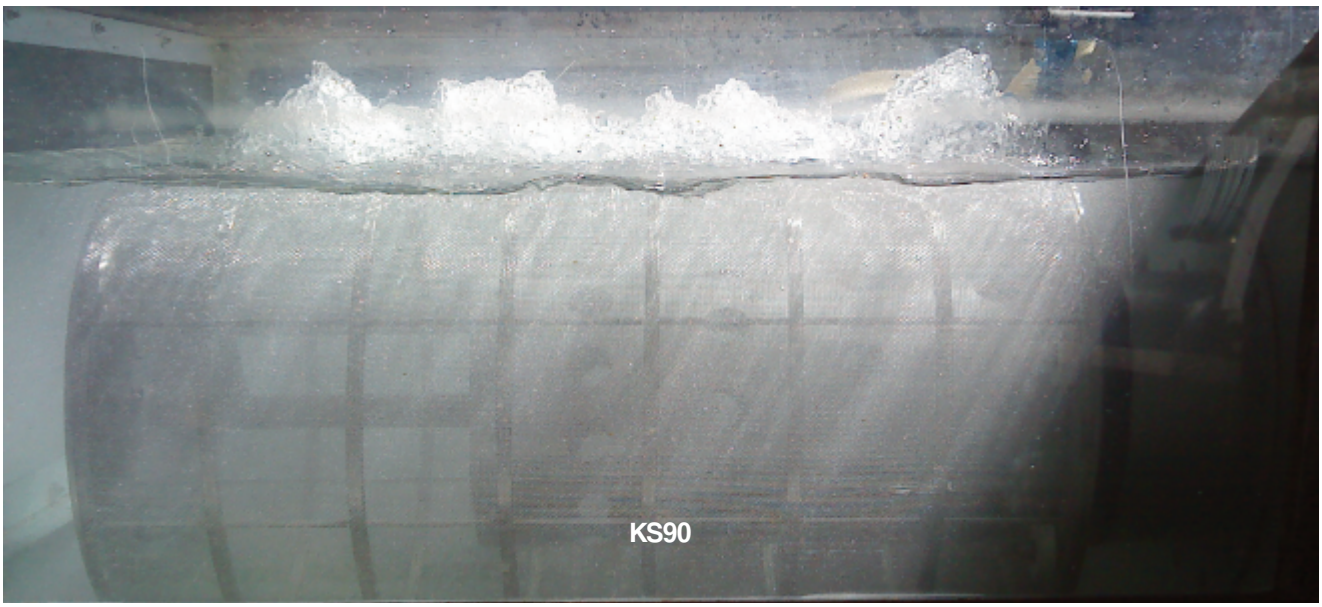
KSO Standard Screens (over 15 l/s)

All-stainless construction with thermoplastic bearings, KSO self-cleaning screens rotate around the intake pipe, which also houses spray nozzles that backwash debris off the screens. The Orbitor comes in a range of flow rates and sizes.


KS90


KS240


KS240


KS240

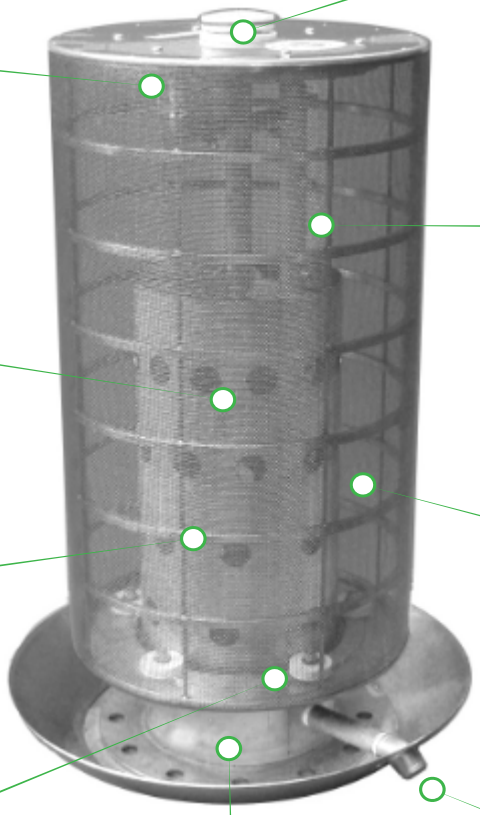
Features

EASILY SERVICED
The quick-remove cap allows easy removal of the screen cage without tools for servicing

