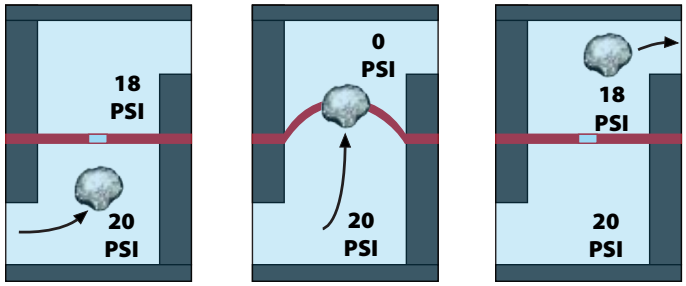
NonStop®
Drip Emitters

Product Description

The Bowsmith NonStop emitter design, patented in 1974, is based on a simple unique principle found in no other emitter. This Pressure Cascade Principle permits the emitter to tolerate large amounts of suspended solids in irrigation water, without clogging and without the need for fine-mesh filter screens.

The BOWSMiTH Principle:

NonStop Continuous Self-Cleaning Action



A Orifice Open - Low pressure across diaphragm (Approximately 2 psi)

B Momentary Blockage - High difference pressure (Up to line pressure)

C Obstruction pushed through - Low difference pressure restored

How it works

1. The flow path is a series of orifices in the silicone diaphragm.
2. In normal operation, the total pressure difference between inlet and outlet is divided equally across each of the orifices in the flow path.
   - For example: 20 psi inlet pressure, and 10 orifices in the flow path, the pressure drop across each orifice is 2 psi.
3. If an obstruction should occur in any of the orifices, the flow through that orifice will be momentarily restricted. As a result, the pressure drop across that orifice will increase, causing the orifice to enlarge until the obstruction has passed.

For over 40 years, millions of Bowsmith NonStop emitters have demonstrated that the unique NonStop Continuous Self-Cleaning Action (Pressure Cascade Principle) really works, even under conditions that would quickly clog ordinary emitters. With only 30-mesh filtration (recommended minimum), Bowsmith NonStop emitters have operated successfully with water containing heavy concentrations of sand, silt, iron bacteria "slime", calcium carbonates, even algae and moss.

This means:

- Trees & Plants will be Irrigated
- Reduction in Plant Loss and Stress
- Less Maintenance-Lower Labor Costs
- Lower Capital Investment in Filtration Equipment.

Bowsmith emitters are available in single and multi outlet models, and with flow rates of 0.6 gph, 1.0 gph, 2.0 gph, and 3.0 gph.

Notes

- 30-mesh filtration and 15 PSI emitter operating pressure are the recommended minimums for a NonStop emitter system.
- Manufacturer's variation, C_v: ≤ 0.05

"ML" Series

"SL" Series

"SB" Series

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rev.121515

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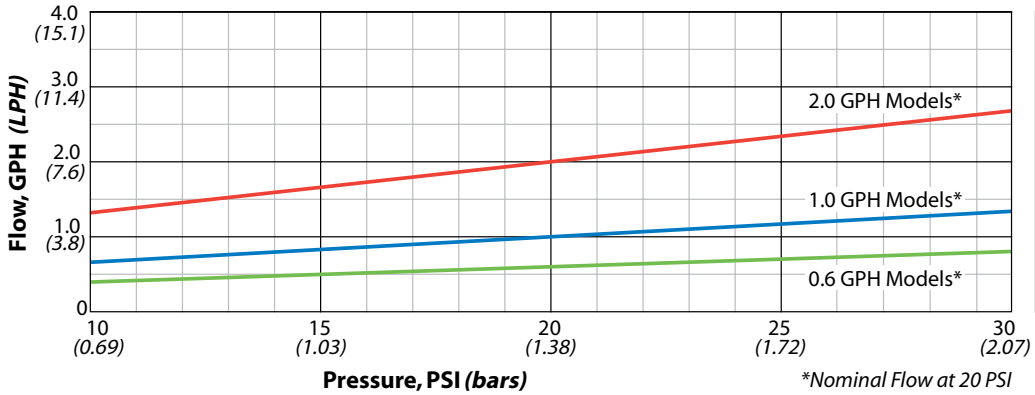
Drip Emitters

	Description	Model No.	Stock No.	Specifications–*Nominal Flow @ 20 PSI*	
"SB" Series 	Single barb outlet, 0.250" and 0.175" barbs on opposite ends; either can be used as inlet.	SB-06	6120	0.6 GPH *(2.3 LPH)*	(Green Insert)
		SB-10	6121	1.0 GPH *(3.8 LPH)*	(Blue Insert)
		SB-20	6123	2.0 GPH *(7.6 LPH)*	(Red Insert)
		SB-30	6124	3.0 GPH *(11.4 LPH)*	(Yellow Insert)
"SL200" Series 	Single outlet, ½" FPT inlet. barbed elbow outlet port.	SL206	6034	0.6 GPH *(2.3 LPH)*	(Green Port)
		SL210	6035	1.0 GPH *(3.8 LPH)*	(Blue Port)
		SL220	6036	2.0 GPH *(7.6 LPH)*	(Red Port)
		SL230	6037	3.0 GPH *(11.5 LPH)*	(Yellow Port)
"M200" Series 	6 outlets open, 0.250" barb inlet. *Includes full set of elbow/outlet caps and line plugs.*	M206	7063	0.6 GPH *(2.3 LPH)*	(Green Cap)
		M210	7064	1.0 GPH *(3.8 LPH)*	(Blue Cap)
		M220	7066	2.0 GPH *(7.6 LPH)*	(Red Cap)
"ML200" Series 	6 outlets open, ½" FPT inlet. *Includes full set of elbow/outlet caps and line plugs.*	ML206	7068	0.6 GPH *(2.3 LPH)*	(Green Cap)
		ML210	7069	1.0 GPH *(3.8 LPH)*	(Blue Cap)
		ML220	7071	2.0 GPH *(7.6 LPH)*	(Red Cap)
Series "2000" Flow Distributor 	6 outlets open, ½" FPT inlet. *Includes full set of elbow/outlet caps and line plugs.*	FD-2010	6075	1.0 GPH *(3.8 LPH)* @ 15-100 PSI	(Blue Cap)
		FD-2020	6080	2.0 GPH *(7.6 LPH)* @ 15-100 PSI	(Red Cap)
"Gripper" Series 	Single outlet, barb inlet, gripper sleeve. *•Available factory installed on Bowsmith tubing.*	NSG-06	6050	0.6 GPH *(2.3 LPH)*	(Green End)
		NSG-10	6051	1.0 GPH *(3.8 LPH)*	(Blue End)
		NSG-20	6053	2.0 GPH *(7.6 LPH)*	(Red End)
		NSG-30	6056	3.0 GPH *(11.5 LPH)*	(Yellow End)

NonStop Drip Emitters

Nominal Performance



*Nominal Flow at 20 PSI

Notes

- 30-mesh filtration and 15 PSI emitter operating pressure are the recommended minimums for a NonStop emitter system.
- Manufacturer's variation, C_v: ≤ 0.05

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Drip Emitters

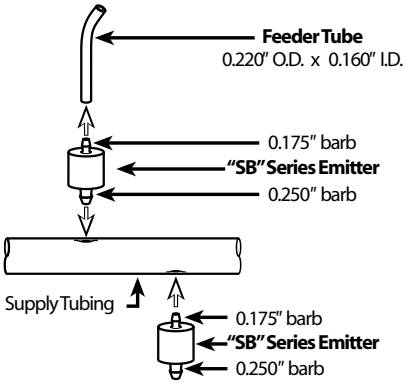
SB Series

- Single outlet.
- 0.175″ O.D. or 0.250″ O.D. inlet/outlet barb connections on opposite ends. Either can be used as outlet.
- Accessories: riser or feeder tubing for extending the emitter away from the water supply. *See the illustration, below.*

Stock No	Model No.	Nominal Flow*
6120	SB-06 (Green Insert)	0.6 GPH *(2.3 LPH)*
6121	SB-10 (Blue Insert)	1.0 GPH *(3.8 LPH)*
6123	SB-20 (Red Insert)	2.0 GPH *(7.6 LPH)*
6124	SB-30 (Yellow Insert)	3.0 GPH *(11.4 LPH)*

** Nominal Flow @ 20 PSI*

Connection / Extension Options



M200 Series

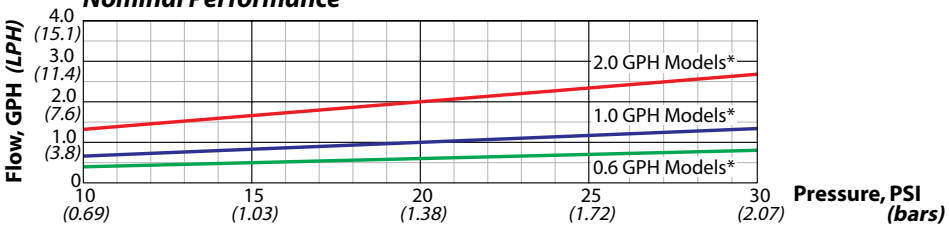
- Six open outlets. Each maintains its own flow path .
- 0.250″ barb inlet.
- Includes full set (6 each) of elbow/outlet caps, and line plugs.
  - One-piece elbow/outlet cap fixes position of elbow to prevent it from coming loose in application. 0.175″ barb for secure attachment of spreader tubing.
  - The elbow is easily reversed to cap off any unused outlets.
  - Line plugs can be placed in the end of the spreader tubes to help keep bugs out, but still allow passage of water.

Stock No	Model No.	Nominal Flow* *each open outlet*
7063	M206 (Green Cap)	0.6 GPH *(2.3 LPH)*
7064	M210 (Blue Cap)	1.0 GPH *(3.8 LPH)*
7066	M220 (Red Cap)	2.0 GPH *(7.6 LPH)*

** Nominal Flow @ 20 PSI*

NonStop Drip Emitters

Nominal Performance



Notes

- Manufacturer's variation, C_v: ≤ 0.05
- 30-mesh filtration and 15 PSI emitter operating pressure are the recommended minimums for a NonStop emitter system.

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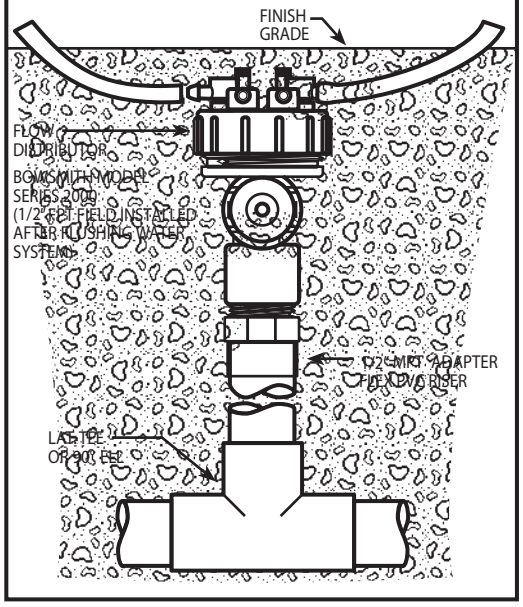
Drip Emitters

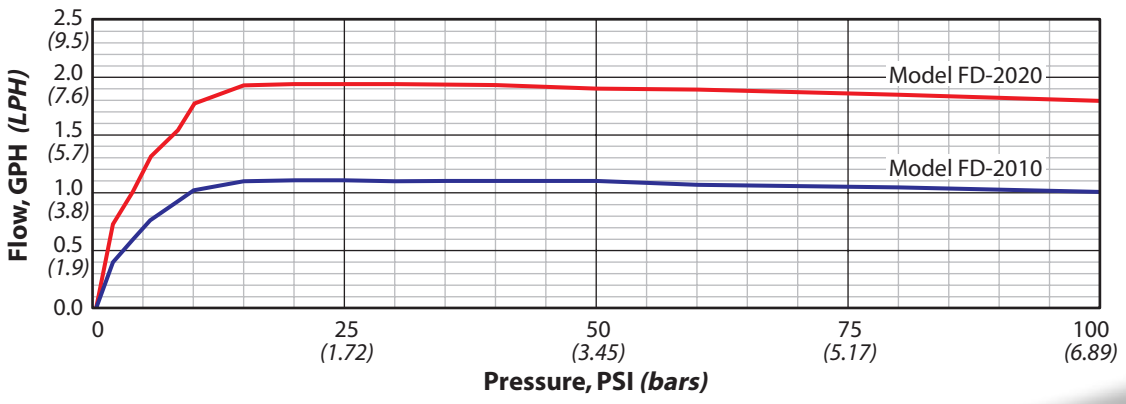
Series 2000
Flow Distributor

- Two devices in one: drip emitter and pressure regulator.
  - Pressure regulator operates on supply pressure from 15 to 100 PSI.
  - Pressure regulator valve uses durable, accurate stainless steel spring.
- Six open outlets. Each maintains its own flow path.
- ½" FPT inlet.
- Includes full set (6 each) of elbow/outlet caps, and line plugs.
  - One-piece elbow/outlet cap fixes position of elbow to prevent it from coming loose in application. 0.175" barb for secure attachment of spreader tubing.
  - The elbow is easily reversed to cap off any unused outlets.
  - Line plugs can be placed in the end of the spreader tubes to help keep bugs out, but still allow passage of water.

Stock No	Model No.	Nominal Flow*
6075	FD-2010 (Blue Cap)	1.0 GPH *(3.8 LPH)*
6080	FD-2020 (Red Cap)	2.0 GPH *(7.6 LPH)*

TYPICAL INSTALLATION





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Drip Emitters

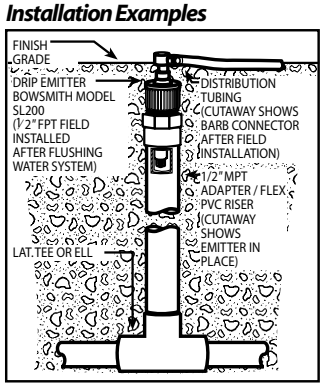
SL200 Series

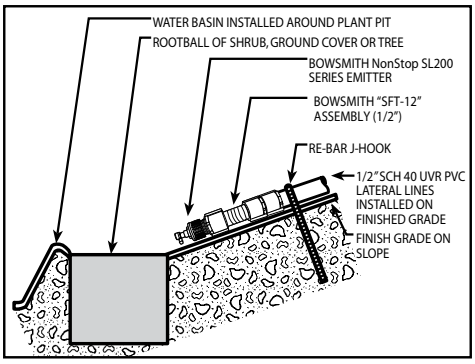
- Barbed elbow outlet port for connecting spreader tubing, if desired.
- Industry standard ½" FPT connection in cap.
- Silicone O-ring inside cap for leak-free connections.
- Constructed of tough engineering grade plastic with UV inhibitors.

Stock No	Model No.	Nominal Flow*
6034	SL206 (Green Port)	0.6 GPH *(2.3 LPH)*
6035	SL210 (Blue Port)	1.0 GPH *(3.8 LPH)*
6036	SL220 (Red Port)	2.0 GPH *(7.6 LPH)*
6037	SL230 (Yellow Port)	3.0 GPH *(11.4 LPH)*

** Nominal Flow @ 20 PSI*

Installation Examples





ML200 Series

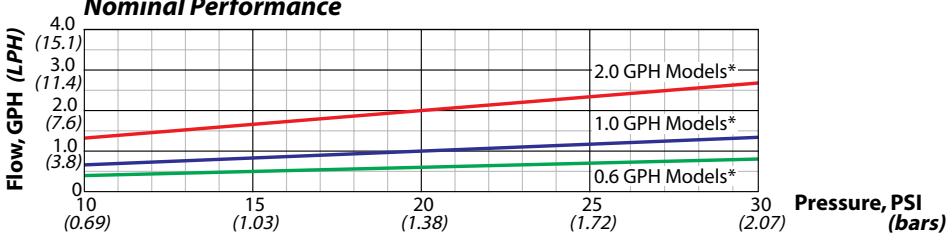
- Six open outlets. Each maintains its own flow path .
- ½" FPT inlet.
- Includes full set (6 each) of elbow/outlet caps, and line plugs.
  - One-piece elbow/outlet cap fixes position of elbow to prevent it from coming loose in application. 0.175" barb for secure attachment of spreader tubing.
  - The elbow is easily reversed to cap off any unused outlets.
  - Line plugs can be placed in the end of the spreader tubes to help keep bugs out, but still allow passage of water.

