



Simply scan the code with your smart phone to see how easy it is to move the K-Line Pod System.

K-Line Irrigation System Features	Benefit
Low capital cost	Low capital cost to get up and running.
Easy to do	Ease of installation, use and operation - making it an ideal DIY project.
Multi-terrain	Suits all types of terrain.
Low pressure	Low pressure requirements.
Lower power	Lower power requirements than other systems.
Expandable	Modular system that can grow with your needs.
Movable	Transportable and able to cover a large area by shifting using a quad bike or ATV.
Economical	Low maintenance costs as the only moving parts are the sprinklers, pipe, pumps and valves.

## WHAT'S AVAILABLE IN THE K-LINE RANGE?

### K-Line Standard (Std) Pod Irrigation range

(430 x 230mm) offers the following selection of sprinklers:

- **Naan 5022 sprinkler** with nozzle sizes of 2.8 to 4.0mm, with a maximum spacing of up to 15m, a recommended working pressure of 2.5 to 3.5 bar, flow rate of 450 to 1100 litres/hour and diameter of 21 to 25.5m. Sprinklers are colour coded for easy identification.
- **Nelson R2000WF sprinkler** ideal for use at wind affected sites or where the option of pressure regulation is required. Has a maximum spacing of up to 15m, a recommended working pressure of 2.75 to 4.5 bar, flow rate of 201 to 1295 litres/hour and diameter of 21 to 27.4m. Sprinklers are colour coded for easy identification.

Also available pre-packaged with the Nelson Mini Regulator, pressure regulated to 50PSI.

- **Senninger 2023 sprinkler** with nozzle sizes of 3.7 to 4.76mm, with a maximum spacing of up to 20m, a recommended working pressure of 2.0 to 3.5 bar, flow rate range of 700 to 1619 litres/hour and a diameter range of 26 to 30m. Sprinklers are colour coded for easy identification.

### K-Line Mid Irrigation pod range

(560 x 290mm) provides a slightly larger pod meaning greater stability during transport offering:

- **A Senninger 5023 sprinkler** with nozzle sizes of 5.16 to 7.14mm, with a maximum spacing of up to 20m, a recommended working pressure of 2.5 to 3 bar, flow rate range of 1630 to 3260 litres/hour and a diameter range of 29.2 to 34m.

Sprinklers are colour coded for easy identification.

### K-Line Max Irrigation pod range

(860 x 590mm) is the largest pod size offering even greater stability during transport and ability to house even larger sprinklers, offering:

- **Senninger 7025 sprinkler** with nozzle sizes of 5.56 to 9.53mm, with a maximum spacing of up to 40m, a recommended working pressure of 2.5 to 3.0 bar, flow rate range of 1880 to 5630 litres/hour and a diameter range of 34.3 to 46.3m. Sprinklers are colour coded for easy identification.

- **Senninger 8025 sprinkler** with nozzle sizes of 9.53mm to 15.88mm, with a maximum spacing of up to 40m, a recommended working pressure of 2.5 to 3.0 bar, flow rate range of 5450 to 15,880 litres/hour and a diameter range of 39.5 to 51.4m. Sprinklers are colour coded for easy identification.

## RESOURCES AVAILABLE

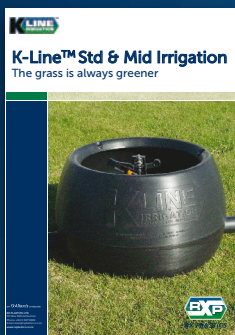
The following resources are readily available via the Philmac website at [www.philmac.com.au](http://www.philmac.com.au) as well as a selection of videos on the product in use.



