



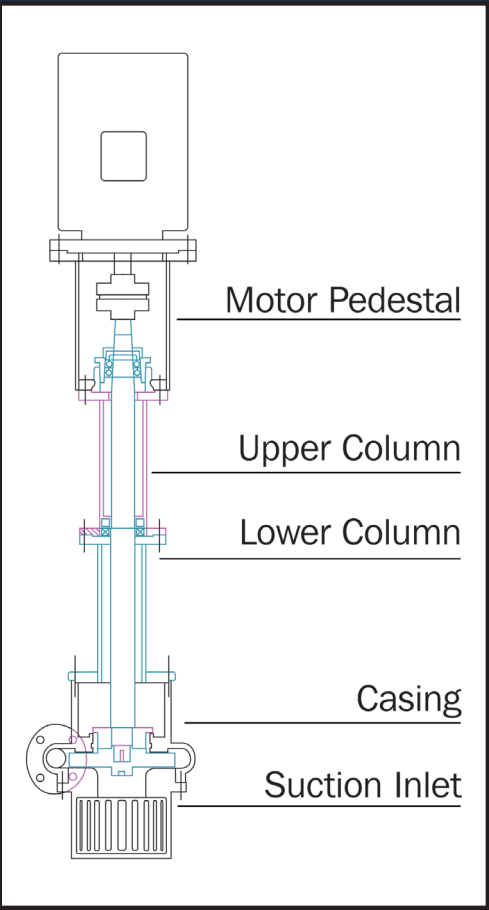
UNIPUMP

VERTICAL SPINDLE PUMP

- Extreme dry run capabilities
- Spigot aligned – no gaskets
- Impeller easily adjustable
- No exposed moving parts
- Pre-assembled bearing cartridges readily available

UniPump

The Unipump is a vertical spindle pump designed to be robust, abrasion resistant, reliable and have a long life. The Unipump is made in three sizes; 50 mm, 80 mm and 100 mm. Each model has it's own unique duty, the combination of motor speeds and different impeller diameters gives a mid-point pumping range of 160 m³/hr and total heads up to 70m. The pump does not have a mechanical seal or packing gland. Consequently it can run dry indefinitely. The Unipump does not have any external moving parts ensuring safe installations. The depth to which pumps can be immersed is governed by the position of the bearing in the lower end of the upper column. This bearing is protected by a normal rotary seal, but for maximum reliability it should be kept above the water level. The recommended maximum water level is clearly marked on all pumps.



UNIPUMP

CONSTRUCTION MATERIALS

Wet Ends - chrome iron 27% heat treated to 650 BN, also available in stainless steel ss316.
Column assemblies - Mild steel fabrication, also available in stainless steel.
Shaft material EN8 steel spindle with roller and thrust bearings.
Polyurethane - shaft sleeve and casing insert.
All mating components have spigots and no gaskets required.
Adjusting the bearing housing sets the impeller clearance. No shim or spacers required.

TECHNICAL SPECIFICATIONS

Sump installation - maximum immersion depth 500 mm. The open vein impeller pumps solids up to 12 mm in diameter and slurries up to 1.5 S.G. Lower bearing lubrication is a standard external grease nipple.

