

DRIPLINE • MICRO-LINE™ AND EXCEL PC™

Whether designing, installing or maintaining an efficient irrigation system, place DIG's EXCEL™ PC CV, EXCEL™ PC and MICRO-LINE™ dripline at the top of your list. Offering new advances in pressure compensating dripline for above or below grade, our EXCEL™ PC CV dripline features a built-in check valve that increases uniformity and conserves water, producing an extended range of dripline for versatility in a wide variety of applications.

Both 1/2" and 1/4" dripline contain UV protection and micro filters within each drip emitter to ensure long life and trouble-free operation.



DRIPLINE

2



MICRO-LINE™ Dripline

3



EXCEL™ Pressure Compensating
Dripline with Check Valve

5



EXCEL™ Pressure Compensating (PC) Dripline

1

DRIPLINE™ • MICRO-LINE™ AND EXCEL™

MICRO-LINE™ Dripline

Features

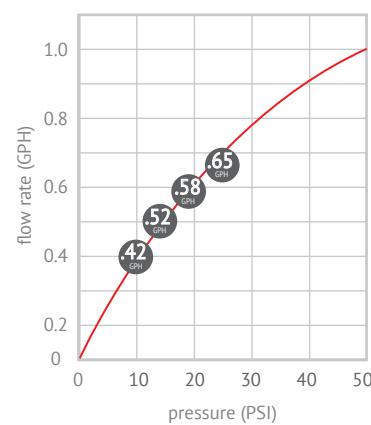
- Used above ground or under mulch for a variety of applications such as containers and narrow plantings
- Large labyrinth water passage and turbulent flow help reduce clogging
- Inlet filter helps prevent particles from entering the drip emitter labyrinth path
- Resistant to chemicals and fertilizers commonly used in landscape applications
- Used with 1/4" (6 mm) barbed fittings
- Flexible tubing for easy installation
- Two outlets per drip emitter ensure less chance of clogging

Specifications

- Operating pressure: 10-25 PSI (0.7-1.7 BAR)
- Flow rates: .52 GPH (1.97 L/H) at 15 PSI (1 BAR)
- Dripline color code: black or brown
- Dripper color code: blue
- Size: 1/4" (.170" ID x .250" OD)
(4 mm ID x 6 mm OD)
- Spacing: 6", 9" or 12"
(15 cm, 23 cm, or 30 cm)
- Available in 100', 500', 1000' and 3000' coils (30 m, 152 m, 305 m and 914 m)
- Minimum bending radius: 1' (30 cm)
- Filter requirement: minimum of 150 mesh
- Materials: polyethylene resin



Flow rate vs. pressure



Maximum recommended length of single lateral

Pressure (BAR)	Flow Rate (GPH)	Dripper Spacing		
		6" (15 cm)	9" (23 cm)	12" (30 cm)
15 PSI (1.0)	.52 (1.97 L/H)	18' (5 m)	24' (7 m)	28' (9 m)
20 PSI (1.4)	.58 (2.2 L/H)	17' (5 m)	22' (7 m)	27' (8 m)
25 PSI (1.7)	.65 (2.46 L/H)	16' (5 m)	21' (6 m)	27' (8 m)

How to specify

Model	Description	Color
ML-1XX	100'.52 GPH	Black
ML-1XXB	100'.52 GPH	Brown
ML-5XX	500'.52 GPH	Black
ML-5XXB	500'.52 GPH	Brown
ML-10XX	1,000'.52 GPH	Black
ML-10XXB	1,000'.52 GPH	Brown
ML-30XX	3,000'.52 GPH	Black
ML-30XXB	3,000'.52 GPH	Brown

XX = dripper spacing

example: ML-1XX	= 6" (15 cm)
ML-1XXB	= 9" (23 cm)
ML-112	= 12" (30 cm)

Pressure vs. flow

Pressure (PSI)	Flow (GPH)	Pressure (BAR)	Flow (L/H)
10	0.42	0.7	1.59
15	0.52	1.0	1.97
20	0.58	1.4	2.2
25	0.65	1.7	2.46

EXCEL™ PC CV Pressure Compensating Dripline with Check Valve

Features

- Can be installed above or below grade
- In-line emitter check valve prevents drainage from the dripline when water pressure drops below 2.5 PSI, protecting the emitters against the siphoning of small sediment and soil particles and making it ideal for sub-surface drip installation
- Available in two flow rates, and a wide range of spacings and coil lengths to provide maximum design flexibility in a variety of applications
- Pressure compensating feature provides flow uniformity regardless of pressure variations along the line
- Drip emitter and diaphragm are self-contained units molded to the interior wall of the tubing
- Turbulent flow through a large labyrinth water passage leads water into the flow control chamber where a sensitive floating silicon diaphragm regulates and maintains a constant flow rate at variable inlet pressures. The self-flushing silicon diaphragm allows pressure to build up within the chamber and flush any debris not captured by the intake filter
- Dripline includes one inlet and two outlets per emitter
- Intake inlet has a number of raised grooves that act as a secondary filter; the filter intake area is continuously flushed by water flow through the operation of the system, preventing