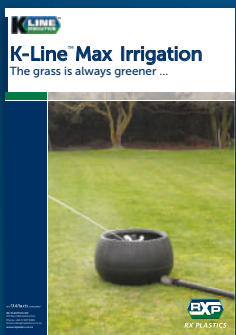
K-Line FarmPack A4 Flyer



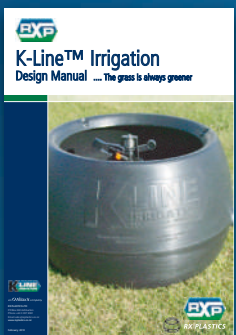
K-Line Irrigation 5 pod/1 hectare kit (FarmPack) installation and user manual



K-Line Std and Mid Irrigation Product Brochure



K-Line Max Irrigation Product Brochure



K-Line Irrigation Technical Manual

Available From:



Ph: 1800 755 899  
Fax: 1800 244 688  
[www.philmac.com.au](http://www.philmac.com.au)



# Irrigation Solutions

Low cost, transportable, modular irrigation system



EASY. EFFECTIVE. EFFICIENT.

Proudly distributed by:



## INTRODUCTION TO RX PLASTICS & PHILMAC

RX Plastics is New Zealand's leading manufacturer of irrigation products, pipe and effluent dispersal systems.

With over 30 years' experience, RX Plastics has a strong innovation focus and dedication to high quality thermoplastic solutions for water transport and dispersion.

The RX Irrigation and Effluent solutions are proudly distributed in Australia by Australian manufacturer and distributor, Philmac.

As members of the Aliaxis group of companies, RX Plastics and Philmac have access to a worldwide presence and 15,000 employees dedicated to the development and supply of special plastic pipe and fitting products.

Philmac has over 80 years' experience in the design and manufacture of world leading compression fittings and valves for polyethylene pipelines for the global market. The K-Line Irrigation and Effluent solutions are supported by Philmac's local distribution centres, Australian contact centre and dedicated sales team.

## WHAT IS THE K-LINE IRRIGATION SOLUTION?

K-Line Irrigation is a revolutionary, specially formulated flexible tubing and unique patented pod sprinkler system designed to reduce the time and money spent on irrigation installation, operating and repairs. It is both power and water efficient.

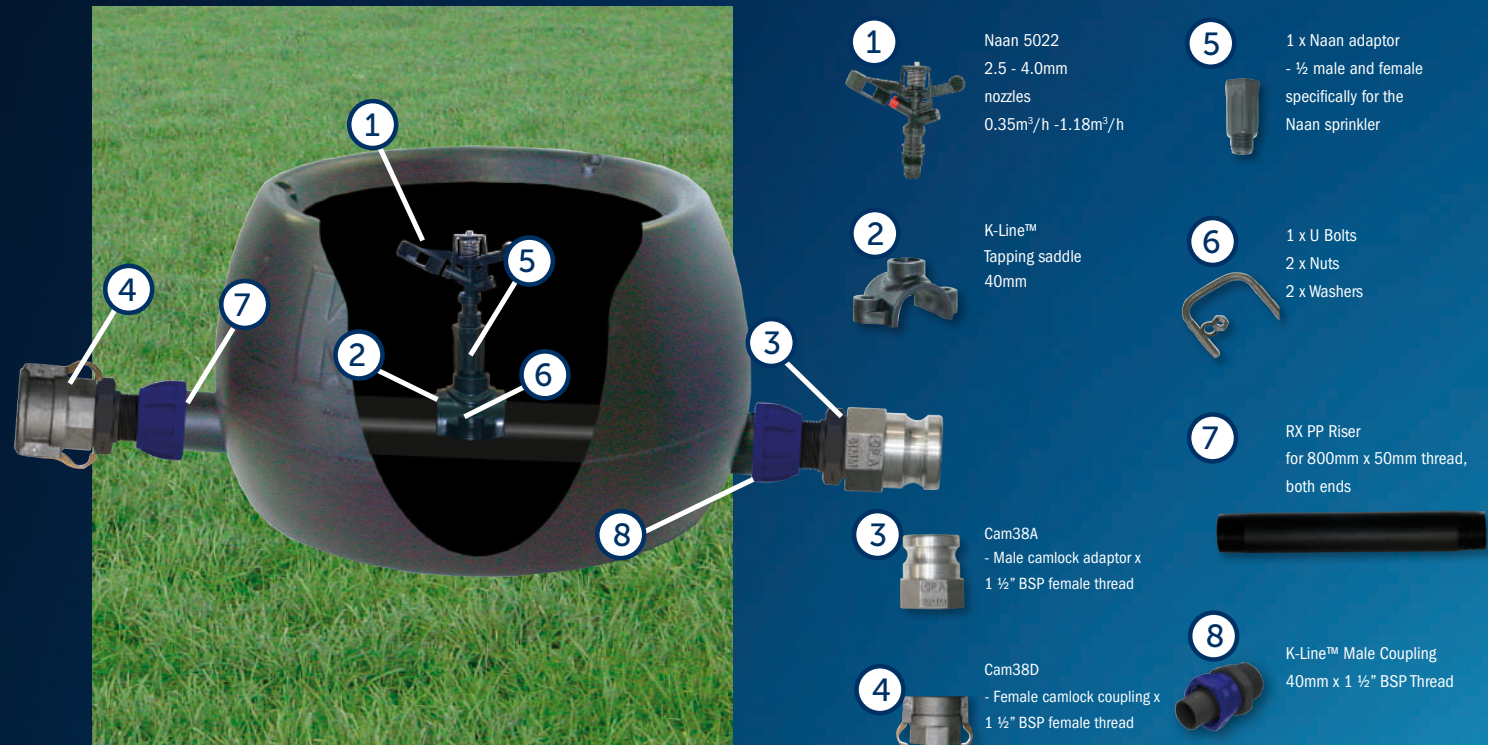
The heart of the system is a series of highly durable patented transportable pods. Made from advanced thermoplastics, the pod protects a sprinkler that is firmly attached to the exceptionally strong and flexible polyethylene (PE or poly) K-Pipe that resists kinking, abrasive soils, freezing, UV light and the stresses of transporting the K-Line system.

