

NFA 1901 RATING CHART

AP FLEX SERIES PTO PUMP

FSG-CRV-01497

RATED 250 GPM @ 150 PSI TO 500 GPM @ 150 PSI
SINGLE STAGE PUMP- 190.5 mm (7.50 inch) DIAMETER IMPELLER

MAXIMUM ELEVATION AT WHICH THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF 10 FT LIFT, 20 FT OF SUCTION HOSE & STRAINER.
 STANDARD TEST CONDITIONS AND MAXIMUM ELEVATION DO NOT INCLUDE TRUCK PIPING LOSSES.

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|--------------------------------------|---|-------------------------------------|
| AP25 3 IN. HOSE, 6220 FEET (1890 m) | AP30 4-1/2 IN. HOSE, 9170 FEET (2790 m) | AP35 6 IN. HOSE, 9480 FEET (2880 m) |
| AP30 3 IN. HOSE, 3140 FEET (950 m) | AP35 4-1/2 IN. HOSE, 8090 FEET (2460 m) | AP50 6 IN. HOSE, 6380 FEET (1940 m) |
| AP25 4 IN. HOSE, 10320 FEET (3140 m) | AP50 4-1/2 IN. HOSE, 3850 FEET (1170 m) | |
| AP30 4 IN. HOSE, 8610 FEET (2620 m) | AP35 5 IN. HOSE, 8830 FEET (2690 m) | |
| AP35 4 IN. HOSE, 7360 FEET (2240 m) | AP50 5 IN. HOSE, 5200 FEET (1580 m) | |

RATED CAPACITY (US GPM)	CAPACITY (US GPM)	PRESSURE (PSIG)	POWER REQUIRED (HP)	GEARBOX INPUT DRIVE SHAFT (Rev/Min) ²															
				3.74		2.91		2.60		2.33		1.90		1.64		1.31		1.14	
				RATIO	TORQUE (LBS-FT)	RATIO	TORQUE (LBS-FT)	RATIO	TORQUE (LBS-FT)	RATIO	TORQUE (LBS-FT)	RATIO	TORQUE (LBS-FT)	RATIO	TORQUE (LBS-FT)	RATIO	TORQUE (LBS-FT)	RATIO	TORQUE (LBS-FT)
250	PUMP MODEL			AP25-37F		AP25-29F		AP25-26F		AP25-23F		AP25-19F		AP25-16F		AP25-13F		AP25-11F	
	250	150	42	1200	185	1540	144	1730	128	1930	115	2360	94	2730	81	3440	64	3930	56
	250	165	46	1250	194	1610	150	1800	134	2000	121	2460	98	2840	85	3580	68	4090	59
	175	200	50	1370	192	1750	150	1960	134	2190	120	2680	98	3100	85	3900	67	4470	59
	125	250	63	1520	217	1950	169	2180	151	2430	136	2980	111	3440	96	4330	76	4960	66
300	PUMP MODEL			AP30-37F		AP30-29F		AP30-26F		AP30-23F		AP30-19F		AP30-16F		AP30-13F		AP30-11F	
	300	150	49	1240	208	1590	162	1780	145	1990	129	2440	106	2820	91	3550	73	4060	63
	300	165	53	1290	216	1650	169	1850	150	2060	135	2530	110	2920	95	3680	76	4210	66
	210	200	56	1390	211	1780	165	1990	147	2220	132	2720	108	3150	93	3960	74	4530	65
	150	250	68	1530	232	1960	181	2200	161	2450	145	3010	118	3480	102	4380	81	5010	71
350	PUMP MODEL			AP35-37F		AP35-29F		AP35-26F		AP35-23F		AP35-19F		AP35-16F		AP35-13F		AP35-11F	
	350	150	56	1280	229	1640	179	1840	160	2040	144	2510	117	2900	101	3650	80	4180	70
	350	165	61	1330	240	1710	187	1910	167	2130	150	2610	122	3020	106	3810	84	4350	73
	245	200	62	1400	232	1800	180	2020	161	2250	144	2760	118	3190	102	4010	81	4590	71
	175	250	73	1540	247	1980	192	2220	172	2470	154	3030	126	3500	109	4410	86	5050	75
500	PUMP MODEL			AP50-37F		AP50-29F		AP50-26F		AP50-23F		AP50-19F		AP50-16F		AP50-13F		AP50-11F	
	500	150	76	1360	295	1740	231	1950	206	2170	185	2660	151	3080	130	3870	104	4430	91
	500	165	81	1400	305	1790	239	2010	213	2240	191	2740	156	3170	135	3990	107	4570	94
	350	200	75	1430	274	1840	213	2060	190	2290	171	2810	139	3250	120	4090	96	4680	84
	250	250	80	1550	272	1990	212	2230	189	2490	170	3050	138	3530	120	4440	95	5080	83

