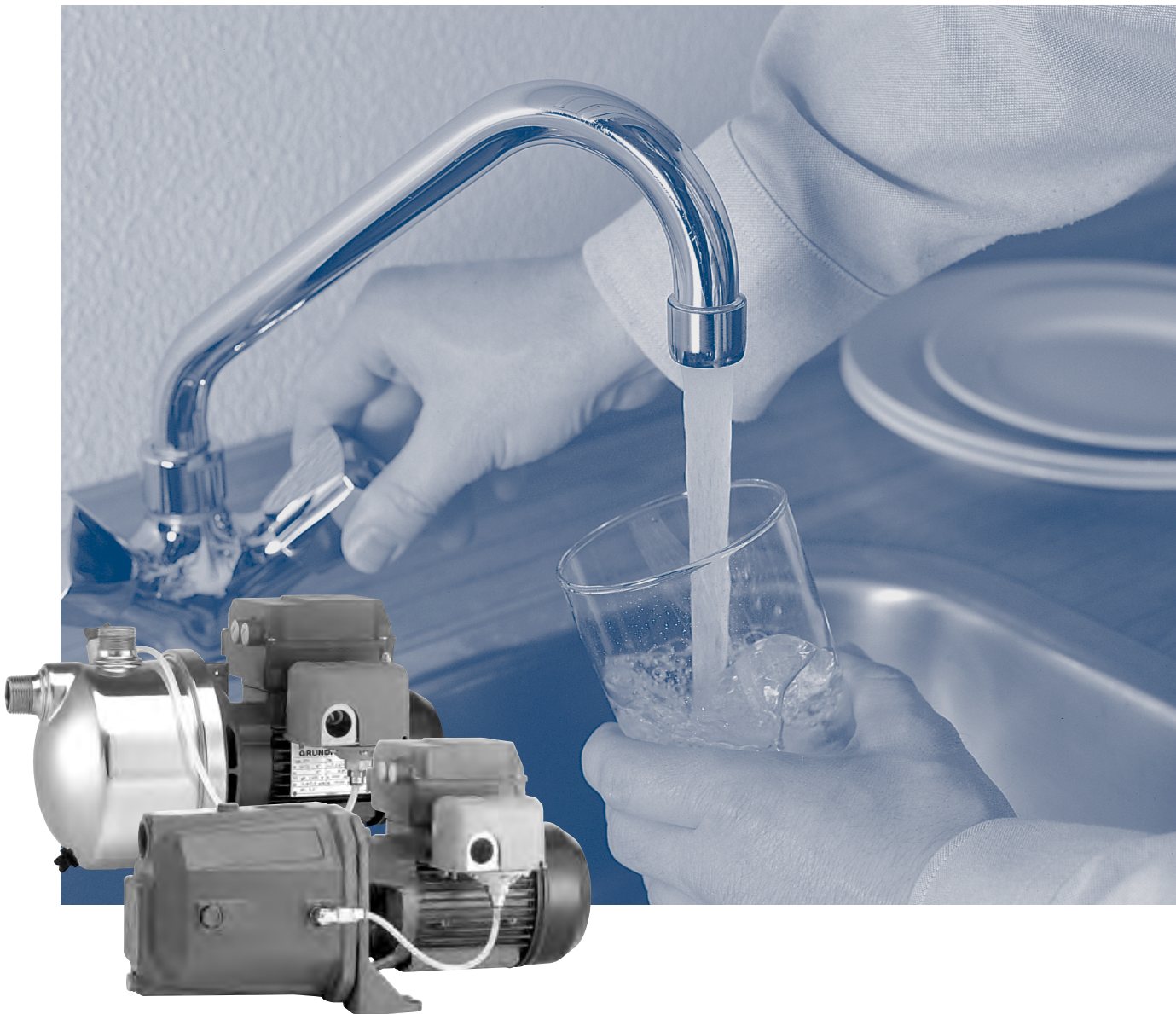




# JPF, JPS, JDF

Shallow Well, Deep Well and  
Convertible Jet Pumps  
60 Hz



# Contents

---

	Page
<b>Mission</b>	3
<b>General data</b>	
Performance range	4
Product range	5
Applications	6
Pump	6
Motor	6
Pumped Liquid	6
Agency Approvals	6
Mounting Position	6
Electrical Data	7
Materials of Construction	8
<b>Technical data</b>	
JPF 2A, 3A, 4A, 41A	11
Dimensions and Weights	11
Performance Chart	11
Performance Curves	12
JPF 5A, 7A Convertibles	13
Dimensions and Weights	13
Conversion Instructions	13
Performance Chart	14
Performance Curves	14
Deep Well Performance Chart	15
JPS 2A, 4A	16
Dimensions and Weights	16
Performance Chart	16
Performance Curves	17
JDF 2A, 4A	18
Dimensions and Weights	18
Ejector Dimensions	18
Performance Chart	19
JPF Pump Package	20
Dimensions and Weights	20
Performance Chart	20
JPS Pump Package	21
Dimensions and Weights	21
Performance Chart	21

# Mission

- to successfully develop, produce, and sell high quality pumps and pumping systems worldwide, contributing to a better quality of life and healthier environment



