25.9	9.90	165.0	14.8	17.0
			6.2	620	26.5	10.52	175.3	15.0	17.3
803611	Dk. Brown	315300	6.9	689	27.1	11.09	184.7	15.1	17.4
Dk. Brown	48	Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.4	10.65	177.5	14.2	16.3
			5.5	551	28.0	11.11	185.1	14.1	16.3
			6.2	620	28.7	11.46	191.0	14.0	16.1
803610	Dk. Green	833500	6.9	689	29.3	12.15	202.5	14.2	16.4
Dk. Brown	53	Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.7	11.31	188.5	14.7	17.0
			5.5	551	28.3	11.86	197.7	14.8	17.0
			6.2	620	29.0	12.61	210.1	15.0	17.4
803610	Dk. Blue	833500	6.9	689	29.6	13.29	221.4	15.2	17.6

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

G-884 STANDARD NOZZLES

G-884 LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce radius by 15%

G-885 Rotor with Total-Top-Serviceability and Decoder-in-Head Technology

TTS Flange Compartment

All TTS rotors include ample room for solenoid splice connections and a Pilot® Two-Way Module when needed.

G-800 SERIES

These rotors feature convenient no-dig Total-Top-Serviceability and a powerful, high-torque gear drive.

KEY BENEFITS

- Adjustable model distinguished by a grey collar that comes factory set in a part-circle configuration (60° to 360°)
- Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
- High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle

OPERATING SPECIFICATIONS

- Radius: 11.3 to 28.7 m
- Flow: 2.02 to 13.54 m³/hr; 33.7 to 225.6 l/min
- Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 10 to 53
  - 12 standard trajectory (22.5°) nozzles
  - 9 low-angle trajectory (15°) nozzles

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

G-885C
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-885E
Pop-up height: 9.5 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-885 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
G-885 = Full/part-circle 60° to 360° arc range	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**10 to 53** = Installed G-885 nozzle	**P5** = 50 PSI; 3.4 bar; 340 kPa (nozzles 10 to 18) **P6** = 65 PSI; 4.5 bar; 450 kPa (nozzles 18 to 25) **P8** = 80 PSI; 5.5 bar; 550 kPa (nozzles 25 to 53)

Example:
G-885-E-33-P8 = G-885 full/part-circle electric Valve-in-Head Technology, installed 33 nozzle, 80 PSI; 5.5 bar; 550 kPa regulation

G-885 NOZZLE PERFORMANCE DATA*

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
Orange	10	Dk. Green	3.4	344	11.3	2.02	33.7	15.9	18.4
			4.1	413	11.9	2.23	37.1	15.8	18.2
803603		315312	4.5	450	12.5	2.32	38.6	14.8	17.1
			-	-	-	-	-	-	-
●	Lt. Green	●	-	-	-	-	-	-	-
Orange	13	White	3.4	344	14.3	2.59	43.2	12.6	14.6
			4.1	413	14.6	2.79	46.6	13.1	15.1
803603		315314	4.5	450	14.9	2.93	48.8	13.1	15.2
			-	-	-	-	-	-	-
●	Lt. Blue	●	-	-	-	-	-	-	-
Orange	15	White	3.4	344	15.9	2.93	48.8	11.7	13.5
			4.1	413	15.9	3.29	54.9	13.1	15.1
803603		315314	4.5	450	16.2	3.38	56.4	13.0	15.0
			4.8	482	16.2	3.52	58.7	13.5	15.6
●	White	●	5.5	551	16.5	3.75	62.5	13.8	16.0
Orange	18	Lt. Green	3.4	344	17.4	3.77	62.8	12.5	14.4
			4.1	413	17.7	4.04	67.4	12.9	14.9
803603		315313	4.5	450	18.0	4.23	70.4	13.1	15.1
			4.8	482	18.3	4.41	73.4	13.2	15.2
●	Orange	●	5.5	551	18.6	4.66	77.6	13.5	15.6
Orange	20	Lt. Green	3.4	344	18.0	4.07	67.8	12.6	14.5
			4.1	413	18.6	4.43	73.8	12.8	14.8
803603		315313	4.5	450	18.9	4.50	75.0	12.6	14.5
			4.8	482	19.2	4.68	78.0	12.7	14.7
●	Tan	●	5.5	551	19.5	5.02	83.7	13.2	15.2
Orange	23	Lt. Green	3.4	344	19.8	4.59	76.5	11.7	13.5
			4.1	413	20.1	5.02	83.7	12.4	14.3
803603		315313	4.5	450	20.4	5.43	90.5	13.0	15.0
			4.8	482	20.4	5.50	91.6	13.2	15.2
●	Green	●	5.5	551	21.0	5.88	98.0	13.3	15.4
Red	25	Green	4.5	450	21.6	6.43	107.1	13.7	15.8
			4.8	482	21.9	6.66	110.9	13.8	16.0
803602		315310	5.5	551	22.3	7.16	119.2	14.5	16.7
			6.2	620	22.6	7.59	126.4	14.9	17.2
●	Blue	●	6.9	689	22.9	8.04	134.0	15.4	17.8
Red	33	Green	4.5	450	21.9	6.95	115.8	14.4	16.7
			4.8	482	22.3	7.18	119.6	14.5	16.7
803602		315310	5.5	551	22.9	7.70	128.3	14.7	17.0
			6.2	620	23.5	8.13	135.5	14.8	17.0
●	Grey	●	6.9	689	24.1	8.61	143.5	14.8	17.1
Red	38	Green	4.5	450	23.2	7.93	132.1	14.8	17.1
			4.8	482	23.8	8.22	137.0	14.5	16.8
803602		315310	5.5	551	24.4	8.88	148.0	14.9	17.2
			6.2	620	25.0	9.36	156.0	15.0	17.3
●	Red	●	6.9	689	25.6	9.88	164.7	15.1	17.4
Red	43	Green	-	-	-	-	-	-	-
			4.8	482	24.7	9.36	156.0	15.4	17.7
803602		315310	5.5	551	25.3	9.88	164.7	15.4	17.8
			6.2	620	26.2	10.49	174.9	15.3	17.6
●	Dk. Brown	●	6.9	689	27.1	11.06	184.3	15.0	17.4
Dk. Red	48	Dk. Green	-	-	-	-	-	-	-
			4.8	482	25.3	10.52	175.3	16.4	19.0
803601		315312	5.5	551	25.9	10.99	183.2	16.4	18.9
			6.2	620	27.1	11.74	195.7	16.0	18.4
●	Dk. Green	●	6.9	689	27.7	12.38	206.3	16.1	18.6
Dk. Red	53	Dk. Green	-	-	-	-	-	-	-
			4.8	482	26.5	11.52	191.9	16.4	18.9
803601		315312	5.5	551	27.1	12.06	201.0	16.4	18.9
			6.2	620	28.0	12.81	213.5	16.3	18.8
●	Dk. Blue	●	6.9	689	28.7	13.54	225.6	16.5	19.0

● = Nozzle plug P/N 315300 installed in the back side of the nozzle housing.

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

G-885 STANDARD NOZZLES

G-885 LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.

Contour Back-Nozzle Capabilities

Whether you want a little extra green behind your adjustable arc TTS rotors or a more modeled look to your fairway's hard edges, contour back-nozzles are here to make your vision a reality. Choose from four short-range or four mid-range nozzles to suit your needs.

CONTOUR BACK-NOZZLE PERFORMANCE DATA

			4.5 Bar		5.5 Bar	
P/N	Colour	Profile	Metres	L/M	Metres	L/M
803604	Peach		7.6	12.9	8.2	14.8
803603	Orange		8.5	14.4	8.8	15.9
803602	Red		9.4	15.9	10.1	17.0
803601	Dk. Red		10.4	17.4	11.0	18.5
315314	White		11.3	10.6	11.6	11.0
315313	Lt. Green		12.8	16.3	13.4	17.8
315310	Green		14.0	19.7	14.6	21.6
315312	Dk. Green		14.9	29.9	15.5	33.3

GT-885/G-885 CONTOUR BACK-NOZZLES

QuickSet-360 with Ratcheting Riser

Setting up your adjustable arc TTS rotor is fast and simple. The integrated ratcheting mechanism allows a simple twist of the riser to align the right-side reversing point. These rotors are also easily convertible to a true non-reversing full-circle with our exclusive QuickSet-360 feature.

G-800 SERIES

These rotors feature convenient no-dig Total-Top-Serviceability and a shorter-radius, lower-flow internals.

KEY BENEFITS

- Adjustable, shorter-radius model (50° to 360°)
- Proprietary Filter Sentry™ Mechanism cleans the filter with every opening and closing cycle

OPERATING SPECIFICATIONS

- Radius: 5.5 to 15.2 m
- Flow: 0.43 to 2.91 m^3/hr; 7.2 to 48.5 l/min
- Pressure range: 2.8 to 4.5 bar; 280 to 450 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Nozzle range: 2 to 12

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

G-835C
Pop-up height: 8 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-835E
Pop-up height: 8 cm
Overall height: 30 cm
Flange diameter: 18 cm
Female inlet: 1½" (40 mm) Acme

G-835 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Regulation
G-835 = Full/part-circle, 50° to 360°	**C** = Check-O-Matic Technology * **D** = Decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**6** = Installed G-835 nozzle (includes 8-nozzle rack)	**P5** = 50 PSI; 3.4 bar; 340 kPa **P6** = 65 PSI; 4.5 bar; 450 kPa

Example:
G-835E-6-P6= G-835 full/part-circle electric Valve-in-Head Technology, installed 6 nozzle, 50 PSI; 3.4 bar; 340 kPa regulation

G-835 NOZZLE PERFORMANCE DATA*

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
2 Yellow	2.8	280	5.5	0.43	7.2	14.3	16.6
	3.4	340	6.1	0.48	7.9	12.8	14.8
	4.1	410	6.7	0.55	9.1	12.1	14.0
	4.5	450	7.0	0.59	9.8	12.0	13.9
3 Yellow	2.8	280	7.0	0.68	11.4	13.9	16.0
	3.4	340	7.6	0.73	21.1	12.5	14.5
	4.1	410	8.2	0.80	13.2	11.7	13.6
	4.5	450	8.5	0.82	13.6	11.2	13.0
4 Yellow	2.8	280	7.6	0.89	14.8	15.3	17.6
	3.4	340	8.5	0.93	15.5	12.8	14.8
	4.1	410	9.1	1.00	16.7	12.0	13.8
	4.5	450	9.4	1.04	17.4	11.7	13.5
5 Yellow	2.8	280	8.8	1.07	17.8	13.7	15.8
	3.4	340	9.8	1.14	18.9	11.9	13.8
	4.1	410	10.1	1.20	20.1	11.9	13.7
	4.5	450	10.7	1.23	20.4	10.8	12.4
6 Yellow	2.8	280	9.8	1.36	22.7	14.3	16.5
	3.4	340	10.7	1.43	23.8	12.6	14.5
	4.1	410	11.3	1.50	25.0	11.8	13.6
	4.5	450	11.9	1.54	25.7	10.9	12.6
8 Yellow	2.8	280	11.0	1.77	29.5	14.7	17.0
	3.4	340	11.9	1.82	30.3	12.9	14.8
	4.1	410	12.8	1.89	31.4	11.5	13.3
	4.5	450	13.1	1.93	32.2	11.2	13.0
10 Yellow	2.8	280	11.9	2.20	36.7	15.6	18.0
	3.4	340	13.1	2.29	38.2	13.4	15.4
	4.1	410	13.7	2.34	39.0	12.4	14.4
	4.5	450	14.3	2.39	39.7	11.6	13.4
12 Yellow	2.8	280	13.4	2.73	45.4	15.2	17.5
	3.4	340	14.3	2.77	46.2	13.5	15.6
	4.1	410	14.6	2.84	47.3	13.3	15.3
	4.5	450	15.2	2.91	48.5	12.5	14.5

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

G-835 NOZZLES

QuickSet-360

With Hunter's QuickCheck Arc Mechanism and patented QuickSet-360 non-reversing full-circle feature in a variable arc rotor, adjustments are fast, easy, and more flexible than ever before. Now available on all TTS-800 Series, G-800 Series, and B Series adjustable arc rotors.

B SERIES

These highly efficient block rotors have a powerful gear drive backed by the reliability synonymous with the Hunter name.

KEY BENEFITS

- Dedicated, true full-circle model distinguished by a black collar
- Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
- High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration

OPERATING SPECIFICATIONS

- G-80-B
  - Radius: 14.9 to 29.6 m
  - Flow: 3.23 to 13.29 m³/hr; 53.8 to 221.4 l/min
  - Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- All B Series Golf Rotors are pressure-rated at 10 bar; 1,000 kPa
- Check height up to 2 m in elevation change
- Nozzle range: 15 to 53
  - 10 standard trajectory (22.5°) nozzles
  - 9 low-angle trajectory (15°) nozzles

G-80-B
Pop-up height: 9.5 cm
Overall height: 24.5 cm
Flange diameter: 13.7 cm
Female inlet: 1¼" (32 mm) Acme

G-80-B – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Options*
G-80 = Full-circle	**B** = Block rotor with check valve	**15 to 53** = Installed G80 nozzle* **SSU = 18, 25, or 48*	**S** = SSU* **Standard stocking unit*

Example:
G-80-B-25-S = G-80 full-circle block rotor, installed 25 nozzle, standard stocking unit model

G-80-B NOZZLE PERFORMANCE DATA

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
● Tan	◯	● Grey	3.4	344	14.9	3.23	53.8	14.5	16.7
			4.1	413	15.5	3.57	59.4	14.8	17.0
	15		4.5	450	15.9	3.73	62.1	14.8	17.1
			4.8	482	16.2	3.86	64.4	14.8	17.1
803611	White	315317	5.5	551	16.8	4.13	68.9	14.7	17.0
● Tan	◯	● Grey	3.4	344	17.1	3.91	65.1	13.4	15.5
			4.1	413	17.7	4.28	71.3	13.7	15.8
	18		4.5	450	18.0	4.48	74.6	13.8	16.0
			4.8	482	18.3	4.54	75.7	13.6	15.7
803611	Orange	315317	5.5	551	18.6	4.82	80.3	13.9	16.1
● Tan	◯	● Grey	3.4	344	17.4	4.18	69.7	13.8	16.0
			4.1	413	18.0	4.61	76.8	14.3	16.5
	20		4.5	450	18.6	4.86	81.0	14.1	16.2
			4.8	482	19.2	4.91	81.8	13.3	15.4
803611	Brown	315317	5.5	551	19.5	5.16	85.9	13.5	15.6
● Tan	◯	● Lt. Blue	3.4	344	19.2	4.91	81.8	13.3	15.4
			4.1	413	19.8	5.22	87.1	13.3	15.4
	23		4.5	450	20.1	5.45	90.8	13.5	15.6
			4.8	482	20.4	5.66	94.3	13.6	15.7
803611	Green	315311	5.5	551	20.7	6.04	100.7	14.1	16.2
● Tan	◯	● Lt. Blue	4.5	450	21.6	6.50	108.3	13.9	16.0
			4.8	482	22.3	6.75	112.5	13.6	15.7
	25		5.5	551	22.6	7.19	119.8	14.1	16.3
			6.2	620	22.9	7.65	127.5	14.6	16.9
803611	Blue	315311	6.9	689	23.5	8.12	135.3	14.7	17.0
● Tan	◯	● Lt. Blue	4.5	450	22.6	7.02	117.0	13.8	15.9
			4.8	482	22.9	7.27	121.1	13.9	16.1
	33		5.5	551	23.5	7.77	129.5	14.1	16.3
			6.2	620	24.1	8.22	137.0	14.2	16.4
803611	Grey	315311	6.9	689	24.7	8.68	144.6	14.2	16.4
● Tan	◯	● Lt. Blue	4.5	450	23.5	7.97	132.9	14.5	16.7
			4.8	482	24.1	8.31	138.5	14.3	16.6
	38		5.5	551	25.0	8.84	147.3	14.1	16.3
			6.2	620	25.6	9.38	156.3	14.3	16.5
803611	Red	315311	6.9	689	26.5	9.90	165.0	14.1	16.3
● Tan	◯	● Blue	-	-	-	-	-	-	-
			4.8	482	25.3	9.38	156.3	14.7	16.9
	43		5.5	551	25.9	9.90	165.0	14.8	17.0
			6.2	620	26.5	10.52	175.3	15.0	17.3
803611	Dk. Brown	315300	6.9	689	27.1	11.09	184.7	15.1	17.4
● Dk. Brown	◯	● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.4	10.65	177.5	14.2	16.3
	48		5.5	551	28.0	11.11	185.1	14.1	16.3
			6.2	620	28.7	11.46	191.0	14.0	16.1
803610	Dk. Green	833500	6.9	689	29.3	12.15	202.5	14.2	16.4
● Dk. Brown	◯	● Dk. Blue	-	-	-	-	-	-	-
			4.8	482	27.7	11.31	188.5	14.7	17.0
	53		5.5	551	28.3	11.86	197.7	14.8	17.0
			6.2	620	29.0	12.61	210.1	15.0	17.4
803610	Dk. Blue	833500	6.9	689	29.6	13.29	221.4	15.2	17.6

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral.

G-80-B NOZZLES

LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.

B SERIES

These highly efficient block rotors have a powerful gear drive backed by the reliability synonymous with the Hunter name.

