

1/3 - 1-1/2 HP

Whether operating as a shallow well or deep well pump, count on F & W's versatile, powerful jet pumps to deliver more water at full city pressures.

These pumps provide higher single stage capacities and pressures; depths to 150 feet, capacities to 1800 GPH and as much as 90 pound pressure.



Higher single-stage capacities and pressures

Depths to 150 ft.

Up to 1800 GPH with up to 90 PSI



## **Service Plus F&W Motors**

# "Service Plus" means top reliability plus quick access to all electrical components.

Routine maintenance is simplified through the convenient mounting of electrical components. Removal of the rear access cover exposes components for fast replacement. Spade connectors enable quick hookup and voltage change.

### Rear access cover

Directs ventilating air over the windings and bearings, and away from the switch mechanism. All electrical components are protected from dirt, dust and insects.

### Quality-wound double insulated stator

Uses nylon over coated wire with an additional varnish dip to insure against moisture penetration. Class B wire insulation rated for 266°F.

### Permanently lubricated ball bearings

Located on each end of the motor insuring alignment of the dynamically balanced rotor for smooth operation and extended motor life.

## Fully enclosed transfer switch

Mounted on a UL recognized thermo-set plastic board utilizes spark quenching and extra large silver cadmium oxide contact points.

## **Patented governor**

Features an advanced simplified design, using a stainless steel compression spring to insure proper motor RPM before switching from start to run windings.

## Zinc clad steel shell and cooling fan

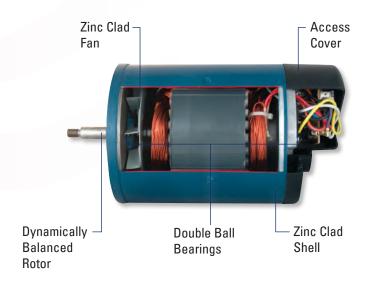
Resist corrosion and dissipate motor heat.

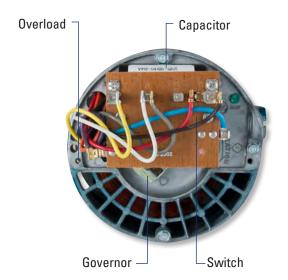
## **Automatic overload**

Senses both start and run winding heat to ensure complete winding protection.

### "Service Plus" motors

Manufactured by Flint & Walling, Inc. in Kendallville, IN, USA—An industry exclusive among jet pump manufacturers.









## **EK, CPJ, CPH Product Features**

## High tensile gray iron pump bodies

Large water cavities provide fast, easy priming. Separate priming ports enable quick water fill and the fast evacuation of air. Separate 1/4" tappings are provided for the convenient mounting of pressure/vacuum gauges and the pressure switch, and for pump draining.

### Buna-n Quadraseal

Reusable — provides a positive seal between the pump case and motor bracket.

#### **Molded diffusers**

Corrosion and abrasion resistant, provide precision alignment with the impeller for maximum performance. The snapin diffuser design uses no bolts and is held in place by compression.

### Impellers —

Precision balanced, these impellers are ultra-smooth for high efficiency. 1/3 thru 1 HP CPJ, CPH, and EK models feature molded thermoplastic impellers. 1-1/2 HP CPJ models feature brass impellers.

## Pipe plugs and priming plugs

Coated with a non-hardening, non-toxic, non-corrosive material which allows for easy removal even after the pump has been in service for years.

### Standard shaft seal

Silicon carbide face is self-adjusting throughout the seal life. One size fits all models.

### **CPH** and **EK** Patented uni-frame motor bracket

Unique to the water systems industry — designed to accept any NEMA J motor if motor replacement is ever necessary.

### **Automatic overload**

Senses both start and run winding heat to ensure complete winding protection.

#### **CPJ** models

Feature NEMA J motors. All motors are dual voltage, capacitor start with automatic thermal overload protection.

### 1/3 and 1/2 HP CPJ SERIES



### **CPJS SHALLOW WELL**

Includes: Pump, Motor, Pressure Switch and Shallow Well Ejector.

### **CPJ CONVERTIBLE**

Includes: Pump, Motor, Pressure Switch and Flow Control Screw. Order Ejector and Pressure Gauge Separately.



