



FLINT & WALLING

Zoeller Family of Water Solutions™

FW1674

0414B

Supersedes

0415

Four-Inch Submersible Pumps

**2 and 3 wire
1/2 thru 7 1/2 HP
5 to 85 GPM**

Series "4F"

Low, medium and high capacity submersible pumps for home, farm, industry and many other domestic and commercial applications

- Stainless steel or cast iron suction and discharge housings
- Stainless steel pump shell
- Stainless steel hex drive shaft and coupling
- Stainless steel screen
- Corrosion resistant cable guard
- NEMA standard motor mounting ring
- Field replaceable cartridge assembly, lead guard, motor and motor lead wire assembly
- Flint & Walling or Franklin NEMA-mount stainless steel motors with lightning protection - (F&W available up to 2 HP)



5 thru 27 GPM
"A" Captain®
Series with Cast
Iron Suction
& Discharge
Housing



5 thru 27 GPM
"S" Commander®
Series with 304
S.S. Suction
& Discharge
Housing



35 thru 85 GPM
"A" Captain®
Plus Series
with Cast Iron
Suction and
Discharge
Housing



35 thru 85 GPM
"S" Commander®
Plus Series with
304 S.S. Suction
and Discharge
Housing



For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301



MATERIAL CONSTRUCTION

Component Description	Commander® "S" Series 5, 7, 10, 15, 19 & 27 GPM 1/2 thru 5 HP	Captain® "A" Series 5, 7, 10, 19 & 27 GPM 1/2 thru 5 HP
Discharge Head	Stainless Steel, 1-1/4" NPT, safety rope eyelet included	Cast Iron, 1-1/4" NPT, safety rope eyelet included
Check Valve Poppet	Internal removable, with elastomer sealing ring	
Top Bearing	Closed sintered lead free sleeve bearing	
Pump Shell	Heavy wall stainless steel	Heavy wall stainless steel
Cable Guard	Stainless steel	Stainless steel or Crush-proof PVC
Staging*	Noryl® impellers and diffusers; type stainless steel floating bearing inserts and acetal diffuser plates	Noryl® impellers and diffusers; type stainless steel floating bearing inserts and acetal diffuser plates
Pump Shaft*	Stainless steel hex shaft with one piece motor-to-shaft coupling	Stainless steel hex shaft with one piece motor-to-shaft coupling
Motor Bracket	NEMA standard, stainless steel with stainless steel suction screen	NEMA standard, cast iron with stainless steel suction screen
Motor	All pumps driven by a complete selection of Flint & Walling or Franklin stainless steel two wire or three wire motors. (F&W available up to 2 HP).	
Motor Controls	F&W control boxes required for three-wire single phase motors. Franklin control boxes available on request. Magnetic starters and heaters are required for three phase models. Purchase at your local electrical outlet.	

* Replacement cartridge assembly available for all models. Includes all necessary parts to restore pumps to like-new performance. No special tools required. Noryl® is a registered trademark of General Electric.

For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301



MATERIAL CONSTRUCTION

Component Description	Commander® Plus "S" Series 35, 55 & 85 GPM 1 thru 7-1/2 HP	Captain® Plus "A" Series 35, 55 & 85 GPM 1 thru 7-1/2 HP
Discharge Head	Stainless Steel, 2" NPT, safety rope eyelets included	Cast Iron, 2" NPT
Check Valve Poppet	Check valve not included	Check valve not included
Top Bearing	Closed sintered lead free sleeve bearing	Closed sintered lead free sleeve bearing
Pump Shell	Heavy wall stainless steel	Heavy wall stainless steel
Cable Guard	Stainless steel	Stainless steel or Crush-proof PVC
Staging*	Noryl® impellers and diffusers; stainless steel floating bearing inserts and acetal diffuser plates	Noryl® impellers and diffusers; stainless steel floating bearing inserts and acetal diffuser plates
Pump Shaft*	Stainless steel hex shaft with one piece motor-to-shaft coupling	Stainless steel hex shaft with one piece motor-to-shaft coupling
Motor Bracket	NEMA standard, stainless steel with stainless steel suction screen	NEMA standard, cast Iron with stainless steel suction screen
Motor	All pumps driven by a complete selection of Flint & Walling or Franklin stainless steel two wire or three wire motors. (F&W available up to 2 HP). Order motors separately.	
Motor Controls	F&W control boxes required for three-wire single phase motors. Franklin control boxes available on request. Magnetic starters and heaters are required for three phase models. Purchase at your local electrical outlet.	

