

## Agricultural Irrigation Products 2017 Catalog



A Legacy of Agricultural Innovation



LF™ SERIES SPRINKLERS



LFX™ SERIES SPRINKLERS WITH PETUBING



MICRO-QUICK™ SPRAYS WITH PE TUBING



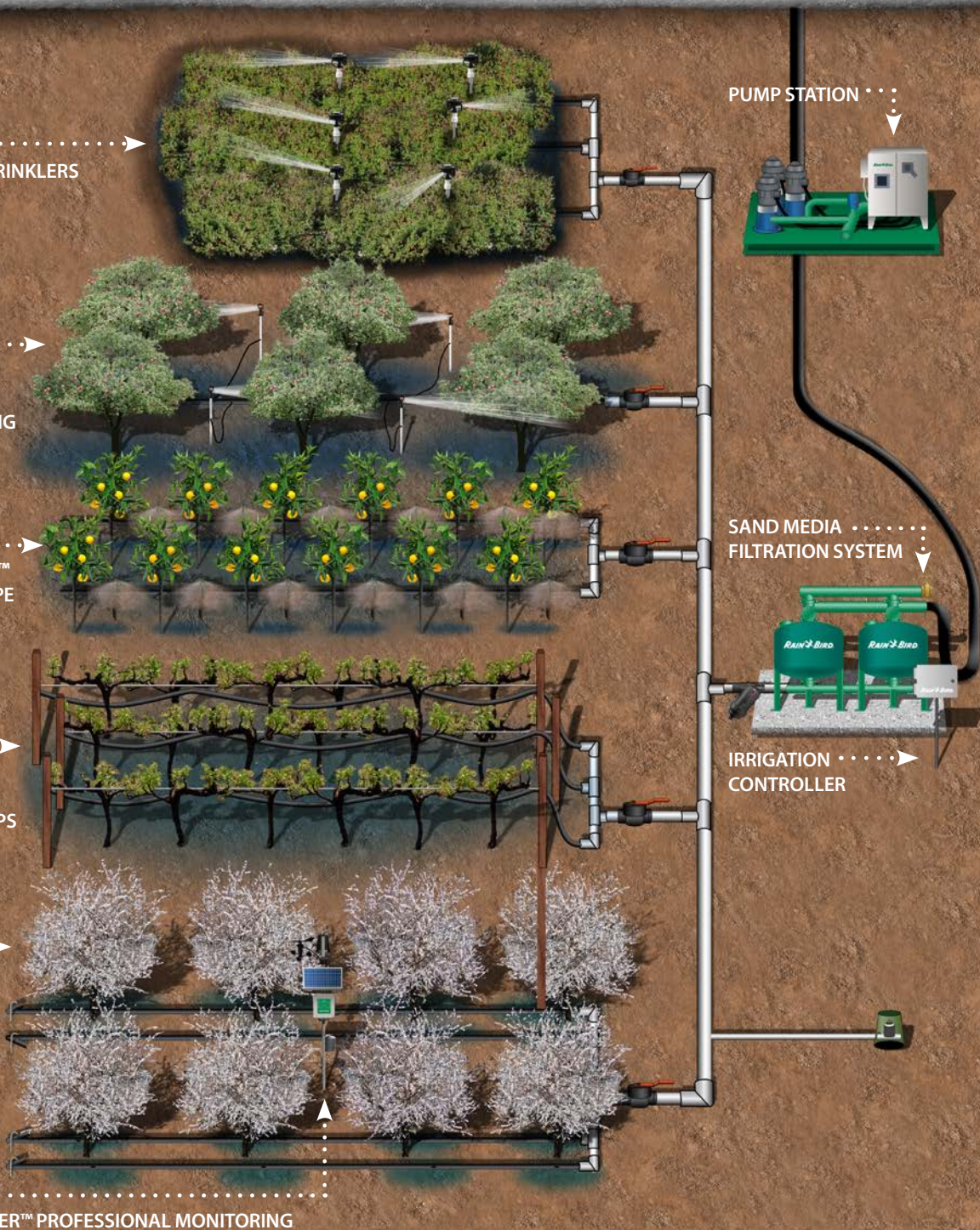
A5 PC™ DRIPLINE WITH VINE CLIPS



A5 PC™ DRIPLINE



CLIMATEMINDER™ PROFESSIONAL MONITORING



## IRRIGATION PRODUCTS NEEDED FOR ALL STAGES OF FIELD DEVELOPMENT

With a legacy rooted in agriculture, Rain Bird applies its industry leading irrigation expertise to design and manufacture a number of solutions to meet a grower's needs. From low-volume precision dripline irrigation to high-volume long-throw sprinklers – our products minimize maintenance, maximize distribution uniformity and efficiently deliver water and nutrients to where it's needed during all stages of a crop's life.



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# Drip Irrigation

Rain Bird® has leveraged over 75 years of irrigation expertise to develop a line of agriculture tubing products. Allowing for precise water and nutrient application, A5 PC™ Series Pressure Compensating Dripline and PE Polyethylene tubing were designed and developed to address the key issues facing growers today.

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# Drip Irrigation



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## A5 PC™ Series Pressure Compensating Heavywall Dripline



**Ultimate in water distribution; precision location, one drop at a time. Reliable, durable, and high performing pressure compensating dripline ideal for permanent crop applications.**

### Features

#### Reliable, Steady Flow

A5 PC's grit-tolerant, clog-resistant design ensures that water will keep flowing to crops, whether it is being drawn from a well, pond, reservoir or canal.

#### High Uniformity and Efficiency

The technologically advanced pressure-compensating design of the low-profile flat-emitter maximizes uniformity and water-use efficiency, even with elevation changes. Increase crop yield by reducing the use of water, chemicals, and fertilizer.

#### Maximum Durability

Growers demand reliable performance in the harshest conditions. A5 PC dripline is engineered and tested to stand up to harsh chemicals, UV radiation and damage that can be caused by farm equipment, giving you years of worry-free performance.

#### Application Versatility

Best suited for permanent crops, orchard and vineyard applications including grapes, hops, stone fruit, almonds, walnuts, pistachios, blueberries, and pecans.

#### Operating Range

- Compensating Pressure: 7 to 60 psi (0.48 to 4.14 bar)
- Water Temperature: Up to 110° F (43.3° C)
- Ambient Temperature: Up to 150° F (65.6° C)
- Required Filtration: 120 mesh (125 micron)

### Specifications

#### Nominal Flow Rates:

- 0.31 gph (1.2 l/h)
- 0.42 gph (1.6 l/h)
- 0.53 gph (2.0 l/h)
- 0.61 gph (2.3 l/h)
- 1.06 gph (4.0 l/h)

#### Standard Emitter Spacing:

- 18", 24", 30", 36", 42", 48", 60"
- 20 cm, 40 cm, 45 cm, 50 cm, 55 cm, 60 cm, 70 cm, 75 cm, 100 cm
- Custom spacing available

#### Tubing Dimensions:

- 16 mm with 35mil wall: OD 0.610" (15.5mm), ID 0.540" (13.7mm), wall thickness 0.035"(0.9mm)
- 16 mm with 45mil wall: OD 0.630" (16.0mm), ID 0.540" (13.7mm), wall thickness 0.045"(1.1 mm)
- 18 mm: OD 0.709" (18.0mm), ID 0.619" (15.7mm), wall thickness 0.045"(1.1 mm)
- 20 mm: OD 0.786" (19.9mm), ID 0.690" (17.5mm), wall thickness 0.048"(1.2mm)

#### Customer Satisfaction Policy:

Rain Bird's Customer Satisfaction Policy provides 5 years of protection on product workmanship and 7 years on environmental stress cracking.



### Optional Preinstalled Vine Clips

Rain Bird preinstalled vine clips help improve water placement and dramatically reduce installation time and labor costs. Vine clips are available on A5 PC™ Pressure Compensating Dripline and select sizes of PE Polyethylene Tubing. Ideal for all on-wire dripline applications.

- Installed to the growers specifications at the time of order; most common spacing ranges from 24" to 48"
- Easily adjustable in field to position and hold dripline or emitter location in place for precise water application
- Commonly used in applications with elevation changes to prevent water migration and ensure droplets fall at desired plant location
- Low profile design optimal for mechanical harvesting

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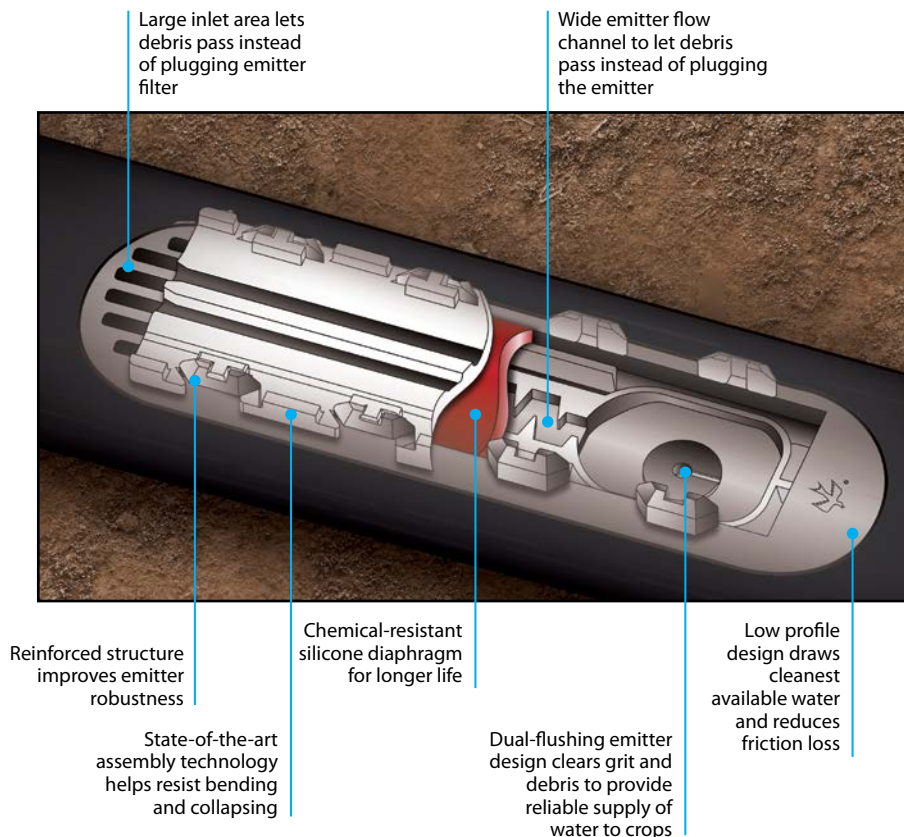
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## A5 PC™ Series Pressure Compensating Ag Dripline With GritX™ Emitter Technology



### Emitter Performance Data

	0.31 gph (1.2 l/h)	0.42 gph (1.6 l/h)	0.53 gph (2.0 l/h)	0.61 gph (2.3 l/h)	1.06 gph (4.0 l/h)
<b>Coefficient of Variation (Cv)</b>	0.036	0.037	0.035	0.028	0.035
<b>Constant (k)</b>	0.35	0.41	0.53	0.63	1.01
<b>Exponent (x)</b>	-0.026	0.019	0.017	0.007	0.004
<b>Barb Loss Factor (Kd)</b>	16mm = 1.40, 18mm = 0.85, 20mm = 0.41				

### How to Order A5 PC™ Series Pressure Compensating Ag Dripline

<b>A5</b>	-	<b>18</b>	-	<b>05</b>	-	<b>18</b>	-	<b>24</b>
<b>Model</b> A5 PC™ AG Dripline		<b>Tube Diameter</b> 1635 = 16 mm 0.035 wall 1645 = 16 mm 0.045 wall 18 = 18 mm 0.045 wall 20 = 20 mm 0.048 wall		<b>Flow Rate</b> 03 = 0.31 gph (1.2 l/h) 04 = 0.42 gph (1.6 l/h) 05 = 0.53 gph (2.0 l/h) 06 = 0.61 gph (2.3 l/h) 10 = 1.06 gph (4.0 l/h)		<b>Emitter Spacing</b> 18 = 18" (45.7 cm) 24 = 24" (61.0 cm) 30 = 30" (76.2 cm) 36 = 36" (91.4 cm) 42 = 42" (106.7 cm) 48 = 48" (121.9 cm) 60 = 60" (152.4 cm)		<b>Vine Clip Spacing (Optional)</b> 24 = 24" (61.0 cm) 30 = 30" (76.2 cm) 36 = 36" (91.4 cm) 42 = 42" (106.7 cm)

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## A5 PC™ 16 mm Headloss and Lateral Length

### Calculating Lateral Length Inlet Pressure

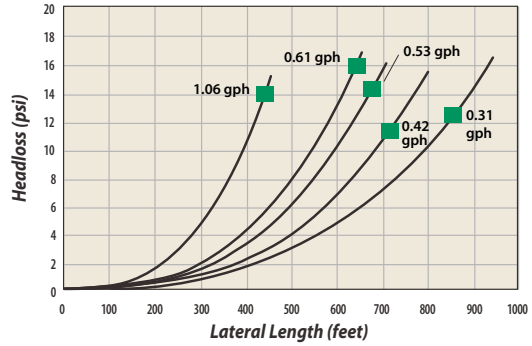
$$\begin{aligned} &\text{Line End Pressure*} \\ &+ \text{Pressure Loss (from graph)} \\ &= \text{Inlet Pressure} \end{aligned}$$

\*Minimum pressure at lateral length end = 7 psi.

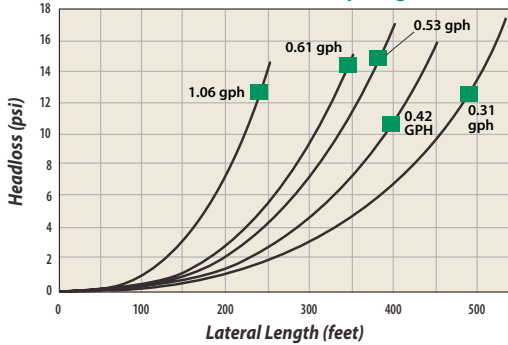
#### Example:

A5 PC 18" Spacing                      **7 psi (end pressure)**  
0.53 gph, 350' Run                      + **12 psi (from graph)**  
Minimum Inlet Pressure                = **19 psi**

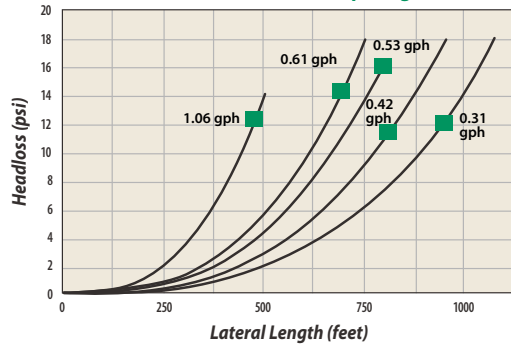
A5 PC - 16mm - 36" Spacing



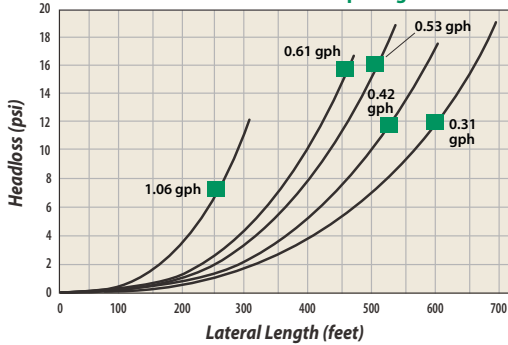
A5 PC - 16mm - 18" Spacing



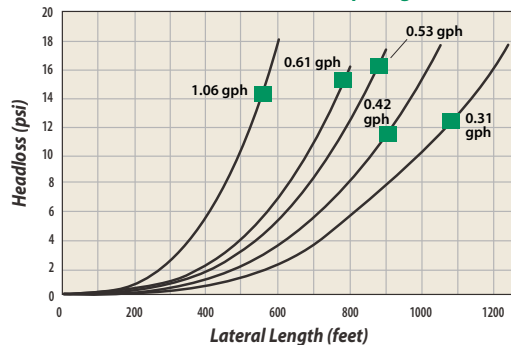
A5 PC - 16mm - 42" Spacing



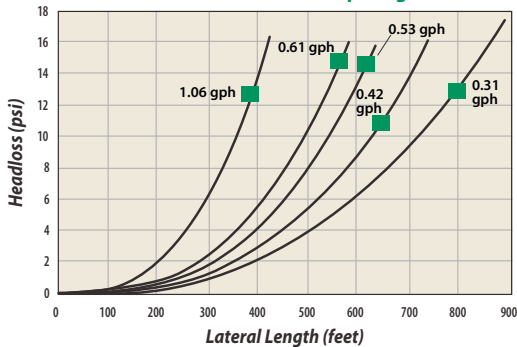
A5 PC - 16mm - 24" Spacing



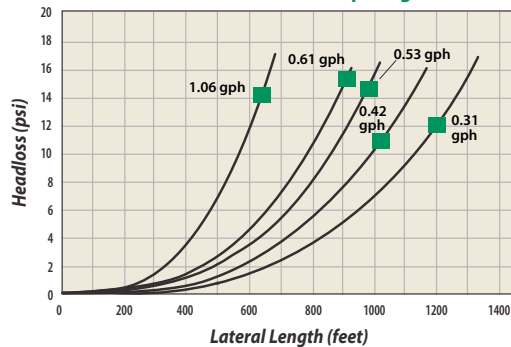
A5 PC - 16mm - 48" Spacing



A5 PC - 16mm - 30" Spacing



A5 PC - 16mm - 60" Spacing



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## A5 PC™ 16 mm Headloss and Lateral Length (Metric)

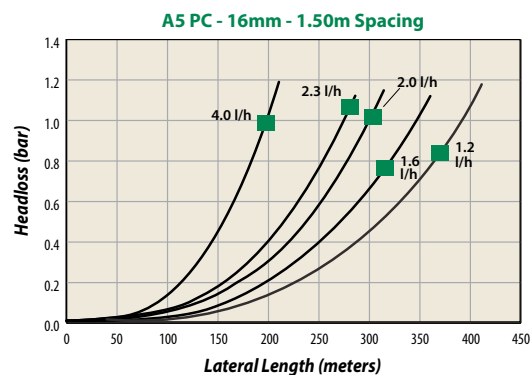
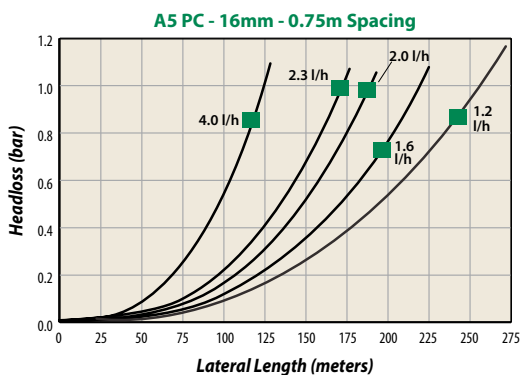
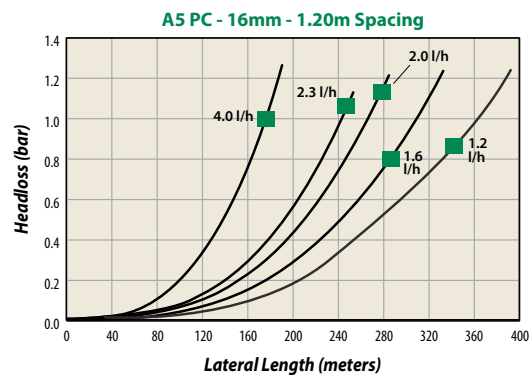
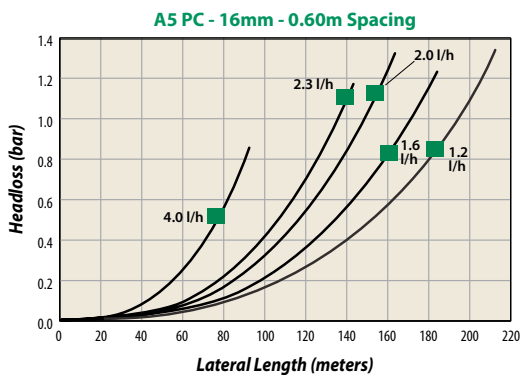
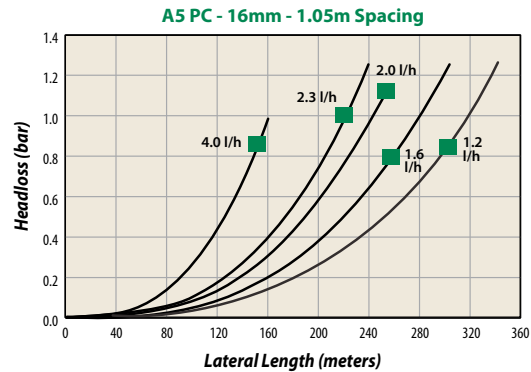
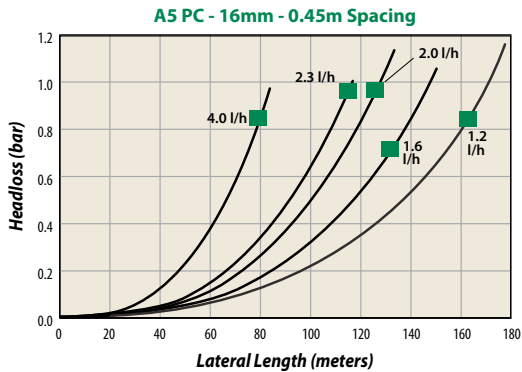
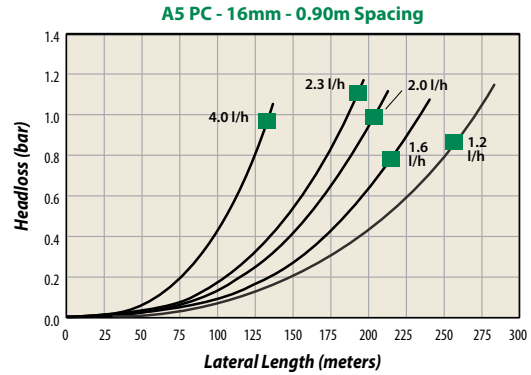
### Calculating Lateral Length Inlet Pressure

$$\begin{aligned} &\text{Line End Pressure*} \\ &+ \text{Pressure Loss (from graph)} \\ &= \text{Inlet Pressure} \end{aligned}$$

\*Minimum pressure at lateral length end = 0.48 bar.

#### Example:

$$\begin{aligned} &\text{A5 PC 0.45m Spacing} && \mathbf{0.48 \text{ bar (end pressure)}} \\ &\text{2.0 l/h, 106.7m (350') Run} && \mathbf{+ 0.82 \text{ bar (from graph)}} \\ &\text{Minimum Inlet Pressure} && \mathbf{= 1.30 \text{ bar}} \end{aligned}$$



## A5 PC™ 18 mm Headloss and Lateral Length

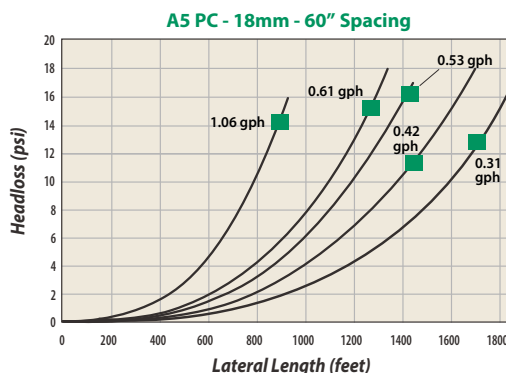
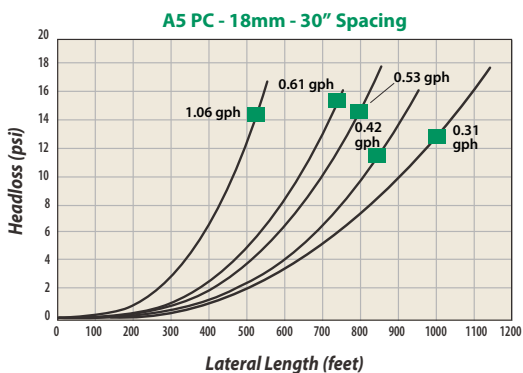
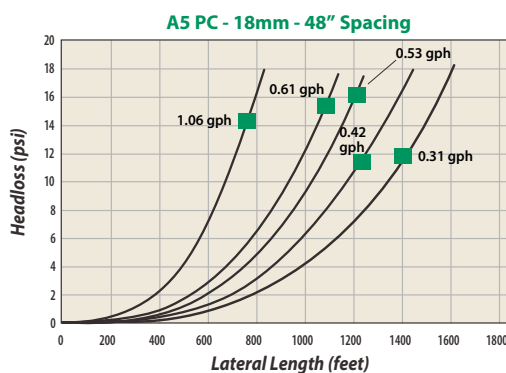
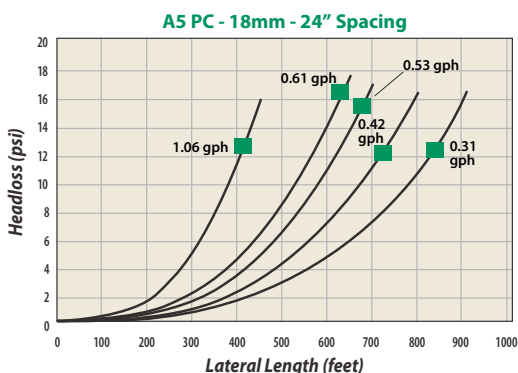
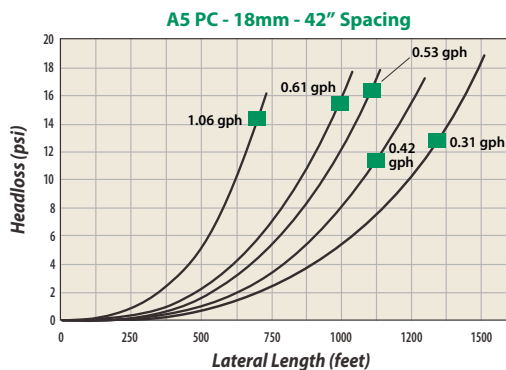
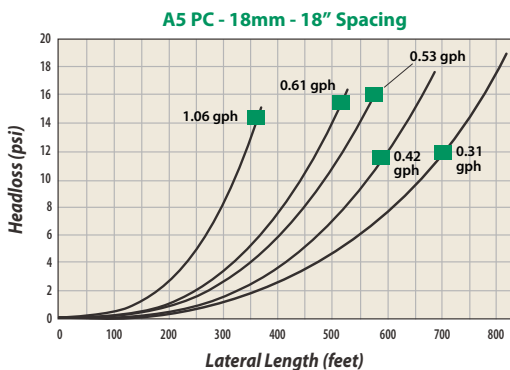
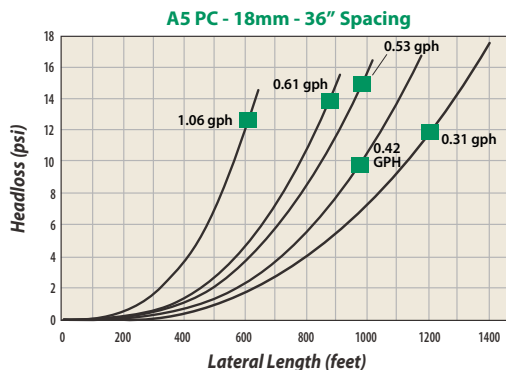
### Calculating Lateral Length Inlet Pressure

$$\begin{aligned} &\text{Line End Pressure*} \\ &+ \text{Pressure Loss (from graph)} \\ &= \text{Inlet Pressure} \end{aligned}$$

\*Minimum pressure at lateral length end = 7 psi.

#### Example:

$$\begin{aligned} &\text{A5 PC 18" Spacing} && \mathbf{7 \text{ psi (end pressure)}} \\ &0.53 \text{ gph, 500' Run} && + \mathbf{11 \text{ psi (from graph)}} \\ &\text{Minimum Inlet Pressure} && = \mathbf{18 \text{ psi}} \end{aligned}$$



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## A5 PC™ 18 mm Headloss and Lateral Length (Metric)

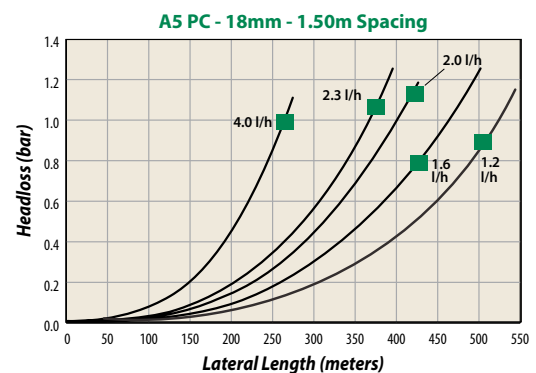
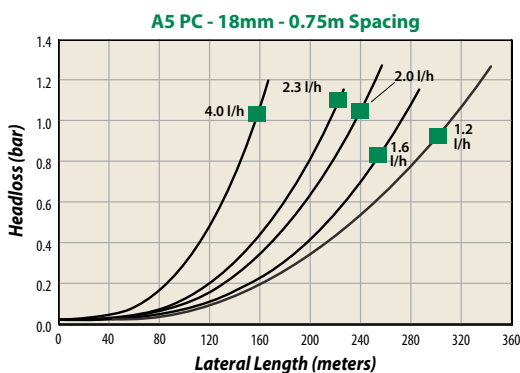
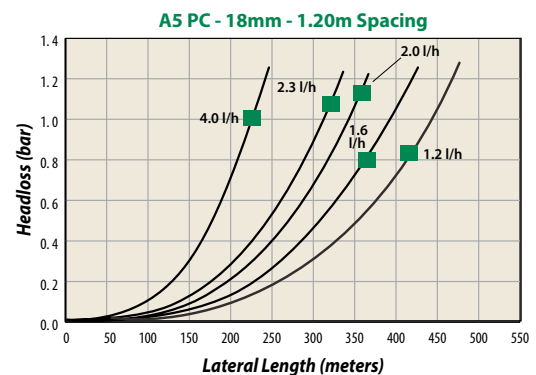
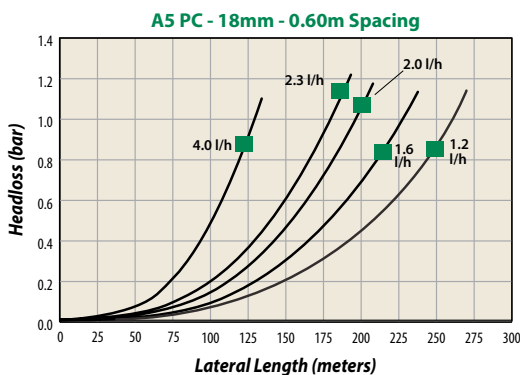
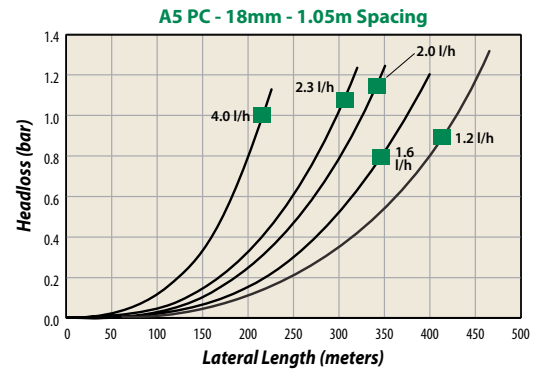
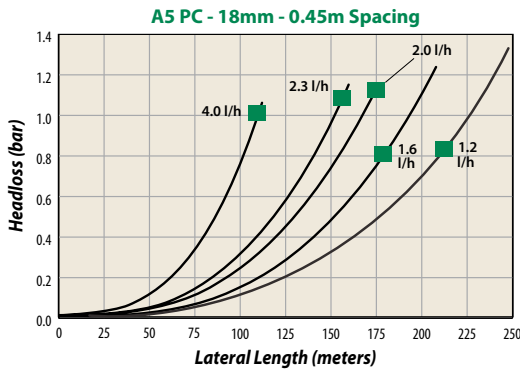
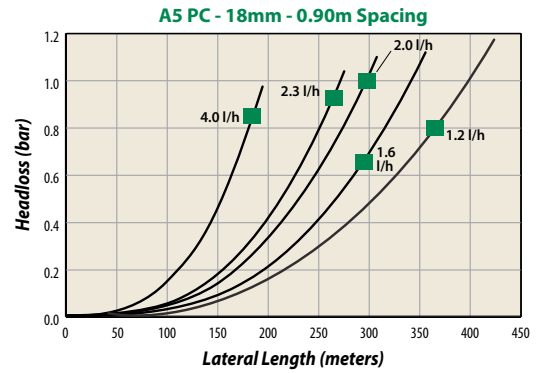
### Calculating Lateral Length Inlet Pressure

$$\begin{aligned} &\text{Line End Pressure*} \\ &+ \text{Pressure Loss (from graph)} \\ &= \text{Inlet Pressure} \end{aligned}$$

\*Minimum pressure at lateral length end = 0.48 bar.

#### Example:

A5 PC 0.45m Spacing	<b>0.48 bar (end pressure)</b>
2.0 l/h, 152.4m (500') Run	<b>+ 0.75 bar (from graph)</b>
Minimum Inlet Pressure	<b>= 1.23 bar</b>



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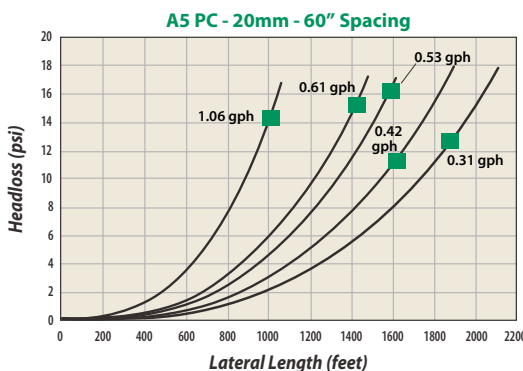
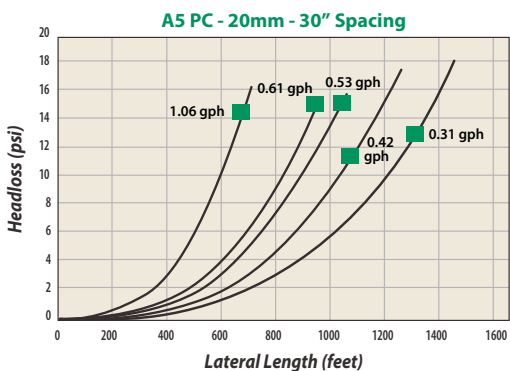
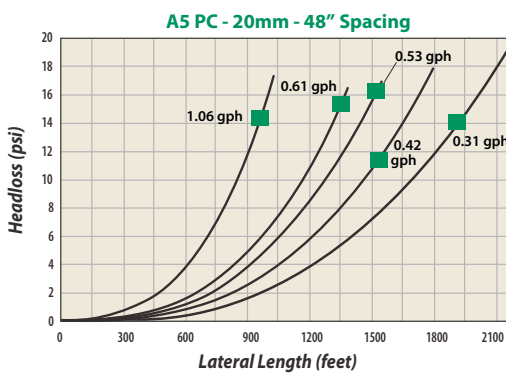
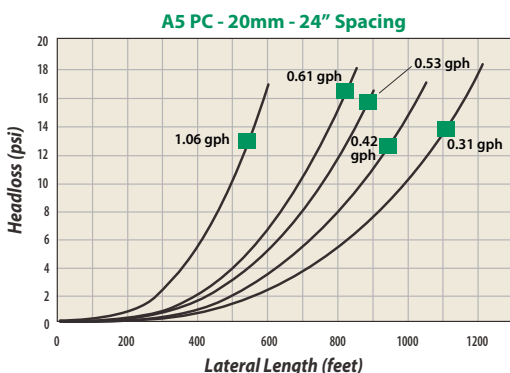
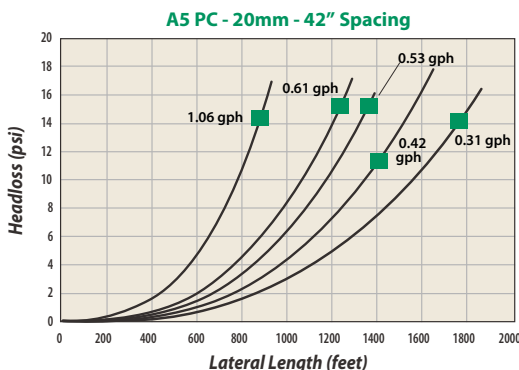
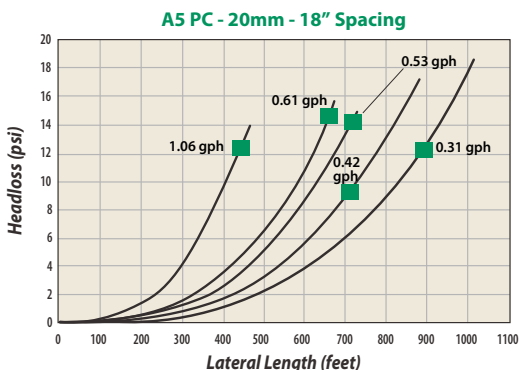
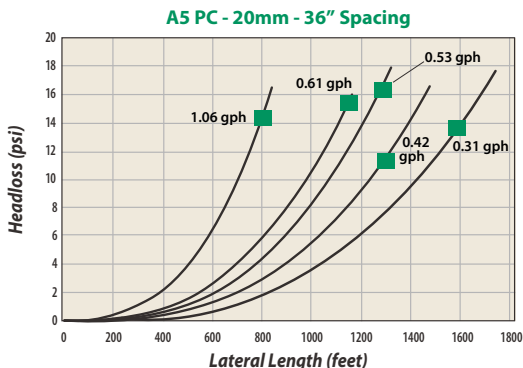
## A5 PC™ 20 mm Headloss and Lateral Length

### Calculating Lateral Length Inlet Pressure

$$\begin{aligned} &\text{Line End Pressure*} \\ &+ \text{Pressure Loss (from graph)} \\ &= \text{Inlet Pressure} \end{aligned}$$

\*Minimum pressure at lateral length end = 7 psi.

**Example:**  
A5 PC 18" Spacing                      7 psi (end pressure)  
0.53 gph, 700' Run                    + 14 psi (from graph)  
Minimum Inlet Pressure = 21 psi



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## A5 PC™ 20 mm Headloss and Lateral Length (Metric)

### Calculating Lateral Length Inlet Pressure

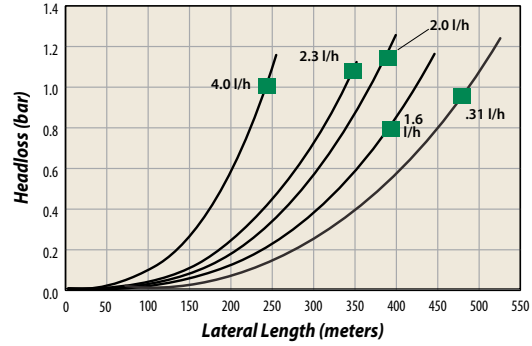
$$\begin{aligned} &\text{Line End Pressure*} \\ &+ \text{Pressure Loss (from graph)} \\ &= \text{Inlet Pressure} \end{aligned}$$

\*Minimum pressure at lateral length end = 0.48 bar.