K-Line is a low pressure transportable and modular irrigation system designed to distribute water with a slow, efficient absorption method similar to rain - saving time, labour and water resources. The K-Line system can be easily shifted by an ATV/quad bike or similar tow vehicle in minutes, efficiently irrigating from 1ha to more than 10,000ha. K-Line's modular design can adapt and grow with your needs.





## K-LINE POD IRRIGATION COMPONENTS



Number	Element	K-Line Standard	K-Line Mid	K-Line Max
1	Sprinkler	Naan 5022##	Naan 5035	Senninger 7025
1	Sprinkler	Senninger compact	Senninger 5023	Senninger 8025
1	Sprinkler	Nelson R2KWF	Senninger compact	N/A
2	Saddle	40 or 45mm KLTPS	40 or 45 KLTPS	63x 25mm tapping saddle
3	Male Camlock	N/A	N/A	2" males x FI BSP
4	Female Camlock	N/A	N/A	2" Females x FI BSP
5	Adaptor	Naan Adaptor	Mid Adaptor	Sen70 or 80. adaptor
6	U-Bolt	UBSS3240	UBSS3240	UBSS63
7	LD Pipe 40 or 45mm	LD 40 or 45mm	LD 40 or 45mm	800 x50mm PP riser
8	K-Line Male Coupling	40/45mm x 1 1/2" Coupling	40/45mm x 1 1/2" Coupling	N/A

NB: Tow Hooks, Sprinkler Nozzle colour, Pipe fittings, Stock guards and camlocks to be added.  
NB: Max pods come with manifold complete (ie. camlocks, tapping saddle, riser). Sprinkler and adaptor need to be added.

### Senninger 5023

Pressure (Bar)	2.50	2.75	3.00
Purple (2.5mm)			
(m³/hr)	1.88	1.97	2.05
Diameter (metres)	34.3	34.7	35.1
Orange (2.8mm)			
(m³/hr)	2.48	2.60	2.75
Diameter (metres)	36.3	37.0	37.6
Red (3.0mm)			
(m³/hr)	0.51	0.63	0.72
Diameter (metres)	23.0	24.5	25.0
Green (3.2mm)			
(m³/hr)	0.57	0.70	0.81
Diameter (metres)	23.5	24.5	25.4
Blue (3.5mm)			
(m³/hr)	0.66	0.81	0.93
Diameter (metres)	25.0	26.0	26.0
Black (4.0mm)			
(m³/hr)	0.85	1.03	1.18
Diameter (metres)	24.0	26.0	26.0