## **CPJ and CPH Series Jet Pumps**

## 3/4, 1 and 1-1/2 HP CPJ SERIES



### **CPJS SHALLOW WELL**

Includes: pump, motor, pressure switch and shallow well ejector.

### **CPJ CONVERTIBLE**

Includes: pump, motor, pressure switch and pressure regulator. Order ejector and pressure gauge separately.

## 1/2, 3/4 and 1 HP CPH SERIES



### **CPHS SHALLOW WELL**

Available in 1/2, 3/4 and 1 HP. Includes: pump, motor, pressure switch and shallow well ejector.



## **CPH CONVERTIBLE**

Available in 1/2, 3/4 and 1 HP. Includes: pump, motor and pressure switch. Order ejector, control package and pressure gauge separately.

\*Add "R" to end of model number to include 134349 control package with pump.



134349 Control Package\*

Order Separately for Deep Well Applications.



## **EK SHALLOW WELL JET PUMPS**



### **EK SHALLOW WELL JET PUMP**

Includes: Pump, Motor, Pressure Switch and Ejector.

NOTE: EK05S and EK07S feature built-in ejector - no assembly required. EK10S ejector requires assembly.

## **EK SHALLOW WELL CAPACITIES**

		Custian		Discharge Pr	essures (PSI)		Shut Off	Cuption 9	Pressure Switch	Pump
Model	HP	Suction Lift. Ft.	20	30	40	50	Pressure @ 0	Suction & Discharge		Shipping
		LIIL FL	CAPA	CITY - U.S. GA	LLONS PER M	INUTE	Lift (PSI)	Discharge	Setting - PSI	Weight
		5	10.5	9.5	5.8	4.0				
EK05S	1/2	15	7.6	7.3	4.5	2.5	60	1-1/4" x 3/4"	20-40	40
		25	4.5	4.2	3.5	2.0				
		5	15.5	15.0	10.0	5.8				
EK07S	3/4	15	11.9	11.7	9.1	3.8	65	1-1/4" x 3/4"	30-50	41
		25	6.0	5.8	5.2	2.0				
		5	20.0	20.0	19.5	18.3	65			
EK10S	1	15	15.8	15.5	15.0	14.5	60	1-1/4" x 1"	30-50	51
		25	10.0	9.7	9.5	9.0	55			

Maximum Pump Case Pressure = 150 PSI



## **CPJS, CPHS, CPJ and CPH Shallow Well Capacities**

## CPJS AND CPHS SHALLOW WELL PERFORMANCE WITH SHALLOW WELL EJECTORS



SW Single Pipe Shallow Well Ejector

				D	ischarg	e Pressi	ıres (PS	I)		Pressure	Shut Off	Dumn
Model	НР	Ejector*	Suction	20	30	40	50	60	Suction &	Switch	Pressure	Pump
No.	l ur	Assembly	Lift Ft.	CAF		U.S. GA MINUTE		PER	Discharge	Setting	PSI	Shipping Weight
CPJ03SI	3 1/3	SW03E-1626	5 15 25	11.3 8.7 5.3	10.7 8.5 5.3	9.5 7.8 5.2	6.7 5.3 4.2		1-1/4" X 3/4"	30-50	74 69 65	49
CPJ05SI CPH05S	1/2	SW05E-1630	5 15 25	17.2 12.8 7.7	16.8 12.7 7.5	14.8 12.2 7.2	10.0 7.7 5.3		1-1/4" X 3/4"	30-50	69 64 60	50 43
CPJ07SI	2//	SW07E-1432	5 15 25	19.8 15.5 9.8	19.5 15.2 9.5	19.2 14.8 9.3	18.0 14.2 8.8		1-1/4" X 1"	30-50	65 60 55	58
CPJ10SE	1 1	SW10E-1334	5 15 25	23.7 18.3 11.7	23.5 18.3 11.7	23.3 18.2 11.5	23.0 18.0 11.3		1-1/4" X 1"	30-50	70 65 58	62 53
CPJ15S	1-1/2	SW15E-1238	5 15 25	30.0 24.0 15.0	29.8 23.8 15.0	29.8 23.7 15.0	29.8 23.5 14.8	23.3 18.7 8.0	1-1/4" X 1"	30-50	77 72 63	72