KEY BENEFITS

- G-84-B
  - Adjustable model distinguished by a grey collar that comes factory set in a true full-circle configuration
  - Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
  - High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration
- G-85-B
  - Adjustable model distinguished by a grey collar that comes factory set in a part-circle configuration (60° to 360°)
  - Exclusive PressurePort™ Technology optimises incoming pressure at each nozzle to increase consistency and maximise distribution uniformity
  - High-torque gear drive is the strongest in the industry to mitigate the challenges of debris infiltration

G-84-B
Pop-up height: 9.5 cm
Overall height: 24.5 cm
Flange diameter: 13.7 cm
Female inlet: 1¼" (30 mm) Acme

OPERATING SPECIFICATIONS

- G-84-B
  - Radius: 14.9 to 29.6 m
  - Flow: 3.23 to 13.29 m³/hr; 53.8 to 221.4 l/min
  - Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
  - Check height up to 2 m in elevation change
  - Nozzle range: 15 to 53
    - 10 standard trajectory (22.5°) nozzles
    - 9 low-angle trajectory (15°) nozzles
- G-85-B
  - Radius: 11.3 to 28.7 m
  - Flow: 2.02 to 13.54 m³/hr; 33.7 to 225.6 l/min
  - Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
  - Check height up to 2 m in elevation change
  - Nozzle range: 10 to 53
    - 12 standard trajectory (22.5°) nozzles
    - 9 low-angle trajectory (15°) nozzles
- All B Series Golf Rotors are pressure-rated at 10 bar; 1,000 kPa

G-85-B
Pop-up height: 9.5 cm
Overall height: 24.5 cm
Flange diameter: 13.7 cm
Female inlet: 1¼" (30 mm) Acme

G-84-B & G-85-B – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Options*
G-84 = Full-circle	**B** = Block rotor with check valve	**15 to 53** = Installed G84 nozzle* **SSU = 18, 25, or 48*	**S** = SSU* **Standard stocking unit*
G-85 = Full/part-circle, 60° to 360°	**B** = Block rotor with check valve	**10 to 53** = Installed G85 nozzle** ***SSU = 18, 25, or 48*	**S** = SSU* **Standard stocking unit*

Example:
G-85-B-25-S = G-85 part-circle block rotor, installed 25 nozzle, standard stocking unit model

G-84-B NOZZLE PERFORMANCE DATA*

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
● Tan 803611	15	● Grey 315317	3.4	344	14.9	3.23	53.8	14.5	16.7
	White		4.1	413	15.5	3.57	59.4	14.8	17.0
			4.5	450	15.9	3.73	62.1	14.8	17.1
			4.8	482	16.2	3.86	64.4	14.8	17.1
			5.5	551	16.8	4.13	68.9	14.7	17.0
● Tan 803611	18	● Grey 315317	3.4	344	17.1	3.91	65.1	13.4	15.5
	Orange		4.1	413	17.7	4.28	71.3	13.7	15.8
			4.5	450	18.0	4.48	74.6	13.8	16.0
			4.8	482	18.3	4.54	75.7	13.6	15.7
			5.5	551	18.6	4.82	80.3	13.9	16.1
● Tan 803611	20	● Grey 315317	3.4	344	17.4	4.18	69.7	13.8	16.0
	Brown		4.1	413	18.0	4.61	76.8	14.3	16.5
			4.5	450	18.6	4.86	81.0	14.1	16.2
			4.8	482	19.2	4.91	81.8	13.3	15.4
			5.5	551	19.5	5.16	85.9	13.5	15.6
● Tan 803611	23	● Lt. Blue 315311	3.4	344	19.2	4.91	81.8	13.3	15.4
	Green		4.1	413	19.8	5.22	87.1	13.3	15.4
			4.5	450	20.1	5.45	90.8	13.5	15.6
			4.8	482	20.4	5.66	94.3	13.6	15.7
			5.5	551	20.7	6.04	100.7	14.1	16.2
● Tan 803611	25	● Lt. Blue 315311	4.5	450	21.6	6.50	108.3	13.9	16.0
	Blue		4.8	482	22.3	6.75	112.5	13.6	15.7
			5.5	551	22.6	7.19	119.8	14.1	16.3
			6.2	620	22.9	7.65	127.5	14.6	16.9
			6.9	689	23.5	8.12	135.3	14.7	17.0
● Tan 803611	33	● Lt. Blue 315311	4.5	450	22.6	7.02	117.0	13.8	15.9
	Grey		4.8	482	22.9	7.27	121.1	13.9	16.1
			5.5	551	23.5	7.77	129.5	14.1	16.3
			6.2	620	24.1	8.22	137.0	14.2	16.4
			6.9	689	24.7	8.68	144.6	14.2	16.4
● Tan 803611	38	● Lt. Blue 315311	4.5	450	23.5	7.97	132.9	14.5	16.7
	Red		4.8	482	24.1	8.31	138.5	14.3	16.6
			5.5	551	25.0	8.84	147.3	14.1	16.3
			6.2	620	25.6	9.38	156.3	14.3	16.5
			6.9	689	26.5	9.90	165.0	14.1	16.3
● Tan 803611	43	● Blue 315300	-	-	-	-	-	-	-
	Dk. Brown		4.8	482	25.3	9.38	156.3	14.7	16.9
			5.5	551	25.9	9.90	165.0	14.8	17.0
			6.2	620	26.5	10.52	175.3	15.0	17.3
			6.9	689	27.1	11.09	184.7	15.1	17.4
● Dk. Brown 803610	48	● Dk. Blue 833500	-	-	-	-	-	-	-
	Dk. Green		4.8	482	27.4	10.65	177.5	14.2	16.3
			5.5	551	28.0	11.11	185.1	14.1	16.3
			6.2	620	28.7	11.46	191.0	14.0	16.1
			6.9	689	29.3	12.15	202.5	14.2	16.4
● Dk. Brown 803610	53	● Dk. Blue 833500	-	-	-	-	-	-	-
	Dk. Blue		4.8	482	27.7	11.31	188.5	14.7	17.0
			5.5	551	28.3	11.86	197.7	14.8	17.0
			6.2	620	29.0	12.61	210.1	15.0	17.4
			6.9	689	29.6	13.29	221.4	15.2	17.6

G-85-B NOZZLE PERFORMANCE DATA

Nozzle Set			Pressure		Radius	Flow		Precip mm/hr	
			bar	kPa	m	m³/hr	l/min	■	▲
Orange 803603	10	Dk. Green 315312	3.4	344	11.3	2.02	33.7	15.9	18.4
			4.1	413	11.9	2.23	37.1	15.8	18.2
			4.5	450	12.5	2.32	38.6	14.8	17.1
			-	-	-	-	-	-	-
● Lt. Green		●	-	-	-	-	-	-	-
Orange 803603	13	White 315314	3.4	344	14.3	2.59	43.2	12.6	14.6
			4.1	413	14.6	2.79	46.6	13.1	15.1
			4.5	450	14.9	2.93	48.8	13.1	15.2
			-	-	-	-	-	-	-
● Lt. Blue		●	-	-	-	-	-	-	-
Orange 803603	15	White 315314	3.4	344	15.9	2.93	48.8	11.7	13.5
			4.1	413	15.9	3.29	54.9	13.1	15.1
			4.5	450	16.2	3.38	56.4	13.0	15.0
			4.8	482	16.2	3.52	58.7	13.5	15.6
● White		●	5.5	551	16.5	3.75	62.5	13.8	16.0
Orange 803603	18	Lt. Green 315313	3.4	344	17.4	3.77	62.8	12.5	14.4
			4.1	413	17.7	4.04	67.4	12.9	14.9
			4.5	450	18.0	4.23	70.4	13.1	15.1
			4.8	482	18.3	4.41	73.4	13.2	15.2
● Orange		●	5.5	551	18.6	4.66	77.6	13.5	15.6
Orange 803603	20	Lt. Green 315313	3.4	344	18.0	4.07	67.8	12.6	14.5
			4.1	413	18.6	4.43	73.8	12.8	14.8
			4.5	450	18.9	4.50	75.0	12.6	14.5
			4.8	482	19.2	4.68	78.0	12.7	14.7
● Tan		●	5.5	551	19.5	5.02	83.7	13.2	15.2
Orange 803603	23	Lt. Green 315313	3.4	344	19.8	4.59	76.5	11.7	13.5
			4.1	413	20.1	5.02	83.7	12.4	14.3
			4.5	450	20.4	5.43	90.5	13.0	15.0
			4.8	482	20.4	5.50	91.6	13.2	15.2
● Green		●	5.5	551	21.0	5.88	98.0	13.3	15.4
Red 803602	25	Green 315310	4.5	450	21.6	6.43	107.1	13.7	15.8
			4.8	482	21.9	6.66	110.9	13.8	16.0
			5.5	551	22.3	7.16	119.2	14.5	16.7
			6.2	620	22.6	7.59	126.4	14.9	17.2
● Blue		●	6.9	689	22.9	8.04	134.0	15.4	17.8
Red 803602	33	Green 315310	4.5	450	21.9	6.95	115.8	14.4	16.7
			4.8	482	22.3	7.18	119.6	14.5	16.7
			5.5	551	22.9	7.70	128.3	14.7	17.0
			6.2	620	23.5	8.13	135.5	14.8	17.0
● Grey		●	6.9	689	24.1	8.61	143.5	14.8	17.1
Red 803602	38	Green 315310	4.5	450	23.2	7.93	132.1	14.8	17.1
			4.8	482	23.8	8.22	137.0	14.5	16.8
			5.5	551	24.4	8.88	148.0	14.9	17.2
			6.2	620	25.0	9.36	156.0	15.0	17.3
● Red		●	6.9	689	25.6	9.88	164.7	15.1	17.4
Red 803602	43	Green 315310	-	-	-	-	-	-	-
			4.8	482	24.7	9.36	156.0	15.4	17.7
			5.5	551	25.3	9.88	164.7	15.4	17.8
			6.2	620	26.2	10.49	174.9	15.3	17.6
● Dk. Brown		●	6.9	689	27.1	11.06	184.3	15.0	17.4
Dk. Red 803601	48	Dk. Green 315312	-	-	-	-	-	-	-
			4.8	482	25.3	10.52	175.3	16.4	19.0
			5.5	551	25.9	10.99	183.2	16.4	18.9
			6.2	620	27.1	11.74	195.7	16.0	18.4
● Dk. Green		●	6.9	689	27.7	12.38	206.3	16.1	18.6
Dk. Red 803601	53	Dk. Green 315312	-	-	-	-	-	-	-
			4.8	482	26.5	11.52	191.9	16.4	18.9
			5.5	551	27.1	12.06	201.0	16.4	18.9
			6.2	620	28.0	12.81	213.5	16.3	18.8
● Dk. Blue		●	6.9	689	28.7	13.54	225.6	16.5	19.0

G-84-B NOZZLES

G-85-B NOZZLES

LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.

● = Nozzle plug P/N 315300 installed in the back side of the nozzle housing.

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral.

B SERIES

These cost-effective block rotors have a powerful gear drive backed by the reliability synonymous with the Hunter name.

KEY BENEFITS

- G-70-B is a dedicated, true full-circle model
- G-75-B is an adjustable part-circle model (50° to 360°)

OPERATING SPECIFICATIONS

- G-70-B
  - Radius: 16.2 to 22.9 m
  - Discharge rate: 2.95 to 7.66 m^3/hr; 49.2 to 127.6 l/min
  - Pressure range: 3.4 to 6.9 bar; 340 to 690 kPa
- G-75-B
  - Radius: 14.3 to 21.6 m
  - Discharge rate: 1.75 to 7.34 m^3/hr; 29.1 to 122.3 l/m
  - Pressure range: 2.8 to 6.9 bar; 280 to 690 kPa
- All B Series Golf Rotors are pressure-rated at 10 bar; 1,000 kPa
- Check height up to 2 m in elevation change
- Nozzle range: 8 to 28
  - G-70-B has 6 standard trajectory (25°) nozzles
  - G-75-B has 9 standard trajectory (25°) nozzles

G-70-B
Pop-up height: 8 cm
Overall height: 23 cm
Flange diameter: 12 cm
Female inlet: 1¼" (30 mm) Acme

G-75-B
Pop-up height: 8 cm
Overall height: 23 cm
Flange diameter: 12 cm
Female inlet: 1¼" (30 mm) Acme

G-70-B & G-75-B - SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Options
G-70 = Full-circle	**B** = Block rotor with check valve	**25** = Installed G70 nozzle * ** Available in SSU model only* *SSU = 25* *(includes nozzle pack)*	**S** = SSU * ** Standard stocking unit*
G-75 = Full/part-circle, 50° to 360° arc range	**B** = Block rotor with check valve	**25** = Installed G75 nozzle ** *** Available in SSU model only* *SSU = 25* *(includes nozzle pack)*	**S** = SSU * ** Standard stocking unit*

Example:
G-70-B-25-S = G-70 full-circle block rotor, installed 25 nozzle with nozzle pack, standard stocking unit model

G-70-B NOZZLE PERFORMANCE DATA*

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
15 ● Grey	3.4	340	16.2	2.95	49.2	11.3	13.1
	4.1	410	16.5	3.20	53.4	11.8	13.7
	4.5	450	16.8	3.36	56.0	12.0	13.8
	4.8	480	17.1	3.52	58.7	12.1	14.0
	5.5	550	17.7	3.70	61.7	11.8	13.7
18 ● Red	3.4	340	17.7	3.23	53.8	10.3	11.9
	4.1	410	18.0	3.61	60.2	11.2	12.9
	4.5	450	18.3	3.70	61.7	11.1	12.8
	4.8	480	18.3	3.84	64.0	11.5	13.3
	5.5	550	18.6	4.04	67.4	11.7	13.5
20 ● Dk. Brown	3.4	340	18.6	4.27	71.2	12.4	14.3
	4.1	410	18.9	4.45	74.2	12.5	14.4
	4.5	450	19.2	4.66	77.6	12.6	14.6
	4.8	480	19.5	5.00	83.3	13.1	15.2
	5.5	550	19.5	5.32	88.6	14.0	16.1
23 ● Dk. Green	3.4	340	19.2	4.57	76.1	12.4	14.3
	4.1	410	19.8	4.77	79.5	12.2	14.0
	4.5	450	19.8	4.97	82.9	12.7	14.6
	4.8	480	20.1	5.32	88.6	13.1	15.2
	5.5	550	20.4	5.66	94.3	13.6	15.7
25 ● Dk. Blue	3.4	340	19.8	4.95	82.5	12.6	14.6
	4.1	410	20.4	5.11	85.2	12.3	14.1
	4.5	450	20.4	5.36	89.3	12.9	14.8
	4.8	480	21.0	5.75	95.8	13.0	15.0
	5.5	550	21.6	6.11	101.8	13.0	15.1
28 ● Black	4.8	480	21.6	6.38	106.4	13.6	15.7
	5.5	550	21.6	6.79	113.2	14.5	16.7
	6.2	620	22.3	7.22	120.4	14.6	16.8
	6.9	690	22.9	7.66	127.6	14.6	16.9

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

G-75-B NOZZLE PERFORMANCE DATA*

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
8 ● Lt. Brown	2.8	280	14.3	1.75	29.1	8.5	9.8
	3.4	340	14.9	1.89	31.4	8.5	9.8
	4.1	410	15.2	2.09	34.8	9.0	10.4
	4.5	450	15.2	2.16	36.0	9.3	10.7
	4.8	480	15.5	2.25	37.5	9.3	10.7
10 ● Lt. Green	3.4	340	16.2	2.48	41.3	9.5	11.0
	4.1	410	16.5	2.73	45.4	10.1	11.6
	4.5	450	16.5	2.84	47.3	10.5	12.1
	4.8	480	16.8	2.98	49.6	10.6	12.2
	5.5	550	17.1	3.25	54.1	11.1	12.9
13 ● Lt. Blue	3.4	340	16.8	2.54	42.4	9.1	10.5
	4.1	410	17.1	2.79	46.6	9.6	11.1
	4.5	450	17.1	2.91	48.5	10.0	11.5
	4.8	480	17.4	3.02	50.3	10.0	11.6
	5.5	550	17.4	3.25	54.1	10.8	12.4
15 ● Grey	3.4	340	17.4	3.04	50.7	10.1	11.6
	4.1	410	17.7	3.25	54.1	10.4	12.0
	4.5	450	18.0	3.36	56.0	10.4	12.0
	4.8	480	18.0	3.48	57.9	10.7	12.4
	5.5	550	18.3	3.73	62.1	11.2	12.9
18 ● Red	3.4	340	18.3	3.29	54.9	9.8	11.4
	4.1	410	18.6	3.57	59.4	10.3	11.9
	4.5	450	18.6	3.70	61.7	10.7	12.4
	4.8	480	18.9	3.84	64.0	10.7	12.4
	5.5	550	19.2	4.13	68.9	11.2	12.9
20 ● Dk. Brown	4.1	410	18.9	4.04	67.4	11.3	13.1
	4.5	450	18.9	4.13	68.9	11.6	13.4
	4.8	480	19.2	4.36	72.7	11.8	13.7
	5.5	550	19.5	4.66	77.6	12.2	14.1
	6.2	620	19.8	4.95	82.5	12.6	14.6
23 ● Dk. Green	4.1	410	19.5	4.97	82.9	13.1	15.1
	4.5	450	19.8	4.86	81.0	12.4	14.3
	4.8	480	19.8	5.36	89.3	13.7	15.8
	5.5	550	20.1	5.82	96.9	14.4	16.6
	6.2	620	20.4	6.13	102.2	14.7	17.0
25 ● Dk. Blue	4.1	410	19.8	5.34	89.0	13.6	15.7
	4.5	450	19.8	5.63	93.9	14.4	16.6
	4.8	480	20.4	5.82	96.9	13.9	16.1
	5.5	550	21.0	6.20	103.3	14.0	16.2
	6.2	620	21.6	6.59	109.8	14.1	16.2
28 ● Black	4.8	480	20.1	6.11	101.8	15.1	17.4
	5.5	550	20.7	6.56	109.4	15.3	17.6
	6.2	620	21.3	6.95	115.8	15.3	17.6
	6.9	690	21.6	7.34	122.3	15.7	18.1

G-70-B & G-75-B NOZZLES

G-70-B

G-75-B

B SERIES

These cost-effective block rotors have shorter-radius, lower-flow nozzles for use in smaller areas.

KEY BENEFITS

- Adjustable, shorter-radius model (50° to 360°)

OPERATING SPECIFICATIONS

- Radius: 5.5 to 15.2 m
- Flow: 0.43 to 2.91 m^3/hr; 7.2 to 48.5 l/min
- Pressure range: 2.8 to 4.5 bar; 280 to 450 kPa
- All B Series Golf Rotors are pressure-rated at 10 bar; 1,000 kPa
- Check height up to 2 m in elevation change
- Nozzle range: 2 to 12

G-35-B
Pop-up height: 8 cm
Overall height: 23 cm
Flange diameter: 12 cm
Female inlet: 1¼" (30 mm) Acme

G-35-B – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Valve Options	3 Nozzle	4 Options*
G-35 = Full/part-circle 50° to 360°	**B** = Block rotor with check valve	**6** = Installed G35 nozzle* ** Available in SSU model only* *SSU = 6* *(includes nozzle rack)*	**S** = SSU* ** Standard stocking unit*

Example:
G-35-B-6-S = G-35 full/part-circle block rotor, installed 6 nozzle with nozzle rack, standard stocking unit model

G-35-B NOZZLE PERFORMANCE DATA*

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m^3/hr	l/min	■	▲
2 Yellow	2.8	280	5.5	0.43	7.2	14.3	16.6
	3.4	340	6.1	0.48	7.9	12.8	14.8
	4.1	410	6.7	0.55	9.1	12.1	14.0
	4.5	450	7.0	0.59	9.8	12.0	13.9
3 Yellow	2.8	280	7.0	0.68	11.4	13.9	16.0
	3.4	340	7.6	0.73	21.1	12.5	14.5
	4.1	410	8.2	0.80	13.2	11.7	13.6
	4.5	450	8.5	0.82	13.6	11.2	13.0
4 Yellow	2.8	280	7.6	0.89	14.8	15.3	17.6
	3.4	340	8.5	0.93	15.5	12.8	14.8
	4.1	410	9.1	1.00	16.7	12.0	13.8
	4.5	450	9.4	1.04	17.4	11.7	13.5
5 Yellow	2.8	280	8.8	1.07	17.8	13.7	15.8
	3.4	340	9.8	1.14	18.9	11.9	13.8
	4.1	410	10.1	1.20	20.1	11.9	13.7
	4.5	450	10.7	1.23	20.4	10.8	12.4
6 Yellow	2.8	280	9.8	1.36	22.7	14.3	16.5
	3.4	340	10.7	1.43	23.8	12.6	14.5
	4.1	410	11.3	1.50	25.0	11.8	13.6
	4.5	450	11.9	1.54	25.7	10.9	12.6
8 Yellow	2.8	280	11.0	1.77	29.5	14.7	17.0
	3.4	340	11.9	1.82	30.3	12.9	14.8
	4.1	410	12.8	1.89	31.4	11.5	13.3
	4.5	450	13.1	1.93	32.2	11.2	13.0
10 Yellow	2.8	280	11.9	2.20	36.7	15.6	18.0
	3.4	340	13.1	2.29	38.2	13.4	15.4
	4.1	410	13.7	2.34	39.0	12.4	14.4
	4.5	450	14.3	2.39	39.7	11.6	13.4
12 Yellow	2.8	280	13.4	2.73	45.4	15.2	17.5
	3.4	340	14.3	2.77	46.2	13.5	15.6
	4.1	410	14.6	2.84	47.3	13.3	15.3
	4.5	450	15.2	2.91	48.5	12.5	14.5

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

G-35-B NOZZLES

G-35-B ROTOR

G-900 SERIES

These rotors are simple to install and perfect for retrofits. Total-Top-Serviceability makes field maintenance quick and easy.