EFFICIENT DRIVE
Drive nozzle directs water jet onto ring of blades to rotate the screen

BACKWASH NOZZLES
At right angles to screen for uniform and efficient backwash-ing. The flow from backwashing and drive varies from 3.75% to 1.8% of total flow, depending on size of screen

UNIFORM INTAKE VELOCITY
Internal baffle evenly distributes flow over whole screen and keeps maximum intake velocity below 0.15 m/sec



STRONG AND DURABLE
Stainless steel screen, baffle, and frame provide strength and durability

MESH OPTIONS
Standard Mesh hole size 0.9mm (20 mesh), optional 0.6mm (30 mesh), 1.9mm (10 mesh). Other meshes available.

SMOOTH OPERATION
Wheels allow rotation of screen around outlet pipe

BACKWASH CONNECTION
Female BSP connection

OUTLET PIPE
Ranges from 150NB up to 400NB AS2129 Table E hole dimensions

KS90 - KleenScreen Orbitor
*Pictured with optional Screen Guard

Benefits

ENERGY SAVING
With a small portion (1.8% - 3.75%) of pumped water backwashing and rotating the screen, it
is continuously cleaned. This maintains the pumping efficiency of the system at optimum, thereby reducing power consumption.

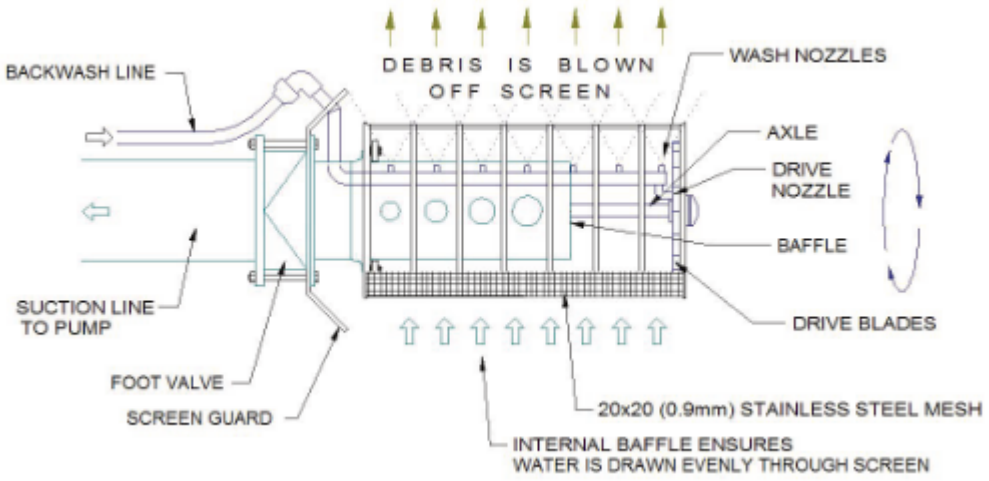
REPAIRS AND MAINTENANCE
The small screen holes (10 mesh 1.9mm, 20 mesh 0.9mm, 30 mesh 0.6mm) filter water entering the system. This can significantly reduce wear on pump and other system components.

LABOUR SAVING
By reducing major causes of water supply problems, ie screen blockage, loss of prime, and wear on pump, the labour required to maintain the system is reduced significantly.

DURABLE
Stainless steel and thermoplastic components for rugged construction and long operational life.

ENVIRONMENTALLY FRIENDLY
Satisfies Environmental Council requirements for screen hole size, and intake velocity.

