



FMCWS-225F-HYD Series Oasis™ High Performance Hydraulic Motor Driven Centrifugal Pump

The Pro 5 Series 225 Models provide the convenience of 220 x 220 flanged ports for lower flow applications and easy replacement of similar models. The compact, close coupled design includes several new features to maximize life and reliability. E-coat corrosion protection and larger bearings provide longer life. Oasis™ Wet Seal Technology prevents run dry failure and isolates seals from harsh chemicals. Interchangeability of parts within the Pro 5 Series simplifies stock and reduces inventory needed for field support.



SPECIFICATIONS

Pump Specifications

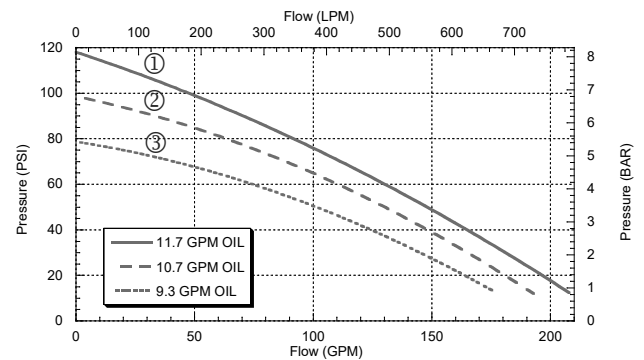
Ports	220 x 220 Flange	
Max. Flow	220 GPM (833 LPM)	
Max. Pressure	120 PSI (8.3 BAR) for 304	130 PSI (9.0 BAR) for 306
Construction	E-coated Cast Iron	
Seal	Dual carbon /ceramic/ FKM with Oasis™ WetSeal Technology	
Shaft	Stainless Steel	
Bearings	Sealed for long life	
Impeller	Thermoplastic with Stainless Steel Hub	
Wear Ring	Stainless Steel	

Motor Specifications

Type	High Efficiency Close Coupled Gear Motor			
Seal	High Pressure Double Lip Teflon			
Internal Coasting Check	Prevents Damaging Pressure Spikes when Turned Off			
Size	-304	-304 PWM	-306	-310
Maximum Flow	11.7 GPM (44.3 LPM)		16.7 GPM (63.2 LPM)	24.0 GPM (90.9 LPM)
Maximum Pressure	2500 PSI (172.4 BAR)		2500 PSI (172.4 BAR)	1650 PSI (113.8 BAR)
Bypass Needle	Up to 9 GPM (34 LPM)	Not included	Up to 9 GPM (34 LPM)	Up to 9 GPM (34 LPM)
Use on HYD Systems	PC, LS, and OC	PC, LS	PC , LS, and OC	OC
External Reverse Check	✓ 1/2" FNPT	✓ #10 SAE	✓ 1/2" FNPT	✓ 1/2" FNPT
Inlet Adapter / Restrictor Body 1/2"FNPT	✓	✗	✓	✓
Restrictor Insert	✓	✗	✓	✗
-304 PWM	Integrated 12V Proportional and Pressure Relief Valves for Precision Applications using Pulse Width Modulated control systems.			
Case Drain (Option)	Available	Not Available	Not Available	
Flow Limiter (Optional)	LS-304N	Do not use	--	
Available Models				
	FMCWS-225F-HYD-304		FMCWS-225F-HYD-304-PWM	
	FMCWS-225F-HYD-306		FMCWS-225F-HYD-310	

