

GROUNDWATER

SOUTHERN CROSS • PENTEK

SUBMERSIBLE BOREHOLE PUMPS, MOTORS AND CONTROLLERS



SD Series

Our extensive range of submersible borehole pumps.

SAVA Motors

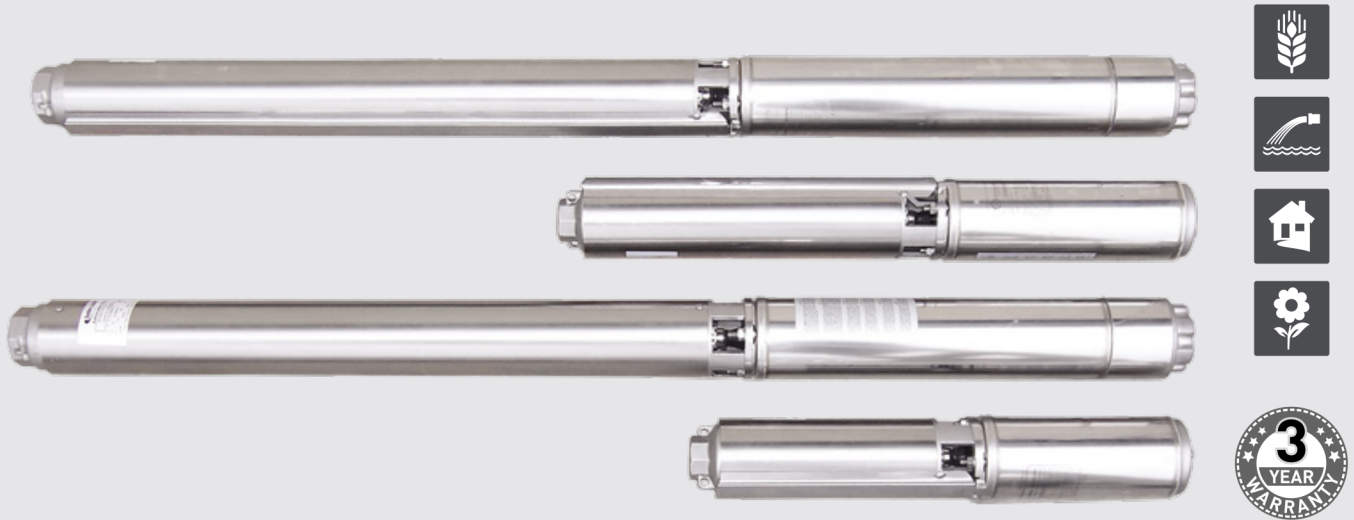
The Southern Cross 4" SAVA rewindable submersible motors are efficient and reliable, perfect for borehole and submersible pumping applications. They include removable waterproof cable connectors for easy maintenance, a long service life and superior performance within wider voltage fluctuations. All SAVA submersible motors are tested under the most stringent quality control procedures.

Franklin Motors 4" submersible motors are also available.



SUBMERSIBLE BOREHOLE PUMPS

SD 4" SERIES



For all general water supply 4" (100mm) or larger boreholes.

Applications:

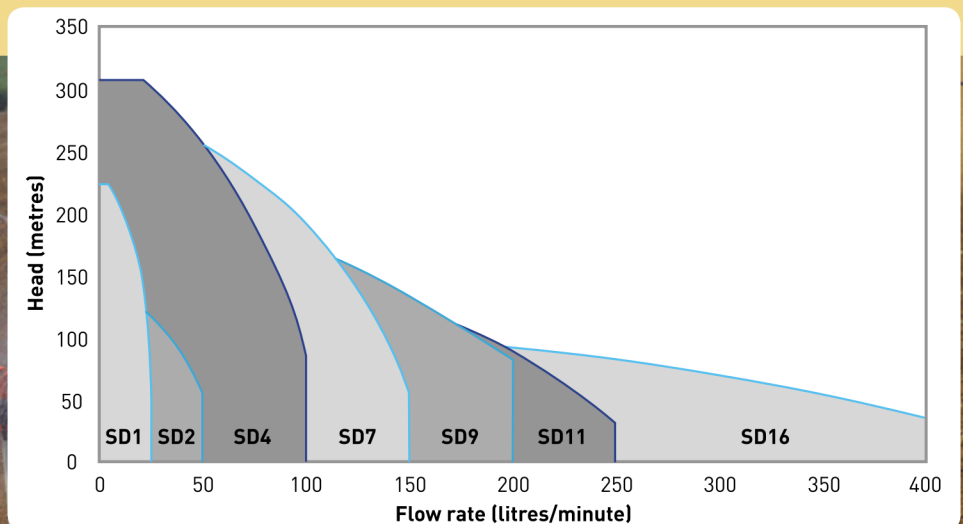
- Domestic.
- Industrial.
- Stock watering.
- Firefighting.
- Pressure boosting.
- Irrigation.

Features:

- Exceptional quality and hydraulic design.
- 304 stainless steel pump bowls with high grade noryl floating stack impellers and lexal diffusers for optimum wear and corrosion resistance.
- 304 stainless steel pump enclosure, pump shaft and motor coupling.

- Choice of quality NEMA standard motors from 0.37 to 5.5kW
- Capacities to 400 litres/minute.
- Heads to 300m.

