



DRIP IRRIGATION

- Drip Irrigation is a modern method of watering plants where water is delivered slowly and directly to the root zone of each plant .This is done through a network of pipes Tubes valves and emitters its is also know as trickle irrigation

Motor's

A Motor is a machine that pumps water from a source and pushes it into the drip system

uses of motor : water lifting , water pressure , continuous supply

Three type of motor's

1 HP Motor

1.50 HP Motor

2 HP Motor



Main Components of a Drip System

- Water Source :
- Filter's : Removes dirt and Particles from the water common types :
 - Hydro cyclone Filter
 - Gravel Filter
 - Disc Filter
 - Screen Filter



Header assembly & Venturi

- The Venturi injector is a device used to mix fertilizer or chemicals into the irrigation water it is a part of the fertigation system
- The Venturi creates a low pressure area inside the pipe which suck the liquid fertilizer from a tank and mixes it with the irrigation water
- It works without electricity or motor using only water pressure



- Pressure Gauge : Helps You see the water pressure in your drip irrigation system
- Air Relief Valve : used to remove air from the pipe lines
- Flange With Gasket :



HDPE PIPE

- Main line Pipe 40 MM , 50 MM , 63 MM
- Strong and flexible
- Can Handle high pressure and temperature
- Leak – proof and long lasting
- Commonly used in modern drip irrigation system



Lateral Pipe

- These are thinner pipes connected to the main or sub main pipes
- Emitters or drippers are attached to these to deliver water directly to plant roots



Drip irrigation accessories

- Threaded valve :- The Threaded valve is used to open or close water flow to a particular section of the pipeline
- Male threaded :- joining main and sub main pipes
These fittings help connect hdpe pipe to each other securely
- TEE :- Splits one pipe into two directions
- Elbow :- Used to bend pipes
- Joiner :- If a pipe is broken the damaged section is cut out and a joiner is used to reconnect
- End caps :- Closes the end of a pipe



Grommet Rubber : used to Connect Lateral pipe to the main line pipe

Start nipple : used to connect lateral pipe to the main line pipe

Line Controller :

End Cap :

16 MM Tee :

16 MM Elbow :

16 MM Joiner :



Dripper's

- Non PC Dripper : It gives water to plants , but the amount depends on water pressure in the pipe
If pressure is high ,it gives more water
If Pressure is low , it gives less water
- PC Dripper : gives the equal water of every plants
- PCND Dripper : It is a special type of dripper used in drip irrigation that does two things .



That's gives equal water to all plants

Stops draining when the system is off, keeping water inside the pipe