Bjerringbro, Denmark



Fresno, California



Olathe, Kansas



Monterrey, Mexico



Allentown, Pennsylvania

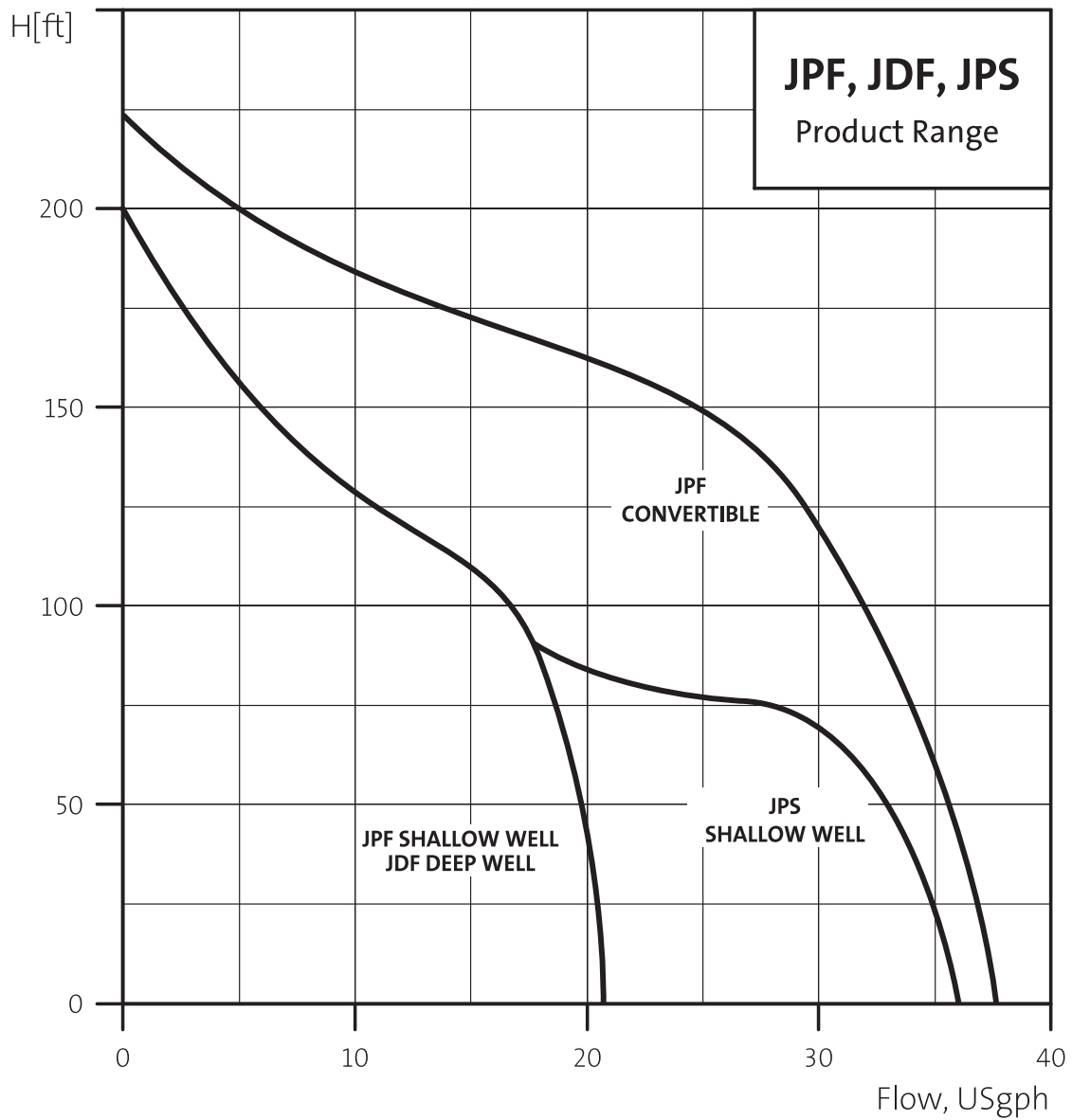


Oakville, Ontario, Canada

- One of the largest pump companies in the world with over 11,000 employees worldwide
- World headquarters in Denmark
- North American headquarters in Kansas City - Manufacturing in Fresno, California
- 60 companies in 40 countries
- More than 10 million pumps produced annually worldwide
- North American companies operating in USA, Canada and Mexico
- Continuous reinvestment in growth and development enables the company to **BE** responsible, **THINK** ahead, and **INNOVATE**

# General data

## Performance range



# General data

## Product range

Model	JPF 2-A	JPF 3-A	JPF 4-A	JPF 41-A	JPF 5-A	JPF 7-A	JPS 2-A	JPS 4-A	JDF 2-A	JDF 4
Flow range (gpm)	0-13	0-12.5	0-16	0-21	0-22	0-35	0-17	0-29	0-10	0-14
Max. pump head H(ft)	135	170	172	185	200	200	140	155	145	167
Max. working pressure (psi)	87	87	87	87	110	110	110	110	87	87
Motor power (hp), Nominal	1/3	1/2	3/4	1	1.5	2	1/2	1	1/2	3/4
Maximum Fluid Temperature range	14°F to 104°F (-10 to 40°C)									
Maximum lift, Ft	26	26	26	26			26	26		
Maximum Ambient Temp	34°F to 104°F (1 to 40°C)									
Factory Pressure -Switch setting (PSI)	20-40	30-50	30-50	50-70	50-70	50-70	30-50	30-50	30-50	30-50
Storage Temp	14°F to 104°F (-10 to 40°C)									
Relative Humidity	95%									
Maximum Starts per hour	20									

# General data

## Applications

Shallow well, Deep well and Convertible pump applications. Grundfos jet pumps are self-priming centrifugal pumps suitable for domestic water supply systems, light agricultural and industrial water transfer applications

## Pumps

### JPF2A, JPF3A, JPF4A, JPF41A Pumps:

Rugged cast iron construction, single-stage shallow well centrifugal pumps. End suction, top discharge arrangement and Technopolymer impeller. Pump has built-in ejector complete with clean out port to clear blockages from nozzle. Convenient priming plug for ease of priming and air elimination. Ceramic-Carbon bellows mechanical seal ensures trouble-free operation.

### JPF5A & JPF7A Pumps:

Rugged cast iron construction, multistage convertible centrifugal pumps. End suction, top discharge arrangement with detachable ejector assembly for deep well applications and Technopolymer impellers. Pump complete with clean out port to clear blockages from nozzle. Convenient priming plug for ease of priming and air elimination. Ceramic-Carbon bellows mechanical seal ensures trouble-free operation.

### JDF2A & JDF4A Pumps:

Rugged cast iron construction, single-stage deep well centrifugal pumps. End suction, top discharge arrangement and Technopolymer impeller. Pump has separate deep well port for connection to Deep Well ejector kit. Convenient priming plug for ease of priming and air elimination. Ceramic-Carbon bellows mechanical seal ensures trouble-free operation.

### JPS2A & JPS4A Pumps:

Corrosion resistant stainless steel construction, single stage shallow well centrifugal pumps. End suction, top discharge arrangement and Technopolymer impeller. Ceramic-Carbon bellows mechanical seal ensures trouble-free operation.

## Motors

All jet pump motors are totally enclosed and fan-cooled design for quiet operation and superior protection in harsh environments. Stainless steel motor shaft offers excellent corrosion resistance. Double, oversized greased ball bearings are maintenance-free sealed for life. All motors have built-in thermal overload protection and are capacitor-run, with no switches to fail. Drive end motor bearing protected by durable lip seal. Motor insulation class F. NEMA 3R enclosure rating on motor terminal box.

## Pumped Liquid

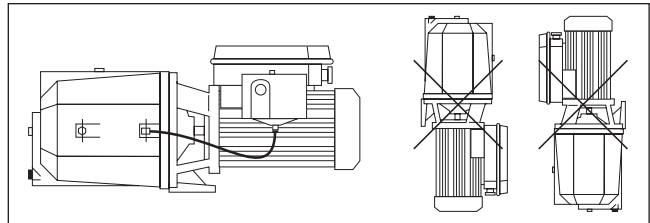
Only use on clean, non-viscous, non-aggressive, non-explosive liquids. Pump not to be used on pool water applications or hydrocarbon transfer (i.e. diesel, gasoline, etc).

## Agency Approvals:

CSA -Std C22.2 No 108, No 77-95.

## Mounting Position:

Shaft in horizontal position only for all pumps.



# General data

## Electrical Data:

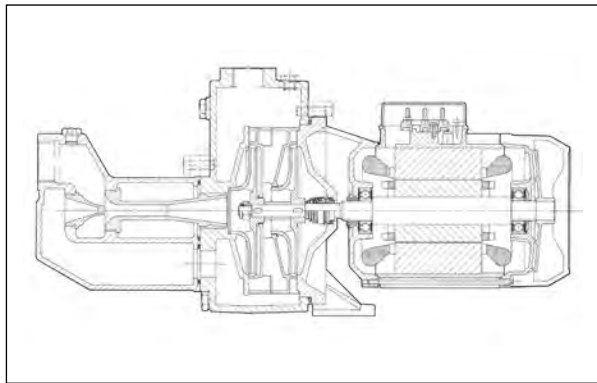
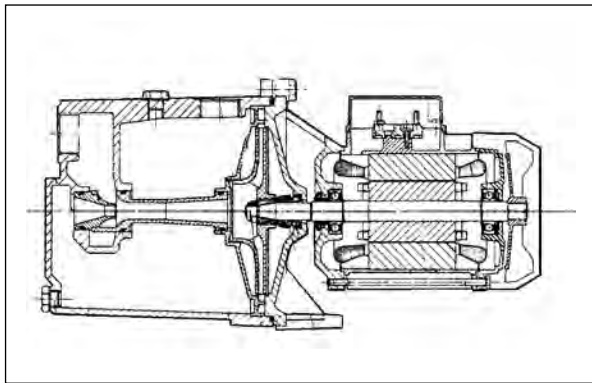
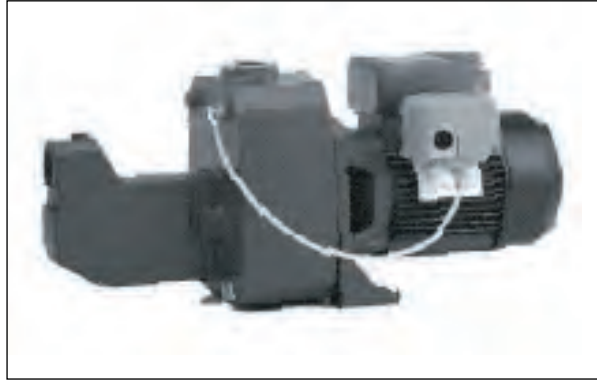
Model	Electrical Data					
	Voltage 60 Hz	kW Maximum	hp Nominal	S.F.	I Amps	Capacitor μF
JPF2A	115	0.44	1/3	1.8	6	40
JPF2A	230	0.44	1/3	1.8	3	10
JPF3A	115	0.59	1/2	1.6	7.5	20
JPF3A	230	0.59	1/2	1.6	3.8	12.5
JPF4A	115	0.75	3/4	1.3	10	64
JPF4A	230	0.75	3/4	1.3	5	16
JPF41A	115	1.31	1	1.4	12	80
JPF41A	230	1.31	1	1.4	A	20
JPF5A	230	1.1	1.5	1.5	8	31.5
JPF7A	230	1.85	2	1.3	11	40
JPS2A	115	0.88	1/2	1.6	7.6	50
JPS2A	230	0.82	1/2	1.6	3.7	12.5
JPS4A	115	1.6	1	2.0	13.6	80
JPS4A	230	1.53	1	2.0	7	20
JDF2A	115	0.6	1/2	1.6	7	50
JDF 2A	230	0.6	1/2	1.6	3.4	12.5
JDF4A	115	0.75	3/4	1.3	8	64
FDF 4A	230	0.75	3/4	1.3	4	16

