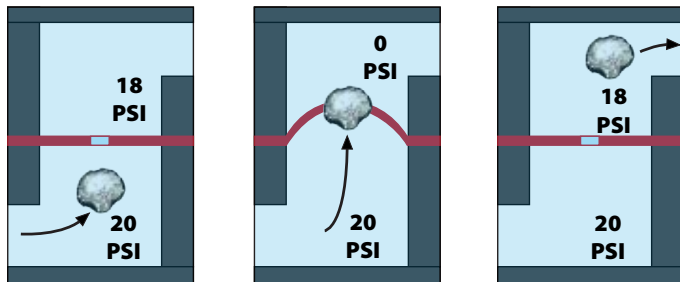


# NonStop<sup>®</sup> Drip Emitters

## 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,  $C_v: \leq 0.05$



"ML" Series









"SL" Series



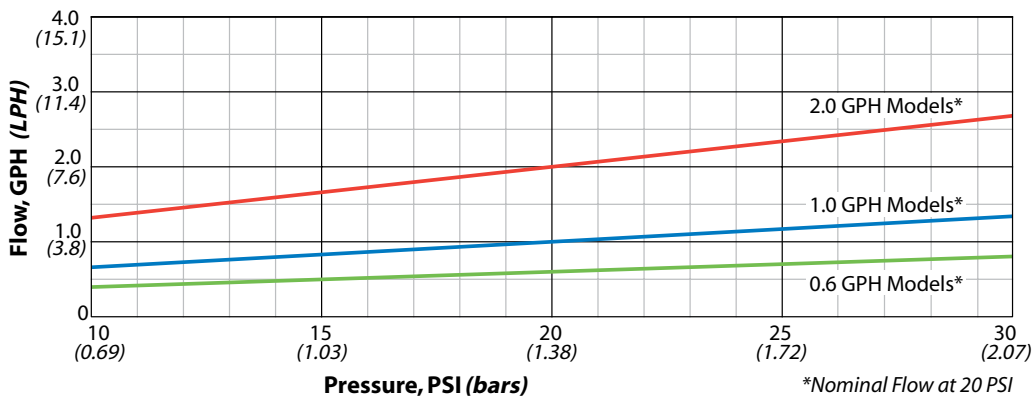
"SB" Series

# NonStop<sup>®</sup> Drip Emitters

	Description	Model No.	Stock No.	Specifications—Nominal Flow @ 20 PSI	
 <p><b>"SB" Series</b></p>	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)
 <p><b>"SL200" Series</b></p>	Single outlet, 1/2" 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)
 <p><b>"M200" Series</b></p>	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)
 <p><b>"ML200" Series</b></p>	6 outlets open, 1/2" 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)
 <p><b>Series "2000" Flow Distributor</b></p>	6 outlets open, 1/2" 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)
 <p><b>"Gripper" Series</b></p>	Single outlet, barb inlet, gripper sleeve. <small>*Available factory installed on Bowsmith tubing.</small>	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



### Notes

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

\*Nominal Flow at 20 PSI

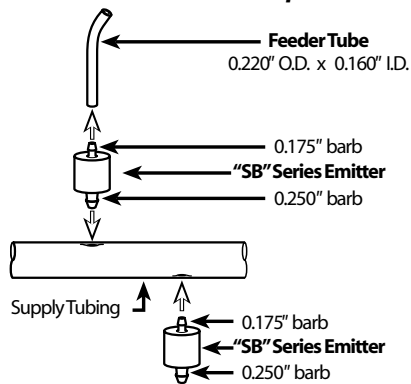
# NonStop® Drip Emitters

## 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.

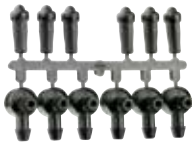
### Connection/Extension Options



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

## M200 Series

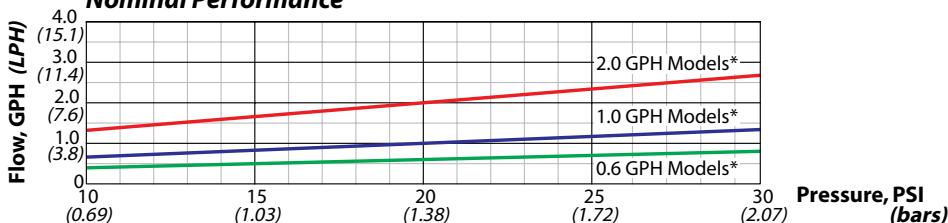


- Six open outlets. Each maintains its own flow path.
- 0.250" barb inlet.
- Includes full set (6 each) of elbow/outlet caps, and line plugs.
- One-piece elbow/outlet cap fixes position of elbow to prevent it from coming loose in application. 0.175" barb for secure attachment of spreader tubing.
- The 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

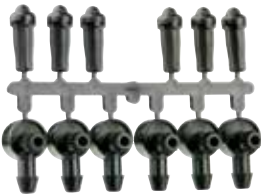


### Notes

- Manufacturer's variation,  $C_v \leq 0.05$
- 30-mesh filtration and 15 PSI emitter operating pressure are the recommended minimums for a Non-Stop emitter system.