* Replacement cartridge assembly available for all models. Includes all necessary parts to restore pumps to like-new performance. No special tools required. Noryl® is a registered trademark of General Electric.

For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301



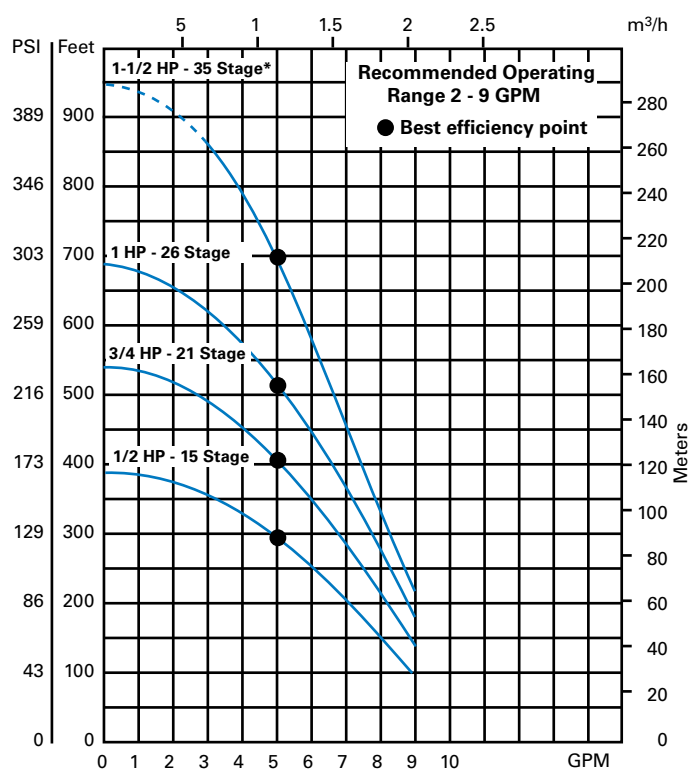
4" 5 GPM • 1/2 thru 1 1/2 HP • 3450 RPM • 60 Cycle

HP Size and Model No.	Stages	Weight		Disch. Pressure PSI	DEPTH TO WATER LEVEL IN FEET																							Max. Pressure	
		Motor Type	Ship Wt.		CAPACITIES IN GALLONS PER MINUTE																								
					20	40	60	80	100	120	140	160	180	200	225	250	275	300	325	350	400	450	500	550	600	650	700	800	Ft.
1/2 HP 4F05A05 4F05S05 4F05G05	15	1 PH 3 Wire	29	0			8.8	8.4	8.1	7.7	7.3	6.9	6.5	6.0	5.5	4.8	4.1	3.3	2.3	390	168								
		1 PH 2 Wire	29	80	8.3	7.9	7.5	7.1	6.7	6.3	5.9	5.4	4.9	4.2	3.6	2.7													
3/4 HP 4F05A07 4F05S07	21	1 PH 3 Wire	35	0					8.9	8.7	8.4	8.2	7.9	7.7	7.2	6.9	6.5	6.1	5.7	5.3	4.3	3.0	550	238					
		1 PH 2 Wire	35	80	8.7	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.5	6.2	5.7	5.3	4.9	4.4	3.1										
1 HP 4F05A10 4F05S10	26	1 PH 3 Wire	43	0					9.0	8.8	8.6	8.4	8.2	7.9	7.7	7.4	7.2	6.9	6.6	6.0	5.3	4.6	3.7	2.4	695	300			
		1 PH 2 Wire	43	80	8.5	8.3	8.1	7.9	7.7	7.5	7.2	7.0	6.7	6.4	6.1	5.8	5.5	4.7	3.8										
1-1/2 HP 4F05A15 4F05S15	35	1 PH 3 Wire	55	0					9.0	8.9	8.7	8.6	8.4	8.2	8.0	7.9	7.7	7.5	7.3	7.1	950	411							
		1 PH 2 Wire	55	80			8.8	8.6	8.5	8.4	8.2	8.0	7.9	7.7	7.5	7.3	7.1												
		3 PH 3 Wire	52	80	8.8	8.6	8.5	8.4	8.2	8.0	7.9	7.7	7.5	7.3	7.1														

NOTE: Pipe friction loss in drop pipe is not included in chart above.
1/2 thru 2 HP, 1 PH pumps feature Flint & Walling motors.



