

RUSSELL PUMP

Model A720

End Suction, 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. 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 to 225°F and pressure to 175PSI. Carbon seal face mates with the cermaic seat providing years of trouble free service. Alternate seals available upon request.

IMPELLER

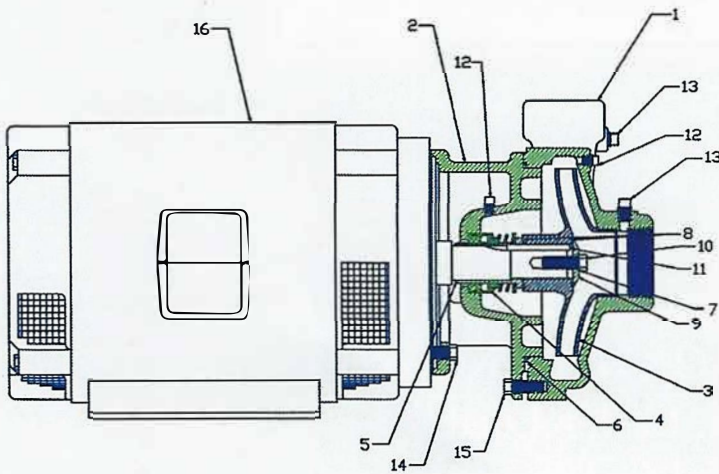
The hydraulic design of the impeller maximize pressure and gpm while minimizing horsepower. The enclosed impeller is made of cast bronze.

ADAPTER

The precise machining of the adapter allows for easy assembly of the pump. A 1/8 npt hole is provided if a seal flush line is added. Construction consists of ASTM A48 class 30 cast iron.

MOTOR

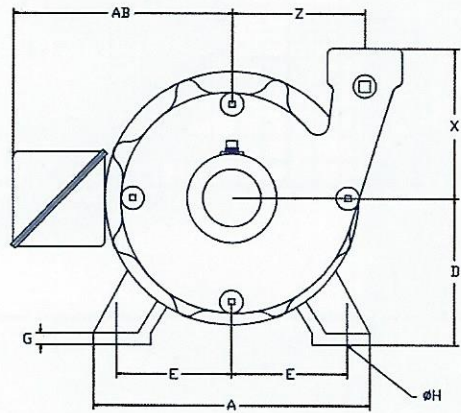
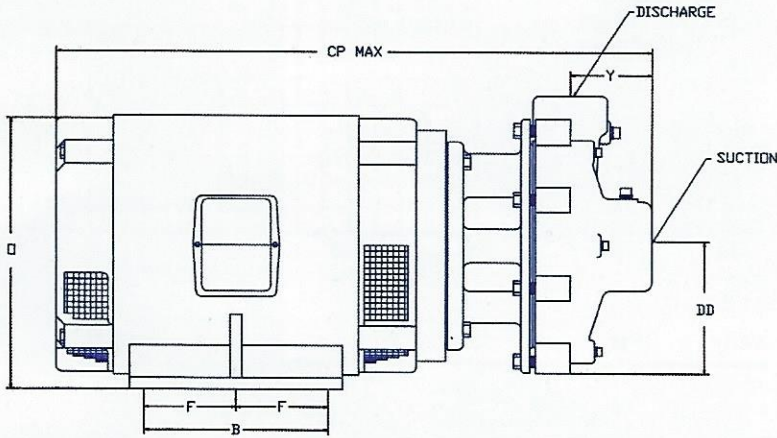
The NEMA JM frame motor utilizes a high carbon steel shaft. The motor's heavy duty ball bearings withstand axial and radial thrust loads with no problem. Standard Enclosure type is drip proof but alternates are available.