Stock No	Model No.	Nominal Flow* *each open outlet*
7068	ML206 (Green Cap)	0.6 GPH *(2.3 LPH)*
7069	ML210 (Blue Cap)	1.0 GPH *(3.8 LPH)*
7071	ML220 (Red Cap)	2.0 GPH *(7.6 LPH)*

** Nominal Flow @ 20 PSI*

NonStop Drip Emitters

Nominal Performance



Notes

- Manufacturer's variation, C_v: ≤0.05
- 30-mesh filtration and 15 PSI emitter operating pressure are the recommended minimums for a NonStop emitter system.

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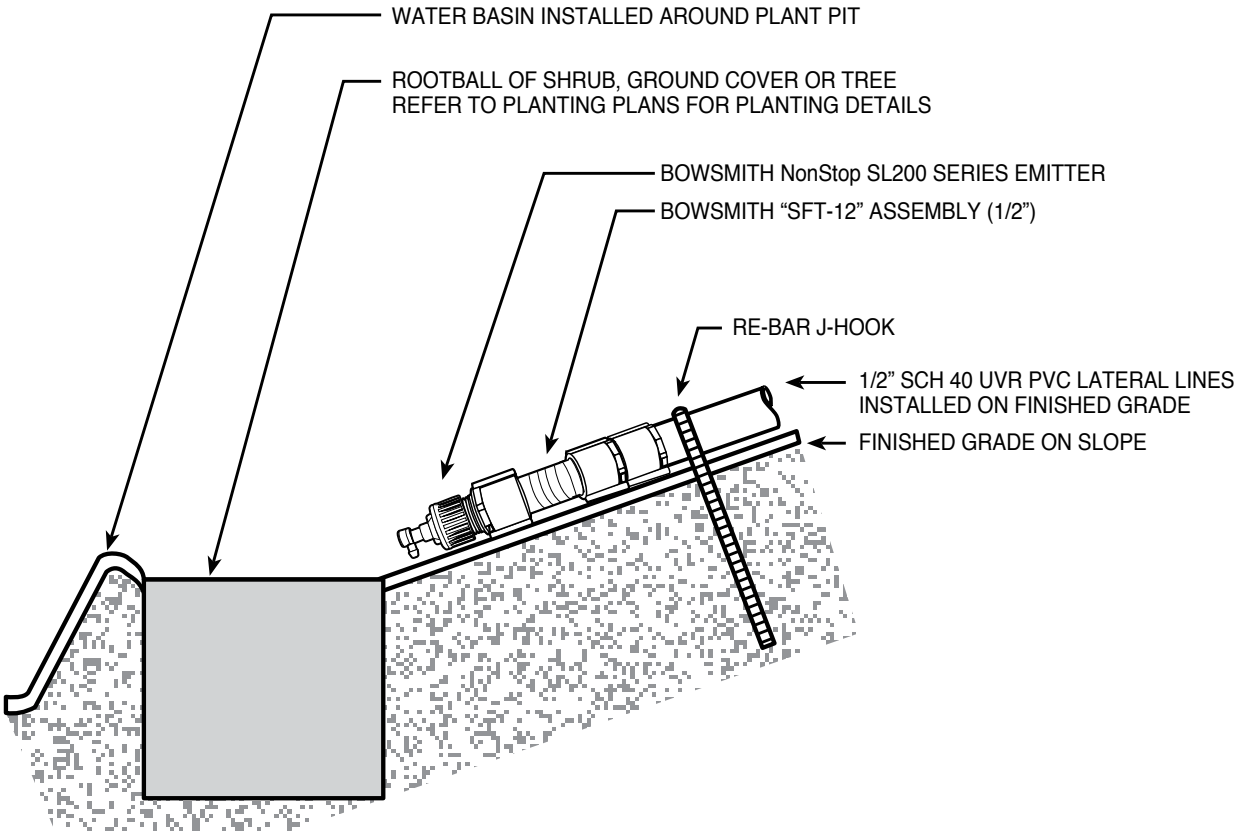
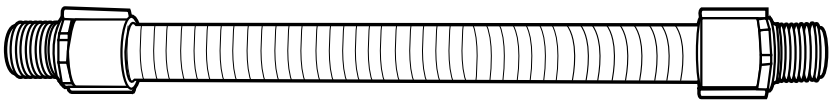
BOWSMITH®

NonStop®
Drip Emitters
Typical Installation Examples

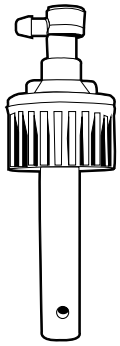
TYPICAL INSTALLATION



BOWSMITH "SUPER FLEX" TUBE ASSEMBLY



BOWSMITH "SL200" EMITTER



NOTE:
DRIP EMITTER SHALL BE PLACED TO DROP 8"-12" UPHILL FROM ROOTBALL.

PVC LATERAL SUPPLY LINES SHALL RUN PARALLEL TO SLOPE WITH DRIP EMITTER LINES RUN PERPENDICULAR TO SLOPE AS SHOWN ABOVE.

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rev.080615

Tru-Flo™
Drip Emitters

Product Description

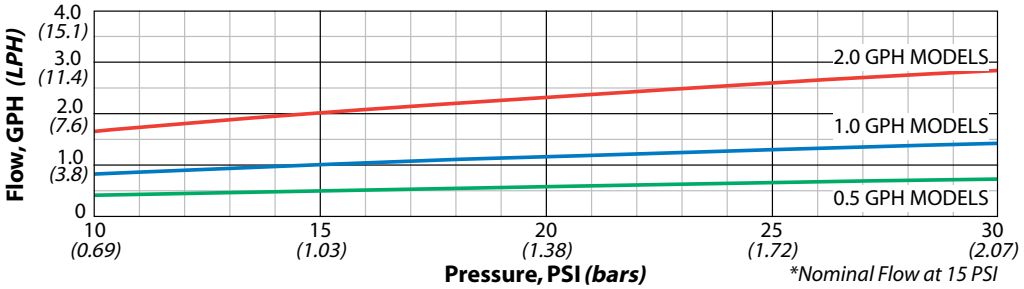
The Tru-Flow mechanism is a moderately priced alternative to Bowsmith NonStop emitter, ideal for irrigation systems where the levels of suspended solids are not as severe as those requiring the unmatched clog resistance of the NonStop. With their exceptionally large flow passages, Tru-Flo emitters outperform virtually all fixed orifice and pressure compensating emitters made by other manufacturers.

Long, tortuous flow path with big cross-section allows passage of large particles and creates turbulence to keep fine particles moving through the emitter.

	Description	Model No.	Specifications
"Gripper" Series 	Single outlet, barb inlet, gripper sleeve. • *Available factory installed on Bowsmith tubing.*	TFG-05	0.5 GPH *(1.9 LPH)** (Green End)
		TFG-10	1.0 GPH *(3.8 LPH)** (Blue End)
		TFG-20	2.0 GPH *(7.6 LPH)** (Red End)
"Shur-Lok"™ Series 	Single outlet, twin barb connection.	TFS-05	0.5 GPH *(1.9 LPH)** (Green End)
		TFS-10	1.0 GPH *(3.8 LPH)** (Blue End)
		TFS-20	2.0 GPH *(7.6 LPH)** (Red End)
"VGT" Series  	Single outlet, single barb connection. Clip/wire retention hook for vine trellis wire installations. *Model numbers ending with "-7" fit Bowsmith 700 series size tubing. Those ending with "-8" fit Bowsmith 800 series size tubing.*	VGT-05-7	0.5 GPH *(1.9 LPH)** (Green End)
		VGT-10-7	1.0 GPH *(3.8 LPH)** (Blue End)
		VGT-20-7	2.0 GPH *(7.6 LPH)** (Red End)
		VGT-05-8	0.5 GPH *(1.9 LPH)** (Green End)
		VGT-10-8	1.0 GPH *(3.8 LPH)** (Blue End)
		VGT-20-8	2.0 GPH *(7.6 LPH)** (Red End)

**Nominal Flow @ 15 PSI*
See Nominal Performance graphs for these models on following pages.

Tru-Flo Drip Emitters
Nominal Performance



**Nominal Flow at 15 PSI*

Notes

- Manufacturer's variation, C_v: ≤ 0.02
- Avg. Emitter Exponent= 0.5

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BOWSMITH®

Tru-Flo™
Drip Emitters

"Gripper" — TFG Series

- Integral wraparound "Gripper" sleeve keeps emitter securely attached on the tubing during handling, shipping, installation and use.
- Available in standard packaging for hand installation, or pre-installed on Bowsmith tubing for far less than the cost of installation by hand.
- Recommended tubing sizes: 0.625" to 0.835" O.D.
- Top quality, UV resistant polypropylene casing enhances durability.

Stock No	Model No.	Nominal Flow*
6090	TFG-05 (Green End)	0.5 GPH *(1.9 LPH)*
6091	TFG-10 (Blue End)	1.0 GPH *(3.8 LPH)*
6092	TFG-20 (Red End)	2.0 GPH *(7.6 LPH)*

** Nominal Flow @ 15 PSI*

"Shur-Lok"— TFS Series

- Twin-barb connection provides for highly reliable connection to virtually any size PE supply tubing.
- Stabilizing barb flexes with the natural movement of the supply tubing, preventing the emitter from coming loose or leaking at the inlet port.
- Tubing Sizes: 0.625" O.D. or larger.
- Top quality, UV resistant polypropylene casing enhances durability.

Stock No.	Model No.	Nominal Flow*
6095	TFS-05 (Green End)	0.5 GPH *(1.9 LPH)*
6096	TFS-10 (Blue End)	1.0 GPH *(3.8 LPH)*
6097	TFS-20 (Red End)	2.0 GPH *(7.6 LPH)*

** Nominal Flow @ 15 PSI*

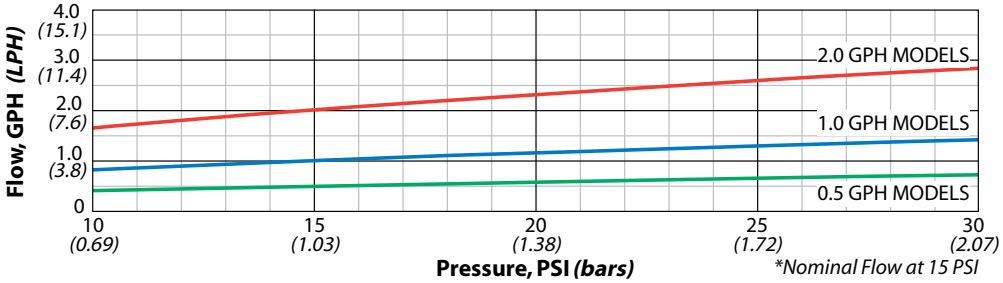
"VG"— VGT Series

- High-strength clip secures emitter/hose combination to the vine trellis wire for fast, reliable installation.
- Wire retention hook on the clip assures a tight, secure wire attachment. Protects against accidental damage during harvest and pruning.
- Downward emitter orientation assures water drips at the emitter and does not run down the hose.
- Tubing sizes: models to fit either Bowsmith 700 or 800 series size tubing.

Stock No.	Model No.	Tubing Size Range	Nominal Flow*
6100	VGT-05-7 (Green End)	700 series	0.5 GPH *(1.9 LPH)*
6101	VGT-10-7 (Blue End)	700 series	1.0 GPH *(3.8 LPH)*
6103	VGT-20-7 (Red End)	700 series	2.0 GPH *(7.6 LPH)*
6104	VGT-05-8 (Green End)	800 series	0.5 GPH *(1.9 LPH)*
6105	VGT-10-8 (Blue End)	800 series	1.0 GPH *(3.8 LPH)*
6107	VGT-20-8 (Red End)	800 series	2.0 GPH *(7.6 LPH)*

** Nominal Flow @ 15 PSI*

Tru-Flo Drip Emitters
Nominal Performance



**Nominal Flow at 15 PSI*

Notes

- Manufacturer's variation, C_v: ≤ 0.02
- Avg. Emitter Exponent= $\overset{\leq}{0.5}$

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BOWSMITH®

"TFI" Series

Tru-Flo™ Inline Drip Tubing

Features	Benefits
In-line emitters installed in the tube	• Emitters are factory installed for accurate spacing. • Smooth profile for efficient lay-out. • Less emitter damage during field installation.
Turbulent flow drip emitter	• Labyrinth design creates velocity—flushes small particles. • Large water passages are highly clog-resistant. • Extremely accurate flow rate. • Cost-effective irrigation.

Cutaway shows the wide turbulent flow path in the TFI Series Drip Tubing.

Tubing specifications

O.D. mm *(in.)*	I.D. mm *(in.)*	Avg. Wall Thickness mm *(in.)*
16 *(0.640)*	14 *(0.560)*	1.02 *(0.040)*
18 *(0.710)*	16 *(0.625)*	1.08 *(0.0425)*
20 *(0.790)*	18 *(0.700)*	1.14 *(0.045)*

Maximum number of emitters and lateral run lengths (±5% allowable flow variation; level ground)

TFI 16mm Series

Flow Rate (gph)	Emitter Spacing (inches)									
	18		24		30		36		42	
	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)
.42	210	315	195	390	173	434	171	515	164	575
.50	166	250	150	300	140	350	133	400	128	450
1.0	113	170	102	205	94	235	90	270	88	310

TFI 18mm Series

Flow Rate (gph)	Emitter Spacing (inches)									
	18		24		30		36		42	
	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)
.50	263	395	237	474	218	547	204	614	193	677
1.0	169	254	152	305	140	351	131	395	124	436

TFI 20mm Series

Flow Rate (gph)	Emitter Spacing (inches)									
	18		24		30		36		42	
	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)	Qty Emitters	/ Length (ft)
.50	316	475	285	571	263	658	246	739	232	815
1.0	203	305	183	367	169	423	158	475	149	524

Flow Rate (gph)	Pressure (psi)						
	10	15	20	25	30	35	40
0.42	.34	.42	.49	.55	.60	.66	.71
0.50	.41	.50	.58	.58	.72	.77	.83
1.00	.81	1.00	1.15	1.29	1.41	1.52	1.63

Notes

- Manufacturer's variation, C_v: ≤ 0.03
- Avg. Emitter Exponent, 0.5

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BOWSMiTH®

rev.072915

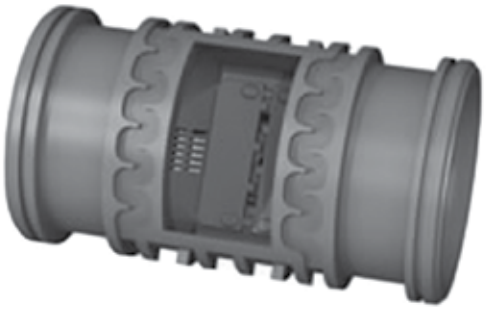
"PCI" Series

Pressure Compensating Inline Drip Tubing

Features

- Unique flow regulating concept: wide effective labyrinth, leading into the flow control chamber, where a sensitive floating diaphragm regulates and maintains a constant flow rate at variable inlet pressure.
- High clog resistance:
  - Dripper's large intake filter is continuously flushed by the water flow.
  - Large cross section on labyrinth.
  - Self-cleaning mechanism at the flow regulated water outlet.
- Uniform flows from 7–60 PSI
- Manufactured from durable plastics for long service life.
- Multi-season use.
- Available in a standard, custom or skip spacing.

