

TORO

Count on it.

Drip In[®] PC

Pressure Compensating Dripline

Micro-Irrigation



A technologically superior and cost effective way to irrigate

- Difficult topographical conditions
- Low and varying water pressures
- Installations requiring longer lateral runs

Features & Benefits:

Highly clog resistant

Due to wide, deep turbulent passageways and raised inlets.

Extremely accurate flow rate

Due to high quality control standards.

Reduced labor and installation cost

No hole punching, lost emitters or handling damage. Emitters are factory spaced.

Can't separate

Because there are no clip-ons or connections.

Lower friction loss

Due to jointless design, allows longer runs and fewer mainlines.

Versatility

Flow rates available in three hose sizes:
(0.550" (16mm), 0.620" (18mm) and 0.710" (20mm))

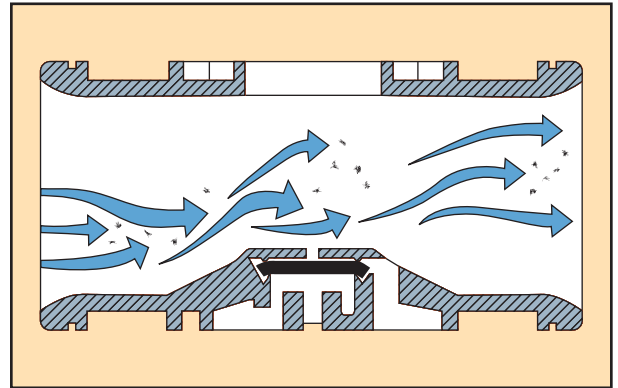
Drip In[®] PC

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Design Advantages:

High Resistance to Plugging

Water enters the emitter through a raised filtration system. Debris is deflected upward and away from the inlet because of the unique construction of the emitter. This feature significantly reduces the amount of debris entering the emitter when the system is operating. The positioning of the raised inlet also prevents sediment from collecting near the inlet while the system is not operating, and being ingested into the emitter at start-up. The emitter's filter ensures that only particles smaller than the emitter's cross-sectional dimensions will enter.



Three flushing cycles to ensure continued reliability and performance.

1. Pre-regulating Flush:

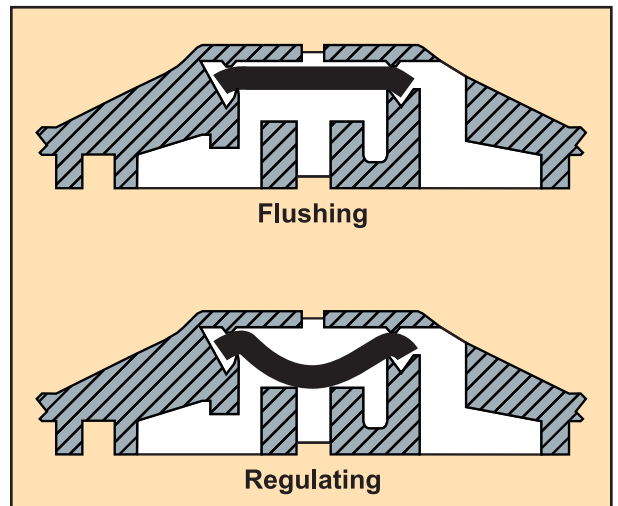
The automatic flushing feature is activated at low pressures during system startup. The diaphragm is relaxed allowing particles to be freely flushed out.

2. Irrigation Flush:

During the irrigation cycle the diaphragm is depressed across the compensating chamber. If the emitter begins to clog, there is a reduction of flow, and pressure on both sides of the diaphragm begins to equalize. The diaphragm returns to its relaxed position and particles are flushed out. The dripper returns to normal performance.

3. Shut-down Flush:

As pressure is reduced, the diaphragm returns to its relaxed position allowing accumulated particles to be flushed out.



Wide Compensating Range

At low pressures, 10 - 15 psi, the emitter behaves like a turbulent-flow emitter. From 15 - 60 psi, the emitter is fully pressure compensating.

