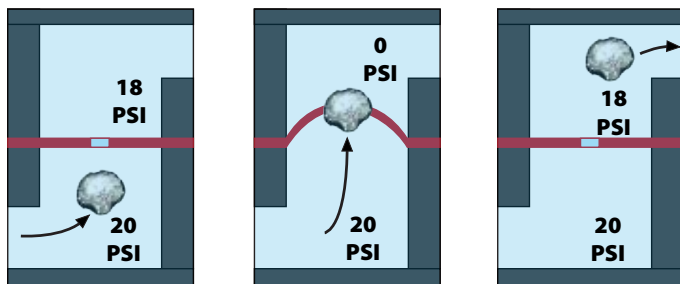


NonStop[®] Drip Emitters

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.

Notes

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

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 0.3 gph, 0.6 gph, 1.0 gph, 2.0 gph and 3.0 gph.



"ML" Series









"SL" Series



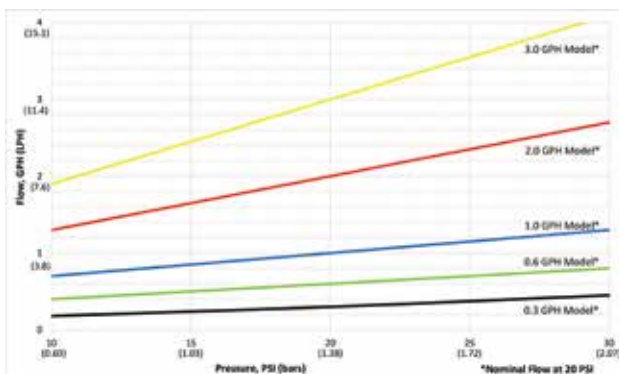
"SB" Series

NonStop® Drip Emitters

	Description	Model No.	Stock No.	Specifications—Nominal Flow @ 20 PSI
"SB" Series 	Single barb outlet, 0.175" barb, either can be used as inlet/outlet.	SB-03	6119	0.3 GPH (1.1 LPH) (Black Insert)
		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, 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 (11.4 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)
		M230	7067	3.0 GPH (11.4 LPH) (Yellow Cap)
"ML200" Series 	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)
		ML230	7072	3.0 GPH (11.4 LPH) (Yellow Cap)
Series "2000" Flow Distributor 	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 End)
		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 (11.4 LPH) (Yellow End)

