



### **User Benefits**

---

- Robust construction
- Glandless
- Dry running capability
- Ability to pump large solids
- Cost effective easy maintenance

# *Single Disc*

---

## Pumps for waste solids handling

SSP Single Disc pumps are designed for use within effluent processes for pumping sludges and other waste media having entrained solids.

The SSP Single Disc pumps have a glandless disc design providing indefinite dry running capability. This design together with its robust construction and cost effective easy maintenance, provides a mechanically simple but highly effective solution to waste transfer duties with unparalleled tolerance of problem solids including rag, fibrous matter and grit.

SSP Single Disc pumps are ideal for primary tank manual and auto de-sludging duties. Other applications include digested and humus sludge, raw sewage, abattoir and poultry wastes, and other industrial waste products.

### Operation

The gearbox shaft turns a crank assembly providing the reciprocating pumping action of the single rubber disc. On the upward stroke the pumped media is drawn through the inlet valve into the pump body. The downward stroke shuts the inlet valve, whilst at the same time forcing the pumped media through the outlet valve.

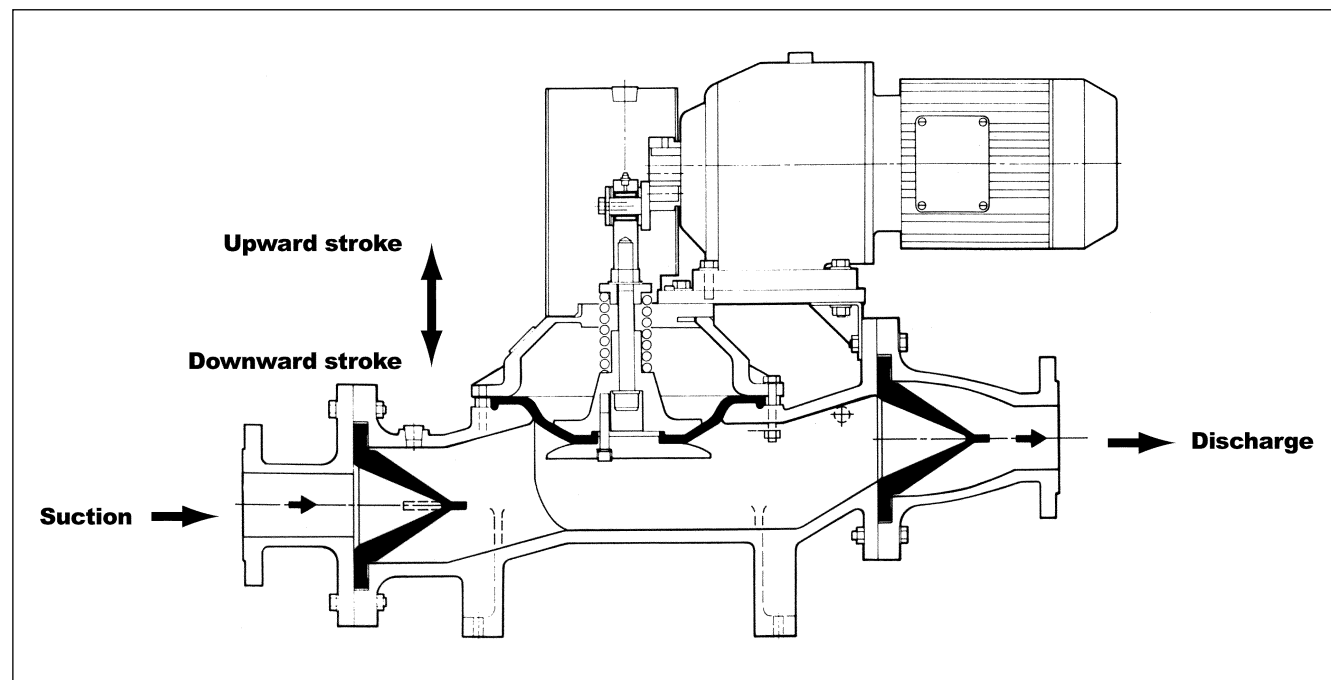
The diagram below shows the media flow through the pump with the elastomeric non-return valves in position.

### Basic Design

The SSP Single Disc pump body is designed with the outlet port higher than the inlet port to minimise the risk of air or gas build up inside the pump chamber.