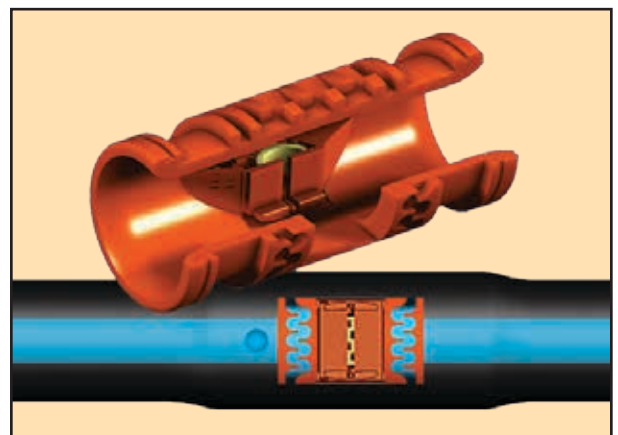
Flat discharge curve over a wide range of pressures (10-60 PSI)

Chemical Resistance

Drip In PC is manufactured from the highest quality materials. The emitter body is made from injection molded polyethylene resins. The diaphragm is made from silicon. This combination will withstand acids down to pH2 as well as most commonly used ag chemicals, fertilizers and chlorine.

Uniformity

Drip In PC's state of the art manufacturing process and high quality control standards assures dependable, uniform and precise emitter discharge. Drip In emitters have Cv values less than .05, one of the highest rankings of all manufacturers.

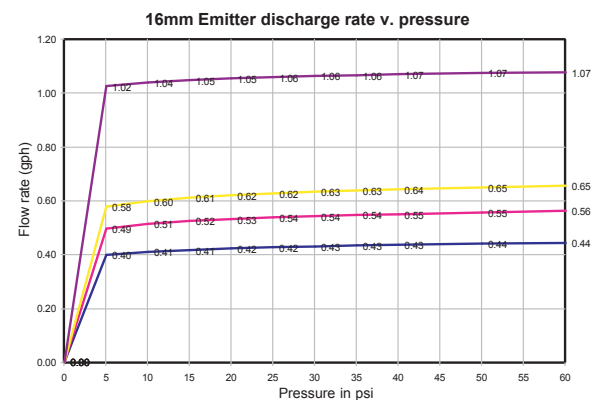
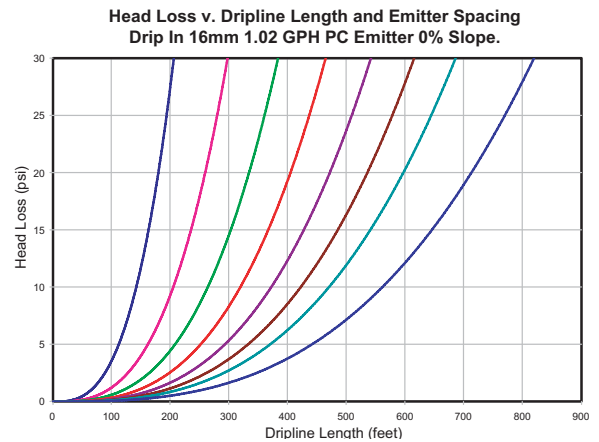
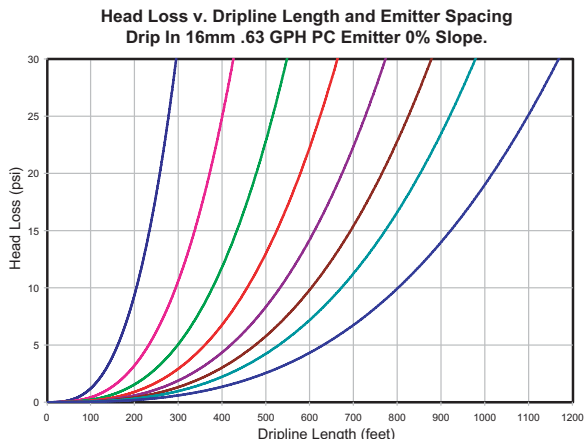
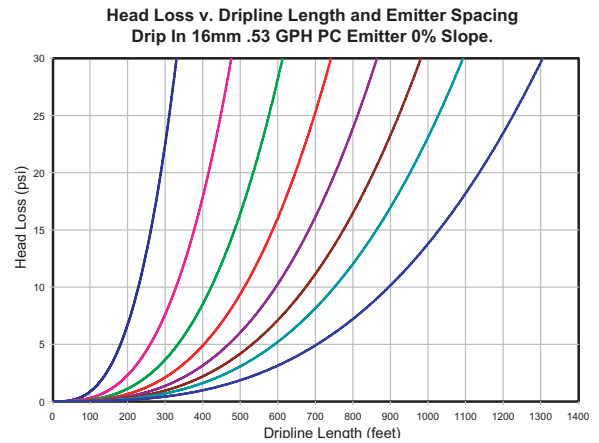
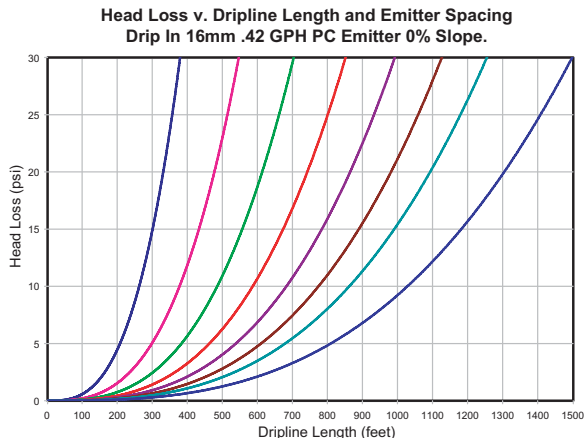