MAINTENANCE

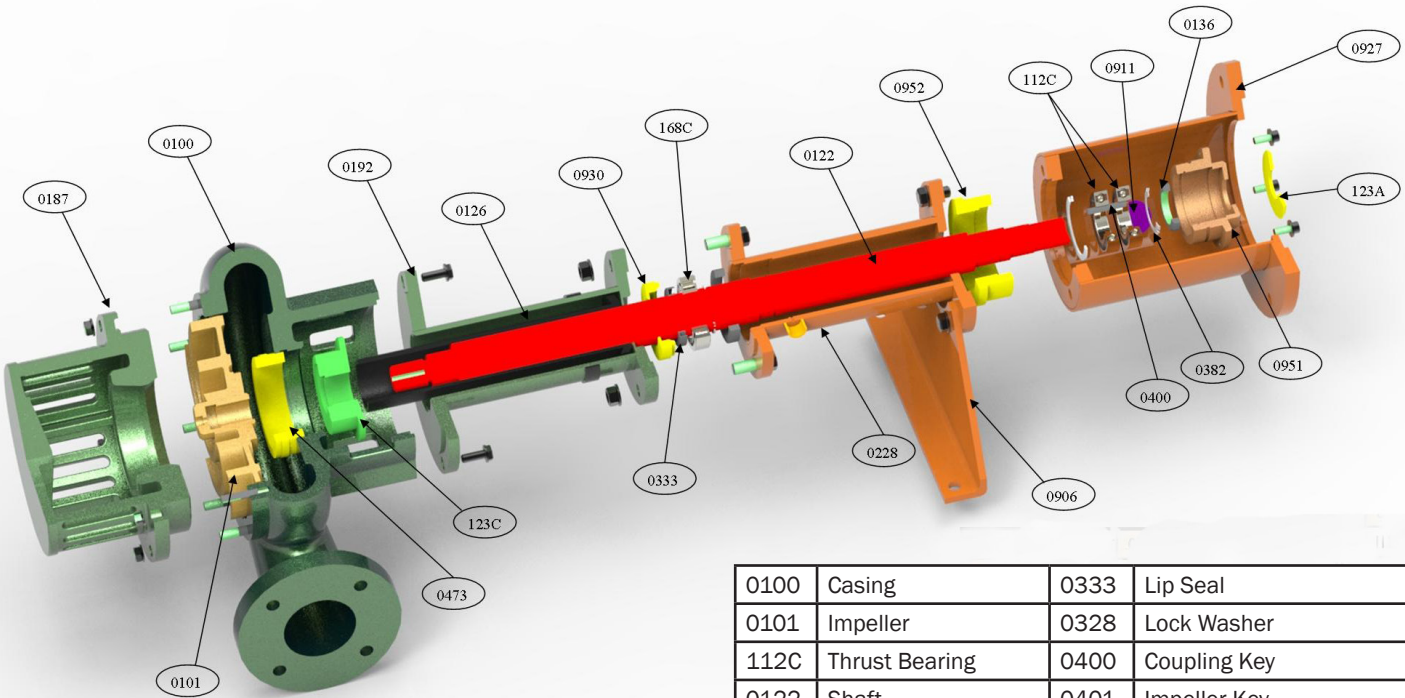
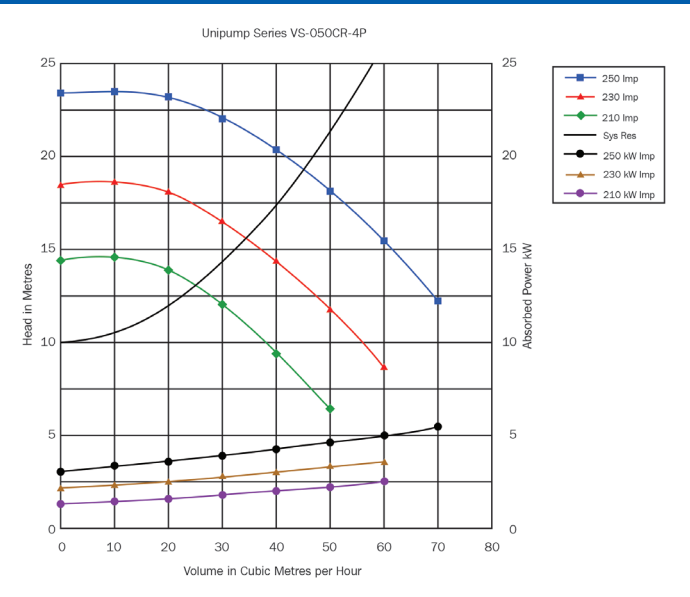
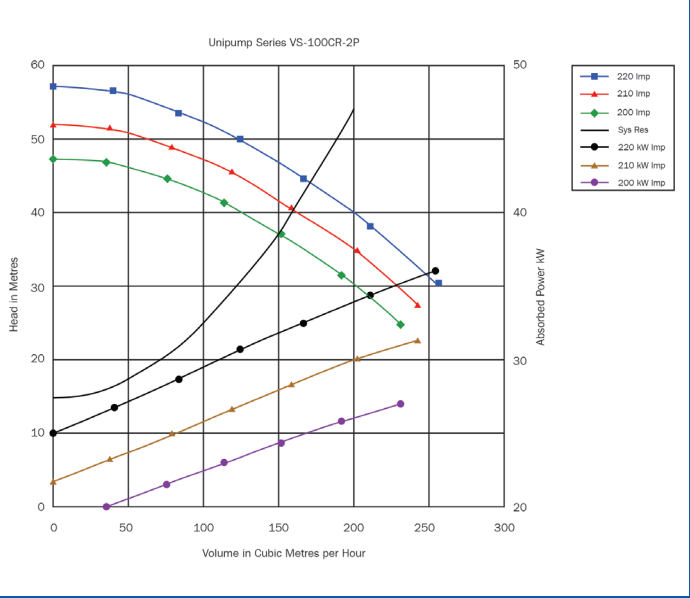
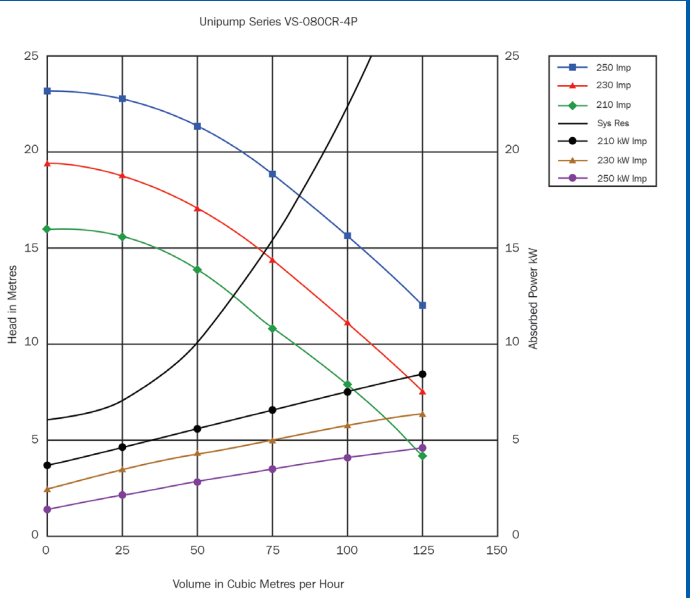
An easily replaceable polyurethane insert is fitted in the pump casing over the maximum wear area. The impeller adjustment is made without any use of spacers or shims. The upper bearing is greased for life and does not need any maintenance. The Unipump is manufactured in South Africa and spare parts are readily available.