5 GPM • 1/2-1 1/2 HP



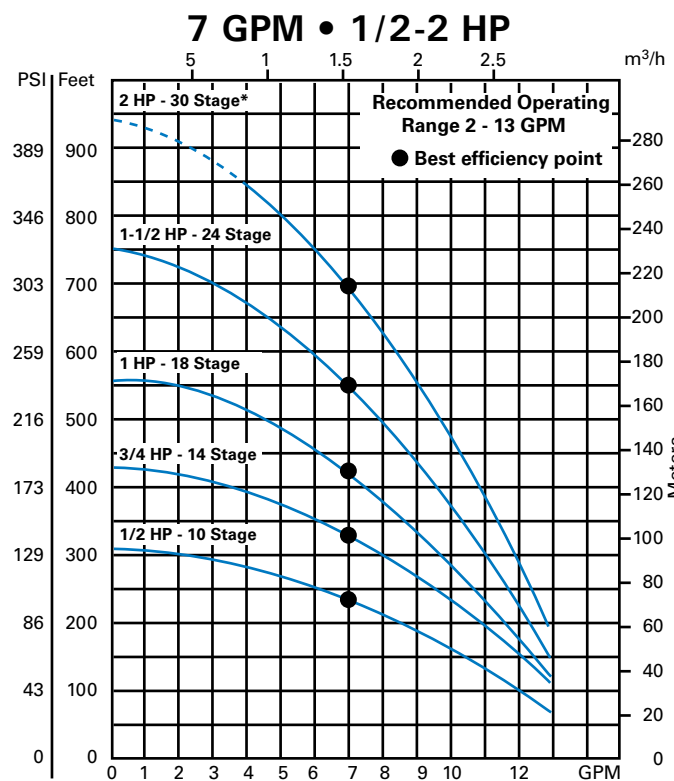
* Pumps marked with asterisks not to be operated at GPM flows indicated by dotted line.

For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301

4" 7 GPM • 1/2 thru 2 HP • 3450 RPM • 60 Cycle

HP Size and Model No.	Stages	Weight		Disch. Press. PSI	CAPACITIES IN GALLONS PER MINUTE																							Max. Pressure	
		Motor Type	Ship Wt.		CAPACITIES IN GALLONS PER MINUTE																								
					20	40	60	80	100	120	140	160	180	200	225	250	275	300	325	350	400	450	500	550	600	650	700	800	Ft.
1/2 HP 4F07A05 4F07S05 4F07G05	10	1 PH 3 Wire	28	0			13.0	12.4	11.7	11.0	10.4	9.8	9.0	8.2	7.2	5.8	4.2	2.1	310	134									
		1 PH 2 Wire	28	80	12.9	12.2	11.6	10.9	10.3	9.6	8.9	8.1	7.2	6.1	4.7	2.0													
3/4 HP 4F07A07 4F07S07 4F07G07	14	1 PH 3 Wire	33	0			12.7	12.4	12.9	12.5	12.0	11.6	11.1	10.7	10.0	9.3	8.5	7.8	6.9	6.0	3.4	430	186						
		1 PH 2 Wire	33	80	12.2	11.8	11.3	10.9	10.3	9.8	9.2	8.6	8.0	7.2	6.3	5.3	3.9												
1 HP 4F07A10 4F07S10 4F07G10	18	1 PH 3 Wire	37	0			12.7	12.4	12.7	12.4	12.1	11.7	11.4	10.9	10.6	10.1	9.7	9.2	8.7	7.8	7.5	6.3	4.7	2.1	560	242			
		1 PH 2 Wire	37	80	12.0	11.9	11.5	11.2	10.8	10.4	10.1	9.7	9.2	8.7	8.1	7.6	7.0	6.3	4.7	2.1									
1-1/2 HP 4F07A15 4F07S15	24	1 PH 3 Wire	51	0			12.8	12.6	12.3	12.1	11.8	11.6	11.3	10.9	10.6	10.2	9.9	9.5	9.1	8.7	7.9	7.0	6.0	4.8	3.3	745	322		
		1 PH 2 Wire	51	80	12.2	12.0	11.7	11.5	11.2	10.9	10.6	10.2	9.9	9.5	9.1	8.7	8.1	7.1	6.1	4.9	3.3								
		3 PH 3 Wire	46	80	11.0	10.7	10.5	10.2	9.9	9.6	9.2	8.9	8.5	8.1	7.6	7.2	6.2	5.0	3.5										
2 HP 4F07A20 4F07S20	30	1 PH 3 Wire	61	0				12.7	12.5	12.3	12.1	11.9	11.6	11.3	11.1	10.8	10.5	10.2	9.7	9.1	8.4	7.7	7.0	6.2	945	409			
		3 PH 3 Wire	51	80	11.8	11.6	11.4	11.1	10.9	10.6	10.3	10.0	9.7	9.1	8.5	7.8	7.1	6.3	5.5	4.4									