NOTES:

1. GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.
2. SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.

THIS CHART IS TO BE USED TO SELECT THE PROPER PUMP GEARBOX RATIO. THE INPUT SPEED AND POWER REQUIREMENTS SHOWN ARE NOMINAL ±5% FIGURES. WHEN USING THIS CHART, IT IS IMPORTANT TO OBTAIN THE NET POWER OUTPUT OF THE ENGINE. THE ENGINE MANUFACTURER'S PUBLISHED CURVE MAY NOT REPRESENT A TRUE NET POWER WHEN TOTALING ALL THE LOAD DEDUCTIONS THAT MAY BE ENCOUNTERED FOR THE RATING. THE DEDUCTIONS COULD BE ENGINE AND VEHICLE ACCESSORIES, ALTITUDE, TEMPERATURE, BAROMETER, ETC. CHECK WITH THE ENGINE MANUFACTURER FOR THEIR RECOMMENDATION AND APPROVAL OF THE NET POWER CURVE.

THE PUMPING TORQUE REQUIREMENTS MIGHT EXCEED THE TRUCK'S TRANSMISSION CASE, POWER TAKE-OFF AND DRIVELINE COMPONENT LIMITS. CONTACT THE RESPECTIVE EQUIPMENT MANUFACTURER FOR THEIR APPROVAL OF THE PUMPING APPLICATION.

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4566	A	RELEASE TO PRODUCTION	DLM	27Sep2018	MAL	
4657	B	CHANGED RATIO FROM 1.65 TO 1.64 TO MATCH OTHER FLEX DOCUMENTS	DLM	16Nov2018	MAL	
DRAWN:			CHECKED:	DATE:	Page	FSG-CRV-01497
DLM			MAL	01Mar2018	1 of 3	

NFPA 1901 METRIC RATING CHART

AP FLEX SERIES PTO PUMP

RATED 1000 LPM @ 1000 kPa TO 2000 LPM @ 1000 kPa
SINGLE STAGE PUMP- 190.5 mm (7.50 inch) DIAMETER IMPELLER

FSG-CRV-01497

MAXIMUM ELEVATION AT WHICH THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF 3 m LIFT, 6 m OF SUCTION HOSE & STRAINER.
 STANDARD TEST CONDITIONS AND MAXIMUM ELEVATION DO NOT INCLUDE TRUCK PIPING LOSSES.

AP100M 75 mm HOSE, 1640 m (5390 ft.)	AP110M 110 mm HOSE, 2920 m (9610 ft.)	AP130M 150 mm HOSE, 2980 m (9790 ft.)
AP110M 75 mm HOSE, 1060 m (3500 ft.)	AP130M 110 mm HOSE, 2550 m (8390 ft.)	AP200M 150 mm HOSE, 1740 m (5720 ft.)
	AP200M 110 mm HOSE, 850 m (2790 ft.)	
AP100M 100 mm HOSE, 3050 m (10030 ft.)		
AP110M 100 mm HOSE, 2750 m (9030 ft.)	AP130M 125 mm HOSE, 2780 m (9130 ft.)	
AP130M 100 mm HOSE, 2320 m (7640 ft.)	AP200M 125 mm HOSE, 1310 m (4330 ft.)	