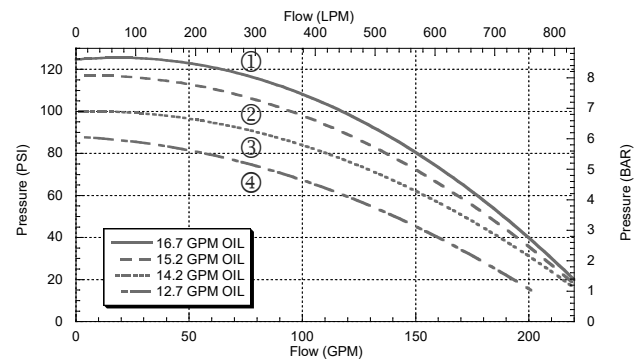
PERFORMANCE

FMCWS-225F-HYD-304



CURVE	-304	
1	11.7 GPM	44.3 LPM
2	10.7 GPM	40.5 LPM
3	9.3 GPM	35.2 LPM

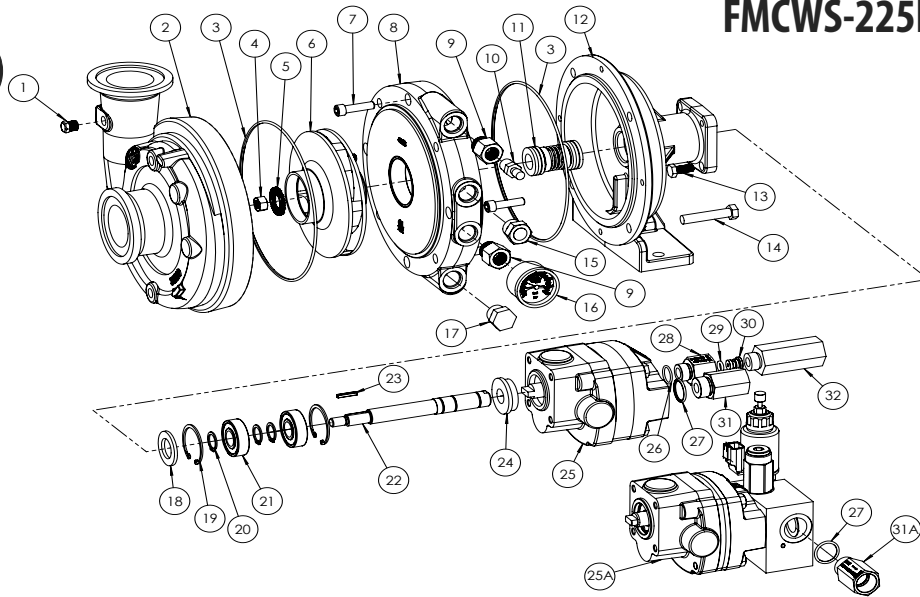
FMCWS-225F-HYD-306



CURVE	-306	
1	16.7 GPM	63.2 LPM
2	15.2 GPM	57.5 LPM
3	14.2 GPM	53.8 LPM
4	12.7 GPM	48.1 LPM



FMCWS-225F-HYD Series

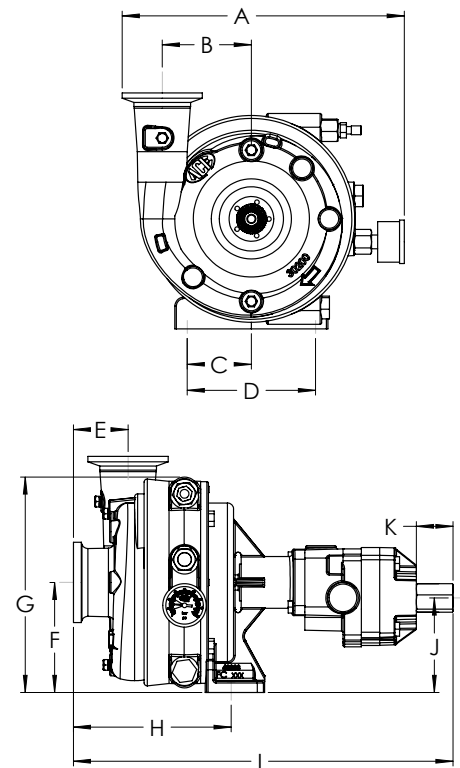


PARTS LIST

REF. #	PART NUMBER	EDP #	DESCRIPTION	REQ.
1	BAC-53	41100	Pipe plug	3
1	41120	41120	Pipe plug, stainless steel (optional)	3
2	BAC-12-225-FLG	30200	Volute, cast iron, 220 x 220 flanged, E-coated	1
3 ^⓪	BAC-4-150	40015	O-ring, body seal	2
4	BAC-23-B-SS	40393	Nut, 3/8" NF, SS	1
5	BAC-24-B-SS	42702	Washer, 3/8" SS, vibration proof	1
6	BAC-26-255-P	40454	Impeller, thermoplastic, keyway	1
7	72762	72762	Bolt, 5/16"-18 x 1-1/4", socket head, SS	4
8	BAC-16	45285	Seal plate, cast iron, e-coated	1
9	41107	41107	Bushing, #8 SAE x 1/4" FNPT, w/ o-ring	2
10	41316	41316	Air valve, 1/4" NPT	1
11 ^⓪	BAC-7-WS	40139	Seal, dual seal assembly, Type 21, 5/8" shaft	1
12	BAC-14-5-HYD	40288	Mounting frame, cast iron, e-coated	1
13	41330	41330	Cap screw, 5/16"-16 x 3/4", hex head, motor to pump	2
14	BAC-42	40970	Cap screw, 5/16"-16 x 2", hex head	4
15	55851	55851	Sight gauge, #8 SAE, with o-ring	1
16	50150	50150	Pressure gauge, 0-160 PSI, 1/4" NPT	1
17	41108	41108	Plug, #8 SAE, hex head	1
18	BAC-54	41130	Slinger	1
19	BACH-33	40820	Snap ring, internal, mounting frame	2
20	BACH-32-HD	40385	Snap ring, external, shaft	3
21	40880	40880	Bearing	2
22	BAC-6-255-HYD-SS-WS	41583	Shaft, .625 DIA, 255, SS, WS	1