# General data

## JPF 2A, 3A, 4A, 41A Shallow Well



## JPF 5A, 7A Convertible



### Materials: JPF 2A, 3A, 4A, 41A Shallow Well

Descriptions	Material
Motor Stool	Cast Iron
Shaft Seal	Carbon/Ceramic/NBR
O-Rings & Gaskets	NBR
Base Plate	Cast Iron
Pump Housing	Cast Iron
Impeller	Technopolymer
Tubing	Polyethylene
Seal plate	Noryl©
Ejector/Guide Vane	Noryl©

Note: Noryl© is a registered trademark of General Electric Company

### Materials: JPF 5A, 7A Convertible

Descriptions	Material
Motor Stool	Cast Iron
Shaft Seal	Carbon/Ceramic/NBR
Motor Shaft	Stainless Steel
O-Rings & Gaskets	NBR
Base Plate	Cast Iron
Pump housing	Cast Iron
Impellers	Technopolymer
Tubing	Polyethylene
Seal plate	Noryl©
Ejector/Guide Vane	Noryl©

Note: Noryl© is a registered trademark of General Electric Company

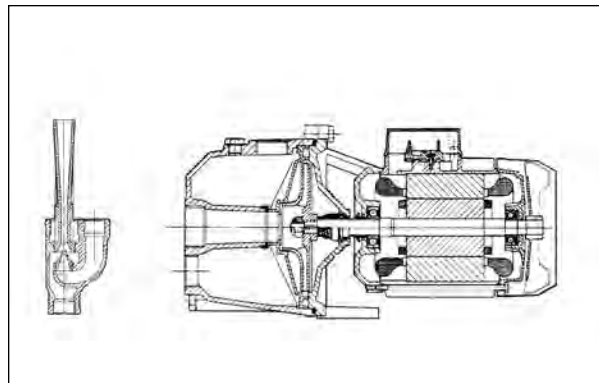
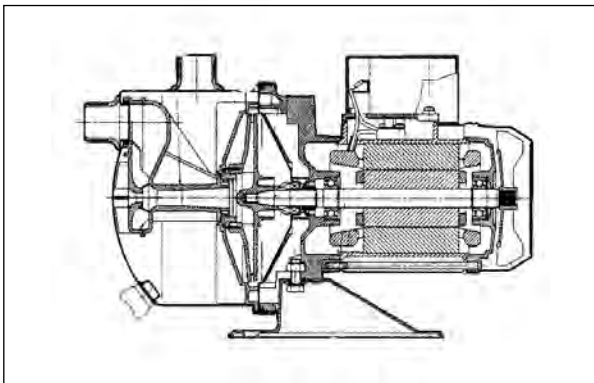
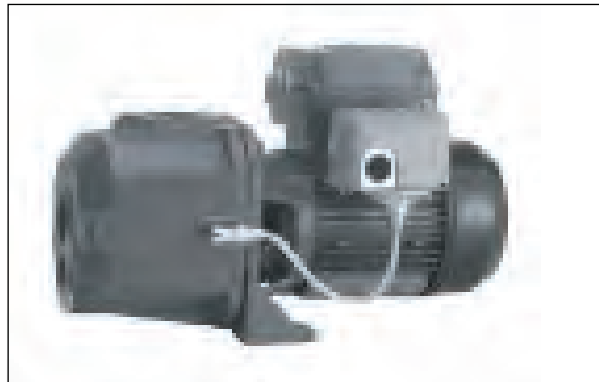


# General data

**JPS 2A, 4A**



**JDF 2A, 4A**



**Materials: JPS 2A, 4A**

Descriptions	Material
Motor Stool	Cast Iron
Shaft Seal	Carbon/Ceramic/NBR
O-Rings & Gaskets	NBR
Base Plate	Steel
Pump housing	Stainless Steel AISI 304
Impeller	Technopolymer A
Tubing	Polyethylene
Seal plate	Stainless Steel AISI 304
Ejector/Guide Vane	Technopolymer A

**Materials: JDF 2A, 4A**

Descriptions	Material
Motor Stool	Cast Iron
Shaft Seal	Ceramic/Ceramic/NBR
O-Rings & Gaskets	NBR
Base Plate	Cast Iron
Pump housing	Cast Iron
Impeller	Technopolymer
Tubing	Polyethylene
Seal plate	Noryl©

Note: Noryl© is a registered trademark of General Electric Company

# General data

## JPF Pump package\* Cast Iron



\*Only available in Canada

## JPS Pump package\* Stainless Steel



\*Only available in Canada

### Features and Benefits

Assembled jet-pump and tank package. Available with rugged cast iron pump or corrosion-resistant stainless steel pump mounted on a stainless steel, 6 gallon (24 Litre) diaphragm tank. Package comes complete with pressure switch, gauge, hose and fittings, ready to go.

### Materials: JPF Pump Package

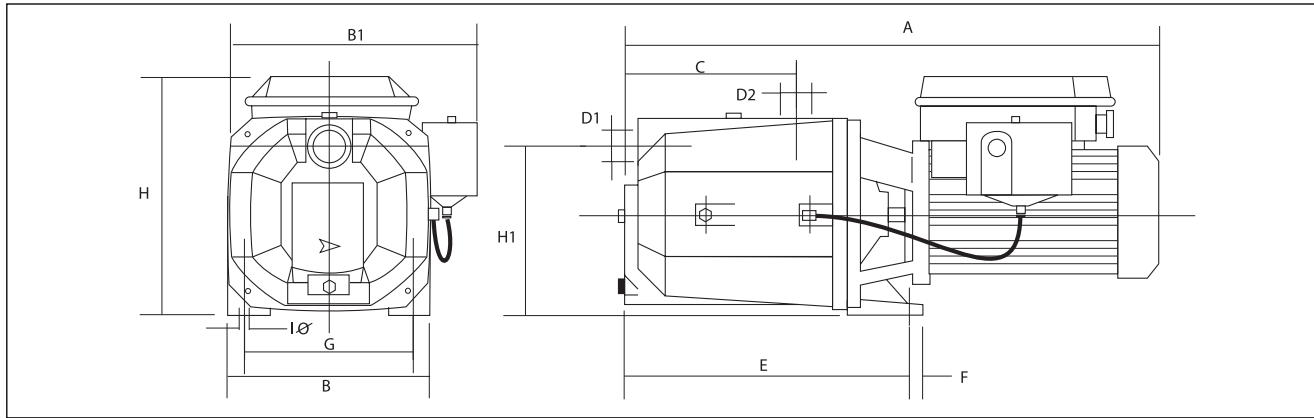
Descriptions	Material
Motor Stool	Cast Iron
Shaft Seal	Carbon/Ceramic/NBR
O-Rings and Gaskets	NBR
Base Plate	Cast Iron
Pump Housing	Cast Iron
Impeller	Technopolymer
Tubing	Polyethylene
Seal Plate	Noryl©
Ejector/Guide Vane	Noryl©
Tank	Stainless Steel AISI304

