



TECH SPECS

On-Line Emitters Rain Bug® PC and Lady Bug Series

Precise water application, self-flushing action, excellent value

The wide range of drip irrigation equipment offered by Rain Bird includes on-line emitters that deliver the precise amount of required water and fertilizer to the place they are needed - the root zone.

These high-quality, low-volume irrigation products are easily installed and are excellent choices for many applications including vineyards, nurseries, and orchards. They can also be used as water-saving alternatives for greenhouses and are the ideal choice for demanding applications.

Rain Bug® PC Emitters

For superior flow uniformity over a wide range of operating pressures, pressure compensating PC emitters are an excellent choice. PC emitters are ideal for demanding applications such as uneven terrain and long lateral lines. The PC emitter is capable of operating at lower pressures, reducing pumping costs and providing energy savings.

The pressure-compensating diaphragm delivers constant flow at varying pressures. PC emitters feature pressure-compensating elastomer diaphragms (patented) and unique turbulent-flow path design that enables the emitters to flush out debris each time the system is activated. A color-coded inlet barb identifies flow rate. PC emitters are manufactured with engineering-grade plastic to withstand the effects of ultraviolet rays.

Lady Bug™ Emitters

In applications where water pressure variations are not a significant factor, the



Lady Bug non pressure-compensating emitter is an excellent choice. The tortuous path of the Lady Bug design allows particles to be kept in suspension during normal operation, and in turn makes the emitter more resistant to clogging.

The Lady Bug brings value and economy to low volume irrigation. The emitter is designed to provide savings not only at the initial time of purchase, but also over the entire operating life of the system. The clog-resistant feature reduces overall system maintenance, and results in lower operating costs. The Lady Bug emitter is an ideal choice for a variety of agricultural, landscape, nursery, greenhouse, and turf applications.

Multi-Outlet Rain Bug® Pressure-Compensating Emitters

The Multi-Outlet Rain Bug emitter provides six independently operating,

pressure-compensating outlets in one emission device. Each outlet is self-regulating and self-flushing. These emitters are also available in both barbed and 1/2" female pipe thread inlet. The outlets are easily opened by removing the tip with cutting pliers. For uneven terrain, long laterals, pipe friction loss and mainline variations, the pressure-compensating design assures a high level of uniformity.

How to Order:

<u>EM- L 05 B SSP</u>	
<u>Product Line Identification</u>	<u>Inlet Style</u> SSP=Self-Piercing NSP=Non Self-Piercing
<u>Emitter Style</u> M=Rain Bug L=Lady Bug	<u>Outlet Style</u> B=Barbed (Blank)=Smooth
<u>Flow Rate</u> 05=0.5 gph 10=1.0 gph 20=2.0 gph	



U.S. Units

Product Specifications - Rain Bug PC Emitter

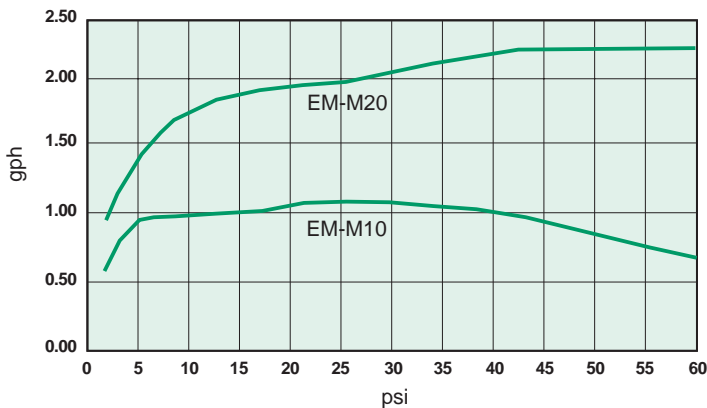
	Rain Bug PC Emitter	
	1.0* gph	2.0 gph
Minimum Operating Pressure (psi)	15	15
Maximum Operating Pressure (psi)	50	50
Emitter Flow Rate (gph) @ 20 PSI	1.0	2.0
Filtration (mesh)	200	200
Flushing Pressure (psi)	<5	<5

*For flow rate on EM6 and EMT6 multiply number of outlets open by 1.0 gph.