NonStop Drip Emitters

Nominal Performance

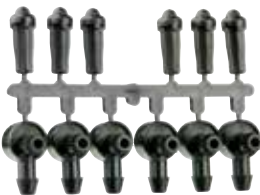


Notes

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

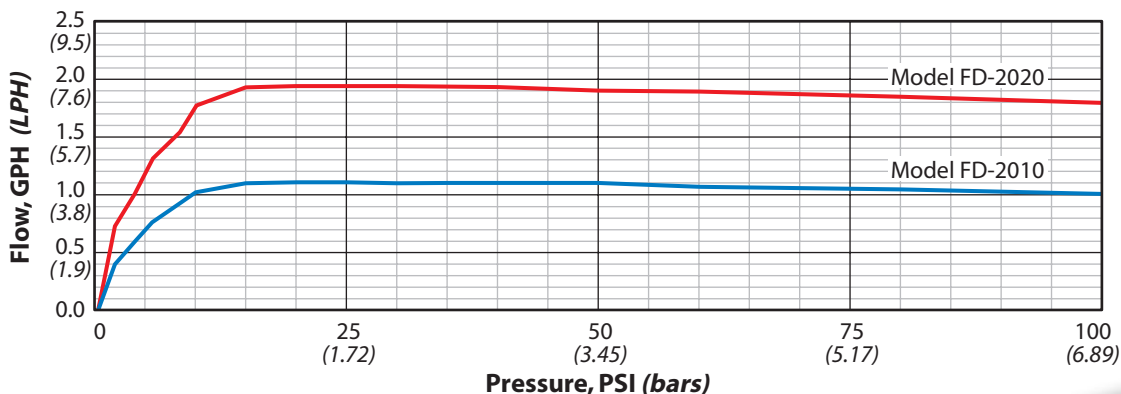
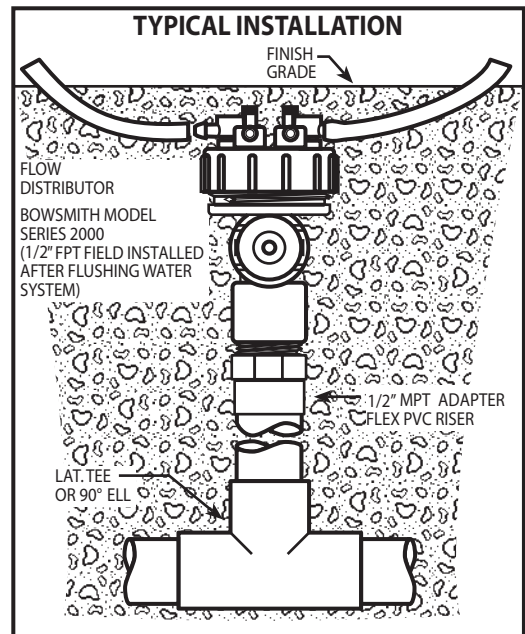
NonStop[®] Drip Emitters

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[®] Drip Emitters

SL200 Series

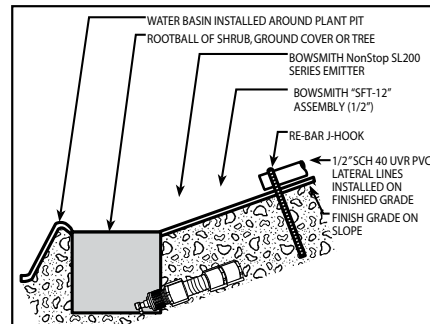
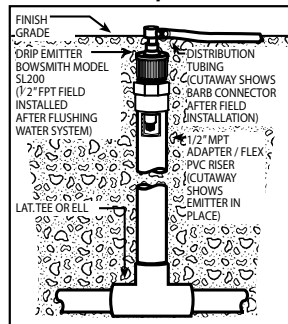


- Barbed elbow outlet port for connecting spreader tubing, if desired.
- Industry standard 1/2" FPT connection in cap.
- Silicone O-ring inside cap for leak-free connections.
- Constructed of tough engineering grade plastic with UV inhibitors.

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

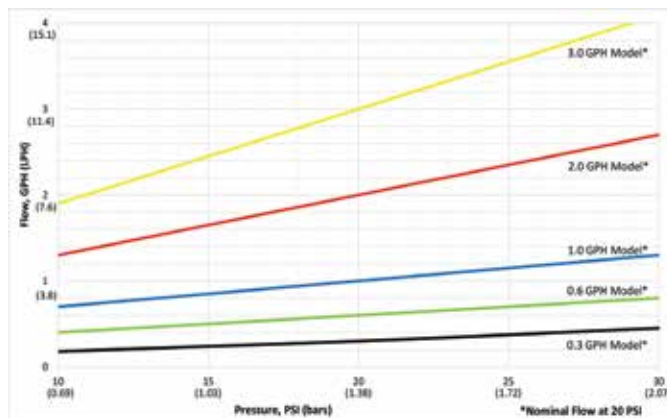


- Six open outlets. Each maintains its own flow path.
- 1/2" FPT inlet.
- Includes full set (6 each) of elbow/outlet caps, and line plugs.
- One-piece elbow/outlet cap fixes position of elbow to prevent it from coming loose in application. 0.175" barb for secure attachment of spreader tubing.
- The elbow 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)
7072	ML230 (Yellow Cap)	3.0 GPH (11.4 LPH)