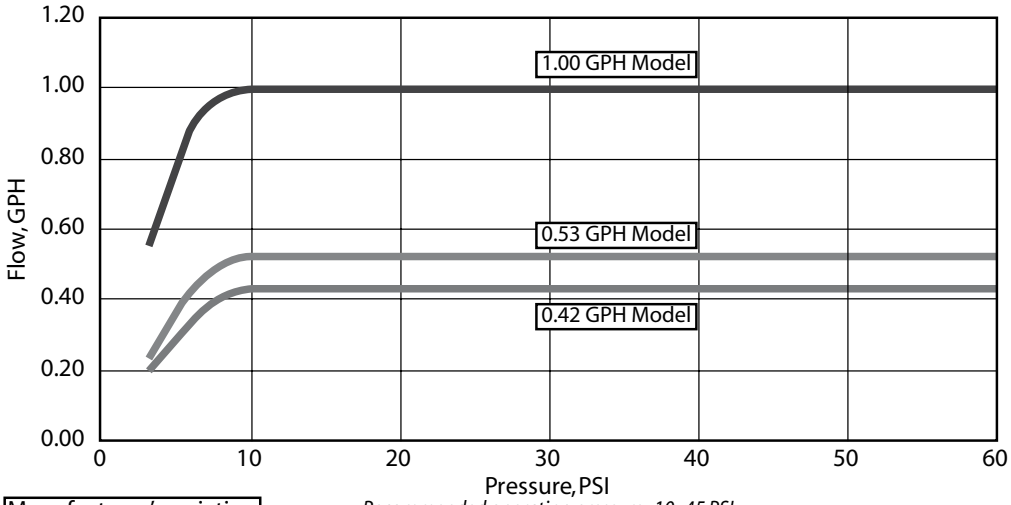
Minimum Filtration: 150 mesh



Tubing specifications

O.D. mm *(in.)*	**I.D.** mm *(in.)*	**Avg. Wall Thickness** mm *(in.)*
16 *(0.640)*	14 *(0.560)*	1.02 *(0.040)*
18 *(0.710)*	16 *(0.625)*	1.08 *(0.0425)*
20 *(0.790)*	18 *(0.700)*	1.14 *(0.045)*

Emitter Flow Performance



Manufacturer's variation (Cv): ≤ 0.04

Recommended operating pressure: 10–45 PSI

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Drip Tape

"Medium Flow" Series

The largest flow path of any drip tape on the market.

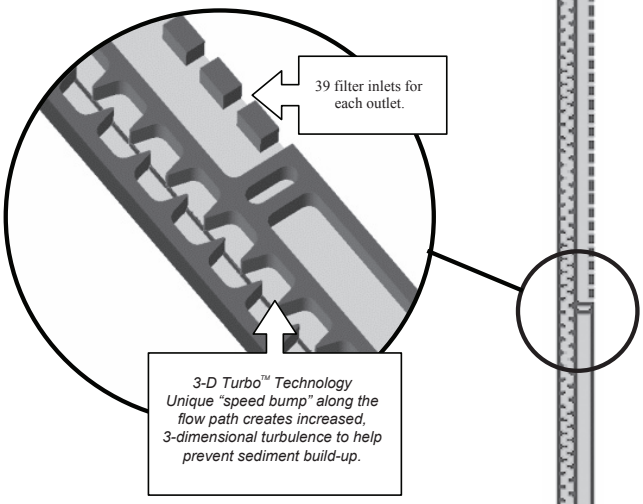
Reduced Clogging

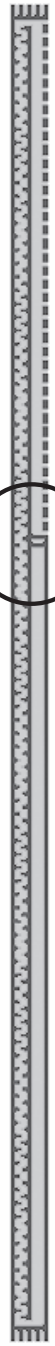
- The biggest footprint, or turbulent flowpath of any drip tape product.

Compare flow path dimensions

Dripper	Flow Path Dimension (in.)		
	Width	Depth	Length
Bowsmith BigFoot 0.21 GPH	**0.035**	**0.035**	**7.9**
Netafim Streamline* 0.21 LPH	0.021	0.020	0.504

** "Netafim" and "Streamline" are trademarks of Netafim USA*





Actual Emitter Size

Reliable Performance

- Enhanced turbulent flow path for better emission uniformity.
- Reliable performance for increased yields.

Cost Effective

- Save on water and fertilizer costs.
- Low inlet pressure requirements save on energy costs.

Emitter Model / Nominal Flow Rate	Wall Thickness	Maximum Operating Pressure	Inside Diameter	Dripper Spacing (*in.*)	Flow: GPM / 100' @ 8 PSI
Medium Flow 0.21 GPH @ 8 PSI	6 mil	10 PSI	5/8"	8"	.530
				12"	.350
	8 mil	12 PSI		16"	.260
				8"	.530
	10 mil	15 PSI	7/8"	12"	.350
				16"	.260

Cv ≤ 0.03 Emitter exponent = 0.5

Wall Thickness	5/8" Coil Length (ft.)	7/8" Coil Length (ft.)	Shipping Weight (lbs.)
6 mil	8000	7000	70
8 mil	6500	5500	70
10 mil	5500	4250	70

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Run Length Guidelines

BigFoot™ "Medium Flow" Series
Emitter Flow Rate 0.21 gph @ 8 psi

U.S. Units

5/8" Flat Terrain 10 psi Inlet Pressure

Maximum Run Length (Feet)

Emitter Spacing	Flow (gpm/100')	EU 94%	EU 92%	EU 90%	EU 85%
8"	0.53	310	400	450	575
12"	0.35	400	500	575	745

7/8" Flat Terrain 10 psi Inlet Pressure

Maximum Run Length (Feet)

Emitter Spacing	Flow (gpm/100')	EU 94%	EU 92%	EU 90%	EU 85%
8"	0.53	550	700	800	1025
12"	0.35	925	1150	1300	1700

Metric

16mm Flat Terrain 0.70 bar Inlet Pressure

Maximum Run Length (Meters)

Emitter Spacing	Flow (lph/m)	EU 94%	EU 92%	EU 90%	EU 85%
20 cm	3.97	94	122	137	175
30 cm	2.65	122	152	175	227

22mm Flat Terrain 0.70 bar Inlet Pressure

Maximum Run Length (Meters)

Emitter Spacing	Flow (lph/100m)	EU 94%	EU 92%	EU 90%	EU 85%
20 cm	3.97	167	213	244	312
30 cm	2.65	282	351	396	518

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Dripper	Flow Path Dimension (in.)		
	Width	Depth	Length
Bowsmith BigFoot 0.07 GPH	**0.020**	**0.032**	**7.9**
Netafim Streamline* 0.21 GPH	0.021	0.020	0.504

**"Netafim" and "Streamline" are trademarks of Netafim USA*

Reliable Performance

- Enhanced turbulent flow path
- Reliable performance for increased yields.

Cost Effective

- Save on water and fertilizer costs.
- Low inlet pressure requirements save on energy costs.

$C_V \leq 0.03$ Emitter exponent = 0.5

Wall Thickness	5/8" Coil Length (*ft.*)	7/8" Coil Length (*ft.*)	Shipping Weight (*lbs.*)
6 mil	8000	7000	70
8 mil	6500	5500	70
10 mil	5500	4250	70

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BigFoot® Drip Tape

Run Length Guidelines

BigFoot™ "Low Flow" Series
Emitter Flow Rate 0.07 gph @ 8 psi

U.S. Units

5/8" Flat Terrain 10 psi Inlet Pressure

Maximum Run Length (Feet)

Emitter Spacing	Flow (gpm/100')	EU 94%	EU 92%	EU 90%	EU 85%
6"	0.23	525	650	750	975
12"	0.12	800	950	1200	1500

7/8" Flat Terrain 10 psi Inlet Pressure

Maximum Run Length (Feet)

Emitter Spacing	Flow (gpm/100')	EU 94%	EU 92%	EU 90%	EU 85%
6"	0.23	925	1200	1380	1750
12"	0.12	1450	1850	2150	2700

Metric

16mm Flat Terrain 0.70 bar Inlet Pressure

Maximum Run Length (Meters)

Emitter Spacing	Flow (lph/100m)	EU 94%	EU 92%	EU 90%	EU 85%
15 cm	177	160	198	229	297
30 cm	88	244	290	366	457

22mm Flat Terrain 0.70 bar Inlet Pressure

Maximum Run Length (Meters)

Emitter Spacing	Flow (lph/100m)	EU 94%	EU 92%	EU 90%	EU 85%
15 cm	177	282	366	421	533
30 cm	88	442	564	655	823

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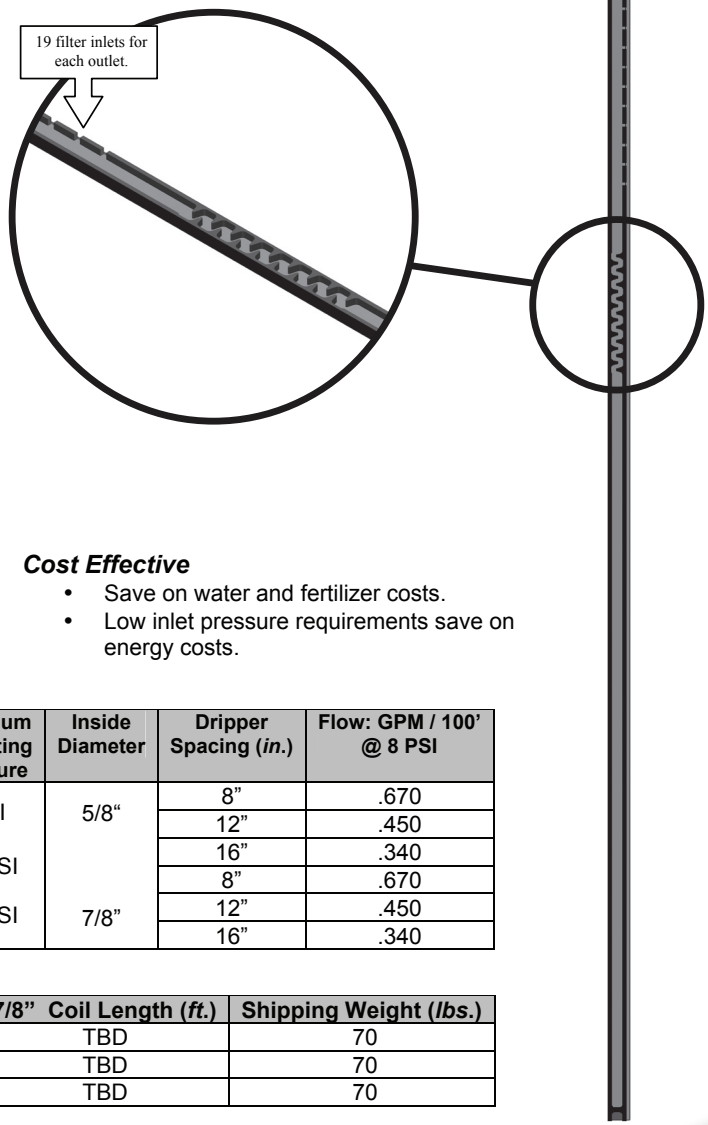
Reduced Clogging

- The biggest footprint, or turbulent flowpath of any drip tape product.

Compare flow path dimensions

Dripper	Flow Path Dimension (in.)		
	Width	Depth	Length
Bowsmith BigFoot 0.27 GPH	**0.035**	**0.020**	**.750**
Netafim Streamline* 0.36 GPH	0.026	0.022	0.512

*"Netafim" and "Streamline" are trademarks of Netafim USA



Reliable Performance

- Enhanced turbulent flow path for better emission uniformity.
- Reliable performance for increased yields.

Cost Effective

- Save on water and fertilizer costs.
- Low inlet pressure requirements save on energy costs.

Emitter Model / Nominal Flow Rate	Wall Thickness	Maximum Operating Pressure	Inside Diameter	Dripper Spacing (*in.*)	Flow: GPM / 100' @ 8 PSI
High Flow 0.27 GPH @ 8 PSI	5 mil	8 PSI	5/8"	8"	.670
				12"	.450
	6 mil	10 PSI		16"	.340
				8"	.670
	8 mil	12 PSI	7/8"	12"	.450
				16"	.340

Cv ≤ 0.03 Emitter exponent = 0.5

Wall Thickness	5/8" Coil Length (*ft.*)	7/8" Coil Length (*ft.*)	Shipping Weight (*lbs.*)
5 mil	11000	TBD	70
6 mil	10000	TBD	70
8 mil	8000	TBD	70

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Run Length Guidelines

BigFoot® "High Flow" Series
Emitter Flow Rate 0.27 gph @ 8 psi

U.S. Units

5/8" Flat Terrain 10 psi Inlet Pressure

Maximum Run Length (Feet)

Emitter Spacing	Flow (GPM/100')	EU 94%	EU 92%	EU 90%	EU 85%
8"	0.67	260	340	390	490
12"	0.45	340	430	500	640

7/8" Flat Terrain 10 psi Inlet Pressure

Maximum Run Length (Feet)

Emitter Spacing	Flow (GPM/100')	EU 94%	EU 92%	EU 90%	EU 85%
8"	0.67	470	610	700	890
12"	0.45	610	780	910	1150

Metric

16mm Flat Terrain 0.70 bar Inlet Pressure

Maximum Run Length (Meters)

Emitter Spacing	Flow (lph/m)	EU 94%	EU 92%	EU 90%	EU 85%
20 cm	5.11	79	104	119	149
30 cm	3.41	104	131	152	195

22mm Flat Terrain 0.70 bar Inlet Pressure

Maximum Run Length (Meters)

Emitter Spacing	Flow (lph/m)	EU 94%	EU 92%	EU 90%	EU 85%
20 cm	5.11	143	186	213	271
30 cm	3.41	186	238	277	351

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BOWSMITH®

Fan-Jet®
Microsprinklers

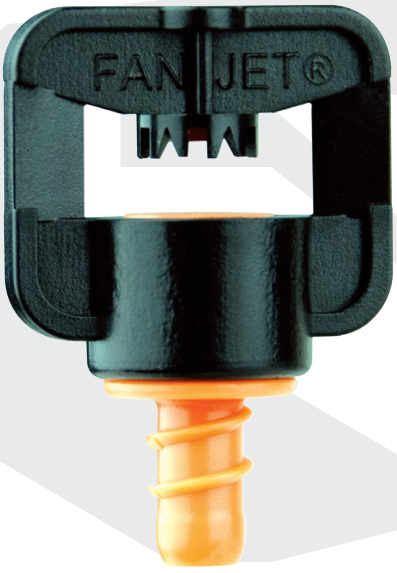
Product Description

The Bowsmith Fan-Jet microsprinkler is the benchmark in low volume spray devices.

Developed by Bowsmith in 1977, the Fan-Jet's breakthrough design provided high spray trajectories , more consistent and larger wetting patterns, and lower cost in a water-saving, low-flow device. The 1986 introduction of the twin wedge post head design enabled a wider variety of wetting patterns, including full-circle. Today, the Fan-Jet remains the standard other microsprayers have to meet.

Fan-Jet's fixed splash plate design has no moving parts to wear out or jam. They're available in 18 different wetting patterns to suit virtually any low-volume or retrofit application. Color-coded nozzles in 7 different sizes offer even more customization possibilities.

There are other microsprinklers available; the Fan-Jet is made only by Bowsmith.



Fan-Jet Features

1 Exclusive Fan-Jet frame

- Twin wedge post construction.
- Durable, low profile, impact resistant.
- Open design – no pockets to collect debris or harbor insects.
- High grade copolymer material for limited creep and shrinkage. Splash plate maintains precise alignment over time.

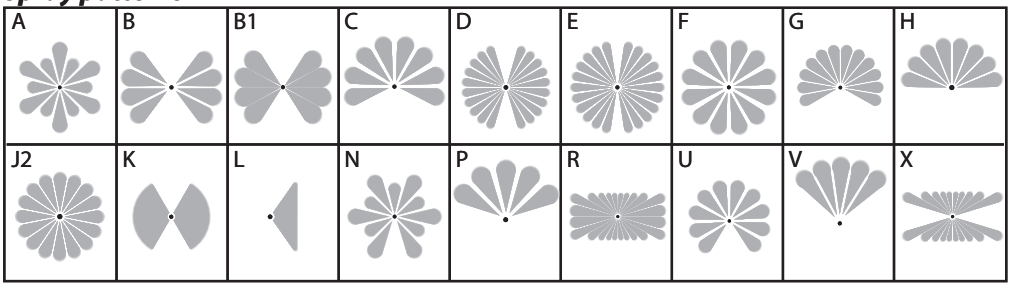
2 Integral fixed splash plate

- No moving parts to jam or wear out.
- Stays aligned with nozzle for consistent patterns.
- 18 spray patterns available.