KEY BENEFITS

- G-990 is a dedicated, true full-circle model
- G-995 is an adjustable part-circle model (40° to 360°)
- Higher-flow, longer-radius rotor designed for single-row systems
- Contour back-nozzle capability for special applications

OPERATING SPECIFICATIONS

- G-990
  - Radius: 27.1 to 31.4 m
  - Flow: 12.31 to 18.92 m^3/hr; 205.2 to 315.3 l/min
  - Pressure range: 5.5 to 8.3 bar; 550 to 830 kPa
- G-995
  - Radius: 24.7 to 29.6 m
  - Flow: 12.47 to 19.04 m^3/hr; 207.8 to 317.2 l/min
  - Pressure range: 5.5 to 8.3 bar; 550 to 830 kPa
- All TTS rotors are pressure-rated at 10 bar; 1,000 kPa
- Check height up to 2 m in elevation change
- Nozzle range: 53 to 73
  - 3 standard trajectory (22.5°) nozzles
  - 3 low-angle trajectory (15°) nozzles

OPTIONS

- C – Check-O-Matic Technology checks up to 8 m in elevation change and readily converts to normally open hydraulic with through-the-top connections
- D – Decoder Valve-in-Head Technology with all "E" specifications below*
- DD – Two-station decoder Valve-in-Head Technology with all "E" specifications below*
- E – Electric Valve-in-Head Technology with adjustable pressure regulation, on-off-auto selector, 210 mA (370 mA inrush) 50 Hz; 190 mA (350 mA inrush) 60 Hz solenoid with captive plunger and internal downstream bleed

* All DIH rotors include two DBRY-6 Splice Connectors for connection to the two-wire path. See **page 11** for critical recommendations on grounding DIH rotors.

G-990C
Pop-up height: 8 cm
Overall height: 34 cm
Flange diameter: 19 cm
Female inlet: 1½" (40 mm) Acme

G-995E
Pop-up height: 8 cm
Overall height: 34 cm
Flange diameter: 19 cm
Female inlet: 1½" (40 mm) Acme

G-990 & G-995 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4 + 5

1 Model	2 Valve Options	3 Nozzle	4 Regulation*	5 Options
G-990 = Full-circle	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology	**53 to 73** = Installed G-990 nozzle*	**P8** = 80 PSI; 5.5 bar; 550 kPa (nozzle 53) **P1** = 100 PSI; 6.9 bar; 690 kPa (nozzles 53 to 73) **P2** = 120 PSI; 8.3 bar: 830 kPa (nozzle 73)	**S** = SSU*
G-995 = Adjustable arc, 40° to 360°	**C** = Check-O-Matic Technology* **D** = Decoder Valve-in-Head Technology **DD** = Two-station decoder Valve-in-Head Technology **E** = Electric Valve-in-Head Technology **Converts to N.O. hydraulic Valve-in-Head Technology*	**53 to 73** = Installed G-995 nozzle* ** SSU = 53*	**P8** = 80 PSI; 5.5 bar; 550 kPa (nozzle 53) **P1** = 100 PSI; 6.9 bar; 690 kPa (nozzles 53 to 73) **P2** = 120 PSI; 8.3 bar: 830 kPa (nozzle 73) ** SSU = P8/53*	**S** = SSU* **Standard stocking unit*

Example:
G-990-E-53-P8-S = G-990 full-circle electric Valve-in-Head Technology, installed 53 nozzle, 80 PSI; 5.5 bar; 550 kPa regulation, standard stocking unit model

G-990 NOZZLE PERFORMANCE DATA*

Nozzle	Pressure bar	Pressure kPa	Radius** m	Flow m³/hr	Flow l/min	Precip mm/hr ■	Precip mm/hr ▲
53 ● Dk. Blue	5.5	550	27.1	12.31	205.2	16.7	19.3
	6.2	620	27.4	12.88	214.6	17.1	19.8
	6.9	690	28.0	13.45	224.1	17.1	19.7
	7.6	760	28.3	14.02	233.6	17.4	20.1
	8.3	830	28.7	14.58	243.0	17.8	20.5
63 ● Black	5.5	550	28.0	14.36	23.92	18.3	21.1
	6.2	620	28.7	14.97	249.5	18.2	21.1
	6.9	690	29.3	15.76	265.7	18.4	21.3
	7.6	760	29.6	16.36	272.5	18.7	21.6
	8.3	830	29.9	17.01	283.5	19.1	22.0
73 ● Orange	5.5	550	29.3	16.38	272.9	19.1	22.1
	6.2	620	29.9	17.04	283.9	19.1	22.0
	6.9	690	30.2	17.67	297.5	19.4	22.4
	7.6	760	31.1	18.29	304.7	18.9	21.8
	8.3	830	31.4	18.92	315.3	19.2	22.2

G-995 NOZZLE PERFORMANCE DATA*

Nozzle	Pressure bar	Pressure kPa	Radius** m	Flow m³/hr	Flow l/min	Precip mm/hr ■	Precip mm/hr ▲
53 ● Dk. Blue	5.5	550	24.7	12.47	207.8	20.5	23.6
	6.2	620	25.6	12.99	216.5	19.8	22.9
	6.9	690	26.2	13.52	225.2	19.7	22.7
	7.6	760	26.5	14.11	235.1	20.1	23.2
	8.3	830	26.8	14.63	243.8	20.3	23.5
63 ● Black	5.5	550	26.2	14.15	235.8	20.6	23.8
	6.2	620	26.8	14.88	247.9	20.7	23.9
	6.9	690	27.4	15.67	261.2	20.8	24.0
	7.6	760	27.7	16.33	272.2	21.2	24.5
	8.3	830	28.0	16.97	282.8	21.6	24.9
73 ● Orange	5.5	550	27.1	16.51	275.2	22.4	25.9
	6.2	620	27.7	17.13	285.4	22.3	25.7
	6.9	690	28.3	17.74	295.6	22.1	25.5
	7.6	760	29.0	18.38	306.2	21.9	25.3
	8.3	830	29.6	19.04	317.2	21.8	25.1

* Complies to ASAE standard. All precipitation rates calculated for 360° operation. All triangular rates are equilateral. To calculate precipitation rates for 180° operation, multiply by 2.

G-900 NOZZLES

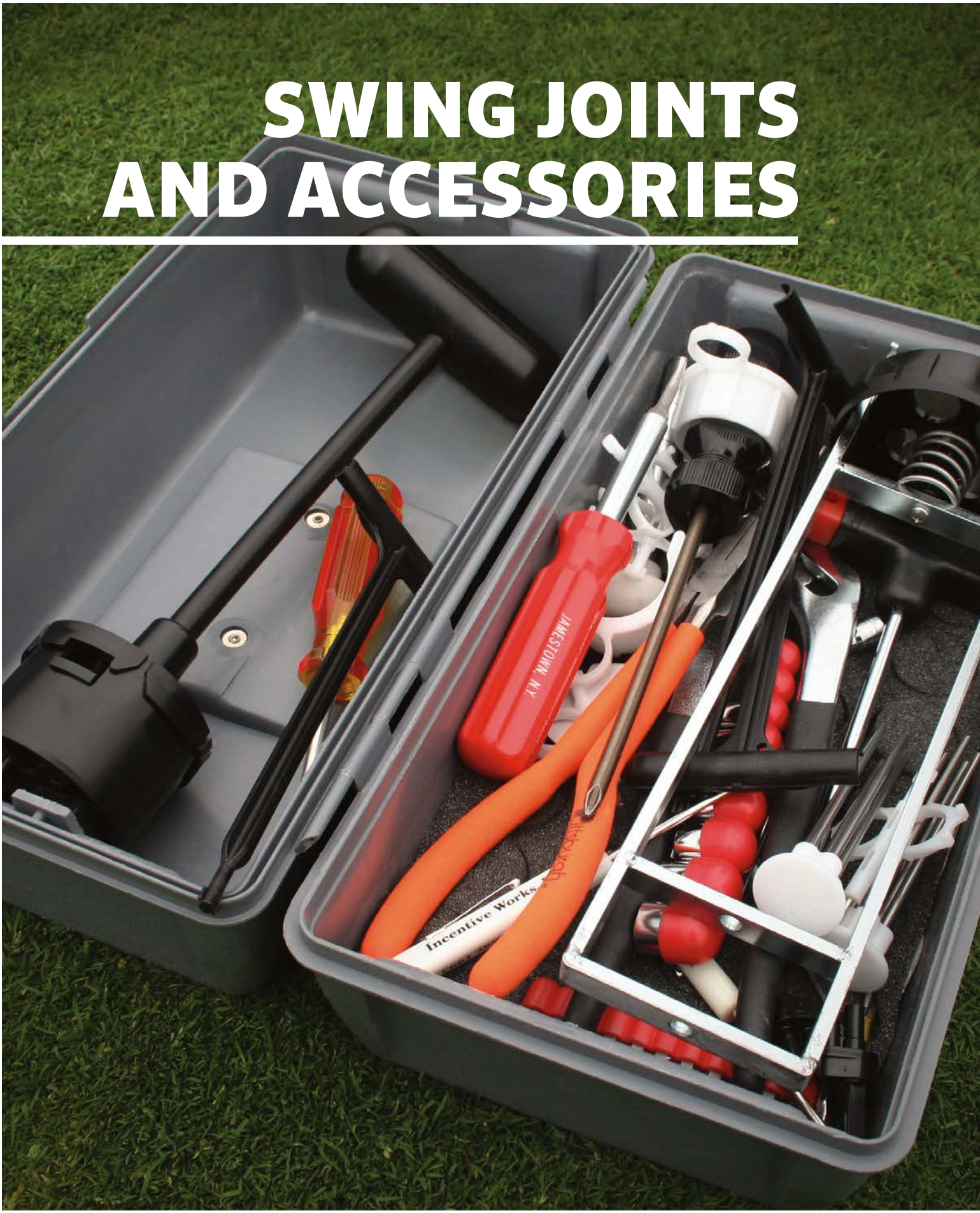
G-900 LOW-ANGLE NOZZLES**

** Low-angle nozzles reduce the radius by 15%.

Contour Back-Nozzle Capabilities

Choose any nozzle from the I-40 and G-70 nozzle racks, or from the short- and mid-range G-900 nozzles.

SWING JOINTS AND ACCESSORIES



HSJ SWING JOINTS
ADVANCED FEATURES

Proven Products, Proven Partners

Over the last four decades, Hunter has become the leading producer of gear-driven rotors, known worldwide for its quality product and excellent customer support. Similarly, LASCO has spent the last 50 years developing a reputation as the industry's leading producer of PVC irrigation fittings and swing joints, providing outstanding customer support in the golf irrigation market. When Hunter sought a partner for its Hunter-branded swing joints, the choice was immediately clear.

We are proud to introduce Hunter HSJ Swing Joints by LASCO — a proven team with time-tested solutions for the golf irrigation market. HSJs are available in a multitude of inlet, outlet, size, and length configurations for every course and preference.

Upgrade Your Rotor Warranty

Include Hunter HSJ Swing Joints with your golf rotor order and qualify for a 5-year component exchange warranty. HSJ Swing Joints must be purchased from an authorised Hunter Golf Distributor to qualify.

HSJ SWING JOINTS

With swivel ells on both ends, HSJ Swing Joints easily adjust sprinklers to proper height and position in any configuration.

KEY BENEFITS

- Strength, longevity, and contamination resistance
  - Prefabricated PVC design with O-Ring Seals
- Configurations to meet every installation requirement
  - Available in all popular inlet and outlet configurations
  - Choose from 20 cm, 30 cm, or 46 cm lay arm lengths
  - Single top-out or triple top-out designs

Swing Joints
HSJ-0 = Model ¾"
HSJ-1 = Model 1" (25 mm)
HSJ-2 = Model 1¼" (30 mm)
HSJ-3 = Model 1½" (40 mm)

SWING JOINT – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4 + 5

1 Model	2 Inlet Type (from pipe fitting)	3 Outlet Type (to sprinkler inlet)	4 Outlet Style	5 Lay Length
HSJ-0 = ¾" commercial swing joint **HSJ-1** = 1" (25 mm) heavy-duty swing joint **HSJ-2** = 1¼" (30 mm) heavy-duty swing joint **HSJ-3** = 1½" (40 mm) heavy-duty swing joint	**3** = Male NPT  **4** = Male Acme*  **6** = Male BSP**  **7** = Spigot, 10 cm long**  **B** = Additional elbow for male BSP inlet, allows vertical mounting. Available for outlet types 0, 5, 8. **M** = Main Acme H-connection*** **P** = Main Acme V-connection***	**0** = Male Acme  **2** = Male NPT  **5** = Male BSP *(not available in HSJ-0)*  **6** = Enlarging to 1½" (40 mm) male BSP* **8** = Enlarging to 1½" (40 mm) male Acme* **A** = Enlarging/reducing to 1¼" (30 mm) male Acme**	**2** = Single top-out  **4** = Triple top-out 	**8** = 20 cm lay arm†  **12** = 30 cm lay arm  **18** = 46 cm lay arm‡ 

Example:
HSJ-3-M-0-2-12 = HSJ 1½" (40 mm) heavy-duty swing joint, 1½" (40 mm) male Acme horizontal connection to mainline tee, 1½" (40 mm) male Acme single top outlet, 30 cm lay arm length.

** Not available in HSJ-0 or HSJ-3. Use "M" inlet for HSJ-3. ** Not available in HSJ-0. *** Connection reduces from 1½" (40 mm) Acme to swing joint size. † HSJ-0 only. ‡ Not available in HSJ-0.*

ACME ADAPTER FITTINGS

Choose Hunter Acme Adapter Fittings for maximum system design flexibility.

1¼" (30 mm) Models

1¼" (30 mm) male Acme x 1" (25 mm) female NPT	P/N 109325
1¼" (30 mm) male Acme x 1" (25 mm) female BSP	P/N 105329
1¼" (30 mm) male Acme x 1¼" (30 mm) female NPT	P/N 474800
1¼" (30 mm) male Acme x 1¼" (30 mm) female BSP	P/N 474900
1¼" (30 mm) male Acme x 1½" (40 mm) female NPT	P/N 104153
1¼" (30 mm) male Acme x 1½" (40 mm) female BSP	P/N 107262

1½" (40 mm) Models

1½" (40 mm) male Acme x 1" (25 mm) female NPT	P/N 475400
1½" (40 mm) male Acme x 1" (25 mm) female BSP	P/N 475500
1½" (40 mm) male Acme x 1¼" (30 mm) female NPT	P/N 475200
1½" (40 mm) male Acme x 1¼" (30 mm) female BSP	P/N 475300
1½" (40 mm) male Acme x 1½" (40 mm) female NPT	P/N 475000
1½" (40 mm) male Acme x 1½" (40 mm) female BSP	P/N 475100

Acme x Acme Models

1½" (40 mm) male Acme x 1" (25 mm) Acme female	P/N 225300
1½" (40 mm) male Acme x 1¼" (30 mm) Acme female	P/N 225400
1¼" (30 mm) male Acme x 1" (25 mm) Acme female	P/N 225500

B2B Tee Assembly

1½" (40 mm) Acme threaded tee and 40 mm adapter for connecting two swing joints to a single mainline connection in back-to-back installations around greens.

P/N = HSJ-305-015-3 = NPT inlet
P/N = HSJ-305-015-6 = BSP inlet
P/N = HSJ-305-015-M = Acme inlet (shown)

ROTOR ACCESSORIES

Customise golf rotors according to course needs with these useful accessories.

HOSE SWIVEL ADAPTERS

Models

- Hose Swivel Adapter for G-900 Series (fits ¾" and 1" (25 mm) hose) P/N G90HS100
- Hose Swivel Adapter for G-800 Series (fits ¾" and 1" (25 mm) hose) P/N G800HS100

Hose Swivel Adapters

RUBBER COVER KITS

Models

- TTS-800 Series Low-Bounce Rubber Cover Kit P/N 987200SP
- TTS-800 Series Low-Bounce Rubber Cover Kit (Green) P/N 987201SP
- TTS-800 Series No-Bounce Turf Cup Kit P/N 987100SP
- G-990 Series Rubber Cover Kit (date codes 06/11 and prior only) P/N 473800
- G-995 Series Rubber Cover Kit (also G990 date codes 07/11 and after) P/N 473900

Rubber Cover Kit

SPOTSHOT HOSE-END NOZZLES

Models

- ¾" hose thread inlet – P/N 160700SP
- 1" hose thread inlet – P/N 160705SP

Features

- Variable nozzle stream choices:
  - Jet-Stream Nozzle: Tightly focused stream for power washing
  - Soak-Stream Nozzle: Medium stream for dust control areas
  - Fan-Stream Nozzle: Broad light stream for turf hot spots

Operating Specifications

- Flow: 132 l/min (7.9 m^3/hr) at 5.5 bar (550 kPa)*

** Not recommended for residential use with regulated, low-pressure, or low-flow conditions.*

SpotShot Hose-End Nozzles
¾" P/N 160700SP
1" (25 mm) P/N 160705SP

Jet-Stream Nozzle

Soak-Stream Nozzle

Fan-Stream Nozzle

QUICK COUPLERS

The sturdy red brass and stainless steel construction of Quick Couplers strengthens any project.

