



K-LINE® Irrigation Farm Packs

*3 Pod, 4 Pod, 5 Pod Farm Pack with 32mm K.PIPE®
5 Pod Extension Pack with 40mm K.PIPE®*

K-LINE® Irrigation Systems



by aliaxis

K-LINE® Irrigation

K-LINE® Irrigation is a specially formulated, flexible tubing line and pod sprinkler system designed to reduce the time and money you spend on irrigation installation, operation and repairs. Easily installed, a perfect DIY project.

The heart of the system is a series of extremely durable pods that protect a sprinkler that is firmly attached to the exceptionally strong and flexible polyethylene K.PIPE® that resists kinking, abrasive soils, freezing, UV light and the stresses of moving the K-LINE®.

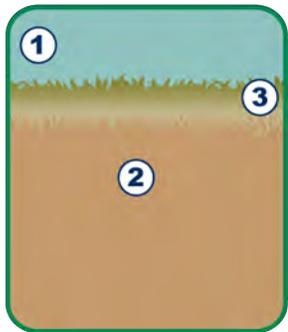


K-LINE® Irrigation is a low pressure system designed to distribute water with a slow, efficient absorption method that eliminates the need to shift irrigation several times a day - saving time, labour and water resources. K-LINE® Irrigation uses less water more effectively.

K-LINES can be shifted by hand or with an ATV, Gator or similar tow vehicle in minutes, efficiently irrigating 1, 10, or 1,000+ hectares. K-LINE® adapts and grows with your needs.

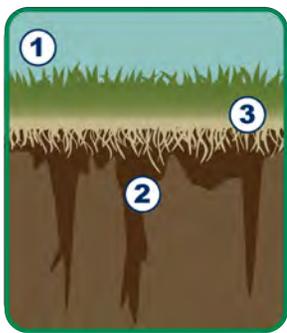
Irrigation Like a Soft Rain

K-LINE® Irrigation results in better water penetration, virtually no water run-off, and increased root mass. K-LINES's gentle water application dissolves fertilisers and better disperses nutrients into the soil profile.



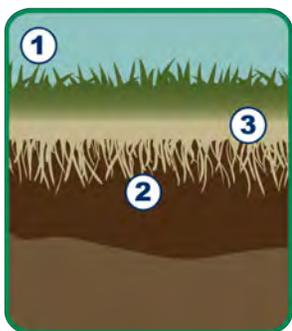
Unirrigated Pasture/Soil

- 1 Rain can be sporadic or poorly timed, with highly variable amounts of rainfall which rarely matches plant needs.
- 2 When water becomes available after a long dry period, dry soils are very hard packed and difficult for water to penetrate - resulting in a slick surface where water pools, evaporates away or runs off into undesired areas.
- 3 Root growth is minimal, plants fail to flourish and will quickly go to seed and enter dormancy. Once dormant, even adequate rains will not restore a plant to acceptable levels of new growth.



Standard Irrigation

- 1 Soil is flooded with water faster than it can be absorbed - allowing water and nutrients to pool in low areas, evaporate away, and run off into waterways.
- 2 Water and nutrient absorption into the soil is poor, resulting in stunted root growth. High rates of application fill macropores before micropores and water is lost down into the soil in 'water highways'.
- 3 Plants fail to produce extensive root systems and are often less healthy with slower regrowth.



K-LINE® "Soft Rain" Irrigation

- 1 Water application rates match that of soil absorption rates, keeping water and nutrients from running off or evaporating. Water settles into and fills the soil profile, maintaining moisture in the root zone for a much longer period of time.
- 2 Slow root zone penetration permits moisture and nutrient distribution without washing them out of the plants soil profile.
- 3 Plants develop stronger, deeper, more extensive root systems capable of utilising more water and nutrients - promoting a stronger and healthier plant that is capable of quicker, more efficient growth.

System Requirements

- Field Dimensions - 10 shifts and standard 15m x 15m spacings
 - 75m x 90m length (3 pod pack)
 - 75m x 120m length (4 pod pack)
 - 75m x 150m length (5 pod pack)
- Water Requirements
 - 1.6m³/hr - 5.2m³/hr, varies depending on pack selection and nozzle size.
- Sprinklers options included
 - Supplied with packs: - Orange (2.8mm), Red (3.0mm) and Black (4.0mm) - Available separately: - Green (3.2mm) and Blue (3.5mm)
- Optimal Sprinkler pressure range
 - 280kPa - 350kPa (40 - 50 psi)
- Application Rates
 - 50 - 120mm (24hour application depth), varies depending on pack selection and nozzle size.

