

RUSSELL PUMP



Model A510SS

End Suction, Close Coupled, All Stainless
Centrifugal Pump



Typical Applications Include:

**General Purpose, OEM, Boosters
Cooling Towers, Boiler Feed,
Process Fluids, HVAC, Irrigation,
Hot and Chilled Water Circulation**

Russell Pump and Engineering Inc.
102 W. Chicago Street
Albion, IA 50005
641-488-2319

Design Features

Casing

Constructed of cast 304 stainless steel. the discharge can be mounted in any 90° position. Drain and air ports are also positioned every 90°, 1/4 npt suction and discharge tappings are standard. Back pull out design allows the pump to be serviced without disturbing the piping. The volute was designed to maximize hydraulic efficiency.

Mechanical Seal

Type 21 buna-n seal is rated 225°F and pressures to 175PSI. Carbon seal face mates with the ceramic seat providing years of trouble free service. Alternate seals available upon request.

Impeller

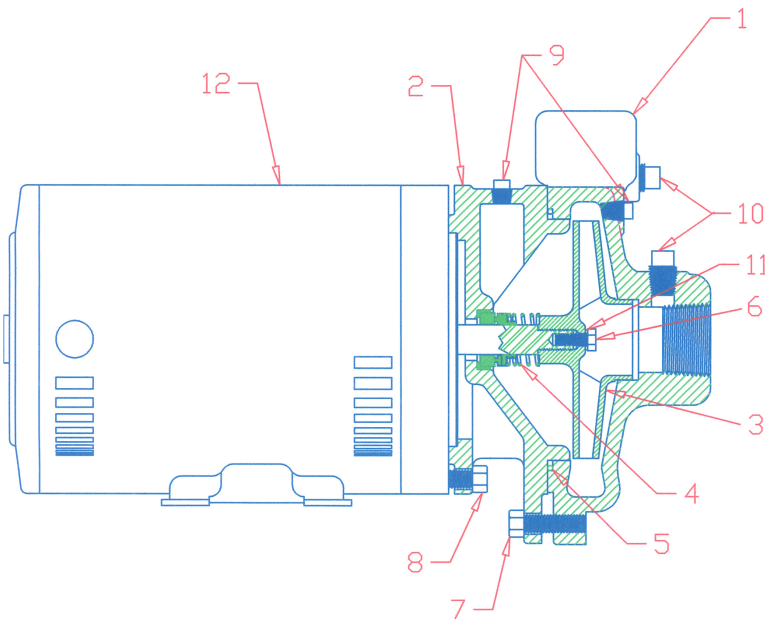
The hydraulic design of the impeller maximizes pressure and gpm while minimizing horsepower. The enclosed impeller is made of cast 304 stainless steel.

Adapter

The precise machining of the adapter allows for easy assembly of the pump. a 1/8 npt hole is provided if a seal flush line is added. Construction consists of cast 304 stainless steel.

Motor

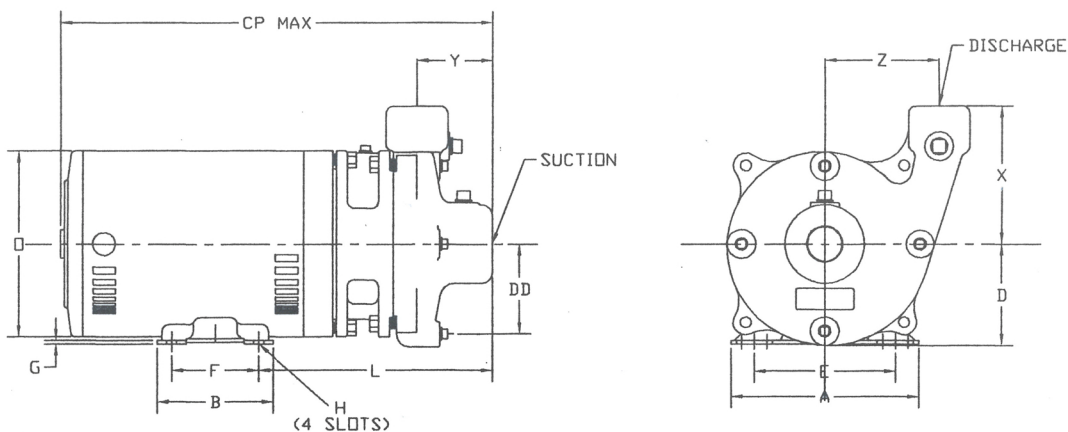
The NEMA 56J motor utilizes a 416 stainless steel shaft. The motor's heavy duty ball bearings withstand axial and radial thrust loads with no problem. Standard enclosure type is drip-proof but alternates are available.