FEATURES

- 100% interchangeable with major brands
- Red brass and stainless steel construction
- Heavy-duty thermoplastic locking and non-locking covers
- Optional winged stabilisation and Acme key connection
- Stainless steel lug on 1" (25 mm) and 1¼" (30 mm) keys
- Spring-loaded covers with stainless steel springs for positive closing and protection of valve's sealing components
- Warranty period: 5 years

Quick Couplers

HQ QUICK COUPLER – SPECIFICATION BUILDER: ORDER 1 + 2 + 3

1 Model	2 Cover Options	3 Additional Options
HQ-3 = ¾" inlet, 1-piece body, 2 slots	**RC** = Yellow rubber cover	**(blank)** = No option
HQ-5 = 1" (25 mm) inlet, 1-piece body, 1 slot	**LRC** = Yellow locking rubber cover *(Not available for HQ-3 body)*	**AW** = Acme key with anti-rotation wings *(Only available for HQ-44 body)*
HQ-33D = ¾" inlet, 2-piece body, 2 slots		**BSP** = BSP threads *(Only available for HQ-5 body)*
HQ-44 = 1" (25 mm) inlet, 2-piece body, 1 slot or Acme		**R** = Purple locking cover *(reclaimed water ID; only available for LRC models)*

Examples:
HQ-3-RC = HQ-3 valve with rubber cover
HQ-44-LRC = HQ-44 valve with locking rubber cover
HQ-44-LRC-R = HQ-44 valve with locking rubber cover and purple locking cover
HQ-44-LRC-AW-R = HQ valve, with locking rubber cover, Acme key socket, anti-rotation wings and purple locking cover
HQ-5-LRC-BSP = HQ-5 valve with locking rubber cover and BSP threads

HQ-3-RC HQ-5-RC HK-33

HQ-33-DLRC-R HQ-44-LRC HK-44

Non-locking Cover Locking Cover Reclaimed Cover

HQ-44-RC-AW HK-44A

Quick Coupler Key

Reclaimed Water Option
All locking models have an optional purple cover for sites using reclaimed water.

HK KEYS		
Key Model	**Compatible Valve**	**Compatible Swivel**
HK-33 = ¾" valve, ¾" key inlet	HQ-3, HQ-33	HS-0
HK-44 = 1" (25 mm) valve, 1" (25 mm) key inlet	HQ-44	HS-1, HS-2, HS-1-B, HS-2-B
HK-44A = 1" (25 mm) valve, Acme key inlet	HQ-44-AW	HS-1, HS-2, HS-1-B, HS-2-B
HK-55 = 1" (25 mm) valve, 1¼" (30 mm) key inlet	HQ-5	HS-1, HS-2, HS-1-B, HS-2-B

HS HOSE SWIVELS	
Hose Swivel	**Compatible Key**
HS-0 = ¾" inlet, ¾" hose outlet	HK-33
HS-1 = 1" (25 mm) inlet, ¾" hose outlet	HK-44, HK-44A, HK-55
HS-2 = 1" (25 mm) inlet, 1" (25 mm) hose outlet	HK-44, HK-44A, HK-55
HS-1-B = 1" (25 mm) inlet, ¾" (20 mm) BSP outlet	HK-44, HK-44A, HK-55
HS-2-B = 1" (25 mm) inlet, 1" (25 mm) BSP outlet	HK-44, HK-44A, HK-55

QUICK COUPLER, KEY, AND HOSE SWIVEL CHARTS

Model	Inlet Threads	Slots	Body	Colour*	Locking	Key	Swivels
HQ-3-RC	¾"	2	1-piece	Yellow	No	HK-33	HS-0
HQ-33-DRC	¾"	2	2-piece	Yellow	No	HK-33	HS-0
HQ-33-DLRC	¾"	2	2-piece	Yellow	Yes	HK-33	HS-0
HQ-44-RC	1" (25 mm) NPT	1	2-piece	Yellow	No	HK-44	HS-1 or HS-2
HQ-44-LRC	1" (25 mm) NPT	1	2-piece	Yellow	Yes	HK-44	HS-1 or HS-2
HQ-44-RC-AW	1" (25 mm) NPT	Acme	2-piece wing**	Yellow	No	HK-44A	HS-1 or HS-2
HQ-44-LRC-AW	1" (25 mm) NPT	Acme	2-piece wing**	Yellow	Yes	HK-44A	HS-1 or HS-2
HQ-5-RC	1" (25 mm) NPT	1	1-piece	Yellow	No	HK-55	HS-1 or HS-2
HQ-5-LRC	1" (25 mm) NPT	1	1-piece	Yellow	Yes	HK-55	HS-1 or HS-2
HQ-5-RC-BSP	1" (25 mm) BSP	1	1-piece	Yellow	Yes	HK-55	HS-1 or HS-2
HQ-5-LRC-BSP	1" (25 mm) BSP	1	1-piece	Yellow	Yes	HK-55	HS-1 or HS-2

Notes:
* All locking cover models are available with purple covers for reclaimed water applications
** Anti-rotation stabilisation wings

SNAPLOK™ COMBO KITS

FEATURES

- Versatile, cross-compatible and heavy-duty quick coupler
- Highly effective solution for quick coupler stabilisation
- SnapLok design includes:
  - Heavy-duty PVC and brass outlet construction
  - Anti-rotation coupler locking feature
  - Accommodates both rebar and pipe stabilisation

See the HSJ Swing Joints on page 50

Quick Coupler with SnapLok
Equipped HSJ-1 Swing Joint

SNAPLOK COMBO KITS		
Kit Model	**Quick Coupler Model**	**SnapLok Model**
HQ-SL-K-1-B = Locking Lid, BSP x 18" (46 cm) SnapLok	HQ-44-LRC	HSJ-1-6S-212
HQ-SL-K-1-RB = Locking Reclaimed Lid, BSP x 18" (46 cm) SnapLok	HQ-44-LRCR	HSJ-1-6S-212

SnapLok is a trademark of LASCO Fittings Inc.

TOOLS

Arc Adjustment/ Riser Hold-up Tool
P/N 382800SP
G-85B/G-885

Valve Insertion/ Removal Tool
P/N 604000SP
G-800 Series

Valve Insertion/ Removal Tool
P/N 280500SP
G-900/G90 Series

Valve and Snap Ring Insertion/Removal Pliers
P/N 475600SP
G-800 Series

Snap Ring Removal Tool
P/N 251000SP
All Golf Models

T-Handle Tool
P/N 319100SP

Hand Pump
P/N 217500SP

Pitot Gauge
P/N 280100SP

Hunter Wrench
P/N 172000SP

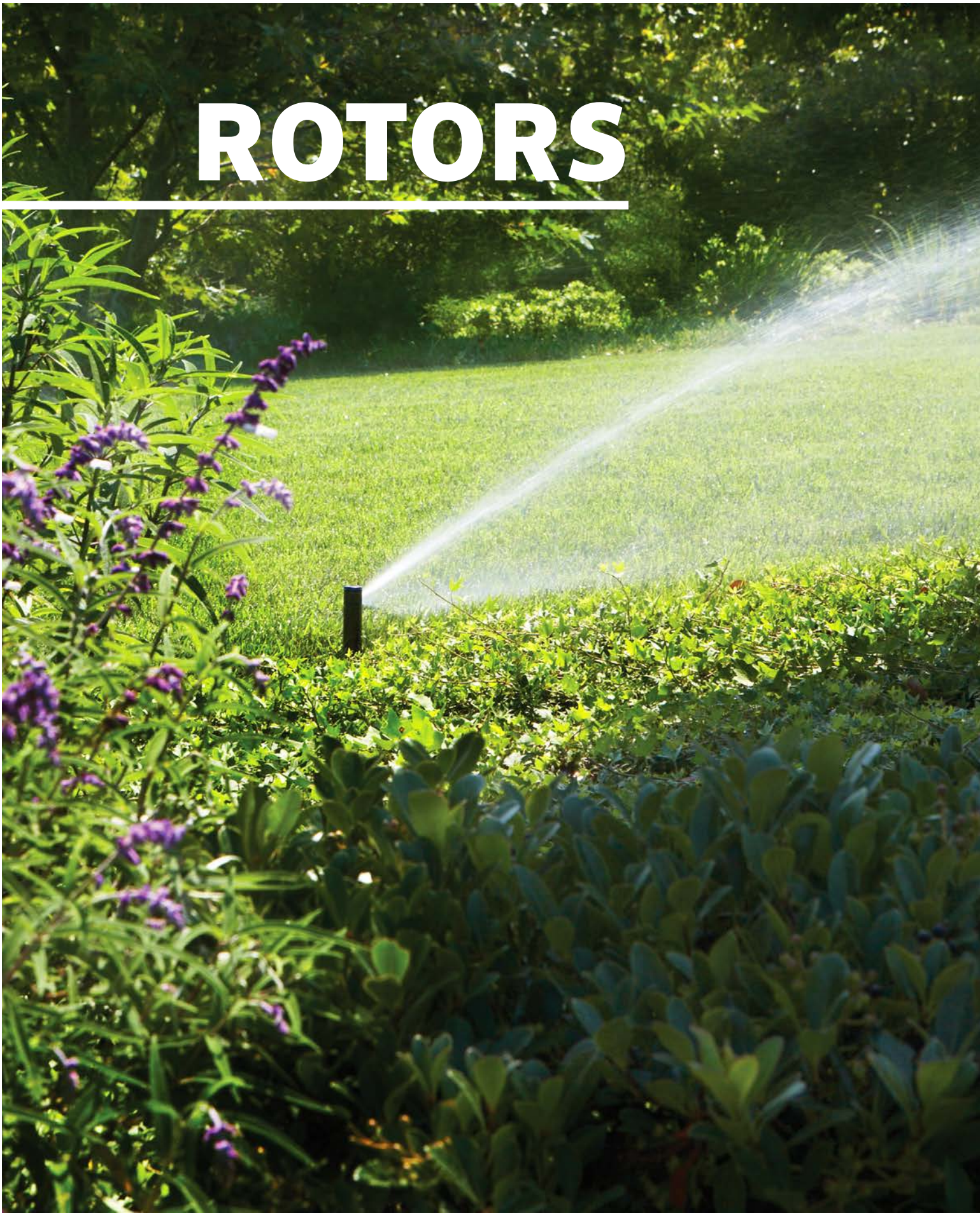
Nozzle Removal/ Installation Tool
P/N 803700SP
G-85B, G-885 Short- and Mid-range Nozzles

Riser Pressure Gauge
P/N 991200SP
G-80 (2019), G-85B, and G-885 Risers

LANDSCAPE SOLUTIONS

From clubhouse grounds and perimeters to driveways and walking paths, golf irrigation needs extend well past the course itself. Our full spectrum of industry-leading irrigation solutions will help ensure beautiful, thriving landscapes across all areas of your property.

ROTORS



PGP™ ULTRA

The PGP Ultra raises the bar for rotor technology with powerful features developed over three decades of research, customer feedback, and lab testing.

KEY BENEFITS

- Patented automatic arc return feature returns the turret back to the original arc pattern if vandalised; adjustable arc from 50° to 360°
- Non-strippable drive mechanism is protected from damage if turned in the opposite direction of travel
- Part- and full-circle in one model for flexibility across landscapes and reduced inventory
- Headed and slotted setscrew allows radius adjustment with a Hunter Wrench or flat-blade screwdriver
- Flat-top nozzles allow fast, easy insertion
- QuickCheck™ Arc Mechanism for fast arc adjustment

OPERATING SPECIFICATIONS

- Nozzle choices: 34
- Radius: 4.9 to 14.0 m
- Flow: 0.07 to 3.23 m³/hr; 1.2 to 53.8 l/min
- Recommended pressure range: 1.7 to 4.5 bar; 170 to 450 kPa
- Operating pressure range: 1.4 to 7.0 bar; 140 to 700 kPa
- Precipitation rate: 10 mm/hr approximately
- Nozzle trajectory: standard = 25°, low-angle = 13°
- Nozzle racks: 1.5 to 8.0 blue, 2.0 to 4.5 low-angle grey, 0.50 to 3.0 black, 6.0 to 13.0 green, MPR-25, MPR-30, MPR-35
- Warranty period: 5 years

FACTORY-INSTALLED OPTIONS

- Drain Check Valve (up to 3 m of elevation)
- Reclaimed water ID
- 1.5–4.0 Blue Nozzles

USER-INSTALLED OPTIONS

- Drain Check Valve (up to 1 m of elevation) PGP-04 only (P/N 142300SP)
- HSJ-0 prefabricated ¾" PVC Swing Joint

PGP Ultra Reclaimed
Available as a factory-installed option on all models

PGP Ultra
Easy arc and radius adjustment

PGP-ULTRA – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Standard Features	3 Feature Options	4 Nozzle Options
PGP-00 = Shrub **PGP-04** = 10 cm pop-up **PGP-06** = 15 cm pop-up **PGP-12** = 30 cm pop-up	Adjustable arc, plastic riser, 8 standard nozzles, and 4 low-angle nozzles	**CV** = Drain Check Valve **CV-R** = Drain Check Valve and reclaimed water ID	**1.5–8.0 Blue** **Grey low-angle** **Black short-radius** **Green high-flow** **MPR-25-Q, T, H, F** **MPR-30-Q, T, H, F** **MPR-35-Q, T, H, F** **1.5 to 4.0** = Only nozzles 1.5–4.0 can be factory-installed

Examples:
PGP-04 = 10 cm pop-up, adjustable arc
PGP-04-2.5 = 10 cm pop-up, adjustable arc and 2.5 nozzle
PGP-12-CV-R-4.0 = 30 cm pop-up, adjustable arc, with Drain Check Valve and reclaimed water ID with 4.0 nozzle

PGP-00
Overall height: 19 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

PGP-04
Overall height: 19 cm
Pop-up height: 10 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

PGP-06
Overall height: 25 cm
Pop-up height: 15 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

PGP-12
Overall height: 43 cm
Pop-up height: 30 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

I-20

The I-20 Rotor is loaded with upgraded features such as FloStop™ Technology, check valves, and efficient nozzles that make it the perfect choice in a range of applications.

KEY BENEFITS

- Patented automatic arc return feature returns the turret back to the original arc pattern if vandalised; adjustable arc from 50° to 360°
- Non-strippable drive mechanism is protected from damage if turned in the opposite direction of travel
- Part- and full-circle in one model is flexible for all landscapes and decreases inventory
- Headed and slotted setscrew allows radius adjustment with a Hunter Wrench or flat-blade screwdriver
- FloStop Technology closes the flow of water from individual sprinklers to change the nozzle or perform repairs
- Flat-top nozzles allow fast, easy insertion
- Drain Check Valve prevents low-head drainage (up to 3 m of elevation)

OPERATING SPECIFICATIONS

- Nozzle choices: 34
- Radius: 4.9 to 14.0 m
- Flow: 0.07 to 3.23 m³/hr; 1.2 to 53.8 l/min
- Recommended pressure range: 1.7 to 4.5 bar; 170 to 450 kPa
- Operating pressure range: 1.4 to 7.0 bar; 140 to 700 kPa
- Precipitation rate: 10 mm/hr approximately
- Nozzle trajectory: standard = 25°, low-angle = 13°
- Nozzle racks: 1.5 to 8.0 blue, 2.0 to 4.5 low-angle grey, 0.50 to 3.0 black, 6.0 to 13.0 green, MPR-25, MPR-30, MPR-35
- Warranty period: 5 years

FACTORY-INSTALLED OPTIONS

- No Drain Check Valve (NCV models)
- Reclaimed water ID
- 1.5–4.0 Blue Nozzles

I-20 Reclaimed

Available as a factory-installed option on all models

USER-INSTALLED OPTIONS

- HSJ-0 prefabricated ¾" PVC Swing Joint

I-20 (PLASTIC) – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Standard Features	3 Feature Options	4 Nozzle Options
I-20-00 = Shrub **I-20-04** = 10 cm pop-up **I-20-06** = 15 cm pop-up **I-20-12** = 30 cm pop-up	Adjustable arc, plastic, check valve, 8 standard nozzles, and 4 low-angle nozzles	**(blank)** = No option **NCV** = Without check valve *(only available on 10 cm model)* **R** = Reclaimed water ID	**1.5–8.0 Blue** **Grey low-angle** **Black short-radius** **Green high-flow** **MPR-25-Q, T, H, F** **MPR-30-Q, T, H, F** **MPR-35-Q, T, H, F** **1.5 to 4.0** = Only nozzles 1.5–4.0 can be factory-installed

I-20 (STAINLESS STEEL) – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Standard Features	3 Feature Options	4 Nozzle Options
I-20-04-SS = 10 cm pop-up **I-20-06-SS** = 15 cm pop-up	Adjustable arc, stainless steel, check valve, 8 standard nozzles, and 4 low-angle nozzles	**(blank)** = No option **NCV** = Without check valve *(only available on 10 cm model)* **R** = Reclaimed water ID	**1.5–8.0 Blue** **Grey low-angle** **Black short-radius** **Green high-flow** **MPR-25-Q, T, H, F** **MPR-30-Q, T, H, F** **MPR-35-Q, T, H, F** **1.5 to 4.0** = Only nozzles 1.5–4.0 can be factory-installed

Examples:
I-20-04 = 10 cm pop-up, adjustable arc
I-20-12-R-4.0 = 30 cm pop-up, adjustable arc, check valve, with reclaimed water ID, and 4.0 nozzle
I-20-06-SS-R-3.0 = 15 cm pop-up, adjustable arc, stainless steel riser, with reclaimed water ID, and 3.0 nozzle

I-20-00
Overall height: 20 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

I-20-04
Overall height: 19 cm
Pop-up height: 10 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

I-20-06
Overall height: 25 cm
Pop-up height: 15 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

I-20-12
Overall height: 43 cm
Pop-up height: 30 cm
Exposed diameter: 4.5 cm
Inlet size: ¾"

PGP / I-20 BLUE STANDARD NOZZLE PERFORMANCE DATA

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
1.5 ● Blue	1.7	170	8.8	0.27	4.5	7	8
	2.0	200	9.1	0.29	4.8	7	8
	2.5	250	9.4	0.32	5.4	7	8
	3.0	300	9.8	0.35	5.9	7	9
	3.5	350	9.8	0.38	6.4	8	9
	4.0	400	9.8	0.41	6.8	9	10
	4.5	450	9.4	0.43	7.2	10	11
2.0 ● Blue	1.7	170	10.1	0.32	5.4	6	7
	2.0	200	10.1	0.35	5.8	7	8
	2.5	250	10.1	0.39	6.5	8	9
	3.0	300	10.4	0.43	7.2	8	9
	3.5	350	10.4	0.47	7.8	9	10
	4.0	400	10.4	0.50	8.3	9	11
	4.5	450	10.4	0.53	8.8	10	11
2.5 ● Blue	1.7	170	10.1	0.39	6.6	8	9
	2.0	200	10.4	0.43	7.1	8	9
	2.5	250	10.7	0.48	8.0	8	10
	3.0	300	10.7	0.54	8.9	9	11
	3.5	350	10.7	0.58	9.7	10	12
	4.0	400	10.7	0.62	10.4	11	13
	4.5	450	10.7	0.66	11.1	12	13
3.0 ● Blue	1.7	170	10.7	0.50	8.4	9	10
	2.0	200	10.7	0.54	9.1	10	11
	2.5	250	11.0	0.61	10.2	10	12
	3.0	300	11.6	0.68	11.4	10	12
	3.5	350	11.9	0.74	12.3	10	12
	4.0	400	11.9	0.79	13.2	11	13
	4.5	450	11.9	0.84	14.0	12	14
4.0 ● Blue	1.7	170	11.3	0.68	11.3	11	12
	2.0	200	11.6	0.73	12.2	11	13
	2.5	250	11.9	0.81	13.6	12	13
	3.0	300	12.2	0.90	15.0	12	14
	3.5	350	12.2	0.97	16.2	13	15
	4.0	400	12.5	1.04	17.3	13	15
	4.5	450	12.5	1.10	18.3	14	16
5.0 ● Blue	1.7	170	11.3	0.84	14.0	13	15
	2.0	200	11.6	0.91	15.2	14	16
	2.5	250	11.9	1.02	17.1	15	17
	3.0	300	12.8	1.14	19.0	14	16
	3.5	350	12.8	1.24	20.6	15	17
	4.0	400	12.8	1.32	22.1	16	19
	4.5	450	12.8	1.41	23.4	17	20
6.0 ● Blue	1.7	170	11.6	1.01	16.8	15	17
	2.0	200	11.9	1.09	18.2	15	18
	2.5	250	12.2	1.22	20.4	16	19
	3.0	300	13.1	1.36	22.7	16	18
	3.5	350	13.1	1.47	24.5	17	20
	4.0	400	13.4	1.57	26.2	18	20
	4.5	450	13.4	1.67	27.9	19	21
8.0 ● Blue	1.7	170	11.3	1.35	22.5	21	25
	2.0	200	11.9	1.46	24.3	21	24
	2.5	250	12.5	1.63	27.2	21	24
	3.0	300	13.4	1.81	30.2	20	23
	3.5	350	13.7	1.95	32.6	21	24
	4.0	400	14.0	2.09	34.8	21	25
	4.5	450	14.0	2.22	36.9	23	26