1	CASING A720	CLASS 30 CAST IRON	40059	1
	ADAPTER A7 143-184 JM	BRASS	40010	
	ADAPTER A7 213-215 JM	CLASS 30 CAST IRON	40011	
2	ADAPTER A7 254-326 JM		40055	1
	ADAPTER A7 143-184 JM		40012	
	ADAPTER A7 213-215 JM	BRASS	40013	
	ADAPTER A7 254-326 JM			
3	IMPELLER A720 143-215 JM	SILICON BRONZE	30011	1
	IMPELLER A720 254-326 JM	SILICON BRONZE	30012	
	MECHANICAL SEAL 143-215JM	BUNA-N	N-103	
		VITON	N-104	
4	MECHANICAL SEAL 254-326JM	BUNA-N	N-105	1
		VITON	N-106	
		FPT	N-107	
		VITON	N-108	
5	SLEEVE 143-215 JM	BRASS	10000	1
	SLEEVE 254-326 JM		10001	
		BUNA-N	N-148	
		VITON	N-149	
		FPT	N-150	
		BUNA-N	N-141	
7	O-RING WASHER 143-215JM	VITON	N-142	1
		BUNA-N	N-143	
		FPT	N-144	
		VITON	N-145	
		BUNA-N	N-146	
		FPT	N-147	
8	O-RING IMPELLER 143-215JM	BUNA-N	N-135	2
		VITON	N-136	
		FPT	N-137	
		BUNA-N	N-138	
		VITON	N-139	
		FPT	N-140	
9	IMPELLER WASHER 143-215 JM	BRASS	10002	1
	IMPELLER WASHER 254-326 JM		10003	
	IMPELLER CAP SCREW 143-215 JM	3/8-16 X 1 BRASS	75020	
10	IMPELLER CAP SCREW 254-326 JM	1/2-13 X 1 BRASS	75037	1
	KEY 143-215 JM	STAINLESS STEEL	10004	
	KEY 254-326 JM		10005	
12	PIPE PLUG	1/8 NPT BRASS	65845	5
13	PIPE PLUG	1/4 NPT BRASS	65845	2
14	CAP SCREW 143-184 JM	3/8-16 X 1 STEEL	13391	4
	CAP SCREW 213-215 JM		13391	
15	CAP SCREW	1/2-13 X 1 1/4 STEEL	13358	8
16	MOTOR	-	-	1

LIMITATIONS

MAXIMUM WORKING PRESSURE	-	175PSI
MAXIMUM GALLONS PER MINUTE	-	370
MAXIMUM HEAD PRODUCED	-	270FT.
RPM	-	3500 & 1750
MAXIMUM SEAL TEMP BUNA-N	-	225°
EPT	-	300°
VITON	-	400°
MAXIMUM HORSEPOWER	-	20



FRAME SIZE	SUCTION	DISCHARGE	A	AB	B	CP	D	DD	E	F	G	H	D	X	Y	Z
143JM	2 1/2 NPT	2 NPT	7	5 1/4	5 15/16	20 7/32	3 1/2	5 1/2	2 3/4	2	1/8	11/32	6 7/8	6 1/2	3 9/16	5 3/4
145JM						20 1/4				2 1/2						
182JM			9	5 7/8	6 1/2	22 7/8	4 1/2		3 3/4	2 1/4	3/16	13/32	8 7/16			
184JM						24 13/32			2 3/4							
213JM			10 1/2	7 3/8	8	22 7/8	5 1/4		4 1/4	2 3/4	1/4	13/32	10 1/16			
215JM						27 1/16				3 1/2						
254JM			11 1/4	8 15/16	9 1/2	26 7/8	6 1/4		5	4 1/8	1/2	17/32	12			
256JM						11 3/4				30						

FRAME SIZE	HORSEPOWER -- DDP				HORSEPOWER -- TEFC	
	3500RPM 3Ø	3500RPM 1Ø	1750RPM 3Ø	1750RPM 1Ø	3500RPM 3Ø	1750RPM 3Ø
143JM	1, 1 1/2	1 1/2	1	1	1 1/2	1
145JM	2,3	2	1 1/2, 2	1 1/2	2,3	1 1/2, 2
182JM	5	3	3	2	3	3
184JM	7 1/2	5	5	3	5	5
213JM	10	7 1/2	7 1/2	5	7 1/2	7 1/2
215JM	15	10	10	7 1/2, 10	10	10
254JM	20		15		15	15
256JM	25		20		20	20

