

HIT THE TARGET WITH DRIPLINE SELECTION

Can we hit a bull's eye without the right tool for every job?

NETAFIM KNOWLEDGE



Drip irrigation is the optimal solution as we target efficient water and nutrient application, offering important benefits such as increased yield and resource savings.

However, success depends on suitable water availability, the selection of appropriate driplines and other equipment, correct installation, smart scheduling, and faithful maintenance. Correct dripline selection is key - **it must align with production potential while ensuring efficient precision irrigation to achieve optimal results.**

To select the correct dripline you must check three boxes:

-  Selecting the dripline with the most suitable specifications and features
-  Selecting a high-quality dripline
-  Balancing dripline performance and dripline cost to ensure optimal ROI

To do so, you must make important selection decisions in these categories:

Dripper Type, Features and Specifications		Dripline Wall Thickness
Dripper Spacing	Dripper Flow Rate	Dripline Supplier

Another important part of dripper selection is to consider the many innovative dripper features available and select those essential to your production needs, balancing functionality with cost-efficiency.

DRIPPER FEATURES				
Pressure Compensation	Anti-siphon	Root Intrusion Inhibitors	Non-drainage	Flap Outlet

Furthermore, each dripline's technical specifications determine its suitability and performance. These data points are critical for irrigation designers when calculating and designing an effective drip irrigation system.

Technical Data			
Size of the Effective Filtration Area	Working Pressure Range	Filtration Requirements	Turbulence Coefficient
Pressure Exponent	Head Loss	Dripper Size (Longevity)	Wall Thickness Suitability

To make optimal decisions around a dripline's technical specifications and features, consider these impacting factors:

Crop Requirements	Water Availability	Row and Plant Spacing
Soil Type, Composition, and Behaviour	System Capabilities – max flow rate, pressures, etc.	

Beyond selecting the correct type of dripper, two other very important decisions must be made to ensure water and nutrient delivery are in line with requirements. These are:

Dripper Flow Rate

Dripper Spacing Along the Dripline

These decisions are impacted by a host of factors. To view it broadly, it comes down to

Installation: Surface or Sub-surface	Topography	Possible Production Challenges
Required Dripper Longevity (Seasonal vs Permanent Drip)	ROI Calculations (Crop value & other impacting factors)	

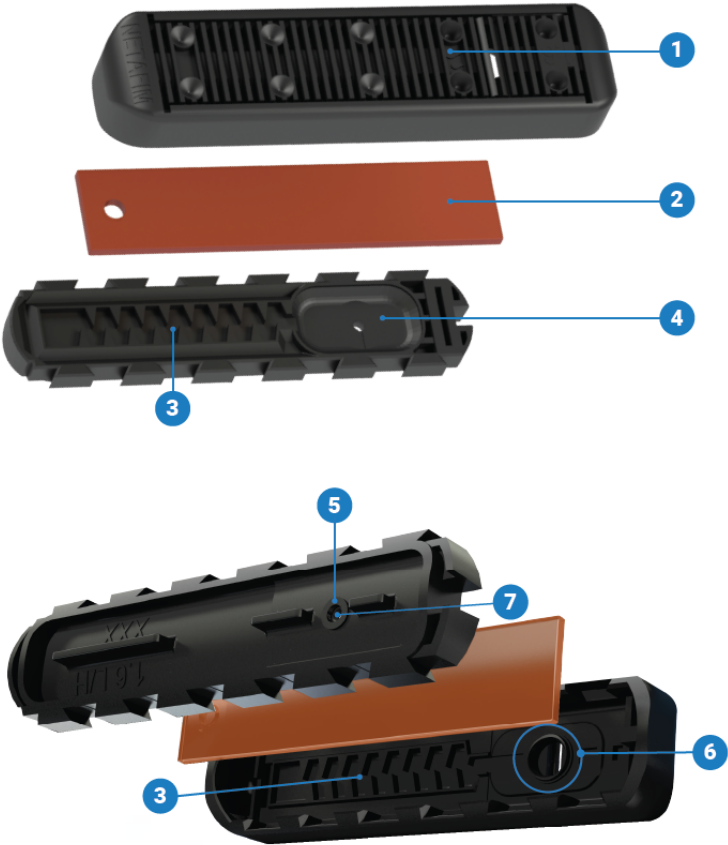


HOLISTIC DECISION-MAKING

Efficient dripline selection requires a holistic view of the farming operation, considering all factors and their interactions - to make a comprehensive decision about all variables that impact crop production success. **The table below highlights how production goals and conditions align with dripper features and specifications.**

FACTOR	FEATURE/SPECIFICATION
Installation: Surface or Sub-surface	Flap Outlet Anti-siphon Root Intrusion Inhibitors
Required System Longevity (Seasonal vs Permanent Drip)	Size of the Effective Filtration Area Wall Thickness
Topography	Pressure Compensation
ROI Calculations (Crop value and other impacting factors)	All Features and Specifications Quality Considerations
Possible Production Challenges	Flap Outlet Anti-siphon Non-drainage Root Intrusion Inhibitors
Crop's Water and Nutrient Requirements, Soil Conditions, Plant Spacing, etc.	Dripper Flow Rate Dripper Spacing

INSIDE A DRIPPER



- 1 Filtration Area**
Its largest industry-leading filtration area maximises the lifetime of the dripper by preventing the entry of particles into the dripper flow path to increase **durability even under the harshest water conditions**.
- 2 Diaphragm**
Made of chemical-resistant silicone, it is vital to UniRam™'s **pressure compensating** and **self-cleaning** capabilities.
- 3 TurboNet™ Labyrinth**
The patented double flow path is designed with a large deep and wide cross-section as well as razor sharp teeth to **maximise turbulence** and **prevent clogging**.
- 4 Pressure Compensation Chamber**
It is pivotal in the dripper's ability to **maintain constant flow rate** on diverse terrains and with long laterals. It further enables efficient self-cleaning at varying pressures.
- 5 Root Barrier**
The unique dripper design includes a **physical root barrier** at the outlet for better protection against root intrusion, further ensuring longevity.
- 6 Dripper Inlet**
- 7 Dripper Outlet**

COST, PERFORMANCE AND QUALITY

Equipment cost is a sliding scale determined by a host of factors. Dripline cost will vary based on factors such as application, durability, clogging resistance and more.

A wide range of drippers exists to suit various crops and applications, and the best choice balances performance with cost. **However, quality must never be compromised. Regardless of features or specifications, using quality products is key to long-term irrigation success.**

KEY QUESTIONS TO ASSESS DRIPLINE QUALITY

Does the dripper deliver accurate, constant flow rates over its lifetime?	Does the supplier comply with industry standards?
Is the supplier reputable and knowledgeable?	Is sufficient technical data provided?
Do they offer technical and agronomic after-sales support?	

Every answer must be "yes." Poor-quality products, even with the correct specifications, can lead to failure in the field. Always prioritise quality to ensure irrigation success.

THE NETAFIM DRIPPER OFFER