• SD Series Performance



SUBMERSIBLE BOREHOLE PUMP MOTORS

SAVA 4" SERIES



The SAVA 4" oil filled submersible motors are designed to operate in 4" and larger boreholes.

Applications:

- Domestic.
- Water supply.
- Agriculture.
- Stock watering.
- Irrigation.
- Water transfer.

Features:

- Non-toxic, premium quality, colourless food grade oil. (USA FDA, US Pharmacopeia/National Formulary & European Pharmacopeia approved).
- Special stator design with high starting torque in single phase models.
- Unique single-phase electrical design for starting capacitor and PSC starting or PSC only starting.

- Cable materials are CE approved for potable water applications.
- Stainless steel motor casing, shaft, upper cover and bottom end cover.
- High efficiency stators with the ability to operate within wide voltage fluctuations.
- High quality European components: mechanical seal, cable connectors, copper winding wires and insulation.
- Removable waterproof cable connector for easy maintenance.
- Factory tested.

SINGLE PHASE		Power		Voltage Rating (V)	FLC (A)	LRC (A)
Model	kW	HP				
4R201	0.37	0.5	230	3.7	12	
4R202	0.55	0.75	230	4.3	15	
4R203	0.75	1	230	5.7	20	
4R204	1.1	1.5	230	7.8	32	
4R206	1.5	2	230	9.8	38	
4R307	2.2	3	230	15	46	
THREE PHASE		Power		Voltage Rating (V)	FLC (A)	LRC (A)
Model	kW	HP				
4R222	0.37	0.5	230	2.05	7.8	
4R223	0.55	0.75	230	2.8	11.6	
4R224	0.75	1	230	3.6	15	
4R225	1.1	1.5	230	4.7	21	
4R226	1.5	2	230	6.3	24	
4R328	2.2	3	230	9.3	38	
4R529	3	4	230	13	74	
4R530	4	5.5	230	17	84	
4R531	5.5	7.5	230	24	112	
4R210	0.37	0.5	400	1.2	4.5	
4R211	0.55	0.75	400	1.6	6.7	
4R212	0.75	1	400	2.1	8.9	
4R213	1.1	1.5	400	2.7	12	
4R214	1.5	2	400	3.6	14	
4R316	2.2	3	400	5.4	22	
4R517	3	4	400	7.5	43	
4R518	4	5.5	400	9.9	49	
4R519	5.5	7.5	400	13.8	65	
4R521	7.5	10	400	19	87	

PENTEK CONSTANT PRESSURE CONTROLLER

INTELLIDRIVE™



BUILD-IN DIAGNOSTICS & PROTECTION

Over Current	Over Voltage
Under Voltage	Rotor Jam
Dry Run	Ground Fault
Over Temperature	Pipe Break
Jam Warning	Lightening Arrester



Most homeowners with well systems know what happens when demand for water changes. If they're taking a shower, water pressure drops when someone starts the dishwasher or turns on a faucet. Weak showers, unclean dishes and other water pressure problems become frustrating daily experiences.

The Pentek Intellidrive constant pressure controller directs changes in pump motor speed, responding to fluctuations in demand. If water pressure starts dropping, an electronic pressure transducer signals the drive to accelerate the pump motor to increase water volume going into the home. The Benefit? Strong, equal pressure, everywhere.

Homeowners will recognize the difference right away. Water flows smoothly and evenly throughout the home. Regardless of changes in demand, water pressure stays the same: in the shower, the dishwasher, and from every other faucet and fixture. And from homeowners are outside, they'll enjoy a lush, green lawn and landscaping. Sprinkler systems will perform at their best, with consistent spray patterns, constantly pressurized to achieve complete coverage. The pump and motor will last longer.

The Pentek Intellidrive features "Soft Start/Coast to Stop" design, which minimizes mechanical stress. And during long running applications like lawn irrigation, pressure cycling is eliminated.

Benefits:

- Maintains constant water pressure for submersible pump systems.
- Automatically adjusts motor speed to meet changes in water demand.
- Instantaneous feedback from an electronic pressure transducer instructs the drive to change the submersible pump motor speed to maintain constant pressure throughout the system.
- Energy savings from managed speed.
- Pentek Intellidrive with LED displays written faults clearly on the screen to avoid any confusion – no flashing lights or guessing required.

Pentek Intellidrive			
Motor	Input	Output	kW Range
3 - Wire	1 - Phase	1 - Phase	0.75 - 1.5



1
The Intellidrive is connected to an electronic pressure transducer, and to the submersible pump.

2
A properly sized tank is installed between the pump and the pressure transducer. The minimum size tank recommended is 2 gallons.

3
A pressure transducer measures changes in system pressure continuously, and sends electronic signals to the Intellidrive.

4
When pressure drops the intellidrive responds by increasing pump motor speed and water flow; first from the pressure tank, then directly from the well.

5
Increased water flow maintains constant pressure wherever it is needed throughout the home.

6
In the case of decreased demand, when signaled by the pressure transducer, the pressure tank is replenished, and the Intellidrive responds by reducing or shutting off water flow. Once water flow shuts off, the system returns to monitoring phase until the next demand for pressure adjustment.