

RUSSELL PUMP

Model PA615

**Self Priming, Close Coupled, Bronze Fitted,
Centrifugal Pump**



Typical Applications

**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 as ASTM A48 class 30 cast iron. Back pull out design allows the pump to be served without disturbing the piping. 1/4 npt suction guage and 1/8 npt drain tappings are standard. Self venting design prevents air binding within the pump. After initial priming the pump never needs to be primed again.

MECHANICAL SEAL

Type 21 buna-n seal is rated to 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

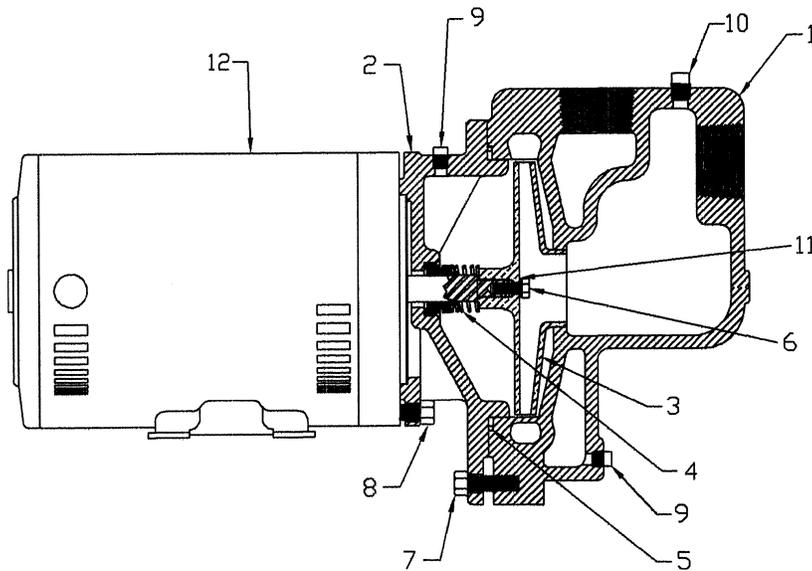
The hydraulic design of the impeller maximizes pressure and gpm while minimizing horsepower. The enclosed impeller is made of cast bronze.

ADAPTER

The precise machining of the adapter allows for easy assembly of the pump. Construction consists of ASTM A48 class 30 cast iron.

MOTOR

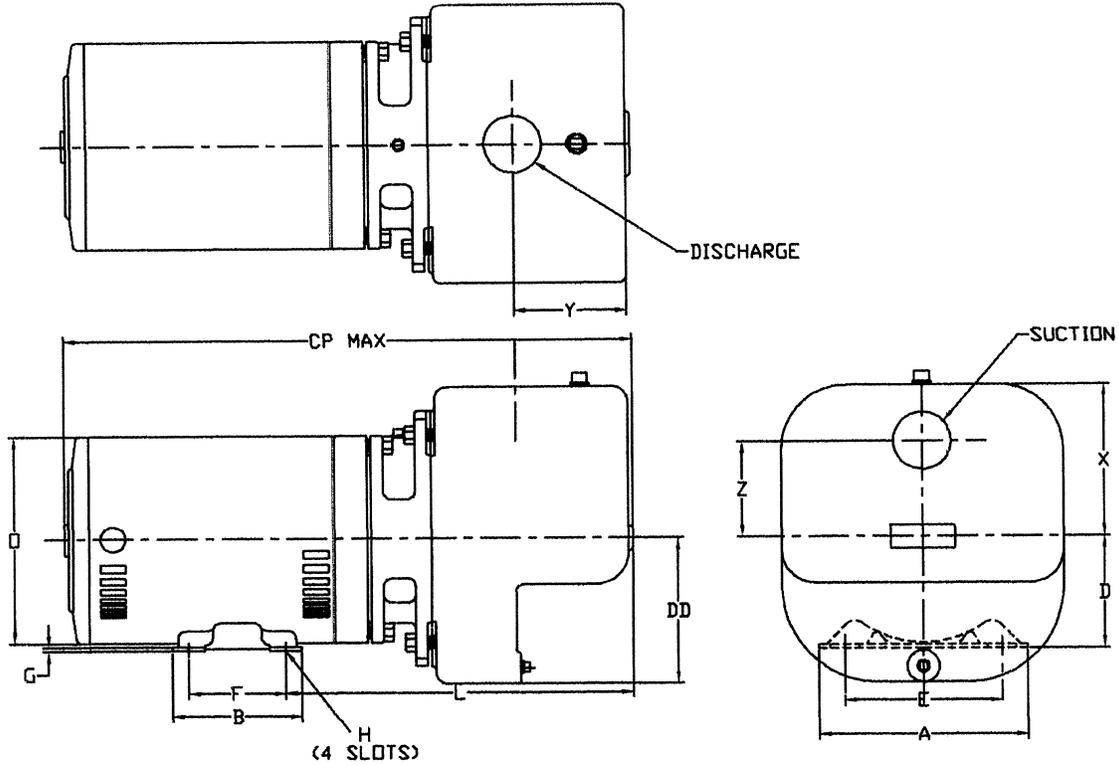
The NEMA 56J motor utilizes a 416 stainless steel shaft. The motors heavy duty ball bearings withstand axial and radial thrust loads with no problem. Standard enclosure type is dripproof but alternates are available.