NOTE: Pipe friction loss in drop pipe is not included in chart above.
1/2 thru 2 HP, 1 PH pumps feature Flint & Walling motors.



* Pumps marked with asterisks not to be operated at GPM flows indicated by dotted lines.

For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301



HP Size And Model No.	Stages	WEIGHT		Disch. Press. PSI	DEPTH TO WATER LEVEL IN FEET																							Max. Pressure	
		Motor Type	Shp. Weight		20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	350	400	450	500	550	600	650	700	750	800
3/4 HP 4F27A07 4F27S07	6	1 PH 3 Wire	33	0	32	29	26	30	27	24	21	16	5															180	78
		1 PH 2 Wire	33	0	25	22	18	23	20	15																		180	78
1 HP 4F27A10 4F27S10 4F27G10	7	1 PH 3 Wire	35	0	33	31	29	34	32	27	24	22	18	13														215	93
		1 PH 2 Wire	35	0	28	25	23	29	26	20	17	10																215	93
1-1/2 HP 4F27A15 4F27S15 4F27G15	10	1 PH 3 Wire	43	0	31	30	28	34	33	31	29	28	26	24	22	20	17	14	6									305	132
		1 PH 2 Wire	43	0	28	26	24	30	29	27	25	24	22	19	11													305	132
		3 PH 3 Wire	38	0	31	30	28	34	33	31	29	28	26	24	22	20	17	14	6									305	132
2 HP 4F27A20 4F27S20	12	1 PH 3 Wire	44	0	31	30	28	34	33	31	29	28	26	24	22	20	17	13	9									360	156
		3 PH 3 Wire	46	0	31	30	28	34	33	31	29	28	26	24	22	20	17	13	9									360	156
3 HP* 4F27A30 4F27S30	17	1 PH 3 Wire	73	0	31	30	28	34	33	31	29	28	26	24	22	20	17	11										515	223
		3 PH 3 Wire	73	0	31	30	28	34	33	31	29	28	26	24	22	20	17	11										515	223
5 HP* 4F27A50 4F27S50	29	1 PH 3 Wire	116	0	31	30	28	34	33	31	29	28	26	24	22	20	17	11										880	380
		3 PH 3 Wire	80	0	31	30	28	34	33	31	29	28	26	24	22	20	17	11										880	380

NOTE: Pipe friction loss in drop pipe is not included in chart above.

*For 3 HP and above, refer to motor manufacturer's handbook for proper flow rates to cool motor.

1/2 thru 2 HP, 1 PH pumps feature Flint & Walling motors.