RATED CAPACITY (LPM)	CAPACITY (LPM)	PRESSURE (kPa) ¹	POWER REQUIRED (kW)	GEARBOX INPUT DRIVE SHAFT (Rev/Min) ²															
				3.74		2.91		2.60		2.33		1.90		1.64		1.31		1.14	
				RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)
1000	PUMP MODEL			AP100M-37F		AP100M-29F		AP100M-26F		AP100M-23F		AP100M-19F		AP100M-16F		AP100M-13F		AP100M-11F	
	1000	1000	32	1210	254	1550	198	1740	177	1930	159	2370	130	2740	112	3450	89	3950	78
	1000	1100	36	1260	271	1610	212	1810	189	2010	170	2470	138	2850	120	3590	95	4110	83
	700	1400	39	1370	275	1760	214	1970	191	2200	171	2690	140	3110	121	3920	96	4480	84
	500	1700	49	1520	308	1950	240	2180	215	2430	192	2980	157	3440	136	4330	108	4960	94
1100	PUMP MODEL			AP110M-37F		AP110M-29F		AP110M-26F		AP110M-23F		AP110M-19F		AP110M-16F		AP110M-13F		AP110M-11F	
	1100	1000	36	1240	276	1590	215	1780	192	1980	173	2430	141	2800	122	3530	97	4040	85
	1100	1100	39	1290	287	1650	224	1850	200	2070	179	2530	146	2930	126	3690	100	4220	88
	770	1400	41	1380	283	1770	221	1990	196	2210	177	2710	144	3130	125	3950	99	4520	86
	550	1700	50	1530	310	1960	242	2200	216	2450	194	3010	158	3480	136	4380	108	5010	95
1300	PUMP MODEL			AP130M-37F		AP130M-29F		AP130M-26F		AP130M-23F		AP130M-19F		AP130M-16F		AP130M-13F		AP130M-11F	
	1300	1000	41	1270	308	1630	240	1820	215	2030	193	2490	157	2880	136	3630	108	4150	94
	1300	1100	43	1320	312	1700	242	1900	217	2120	194	2600	158	3000	137	3780	109	4330	95
	910	1400	45	1400	309	1790	242	2010	215	2240	193	2750	157	3170	137	4000	108	4580	95
	650	1700	53	1540	331	1980	257	2220	230	2470	206	3030	168	3500	146	4410	116	5040	101
2000	PUMP MODEL			AP200M-37F		AP200M-29F		AP200M-26F		AP200M-23F		AP200M-19F		AP200M-16F		AP200M-13F		AP200M-11F	
	2000	1000	58	1370	408	1760	317	1970	283	2200	254	2690	208	3110	180	3920	142	4480	125
	2000	1100	63	1410	426	1810	332	2030	296	2260	266	2770	217	3200	188	4030	149	4610	130
	1400	1400	57	1430	381	1840	296	2060	264	2300	237	2820	193	3260	167	4100	133	4690	116
	1000	1700	62	1560	380	2010	295	2250	264	2510	236	3070	193	3550	167	4470	133	5120	116

NOTES:

1. GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.
2. SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.

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THE PUMPING TORQUE REQUIREMENTS MIGHT EXCEED THE TRUCK'S TRANSMISSION CASE, POWER TAKE-OFF AND DRIVELINE COMPONENT LIMITS. CONTACT THE RESPECTIVE EQUIPMENT MANUFACTURER FOR THEIR APPROVAL OF THE PUMPING APPLICATION.

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DRAWN: DLM CHECKED: MAL DATE: 01Mar2018 Page 2 of 3						FSG-CRV-01497

GB6245 - 2006 RATING CHART

AP GB FLEX SERIES PTO PUMP

FSG-CRV-01497

RATED 16 Liter/sec @ 1.03 MPa TO 31 Liter/sec @ 1.03 MPa
SINGLE STAGE PUMP- 190.5 mm (7.50 inch) DIAMETER IMPELLER

OPERATING CONDITIONS C1 & C2:

THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF SEA LEVEL ALTITUDE,
 758.0 mm-Hg [29.84 in-Hg] ATMOSPHERIC PRESSURE, 20 °C [68 °F] WATER TEMPERATURE, 3 m [10 ft] LIFT, 6 m [20 ft] OF SUCTION HOSE & STRAINER¹.

OPERATING CONDITION C3:

THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF SEA LEVEL ALTITUDE,
 758.0 mm-Hg [29.84 in-Hg] ATMOSPHERIC PRESSURE, 20 °C [68 °F] WATER TEMPERATURE, 7 m [23 ft] LIFT, 9 m [30 ft] OF SUCTION HOSE & STRAINER¹.