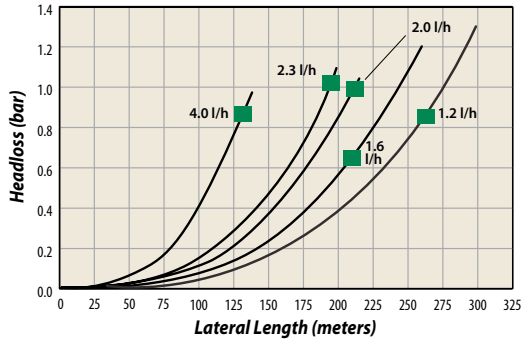
#### Example:

A5 PC 0.45m Spacing	<b>0.48 bar (end pressure)</b>
2.0 l/h, 213.4m (700') Run	<b>+ 0.95 bar (from graph)</b>
Minimum Inlet Pressure	<b>= 1.43 bar</b>

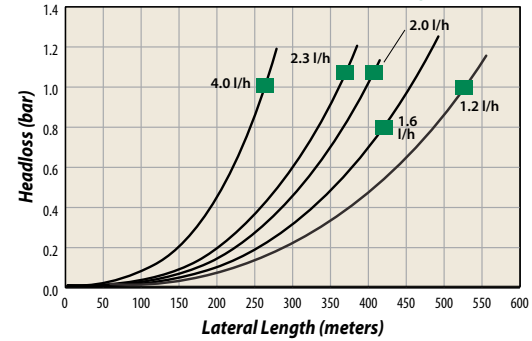
A5 PC - 20mm - 0.90m Spacing



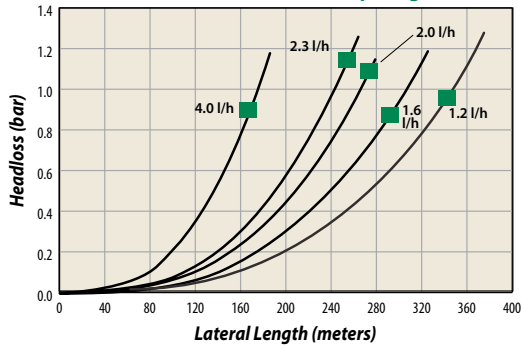
A5 PC - 20mm - 0.45m Spacing



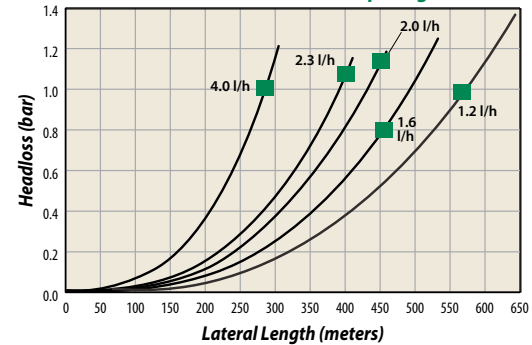
A5 PC - 20mm - 1.05m Spacing



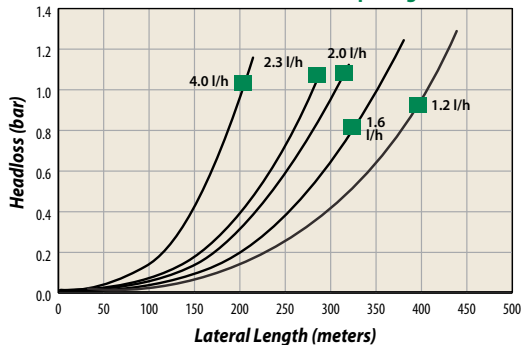
A5 PC - 20mm - 0.60m Spacing



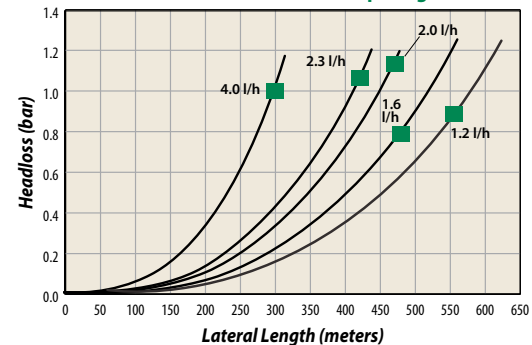
A5 PC - 20mm - 1.20m Spacing



A5 PC - 20mm - 0.75m Spacing



A5 PC - 20mm - 1.50m Spacing



## PE Polyethylene Tubing

### Features

#### Maximum Durability

Rain Bird PE Polyethylene Tubing is engineered and tested to stand up to harsh chemicals, UV radiation and damage that can be caused by farm equipment, resulting in years of worry-free performance.

#### Application Versatility

Rain Bird PE Polyethylene Tubing is ideally suited for all vineyard, orchard, greenhouse and nursery applications, including grapes, hops, stone fruits, almonds, walnuts, pecans and more. It can be placed on surface, subsurface or suspended and used with both online drippers and micro-sprays.

#### Unmatched UV Protection

Manufactured from a unique, field-proven resin blend that holds up against destructive UV radiation. Resists cracking and splitting to deliver years of reliable operation.

#### Customer Satisfaction Policy

Rain Bird's best-in-industry Customer Satisfaction Policy provides 7 years of protection on product workmanship and 7 years on environmental stress cracking. This policy applies only to tubing with a wall thickness of 35 mil or greater.



PE Polyethylene Tubing

### How to Order PE Polyethylene Tubing

<p><b>PE</b></p> <p>Model</p> <p>PE Polyethylene Tubing</p>	<p><b>820</b></p> <p>Tube Inside Diameter</p> <p>520 = 0.520" (13.2mm) 570 = 0.570" (14.5mm) 600 = 0.600" (15.2mm) 620 = 0.620" (15.7mm) 690 = 0.690" (17.5mm) 720 = 0.720" (18.3mm) 820 = 0.820" (20.8mm) 830 = 0.830" (21.1mm) 106 = 1.060" (26.9mm)</p>	<p><b>930</b></p> <p>Tube Outside Diameter</p> <p>620 = 0.620" (15.7mm) 660 = 0.660" (16.7mm) 700 = 0.700" (17.8mm) 710 = 0.710" (18.0mm) 790 = 0.790" (20.1mm) 820 = 0.820" (20.8mm) 930 = 0.930" (23.6mm) 940 = 0.940" (23.9mm) 118 = 1.184" (30.1mm)</p>	<p><b>10</b></p> <p>Coil Length</p> <p>50 = 500' (152.4m) 66 = 660' (201.2m) 10 = 1000' (304.8m)</p>
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See complete chart of available sizes on next page.

- To place an order in the United States call (800) HELLO AG (435-5624) or, use the Toll-FREE Fax Ordering number at (800) 843-4162.
- Customers outside the U.S. can contact the International Customer Service Department at (520) 878-2400 to place an order.

### Technical Information

Nominal Diameter		Wall Thickness	Max. Working Pressure	Model Number*		
Inside	Outside			500' Coil	660' Coil	1000' Coil
0.520" (13.2 mm)	0.620" (15.7 mm)	0.050" (1.27 mm)	66 psi (4.6 bar)	PE52062050		PE52062010
0.540" (13.7 mm)	0.610" (15.5 mm)	0.035" (0.89 mm)	47 psi (3.2 bar)			A51635BLANK
0.540" (13.7 mm)	0.630" (16.0 mm)	0.045" (1.14 mm)	58 psi (4.0 bar)			A51645BLANK
0.570" (14.5 mm)	0.660" (16.7 mm)	0.045" (1.14 mm)	55 psi (3.8 bar)	PE57066050		PE57066010
0.600" (15.2 mm)	0.700" (17.8 mm)	0.050" (1.27 mm)	58 psi (4.0 bar)	PE60070050		PE60070010
0.619" (15.7 mm)	0.709" (18.0 mm)	0.045" (1.14 mm)	51 psi (3.5 bar)			A518BLANK
0.620" (15.7 mm)	0.710" (18.0 mm)	0.045" (1.14 mm)	51 psi (3.5 bar)	PE62071050		PE62071010
0.690" (17.5 mm)	0.786" (20.0 mm)	0.048" (1.22 mm)	50 psi (3.4 bar)			A520BLANK
0.690" (17.5 mm)	0.790" (20.1 mm)	0.050" (1.27 mm)	51 psi (3.5 bar)	PE69079050		PE69079010
0.720" (18.3 mm)	0.820" (20.8 mm)	0.050" (1.27 mm)	49 psi (3.4 bar)	PE72082050		PE72082010
0.820" (20.8 mm)	0.930" (23.6 mm)	0.055" (1.40 mm)	47 psi (3.2 bar)	PE82093050		PE82093010
0.820" (20.8 mm)	0.940" (23.9 mm)	0.060" (1.52 mm)	51 psi (3.5 bar)	PE82094050		PE82094010
0.830" (21.1 mm)	0.940" (23.9 mm)	0.055" (1.40 mm)	46 psi (3.2 bar)	PE83094050		PE83094010
1.060" (26.9 mm)	1.184" (30.1 mm)	0.062" (1.57 mm)	49 psi (3.4 bar)	PE10611850	PE10611866	

\*PE with vine clips are special order. Call for ordering information.



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## Distribution Tubing

Rain Bird distribution tubing increases installation flexibility by allowing growers to adjust and customize the output device location.

### Features

- Available in 2 different tube sizes, both compatible with standard fittings for those sizes
- MQT ¼" distribution tubing ideal for use with Rain Bird® Micro-Quick™ Sprays and Micro Bird® Spinners
- 5mm distribution tubing ideal for use with LFX300 Low Flow Sprinkler
- Constructed of a durable, UV-resistant polyethylene blend
- MQT 1/4" tubing features self extracting coil for easy use, storage, and reduced waste



1,000 ft. Coil in Bucket  
Model# MQTBKT1000  
Item# Q10525

1,000 ft. Coil  
Model# MQT1000  
Item# Q10520

500 foot Coil  
Model# LFXT550  
Item# 18208750

Models							
Nominal Diameter		Wall Thickness	Max. Pressure	Packaging	Length	Model Number	Item Number
Inside	Outside						
0.17" (4.3mm)	0.25" (6.3mm)	0.04" (1 mm)	60 psi (4.14 bar)	Coil	1,000 ft. (305 m)	MQT1000	Q10520
0.17" (4.3mm)	0.25" (6.3mm)	0.04" (1 mm)	60 psi (4.14 bar)	Coil in Bucket	1,000 ft. (305 m)	MQTBKT1000	Q10520
0.20" (5.1mm)	0.30" (7.6mm)	0.05" (1.3mm)	60 psi (4.14 bar)	Coil	500 ft. (152 m)	LFXT550	18208750

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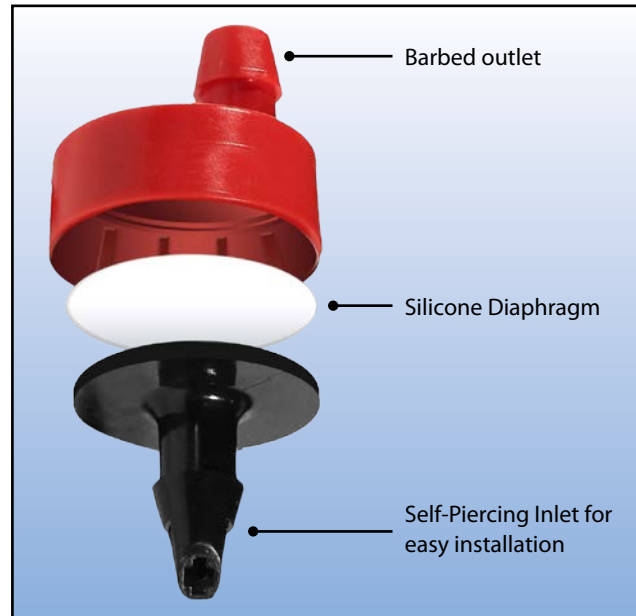


## Online Emitters – PC Emitters

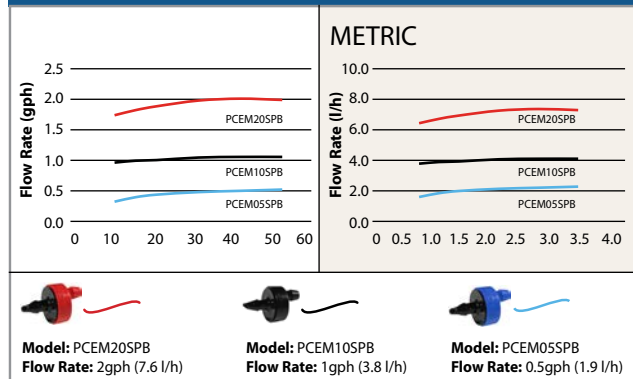
Rain Bird pressure compensating online emitters offer precise water application with a self-flushing action at an excellent value.

### Features

- **Pressure Compensating**
  - Provides superior flow from 15 to 50 psi (1 to 3.4 bar)
  - Ideal for undulating terrain or systems with a large variation in pressure
- **Barbed Outlet - Standard**
  - Use distribution tubing to direct water for maximum accuracy
- **Silicone Diaphragm**
  - Best material for long-term exposure to ag chemicals
  - Superior flush of debris when system is activated
- **Self-piercing Inlet**
  - One-step installation saves labor costs
- **Turbulent Flow Path**
  - Three dimensional geometry to keep grit in suspension as it moves through the emitter
  - Emitter body and inlet made of materials to withstand chemical and UV degradation
  - No squirting - puts water at the desired spot
  - Color-coded outlet barb identifies flow rate
- **Economical**
  - Compact design for low cost
  - Energy savings



### Online Emitter Performance



- **Model: PCEM05SPB**  
**Flow Rate: 0.5gph (1.9 l/h)**
- **Model: PCEM10SPB**  
**Flow Rate: 1.0gph (3.8 l/h)**
- **Model: PCEM20SPB**  
**Flow Rate: 2.0gph (7.6 l/h)**

Models					
Model Number	Flow Rate (gph)	Flow Rate (l/h)	Inlet	Outlet	Part Number
PCEM05SPB	0.5	1.9	Self-Piercing	Barb (Blue)	A118410
PCEM10SPB	1.0	3.8	Self-Piercing	Barb (Black)	A118411
PCEM20SPB	2.0	7.6	Self-Piercing	Barb (Red)	A118412

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# Micro Spray and Spinner Irrigation

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# Micro Spray and Spinner Irrigation



The Micro-Quick™ Spray system helps provide for a more efficient use of water, chemicals, and energy. The unique snap fit of the nozzles and deflectors reduce the time and expense needed for regular maintenance and to make modifications for a variety of growing conditions. Micro-Quick sprays are the only micro spray system available with a reversible deflector design featuring two-patterns to give more options for efficient irrigation.

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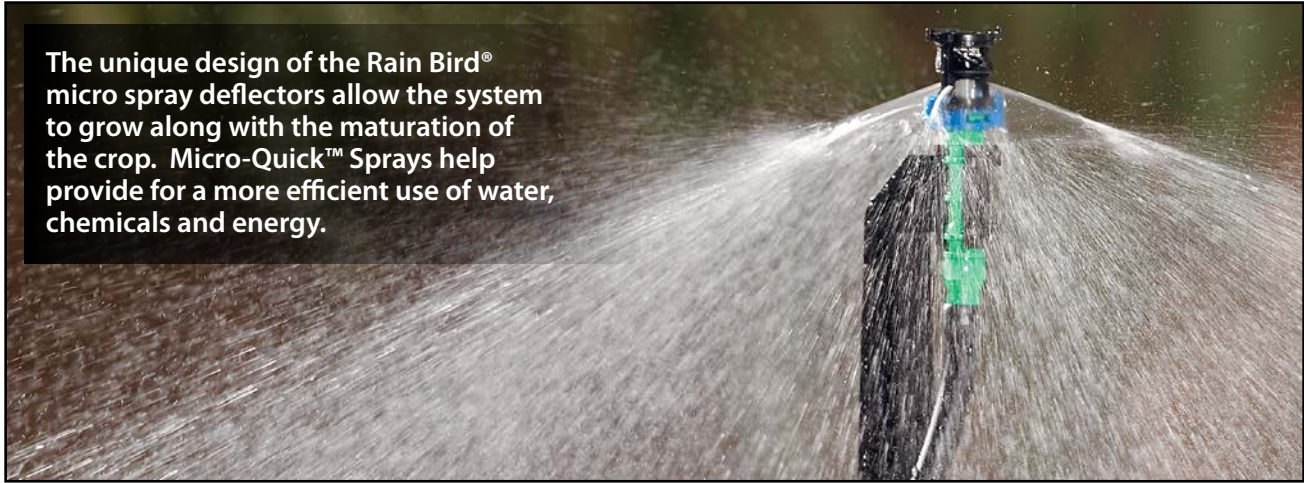
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## Micro-Quick™ Sprays

The unique design of the Rain Bird® micro spray deflectors allow the system to grow along with the maturation of the crop. Micro-Quick™ Sprays help provide for a more efficient use of water, chemicals and energy.



### Features

- No tools required for assembly, disassembly, or cleaning maintenance with easy snap fit nozzles and deflectors
- Interchangeable nozzles and deflectors to change flow rates or spray patterns as needed
- Color-coded nozzles for easy identification
- Less maintenance required with no moving parts
- Constructed with Ultraviolet (UV) stabilized resin to protect from sun damage and chemicals
- Order preassembled from the factory or as individual components for field customization

### Applications

- For agriculture, greenhouse, and nursery use
- Operates in both an upright or inverted installation, making it ideal for nurseries, orchards, vineyards, vegetables, nut and citrus crops

### Specifications

#### Operating pressure:

- 10 to 30 psi (0.69 to 2.07 bar)

#### Flow Range:

- 3.7 to 30.6 gph (13.8 to 115.7 l/h)

#### Wetted Diameter Range:

- 3 to 28 feet (0.91 to 8.5m)

#### Filtration:

- Recommendation varies by nozzle selection
- Ranges from 80 to 200 mesh (74 to 180 micron)

#### Distribution/Transfer tubing:

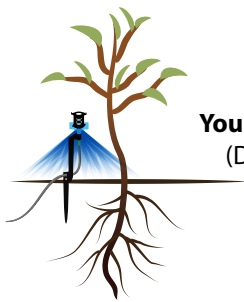
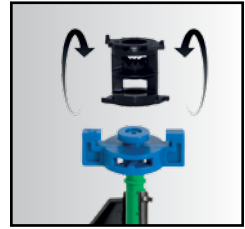
- Standard length in assembly: 36" (0.91 m), call for custom length options
- Tubing Size: OD: 0.25" (6.4 mm), ID: 0.17" (4.3 mm), wall thickness: 0.04" (1mm)

### Packaging Data

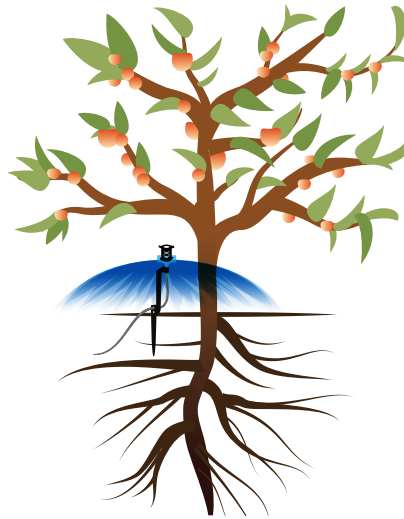
- Assembled sprays can be ordered in increments of 1; case quantity of 400
- Nozzles and deflectors can be ordered in increments of 200 pieces; case quantity of nozzles is 3,000, case quantity of deflectors is 5,000
- Stakes can be ordered in increments of 1; case quantity of 130
- Transfer assemblies can be ordered in increments of 100; case quantity of 700

### Dual Pattern Deflector to Optimize Water Application

With no tools required, the convenient two-sided deflector can be flipped over to quickly change the pattern and size of the wetted area.



**Young Tree: Pattern E**  
(Deflector Side 1)



**Mature Tree: Pattern D**  
(Deflector Side 2)

### How to Order Micro-Quick Sprays

**MQ**

MQ = Micro-Quick™ Spray

**36**

**Tubing Length**  
36 = 36" (0.9m) Tubing

\*Call for custom spacing

**BS**

**Stake**  
BS = Black Stake

**AA**

**Deflector**  
(Down x Up)  
AA – A x A Pattern  
AC – A x C Pattern  
AE – A x E Pattern  
BC – B x C Pattern  
BE – B x E Pattern  
DC – D x C Pattern  
DE – D x E Pattern  
EA – E x A Pattern  
ED – E x D Pattern  
EF – E x F Pattern  
EG – E x G Pattern  
FE – F x E Pattern  
GE – G x E Pattern

**05**

**Nozzle Size**  
05 – 5 gph (18.9 l/h) Black  
08 – 8 gph (30.3 l/h) Orange  
12 – 12 gph (45.4 l/h) Blue  
14 – 14 gph (53 l/h) Violet  
17 – 17 gph (64.4 l/h) Green  
24 – 24 gph (90.8 l/h) Red  
33 – 33 gph (124.9 l/h) White

The Micro-Quick™ Sprays and Micro Bird® Spinner families can be ordered fully assembled or as individual components.

- To place an order in the United States call (800) HELLO AG (435-5624) or, use the Toll-FREE Fax Ordering number at (800) 843-4162.
- Customers outside the U.S. can contact the International Customer Service Department at (520) 878-2400 to place an order.

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## System Components

### Dual Pattern Deflector (QD-XX)

Item: Q10900XX

Q10900AA (QD-AA), AA Pattern  
Q10900AC (QD-AC), AC Pattern  
Q10900AE (QD-AE), AE Pattern  
Q10900BC (QD-BC), BC Pattern  
Q10900BE (QD-BE), BE Pattern  
Q10900DC (QD-DC), DC Pattern  
Q10900DE (QD-DE), DE Pattern  
Q10900EF (QD-EF), EF Pattern  
Q10900EG (QD-EG), EG Pattern

### Transfer Assembly (QTAZZ)

Includes QTB, ¼" Tubing, and QA Adaptor  
36" (0.9 m) Assembly Item: Q1010036\*  
48" (1.2 m) Assembly Item: Q1010048  
(ZZ = Tubing Length in Inches)  
\*Default for all assemblies

### Stake (QSBLACK)

Compatible with both Micro-Quick  
Spray and Micro Bird® Spinner.  
Item: Q10700

### Nozzle (QN-YY)

Item: Q10800YY

Q1080005 (QN-05), 5 gph (18.9 l/h) Black  
Q1080008 (QN-08), 8 gph (30.3 l/h) Orange  
Q1080012 (QN-12), 12 gph (45.4 l/h) Blue  
Q1080014 (QN-14), 14 gph (53 l/h) Violet  
Q1080017 (QN-17), 17 gph (64.4 l/h) Green  
Q1080024 (QN-24), 24 gph (90.9 l/h) Red  
Q1080033 (QN-33), 33 gph (124.9 l/h) White

### Micro-Quick Adaptor (QA)

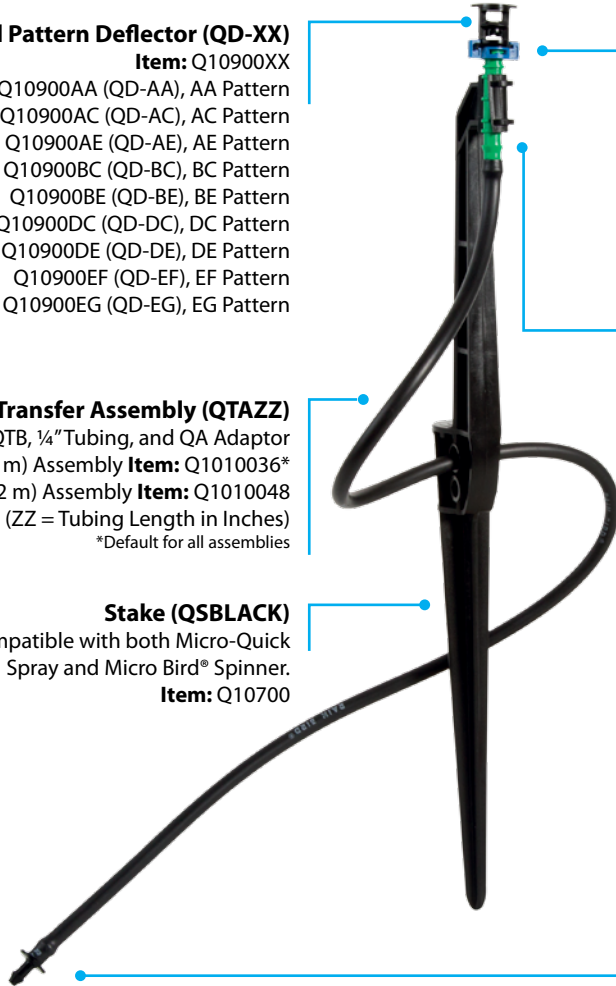
Included in the transfer assembly.  
Item: Q10400

### Distribution Tubing (MQT)

36" segment included in the transfer assembly.  
1000' (304.8 m) coil also available.  
Item: 1000' Coil Only: Q10520,  
1000' Coil in Bucket: Q10525

### Transfer Barb (QTB)

Item: Q10600



## Other Available Parts



### Conversion Adaptor

10-32 thread inlet x snap outlet to connect Rain Bird® Micro-Quick™ to non-Rain Bird transfer assemblies.

Model: QCA  
Item: Q11200



### Deflector Removal Tool

Model: QDT  
Item: Q11400



### Nozzle Plug

Model: QNP  
Item: Q1080099

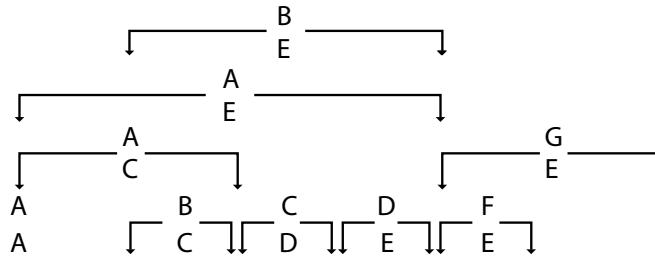









### Line/Goof Plug

Model: EMA-GP  
Item: D24695

### Performance Data

US Units



Nozzle	Pressure (psi)	Pattern Flow (gph)	A		B		C		D		E		F		G		Recommended Filtration (mesh/micron)
			360° Star Bird™ Diameter (ft)	120° Fan Spray Radius (ft)	360° 24 Stream Diameter (ft)	Down Spray Diameter (ft)	Notched Diameter (ft)	Rectangular Length (ft)	Rectangular Width (ft)								
 <b>QN-05</b> 0.026"(0.66 mm) Black Q1080005	10	3.7	8.5	4.0	8.0	3.0	10.0	9.0	6.0	200/74							
	15	4.5	9.5	4.5	9.5	3.0	11.0	10.0	6.5								
	20	5.2	10.5	5.0	11.0	3.0	12.0	11.0	7.0								
	25	5.9	11.0	5.3	11.0	3.0	12.5	12.0	7.5								
	30	6.5	11.5	5.5	11.0	3.0	13.0	13.0	8.0								
 <b>QN-08</b> 0.033"(0.84 mm) Orange Q1080008	10	5.6	13.0	4.5	9.5	3.0	12.5	12.0	7.0	170/93							
	15	6.9	13.5	5.0	11.0	3.0	13.5	13.5	8.0								
	20	8.0	14.0	5.5	12.5	3.0	14.0	15.0	9.0								
	25	9.2	14.5	6.0	13.5	3.0	14.0	16.5	10.0								
	30	10.0	15.0	6.5	14.5	3.0	14.5	18.0	10.5								
 <b>QN-12</b> 0.038"(0.97 mm) Blue Q1080012	10	7.3	17.0	4.5	11.0	3.0	14.5	15.0	8.0	150/105							
	15	9.1	17.5	5.3	12.5	3.0	15.5	16.5	9.0								
	20	10.6	18.0	6.0	13.5	3.0	16.0	18.0	9.5								
	25	11.8	18.0	6.5	15.8	3.0	17.0	20.5	10.5								
	30	13.2	18.0	7.0	18.0	3.0	17.5	23.0	11.0								
 <b>QN-14</b> 0.044"(1.12 mm) Violet Q1080014	10	9.7	19.0	5.0	12.0	3.0	16.5	15.5	8.5	130/118							
	15	11.8	20.0	5.5	14.0	3.0	17.5	17.5	9.5								
	20	13.7	20.5	6.0	15.5	3.0	18.5	19.5	10.0								
	25	15.5	20.5	6.0	18.0	3.0	19.5	22.0	11.0								
	30	17.2	21.0	7.0	20.5	3.0	20.5	24.0	11.5								
 <b>QN-17</b> 0.048"(1.22 mm) Green Q1080017	10	10.7	21.0	6.0	13.0	3.0	17.0	16.0	9.0	120/125							
	15	13.3	22.0	6.0	15.0	3.0	18.5	18.5	10.0								
	20	15.5	22.5	6.0	17.0	3.0	20.0	20.5	10.5								
	25	17.4	23.0	6.5	20.0	3.0	21.5	23.0	11.0								
	30	19.1	23.5	7.0	23.0	3.0	23.0	25.0	12.0								
 <b>QN-24</b> 0.057"(1.45 mm) Red Q1080024	10	14.2	23.0	6.5	15.0	3.0	18.0	18.5	11.0	100/150							
	15	17.3	25.5	7.0	17.0	3.0	20.0	20.5	12.0								
	20	20.1	28.0	7.5	19.0	3.0	21.5	22.0	13.0								
	25	22.4	28.0	7.5	24.0	3.0	23.5	24.0	13.5								
	30	26.0	28.0	7.5	25.0	3.0	25.0	25.5	14.0								
 <b>QN-33</b> 0.068"(1.73 mm) White Q1080033	10	17.2	25.0	7.5	17.5	3.0	19.0	21.0	13.0	80/180							
	15	21.0	26.0	8.3	19.2	3.0	21.0	22.5	14.0								
	20	25.2	27.0	9.0	21.0	3.0	23.0	23.5	14.5								
	25	27.9	28.0	9.4	23.0	3.0	25.0	25.0	15.5								
	30	30.6	28.0	9.5	25.0	3.0	27.0	26.0	16.0								

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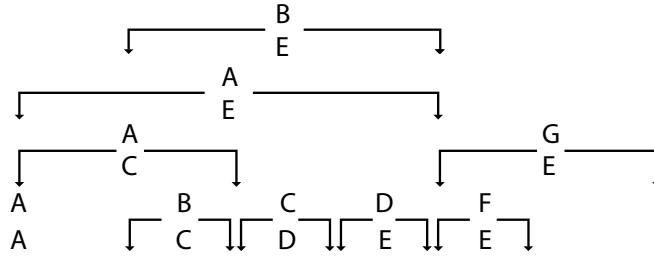
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## Performance Data

Metric Units



Nozzle	Pattern Pressure (bar)	Flow (l/h)	A		B		C	D	E	F		G		Recommended Filtration (mesh/micron)
			360° Star Bird™ Diameter (m)	Butterfly Length (m)	Width (m)	120° Fan Spray Radius (m)	360° 24 Stream Diameter (m)	Down Spray Diameter (m)	Notched Diameter (m)	Rectangular Length (m)	Width (m)			
<b>Q1080005</b> 0.026" (0.66 mm) Black	0.75	13.8	2.6	2.4	2.3	1.2	2.4	0.9	3.0	2.7	1.8	200/74		
	1.00	17.2	2.9	3.0	2.6	1.4	2.9	0.9	3.3	3.0	2.0			
	1.50	19.8	3.3	3.3	2.7	1.6	3.2	0.9	3.6	3.3	2.1			
	1.75	22.3	3.4	3.5	2.9	1.6	3.4	0.9	3.8	3.6	2.3			
	2.00	24.5	3.5	3.7	3.0	1.7	3.4	0.9	4.0	4.0	2.4			
<b>Q1080008</b> 0.033" (0.84 mm) Orange	0.75	21.0	3.7	3.0	2.3	1.4	2.9	0.9	3.8	3.6	2.1	170/93		
	1.00	26.3	3.8	3.5	2.6	1.5	3.3	0.9	4.1	4.1	2.4			
	1.50	30.1	4.3	3.8	2.9	1.7	3.8	0.9	4.2	4.6	2.7			
	1.75	34.6	4.4	3.8	2.9	1.8	4.0	0.9	4.2	5.0	3.0			
	2.00	37.8	4.5	4.0	3.0	2.0	4.2	0.9	4.4	5.4	3.2			
<b>Q1080012</b> 0.038" (0.97 mm) Blue	0.75	27.6	5.1	3.4	2.9	1.4	3.3	0.9	4.4	4.6	2.4	150/105		
	1.00	34.5	5.3	4.0	3.0	1.6	3.7	0.9	4.7	5.0	2.7			
	1.50	40.0	5.4	4.4	3.2	1.9	4.0	0.9	4.9	5.4	2.9			
	1.75	44.7	5.5	4.6	3.5	2.0	4.8	0.9	5.1	6.2	3.2			
	2.00	49.9	5.5	4.7	3.7	2.1	5.3	0.9	5.3	7.0	3.3			
<b>Q1080014</b> 0.044" (1.12 mm) Violet	0.75	36.5	5.8	4.0	3.0	1.5	3.6	0.9	5.0	4.7	2.6	130/118		
	1.00	44.6	6.1	4.9	3.5	1.7	4.2	0.9	5.3	5.3	2.9			
	1.50	52.0	6.3	5.2	3.7	1.8	5.0	0.9	5.6	5.9	3.0			
	1.75	58.7	6.3	5.5	3.8	1.9	5.5	0.9	5.9	6.7	3.3			
	2.00	65.0	6.4	5.8	4.0	2.1	6.1	0.9	6.2	7.3	3.5			
<b>Q1080017</b> 0.048" (1.22 mm) Green	0.75	40.5	6.4	4.6	3.2	1.8	4.0	0.9	5.1	4.9	2.7	120/125		
	1.00	50.5	6.7	5.2	3.7	1.8	4.5	0.9	5.6	5.6	3.0			
	1.50	58.5	6.9	5.8	3.8	1.9	5.5	0.9	6.1	6.2	3.2			
	1.75	65.9	7.0	6.1	4.0	2.0	6.0	0.9	6.5	7.0	3.3			
	2.00	72.3	7.1	6.4	4.1	2.1	6.8	0.9	7.0	7.6	3.7			
<b>Q1080024</b> 0.057" (1.45 mm) Red	0.75	53.9	7.1	4.9	3.5	2.0	4.6	0.9	5.4	5.6	3.3	100/150		
	1.00	65.6	7.8	5.5	3.8	2.2	5.1	0.9	6.1	6.2	3.7			
	1.50	76.0	8.2	5.9	4.0	2.2	6.3	0.9	6.5	6.7	3.9			
	1.75	84.9	8.5	6.4	4.1	2.3	7.0	0.9	7.1	7.3	4.1			
	2.00	98.4	8.5	6.7	4.3	2.3	7.3	0.9	7.6	7.7	4.2			
<b>Q1080033</b> 0.068" (1.73 mm) White	0.75	65.1	7.6	5.5	3.4	2.3	5.4	0.9	5.8	6.4	3.9	80/180		
	1.00	79.5	7.9	6.4	4.0	2.5	5.8	0.9	6.4	6.9	4.2			
	1.50	95.3	8.3	7.0	4.4	2.8	6.6	0.9	7.0	7.1	4.4			
	1.75	105.7	8.4	7.3	4.6	2.9	7.1	0.9	7.6	7.6	4.7			
	2.00	115.7	8.5	7.6	4.7	2.9	7.5	0.9	8.2	7.9	4.9			

### Transfer Tube Assembly Pressure Loss Chart

U.S. UNITS			METRIC UNITS		
Flow (gph)	Pressure Loss (psi)		Flow (l/h)	Pressure Loss (bar)	
	24"	36"		61cm	91cm
05	0.2	0.2	20	0.01	0.02
10	0.6	0.8	40	0.04	0.06
15	1.2	1.7	60	0.10	0.13
20	2.2	3.0	80	0.17	0.23
25	3.3	4.5	100	0.25	0.35
30	4.7	6.4	120	0.36	0.49
35	6.2	8.5	140	0.48	0.65

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION



## Micro Bird® Spinners

The Micro Bird® Spinner is a low-flow, micro-sprinkler ideal for applications of mature trees, greenhouses, nurseries, gardens, and landscapes.

### Features

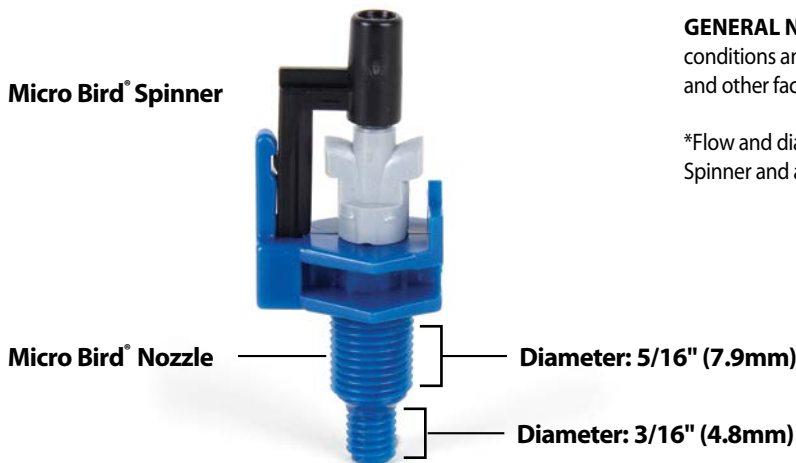
- “Tall Bridge” and superior plastic design reduces wear and stalling
- All components are protected by UV inhibitors and resist agricultural chemicals
- “Two-Step” thread configuration to accommodate both large and small sizes of distribution tubing
- Four color-coded nozzle bodies for easy identification
- 340° pattern design provides uniform coverage without wetting tree trunks
- Low 10° trajectory angle to fight wind drift
- Filtration mesh hole size should be approximately 10 times smaller than nozzle size

Performance Data*							
MODEL (Nominal Nozzle Diameter)	Filtration Requirements Mesh (Microns)	U.S.			Metric		
		Pres (psi)	Flow (gph)	Dia (ft)	Pres (bar)	Flow (l/h)	Dia (m)
SP12-340 Blue (0.99mm/0.039")	150 (105)	15	10.1	18	1.0	38.0	5.6
		20	11.6	19	1.5	45.0	6.0
		25	12.9	20	2.0	53.0	6.4
		30	14.1	21	2.5	58.0	6.6
SP16-340 Green (1.21mm/0.048")	120 (125)	15	15.1	20	1.0	57.0	6.0
		20	17.4	21	1.5	67.0	6.6
		25	19.4	22	2.0	80.2	7.0
		30	21.2	23	2.5	86.3	7.2
SP24-340 Red (1.45mm/0.057")	100 (150)	15	20.9	21	1.0	79.0	6.4
		20	24.1	23	1.5	95.0	7.0
		25	26.9	24	2.0	110.0	7.4
		30	29.3	24	2.5	118.0	7.6
SP30-340 Orange (1.73mm/0.068")	80 (180)	15	28.9	23	1.0	110.0	7.0
		20	33.4	24	1.5	129.0	7.6
		25	37.2	26	2.0	153.0	8.0
		30	40.5	26	2.5	164.0	8.2
		35	43.3	27	3.0	180.0	8.4
		40	45.8	27			

**GENERAL NOTE:** Performance data is obtained under ideal test conditions and may be adversely affected by wind, hydraulic conditions, and other factors.

\*Flow and diameter are based on pressure at the base of the Micro Bird® Spinner and a 6 in. (15cm) riser height.

### Micro Bird® Spinner



**Micro Bird® Adaptor  
(MBQA)  
Q11000**  
Use with  
Micro Bird® system

**36" (0.9m) Transfer Assembly  
(MBQA36)  
Q1110036**  
Includes QTB, TB,  
MBQA adaptor

# Low Flow Irrigation

DRIP  
IRRIGATION

MICRO  
IRRIGATION

LOW FLOW  
IRRIGATION

IMPACT  
SPRINKLERS

MONITORING  
& CONTROLS

FILTRATION



# Low Flow Irrigation



The Rain Bird® Low Flow Series of sprinklers are built rugged to withstand the harsh conditions in agricultural applications. With flow rates ranging from 0.3 to 6.82 gpm (68 to 1,549 l/h), these sprinklers deliver precise, uniform and unrivaled water distribution.

DRIP  
IRRIGATION

MICRO  
IRRIGATION

LOW FLOW  
IRRIGATION

IMPACT  
SPRINKLERS

MONITORING  
& CONTROLS

FILTRATION

## LFX300 Low Flow Sprinkler

The Rain Bird® LFX Low Flow Sprinkler was designed and built with efficiency in mind. The small footprint of the low-volume LFX300 offers unparalleled operational flexibility with both interchangeable brake assemblies and nozzles. Featuring unmatched water distribution at all trajectories, the LFX300 is perfect for a wide variety of applications.