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

PGP / I-20 GREY LOW-ANGLE NOZZLE PERFORMANCE DATA

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
2.0 LA ● Grey	1.7	170	7.3	0.33	5.6	12	14
	2.0	200	7.6	0.36	6.0	12	14
	2.5	250	7.9	0.40	6.7	13	15
	3.0	300	8.2	0.45	7.4	13	15
	3.5	350	8.5	0.48	8.0	13	15
	4.0	400	8.8	0.52	8.6	13	15
	4.5	450	9.1	0.55	9.1	13	15
2.5 LA ● Grey	1.7	170	7.9	0.44	7.3	14	16
	2.0	200	8.2	0.47	7.9	14	16
	2.5	250	8.8	0.53	8.8	14	16
	3.0	300	9.4	0.59	9.8	13	15
	3.5	350	10.1	0.64	10.6	13	15
	4.0	400	10.4	0.68	11.3	13	15
	4.5	450	10.7	0.72	12.0	13	15
3.5 LA ● Grey	1.7	170	8.5	0.58	9.7	16	18
	2.0	200	8.8	0.62	10.3	16	18
	2.5	250	9.1	0.68	11.4	16	19
	3.0	300	10.1	0.75	12.5	15	17
	3.5	350	10.7	0.80	13.3	14	16
	4.0	400	11.0	0.85	14.1	14	16
	4.5	450	11.3	0.89	14.8	14	16
4.5 LA ● Grey	1.7	170	8.2	0.71	11.8	21	24
	2.0	200	8.8	0.76	12.7	19	23
	2.5	250	9.1	0.84	14.1	20	23
	3.0	300	10.1	0.93	15.5	18	21
	3.5	350	10.7	1.00	16.6	18	20
	4.0	400	11.0	1.06	17.6	18	20
	4.5	450	11.3	1.12	18.6	18	20

I-20 with Blue Standard Nozzle

I-20 NOZZLES

Blue Standard / Grey Low-Angle (P/N 782900)

Flat-top nozzle for easy insertion coupled with a headed slotted adjustment screw for quick radius adjustment with a Hunter Wrench or a flat-blade screwdriver.

PR-075
Overall height: 5.7 cm
Inlet/outlet size: ¾"
For use with all ¾" inlet sprinkler models, regulates to 3.1 bar; 310 kPa

ROTORS

I-25

The reliable, durable, and versatile I-25 Rotor offers an expansive nozzle selection that makes it the perfect choice for large turf applications.

KEY BENEFITS

- Patented automatic arc return feature returns the turret back to the original arc pattern if vandalised; adjustable arc from 50° to 360°
- Non-strippable drive mechanism is protected from damage if turned in the opposite direction of travel
- Part- and full-circle in one model for flexibility across landscapes and reduced inventory
- Colour-coded nozzles make identification easy
- Drain Check Valve prevents low-head drainage (up to 3 m of elevation)

OPERATING SPECIFICATIONS

- Nozzle choices: 11
- Radius: 11.9 to 21.6 m
- Flow: 0.82 to 7.24 m³/hr; 13.6 to 120.2 l/min
- Recommended pressure range: 2.5 to 7.0 bar; 250 to 700 kPa
- Warranty period: 5 years
- Operating pressure range: 2.5 to 7.0 bar; 250 to 700 kPa
- Precipitation rate: 15 mm/hr approximately
- Nozzle trajectory: standard = 25°

FACTORY-INSTALLED OPTIONS

- Reclaimed water ID
- High-speed rotation

USER-INSTALLED OPTIONS

- HSJ-1 prefabricated 1" (25 mm) PVC Swing Joint

I-25-04
Overall height: 20 cm
Pop-up height: 10 cm
Exposed diameter: 5 cm
Inlet size: 1" (25 mm) BSP

I-25-06
Overall height: 26 cm
Pop-up height: 15 cm
Exposed diameter: 5 cm
Inlet size: 1" (25 mm) BSP

I-25 Reclaimed
Available as a factory-installed option on all models

I-25 High-Speed
Available as a factory-installed option on all stainless steel models

I-25 (PLASTIC) - SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Standard Features	3 Feature Options	4 Nozzle Options
I-25-04 = 10 cm pop-up **I-25-06** = 15 cm pop-up	Adjustable arc, plastic riser, check valve, and 5 nozzles	**B** = BSP inlet threads **R** = Reclaimed water ID	**4 - 28** = Factory-installed nozzle number

I-25 (STAINLESS STEEL) - SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Standard Features	3 Feature Options	4 Nozzle Options
I-25-04-SS = 10 cm pop-up **I-25-06-SS** = 15 cm pop-up	Adjustable arc, stainless steel riser, check valve, and 5 nozzles	**B** = BSP inlet threads **R** = Reclaimed water ID **HS** = High-speed **HS-R** = High-speed and reclaimed water ID	**4 - 28** = Factory-installed nozzle number

Examples:
I-25-04-B = 10 cm pop-up, adjustable arc, BSP inlet threads
I-25-04-SS-R-B-18 = 10 cm pop-up, adjustable arc, stainless steel riser, reclaimed water ID, and 18 nozzle, BSP inlet threads
I-25-06-SS-B = 15 cm pop-up, adjustable arc, stainless steel riser, BSP inlet threads

I-25 STANDARD NOZZLE PERFORMANCE DATA

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
4 Yellow	2.5	250	11.9	0.82	13.6	12	13
	3.0	300	12.2	0.91	15.2	12	14
	3.5	350	12.5	0.98	16.4	13	15
	4.0	400	12.5	1.05	17.5	13	16
	4.5	450	12.8	1.11	18.6	14	16
	5.0	500	13.1	1.18	19.6	14	16
	5.5	550	13.4	1.24	20.7	14	16
7 Orange*	2.5	250	13.4	1.44	24.0	16	19
	3.0	300	14.0	1.54	25.6	16	18
	3.5	350	14.3	1.61	26.9	16	18
	4.0	400	14.3	1.68	28.0	16	19
	4.5	450	14.6	1.75	29.1	16	19
	5.0	500	14.9	1.81	30.1	16	19
	5.5	550	15.2	1.87	31.1	16	19
8 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
	5.5	550	15.8	2.38	39.6	19	22
10 Lt. Green*	3.0	300	15.2	2.15	35.8	18	21
	3.5	350	15.5	2.32	38.6	19	22
	4.0	400	15.8	2.48	41.3	20	23
	4.5	450	16.2	2.63	43.9	20	23
	5.0	500	16.2	2.78	46.3	21	25
	5.5	550	16.5	2.94	48.9	22	25
	6.0	600	16.8	3.07	51.1	22	25
13 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	3.04	51.2	22	25
	5.5	550	16.8	3.24	54.0	23	27
	6.0	600	17.1	3.39	56.4	23	27

Nozzle	Pressure		Radius	Flow		Precip mm/hr	
	bar	kPa	m	m³/hr	l/min	■	▲
15 Grey*	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
	6.0	600	18.0	3.82	63.7	24	27
	6.2	620	18.3	3.88	64.6	23	27
18 Red	3.0	300	17.4	30.8	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
	6.0	600	19.5	4.28	71.4	23	26
	6.2	620	19.5	4.35	72.5	23	26
20 Dk. Brown*	3.5	350	18.0	3.72	62.1	23	27
	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
	6.9	690	20.4	5.21	86.8	25	29
23 Dk. Green	3.5	350	18.6	4.56	76.0	26	30
	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
	6.9	690	20.7	6.50	108.3	30	35
25 Dk. Blue*	3.5	350	19.2	4.86	80.9	26	30
	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	5.92	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
	6.9	690	21.6	7.15	119.2	31	35
28 Black	3.5	350	18.3	5.31	88.5	32	37
	4.0	400	19.2	5.63	93.8	31	35
	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
	6.9	690	21.6	7.21	120.2	31	36

* Five standard nozzles included with each sprinkler.

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

I-25 NOZZLE

Standard

MP ROTATOR™ NOZZLES

MP ROTATOR NOZZLES

10 mm/hr

The MP Rotator Nozzle is the most trusted high-efficiency solution on the market, offering up to 30% water savings over traditional spray nozzles.

KEY BENEFITS

- Lowest precipitation rate in the industry of approximately 10 mm/hr
- Matched precipitation for simplified irrigation design and flexibility
- Double-pop feature protects the nozzle from external debris
- High distribution uniformity for a healthy landscape with maximum water efficiency

ADDITIONAL FEATURES

- Wind-resistant, multi-stream technology prevents misting
- Arc adjustments allowed only when running to deter vandalism
- Removable filter screen keeps nozzle from clogging
- Colour-coded for easy identification

OPERATING SPECIFICATIONS

- Radius reduction up to approximately 25% on all models
- Recommended operating pressure: 2.8 bar; 280 kPa
- Minimum radius setting achieved at 2.1 bar; 210 kPa
- Warranty period: 3 years

OPTIONS

- Pair with Pro-Spray™ PRS40 Sprinkler Body for pressure regulation to 2.8 bar; 280 kPa for nominal radius settings
- Pair with Pro-Spray PRS30 Sprinkler Body for pressure regulation to 2.1 bar; 210 kPa for minimum radius settings

MP ROTATOR – SPECIFICATION BUILDER: ORDER 1 + 2

1 Model	2 Options
MP1000-90 = 2.5 to 4.5 m radius, adjustable from 90° to 210°	**(blank)** = No option
MP1000-210 = 2.5 to 4.5 m radius, adjustable from 210° to 270°	**HT** = Male threaded version *(Not available in 3500 and 1000-210)*
MP1000-360 = 2.5 to 4.5 m radius, 360°	
MP2000-90 = 4.0 to 6.4 m radius, adjustable from 90° to 210°	
MP2000-210 = 4.0 to 6.4 m radius, adjustable from 210° to 270°	
MP2000-360 = 4.0 to 6.4 m radius, 360°	
MP3000-90 = 6.7 to 9.1 m radius, adjustable from 90° to 210°	
MP3000-210 = 6.7 to 9.1 m radius, adjustable from 210° to 270°	
MP3000-360 = 6.7 to 9.1 m radius, 360°	
MP3500-90 = 9.4 to 10.7 m radius, adjustable from 90° to 210°	
MPLCS-515 = Left corner strip, 1.5 m x 4.6 m	
MPRCS-515 = Right corner strip, 1.5 m x 4.6 m	
MPSS-530 = Side strip, 1.5 m x 9.1 m	
MP-CORNER = 2.5 to 4.5 m radius, adjustable from 45° to 105°	

MP1000: 2.5 to 4.5 m radius

MP1000-90
90° to 210°

MP1000-210
210° to 270°

MP1000-360
360°

MP2000: 4.0 to 6.4 m radius

MP2000-90
90° to 210°

MP2000-210
210° to 270°

MP2000-360
360°

MP3000: 6.7 to 9.1 m radius

MP3000-90
90° to 210°

MP3000-210
210° to 270°

MP3000-360
360°

MP3500: 9.4 to 10.7 m radius

MP3500-90
90° to 210°

MP ROTATOR PERFORMANCE DATA

MP1000
Radius: 2.5 to 4.5 m
Adjustable Arc and Full-Circle
- Maroon: 90° to 210°
- Lt. Blue: 210° to 270°
- Olive: 360°

MP2000
Radius: 4.0 to 6.4 m
Adjustable Arc and Full-Circle
- Black: 90° to 210°
- Green: 210° to 270°
- Red: 360°

MP3000
Radius: 6.7 to 9.1 m
Adjustable Arc and Full-Circle
- Blue: 90° to 210°
- Yellow: 210° to 270°
- Grey: 360°

Arc	Pressure bar	Pressure kPa	MP1000 Radius m	MP1000 Flow m³/hr	MP1000 Flow l/min	MP1000 Precip mm/hr ■	MP1000 Precip mm/hr ▲	MP2000 Radius m	MP2000 Flow m³/hr	MP2000 Flow l/min	MP2000 Precip mm/hr ■	MP2000 Precip mm/hr ▲	MP3000 Radius m	MP3000 Flow m³/hr	MP3000 Flow l/min	MP3000 Precip mm/hr ■	MP3000 Precip mm/hr ▲
90°	1.7	170	-	-	-	-	-	5.2	0.08	1.29	12	13	7.6	0.16	2.69	11	13
	2.0	200	3.7	0.04	0.64	11	13	5.5	0.09	1.44	12	13	8.2	0.17	2.88	10	12
	2.5	250	4.0	0.04	0.72	11	13	5.8	0.09	1.52	11	13	8.5	0.19	3.11	10	12
	2.8	**280**	**4.1**	**0.05**	**0.80**	**11**	**13**	**6.1**	**0.10**	**1.63**	**11**	**12**	**9.1**	**0.20**	**3.26**	**10**	**11**
	3.0	300	4.3	0.05	0.87	11	13	6.4	0.11	1.74	10	12	9.1	0.21	3.41	10	12
	3.5	350	4.5	0.06	0.95	11	13	6.4	0.11	1.78	11	12	9.1	0.22	3.60	11	12
	3.8	380	4.5	0.06	1.02	12	14	6.4	0.11	1.82	11	12	9.1	0.23	3.83	11	13
180°	1.7	170	-	-	-	-	-	4.9	0.14	2.27	11	13	7.6	0.33	5.46	11	13
	2.0	200	3.7	0.08	1.29	11	13	5.2	0.15	2.43	11	13	8.2	0.36	5.99	11	12
	2.5	250	4.0	0.09	1.44	11	13	5.5	0.16	2.69	11	12	8.5	0.39	6.44	11	12
	2.8	**280**	**4.1**	**0.10**	**1.59**	**11**	**13**	**5.8**	**0.18**	**2.92**	**11**	**12**	**9.1**	**0.42**	**6.90**	**10**	**12**
	3.0	300	4.3	0.10	1.67	11	13	6.1	0.20	3.22	11	12	9.1	0.44	7.31	11	12
	3.5	350	4.5	0.12	1.90	11	13	6.4	0.21	3.45	10	12	9.1	0.47	7.73	11	13
	3.8	380	4.5	0.12	1.93	12	13	6.4	0.22	3.60	11	12	9.1	0.49	8.07	12	14
210°	1.7	170	-	-	-	-	-	4.9	0.17	2.73	12	14	7.6	0.39	6.37	11	13
	2.0	200	3.7	0.09	1.52	12	13	5.2	0.17	2.84	11	13	8.2	0.42	6.97	11	12
	2.5	250	4.0	0.10	1.71	11	13	5.5	0.19	3.07	11	12	8.5	0.46	7.54	11	13
	2.8	**280**	**4.1**	**0.11**	**1.86**	**11**	**13**	**5.8**	**0.20**	**3.26**	**10**	**12**	**9.1**	**0.49**	**8.03**	**10**	**12**
	3.0	300	4.3	0.12	1.93	11	13	6.1	0.21	3.45	10	11	9.1	0.52	8.53	11	12
	3.5	350	4.5	0.13	2.16	11	13	6.4	0.23	3.71	9	11	9.1	0.55	8.98	11	13
	3.8	380	4.5	0.14	2.24	11	13	6.4	0.23	3.83	10	11	9.1	0.57	9.44	12	14
270°	1.7	170	-	-	-	-	-	4.9	0.20	3.30	11	13	7.6	0.50	8.30	12	13
	2.0	200	3.7	0.11	1.82	11	12	5.2	0.22	3.60	11	12	8.2	0.55	8.98	11	12
	2.5	250	4.0	0.12	2.01	10	12	5.5	0.24	3.90	10	12	8.5	0.59	9.66	11	12
	2.8	**280**	**4.1**	**0.14**	**2.39**	**11**	**13**	**5.8**	**0.25**	**4.17**	**10**	**12**	**9.1**	**0.63**	**10.35**	**10**	**12**
	3.0	300	4.3	0.15	2.54	11	13	6.1	0.27	4.43	10	11	9.1	0.66	10.95	11	12
	3.5	350	4.5	0.17	2.73	11	13	6.4	0.28	4.66	9	11	9.1	0.70	11.60	11	13
	3.8	380	4.5	0.17	2.84	11	13	6.4	0.30	4.93	10	11	9.1	0.74	12.20	12	14
360°	1.7	170	-	-	-	-	-	4.9	0.28	4.55	11	13	7.6	0.66	10.92	11	13
	2.0	200	3.7	0.16	2.62	12	13	5.2	0.29	4.85	11	13	8.2	0.72	11.94	11	12
	2.5	250	4.0	0.18	2.92	11	13	5.5	0.32	5.19	10	12	8.5	0.78	12.89	11	12
	2.8	**280**	**4.1**	**0.19**	**3.18**	**11**	**13**	**5.8**	**0.34**	**5.61**	**10**	**12**	**9.1**	**0.84**	**13.80**	**10**	**12**
	3.0	300	4.3	0.20	3.34	11	13	6.1	0.36	5.95	10	11	9.1	0.89	14.63	11	12
	3.5	350	4.5	0.23	3.71	11	13	6.4	0.39	6.37	9	11	9.1	0.94	15.43	11	13
	3.8	380	4.5	0.23	3.83	11	13	6.4	0.40	6.59	10	11	9.1	0.98	16.18	12	14

Bold = Optimal pressure for the MP Rotator is 2.8 bar; 280 kPa. This can easily be achieved by using the MP Rotator with the pressure-regulated Pro-Spray PRS40 Sprinkler Body at 2.8 bar; 280 kPa.

