

Tips on Drip

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“Why is pressure so important for CV Dripline?”

When installing dripline with a check valve the pressure is critical to insure that the emitters open and provide the specified flow rate. Landscape Products EZ-ID CV requires a minimum opening pressure of 12.0 psi at the emitter. Other CV dripline emitters require higher opening pressures - (Netafim HCVXR is 21.8 psi and Rain Bird XFCV is 14.5 psi) Non-check valve pressure compensated dripline is a little more forgiving as it has a lower opening pressure and will emit water at lower pressures. Contractors must be aware when adding or replacing dripline with CV on an existing PC installation.

Dripline Selection Guidelines

	Clay	Loam	Sand
Nominal Emitter Flow Rate	0.4 GPH	0.6 GPH	1.0 GPH
EZ-ID color code	Orange	Blue	White
Emitter Spacing	18"	12"	12"
Dripline Row Spacing	18"	18"	12"
Application Rate (inches/hour)	0.29	0.64	1.60
Time to apply 1/4" of water	53 min.	23 min.	10 min.

Flow Rate Conversion GPH to GPM per 100'

Emitter Spacing	Nominal Flow Rate (GPH/GPM)					
	0.4 GPH		0.6 GPH		1.0 GPH	
12"	40.0 GPH	0.67 GPM	60.0 GPH	1.0 GPM	100 GPH	1.67 GPM
18"	26.67 GPH	0.44 GPM	40.0 GPH	0.67 GPM	66 GPH	1.11 GPM

Single Lateral Maximum Run Length (feet)

Outlet Pressure (PSI)	12" Spacing Nominal Flow Rate (GPH)			18" Spacing Nominal Flow Rate (GPH)		
	0.4	0.6	1	0.4	0.6	1
20	282	233	173	394	325	243
25	328	271	201	459	378	283
30	364	301	224	510	420	314
35	394	326	242	553	456	341
40	421	348	259	591	488	363
45	445	367	270	624	514	381

As with sprinklers and rotary heads, two factors come into play with dripline installations, the available flow and the outlet pressure from the drip control zone kit. Let's use an example of 12 GPM available and a 25 psi control zone kit. If we use 0.6 gph dripline with 12 inch emitter spacing we can install up to a maximum 1200' of dripline with no single run greater than 271'.

A great rule of thumb for dripline installation challenges is to ask yourself **“how would I do this if I was installing sprinklers?”** The hydraulic solutions are the same.