The SSP Single Disc pump is constructed from a minimal number of parts with the pump body manufactured from cast iron. The high grade disc and valves, manufactured from natural rubber and a thermoplastic elastomer, are the main consumable parts. These are low cost items, easily replaced on site without the need for highly skilled personnel.

The absence of close tolerance clearances in the pumping chamber, means that SSP Single Disc pumps have a high resistance to grit abrasion.

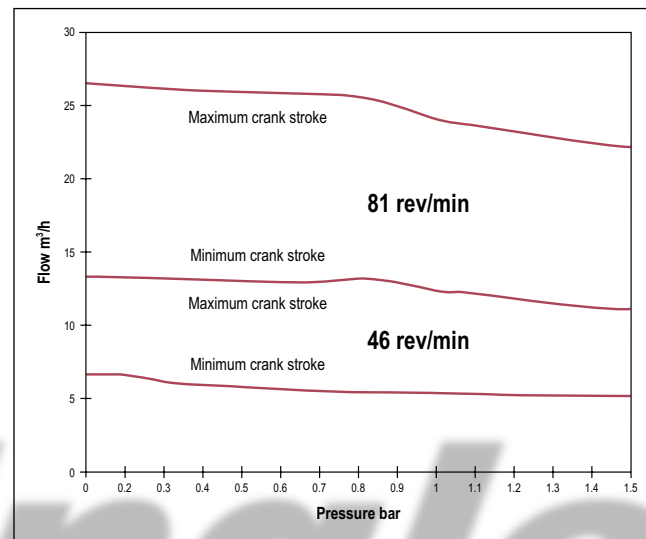


### Performance

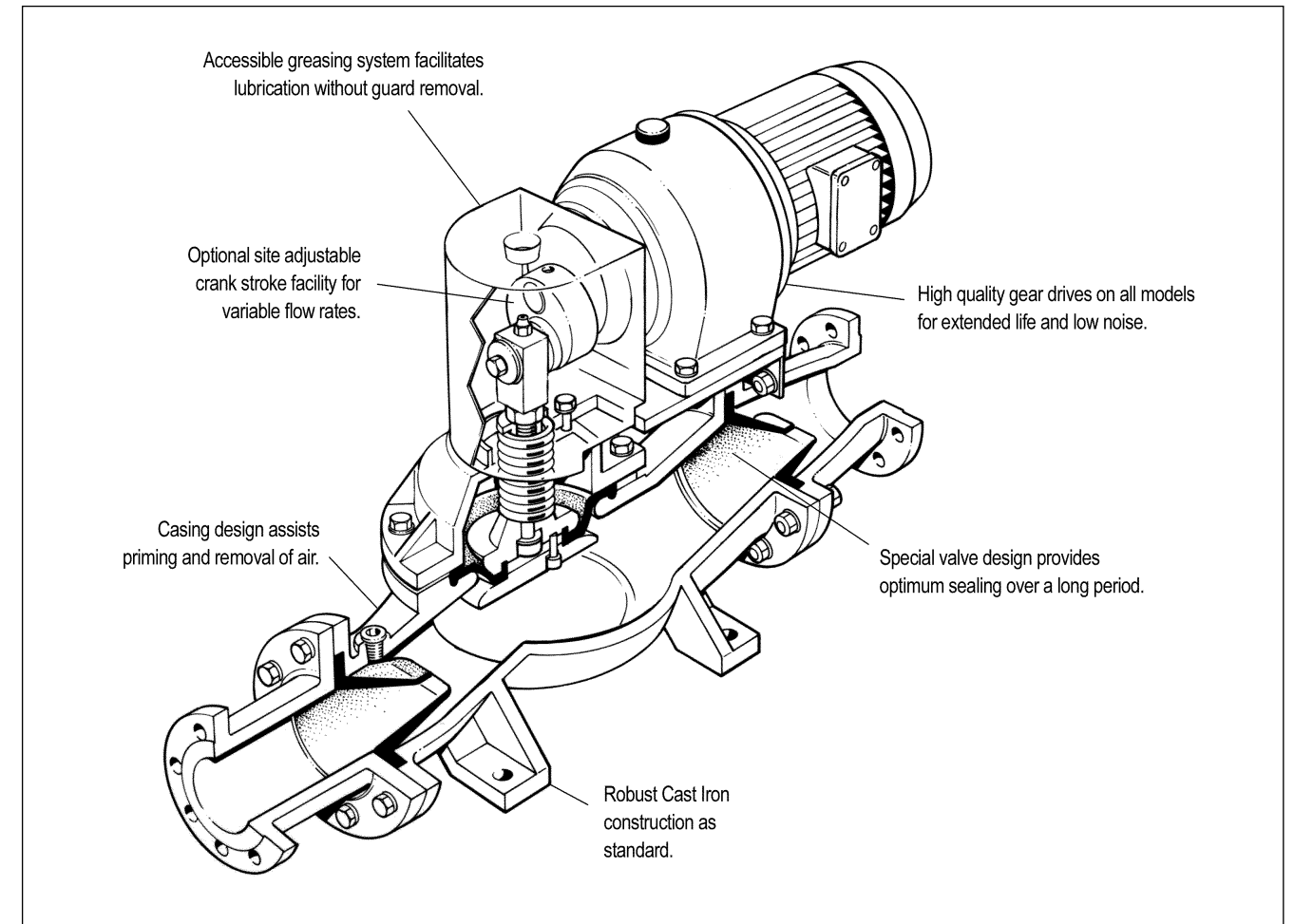
- Flow rates up to 24 m<sup>3</sup>/h
- Differential pressures up to 1.5 bar
- Sludge thickness content up to 6%