3 Color coded nozzles

- 7 sizes to choose from.
- Quick-twist thread for fast, easy field installation.

Spray patterns



Nozzle sizes (color coded)

#30 (Black)	#35 (Orange)	#40 (Blue)	#45 (Violet)	#50 (Green)	#55 (Yellow)	#60 (Red)

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Fan-Jet®
Microsprinklers

	Description
"SK" Series 	• Fan-Jet head *(Specify nozzle size and pattern.)* • Feeder tube *(Specify length.)* • Coupling *(Specify standard barbed or restrictor coupling.)* • SK Stake *(Specify SK-J or SK-C stake.)* • *Available with Fan-Jet "PC" Pressure Compensator*
"SP" Series 	• Fan-Jet head *(Specify nozzle size and pattern.)* • Riser *(Specify length.)* • SP spike *(Specify SP-T threaded riser connection –or– SP-B barb riser connection.)* • *Available with Fan-Jet "PC" Pressure Compensator*
"TB" Series 	• Fan-Jet head *(Specify nozzle size and pattern.)* • Riser *(Specify length.)* • Threaded base *(Specify 3/8" or 1/2" MPT base.)* • *Available with Fan-Jet "PC" Pressure Compensator*
"DC" Series 	• Fan-Jet head *(Specify nozzle size and pattern.)* • Drop tube *(12" standard length.)* • PVC weighted sleeve. • Barbed coupling. • *Available with Fan-Jet "PC" Pressure Compensator*

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BOWSMiTH®

Fan-Jet®
Microsprinklers

"SK" Series

Features

- Sprinkler / Feeder Tube Assembly:
  - Fan-Jet Microsprinkler Head
  - Feeder Tube
  - Barbed Coupling
- SK Stakes —*your choice*—
  - SK-J Stake:

    - 9" shank provides good support in soft ground.
    - Made of durable, impact resistant polypropylene.
    - 90° large radius feeder tube channel provides a durable, reliable assembly.
    - Low profile stake reduces damage and keeps feeder tubing level with ground.
    - Recommended for use with 0.245" O.D. polyethylene feedertubing for adjustable riser height.

    —OR—

  - SK-C Stake:

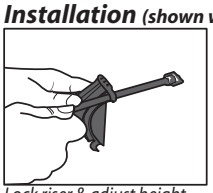
    - 13" shank for stability in particularly soft or sandy soils.
    - Made of durable, impact resistant polypropylene.
    - Positive lock clip and loop hole on shank retains flexible feeder tubing.
    - Recommended for use with vinyl feeder tubing .

"SK" Series Fan-Jet Model Numbers

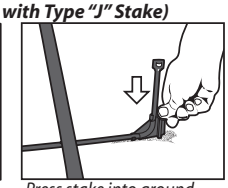
Stock No.	Feeder Tubing* Len./Material	Fan-Jet Head	Coupling	SK Stake
8519	24" / PE	Specify by Nozzle Size and Pattern	Specify Standard Barb or Restrictor	Specify "J" or "C" Type
8520	36" / PE			
8523	48" / PE			
8524	60" / PE			
8521	72" / PE			
8530	24" / vinyl**			
8507	36" / vinyl**			
8534	48" / vinyl**			
8539	60" / vinyl**			
8304	72" / vinyl**			

** Feeder tubing: PE is 0.160" I.D. x 0.245" O.D.*
Vinyl is 0.140" I.D. x 0.250" O.D.
***Vinyl feeder tubing stocked in Avon Park, FL plant only)*

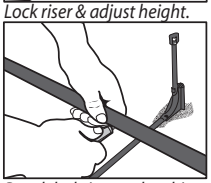
Installation *(shown with Type "J" Stake)*



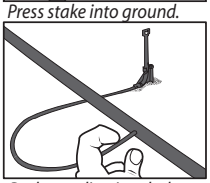
Lock riser & adjust height.



Press stake into ground.



Punch hole in supply tubing.



Push coupling into hole.

"SP" Series

Features

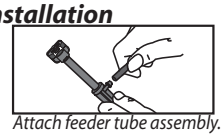
- All components factory-assembled for leak-free connections.
  - Fan-Jet Microsprinkler Head
  - Riser
  - SP-1 Spike
    - Compact design for durability and easy, low-cost field installation and relocation.
    - Choice of barb or thread riser coupling integral with spike.

"SP" Series Fan-Jet Model Numbers

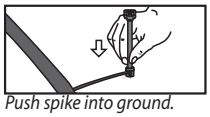
Stock No.	Riser* Len./Material	Fan-Jet Head	SP Spike
8655	3" / PE	Specify by Nozzle Size and Pattern	Assembled with Choice of #3018 Thread or #3028 Barb Spike
8656	6" / PE		

** Riser is 0.158" I.D. x 0.300" O.D.*

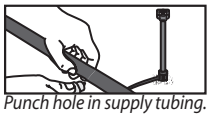
Installation



Attach feeder tube assembly.



Push spike into ground.



Punch hole in supply tubing.

Push coupling into hole.

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BOWSMiTH®

Fan-Jet®
Microsprinklers

"TB" Series

Features

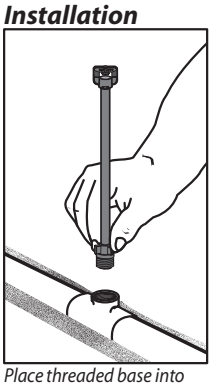
- All components factory-assembled for leak-free connections.
  - Fan-Jet Microsprinkler Head
  - Riser
    - Heavy wall construction prevents kinks and provides stability, even at extended lengths.
    - Riser length to your specifications (see standard lengths available in the "TB" Series Fan-Jet Model numbers table, below).
  - Threaded base
    - Choice of ⅜" MIPT or ½" MIPT.
    - "Wing nut" design for easy hand installation. No other tools necessary.
    - Can be used in place of rotary sprinklers or other spray devices with threaded bases.

"TB" Series Fan-Jet Model Numbers

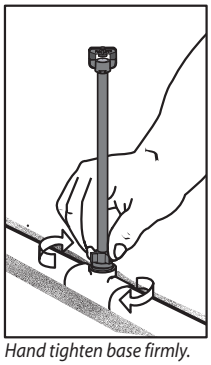
Stock No.	Riser* Length	Fan-Jet Head	Threaded Base
8645	3"	Specify by Nozzle Size and Pattern	Assembled with Choice of ⅜" or ½" MIPT base
8646	6"		

** Riser is 0.158" I.D. x 0.300" O.D.*

Installation



Place threaded base into threaded pipe fitting.



Hand tighten base firmly.

"DC" Series

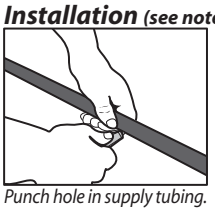
Features

- All components factory-assembled for leak-free connections.
  - Barb Coupling
    - Hard sharp edge for maximum retention to supply tubing.
    - Leak-free connection.
  - Feeder Tube
    - Flexible thin wall tube for maintaining vertical head position with weighted sleeve.
  - PVC Weighted Sleeve
    - Resists cracking.
    - Controlled diameter provides added sprinkler head retention.
  - Fan-Jet Microsprinkler Head

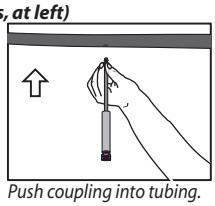
"DC" Series Fan-Jet Model Numbers

Stock No.	Drop Tube* Length	Fan-Jet Head	PVC Weighted Sleeve	Barb Coupling
8686	12"	Specify by Nozzle Size and Pattern	Assembled with other components	Assembled with other components

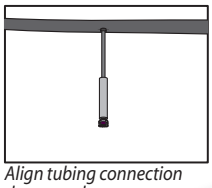
Installation (see notes, at left)



Punch hole in supply tubing.



Push coupling into tubing.



Align tubing connection downward.

Installation Notes

- *When punching holes in supply tubing, be sure all holes are in a line. Use the printing on the tubing as a guide. Holes can be punched with the tubing either suspended or on the ground.*
- *When tubing is suspended, make sure all connectors and punched holes point directly downward. Again, the printing can be used as a guide.*

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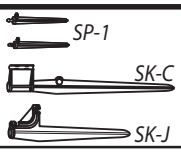
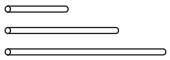
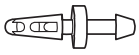
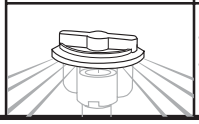
BOWSMiTH®

Fan-Jet®
Microsprinklers

Fan-Jet Accessories

		Product	Description	Specifications
Components		Stakes	Support riser and fix sprinkler location. Used in SK and SP Series Fan-Jet assemblies.	SK-J (for heavy wall PE riser) SK-C (for flexible vinyl riser) SP-1 (threaded or barb outlet for SP Series)
		Risers	For TB & SP assemblies.	Heavy wall PE (0.300" O.D. x 0.160" I.D.) Standard lengths: 3, 6 or 12 inches.
		Feeder Tube / Coupling	For connecting PE supply tubing to Fan-Jet.	Specify PE or vinyl. Standard lengths: 24, 36, 48, 60 or 72 inches.
		Threaded base / riser	MIPT connection to Fan-Jet.	Specify 3/8" or 1/2" MIPT base. Standard riser lengths: 3, 6 or 12 inches.
		Drop Tube and Weighted Sleeve	For DC assemblies.	Available separately: Drop tube and coupling: 12 inch standard length. PVC weighted sleeve.
Couplings		Barbed Coupling	For connecting microtubing.	0.175" x 0.175" barb both ends.
		Line Plugs	For plugging holes punched in PE supply tubing.	Specify: 0.175" or 0.250" barb
		Threaded Bases	MIPT connections. Used in TB assemblies	Specify 3/8" MIPT or 1/2" MIPT base.
Tools		Nozzle Cleaner	For cleaning Type 2 Fan-Jet heads.	—
		Hole Punch	Punches holes for couplings in PE supply tubing.	Plastic one piece.
Flow Control Devices		Fan-Jet "PC" Series Pressure Compensators	Replaces barb coupling on feeder tube to provide pressure compensation to Fan-Jet head.	Please see separate sheet for more information.
		Flow Restrictor Couplings	Replaces barb coupling on feeder tube to reduce flow through larger nozzle sizes.	Please see separate sheet for more information.
		Top Hat™ Throw Limiter.	Snaps on Fan-Jet head to limit wetted area. Can be easily removed when larger wetted area is needed.	Fits any Bowsmith Type 2 Fan-Jet head.

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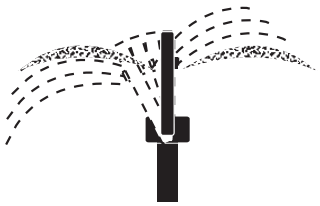
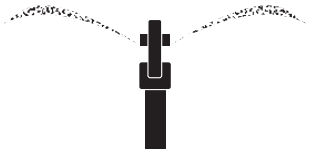
BOWSMITH®

Fan-Jet Advantage

Fan-Jets vs. Other Jets

Fan-Jet®
Microsprinklers

	Other Jets	Fan-Jet
Materials	 Homopolymer material can overflex. Wetting pattern degrades over time. Softer material compromises feeder tube connections.	 High grade copolymer for limited creep and shrinkage. Maintains precise align-ment over time. Prevents misalignment of splash plate that causes uneven wetting. High strength material maintains secure tubing connections.
Design	Larger heads provide less accurate wetting patterns and shorter throw distances. One-piece and other large open designs provide limited variety of patterns. 10-32 thread and other quick-disconnect methods take longer to install and/or pop off more easily.	Compact head maintains integrity with nozzle before water stream can "twist" and throw off wetting pattern accuracy. More resistant to accidental field damage. • Splash plate design enables longer throw for larger root systems and higher yields. • Integral splash plate is precisely aligned with nozzle. • Enables a wide variety of spray pat-terns to precisely match the application. • Quick-turn thread reduces installation time. • NOTE: Only Fan-Jet microsprinklers offer all these features.
Manufacture	Deficient materials used in manufacture can compromise field performance. Bowsmith service and product support has been unmatched in the industry since 1974.	Bowsmith experience: innovators in jet design and manufacture. • 1977: Type 1 Fan-Jet introduced. Breakthrough design provides high spray trajectories, more consistent and larger wetting patterns, and lower cost. • 1986: Type 2 Fan-Jet with twin wedge post design introduced. En-ables full circle wetting patterns and nozzle color-coding for easy field identification. Quick-turn thread introduced in 1992 speeds installation, provides stronger con-nection. Bowsmith quality: painstaking quality control in every phase of manufacturing. Bowsmith service: outstanding reputation for service, product and warranty support.

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BOWSMITH®

Fan-Jet® PLUS
Microsprinklers

The Bowsmith Fan-Jet PLUS™ micro-sprinkler combines the quality of the original Fan-Jet micro-sprinkler, plus the added feature that prevents clogging or pattern distortion due to insects and other external objects - saving you time and money.

- **Exclusive Fan-Jet PLUS "Dual Action" frame: pops-up & retracts**
- **All water contact surfaces are protected from insects and other external foreign objects**
- **No rotating parts to break, stick, or wear out.**
- **Simple take-a-part, two piece design allows for quick cleaning of nozzle clogged by particles in the irrigation water**
- **Five spray patterns available**
- **Seven color-coded flow rates: 6.0 to 29.4 gallons per hour**

Fan-Jet PLUS™

Microsprinklers

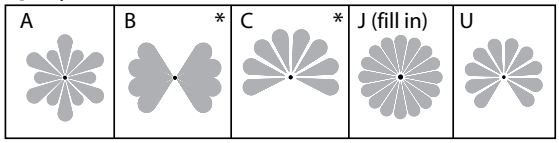
Fan-Jet PLUS advantages over drip emitters:

- **Larger wetted area per tree = Larger root system**
- **Greater irrigation flexibility = Energy savings, soil aeration, & frost protection**
- **Priced lower than dual line drip = Better value**

Fan-Jet PLUS Advantages over rotary sprinklers:

- **Precision water placement = Better irrigation efficiency**
- **Precise delivery of fertilizers & micronutrients = $avings**
- **Low application rates = Better soil penetration and less runoff**
- **Lower operating pressures = Lower energy costs**
- **Lower price = Better value**

Spray Patterns



Flow Rates (gph @ 20 psi)

* Available Soon

6.0	**8.4**	**10.7**	**14.2**	**16.7**	**20.5**	**24.0**
#30 (Black)	**#35 (Orange)**	**#40 (Blue)**	**#45 (Violet)**	**#50 (Green)**	**#55 (Yellow)**	**#60 (Red)**

