

# DRIP IRRIGATION

## Smart Water Use

### Features & Benefits

- Reduces water consumption
- Reduces evaporation
- Reduces plant disease
- Reduces weed growth
- Eliminates wind drift
- Eliminates 'over spray'
- Avoid water run off
- Delivers water directly to the root zone
- Not effected by water Government Restrictions in some states.
- Reduces vandalism
- Safe use of waste water
- SAVE WATER



# Water where it's needed and save up to 60% of your water

**Fresh Water is one of the World's scarcest commodities and as seen recently in most states of Australia worth saving through the introduction of water restrictions. Most of our potable water is consumed in domestic gardens!**

Traditional watering methods implement the use of overhead sprinklers, which distribute a very fine sheet of water over the selected garden area. To date problems with this method of irrigation are:

- Misting
- Over spray
- Wind drift
- Water run off onto paths and roadways
- Water collection on garden mulch
- Easily vandalised and broken.
- Spray easily impeded by growing plants
- Promotion of plant disease and discolouration
- Restricted use through Government Water Restrictions

There is a solution to this irrigation dilemma. Drip irrigation has been extensively used throughout the world as an efficient and effective irrigation method. **Netafim** have been involved in providing many drip irrigation solutions for some of the World's biggest irrigation projects. **Netafim** can now offer you a drip irrigation alternative that:

- Reduces water consumption
- Reduces evaporation
- Reduces plant disease
- Reduces weed growth
- Eliminates wind drift
- Eliminates "over spray"
- Avoid water run-off
- Blend in with the aesthetics of your garden
- Delivers water directly to the root zone
- Not effected by Government Water Restrictions in some states.
- **\$AVE WATER**

**Netafim**, the world leader in drip irrigation, have a range of drip products which will allow you to irrigate all lawn and garden areas in the most efficient way, from below the surface so that vandalism, injury and water wastage are no longer a concern. To truly make drip irrigation easier, **Netafim** have an extensive range of integrated drip tubes, which have drippers moulded directly into the drip tube at preset intervals. All you need to do is to simply select the right **Netafim** drip tube and roll it out across your garden or under your lawn. **Netafim** have a drip tube to make the installation of your next irrigation project fast, simple and especially water efficient.





# Which Netafim drip-line do I use?

## Selection guide:

Netafim manufacture a vast range of integrated drip-lines. They vary in the discharge rate and type of dripper used. The drip lines are available in both compensated and non-compensated flow as well as various tube diameters and drip spacing.

The following guide is designed to help you determine which Netafim drip-line you should use and what spacing should be used.

## Drip and Drip-line spacing guide

Type of soil	Clay	Turf Loam	Sand	Shrubs/ground cover*		
				Clay	Loam	Sand
Drip spacing (cm)	50	40	30	50	40	30
Drip-line spacing (cm)	50-60	40-50	30-40	50-100	40-100	30-100

**\*Note:** The large spacing range for drip line in Shrubs/ground cover situations, is a result of trying to cater for plants with either high or low water requirements. Example – plants with high water requirement will have drip lines spaced closer together than those which require a lower water requirement which will have drip lines spaced further apart. Also consideration should be given to the extent of the plants root system. Plants with small root systems will require drip line spaced closer together than plants with a large root system.

## Techline sub-surface grid-layout



## Mniscap garden layout



## Miniscape – Gardens

Miniscape is an 6mm I.D. drip-line manufactured from high-grade UV stable L.D. Polyethylene. Miniscape uses a “Turbonet” dripper, which is extruded in the internal wall of the brown tube. Miniscape's small size and flexibility makes it ideal for home gardens and pot plants. It can be run up to 15m\* as a single lateral of 30m\* when fed back into the line.

Miniscape as a replacement to micro sprays can save over 60% of water used. It can easily be retro-fitted from an existing micro spray system.

\* Run lengths refer to 0.3m spacing

Tube Size: O.D. 8.0mm, I.D. 6.0mm. Operating Pressure: 50-300kpa (5-30m)

Flow rate (L/H)	Drip spacing (m)		
	0.15	0.30	0.50
<b>1.9</b>	<b>8m</b>	<b>15m</b>	<b>22m</b>
Max. continuous run length in metres on level ground at 150kpa (15m)			



## Scapeline – Large gardens & parks

Scapeline is a 13mm I.D. drip-line. Like the Miniscape it is made from quality polyethylene and uses the “turbonet” dripper. Due to its larger diameter it can be run up to 60m\*.