23	BAC-25	40425	Key, 1/8" x 1/8" x 13/16" SS	1
24	S305	40163	Seal support spacer	1
25	BAC-75-HYD-304	41343	Hydraulic motor, 9 GPM (includes 24, 25, 26, 27, 28, 29, 30, 31)	1
25	BAC-75-HYD-306	41312	Hydraulic motor, 16.5 GPM (includes 24, 25, 26, 27, 28, 29, 30A, 31)	1
25A	BAC-75-HYD-304-PWM	41348	Hydraulic motor, integrated PWM valve, 9 GPM (includes 24, 25A, 26, 31A)	1
26	41875	41875	O-ring, #8 SAE fitting	2
27	41445	41445	O-ring, #10 SAE fitting	1
28	BAC-80-8SAE	41455	Body, restrictor orifice, #8 SAE x 1/2" NPT, w/ O-ring	1
29	41448	41448	O-ring, restrictor	1
30	BAC-79-8	41447	Orifice insert, restrictor, w/ O-ring (304) (Do not use with 304-PWM)	1
30A	BAC-79-9	41449	Orifice insert, restrictor, w/ O-ring (306)	1
31	BAC-78-10SAE	41442	Reverse check assembly, #10 SAE x 1/2" NPT, w/ O-ring	1
31A	BAC-78-10X10SAE	41467	Reverse check assembly, #10 SAE x #10 SAE, w/ O-ring	1
32	LS-304N	41429	Flow limiting valve, #8 MSAE x 1/2" FNPT (304) (optional)	1
*33 ^⓪	55032	55032	Barrier fluid, quart	-
⓪	RK-FMCWS-PRO5	52728	Repair kit, includes items 3 (2 each), 11, and 34	-
*	RK-BAC-75-HYD-300-L	41362	Repair kit; 300 series hyd motor with high pressure lip seal	-

* Not shown in parts diagram

DIMENSIONS



Ref.	A	B	C	D	E	F	G	H	K
Inches	11.50	3.65	2.63	5.25	2.23	4.50	8.81	6.45	1.50
MM	292.1	92.7	66.8	133.4	56.6	114.3	223.8	163.8	38.1

-304		-304-PWM	
Ref.	I	J	I
Inches	15.53	3.86	15.68
MM	394.5	98.0	398.3

-306		-310	
Ref.	I	J	I
Inches	15.73	3.86	16.11
MM	399.5	98.0	409.2

3D Model Available

<https://www.3DContentCentral.com/parts/supplier/Ace-Pumps.aspx>