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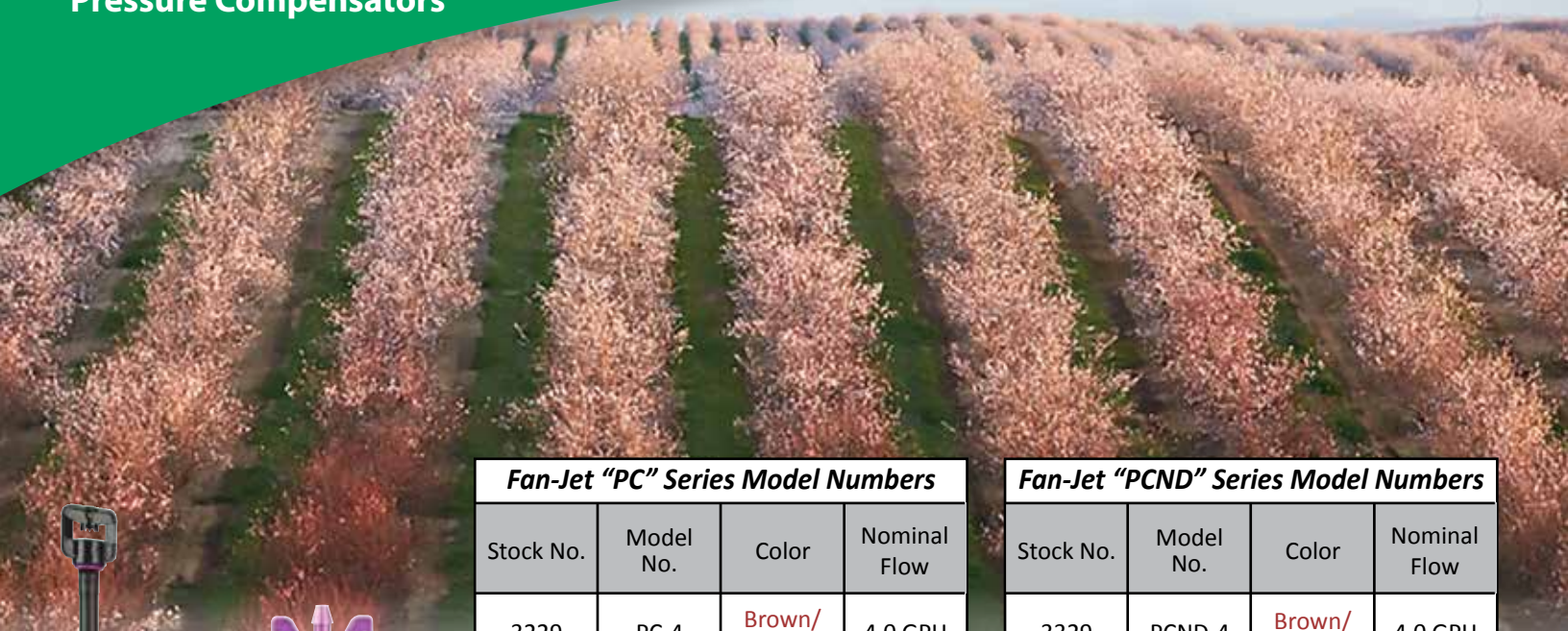
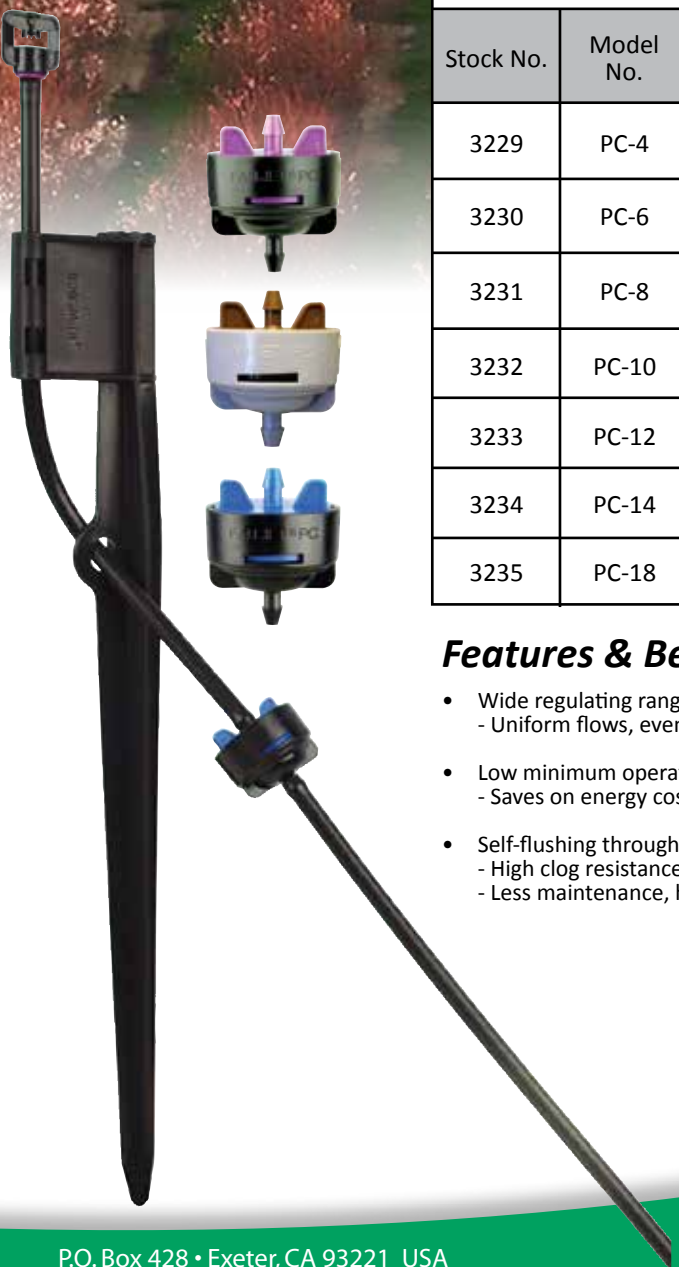
BOWSMITH®

rev.101415

Fan-Jet®
"PC" and "PCND" Series
Pressure Compensators





Fan-Jet "PC" Series Model Numbers			
Stock No.	Model No.	Color	Nominal Flow
3229	PC-4	Brown/ Black	4.0 GPH
3230	PC-6	Black/ Black	6.0 GPH
3231	PC-8	Orange/ Black	8.0 GPH
3232	PC-10	Blue/ Black	10.0 GPH
3233	PC-12	Gray/ Black	12.0 GPH
3234	PC-14	Violet/ Black	14.0 GPH
3235	PC-18	Green/ Black	18.0 GPH

Fan-Jet "PCND" Series Model Numbers			
Stock No.	Model No.	Color	Nominal Flow
3329	PCND-4	Brown/ Gray	4.0 GPH
3330	PCND-6	Black/ Gray	6.0 GPH
3331	PCND-8	Orange/ Gray	8.0 GPH
3332	PCND-10	Blue/ Gray	10.0 GPH
3333	PCND-12	Gray/ Gray	12.0 GPH
3334	PCND-14	Violet/ Gray	14.0 GPH
3335	PCND-18	Green/ Gray	18.0 GPH

Features & Benefits

- Wide regulating range
  - Uniform flows, even at low or high pressures
- Low minimum operating pressure
  - Saves on energy costs
- Self-flushing throughout operation
  - High clog resistance
  - Less maintenance, higher crop yield
- Unique two-piece design
  - Allows for quick, easy cleaning
- Regulates microsprinklers
  - Pairs with multiple Fan-Jet nozzles
  - You choose the flow rate, pattern, and nozzle
  - Works at the end or middle of feeder tubes
- Available with Non-Drain feature, PCND (gray base)
  - Opening pressure 3.5 psi
  - Shutoff pressure 2.2 psi

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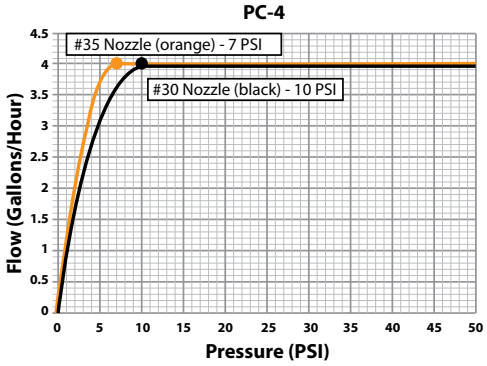
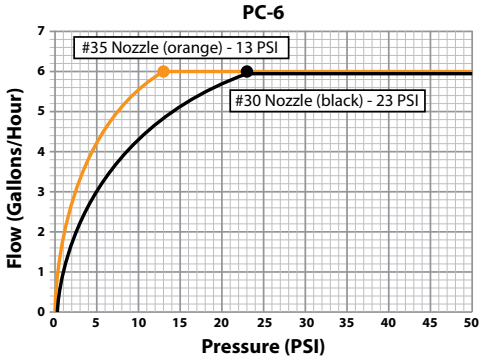
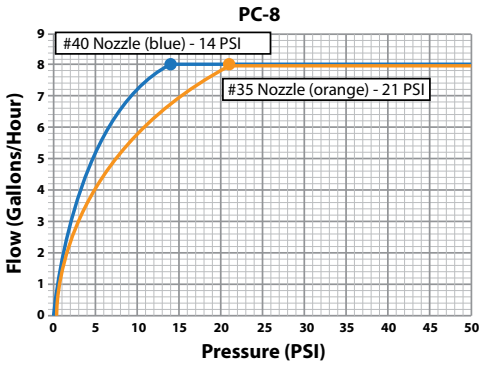
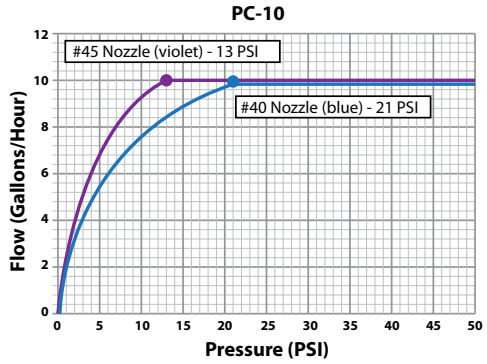
Fan-Jet®
"PC" and "PCND" Series
Pressure Compensators

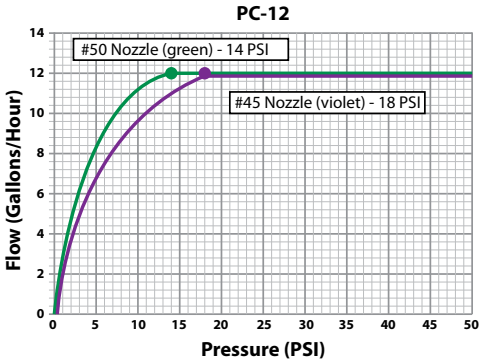
● Minimum Operating Pressure

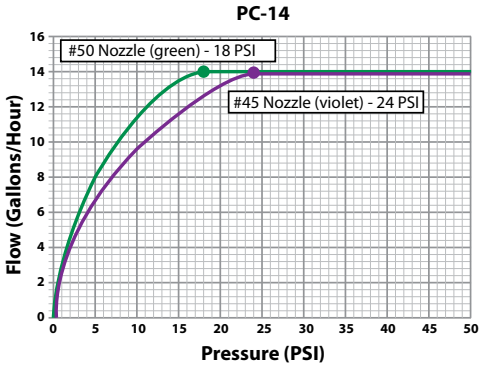


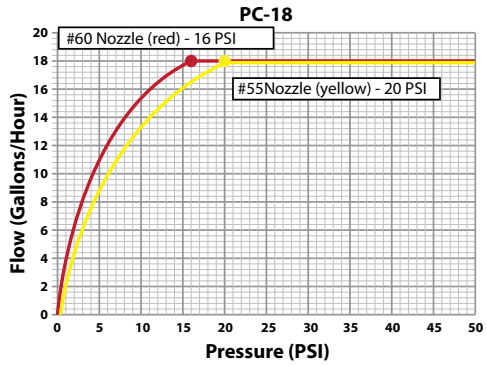












PCND Models -
Same Minimum Operating Pressure
- Opening pressure 3.5 psi
- Shutoff pressure 2.2 psi

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BOWSMITH®

rev.042518

Fan-Jet®
"PC" Series
Pressure Compensators

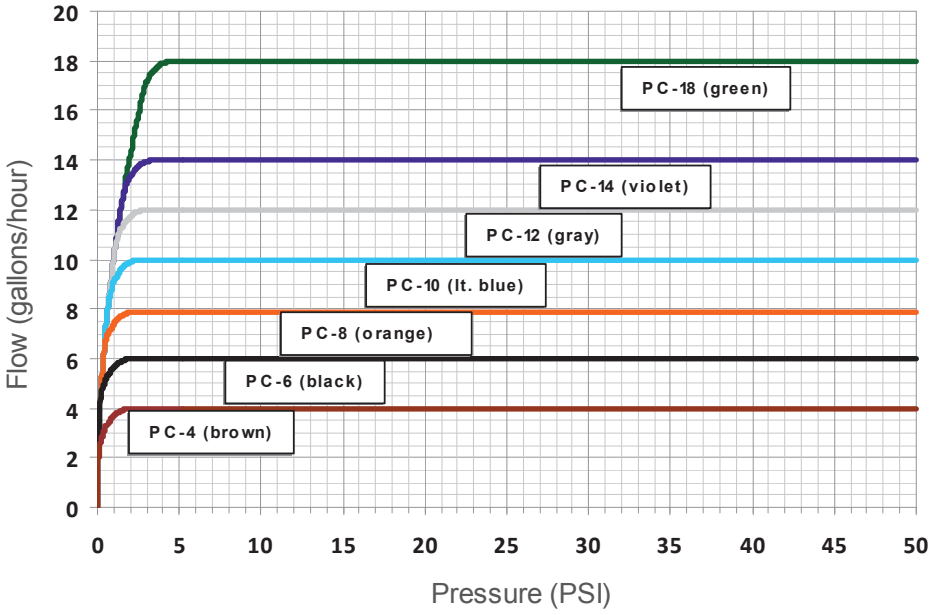
Features & Benefits

- Wide regulating range
  -Uniform flows, even at low or high pressures
- Low minimum operating pressure
  -Saves on energy costs
- Self-flushing throughout operation
  -High clog resistance
  -Less maintenance, higher crop yield
- Unique two-piece design
  -Allows for quick, easy cleaning
- Regulates microsprinklers
  -Pairs with multiple Fan-Jet nozzles
  -You choose the flow rate, pattern, and nozzle
  -Works at the end or middle of feeder tubes

Fan-Jet "PC" Series Model Numbers

Stock No.	Model No.	Color	Nominal Flow
3229	PC-4	Brown	4.0 GPH
3230	PC-6	Black	6.0 GPH
3231	PC-8	Orange	8.0 GPH
3232	PC-10	Blue	10.0 GPH
3233	PC-12	Gray	12.0 GPH
3234	PC-14	Violet	14.0 GPH
3235	PC-18	Green	18.0 GPH

Nominal Performance



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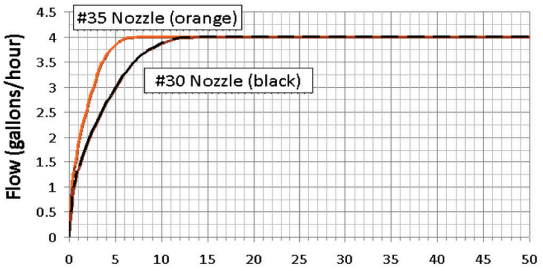
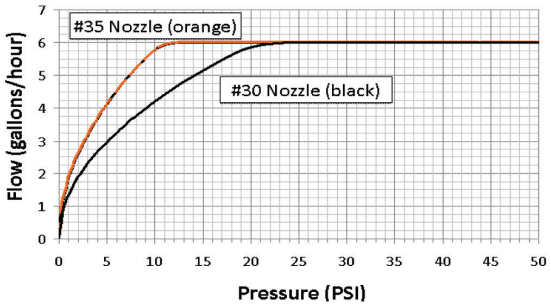
Fan-Jet®
"PC" Series
Pressure Compensators