### Features

- Simple three part sprinkler design includes body, nozzle, and brake assembly with attached deflector
- Each nozzle and brake assembly was designed to easily be changed with other sizes or outlet trajectories to maximize operational flexibility
- Easy in-field maintenance with simple snap-in-place nozzle and brake assembly including visual indicators to ensure correct positioning
- Engineered to provide superior distribution uniformity for low volume applications in either an under-tree or over-head configuration
- Constructed of engineered thermoplastic materials for durability and weather resistance
- Color coded nozzles and deflectors for easy identification
- Two flow control nozzle options for consistent flow of water

### Applications

- For Agriculture, Greenhouse, and Nursery applications which require a small footprint or low-volume sprinkler
- Optimized for a wide variety of applications including orchard and field irrigation, environmental control, crop cooling, and dust control

### Accessories

- Stake options include: steel, fiberglass, or preassembled PVC assemblies
- 5mm feedtube configurations include: coil for custom installation, precut pieces in 30" (76.2cm) or 42" (106.7cm) length with barb preinstalled (with or without stake adapter installed)
- Variety of adapters for increased application flexibility

### Specifications

#### Operating Range:

- Pressure: 25 to 50 psi (1.72 to 3.45 bar)
- Flow rate: 0.28 to 0.73 gpm (62 to 161 l/h)
- Radius of throw: 18 to 25 feet (5.5 to 7.6 meters)

#### Sprinkler Body Options:

- 1/2" (13mm) NPT male pipe thread
- Female ACME thread

#### Deflector Trajectory Outlets:

- Deflector preassembled in brake assembly
- 9° Red
- 9° White
- 15° Orange

#### Nozzle Sizes:

- 40 Light Blue (0.040", 1.02mm)
- 45 Light Purple (0.045", 1.14mm)
- 50 Dark Green (0.050", 1.27mm)
- 55 Light Yellow (0.055", 1.40mm)
- 60 Light Red (0.060", 1.52mm)
- F1 0.35 gpm (79.5 l/h) Flow Control
- F2 0.50 gpm (113.6 l/h) Flow Control

### Packaging Data

- Sprinkler can be ordered assembled from the factory or a la carte for ultimate field flexibility
- Assembled sprinklers can be ordered in increments of 1; case quantity of 400
- Sprinkler parts vary in order increment and case quantity; Nozzles: Order increment of 200; case quantity of 1,600. Brake Assemblies: Order increment of 200; case quantity of 4,000. Bodies: Order increment of 1; case quantity of 400
- Accessories and mounting options vary in order increment; call for details

## System Components



**Nozzle**  
 Light Blue 40, 0.040" (1.01mm), Item 18116940B  
 Light Purple 45, 0.045" (1.14mm), Item 18116945P  
 Dark Green 50, 0.050" (1.27mm), Item 18116950G  
 Light Yellow 55, 0.055" (1.40mm), Item 18116955Y  
 Light Red 60, 0.060" (1.52mm), Item 18116960R  
 F1 0.35gpm (79.5 l/h) Flow Control, Item 18212535  
 F2 0.50gpm (113.6 l/h) Flow Control, Item 18212550

**Brake Assembly with Deflector**  
 9° Red, Item 1804999R  
 9° White Item 1804999W  
 15° Orange, Item 18049915O

**Body**  
 Female ACME, Item 180502  
 1/2" (12.7mm) Male NPT, Item 180474

## How to Order LFX300 Low Flow Sprinkler

**LF03**

**Core Family**  
 LF03 - LFX300 Sprinkler

**N**

**Body**  
 A - Female ACME Thread  
 N - 1/2" Male NPT Thread

**09R**
















**Deflector**  
 09R - 9° Red  
 09W - 9° White  
 15O - 15° Orange

**40**

**Nozzle**  
 40 - Light Blue  
 45 - Light Purple  
 50 - Dark Green  
 55 - Light Yellow  
 60 - Light Red  
 F1 - FC 0.35 gpm  
 F2 - FC 0.50 gpm

LFX300 Performance Data

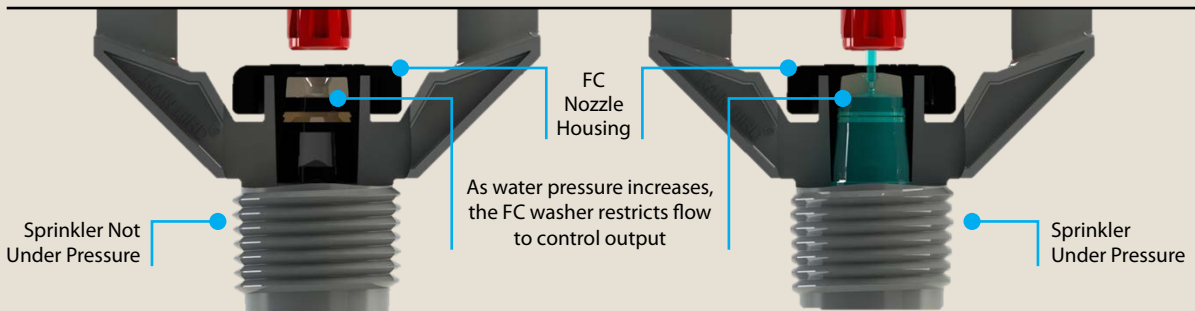
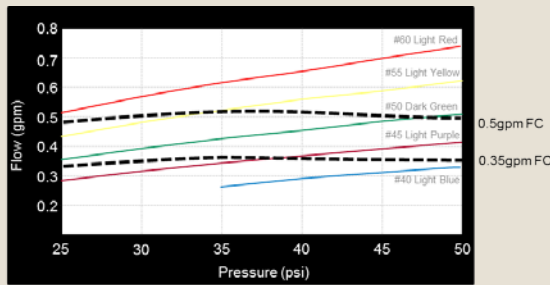
US Measurements

BRAKE ASSEMBLY WITH DEFLECTOR	NOZZLE	STREAM HEIGHT	FLOW RATES AT STANDARD PRESSURE						MODEL NUMBER PART NUMBER	
			GALLONS PER MINUTE (gpm) Throw Radius (feet)						NPT THREAD	ACME THREAD
			25 psi	30 psi	35 psi	40 psi	45 psi	50 psi		
 <b>9 Degree Red</b> 1804999R	<b>Light Blue #40</b> 0.040" (1.016 mm) Item# 18116940B	 20-23 in (50.8-58.4cm)	—	—	0.28	0.30	0.32	0.34	LF03N09R40	LF03A09R40
	<b>Light Purple #45</b> 0.045" (1.143 mm) Item# 18116945P	 19-25 in (48.3-63.5cm)	0.29	0.32	0.35	0.37	0.39	0.41	LF03N09R45	LF03A09R45
	<b>Dark Green #50</b> 0.050" (1.270 mm) Item# 18116950G	 21-29 in (53.3-73.6cm)	0.36	0.40	0.43	0.46	0.48	0.51	LF03N09R50	LF03A09R50
	<b>FC1 0.35gpm (79.5 l/h)</b> Item# 18212535	 20-25 in (50.8-63.5cm)	0.35						LF03N09RF1	LF03A09RF1
 <b>9 Degree White</b> 1804999W	<b>Dark Green #50</b> 0.050" (1.270 mm) Item# 18116950G	 20-24 in (50.8-61cm)	—	—	0.43	0.46	0.48	0.51	LF03N09W50	LF03A09W50
	<b>Light Yellow #55</b> 0.055" (1.397 mm) Item# 18116955Y	 17-25 in (43.2-63.5cm)	0.44	0.48	0.52	0.55	0.59	0.62	LF03N09W55	LF03A09W55
	<b>Light Red #60</b> 0.060" (1.524 mm) Item# 18116960R	 17-25 in (43.2-63.5cm)	0.51	0.56	0.61	0.65	0.69	0.73	LF03N09W60	LF03A09W60
	<b>FC2 0.50 gpm (113.6 l/h)</b> Item# 18212550	 20-25 in (50.8-63.5cm)	0.50						LF03N09WF2	LF03A09WF2
 <b>15 Degree Orange</b> 18049915O	<b>Dark Green #50</b> 0.050" (1.270 mm) Item# 18116950G	 34-39 in (86.4-99.1cm)	—	—	0.43	0.46	0.48	0.51	LF03N15O50	LF03A15O50
	<b>Light Yellow #55</b> 0.055" (1.397 mm) Item# 18116955Y	 36-42 in (91.4-106.7cm)	0.44	0.48	0.52	0.55	0.59	0.62	LF03N15O55	LF03A15O55
	<b>Light Red #60</b> 0.060" (1.524 mm) Item# 18116960R	 33-41 in (83.8-104.1cm)	0.51	0.56	0.61	0.65	0.69	0.73	LF03N15O60	LF03A15O60
	<b>FC2 0.50 gpm (113.6 l/h)</b> Item# 18212550	 30-42 in (76.2-106.7 cm)	0.50						LF03N15OF2	LF03A15OF2
















Upgrade to Flow Control (FC) Nozzles to Regulate Application Across Pressure Range

LFX FC Nozzles control water flow over pressure variation to provide a consistent application rate along laterals or across terrain variation.

- Two flow rates available: 0.35gpm (79.5 l/h) or 0.50 gpm (113.6 l/h)
- Operating range from 25 to 50 psi (1.72 to 3.45 bar)
- Flow control mechanism contained in nozzle housing; installs in standard body. No special tools required.



Metric Measurements

BRAKE ASSEMBLY WITH DEFLECTOR	NOZZLE	STREAM HEIGHT	FLOW RATES AT STANDARD PRESSURE						MODEL NUMBER PART NUMBER		
			LITERS PER HOUR (l/h) Throw Radius (meter)						NPT THREAD	ACME THREAD	
			1.75 bar	2 bar	2.25 bar	2.5 bar	2.75 bar	3 bar			3.25 bar
 <b>9 Degree Red</b> 1804999R	<b>Light Blue #40</b> 0.040" (1.016 mm) Item# 18116940B	 20-23 in (50.8-58.4cm)	-	-	62	65	68	71	74	LF03N09R40	LF03A09R40
	<b>Light Purple #45</b> 0.045" (1.143 mm) Item# 18116945P	 19-25 in (48.3-63.5cm)	67	72	76	80	84	88	91	LF03N09R45	LF03A09R45
	<b>Dark Green #50</b> 0.050" (1.270 mm) Item# 18116950G	 21-29 in (53.3-73.6cm)	83	88	94	99	104	108	113	LF03N09R50	LF03A09R50
	<b>FC1 0.35gpm (79.5 l/h)</b> Item# 18212535	 20-25 in (50.8 - 63.5 cm)	79.5						LF03N09RF1	LF03A09RF1	
 <b>9 Degree White</b> 1804999W	<b>Dark Green #50</b> 0.050" (1.270 mm) Item# 18116950G	 20-24 in (50.8-61cm)	-	-	94	99	104	108	113	LF03N09W50	LF03A09W50
	<b>Light Yellow #55</b> 0.055" (1.397 mm) Item# 18116955Y	 17-25 in (43.2-63.5cm)	100	107	114	120	126	131	137	LF03N09W55	LF03A09W55
	<b>Light Red #60</b> 0.060" (1.524 mm) Item# 18116960R	 17-25 in (43.2-63.5cm)	118	126	134	141	148	154	161	LF03N09W60	LF03A09W60
	<b>FC2 0.50 gpm (113.6 l/h)</b> Item# 18212550	 20-25 in (50.8 - 63.5 cm)	113.6						LF03N09WF2	LF03A09WF2	
 <b>15 Degree Orange</b> 18049915O	<b>Dark Green #50</b> 0.050" (1.270 mm) Item# 18116950G	 34-39 in (86.4-99.1cm)	-	-	94	99	104	108	113	LF03N15O50	LF03A15O50
	<b>Light Yellow #55</b> 0.055" (1.397 mm) Item# 18116955Y	 36-42 in (91.4-106.7cm)	100	107	114	120	126	131	137	LF03N15O55	LF03A15O55
	<b>Light Red #60</b> 0.060" (1.524 mm) Item# 18116960R	 33-41 in (83.8-104.1cm)	118	126	134	141	148	154	161	LF03N15O60	LF03A15O60
	<b>FC2 0.50 gpm (113.6 l/h)</b> Item# 18212550	 30-42 in (76.2-106.7 cm)	113.6						LF03N15OF2	LF03A15OF2	

MATRIX OF ASSEMBLIES (METRIC)

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS




MONITORING & CONTROLS

FILTRATION

**Mounting Options and Accessories**

A variety of mounting options are available to support the LFX300 Low Flow Sprinkler. These interchangeable, inexpensive, and simple to use mounting options are supported with installation tools. To add flexibility to this already flexible sprinkler, mounting accessories also feature Rain Bird® extruded 5mm feedtube in two pre-cut lengths or a full coil for complete customization.



Adapter Options		
 <p><b>Universal Stake Adapter</b> Interchangeable stake adapter for use with small diameter (1/4" or 5/16") or large diameter (1/2" or 3/4") stakes. Item #181179</p>	 <p><b>ACME to Slip Adapter</b> Converts female ACME connection to slip fit; allows adapter to be glued to stake. ACME to 1/2" or 3/4". Grey. Item #181177 ACME to 20mm or 25mm. White. Item #181178</p>	 <p><b>ACME to 1/2" MNPT Adapter</b> Converts Female ACME connection to 1/2" MNPT. Item #181175</p>

**1/2" (13mm) PVC Stake Assembly**

Factory assembled with, PVC stake, 5mm feedtube, and adapter

**30" (76cm) Lead**

Item# 18209130

**42" (106.7cm) Lead**

Item# 18209142



**Sprinkler with Female ACME Connection**  
(sold separately)

**Universal Stake Adapter**  
Item# 181179

**5mm Feedtube**  
Length Options:  
30" (76cm)  
42" (106.7cm)

**PVC Stake**  
Diameter: 1/2" (13mm)  
Length: 21" (53.3cm)  
Exit Hole: 9.5" (24cm) from top

**5mm/10mm Universal Barb**  
Item# 181182

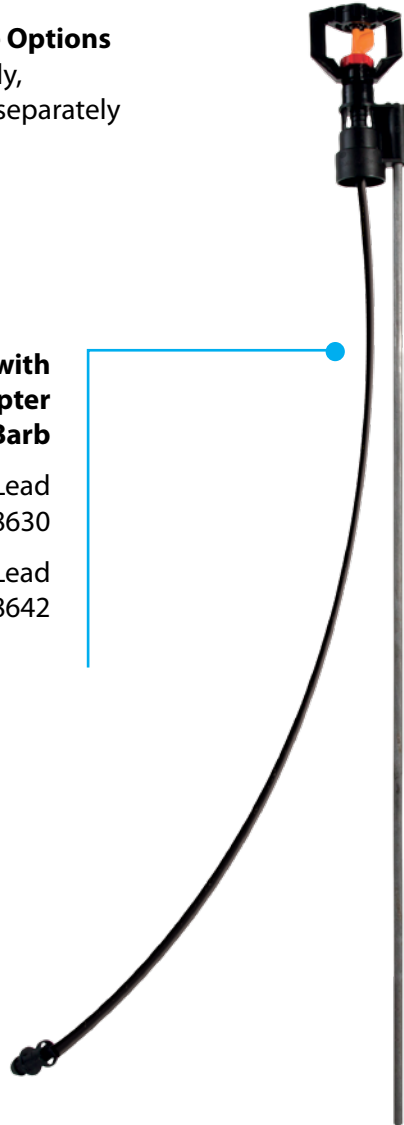


**24" (61CM) Long Stake Options**  
Stake, feedtube assembly,  
and sprinkler each sold separately

**Feedtube Assembly with  
Universal Stake Adapter  
and Universal Barb**

With 30" (76cm) Lead  
Item# 18208630

With 42" (106.7cm) Lead  
Item# 18208642



**Sprinkler with Female  
ACME Connection**  
(sold separately)

**24" (61 cm) Long Stake Options**


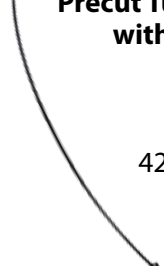

**Steel Stake**  
Diameter: 1/4" (6.4mm)  
Item# 18208S124

**Steel Stake**  
Diameter: 5/16" (8mm)  
Item# 18208S224

**Fiberglass Stake**  
Diameter: 1/4" (6.4mm)  
Item# 18208F124

**Fiberglass Stake**  
Diameter:  
5/16" (8mm)  
Item# 18208F224

**DISTRIBUTION TUBING OPTIONS**

<p><b>Precut Tube, Assembled with Universal Stake Adapter &amp; Barb</b></p> <p>30" (76cm) Lead Item# 18208630</p> <p>42" (106.7cm) Lead Item# 18208642</p> 	<p><b>Precut Tube, Assembled with Universal Barb</b></p> <p>30" (76cm) Lead Item# 18208530</p> <p>42" (106.7cm) Lead Item# 18208542</p> 	<p><b>5MM Distribution Tubing</b></p>  <p>OD: 0.30" (7.62mm) ID: 0.20" (5.08mm) Wall Thickness: 0.05" (1.27mm) Coil Length: 500' (152.4m) Model# LFXT550 Item# 18208750</p>
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## LF™ Series Sprinkler

The Rain Bird® LF™ Series Sprinkler is built to withstand the harsh conditions of a variety of agricultural applications. Leveraging the advantages of an impact sprinkler, the LF Series Sprinkler offers full circle operation with stream height flexibility to deliver precise, uniform, and unrivaled water distribution.



### Features

- Weighted drive unit increases dwell time between stream interruptions to maximize throw distance
- Precision Jet (PJ) spoon directs water toward the field to prevent erosion at the riser base
- Deflector's made of engineered thermoplastic for wear resistance and dimensional stability and designed with break-up features to optimize uniformity
- Consistent performance in wide temperature range: ideal for cooling or frost protection
- Snap-in-place color-coded nozzles and deflectors for simple setup and easy field identification – no tools required
- Sprinkler can be purchased assembled or separately and comprised of four simple parts: drive unit, body (ACME or NPT), deflector, and nozzle. Anti-theft bodies sold separately.

### Deflector Trajectory Outlets:

- Deflector trajectories vary by sprinkler model, see performance charts for details
- LF800 available with 6°, 9°, 12°, or 15°
- LF1200 available with 6°, 10°, 12°, 16°, 17°, or 21°
- LF2400 available with 10°, 13°, 15°, or 22°
- LF2400 Long Range available with 27° only

### Nozzle Sizes:

- Nozzle sizes vary by sprinkler model, see performance charts for details
- LF800 includes nozzles ranging in size from 0.070 - 0.086" (1.79 - 2.18mm)
- LF1200 includes nozzles ranging in size from 0.078 - 0.117" (1.98 - 2.97mm)
- LF2400 includes nozzles ranging in size from 0.109 - 0.141" (2.76 - 3.57mm)
- LF2400 Long Range includes nozzles ranging in size from 0.141 - 0.172" (3.57 - 4.37mm)

### Specifications

#### Operating pressure:

- 25 to 60 psi (1.7 to 4.2 bar)

#### Flow range:

- 0.77 to 6.82 gpm (175 to 1,549 l/h)

#### Throw Radius Range

- 22 to 50 ft. (6.6 to 15.2m)

#### Stream Height Range:

- 12 to 120 in. (30 to 305cm)

#### Sprinkler Body Options:

- ½" (13mm) NPT male pipe thread
- 23mm ACME male thread (requires special adapter)
- Anti-theft bodies available

### Packaging Data

- Assembled sprinklers can be ordered in increments of 1; case quantity of 100
- Nozzles and deflectors can be ordered in increments of 200 pieces; case quantity of nozzles is 2,000, case quantity of deflectors is 1,600
- Unassembled Body and Drive Units can be ordered in increments of 1; case quantity of 100

### Accessories

- Adapters available to convert ACME body to ½" or ¾" Male NPT
- Adapters available to convert ACME to female slip including: ½" and ¾" slip or 20mm and 25mm slip
- Edge guard, splash guard, and stream splitter available

## How to Order LF Series Sprinkler

	Deflector	Nozzle	Stream Height (in.)	Flow Rate at Standard Pressures (gpm)								Model Number Item Number	
				25 psi	30 psi	35 psi	40 psi	45 psi	50 psi	55 psi	60 psi	NPT	ACME
Part number for Nozzle Only	6 Degree Dark Purple 118285	Orange (11809844) 44 Drill, 0.086"	14-20		1.17	1.26	1.35	1.43	1.51	1.59	1.67	LF12N06P44	LF12A06P44
				23	23	25	25	25	26	26	A85001B0644	A85003B0644	
Part number for Deflector Only	T	Purple (11809806) 3/32", 0.094"	14-21	1.27	1.39	1.5	1.61	1.71	1.8	1.89	1.98	LF12N06P06	LF12A06P06
		22		24	24	26	26	28	26	27	A85001B0606	A85003B0606	
		Yellow (11809838) 38 Drill, 0.102"	16-21	1.49	1.63	1.77	1.89	2.00	2.12			LF12N06P38	LF12A06P38
				23	25	25	27	27	28			A85001B0638	A85003B0638

Empty boxes represent application combinations not recommended by Rain Bird.

Part number and model number for fully assembled sprinkler with NPT body

Part number and model number for fully assembled sprinkler with ACME body



The LF™ Series Sprinkler family can be ordered fully assembled or as individual components. Utilize Rain Bird's FREE Uniformity Pro™ software to make your sprinkler selections, or contact a Rain Bird dealer for assistance.

- To place an order in the United States call (800) HELLO AG (435-5624) or, use the Toll-FREE Fax Ordering number at (800) 843-4162.
- Customers outside the U.S. can contact the International Customer Service Department at (520) 878-2400 to place an order.

## System Components



Optional: Anti-theft (AT) body features screws to add additional security in the field.

DRIP  
IRRIGATION

MICRO  
IRRIGATION

LOW FLOW  
IRRIGATION

IMPACT  
SPRINKLERS

MONITORING  
& CONTROLS

FILTRATION

Part Numbers & Descriptions for Ordering Separately					
		Description	Recommened Usage	Order Increment	Item Number
DEFLECTOR		6 Degree Dk. Purple	LF1200	200	118285
		6 Degree Yellow	LF800	200	118582
		9 Degree Purple	LF800	200	118601
		10 Degree Lime	LF2400	200	118599
		10 Degree White	LF1200	200	118231
		12 Degree Copper	LF800	200	118575
		12 Degree Cyan Blue	LF1200	200	118262
		12 Degree Pink	LF1200	200	118354
		13 Degree Maroon	LF2400	200	118600
		15 Degree Brown	LF800	200	118586
		15 Degree Tangerine	LF2400	200	118583
		16 Degree Red	LF1200	200	118240
		17 Degree Powder Blue	LF1200	200	118226
		21 Degree Olive Green	LF1200	200	118339
		22 Degree Dark Green	LF2400	200	118585
27 Degree Black	LF2400 LR	200	118602		
NOZZLE		White, 50 Drill, 0.070", 1.79mm	LF800	200	11809850
		Blue, 5/64", 0.078", 1.98mm	LF800/LF1200	200	11809805
		Orange, 44 Drill, 0.086", 2.18mm	LF800/LF1200	200	11809844
		Purple, 3/32", 0.094", 2.39mm	LF1200	200	11809806
		Yellow, 38 Drill, 0.102", 2.59mm	LF1200	200	11809838
		Green, 7/64", 0.109", 2.76mm	LF1200/LF2400	200	11809807
		Tan, 30 Drill, 0.117", 2.97mm	LF1200/LF2400	200	11809830
		Red, 1/8", 0.125", 3.18mm	LF2400	200	11809808
		Black, 29 Drill, 0.133", 3.38mm	LF2400	200	11809829
		Silver, 9/64", 0.141", 3.57mm	LF2400/LF2400 LR	200	11809809
		Brown, 5/32", 0.156", 3.97mm	LF2400 LR	200	11809810
		Dark Grey, 11/64", 0.172", 4.37mm	LF2400 LR	200	11809811
DRIVE UNIT		Drive Only	LF800	1	118347
		Drive Only	LF1200	1	118201
		Drive Only	LF2400/LF2400 LR	1	118572
		Drive with NPT Body	LF800	1	A85100
		Drive with NPT Body	LF1200	1	A85000
		Drive with NPT Body	LF2400/LF2400 LR	1	A85200
		Drive with Anti-Theft ACME Body	LF800	1	A85100AT
		Drive with Anti-Theft ACME Body	LF1200	1	A85000AT
		Drive with Anti-Theft ACME Body	LF2400/LF2400 LR	1	A85200AT
BODIES		NPT Body	Any	1	118134
		ACME Body (adapter required)	Any	1	118311
		ACME Anti-Theft Body (adapter required)	Any	1	118310
		NPT Body with LF800 Drive	LF800	1	A85100
		NPT Body with LF1200 Drive	LF1200	1	A85000
		NPT Body with LF2400 Drive	LF2400/LF2400 LR	1	A85200
		Anti-Theft ACME Body with LF800 Drive	LF800	1	A85100AT
		Anti-Theft ACME Body with LF1200 Drive	LF1200	1	A85000AT
		Anti-Theft ACME Body with LF2400 Drive	LF2400/LF2400 LR	1	A85200AT
		Anti-Theft Screwdriver	Anti-Theft Bodies	1	118317

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION
















IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION

LF800 Performance Data

US Measurements

Deflector	Nozzle	Stream Height (in.)	Flow Rate at Standard Pressures (gpm) Throw Radius at Standard Pressure (feet)									Model Number Item Number	
			25 psi	30 psi	35 psi	40 psi	45 psi	50 psi	55 psi	60 psi	NPT	ACME	
	White (11809850) 50 Drill .070" 	14-21		<b>0.77</b>	<b>0.83</b>	<b>0.89</b>	<b>0.96</b>	<b>1.01</b>	<b>1.06</b>	<b>1.11</b>	LF08N06Y50	LF08A06Y50	
				23	24	25	25	25	26	26	A85101A0650	A85103A0650	
	Blue (11809805) 5/64" .078" 	12-21	<b>0.88</b>	<b>0.97</b>	<b>1.05</b>	<b>1.12</b>	<b>1.19</b>	<b>1.25</b>	<b>1.31</b>	<b>1.37</b>	LF08N06Y05	LF08A06Y05	
			23	24	25	26	26	27	27	27	A85101A0605	A85103A0605	
	Orange (11809844) 44 Drill .086" 	14-22	<b>1.07</b>	<b>1.17</b>	<b>1.26</b>	<b>1.35</b>	<b>1.43</b>	<b>1.51</b>	<b>1.59</b>	<b>1.67</b>	LF08N06Y44	LF08A06Y44	
			23	25	26	27	28	28	28	29	A85101A0644	A85103A0644	
	White (11809850) 50 Drill .070" 	17-25		<b>0.77</b>	<b>0.83</b>	<b>0.89</b>	<b>0.96</b>	<b>1.01</b>	<b>1.06</b>	<b>1.11</b>	LF08N09P50	LF08A09P50	
				25	25	26	27	27	27	27	27	A85101A0950	A85103A0950
	Blue (11809805) 5/64" .078" 	15-28	<b>0.88</b>	<b>0.97</b>	<b>1.05</b>	<b>1.12</b>	<b>1.19</b>	<b>1.25</b>	<b>1.31</b>	<b>1.37</b>	LF08N09P05	LF08A09P05	
			25	26	27	28	28	28	28	29	A85101A0905	A85103A0905	
		White (11809850) 50 Drill .070" 	26-35		<b>0.77</b>	<b>0.83</b>	<b>0.89</b>	<b>0.96</b>	<b>1.01</b>	<b>1.06</b>	<b>1.11</b>	LF08N12C50	LF08A12C50
					27	28	29	29	29	29	29	A85101A1250	A85103A1250
Blue (11809805) 5/64" .078" 		25-38	<b>0.88</b>	<b>0.97</b>	<b>1.05</b>	<b>1.12</b>	<b>1.19</b>	<b>1.25</b>	<b>1.31</b>	<b>1.37</b>	LF08N12C05	LF08A12C05	
			27	28	30	30	31	31	31	31	A85101A1205	A85103A1205	
Orange (11809844) 44 Drill .086" 		26-41	<b>1.07</b>	<b>1.17</b>	<b>1.26</b>	<b>1.35</b>	<b>1.43</b>	<b>1.51</b>	<b>1.59</b>	<b>1.67</b>	LF08N12C44	LF08A12C44	
			28	30	31	32	32	33	33	34	A85101A1244	A85103A1244	
	White (11809850) 50 Drill .070" 	34-45		<b>0.77</b>	<b>0.83</b>	<b>0.89</b>	<b>0.96</b>	<b>1.01</b>	<b>1.06</b>	<b>1.11</b>	LF08N15B50	LF08A15B50	
				28	29	30	30	30	30	31	A85101A1550	A85103A1550	
	Blue (11809805) 5/64" .078" 	32-50	<b>0.88</b>	<b>0.97</b>	<b>1.05</b>	<b>1.12</b>	<b>1.19</b>	<b>1.25</b>	<b>1.31</b>	<b>1.37</b>	LF08N15B05	LF08A15B05	
			28	30	31	31	33	33	33	33	A85101A1505	A85103A1505	
	Orange (11809844) 44 Drill .086" 	28-55	<b>1.07</b>	<b>1.17</b>	<b>1.26</b>	<b>1.35</b>	<b>1.43</b>	<b>1.51</b>	<b>1.59</b>	<b>1.67</b>	LF08N15B44	LF08A15B44	
			28	31	32	33	33	34	34	34	A85101A1544	A85103A1544	

Sprinkler riser must be stable to achieve stated performance. Performance data based on 12 inch riser. Standard ACME body listed. Call for Item Numbers with Anti-Theft ACME body.

DRIP IRRIGATION  
MICRO IRRIGATION  
LOW FLOW IRRIGATION  
IMPACT SPRINKLERS  
MONITORING & CONTROLS  
FILTRATION

Metric Measurements

DRIP  
IRRIGATION
















MICRO  
IRRIGATION

LOW FLOW  
IRRIGATION

IMPACT  
SPRINKLERS

MONITORING  
& CONTROLS








FILTRATION

Deflector	Nozzle	Stream Height (cm)	Flow Rate at Standard Pressures (l/h) Throw Radius at Standard Pressure (m)								Model Number Item Number	
			1.7 bar	2.1 bar	2.4 bar	2.8 bar	3.1 bar	3.5 bar	3.8 bar	4.2 bar	NPT	ACME
<b>6 Degree Yellow</b> 118582 	<b>White</b> (11809850) 50 Drill 1.79mm 	35-53	175	188	202	218	229	241	252	LF08N06Y50	LF08A06Y50	
			6.9	7.2	7.5	7.5	7.5	7.8	7.8	A85101A0650	A85103A0650	
	<b>Blue</b> (11809805) 5/64" 1.98mm 	30-53	200	220	238	254	270	284	298	311	LF08N06Y05	LF08A06Y05
			6.9	7.2	7.5	7.8	8.1	8.1	8.1	8.1	A85101A0605	A85103A0605
	<b>Orange</b> (11809844) 44 Drill 2.18mm 	35-55	243	266	286	307	325	343	361	379	LF08N06Y44	LF08A06Y44
			6.9	7.5	7.8	8.1	8.4	8.4	8.4	8.7	A85101A0644	A85103A0644
<b>9 Degree Bright Purple</b> 118601 	<b>White</b> (11809850) 50 Drill 1.79mm 	43-63	175	188	202	218	229	241	252	LF08N09P50	LF08A09P50	
			7.5	7.5	7.8	8.1	8.1	8.1	8.1	A85101A0950	A85103A0950	
	<b>Blue</b> (11809805) 5/64" 1.98mm 	38-71	200	220	238	254	270	284	298	311	LF08N09P05	LF08A09P05
			7.5	7.8	8.1	8.4	8.4	8.4	8.4	8.7	A85101A0905	A85103A0905
	<b>12 Degree Copper</b> 118575 	<b>White</b> (11809850) 50 Drill 1.79mm 	66-88	175	188	202	218	229	241	252	LF08N12C50	LF08A12C50
				8.1	8.4	8.7	8.7	8.7	8.7	8.7	A85101A1250	A85103A1250
<b>Blue</b> (11809805) 5/64" 1.98mm 		63-96	200	220	238	254	270	284	298	311	LF08N12C05	LF08A12C05
			8.1	8.4	9.0	9.0	9.3	9.3	9.3	9.3	A85101A1205	A85103A1205
<b>Orange</b> (11809844) 44 Drill 2.18mm 		66-104	243	266	286	307	325	343	361	379	LF08N12C44	LF08A12C44
			8.4	9.0	9.3	9.6	9.6	9.9	9.9	10.2	A85101A1244	A85103A1244
<b>15 Degree Brown</b> 118586 	<b>White</b> (11809850) 50 Drill 1.79mm 	86-114	175	188	202	218	229	241	252	LF08N15B50	LF08A15B50	
			8.4	8.7	9.0	9.0	9.0	9.0	9.3	A85101A1550	A85103A1550	
	<b>Blue</b> (11809805) 5/64" 1.98mm 	81-127	200	220	238	254	270	284	298	311	LF08N15B05	LF08A15B05
			8.4	9.0	9.3	9.3	9.9	9.9	9.9	9.9	A85101A1505	A85103A1505
	<b>Orange</b> (11809844) 44 Drill 2.18mm 	71-139	243	266	286	307	325	343	361	379	LF08N15B44	LF08A15B44
			8.4	9.3	9.6	9.9	9.9	10.2	10.2	10.2	A85101A1544	A85103A1544

Sprinkler riser must be stable to achieve stated performance. Performance data based on 30cm riser. Standard ACME body listed. Call for Item Numbers with Anti-Theft ACME body.

LF1200 Performance Data

US Measurements

Deflector	Nozzle	Stream Height (in.)	Flow Rate at Standard Pressures (gpm)									Model Number		
			Throw Radius at Standard Pressure (feet)									Item Number		
			25 psi	30 psi	35 psi	40 psi	45 psi	50 psi	55 psi	60 psi	NPT	ACME		
	<b>Orange</b> (11809844) 44 Drill, 0.086"	14-20		1.17	1.26	1.35	1.43	1.51	1.59	1.67			LF12N06P44	LF12A06P44
				23	23	25	25	25	26	26			A85001B0644	A85003B0644
	<b>Purple</b> (11809806) 3/32", 0.094"	14-21	1.27	1.39	1.5	1.61	1.71	1.8	1.89	1.98			LF12N06P06	LF12A06P06
			22	24	24	26	26	28	26	27			A85001B0606	A85003B0606
	<b>Yellow</b> (11809838) 38 Drill, 0.102"	16-21	1.49	1.63	1.77	1.89	2.00	2.12					LF12N06P38	LF12A06P38
			23	25	25	27	27	28					A85001B0638	A85003B0638
	<b>Blue</b> (11809805) 5/64", 0.078"	19-29		0.97	1.05	1.12	1.19	1.25	1.31	1.37			LF12N10W06	LF12A10W06
				25	26	26	27	27	27	27			A85001B1006	A85003B1006
	<b>Orange</b> (11809844) 44 Drill, 0.086"	24-33		1.17	1.26	1.35	1.43	1.51	1.59	1.67			LF12N10W44	LF12A10W44
				25	27	27	28	28	30	29			A85001B1044	A85003B1044
	<b>Purple</b> (11809806) 3/32", 0.094"	22-34	1.27	1.39	1.5	1.61	1.71	1.8	1.89	1.98			LF12N10W06	LF12A10W06
			26	28	28	28	29	29	29	29			A85001B1006	A85003B1006
	<b>Yellow</b> (11809838) 38 Drill, 0.102"	24-34	1.49	1.63	1.77	1.89	2.00	2.12					LF12N10W38	LF12A10W38
			27	29	28	31	30	30					A85001B1038	A85003B1038
	<b>Orange</b> (11809844) 44 Drill, 0.086"	28-39		1.17	1.26	1.35	1.43	1.51	1.59	1.67			LF12N12B44	LF12A12B44
				27	28	29	29	29	30	30			A85001B1244	A85003B1244
	<b>Purple</b> (11809806) 3/32", 0.094"	28-40	1.27	1.39	1.5	1.61	1.71	1.8	1.89	1.98			LF12N12B12	LF12A12B12
			27	29	30	31	31	31	32	32			A85001B1206	A85003B1206
	<b>Yellow</b> (11809838) 38 Drill, 0.102"	30-43	1.49	1.63	1.77	1.89	2.00	2.12					LF12N12B38	LF12A12B38
			28	30	32	32	32	33					A85001B1238	A85003B1238
	<b>Green</b> (11809807) 7/64", 0.109"	30-41	1.69	1.85	2.00	2.15							LF12N12P07	LF12A12P07
			30	32	33	34							A85001B1207	A85003B1207
	<b>Tan</b> (11809830) 30 Drill, 0.117"	34-44	1.97	2.17	2.35	2.53							LF12N12P30	LF12A12P30
			31	33	34	35							A85001B1230	A85003B1230
	<b>Blue</b> (11809805) 5/64", 0.078"	46-59				1.12	1.19	1.25	1.31	1.37			LF12N16R06	LF12A16R06
						30	31	30	31	31			A85001B1606	A85003B1606
	<b>Orange</b> (11809844) 44 Drill, 0.086"	42-55		1.17	1.26	1.35	1.43	1.51	1.59	1.67			LF12N16R44	LF12A16R44
				31	32	32	32	32	32	32			A85001B1644	A85003B1644
	<b>Purple</b> (11809806) 3/32", 0.094"	40-55	1.27	1.39	1.50	1.61	1.71	1.80	1.89	1.98			LF12N16R06	LF12A16R06
			30	31	32	33	33	34	34	34			A85001B1606	A85003B1606
	<b>Yellow</b> (11809838) 38 Drill, 0.102"	40-55	1.49	1.63	1.77	1.89	2.00	2.12					LF12N16R38	LF12A16R38
			30	31	33	33	33	32					A85001B1638	A85003B1638
	<b>Blue</b> (11809805) 5/64", 0.078"	41-55		0.97	1.05	1.12	1.19	1.25	1.31	1.37			LF12N17B06	LF12A17B06
				27	31	30	33	33	33	33			A85001B1706	A85003B1706
	<b>Orange</b> (11809844) 44 Drill, 0.086"	49-60		1.17	1.26	1.35	1.43	1.51	1.59	1.67			LF12N17B44	LF12A17B44
				31	33	34	34	34	34	33			A85001B1744	A85003B1744
	<b>Purple</b> (11809806) 3/32", 0.094"	42-61	1.27	1.39	1.50	1.61	1.71	1.80	1.89	1.98			LF12N17B06	LF12A17B06
			31	33	34	35	36	35	36	36			A85001B1706	A85003B1706
	<b>Yellow</b> (11809838) 38 Drill, 0.102"	43-61	1.49	1.63	1.77	1.89	2.00	2.12					LF12N17B38	LF12A17B38
			32	34	35	36	36	37					A85001B1738	A85003B1738
	<b>Orange</b> (11809844) 44 Drill, 0.086"	60-74		1.17	1.26	1.35	1.43	1.51	1.59	1.67			LF12N21G44	LF12A21G44
				34	34	34	35	35	35	35			A85001B2144	A85003B2144
	<b>Purple</b> (11809806) 3/32", 0.094"	50-75	1.27	1.39	1.50	1.61	1.71	1.80	1.89	1.98			LF12N21G06	LF12A21G06
			33	34	35	35	35	35	35	36			A85001B2106	A85003B2106
	<b>Yellow</b> (11809838) 38 Drill, 0.102"	53-72	1.49	1.63	1.77	1.89	2.00	2.12					LF12N21G38	LF12A21G38
			34	35	36	36	36	36					A85001B2138	A85003B2138

Sprinkler riser must be stable to achieve stated performance. Performance data based on 12 inch riser. Standard ACME body listed. Call for Item Numbers with Anti-Theft ACME body.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION