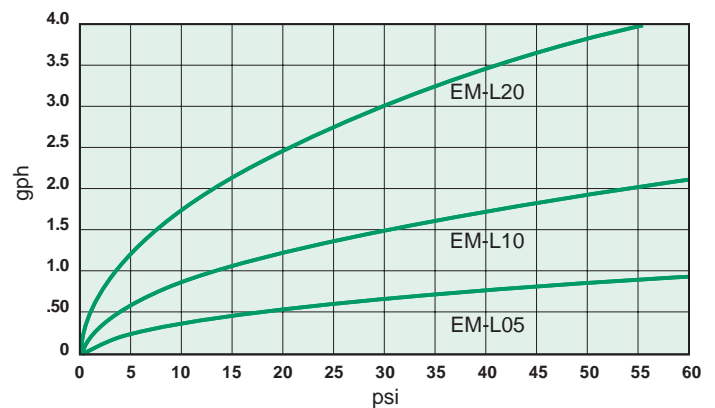
Product Specifications - Lady Bug Emitter

	Lady Bug Emitter		
	0.5 gph	1.0 gph	2.0 gph
Nominal Operating Pressure (psi)	15	15	15
Flow Rate (gph)	0.5	1.0	2.0
Filtration (mesh)	200	100	100

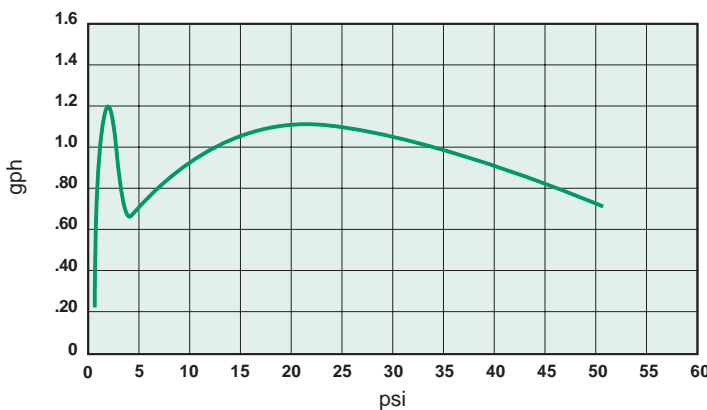
Rain Bug PC Performance Curves



Lady Bug Performance Curves



Multi-Outlet Performance Curves



	Rain Bug PC Emitter SSP (Self-piercing inlet)		Rain Bug PC Emitter NSP (Non self-piercing)		Multi-Outlet Emitter NSP (Non self-piercing)		Lady Bug Emitter SSP (Self-piercing inlet)		
Nominal Flow Rate	1.0 gph	2.0 gph	1.0 gph	2.0 gph	1.0 gph/outlet	2.0 gph/outlet	0.5 gph	1.0 gph	2.0 gph
Smooth Outlet	EM-M10 SSP A117431	EM-M20 SSP A117432	EM-M10 NSP A117441	EM-M20 NSP A117442					
Barbed Outlet	EM-EM10-B SSP A117411	EM-M20-B SSP A117412	EM-M10-B NSP A117421	EM-M20-B NSP A117422	EM6-M101 A78314	EM6-M201 A78312	EM-L05 SSP A77322	EM-L10 SSP A77324	EM-L20 SSP A77328
1/2" Threaded					EMT6-M101 A78714				

Metric Units

Product Specifications - Rain Bug PC Emitter

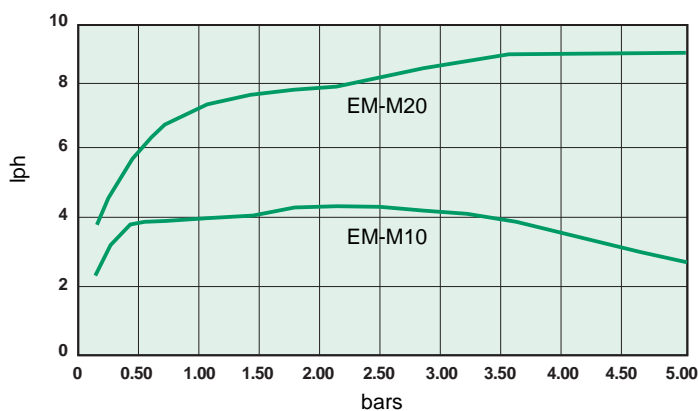
	Rain Bug PC Emitter	
	3,8* lph	7,6 lph
Minimum Operating Pressure (bars)	1,0	1,0
Maximum Operating Pressure (bars)	3,4	3,4
Emitter Flow Rate (lph) @ 1,4 bars	3,8	7,6
Filtration (microns)	75	75
Flushing Mechanism	0,3 bars	0,3 bars

*For flow rate on EM6 and EMT6 multiply number of outlets open by 3,8 lph.

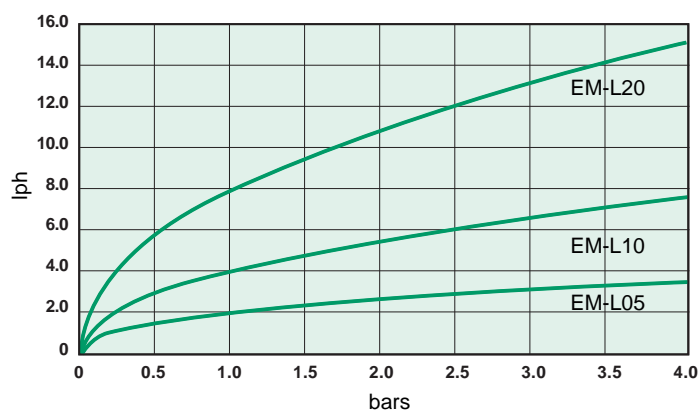
Product Specifications - Lady Bug Emitter