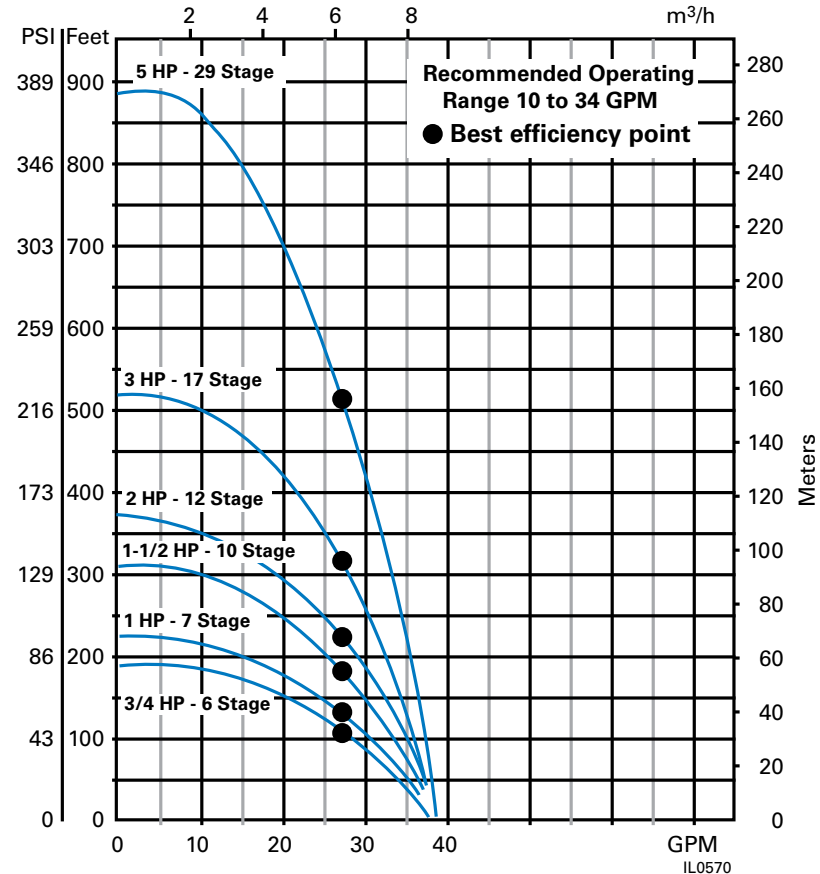
HP Size And Model No.	Stages	Phase	WEIGHT		Disch. Press. PSI	DEPTH TO WATER LEVEL IN FEET																							Max. Pressure	
			Pump End	Motor End		20	40	60	80	100	120	140	160	180	200	220	240	260	300	350	400	450	500	550	600	650	700	Ft.	PSI	
1 HP 4F35A10 4F35S10	4	1	11	23	0	42	37	32	47	43	38	33	27															140	67	
					0	30	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	140	67
1-1/2 HP 4F35A15 4F35S15	5	1	12	28	0	46	43	39	47	43	40	36	31	25	10													180	78	
		3	12	25	0	38	33	28	33	33	30	23	18	13	10													180	78	
2 HP 4F35A20 4F35S20	7	1	14	30	0	47	45	42	50	48	45	43	40	37	34	30	26	19										245	106	
		3	14	28	0	41	38	35	41	38	35	32	28	22	22	22	22	22	22	22	22	22	22	22	22	22	22	245	106	
3 HP* 4F35A30 4F35S30	10	1	17	52	0	48	47	45	49	47	45	44	42	40	38	36	33	28	17									355	154	
		3	17	43	0	45	43	41	45	43	41	39	37	35	32	29	26	22	17									355	154	
5 HP* 4F35A50 4F35S50	16	1	23	69	0	49	48	46	50	49	48	46	45	44	42	41	40	39	36	32	28	22						560	245	
		3	23	53	0	47	46	44	47	46	45	44	42	41	40	39	37	35	32	28	22	22						560	245	
7-1/2 HP* 4F35A75 4F35S75	23	3	31	69	0	49	48	46	50	49	48	46	45	44	42	41	40	39	36	32	28	22						810	350	
				60	0	48	47	46	49	48	47	45	44	42	41	40	39	37	35	32	28	22						810	350	

NOTE: Pipe friction loss in drop pipe is not included in chart above.

*For 3 HP and above, refer to motor manufacturer's handbook for proper flow rates to cool motor.