Performance Curves with Fan-Jet Sprinkler Heads

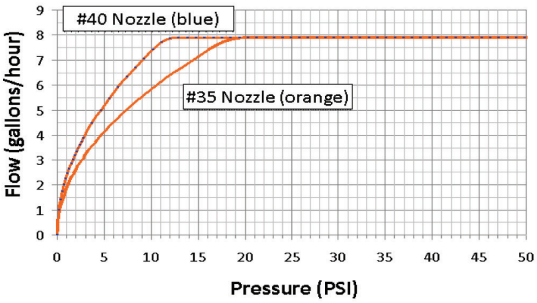
PC-4



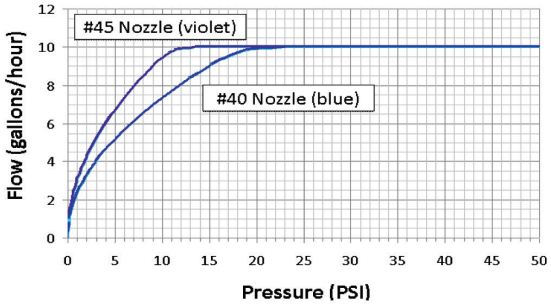
PC-6



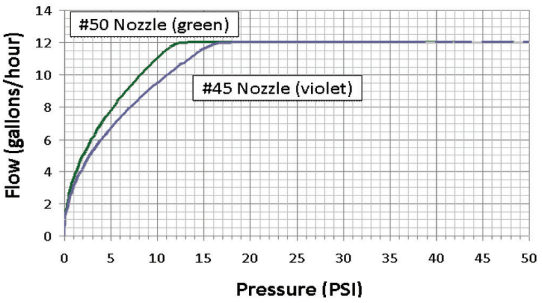
PC-8



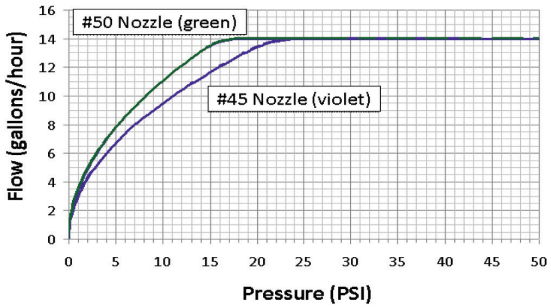
PC-10



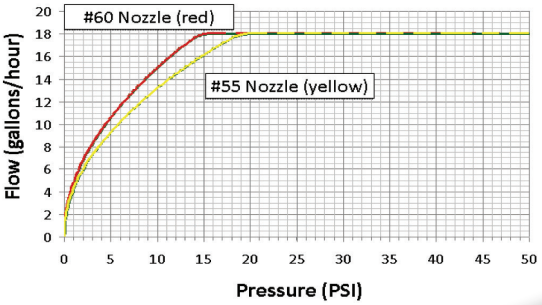
PC-12



PC-14



PC-18



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BOWSMiTH®

Premium Plus+™
Tubing

Features

- Bowsmith Premium Plus+ tubing is manufactured from the highest grades of polyethylene resins.
- Contains a minimum of 2% carbon black.
- Every reel undergoes a series of tests to insure Bowsmith's high quality manufacturing standards are met.
- Available in a wide range of diameters, wall thickness and coil lenghts to accommodate required lenghts of run, working pressures and terrain.
- Pre-punched and marked custom spacing are availabe for easy Fan-Jet® microsprinkler or NonStop® emitter installations.
- Manufactured in Exeter, California and Avon Park, Florida.
- Seven-year warranty backs it all up. (See warranty for details)

Dimensions

	Nominal Tubing Size					
Size	Outside	Wall	Inside	Pressure	Coil Length (in.)	
Designation*	Diam (in.)	Thickness (in.)	Diam (in.)	Rating	Standard	Custom
490P40	0.490	0.040	0.410	70	2000′	
590P40	0.590	0.040	0.510	58	1000′	
625P48	0.625	0.048	0.530	67	1000′	100′, 500′
625P50	0.625	0.050	0.525	71	1000′	100′, 500′
620/710	0.715	0.0475	0.620	57	1000′	100′, 500′
700P48	0.700	0.048	0.605	59	1000′	100′, 500′
700P50	0.700	0.050	0.600	63	1000′	100′, 500′
700P55	0.700	0.055	0.590	70	1000′	100′, 500′
720P48	0.720	0.048	0.625	57	1000′	500′
795P52	0.795	0.053	0.690	57	1000′	500′
720/820	0.825	0.0525	0.720	55	1000′	500′
835P52	0.835	0.053	0.730	55	1000′	500′
935P62	0.935	0.063	0.811	57	1000′	500′
935P58	0.935	0.058	0.822	55	1000′	500′
3/4″-50	0.916	0.055	0.805	54	1000′	500′
1195P72	1.195	0.073	1.050	53	500′, 660′	
1″-45	1.190	0.064	1.060	49	500′, 660′	
1530P72	1.530	0.075	1.380	42	400′	
1-1/4″-50	1.540	0.0865	1.365	50	300′	

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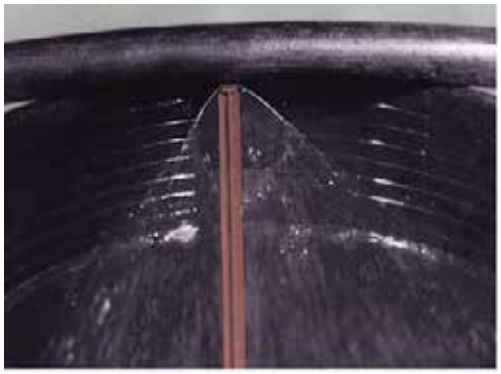
BOWSMITH®

Jet Stake™
Spray Stake for Nursery or Landscape



The Jet Stakes barb inlet attaches securely to supply hose or distribution tubing.

Product Features

- Rabbit / Rodent resistant: when the Jet Stake is attached directly into the supply hose, feeder tubing is eliminated. Therefore virtually all damages caused by rabbits or rodents are eliminated also.
- 0.165" (4.2mm) barb inlet for secure connections to PE supply hose or distribution tubing ("0.160" [4.0mm] I.D. distribution tubing recommended).
- Overall length of 6 3/8" (16.2cm) insures stability when inserted into loose dirt or potting soil.
- Thread size at tapered end designed to quick-turn into "0.160" (4.0mm) I.D. tubing for shutoff at the watering site.
- Excellent distribution uniformity.
- High-grade resins in manufacture for mechanical stability and durability.

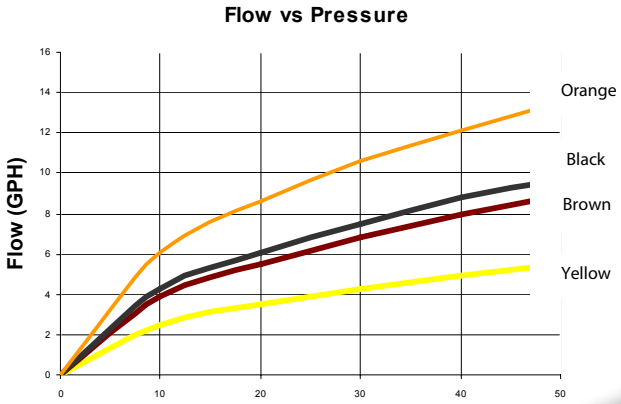
Standard models color-coded by flow rate:

- 3.5 GPH ~ yellow
- 5.5 GPH ~ brown
- 6.1 GPH ~ black
- 8.6 GPH ~ orange

(Nominal flow rates @ 20 PSI)

- Ideal for 5, 7, 10 or 15-gallon pots.
- Excellent distribution uniformity.
- UV inhibitors for long life.

Flow Rate vs. Pressure							
Stock #	Flow @ 20 PSI Nominal	Jet Stake Color	Pressure, PSI				
			10	20	30	40	50
1081	5.5	Brown	3.9	5.5	6.8	7.9	8.9
1082	6.1	Black	4.3	6.1	7.5	8.8	9.7
1083	8.6	Orange	6.0	8.6	10.6	12.2	13.5
1085	3.5	Yellow	2.5	3.5	4.3	4.9	5.5



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BOWSMiTH®

rev.080615

Vine Clip™
Clamping System

Product Features

Clamping system specially designed for hanging irrigation pipe or tubing to wire for use in overhead drip or microsprinkler applications.

Vine Clips
- Galvanized wire (2mm diameter wire)

Vine Clip Pliers
- Fast attachment of magazine-fed Vine Clips

Vine Clip Magazines
- Hold multiple Vine Clips per magazine

The Vine Clip System:
- *Three times faster* installation over traditional hose clamping systems. Saves on labor and materials.
- *More reliable hold* than other methods.
- Better Quality hold-allows for tubing dilation and contraction.

Description	Part No.	Specifications	Box Qty.	Carton Qty.
Vine Clip, 700 series (Model E-45)	1027	2mm galvanized wire Hose O.D : 17-20mm (0.670-0.787 in.)	650	8
Vine Clip, 700 series Hand Pliers, (Model 140)	1025	Works with the 700 series Magazine	N/A	N/A
Vine Clip, 700 series Magazine (Model E-45)	1026	Works with the 700 series Hand Pliers	N/A	N/A
Vine Clip, 800 series (Model E-50)	1029	2mm galvanized wire Hose O.D : 21-24mm (0.827-0.945 in.)	500	10
Vine Clip, 800 series Hand Pliers / Magazine (Model E-50)	1028	Hand pliers and Magazine are an integral unit	N/A	N/A

Manufactured by: SIMES

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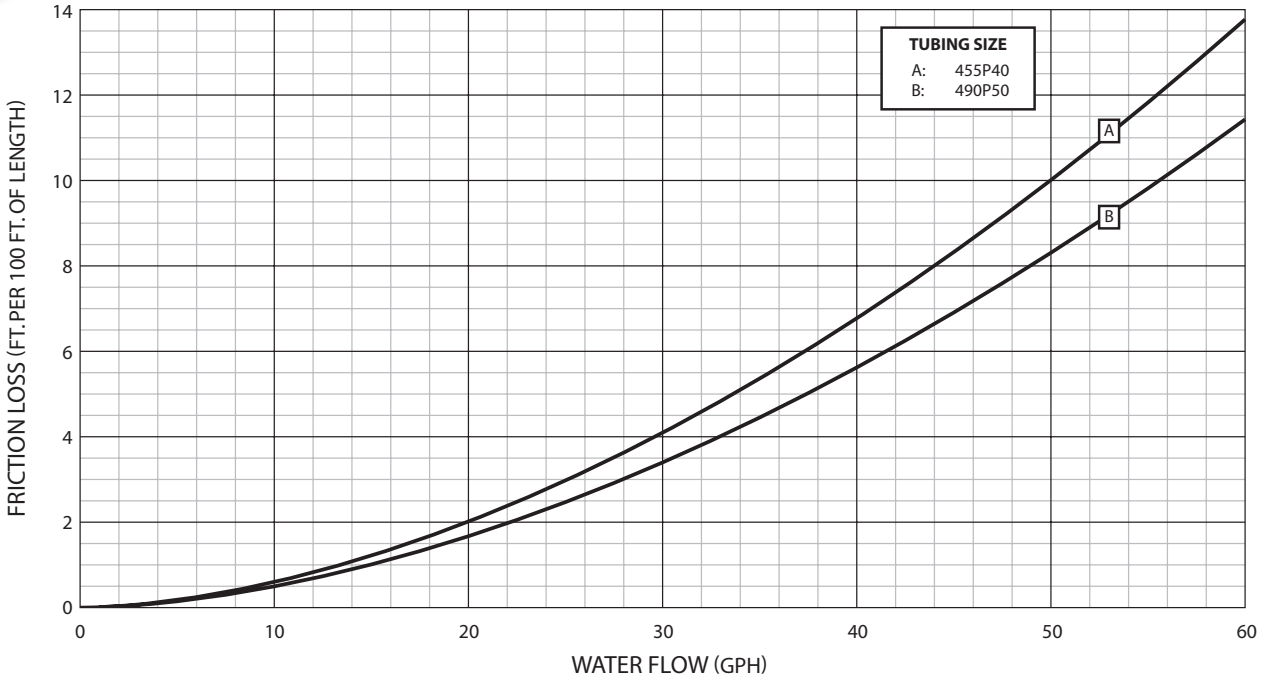
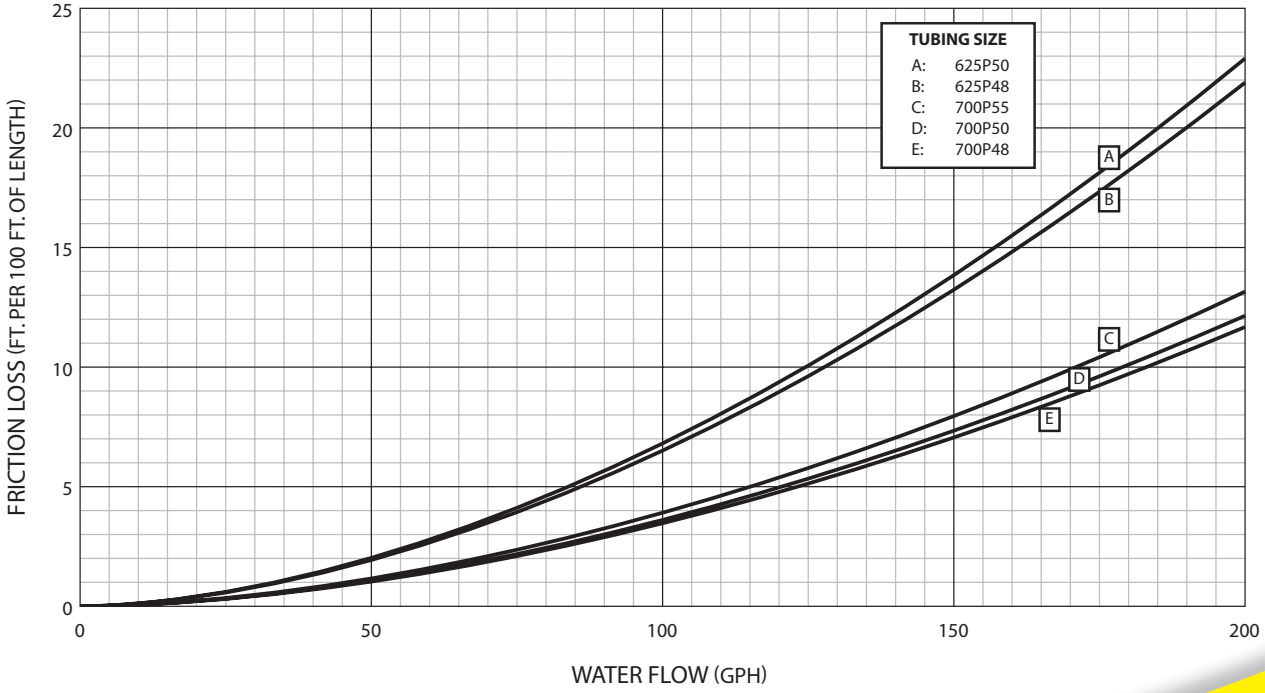
BOWSMITH®