Matrix of Assemblies



Metric Measurements

Matrix of Assemblies	Deflector	Nozzle	Stream Height (cm)	Flow Rate at Standard Pressures (l/h)								Model Number	
				Throw Radius at Standard Pressure (m)								Item Number	
				1.7 bar	2.1 bar	2.4 bar	2.8 bar	3.1 bar	3.5 bar	3.8 bar	4.2 bar	NPT	ACME
6 Degree Dark Purple 118285		Orange (11809844) 44 Drill, 0.086"	35-50	266	286	307	325	343	361	379	LF12N06P44	LF12A06P44	
		6.9		6.9	7.5	7.5	7.8	7.8	7.8	A85001B0644	A85003B0644		
	Purple (11809806) 3/32", 0.094"	35-53	288	316	341	366	388	409	429	450	LF12N06P06	LF12A06P06	
			6.6	7.2	7.2	7.8	7.8	8.4	7.8	8.1	A85001B0606	A85003B0606	
	Yellow (11809838) 38 Drill, 0.102"	40-53	338	370	402	429	454	481	LF12N06P38	LF12A06P38			
			6.9	7.5	7.5	8.1	8.1	8.4	A85001B0638	A85003B0638			
	10 Degree White 118231		Blue (11809805) 5/64", 0.078"	48-73	220	238	254	270	284	298	311	LF12N10W06	LF12A10W06
			7.5		7.8	7.8	8.1	8.1	8.1	8.1	A85001B1006	A85003B1006	
		Orange (11809844) 44 Drill, 0.086"	60-83	266	286	307	325	343	361	379	LF12N10W44	LF12A10W44	
7.5				8.1	8.1	8.4	8.1	9.0	8.7	A85001B1044	A85003B1044		
Purple (11809806) 3/32", 0.094"		55-86	288	316	341	366	388	409	429	450	LF12N10W06	LF12A10W06	
			7.8	8.4	8.4	8.4	8.7	8.7	8.7	A85001B1006	A85003B1006		
Yellow (11809838) 38 Drill, 0.102"	60-86	338	370	402	429	454	481	LF12N10W38	LF12A10W38				
		8.1	8.7	8.4	9.3	9.0	9.0	A85001B1038	A85003B1038				
12 Degree Cyan Blue 118262		Orange (11809844) 44 Drill, 0.086"	71-99	266	286	307	325	343	361	379	LF12N12B44	LF12A12B44	
		8.1		8.4	8.7	8.7	8.7	9.0	9.0	A85001B1244	A85003B1244		
	Purple (11809806) 3/32", 0.094"	71-101	288	316	341	366	388	409	429	450	LF12N12B12	LF12A12B12	
			8.1	8.7	9.0	9.3	9.3	9.39	9.6	9.6	A85001B1206	A85003B1206	
	Yellow (11809838) 38 Drill, 0.102"	76-109	338	370	402	429	454	481	LF12N12B38	LF12A12B38			
			8.4	9.0	9.6	9.6	9.6	9.6	A85001B1238	A85003B1238			
12 Degree Pink 118354		Green (11809807) 7/64", 0.109"	76-104	384	420	454	488	LF12N12P07	LF12A12P07				
		9.0		9.6	9.9	10.2	A85001B1207	A85003B1207					
	Tan (11809830) 30 Drill, 0.117"	86-111	447	493	534	575	LF12N12P30	LF12A12P30					
			9.3	9.9	10.2	10.5	A85001B1230	A85003B1230					
16 Degree Red 118240		Blue (11809805) 5/64", 0.078"	116-149	254	270	284	298	311	LF12N16R06	LF12A16R06			
		9.0		9.3	9.0	9.3	9.3	A85001B1606	A85003B1606				
	Orange (11809844) 44 Drill, 0.086"	106-139	266	286	307	325	343	361	379	LF12N16R44	LF12A16R44		
			9.3	9.6	9.6	9.6	9.6	9.6	9.6	A85001B1644	A85003B1644		
	Purple (11809806) 3/32", 0.094"	101-139	288	316	341	366	388	409	429	450	LF12N16R06	LF12A16R06	
9.0			9.3	9.6	9.9	9.9	10.2	10.2	10.2	A85001B1606	A85003B1606		
Yellow (11809838) 38 Drill, 0.102"	101-139	338	370	402	429	454	481	LF12N16R38	LF12A16R38				
		9.0	9.3	9.9	9.9	9.9	9.6	A85001B1638	A85003B1638				
17 Degree Powder Blue 118226		Blue (11809805) 5/64", 0.078"	104-139	220	238	254	270	284	298	311	LF12N17B06	LF12A17B06	
		8.1		9.3	9.0	9.9	9.9	9.9	9.9	A85001B1706	A85003B1706		
	Orange (11809844) 44 Drill, 0.086"	124-152	266	286	307	325	343	361	379	LF12N17B44	LF12A17B44		
			9.3	9.9	10.2	10.2	10.2	10.2	9.9	A85001B1744	A85003B1744		
	Purple (11809806) 3/32", 0.094"	106-154	288	316	341	366	388	409	429	450	LF12N17B06	LF12A17B06	
			9.3	9.9	10.2	10.5	10.8	10.5	10.8	10.8	A85001B1706	A85003B1706	
Yellow (11809838) 38 Drill, 0.102"	109-154	338	370	402	429	454	481	LF12N17B38	LF12A17B38				
		9.6	10.2	10.5	10.8	10.8	11.1	A85001B1738	A85003B1738				
21 Degree Olive Green 118339		Orange (11809844) 44 Drill, 0.086"	152-187	266	286	307	325	343	361	379	LF12N21G44	LF12A21G44	
		10.2		10.2	10.2	10.5	10.5	10.5	10.5	A85001B2144	A85003B2144		
	Purple (11809806) 3/32", 0.094"	127-190	288	316	341	366	388	409	429	450	LF12N21G06	LF12A21G06	
			9.9	10.2	10.5	10.5	10.5	10.5	10.5	10.8	A85001B2106	A85003B2106	
Yellow (11809838) 38 Drill, 0.102"	134-182	338	370	402	429	454	481	LF12N21G38	LF12A21G38				
		10.2	10.5	10.8	10.8	10.8	10.8	A85001B2138	A85003B2138				

Sprinkler riser must be stable to achieve stated performance. Performance data based on 30cm riser. Standard ACME body listed. Call for Item Numbers with Anti-Theft ACME body.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION





IMPACT SPRINKLERS

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LF2400 Performance Data

US Measurements





Deflector	Nozzle	Stream Height (in.)	Flow Rate at Standard Pressures (gpm) Throw Radius at Standard Pressure (feet)									Model Number Item Number	
			25 psi	30 psi	35 psi	40 psi	45 psi	50 psi	55 psi	60 psi	NPT	ACME	
 10 Degree Lime 118599	Green (11809807) 7/64", 0.109"	20-38	1.69	1.85	2.00	2.15	2.28	2.45	2.57	2.70	LF24N10L07	LF24A10L07	
			27	29	30	32	33	34	34	35	A85201C1007	A85203C1007	
	Tan (11809830) 30 Drill, 0.117"	24-38	1.97	2.17	2.35	2.53	2.67	2.81	2.95	3.09	LF24N10L30	LF24A10L30	
			29	30	32	33	34	35	35	36	A85201C1030	A85203C1030	
	Red (11809808) 1/8", 0.125"	42-41	2.24	2.50	2.70	2.89	3.07	3.20	3.36	3.52	LF24N10L08	LF24A10L08	
		30	32	33	34	35	36	36	36	A85201C1008	A85203C1008		
	Black (11809829) 29 Drill, 0.133"	30-48	2.52	2.81	3.03	3.25	3.45	3.60	3.75	3.88	LF24N10L29	LF24A10L29	
		30	32	33	35	35	36	36	37	A85201C1029	A85203C1029		
	Silver (11809809) 9/64", 0.141"	32-44	2.93	3.27	3.53	3.78	4.02				LF24N10L09	LF24A10L09	
		32	34	35	36	37				A85201C1009	A85203C1009		
 13 Degree Maroon 118600	Green (11809807) 7/64", 0.109"	28-50	1.69	1.85	2.00	2.15	2.28	2.45	2.57	2.70	LF24N13M07	LF24A13M07	
			30	31	32	33	34	34	35	35	A85201C1307	A85203C1307	
	Tan (11809830) 30 Drill, 0.117"	30-48	1.97	2.17	2.35	2.53	2.67	2.81	2.95	3.09	LF24N13M30	LF24A13M30	
			31	32	33	36	35	36	36	36	A85201C1330	A85203C1330	
	Red (11809808) 1/8", 0.125"	32-49	2.24	2.50	2.70	2.89	3.07	3.20	3.36	3.52	LF24N13M08	LF24A13M08	
		31	33	34	35	36	37	38	37	A85201C1308	A85203C1308		
	Black (11809829) 29 Drill, 0.133"	33-50	2.52	2.81	3.03	3.25	3.45	3.60	3.75	3.88	LF24N13M29	LF24A13M29	
		32	33	34	35	36	36	37	37	A85201C1329	A85203C1329		
	Silver (11809809) 9/64", 0.141"	38-54	2.93	3.27	3.53	3.78	4.02				LF24N13M09	LF24A13M09	
		33	36	37	38	39				A85201C1309	A85203C1309		
 15 Degree Tangerine 118583	Green (11809807) 7/64", 0.109"	32-50	1.69	1.85	2.00	2.15	2.28	2.45	2.57	2.70	LF24N15T07	LF24A15T07	
			31	32	33	34	35	35	36	37	A85201C1507	A85203C1507	
	Tan (11809830) 30 Drill, 0.117"	28-50	1.97	2.17	2.35	2.53	2.67	2.81	2.95	3.09	LF24N15T30	LF24A15T30	
			30	33	34	36	36	36	37	37	A85201C1530	A85203C1530	
	Red (11809808) 1/8", 0.125"	35-54	2.24	2.50	2.70	2.89	3.07	3.20	3.36	3.52	LF24N15T08	LF24A15T08	
		32	34	35	37	37	37	37	37	A85201C1508	A85203C1508		
	Black (11809829) 29 Drill, 0.133"	40-67	2.52	2.81	3.03	3.25	3.45	3.60	3.75	3.88	LF24N15T29	LF24A15T29	
		32	36	37	38	38	39	39	40	A85201C1529	A85203C1529		
	Silver (11809809) 9/64", 0.141"	42-57	2.93	3.27	3.53	3.78	4.02				LF24N15T09	LF24A15T09	
		34	36	37	39	39				A85201C1509	A85203C1509		
 22 Degree Dark Green 118585	Green (11809807) 7/64", 0.109"	63-95	1.69	1.85	2.00	2.15	2.28	2.45	2.57	2.70	LF24N22G07	LF24A22G07	
			36	38	38	38	39	39	39	39	A85201C2207	A85203C2207	
	Tan (11809830) 30 Drill, 0.117"	64-97	1.97	2.17	2.35	2.53	2.67	2.81	2.95	3.09	LF24N22G30	LF24A22G30	
			36	38	39	40	41	41	41	42	A85201C2230	A85203C2230	
	Red (11809808) 1/8", 0.125"	67-100	2.24	2.50	2.70	2.89	3.07	3.20	3.36	3.52	LF24N22G08	LF24A22G08	
		36	39	40	41	41	43	43	44	A85201C2208	A85203C2208		
	Black (11809829) 29 Drill, 0.133"	74-120	2.52	2.81	3.03	3.25	3.45	3.60	3.75	3.88	LF24N22G29	LF24A22G29	
		38	41	42	42	43	44	44	44	A85201C2229	A85203C2229		
	Silver (11809809) 9/64", 0.141"	72-102	2.93	3.27	3.53	3.78	4.02				LF24N22G09	LF24A22G09	
		39	40	43	44	45				A85201C2209	A85203C2209		

Sprinkler riser must be stable to achieve stated performance. Performance data based on 12 inch riser. Standard ACME body listed. Call for Item Numbers with Anti-Theft ACME body.

DRIP IRRIGATION  
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LOW FLOW IRRIGATION  
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Matrix of Assemblies

Metric Measurements

Deflector	Nozzle	Stream Height (cm)	Flow Rate at Standard Pressures (l/h)									Model Number	
			Throw Radius at Standard Pressure (m)									Item Number	
			1.7 bar	2.1 bar	2.4 bar	2.8 bar	3.1 bar	3.5 bar	3.8 bar	4.2 bar	NPT	ACME	
 <b>10 Degree Lime</b> 118599	<b>Green</b> (11809807) 7/64", 2.76mm	50-96	384	420	454	488	518	556	584	613	LF24N10L07	LF24A10L07	
			8.1	8.7	9.0	9.6	9.9	10.2	10.2	10.5	A85201C1007	A85203C1007	
	<b>Tan</b> (11809830) 30 Drill, 2.97mm	60-96	447	493	534	575	606	638	670	702	LF24N10L30	LF24A10L30	
			8.7	9.0	9.6	9.9	10.2	10.5	10.5	10.8	A85201C1030	A85203C1030	
	<b>Red</b> (11809808) 1/8", 3.18mm	60-104	509	568	613	656	697	727	763	799	LF24N10L08	LF24A10L08	
		9.0	9.6	9.9	10.2	10.5	10.8	10.8	10.8	A85201C1008	A85203C1008		
	<b>Black</b> (11809829) 29 Drill, 3.38mm	76-121	572	638	688	738	784	818	852	881	LF24N10L29	LF24A10L29	
			9.0	9.6	9.9	10.5	10.5	10.8	10.8	11.1	A85201C1029	A85203C1029	
	<b>Silver</b> (11809809) 9/64", 3.57mm	81-111	665	743	802	858	913				LF24N10L09	LF24A10L09	
			9.6	10.2	10.5	10.8	11.1				A85201C1009	A85203C1009	
 <b>13 Degree Maroon</b> 118600	<b>Green</b> (11809807) 7/64", 2.76mm	71-127	384	420	454	488	518	556	584	613	LF24N13M07	LF24A13M07	
			9.0	9.3	9.6	9.9	10.2	10.2	10.5	10.5	A85201C1307	A85203C1307	
	<b>Tan</b> (11809830) 30 Drill, 2.97mm	76-121	447	493	534	575	606	638	670	702	LF24N13M30	LF24A13M30	
			9.3	9.6	9.9	10.8	10.5	10.8	10.8	10.8	A85201C1330	A85203C1330	
	<b>Red</b> (11809808) 1/8", 3.18mm	81-127	509	568	613	656	697	727	763	799	LF24N13M08	LF24A13M08	
		9.3	9.9	10.2	10.5	10.8	11.1	11.4	11.1	A85201C1308	A85203C1308		
	<b>Black</b> (11809829) 29 Drill, 3.38mm	86-127	572	638	688	738	784	818	852	881	LF24N13M29	LF24A13M29	
			9.6	9.9	10.2	10.5	10.8	10.8	11.1	11.1	A85201C1329	A85203C1329	
	<b>Silver</b> (11809809) 9/64", 3.57mm	96-137	665	743	802	858	913				LF24N13M09	LF24A13M09	
			9.9	10.8	11.1	11.4	11.7				A85201C1309	A85203C1309	
 <b>15 Degree Tangerine</b> 118583	<b>Green</b> (11809807) 7/64", 2.76mm	81-127	384	420	454	488	518	556	584	613	LF24N15T07	LF24A15T07	
			9.3	9.6	9.9	10.2	10.5	10.5	10.8	11.1	A85201C1507	A85203C1507	
	<b>Tan</b> (11809830) 30 Drill, 2.97mm	71-127	447	493	534	575	606	638	670	702	LF24N15T30	LF24A15T30	
			9.0	9.9	10.2	10.8	10.8	10.8	11.1	11.1	A85201C1530	A85203C1530	
	<b>Red</b> (11809808) 1/8", 3.18mm	88-137	509	568	613	656	697	727	763	799	LF24N15T08	LF24A15T08	
		9.6	10.2	10.5	11.1	11.1	11.1	11.1	11.1	A85201C1508	A85203C1508		
	<b>Black</b> (11809829) 29 Drill, 3.38mm	101-170	572	638	688	738	784	818	852	881	LF24N15T29	LF24A15T29	
			9.6	10.8	11.1	11.4	11.4	11.7	11.7	12.0	A85201C1529	A85203C1529	
	<b>Silver</b> (11809809) 9/64", 3.57mm	106-144	665	743	802	858	913				LF24N15T09	LF24A15T09	
			10.2	10.8	11.1	11.7	11.7				A85201C1509	A85203C1509	
 <b>22 Degree Dark Green</b> 118585	<b>Green</b> (11809807) 7/64", 2.76mm	160-241	384	420	454	488	518	556	584	613	LF24N22G07	LF24A22G07	
			10.8	11.4	11.4	11.4	11.7	11.7	11.7	11.7	A85201C2207	A85203C2207	
	<b>Tan</b> (11809830) 30 Drill, 2.97mm	162-246	447	493	534	575	606	638	670	702	LF24N22G30	LF24A22G30	
			10.8	11.4	11.7	12.0	12.3	12.3	12.3	12.6	A85201C2230	A85203C2230	
	<b>Red</b> (11809808) 1/8", 3.18mm	170-254	509	568	613	656	697	727	763	799	LF24N22G08	LF24A22G08	
		10.8	11.7	12.0	12.3	12.3	12.9	12.9	13.2	A85201C2208	A85203C2208		
	<b>Black</b> (11809829) 29 Drill, 3.38mm	287-304	572	636	688	738	784	818	852	881	LF24N22G29	LF24A22G29	
			11.4	12.3	12.6	12.6	12.9	13.2	13.2	13.2	A85201C2229	A85203C2229	
	<b>Silver</b> (11809809) 9/64", 3.57mm	182-259	665	743	802	858	913				LF24N22G09	LF24A22G09	
			11.7	12.0	12.9	13.2	13.5				A85201C2209	A85203C2209	

Sprinkler riser must be stable to achieve stated performance. Performance data based on 30 cm riser. Standard ACME body listed. Call for Item Numbers with Anti-Theft ACME body.

DRIP IRRIGATION

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LOW FLOW IRRIGATION


IMPACT SPRINKLERS

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## LF2400 Long Range Performance Data

### US Measurements

Matrix of Assemblies	Deflector	Nozzle	Stream Height (inch)	Flow Rate at Standard Pressures (gpm) Throw Radius at Standard Pressure (feet)								Model Number Item Number												
				25 psi	30 psi	35 psi	40 psi	45 psi	50 psi	55 psi	60 psi	½" NPT	ACME	ACME w/¾" NPT ADAPTER										
															<b>27 Degree Black</b> 118602	<b>Silver</b> (11809809) 9/64" 0.143"	76-116	2.93	3.27	3.53	3.78	4.02	4.23	4.43
	38	40	40														42	44	45	46	46	A85201C2709	A85203C2709	A85223C2709
	<b>Brown</b> (11809810) 5/32" 0.156"	78-118	3.64												3.99	4.31	4.60	4.88	5.15	5.40	5.64	LF24N27B10	LF24A27B10	LF24A27B10A
			38												40	42	44	44	45	46	46	A85201C2710	A85203C2710	A85223C2710
	<b>Dark Grey</b> (11809811) 11/64" 0.172"	80-120	4.40												4.82	5.21	5.57	5.91	6.23	6.53	6.82	LF24N27B11	LF24A27B11	LF24A27B11A
			40												42	44	47	48	48	48	50	A85201C2711	A85203C2711	A85223C2711

### Metric Measurements

Matrix of Assemblies	Deflector	Nozzle	Stream Height (cm)	Flow Rate at Standard Pressures (l/h) Throw Radius at Standard Pressure (m)								Model Number Item Number												
				1.7 bar	2.1 bar	2.4 bar	2.8 bar	3.1 bar	3.5 bar	3.8 bar	4.2 bar	½" NPT	ACME	ACME w/¾" NPT ADAPTER										
															<b>27 Degree Black</b> 118602	<b>Silver</b> (11809809) 9/64" 3.63mm	193-295	665	743	802	858	913	961	1,006
	11.6	12.2	12.2														12.8	13.4	13.7	14.0	14.0	A85201C2709	A85203C2709	A85223C2709
	<b>Brown</b> (11809810) 5/32" 3.97mm	198-300	827												906	979	1,045	1,108	1,170	1,226	1,281	LF24N27B10	LF24A27B10	LF24A27B10A
			11.6												12.2	12.8	13.4	13.4	13.7	14.0	14.0	A85201C2710	A85203C2710	A85223C2710
	<b>Dark Grey</b> (11809811) 11/64" 4.37mm	203-305	999												1,095	1,183	1,265	1,265	1,415	1,483	1,549	LF24N27B11	LF24A27B11	LF24A27B11A
			12.2												12.8	13.4	14.3	14.6	14.6	14.6	15.2	A85201C2711	A85203C2711	A85223C2711

ACME x ¾" Male NPT Adapter - Part Number: 118297

ACME x 20mm x 25mm Female Slip Adapter - Part Number: 118294

Standard ACME body listed. Call for Item Numbers with Anti-Theft ACME body.

## Adapters



### ACME x Male NPT Adapter

- ACME x Male 1/2" NPT, Item 118292
- ACME x Male 3/4" NPT, Item 118297



### ACME x Female Slip Adapter

- ACME x Male 1/2" x 3/4" Slip (Gray), Item 118328
- ACME x 20mm x 25mm Slip (White), Item 118294

## Accessories



### Edge Guard

Item 118366

The Rain Bird Edge Guard for LF Series Sprinklers provides you with the ability to keep water out of unwanted areas. Whether it is a road, a walkway, or just the end of the field, the Edge Guard takes the water from the sprinkler stream and redirects it back into the desired area.



### Stream Splitter

Item 118259

Stream Splitters splits the water to avoid direct water streams into tree trunks, equipment, and general areas that do not need watering.



### Splash Guard

Item 118337

The Splash Guard is an accessory for Rain Bird LF Series Sprinklers that allows you to change or clean nozzles without getting soaked while the sprinkler is in operation. It fits over the top of the sprinkler and directs water downwards while you remove and replace the sprinkler.

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# Impact Sprinklers

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# Impact Sprinklers



Rain Bird introduced the first impact sprinkler to the market in 1933 (U.S. Patent 1,997,901), ushering in the era of efficient modern irrigation. Our commitment to offering superior impact sprinklers is as strong today as it was 80 years ago.

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DRIP IRRIGATION  
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LOW FLOW IRRIGATION  
IMPACT SPRINKLERS  
MONITORING & CONTROLS  
FILTRATION

Impact Sprinklers



Rain Bird® agricultural impact sprinklers have set the industry standard, offering smooth performance and unmatched grit tolerance under the most demanding field conditions.

How to Order Impact Sprinklers

<b>Sprinkler Only</b>		<b>Nozzle Only</b>		XX = Nozzle Size					
Sprinkler without Nozzle	<b>A01619</b>		<b>U.S. Standard</b>	<b>1/16"</b>	<b>51 DRILL</b>	<b>5/64"</b>	<b>3/32"</b>	<b>7/64"</b>	
			<b>Metric</b>	<b>1.59 mm</b>	<b>1.70mm</b>	<b>1.98 mm</b>	<b>2.38 mm</b>	<b>2.78 mm</b>	
<b>Assembled Sprinkler/Nozzle Factory Combination</b>		Brass Straight Bore Nozzle	<b>SBN-1</b>	<b>105780-XX</b>	<b>04</b>	<b>51</b>	<b>05</b>	<b>06</b>	<b>07</b>
Sprinkler with Nozzle	<b>A0162005</b>	Part number for Sprinkler Only		Part number for Nozzle Only		Available Nozzle Size. Use this number to complete the Nozzle part number			
<b>SBN-1 5/64"</b>		Part number for Assembled Sprinkler and Nozzle, when available							

Option Guide (where available)			
FP	Full or Part Circle	W	Single Nozzle Spreader Plugged
BPJ	Brass Precision Jet	E	Straightening Vane
ADJ	Adjustable Nozzle	LPN	Low Pressure Nozzle
DA	Distance Control Flap	LAN	Low Angle Nozzle Spreader Nozzle
H	Superior H bearing	P	Anodized Aluminum Arm
TNT	PTFE, Nylon, PTFE Washer Stack	PM	Plastic Bearing
PJ	Precision Jet Spoon	V	Wedge
D	Durable Plastic Arm and Body	F	Frost/Chemically Resistant Washers
LA	Low Angle	M	Male Bearing
WS	Single Nozzle Body		

**The majority of the brass impact sprinklers and nozzles are ordered separately.**  
Where applicable, part numbers for assembled combinations are provided.

- To place an order in the United States call (800) HELLO AG (435-5624) or, use the Toll-FREE Fax Ordering number at (800) 843-4162.
- Customers outside the U.S. can contact the International Customer Service Department at (520) 878-2400 to place an order.



**Quick Reference Selection Guide**

Full Circle Impact Sprinklers																										
Model	Drive	Arm	Spreader Nozzle Port	Throw Radius (ft)	Bearing Size					Operating Pressure Range (psi)												Must Order Nozzle Separately*				
					1/2" Male NPT	3/4" Male NPT	1" Female NPT	1" Male NPT	1-1/4" Male NPT	20	25	30	35	40	45	50	55	60	65	70	75		80	85	90	95
14VH	Wedge	Brass	No	29-38	•																					
L20VH	Wedge	Brass	No	23-32	•																					✓
L20H	Spoon	Brass	No	28-35	•																					✓
M20VH-PM	Wedge	Brass	No	25-35	•																					✓
20JH	Spoon	Brass	No	38-44	•																					
29JH	Spoon	Brass	No	35-46	•																					✓
L36H	Spoon	Plastic	Yes	40-61		•																				✓
48H	Spoon	Plastic	Yes	42-60		•																				
30H	Spoon	Brass	Yes	40-56		•																				✓
30WH	Spoon	Brass	Plugged	40-56		•																				✓
30PWH	Spoon	Aluminum	Plugged	38-46		•																				✓
14070H	Spoon	Brass	Yes	44-71		•																				✓
30FH	Spoon	Brass	Yes	39-43		•																				✓
30FWH	Spoon	Brass	Plugged	39-43		•																				✓
70CH	Spoon	Brass	Yes	57-82			•																			✓
70CHM	Spoon	Brass	Yes	57-82				•																		✓
80EHD	Spoon	Brass	No	61-116					•																	✓

Full or Part Circle Impact Sprinklers																										
Model	Drive	Arm	Spreader Nozzle Port	Throw Radius (ft)	Bearing Size					Operating Pressure Range (psi)												Must Order Nozzle Separately*				
					1/2" Male NPT	3/4" Male NPT	1" Female NPT	1" Male NPT	1-1/4" Male NPT	20	25	30	35	40	45	50	55	60	65	70	75		80	85	90	95
25BPJ-FP-ADJ	Precision Jet	Brass	No	38-41	•																					
25BPJ-FP-ADJ-DA-TNT	Precision Jet	Brass	No	38-41	•																					
2045PJ	Precision Jet	Plastic	No	22-45	•																					
35A-TNT	Spoon	Brass	No	38-41		•																				
35A-ADJ-TNT	Spoon	Brass	No	42-51		•																				
35A-PJ-ADJ-TNT	Precision Jet	Brass	No	42-51		•																				
35A-PJ-DA-TNT	Precision Jet	Brass	No	42-51		•																				
65PJ	Precision Jet	Brass	No	57-65			•																			
85EHD	Spoon	Brass	Yes	61-116					•																	✓
85EHD-LA	Spoon	Brass	Yes	48-108					•																	✓

DRIP IRRIGATION

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### 14VH

1/2" 13mm Full Circle, Brass, Wedge Drive Impact Sprinkler

- Patented, self-flushing wedge drive
- Durable brass die-cast arm
- Stainless steel springs and fulcrum pin

#### Features

- Chemically resistant washers

#### Benefits

- Wedge drive runs on smaller nozzles and lower pressures
- Self-flushing design reduces wear from grit
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Brass
- Trajectory Angle: 23°
- Operating Range: 20-60 psi (1.4-4.1 bar)
- Flow Rate: .056-2.68 gpm (0.14-0.61 m3/h)
- Radius: 29-38 ft. (9.0-11.70 meters)
- Nozzle Port: 1/8" Female NPT



Straight Bore Nozzle (SBN-1) Performance*										
psi @ Nozzle	NOZZLE SIZE (Stream Height: 6 ft.)									
	1/16"		51 DRILL		5/64"		3/32"		7/64"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
20	-	-	29	0.59	30	0.79	33	1.14	34	1.55
25	29	0.56	29	0.65	31	0.88	33	1.27	35	1.73
30	29	0.62	30	0.71	31	0.97	34	1.39	35	1.90
35	30	0.66	30	0.77	32	1.05	34	1.50	36	2.05
40	30	0.72	31	0.83	32	1.12	35	1.61	37	2.19
45	31	0.75	31	0.87	33	1.19	35	1.71	37	2.32
50	31	0.80	32	0.92	34	1.25	36	1.80	38	2.45
55	32	0.84	32	0.96	34	1.31	36	1.89	38	2.57
60	32	0.88	33	1.01	34	1.37	37	1.97	38	2.68

Straight Bore Nozzle (SBN-1) Performance*											METRIC				
bar @ Nozzle	NOZZLE SIZE (Stream Height: 1.8m)														
	1.59 mm (1/16")			1.70 mm (51 Drill)			1.98 mm (5/64")			2.38 mm (3/32")			2.78 mm (7/64")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.4	-	-	-	8.8	0.04	0.13	9.3	0.05	0.18	10.1	0.07	0.26	10.4	0.10	0.35
1.5	-	-	-	8.9	0.04	0.14	9.3	0.05	0.19	10.1	0.07	0.27	10.5	0.10	0.37
2.0	9.0	0.04	0.14	9.1	0.04	0.16	9.6	0.06	0.22	10.3	0.09	0.31	10.8	0.12	0.42
2.5	9.2	0.04	0.15	9.3	0.05	0.18	9.8	0.07	0.24	10.6	0.10	0.35	11.0	0.13	0.47
3.0	9.4	0.05	0.17	9.6	0.05	0.19	10.1	0.07	0.27	10.8	0.11	0.38	11.4	0.14	0.52
3.5	9.6	0.05	0.18	9.8	0.06	0.21	10.4	0.08	0.29	11.0	0.11	0.41	11.6	0.16	0.56
4.0	9.8	0.05	0.20	10.0	0.06	0.22	10.5	0.08	0.31	11.2	0.12	0.44	11.7	0.17	0.60
4.1	9.9	0.06	0.20	10.1	0.06	0.23	10.5	0.09	0.31	11.3	0.12	0.45	11.7	0.17	0.61

\* Available without Nozzle or Assembled with 5/64" (05) Straight Bore Nozzle. All other Nozzles must be purchased separately. See Chart below.

#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A01619</b>

Assembled Sprinkler Factory Combination	
Sprinkler with Nozzle SBN-1 5/64"	<b>A0162005</b>

Nozzle Only		XX = Nozzle Size						
U.S. Standard		1/16"	51 DRILL	5/64"	3/32"	7/64"	1/8"	
Metric		1.59 mm	1.70mm	1.98 mm	2.38 mm	2.78 mm	3.18 mm	
Brass Straight Bore Nozzle	<b>SBN-1 105780-XX</b>	04	51	<b>05</b>	06	07	-	

Bold nozzle size numbers denote the most common nozzle choices.

# Impact Sprinklers

## 1/2" (13mm) Full Circle



### L20VH

1/2" 13mm Full Circle, Brass, Wedge Drive Impact Sprinkler

- Patented, self-flushing wedge drive
- Durable brass die-cast arm
- Stainless steel springs and fulcrum pin

#### Features

- Chemically resistant washers

#### Benefits

- Wedge drive runs on smaller nozzles and lower pressures
- Self-flushing design reduces wear from grit
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Brass
- Trajectory Angle: 10°
- Operating Range: 25-50 psi (1.7-3.5 bar)
- Flow Rate: 0.56-2.45 gpm (0.13-0.56 m3/h)
- Radius: 23-32 ft. (7.2-9.6 meters)
- Nozzle Port: 1/8" Female NPT



Straight Bore Nozzle (SBN-1) Performance*										
psi @ Nozzle	NOZZLE SIZE (Stream Height: 2.5 ft.)									
	1/16"		51 drill		5/64"		3/32"		7/64"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	23	0.56	24	0.65	25	0.88	26	1.27	27	1.73
30	24	0.62	25	0.71	26	0.97	27	1.39	28	1.90
35	25	0.66	26	0.77	27	1.05	28	1.50	29	2.05
40	25	0.72	26	0.83	27	1.12	29	1.61	30	2.19
45	26	0.75	27	0.87	28	1.19	30	1.71	31	2.32
50	27	0.80	28	0.92	29	1.25	31	1.80	32	2.45

Straight Bore Nozzle (SBN-1) Performance*										METRIC					
bar @ Nozzle	NOZZLE SIZE (Stream Height: 0.8m)														
	1.59 mm (1/16")			1.7 mm (51 drill)			1.98 mm (5/64")			2.38 mm (3/32")			2.78 mm (7/64")		
	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)
1.7	7.2	0.04	0.13	7.3	0.04	0.15	7.6	0.06	0.20	8.1	0.08	0.29	8.2	0.11	0.39
2.0	7.3	0.04	0.14	7.6	0.04	0.16	7.9	0.06	0.22	8.3	0.09	0.31	8.5	0.12	0.42
2.5	7.7	0.04	0.15	7.9	0.05	0.17	8.3	0.07	0.24	8.8	0.10	0.35	8.9	0.13	0.47
3.0	8.0	0.05	0.17	8.2	0.05	0.20	8.6	0.07	0.27	9.1	0.11	0.38	9.4	0.14	0.52
3.5	8.2	0.05	0.18	8.5	0.06	0.21	8.8	0.08	0.28	9.4	0.11	0.41	9.6	0.15	0.56

\* Nozzles must be purchased separately. See Chart below.

### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A06240</b>

Nozzle Only			XX = Nozzle Size					
U.S. Standard			1/16"	51 DRILL	5/64"	3/32"	7/64"	1/8"
Metric			1.59 mm	1.70mm	1.98 mm	2.38 mm	2.78 mm	3.18 mm
Brass Straight Bore Nozzle	<b>SBN-1</b>	<b>105780-XX</b>	04	51	<b>05</b>	06	07	-

Bold nozzle size number denotes the most common nozzle choice.

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### L20H

1/2" 13mm Full Circle, Brass Impact Sprinkler

- Durable brass die-cast arm
- Stainless steel springs and fulcrum pin
- Corrosion and grit resistant

#### Features

- Chemically resistant washers

#### Benefits

- Spoon drive arm runs on larger nozzles and higher pressures
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Brass
- Trajectory Angle: 10°
- Operating Range: 25-50 psi (1.7-3.5 bar)
- Flow Rate: 1.73-4.05 gpm (0.39-0.92 m<sup>3</sup>/h)
- Radius: 28-35 ft. (8.5-10.83 meters)
- Nozzle Port: 1/8" Female NPT



#### Straight Bore Nozzle (SBN-1) Performance\*

psi @ Nozzle	NOZZLE SIZE (Stream Height: 2.5 ft.)					
	7/64"		1/8"		9/64"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	28	1.73	29	2.26	30	2.86
30	29	1.90	30	2.48	31	3.14
35	30	2.05	31	2.68	33	3.39
40	31	2.19	32	2.86	33	3.62
45	32	2.32	33	3.03	34	3.84
50	32	2.45	34	3.20	35	4.05

#### Straight Bore Nozzle (SBN-1) Performance\*

#### METRIC

bar @ Nozzle	NOZZLE SIZE (Stream Height: 0.8m)								
	2.78 mm (7/64")			3.18 mm (1/8")			3.57 mm (9/64")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	8.5	0.11	0.39	9.0	0.14	0.51	9.3	0.18	0.65
2.0	8.8	0.12	0.42	9.2	0.15	0.55	9.5	0.19	0.70
2.5	9.2	0.13	0.47	9.7	0.17	0.62	10.1	0.22	0.78
3.0	9.7	0.14	0.52	10.0	0.19	0.68	10.4	0.24	0.86
3.5	9.9	0.15	0.56	10.4	0.20	0.73	10.8	0.26	0.92

\* Nozzles must be purchased separately. See Chart below.

#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A06015</b>

Nozzle Only			XX = Nozzle Size		
U.S. Standard			7/64"	1/8"	9/64"
Metric			2.78 mm	3.18 mm	3.57 mm
Brass Straight Bore Nozzle	SBN-1	<b>105780-XX</b>	07	08	09

Bold nozzle size number denotes the most common nozzle choice.

# Impact Sprinklers

## 1/2" (13mm) Full Circle



### M20VH-PM

1/2" 13mm Full Circle, Brass, Wedge Drive Impact Sprinkler

- Patented, self-flushing wedge drive
- Durable brass die-cast arm
- Stainless steel springs and fulcrum pin

#### Features

- Chemically resistant washers

#### Benefits

- Wedge drive runs on smaller nozzles and lower pressures
- Self-flushing design reduces wear from grit
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Plastic
- Trajectory Angle: 15°
- Operating Range: 25-50 psi (1.7-3.5 bar)
- Flow Rate: 0.56-2.45 gpm (0.13-0.56 m<sup>3</sup>/h)
- Radius: 25-35 ft. (7.8-10.8 meters)
- Nozzle Port: 1/8" Female NPT



Straight Bore Nozzle (SBN-1) Performance*										
psi @ Nozzle	NOZZLE SIZE (Stream Height: 3.5 ft.)									
	1/16"		51 DRILL		5/64"		3/32"		7/64"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	25	0.56	26	0.65	27	0.88	29	1.27	31	1.73
30	26	0.62	27	0.71	28	0.97	30	1.39	32	1.90
35	27	0.66	28	0.77	29	1.05	31	1.50	33	2.05
40	28	0.72	28	0.83	30	1.12	32	1.61	34	2.19
45	29	0.75	29	0.87	31	1.19	33	1.71	35	2.32
50	29	0.80	30	0.92	32	1.25	33	1.80	35	2.45

Straight Bore Nozzle (SBN-1) Performance*											METRIC				
bar @ Nozzle	NOZZLE SIZE (Stream Height: 1.1m)														
	1.59 mm (1/16")			1.70 mm (51 Drill)			1.98 mm (5/64")			2.38 mm (3/32")			2.78 mm (7/64")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	7.8	0.04	0.13	7.9	0.04	0.15	8.4	0.06	0.20	9.0	0.08	0.29	9.4	0.11	0.39
2.0	8.0	0.04	0.14	8.2	0.04	0.16	8.6	0.06	0.22	9.2	0.09	0.31	9.7	0.12	0.42
2.5	8.4	0.04	0.15	8.6	0.05	0.18	9.1	0.07	0.24	9.7	0.10	0.35	10.1	0.13	0.47
3.0	8.7	0.05	0.17	8.9	0.05	0.19	9.4	0.07	0.27	10.0	0.11	0.38	10.6	0.14	0.52
3.5	9.0	0.05	0.18	9.1	0.06	0.21	9.8	0.08	0.28	10.2	0.11	0.41	10.8	0.15	0.56

\* Nozzles must be purchased separately. See Chart below.

### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A05980</b>

Nozzle Only		XX = Nozzle Size						
U.S. Standard		1/16"	51 DRILL	5/64"	3/32"	7/64"	1/8"	
Metric		1.59 mm	1.70mm	1.98 mm	2.38 mm	2.78 mm	3.18 mm	
Brass Straight Bore Nozzle	<b>SBN-1</b>	<b>105780-XX</b>	04	51	<b>05</b>	06	07	–

Bold nozzle size number denotes the most common nozzle choice.

# Impact Sprinklers

## 1/2" (13mm) Full Circle

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### 20JH

1/2" 13mm Full Circle, Brass Impact Sprinkler

- Durable brass die-cast arm
- Stainless steel springs and fulcrum pin
- Corrosion and grit resistant

#### Features

- Chemically resistant PTFE washers

#### Benefits

- Spoon drive arm runs on larger nozzles and higher pressures
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Brass
- Trajectory Angle: 23°
- Operating Range: 35-60 psi (2.4-4.1 bar)
- Flow Rate: 2.05-5.47 gpm (0.47-1.24 m<sup>3</sup>/h)
- Radius: 38-44 ft. (11.6-13.4 meters)
- Nozzle Port: 1/8" Female NPT



Straight Bore Nozzle (SBN-1) Performance*								
psi @ Nozzle	NOZZLE SIZE (Stream Height: 6 ft.)							
	7/64"		1/8"		9/64"		5/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
35	38	2.05	38	2.68	39	3.39	39	4.19
40	38	2.19	39	2.86	40	3.62	39	4.47
45	39	2.32	39	3.03	40	3.84	40	4.73
50	39	2.45	39	3.20	40	4.05	40	5.00
55	39	2.57	40	3.35	40	4.24	40	5.23
60	39	2.68	40	3.50	41	4.43	41	5.47

Straight Bore Nozzle with Vane (SBN-1V)*						
psi @ Nozzle	NOZZLE SIZE (Stream Height: 7 ft.)					
	1/8"		9/64"		5/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
35	39	2.68	41	3.39	42	4.19
40	40	2.86	41	3.62	42	4.47
45	40	3.03	42	3.84	42	4.73
50	41	3.20	42	4.05	43	5.00
55	41	3.35	43	4.24	43	5.23
60	41	3.50	43	4.43	44	5.47

Straight Bore Nozzle (SBN-1) Performance* METRIC												
bar @ Nozzle	NOZZLE SIZE (Stream Height: 1.8m)											
	2.78 mm (7/64")			3.18 mm (1/8")			3.57 mm (9/64")			3.97 mm (5/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
2.4	11.6	0.13	0.47	11.7	0.17	0.61	12.0	0.21	0.77	12.0	0.26	0.95
2.5	11.6	0.13	0.47	11.8	0.17	0.62	12.1	0.22	0.78	12.0	0.27	0.97
3.0	11.8	0.14	0.52	12.0	0.19	0.68	12.2	0.24	0.86	12.1	0.29	1.06
3.5	11.9	0.16	0.56	12.1	0.20	0.73	12.3	0.26	0.93	12.3	0.32	1.14
4.0	12.0	0.17	0.60	12.2	0.22	0.78	12.4	0.27	0.99	12.4	0.34	1.22
4.1	12.0	0.17	0.61	12.2	0.22	0.79	12.5	0.28	1.01	12.5	0.35	1.24

Straight Bore Nozzle with Vane (SBN-1V)* METRIC									
bar @ Nozzle	NOZZLE SIZE (Stream Height: 2.1m)								
	3.18 mm (1/8")			3.57 mm (9/64")			3.97 mm (5/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
2.4	12.0	0.17	0.61	12.5	0.21	0.77	12.8	0.26	0.95
2.5	12.1	0.17	0.62	12.5	0.22	0.78	12.8	0.27	0.97
3.0	12.3	0.19	0.68	12.8	0.24	0.86	13.0	0.29	1.06
3.5	12.5	0.20	0.73	13.0	0.26	0.93	13.1	0.32	1.14
4.0	12.5	0.22	0.78	13.2	0.27	0.99	13.3	0.34	1.22
4.1	12.5	0.22	0.79	13.3	0.28	1.01	13.4	0.35	1.24

\* Available without Nozzle or Assembled with either a 7/64" (07) or 1/8" (08) Straight Bore Nozzle. All other Nozzles must be purchased separately. See Chart below.

### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A05840</b>

Assembled Sprinkler/Nozzle Factory Combination	
Sprinkler with Nozzle <b>SBN-1</b> 7/64"	<b>A0584107</b>
Sprinkler with Nozzle <b>SBN-1</b> 1/8"	<b>A0584108</b>

Nozzle Only		XX = Nozzle Size				
		U.S. Standard	7/64"	1/8"	9/64"	5/32"
		Metric	2.78 mm	3.18 mm	3.57 mm	3.97 mm
Brass Straight Bore Nozzle	<b>SBN-1</b>	<b>105780-XX</b>	<b>07</b>	08	09	10
Brass Straight Bore Nozzle with Vane	<b>SBN-1-V</b>	<b>106160-XX</b>	—	08	09	10

Bold nozzle size number denotes the most common nozzle choice.

# Impact Sprinklers

## 1/2" (13mm) Full Circle



### 29JH

1/2" 13mm Full Circle, Brass Impact Sprinkler

- Extra large body
- Stainless steel springs and fulcrum pin
- Large body accommodates a wide range of flow rates

#### Features

- Chemically resistant washers

#### Benefits

- Corrosion and grit resistant
- Built to last
- Spoon drive arm runs on larger nozzles and higher pressures.
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Brass
- Trajectory Angle: 23°
- Operating Range: 20-80 psi (1.4-5.5 bar)
- Flow Rate: 1.56-6.35 gpm (0.35-1.44 m<sup>3</sup>/h)
- Radius: 35-46 ft. (10.8-14.2 meters)
- Nozzle Port: 1/4" Female NPT



Straight Bore Nozzle (SBN-3)*								
psi @ Nozzle	NOZZLE SIZE (Stream Height: 7 ft.)							
	7/64"		1/8"		9/64"		5/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
20	35	1.56	36	2.03	38	2.57	39	3.17
25	37	1.74	37	2.27	38	2.87	40	3.55
30	37	1.91	38	2.49	39	3.15	41	3.89
35	38	2.06	38	2.69	40	3.40	42	4.20
40	38	2.20	39	2.87	41	3.64	42	4.49
45	39	2.33	39	3.05	41	3.86	43	4.76
50	39	2.46	40	3.21	42	4.07	44	5.02
55	39	2.58	40	3.37	42	4.28	44	5.26
60	39	2.69	40	3.52	42	4.45	44	5.50
65	39	2.80	41	3.66	43	4.64	45	5.72
70	39	2.91	41	3.80	43	4.81	45	5.94
75	40	3.01	41	3.93	44	4.98	46	6.15
80	40	3.11	42	4.06	44	5.14	46	6.35

Straight Bore Nozzle (SBN-3)*												
bar @ Nozzle	NOZZLE SIZE (Stream Height: 2.1m)											
	2.78 mm (7/64")			3.18 mm (1/8")			3.57 mm (9/64")			3.97 mm (5/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.4	10.8	0.10	0.35	11.1	0.13	0.46	11.6	0.16	0.58	11.9	0.20	0.72
1.5	11.0	0.10	0.37	11.2	0.13	0.48	11.6	0.17	0.61	12.0	0.21	0.75
2.0	11.4	0.12	0.43	11.5	0.15	0.56	12.0	0.20	0.70	12.4	0.24	0.87
2.5	11.6	0.13	0.48	11.8	0.17	0.62	12.3	0.22	0.79	12.8	0.27	0.97
3.0	11.8	0.14	0.52	12.1	0.19	0.68	12.6	0.24	0.86	13.1	0.30	1.06
3.5	11.9	0.16	0.56	12.2	0.20	0.73	12.8	0.26	0.93	13.4	0.32	1.15
4.0	12.0	0.17	0.60	12.4	0.22	0.79	13.0	0.28	1.00	13.6	0.34	1.23
4.5	12.0	0.18	0.64	12.6	0.23	0.83	13.1	0.29	1.06	13.7	0.36	1.30
5.0	12.1	0.19	0.67	12.7	0.24	0.88	13.3	0.31	1.11	13.9	0.38	1.37
5.5	12.2	0.20	0.71	10.1	0.26	0.92	13.4	0.32	1.17	14.2	0.40	1.44

\* Nozzles must be purchased separately. See Chart below.

#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A06501</b>

Nozzle Only			XX = Nozzle Size			
U.S. Standard			7/64"	1/8"	9/64"	5/32"
Metric			2.78 mm	3.18 mm	3.57 mm	3.97 mm
Brass Straight Bore Nozzle	<b>SBN-3</b>	<b>105842-XX</b>	<b>07</b>	<b>08</b>	<b>09</b>	<b>10</b>

Bold nozzle size number denotes the most common nozzle choice.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION

### L36H

3/4" 19 mm Full Circle, Plastic, Low Angle Impact Sprinkler

- Durable Delrin™ plastic body and arm
- Slotted spoon for larger nozzles

#### Features

- Wide range of quick-fit nozzles
- Stainless steel springs and fulcrum pin
- Brass bearing sleeve
- Chemically resistant washers
- Dual nozzle ports

#### Benefits

- Superior chemical and grit resistance
- Low angle fights strong wind conditions
- Great choice for pivot or under tree applications
- Easy maintenance
- Added design flexibility
- Built to last
- Two-year Customer Satisfaction Policy

#### Specifications

- Bearing: 3/4" (19mm) Male NPT, Brass
- Trajectory Angle: 10°
- Operating Range: 20-60 psi (1.4-4.1 bar)
- Flow Rate: 1.6-17.8 gpm (0.36-4.04 m<sup>3</sup>/h)
- Radius: 43-61 ft. (13.1-18.7m)
- Nozzle Port: Plastic Quick-Fit

#### L36H Quick-Fit Straight Bore Nozzle (QF-SBN-3) (Star Hole) Performance\*

psi@ Nozzle	NOZZLE SIZE																							
	5/32"		11/64"		3/16"		13/64"		7/32"		15/64"		1/4"		17/64"		9/32"							
	Rad.	Flow	Rad.	Flow	Rad.	Flow	Rad.	Flow	Rad.	Flow	Rad.	Flow	Rad.	Flow	Rad.	Flow	Rad.	Flow						
	(ft.)	(gpm)	(ft.)	(gpm)	(ft.)	(gpm)	(ft.)	(gpm)	(ft.)	(gpm)	(ft.)	(gpm)	(ft.)	(gpm)	(ft.)	(gpm)	(ft.)	(gpm)						
35	48	4.20	49	5.00	50	6.00	51	7.10	52	8.30	53	9.50	53	10.80	53	12.10	54	13.60	54	14.60	54	15.40		
40	49	4.50	51	5.40	52	6.40	52	7.60	53	8.90	54	10.10	55	11.50	55	13.00	56	14.60	56	15.40	56	16.30	56	17.10
45	51	4.70	52	5.70	53	6.80	53	8.10	54	9.40	55	10.70	56	12.20	57	13.80	58	15.40	58	16.30	58	17.10	58	17.80
50	53	5.00	54	6.00	54	7.20	54	8.50	56	9.90	57	11.30	58	12.90	59	14.50	59	16.30	60	17.10	60	17.80	60	18.60
55	53	5.20	54	6.30	55	7.50	55	8.90	57	10.30	58	11.80	59	13.50	60	15.20	60	17.10	61	18.60	61	19.50	61	20.40
60	54	5.40	55	6.60	55	7.80	56	9.20	58	10.60	59	12.40	60	14.10	61	15.90	61	17.80	61	19.70	61	21.60	61	23.50

Note: Performance data taken using 13' (4m) riser

\* Nozzles must be purchased separately. See Chart below.



#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A07360</b>

Nozzle Only	U.S. Standard	XX = Nozzle Size									
		5/32"	11/64"	3/16"	13/64"	7/32"	15/64"	1/4"	17/64"	9/32"	
	Metric	3.97mm	4.37mm	4.76mm	5.16mm	3.97mm	5.56mm	6.35mm	6.75mm	7.14mm	
Plastic Quick-Fit Straight Bore Nozzle	<b>QF-SBN-3</b>	<b>107881-XX</b>	<b>10</b>	<b>11</b>	12	13	14	15		17	18

Bold nozzle size number denotes the most common nozzle choice.



# Impact Sprinklers

## 3/4" (19mm) Full Circle



L36H Quick-Fit Straight Bore Nozzle (QF-SBN-3) (Star Hole) Performance*													METRIC														
bar @ Nozzle	NOZZLE SIZE																										
	3.97 mm (5/32")			4.37 mm (11/64")			4.76 mm (3/16")			5.16 mm (13/64")			5.56 mm (7/32")			5.95 mm (15/64")			6.35 mm (1/4")			6.75 mm (17/64")			7.14 mm (9/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
2.4	14.8	0.26	0.95	15.1	0.32	1.14	15.2	0.38	1.36	15.5	0.45	1.61	15.8	0.52	1.89	16.2	0.60	2.16	16.3	0.68	2.45	16.3	0.76	2.75	16.5	0.86	3.09
2.5	14.9	0.27	0.97	15.2	0.32	1.16	15.4	0.38	1.39	15.7	0.46	1.64	15.9	0.53	1.92	16.2	0.61	2.19	16.4	0.69	2.49	16.5	0.78	2.80	16.6	0.87	3.14
3.0	15.5	0.29	1.05	15.9	0.35	1.27	16.1	0.42	1.52	16.2	0.50	1.81	16.5	0.58	2.10	16.8	0.66	2.39	17.1	0.76	2.72	17.2	0.86	3.08	17.5	0.96	3.44
3.5	16.2	0.32	1.14	16.5	0.38	1.37	16.6	0.46	1.65	16.7	0.54	1.94	17.1	0.63	2.26	17.4	0.72	2.58	17.9	0.82	2.95	18.0	0.92	3.32	18.2	1.04	3.73
4.0	16.4	0.34	1.21	16.7	0.41	1.47	16.9	0.48	1.74	17.0	0.57	2.06	17.6	0.66	2.38	18.0	0.77	2.76	18.3	0.87	3.15	18.5	0.99	3.55	18.6	1.11	3.98
4.1	16.5	0.34	1.23	16.8	0.42	1.50	16.9	0.49	1.77	17.1	0.58	2.09	17.7	0.67	2.41	18.1	0.78	2.82	18.4	0.89	3.20	18.6	1.00	3.61	18.7	1.12	4.04

\* Nozzles must be purchased separately. See chart on previous page.

DRIP IRRIGATION  
MICRO IRRIGATION  
LOW FLOW IRRIGATION  
IMPACT SPRINKLERS  
MONITORING & CONTROLS  
FILTRATION

# Impact Sprinklers

## 3/4" (19mm) Full Circle

### 48H

3/4" (19mm) Full Circle, Plastic Impact Sprinkler

- Durable Delrin™ plastic body, and arm
- Stainless steel spring and fulcrum pin
- Chemically resistant, PTFE washers

#### Features

- Color coded quick-fit nozzles provide easy maintenance
- 5 nozzles, 2 spreader nozzles, and a plug allow for design flexibility
- Plastic body and bearing provide increased affordability

#### Benefits

- PTFE washers allow for smaller nozzles and lower pressures
- Superior chemical and grit resistance
- Exceptionally wide range of flow rates
- Built to last
- Two-year Customer Satisfaction Policy

#### Specifications

- Bearing: 3/4" (19mm) Male NPT, Plastic
- Trajectory Angle: 23°
- Operating Range: 30-80 psi (2.1-5.5 bar)
- Flow Rate: 4.2 – 14.2 gpm (960-3230 l/h)
- Radius: 42-60 ft. (12.8-18.3 m)
- Nozzle Port: 1/4" Female NPT
- Spreader Nozzle Port: 3/32" or 1/8" Female NPT



Plastic Nozzle with Plug Performance										
psi@ Nozzle	NOZZLE SIZE									
	5/32"		11/64"		3/16"		13/64"		7/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
30	-	-	-	-	46	5.43	49	6.18	48	7.1
35	44	4.22	46	5.02	47	5.88	50	6.68	50	7.69
40	46	4.5	48	5.48	50	6.26	52	7.22	50	8.27
45	46	4.82	50	5.78	51	6.68	52	7.67	54	8.81
50	48	5.03	51	6.17	52	7.1	53	8.12	54	9.29
55	50	5.37	51	6.44	52	7.47	54	8.54	57	9.78
60	50	5.54	51	6.67	52	7.7	55	8.93	58	10.25
65	50	5.81	52	7.09	53	8.15	56	9.27	58	10.73
70	51	6.04	54	7.33	54	8.45	56	9.66	58	11
75	51	6.22	54	7.58	55	8.72	57	10	58	11.46
80	51	6.46	55	7.84	55	8.97	57	10.31	59	11.8

Plastic Nozzle with 3/32" Spreader Nozzle Performance										
psi@ Nozzle	NOZZLE SIZE									
	5/32"		11/64"		3/16"		13/64"		7/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
30	-	-	-	-	44	6.4	46	7.26	47	8.22
35	44	5.4	44	6.25	45	7	48	7.9	49	8.91
40	46	5.77	46	6.69	47	7.53	50	8.4	51	9.49
45	46	6.16	48	7.16	49	7.98	51	8.98	52	10.19
50	47	6.54	49	7.58	50	8.45	52	9.46	54	10.7
55	47	6.84	50	7.91	52	8.94	53	9.94	54	11.19
60	48	7.18	50	8.26	53	9.26	54	10.27	56	11.8
65	49	7.46	51	8.61	54	9.7	54	10.85	58	12.1
70	50	7.72	52	8.97	54	10.09	56	11.23	59	12.72
75	51	7.97	53	9.17	56	10.35	56	11.69	60	12.95
80	51	8.28	54	9.51	56	10.7	57	12.01	60	13.56

Plastic Nozzle with 1/8" Spreader Nozzle Performance										
psi@ Nozzle	NOZZLE SIZE									
	5/32"		11/64"		3/16"		13/64"		7/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
30	-	-	-	-	44	6.89	45	7.7	46	8.63
35	42	5.91	44	6.73	44	7.43	47	8.34	48	9.27
40	45	6.32	45	7.24	46	8.02	49	8.91	50	10.03
45	46	6.72	46	7.66	48	8.54	50	9.46	52	10.63
50	46	7.1	48	8.1	50	9.01	52	10.04	54	11.19
55	46	7.46	49	8.4	52	9.37	54	10.54	56	11.84
60	47	7.76	50	8.88	52	9.89	54	11.04	56	12.3
65	48	8.11	50	9.32	52	10.31	56	11.5	57	12.87
70	48	8.39	51	9.59	54	10.66	56	11.95	58	13.29
75	48	8.75	51	9.92	55	11.08	57	12.33	58	13.85
80	49	8.99	52	10.25	55	11.46	58	12.75	60	14.24

\* Nozzles must be purchased separately. See Chart below.

#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler Without Nozzle, Without Plug	<b>A07370</b>

Plastic Quick-Fit Nozzle Only	
5/32" (3.97 mm) Plastic Straight Bore Quick-Fit Nozzle (Black)	<b>A07390</b>
11/64" (4.37 mm) Plastic Straight Bore Quick-Fit Nozzle (Brown)	<b>A07391</b>
3/16" (4.76 mm) Plastic Straight Bore Quick-Fit Nozzle (Yellow)	<b>A07392</b>
13/64" (5.16 mm) Plastic Straight Bore Quick-Fit Nozzle (Purple)	<b>A07393</b>
7/32" (5.56 mm) Plastic Straight Bore Quick-Fit Nozzle (Orange)	<b>A07394</b>

Spreader Nozzle and Plug Only	
3/32" (2.38 mm) Plastic Spreader Nozzle (Green)	<b>A07395</b>
1/8" (3.18 mm) Plastic Spreader Nozzle (Blue)	<b>A07396</b>
Plastic Plug (Orange)	<b>A07397</b>

# Impact Sprinklers

3/4" (19mm) Full Circle



Plastic Nozzle with Plug Performance							METRIC			
psi@ Nozzle	NOZZLE SIZE									
	5/32"		11/64"		3/16"		13/64"		7/32"	
	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)
2.1	-	-	-	-	14.0	1230	14.9	1400	14.6	1610
2.4	13.4	960	14.0	1140	14.3	1340	15.2	1520	15.2	1750
2.8	14.0	1020	14.6	1240	15.2	1420	15.8	1640	15.2	1880
3.1	14.0	1090	15.2	1310	15.5	1520	15.8	1740	16.5	2000
3.4	14.6	1140	15.5	1400	15.8	1610	16.2	1840	16.5	2110
3.8	15.2	1220	15.5	1460	15.8	1700	16.5	1940	17.4	2220
4.1	15.2	1260	15.5	1510	15.8	1750	16.8	2030	17.7	2330
4.5	15.2	1320	15.8	1610	16.2	1850	17.1	2110	17.7	2440
4.8	15.5	1370	16.5	1660	16.5	1920	17.1	2190	17.7	2500
5.2	15.5	1410	16.5	1720	16.8	1980	17.4	2270	17.7	2600
5.5	15.5	1470	16.8	1780	16.8	2040	17.4	2340	18.0	2680



Plastic Nozzle with 3/32" Spreader Nozzle Performance							METRIC			
psi@ Nozzle	NOZZLE SIZE									
	5/32"		11/64"		3/16"		13/64"		7/32"	
	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)
2.1	-	-	-	-	13.4	1450	14.0	1650	14.3	1870
2.4	13.4	1230	13.4	1420	13.7	1590	14.6	1790	14.9	2020
2.8	14.0	1310	14.0	1520	14.3	1710	15.2	1910	15.5	2160
3.1	14.0	1400	14.6	1630	14.9	1810	15.5	2040	15.8	2310
3.4	14.3	1490	14.9	1720	15.2	1920	15.8	2150	16.5	2430
3.8	14.3	1550	15.2	1800	15.8	2030	16.2	2260	16.5	2540
4.1	14.6	1630	15.2	1880	16.2	2100	16.5	2330	17.1	2680
4.5	14.9	1690	15.5	1960	16.5	2200	16.5	2460	17.7	2750
4.8	15.2	1750	15.8	2040	16.5	2290	17.1	2550	18.0	2890
5.2	15.5	1810	16.2	2080	17.1	2350	17.1	2650	18.3	2940
5.5	15.5	1880	16.5	2160	17.1	2430	17.4	2730	18.3	3080

Plastic Nozzle with 1/8" Spreader Nozzle Performance							METRIC			
psi@ Nozzle	NOZZLE SIZE									
	5/32"		11/64"		3/16"		13/64"		7/32"	
	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)	Rad. (m)	Flow (l/h)
2.1	-	-	-	-	13.4	1560	13.7	1750	14.0	1960
2.4	12.8	1340	13.4	1530	13.4	1690	14.3	1890	14.6	2110
2.8	13.7	1440	13.7	1640	14.0	1820	14.9	2020	15.2	2280
3.1	14.0	1530	14.0	1740	14.6	1940	15.2	2150	15.8	2410
3.4	14.0	1610	14.6	1840	15.2	2050	15.8	2280	16.5	2540
3.8	14.0	1690	14.9	1910	15.8	2130	16.5	2390	17.1	2690
4.1	14.3	1760	15.2	2020	15.8	2250	16.5	2510	17.1	2790
4.5	14.6	1840	15.2	2120	15.8	2340	17.1	2610	17.4	2920
4.8	14.6	1910	15.5	2180	16.5	2420	17.1	2710	17.7	3020
5.2	14.6	1990	15.5	2250	16.8	2520	17.4	2800	17.7	3150
5.5	14.9	2040	15.8	2330	16.8	2600	17.7	2900	18.3	3230

\* Nozzles must be purchased separately. See chart on previous page.

DRIP IRRIGATION  
 MICRO IRRIGATION  
 LOW FLOW IRRIGATION  
 IMPACT SPRINKLERS  
 MONITORING & CONTROLS  
 FILTRATION

# Impact Sprinklers

3/4" (19mm) Full Circle

## 30H / 30WH

3/4" 19 mm Full Circle, Brass Impact Sprinkler

- Heavy duty brass construction
- Stainless steel springs and fulcrum pin
- Chemically resistant washers

### Features

- Dual nozzle ports
- 30H unit does not have a spreader plug
- 30WH unit has spreader plug

### Benefits

- Wide range of flow rates
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

### Specifications

- Bearing: 3/4" (19mm) Male NPT, Brass
- Trajectory Angle: 27°
- Operating Range: 25-80 psi (1.7-5.5 bar)
- Flow Rate: 2.9-13.1 gpm (0.66-2.98 m<sup>3</sup>/h)
- Radius: 40-56 ft. (12.20-17.23 meters)
- Nozzle Port: 1/8" Female NPT
- Spreader Nozzle Port: 1/8" Female NPT



Brass Straight Bore Nozzle (SBN-3) with Plug Performance*					
psi@ Nozzle	NOZZLE SIZE (Stream Height: 9 ft.)				
	9/64"	5/32"	11/64"	3/16"	
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	
25	40 2.90	41 3.50	41 4.30	42 5.10	
30	40 3.10	42 3.90	44 4.70	45 5.60	
35	41 3.40	43 4.20	45 5.10	47 6.00	
40	41 3.60	44 4.50	46 5.40	48 6.40	
45	42 3.80	44 4.70	46 5.70	49 6.80	
50	42 4.10	45 5.00	47 6.10	50 7.20	
55	43 4.20	45 5.20	48 6.30	50 7.60	
60	43 4.40	46 5.50	48 6.60	51 7.90	
65	44 4.60	46 5.80	49 6.90	51 8.20	
70	44 4.80	47 5.90	49 7.20	52 8.50	
75	45 5.00	47 6.10	50 7.40	52 8.80	
80	45 5.10	48 6.30	50 7.70	53 9.10	

Brass Straight Bore Nozzle (SBN-3) with Spreader (LAN-1) Performance*					
psi@ Nozzle	NOZZLE SIZE (Stream Height: 9 ft.)				
	9/64" x 3/32-7"	5/32" x 3/32-7"	11/64" x 3/32-7"	3/16" x 3/32-7"	3/16" x 1/8-20"
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)
25	40 4.20	41 4.80	41 5.60	42 6.40	42 7.40
30	40 4.60	42 5.30	44 6.10	45 7.00	45 8.10
35	41 4.90	43 5.70	45 6.60	47 7.50	47 8.70
40	41 5.20	44 6.10	46 7.00	48 8.10	48 9.30
45	42 5.60	44 6.50	46 7.40	49 8.50	49 9.90
50	42 5.90	45 6.80	47 7.90	50 9.00	50 10.40
55	43 6.10	45 7.10	48 8.20	50 9.40	50 10.90
60	43 6.40	46 7.40	48 8.60	51 9.90	51 11.40
65	44 6.70	46 7.80	49 8.90	51 10.20	51 11.80
70	44 6.90	47 8.10	49 9.30	52 10.70	52 12.30
75	45 7.20	47 8.30	50 9.60	52 11.00	52 12.70
80	45 7.50	48 8.70	50 10.00	53 11.50	53 13.10

Brass Straight Bore Nozzle with Vane (SBN-3V) with Plug Performance*					
psi@ Nozzle	NOZZLE SIZE (Stream Height: 10 ft.)				
	9/64"	5/32"	11/64"	3/16"	
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	
25	42 2.90	44 3.50	45 4.30	48 5.10	
30	43 3.10	45 3.90	46 4.70	47 5.60	
35	44 3.40	46 4.20	47 5.10	49 6.00	
40	45 3.60	47 4.50	48 5.40	50 6.40	
45	46 3.80	48 4.70	49 5.70	52 6.80	
50	46 4.10	49 5.00	50 6.10	53 7.20	
55	47 4.20	50 5.20	51 6.30	53 7.60	
60	47 4.40	50 5.50	51 6.60	54 7.90	
65	48 4.60	51 5.80	52 6.90	55 8.20	
70	48 4.80	51 5.90	53 7.20	55 8.50	
75	49 5.00	52 6.10	54 7.40	56 8.80	
80	50 5.10	52 6.30	55 7.70	56 9.10	

Brass Straight Bore Nozzle with vane (SBN-3v) with Spreader (LAN-1) Performance*					
psi@ Nozzle	NOZZLE SIZE (Stream Height: 10 ft.)				
	9/64" x 3/32-7"	5/32" x 3/32-7"	11/64" x 3/32-7"	3/16" x 3/32-7"	3/16" x 1/8-20"
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)
25	42 4.20	44 4.80	45 5.60	45 6.40	46 7.40
30	43 4.60	45 5.30	46 6.10	47 7.00	47 8.10
35	44 4.90	46 5.70	47 6.60	49 7.50	49 8.70
40	45 5.20	47 6.10	48 7.00	50 8.10	50 9.30
45	46 5.60	48 6.50	49 7.40	52 8.50	52 9.90
50	46 5.90	49 6.80	50 7.90	53 9.00	53 10.40
55	47 6.10	50 7.10	51 8.20	54 9.40	54 10.90
60	47 6.40	50 7.40	51 8.60	54 9.90	54 11.40
65	48 6.70	51 7.80	52 8.90	55 10.20	55 11.80
70	48 6.90	51 8.10	53 9.30	55 10.70	55 12.30
75	49 7.20	52 8.30	54 9.60	56 11.00	56 12.70
80	50 7.50	52 8.70	55 10.00	56 11.50	56 13.10

\* Nozzles must be purchased separately. See chart below.

## Part Numbers and Ordering Information

Sprinkler Only		
Sprinkler Without Nozzle, Without Plug	<b>30H</b>	<b>A08401</b>
Sprinkler without Nozzle, With Plug	<b>30WH</b>	<b>A08411</b>

Nozzle Only		XX = Nozzle Size							
U.S. Standard		3/32"	7/64"	1/8"	9/64"	5/32"	11/64"	3/16"	
Metric		2.38mm	2.78mm	3.18mm	3.57mm	3.97mm	4.37mm	4.76mm	
Brass Straight Bore Nozzle	SBN-3	<b>105842-XX</b>	—	—	—	09	10	<b>11</b>	12
Brass Straight Bore Nozzle with Vane	SBN-3V	<b>106131-XX</b>	—	—	—	09	10	<b>11</b>	12
Brass 7° Low Angle Spreader	LAN-1-7	<b>100225-XX</b>	<b>06</b>	07	08	09	10	—	—
Brass 20° Low Angle Spreader	LAN-1-20	<b>100226-XX</b>	06	07	<b>08</b>	09	10	—	—
<b>Brass Plug</b>		<b>100255</b>							

Bold nozzle size number denotes the most common nozzle choice.

# Impact Sprinklers

## 3/4" (19mm) Full Circle



30H Brass Straight Bore Nozzle (SBN-3) with Plug *												METRIC		
bar @ Nozzle	NOZZLE SIZE (Stream Height: 1.1m)													
	3.57 MM (9/64")			3.97 MM (5/32")			4.37 MM (11/64")			4.76 MM (3/16")				
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)		
1.7	12.2	0.18	0.66	12.5	0.22	0.79	12.6	0.27	0.98	13.0	0.32	1.16		
2.0	12.3	0.19	0.69	12.9	0.24	0.87	13.3	0.29	1.05	13.7	0.35	1.25		
2.5	12.5	0.22	0.78	13.3	0.27	0.97	13.8	0.33	1.18	14.4	0.38	1.39		
3.0	12.8	0.24	0.85	13.5	0.29	1.05	14.1	0.35	1.27	14.8	0.42	1.52		
3.5	13.0	0.26	0.93	13.7	0.32	1.14	14.5	0.39	1.39	15.3	0.46	1.65		
4.0	13.2	0.27	0.98	14.0	0.34	1.22	14.7	0.41	1.47	15.5	0.49	1.77		
4.5	13.4	0.29	1.05	14.2	0.37	1.32	14.9	0.44	1.57	15.7	0.52	1.87		
5.0	13.6	0.31	1.11	14.4	0.38	1.36	15.2	0.46	1.66	15.9	0.55	1.96		
5.5	13.9	0.32	1.16	14.6	0.40	1.43	15.4	0.49	1.75	16.2	0.57	2.07		

30H Brass Straight Bore Nozzle (SBN-3) with Spreader (LAN-1*)												METRIC			
bar @ Nozzle	NOZZLE SIZE (Stream Height: 1.1m)														
	3.57 mm x 2.38 mm (9/64" x 3/32") 7"			3.97 mm x 2.38 mm (5/32" x 3/32") 7"			4.37 mm x 2.38 mm (11/64" x 3/32") 7"			4.76 mm x 2.38 mm (3/16" x 3/32") 7"			4.76 mm x 3.18 mm (3/16" x 1/8") 20"		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	12.2	0.26	0.95	12.5	0.30	1.09	12.6	0.35	1.27	13.0	0.40	1.45	13.0	0.47	1.68
2.0	12.3	0.29	1.03	12.9	0.33	1.18	13.3	0.38	1.36	13.7	0.43	1.56	13.7	0.50	1.81
2.5	12.5	0.31	1.13	13.3	0.37	1.32	13.8	0.42	1.52	14.4	0.48	1.74	14.4	0.56	2.01
3.0	12.8	0.35	1.24	13.5	0.40	1.45	14.1	0.46	1.65	14.8	0.53	1.90	14.8	0.61	2.21
3.5	13.0	0.37	1.35	13.7	0.43	1.55	14.5	0.50	1.80	15.3	0.57	2.06	15.3	0.66	2.38
4.0	13.2	0.40	1.43	14.0	0.46	1.65	14.7	0.53	1.92	15.5	0.61	2.20	15.5	0.71	2.54
4.5	13.4	0.42	1.52	14.2	0.49	1.77	14.9	0.56	2.03	15.7	0.64	2.32	15.7	0.75	2.69
5.0	13.6	0.44	1.60	14.4	0.52	1.86	15.2	0.60	2.15	15.9	0.68	2.46	15.9	0.79	2.84
5.5	13.9	0.47	1.70	14.6	0.55	1.98	15.4	0.63	2.27	16.2	0.73	2.61	16.2	0.83	2.98

30H Brass Straight Bore Nozzle (SBN-3) with Plug *												METRIC		
bar @ Nozzle	NOZZLE SIZE (Stream Height: 3m)													
	3.57 MM (9/64")			3.97 MM (5/32")			4.37 MM (11/64")			4.76 MM (3/16")				
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)		
1.7	13.0	0.18	0.66	13.4	0.22	0.79	13.7	0.27	0.98	14.0	0.32	1.16		
2.0	13.2	0.19	0.69	13.7	0.24	0.87	14.0	0.29	1.05	14.4	0.35	1.25		
2.5	13.6	0.22	0.78	14.1	0.27	0.97	14.4	0.33	1.18	15.0	0.38	1.39		
3.0	14.0	0.24	0.85	14.5	0.29	1.05	14.8	0.35	1.27	15.7	0.42	1.52		
3.5	14.2	0.26	0.93	15.0	0.32	1.14	15.3	0.39	1.39	16.2	0.46	1.65		
4.0	14.4	0.27	0.98	15.3	0.34	1.22	15.6	0.41	1.47	16.5	0.49	1.77		
4.5	14.6	0.29	1.05	15.6	0.37	1.32	15.9	0.44	1.57	16.8	0.52	1.87		
5.0	14.9	0.31	1.11	15.8	0.38	1.36	16.3	0.46	1.66	17.0	0.55	1.96		
5.5	15.2	0.32	1.16	16.0	0.40	1.43	16.8	0.49	1.75	17.2	0.57	2.07		

30H Brass Straight Bore Nozzle (SBN-3) with Spreader (LAN-1*)												METRIC			
bar @ Nozzle	NOZZLE SIZE (Stream Height: 3m)														
	3.57 mm x 2.38 mm (9/64" x 3/32") 7"			3.97 mm x 2.38 mm (5/32" x 3/32") 7"			4.37 mm x 2.38 mm (11/64" x 3/32") 7"			4.76 mm x 2.38 mm (3/16" x 3/32") 7"			4.76 mm x 3.18 mm (3/16" x 1/8") 20"		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	13.0	0.26	0.95	13.4	0.30	1.09	13.9	0.35	1.27	13.9	0.40	1.45	13.9	0.47	1.68
2.0	13.2	0.29	1.03	13.7	0.33	1.18	14.0	0.38	1.36	14.4	0.43	1.56	14.4	0.50	1.81
2.5	13.6	0.31	1.13	14.1	0.37	1.32	14.4	0.42	1.52	15.0	0.48	1.74	15.0	0.56	2.01
3.0	14.0	0.35	1.24	14.5	0.40	1.45	14.8	0.46	1.65	15.7	0.53	1.90	15.7	0.61	2.21
3.5	14.2	0.37	1.35	15.0	0.43	1.55	15.3	0.50	1.80	16.2	0.57	2.06	16.2	0.66	2.38
4.0	14.4	0.40	1.43	15.3	0.46	1.65	15.6	0.53	1.92	16.5	0.61	2.20	16.5	0.71	2.54
4.5	14.6	0.42	1.52	15.6	0.49	1.77	15.9	0.56	2.03	16.8	0.64	2.32	16.8	0.75	2.69
5.0	14.9	0.44	1.60	15.8	0.52	1.86	16.3	0.60	2.15	17.0	0.68	2.46	17.0	0.79	2.84
5.5	15.2	0.47	1.70	16.0	0.55	1.98	16.8	0.63	2.27	17.2	0.73	2.61	17.2	0.83	2.98

\* Nozzles must be purchased separately. See chart on previous page.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION

### 30PWH

3/4" 19mm Full Circle, Aluminum Arm Impact Sprinkler

- Durable die-cast, anodized, aluminum arm
- Stainless steel springs and fulcrum pin
- Aluminum arm allows for smaller nozzles and lower pressures

#### Features

- Chemically resistant washers

#### Benefits

- Wide range of flow rates
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 3/4" (19mm) Male NPT, Brass
- Trajectory Angle: 27°
- Operating Range: 25-80 psi (1.7-5.5 bar)
- Flow Rate: 1.7-5.5 gpm (0.39-1.22 m<sup>3</sup>/h)
- Radius: 38-46 ft. (11.74-14.03 meters)
- Nozzle Port: 1/4" Female NPT
- Spreader Nozzle Port: 1/8" Female NPT



Straight Bore Nozzle (SBN-3*)								
psi@ Nozzle	NOZZLE SIZE (Stream Height: 9 ft.)							
	7/64"		1/8"		9/64"		5/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	38	1.70	39	2.30	40	2.90	41	3.50
30	39	1.90	39	2.50	40	3.20	42	3.90
35	39	2.10	40	2.70	41	3.40	43	4.20
40	39	2.20	40	2.90	41	3.60	44	4.50
45	40	2.30	41	3.10	42	3.80	44	4.70
50	40	2.40	41	3.20	42	4.00	45	5.00
55	40	2.60	42	3.40	43	4.20	45	5.20
60	41	2.70	42	3.60	43	4.40	46	5.50
65	41	2.80	43	3.70	44	4.70	-	-
70	41	2.90	43	3.80	44	4.80	-	-
75	41	3.00	43	4.00	-	-	-	-
80	42	3.10	43	4.10	-	-	-	-

Straight Bore Nozzle (SBN-3*)												METRIC		
bar @ Nozzle	NOZZLE SIZE (Stream Height: 2.7m)													
	2.78 mm (7/64")			3.18 mm (1/8")			3.57 mm (9/64")			3.97 mm (5/32")				
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)		
1.7	11.7	0.11	0.39	11.9	0.15	0.52	12.2	0.18	0.66	12.5	0.22	0.79		
2.0	11.9	0.12	0.42	12.0	0.16	0.56	12.3	0.20	0.71	12.9	0.24	0.87		
2.5	11.9	0.13	0.48	12.2	0.17	0.62	12.5	0.22	0.78	13.3	0.27	0.97		
3.0	12.1	0.14	0.52	12.5	0.19	0.69	12.8	0.24	0.85	13.5	0.29	1.05		
3.5	12.2	0.15	0.55	12.7	0.20	0.73	13.0	0.25	0.92	13.7	0.32	1.14		
4.0	12.4	0.17	0.60	12.9	0.22	0.80	13.2	0.27	0.98	14.0	0.34	1.22		
4.5	12.5	0.18	0.64	13.1	0.23	0.84	13.4	0.30	1.07	-	-	-		
5.0	12.6	0.19	0.67	13.2	0.25	0.89	-	-	-	-	-	-		
5.5	12.8	0.20	0.70	13.3	0.26	0.93	-	-	-	-	-	-		

\* Nozzles must be purchased separately. See chart below.

### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle with Plug	<b>A11355</b>

Nozzle Only			XX = NOZZLE SIZE			
U.S. Standard			7/64"	1/8"	9/64"	5/32"
Metric			2.78 mm	3.18 mm	3.57 mm	3.97 mm
Brass Straight Bore Nozzle	SBN-3	<b>105842-XX</b>	07	<b>08</b>	09	10
Brass Straight Bore Nozzle with Vane	SBN-3V	<b>106131-XX</b>	07	<b>08</b>	09	10

Bold nozzle size number denotes the most common nozzle choice.

# Impact Sprinklers

## 3/4" (19mm) Full Circle



### 14070H

3/4" 19mm Full Circle, Brass Impact Sprinkler

- Heavy duty brass construction
- Extra large body and barrel
- Stainless steel springs and fulcrum pin

#### Features

- Chemically resistant washers
- Dual nozzle ports

#### Benefits

- Extra large body accommodates wide range of flow rates and nozzles
- Long nozzle barrel increases distance of throw
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 3/4" (19mm) Male NPT, Brass
- Trajectory Angle: 27°
- Operating Range: 25-80 psi (1.7-5.5 bar)
- Flow Rate: 4.2-23 gpm (0.97-5.34 m<sup>3</sup>/h)
- Radius: 44-71 ft. (13.57-22.10 meters)
- Nozzle Port: 1/4" Female NPT
- Spreader Nozzle Port: 1/8" Female NPT



#### Straight Bore Nozzle (SBN-3) with Spreader (LAN-1-20)\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 10 ft.)													
	3/16" x 1/8-20"		13/64" x 1/8-20"		7/32" x 1/8-20"		15/64" x 1/8-20"		1/4" x 1/8-20"		17/64" x 1/8-20"		9/32" x 1/8-20"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	44	7.40	45	8.30	46	9.20	46	10.30	47	11.40	47	12.50	48	13.80
30	47	8.10	48	9.10	49	10.10	50	11.20	51	12.40	51	13.70	52	15.10
35	49	8.70	50	9.80	51	10.90	52	12.10	52	13.40	53	14.80	54	16.30
40	50	9.30	51	10.50	52	11.70	53	13.00	54	14.40	55	15.80	56	17.40
45	51	9.90	52	11.10	54	12.40	55	13.80	56	15.20	57	16.80	58	18.50
50	52	10.40	53	11.70	55	13.10	56	14.50	57	16.10	58	17.70	59	19.50
55	53	10.90	54	12.30	56	13.70	57	15.20	59	16.90	59	18.60	61	20.40
60	53	11.40	55	12.80	57	14.30	58	15.90	60	17.60	61	19.40	62	21.30
65	54	11.90	56	13.30	58	14.90	59	16.50	61	18.30	62	20.20	63	22.20
70	55	12.40	57	13.80	59	15.40	60	17.20	62	19.00	63	21.00	65	23.00
75	55	12.80	58	14.30	60	16.00	61	17.80	63	19.70	-	-	-	-
80	56	13.20	58	14.80	61	16.50	62	18.40	64	20.30	-	-	-	-

#### Straight Bore Nozzle (SBN-3V) with Plug\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 10 ft.)																	
	5/32"		11/64"		3/16"		13/64"		7/32"		15/64"		1/4"		17/64"		9/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	-	-	-	-	44	5.10	45	6.00	46	7.00	46	8.00	47	9.10	48	10.30	48	11.50
30	-	-	-	-	47	5.60	48	6.60	49	7.60	50	8.80	51	10.00	51	11.20	52	12.60
35	46	4.20	47	5.10	49	6.10	50	7.10	51	8.20	52	9.50	52	10.80	53	12.10	54	13.60
40	46	4.50	48	5.40	50	6.50	51	7.60	52	8.80	53	10.10	54	11.50	55	13.00	56	14.60
45	47	4.80	49	5.80	51	6.90	52	8.10	54	9.30	55	10.70	56	12.20	57	13.80	58	15.40
50	48	5.00	50	6.10	52	7.20	53	8.50	55	9.80	56	11.30	57	12.90	58	14.50	59	16.30
55	48	5.30	50	6.40	53	7.60	54	8.90	56	10.30	54	11.80	59	13.50	59	15.20	61	17.10
60	49	5.50	51	6.70	53	7.90	55	9.30	57	10.80	58	12.40	60	14.10	61	15.90	62	17.80
65	49	5.70	52	6.90	54	8.30	56	9.70	58	11.20	59	12.90	61	14.70	62	16.50	63	18.50
70	50	5.90	52	7.20	55	8.60	57	10.00	59	11.60	60	13.40	62	15.20	63	17.20	65	19.20
75	50	6.20	53	7.40	55	8.90	58	10.40	60	12.10	61	13.80	63	15.70	-	-	-	-
80	50	6.40	53	7.70	56	9.10	58	10.70	61	12.40	62	14.30	64	16.30	-	-	-	-

#### Straight Bore Nozzle with Vane (SBN-3V) with Spreader (LAN-1-20)\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 10 ft.)													
	3/16" x 1/8-20"		13/64" x 1/8-20"		7/32" x 1/8-20"		15/64" x 1/8-20"		1/4" x 1/8-20"		17/64" x 1/8-20"		9/32" x 1/8-20"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	47	7.40	49	8.30	51	9.20	51	9.80	51	10.80	51	11.90	51	13.10
30	50	8.10	51	9.10	54	10.10	54	10.60	55	11.80	55	13.00	55	14.30
35	51	8.70	53	9.80	55	10.90	56	11.50	57	12.70	57	14.10	57	15.50
40	52	9.30	54	10.50	56	11.70	57	12.40	59	13.70	59	15.10	60	16.50
45	53	9.90	55	11.10	57	12.40	59	13.10	60	14.40	61	16.00	62	17.60
50	53	10.40	56	11.70	58	13.10	60	13.80	62	15.30	63	16.80	64	18.50
55	54	10.90	56	12.30	59	13.70	61	14.40	63	16.10	65	17.70	66	19.40
60	55	11.40	57	12.80	60	14.30	62	15.10	64	16.70	67	18.40	68	20.20
65	55	11.90	58	13.30	61	14.90	63	15.70	65	17.40	68	19.20	69	21.10
70	56	12.40	58	13.80	62	15.40	64	16.30	66	18.10	69	20.00	71	21.90
75	56	12.80	59	14.30	62	16.00	65	16.90	67	18.70	-	-	-	-
80	57	13.20	60	14.80	63	16.50	66	17.50	69	19.30	-	-	-	-

\* Nozzles must be purchased separately. See chart below.

