

JET PUMPS

FW0180
0221
Supersedes
1120



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.



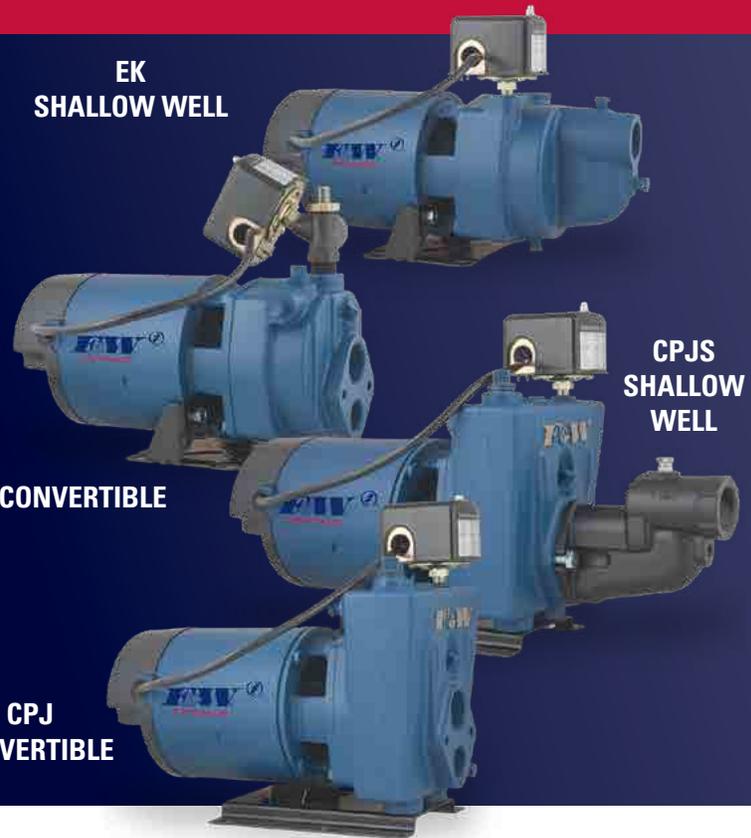
EK, CPH, CPJS, CPJ, EK TANK SYSTEMS

EK
SHALLOW WELL

CPH CONVERTIBLE

CPJ
CONVERTIBLE

CPJS
SHALLOW
WELL



Higher single-stage capacities and pressures

Depths to 150 ft.

Up to 1800 GPH with up to 90 PSI



"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

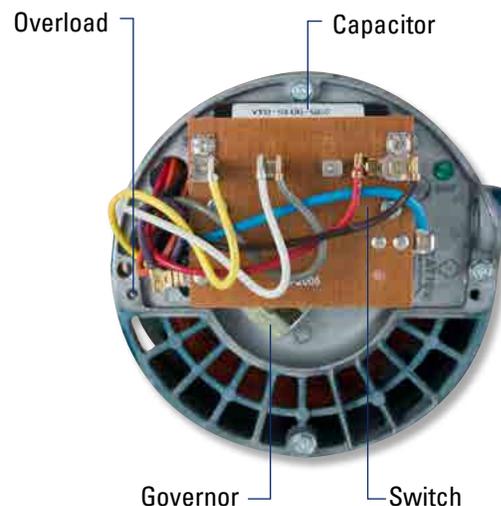
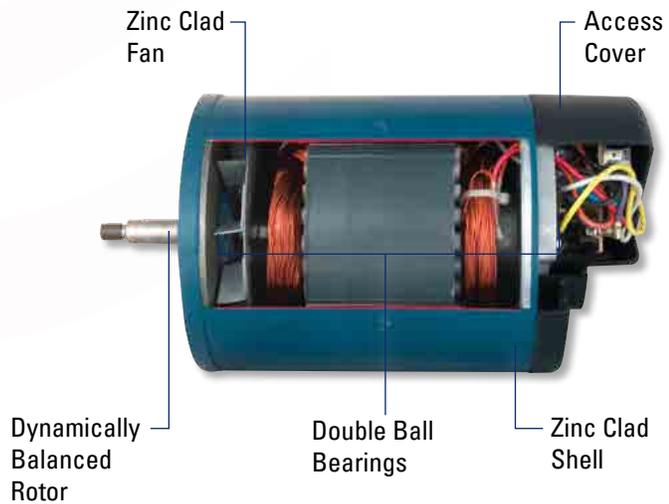
Resist corrosion and dissipate motor heat.