rev.080615

Friction Loss vs. Flow

Bowsmith Premium Polyethylene Tubing





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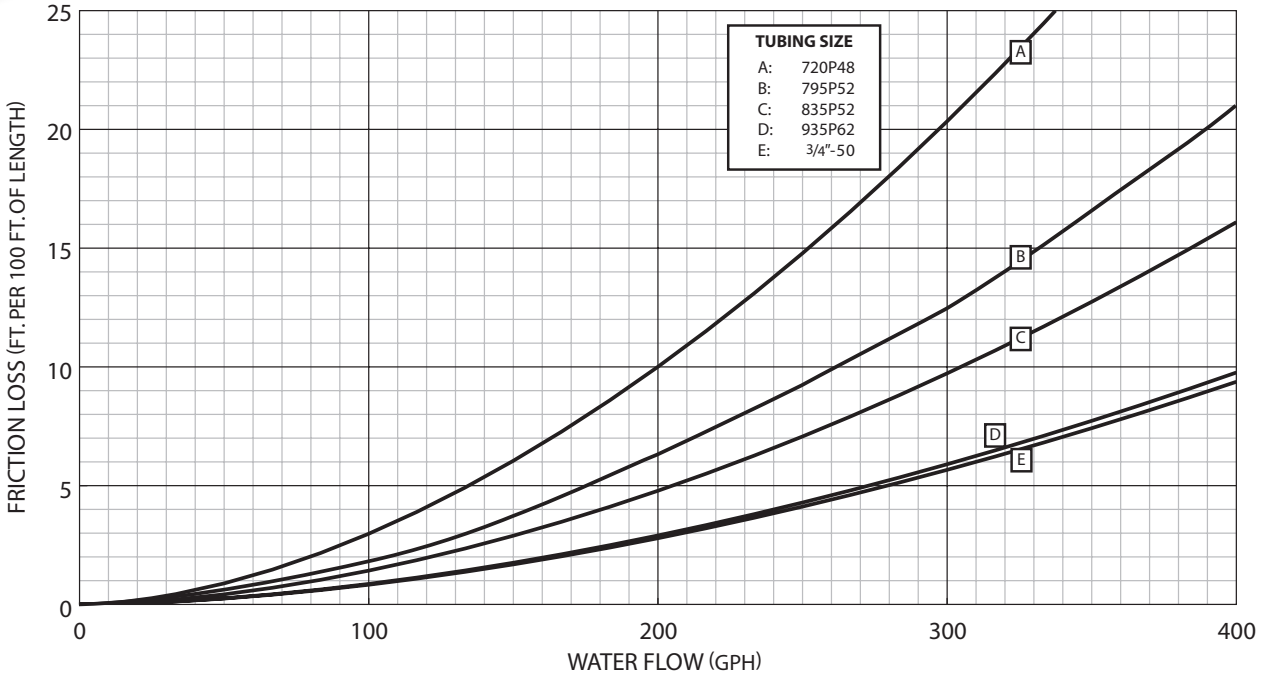
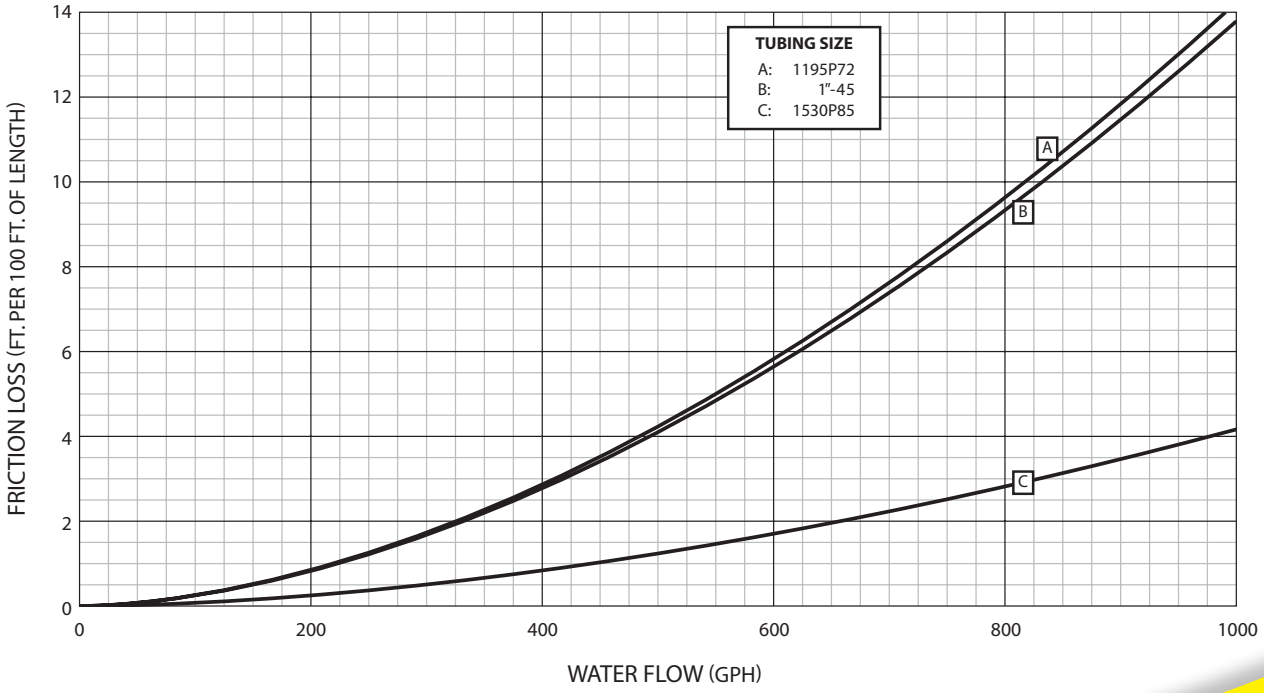
BOWSMITH®

Friction Loss vs. Flow

Bowsmith Premium Polyethylene Tubing





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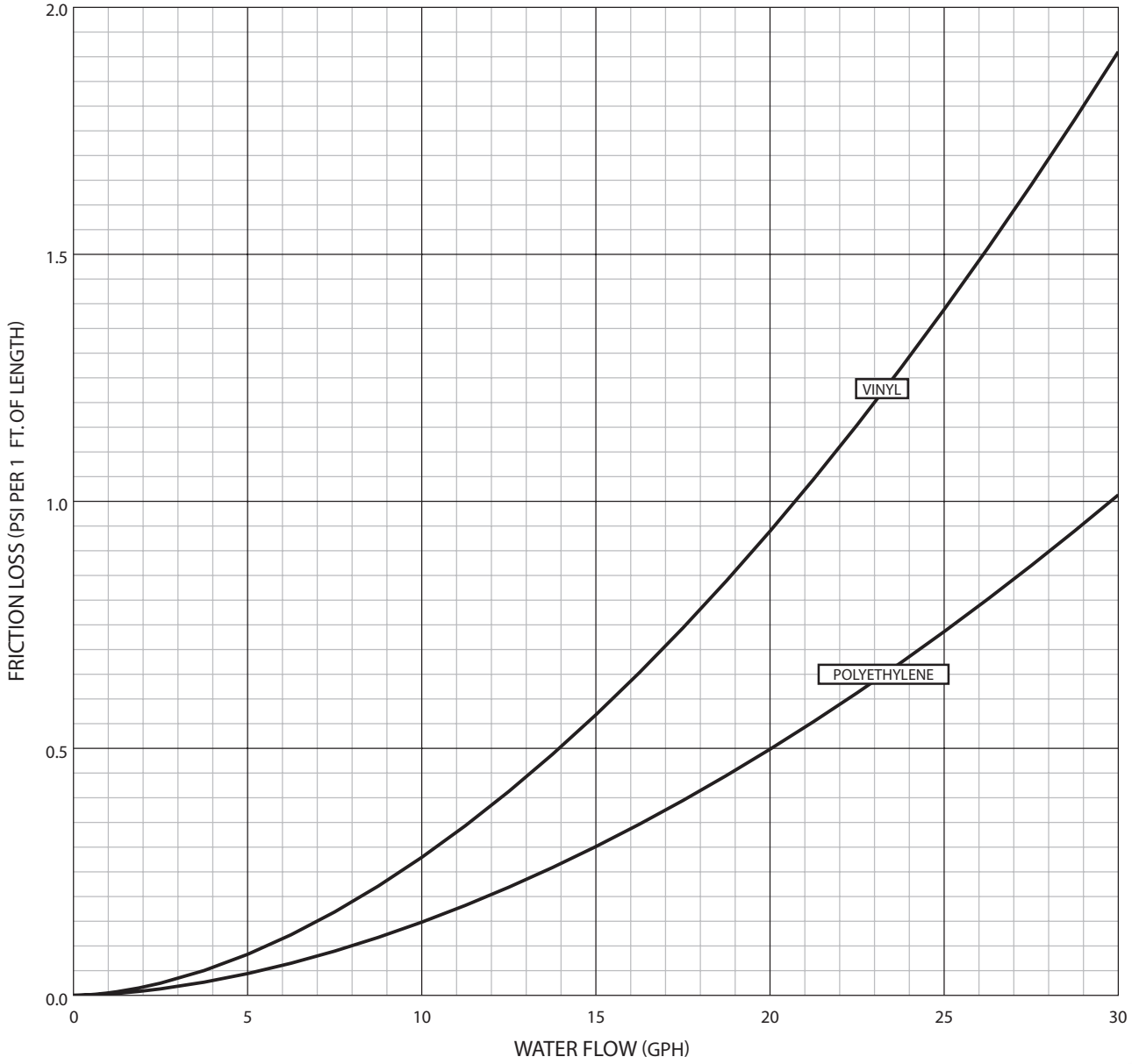
BOWSMITH®

Friction Loss vs. Flow

Bowsmith Fan-Jet® Feeder Tube

0.140" I.D. Vinyl and 0.160" I.D. Polyethylene



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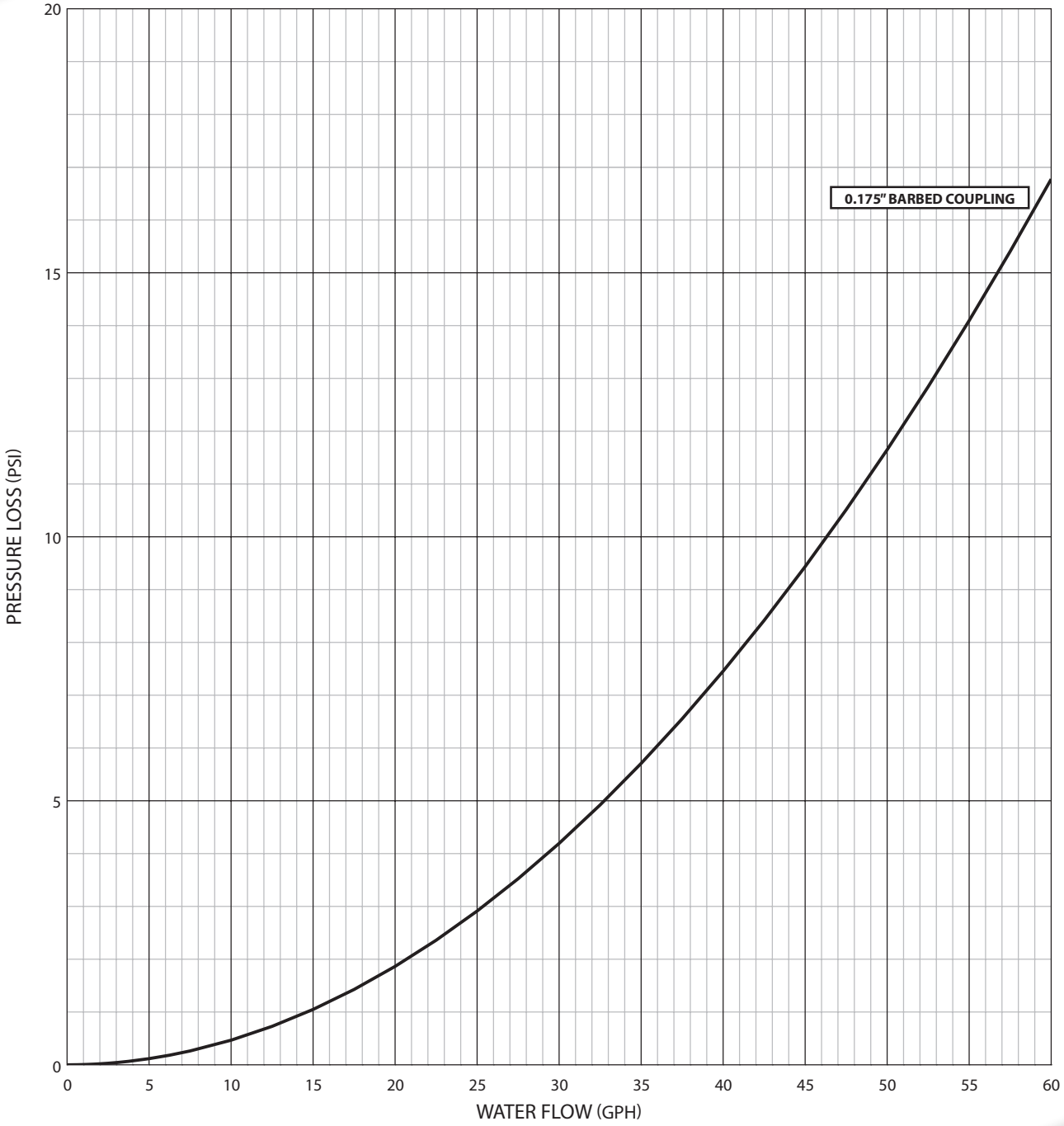
Flow vs. Pressure Loss

Bowsmith Fan-Jet® Coupling



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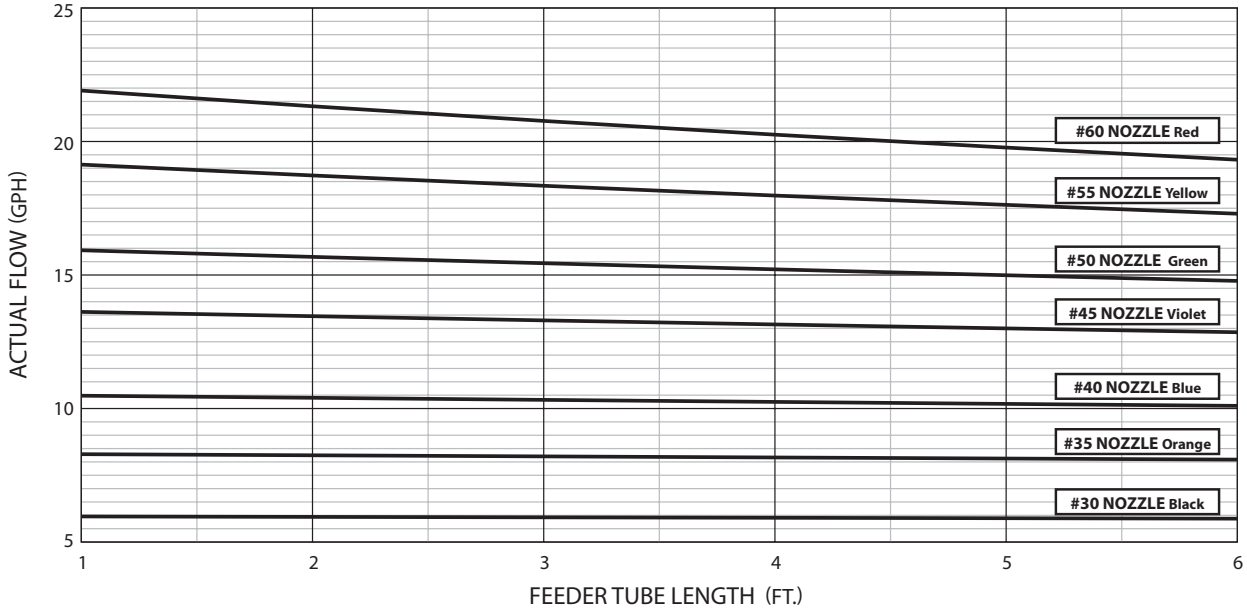
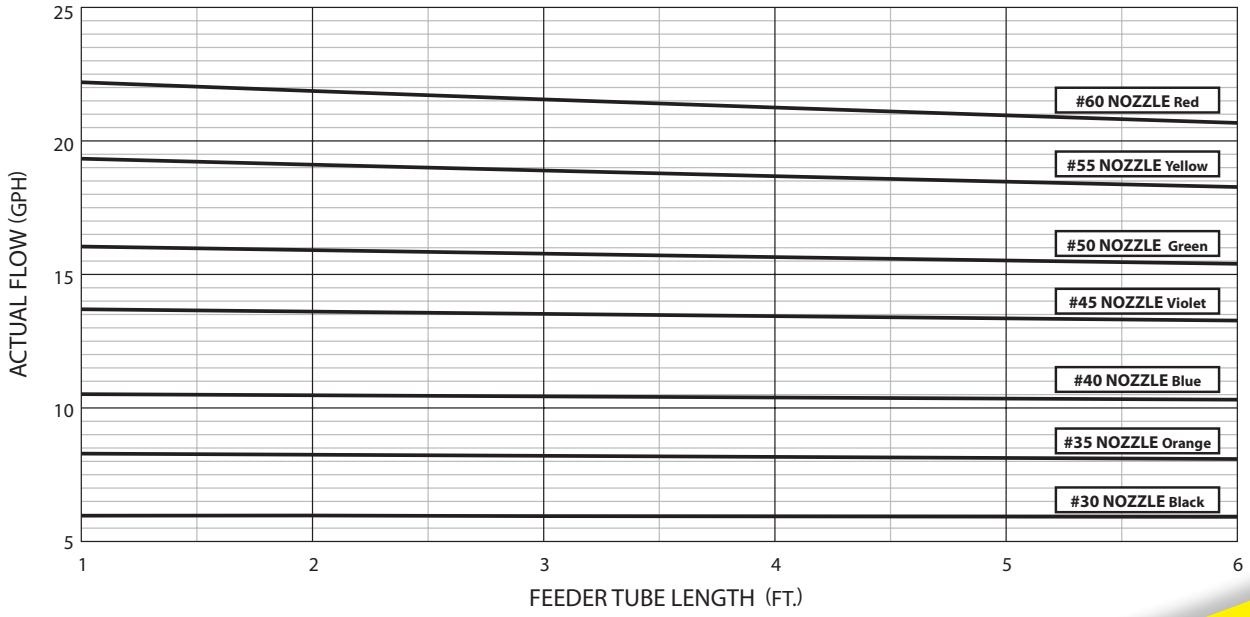
Feeder Tube Length vs. Fan-Jet® Flow

