



DRSS

SUBMERSIBLE SLURRY PUMPS

WITH AGITATOR

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Durable, electro-submersible slurry pumps. Versatile and rugged solution for the transfer of abrasive and high density slurries in mining, civil construction, industry and other heavy duty applications.

VERSATILE HEAVY DUTY SOLUTION

Versa DRSS series are a heavy duty, electro-submersible slurry pumps designed to handle a wide range of slurries and abrasive particles in submersible applications in mining and industry.

DRSS pumps feature a rugged construction using the highest quality materials to ensure reliable performance and excellent service life. The high quality electric motors incorporate multiple protection features to detect the ingress of water or excessive temperatures to shut off the pump and prevent damage.

Pumps are available in 72 different models in sizes ranging from 80mm to 400mm (3.15 - 16 inches) discharge and are capable of flow rates from 23 to 2400 cubic metres per hour (100-10560USGPM) and heads up to 64 metres (210ft). Pumps can pass solids up to 60mm (2.4 inches) in diameter enabling them to transfer dense slurries with large abrasive particles.

LARGE CUT WATER CLEARANCE

The pump casing features a large cut water clearance which allows the easy passage of large solids and reduces wear and erosion to improve service life and prevent loss of efficiency.

INTEGRAL AGITATOR

The 27% chrome white iron agitator assists in the pumping of slurries by breaking up large particles and agitating high concentrations of solids.

HEAVY DUTY CONSTRUCTION

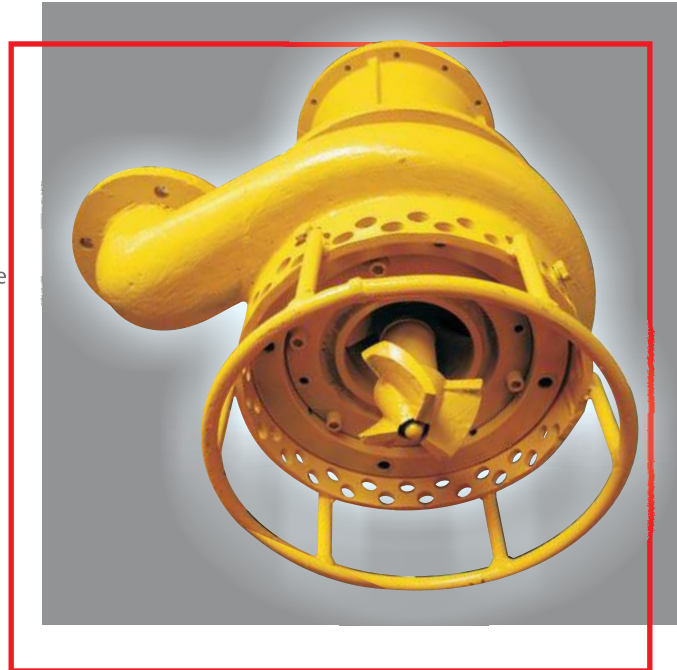
The pump casing, impeller, backplate and agitator are manufactured from high quality 27% chrome white iron. This extremely tough construction material can withstand continuous use in heavy duty applications and allows the DRSS pumps to transfer abrasive and dense slurries with minimal wear. The pumps feature a replaceable backplate allowing for simple servicing and easy replacement of worn components.

F CLASS MOTOR INSULATION

F class motor insulation is used to ensure reliable operation in heavy duty applications in temperatures up to +40°C. In applications where higher temperatures are expected, H class motor insulation can be used to allow operating temperatures up to +70 °C.

SUPPORT FRAME AND STRAINER

A heavy duty mild steel frame with round base and strainer provide excellent stability and durability whilst preventing blockages.





DRSS + SA (+ Side Agitator)

DOUBLE MECHANICAL SEAL

A double mechanical seal provides excellent shaft sealing between the electric motor and wet end. The seals are oil bath lubricated and feature carbon/ceramic seal faces in the wet end and tungsten ceramic faces in the drive end to provide excellent durability and service life across a wide range of duties and applications.

OIL CHAMBER LEAKAGE PROBE

The oil chamber incorporates a water leakage probe which detects when the water-to-oil ratio is too high and automatically shuts down the motor to prevent damage.

MOTOR FLOAT SWITCH

A float switch is located in the bottom of the motor to detect the ingress of water and shut down the motor to prevent damage due to shorting out.