### Materials: JPS Pump Package

Descriptions	Material
Motor Stool	Cast Iron
Shaft Seal	Carbon/Ceramic/NBR
O-Rings and Gaskets	NBR
Base Plate	Steel
Pump Housing	Stainless Steel AISI304
Impeller	Technopolymer A
Tubing	Polyethylene
Seal Plate	Stainless Steel AISI304
Ejector/Guide Vane	Technopolymer A
Tank	Stainless Steel AISI304

Note: Noryl© is a registered trademark of General Electric Company

Dimensional Drawings



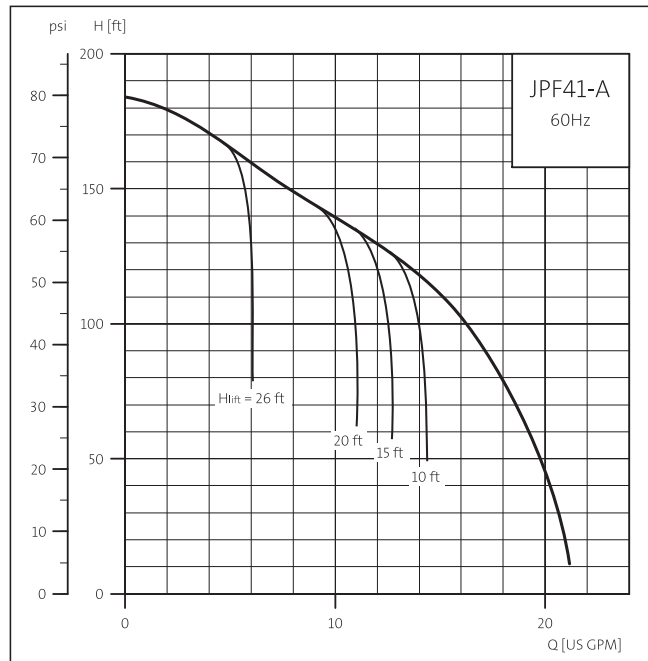
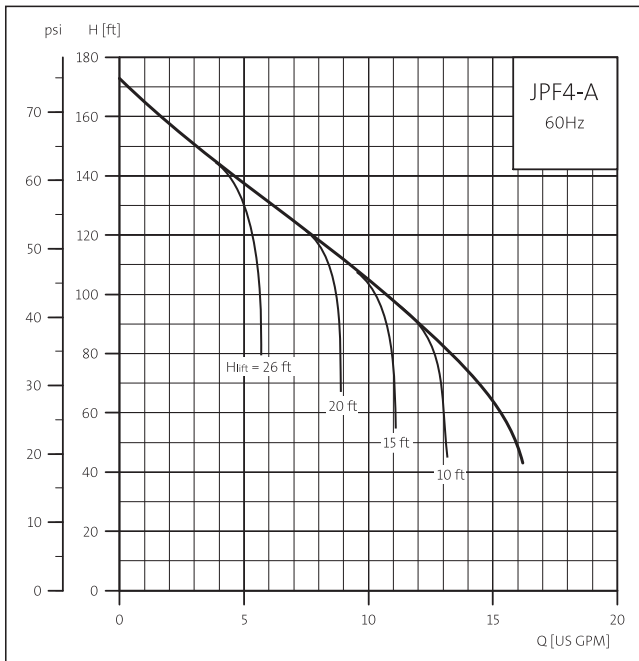
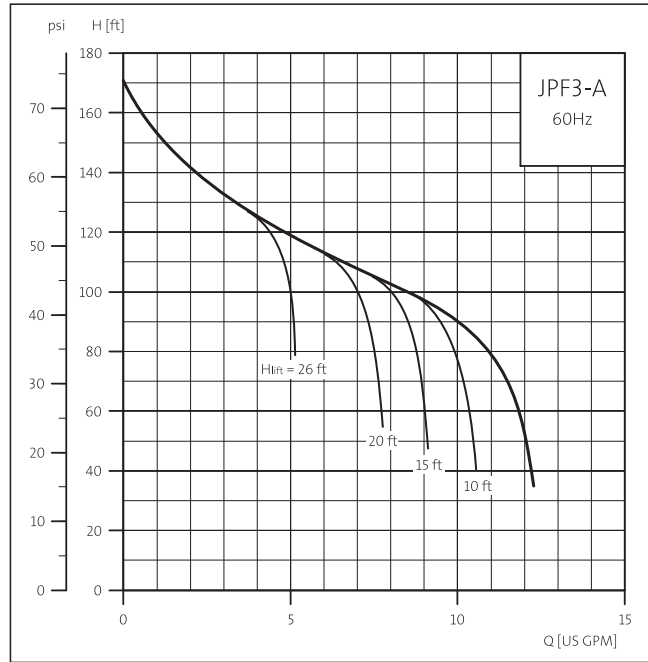
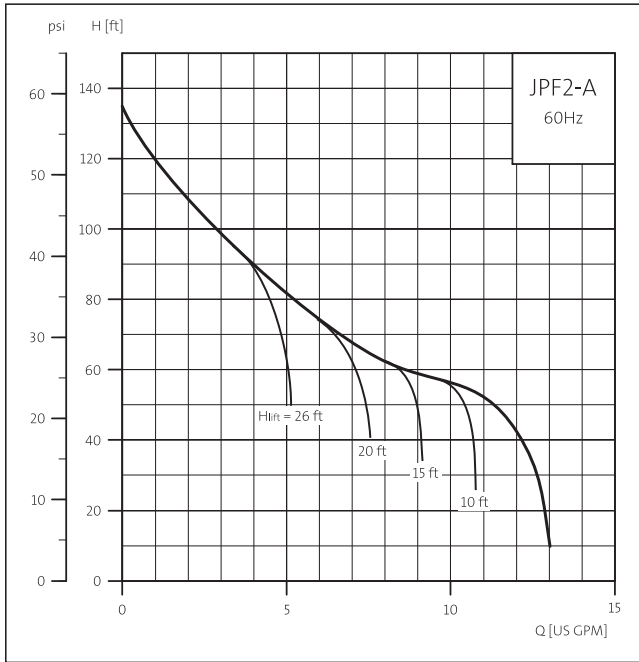
Dimensions and Weights

Pump Type	Motor Data				D1 Suction NPT	D2 Disch. NPT	Dimensions (inches)										Ship Wt. (lbs)	Ship Vol. (Cu Ft.)
	HP	S.F.	PH	Volts			A	B	B1	C	E	F	G	H	H1	IØ		
JPF2A	1/3	1.8	1	115 or 230	1"	1"	16.2	7.1	9.1	5.5	8.9	0.6	5.5	8.9	6.0	0.38	35	1.5
JPF3A	1/2	1.6	1	115 or 230	1"	1"	16.2	7.1	9.1	5.5	8.9	0.6	5.5	8.5	6.0	0.38	36	1.5
JPF4A	3/4	1.3	1	115 or 230	1"	1"	17.3	7.1	9.1	5.5	9.2	0.6	5.5	8.9	6.0	0.38	41	1.5
JPF41A	1	1.4	1	115 or 230	1"	1"	17.3	7.1	9.1	5.5	9.2	0.6	5.5	8.9	6.0	0.38	43	1.5