Bowsmith Fan-Jet® Feeder Tube and Coupling

0.140″ I.D. Vinyl
20 Psi Line Pressure



0.160″ I.D. Polyethylene
20 Psi Line Pressure



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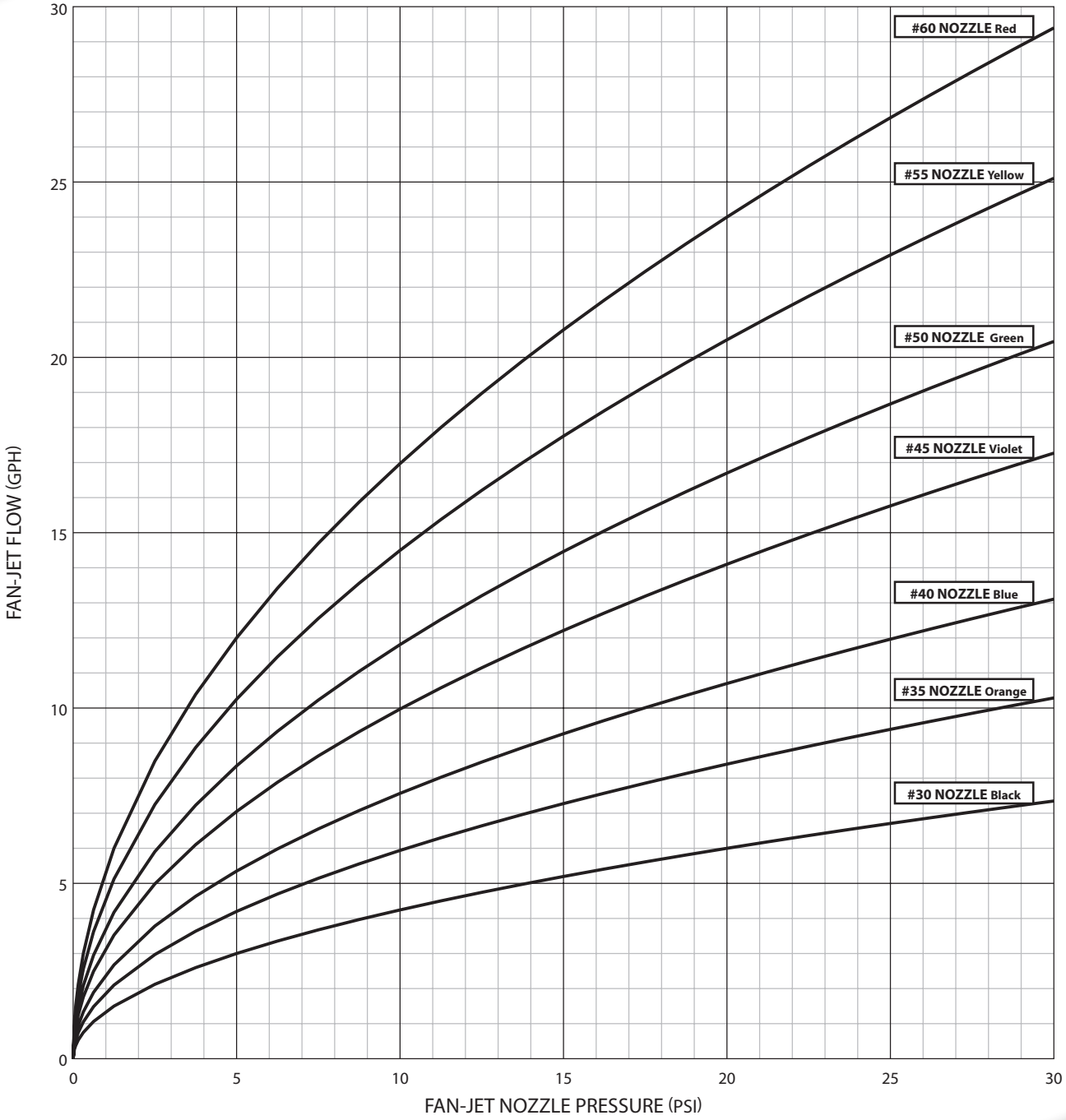
Fan-Jet® Flow vs. Nozzle Pressure



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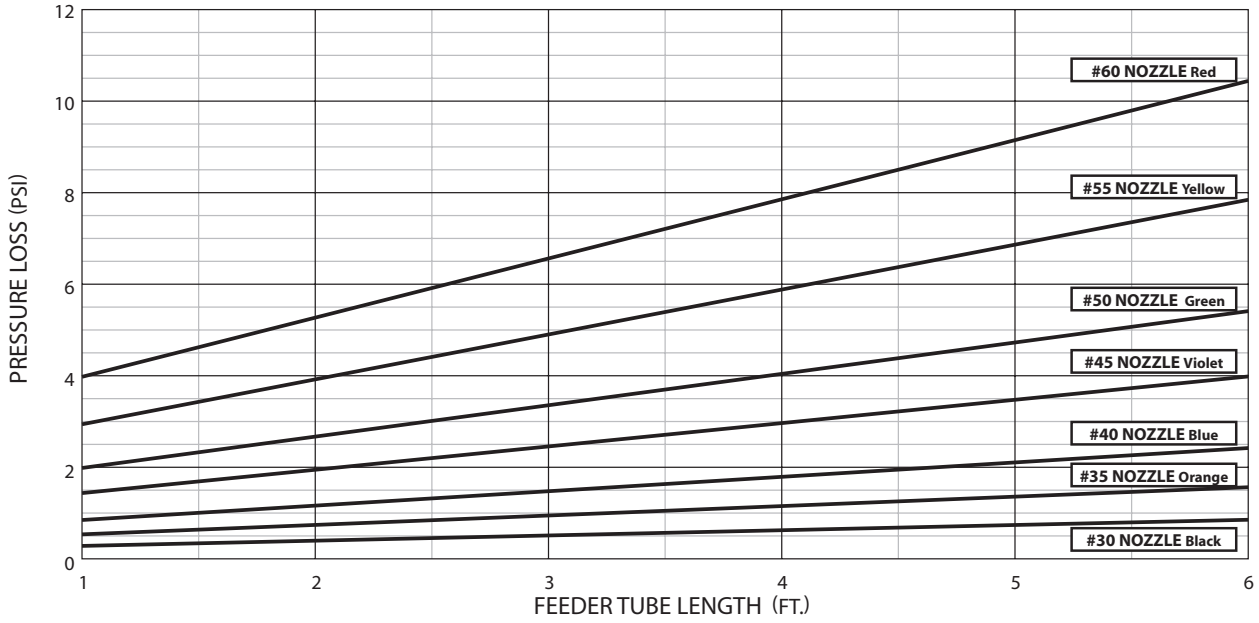
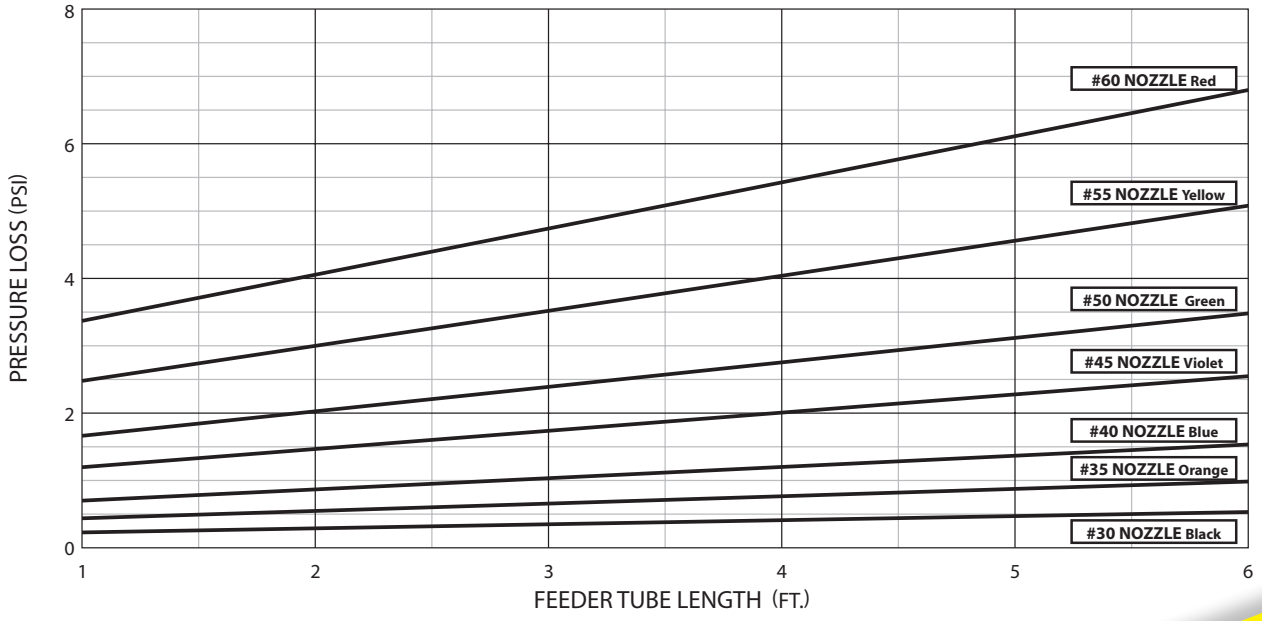
Combined Pressure Loss vs. Tube Length

Bowsmith Fan-Jet® Feeder Tube and Coupling

0.140″ I.D. VINYL
20 PSI at base of Fan-Jet head



0.160″ I.D. POLYETHYLENE
20 PSI at base of Fan-Jet head



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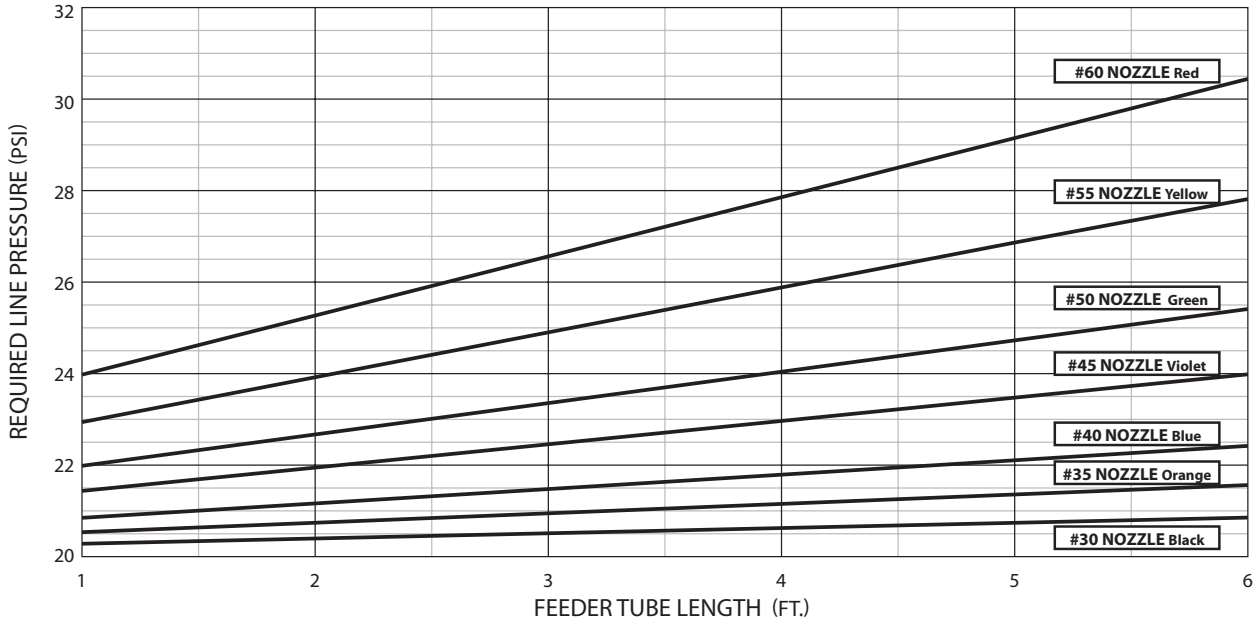
Tube Length vs Required Line Pressure

Bowsmith Fan-Jet® Feeder Tube and Coupling

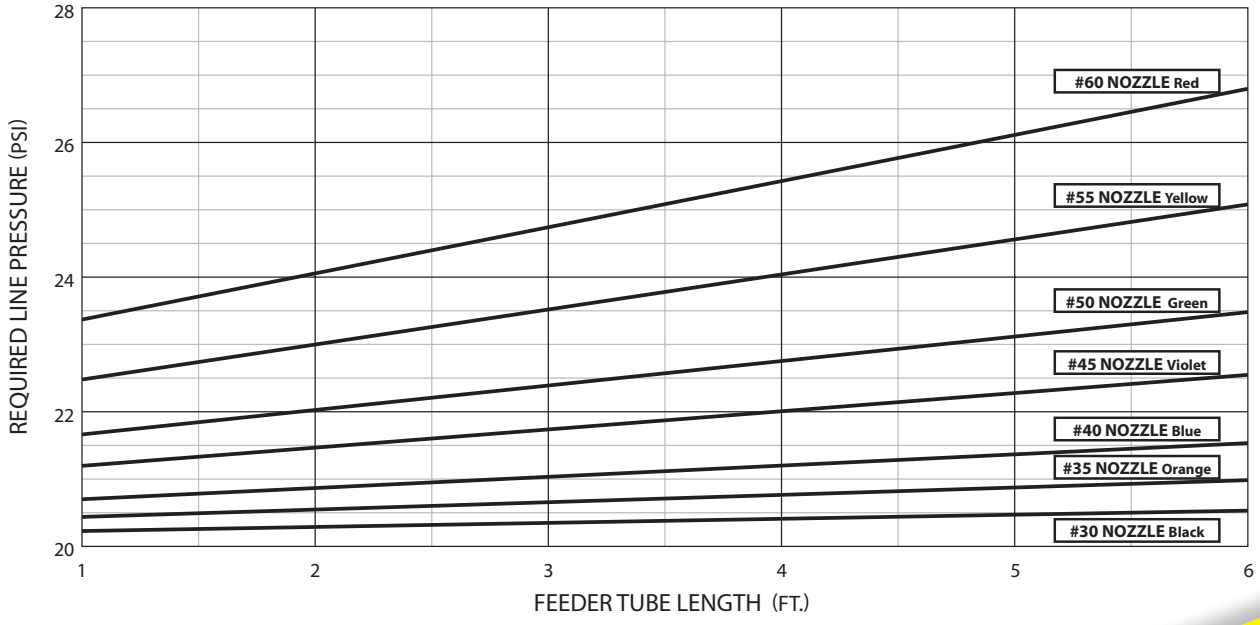
VINYL FEEDER TUBES

Pressure required to obtain 20 PSI at Fan-Jet head base



POLYETHYLENE FEEDER TUBES

Pressure required to obtain 20 PSI at Fan-Jet head base



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