Drip In® PC

Spacings:

12" 18" 24" 30" 36" 42" 48" 54" 60"

0.550" (16MM) DRIP IN® PC DRIPLINE



16mm Drip In PC – Maximum Recommended Dripline Length (Feet) (0.550" I.D./0.640" O.D./0.045" Wall)

Inlet Pressure	Dripper Spacing																							
	12"		18"		24"		36"		42"		48"		54"		60"									
15 psi	199	174	156	115	286	250	224	165	366	321	287	211	513	449	402	296	581	509	456	335	649	566	507	373
25 psi	297	260	233	171	426	373	334	246	546	478	428	315	766	670	600	442	867	759	680	500	964	844	756	556
35 psi	358	313	280	206	513	449	402	296	658	576	516	379	922	807	723	532	1044	914	819	602	1161	1016	910	670
45 psi	404	354	317	233	585	508	455	335	743	651	583	429	1042	912	817	601	1180	1033	925	681	1312	1149	1029	757
Dripper Flow Rate (gph)	0.42	0.53	0.63	1.02	0.42	0.53	0.63	1.02	0.42	0.53	0.63	1.02	0.42	0.53	0.63	1.02	0.42	0.53	0.63	1.02	0.42	0.53	0.63	1.02

Barb Loss Factor (kd) 2.07 Coefficient of variation ≤5%

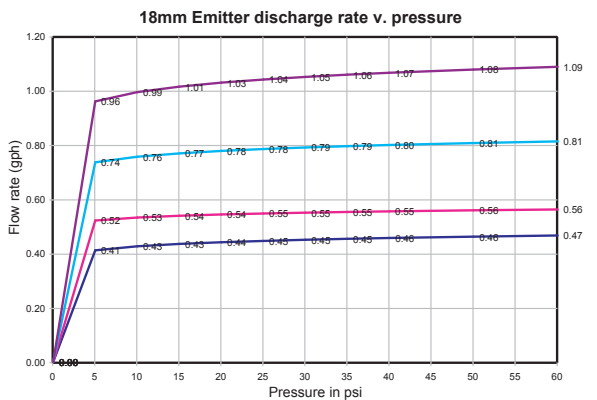
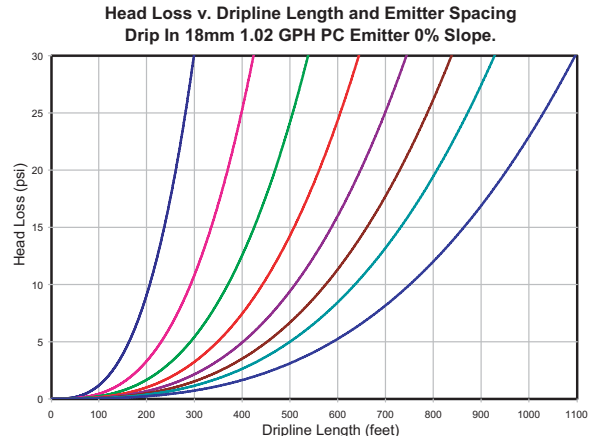
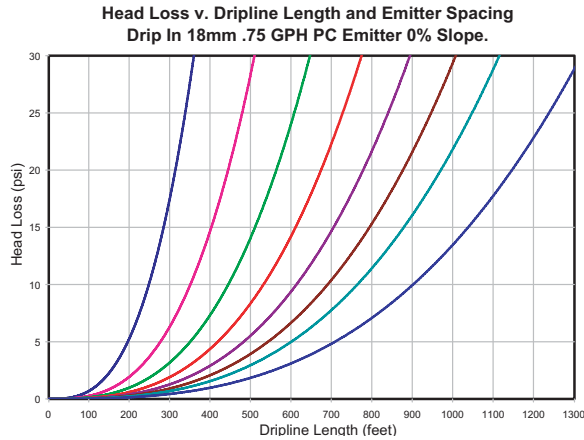
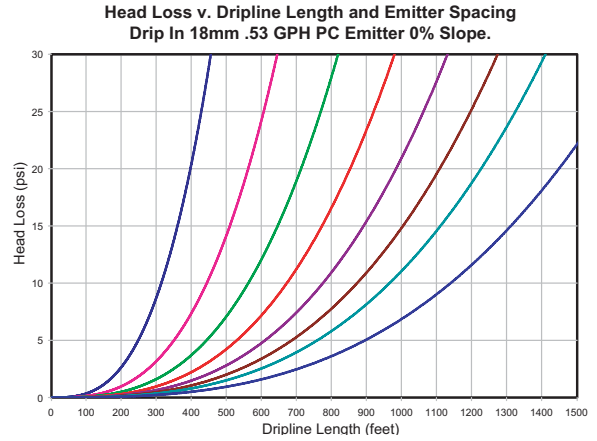