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 Square cut ring

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 snap-in 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 through 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.

EK SHALLOW WELL JET PUMPS - 1/2, 3/4 and 1 HP

Includes: Pump, Motor, Pressure Switch and Ejector.

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

Product may not be exactly as shown



EK SHALLOW WELL CAPACITIES

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

Maximum Pump Case Pressure = 150 PSI



CPHS and CPJS Shallow Well Jet Pumps

CPHS SERIES - 1/2, 3/4 and 1 HP

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



CPJS SERIES - 1/3, 1/2, 3/4, 1 and 1-1/2 HP

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

Product may not be exactly as shown



CPJS AND CPHS SHALLOW WELL PERFORMANCE WITH SHALLOW WELL EJECTORS



**SW Single Pipe
Shallow Well Ejector**

Model No.	HP	Ejector* Assembly	Suction Lift Ft.	Discharge Pressures (PSI)					Suction & Discharge	Pressure Switch Setting	Shut Off Pressure PSI	Pump Shipping Weight
				20	30	40	50	60				
				CAPACITY - U.S. GALLONS PER MINUTE								
CPJ03SB	1/3	SW03E-1626	5	11.3	10.7	9.5	6.7	1-1/4" X 3/4"	30-50	74	49	
			15	8.7	8.5	7.8	5.3					
			25	5.3	5.3	5.2	4.2					
CPJ05SB CPH05S	1/2	SW05E-1630	5	17.2	16.8	14.8	10.0	1-1/4" X 3/4"	30-50	69	50	
			15	12.8	12.7	12.2	7.7					
			25	7.7	7.5	7.2	5.3					
CPJ07SB CPH07S	3/4	SW07E-1432	5	19.8	19.5	19.2	18.0	1-1/4" X 1"	30-50	65	58	
			15	15.5	15.2	14.8	14.2					
			25	9.8	9.5	9.3	8.8					
CPJ10SB CPH10S	1	SW10E-1334	5	23.7	23.5	23.3	23.0	1-1/4" X 1"	30-50	70	62	
			15	18.3	18.3	18.2	18.0					
			25	11.7	11.7	11.5	11.3					
CPJ15S	1-1/2	SW15E-1238	5	30.0	29.8	29.8	29.8	23.3	1-1/4" X 1"	30-50	77	72
			15	24.0	23.8	23.7	23.5	18.7				
			25	15.0	15.0	15.0	14.8	8.0				

* Ejector assembly included
Maximum Pump Case Pressure = 150 PSI



CPH and CPJ Convertible Jet Pumps

CPH SERIES - 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.

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

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

Product may not be exactly as shown



See pages 6 & 7 for performance charts on the following models:

- | | |
|---------|---------|
| CPJ05B | CPJ10B |
| CPH05 | CPH10 |
| CPH05R† | CPH10R† |
| CPJ07B | CPJ15 |
| CPH07 | |
| CPH07R† | |



CPJ and CPH Performance with DW Convertible Ejector

CPJ AND CPH SHALLOW WELL CAPACITIES WITH CONVERTIBLE EJECTOR



DW40E Cast Iron Two Pipe Convertible Ejector

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

†"R" 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.