- particles from entering the labyrinth and giving the drip emitter its resistance to clogging
- Check valve and dual, oppositely oriented directional outlets act as a physical barrier to root and debris intrusion
- Resistant to chemicals and fertilizers commonly used in landscaping
- Flexible tubing for easy installation
- Dripline is marked with flow rate and size for easy identification
- Can be used with DIG's 17 mm barb fittings, .700" OD compression fittings and universal Nut Lock™ fittings

Easy to read labels provide a clear description of dripline specifications and spacing



Pressure PSI (BAR)	Dripper spacing		
	12" (30 cm)	18" (46 cm)	24" (61 cm)
15 PSI (1.0)	215' (66 m)	244' (74 m)	370' (113 m)
25 PSI (1.7)	304' (93 m)	406' (124 m)	482' (147 m)
35 PSI (2.4)	343' (105 m)	459' (140 m)	617' (188 m)
45 PSI (3.1)	442' (135 m)	548' (167 m)	772' (235 m)
Flow rate .6 GPH (2.3 L/H)			
15 PSI (1.0)	145' (44 m)	221' (67 m)	294' (90 m)
25 PSI (1.7)	185' (56 m)	294' (90 m)	403' (123 m)
35 PSI (2.4)	248' (76 m)	347' (106 m)	479' (146 m)
45 PSI (3.1)	287' (87 m)	413' (126 m)	512' (156 m)
Flow rate 1.0 GPH (3.8 L/H)			
15 PSI (1.0)	145' (44 m)	221' (67 m)	294' (90 m)
25 PSI (1.7)	185' (56 m)	294' (90 m)	403' (123 m)
35 PSI (2.4)	248' (76 m)	347' (106 m)	479' (146 m)
45 PSI (3.1)	287' (87 m)	413' (126 m)	512' (156 m)

Dripper spacing	Flow rate per 100' (30 m)		
	GPM	Flow rate .6 GPH L/M	GPH L/H
12" (30 cm)	1	3.79	60
18" (46 cm)	0.67	2.54	40
24" (61 cm)	0.50	1.89	30
Dripper spacing	Flow rate 1.0 GPH (3.8 L/H)		
12" (30 cm)	1.67	6.32	100
18" (46 cm)	1.11	4.2	67
24" (61 cm)	0.83	3.14	50

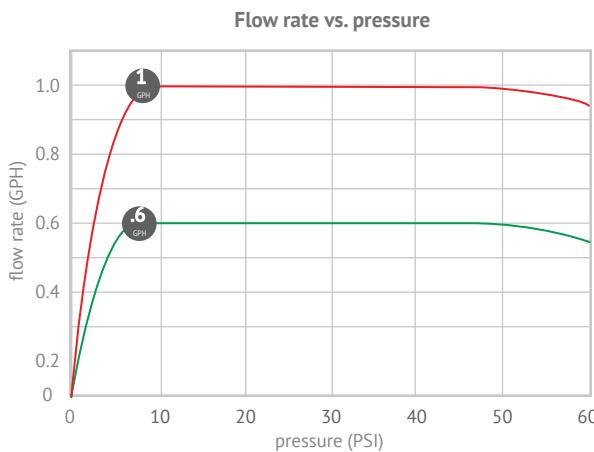
Excel™ PC CV pressure compensating (PC) dripline: flexible, durable and precise with all the features you look for in dripline.

Specifications

- Operating pressure: 12-50 PSI (.8-3.4 BAR)
- Check valve opening pressure: 4.3 PSI (.3 BAR)
- Check valve sealing pressure: 2.5 PSI (.2 BAR)
- Flow rates:
 - .6 GPH (2.3 L/H) color code – orange
 - 1 GPH (3.8 L/H) color code – gray
- Dripline color: brown
- Size: 1/2" (.570" ID x .670" OD)
(14.5 mm ID x 17 mm OD)
- Spacing: 12", 18" or 24"
(30 cm, 46 cm and 61 cm)
- Available in 100', 250', 500' and 1000' coils (30 m, 76 m, 152 m and 305 m)
- Minimum bending radius: 1' (30 cm)
- Filter requirement: minimum of 150 mesh
- Materials: polyethylene resin



The dripline drip emitter's check valve feature prevents water draining when water pressure drops below 2.5 PSI, protecting the drip emitters from siphoning sediment, soil particles and debris at the end of each irrigation cycle.



How to specify		
Model	Description	Color
A5-1XXP-CV	100' .6 GPH	Brown
A1-1XXP-CV	100' 1.0 GPH	Brown
A5-2XXP-CV	250' .6 GPH	Brown
A1-2XXP-CV	250' 1.0 GPH	Brown
A5-5XXP-CV	500' .6 GPH	Brown
A1-5XXP-CV	500' 1.0 GPH	Brown
A5-XXP-CV	1,000' .6 GPH	Brown
A1-XXP-CV	1,000' 1.0 GPH	Brown

XX = dripper spacing

example:
A5-5XXP-CV
↓
A5-512P-CV

12	= 12" (30 cm)
18	= 18" (46 cm)
24	= 24" (61 cm)



EXCEL™ Pressure Compensating (PC) Dripline

Providing trouble-free operation, long life and optimum plant growth for a sustainable and efficient irrigation system.