MOTOR TEMPERATURE SENSORS

Temperature sensors are located in the motor stator to detect excessive temperatures and can shut down the motor to prevent damage due to overheating.

THRUST BEARING SENSORS

Temperature and moisture sensors are located in the motor thrust bearings to detect excessive temperatures and the ingress of water and shut down the motor to prevent bearing failure.

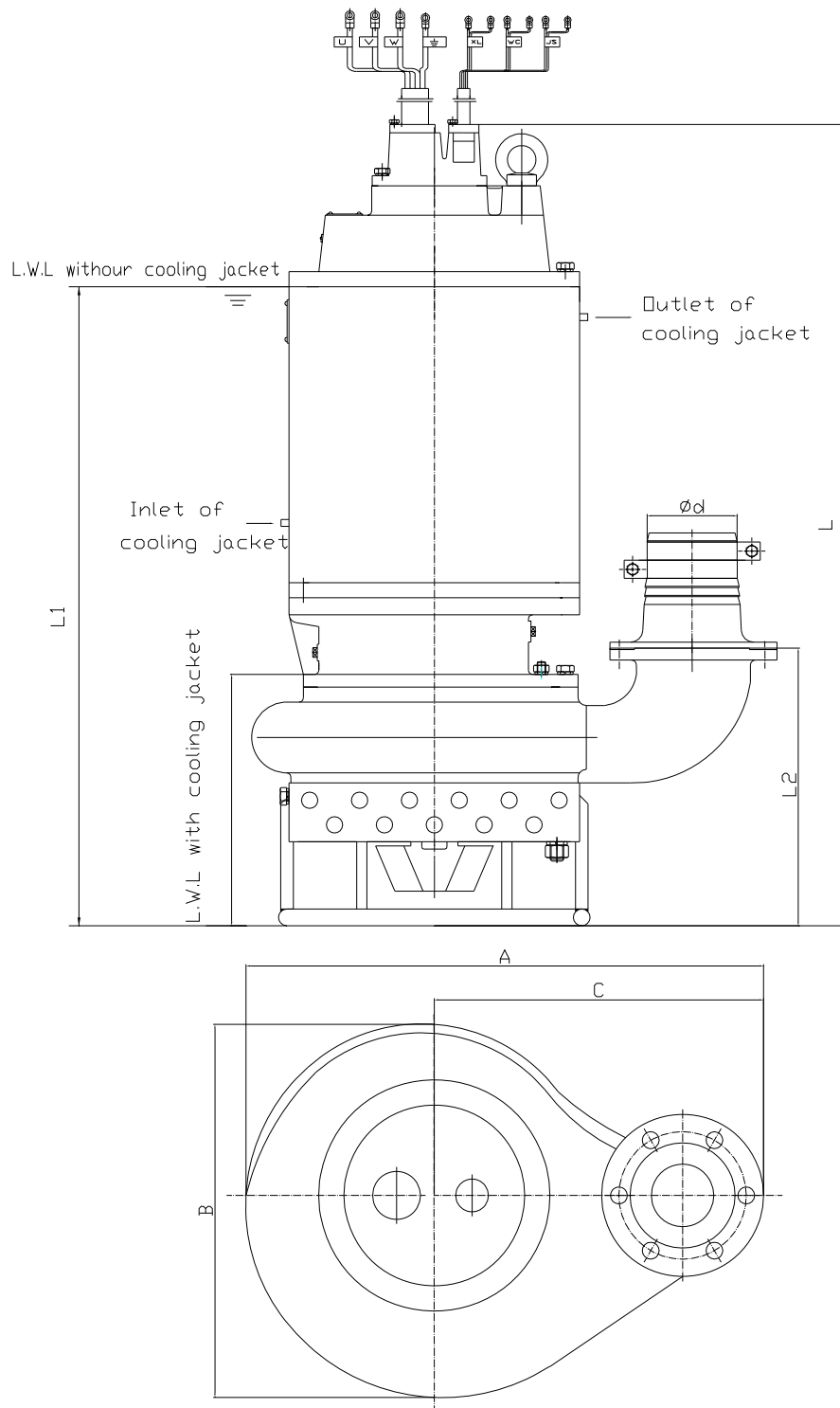
OPTIONAL EXTERNAL COOLING

Cooling jackets can be provided with external water supply in high temperature applications to keep motor temperature down and prevent excessive stator and bearing damage.