### Solids Handling Capability

The SSP Single Disc pump is ideal for solids handling. The clear flow path through the pump minimises the risk of blockage and allows the passage of large diameter spherical solids up to 65mm size.



### Specification Options



### Drive units

The Single Disc pump is supplied fully motorised with a fixed speed geared electric motor drive at either 81 or 46 rev/min dependent upon duty requirements.

### GRP covers

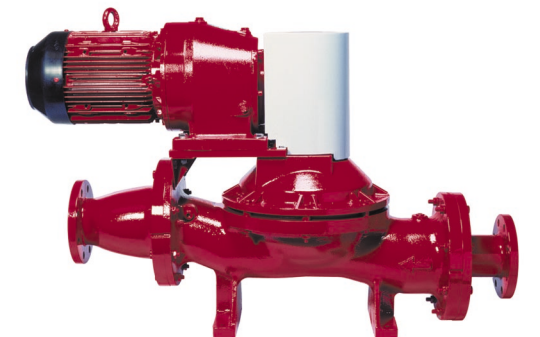
For frost protection in exposed environments, Single Disc pumps can be supplied with GRP covers to include heaters.

### Connections

Flange connections to ASA/ANSI150 and BS4504/DIN2533.

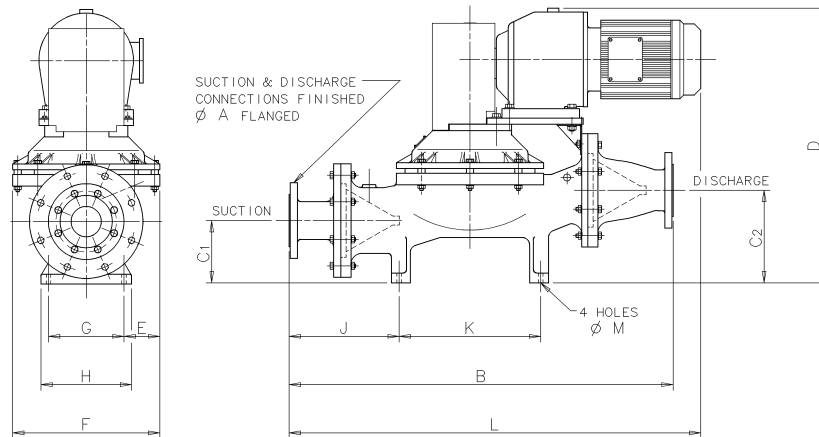
### Variable flow rates

For variable flow rates the Single Disc pump has an optional site adjustable crank stroke facility.



# Single Disc

## Pump Dimensions



All dimensions in mm

SD Pump	A	B	C1	C2	D	E	F	G	H	J	K	L	M
2.2 kW	80	1017	165	245	685	95	390	200	240	292	375	1096	12
4.0 kW	80	1017	165	245	685	95	390	200	240	292	375	1102	12

**Sales - Pumps: +44 (0)1323 414600**  
**Spares: +44 (0)1323 414601**



The information contained herein is correct at the time of issue,  
but may be subject to change without prior notice

[www.ssppumps.com](http://www.ssppumps.com)