Works best with Pro-Spray PRS40 Sprinkler Body

For Pro-Spray PRS40 information, see **page 66**

Smart WaterMark
Recognised as a responsible water-saving tool

Compatible with:

Pro-Spray PRS40
Page 66

MP ROTATOR PERFORMANCE DATA

MP3500
Radius: 9.4 to 10.7 m
Adjustable Arc
● Light Brown: 90° to 210°

Arc	Pressure bar	Pressure kPa	Radius m	Flow m³/hr	Flow l/min	Precip. mm/hr ■	Precip. mm/hr ▲
90°	1.7	170	10.1	0.24	3.94	9	11
	2.0	200	10.4	0.26	4.28	10	11
	2.5	250	10.4	0.28	4.58	10	12
	2.8	**280**	**10.7**	**0.29**	**4.84**	**10**	**12**
	3.0	300	10.7	0.31	5.22	11	13
	3.5	350	10.7	0.33	5.41	11	13
	3.8	380	10.7	0.34	5.68	12	14
180°	1.7	170	10.1	0.50	8.36	10	11
	2.0	200	10.4	0.51	8.48	9	11
	2.5	250	10.4	0.60	10.03	11	13
	2.8	**280**	**10.7**	**0.65**	**10.83**	**11**	**13**
	3.0	300	10.7	0.70	11.73	12	14
	3.5	350	10.7	0.73	12.15	13	15
	3.8	380	10.7	0.75	12.41	13	15
210°	1.7	170	10.1	0.59	9.80	10	12
	2.0	200	10.4	0.65	10.75	10	12
	2.5	250	10.4	0.70	11.66	11	13
	2.8	**280**	**10.7**	**0.75**	**12.45**	**11**	**13**
	3.0	300	10.7	0.80	13.40	12	14
	3.5	350	10.7	0.85	14.23	13	15
	3.8	380	10.7	0.90	14.91	13	16

MP ROTATOR PERFORMANCE DATA

- **MPLCS-515:** Ivory, MP Left Corner Strip
- **MPRCS-515:** Copper, MP Right Corner Strip
- **MPSS-530:** Brown, MP Side Strip

	Pressure bar	Pressure kPa	Radius m	Flow m³/hr	Flow l/min
MP Left Corner Strip	1.7	170	1.1 x 4.2	0.04	0.67
	2.0	200	1.2 x 4.3	0.04	0.72
	2.5	250	1.4 x 4.5	0.05	0.79
	2.8	**280**	**1.5 x 4.6**	**0.05**	**0.84**
	3.0	300	1.6 x 4.7	0.06	0.87
	3.5	350	1.7 x 4.8	0.06	0.94
	3.8	380	1.8 x 4.9	0.06	0.99
MP Right Corner Strip	1.7	170	1.1 x 4.2	0.04	0.67
	2.0	200	1.2 x 4.3	0.04	0.72
	2.5	250	1.4 x 4.5	0.05	0.79
	2.8	**280**	**1.5 x 4.6**	**0.05**	**0.84**
	3.0	300	1.6 x 4.7	0.05	0.87
	3.5	350	1.7 x 4.8	0.06	0.94
	3.8	380	1.8 x 4.9	0.06	0.99
MP Side Strip	1.7	170	1.1 x 8.3	0.08	1.34
	2.0	200	1.2 x 8.6	0.09	1.43
	2.5	250	1.4 x 8.9	0.09	1.57
	2.8	**280**	**1.5 x 9.1**	**0.10**	**1.66**
	3.0	300	1.6 x 9.3	0.10	1.72
	3.5	350	1.7 x 9.6	0.11	1.87
	3.8	380	1.8 x 9.9	0.12	1.96

MP Corner Nozzle

MP-CORNER
2.5 to 4.5 m

Male Threaded Nozzle

MP-HT
Male Threaded

MP Tool

MPTOOL
Adjusts all MP Rotator Nozzles

MP Stick

MPSTICK
Snaps onto any length of 1" (25 mm) PVC to allow standing adjustment;
PVC pipe not included

Bold = Optimal pressure for the MP Rotator is 2.8 bar; 280 kPa. This can easily be achieved by using the MP Rotator with the pressure-regulated Pro-Spray PRS40 Sprinkler Body at 2.8 bar; 280 kPa.

MP Strips Nozzles

MPLCS-515
Left Corner Strip
1.5 x 4.6 m

MPRCS-515
Right Corner Strip
1.5 x 4.6 m

MPSS-530
Side Strip
1.5 x 9.1 m

Notes:
To match the precipitation rate of Standard MP Rotator models, use single-row or triangular spacing. To match the MP800, use rectangular spacing.

See **page 78** for precipitation rate calculation.

PRO-SPRAY™ PRS40

To optimise MP Rotator Nozzle performance, the Pro-Spray PRS40 Sprinkler Body is pressure-regulated to 2.8 bar; 280 kPa.

KEY BENEFITS

- Industry's strongest sprinkler body for years of reliable performance
- Pressure-regulated to 2.8 bar; 280 kPa for the MP Rotator Nozzle
- Grey cap for easy field identification
- Co-moulded wiper seal made from chemical- and chlorine-resistant materials
- Innovative seal design prevents cap-to-body leaks, even with a loose cap
- FloGuard Technology option eliminates water waste in the event of a missing nozzle

ADDITIONAL FEATURES

- Directional flush plug design for cleaner installation
- Interchangeable components for easier servicing, retrofits, and upgrades
- Heavy-duty spring for consistent riser retraction
- Check valve option eliminates low-head drainage

OPERATING SPECIFICATIONS

- Check valve available for 10 cm, 15 cm, and 30 cm models (up to 4.3 m of elevation)
- Operational pressure range: 1.0 to 7.0 bar; 100 to 700 kPa
- Warranty period: 5 years

FACTORY-INSTALLED OPTIONS

- Reclaimed water identification
- FloGuard Technology available for pop-up models

USER-INSTALLED OPTIONS

- Reclaimed water ID cap (P/N 458562SP)
- Snap-on reclaimed cover (P/N PROS-RC-CAP-SP)
- Shutoff cap (P/N 213600SP)
- Shutoff nozzle (P/N 916400SP)

PRS40 Reclaimed

PRS40 models include optional factory-installed purple reclaimed caps.

PROS-00-PRS40
Retracted height: 11 cm
Inlet size: ½"

PROS-04-PRS40-CV
Retracted height: 15.5 cm
Pop-up height: 10 cm
Exposed diameter: 5.7 cm
Inlet size: ½"

FloGuard Technology

PROS-06-PRS40-CV
Retracted height: 22.5 cm
Pop-up height: 15 cm
Exposed diameter: 5.7 cm
Inlet size: ½"

PROS-12-PRS40-CV
Retracted height: 41 cm
Pop-up height: 30 cm
Exposed diameter: 5.7 cm
Inlet size: ½"

PRO-SPRAY PRS40 – SPECIFICATION BUILDER: ORDER 1 + 2 + 3

1 Model	2 Feature Options	3 Specialty Options
PROS-00-PRS40 = 2.8 bar regulated shrub adapter	**(blank)** = No option	**(blank)** = No option
PROS-04-PRS40 = 2.8 bar regulated 10 cm pop-up	**CV** = Factory-installed drain check valve *(pop-up models only)*	**R** = Factory-installed reclaimed body cap
PROS-06-PRS40 = 2.8 bar regulated 15 cm pop-up		**F** = FloGuard Technology
PROS-12-PRS40 = 2.8 bar regulated 30 cm pop-up		**F-R** = FloGuard Technology with reclaimed body cap

PRO-SPRAY PRS40 (SIDE INLET) MODELS

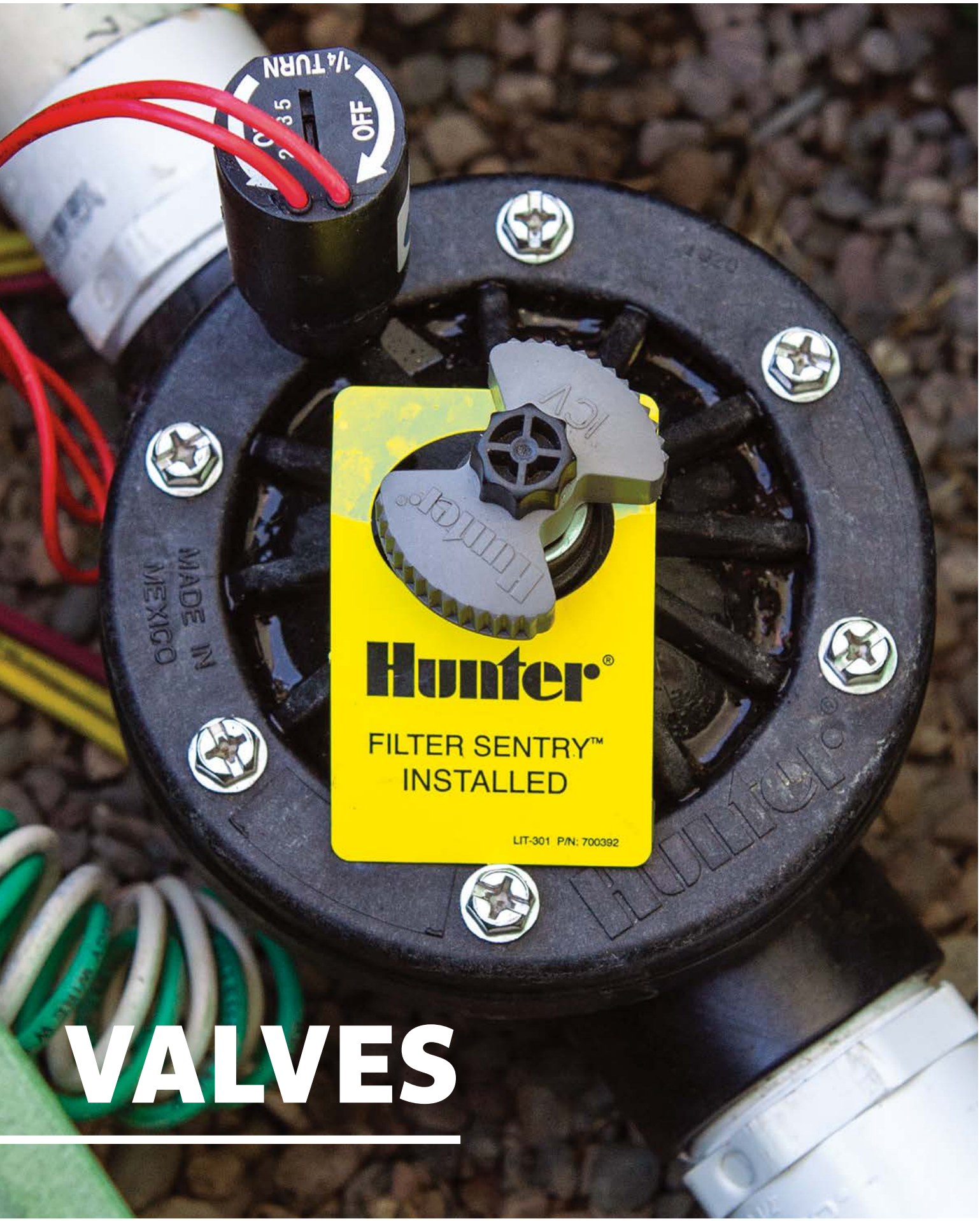
PROS-06-SI-PRS40 = 2.8 bar regulated 15 cm pop-up with side inlet

PROS-12-SI-PRS40 = 2.8 bar regulated 30 cm pop-up with side inlet

Examples:
PROS-06-SI-PRS40 = 15 cm pop-up with side inlet regulated at 2.8 bar; 210 kPa
PROS-06-PRS40-CV = 15 cm pop-up regulated at 2.8 bar; 210 kPa, drain check valve
PROS-12-PRS40-CV-F-R = 30 cm pop-up regulated at 2.8 bar; 210 kPa, drain check valve, and FloGuard Technology with reclaimed body cap

Compatible with:

MP Rotator Nozzles
Pages 63 to 65


1/4 TURN
OFF
MADE IN MEXICO
Hunter®
FILTER SENTRY™
INSTALLED
LIT-301 P/N: 700392

VALVES

VALVE COMPARISON CHART

QUICK SPECS	1" (25 MM) PGV & JAR-TOP	PGV	ICV	ICV FILTER SENTRY	IBV FILTER SENTRY
SIZE	1" BSP (25 mm)	1½", 2" BSP (40, 50 mm)	1", 1½", 2", 3" BSP (25, 40, 50, 80 mm)	1", 1½", 2", 3" BSP (25, 40, 50, 80 mm)	1", 1½", 2", 3" BSP (25, 40, 50, 80 mm)
FLOW (m^3/hr)	0.05–9	0.05–34	0.05–68	0.05–68	0.05–68
FLOW (l/min)	0.7-150	0.7-570	0.4-1135	0.4-1135	0.4-1135
FEATURES					
CAPTIVE BONNET BOLTS	●	●	●	●	
EPDM DIAPHRAGM AND SEAT			Standard	Standard	Standard
WARRANTY	2 Years	2 Years	5 Years	5 Years	5 Years
ADVANCED FEATURES					
FLOW CONTROL	Optional	●	●	●	●
FILTER SENTRY™ MECHANISM			User-Installed	Factory-Installed	Factory-Installed
ACCU SYNC™ CAPABLE	●	●	●	●	●
RECLAIMED WATER ID HANDLE	User-Installed	User-Installed	User-Installed	User-Installed	
RECLAIMED WATER ID TAG			User-Installed	User-Installed	User-Installed
APPLICATIONS					
RESIDENTIAL	●	●	●		
COMMERCIAL		●	●	●	●
POTABLE WATER	●	●	●	●	●
RECLAIMED WATER			●	●	●
SECONDARY WATER				●	●
PRESSURE REGULATION	●	●	●	●	●
HIGH-PRESSURE SYSTEMS			●	●	●
LOW-PRESSURE SYSTEMS	●	●	●	●	●
HIGH-TEMPERATURE LOCATIONS			●	●	●
USE AS MASTER VALVE		●	●	●	●

Advanced Features

ACCU SYNC PRESSURE REGULATORS

Available on:

PGV, ICV, IBV Valves

Avoid sprinkler over-pressure conditions and gain significant water savings with Accu Sync Pressure Regulators. This option is available in adjustable or fixed pressure models.

FILTER SENTRY MECHANISM

For use with:

ICV, IBV Valves

The Filter Sentry Mechanism scours the filter clean twice during each valve cycle. Since it is attached to the diaphragm, the Filter Sentry feature can be easily added after a valve has been installed.

ICV

This valve is the perfect choice for high-pressure systems and dirty water conditions.

KEY BENEFITS

- Optional Filter Sentry Mechanism scours the filter screen in dirty water conditions
- External/internal manual bleed allows for quick and easy activation at the valve
- Glass-filled nylon construction provides high-pressure rating and reliability
- Double-beaded diaphragm seal design ensures leak-free performance
- Fabric-reinforced EPDM diaphragm and seat ensure greater performance in all water conditions
- Captive bonnet screws eliminate the possibility of lost parts during disassembly
- Triple-tool bonnet screws are compatible with standard or Phillips screwdrivers as well as a nut driver
- Encapsulated solenoid with captive plunger used on every Hunter valve provides hassle-free service
- Flow control maximises efficiency and prolongs the life of the system

USER-INSTALLED OPTIONS

- Accu Sync™ Pressure Regulator at the valve
- DC-Latching Solenoid for battery-operated controllers (P/N 458200)
- Filter Sentry Mechanism easily added to an installed valve

FACTORY-INSTALLED OPTIONS

- LS: Valve without solenoid
- DC: DC-Latching Solenoid for battery-operated controllers
- FS: Filter Sentry
- FS-R: Reclaimed option with Filter Sentry Mechanism, purple control knob, and purple chlorine-resistant diaphragm

OPERATING SPECIFICATIONS

- Flow:
  - ICV-101G: 0.03 to 9 m^3/hr; 0.4 to 150 l/min
  - ICV-151G: 0.03 to 34 m^3/hr; 0.4 to 568 l/min
  - ICV-201G: 0.03 to 45 m^3/hr; 0.4 to 757 l/min
  - ICV-301: 0.03 to 68 m^3/hr; 0.4 to 1,135 l/min
- Recommended pressure range: 1.5 to 15.0 bar; 150 to 1,500 kPa
- Temperature rating: 66°C
- Warranty period: 5 years

SOLENOID SPECIFICATIONS

- 24 VAC solenoid
  - 350 mA inrush, 190 mA holding, 60 Hz
  - 370 mA inrush, 210 mA holding, 50 Hz

ICV-101G
Inlet diameter: 1" (25 mm)
Height: 14 cm
Length: 12 cm
Width: 10 cm

ICV-151G
Inlet diameter: 1½" (40 mm)
Height: 18 cm
Length: 17 cm
Width: 14 cm

ICV-201G
Inlet diameter: 2" (50 mm)
Height: 18 cm
Length: 17 cm
Width: 14 cm

ICV-301
Inlet diameter: 3" (80 mm)
Height: 27 cm
Length: 22 cm
Width: 19 cm

ICV-R
Inlet diameter: 1" (25 mm), 1½" (40 mm), 2" (50 mm), and 3" (80 mm)
Height: 18 cm
Length: 17 cm
Width: 14 cm

Double-Beaded Chlorine-Resistant Diaphragm

Filter Sentry Mechanism

VALVES

ICV 1", 1½", 2" AND 3" – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Standard Features	3 Feature Options	4 User-Installed Options
ICV-101-G-B = 1"(25 mm) BSP **ICV-151-G-B** = 1½" (40 mm) BSP **ICV-201-G-B** = 2" (50 mm) BSP	Globe valve with flow control	**(blank)** = No option **R** = Filter Sentry, purple reclaimed diaphragm and ID tag **DC** = DC-Latching Solenoid battery-operated controllers **LS** = Less solenoid	**AS-ADJ** = Accu Sync adjustable **458200** = DC-Latching Solenoid for battery-operated controllers **607105** = Reclaimed flow control handle (25, 40, 50 mm only) **LIT-700** = Reclaimed ID tag
ICV-301-B = 3" (80 mm) BSP	Globe / angle valve with flow control		

Example:
ICV-201G-B-AS-ADJ = 2" (50 mm) BSP ICV globe valve with flow control, user-installed adjustable Accu Sync Pressure Regulator

Double-Beaded Diaphragm

Optional: Filter Sentry Mechanism

Captive Bonnet Bolts

ICV PRESSURE LOSS (AT OPTIMAL FLOWS) IN BAR

Flow m^3/hr	1" (25 mm) Globe	1½" (40 mm) Globe	2" (50 mm) Globe	3" (80 mm) Globe	3" (80 mm) Angle
0.05	0.1				
0.1	0.1				
0.3	0.1				
1.0	0.2				
2.5	0.2				
3.5	0.2				
4.5	0.2	0.1			
7.0	0.4	0.1			
9.0	1.0	0.1	0.1		
11.0		0.2	0.1		
13.5		0.2	0.1		
17.0		0.3	0.1		
20.5		0.4	0.2		
23.0		0.5	0.3		
27.0		0.7	0.4		
30.5		0.9	0.5		
34.0		1.2	0.6	0.2	0.1
40.0			0.9	0.2	0.2
45.5			1.2	0.3	0.2
51.0				0.3	0.3
57.0				0.4	0.4
62.5				0.5	0.5
68.0				0.6	0.6

ICV PRESSURE LOSS (AT OPTIMAL FLOWS) IN kPa

Flow l/min	1" (25 mm) Globe	1½" (40 mm) Globe	2" (50 mm) Globe	3" (80 mm) Globe	3" (80 mm) Angle
1	14				
2	14				
4	14				
20	17				
40	20				
60	20				
75	20	9.6			
115	62	10			
150	139	12	5.0		
190		15	7.0		
225		18	9.3		
280		26	14		
340		37	20		
380		46	26		
450		65	36		
510		84	47		
565		104	57	16	12
660			79	22	17
750			103	29	23
850				38	30
950				47	38
1,050				58	47
1,135				69	56

AC Solenoid
(P/N 606800)
Two red wires

DC-Latching Solenoid
(P/N 458200)
One black (common) wire and one red (station) wire

IBV

Built of solid brass, this valve can power through the fiercest irrigation conditions.