\*Run lengths refer to 0.3m spacing

Tube Size: O.D. 16.0mm, I.D. 13.0mm. Operating Pressure 50-400kpa (5-40m)

Flow rate (L/H)	Drip spacing (m)		
	0.30	0.40	0.50
<b>2.0</b>	<b>60m</b>	<b>75m</b>	<b>88m</b>
Max. continuous run length in metres on level ground at 150kpa (15m)			



## Techline – Large gardens, parks and steep slopes

Techline is a 13mm I.D. drip-line manufactured from high-grade UV stable L.D. polyethylene. Techline uses a “RAM” pressure compensating (PC) and self-cleaning dripper, which is extruded into the internal wall of the drip tube. Available with two different flow rates and an assortment of drip spacings, this tube is ideal for all landscape and turf irrigation situations. Techline with its PC drip is ideal for long run lengths and steep undulating landscape areas.

Tube Size: O.D. 16.0mm, I.D. 13.0mm. Operating Pressure Range: 50-400kpa (5-40m)

Flow rate (L/H)	Drip spacing (m)		
	0.30	0.40	0.50
<b>1.6</b>	<b>100m</b>	<b>130m</b>	<b>155m</b>
<b>2.3</b>	<b>75m</b>	<b>100m</b>	<b>120m</b>
Max. continuous run length in metres on level ground at 250kpa (25m)			





## UniRam - The world's most advanced dripper



Flow rate (L/H)	Drip spacing (m)		
	0.30	0.40	0.50
1.6 CNL	110m	140m	170m
2.3 CNL	85m	110m	135m
Max. continuous run length in metres on level ground at 250kpa (25m)			

UniRam is a 16.4mm I.D dripline which has all the advantages of all the Netafim drippers as well as several others which makes it the ultimate dripper for any situation. Besides the high quality polyethylene, the Turbonet, pressure regulating, self-cleaning features the UniRam also has: anti-suckback, non-leakage, rack design filter and a mechanical root intrusion barrier. With all these extra features the Uniram is ideal for an subsurface and waste water application.

### Sub-surface

The anti-suckback mechanism prevents dirt being sucked back into the dripper when the system is turned of and a vacuum is created inside the dripline. With this feature as well as the improved internal filter and the root barrier the dripline is ideal for sub-surface applications.



### Waste Water Dispersal - Bioline (purple uniram)



As Bioline uses the UniRam dripper it can be placed above or below ground with the security of the features and benefits of the UniRam's sub-surface capabilities as well as the non-leakage mechanism which will prevent ponding of waste water.



# What else will I need?

## Netafim Drip-line accessories:

Netafim also have all the accessories that you will require to install a successful drip-line system. The following items are required to ensure that your system operates the way it's supposed to with many years of trouble free operation. For further information contact your nearest **Netafim** Professional Irrigation dealer.



### Miracle controller

6, 9, 12 station controller 3 program w/sensor input, rain delay & budget facility



### Flori Com

Soil moisture sensor which senses soil moisture content to override the Miracle controller



### Flori DC

Battery operated moisture activated controller - 1 & 3 stn.



### Aquapro

Battery operated controller comes with Aquanet DC 25mm valve.



### Valves

Netafim 1" Solenoid valve. And Aquanet DC Valves



### Pressure reducing

Netafim, Planet & Bermad. Available in preset or adjustable models.



### Air release valves

Netafim, Bermad & ARI air/vacuum release valves. Fit to the highest point in your drip system



### Auto flush valve

Netafim, auto flushing Valve. Will discharge approx. 4 ltrs of water every irrigation cycle.



### Arkal filter

Disc filter available in 20mm-50mm in mesh sizes from 40-140 mesh.



### Tech-filter

Tech-filter or system protection unit introduces minutes traces of Treflan into the system to prevent root intrusion.



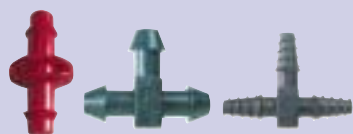
### Line Indicator flag

Flag lifts to indicate when the drip line is in use. Simply plugs into dripline via 4mm barbed connector.



### Techline start connector & fittings

Start connector & fittings are available for all dripline sizes.



### 6mm fittings

assorted fittings for Miniscape Tees, elbows and take-offs.



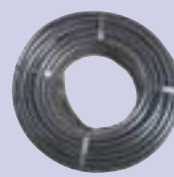
### Hole punches

Hole Punch tools for 5mm and 7mm Take-off adaptors.



### Pipe stakes

Pipe Stakes for 8mm Miniscape & 16mm scapeline, Techline & Bioline.



### LD Poly

Low Density Poly pipe in 13mm, 19mm, 25mm & 32mm.



### Mniscap

8mm drip tube 1.9L/H drip 0.15, 0.30, 0.50m spacing 30m, 100m & 300m rolls



### Scapeline

16mm O.D. drip tube 2.0L/H drip 0.3, 0.4, 0.5m spacing 50m & 200m roll



### Techline

16mm O.D. drip tube 1.6L/H & 2.3L/H 0.3, 0.4, 0.5m spacing 50m & 200m roll



### Bioline

17mm O.D. drip tube 1.6L/H & 2.3L/H 0.3, 0.4, 0.5m spacing 200m roll



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