RATED CAPACITY (LITER/SEC)	OPERATING CONDITION	CAPACITY (LITER/SEC)	PRESSURE (MPa)	POWER REQUIRED (kW)	GEARBOX INPUT DRIVE SHAFT (Rev/Min) ²															
					3.74		2.91		2.60		2.33		1.90		1.64		1.31		1.14	
					RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)	RATIO	TORQUE (N-m)		
16	PUMP MODEL				CB10/16															
					AP16GB-37F		AP16GB-29F		AP16GB-26F		AP16GB-23F		AP16GB-19F		AP16GB-16F		AP16GB-13F		AP16GB-11F	
	C1	16	1.03	35	1220	274	1570	213	1760	190	1960	171	2400	139	2780	120	3500	96	4000	84
	C2	11	1.34	43	1360	298	1740	233	1950	208	2170	187	2660	153	3080	132	3870	105	4430	92
C3	8	1.03	28	1210	218	1560	169	1740	151	1940	136	2380	111	2750	96	3470	76	3970	66	
22	PUMP MODEL				CB10/22															
					AP22GB-37F		AP22GB-29F		AP22GB-26F		AP22GB-23F		AP22GB-19F		AP22GB-16F		AP22GB-13F		AP22GB-11F	
	C1	22	1.03	40	1250	308	1610	239	1800	214	2000	192	2460	156	2840	135	3580	107	4090	94
	C2	15	1.34	45	1370	312	1760	243	1970	217	2200	194	2700	158	3120	137	3930	109	4490	95
C3	11	1.03	31	1220	245	1560	192	1750	171	1950	153	2390	125	2760	108	3480	86	3980	75	
29	PUMP MODEL				CB10/29															
					AP29GB-37F		AP29GB-29F		AP29GB-26F		AP29GB-23F		AP29GB-19F		AP29GB-16F		AP29GB-13F		AP29GB-11F	
	C1	29	1.03	51	1310	375	1680	292	1890	260	2100	234	2580	190	2980	165	3750	131	4290	115
	C2	20	1.34	54	1390	369	1790	286	2000	256	2230	230	2730	188	3160	162	3980	129	4550	113
C3	15	1.03	33	1230	255	1580	198	1770	177	1970	159	2410	130	2790	112	3510	89	4020	78	
31	PUMP MODEL				CB10/31															
					A31GB-37F		AP31GB-29F		AP31GB-26F		AP31GB-23F		AP31GB-19F		AP31GB-16F		AP31GB-13F		AP31GB-11F	
	C1	31	1.03	56	1330	402	1700	314	1910	280	2130	251	2610	205	3010	177	3790	141	4340	123
	C2	22	1.34	55	1400	376	1790	294	2010	262	2240	235	2740	192	3170	166	3990	132	4570	115
C3	15	1.03	34	1230	266	1580	207	1770	185	1970	166	2420	135	2790	117	3520	93	4030	81	

NOTES:

1. SIZE OF SUCTION HOSE & STRAINER: 16 L/s: 75 mm (3 inch); 22 & 29 L/s: 100 mm (4 inch); 31 L/s: 115 mm (4.5 inch).
2. SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.

THIS CHART IS TO BE USED TO SELECT THE PROPER PUMP GEARBOX RATIO. THE INPUT SPEED AND POWER REQUIREMENTS SHOWN ARE NOMINAL ±5% FIGURES. WHEN USING THIS CHART, IT IS IMPORTANT TO OBTAIN THE NET POWER OUTPUT OF THE ENGINE. THE ENGINE MANUFACTURER'S PUBLISHED CURVE MAY NOT REPRESENT A TRUE NET POWER WHEN TOTALING ALL THE LOAD DEDUCTIONS THAT MAY BE ENCOUNTERED FOR THE RATING. THE DEDUCTIONS COULD BE ENGINE AND VEHICLE ACCESSORIES, ALTITUDE, TEMPERATURE, BAROMETER, ETC. CHECK WITH THE ENGINE MANUFACTURER FOR THEIR RECOMMENDATION AND APPROVAL OF THE NET POWER CURVE.

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