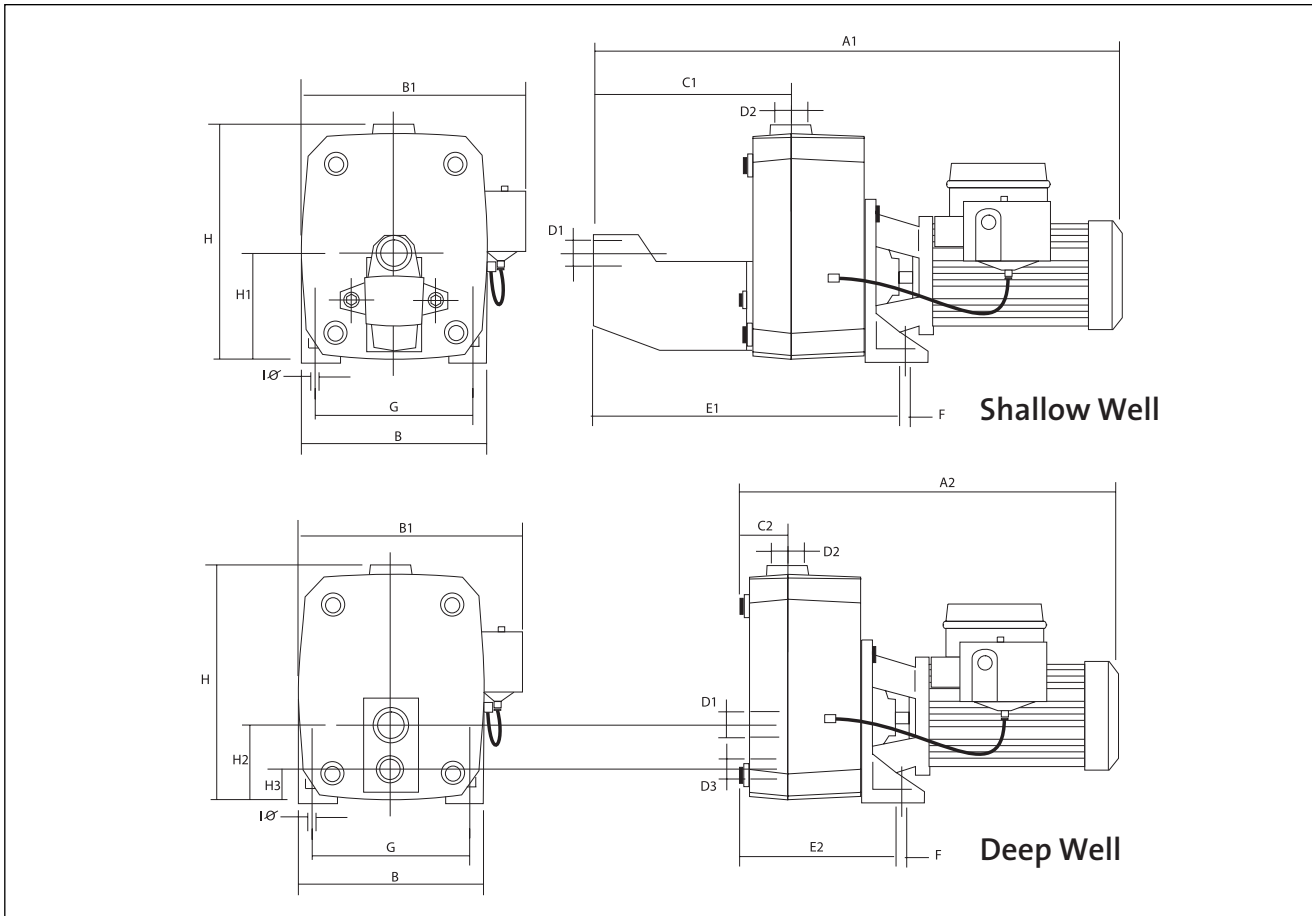
Shallow Well Performance Chart

Model	HP	Depth to Water	Discharge Pressure (PSI)							Shut-off (PSI)	Pressure Switch Settings (PSI)
			20	30	35	40	45	50	55		
			Capacities (GPM)*								
JPF2A	1/3	5	11	7	6	4	3	2		58	20-40
		10	10	7	6	4	3	2		56.5	
		15	9	7	6	4	3	2		54	
		20	7	6	5	4	3	2		51.5	
		25	5	4	3	2	1			49	
JPF3A	1/2	5	12	11	11	10	7	6	4	73.5	30-50
		10	10.5	10	10	9.5	7	6	4	71	
		15	9	8.5	8	8	7	6	4	68.5	
		20	7.5	7	7	7	6.5	6	4	66	
		25	5	5	5	5	4.5	4	4	63.5	
JPF4A	3/4	5	15	14	14	13	10	8.5	6	75.5	30-50
		10	13	12.5	12.5	12	10	8.5	6	73	
		15	11	11	10	10	10	8	6	70.5	
		20	9	9	9	8.5	8	7	6	68	
		25	6	6	6	6	5	5	5	65.5	
JPF41A	1	5	21	20.5	20	20	20	19	17.5	86.5	50-70
		10	19	18.5	18	18	17.5	17.5	17	84	
		15	16	16	16	15.5	15	15	14.5	81.5	
		20	13.5	13.5	13.5	13	13	12.5	12	79	
		25	10	10	10	9.5	9	9	8.5	76.5	

## Shallow Well Performance Curves



Dimensional Drawings

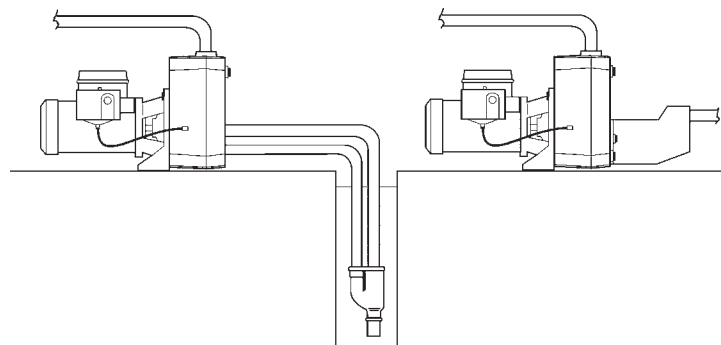


Dimensions and Weights

Pump Type	Motor Data				D1 Suction NPT	D2 Disch. NPT	D3 Return NPT	Dimensions (inches)														Ship Wt. (lbs)	Ship Vol. (Cu Ft.)	
	HP	S.F.	PH	Volts				A1	A2	B	B1	C1	C2	E1	E2	F	G	H	H1	H2	H3			Ø
JPF5A	1.5	1.5	1	230	1-1/4"	1"	1"	22.0	15.3	8.3	11.0	8.7	2.0	13.8	7.8	0.78	5.7	10.0	6.2	4.3	2.1	0.44	70	1.9
JPF7A	2	1.3	1	230	1-1/4"	1"	1"	25.6	19.9	8.3	12.4	8.7	2.0	13.8	7.8	0.78	5.7	10.0	6.2	4.3	2.1	0.44	73	2.5

Conversion Instructions from Shallow Well to DeepWell

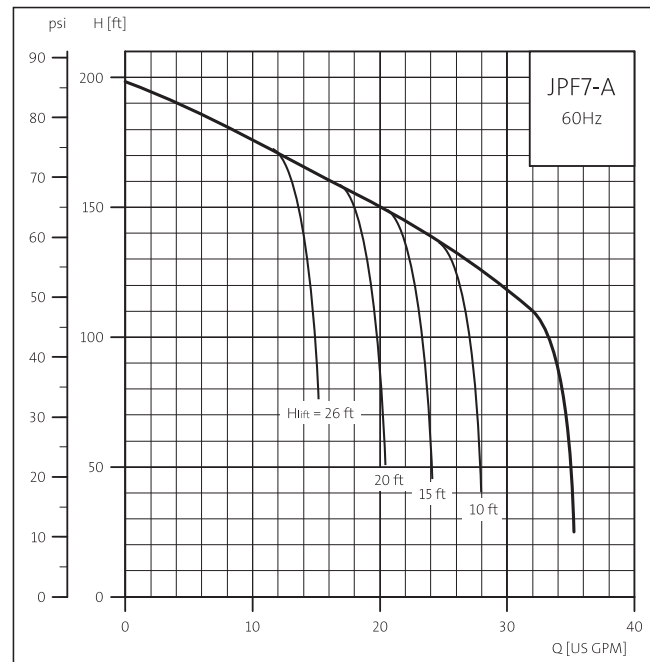
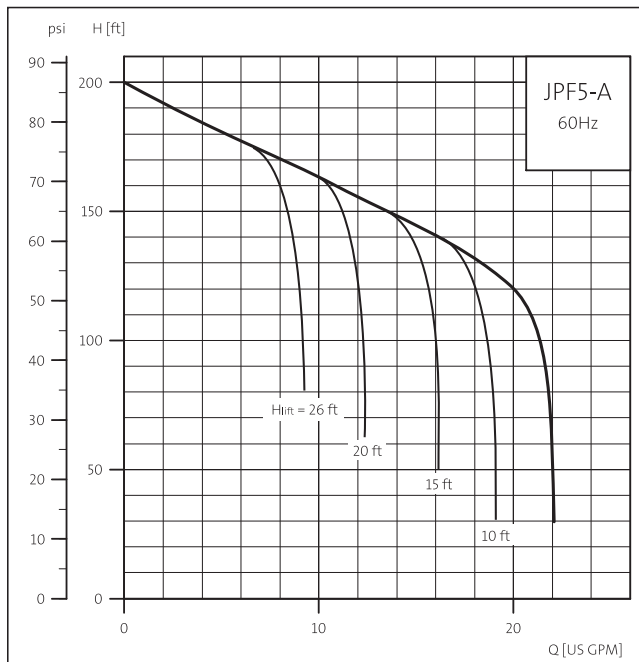
Remove bolts and detach ejector nose from convertible jet pump. Connect suction (D1) and pressure (D3) port to deep well ejector.