KEY BENEFITS

- Factory-installed Filter Sentry™ Mechanism scours the filter screen in dirty water conditions
- External/internal manual bleed allows for quick and easy activation at the valve
- Heavy-duty brass construction provides high pressure rating and reliability
- Double-beaded diaphragm seal design ensures leak-free performance
- Fabric-reinforced EPDM diaphragm and seat ensure greater performance in all water conditions
- Triple-tool bonnet screws are compatible with standard or Phillips screwdrivers as well as a nut driver
- Encapsulated solenoid with captive plunger used on every Hunter valve provides hassle-free service
- Flow control maximises efficiency and prolongs the life of the system

USER-INSTALLED OPTIONS

- Accu Sync™ Pressure Regulator at the valve
- DC-Latching Solenoid for battery-operated controllers (P/N 458200)

FACTORY-INSTALLED OPTIONS

- DC: DC-Latching Solenoid for battery-operated controllers

OPERATING SPECIFICATIONS

- Flow rate:
  - IBV-101G-FS: 0.03 to 9 m^3/hr; 0.4 to 150 l/min
  - IBV-151G-FS: 0.03 to 34 m^3/hr; 0.4 to 568 l/min
  - IBV-201G-FS: 0.03 to 45 m^3/hr; 0.4 to 757 l/min
  - IBV-301G-FS: 0.03 to 68 m^3/hr; 0.4 to 1,135 l/min
- Recommended pressure range: 1.5 to 15 bar; 150 to 1,500 kPa
- Temperature rating: 66°C
- Warranty period: 5 years

SOLENOID SPECIFICATIONS

- 24 VAC solenoid
  - 350 mA inrush, 190 mA holding, 60 Hz
  - 370 mA inrush, 210 mA holding, 50 Hz

IBV-101G-FS
Inlet diameter: 1" (25 mm)
Height: 14 cm
Length: 12 cm
Width: 8 cm

IBV-151G-FS
Inlet diameter: 1½" (40 mm)
Height: 17 cm
Length: 15 cm
Width: 15 cm

IBV-201G-FS
Inlet diameter: 2" (50 mm)
Height: 18 cm
Length: 15 cm
Width: 15 cm

IBV-301G-FS
Inlet diameter: 3" (80 mm)
Height: 23 cm
Length: 22 cm
Width: 18 cm

IBV 1", 1½", 2", & 3" – SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Model	2 Standard Features	3 Feature Options	4 User-Installed Options
IBV-101G-B-FS = 1" (25 mm) BSP **IBV-151G-B-FS** = 1½" (40 mm) BSP **IBV-201G-B-FS** = 2" (50 mm) BSP **IBV-301G-B-FS** = 3" (80 mm) BSP	Brass globe valve with flow control, Filter Sentry Mechanism	**(blank)** = No option **R** = Filter Sentry purple reclaimed diaphragm and ID tag **DC** = DC-Latching Solenoid for battery-operated controllers **LS** = Less solenoid	**AS-ADJ** = Adjustable Accu Sync Pressure Regulator **458200** = DC-Latching Solenoid for battery-operated controllers **607105** = Reclaimed flow control handle **LIT-700** = Reclaimed ID tag

Example:
IBV-201G-B-FS-AS-ADJ = 2" (50 mm) BSP IBV brass globe valve with flow control, Filter Sentry Mechanism, user-installed adjustable Accu Sync Pressure Regulator

IBV PRESSURE LOSS (AT OPTIMAL FLOWS) IN BAR

Flow m^3/hr	1" (25 mm) Globe	1½" (40 mm) Globe	2" (50 mm) Globe	3" (80 mm) Globe
0.05	0.1			
0.1	0.1			
0.3	0.1			
1.0	0.2			
2.5	0.2			
3.5	0.2			
4.5	0.2	0.1		
7.0	0.4	0.1		
9.0	1.0	0.1	0.1	
11.0		0.2	0.1	
13.5		0.2	0.1	
17.0		0.3	0.2	
20.5		0.4	0.2	
23.0		0.5	0.3	
27.0		0.7	0.4	
30.5		0.9	0.5	
34.0			0.6	0.2
40.0				0.2
45.5				0.3
51.0				0.3
57.0				0.4
62.5				0.5
68.0				0.6

IBV PRESSURE LOSS (AT OPTIMAL FLOWS) IN kPa

Flow l/min	1" (25 mm) Globe	1½" (40 mm) Globe	2" (50 mm) Globe	3" (80 mm) Globe
0.1	14			
0.5	14			
4	14			
20	17			
40	20			
60	20			
75	20	9.6		
115	62	10		
150	139	12	5	
190		15	7	
225		18	9.3	
280		26	14	
340		37	20	
380		46	26	
450		65	36	
510		84	47	
565			57	16
660				22
750				29
850				38
950				47
1,050				58
1,135				69

ACCU SYNC™ PRESSURE REGULATORS

Gain unparalleled pressure regulation for any Hunter valve.

OPERATING SPECIFICATIONS

- Regulation from 1.4 to 7.0 bar; 140 to 700 kPa
- Static pressure: 10 bar; 1,000 kPa
- Required dynamic pressure differential: 1.0 bar; 100 kPa
- Works with DC-Latching and AC Solenoids
- Works with any Hunter valve
- Warranty period: 2 years

ACCU SYNC VALVE RECOMMENDED FLOW RANGE

Valve	Flow	
	m^3/hr	l/min
PGV-100/101	1.2–6.8	19–114
PGV-151	4.5–28	75–454
PGV-201	9.0–34	150–750
ICV-101	1.2–9.0	19–150
ICV-151	4.5–31	75–510
ICV-201	9.0–34	150–560
ICV-301	34–68	565–1135
IBV-101	1.2–9.0	19–150
IBV-151	4.5–31	75–510
IBV-201	9.0–46	150–560
IBV-301	34–68	565–1135

ADJUSTABLE

AS-ADJ
Height with solenoid: 8 cm

ADAPTER

SOLENOID ADAPTER

FIXED

AS-30
Height with solenoid: 8 cm

AS-40
Height with solenoid: 8 cm

ACCU SYNC APPLICATIONS

● **Adjustable 1.4 to 7.0 bar**	For full customisation, the adjustable Accu Sync can regulate pressure from 1.4 to 7.0 bar; 140 to 700 kPa
● **Fixed 2.1 bar**	Ideal for spray systems, pressure-regulated to 2.1 bar; 210 kPa
● **Fixed 2.8 bar**	Ideal for MP Rotator Nozzles and large in-line drip systems, pressure-regulated to 2.8 bar; 280 kPa

ACCU SYNC PRESSURE REGUALTORS– SPECIFICATION BUILDER: ORDER 1 + 2

1 Model	2 Inlet/Outlet
ACCU SYNC	**ADJ** = Adjustable Pressure Regulator (1.4 to 7.0 bar)
	30 = Fixed Pressure Regulator (2.1 bar)
	40 = Fixed Pressure Regulator (2.8 bar)

Example:
ICV-201G-B-AS-ADJ = 2" (50 mm) BSP ICV globe valve with flow control, user-installed adjustable Accu Sync Pressure Regulator

Installation
Accu Sync Pressure Regulator shown installed on ICV and PGV Valves.

EXPERIENCE ALL
WALKS OF LIGHT

LANDSCAPE AND ARCHITECTURAL LIGHTING

FX Luminaire provides industry-leading landscape and architectural lighting solutions with a focus on the advancement of LED technology and digital lighting control with zoning, dimming, and colour adjustment capabilities.

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FX Luminaire offers a range of classic and contemporary lighting fixtures in all configurations, from up lights and down lights to path lights and specialty lights.

Our fixture classification system is based on material construction, performance, and price. This helps you quickly identify common fixtures and create lighting packages for any project or budget. All FX Luminaire fixtures are made with top-quality materials and backed by the industry's best support team.

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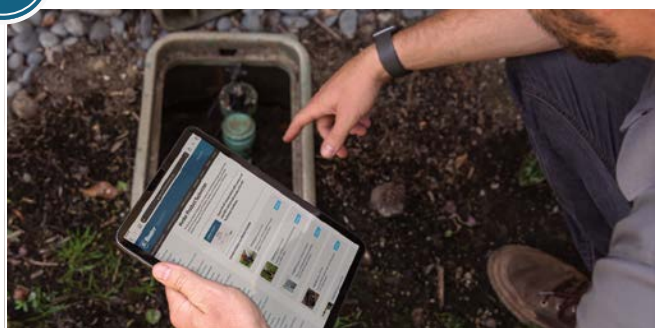
With Luxor Technology, you can liven up your clubhouse, course pathways, or property entryways to complement any occasion with 30,000 colours. Design one-of-a-kind holiday displays, create ambience for weddings, add company colours for corporate events, or simply adjust hues to match vegetation as the seasons change.

With a Luxor Controller, you can also create up to 250 adjustable lighting groups that can be turned on independently and dimmed from 1–100%.

The Luxor App provides ultimate flexibility and convenience when designing with Luxor Lighting Control Systems. With the app, you can adjust fixture intensities and colours, program up to 40 calendar-based themes, and fine-tune your colour palette — from anywhere!


FXLuminaire®
LANDSCAPE & ARCHITECTURAL LIGHTING | Learn more. Visit fxl.com

TECHNICAL INFORMATION



HUNTER UNIVERSITY

https://hunter.info/hunteruniversityem

Advance your career with our comprehensive online training programmes for golf irrigation professionals. From fundamental product knowledge to advanced control systems to design techniques, there's a golf professional development programme waiting for you!
Learn more at **training.hunterindustries.com**.

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These interactive, instructor-led courses feature a hands-on approach to learning about irrigation. Classes are held at the Hunter Industries campus in San Marcos, California, and select locations worldwide. To learn more, contact **training@hunterindustries.com**.

Golf Irrigation Training Programmes

Learn how to expertly manage your watering needs to ensure a healthy, playable course. Check out the golf-specific training programmes below!

Pilot Command Center Software

- Pilot Command Center Introduction
- Pilot Command Center Course Irrigation Profile
- Pilot Command Center Settings
- Pilot Command Center Disable Specific Areas
- Pilot Command Center Adjust Plan for Limited Flow

Pilot Controllers

- PilotFCP Utility Demo
- Pilot Field Controller and Integrated Hub Fundamentals

Maintenance

- Golf Rotor Maintenance
- Golf Controller Maintenance
- Distribution Uniformity Audit

PRECIPITATION RATES

In this section, the "Sprinkler Spacing Method–Any Arc and Any Spacing" equation is used to calculate precipitation rates. The first set of equations with the ■ shows the precipitation rate for the sprinklers when they are laid out in a square pattern. The next set with the ▲ shows the precipitation rate for the sprinklers laid out in an equilateral triangular spacing pattern. This is the "Sprinkler Spacing Method–Equilateral Triangular Spacing" equation.

WHAT IS PRECIPITATION RATE?

If someone said they were caught in a rainstorm that dropped 25 mm of water in an hour, you would have some idea of how hard or heavily the rain came down. A rainstorm that covers an area with 25 mm of water in one hour has a precipitation rate of 25 mm per hour. Similarly, the precipitation rate is the speed at which a sprinkler or an irrigation system applies water.

MATCHED PRECIPITATION RATES

A zone or system in which all the heads have similar precipitation rates is said to have "matched precipitation rates." Systems that have matched precipitation rates reduce wet and dry spots and minimise run times, which reduces water consumption and lowers costs. Knowing that sprinkler spacing, flow rates, and arcs of coverage affect precipitation rates, a general guideline is: as the spray arc doubles, so should the flow.

90° Arc = 1 GPM; 0.23 m^3/hr; 3.8 l/min

180° Arc = 2 GPM; 0.45 m^3/hr; 7.6 l/min

360° Arc = 4 GPM; 0.91 m^3/hr; 15.1 l/min

The flow rate of half-circle heads must be two times the flow rate of the quarter-circle heads, and the full-circle heads must have two times the flow rate of the half-circle heads. In the illustration, the same amount of water is applied to each quarter circle area and precipitation is therefore matched.

CALCULATING PRECIPITATION RATES

Depending on the construction of the irrigation system, the precipitation rate may be calculated by either a Sprinkler Spacing or a Total Area method.

Sprinkler Spacing Method (■)
The precipitation rate should be calculated for each individual zone. If all sprinkler heads on the zone have the same spacing, flow rate, and arc of coverage, use one of the following formulas:

Any Arc and Any Spacing (■):

$$\text{P.R. (in/hr)} = \frac{\text{Flow Rate (GPM) for any Arc} \times 34{,}650}{\text{Degrees of Arc} \times \text{Head Spacing (ft)} \times \text{Row Spacing (ft)}}$$

$$\text{P.R. (mm/hr)} = \frac{\text{Flow Rate } (m^3/hr) \text{ for any Arc} \times 360{,}000}{\text{Degrees of Arc} \times \text{Head Spacing (m)} \times \text{Row Spacing (m)}}$$

$$\text{P.R. (mm/hr)} = \frac{\text{Flow Rate (l/min) for any Arc} \times 21{,}600}{\text{Degrees of Arc} \times \text{Head Spacing (m)} \times \text{Row Spacing (m)}}$$

Sprinkler Spacing Method (▲)
The precipitation rate should be calculated for each individual zone. If all sprinkler heads on the zone have the same spacing, flow rate, and arc of coverage, use one of the following formulas:

Equilateral Triangular Spacing (▲):

$$\text{P.R. (in/hr)} = \frac{\text{Flow Rate (GPM) for any Arc} \times 34{,}650}{\text{Degrees of Arc} \times (\text{Head Spacing})^2 \times 0.866}$$

$$\text{P.R. (mm/hr)} = \frac{\text{Flow Rate } (m^3/hr) \text{ for any Arc} \times 360{,}000}{\text{Degrees of Arc} \times (\text{Head Spacing})^2 \times 0.866}$$

$$\text{P.R. (mm/hr)} = \frac{\text{Flow Rate (l/min) for any Arc} \times 21{,}600}{\text{Degrees of Arc} \times (\text{Head Spacing})^2 \times 0.866}$$

Total Area Method
The precipitation rate for a "system" is the average precipitation rate of all sprinklers in an area, regardless of the spacing, flow rate, or arc for each head. The Total Area Method calculates all the flows of all of the heads in any given area.

$$\text{P.R. (in/hr)} = \frac{\text{Flow (GPM)} \times 96.25}{\text{Total Area (ft)}}$$

$$\text{P.R. (mm/hr)} = \frac{\text{Flow } (m^3/hr) \times 1{,}000}{\text{Total Area } (m^2)}$$

$$\text{P.R. (mm/hr)} = \frac{\text{Flow (l/min)} \times 60}{\text{Total Area } (m^2)}$$

CONVERSION FACTORS

CONVERSION FACTORS			
To Convert	**From**	**To**	**Multiply By**
Area	acres	foot^2	43560
	acres	metre^2	4046.8
	metre^2	foot^2	10.764
	foot^2	inch^2	144
	inch^2	centimetre^2	6.452
	hectares	metre^2	10000
	hectares	acres	2.471
Power	kilowatts	horsepower	1.341
Flow	foot^3/minute	metre^3/second	0.0004719
	foot^3/second	metre^3/second	0.02832
	yards^3/minute	metre^3/second	0.01274
	gallon/minute	metre^3/hour	0.22716
	gallon/minute	litre/minute	3.7854
	gallon/minute	litre/second	0.06309
	metre^3/hour	litre/minute	16.645
	metre^3/hour	litre/second	0.2774
	litre/minute	litre/second	60
Length	foot	inch	12
	inch	centimetre	2.54
	foot	metre	0.30481
	kilometre	miles	0.6214
	miles	foot	5280
	miles	metre	1609.34
	millimetre	inch	0.03937
Pressure	PSI	kilopascals	6.89476
	PSI	bar	0.068948
	bar	kilopascals	100
	PSI	feet of head	2.31
Velocity	feet/second	metre/second	0.3048
Volume	feet^3	gallon	7.481
	feet^3	litre	28.32
	metre^3	feet^3	35.31
	metre^3	yard^3	1.3087
	yard^3	feet^3	27
	yard^3	gallon	202
	acres/feet	foot^3	43,560
	gallon	metre^3	0.003785
	gallon	litre	3.785
	imperial gallon	gallon	1.833

SYMBOLS AND CONSTANTS

SYMBOLS AND CONSTANTS			
Symbol	**Description**	**U.S. Units**	**SI Units**
a	Cross-sectional area of pipe flow	inches^2 (in^2)	millimetres^2 (mm^2)
C	Hazen-Williams roughness coefficient	none/unitless	none/unitless
Cu	Christiansen's coefficient of uniformity	percent (%)	percent (%)
d	inside diameter of pipe	inches (in)	millimetres (mm)
Dt	diameter of throw of a sprinkler	feet (ft)	metres (m)
DU	distribution uniformity	percent (%)	percent (%)
ETc	crop evapotranspiration	inches per day (in/day)	millimetres per day (mm/day)
ETO	reference evapotranspiration	inches per day (in/day)	millimetres per day (mm/day)
I	electrical current	amps (A), milliamps (mA)	amps (A), milliamps (mA)
ID	inside diameter of pipe	inches (in)	millimetres (mm)
hf	energy loss due to friction	feet of water (ft)	metres of water (m)
Kc	crop coefficient	percent (%)	percent (%)
ks	constant used to compute sprinkler spacing	none/unitless	none/unitless
L	spacing between lateral lines	feet (ft)	metres (m)
MAD	management allowable depletion	none/unitless	none/unitless
MC	maximum coverage for single-row sprinklers	feet (ft)	metres (m)
OD	outside diameter of pipe	inches (in)	millimetres (mm)
P	pressure of water	pounds per inch^2 (PSI)	kilopascals (kPa), bars (bar)
PR	precipitation rate	inches per day (in/day)	millimetres per day (mm/day)
Po	sprinkler operating pressure	pounds per inch^2 (PSI)	kilopascals (kPa), bars (bar)
Q	flow of water in a pipe	gallons per minute (GPM)	cubic metres per hour(m^3/hr), litres per second (lps)
R	electrical resistance	ohms (Ω)	ohms (Ω)
Rt	radius of throw	feet (ft)	metres (m)
S	sprinkler spacing	feet (ft)	metres (m)
SC	scheduling coefficient	none/unitless	none/unitless
v	average velocity of water in pipe	feet per second (fps)	metres per second (mps)
Vo	electrical voltage	volts (V)	volts (V)

PILOT FIELD CONTROLLER ELECTRICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Supply Voltage
Auto-sensing frequency (50 or 60 Hz)
120 VAC nominal (100 to 132 VAC)[1]
230 VAC nominal (200 to 260 VAC)[1]
Station output: 24 VAC at 1.0 A

CAPACITIES

Station Capacity
80 stations
Up to 20 stations can run simultaneously[2]

Station Solenoid Load
Up to four 24 VAC Hunter golf solenoids per station output[3]

[1] To prevent damage, all Pilot Field Controllers are shipped with the supply voltage set to 230 VAC.
[2] One 24 VAC Hunter golf solenoid per station.
[3] Multiple solenoids connected to a single station will reduce total simultaneous stations.