Operation



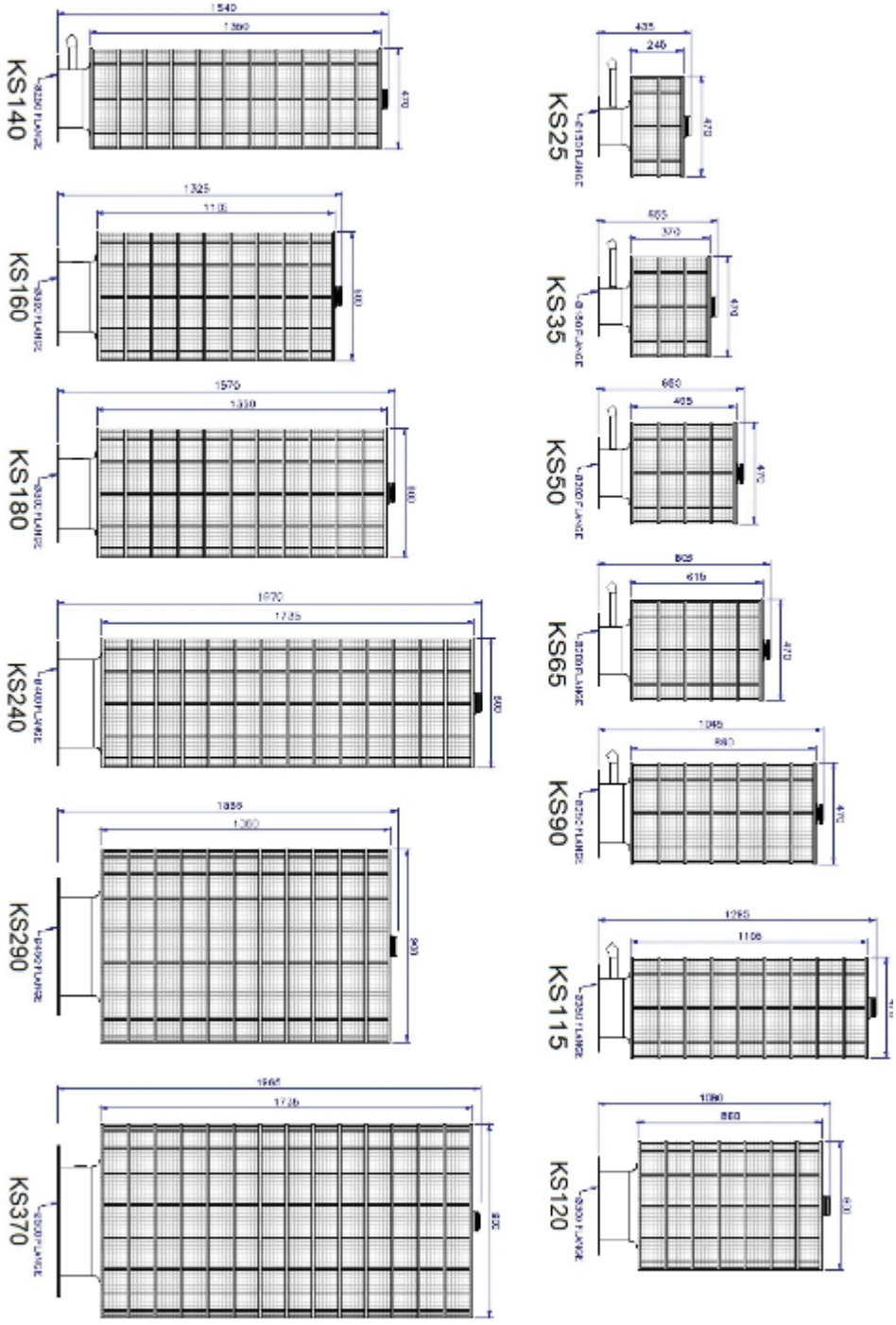
Flow | Pressure | Connections

Base Model	Maximum Flow (Wedge-wire with 0.5mm wire spacing)				Backwash Connection	Outlet Connection	Required Pressure for Backwash.	Backwash Flow at Required Pressure.
	L/S	M^3 /Hour	IGPM	USGPM	International (USA)	International (USA)	Meters (USA)	L/S (USA)
KS25	25	90	330	397	3/4" BSP fem (3/4" NPT)	150NB Tab E (6" Flange)	35 (50)	0.8 (13)
KS35	35	126	463	556	3/4" BSP fem (3/4" NPT)	150NB Tab E (6" Flange)	35 (50)	0.9 (14)
KS50	50	180	661	794	3/4" BSP fem (3/4" NPT)	200NB Tab EEz (8" Flange)	40 (60)	1.2 (19)
KS65	65	234	859	1032	3/4" BSP fem (3/4" NPT)	200NB Tab E (8" Flange)	40 (60)	1.3 (21)
KS90	90	324	1189	1429	1" BSP fem (1" NPT)	250NB Tab E (10" Flange)	40 (60)	2.1 (33)
KS115	115	414	1520	1825	1" BSP fem (1" NPT)	250NB Tab E (10" Flange)	45 (60)	2.6 (41)
KS140	140	504	1850	2222	1" BSP fem (1" NPT)	250NB Tab E (10" Flange)	50 (75)	3.1 (49)
KS180	180	648	2378	2858	1 1/2" BSP (1 1/2" NPT)	300NB Tab E (12" Flange)	50 (75)	4.4 (70)
KS240	240	864	3168	3840	1 1/2" BSP (1 1/2" NPT)	400NB Tab E (16" Flange)	50 (80)	4.9 (78)
KS290	290	1044	3828	4640	1 1/2" BSP (1 1/2" NPT)	450NB Tab E		
KS370	370	1332	4884	5920	1 1/2" BSP (1 1/2" NPT)	500NB Tab E		