PERFORMANCE

Heads to 20 m at 40 m³/h can be achieved at speeds from 1450 rpm and head to 60 m at 100m³/h can be achieved at 3000 rpm.

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0100	Casing	0333	Lip Seal
0101	Impeller	0328	Lock Washer
112C	Thrust Bearing	0400	Coupling Key
0122	Shaft	0401	Impeller Key
123A	Dust Cover	0473	Throttle Brush
123C	Deflector	0906	Mounting Bracket
0126	Shaft Sleeve	0911	Finger Guard
0136	Lock Nut	0927	Direct Motor Mount
168C	Radial Bearing	0930	Internal Seal Support
0187	Suction Strainer	0951	Bearing Housing Top
0192	Pipe Column	0952	Bearing Housing Bottom
0228	Bearing Frame		

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MINING SYSTEMS

POPULAR PUMP SELECTIONS AND DATA

Bareshaft Pump Weights

Unipump VS50CR-250 (Bare Pump)	165 kg
Unipump VS80CR-250 (Bare Pump)	175 kg
Unipump VS100CR-270 (Bare Pump)	196 kg

QUICK SELECTION GUIDE FOR PUMPS

VS50CR-250-7.5-4P (Standard 250 mm Diameter Impeller) 4 Pole Motor	50mm
23m Head with a flow of 20m³/h	
20m Head with a flow of 40m³/h	
15m Head with a flow of 60m³/h	
VS50CR-190-11-2P (Undercut 190 mm Diameter Impeller) 2 Pole Motor	
50m Head with a flow of 10m³/h	
45m Head with a flow of 30m³/h	
28m Head with a flow of 50m³/h	
VS50CR-210-15-2P (Undercut 210 mm Diameter Impeller) 2 Pole Motor	
60m Head with a flow of 20m³/h	
50m Head with a flow of 40m³/h	
38m Head with a flow of 58m³/h	
VS50CR-250-22-2P (Standard 250 mm Diameter Impeller) 2 Pole Motor	
80m Head with a flow of 20m³/h	
65m Head with a flow of 60m³/h	
45m Head with a flow of 80m³/h	
VS80CR-250-11-4P (Standard 250 mm Diameter Impeller) 4 Pole Motor	80mm
24m Head with a flow of 20m³/h	
18m Head with a flow of 80m³/h	
12m Head with a flow of 120m³/h	
VS80CR-200-22-2P (Undercut 200 mm Diameter Impeller) 2 Pole Motor	
55m Head with a flow of 20m³/h	
50m Head with a flow of 80m³/h	
45m Head with a flow of 110m³/h	
VS80CR-220-37-2P (Undercut 220 mm Diameter Impeller) 2 Pole Motor	
68m Head with a flow of 40m³/h	
60m Head with a flow of 100m³/h	
55m Head with a flow of 140m³/h	
VS100CR-270-15-4P (Standard 270 mm Diameter Impeller) 4 Pole Motor	100mm
24m Head with a flow of 40m³/h	
20m Head with a flow of 130m³/h	
12m Head with a flow of 200m³/h	
VS100CR-210-37-2P (Undercut 210 mm Diameter Impeller) 2 Pole Motor	
45m Head with a flow of 80m³/h	
40m Head with a flow of 170m³/h	
30m Head with a flow of 240m³/h	