## Shallow Well Performance Chart

Model	HP	Depth to Water	Discharge Pressure (PSI)							Shut-off (PSI)	Pressure Switch Settings (PSI)
			20	30	35	40	45	50	55		
			Capacities (GPM)*								
JPF5A	1-1/2	5	21	20.5	20	20	20	19	17.5	86.5	50-70
		10	19	18.5	18	18	17.5	17.5	17	84	
		15	16	16	16	15.5	15	15	14.5	81.5	
		20	13.5	13.5	13.5	13	13	12.5	12	79	
		25		10	10	9.5	9	9	8.5	76.5	
JPF7A	2	5	34	34	33.5	33	32.5	30	27	88	50-70
		10	28.5	28	28	28	27.5	27	26	85.7	
		15	24	24	23.5	23.5	23	22.5	22	83	
		20	20	20	19.5	19.5	19.5	19	19	80	
		25		15.5	15.5	15.5	15	15	15	77.8	

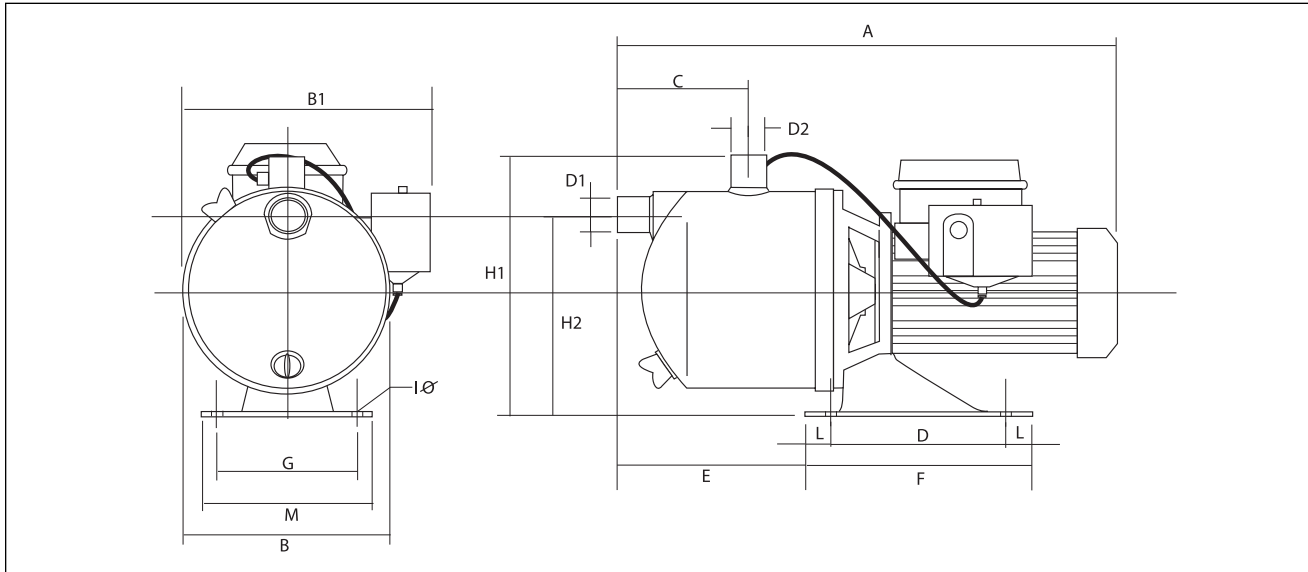
## Performance Curves



## Deep Well Performance Chart

Model	Ejector Type	Discharge Pressure (psig)	Depth to water (feet)									
			30	40	50	60	70	80	90	100	120	140
			Capacities USgph*									
JPF5A	E20	45	896	794	682	586						
		50	727	615	505	404						
		60	575	438	320	220						
		65	365	247	130							
		75	177	63								
	E25	50			606	534						
		60			484	411						
		65			362	323						
		75			247	190						
		80			151	102						
	E30	50					449	406	358	302		
		60					373	333	293	248		
		65					306	271	234	190		
		75					244	214	177	125		
		80					190	162	137	113		
JPF7A	E20	50	1054	945	859	703						
		60	854	755	633	510						
		65	664	589	430	305						
		75	469	365	221	102						
		80	253	156								
	E25	50			716	635	560	482				
		60			586	505	430	352				
		65			456	379	313	240				
		75			331	260	201	143				
		90			221	161	112					
	E30	65					478	411	371	310		
		75					383	341	306	262		
		80					318	281	247	215		
		90					255	226	195	157		
		95					203	177	148	116		

Dimensional Drawings



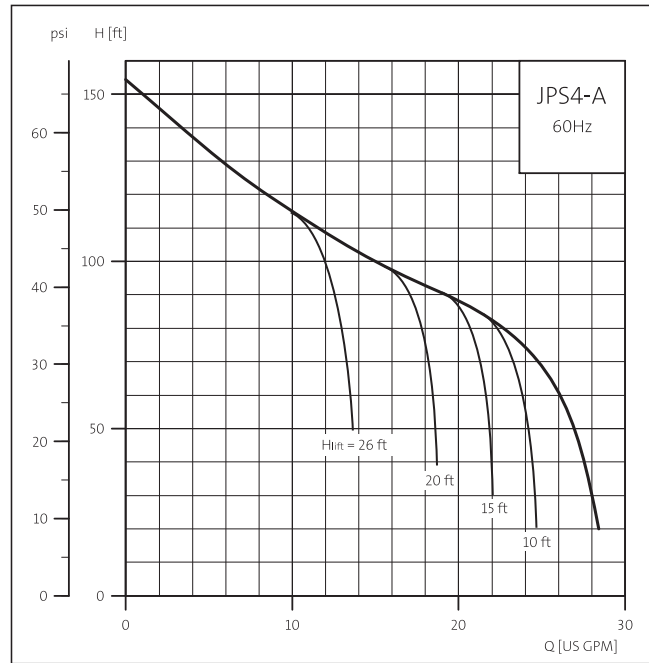
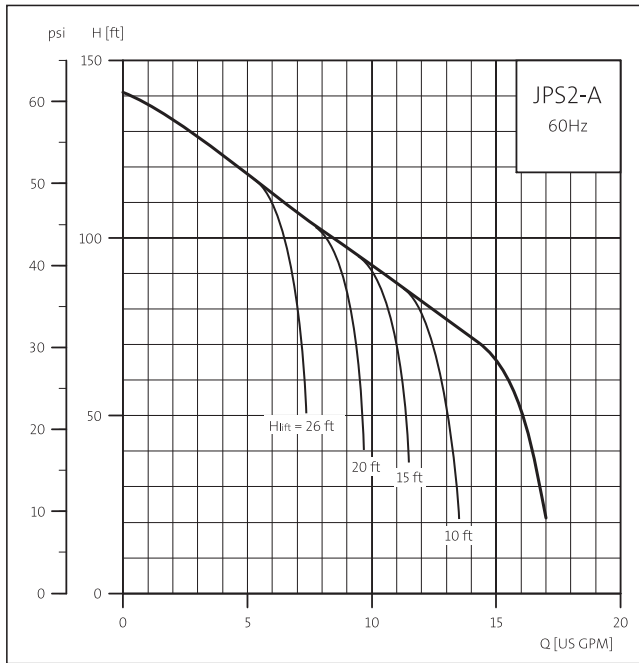
Dimensions and Weights