### Senninger 7025






Pressure (Bar)	2.50	2.75	3.00
#14 Nozzle (5.56mm)			
(m³/hr)	1.88	1.97	2.05
Diameter (metres)	34.3	34.7	35.1
#16 Nozzle (6.35mm)			
(m³/hr)	2.48	2.60	2.75
Diameter (metres)	36.3	37.0	37.6
#18 Nozzle (7.14mm)			
(m³/hr)	3.07	3.23	3.37
Diameter (metres)	38.4	39.0	39.6
#20 Nozzle (7.94mm)			
(m³/hr)	3.68	3.86	4.03
Diameter (metres)	40.5	41.3	42.0
#22 Nozzle (8.73mm)			
(m³/hr)	4.42	4.64	4.84
Diameter (metres)	42.2	43.8	45.3
#24 Nozzle (9.53mm)			
(m³/hr)	5.15	5.39	5.63
Diameter (metres)	43.6	45.0	46.3

### Senninger 8025

Pressure (Bar)	2.50	2.75	3.00
#24 Nozzle (9.53mm)			
(m³/hr)	5.45	5.71	5.97
Diameter (metres)	39.5	40.7	41.9
#26 Nozzle (10.32mm)			
(m³/hr)	6.43	6.64	6.94
Diameter (metres)	41.9	43.2	44.4
#28 Nozzle (11.11mm)			
(m³/hr)	7.34	7.70	8.04
Diameter (metres)	43.7	45.0	46.2
#30 Nozzle (11.91mm)			
(m³/hr)	8.32	8.73	9.12
Diameter (metres)	45.3	46.5	47.7
#32 Nozzle (12.7mm)			
(m³/hr)	9.47	9.93	10.38
Diameter (metres)	46.2	47.4	48.6
#34 Nozzle (13.49mm)			
(m³/hr)	10.69	11.21	11.71
Diameter (metres)	47.1	48.3	49.5
#36 Nozzle (14.29mm)			
(m³/hr)	12.00	12.58	13.14
Diameter (metres)	47.7	48.9	50.1
#38 Nozzle (15.08mm)			
(m³/hr)	12.93	13.56	14.16
Diameter (metres)	48.3	49.6	50.8
#40 Nozzle (15.88mm)			
(m³/hr)	-	15.20	15.88
Diameter (metres)	-	50.7	51.4

### Nelson R20000 WF

Plate / Nozzle Options and Flow Performance in LP

Plate options*	Recommended Nozzles	Bar					
		2.75	3.0	3.5	4.0	4.5	
Green WF14							
Radius: 38 - 41 feet (11.9 - 12.5 metres)	#14 Green (7/64)		487	509	550	590	626
Red WF16							
Radius: 40 - 42 feet	#15 Tan (15/128)		574	597	647	695	737
(12.2 - 12.8 metres)	#16 Red (1/8)		655	385	739	792	837
Gold WF18							
Radius: 41 - 43 feet (12.5 - 13.1 metres)	#18 Gold (9/64)		834	869	940	1001	1060
Dark Brown WF20							
Radius 42 - 45 feet (12.8 - 13.7 metres)	#20 Dark Brown ***		1016	1062	1144	1222	1295

### Naan 5035

Pressure (Bar)	3.00	4.00	5.00
Blue (3.5mm)			
(m³/hr)	0.81	0.93	1.02
Diameter (metres)	26.5	27.5	28.0
Black (4.0mm)			
(m³/hr)	1.06	1.22	1.35
Diameter (metres)	28.0	29.0	29.5
Brown (4.5mm)			
(m³/hr)	1.29	1.50	1.65
Diameter (metres)	28.5	30.0	33.0
Purple (5.0mm)			
(m³/hr)	1.60	1.85	2.10
Diameter (metres)	30.0	33.5	34.0
Orange (5.5mm)			
(m³/hr)	1.95	2.25	2.50
Diameter (metres)	32.0	34.5	36.0
Red (6.0mm)			
(m³/hr)	2.30	2.70	3.00
Diameter (metres)	33.0	35.5	36.0