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



DW40E Cast Iron Two Pipe Convertible Ejector

Model No.	HP	Ejector Assembly	Min. Oper. Press.	Disch. Press. PSI	Vertical Distance to Water in Feet														Press. Switch Setting	Pump Ship Wt.			
					20	30	40	50	60	70	80	90	100	110	120	130	140						
					CAPACITY - U.S. GALLONS PER MINUTE																		
CPJ05B CPH05	1/2	DW40E-1730	25	30 50 Shut Off	12.5 5.5 6.7	10.8 3.7 6.3	8.7 2.0 5.7											30-50	46 38				
			DW40E-1828	25-28	30 50 Shut Off	11.2 6.7 7.5	10.8 5.5 6.9	8.8 3.8 6.4	7.2 2.3 5.9	5.0 0.8 5.4										30-50			
				DW40E-1622	30	30 50 Shut Off			6.7 4.3 9.1	6.0 3.8 8.6	5.3 3.3 8.0	4.3 2.5 7.4	3.3 1.7 6.8	2.5 0.8 6.0							30-50		
		CPJ07B CPH07	3/4	DW40E-1630	35-37	30 50 Shut Off	16.7 12.5 7.5	14.2 8.3 7.0	12.2 5.0 6.5	8.3 2.5 5.9												30-50	56
					DW40E-1726	37-39	30 50 Shut Off	11.7 9.2 9.8	11.7 9.2 9.1	11.5 8.21 8.6	10.3 7.0 8.0	9.0 5.7 7.4	7.7 4.3 6.9	6.2 3.2 6.5	4.8 1.7 5.8					30-50			
						DW40E-1520	39	30 50 Shut Off							5.0 3.7 10.5	4.8 3.3 9.5	4.3 3.0 9.0	3.7 2.7 8.5			3.2 2.0 8.0		
CPJ10B CPH10	1			DW40E-1634	46	30 50 Shut Off	19.2 10.0 7.1	15.0 7.5 6.6	11.7 5.0 6.2	8.3 2.5 5.7										30-50	58 49		
					DW40E-1828	46-47	30 50 Shut Off	13.0 12.0 1.10	13.0 12.0 1.05	12.8 10.8 9.9	12.5 9.5 9.3	10.5 7.8 8.7	9.0 6.2 8.1	7.5 5.0 7.6	5.8 3.5 7.0	4.0 2.0 6.4						30-50	
						DW40E-1520	46-47	30 50 Shut Off							5.5 5.2 1.30	5.5 4.7 1.23	5.0 4.2 1.17	4.5 3.7 1.10	3.8 3.2 1.04				
		CPJ15	1-1/2	DW40E-1736	46-52	30 50 Shut Off	21.7 15.0 8.0	17.5 11.7 7.6	13.3 8.3 7.1	10.0 5.0 6.5	6.7 2.7 6.0								30-50				
					DW40E-1728	50-53	30 50 Shut Off			12.8 11.7 1.05	12.5 11.3 9.8	10.7 9.7 9.2	9.0 7.8 8.7	7.7 6.7 8.2	6.2 5.0 7.7	5.0 3.3 7.2	3.5 2.5 6.5					30-50	
				DW40E-1520		52-54	30 50 Shut Off							5.3 5.2 1.35	5.3 5.0 1.28	5.2 4.7 1.23	5.0 4.2 1.18	4.3 3.8 1.12	3.8 3.3 1.05	3.3 2.8 1.00			30-50

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



CPJ and CPH Performance with 2" Single Pipe Ejector

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



**Two Inch
Single Pipe
Ejector**

Model No.	HP	Ejector Assembly	Min. Oper. Press.	Disch. Press. PSI	Vertical Distance to Water in Feet															Press. Switch Setting	Pump Ship Wt.
					20	30	40	50	60	70	80	90	100	110	120	130	140	150			
					CAPACITY - U.S. GALLONS PER MINUTE																
CPJ05B CPH05	1/2	SP20BL-1730†	27	30 50 Shut Off	10.8 5.0 65	9.2 3.3 60	7.5 1.7 55												30-50	46 38	
		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 2.8 55	3.8										30-50		
		SP20BL-1622†	31	30 50 Shut Off			6.2 4.2 90	5.8 3.7 83	5.0 2.2 76	4.0 1.3 70	3.3 0.3 61	2.3 0.3 55							30-50		
CPJ07B CPH07	3/4	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	56	
		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			
		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		
CPJ10B CPH10	1	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	49	
		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			
		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		
CPJ15	1-1/2	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	66	
		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			
		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 †Not for sale in states following Proposition 65 or AB 1953



Jet Pump Accessories, Service Kits

"EK" SHALLOW WELL TANK MOUNTED SYSTEMS



Model	HP	Tank Type	Approximate Dimensions - Inches			Ship Wt.
			L	W	H	
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

†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
148143	1/3 HP CPJ Jet Pumps 1/2 HP EK Jet Pump	Impeller, Diffuser, Rotary Seal, Square Cut Ring, Diffuser Rubber
148141	1/2 HP CPJ & CPH Jet Pumps 3/4 HP EK Jet Pump	
148140	3/4 HP CPJ & CPH Jet Pumps 1 HP EK Jet Pump	
023705	1 HP CPJ, CPH & VPH10 Jet Pumps	

