

# Centrifugal Pump Submittal Data

FW0547 1220  
Supersedes 0319

Job or Customer	
Engineer	
Contractor	
Submitted by	Date
Approved by	Date
Specification Reference	
Quote Date	Quote Number



**SPJ SERIES**

Quantity	Model Number	System Discharge Pressure (PSI)	Flow (GPM)	System Inlet Pressure (PSI)	Volts	Phase	Comments

## SPECIFICATIONS

HP	Type	Volts	Hz	RPM	Motor Voltage (Factory) Connected	Service Factor Motor Amps				Max Liquid Temp	Max Suction Lift
						Single Phase		Three Phase			
						115V	230V	230V	460V		
3/4	Single Ph	115/230	60	3450	115V	14.0	7.0	-	-	180°F	25 Ft.
1					230V	18.0	9.0				
1-1/2					230V	21.0	10.5				
2					230V	25.0	12.5				
3					230	-	13.5				
3/4	Three Ph	208-230/460	60/50	3450/2850	230V	-	-	3.5	1.75	180°F	25 Ft.
1								4.5	2.25		
1-1/2								5.7	2.85		
2								7.4	3.70		
3								9.8	4.90		

Suction lift varies, depending upon elevation (altitude) and water temperatures.



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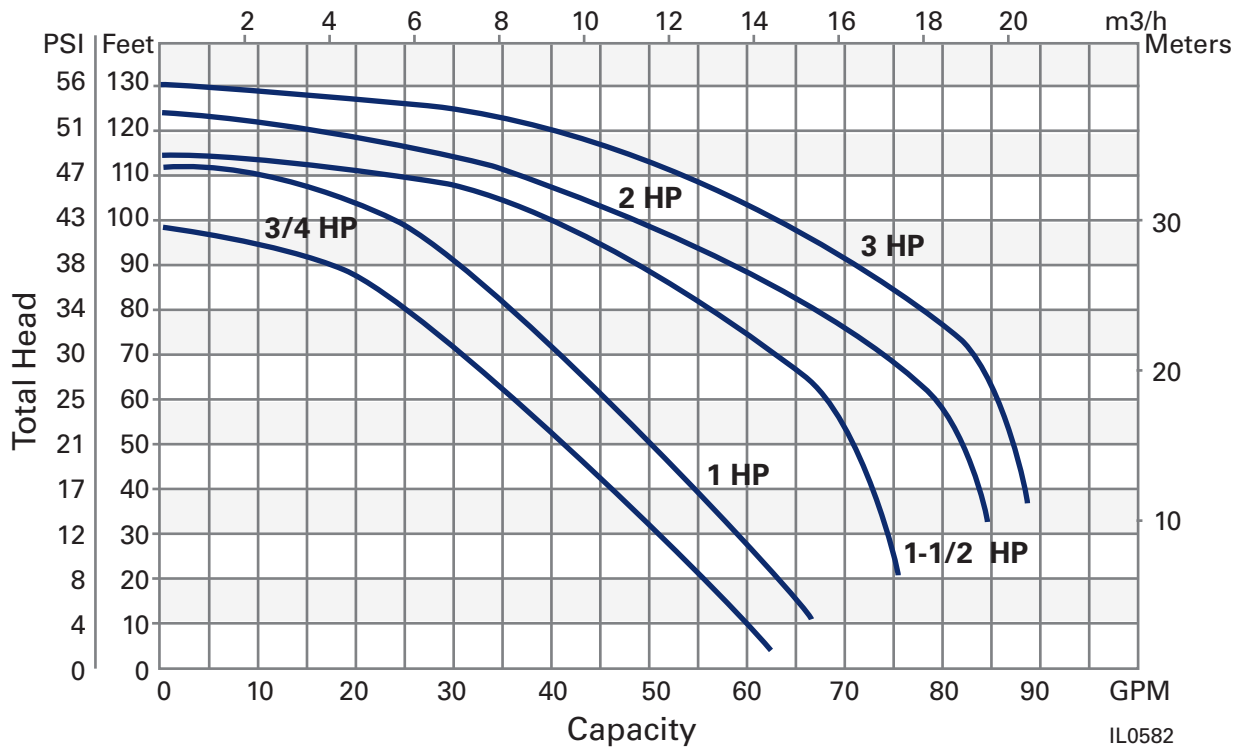
## PERFORMANCE CHART