Pump Type	Motor Data				D1 Suction NPT	D2 Disch. NPT	Dimensions (inches)											Ship Wt. (lbs)	Ship Vol. (Cu Ft.)
	HP	S.F.	PH	Volts			A	B	B1	C	E	F	G	H1	H2	L	IØ		
JPS2A	1/2	1.5	1	115 or 230	1"	1"	14.8	7.5	9.3	3.7	4.8	7.1	4.3	9.1	7.0	0.83	0.42	24	1.5
JPS4A	1	1.36	1	115 or 230	1"	1"	15.6	7.5	9.3	3.7	4.8	7.1	4.3	9.1	7.0	0.83	0.42	31	1.5

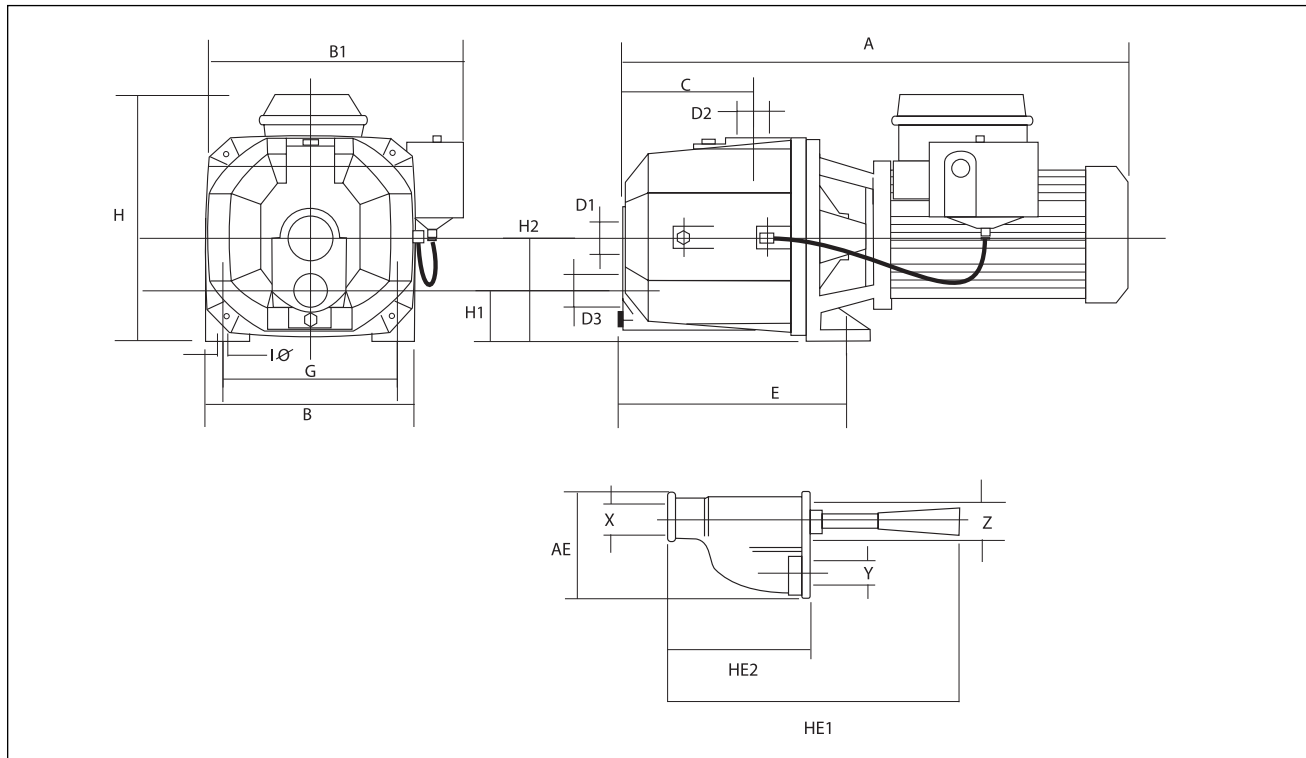
Shallow Well Performance Chart

Model	HP	Depth to Water	Discharge Pressure (PSI)							Shut-off (PSI)	Pressure Switch Settings (PSI)
			20	30	35	40	45	50	55		
			Capacities (GPM)*								
JPS2A	1/2	5	15	13	11	8	6	4	2	62	30-50
		10	14	12	10	7	5	3	1	59.5	
		15	13	11	9	6	4	2		57	
		20	10	10	8	5	3	1		54.5	
		25	8	8	7	4	2			52	
JPS4A	1	5	30	27	22	17	14	10	7	68	30-50
		10	26	23	21	16	13	9	6	65.5	
		15	22	21	20	15	12	8	5	63	
		20	18	17	16	14	11	7	4	60.5	
		25	14	13	13	12	11	6	3	58	





Dimensional sketches



Dimensions and Weights

Pump Type	Motor Data				D1 Suction NPT	D2 Disch. NPT	D3 Return NPT	Dimensions (inches)										Ship Wt. (lbs)	Ship Vol. (Cu Ft.)
	HP	S.F.	PH	Volts				A	B	B1	C	E	IØ	G	H	H1	H2		
JDF2A	1/2	1.6	1	115 or 230	1.25"	1"	1"	15.2	7.1	9.1	3.5	8.0	0.38	5.5	8.9	1.9	3.6	36	1.5
JDF4A	3/4	1.3	1	115 or 230	1.25"	1"	1"	15.2	7.1	9.1	3.5	8.0	0.38	5.5	8.9	1.9	3.6	37	1.5