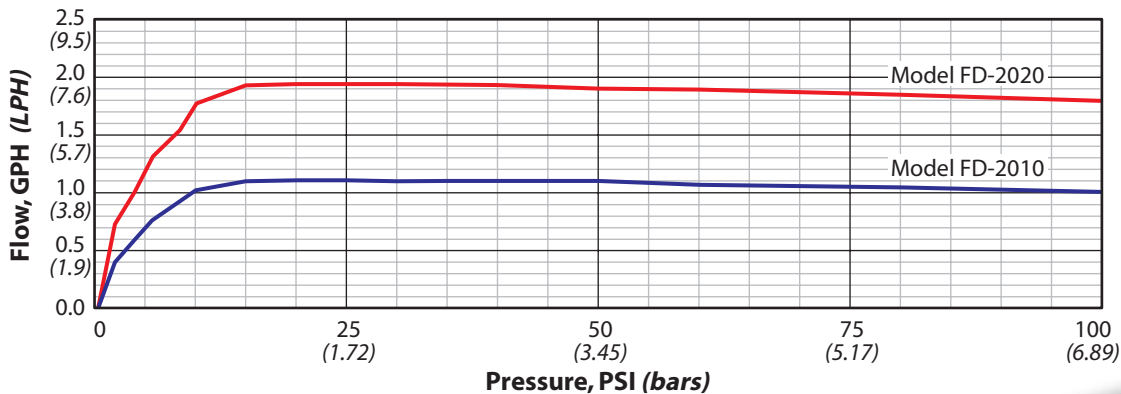
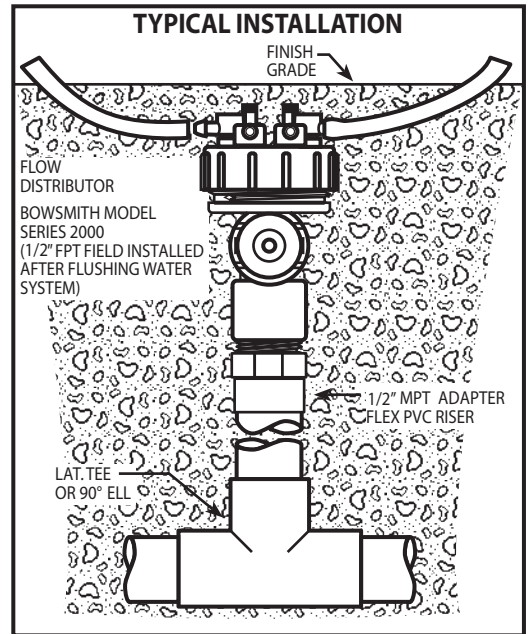
# NonStop<sup>®</sup> Drip Emitters

## 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.
- 1/2" 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)



# NonStop<sup>®</sup> Drip Emitters

## SL200 Series

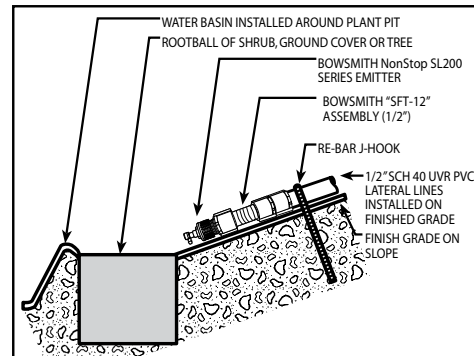
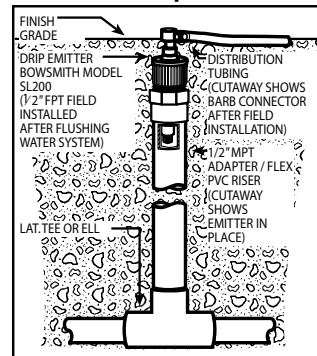


- Barbed elbow outlet port for connecting spreader tubing, if desired.
- Industry standard 1/2" FPT connection in cap.
- Silicone O-ring inside cap for leak-free connections.
- Constructed of tough engineering grade plastic with UV inhibitors.