<sup>\*</sup> Ejector assembly included

## CPJ AND CPH SHALLOW WELL CAPACITIES WITH CONVERTIBLE EJECTOR



DW40E Convertible Ejector

					Discharge Pressures (PSI)			Pressure	Shut Off	Pump					
Model No.	HP	Ejector Assembly	Suct. Lift Ft.	20 C/	30	40 TV - 11	50 .S. GA	60 LLONS	70	80 MINII	90 TF	Suction & Discharge	Switch Setting	Pressure PSI	
CPJ05B CPH05 CPH05R†	1/2	DW40E-1730 DW40E-1828	5 15 25 5 15 25	14.8 11.8 7.3 12.0 9.0 5.3	14.5 11.3 7.2 11.5 8.8 5.3	13.2 11.2 7.0 11.3 8.7 5.2	10.0 8.3 6.5 10.2 8.5 5.2	6.7 5.0 3.3 7.8 6.7 5.0	5.0 4.2 3.3			1-1/4" X 3/4" 1-1/4" X 3/4"	30-50 30-50	76 72 67 90 85 80	46 38
CPJ07B	0/4	DW40E-1630	5 15 25	16.0 12.5 8.3	15.7 12.3 8.3	15.5 12.3 8.2	15.0 12.2 8.0	10.3 7.0 4.2				1-1/4" X 1"	30-50	75 72 66	56
CPH07 CPH07R†	3/4	DW40E-1726	5 15 25	10.2 8.0 4.8	10.0 7.5 4.7	9.7 7.3 4.5	9.5 7.3 4.3	9.3 7.2 4.2	9.2 7.2 4.2	7.5 6.7 4.2	5.7 5.0 3.3	1-1/4" X 1"	30-50	120 115 110	90
CPJ10B CPH10	1	DW40E-1634	5 15 25	20.8 16.7 11.7	20.8 16.7 11.5	20.5 16.3 11.3	20.3 16.2 11.2	15.8 13.0 9.3				1-1/4" X 1"	30-50	80 75 70	58
CPH10R†		DW40E-1828	5 15 25	12.2 9.5 5.7	11.7 9.2 5.5	11.7 9.0 5.3	11.3 8.8 5.2	11.2 8.8 5.0	11.2 8.8 5.0	10.8 8.7 5.0	8.0 6.7 5.0	1-1/4′ x 1″	30-50	125 120 115	49
CPJ15	1-1/2	DW40E-1736	5 15 25	23.8 18.0 11.0	23.3 17.8 10.7	23.3 17.5 10.7	23.0 17.3 10.5	18.7 16.3 10.3	13.8 11.7 8.3	8.3 6.0 2.0		1-1/4" x 1"	30-50	93 88 82	66

 $<sup>1^{\</sup>prime\prime}\text{R}^{\prime\prime}$  models include pressure switch and 134349 control package. Order ejector separately. Maximum Pump Case Pressure = 150 PSI

NOTE: The DW40E ejector can be bolted to the pump as a shallow well ejector or submerged in casing as a convertible "deep well" ejector.



