



FMCWS-255F-HYD High Performance Hydraulic Motor Driven Centrifugal Pump



The Pro 5 Series has the same compact, close coupled design that you have come to expect with several new features to maximize life and reliability. The pump life has been enhanced with standard E-coated castings, an optional chemical resistant stainless steel wet end, and larger bearings. 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.



255 PRO 5 SERIES

SPECIFICATIONS

Pump Specifications	
Ports	300 x 220 Flange
Max. Flow	260 GPM (984 LPM) for 304 260 GPM (984 LPM) for 306
Max. Pressure	120 PSI (8.3 BAR) for 304 130 PSI (9.0 BAR) for 306
Construction	E-coated Cast Iron or 316 Stainless Steel (FS)
Seal	Carbon ceramic / FKM
Shaft	Stainless Steel
Bearings	Sealed for long life
Impeller	Thermoplastic with Stainless Steel Hub
Wear Ring	Stainless Steel

Motor Specifications

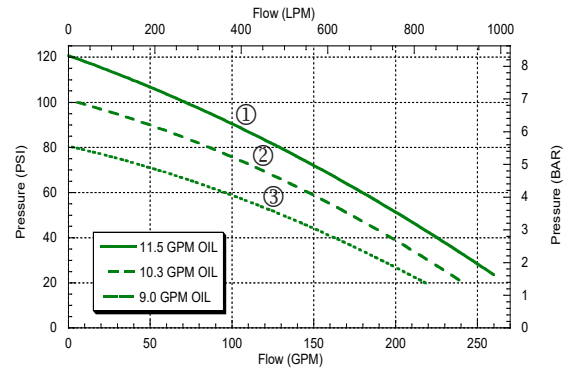
Type	High Efficiency Close Coupled Gear Motor		
Seal	High Pressure Double Lip Teflon		
Internal Coasting Check	Prevents Damaging Pressure Spikes when Turned Off		
Size	-304	-304 PWM	-306
Maximum Flow	11 GPM (41.6 LPM)	16.5 GPM (62.5 LPM)	
Maximum Pressure	2500 PSI (172.4 BAR)	2500 PSI (172.4 BAR)	
Bypass Needle	Up to 9 GPM (34 LPM)	Not included	Up to 9 GPM (34 LPM)
Use on HYD Systems	PC, LS, and OC	PC, LS	PC, LS, and OC
External Reverse Check	✓	✓	✓
Inlet Adapter / Restrictor Body 1/2" FNPT	1/2" FNPT	#10 SAE	1/2" FNPT
Restrictor Insert	✓	×	✓
-304 PWM	Integrated 12V Proportional Control Valve and Pressure Relief Valve for use in Precision Applications using Pulse Width Modulated control systems.		
Case Drain (Option)	Available	Not Available	Not Available
Flow Limiter (Optional)	LS-304N	Do not use	LS-306N

Available Models

FMCWS-255F-HYD-304	FMCWS-255FS-HYD-304
FMCWS-255F-HYD-304-PWM	FMCWS-255FS-HYD-304-PWM
FMCWS-255F-HYD-306	FMCWS-255FS-HYD-306