1	CASING PA615	CLASS 30 CAST IRON	40022	1
2	ADAPTER A612	CLASS 30 CAST IRON	40002	1
3	IMPELLER A612	BRONZE	20001	1
4	MECHANICAL SEAL	BUNA-N	S-100	1
		EPT	S-101	
		VITON	S-102	
5	O-RING CASING	BUNA-N	S-132	1
		EPT	S-133	
		VITON	S-134	
6	CAP SCREW	1/4-28UNC X 5/8 SS	70040	1
7	CAP SCREW	3/8-16 X 1 1/4 STEEL	19932	4
8	CAP SCREW	3/8-16 X 1 STEEL	19931	4
9	PIPE PLUG	1/8 NPT BRONZE	69845	2
10	PIPE PLUG	1/4 NPT BRONZE	68585	1
11	LOCKWASHER	1/4 303 SS	0130197	1
12	MOTOR	NEMA 56J	-	1

LIMITATIONS

MAXIMUM WORKING PRESSURE	-	175PSI
MAXIMUM GALLONS PER MINUTE	-	120
MAXIMUM HEAD PRODUCED	-	138 FT.
RPM	-	3450
MAXIMUM SEAL TEMP BUNA-N	-	225°F
EPT	-	300°F
VITON	-	400°F
MAXIMUM HORSEPOWER	-	3



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

HP	SUCTION	DISCHARGE	A	B	CP MAX	D	DD	E	F	G	H	L	O	X	Y	Z
1/3	1 1/2" NPT	1 1/2" NPT	6 1/2	3 3/4	16 1/4	3 1/2	4 9/16	4 7/8	3	1/8	Ø7/16	11 1/8	6 1/2	4 3/4	3 1/2	3
1/2				3 3/4	16 3/4											
3/4				4	16 3/4											
1				4	16 3/4											
1 1/2				4	16 3/4											
2				6 1/2	16 3/4											
3	6 1/2	17 3/4														

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

HP	SUCTION	DISCHARGE	A	B	CP MAX	D	DD	E	F	G	H	L	O	X	Y	Z
1/3	1 1/2" NPT	1 1/2" NPT	6 1/2	3 3/4	16 3/4	3 1/2	4 9/16	4 7/8	3	1/8	Ø7/16	11 1/8	6 1/2	4 3/4	3 1/2	3
1/2				3 3/4	17											
3/4				4	17 1/4											
1				4	18 1/4											
1 1/2				4	18 1/4											
2				6 1/2	17 3/4											
3	6 1/2	18 1/4														

SPECIFICATIONS

The contractor shall furnish (and install as shown on the plans) a Russell Series PA615 self priming, close coupled, centrifugal, bronze fitted pump. Each 1 1/2" x 1 1/2" pump shall have the capacity of ____ GPM when operated at a total head of ____ feet.

The pump casing shall be radially split, self priming with 1/4 npt suction gauge tappings included. There shall be a 1/8 npt drain hole in the casing. The casing shall have a self venting design to prevent air or gas binding. 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 pump shall be close coupled to a NEMA C face ____ HP ____ PHASE ____ HERTZ ____ VOLTAGE ____ RPM dripproof motor. The motor shall be sized to prevent overloading at the duty point. The motor shall have a stainless steel shaft and sealed bearings.

All external cast parts shall have at least one coat of a high grade baked on powder coat paint. Each unit shall be checked by the contractor to regulate the correct pressure, voltage, and amp draw.