1	CASING A510	304 STAINLESS STEEL	40062	1
2	ADAPTER A510	304 STAINLESS STEEL	30013	1
3	IMPELLER A510	304 STAINLESS STEEL	20005	1
4	MECHANICAL SEAL	BUNA-N	S-100	1
		EPT	S-101	
		VITON	S-102	
5	O-RING CASING	BUNA-N	S-109	1
		EPT	S-110	
		VITON	S-111	
6	CAP SCREW	1/4-28UNF X 5/8 SS	70040	1
7	CAP SCREW	3/8-16 X 1 1/4 SS	S-281	4
8	CAP SCREW	3/8-16 X 7/8 SS	S-280	4
9	PIPE PLUG	1/8NPT 18-8SS	S-273	5
10	PIPE PLUG	1/4NPT 18-8SS	S-274	2
11	LOCKWASHER	1/4 303 SS	0130197	1
12	MOTOR	NEMA 56J	-	1

Limitations

Maximum Working Pressure	175PSI
Maximum Gallons Per Minute	82
Maximum Head Produced	105 ft.
RPM	3450
Maximum Seal Temp	Buna-N 225°F
	EPT 300°F
	Viton 400°F
Maximum Horsepower	2



THE CHART BELOW IS BASED ON MOTORS UTILIZING THE FOLLOWING CHARACTERISTICS:
3Ø ODP 3450RPM 208-230/460VOLT 60 HERTZ

HP	SUCTION	DISCHARGE	A	B	CP MAX	D	DD	E	F	G	H	L	Ø	X	Y	Z
1/3	1 1/4" NPT	1" NPT	6 1/2	3 3/4	14	3 9/16	3 1/16	4 7/8	3	1/8	Ø11/32	8 1/16	6 1/2	4 13/16	2 5/8	3 15/16
1/2				3 3/4	14 1/8											
3/4				4	14 3/4											
1				4	15 3/16											
1 1/2				4	16 3/4											
2				6 1/2	16 3/4											
3	6 1/2	16 3/4														

THE CHART BELOW IS BASED ON MOTORS UTILIZING THE FOLLOWING CHARACTERISTICS:
1Ø ODP 3450RPM 115/230VOLT 60 HERTZ

HP	SUCTION	DISCHARGE	A	B	CP MAX	D	DD	E	F	G	H	L	Ø	X	Y	Z
1/3	1 1/4" NPT	1" NPT	6 1/2	3 3/4	13 7/8	3 9/16	3 1/16	4 7/8	3	1/8	Ø11/32	8 1/16	6 1/2	4 13/16	2 5/8	3 15/16
1/2				3 3/4	14 3/8											
3/4				4	15											
1				4	15 1/2											
1 1/2				4	16 3/4											
2				6 1/2	17 1/2											
3	6 1/2	18 1/4														

Specifications

The contractor shall furnish (and install as shown on the plans) a Russell Series A510SS close coupled, centrifugal, all stainless pump. Each 1" x 1 1/4" pump shall have a the capacity of ____ GPM when operated at a total of _____ feet.

The pump casing shall be radially split, end suction with 1/4 npt suction and discharge gauge tapings included. The casing should be able to accomodate any 90° mounting position. There shall be four drain/air ports drilled and tapped 90° apart. The casing design should be of a back pull out type.

The pump is to be furnished with a mechanical seal which incorporates stainless steel parts. Buna-N elastomers, ceramic seat, and carbon seal face shall be standard.

The adapter shall be drilled and tapped to allow for the possible addition of a steal flush line.

The pump shall be close coupled to a NEMA C face ____ HP ____ Phase ____ Hertz ____ Voltage ____ RPM drip-proof motor. The motor shall be sized to prevent overloading at the duty point. The motor shall have a stainless steel shaft and sealed bearings.

Each unit shall be checked by the contractor to regulate the correct pressure, voltage, and amp draw.