### Naan 5022SD

Pressure (Bar)	2.50	3.00
Red (3.0mm)		
(m³/hr)	0.57	0.63
Diameter (metres)	21.0	22.0
Green (3.2mm)		
(m³/hr)	0.64	0.70
Diameter (metres)	21.2	22.2
Blue (3.5mm)		
(m³/hr)	0.74	0.81
Diameter (metres)	23.0	23.0
Black (4.0mm)		
(m³/hr)	0.95	1.03
Diameter (metres)	23.2	24.2

### Compact Impact

Sprinkler Base Pressure (psi)	30	35	40	45	50	Sprinkler Base Pressure (bar)	2.07	2.42	2.76	3.11	3.45
#9 Nozzle - Grey (9/64")						#9 Nozzle - Grey (3.57mm)					
Flow (gpm)	3.08	3.33	3.56	3.78	3.98	Flow (L/hr)	700	756	809	859	904
Diameter at 1.5' ht. (ft)	78	78	82	86	86	Diameter at 0.5m ht (m)	24	24	25	26	26
Diameter at 3.0' ht (ft)	84	86	87	88	90	Diameter at 0.9m ht (m)	26	26	27	27	27
#10 Nozzle - Turquoise (5/32")						#10 Nozzle - Turquoise (3.97mm)					
Flow (gpm)	3.82	4.13	4.41	4.68	4.93	Flow (L/hr)	868	938	1002	1063	1120
Diameter at 1.5' ht. (ft)	80	82	82	86	88	Diameter at 0.5m ht (m)	24	25	25	26	27
Diameter at 3.0' ht (ft)	86	87	89	91	92	Diameter at 0.9m ht (m)	26	27	27	28	28
#11 Nozzle - Yellow (11/64")						#11 Nozzle - Yellow (4.37mm)					
Flow (gpm)	4.63	5.00	5.34	5.67	5.98	Flow (L/hr)	1052	1136	1213	1288	1358
Diameter at 1.5' ht. (ft)	82	82	86	88	90	Diameter at 0.5m ht (m)	25	25	26	27	27
Diameter at 3.0' ht (ft)	88	89	92	94	95	Diameter at 0.9m ht (m)	27	27	28	29	29
#12 Nozzle - Red (3/16")						#12 Nozzle - Red (4.76mm)					
Flow (gpm)	5.52	5.97	6.37	6.76	7.13	Flow (L/hr)	1254	1356	1447	1535	1619
Diameter at 1.5' ht. (ft)	83	87	90	92	96	Diameter at 0.5m ht (m)	25	27	27	28	29
Diameter at 3.0' ht (ft)	89	91	94	97	98	Diameter at 0.9m ht (m)	27	28	29	30	30

Sprinkler performance may vary with different conditions. Diameters shown for standard stream straightening vane (white). Other nozzles and/or vane combinations are available, consult factory for specific performance data. Stream heights range from 7.7 - 10.1 ft (2.3 - 3.1 m) above nozzle based on pressure and nozzle size. Minimum recommended riser height is 1.5 ft (0.5 m). Also available in 1/2" NPT model.

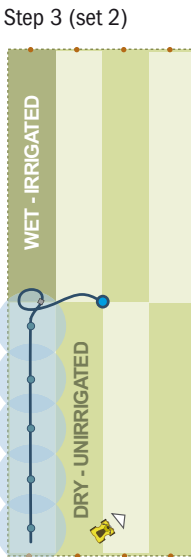
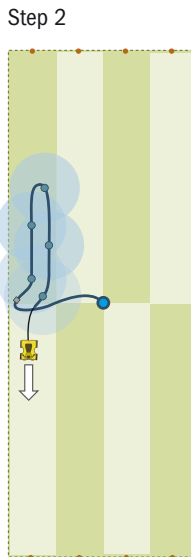
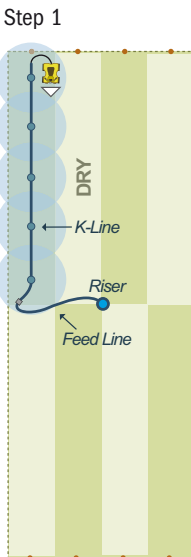
## EXAMPLES OF SHIFTING THE K-LINE

You can shift K-Line Irrigation by hand or with an ATV, heavy duty lawn tractor, golf cart, Gator, or similar tow vehicle.