#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle without Plug	<b>A12800</b>

Nozzle Only	XX = Nozzle Size	U.S. Standard										
		1/8"	5/32"	11/64"	3/16"	13/64"	7/32"	15/64"	1/4"	17/64"	9/32"	
Brass Straight Bore Nozzle	SBN-3	<b>105842-XX</b>	-	10	11	<b>12</b>	13	14	15	16	17	18
Brass Straight Bore Nozzle with Vane	SBN-3V	<b>106131-XX</b>	-	10	11	<b>12</b>	13	14	15	16	17	18
Brass 20° Low Angle Spreader Nozzle	LAN-1-20	<b>100226-XX</b>	<b>08</b>	-	-	-	-	-	-	-	-	-
<b>Brass Plug</b>		<b>100255</b>										

Bold nozzle size number denotes the most common nozzle choice.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION

### 14070H (Continued)

Straight Bore Nozzle (SBN-3) with Spreader (LAN-1-20)*													METRIC								
bar @ Nozzle	NOZZLE SIZE												(Stream Height: 3m)								
	4.76 mm x 3.18 mm (3/16" x 1/8") 20°			5.16 mm x 3.18 mm (13/64" x 1/8") 20°			5.56 mm x 3.18 mm (7/32" x 1/8") 20°			5.95 mm x 3.18 mm (15/64" x 1/8") 20°			6.35 mm x 3.18 mm (1/4" x 1/8") 20°			6.75 mm x 3.18 mm (17/64" x 1/8") 20°			7.14 mm x 3.18 mm (9/32" x 1/8") 20°		
	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)
1.7	13.6	0.47	1.68	13.9	0.52	1.89	14.0	0.58	2.09	14.2	0.65	2.34	14.3	0.72	2.59	14.5	0.79	2.84	14.6	0.87	3.13
2.0	14.3	0.50	1.81	14.6	0.56	2.03	14.9	0.63	2.25	15.0	0.70	2.50	15.3	0.77	2.77	15.4	0.85	3.06	15.6	0.94	3.37
2.5	15.0	0.56	2.01	15.4	0.63	2.26	15.7	0.70	2.52	16.0	0.78	2.80	16.2	0.86	3.10	16.4	0.95	3.42	16.6	1.05	3.76
3.0	15.5	0.61	2.21	15.9	0.69	2.48	16.3	0.77	2.77	16.6	0.86	3.08	16.9	0.94	3.40	17.2	1.04	3.75	17.5	1.15	4.13
3.5	15.9	0.66	2.38	16.4	0.74	2.68	16.8	0.83	3.00	17.1	0.92	3.32	17.6	1.02	3.68	17.9	1.12	4.05	18.2	1.24	4.46
4.0	16.2	0.71	2.54	16.8	0.79	2.86	17.4	0.89	3.19	17.7	0.99	3.55	18.2	1.09	3.93	18.4	1.20	4.33	18.9	1.32	4.75
4.5	16.6	0.75	2.71	17.2	0.84	3.03	17.8	0.94	3.39	18.1	1.04	3.75	18.6	1.16	4.16	19.1	1.28	4.60	19.4	1.40	5.05
5.0	16.8	0.79	2.86	17.5	0.89	3.19	18.1	0.99	3.56	18.6	1.10	3.97	19.1	1.22	4.39	19.6	1.35	4.86	19.9	1.48	5.34
5.5	17.2	0.83	3.00	17.8	0.93	3.36	18.6	1.04	3.75	19.1	1.16	4.18	19.7	1.28	4.61	-	-	-	-	-	-

Straight Bore Nozzle (SBN-3V) with Plug*													METRIC														
bar @ Nozzle	NOZZLE SIZE												(Stream Height: 3m)														
	3.97 mm (5/32")			4.37 mm (11/64")			4.76 mm (3/16")			5.16 mm (13/64")			5.56 mm (7/32")			5.95 mm (15/64")			6.35 mm (1/4")			6.75 mm (17/64")			7.14 mm (9/32")		
	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)
1.7	-	-	-	-	-	-	13.6	0.32	1.16	13.9	0.38	1.36	14.0	0.44	1.59	14.2	0.50	1.82	14.3	0.57	2.07	14.5	0.65	2.34	14.6	0.73	2.61
2.0	-	-	-	-	-	-	14.3	0.35	1.25	14.6	0.41	1.47	14.9	0.47	1.70	15.0	0.54	1.96	15.3	0.62	2.23	15.4	0.70	2.50	15.6	0.78	2.81
2.5	14.1	0.27	0.97	14.4	0.33	1.18	15.0	0.39	1.41	15.4	0.46	1.64	15.7	0.53	1.90	16.0	0.61	2.19	16.2	0.69	2.49	16.4	0.78	2.80	16.6	0.87	3.14
3.0	14.3	0.30	1.07	14.8	0.36	1.29	15.5	0.43	1.54	15.9	0.50	1.81	16.3	0.58	2.08	16.6	0.66	2.39	16.9	0.76	2.72	17.2	0.86	3.08	17.5	0.96	3.44
3.5	14.7	0.32	1.15	15.3	0.39	1.40	15.9	0.46	1.65	16.4	0.54	1.94	16.8	0.62	2.24	17.1	0.72	2.58	17.6	0.82	2.95	17.9	0.92	3.32	18.2	1.04	3.73
4.0	14.9	0.34	1.23	15.5	0.42	1.49	16.2	0.49	1.77	16.8	0.58	2.08	17.4	0.67	2.41	17.7	0.77	2.76	18.2	0.87	3.15	18.4	0.99	3.55	18.9	1.11	3.98
4.5	15.1	0.36	1.30	15.9	0.44	1.57	16.6	0.52	1.89	17.2	0.61	2.21	17.8	0.71	2.55	18.1	0.82	2.93	18.6	0.93	3.34	19.1	1.04	3.75	19.4	1.17	4.21
5.0	15.2	0.38	1.37	16.1	0.46	1.66	16.8	0.55	1.99	17.5	0.64	2.32	18.1	0.75	2.69	18.6	0.86	3.09	19.1	0.97	3.51	19.6	1.10	3.97	19.8	1.23	4.42
5.5	15.4	0.40	1.45	16.3	0.49	1.75	17.2	0.57	2.07	17.8	0.68	2.43	18.6	0.78	2.82	19.1	0.90	3.25	19.7	1.03	3.70	-	-	-	-	-	-

Straight Bore Nozzle with Vane (SBN-3V) with Spreader (LAN-1-20)*													METRIC										
bar @ Nozzle	NOZZLE SIZE												(Stream Height: 3m)										
	4.76 mm x 3.18 mm (3/16" x 1/8") 20°			5.16 mm x 3.18 mm (13/64" x 1/8") 20°			5.56 mm x 3.18 mm (7/32" x 1/8") 20°			5.95 mm x 3.18 mm (15/64" x 1/8") 20°			6.35 mm x 3.18 mm (1/4" x 1/8") 20°			6.75 mm x 3.18 mm (17/64" x 1/8") 20°			7.14 mm x 3.18 mm (9/32" x 1/8") 20°				
	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)	Flow (m³/h)	Rad. (m)	Flow (lps)
1.7	14.5	0.47	1.68	14.9	0.52	1.89	15.5	0.58	2.09	15.5	0.62	2.23	15.7	0.68	2.45	15.5	0.75	2.70	15.5	0.83	2.98		
2.0	15.1	0.50	1.81	15.5	0.56	2.03	16.3	0.63	2.25	16.4	0.66	2.37	16.5	0.73	2.63	16.5	0.81	2.90	16.5	0.89	3.19		
2.5	15.6	0.56	2.01	16.2	0.63	2.26	17.0	0.70	2.52	17.2	0.74	2.66	17.5	0.82	2.94	17.7	0.90	3.25	17.7	0.99	3.58		
3.0	16.1	0.61	2.21	16.7	0.69	2.48	17.4	0.77	2.77	17.8	0.81	2.93	18.3	0.90	3.22	18.6	0.99	3.56	18.7	1.09	3.92		
3.5	16.4	0.66	2.38	17.1	0.74	2.68	17.9	0.83	3.00	18.4	0.88	3.15	18.9	0.97	3.50	19.3	1.07	3.85	19.6	1.18	4.23		
4.0	16.7	0.71	2.54	17.4	0.79	2.86	18.3	0.89	3.19	18.9	0.93	3.37	19.5	1.04	3.74	20.1	1.14	4.11	20.5	1.25	4.51		
4.5	16.9	0.75	2.71	17.7	0.84	3.03	18.8	0.94	3.39	19.4	0.99	3.57	20.0	1.10	3.96	20.7	1.21	4.37	21.2	1.33	4.80		
5.0	17.1	0.79	2.86	17.9	0.89	3.19	19.0	0.99	3.56	19.7	1.05	3.77	20.4	1.16	4.18	21.3	1.28	4.62	22.1	1.40	5.05		
5.5	17.4	0.83	3.00	18.3	0.93	3.36	19.4	1.04	3.75	20.1	1.10	3.97	21.0	1.22	4.38	-	-	-	-	-	-		

\* Nozzles must be purchased separately. See chart below.

### Part Numbers and Ordering Information

Sprinkler Only	Part Number	Nozzle Only	XX = Nozzle Size											
			Metric	3.18 mm	3.97 mm	4.37 mm	4.76 mm	5.16 mm	5.56 mm	5.95 mm	6.35 mm	6.75 mm	7.14 mm	
Sprinkler without Nozzle without Plug	A12800	Brass Straight Bore Nozzle	SBN-3	105842-XX	-	10	11	12	13	14	15	16	17	18
		Brass Straight Bore Nozzle with Vane	SBN-3V	106131-XX	-	10	11	12	13	14	15	16	17	18
		Brass 20° Low Angle Spreader Nozzle	LAN-1-20	100226-XX	08	-	-	-	-	-	-	-	-	-
		Brass Plug		100255										

Bold nozzle size number denotes the most common nozzle choice.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION



# Impact Sprinklers

## 3/4" (19mm) Full Circle



### 30FH / 30FWH

3/4" 19mm Full Circle, Brass Impact Sprinkler

- Heavy duty brass construction
- Stainless steel springs and fulcrum pin
- Chemically resistant, PTFE washers

#### Features

- Dual nozzle ports

#### Benefits

- PTFE washers allow for faster rotation times with a smaller nozzle at lower pressures
- Wide range of flow rates
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 3/4" (19mm) Male NPT, Brass
- Trajectory Angle: 27°
- Operating Range: 25-80 psi (1.7-5.5 bar)
- Flow Rate: 2.26-6.47 gpm (0.51-1.47 m<sup>3</sup>/h)
- Radius: 39-43 ft. (11.90-13.27 meters)
- Nozzle Port: 1/4" Female NPT
- Spreader Nozzle Port: 1/8" Female NPT



#### Straight Bore Nozzle (SBN-3) Performance\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 9 ft.)	
	1/8"	
	Rad. (ft.)	Flow (gpm)
25	39	2.26
30	39	2.48
35	40	2.68
40	40	2.86
45	41	3.03
50	41	3.20
55	42	3.35
60	44	3.50
65	43	3.65
70	43	3.78
75	43	3.91
80	43	4.04

#### Straight Bore Nozzle (SBN-3) with Spreader (LAN-1-20) Performance\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 9 ft.)	
	1/8" x 3/32-20°	
	Rad. (ft.)	Flow (gpm)
25	39	3.52
30	39	3.87
35	40	4.19
40	40	4.49
45	41	4.77
50	41	5.02
55	42	5.27
60	42	5.51
65	43	5.75
70	43	5.99
75	43	6.23
80	43	6.47

#### Straight Bore Nozzle (SBN-3) with Spreader (LAN-1-20) \*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 2.7m)		
	3.18 mm (1/8")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	11.9	0.14	0.51
2.0	12.0	0.15	0.55
2.5	12.2	0.17	0.62
3.0	12.5	0.19	0.68
3.5	12.7	0.20	0.73
4.0	12.9	0.22	0.78
4.5	13.1	0.23	0.83
5.0	13.2	0.24	0.87
5.5	13.3	0.25	0.92

#### Straight Bore Nozzle (SBN-3) with Spreader (LAN-1-20) \* METRIC

psi@ Nozzle	NOZZLE SIZE (Stream Height: 2.7m)		
	3.18 mm x 2.38 mm (1/8" x 3/32") 20°		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	11.9	0.22	0.80
2.0	12.0	0.24	0.86
2.5	12.2	0.27	0.97
3.0	12.5	0.30	1.06
3.5	12.7	0.32	1.15
4.0	12.9	0.34	1.23
4.5	13.1	0.36	1.31
5.0	13.2	0.39	1.39
5.5	13.3	0.41	1.47

\* Nozzles must be purchased separately. See chart below.

#### Part Numbers and Ordering Information

Sprinkler Only		
Sprinkler without Nozzle	<b>30FH</b>	<b>A08401F</b>
Sprinkler without Nozzle with Plug	<b>30FWH</b>	<b>A08901F</b>

Nozzle Only			XX = Nozzle Size	
U.S. Standard			3/32"	1/8"
Metric			2.38 mm	3.18 mm
Brass Straight Bore Nozzle 1/8"	SBN-3	<b>105842-XX</b>	—	<b>08</b>
Brass 20° Low Angle Nozzle 3/32"	LAN-1-20	<b>100226-XX</b>	<b>06</b>	—
<b>Brass Plug</b>		<b>100255</b>		

Bold nozzle size number denotes the most common nozzle choice.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION

# Impact Sprinklers

1" (25mm) Full Circle

## 70CH / 70CHM

1" 25 mm Full Circle, Brass Impact Sprinkler

- Heavy duty brass construction
- 70CH Female NPT Bearing
- 70CHM has Male bearing Integral Straightening Vanes

### Features

- Stainless steel springs and fulcrum pin
- Chemically resistant washers
- Dual nozzle ports

### Benefits

- Low angle ideal for windy conditions
- Integral straightening vanes increase distance of throw
- Wide range of flow rates
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

### Specifications

- Bearing: 1" (25mm) Female NPT, Brass (70CH)
- Bearing: 1" (25mm) Male NPT, Brass (70CHM)
- Trajectory Angle: 21°
- Operating Range: 40-80 psi (2.8-5.5 bar)
- Flow Rate: 8.8-45.8 gpm (2.00-10.40 m<sup>3</sup>/h)
- Radius: 57-82 ft. (17.39-25.01 meters)
- Nozzle Port: 3/8" Female NPT
- Spreader Nozzle Port: 3/8" Female NPT

**(Spreader Nozzle Port requires Spreader Bushing to accept LAN-20 Nozzles)**

### Straight Bore Nozzle (SBN-4) with Plug Performance\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 8 ft.)													
	7/32"		1/4"		9/32"		5/16"		11/32"		3/8"		13/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
40	57	8.80	60	11.50	62	14.60	65	17.70	66	21.10	68	24.40	70	28.50
45	58	9.40	61	12.20	64	15.50	66	18.90	68	22.50	70	26.00	72	30.40
50	59	9.90	62	12.90	65	16.30	68	20.00	70	23.80	71	27.50	73	32.30
55	60	10.40	63	13.60	66	17.20	70	21.00	71	25.00	73	29.10	75	34.00
60	61	10.90	64	14.20	67	18.00	71	22.00	73	26.20	74	30.60	77	35.70
65	62	11.40	65	14.80	68	18.80	72	23.00	74	27.40	76	32.00	78	37.30
70	63	11.80	66	15.40	70	19.50	73	23.90	76	28.50	77	33.20	79	38.90
75	64	12.20	67	16.00	71	20.30	74	24.80	77	29.60	78	34.50	81	40.40
80	65	12.60	68	16.50	72	20.90	75	25.70	78	30.60	80	35.70	82	41.80

### Straight Bore Nozzle (SBN-4) with Spreader (LAN-1-20) Performance\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 8 ft.)													
	7/32" x 1/8-20"		1/4" x 1/8-20"		9/32" x 1/8-20"		5/16" x 1/8-20"		11/32" x 1/8-20"		3/8" x 1/8-20"		13/32" x 1/8-20"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
40	57	11.60	60	14.30	62	17.40	65	20.50	61	23.90	68	27.20	70	31.40
45	58	12.40	61	15.20	64	18.50	66	21.90	68	25.50	70	29.00	72	33.40
50	59	13.00	62	16.00	65	19.40	68	23.10	70	26.90	71	30.60	73	35.50
55	60	13.70	63	16.90	66	20.40	70	24.30	71	28.30	73	32.40	75	37.40
60	61	14.30	64	17.60	67	21.40	71	25.40	73	29.60	74	34.00	77	39.20
65	62	15.00	65	18.40	69	22.40	72	26.60	74	31.00	76	35.60	78	40.90
70	63	15.50	66	19.10	70	23.20	73	27.60	75	32.20	77	36.90	79	42.70
75	64	16.00	67	19.80	71	24.10	74	28.60	77	33.40	78	38.30	81	44.30
80	65	16.50	68	20.40	72	24.80	75	29.60	78	34.50	80	39.60	82	45.80

\* Nozzles must be purchased separately. See Chart below.



### Part Numbers and Ordering Information

Sprinkler Only		Nozzle Only		XX = Nozzle Size							
		U.S. Standard		1/8"	7/32"	1/4"	9/32"	5/16"	11/32"	3/8"	13/32"
		Metric		1.59mm	1.70mm	1.78mm	1.98mm	2.18mm	2.38mm	2.78mm	3.18mm
Sprinkler without Nozzle, Without Plug, Without Bushing; Female body (70CH)	<b>A20000</b>	SBN-4	<b>100382-XX</b>	—	<b>14</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>24</b>	<b>26</b>
Sprinkler without Nozzle, Without Plug, Without Bushing; Male body (70CHM)	<b>A20030</b>	SPB-1	<b>100418</b>	Needed for use with LAN-1-20							
		LAN-1-20	<b>100226</b>	<b>08</b>	—	—	—	—	—	—	—
		Brass Plug	<b>100417</b>								

Bold nozzle size number denotes the most common nozzle choice.

# Impact Sprinklers

## 1" (25mm) Full Circle



Straight Bore Nozzle (SBN-4) with Plug Performance*													METRIC								
bar @ Nozzle	NOZZLE SIZE												(Stream Height: 2.4m)								
	5.56 mm (7/32")			6.35 mm (1/4")			7.14 mm (9/32")			7.94 mm (5/16")			8.73 mm (11/32")			9.53 mm (3/8")			10.32 mm (13/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)			
2.8	17.4	0.56	2.00	18.3	0.73	2.61	19.1	0.92	3.32	19.8	1.12	4.02	20.3	1.33	4.79	20.7	1.54	5.54	21.3	1.80	6.47
3.0	17.7	0.58	2.09	18.5	0.76	2.72	19.4	0.96	3.46	20.1	1.17	4.21	20.6	1.39	5.01	21.2	1.61	5.79	21.8	1.88	6.77
3.5	18.2	0.63	2.26	18.9	0.82	2.95	20.0	1.04	3.73	20.8	1.27	4.58	21.4	1.51	5.45	21.9	1.75	6.30	22.5	2.05	7.39
4.0	18.6	0.67	2.43	19.4	0.88	3.17	20.5	1.12	4.01	21.6	1.36	4.90	22.1	1.62	5.84	22.5	1.89	6.81	23.3	2.21	7.95
4.5	19.1	0.72	2.59	19.8	0.94	3.37	21.0	1.19	4.28	22.1	1.45	5.23	22.7	1.73	6.23	23.2	2.02	7.28	23.9	2.35	8.47
5.0	19.5	0.76	2.72	20.3	0.99	3.56	21.5	1.26	4.52	22.6	1.54	5.53	23.3	1.83	6.60	23.8	2.14	7.69	24.3	2.45	8.82
5.5	19.8	0.79	2.86	20.7	1.04	3.75	21.9	1.32	4.75	23.0	1.62	5.84	23.8	1.93	6.95	24.5	2.25	8.11	25.0	2.64	9.49

Straight Bore Nozzle (SBN-4) with Spreader (LAN-1-20) Performance*													METRIC								
bar @ Nozzle	NOZZLE SIZE												(Stream Height: 2.4m)								
	5.56 mm x 3.18 mm (7/32" x 1/8") 20°			6.35 mm x 3.18 mm (1/4" x 1/8") 20°			7.14 mm x 3.18 mm (9/32" x 1/8") 20°			7.94 mm x 3.18 mm (5/16" x 1/8") 20°			8.73 mm x 3.18 mm (11/32" x 1/8") 20°			9.53 mm x 3.18 mm (3/8" x 1/8") 20°			10.32 mm x 3.18 mm (13/32" x 1/8") 20°		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
2.8	17.4	0.73	2.63	18.3	0.90	3.25	19.1	1.10	3.95	19.8	1.29	4.66	20.3	1.51	5.43	20.7	1.72	6.18	21.3	1.98	7.13
3.0	17.7	0.77	2.76	18.5	0.94	3.39	19.4	1.15	4.13	20.1	1.35	4.88	20.6	1.58	5.68	21.2	1.80	6.46	21.8	2.07	7.45
3.5	18.2	0.83	2.98	18.9	1.02	3.66	20.0	1.23	4.44	20.8	1.47	5.29	21.4	1.71	6.16	21.9	1.95	7.01	22.5	2.26	8.13
4.0	18.6	0.89	3.19	19.4	1.09	3.93	20.5	1.32	4.77	21.6	1.57	5.67	22.1	1.83	6.60	22.5	2.10	7.57	23.3	2.43	8.74
4.5	19.1	0.95	3.41	19.8	1.16	4.19	21.0	1.42	5.10	22.1	1.68	6.05	22.7	1.96	7.05	23.2	2.25	8.10	23.9	2.58	9.29
5.0	19.5	0.99	3.58	20.3	1.23	4.42	21.5	1.49	5.37	22.6	1.77	6.38	23.3	2.07	7.45	23.8	2.37	8.54	24.3	2.69	9.67
5.5	19.8	1.04	3.75	20.7	1.29	4.63	21.9	1.56	5.63	23.0	1.87	6.72	23.8	2.18	7.84	24.5	2.50	8.99	25.0	2.89	10.40

\* Nozzles must be purchased separately. See chart on previous page.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

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# Impact Sprinklers

## 1 1/4" (32mm) Full Circle

### 80EHD

1 1/4" 32 mm Full Circle, Brass Impact Sprinkler

- Heavy duty brass construction
- Internal plastic straightening vane
- Stainless steel springs and fulcrum pin

#### Features

- Plastic bearing hood
- Chemically resistant washers
- Dual nozzle ports

#### Benefits

- Internal straightening vane increases distance of throw
- Plastic bearing hood protects spring and bearing sleeve from damage
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1 1/4" (32mm) Male NPT, Brass
- Trajectory Angle: 27°
- Operating Range: 25-100 psi (1.7-6.9 bar)
- Flow Rate: 17.1-127.7 gpm (3.88-29 m<sup>3</sup>/h)
- Radius: 61-116 ft. (18.6-35.4 meters)
- Nozzle Port: 3/4" Female NPT



Straight Bore Nozzle (SBN-5) Performance*											
psi@ Nozzle	NOZZLE SIZE										(Stream Height: 14 ft.)
	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"	
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)
25	61 17.10	62 20.30	64 23.40	66 26.70	66 30.30	66 33.80	66 37.10	66 42.30	66 51.50	66 61.90	
30	64 18.80	65 22.30	68 25.70	69 29.30	72 33.20	73 37.10	73 40.80	73 46.40	73 56.50	73 68.10	
35	67 20.30	68 24.10	72 27.80	74 31.70	77 35.90	79 40.10	79 44.10	79 50.20	79 61.10	79 73.80	
40	69 21.80	71 25.80	75 29.70	77 33.90	80 38.50	83 42.90	83 47.20	86 53.70	86 65.40	86 79.20	
45	71 23.10	73 27.40	77 31.60	79 36.00	82 40.80	85 45.60	88 50.10	90 57.10	92 69.50	92 84.20	
50	73 24.40	75 28.90	79 33.30	81 38.00	84 43.10	87 48.10	90 52.90	94 60.20	95 73.30	97 88.90	
55	75 25.50	77 30.30	81 34.90	83 39.70	86 45.30	89 50.30	92 55.60	96 63.20	99 77.30	100 93.50	
60	77 25.80	79 30.80	83 35.90	86 41.60	88 47.40	91 53.00	94 58.80	97 65.50	101 80.10	104 97.80	
65	79 26.90	81 32.00	84 37.40	87 43.30	90 49.90	93 55.30	96 61.20	99 69.40	102 84.40	106 102.00	
70	81 28.10	83 33.30	86 38.90	89 45.10	91 51.40	94 57.50	98 63.50	101 72.20	104 87.80	108 106.00	
75	82 29.20	84 34.50	87 40.30	90 46.80	93 53.30	96 59.60	99 65.80	102 74.90	105 91.00	109 109.90	
80	83 30.40	86 35.70	89 41.80	92 48.40	94 55.10	97 61.60	101 68.10	104 77.50	107 94.10	110 113.70	
85	85 31.50	87 37.00	90 43.20	93 50.00	96 56.90	99 63.50	102 70.30	105 80.00	108 97.10	112 117.30	
90	86 32.70	89 38.30	92 44.60	95 51.50	97 58.50	100 65.30	104 72.40	106 82.20	110 99.90	113 120.90	
95	87 33.90	90 39.50	93 46.00	96 53.00	98 60.00	101 67.10	105 74.40	108 84.30	111 102.60	115 124.30	
100	88 34.00	91 40.70	94 47.40	97 54.50	99 61.50	102 68.90	106 76.40	109 87.20	112 105.20	116 127.70	

Straight Bore Nozzle (SBN-5) and Spreader (LAN-1-20) Performance*						
psi@ Nozzle	NOZZLE SIZE					(Stream Height: 14 ft.)
	11/32" x 7/32-20"	3/8" x 7/32-20"	13/32" x 7/32-20"	7/16" x 7/32-20"	15/32" x 7/32-20"	Rad. Flow (ft.) (gpm)
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)
25	61 23.30	62 26.50	64 29.60	66 32.90	66 36.40	
30	64 25.60	65 29.10	68 32.40	69 36.10	72 40.00	
35	67 27.70	68 31.40	72 35.10	74 39.00	77 43.30	
40	69 29.60	71 33.60	75 37.60	77 41.80	80 46.30	
45	71 31.50	73 35.70	77 39.90	79 44.40	82 49.20	
50	73 33.20	75 37.70	79 42.10	81 46.80	84 51.90	
55	75 34.90	77 39.70	81 44.30	83 49.10	86 54.70	
60	77 36.50	79 41.40	83 46.60	86 51.50	88 57.20	
65	79 38.00	81 43.20	84 48.60	87 53.80	90 59.80	
70	81 40.10	83 44.90	86 50.40	89 55.90	91 62.10	
75	82 41.00	84 46.70	87 52.40	90 57.90	93 64.30	
80	83 42.60	86 48.30	89 54.30	92 60.00	94 66.70	
85	85 43.80	87 49.80	90 56.00	93 62.00	96 68.80	
90	86 45.70	89 51.40	92 57.90	95 63.90	97 70.70	
95	87 46.60	90 53.00	93 59.60	96 65.80	98 72.80	
100	88 47.90	91 54.50	94 61.20	97 67.50	99 74.80	

\*Nozzle must be purchased separately. See chart below.

#### Part Numbers and Ordering Information

<b>Sprinkler Only</b>	
Sprinkler without Nozzle	<b>A23802</b>

Nozzle Only		XX = Nozzle Size											
U.S. Standard		7/32"	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"	
Metric		5.56mm	8.7mm	9.5mm	10.3mm	11.1mm	11.9mm	12.7mm	13.5mm	14.3mm	15.9mm	17.5mm	
Brass Straight Bore Nozzle	BN-5	<b>103043-XX</b>	—	<b>22</b>	<b>24</b>	<b>26</b>	<b>28</b>	<b>30</b>	<b>32</b>	<b>34</b>	<b>36</b>	<b>40</b>	<b>44</b>
Brass 20° Low Angle Spreader Nozzle	LAN-1-20	<b>100226-XX</b>	<b>14</b>	—	—	—	—	—	—	—	—	—	—

Bold nozzle size number denotes the most common nozzle choice.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

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# Impact Sprinklers

## 1 1/4" (32mm) Full Circle



### Straight Bore Nozzle (SBN-5) with Plug Performance\* METRIC

bar @ Nozzle	NOZZLE SIZE (Stream Height: 4.3m)														
	8.7 mm (11/32")			9.5 mm (3/8")			10.3 mm (13/32")			11.1 mm (7/16")			11.9 mm (15/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)
1.7	18.6	1.08	3.88	18.9	1.28	4.61	19.5	1.48	5.31	20.1	1.68	6.06	20.1	1.91	6.88
2.0	19.3	1.16	4.19	19.6	1.38	4.97	20.5	1.59	5.73	20.8	1.82	6.53	21.6	2.06	7.41
2.5	20.6	1.30	4.69	21.0	1.55	5.57	22.2	1.78	6.42	22.8	2.03	7.32	23.7	2.31	8.30
3.0	21.5	1.43	5.16	22.1	1.70	6.11	23.3	1.96	7.05	23.9	2.23	8.03	24.8	2.53	9.11
3.5	22.3	1.55	5.58	22.9	1.84	6.61	24.2	2.12	7.62	24.8	2.41	8.69	25.7	2.74	9.86
4.0	23.2	1.62	5.83	23.8	1.93	6.95	25.1	2.24	8.06	25.8	2.58	9.27	26.6	2.94	10.57
4.5	24.1	1.70	6.12	24.7	2.02	7.28	25.6	2.36	8.51	26.5	2.74	9.85	27.4	3.15	11.35
5.0	24.8	1.81	6.51	25.4	2.14	7.70	26.4	2.50	8.99	27.3	2.90	10.43	28.0	3.30	11.89
5.5	25.3	1.91	6.89	26.2	2.25	8.09	27.1	2.63	9.47	28.0	3.05	10.97	28.6	3.47	12.49
6.0	26.0	2.02	7.26	26.8	2.37	8.52	27.7	2.76	9.94	28.6	3.19	11.49	29.4	3.63	13.07
6.5	26.5	2.13	7.66	27.4	2.48	8.93	28.3	2.89	10.40	29.2	3.33	11.98	29.8	3.77	13.57
6.9	26.8	2.15	7.72	27.7	2.57	9.24	28.7	2.99	10.77	29.6	3.44	12.38	30.2	3.88	13.97

bar @ Nozzle	NOZZLE SIZE (Stream Height: 4.3m)														
	12.7 mm (1/2")			13.5 mm (17/32")			14.3 mm (9/16")			15.9 mm (5/8")			17.5 mm (11/16")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)
1.7	20.1	2.13	7.68	20.1	2.34	8.43	20.1	2.67	9.61	20.1	3.25	11.70	20.1	3.91	14.06
2.0	21.8	2.30	8.27	21.8	2.53	9.10	21.8	2.87	10.35	21.8	3.50	12.60	21.8	4.22	15.18
2.5	24.4	2.57	9.26	24.4	2.83	10.19	24.6	3.22	11.60	24.6	3.92	14.12	24.6	4.74	17.06
3.0	25.7	2.83	10.17	26.4	3.11	11.18	27.1	3.54	12.73	27.5	4.31	15.50	27.5	5.22	18.78
3.5	26.6	3.05	11.00	27.5	3.36	12.10	28.7	3.83	13.77	29.1	4.66	16.78	29.7	5.65	20.34
4.0	27.5	3.27	11.79	28.4	3.63	13.06	29.4	4.07	14.66	30.5	4.98	17.93	31.2	6.06	21.82
4.5	28.4	3.49	12.58	29.3	3.87	13.92	30.2	4.39	15.79	31.1	5.33	19.20	32.3	6.45	23.21
5.0	29.0	3.69	13.29	30.0	4.08	14.68	30.9	4.64	16.70	31.8	5.64	20.30	33.1	6.81	24.51
5.5	29.5	3.88	13.96	30.7	4.29	15.44	31.7	4.88	17.57	32.6	5.93	21.33	33.5	7.16	25.77
6.0	30.3	4.05	14.58	31.3	4.49	16.15	32.1	5.10	18.37	33.2	6.20	22.30	34.3	7.49	26.96
6.5	30.7	4.22	15.17	32.0	4.67	16.83	32.8	5.30	19.07	33.8	6.45	23.21	35.0	7.81	28.11
6.9	31.1	4.35	15.65	32.3	4.82	17.35	33.2	5.50	19.81	34.1	6.64	23.89	35.4	8.06	29.00

### Straight Bore Nozzle (SBN-5) and Spreader (LAN-1-20) Performance\* METRIC

bar @ Nozzle	NOZZLE SIZE (Stream Height: 4.3m)														
	8.7 mm x 5.56 mm (11/32" x 7/32") 20°			9.5 mm x 5.56 mm (3/8" x 7/32") 20°			10.3 mm x 5.56 mm (13/32" x 7/32") 20°			11.1 mm x 5.56 mm (7/16" x 7/32") 20°			11.9 mm x 5.56 mm (15/32" x 7/32") 20°		
	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>2</sup> /h)
1.7	18.6	1.47	5.29	18.9	1.67	6.02	19.5	1.87	6.72	20.1	2.08	7.47	20.1	2.30	8.27
2.0	19.3	1.59	5.71	19.6	1.80	6.49	20.5	2.01	7.23	20.8	2.24	8.05	21.6	2.48	8.92
2.5	20.6	1.78	6.40	21.0	2.02	7.25	22.2	2.25	8.11	22.8	2.50	9.01	23.7	2.78	10.00
3.0	21.5	1.95	7.02	22.1	2.21	7.96	23.3	2.47	8.90	23.9	2.75	9.90	24.8	3.05	10.97
3.5	22.3	2.11	7.60	22.9	2.40	8.63	24.2	2.68	9.63	24.8	2.97	10.71	25.7	3.30	11.88
4.0	23.2	2.26	8.14	23.8	2.57	9.25	25.1	2.88	10.37	25.8	3.19	11.48	26.6	3.54	12.76
4.5	24.1	2.40	8.65	24.7	2.73	9.83	25.6	3.07	11.06	26.5	3.40	12.24	27.4	3.78	13.60
5.0	24.8	2.56	9.21	25.4	2.89	10.40	25.5	3.24	11.67	27.3	3.59	12.92	28.0	3.99	14.35
5.5	25.3	2.68	9.65	26.2	3.04	10.95	27.0	3.42	12.31	28.0	3.78	13.60	28.6	4.20	15.12
6.0	26.0	2.81	10.12	26.8	3.18	11.45	27.7	3.58	12.89	28.6	3.96	14.25	29.4	4.39	15.79
6.5	26.5	2.93	10.55	27.4	3.33	11.98	28.3	3.74	13.48	29.2	4.13	14.88	29.8	4.57	16.46
6.9	26.8	3.02	10.88	27.7	3.44	12.38	28.7	3.86	13.90	29.6	4.26	15.33	30.2	4.72	16.99

\* Nozzles must be purchased separately. See chart on previous page.

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# Impact Sprinklers

## 1/2" (13mm) Full or Part Circle

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### 25BPJ-FP-ADJ 25BPJ-FP-ADJ-DA-TNT

1/2" 13mm Full or Part Circle, Brass Impact Sprinklers

- Durable brass die-cast, 'precision jet' (PJ) arm
- Stainless steel springs and fulcrum pin
- PJ arm reduces side splash

#### Features

- Chemically resistant washers
- All models include integral (to sprinkler body) break-up pin for adjustable distribution (ADJ)
- DA option also includes integral (to sprinkler body) distance control flap
- Full or Part Circle operation

#### Benefits

- Many options provide design and application flexibility
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Brass
- Trajectory Angle: 25°
- Operating Range: 30-50 psi (2.1-3.5 bar)
- Flow Rate: 3.1-5.0 gpm (0.7-1.14 m<sup>3</sup>/h)
- Radius: 38-41 ft. (11.6-12.5 meters)
- Nozzle Port: 1/8" Female NPT

#### Straight Bore Nozzle (SBN-1) Performance\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 7 ft.)			
	9/64"		5/32"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
30	38	3.10	39	3.80
35	38	3.40	39	4.10
40	39	3.60	40	4.40
45	39	3.80	40	4.70
50	40	4.00	41	5.00

#### Straight Bore Nozzle (SBN-1) Performance\* METRIC

bar@ Nozzle	NOZZLE SIZE (Stream Height: 2.1m)					
	3.57 mm (9/64")			3.97 mm (5/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
2.1	11.6	0.20	0.70	11.9	0.24	0.86
2.5	11.8	0.22	0.77	12.0	0.26	0.95
3.0	12.0	0.24	0.85	12.2	0.29	1.05
3.5	12.2	0.25	0.91	12.5	0.32	1.14



#### Part Numbers and Ordering Information

Assembled Sprinkler/Nozzle Factory Combination	
25BPJ-FP-ADJ w/SBN-1 9/64" 3.57mm	<b>A32901-09</b>
25BPJ-FP-ADJ w/SBN-1 5/32" 3.97mm	<b>A32901-10</b>
25BPJ-FP-ADJ-DA-TNT w/SBN-1 9/64" 3.57mm	<b>A34403-09</b>
25BPJ-FP-ADJ-DA-TNT w/SBN-1 5/32" 3.57mm	<b>A34403-10</b>

Nozzle Only			XX = Nozzle Size	
U.S. Standard			9/64"	5/32"
Metric			3.57 mm	3.97 mm
Brass Straight Bore Nozzle	SBN-1	<b>105780-XX</b>	<b>09</b>	<b>10</b>

Bold nozzle size number denotes the most common nozzle choice.

### 2045-PJ

1/2" 13mm Full or Part Circle, Plastic Impact Sprinkler

- Durable Delrin™ plastic, body arm, bearing sleeve, nipple and break up pin
- Stainless steel springs and fulcrum pin
- Chemically resistant washers

#### Features

- Plastic Quick Fit Nozzles
- Low Angle (10°) Nozzles available
- Integral straightening vane for greater distance
- Full or Part Circle operation

#### Benefits

- Superior chemical and grit resistance
- Smooth rotation at lower pressures
- Design flexibility
- Built to last
- Two-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1/2" (13mm) Male NPT, Plastic
- Trajectory Angle: Standard 23°  
Low Angle 10° available.
- Operating Range: 25-60 psi (1.7-4.1 bar)
- Flow Rate: 1.5-8.4 gpm (0.34-1.91 m³/h)
- Radius: 22-45 ft. (6.7-13.7 meters)
- Nozzle: QuickFit Nozzle Port

Straight Bore Nozzle (SBN-1) Performance*										
psi@ Nozzle	NOZZLE SIZE (Stream Height: 6 ft.)									
	3/32" Red		7/64" Black		1/8" Blue		5/32" Yellow		3/16" Beige	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	-	-	32	2.20	35	2.80	38	4.20	39	5.50
35	37	2.00	37	2.70	38	3.30	41	4.80	42	6.30
45	38	2.30	39	3.00	40	3.70	42	5.40	44	7.10
55	38	2.50	41	3.30	41	4.10	43	6.00	45	7.90
60	38	2.60	41	3.50	42	4.20	44	6.40	45	8.40

\*Shipped Assembled with a 1/8" (08) Straight Bore Nozzle.