PILOT INTEGRATED HUB ELECTRICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Supply Voltage
Auto-sensing frequency (50 or 60 Hz)
Auto-switching 120/230 VAC nominal (100 to 277 VAC at 50/60 Hz)[1]

CAPACITIES

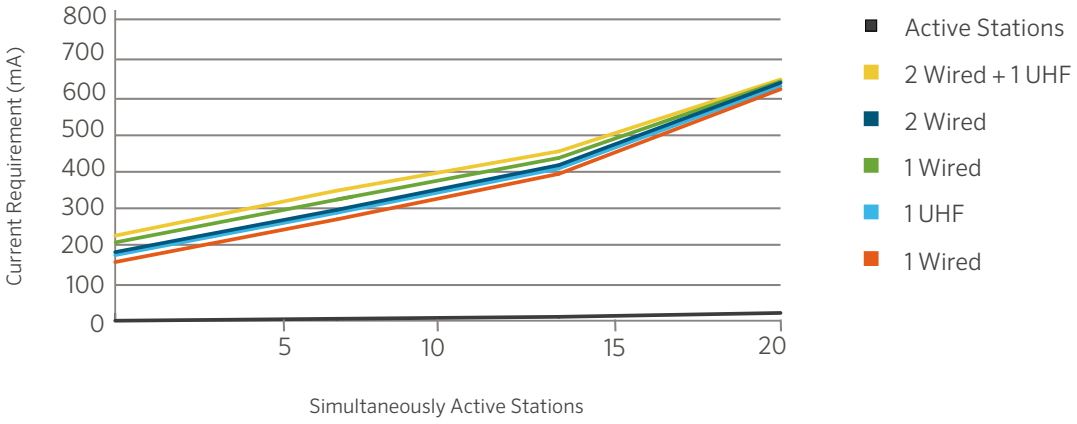
Integrated Two-Way Module Capacity
Up to 999 integrated Pilot® Two-Way Modules per Pilot Integrated Hub
Up to 120 24 VAC Hunter solenoids on at one time[2]

Integrated Two-Way Module Solenoid Load
Up to two 24 VAC Hunter solenoids per integrated Pilot Two-Way Module[3]

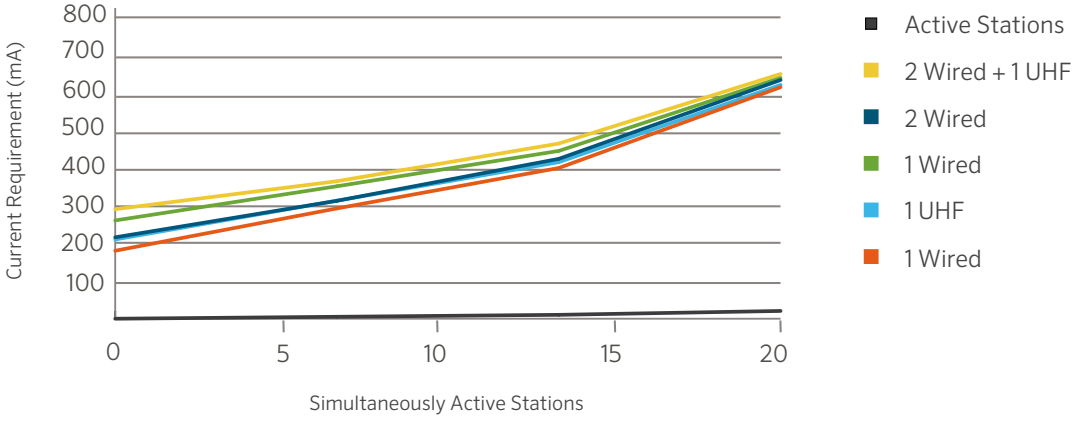
[1] The Pilot Integrated Hub automatically detects supply voltage and frequency.
[2] Depends on configuration. Pilot Integrated Hub will run up to 30 stations simultaneously per output module.
[3] Two solenoids per Pilot Two-Way Module does not reduce the maximum simultaneous station count.

PILOT-FC CURRENT REQUIREMENT CHARTS

PILOT-FC FIELD CONTROLLER CURRENT REQUIREMENTS: 230 VAC/50 Hz Supply Voltage, 10 to 40 Stations, Various Loads and Communication Options

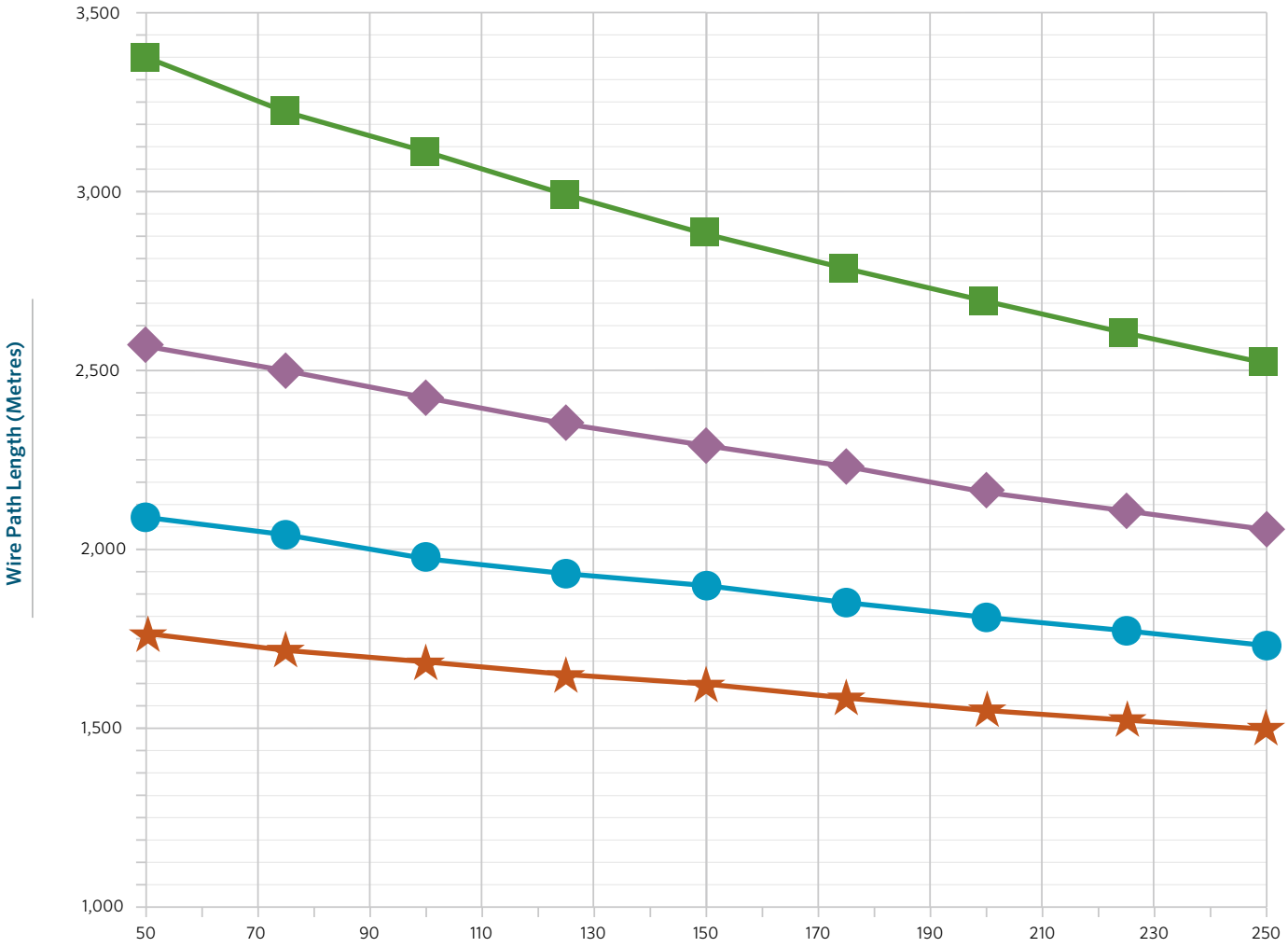


PILOT-FC FIELD CONTROLLER CURRENT REQUIREMENTS: 230 VAC/50 Hz Supply Voltage, 50 to 80 Stations, Various Loads and Communication Options



WIRE USE CHARTS

Active Stations Based on Wire Length and Number of Two-Way Modules Using ID1 (2.2 mm²) Wire



ACTIVE STATIONS	
■	15
◆	20
●	25
★	30

WIRE SIZING

REQUIRED INFORMATION

1) Actual one-way length of wire between the controllers and the power source or the controllers and valves

2) Allowable voltage loss along the wire circuit

3) Accumulative current flowing through the wire section being sized in amperes

RESISTANCE IS CALCULATED USING THIS FORMULA:

$$R = \frac{1{,}000 \times AVL}{2L \times I}$$

R = Maximum allowable resistance of wire in ohms per 1,000 m

AVL = Allowable voltage loss

L = Wire length (one way)

I = Inrush current

AVL for controller power wire sizing is calculated by subtracting the minimum operating voltage required by the controller from the minimum available voltage at the power source.

AVL for valve wire sizing is calculated by subtracting minimum solenoid operating voltage from controller output voltage. This number will vary depending on the manufacturer and in some cases with line pressure.

VALVE WIRE SIZING EXAMPLE

Given: The distance from the controller to the valve is 600 m. The controller output is 24 V. The valve has a minimum operating voltage of 20 V and an inrush current of 370 mA (0.37 A).

$$R = \frac{1{,}000 \times 4}{2\,(600) \times 0.37}$$

$$R = \frac{4{,}000}{444}$$

$$R = 9.01 \text{ ohms/1,000 m}$$

So, wire resistance cannot exceed 9 ohms per 1,000 m. Now go to table 1 and select the proper wire size. Since 1.5 mm^2 gauge wire has more resistance than 9 ohms per 1,000 m, choose 2.5 mm^2 wire.

Table 2 is a quick reference and is set up to provide maximum wire runs given the information at the bottom of the table.

TABLE 1 - RESISTANCE OF COPPER WIRE

Wire Size (mm^2)	Resistance in Ohms per 1,000 m at 20° C
0.5	34.5
1.0	17.2
1.5	11.5
2.5	6.9
4.0	4.3
6.0	2.9

TABLE 2 - ALLOWABLE DISTANCES FOR VARIOUS WIRE SIZES*

Ground Wire (mm^2)	Control Wire (mm^2) 0.5	1.0	1.5	2.5	4.0	6.0
0.5	157	209	235	261	279	289
1.0	209	314	377	449	503	538
1.5	235	377	470	588	684	754
2.5	261	449	588	783	965	1103
4.0	279	503	684	965	1,257	1,502
6.0	289	538	751	1,103	1,502	1,864

Notes:

Maximum one-way distance in metres between controller and solenoid assuming 370 mA inrush current, AVL = 4 volts, 1 valve on at a time.

Table 2 is for a single active solenoid. With two solenoids operating simultaneously on the same wires, the wire distances should be halved.

WIRE DATA

STANDARD ANNEALED COPPER AT 20°C						
American Wire Gauge	Common Metric Equivalent (mm^2)	Diameter (mils)	Diameter (mm)	Cross-Sectional Area (mm^2)	Resistance (Per mft ohms)	Resistance (per km ohms)
1	50	289.3	7.348	42.4	0.924	0.407
2	35	257.6	6.543	33.6	0.156	0.513
3		229.4	5.827	26.7	0.197	0.647
4	25	204.3	5.189	21.1	0.249	0.815
5		181.9	4.62	16.8	0.313	1.028
6	16	162	4.115	13.3	0.395	1.297
7		144.3	3.665	10.6	0.498	1.634
8	10	128.5	3.264	8.36	0.628	2.061
9		114.4	2.906	6.63	0.793	2.6
10	6	101.9	2.588	5.26	0.999	3.277
11		90.7	2.3	4.17	1.26	4.14
12	4	80.8	2.05	3.31	1.59	5.21
13		72	1.83	2.63	2	6.56
14	2.5	64.1	1.63	1.63	2.52	8.28
15		57.1	1.45	1.65	3.18	10.4
16	1.5	50.8	1.29	1.31	4.02	13.2
17		45.3	1.15	1.04	5.05	16.6
18	0.75	40.3	1.02	0.82	6.39	21
19		35.9	0.912	0.65	8.05	26.4
20	0.5	32	0.813	0.52	10.1	33.2

PSR WIRE DATA

MAXIMUM WIRE LENGTH, ONE WAY						
Model	0.75 mm^2	1.5 mm^2	2.5 mm^2	4 mm^2	6 mm^2	10 mm^2
PSR-22	74 m	118 m	188 m	298 m	473 m	751 m
PSR-52	41 m	65 m	104 m	165 m	262 m	416 m
PSR-53	41 m	65 m	104 m	165 m	262 m	416 m

STATEMENT OF WARRANTY

Hunter Residential and Commercial Irrigation Products

Hunter Industries Incorporated ("Hunter") warrants the following products to be free of defects in materials or workmanship under normal use in landscape irrigation applications for the specified period of time outlined below from the original date of manufacture:

ONE YEAR	**ROTORS**	SRM	**MICRO**	Micro Sprays, PLD Fittings, Rigid Risers, Air Relief Valves, RZB
TWO YEARS	**ROTORS**	PGP-ADJ, PGJ, HCV	**CONTROLLERS**	ACC (Legacy), BTT, Eco-Logic, HC, HCC, HPC, I-Core/DUAL Families (Legacy), NODE, NODE-BT, Pro-C Families, Pro-HC, PSR, ROAM, X2, X-Core, XC Hybrid, WAND, WVL
	SPRAYS	PS Ultra Family, SJ, FlexSG, HSBE Family	**SENSORS**	HC Flow Meter (wired and wireless)
	NOZZLES	Spray Nozzles, PCN, PCB, AFB, MSBN	**MICRO**	ACZ, PCZ, RZWS, Point Source Emitters, Tubing, Multi-Port Emitters, IH Risers, MLD, Eco-Indicator, Multi-Purpose Box, Senninger Regulators, PLD-LOC Fittings
	VALVES	PGV Family	**TOOLS**	SpotShot
	CENTRAL	A2CWIFI, A2CLAN, A2CCELLE, WIFIKIT, LANKIT, CELLKIT		
THREE YEARS	**CONTROLLERS**	ROAM XL, EZ Decoder System, EZ-DT	**MP ROTATOR**	All
FIVE YEARS	**ROTORS**	PGP Ultra, I-20, I-25, I-40, I-50, I-80, and I-90 Families	**CONTROLLERS**	ACC2, ICC2, ICD Decoders, ICD-HP
	SPRAYS	Pro-Spray, Pro-Spray PRS30, and Pro-Spray PRS40 Families	**SENSORS**	Clik Sensors, Flow-Sync, MWS, Solar Sync, Wireless Flow Sensor
	VALVES	HQ, ICV, IBV	**MICRO**	ICZ, PLD, HDL, HDL-COP**, Eco-Mat, Eco-Wrap

Hunter Golf and ST System Irrigation Products*

Hunter will unconditionally repair, replace, or repurchase, at its sole discretion, any defective component* assemblies contained within the Golf and ST products listed below by category, returned freight prepaid, from the date of manufacture within a period of:

ONE YEAR	**GOLF CONTROLLERS**	Pilot Command Center Software, Pilot-FC, Pilot-FI, Pilot Hub
THREE YEARS	**GOLF ROTORS**	TTS-800 Series, G-800 Series, G-900 Series, B Series
	GOLF TWO-WAY MODULES	Pilot 100, Pilot 200, Pilot 400, Pilot 600
FIVE YEARS	**GOLF ROTORS**	The golf rotor component warranty is extended to 5 years with a one-for-one purchase of an HSJ Swing Joint from an authorised Hunter Golf distributor.
	SWING JOINTS	HSJ-0, HSJ-1, HSJ-2, HSJ-3
	ST ROTORS	ST-90, STG-900, ST-1200, ST-1600, ST-1700
	ST ACCESSORIES	All models starting with "ST"
	COMPUTER, PRINTERS & ACCESSORIES, MAINTENANCE RADIO & BATTERY	Equipment manufacturer's warranty (no Hunter warranty)

* 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.

If used for agricultural applications, Hunter limits the warranty for its spray, rotator, and rotor products to a period of one (1) year from the original date of manufacture. This agriculture limitation supersedes all other warranties expressed or implied.

**While the use of copper does not completely remove the chance of root intrusion, it has been shown to assist in its prevention when coupled with proper irrigation scheduling.

Hunter® | *Built on Innovation®*

Statement of Warranty, Continued

If a defect in a Hunter product is discovered during the applicable warranty period, Hunter will repair or replace, at its option, the product or the defective part. This warranty does not extend to repairs, adjustments, or replacement of a Hunter product or part that results from misuse, negligence, alteration, modification, tampering, or improper installation and/or maintenance of the product. This warranty extends only to the original installer of the Hunter product. If a defect arises in a Hunter product during the warranty period, contact your local Hunter Authorised Distributor.

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-authorised 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, expressed 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.

Where applicable, Hunter's statement of warranty complies with local directives.

If you have any questions concerning the warranty or its application, email support@hunterindustries.com.

ASAE CERTIFICATION STATEMENT

Hunter Industries Incorporated certifies that pressure, flow rate, and radius data for these products were determined and listed in accordance with ASAE Standard S398.1, Procedure for Sprinkler Testing and Performance Reporting, and are representative of performance of production sprinklers at the time of publication. Actual product performance may differ from the published specifications due to normal manufacturing variations and sample selection. All other specifications are solely the recommendation of Hunter Industries Incorporated.

Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.

Gregory R. Hunter, CEO of Hunter Industries

Gene Smith, President, Landscape Irrigation and Outdoor Lighting

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