	Lady Bug Emitter		
	1,9 lph	3,8 lph	7,6 lph
Nominal Operating Pressure (bars)	1,0	1,0	1,0
Flow Rate (lph)	1,9	3,8	7,6
Filtration (microns)	75	150	150

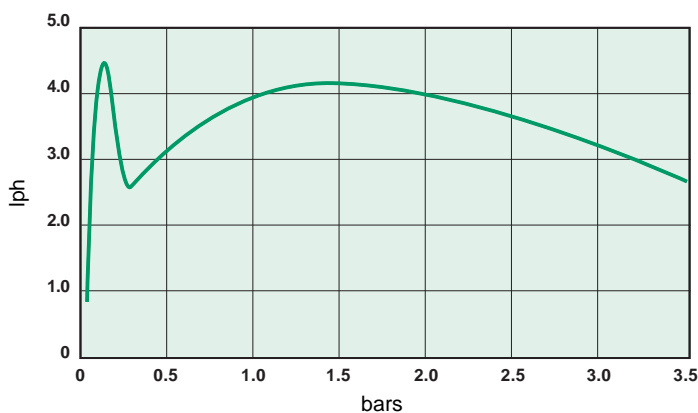
Rain Bug PC Performance Curves



Lady Bug Performance Curves



Multi-Outlet Performance Curves



EM-M Rain Bug



EM6-M Rain Bug



EM-L Lady Bug

	Rain Bug PC Emitter SSP (Self-piercing inlet)		Rain Bug PC Emitter NSP (Non self-piercing)		Multi-Outlet Emitter NSP (Non self-piercing)		Lady Bug Emitter SSP (Self-piercing inlet)		
Nominal Flow Rate	4,0 lph	8,0 lph	4,0 lph	8,0 lph	3,8 lph/outlet	7,6 lph/outlet	2,0 lph	4,0 lph	8,0 lph
Smooth Outlet	EM-M10 SSP A117431	EM-M20 SSP A117432	EM-M10 NSP A117441	EM-M20 NSP A117442					
Barbed Outlet	EM-EM10-B SSP A117411	EM-M20-B SSP A117412	EM-M10-B NSP A117421	EM-M20-B NSP A117422	EM6-M101 A78314	EM6-M201 A78312	EM-L05 SSP A77322	EM-L10 SSP A77324	EM-L20 SSP A77328
1/2" Threaded					EMT6-M101 A78714				



Rain Bug® PC Emitters

PC Emitter Model	Flow Rate GPH	Flow Rate LPH	Inlet	Outlet	Color-Coded Inlet	Part Number
EM-M10 SSP	1.0	3,8	self-piercing	smooth	black	A117431
EM-M10-B SSP	1.0	3,8	self-piercing	barbed	black	A117411
EM-M10 NSP	1.0	3,8	non self-piercing	smooth	black	A117441
EM-M10-B NSP	1.0	3,8	non self-piercing	barbed	black	A117421
EM-M20 SSP	2.0	7,6	self-piercing	smooth	red	A117432
EM-M20-B SSP	2.0	7,6	self-piercing	barbed	red	A117412
EM-M20 NSP	2.0	7,6	non self-piercing	smooth	red	A117442
EM-M20-B NSP	2.0	7,6	non self-piercing	barbed	red	A117422
EM6-M101	1.0	3,8*	non self-piercing	barbed,one open	black	A78314
EM6-M201	2.0	7,6*	non self-piercing	barbed,one open	black	A78312
EMT6-M101	1.0	3,8*	1/2" threaded inlet	barbed,one open	black	A78714

* For flow rate of EM6 and EMT6, multiply number of outlets open by 1.0 gph or 3,8 lph

Lady Bug™ Emitters

Non-PC Emitter Model	Flow Rate GPH	Flow Rate LPH	Inlet	Outlet	Color-Coded Inlet	Part Number
EM-L05	0.5	1,9	self-piercing	barbed	blue	A77322
EM-L10	1.0	3,8	self-piercing	barbed	black	A77324
EM-L20	2.0	7,6	self-piercing	barbed	black	A77328

Filtration Requirement

Required filtration is 200 mesh (75 microns) and can be provided by the new Rain Bird Disk Filters (R and S Series).

EMA-BG "Bug Gun" Emitter Installation Tool

- Used with all single outlet Rain Bug and Lady Bug emitters
- Saves installation time; quick and easy to use
- Allows installation on a pressurized system



Part Number D24706

Also available:

Part Number

EMA-RBP Emitter Installation Punch	D24690
EMA-CD Replacement Cutting Tips	D24692
EMA-GP Dual Size Line (Goof) Plug	D24695
Installation Tool for Self-Piercing Barb	170654

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