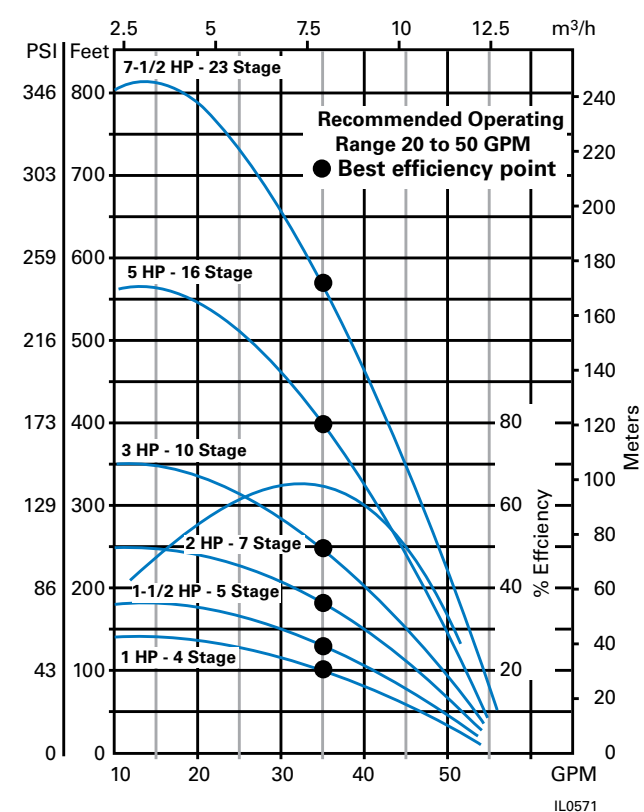
1/2 thru 2 HP, 1 PH pumps feature Flint & Walling motors.

27 GPM • 3/4-5 HP



For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301

35 GPM • 1-7 1/2 HP



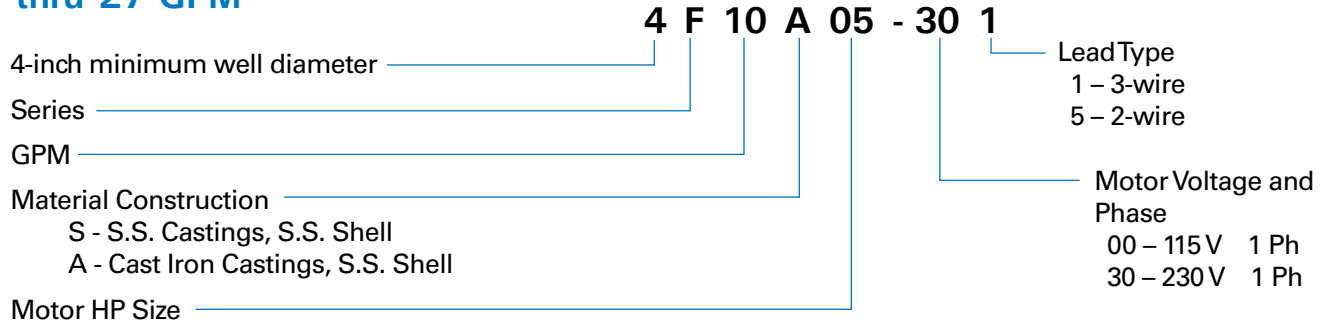
For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301

Model Number Code



FLINT & WALLING
Zoeller Family of Water Solutions™

5 thru 27 GPM



1/2 - 1-1/2 HP Single phase pump and motor assembly includes pump/motor unit with motor leads.

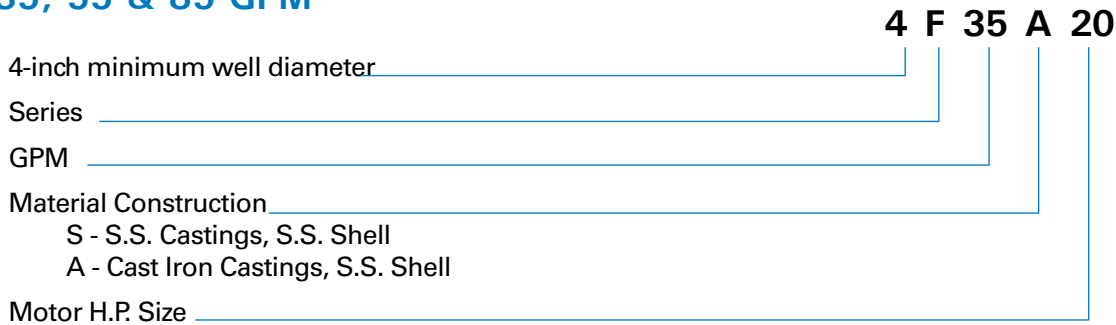
Order control box for 3-wire units separately.