Features

- Installed above grade
- Two flow rates to provide maximum flexibility in a variety of applications
- Flow regulated, self flushing in-line drip emitters deliver equal flow at a wide range of operating pressures
- Flow uniformity regardless of pressure variations along the line
- Drip emitter and diaphragm are self-contained units that are molded into the interior wall of the tubing
- Turbulent flow through a large labyrinth water passage helps reduce clogging
- Emitter is made of three individual sections including a cylindrical plastic housing with a labyrinth water passage, a plastic receptacle and a floating silicon diaphragm
- Resistant to chemicals and fertilizers commonly used in landscaping
- Flexible tubing for easy installation
- Dripline is marked with flow rate, size and date for easy identification
- Can be used with DIG's 17 mm barb fittings, .700" OD compression fittings and universal Nut Lock™ fittings

Specifications

- Operating pressure: 12-50 PSI (.8-3.4 BAR)
- Flow rates:
 - .58 GPH (2.2 L/H)
color code - yellow
 - .95 GPH (3.6 L/H)
color code – white
- Color code: black or brown
- Sizes:
 - .570" ID x .670" OD
(14.5 mm ID x 17 mm OD)
- Spacing: 12", 18", 24", 30" and 36" (30 cm, 46 cm, 61 cm, 76 cm and 91 cm)
- Lengths: 100', 250', 500' and 1000' coils (30 m, 76 m, 152 m and 305 m)
- Minimum bending radius:
1' (30 cm)
- Filter requirement: minimum of 150 mesh
- Materials: polyethylene resin

Easy to read labels provide a clear description of dripline specifications and spacing



How to specify

Model	Description	Color
17 mm PC dripline • .670" OD		
A5-1XXP	100'.58 GPH	Brown
A1-1XXP	100'.95 GPH	Brown
A5-2XXP	250'.95 GPH	Brown
A1-2XXP	250'.95 GPH	Brown
A5-5XXP	500'.58 GPH	Brown
A1-5XXP	500'.95 GPH	Brown
A5-XXP	1000'.58 GPH	Brown
A1-XXP	1000'.95 GPH	Brown

XX = dripper spacing

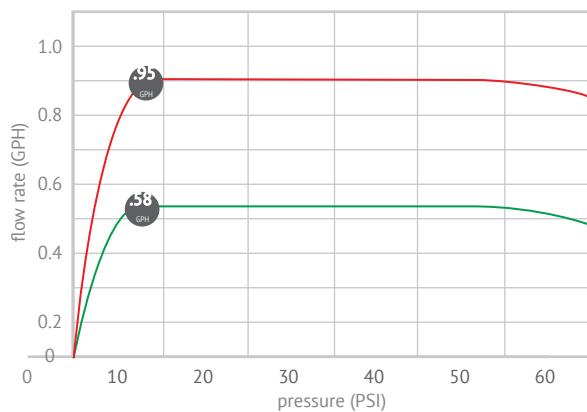
example:	12 = 12" (30 cm)
A5-5XXP	18 = 18" (46 cm)
↓	24 = 24" (61 cm)
A5-512P	30 = 30" (76 cm)

Flow rate per 100' (30 m)

Dripper spacing	Flow rate .58 GPH (2.2 L/H)			
	GPM	L/M	GPH	L/H
12" (30 cm)	0.97	3.67	58	220
18" (46 cm)	0.64	2.42	39	148
24" (61 cm)	0.48	1.82	29	110
30" (76 cm)	0.39	1.48	23	87

Dripper spacing	Flow rate .95 GPH (3.6 L/H)			
	GPM	L/M	GPH	L/H
12" (30 cm)	1.58	5.98	95	360
18" (46 cm)	1.06	4.01	63	240
24" (61 cm)	0.79	2.99	48	182
30" (76 cm)	0.63	2.38	38	144

Flow rate vs. pressure



Maximum length of single lateral 17 mm PC dripline

Pressure PSI (BAR)	Dripper spacing		
	12" (30 cm)	18" (46 cm)	24" (61 cm)
<u>Flow rate .58 GPH (2.2 L/H)</u>			
15 PSI (1.0)	218' (66 m)	281' (86 m)	376' (115 m)
25 PSI (1.7)	320' (98 m)	446' (136 m)	587' (179 m)
35 PSI (2.4)	376' (115 m)	545' (166 m)	706' (215 m)
45 PSI (3.2)	465' (142 m)	624' (190 m)	792' (241 m)
<u>Flow rate .95 GPH (3.6 L/H)</u>			
15 PSI (1.0)	172' (52 m)	221' (67 m)	300' (91 m)
25 PSI (1.7)	231' (70 m)	347' (105 m)	419' (127 m)
35 PSI (2.4)	297' (90 m)	409' (124 m)	512' (155 m)
45 PSI (3.2)	330' (100 m)	479' (145 m)	561' (170 m)