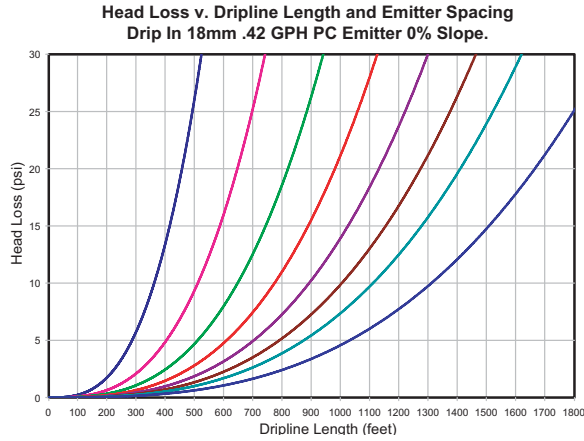
Maximum length of run based on EU and minimum pressures – please contact Toro for length of run based on other criteria such as flushing velocity.

Drip In® PC

Spacings:

12" 18" 24" 30" 36" 42" 48" 54" 60"

0.620" (18MM) DRIP IN® PC DRIPLINE



18mm Drip In PC™ – Maximum Recommended Dripline Length (Feet) (0.620" I.D./0.710" O.D./0.045" Wall)

Inlet Pressure	Dripper Spacing																							
	12"		18"		24"		30"		36"		42"		48"		54"		60"							
15 psi	271	238	190	157	384	336	270	222	488	427	342	281	673	589	473	388	758	664	532	438	839	735	589	484
25 psi	405	354	284	234	573	502	102	331	727	637	510	420	1004	879	705	579	1131	990	794	653	1252	1096	878	722
35 psi	488	427	4342	281	690	604	484	398	876	767	615	505	1210	1059	849	698	1362	1193	956	786	1508	1320	1058	870
45 psi	551	482	387	318	780	683	548	450	990	867	695	571	1367	1197	959	789	1540	1348	1088	888	1704	1492	1196	983
Dripper Flow Rate (gph)	0.42	0.53	0.75	1.02	0.42	0.53	0.75	1.02	0.42	0.53	0.75	1.02	0.42	0.53	0.75	1.02	0.42	0.53	0.75	1.02	0.42	0.53	0.75	1.02

