

PRINCIPLES OF A GOOD IRRIGATION LAYOUT WITH IRRIGATIA C12/24 KITS



Number of Drippers

Use 5 – 24 drippers. The higher the number of drippers, the more care needs to be taken with the system design to get the best results.

Dripper Output

The pump delivers about 150ml/min while it is running. Drippers will drip at about 150ml/min divided by the number of drippers.

Delivery Tube Position

Watering will always be more even if the delivery tubes are lower than the drippers.

This is because the tubes will not drain out between waterings.

Maximum Height / Distance


Water delivery will reduce with height, but up to 5m high, 60m distant, the differences are small.

Height Differences (Figure 1)

Where drippers are at different heights there will be differences in the rate of drips, but these differences will be small if:

- With 24 drippers height differences are zero
- With 18 drippers height difference no more than 1m
- 12 drippers, 2m
- 9 drippers, 2.5m
- 6 drippers, 3m

Where there are significant differences in height, layout design becomes important.

- Water should flow from low to high level
- There should be a one-way valve (Figure 2, IRR-ASD) where the height changes 
 - this will prevent the tubes draining to the lower drippers when the pump stops
 - all drippers will start and stop at the same time
- If there is more than one change of height, a one way valve should be fitted at each
- The height of the highest dripper does not affect the maximum difference in height. For example if the highest of 12 drippers is 5m, the lowest must be at least 3m high – 2m difference

Where there are more than 12 drippers, the delivery tube should be centre fed (Figure 3) – the delivery tube branches and feeds both ways.

Drippers can be grouped (Figure 4), just remember keeping the same length of delivery tube between each group and the pump will give the best results.

FIGURE 1

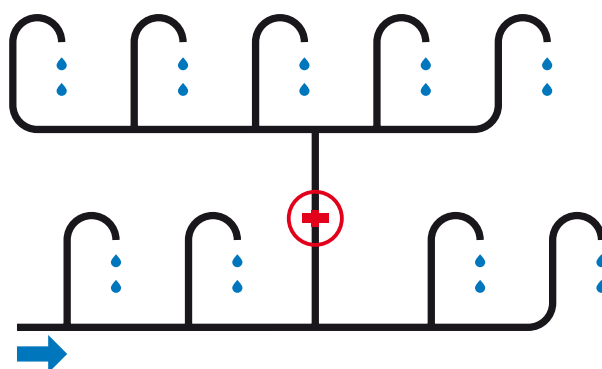


FIGURE 2



FIGURE 3

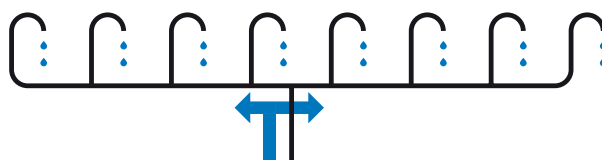


FIGURE 4