Pump Requirements

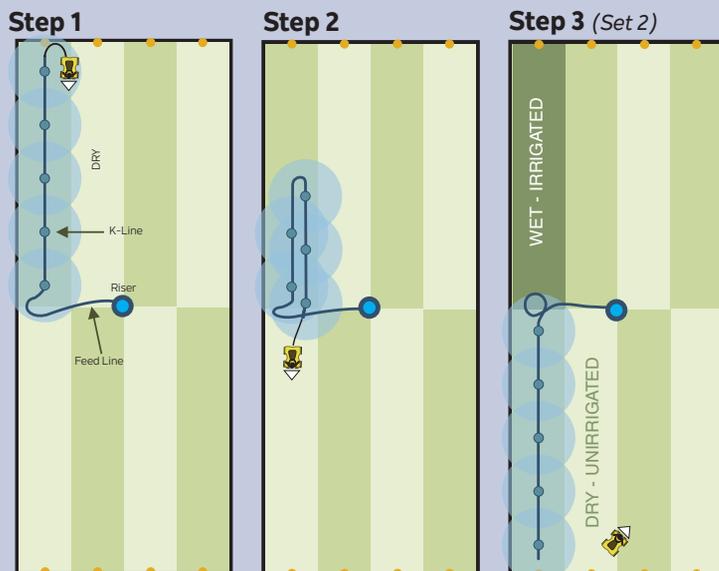
5 Pods can be operated on as little as a 0.75Kw pump. 10 Pods can be operated on as little as a 1.1Kw pump.

- General systems
 - 0.75kw - 1 kw single phase. This assumes that the pods are close to the pump system, a delivery pipe of 40mm internal or greater and pumping from a storage tank. Most domestic systems would be suitable.
- Examples
 - 5 x orange nozzled pods operating at 300 kPa = 2.5m³/hr. Through 200meters of 40mm K.PIPE® to the riser could use a 0.75Kw (1HP) Jet Pump (JSW10M Pedrollo).
- We strongly recommend you consult our pump supplier to confirm suitability of your pump.

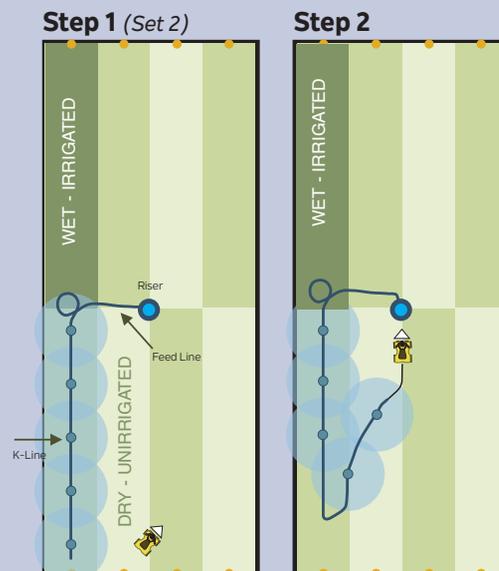
Example of shifting the K-LINE®

You can shift K-LINE® Irrigation by hand or with an ATV, heavy duty lawn tractor, golf cart, Gator, or similar tow vehicle. Position the tow vehicle along side and remain 2 - 2.5m from the K-LINE® as you tow it downfield to the next Set. Shifting the K-LINE® while the sprinklers are in operation is preferred.

Shifting from Set 1 to Set 2



Shifting from Set 2 to Set 3



Full installation and operations instructions, both in printed and visual formats (USB Key), are supplied with the purchase of any K-LINE® Irrigation pack.

K-LINE® Benefits



ECO FRIENDLY

K-LINE® uses both water and electricity incredibly efficiently, while still improving results over other irrigation systems.



ECONOMICAL

K-LINE® is more cost effective both in start-up cost and operating cost than other irrigation systems



MULTI-TERRAIN

K-LINE® performs on flat and hilly terrain with virtually no water run-off.



DURABLE

K-LINE® is built to withstand UV light, freezing temperatures, and vehicle and animal traffic.



MOVABLE

K-LINE® is easily shifted from irrigation set to irrigation set.



EXPANDABLE

The system is designed to expand as needs grow. Mix and match K-LINE® packs to irrigate from 0.5-1000 hectares.



ANIMAL FRIENDLY

K-LINE® is safe to use around grazing animals.



ADAPTABLE

From application rates to field shape, K-LINE® can be adjusted to meet your needs.

K-LINE® Components

K-LINE® PODS

- Strong impact and abrasion resistant UV-protected polyethylene.
- Heavy duty and weighted skid plate, and lower center of gravity, helps keep the pod from tipping during shifting.
- Embedded stainless steel u-bolt provides a strong and corrosion resistant sprinkler/pod/tubing connection.



K.PIPE® TUBING

- Specially formulated and blended low-density polyethylene tubing is extremely strong while remaining flexible. The white stripes on the K.PIPE® help the installer to recognise and prevent the tubing from twisting during installation. K.PIPE® is available in 4 sizes: - 32mm, 40mm, 45mm and 63mm.
- K.PIPE® tubing resists the effects of abrasive soils, kinking, UV light and the stresses exerted on the tubing while moving it from Set to Set, while still remaining flexible over time.



SPRINKLERS

- All farmpacks come with impact sprinklers and three nozzle sizes. However K-LINE® also have available rotators or pop-ups with low-angle nozzles. An assortment of nozzles are available to benefit your needs.



K-LINE® TAPPING SADDLES

- Unique saddle design quickly bolts onto the embedded stainless steel u-bolt and is secured with two brass nuts.