Maximum Pump Case Pressure = 150 PSI

# **CPJ and CPH Deep Well Capacities**

## CPJ AND CPH DEEP WELL CAPACITIES WITH TWO-PIPE CONVERTIBLE EJECTOR



DW40E\* Cast Iron Two Pipe Convertible Ejector

Madal		Finatan	Min.	Disch.				Ver	tical	Dista	nce to	Wat	er in F	eet				Press.	Pump
Model	HP	Ejector	Oper.	Press.	20	30	40	50	60	70	80	90	100	110	120	130	140	Switch	Ship
No.		Assembly	Press.	PSI			(	CAPA	CITY -	U.S.	GALL	ONS F	ER M	INUT	Ē			Setting	Wt.
		DW40E-1730	25	30 50 Shut Off	12.5 5.5 67	10.8 3.7 63	8.7 2.0 57											30-50	
CPJ05B CPH05	1/2	DW40E-1828	25-28	30 50 Shut Off	11.2 6.7 75	10.8 5.5 69	8.8 3.8 64	7.2 2.3 59	5.0 0.8 54									30-50	46 38
		DW40E-1622	30	30 50 Shut Off			6.7 4.3 91	6.0 3.8 86	5.3 3.3 80	4.3 2.5 74	3.3 1.7 68	2.5 0.8 60						30-50	
		DW40E-1630	35-37	30 50 Shut Off	16.7 12.5 75	14.2 8.3 70	12.2 5.0 65	8.3 2.5 59										30-50	
CPJ07B CPH07	3/4	DW40E-1726	37-39	30 50 Shut Off	11.7 9.2 98	11.7 9.2 91	11.5 8.21 86	10.3 7.0 80	9.0 5.7 74	7.7 4.3 69	6.2 3.2 65	4.8 1.7 58						30-50	56
		DW40E-1520	39	30 50 Shut Off							5.0 3.7 105	4.8 3.3 95	4.3 3.0 90	3.7 2.7 85	3.2 2.0 80	2.7 1.8 75		30-50	
		DW40E-1634	46	30 50 Shut Off	19.2 10.0 71	15.0 7.5 66	11.7 5.0 62	8.3 2.5 57										30-50	
CPJ10B CPH10	1	DW40E-1828	46-47	30 50 Shut Off	13.0 12.0 110	13.0 12.0 105	12.8 10.8 99	12.5 9.5 93	10.5 7.8 87	9.0 6.2 81	7.5 5.0 76	5.8 3.5 70	4.0 2.0 64					30-50	58 49
		DW40E-1520	46-47	30 50 Shut Off							5.5 5.2 130	5.5 4.7 123	5.0 4.2 117	4.5 3.7 110	3.8 3.2 104	3.5 2.7 98	2.7 2.2 92	30-50	
		DW40E-1736	46-52	30 50 Shut Off	21.7 15.0 80	17.5 11.7 76	13.3 8.3 71	10.0 5.0 65	6.7 2.7 60									30-50	
CPJ15	1-1/2	DW40E-1728	50-53	30 50 Shut Off			12.8 11.7 105	12.5 11.3 98	10.7 9.7 92	9.0 7.8 87	7.7 6.7 82	6.2 5.0 77	5.0 3.3 72	3.5 2.5 65				30-50	66
		DW40E-1520	52-54	30 50 Shut Off							5.3 5.2 135	5.3 5.0 128	5.2 4.7 123	5.0 4.2 118	4.3 3.8 112	3.8 3.3 105	3.3 2.8 100	30-50	

Maximum Pump Case Pressure = 150 PSI, \* Suction & pressure pipe tapping 1-1/4" x 1"

## CPJ AND CPH DEEP WELL CAPACITIES WITH 2" SINGLE PIPE EJECTOR



Two Inch Single Pipe Ejector

Model		Figotor	Min.	Disch.				١	Vertic	al Dis	stance	e to W	ater i	n Fee	1				Press.	Pump
Model	HP	Ejector	Oper.	Press.	20	30	40	50	60	70	80	90	100	110	120	130	140	150	Switch	Ship
No.		Assembly	Press.	PSI				CAI	PACIT	Y - U.	S. GA	LLON	S PER	MIN	UTE				Setting	Wt.
		SP20BL-1730†	27	30 50 Shut Off	10.8 5.0 65	9.2 3.3 60	7.5 1.7 55												30-50	
CPJ05B CPH05	1/2	SP20BL-1828†	27-30	30 50 Shut Off	11.7 6.7 76	9.7 4.7 68	7.5 2.8 60	5.8 1.2 55	3.8 51										30-50	46 38
		SP20BL-1622†	31	30 50 Shut Off			6.2 4.2 90	5.8 3.7 83	5.0 2.8 76	4.0 2.2 70	3.3 1.3 61	2.3 0.3 55							30-50	
		SP20BL-1630†	39	30 50 Shut Off	16.2 11.7 75	13.7 7.5 70	10.8 5.0 65	7.5 1.7 55											30-50	
CPJ07B CPH07	3/4	SP20BL-1726†	39	30 50 Shut Off	11.0 8.3 91	11.0 7.5 87	9.7 6.7 82	9.5 5.3 78	7.2 4.2 72	5.8 2.8 66	3.3 1.8 62								30-50	56
		SP20BL-1520†	40	30 50 Shut Off					5.3 4.2 108	5.0 3.8 100	4.5 3.3 92	3.8 2.7 84	3.3 2.2 77	2.8 1.7 70					30-50	
		SP20BL-1634†	44-47	30 50 Shut Off	16.7 10.0 71	15.0 7.5 66	11.7 4.7 61	8.3 2.0 55											30-50	
CPJ10B CPH10	1	SP20BL-1828†	44-47	30 50 Shut Off	11.7 11.0 104	11.7 9.8 98	11.2 8.8 92	10.0 7.3 86	8.3 6.0 80	7.0 4.5 72	5.5 3.3 67	3.8 1.8 61	2.2 0.5 55						30-50	49
		SP20BL-1520†	45-47	30 50 Shut Off						5.3 5.0 119	5.3 4.5 113	5.0 4.0 106	4.3 3.5 100	3.7 2.8 94	3.2 2.5 89	2.5 2.0 83	2.0 1.3 78		30-50	
		SP20BL-1736†	46-52	30 50 Shut Off	20.0 13.3 80	15.8 10.0 75	12.5 7.5 70	9.7 5.0 65	6.7 2.7 60										30-50	
CPJ15	1-1/2	SP20BL-1728†	51-53	30 50 Shut Off			11.7 10.0 102	11.7 9.0 96	10.0 7.5 90	8.0 5.8 84	6.3 4.3 78	4.8 3.0 71	3.5 1.8 65						30-50	66
		SP20BL-1520†	52-55	30 50 Shut Off							5.3 5.3 130	5.3 5.0 125	5.3 4.5 120	4.8 4.2 115	4.2 3.7 110	3.7 3.2 103	3.2 2.7 95	2.7 2.2 88	30-50	