Low Angle Nozzle (LAN-1)				
psi@ Nozzle	NOZZLE SIZE (Stream Height: 3 ft.)			
	7/64" Black		5/32" Yellow	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
25	22	1.5	25	3.4
35	23	1.9	29	4.0
45	25	2.1	31	4.0
55	25	2.3	32	5.0
60	25	2.4	32	5.4

Straight Bore Nozzle (SBN-1) Performance*													METRIC		
bar @ Nozzle	NOZZLE SIZE (Stream Height: 1.8m)														
	2.38 mm (3/32") Red			2.78 mm (7/64") Black			3.18 mm (1/8") Blue			3.97 mm (5/32") Yellow			4.76 mm (3/16") Beige		
	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)
1.7	-	-	-	9.8	0.14	0.5	10.7	0.18	0.64	11.6	0.26	0.95	11.9	0.35	1.25
2.0	-	-	-	10.4	0.15	0.55	11.0	0.19	0.68	11.9	0.28	1.01	12.3	0.37	1.32
2.5	11.3	0.13	0.46	11.4	0.17	0.62	11.7	0.21	0.76	12.5	0.31	1.11	12.9	0.40	1.45
3.0	11.5	0.14	0.51	11.8	0.19	0.67	12.1	0.23	0.83	12.8	0.34	1.21	13.3	0.44	1.59
3.5	11.6	0.15	0.55	12.2	0.20	0.72	12.4	0.25	0.89	13.0	0.36	1.30	13.6	0.48	1.72
4.0	11.6	0.16	0.58	12.5	0.22	0.78	12.7	0.26	0.94	13.3	0.39	1.42	13.7	0.52	1.86
4.1	11.6	0.16	0.59	12.5	0.22	0.79	12.8	0.26	0.95	13.4	0.40	1.45	13.7	0.53	1.91

Low Angle Nozzle (LAN-1-10) METRIC										
bar @ Nozzle	NOZZLE SIZE (Stream Height: 0.9m)									
	2.78 mm (7/64") Black			3.97 mm (5/32") Yellow						
	Rad. (m)	Flow (l/s)	Flow (m³/h)	Rad. (m)	Flow (l/s)	Flow (m³/h)				
1.7	6.7	0.09	0.34	7.06	0.21	0.77				
2.0	6.8	0.10	0.38	8.1	0.23	0.83				
2.5	7.1	0.12	0.44	8.9	0.26	0.92				
3.0	7.5	0.13	0.47	9.4	0.28	1.01				
3.5	7.6	0.14	0.50	9.6	0.30	1.09				
4.0	7.6	0.15	0.54	9.8	0.33	1.19				
4.1	7.6	0.15	0.54	9.8	0.34	1.23				



### Part Numbers and Ordering Information

Assembled Sprinkler/Nozzle Factory Combination	
Sprinkler with Nozzle <b>2045-PJ-AG</b>	<b>B4610008</b>

The assembled sprinkler comes with a blue 1/8" nozzle. Other nozzles are available on request at no charge.

Nozzle Only		XX = Nozzle Size					
		U.S. Standard	3/32"	7/64"	1/8"	5/32"	3/16"
		Metric	2.38 mm	2.78 mm	3.18 mm	3.97 mm	4.76 mm
Plastic Quick-Fit Straight Bore Nozzle	PQFN	<b>206592-XX</b>	06	07	<b>08</b>	10	12
Low Angle Quick-Fit Nozzle	PQLAN	<b>115902-XX</b>	-	07	-	10	-

Bold nozzle size number denotes the most common nozzle choice.

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### 35A-TNT 35A-ADJ-TNT 35A-PJ-ADJ-TNT 35A-PJ-DA-TNT

3/4" 19 mm Full or Part Circle, Brass Impact Sprinklers

- "Precision jet" (PJ) arm (35A-PJ)
- Standard spoon style arm also available (35A-TNT)
- Stainless steel springs and fulcrum pin

#### Features

- Chemically resistant washers
- ADJ-3 Nozzles have break-up pins
- DAN-3 Nozzles have a distance control flap

#### Benefits

- PJ arm reduces side splash
- Many options provide design and application flexibility
- Corrosion and grit resistant
- Available less Nozzle with standard spoon only
- Standard spoon model also available with 3/16" (#12) Nozzle
- PJ model available with 3/16" (#12) ADJ pr 3/16" (#12) DA Nozzles only
- Full or Part Circle operation
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 3/4" (19mm) Male NPT, Brass
- Trajectory Angle: 27°
- Operating Range: 30-60 psi (2.1-4.1 bar)
- Flow Rate: 3.9-7.8 gpm (0.89-1.77 m<sup>3</sup>/h)
- Radius: 42-51 ft. (12.8-15.5 meters)
- Nozzle Port: 1/4" Female NPT



Brass Straight Bore Nozzle (ADJN-3) or (DAN-3)						
psi@ Nozzle	NOZZLE SIZE (Stream Height: 9 ft.)					
	5/32"		11/64"		3/16"	
	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)	Rad. (ft.)	Flow (gpm)
30	42	3.90	43	4.60	44	5.50
35	43	4.20	44	5.00	46	6.00
40	44	4.50	45	5.40	47	6.40
45	44	4.70	46	5.70	48	6.80
50	45	5.00	47	6.00	49	7.20
55	45	5.20	48	6.30	50	7.50
60	46	5.40	48	6.60	51	7.80

Brass Straight Bore Nozzle (ADJN-3) or (DAN-3) METRIC									
bar @ Nozzle	NOZZLE SIZE (Stream Height: 2.7m)								
	3.97 mm (5/32")			4.37 mm (11/64")			4.76 mm (3/16")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
2.1	12.8	0.25	0.89	13.1	0.29	1.04	13.4	0.35	1.25
2.5	13.2	0.27	0.97	13.5	0.32	1.16	14.1	0.38	1.39
3.0	13.4	0.29	1.05	13.9	0.35	1.27	14.5	0.42	1.52
3.5	13.7	0.32	1.14	14.4	0.38	1.37	15.0	0.46	1.65
4.0	13.9	0.34	1.21	14.6	0.41	1.47	15.4	0.48	1.74
4.1	14.0	0.34	1.23	14.6	0.42	1.50	15.5	0.49	1.77

#### Part Numbers and Ordering Information

Sprinkler			
35A-TNT Sprinkler without Nozzle	<b>A39200</b>	35A-ADJ-TNT Sprinkler with ADJN-3	<b>A38820-12</b>
35A-TNT Sprinkler with KHN-3	<b>A38810-12</b>	35A-PJ-ADJ-TNT Sprinkler with ADJN-3	<b>A40613-12</b>
35A-PJ-TNT Sprinkler without Nozzle	<b>A39400</b>	35A-PJ-DA-TNT Sprinkler with DAN-3	<b>A40614-12</b>

Nozzle Only		XX = Nozzle Size			
		U.S. Standard	5/32"	11/64"	3/16"
		Metric	3.97 mm	4.37 mm	4.76 mm
Brass Straight Bore Adjustable Nozzle	ADJN-3	<b>100328-XX</b>	10	11	<b>12</b>
Brass Adjustable Do-All Nozzle	DAN-3	<b>100332-XX</b>	10	—	<b>12</b>
Brass Keyhole Nozzle	KHN-3	<b>106353-XX</b>	10	11	

Bold nozzle size number denotes the most common nozzle choice.



# Impact Sprinklers

## 1" (25mm) Full or Part Circle



### 65PJ

1" 25 mm Full or Part Circle, Brass Impact Sprinkler

- Heavy duty brass construction
- 1" Female NPT Bearing
- "Precision jet" (PJ) arm

#### Features

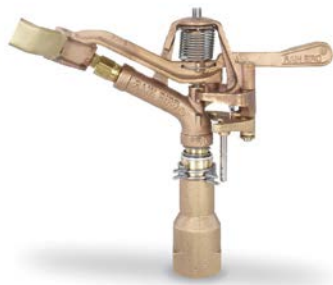
- Stainless steel springs and fulcrum pin
- Chemically resistant washers
- ADJN-4 Nozzles include integral to Nozzle break-up pin
- Full or Part Circle operation

#### Benefits

- PJ arm reduces side splash
- Many options provide design and application flexibility
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1" (25mm) Female NPT, Brass
- Trajectory Angle: 27°
- Operating Range: 50-80 psi (3.5-5.5 bar)
- Flow Rate: 12.9-16.5 gpm (2.93-3.75 m<sup>3</sup>/h)
- Radius: 57-65 ft. (17.4-19.8 meters)
- Nozzle Port: 3/8" Female NPT



Adjustable Straight Bore Nozzle (ADJN-4) Performance		
psi@ Nozzle	NOZZLE SIZE (Stream Height: 9.5 - 14 ft.)	
	1/4"	
	Rad. (ft.)	Flow (gpm)
50	57	12.90
55	57	13.60
60	58	14.20
65	62	14.80
70	63	15.40
75	64	16.00
80	65	16.50

Available without Nozzle or assembled with a 1/4" (16) Straight Bore Nozzle.

Adjustable Straight Bore Nozzle (ADJN-4) Performance			METRIC
bar@ Nozzle	NOZZLE SIZE (Stream Height: 2.9 - 4.3 m)		
	6.35 mm (1/4")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
3.5	17.4	0.82	2.93
4.0	17.9	0.88	3.16
4.5	18.5	0.93	3.37
5.0	19.2	0.99	3.55
5.5	19.8	1.04	3.75

#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>AG2001</b>

Assembled Sprinkler/Nozzle Factory Combination	
Sprinkler with Nozzle	
<b>65PJ-ADJ-TNT</b>	<b>A4200316</b>

Nozzle Only		XX = Nozzle Size	
		U.S. Standard	1/4"
		Metric	6.35 mm
Brass Straight Bore Adjustable Nozzle	<b>ADJN-4</b>	<b>100385-XX</b>	<b>16</b>

Bold nozzle size number denotes the most common nozzle choice.

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# Impact Sprinklers

## 1 1/4" (32mm) Full or Part Circle

### 85EHD Tough Bird®

1 1/4" 32 mm Full or Part Circle,  
Brass Impact Sprinklers

- Heavy duty brass construction
- Stainless steel wear buttons, springs and fulcrum pin
- Locking stainless steel trip collars

#### Features

- Chemically resistant washers
- Full or Part Circle operation

#### Benefits

- Internal straightening vane increases distance of throw
- Stainless steel buttons protect trip mechanism from wear
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1 1/4" (32mm) Male NPT, Brass
- Trajectory Angle: 23°
- Operating Range: 25-100 psi (1.7-6.9 bar)
- Flow Rate: 17.1-127.7 gpm (3.88-29 m³/h)
- Radius: 61-116 ft. (18.6-35.4 meters)
- Nozzle Port: 3/4" Female NPT
- Spreader Nozzle Port: 1/8" Female NPT

#### Straight Bore Nozzle (SBN-5) with Plug Performance\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 14 ft.)									
	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)
25	61 17.10	62 20.30	64 23.40	66 26.70	66 30.30	66 33.80	66 37.10	66 42.30	66 51.50	66 61.90
30	64 18.80	65 22.30	68 25.70	69 29.30	72 33.20	73 37.10	73 40.80	73 46.40	73 56.50	73 68.10
35	67 20.30	68 24.10	72 27.80	74 31.70	77 35.90	79 40.10	79 44.10	79 50.20	79 61.10	79 73.80
40	69 21.80	71 25.80	75 29.70	77 33.90	80 38.50	83 42.90	83 47.20	86 53.70	86 65.40	86 79.20
45	71 23.10	73 27.40	77 31.60	79 36.00	82 40.80	85 45.60	88 50.10	90 57.10	92 69.50	92 84.20
50	73 24.40	75 28.90	79 33.30	81 38.00	84 43.10	87 48.10	90 52.90	94 60.20	95 73.30	97 88.90
55	75 25.50	77 30.30	81 34.90	83 39.70	86 45.30	89 50.30	92 55.60	96 63.20	99 77.30	100 93.50
60	77 25.80	79 30.80	83 35.90	86 41.60	88 47.40	91 53.00	94 58.80	97 65.50	101 80.10	104 97.80
65	79 26.90	81 32.00	84 37.40	87 43.30	90 49.90	93 55.30	96 61.20	99 69.40	102 84.40	106 102.00
70	81 28.10	83 33.30	86 38.90	89 45.10	91 51.40	94 57.50	98 63.50	101 72.20	104 87.80	108 106.00
75	82 29.20	84 34.50	87 40.30	90 46.80	93 53.30	96 59.60	99 65.80	102 74.90	105 91.00	109 109.90
80	83 30.40	86 35.70	89 41.80	92 48.40	94 55.10	97 61.60	101 68.10	104 77.50	107 94.10	110 113.70
85	85 31.50	87 37.00	90 43.20	93 50.00	96 56.90	99 63.50	102 70.30	105 80.00	108 97.10	112 117.30
90	86 32.70	89 38.30	92 44.60	95 51.50	97 58.50	100 65.30	104 72.40	106 82.20	110 99.90	113 120.90
95	87 33.90	90 39.50	93 46.00	96 53.00	98 60.00	101 67.10	105 74.40	108 84.30	111 102.60	115 124.30
100	88 34.00	91 40.70	94 47.40	97 54.50	99 61.50	102 68.90	106 76.40	109 87.20	112 105.20	116 127.70

#### Straight Bore Nozzle (SBN-5) and Spreader (LAN-1-20) Performance\*

psi@ Nozzle	NOZZLE SIZE (Stream Height: 14 ft.)				
	11/32" x 7/32-20"	3/8" x 7/32-20"	13/32" x 7/32-20"	7/16" x 7/32-20"	15/32" x 7/32-20"
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)
25	61 23.30	62 26.50	64 29.60	66 32.90	66 36.40
30	64 25.60	65 29.10	68 32.40	69 36.10	72 40.00
35	67 27.70	68 31.40	72 35.10	74 39.00	77 43.30
40	69 29.60	71 33.60	75 37.60	77 41.80	80 46.30
45	71 31.50	73 35.70	77 39.90	79 44.40	82 49.20
50	73 33.20	75 37.70	79 42.10	81 46.80	84 51.90
55	75 34.90	77 39.70	81 44.30	83 49.10	86 54.70
60	77 36.50	79 41.40	83 46.60	86 51.50	88 57.20
65	79 38.00	81 43.20	84 48.60	87 53.80	90 59.80
70	81 40.10	83 44.90	86 50.40	89 55.90	91 62.10
75	82 41.00	84 46.70	87 52.40	90 57.90	93 64.30
80	83 42.60	86 48.30	89 54.30	92 60.00	94 66.70
85	85 43.80	87 49.80	90 56.00	93 62.00	96 68.80
90	86 45.70	89 51.40	92 57.90	95 63.90	97 70.70
95	87 46.60	90 53.00	93 59.60	96 65.80	98 72.80
100	88 47.90	91 54.50	94 61.20	97 67.50	99 74.80



\* Nozzles must be purchased separately.  
See Chart below.

#### Part Numbers and Ordering Information

Sprinkler Only		Nozzle Only		XX = Nozzle Size										
Sprinkler without Nozzle without Plug	<b>A23600</b>	U.S. Standard		7/32"	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"
		Metric		5.56mm	8.7mm	9.5mm	10.3mm	11.1mm	11.9mm	12.7mm	13.5mm	14.3mm	15.9mm	17.5mm
Brass Straight Bore Nozzle	SBN-5	<b>103043-XX</b>		—	<b>22</b>	<b>24</b>	<b>26</b>	<b>28</b>	<b>30</b>	<b>32</b>	<b>34</b>	<b>36</b>	<b>40</b>	<b>44</b>
Brass 20° Low Angle Spreader Nozzle	LAN-1-20	<b>100226-XX</b>	<b>14</b>	—	—	—	—	—	—	—	—	—	—	—
1/8" Male NPT Plug for Spreader port		<b>100255</b>												

Bold nozzle size number denotes the most common nozzle choice.

# Impact Sprinklers

## 1 1/4" (32mm) Full or Part Circle



### Straight Bore Nozzle (SBN-5) with Plug Performance\* METRIC

bar @ Nozzle	NOZZLE SIZE (Stream Height: 4.3m)														
	8.7 mm (11/32")			9.5 mm (3/8")			10.3 mm (13/32")			11.1 mm (7/16")			11.9 mm (15/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	18.6	1.08	3.88	18.9	1.28	4.61	19.5	1.48	5.31	20.1	1.68	6.06	20.1	1.91	6.88
2.0	19.3	1.16	4.19	19.6	1.38	4.97	20.5	1.59	5.73	20.8	1.82	6.53	21.6	2.06	7.41
2.5	20.6	1.30	4.69	21.0	1.55	5.57	22.2	1.78	6.42	22.8	2.03	7.32	23.7	2.31	8.30
3.0	21.5	1.43	5.16	22.1	1.70	6.11	23.3	1.96	7.05	23.9	2.23	8.03	24.8	2.53	9.11
3.5	22.3	1.55	5.58	22.9	1.84	6.61	24.2	2.12	7.62	24.8	2.41	8.69	25.7	2.74	9.86
4.0	23.2	1.62	5.83	23.8	1.93	6.95	25.1	2.24	8.06	25.8	2.58	9.27	26.6	2.94	10.57
4.5	24.1	1.70	6.12	24.7	2.02	7.28	25.6	2.36	8.51	26.5	2.74	9.85	27.4	3.15	11.35
5.0	24.8	1.81	6.51	25.4	2.14	7.70	26.4	2.50	8.99	27.3	2.90	10.43	28.0	3.30	11.89
5.5	25.3	1.91	6.89	26.2	2.25	8.09	27.1	2.63	9.47	28.0	3.05	10.97	28.6	3.47	12.49
6.0	26.0	2.02	7.26	26.8	2.37	8.52	27.7	2.76	9.94	28.6	3.19	11.49	29.4	3.63	13.07
6.5	26.5	2.13	7.66	27.4	2.48	8.93	28.3	2.89	10.40	29.2	3.33	11.98	29.8	3.77	13.57
6.9	26.8	2.15	7.72	27.7	2.57	9.24	28.7	2.99	10.77	29.6	3.44	12.38	30.2	3.88	13.97

bar @ Nozzle	NOZZLE SIZE (Stream Height: 4.3m)														
	12.7 mm (1/2")			13.5 mm (17/32")			14.3 mm (9/16")			15.9 mm (5/8")			17.5 mm (11/16")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	20.1	2.13	7.68	20.1	2.34	8.43	20.1	2.67	9.61	20.1	3.25	11.70	20.1	3.91	14.06
2.0	21.8	2.30	8.27	21.8	2.53	9.10	21.8	2.87	10.35	21.8	3.50	12.60	21.8	4.22	15.18
2.5	24.4	2.57	9.26	24.4	2.83	10.19	24.6	3.22	11.60	24.6	3.92	14.12	24.6	4.74	17.06
3.0	25.7	2.83	10.17	26.4	3.11	11.18	27.1	3.54	12.73	27.5	4.31	15.50	27.5	5.22	18.78
3.5	26.6	3.05	11.00	27.5	3.36	12.10	28.7	3.83	13.77	29.1	4.66	16.78	29.7	5.65	20.34
4.0	27.5	3.27	11.79	28.4	3.63	13.06	29.4	4.07	14.66	30.5	4.98	17.93	31.2	6.06	21.82
4.5	28.4	3.49	12.58	29.3	3.87	13.92	30.2	4.39	15.79	31.1	5.33	19.20	32.3	6.45	23.21
5.0	29.0	3.69	13.29	30.0	4.08	14.68	30.9	4.64	16.70	31.8	5.64	20.30	33.1	6.81	24.51
5.5	29.5	3.88	13.96	30.7	4.29	15.44	31.7	4.88	17.57	32.6	5.93	21.33	33.5	7.16	25.77
6.0	30.3	4.05	14.58	31.3	4.49	16.15	32.1	5.10	18.37	33.2	6.20	22.30	34.3	7.49	26.96
6.5	30.7	4.22	15.17	32.0	4.67	16.83	32.8	5.30	19.07	33.8	6.45	23.21	35.0	7.81	28.11
6.9	31.1	4.35	15.65	32.3	4.82	17.35	33.2	5.50	19.81	34.1	6.64	23.89	35.4	8.06	29.00

### Straight Bore Nozzle (SBN-5) and Spreader (LAN-1-20) Performance\* METRIC

bar @ Nozzle	NOZZLE SIZE (Stream Height: 4.3m)														
	8.7 mm x 5.56 mm (11/32" x 7/32") 20°			9.5 mm x 5.56 mm (3/8" x 7/32") 20°			10.3 mm x 5.56 mm (13/32" x 7/32") 20°			11.1 mm x 5.56 mm (7/16" x 7/32") 20°			11.9 mm x 5.56 mm (15/32" x 7/32") 20°		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	18.6	1.47	5.29	18.9	1.67	6.02	19.5	1.87	6.72	20.1	2.08	7.47	20.1	2.30	8.27
2.0	19.3	1.59	5.71	19.6	1.80	6.49	20.5	2.01	7.23	20.8	2.24	8.05	21.6	2.48	8.92
2.5	20.6	1.78	6.40	21.0	2.02	7.25	22.2	2.25	8.11	22.8	2.50	9.01	23.7	2.78	10.00
3.0	21.5	1.95	7.02	22.1	2.21	7.96	23.3	2.47	8.90	23.9	2.75	9.90	24.8	3.05	10.97
3.5	22.3	2.11	7.60	22.9	2.40	8.63	24.2	2.68	9.63	24.8	2.97	10.71	25.7	3.30	11.88
4.0	23.2	2.26	8.14	23.8	2.57	9.25	25.1	2.88	10.37	25.8	3.19	11.48	26.6	3.54	12.76
4.5	24.1	2.40	8.65	24.7	2.73	9.83	25.6	3.07	11.06	26.5	3.40	12.24	27.4	3.78	13.60
5.0	24.8	2.56	9.21	25.4	2.89	10.40	25.5	3.24	11.67	27.3	3.59	12.92	28.0	3.99	14.35
5.5	25.3	2.68	9.65	26.2	3.04	10.95	27.0	3.42	12.31	28.0	3.78	13.60	28.6	4.20	15.12
6.0	26.0	2.81	10.12	26.8	3.18	11.45	27.7	3.58	12.89	28.6	3.96	14.25	29.4	4.39	15.79
6.5	26.5	2.93	10.55	27.4	3.33	11.98	28.3	3.74	13.48	29.2	4.13	14.88	29.8	4.57	16.46
6.9	26.8	3.02	10.88	27.7	3.44	12.38	28.7	3.86	13.90	29.6	4.26	15.33	30.2	4.72	16.99

\* Nozzles must be purchased separately. See chart on previous page.

DRIP IRRIGATION

MICRO IRRIGATION

LOW FLOW IRRIGATION

IMPACT SPRINKLERS

MONITORING & CONTROLS

FILTRATION

# Impact Sprinklers

## 1 1/4" (32mm) Full or Part Circle

### 85EHD-LA Tough Bird®

1 1/4" 32 mm Full or Part Circle,  
Brass Impact Sprinklers

- Heavy duty brass construction
- Stainless steel wear buttons, springs and fulcrum pin
- Locking stainless steel trip collars

#### Features

- Chemically resistant washers
- Full or Part Circle operation

#### Benefits

- Internal straightening vane increases distance of throw
- Stainless steel buttons protect trip mechanism from wear
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

#### Specifications

- Bearing: 1 1/4" (32mm) Male NPT, Brass
- Trajectory Angle: 17°
- Operating Range: 25-100 psi (1.7-6.9 bar)
- Flow Rate: 17.1-127.7 gpm (3.88-29.0 m<sup>3</sup>/h)
- Radius: 52-108 ft. (15.8-32.9 meters)
- Nozzle Port: 3/4" Female NPT



#### Straight Bore Nozzle (SBN-5) with Plug Performance\*

psi@ Nozzle	NOZZLE SIZE <span style="float: right;">(Stream Height: 10 ft.)</span>										
	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"	
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	
25	52 17.10	55 20.30	57 23.40	60 26.70	60 30.30	60 33.80	60 37.10	60 42.30	60 51.50	60 61.90	
30	57 18.80	59 22.30	62 25.70	63 29.30	65 33.20	67 37.10	67 40.80	67 46.40	67 56.50	67 68.10	
35	60 20.30	62 24.10	65 27.80	67 31.70	70 35.90	71 40.10	73 44.10	73 50.20	73 61.10	73 73.80	
40	62 21.80	65 25.80	67 29.70	70 33.90	72 38.50	75 42.90	76 47.20	79 53.70	79 65.40	79 79.20	
45	65 23.10	67 27.40	70 31.60	72 36.00	75 40.80	77 45.60	80 50.10	80 57.10	84 69.50	84 84.20	
50	67 24.40	69 28.90	72 33.30	74 38.00	77 43.10	79 48.10	82 52.90	84 60.20	87 73.30	88 88.90	
55	69 25.50	71 30.30	74 34.90	76 39.70	79 45.30	82 50.30	84 55.60	86 63.20	91 77.30	92 93.50	
60	71 25.80	73 30.80	76 35.90	78 41.60	81 47.40	83 53.00	86 58.80	88 66.50	93 80.70	96 97.80	
65	72 26.90	75 32.00	77 37.40	80 43.30	83 49.90	85 55.30	88 61.20	90 69.40	94 84.40	98 102.00	
70	74 28.10	77 33.30	79 38.90	82 45.10	84 51.40	87 57.50	89 63.50	92 72.20	96 87.80	100 106.00	
75	76 29.20	78 34.50	81 40.30	83 46.80	86 53.30	89 59.60	91 65.80	93 74.90	98 91.00	102 109.90	
80	77 30.40	80 35.70	82 41.80	85 48.40	88 55.10	90 61.60	93 68.10	95 77.50	99 94.10	103 113.70	
85	79 31.50	81 37.00	84 43.20	86 50.00	89 56.90	92 63.50	94 70.30	97 80.00	101 97.10	105 117.30	
90	80 32.70	83 38.30	85 44.60	88 51.50	91 58.50	93 65.30	96 72.40	98 82.20	102 99.90	106 120.90	
95	82 33.90	84 39.50	87 46.00	89 53.00	92 60.00	95 67.10	97 74.40	99 84.30	103 102.60	107 124.30	
100	83 34.00	85 40.10	88 47.40	91 54.50	93 61.50	96 68.90	98 76.40	101 87.20	105 105.20	108 127.70	

\* Nozzles must be purchased separately.  
See Chart below.

#### Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	<b>A23960</b>

Nozzle Only		XX = Nozzle Size										
		U.S. Standard	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"
		Metric	8.7mm	9.5mm	10.3mm	11.1mm	11.9mm	12.7mm	13.5mm	14.3mm	15.9mm	17.5mm
Brass Straight Bore Nozzle	SBN-5	<b>103043-XX</b>	<b>22</b>	<b>24</b>	<b>26</b>	<b>28</b>	<b>30</b>	<b>32</b>	<b>34</b>	<b>36</b>	<b>40</b>	<b>44</b>
Brass Low Pressure Nozzle	LPN-5	<b>108149-XX</b>	—	<b>24</b>	—	<b>28</b>	<b>30</b>	<b>32</b>	—	—	<b>40</b>	—

Bold nozzle size number denotes the most common nozzle choice.

DRIP IRRIGATION  
 MICRO IRRIGATION  
 LOW FLOW IRRIGATION  
 IMPACT SPRINKLERS  
 MONITORING & CONTROLS  
 FILTRATION

# Impact Sprinklers

## 1 1/4" (32mm) Full or Part Circle



### Straight Bore Nozzle (SBN-5) Performance\* METRIC

bar @ Nozzle	NOZZLE SIZE (Stream Height: 3m)														
	8.7 mm (11/32")			9.5 mm (3/8")			10.3 mm (13/32")			11.1 mm (7/16")			11.9 mm (15/32")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	15.8	1.08	3.88	16.8	1.28	4.61	17.4	1.48	5.31	18.3	1.68	6.06	18.3	1.91	6.88
2.0	17.1	1.16	4.19	17.7	1.38	4.97	18.6	1.59	5.73	19.0	1.82	6.53	19.5	2.06	7.41
2.5	18.4	1.30	4.69	19.1	1.55	5.57	20.0	1.78	6.42	20.6	2.03	7.32	21.5	2.31	8.30
3.0	19.5	1.43	5.16	20.2	1.70	6.11	21.1	1.96	7.05	21.8	2.23	8.03	22.6	2.53	9.11
3.5	20.5	1.55	5.58	21.1	1.84	6.61	22.0	2.12	7.62	22.6	2.41	8.69	23.6	2.74	9.86
4.0	21.4	1.62	5.83	22.0	1.93	6.95	22.9	2.24	8.06	23.5	2.58	9.27	24.4	2.94	10.57
4.5	22.0	1.70	6.12	22.9	2.02	7.28	23.5	2.36	8.51	24.4	2.74	9.85	25.3	3.15	11.35
5.0	22.9	1.81	6.51	23.6	2.14	7.70	24.4	2.50	8.99	25.1	2.90	10.43	25.9	3.30	11.89
5.5	23.5	1.91	6.89	24.3	2.25	8.09	25.0	2.63	9.47	25.9	3.05	10.97	26.8	3.47	12.49
6.0	24.2	2.02	7.26	24.9	2.37	8.52	25.7	2.76	9.94	26.5	3.19	11.49	27.4	3.63	13.07
6.5	24.9	2.13	7.66	25.6	2.48	8.93	26.4	2.89	10.40	27.1	3.33	11.98	28.0	3.77	13.57
6.9	25.3	2.15	7.72	25.9	2.57	9.24	26.8	2.99	10.77	27.7	3.44	12.38	28.3	3.88	13.97

bar @ Nozzle	NOZZLE SIZE (Stream Height: 3m)														
	12.7 mm (1/2")			13.5 mm (17/32")			14.3 mm (9/16")			15.9 mm (5/8")			17.5 mm (11/16")		
	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)	Rad. (m)	Flow (l/s)	Flow (m <sup>3</sup> /h)
1.7	18.3	2.13	7.68	18.3	2.34	8.43	18.3	2.67	9.61	18.3	3.25	11.70	18.3	3.91	14.06
2.0	20.0	2.30	8.27	20.0	2.53	9.10	20.0	2.87	10.35	20.0	3.50	12.60	20.0	4.22	15.18
2.5	21.9	2.57	9.26	22.5	2.83	10.19	22.7	3.22	11.60	22.7	3.92	14.12	22.7	4.74	17.06
3.0	23.3	2.83	10.17	24.0	3.11	11.18	24.3	3.54	12.73	25.1	4.31	15.50	25.1	5.22	18.78
3.5	24.2	3.05	11.00	25.1	3.36	12.10	25.7	3.83	13.77	26.7	4.66	16.78	27.0	5.65	20.34
4.0	25.2	3.27	11.79	26.0	3.63	13.06	26.6	4.07	14.66	28.1	4.98	17.93	28.8	6.06	21.82
4.5	25.9	3.49	12.58	26.8	3.87	13.92	27.5	4.39	15.79	28.7	5.33	19.20	29.9	6.45	23.21
5.0	26.8	3.69	13.29	27.4	4.08	14.68	28.2	4.64	16.70	29.6	5.64	20.30	30.8	6.81	24.51
5.5	27.4	3.88	13.96	28.3	4.29	15.44	28.9	4.88	17.57	30.2	5.93	21.33	31.4	7.16	25.77
6.0	28.2	4.05	14.58	28.9	4.49	16.15	29.7	5.10	18.37	30.9	6.20	22.30	32.1	7.49	26.96
6.5	28.9	4.22	15.17	29.5	4.67	16.83	30.1	5.30	19.07	31.3	6.45	23.21	32.6	7.81	28.11
6.9	29.3	4.35	15.65	29.9	4.82	17.35	30.8	5.50	19.81	32.0	6.64	23.89	32.9	8.06	29.00

\* Nozzles must be purchased separately. See chart on previous page.

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# Monitoring & Controls

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# Monitoring & Controls



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Rain Bird monitoring and control solutions range from simple standalone controllers to integrated systems that give growers information and control at their fingertips.

## CYCLIK™ Wireless Automatic Control System

The only Rain Bird controller that allows multiple valves to be time synchronized, providing greater flexibility and control. Connect the control module to the solenoid, and the solenoid to the valve. Now download your easily programmed irrigation schedule from the Field Transmitter to the Control Module via a weatherproof optical port. It's that easy.

### Features

- Accurate, synchronized control of up to 85 valves without control wires or AC power
- Weatherproof operation
- Simple menu-driven programming
- On/Off Control: The program is kept from operating until an 'on' command is received
- One year control module operation with one 9-volt alkaline battery

### Benefits

- Low cost installation
- Saves time, reduces errors
- Unauthorized individuals cannot change irrigation programs
- Economical automation

### Models

#### JA1100: CYCLIK CI Field Transmitter

Open and close valves in a sequence.

#### Key Features

- Works with single station control modules
- Max irrigation time is 23 hours 55 minutes
- Max valve overlap is 120 seconds
- Max 14 days between irrigation cycles
- Up to 85 control modules

#### JA 1300 : CYCLIK Micro Field Transmitter

Open and close valves at specific times per day.

#### Micro Mode A Key Features

- 1, 2, or 4 station control modules
- Stations control up to 8 start/run times a day
- Assign an independent program to each station

#### Micro Mode B Key Features

- Up to 2 irrigation operating windows per day
- 10 seconds to 99 minute run time
- 1 minute to 99 minute "soak time"



#### Additional Items

- 118253:** 2-Way Latching Solenoid
- JA3000:** 3-Way Latching Solenoid
- JA3001:** Control Module – 1 Station
- JA3002:** Control Module – 2 Stations
- JA3004:** Control Module – 4 Stations
- 71P51018:** Bracket (attach control module to valve)



## ESP-LX Series Controllers



With a large display, simple-to-use 'hand', 'off', 'auto' dial, English/Spanish language support, and extra simple programming, these controllers dramatically cut installation and troubleshooting time.

### ESP-LXD Decoder Controller

The result of 40 years of expertise and thousands of installed units, the ESP-LXD is a modern, reliable, two-wire decoder controller.

#### Controller Options

- CMLXDWOM:** ESP-LXD 50 station two wire decoder controller
- CMLXDSM75:** 75 station expansion module

#### Field Decoders

- CMLXFD101:** Between the signal line and valve
- CMLXFD102:** Between the signal line and two valves
- CMLXFD202:** Between the signal line and two valves or two pairs of valves
- CMLXSD210:** Signal line and analog or digital sensor
- CMLXLSP1:** Line surge protection



#### Features

- Two-wire run lengths up to 2.5 miles (4 km)
- Control well, boost, fertigation, and other pumps
- Proven reliability over wireless systems
- Up to 96 hours of continuous runtime
- Up to 8 simultaneous stations
- Expandable to 200 stations
- Upgradeable to remote access with web enabled device

### ESP-LXME Modular Controller

The same power, history, and functionality of the ESP-LXD in a traditionally wired solution.

#### Controller Options

- CMLXMEWOM:** ESP-LXME 8 Station controller
- CMLXMESM12:** 12 Station module
- CMLXMEFSM:** Flow Smart Module



#### Features

- Expandable from 8 to 48 stations
- Proven reliability over wireless systems
- Up to 5 simultaneous stations
- Optional Flow Smart Module
- Upgradeable to remote access with web enabled device

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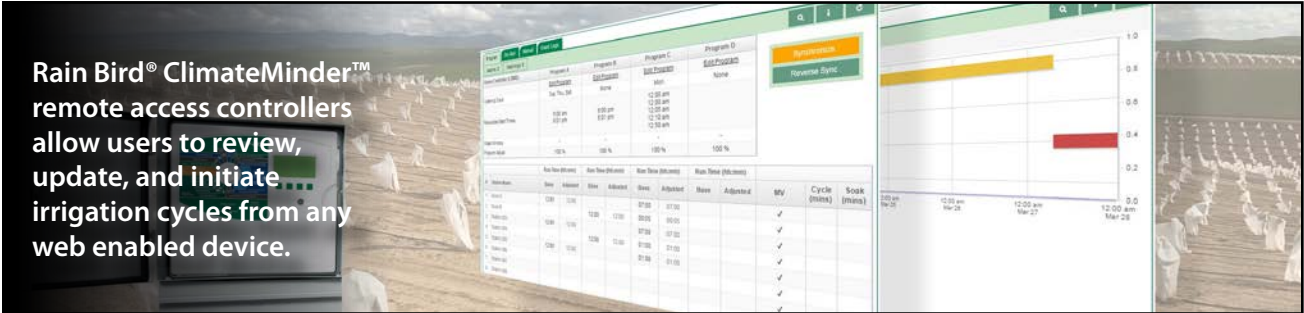
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## ESP-LX with ClimateMinder™ Control



ESP-LX with ClimateMinder™ Controls have the ease of use of the standalone ESP-LX controllers, with a plug and play cellular cartridge for remote on-demand access and to create or modify irrigation programs.

### Features

- From any web enabled device growers can:
- Create or modify irrigation programs
  - Move irrigation sets
  - Adjust the irrigation schedule for the next seven days
  - Manually start or stop a station or program
  - Check current and remaining runtimes
  - Change the controller between off, auto, or manual
  - Reverse synchronize any changes made in the field to the remote system



### Controller Options

- CMLXD:** ClimateMinder ESP-LXD 50 station two wire decoder controller with cell modem and ClimateMinder access
- CMLXME:** ClimateMinder ESP-LXME 8 station traditionally wired controller with cell modem and ClimateMinder access

### Accessories

- CMLXEXTANT:** External GPRS Antenna (optional)

*Additional options and accessories for this item are listed on the ESP-LX main page page 81.*

### Upgrade Kit to Convert Standalone ESP-LX Controllers

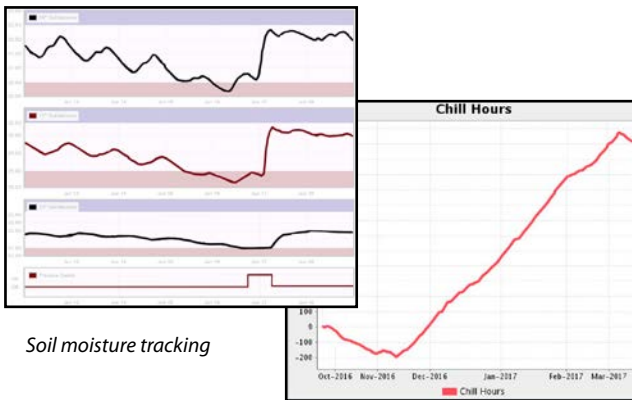
Upgrade existing ESP-LX controllers to add remote access with this simple plug and play cell modem kit. The kit contains the cell network communication cartridge and internal cellular antenna. There is an option for an external antenna if needed.

- CMLXNCCGP:** GPRS/Cellular Network Communication Cartridge with internal antenna
- CMLXEXTANT:** External GPRS Antenna (optional)

ClimateMinder™ products are sold through Authorized ClimateMinder Resellers only. For information on how to become an Authorized ClimateMinder Reseller, please contact Customer Service.

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## ClimateMinder™ Professional Monitoring



Soil moisture tracking

Monitor key indicators

### Features

- Soil moisture tracking
- Irrigation event and water infiltration tracking
- Frost alerts
- Chill hours and growing degree days
- Field level ET calculation
- Pressure and filter monitoring
- Flow monitoring and reporting
- Weekly, monthly, and annually applied water reporting
- Weather (temp, humidity, wind and rain) monitoring

### Benefits

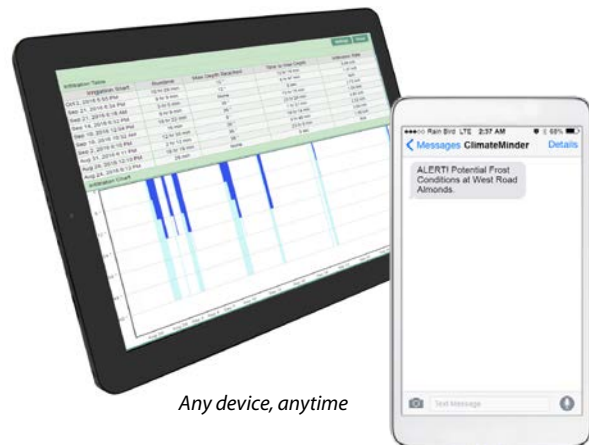
- Increase crop yield and quality
- Reduce plant stress
- Stop leaching fertilizer
- Respond instantly to frost events
- Know your flow and pressure
- Easy regulatory reporting
- Field information always available

### The Hardware

We call it the Gateway, a tower packed with sensors that accurately and reliably record and send readings to the cloud. This data is processed and the actionable results are displayed on the ClimateMinder website or sent straight to users in easy to read reports.