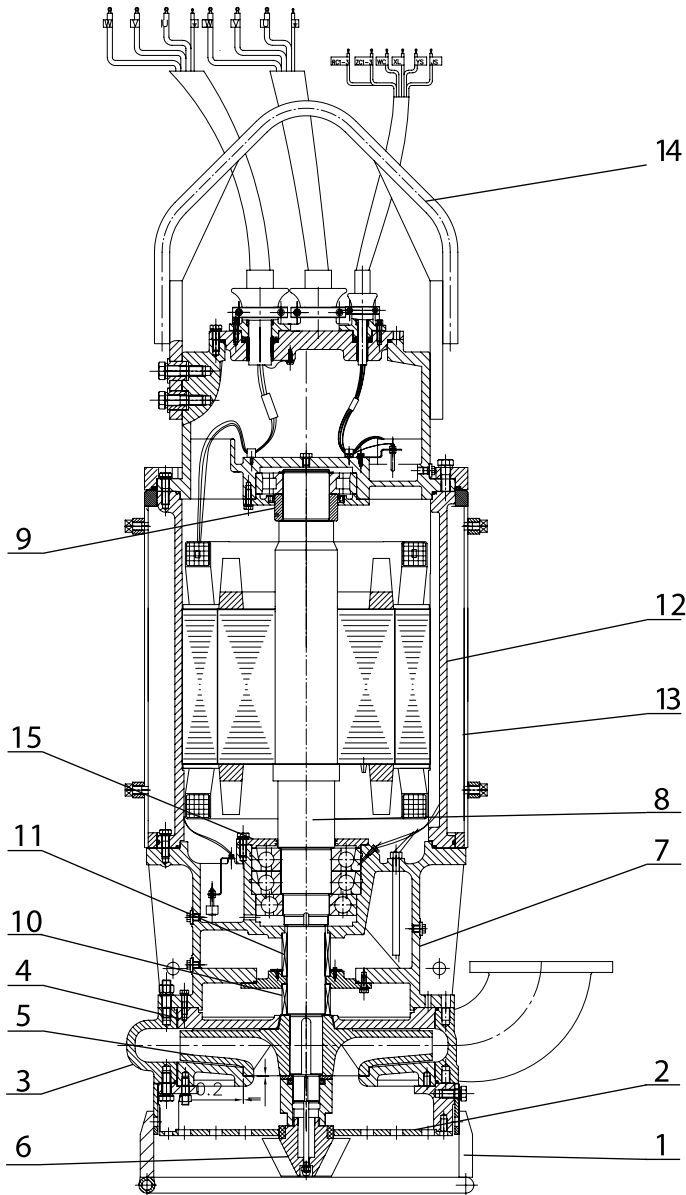
DRSS Submersible Slurry Pumps are available in 72 different models in sizes ranging from 80mm to 400 mm (3.15-16 inches) discharge and are capable of flow rates up to 2400 cubic metres per hour (100-10560UGPM).

DRSS

GENERAL ARRANGEMENT DRAWING



SECTIONAL DRAWING



No.	Description	Standard Material	Material Options
1	Support Frame	Mild Steel	
2	Strainer	420 Stainless Steel	
3	Pump Casing	27% Chrome White Iron	316 Stainless Steel / Duplex ¹
4	Back Plate	27% Chrome White Iron	316 Stainless Steel / Duplex ¹
5	Impeller	27% Chrome White Iron	316 Stainless Steel / Duplex ¹
6	Agitator	27% Chrome White Iron	316 Stainless Steel / Duplex ¹
7	Oil Chamber Housing	Cast Iron	
8	Shaft	420 Stainless Steel	
9	Shaft Sleeve	420 Stainless Steel	
10	Wet End Mechanical Seal	304 Stainless Steel	
11	Motor Mechanical Seal	304 Stainless Steel	
12	Motor Casing	Cast Iron	
13	Motor Cooling Jacket	Fabricated Mild Steel	
14	Lifting Brace	Mild Steel	
15	Bearing Covers	Cast Iron	
16	Oil Chamber Cover	Cast Iron	



DRSS + HP (+ Hydraulic Power)