Dimensions A

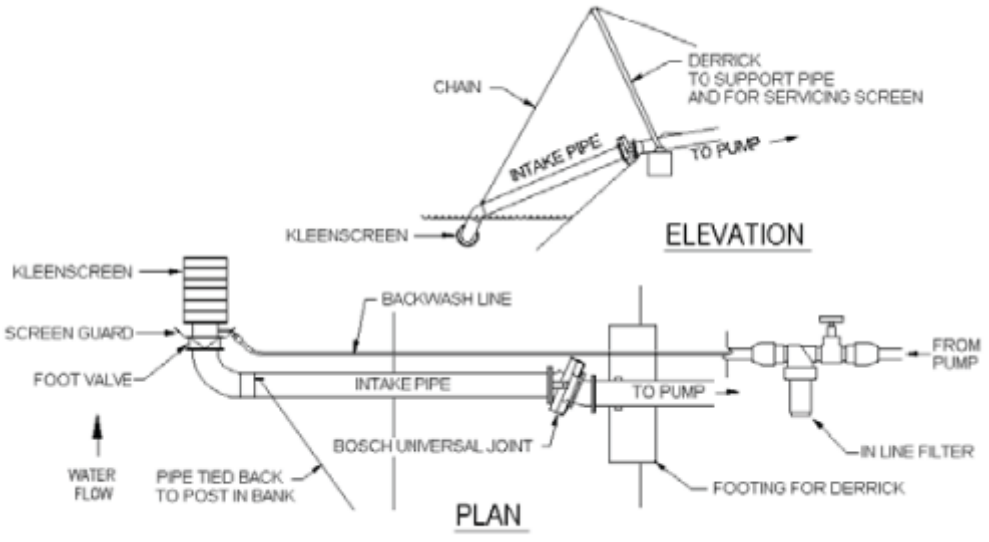
Base Model	Screen Length MM (inches)	Screen Diameter MM (inches)	Overall Length MM (inches)	Net Weight KG (pounds)
KS25	245 (9.6)	470 (18.5)	435 (17.1)	17 (37)
KS35	370 (14.6)	470 (18.5)	555 (21.9)	20 (44)
KS50	490 (19.3)	470 (18.5)	690 (27.2)	23 (51)
KS65	610 (24)	470 (18.5)	810 (31.9)	24 (53)
KS90	855 (33.7)	470 (18.5)	1045 (41.1)	33 (73)
KS115	1100 (43.3.)	470 (18.5)	1295 (51)	35 (77)
KS140	1345 (53)	470 (18.5)	1540 (60.6)	4.8 (106)
KS180	1345 (53)	600 (23.6)	1570 (61.8)	60 (132)
KS240	1730 (68.1)	600 (23.6)	1970 (77.6)	120 (264)
KS290	1350 (53)	900 (23)	1585 (62.4)	
KS370	1735 (68.3)	900 (23)	1965 (77.4)	

Dimensions B



Installation

1. The KleenScreen must be able to rotate. Sufficient clearance (100mm) under the screen is required.
2. At least 50mm is required between water surface and top of screen.
3. The recommended position in a stream/river, is to have a 90º bend at end of intake pipe, with the screen facing downstream. The backwash nozzles should be facing the opposite bank of the stream, at a 45º angle up from horizontal. This is the most effective position to flush any debris away from the screen
4. A screen retrieval system is required to lift the screen out of the water for servicing, and periods of inactivity.
5. It is recommended to lift the screen out of the water when not in use. This prevents the build up of silt and trash around the screen and the growth of algae on the screen.
6. The KS Universal Joint is recommended to provide the flexibility to lift the intake pipe and swing it around to the bank.
7. The backwash line should be plumbed into the discharge of the pump before the valve.
8. The recommended pressure range for backwashing is 40-60 m (60 – 90 psi). If pressure is below this a booster pump is required, or if significantly above a pressure reducing valve.
9. An inline filter with 16 mesh(1.2mm) is required on the backwash line.



KS54-WW

*Pictured with optional Screen Guard

KS90

*Pictured with optional Screen Guard