Barb Loss Factor (kd) 0.98 Coefficient of variation ≤5%

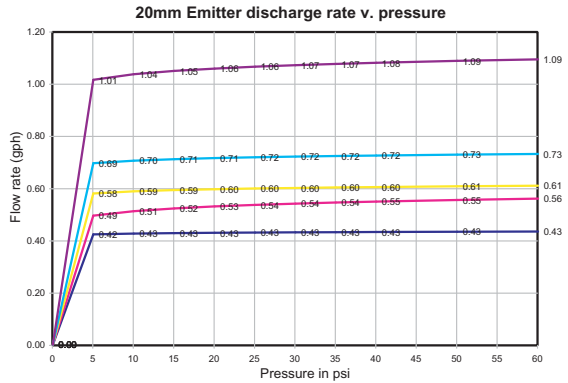
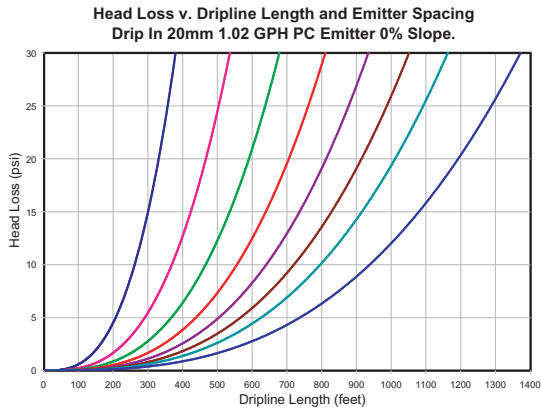
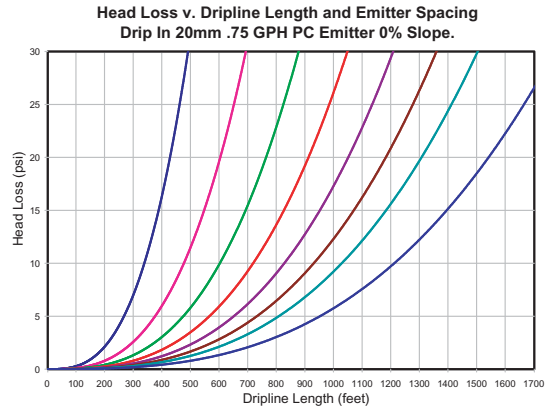
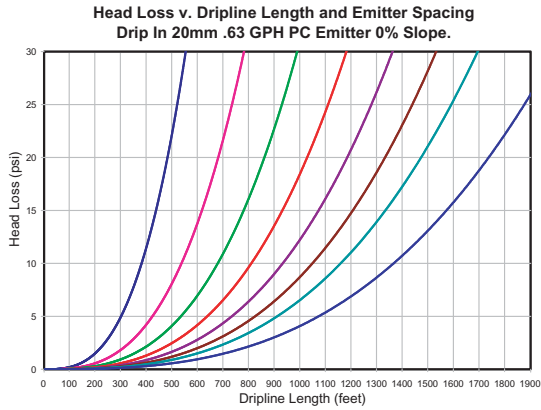
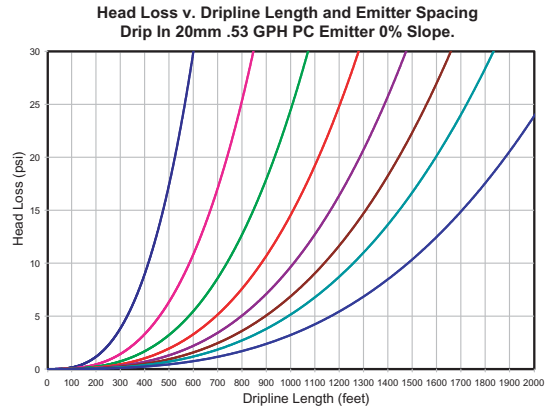
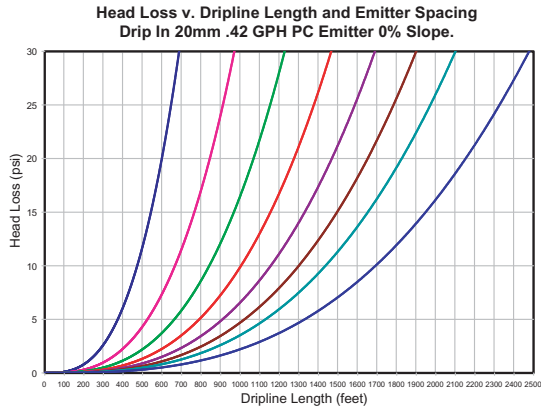
Maximum length of run based on EU and minimum pressures – please contact Toro for length of run based on other criteria such as flushing velocity.