Maximum Pump Case Pressure = 150 PSI 

TNot for sale in states following Proposition 65 or AB 1953

## "EK" SHALLOW WELL TANK MOUNTED SYSTEMS



Model	НР	Tank Type	Approxima	Ship Wt.		
Model	nr	Talik Type	L	W	Н	Silip vvi.
EK05SAT25H	1/2	Horizontal	24.5	17.25	33.5	76 lbs.
EK07SAT44H	3/4	Horizontal	24.5	17.25	33.5	76 lbs.

For performance specifications, see EK pump page.

Includes: Pump, motor, pressure switch, ejector, pressure tank and connection fittings from pump to tank.

## POWER CONVERSION UNIT FOR JET AND CENTRIFUGAL PUMPS



Order No.	Application
122649 NEMA C	Can be used with any jet or centrifugal pump equipped with NEMA C or NEMA J standard electric motors. Gasoline engine or electric motor can be directly coupled with shaft or can be used with belt and pulley. For electric motor used with belt drive, the motor HP should be doubled. The gasoline engine HP should be doubled that of standard motor in either case above.
135458 NEMA J	5/8" diameter steel shaft, mounted in two heavy duty ball bearings, carry all radial and thrust loads.

## **CONVERTIBLE JET PUMPS WITH POWER CONVERSION UNIT**



Model No.	Description	Pressure Control Valve Required†
CPJ05 222	Threaded Shaft	124330
CPJ07 222	Threaded Shaft	132446
CPJ10 222	Threaded Shaft	132446
CPJ15 222	Threaded Shaft	133383

<sup>†</sup>Pressure control valve required for deep well applications - order separately. Order ejector separately. CPJ Convertible Jet Pumps fitted with a power conversion unit offer the flexibility of electric motor or gasoline engine drive. Can be belt or direct driven. Power conversion unit features cast iron body and double, heavy duty ball bearings.

### **SERVICE KITS FOR JET PUMPS**



Model No.	Service Kit For:	Kit Contents	Card Size Inches
KF01	1/3 HP CPJ Jet Pumps		
KF02	1/2 HP CPJ & CPH Jet Pumps	Impeller, Diffuser, Rotary Seal, Quadra-	0 11
KF03	3/4 HP CPJ & CPH Jet Pumps	seal, Diffuser Rubber	8 x 11
KF16	1 HP CPJ, CPH & VPH10 Jet Pumps		
KF04	All CPJ, CPH & EK Jet Pumps	Rotary Seal, Quadraseal (2), Diffuser Rubber	8 x 11
KF05	1/2 HP EK Jet Pump	Impeller, Rotary Seal, Quadraseal,	
KF07	3/4 HP EK Jet Pump	Diffuser Rubber (Order Diffuser	8 x 11
KF10	1 HP EK Jet Pump	Separately)	