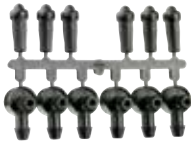
Stock No	Model No.	Nominal Flow*
6034	SL206 (Green Port)	0.6 GPH (2.3 LPH)
6035	SL210 (Blue Port)	1.0 GPH (3.8 LPH)
6036	SL220 (Red Port)	2.0 GPH (7.6 LPH)
6037	SL230 (Yellow Port)	3.0 GPH (11.4 LPH)

\*Nominal Flow @ 20 PSI

### Installation Examples



## ML200 Series

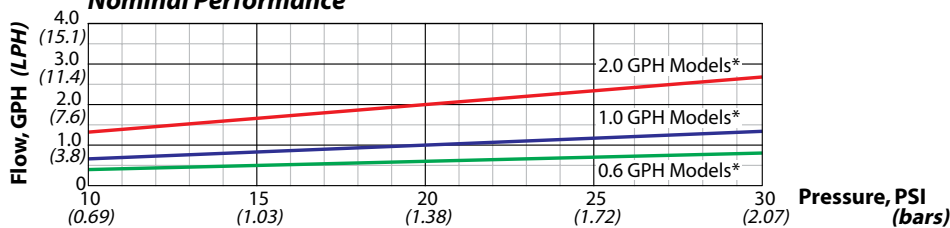


- Six open outlets. Each maintains its own flow path.
- 1/2" FPT inlet.
- Includes full set (6 each) of elbow/outlet caps, and line plugs.
- One-piece elbow/outlet cap fixes position of elbow to prevent it from coming loose in application. 0.175" barb for secure attachment of spreader tubing.
- The elbow 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



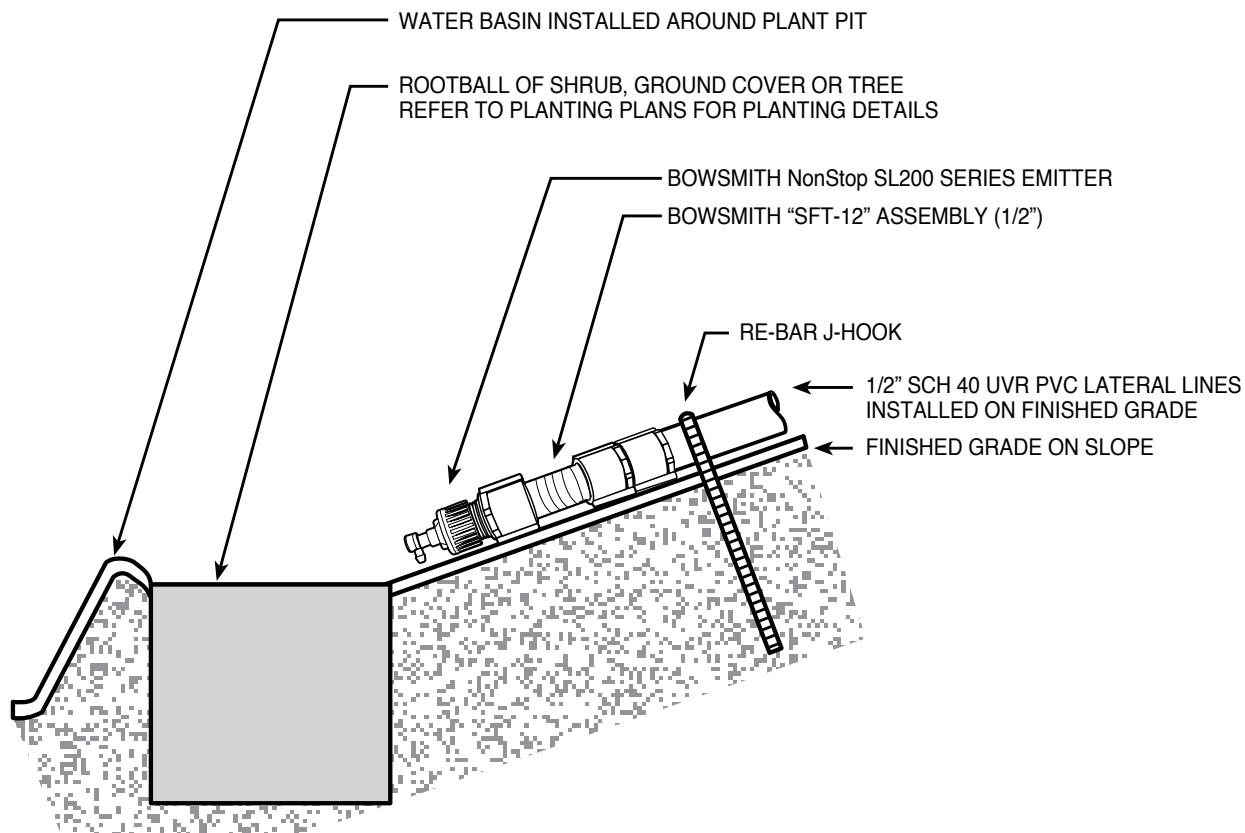
### Notes

- Manufacturer's variation,  $C_v \leq 0.05$
- 30-mesh filtration and 15 PSI emitter operating pressure are the recommended minimums for a Non-Stop emitter system.

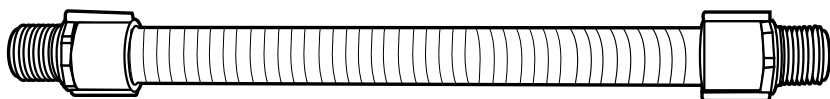
# NonStop<sup>®</sup> Drip Emitters

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.