To expand decision making abilities, additional sensor nodes can be installed. Packed with the same sensing abilities, these nodes send data to the Gateway where it is forwarded on to the cloud.

With solar recharging batteries, self-healing network, and quality Rain Bird® soil probes, growers don't have to worry about hardware, just about what can be done with the mission critical real-time data the system provides.



Any device, anytime

Email, phone or text alerts

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ClimateMinder™ Professional Gateways (Pick One)

	Gateway Part Number	Description	Moisture Depths	Pressure Switch	Soil Temp	Temp & Humidity	Wind & Rain	Leaf Wetness	Soil EC
Weather and Soil Sensors	Rain Bird CM40 Soil Moisture Probe	CMGW305	60" (1.5m) Probe	6	X	X	X	X	-
		CMGW30548	48" (1.2m) Probe	6	X	X	X	X	-
		CMGW30540	40" (1.0m) Probe	6	X	X	X	X	-
		CMGW30532	32" (0.8m) Probe	6	X	X	X	X	-
		CMGW30524	24" (0.6m) Probe	6	X	X	X	X	-
		CMGW30516	16" (0.4m) Probe	4	X	X	X	X	-
	Other Probes	CMGW321	Two GS3 Probes	2	X	X	X	X	X
		CMGW314	Three GS3 Probes	3	X	X	X	X	X
Soil only	Rain Bird CM40 Soil Moisture Probe	CMGW310	60" (1.5m) Probe	6	X	X	-	-	-
		CMGW31048	48" (1.2m) Probe	6	X	X	-	-	-
		CMGW31040	40" (1.0m) Probe	6	X	X	-	-	-
		CMGW31032	32" (0.8m) Probe	6	X	X	-	-	-
		CMGW31024	24" (0.6m) Probe	6	X	X	-	-	-
		CMGW31016	16" (0.4m) Probe	4	X	X	-	-	-
	Other Probes	CMGW327	Two GS3 Probes	2	X	X	-	-	X
		CMGW316	Three GS3 Probes	3	X	X	-	-	X
Weather only	CMGW301	Temp and Humidity	-	-	-	X	-	-	
	CMGW302	Weather	-	-	-	X	X	X	
Telemetry Only*	CMGW3TRW	Weather Gateway	-	X	-	X	-	X	
	CMGW3TR	Soil Gateway	-	X	-	-	-	-	

ClimateMinder™ Professional Sensor Node (Optional)

	Part Number	Description	Moisture Depths	Pressure Switch	Soil Temp	Temp & Humidity	Wind & Rain	Leaf Wetness	Soil EC
Soil only	Rain Bird CM40 Soil Moisture Probe	CMSN3SM04	60" (1.5m) Probe	6	X	X	-	-	-
		CMSN3SM048	48" (1.2m) Probe	6	X	X	-	-	-
		CMSN3SM040	40" (1.0m) Probe	6	X	X	-	-	-
		CMSN3SM042	32" (0.8m) Probe	6	X	X	-	-	-
		CMSN3SM044	24" (0.6m) Probe	6	X	X	-	-	-
		CMSN3SM046	16" (0.4m) Probe	4	X	X	-	-	-
	Other Probes	CMSN3SM9	Two GS3 Probes	2	X	X	-	-	X
		CMSN3SM6	Three GS3 Probes	3	X	X	-	-	X
Weather only	CMSN3TH	Temp and Humidity	-	-	-	X	-	-	
Telemetry Only*	CMSN3TR	Mesh Tower	-	X	-	-	-	-	

\*Telemetry only units are typically used for competitive conversions where some sensors are already installed

ClimateMinder™ Professional Accessories

Part Number	Description
CMIKRPT	Signal repeater to increase reliability between mesh and gateway stations
CMIKRPTSOL	Solar charging kit for repeater includes: solar charger, battery, and solar panel
CMRPTWR	Tower assembly kit (10-12 feet total length)
CMRPYANT	Cellular modem antenna boost kit includes: antenna, 20' (6.1m) cable and SMA adapter

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## Manage Irrigation Operations at Any Time from Any Place.



### Monitor

ClimateMinder monitoring and alerts for field, weather, and crop conditions.

### Control

ClimateMinder control for remote access to update irrigation schedule.

### Report

ClimateMinder reports actionable intelligence to growers and designates.

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# Filtration

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Algae, sand, silt and other solid contaminants that are commonly found in source water will lead to plugged outlet devices, silt deposits in equipment, inoperative valves, and a significant reduction in overall irrigation system efficiency. Rain Bird offers a wide range of filtration products to resolve these problems.

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## Rain Bird Filtration Overview

Rain Bird filters keep irrigation systems free of the contaminants that degrade performance and efficiency.

### SM-Series Sand Media Filtration



One of the most efficient filtration methods for removing algae, organic matter, and other contaminants found in open reservoirs, canals and recycled water systems.

### HDF-Series Automatic Disc Filters



Used as a primary filter for small irrigation systems or a back-up for select zones, this filter removes light sand and small contaminants from surface or well water sources.

### G-Series Hydraulic Suction Scanning Filters



Powered by source line water pressure, the suction scanning screen filter provides worry free medium-flow rate filtered water quality.

### C+ Series Hydraulic Suction Scanning Filters



Utilizes a two-stage screening process; stage 1 consists of a coarse screen for oversized contaminants, stage 2 removes remaining particles, achieving filtration to at specified level.

### CS-Series Centrifugal Sand Separators



Designed to separate abrasive materials including sand, silt, and other grit particles before they enter the irrigation system.

### PSS-Series Self-Cleaning Pump Suction Screen



Removes large trash and debris from water sources that could block flow and cause damage to the pump station or irrigation equipment.

## Filtration Recommendations for Rain Bird Products

### A5 PC™ Series Dripline:

120 mesh (125 micron)

### Online Emitters:

120 mesh (125 micron)

### Sprinklers:

200 mesh (80 micron)

### Micro Bird® Spinners:

Vary by nozzle: 150 mesh (105 micron) minimum

### Micro-Quick™ Sprays:

Black 0.026" (0.66mm) - 200 mesh (74 micron)

Orange 0.033" (0.84mm) - 170 mesh (93 micron)

Blue 0.038" (0.97mm) - 150 mesh (105 micron)

Violet 0.044" (1.12mm) - 130 mesh (118 micron)

Green 0.048" (1.22mm) - 120 mesh (125 micron)

Red 0.057" (1.45mm) - 100 mesh (150 micron)

White 0.068" (1.73mm) - 80 mesh (180 micron)

- For additional support or technical questions on Rain Bird Filters, please call 877-648-9523 or email [filters@rainbird.com](mailto:filters@rainbird.com)
- To place an order for filters in the United States call (800) HELLO AG (435-5624) or, use the Toll-FREE Fax Ordering number at (800) 843-4162.
- Customers outside the U.S. can contact the International Customer Service Department at (520) 878-2400 to place an order.



## SM-Series Sand Media Filters

SM-Series Sand Media Filters provide a reliable, efficient, and long-term solution to a wide range of agriculture filtration applications. Available in carbon or stainless steel, these filters remove algae, sand, rock, grit, and other organic and inorganic contaminants and provide fine contaminant removal down to 75 microns (200 mesh).

### Features

- High strength stainless steel wedgewire underdrain with collapse resistance in excess of 600 psi (41 bar)
- Removable underdrain system feature saves both labor and time during media change-out
- Easy-entry lid closure with weld tabs for operator safety
- Exterior tank on carbon steel product is powder coated with UV stabilized polyester powder coat for longer product life and greater protection from the environment



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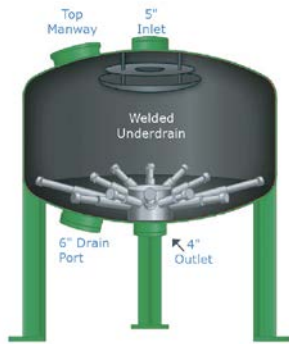
### How to Order SM-Series Media Filters

SM2	4816	5	A	S	A8	C	A3
<b>Series</b>	<b>Tank Size</b>	<b>No of Tanks</b>	<b>Style</b>	<b>Body Type</b>	<b>Controller</b>	<b>Layout Pattern</b>	<b>Mainline Connection</b>
SM2	18" x 16"	2-12	A: Automatic S: Semi-automatic	C: Carbon S: Stainless	A#: Alextronix (A2, A3, A4, A8 or A12) SY: Synergy NC: No Controller	I: Inline End Feed C: Inline Center Feed U: End Feed U B: End Feed Block H: Center Feed H	A1: Groove to Male, Steel A2: Groove to Female, Steel A3: Groove to Straight, PVC A4: Groove to Straight, Steel A5: Groove to Male, PVC

Additional options available, call for ordering instructions and support.

## SM-Series Sand Media Filters (Continued)

Four models to meet variety of needs.



### SM2

- Tank available in carbon or stainless steel
- Tank size options vary by material:
  - Carbon Steel: 14", 18", 24", 30", 36", 48"
  - Stainless Steel: 18", 24", 30", 36", 48"
- One drain port; 6" diameter for 36" and 48" tanks, all others 3" diameter
- Top manway covers vary by material and tank size
- Welded wedgewire underdrain
- Alex-Tronix controller and control box stand assembly included; AC, DC or DCL. Other options available upon request



### SM3

- Available in 36" or 48" carbon or stainless steel
- Includes one 6" diameter drain port and 11x14" elliptical side manway
- Top manway cover sizes vary by material; carbon steel 10", stainless steel 8"
- Removable stainless steel wedgewire underdrain with schedule 80 PVC hub
- Alex-Tronix controller included. Other options available upon request
- Cross flow underdrain available upon request



### SM3.5

- Available in 36" or 48" Carbon Steel
- Includes one 6" diameter drain port and 11x14" elliptical side manway
- Top manway cover: 10"
- Removable stainless steel wedgewire underdrain with schedule 80 PVC hub
- Alex-Tronix controller included. Other options available upon request
- Exterior UV powder coated and interior coated with 3M™ Scotchkote™
- Cross flow underdrain available upon request

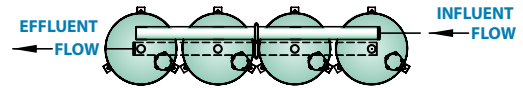


### SM4

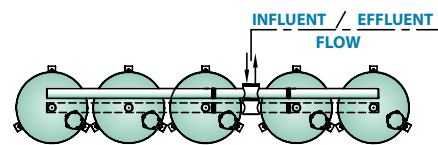
- Available in 48" Carbon Steel
- Includes two 6" diameter drain port and one 11x14" elliptical side manway
- Removable stainless steel wedgewire underdrain with schedule 80 PVC hub
- Top manway cover: 10"
- Alex-Tronix controller included. Other options available upon request
- Exterior UV powder coated and interior coated with 3M™ Scotchkote™
- Cross flow underdrain available upon request

## Layout Pattern Options

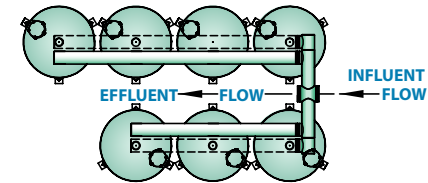
### I: Inline End Feed



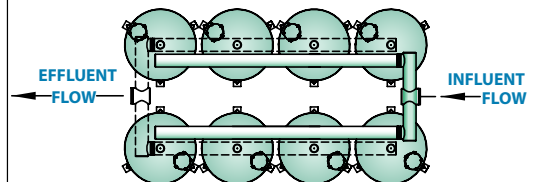
### C: Inline Center Feed



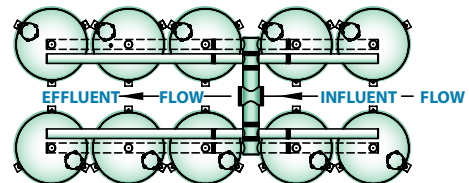
### U: End Feed U



### B: End Feed Block



### H: Center Feed H



### SM2 Automatic Sand Media Filters Performance Data

Tank Diameter (in)	Number of Tanks	Flow Rate min-max		Filtration Surface Area (ft <sup>2</sup> )	Media Required (ft <sup>2</sup> )	Max Pressure (psi)		Common Layout	Model Number	
		gpm	m <sup>3</sup> /h			Carbon	Stainless		Carbon	Stainless
14	2	37-53	8-12	2.1	2	150	100	Inline End Feed	SM2-1416-2-A-C-A2-IA3	
18	2	60-88	14-20	3.5	3	150	100	Inline End Feed	SM2-1816-2-A-C-A2-IA3	SM2-1816-2-A-S-A2-IA3
18	3	90-133	20-30	5.3	5	150	100	Inline End Feed	SM2-1816-3-A-C-A3-IA3	SM2-1816-3-A-S-A3-IA3
24	2	107-158	24-36	6.3	7	150	100	Inline End Feed	SM2-2416-2-A-C-A2-IA3	SM2-2416-2-A-S-A2-IA3
24	3	160-235	36-53	9.4	11	150	100	Inline End Feed	SM2-2416-3-A-C-A3-IA3	SM2-2416-3-A-S-A3-IA3
30	2	167-245	38-56	9.8	10	125	100	Inline End Feed	SM2-3016-2-A-C-A2-IA3	SM2-3016-2-A-S-A2-IA3
30	3	255-368	57-84	14.7	15	125	100	Inline End Feed	SM2-3016-3-A-C-A3-IA3	SM2-3016-3-A-S-A3-IA3
36	2	240-353	55-80	14.1	14	105	80	Inline End Feed	SM2-3616-2-A-C-A2-IA3	SM2-3616-2-A-S-A2-IA3
36	3	360-530	82-120	21.2	21	105	80	Inline End Feed	SM2-3616-3-A-C-A3-IA3	SM2-3616-3-A-S-A3-IA3
48	2	425-625	97-142	25	26	80	80	Inline End Feed	SM2-4816-2-A-C-A2-IA3	SM2-4816-2-A-S-A2-IA3
48	3	638-938	145-213	37.5	39	80	80	Inline End Feed	SM2-4816-3-A-C-A3-IA3	SM2-4816-3-A-S-A3-IA3
48	4	850-1250	193-284	50	52	80	80	Inline End Feed	SM2-4816-4-A-C-A4-IA3	SM2-4816-4-A-S-A4-IA3
48	5	1063-1563	242-355	62.5	65	80	80	Inline Center Feed	SM2-4816-5-A-C-A8-CA3	SM2-4816-5-A-S-A8-CA3
48	6	1275-1875	290-426	75	78	80	80	Inline Center Feed	SM2-4816-6-A-C-A8-CA3	SM2-4816-6-A-S-A8-CA3
48	7	1488-2188	338-497	87.5	91	80	80	End Feed U	SM2-4816-7-A-C-A8-UA3	SM2-4816-7-A-S-A8-UA3
48	8	1700-2500	386-568	100	104	80	80	End Feed U	SM2-4816-8-A-C-A8-UA3	SM2-4816-8-A-S-A8-UA3
48	9	1913-2813	434-639	112.5	117	80	80	Center Feed H	SM2-4816-9-A-C-A12-HA3	SM2-4816-9-A-S-A12-HA3
48	10	2125-3125	482-710	125	130	80	80	Center Feed H	SM2-4816-10-A-C-A12-HA3	SM2-4816-10-A-S-A12-HA3

### SM2 Semi-Automatic Sand Media Filters Performance Data

Tank Diameter (in)	Number of Tanks	Flow Rate min-max		Filtration Surface Area (ft <sup>2</sup> )	Media Required (ft <sup>2</sup> )	Max Pressure (psi)		Common Layout	Model Number	
		gpm	m <sup>3</sup> /h			Carbon	Stainless		Carbon	Stainless
14	2	37-53	8-12	2.1	2	150	100	Inline End Feed	SM2-1416-2-S-C-A2-IA3	
18	2	60-88	14-20	3.5	3	150	100	Inline End Feed	SM2-1816-2-S-C-A2-IA3	SM2-1816-2-S-S-A2-IA3
18	3	90-133	20-30	5.3	5	150	100	Inline End Feed	SM2-1816-3-S-C-A3-IA3	SM2-1816-3-S-S-A3-IA3
24	2	107-158	24-36	6.3	7	150	100	Inline End Feed	SM2-2416-2-S-C-A2-IA3	SM2-2416-2-S-S-A2-IA3
24	3	160-235	36-53	9.4	11	150	100	Inline End Feed	SM2-2416-3-S-C-A3-IA3	SM2-2416-3-S-S-A3-IA3
30	2	167-245	38-56	9.8	10	125	100	Inline End Feed	SM2-3016-2-S-C-A2-IA3	SM2-3016-2-S-S-A2-IA3
30	3	255-368	57-84	14.7	15	125	100	Inline End Feed	SM2-3016-3-S-C-A3-IA3	SM2-3016-3-S-S-A3-IA3
36	2	240-353	55-80	14.1	14	105	80	Inline End Feed	SM2-3616-2-S-C-A2-IA3	SM2-3616-2-S-S-A2-IA3
36	3	360-530	82-120	21.2	21	105	80	Inline End Feed	SM2-3616-3-S-C-A3-IA3	SM2-3616-3-S-S-A3-IA3
48	2	425-625	97-142	25	26	80	80	Inline End Feed	SM2-4816-2-S-C-A2-IA3	SM2-4816-2-S-S-A2-IA3
48	3	638-938	145-213	37.5	39	80	80	Inline End Feed	SM2-4816-3-S-C-A3-IA3	SM2-4816-3-S-S-A3-IA3
48	4	850-1250	193-284	50	52	80	80	Inline End Feed	SM2-4816-4-S-C-A4-IA3	SM2-4816-4-S-S-A4-IA3
48	5	1063-1563	242-355	62.5	65	80	80	Inline Center Feed	SM2-4816-5-S-C-A8-CA3	SM2-4816-5-S-S-A8-CA3
48	6	1275-1875	290-426	75	78	80	80	Inline Center Feed	SM2-4816-6-S-C-A8-CA3	SM2-4816-6-S-S-A8-CA3
48	7	1488-2188	338-497	87.5	91	80	80	End Feed U	SM2-4816-7-S-C-A8-UA3	SM2-4816-7-S-S-A8-UA3
48	8	1700-2500	386-568	100	104	80	80	End Feed U	SM2-4816-8-S-C-A8-UA3	SM2-4816-8-S-S-A8-UA3
48	9	1913-2813	434-639	112.5	117	80	80	Center Feed H	SM2-4816-9-S-C-A12-HA3	SM2-4816-9-S-S-A12-HA3
48	10	2125-3125	482-710	125	130	80	80	Center Feed H	SM2-4816-10-S-C-A12-HA3	SM2-4816-10-S-S-A12-HA3

### Parts and Accessories for SM-Series Sand Media Filters

#### Media

Media Type	Bag Volume	Ship Weight (lbs)	Item Number
Gravel Pack (#3) (1/1" - 3/4")	0.75 Cu Ft / Bag	80	148055075
S47 (#20) Filtration Media (.47mm)	1.0 Cu Ft / Bag	100	148020047
S65 (#16) Filtration Media (.65mm)	1 Supersack	100	148020016
G78 (#11) Filtration Media (.78mm)	1.0 Cu Ft / Bag	4000	148010012
G150 (#12) Filtration Media (1.5mm)	1.0 Cu Ft / Bag	100	148010008

#### Solar Pack

Solar pack is compatible with 12V DC latching solenoids and includes solar panel & battery pack, charge controller, wiring harness and enclosure box.

Description	Item Number
Solar Package with Solar Panel, Battery Pack & Accessories	252550004
12V DC Latching Solenoid compatible with Solar Package	166012300

## HDF-Series Automatic Disc Filters

Rain Bird HDF Series Automatic Disc Filters are ideal filtering surface and well water containing both organic and inorganic materials; rivers, reservoirs, canals, and well water containing light sand and other contaminants.



### Features & Specifications

- High density polyethylene manifolds which resists rust and corrosion from chemicals and water
- Preassembled for easy installation
- Filtration grades can be easily changed
- Control unit allows backwash activation by time or pressure differential
- Control units available in 12V DC, 110V AC, and 220V AC. Specify when ordering
- Standard filtration 100 micron (150 mesh). Additional options include: 130 micron (120 mesh), 200 micron (75 mesh), and 400 micron (40 mesh)
- Maximum pressure: 145psi (10 bar)
- Maximum temperature: 140°F (60°C)

### HDF-Series Automatic Disc Filters Performance Data

Number of Canisters	Manifold Size (in)	Connection Type	Filtering Surface		Model Number
			in <sup>2</sup>	cm <sup>2</sup>	
2	3	Grooved	463	2984	2X2/3G
3	4	Grooved	694	4476	3X2/4G
4	6	Grooved	925	5968	4X2/6G
5	6	Grooved	1156	7460	5X2/6G
6	6	Grooved	1388	8952	6X2/6G
7	6	Grooved	1619	10444	7X2/6G
8	8	Grooved	1850	11936	8X2/8G

### How to Order HDF-Series Automatic Disc Filters



#### No. of Canisters

- 1 - Quantity 1
- 2 - Quantity 2
- 3 - Quantity 3
- 4 - Quantity 4
- 5 - Quantity 5
- 6 - Quantity 6
- 7 - Quantity 7
- 8 - Quantity 8



#### Filter Size

X2 - 2"



#### Manifold Size (in)

- /2 - 2"
- /3 - 3"
- /4 - 4"
- /6 - 6"
- /8 - 8"



#### Connection Type

G - Grooved

## G-Series Vertical Hydraulic Suction Scanning Filters

Rain Bird G-Series Hydraulic Suction Scanning Screen Filter provides worry free medium-flow rate filtered water quality. Powered by source line water pressure, the filter's backwashing system produces a concentrated high velocity and low volume reverse water flow to systematically clean the screen of any entrapped contaminants.



### Features & Specifications

- Powder coated Carbon Steel single filter housing
- Omnitrol 150 AC or DC controller allowing filter to flush on differential pressure or time
- Includes hydraulic rinse valve. Inlet pressure during rinse cycle 35psi.
- Standard screen 200 micron (75 mesh). Additional options include: 300 micron (50 mesh), 120 micron (125 mesh), 100 micron (140 mesh). Specify screen rating when ordering
- Flow rates: 25 – 1750 gpm (5.7-397.5 m<sup>3</sup>/h)
- Working pressure: 35-150psi (2.4-10.3 bar)
- Maximum temperature: 210°F (98°C)
- Maximum operating pressure: 150 psi (10.3 bar)
- Minimum inlet pressure during rinse cycle: 30 psi (2.1 bar)

### G-Series Vertical Hydraulic Suction Scanning Filters Performance Data

Line Size (in)	Woven Screen Area (in <sup>2</sup> )	Recommended Flow Rate (gpm)				Flush Volume (gpm)	Rinse Duration (sec)	Flush Line Size (in)	Model Number
		300 micron (50 mesh)	200 micron (75 mesh)	120 micron (125 mesh)	100 micron (140 mesh)				
1	42	25	23	21	20	4 to 8	4 to 8	1	HS-V-01-LE
1.5	64	65	65	65	65	4 to 8	4 to 8	1	HS-G-105-LE
2	64	110	110	85	65	4 to 5	4 to 8	1	HS-G-02-LE
3	120	200	175	155	120	6 to 8	4 to 8	1	HS-G-03-LE
4	120	300	215	155	120	6 to 8	4 to 8	1.5	HS-G-04-LS
4	466	400	350	350	350	14 to 18	10 to 16	1.5	HS-G-04-LE
6	466	650	592	540	507	14 to 18	10 to 16	1.5	HS-G-06-LS
6	648	850	774	706	663	14 to 18	10 to 16	1.5	HS-G-06-LE
8	648	1300	1183	1079	1014	14 to 18	10 to 16	1.5	HS-G-08-LS
10	648	1750	1593	1453	1365	14 to 18	10 to 16	1.5	HS-G-10-LS

### How to Order G-Series Vertical Hydraulic Suction Scanning Filters

#### HSG

**Series**  
HSG - G Series Hydraulic Suction

#### 01

**Line Size (in)**  
01 - 1"  
015 - 1.5"  
02 - 2"  
03 - 3"  
04 - 4"  
06 - 6"  
08 - 8"  
10 - 10"

#### LE

**Length**  
LS - Length Standard  
LE - Length Extended

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## C+ Series Automatic Hydraulic Suction Scanning Filters

Rain Bird C+ Automatic Hydraulic Suction Scanning Filters provide a compact, easy to service, cost effective filtration solution. This clamp-style filter is available in a horizontal or vertical configuration and utilizes a two-stage screening process to remove oversized contaminants and small particles.



Horizontal



Vertical

### Features & Specifications

- Hydraulically driven filter, powered by line water pressure
- Clamp access to screen for easy maintenance
- 304 Stainless Steel single filter housing standard, 316 Stainless Steel optional; call for details
- Low flush volume with inlet pressure during rinse cycle 35psi.
- Available in various ratings; 300 micron (50 mesh), 200 micron (75 mesh), 120 micron (125 mesh), 100 micron (140 mesh); specify screen rating when ordering

### C+ Series Horizontal Hydraulic Suction Scanning Filter Performance Data

Line Size (in)	Sintered Screen Area (in <sup>2</sup> )	Standard Flow Rate (gpm)				Flush Volume (gpm)	Rinse Duration (sec)	Flush Line Size (in)	Model Number
		300 micron (50 mesh)	200 micron (75 mesh)	120 micron (125 mesh)	100 micron (140 mesh)				
2	432	200	200	200	200	4 to 8	4 to 8	1	HS-IC-02-A-S
3	432	300	300	300	300	4 to 8	4 to 8	1	HS-IC-03-A-S
4	432	500	500	500	500	4 to 8	4 to 8	1	HS-IC-04-A-S
6	432	600	600	600	600	4 to 8	4 to 8	1.5	HS-IC-06-A-S
2	576	200	200	200	200	6 to 10	10 to 16	1.5	HS-IC-02-B-S
3	576	300	300	300	300	6 to 10	10 to 16	1.5	HS-IC-03-B-S
4	576	500	500	500	500	6 to 10	10 to 16	1.5	HS-IC-04-B-S
6	576	1000	1000	960	920	6 to 10	10 to 16	1.5	HS-IC-06-B-S
8	576	1200	1100	960	920	6 to 10	10 to 16	1.5	HS-IC-08-B-S
2	720	200	200	200	200	6 to 10	10 to 16	1.5	HS-IC-02-C-S
3	720	300	300	300	300	6 to 10	10 to 16	1.5	HS-IC-03-C-S
4	720	500	500	500	500	6 to 10	10 to 16	1.5	HS-IC-04-C-S
6	720	1000	1000	1000	1000	6 to 10	10 to 16	1.5	HS-IC-06-C-S
8	720	1500	1375	1200	1150	6 to 10	10 to 16	1.5	HS-IC-08-C-S
10	720	1500	1375	1200	1150	6 to 10	10 to 16	1.5	HS-IC-10-C-S

### How to Order C+ Series Horizontal Hydraulic Suction Scanning Filters

**HS**

**Series**

HS - Hydraulic Suction

**IC**

**Orientation**

IC - Horizontal Clamp

**02**

**Line Size (in)**

02 - 2"  
03 - 3"  
04 - 4"  
06 - 6"  
08 - 8"  
10 - 10"

**A**

**Screen Size (in<sup>2</sup>)**

A - 432  
B - 576  
C - 720

**S**

**Material**

S - Stainless

### C+ Series Vertical Hydraulic Suction Scanning Filter Performance Data

Line Size (in)	Sintered Screen Area (in <sup>2</sup> )	Recommended Flow Rate (gpm)				Flush Volume (gpm)	Rinse Duration (sec)	Flush Line Size (in)	Model Number
		300 micron (50 mesh)	200 micron (75 mesh)	120 micron (125 mesh)	100 micron (140 mesh)				
0.75	58	50	50	50	50	1 to 4	2 to 6	1	HS-GC-075-M-S
1	58	75	75	75	75	1 to 4	2 to 6	1	HS-GC-01-M-S
1.5	58	100	96	85	80	1 to 4	2 to 6	1	HS-GC-015-M-S
2	58	100	96	85	80	1 to 4	2 to 6	1	HS-GC-02-M-S
1.5	144	150	150	150	150	3 to 5	4 to 8	1	HS-GC-015-ML-S
2	144	200	200	200	200	3 to 5	4 to 8	1	HS-GC-02-ML-S
3	144	300	275	240	230	3 to 5	4 to 8	1	HS-GC-03-ML-S
1	144	75	75	75	75	1 to 4	1 to 4	1	HS-GC-01-A-S
1.5	144	150	150	150	150	4 to 8	4 to 8	1	HS-GC-015-A-S
2	144	200	200	200	200	4 to 8	4 to 8	1	HS-GC-02-A-S
4	144	300	275	240	230	3 to 5	4 to 8	1	HS-GC-04-ML-S
3	144	200	200	200	200	4 to 8	4 to 8	1	HS-GC-03-A-S
2	288	200	200	200	200	4 to 8	4 to 8	1	HS-GC-02-B-S
3	288	300	300	300	300	4 to 8	4 to 8	1	HS-GC-03-B-S
4	288	300	400	400	400	4 to 8	4 to 8	1	HS-GC-04-B-S
2	432	200	200	200	200	4 to 8	4 to 8	1	HS-GC-02-C-S
3	432	300	300	300	300	4 to 8	4 to 8	1	HS-GC-03-C-S
4	432	500	500	500	500	4 to 8	4 to 8	1	HS-GC-04-C-S
6	432	600	600	600	600	4 to 8	4 to 8	1	HS-GC-06-C-S
3	432	300	300	300	300	6 to 10	10 to 16	1.5	HS-GC-03-L-S
4	576	500	500	500	500	6 to 10	10 to 16	1.5	HS-GC-04-L-S
8	576	600	600	600	600	4 to 8	4 to 8	1	HS-GC-08-C-S
6	576	1000	1000	960	920	6 to 10	10 to 16	1.5	HS-GC-06-L-S
4	720	500	500	500	500	6 to 10	10 to 16	1.5	HS-GC-04-X-S
6	720	1000	1000	1000	1000	6 to 10	10 to 16	1.5	HS-GC-06-X-S
8	720	1500	1375	1200	1150	6 to 10	10 to 16	1.5	HS-GC-08-X-S
10	720	1500	1375	1200	1150	6 to 10	10 to 16	1.5	HS-GC-10-X-S

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#### How to Order C+ Series Vertical Hydraulic Suction Scanning Filters

**HS**

**Series**  
HS - Hydraulic Suction

**GC**

**Orientation**  
GC - Vertical Clamp

**02**

**Line Size (in)**  
075 - 0.75"  
01 - 1"  
015 - 1.5"  
02 - 2"  
03 - 3"  
04 - 4"  
06 - 6"  
08 - 8"  
10 - 10"

**A**

**Screen Size (in<sup>2</sup>)**  
M - 58  
ML - 144  
A - 144  
B - 288  
C - 432  
L - 576  
X - 720

**S**

**Material**  
S - Stainless

## CS-Series Centrifugal Sand Separators

Rain Bird CS-Series Centrifugal Sand Separators are designed to separate abrasive particles before they can enter the irrigation system, keeping equipment clean and clear of debris to minimize the amount of maintenance required on the irrigation system and increase operational efficiency.

### Features & Specifications

- No moving parts
- 150 PSI carbon steel construction with threaded or flanged inlet/outlet connections
- Polyester powder coated for long service life
- Non-ASME code standard construction (ASME code construction available optionally)
- Capacities of 4 to 8300 gpm
- Simple installation (no electrical required)
- Efficient pre-filter to reduce sand load on downstream components
- Options include: automatic purge package, manual purge package, wall brackets, and support stands

### CS-Series Vertical Centrifugal Sand Separators Performance Data



Vertical

Inlet Size (in)	Maximum Flow Rate (gpm)	Length		Weight (lbs)	Max Particle Size (in)	Flush Valve Size (in)	Model Number
		In	cm				
0.5	10	20	50.8	13	0.625	1	VCS-R5V
0.75	20	20	50.8	15	0.375	1	VCS-R7V
1	38	30.5	77.5	26	0.5	1	VCS-R10V
1.25	52	30.5	77.5	26	0.5	1	VCS-R12V
1.5	79	30.5	77.5	26	0.5	1	VCS-R15V
2	120	36	91.4	44	0.5	2	VCS-R20V
2.5	180	44	111.8	55	0.5	2	VCS-R25V
3	260	48	121.9	75	0.5	2	VCS-R30V
4	345	52	132.1	120	0.5	2	VCS-R40V

### CS-Series Angled Centrifugal Sand Separators Performance Data



Angled

Inlet Size (in)	Maximum Flow Rate (gpm)	Length		Weight (lbs)	Max Particle Size (in)	Flush Valve Size (in)	Model Number
		In	cm				
4	525	80	221	280	1.5	2	ACS-R40LA
6	960	106.25	293.4	493	1.5	2	ACS-R60LA
8	1600	114	316.4	722	1.5	2	ACS-R80LA
10	2300	123.5	342.9	840	1.5	2	ACS-R100LA
12	3400	139	396.2	1400	1.5	2	ACS-R120LA
14	5000	148	424.2	1550	2	2	ACS-R140LA
16	6200	160	462.3	1850	2	2	ACS-R160LA
18	8300	177	462.3	2400	2	3	ACS-R180LA

### How to Order CS-Series Centrifugal Sand Separators

#### VCS

#### Series

VCS - Vertical Centrifugal Separators  
ACS - Angled Centrifugal Separators

#### R5

#### Inlet Size (in)

R5 - 0.5" R40 - 4"  
R7 - 0.75" R60 - 6"  
R10 - 1" R80 - 8"  
R12 - 1.25" R100 - 10"  
R15 - 1.5" R120 - 12"  
R20 - 2" R140 - 14"  
R25 - 2.5" R160 - 16"  
R30 - 3" R180 - 18"

#### V

#### Orientation

V - Vertical  
LA - Angled



## PSS-Series Self-Cleaning Pump Suction Screen

Rain Bird PSS Series Self- Cleaning Pump Suction Screen was designed to keep debris out of the pump and irrigation system. Water passes through the pump suction screen attached to the end of the pump suction line before entering the pump intake pipe. A small, side- stream from the pump discharge pumping drives two spray bars that continually rotate, jetting water at the screen and blasting debris away.



### Features & Specifications

- Galvanized steel body construction with removable exterior basket for service
- Recommended backwash pressure: 45psi (minimum: 22psi)
- Heavy 12 mesh stainless steel screen fabric increases the pump efficiency for years to come
- Custom mesh sizes available: 4, 8, 18, and 24
- Standard flanged connections – others adapters available upon request

### PSS-Series Self-Cleaning Pump Suction Screen Performance Data

Flange Size (in)	Max Flow Rate		Screen Length (in)	Total Length (in)	Screen Diameter (in)	Flange Size (in)	Return Inlet Pipe Size (in)	Operating Pressure min-max (psi)	Weight (lbs)	Cleaning Spray (gpm)	Model Number
	gpm	m <sup>3</sup> /h									
4	325	74	11	25	16	4	1.5	35-100	38	20	PSS200
6	550	125	15	28.8	16	6	1.5	40-100	57	20	PSS400
8	750	170	16	32.5	24	8	1.5	40-100	101	20	PSS600
10	950	216	18	34.5	24	10	1.5	45-100	108	20	PSS800
10	1350	307	23	39.5	24	10	1.5	50-100	116	24	PSS1000
12	1650	375	26	42.5	24	12	1.5	55-100	128	24	PSS1400
12	1950	443	28	44.5	26	12	1.5	55-100	148	24	PSS1700
14	2350	534	32	48.5	26	14	1.5	60-100	160	24	PSS2000
16	2600	590	35	52.5	30	16	1.5	65-100	223	28	PSS2400
16	3000	681	40	57.5	30	16	1.5	40-65	236	44	PSS3000
18	3500	795	40	59.5	36	18	1.5	50-65	283	44	PSS3500
18	4000	908	40	63.5	42	18	1.5	40-65	358	44	PSS4000

### How to Order PSS-Series Pump Suction Screens

Order using the model number noted above.

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### "M" Pressure Regulators

Accurate Pressure Regulation at an Economical Price

- Preset outlet pressure regulators
- 3/4" (20mm) female inlet and outlet
- Choice of 6 outlet pressures

#### Features and Benefits

PSI series regulators hold outlet pressure at a pre-set level. Regulated outlet pressures are available from 15 to 50 psi / 1.0 to 3.4 bar. As either inlet pressure or flow changes, the outlet pressure remains relatively constant.

- Diaphragm operated
- Use in above and below ground applications
- Manufactured from rugged engineering grade plastic

#### "M" Series

Recommended for most operating conditions. This series is designed to withstand surges up to 100 psi / 6.8 bar greater than the rated outlet pressures, where high inlet pressures are combined with high flows.

- Flow Range - 2-10 gpm (0.5-2.27 m<sup>3</sup>/hr, 0.13-0.63 l/s)

#### Models

- PSI-M

Regulated Outlet Pressure		
Model Number	US Units (psi)	Metric (bar)
PSI-M	15	1.0
	20	1.4
	25	1.7
	30	2.1
	40	2.8
	50	3.4



#### How To Specify

PSI - M - 30

Outlet Pressure  
 6 = 6 psi (0.4)  
 10 = 10 psi (0.7 bar)  
 15 = 15 psi (1.0 bar)  
 20 = 20 psi (1.4 bar)  
 25 = 25 psi (1.7 bar)  
 30 = 30 psi (2.1 bar)  
 40 = 40 psi (2.8 bar)  
 50 = 50 psi (3.4 bar)

Pressure Range  
 M = Medium Pressure

Model  
 PSI

## **RAIN BIRD'S PROFESSIONAL CUSTOMER SATISFACTION POLICY**

Rain Bird will repair or replace at no charge any Rain Bird professional product that fails in normal use within the Customer Satisfaction Policy period stated below. You must return it to the dealer or distributor where you bought it. Product failures due to acts of God including without limitation, lightning and flooding, are not covered by this Customer Satisfaction Policy. This commitment to repair or replace is our sole and total warranty.

## **IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IF APPLICABLE, ARE LIMITED TO ONE YEAR FROM THE DATE OF SALE**

Rain Bird will not under any circumstances be liable for incidental or consequential damages, no matter how they occur.

## **AGRICULTURAL PRODUCTS**

- A5 PC Pressure Compensating AG Dripline – Five Years on Product Workmanship, Seven Years on Environmental Stress Cracking
- PE Polyethylene Tubing - Seven Years on Product Workmanship, Seven Years on Environmental Stress Cracking
- LF™ and LFX™ Series Sprinklers – Five Years
- Brass Impact Sprinklers- Five Years
- Plastic Impact Sprinklers – Two Years
- All other agricultural products – One Year

## **HOW TO ORDER**

- Toll-free, 800 fax number is available exclusively for fax orders: (800) 843-4162
- Toll-free, 800 phone number is available exclusively for phone orders: (800) 435-5624
- Toll-free, Rain Bird Technical Service (RBTS): (800) 247-3782
- Customers Outside the U.S. call: (520) 878-2400
- Place orders, check pallet or carton quantities, or track shipping at [www.rainbird.com/distributor](http://www.rainbird.com/distributor)

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**Thank you for choosing Rain Bird. If you have any questions, please contact your Customer Service representative or District Sales Manager for assistance. We welcome any suggestions you may have for making your partnership with Rain Bird AG a pleasant, effective and positive experience.**



## A legacy of agricultural innovation.

Rain Bird has a rich history serving the agricultural community. Beginning in 1933 with the invention of the original horizontal action impact drive sprinkler by a Glendora, California citrus farmer (U.S. Patent #1,997,901), Rain Bird revolutionized the food production industry and ushered in a new era in irrigation, worldwide. The original impact sprinkler was designated a historic landmark in 1990 by the American Society of Agricultural Engineers.

For over eighty years, we've been developing new and innovative products that water more intelligently and our work is not done yet. Rain Bird has been awarded hundreds of patents for innovative irrigation products and technologies that are used in over 130 countries around the world to irrigate nearly every imaginable crop. Rain Bird is committed to The Intelligent Use of Water™, bringing expertise and knowledge to further increase irrigation efficiency, minimize maintenance costs and enhance the health of crops.

Visit [www.rainbird.com/ag](http://www.rainbird.com/ag) for more information.



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