* Nominal Flow @ 20 PSI

NonStop Drip Emitters Nominal Performance



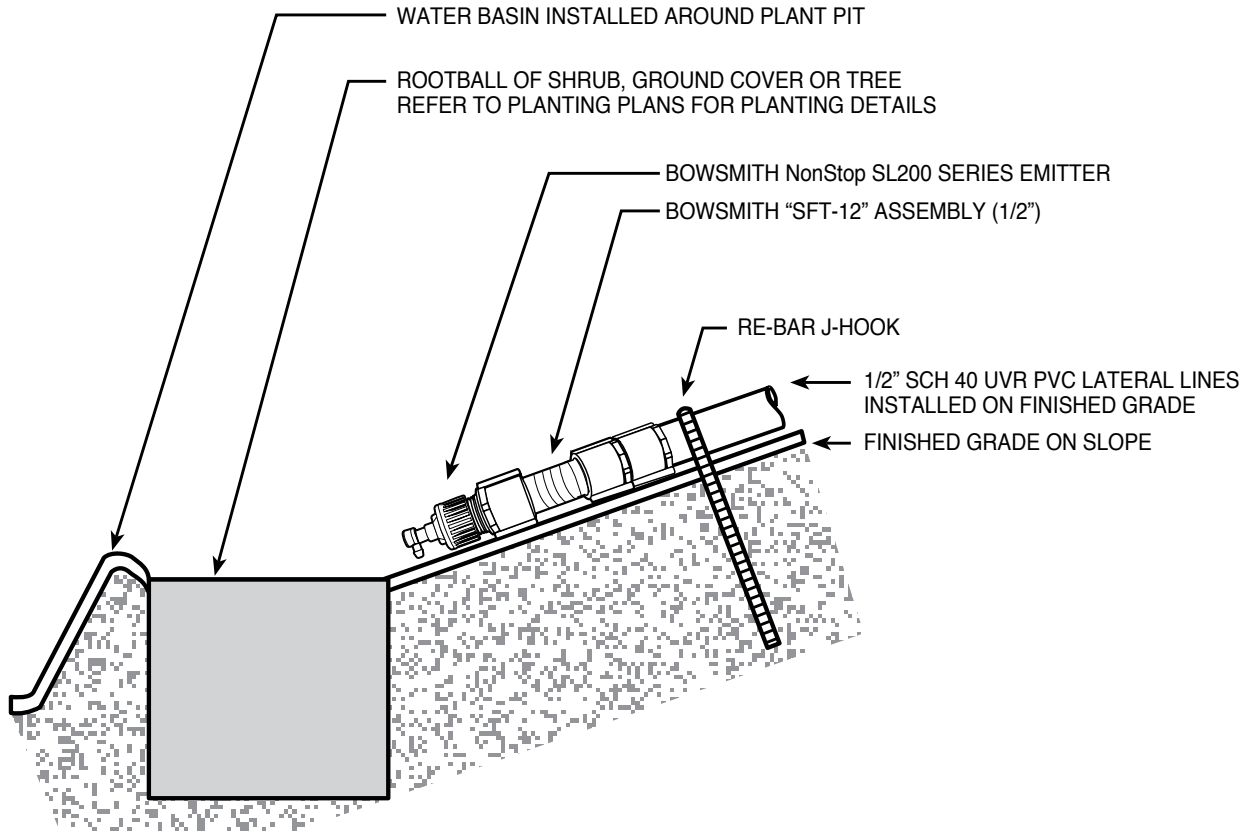
Notes

- 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.

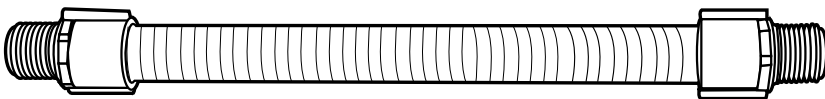
NonStop[®] Drip Emitters

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.