Model Number		HP	Suction Lift Ft.	Discharge Pressure PSI								Shut-Off Pressure PSI	Suction Pipe Tap	Disch. Pipe Tap
1 Phase	3 Phase			10	15	20	25	30	35	40	45			
				Capacity - U.S. Gallons per Minute										
SPJ07P1	SPJ07P3	3/4	5	56	48	42	37	29	21			41	2"	1-1/2"
			15	47	42	37	29	22	12			37		
			25	43	37	31	22	10				33		
SPJ10P1	SPJ10P3	1	5	58	53	48	43	38	32	23	11	48	2"	1-1/2"
			15	53	48	45	37	31	24	12		43		
			25	48	44	38	33	25	14			39		
SPJ15P1	SPJ15B3	1-1/2	5	78	77	74	70	62	53	43	30	47	2"	1-1/2"
SPJ15B1			15	70	68	66	62	53	43	30		41		
			25	47	46	45	44	42	34			36		
SPJ20B1	SPJ20B3	2	5	86	84	81	77	71	62	52	40	50	2"	1-1/2"
			15	76	74	72	69	64	55	43	25	45		
			25	52	51	50	47	45	30			40		
SPJ30B1	SPJ30B3**	3	5	88	86	85	84	80	73	64	53	54	2"	1-1/2"
			15	77	76	75	74	72	65	55	43	50		
			25	54	53	52	51	50	49	45	10	45		

Motor voltage: Single Phase 3/4 - 2 HP - 115/230V; 3 HP - 230V, 60Hz  
 Three Phase 3/4 - 2 HP - 208 - 230/460V, 50/60Hz; 3 HP - 208 - 230/460V; 60Hz  
 Maximum Case Pressure: 100 PSI

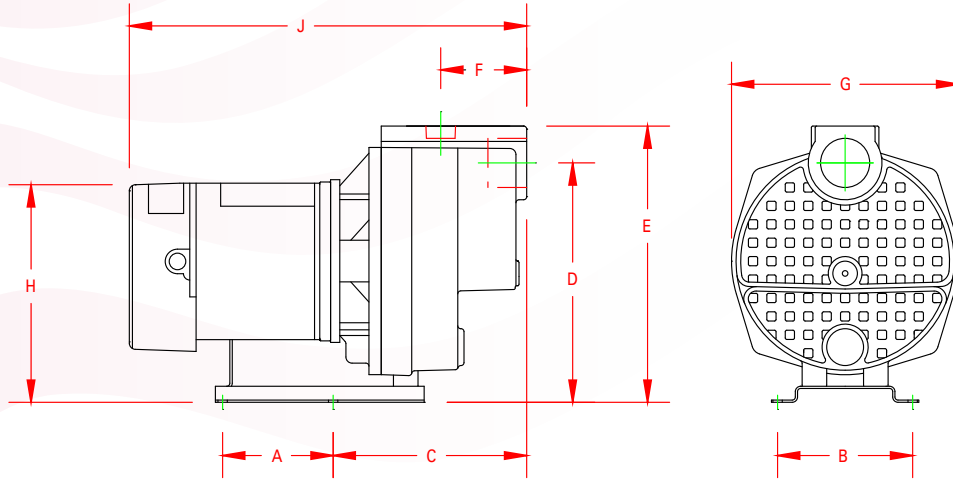
\*\*Less than 50% US content

## PERFORMANCE CURVES



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## PUMP DIMENSIONS 60 HZ



IL0397

HP	Dimensions (In Inches)									Lbs Ship Wt
	A	B	C	D	E	F	G	H	J	
3/4	4-1/2	5-1/2	7-7/8	9-3/4	11-1/8	3-1/2	8-3/4	8-3/4	16-1/12	62
1	4-1/2	5-1/2	7-7/8	9-3/4	11-1/8	3-1/2	8-3/4	8-3/4	17	68-3/4
1-1/2	4-1/2	5-1/2	7-7/8	9-3/4	11-1/8	3-1/2	8-3/4	8-3/4	17-5/8	74-1/2
2	4-1/2	5-1/2	7-7/8	9-3/4	11-1/8	3-1/2	8-3/4	8-3/4	18-1/8	78
3	4-1/2	5-1/2	7-7/8	9-3/4	11-1/8	3-1/2	8-3/4	8-3/4	18-1/8	78-3/4