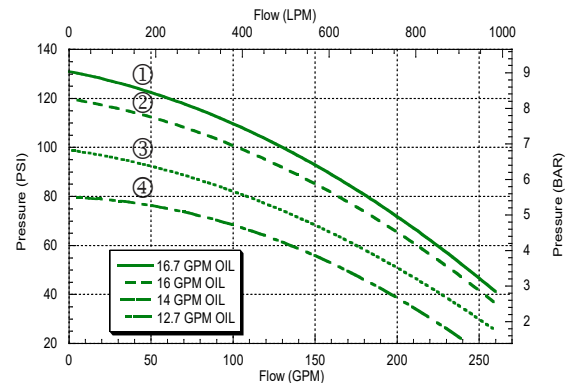
PERFORMANCE

FMCWS-255F-HYD-304



CURVE	-304	
1	11.5 GPM	43.5 LPM
2	10.3 GPM	39.0 LPM
3	9.0 GPM	34.1 LPM

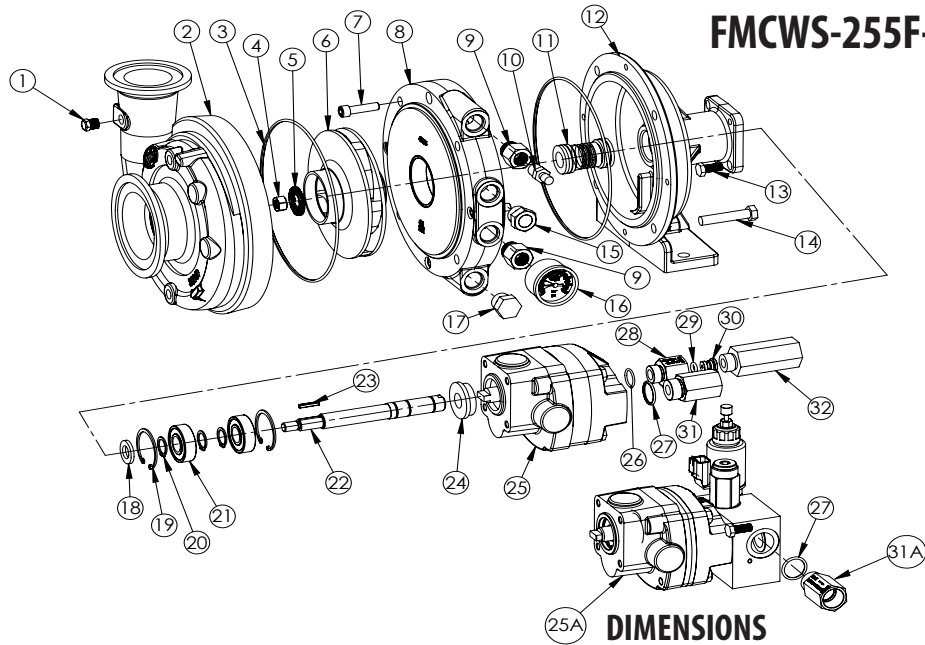
FMCWS-255F-HYD-306



CURVE	-306	
1	16.7 GPM	63.2 LPM
2	16.0 GPM	60.6 LPM
3	14.0 GPM	53.0 LPM
4	12.7 GPM	48.1 LPM



FMCWS-255F-HYD Series

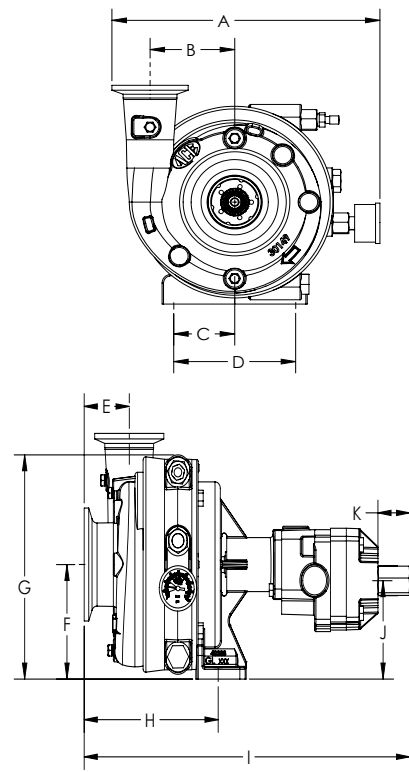


PARTS LIST

REF. #	PART NUMBER	EDP #	DESCRIPTION	REQ.
1	BAC-53	41100	Pipe plug	3
1	41120	41120	Pipe plug, stainless steel (optional)	3
2A	BAC-12-255-FLG	30149	Volute , cast iron, 300 x 220 flanged, E-coated	1
2B	BAC-12-255-FLG-SS	30142	Volute , stainless steel, 300 x 220 flanged	1
3 [Ⓞ]	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
8A	BAC-16	45285	Seal plate, cast iron, e-coated	1
8B	BAC-16-SS	45286	Seal plate, stainless steel	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 [Ⓞ]	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 [Ⓞ]	55032	55032	Barrier fluid, quart	-
Ⓞ	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	2.14	4.50	8.81	6.36	1.50
MM	292.1	92.7	66.8	133.4	54.4	114.3	223.8	161.5	38.1

		-304		-304-PWM	
Ref.	I	J	I	J	
Inches	15.43	3.86	15.58	3.88	
MM	391.9	98.0	395.7	98.5	

		-306	
Ref.	I	J	
Inches	15.61	3.86	
MM	396.5	98.0	

3D Model Available

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