On 2 - 7-1/2 HP and all 3 phase units, order pump, motor and control box separately. Magnetic starters must be purchased locally. Lead wire assembly included with motor.

1/2 thru 2 HP, 1 PH pumps feature Flint & Walling motors.

For F&W pump ends with Franklin motor, please add an "M" prefix to callout number when ordering. Example: M4F10A05301

35, 55 & 85 GPM



On 35, 55 & 85 GPM units order pump, motor and control box separately. Magnetic starters must be purchased locally. Lead wire assembly included with motor.

HP	Voltage & Phase	Motor Type	F&W Motor Thrust Rating	F&W Motor Order No.	F&W Control Box Order Number	Motor Thrust Rating	Motor Order Number	Control Box Order Number
1/2	115V/1PH	3-Wire	300#	137426	022875	300#	M137426	127185
	230V/1PH	3-Wire	300#	137428	022876	300#	M137428	127189
	115V/1PH	2-Wire	300#	137412	N/A	300#	M137412	N/A
3/4	230V/1PH	2-Wire	300#	137414	N/A	300#	M137414	N/A
	230V/1PH	3-Wire	300#	137430	022877	300#	M137430	127197
	230V/1PH	2-Wire	300#	137416	N/A	300#	M137416	N/A
1	230V/1PH	3-Wire	650#	137432	022878	650#	M137432	126319
	230V/1PH	2-Wire	650#	137418	N/A	650#	M137418	N/A
	230V/1PH	3-Wire	650#	137434	022879	650#	M137434	133589
1-1/2	230V/1PH	2-Wire	650#	137420	N/A	650#	M137420	N/A
	200V/3PH	3-Wire	--	N/A	N/A	650#	M137457	N/A
	230V/3PH	3-Wire	--	N/A	N/A	650#	M137458	N/A
	460V/3PH	3-Wire	--	N/A	N/A	650#	M137460	N/A
2	230V/1PH	3-Wire	650#	137435	N/A	650#	M137435	137224+ 126321++
	200V/3PH	3-Wire	--	N/A	N/A	650#	M137461	N/A
	230V/3PH	3-Wire	--	N/A	N/A	650#	M137462	N/A
	460V/3PH	3-Wire	--	N/A	N/A	650#	M137464	N/A

HP	Voltage & Phase	Motor Type	F&W Motor Thrust Rating	F&W Motor Order No.	F&W Control Box Order Number	Motor Thrust Rating	Motor Order Number	Control Box Order Number
3	230V/1PH	3-Wire	--	N/A	N/A	900#	M139422	136800+ 126322++
	200V/3PH	3-Wire	--	N/A	N/A	900#	M139423	N/A
	230V/3PH	3-Wire	--	N/A	N/A	900#	M139424	N/A
	460V/3PH	3-Wire	--	N/A	N/A	900#	M139425	N/A
5	230V/1PH	3-Wire	--	N/A	N/A	1500#	M137456	135269+ 137225++
	200V/3PH	3-Wire	--	N/A	N/A	1500#	M137469	N/A
	230V/3PH	3-Wire	--	N/A	N/A	1500#	M137470	N/A
	460V/3PH	3-Wire	--	N/A	N/A	1500#	M137472	N/A
7-1/2	200V/3PH	3-Wire	--	N/A	N/A	1500#	M137473	N/A
	230V/3PH	3-Wire	--	N/A	N/A	1500#	M137474	N/A
	460V/3PH	3-Wire	--	N/A	N/A	1500#	M137476	N/A

N/A Not available
+ Deluxe control box – includes magnetic contactor. Recommended for water systems which utilize pressure switch.
++ Standard control box.