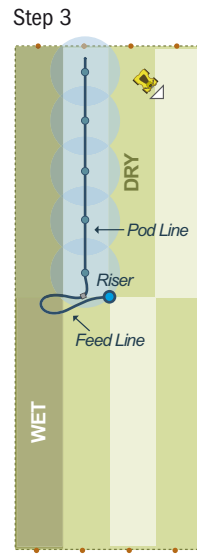
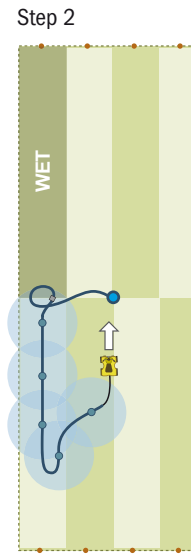
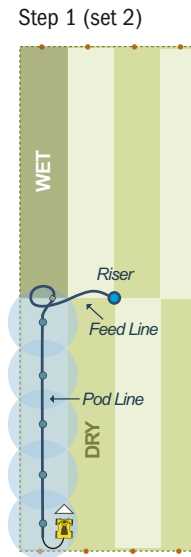
Position the tow vehicle along side and remain 2 to 2.5m from the K-Line as you tow it downfield to the next set. Shifting the K-Line while the sprinklers are in operation is preferred.

Full installation and operation instructions, both in printed and DVD formats, are supplied with the purchase of a K-Line 5 Pod / 1 hectare Kit.

### Shifting from Set 1 to Set 2



### Shifting from Set 2 to Set 3



## PRODUCT LISTING

PRODUCT NO.	DESCRIPTION
K-LINE FARM PACK 1 HECTARE KIT-COMPLETE	
KLSS32FARMPACK	K-Line Female Coupling 40mm
K-LINE PODS COMPLETE WITH NAAN SPRINKLER	
KL40NAANPR	K-Line 40mm NAAN 5022 SPKLR purple
KL40NAANOR	K-Line 40mm NAAN 5022 SPKLR orange
KL40NAANRD	K-Line 40mm NAAN 5022 SPKLR red
KL40NAANGN	K-Line 40mm NAAN 5022 SPKLR green
KL40NAANBU	K-Line 40mm NAAN 5022 SPKLR blue
KL40NAANBK	K-Line 40mm NAAN 5022 SPKLR black
K-LINE PODS COMPLETE WITH NELSON SPRINKLER	
KL40NELGNGN	K-Line 40mm NEL R2KWF SPKLR grn gm
KL40NELRDTN	K-Line 40mm NEL R2KWF SPKLR red tan
KL40NELRDRD	K-Line 40mm NEL R2KWF SPKLR red red
KL40NELGDGD	K-Line 40mm NEL R2KWF SPKLR gl'd gl'd
KL40NELBNBN	K-Line 40mm NEL R2KWF SPKLR brn brn
K-LINE PODS COMPLETE WITH NELSON SPRINKLER PRESSURE REGULATED 50PSI	
KL40NR50GNGN	K-Line 40mm NEL R2KWF 50PSI SPKLR green green
KL40NR50RDTN	K-Line 40mm NEL R2KWF 50PSI SPKLR red tan
KL40NR50RDRD	K-Line 40mm NEL R2KWF 50PSI SPKLR red red
KL40NR50GDGD	K-Line 40mm NEL R2KWF 50PSI SPKLR gold gold
KL40NR50BNBN	K-Line 40mm NEL R2KWF 50PSI SPKLR brown brown
K-LINE PODS COMPLETE WITH SENNINGER COMPACT SPRINKLERS	
KL40SENCOMRD	K-Line 40mm Senninger 2023 Red
KL40SENCOMYE	K-Line 40mm Senninger 2023 Yellow
KL40SENCOMTQ	K-Line 40mm Senninger 2023 Turquoise
KL40SENCOMGR	K-Line 40mm Senninger 2023 Green
K-LINE EFFLUENT PODS COMPLETE WITH SENNINGER SPRINKLERS	
KLMAX8025SEN	K-Line Max Effluent Pod Senninger 8025
KLMAX7025SEN	K-Line Max Effluent Pod Senninger 7025
KLMD5023SEN	K-Line Mid Effluent Pod Senninger 5023
PIPE	
LD40100	K-Line 40mm X 100m LD Polypipe
LD40150	K-Line 40mm X 150m LD Polypipe
LD45125	K-Line 45mm X 125m LD Polypipe
KPIPE6340	Coils 63mm K-Pipe