K-LINE® FITTINGS

- Heavy duty, high grade glass reinforced nylon fittings are extremely durable and impact resistant.
- The double barbed insert is designed with extra length for maximum grip on the inner wall of the tubing while the threaded compression nut bites into the outer wall of the tubing creating an exceptional connection that is as tough and durable as every other component in the K-LINE® system.



K-LINE® Irrigation Farm Pack Selection

K-LINE® 3 Pod Pack



Kit includes:-

3 x K-LINE® Pods
 32mm K.PIPE® x 66 metres
 3 x Naan 5022 sprinklers with red nozzles
 3 each x spare orange and black nozzles
 Fittings for installation

K-LINE® 4 Pod Pack



Kit includes:-

4 x K-LINE® Pods
 32mm K.PIPE® x 76 metres
 4 x Naan 5022 sprinklers with red nozzles
 4 each x spare orange and black nozzles
 Fittings for installation

K-LINE® 5 Pod Pack



Kit includes:-

5 x K-LINE® Pods
 32mm K.PIPE® x 115 metres
 5 x Naan 5022 sprinklers with red nozzles
 5 each x spare orange and black nozzles
 Fittings for installation

K-LINE® 5 Pod Extension Pack



Kit includes:-

5 x K-LINE® Pods
 40mm K.PIPE® x 104 metres
 5 x Naan 5022 sprinklers with red nozzles
 5 each x spare orange and black nozzles
 Fittings for installation

K-LINE® Fittings

Standard components in every pack
 3 Pod pack = 3 x value shown
 4 Pod pack = 4 x value shown
 5 Pod pack = 5 x value shown



Standard components in every pack - one of each supplied only



Standard components for Farmpacks with 32mm pipe



Standard components for 40mm extension Farmpack



How to select an additional pack for your K-LINE® system

Expandable

- Suitable for areas from 1 hectare blocks up to 1000 hectare blocks
- Any combination of K-LINE® packs can be combined to adapt to many field shapes, sizes and watering needs.
- The combination of fittings included in the K-LINE® packs added flexibility and options - see your supplier for suggestions.
- The combination of K-LINE® packs adding up to 10 K-LINE® pods units would require only a 1.1Kw or 1.5HP jet Pump.

Number of Pods in your K-LINE® System @ 15m x 15m spacings								
Nozzle Colour mm/hr @ 3 Bar	3 (90m)	4 (120m)	5 (150m)	6 (180m)	7 (210m)	8 (240m)	9 (270m)	10 (300m)
Orange  2.5mm	3 32mm 32mm Feed Line	4 32mm 32mm Feed Line	5 32mm 32mm Feed Line	3 & 3 32mm 32mm Feed Line	3 & 4 32mm 32mm Feed Line	3 & 5 32mm 32mm Feed Line	4 & 5 32mm 32mm Feed Line	5 & 5 EXTN 32-40mm 40mm Feed Line
Red  2.9mm	3 32mm 32mm Feed Line	4 32mm 32mm Feed Line	5 32mm 32mm Feed Line	3 & 3 32mm 32mm Feed Line	3 & 4 32mm 32mm Feed Line	3 & 5 32mm 32mm Feed Line	4 & 5 EXTN 32-40mm 40mm Feed Line	5 & 5 EXTN 32-40mm 40mm Feed Line
Green  * 3.2mm	3 32mm 32mm Feed Line	4 32mm 32mm Feed Line	5 32mm 32mm Feed Line	3 & 3 32mm 32mm Feed Line	3 & 4 32mm 32mm Feed Line	3 & 5 EXTN 32mm 40mm Feed Line	4 & 5 EXTN 32-40mm 40mm Feed Line	5 EXTN & 5 EXTN 40mm 40mm Feed Line
Blue  * 3.7mm	3 32mm 32mm Feed Line	4 32mm 32mm Feed Line	5 32mm 32mm Feed Line	3 & 5 EXTN 2 spare pods 32mm 40mm Feed Line	3 & 5 EXTN 1 spare pod 32mm 40mm Feed Line	3 & 5 EXTN 32-40mm 40mm Feed Line	4 & 5 EXTN 32-40mm 40mm Feed Line	5 EXTN & 5 EXTN 40mm 40mm Feed Line
Black  4.8mm	3 32mm 32mm Feed Line	4 32mm 32mm Feed Line	5 32mm 40mm Feed Line	3 & 5 EXTN 2 spare pods 32mm 40mm Feed Line	3 & 5 EXTN 1 spare pod 32-40mm 40mm Feed Line	3 & 5 EXTN 32-40mm 40mm Feed Line		

* Green and Blue nozzles can be bought separately, not supplied as part of the Farm Pack kit

Key to reading the chart

4 - Number of pods required in the line.
(120m) - Field length.
K-LINE® will cover half the field length.

Selection of K-LINE® Packs

Minimum pipe selection in the K-LINES
on flat ground. Larger font size means
more of that size pipe in the line.



Approximate percentage of pipe selection
required as a minimum.
Green = 32mm, Blue = 40mm.
nb: Actual selection may have more 40mm
than shown.

Selection of K-LINE® Feed-Line from the
Riser to the first pod minimum.

* See centre page for typical K-Line® layout.

The Perfect Irrigation System for ...