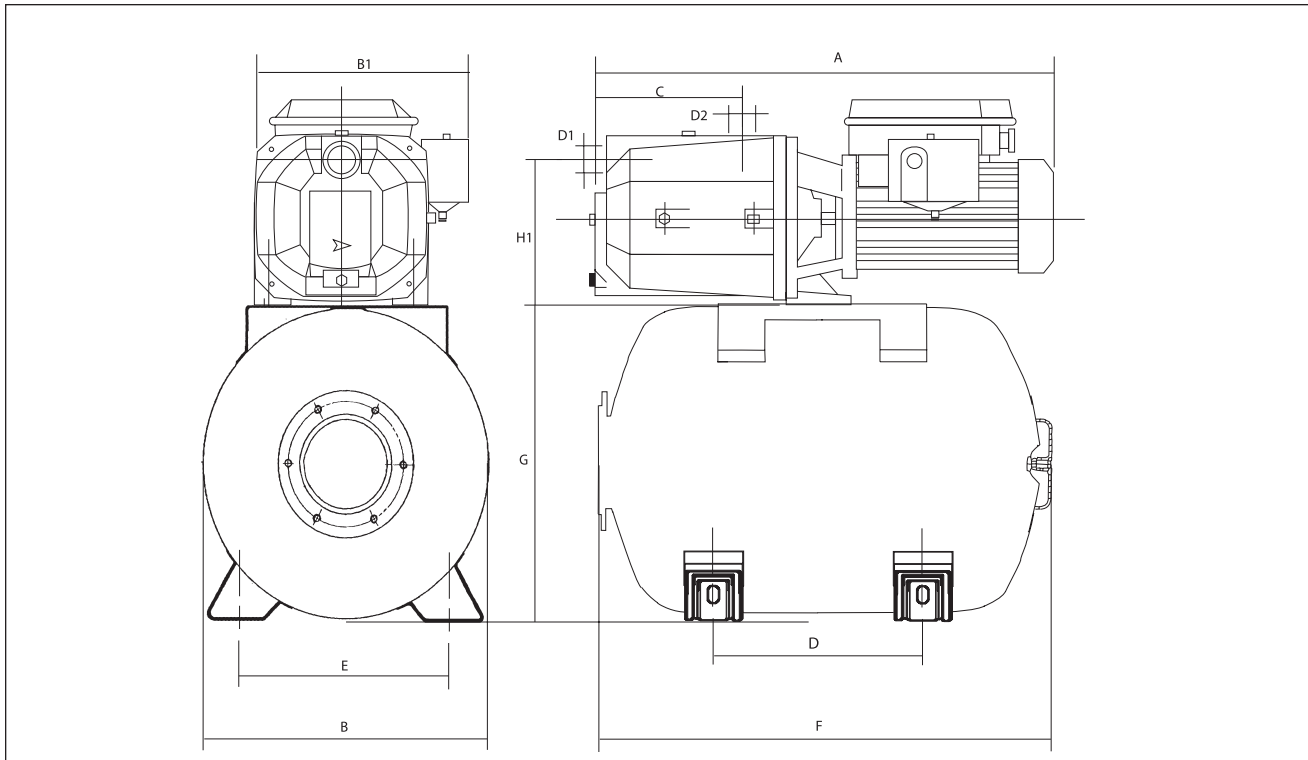
Ejector Dimensions

AE	HE1	HE2	X	Y	Z
3.8	11.6	5.63	1" NPT	1" NPT	1.25" NPT
3.8	11.6	5.63	1" NPT	1" NPT	1.25" NPT

## Performance Chart

Model	Ejector Type	Discharge Pressure (psig)	Depth to water (feet)					100	120
			30	40	50	60	70		
			Capacities USgph*						
JDF2A	E20	20							
		30							
		35							
		45							
		SHUTOFF							
	E25	20	625	510	395				
		30	350	270	175				
		35	230	155	70				
		45	60						
		SHUTOFF	49	44	42				
	E30	20	500	430	375				
		30	355	295	240				
		35	290	230	175				
		45	175	125	80				
		50	125	75	40				
SHUTOFF		63	58	55					
JDF4A	E20	20							
		30							
		35							
		45							
		SHUTOFF							
	E25	20	800	670	525				
		30	525	410	290				
		35	400	280	175				
		45	160	65					
		SHUTOFF	53	49	45				
	E30	30		360	325	265	210		
		35		320	260	200	160		
		45		190	140	100	75		
		50		135	95	65	35		
		SHUTOFF		72	65	60	57		

## Dimensional Drawings



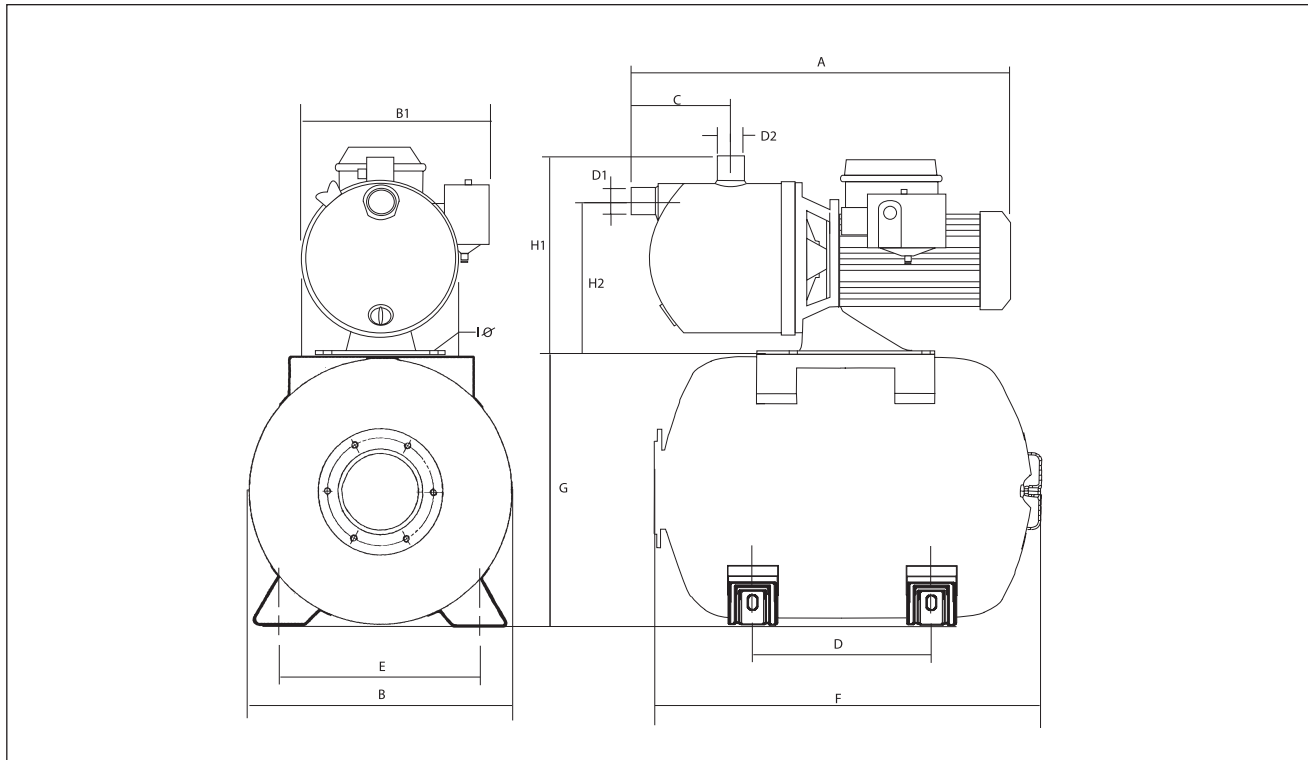
## Dimensions and Weights

Pump Type	Motor Data				D1 Suction NPT	D2 Disch. NPT	Dimensions (inches)										Ship Wt. (lbs)	Ship Vol. (Cu Ft.)
	HP	S.F.	PH	Volts			A	B	B1	C	D	E	F	G	H1			
JPF3A	1/2	1	1	115 or 230	1"	1"	1.2	11.9	9.1	5.5	9.1	7.1	15.2	11.9	6.0	7.0	5.0	

## Shallow Well Performance Chart

Model	HP	Depth to Water	Discharge Pressure (PSI)							Shut-off (PSI)	Pressure Switch Settings (PSI)
			20	30	35	40	45	50	55		
			Capacities (GPM)*								
JPF3A	1/2	5	12	11	11	10	7	6	4	73.5	30-50
		10	10.5	10	10	9.5	7	6	4	71	
		15	9	8.5	8	8	7	6	4	68.5	
		20	7.5	7	7	7	6.5	6	4	66	
		25	5	5	5	5	4.5	4	4	63.5	

## Dimensional Drawings



## Dimensions and Weights

Pump Type	Motor Data				D1 Suction NPT	D2 Disch. NPT	Dimensions (inches)										Ship Wt. (lbs)	Ship Vol. (Cu Ft.)
	HP	S.F.	PH	Volts			A	B	B1	C	E	F	G	H1	H2	IØ		
JPS2A	1/2	1.5	1	115 or 230	1"	1"	14.8	11.9	9.3	3.7	7.1	15.2	11.9	8.5	6.0	0.38	45.0	5.0

## Shallow Well Performance Chart

Model	HP	Depth to Water	Discharge Pressure (PSI)							Shut-off (PSI)	Pressure Switch Settings (PSI)
			20	30	35	40	45	50	55		
			Capacities (GPM)*								
JPS2A	1/2	5	15	13	11	8	6	4	2	62	30-50
		10	14	12	10	7	5	3	1	59.5	
		15	13	11	9	6	4	2		57	
		20	10	10	8	5	3	1		54.5	
		25	8	8	7	4	2			52	



L-JP-PG-001	5/03
PRINTED IN USA	

Subject to alterations.