\* Freight - for all pod/pipe orders freight into store is an additional charge.

# Indicates the product is not a stock item, and will be ordered in by request.  
Product codes without a symbol indicates the product is available as a stock item from the local Philmac branch.  
Note that this is to be treated as a guide only, and stock status may differ between Philmac state distribution centres in line with local market preferences.

PRODUCT NO.	DESCRIPTION
SPARE PARTS	
KLFC40	K-Line Female Coupling 40mm
KLMC40	K-Line Male Coupling 40mm
KLSC40	K-Line Straight Coupling 40mm
KLTPS40	K-Line 40mm Tapping Saddle
NAAN-ADAPTOR	K-Line Naan Adapter
NAANSHAFT	K-Line Naan 5022 splr shaft
NELSON-ADAPT	K-Line Nelson splr adapter
RXGHC40	K-Line 40mm Galvanised hook cap
UB40	K-Line 40mm ss U-Bolt (old)
UBSS32/40	K-Line 32mm 40mmss U-Bolt
KLPRV4030	K-Line Pressure reducing valve 30m Spring
KLPRV4035	K-Line Pressure reducing valve 35m Spring
KLPRV4040	K-Line Pressure reducing valve 40m Spring
KLPRV4045	K-Line Pressure reducing valve 45m Spring
NAAN5022BLK	NAAN 5022 Sprinkler with black nozzle
NAAN5022RED	NAAN 5022 Sprinkler with red nozzle
NAAN5022BLU	NAAN 5022 Sprinkler with blue nozzle
NAAN5022GRN	NAAN 5022 Sprinkler with green nozzle
NAAN5022ORG	NAAN 5022 Sprinkler with orange nozzle
NELR2KWFBR-BR	Nelson R2000WF Sprinkler Brown-Brown
NELR2KWFGL-GL	Nelson R2000WF Sprinkler Gold-Gold
NELR2KWFGR-GR	Nelson R2000WF Sprinkler Green-Green
NELR2KWFDR-RD	Nelson R2000WF Sprinkler Red-Red
NELR2KWFDR-TN	Nelson R2000WF Sprinkler Red-Tan
NELMR40PSI	Nelson Mini Regulator 40PSI
NELMR45PSI	Nelson Mini Regulator 45PSI
NELMR50PSI	Nelson Mini Regulator 50PSI
NELS-NIPPLE	Nelson Nipple for Regulator
NREGR2KWF-40	Nelson Connection for Regulator 40mm
NELR2KWF-40	Nelson Connector 40mm
KLSGNEW	K-Line Stockguard
KLQRRSEN70	Quick release riser for Sen70
KLQRRSEN80	Quick release riser for Sen80
KL63CAMHOOKS18	KL63.camhook51
MID-ADAPTOR	MID-ADAPTOR
NAAN5035RED	Naan 5035 Sprinkler
KLMD25KIT	Bike shift kit
KLMD MID	KL MID STOCK GAURD
KLTPS32	K-Line 32mm Tapping Saddle