Drip In[®] PC

Spacings:

12" 18" 24" 30" 36" 42" 48" 54" 60"

0.710" (20MM) DRIP IN[®] PC DRIPLINE



20mm Drip In PC™ – Maximum Recommended Dripline Length (Feet) (0.710" I.D./0.805" O.D./0.047" Wall)

Inlet Pressure	Dripper Spacing																													
	12"				18"				24"				36"				42"				48"									
15 psi	357	312	280	251	206	502	440	394	353	290	635	556	498	445	366	871	762	683	611	502	979	857	767	687	565	1081	947	848	759	624
25 psi	532	466	418	374	307	749	656	588	526	432	947	829	742	664	546	1299	1137	1019	9122	749	1460	1278	1145	1024	842	1613	1412	1265	1132	930
35 psi	614	561	503	450	370	903	790	708	633	521	1140	998	894	800	658	1588	1369	1227	1098	903	1758	1539	1379	1234	1014	1942	1700	1523	1363	1121
45 psi	725	634	568	509	418	1020	893	800	716	589	1288	1128	1010	904	743	1795	1548	1387	1241	1020	1987	1740	1558	1394	1146	2195	1922	1721	1540	1267
Dripper Flow Rate (gph)	0.42	0.53	0.63	0.75	1.02	0.42	0.53	0.63	0.75	1.02	0.42	0.53	0.63	0.75	1.02	0.42	0.53	0.63	0.75	1.02	0.42	0.53	0.63	0.75	1.02	0.42	0.53	0.63	0.75	1.02

Barb Loss Factor (kd) 0.75 Coefficient of variation ≤5%

Maximum length of run based on EU and minimum pressures – please contact Toro for length of run based on other criteria such as flushing velocity.

The growers most economical choice for vineyards, orchards, and row crops.



Advantages:

- Highly clog-resistant due to wide, deep turbulent passageways and raised inlets.
- Extremely accurate flow rate due to high quality control standards.
- Reduced labor and installation cost. No hole punching, lost emitters or handling damage.
- Can't separate because there are no clip-ons or connections.
- Lower friction loss due to jointless design, allows longer runs and fewer mainlines.
- For above and below ground applications.
- Emitters are factory spaced, thus requiring no field installation (hole punching, clip-ons, etc.).

The **In-line Emitter** is enclosed and inseparably welded to the inside wall of the tubing as it is extruded in the manufacturing process. This emitter has enjoyed over 20 years of reliable performance in a variety of applications.

Pressure Compensating Dripline is a one piece, jointless emitter enclosed tube. It is rugged, lightweight and very flexible. It can be laid out and re-rolled easily with no damage to the in-line emitters. Only the highest quality resins are used. Drip In[®] dripline is the most effective and economical choice for permanent or row crops. PC dripline now comes with the Toro Ag Irrigation Blue Stripe of quality.

High Speed Installation and Removal
In addition to high speed layout and recovery, tractor-mount spindle reels provide convenient storage between seasons, plus easy shipment and handling. Built-in emitters make

Drip In[®] the ideal dripline for quick, damage-free re-rolling through dense crops like tomatoes or cotton.

Other Drip In[®] Products

Drip In[®] Clipperline[®]

Drip In dripline comes factory-installed with clip rings.

- Dramatically reduces labor and installation time in the field.
- Unique engineering plastics provide unparalleled strength on the wire.
- Superior control of water placement by directing water droplet to the plant.
- Low profile for mechanical harvesting.
- Works with 14 gauge wire.
- Patent Pending

Drip In[®] Rootguard[®]

ROOTGUARD protection technology combines Treflan[®] with the drip emitter to inhibit root growth. This is a patented technology where the herbicide is released at a uniform rate over a long period of time. It maintains a sufficient concentration in the soil immediately surrounding the drip emitter, to prevent root growth into the emitter.