## PUMP DATA

Flow Range . . . . . 1.5 to 88 GPM  
 Pressure Boost Range . . . . . 33 - 55 PSI  
 Liquid Temperature -- Brass Impellers . . . . . 34° F to 200° F  
 Liquid Temperature -- Plastic Impellers . . . . . 34° F to 160° F  
 Maximum Case Pressure . . . . . 100 PSI



Agency Approvals . . . . .  
 Duty Cycle . . . . . Continuous  
 Pumping Medium . . . . . Clear Water  
 Service/Repair Information . . . . . Pump and Motor Field Serviceable

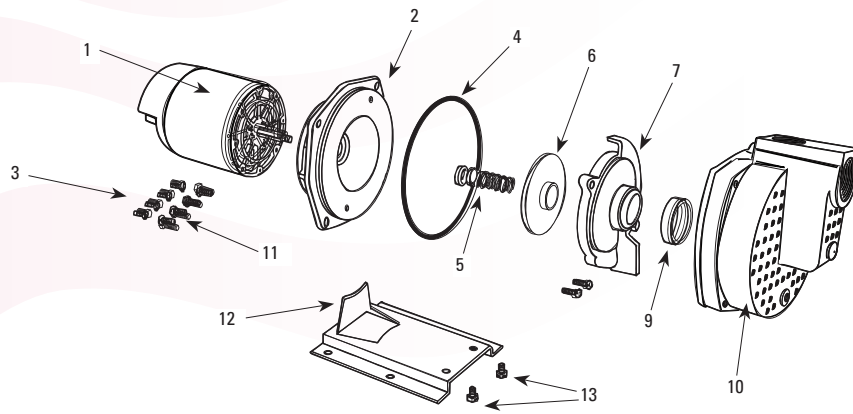
## MOTOR DATA

HP	Locked-Rotor Torque (Starting Torque) In-Lbs.	Single Phase						3 Phase				
		S.F.	Max. Amb.	Max. Amb. @ SF before Overload Tripping	Breakdown Torque In-Lbs.	Peak Output Power		S.F.	Max. Amb.	Breakdown Torque In-Lbs.	Peak Output Power	
						HP	kW				HP	kW
3/4	29	1.5	65° C/149° F	70° C/158° F	42	2.1	1.6	1.5	65° C	49	2.3	1.7
1	48	1.4	65° C/149° F	66° C/151° F	52	2.5	1.9	1.4	65° C	74	3.5	2.6
1.5	59	1.3	65° C/149° F	66° C/151° F	76	3.8	2.8	1.3	65° C	90	4.3	3.2
2	63	1.25	65° C/149° F	66° C/151° F	80	4.0	3.0	1.25	65° C	112	5.3	4.0
3	65	1.0	65° C/149° F	66° C/151° F	95	4.5	3.4	1.0	65° C	125	5.9	4.4



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## CONSTRUCTION MATERIALS - PUMP AND MOTOR



ILO174

ITEM NO.	DESCRIPTION	MATERIALS
1	Motor, NEMA J - 1 PH -- Shell	Zinc-Clad Steel
1	Motor, NEMA J - 3 PH -- Shell	Zinc-Clad Steel
	Motor Access Cover	Valox
2	Mounting Ring	Cast Iron
3	Hex Hd. Cap Screws 3/8 x 3/4"	Plated Steel
4	Ring, Square Cut	Buna Rubber
5	Seal, Rotary w/Spring	Carbon/silicon carbide
6	Impeller, Plastic "P" Models	Noryl
6	Impeller, Brass "B" Models	Brass
7	Diffuser w/Insert	Aqualoy 45
8	Hex Hd. Cap Screws 1/4 x 1"	Plated Steel
9	Rubber Diffuser	Buna Rubber
10	Pump Body	Cast Iron
11	Hex Hd. Cap Screws 7/16 x 1"	Plated Steel
12	Base	Formed Steel
13	Hex Hd. Cap Screws 3/8 x 1/2"	Plated Steel

