

Power end features-Continuous tooth herringbone gear. One-piece alloy steel crank. Renewable crosshead guide. The frame is made of welded steel plate to provide the frame with high strength, good rigidity and lightweight. The extension rod packing is of duplex seal structure to provide the good seal result. The power end uses the combined lubrication system of forced lubrication and splash lubrication.

Crankshaft -The crankshaft is made of cast alloy steel and is furnished with big geared ring, connecting rod and bearing. The tooth form of the big-geared ring is herringbone gear. The gear bore and the crankshaft surface is interference fitted and they are both fastened with bolts and lock nuts. The big end of the connecting rod is mounted on three eccentric straps of the crankshaft through single row short cylindrical roller bearings and the small end on the crosshead pin through double row long cylindrical roller bearing. Double row radial spherical roller bearings are mounted at both ends of the crankshaft.

Cylinders-Cylinders are made of forged alloy steel. Three cylinders of each pump are interchangeable. Valve-over-valve (through type cylinder) design reduces the cylinder volume and promotes the volumetric efficiency. At customers' request, the cylinder surface may be nickel plated to improve the abrasion resistance.

Model	F-500	F-800	F-1000	F-1300	F-1600
Type	Triplex single acting				
Rated Power	373kw/500HP	596kw/800HP	735kw/1000HP	969kw/1300HP	1193kw/1600HP
Rated Speed	165SPM	150SPM	140SPM	120SPM	120SPM
Stroke(mm/inch)	190/7 1/2"	228.6/9"	254/10"	305/12"	305/12"
Max.Liner Dia.	170/6 3/4"	170/6 3/4"	170/6 3/4"	180/7"	180/7"
Gear Type	Herringbone	Herringbone	Herringbone	Herringbone	Herringbone
Valve Pot	API-5#	API-6#	API-6#	API-7#	API-7#
Gear Ratio	4.286:1	4.185:1	4.207:1	4.206:1	4.206:1
Suction Inlet	203/8"	254/10"	305/12"	305/12"	305/12"
Discharge Inlet	4"Flange 5000 psi	5"Flange 5000 psi	5"Flange 5000 psi	5"Flange 5000 psi	5"Flange 5000 psi
Lubrication	Forced & Splash	Forced & Splash	Forced & Splash	Forced & Splash	Forced & Splash
Max. Pressure	27.2Mpa	34.5Mpa	34.5Mpa	34.5Mpa	34.5Mpa
	3945 psi	5000 psi	5000 psi	5000 psi	5080 psi
Overall Size(in)	144*106*86	156*79*66	163*89*70	174*121*78	181*129*106
Weight(kg)	9770	14500	18790	24572	24791

SPECIFICATION SERIES F-500

Stroke /min	Rated Power		Liner diameter(mm)& Pressure Mpa(psi)															
			170		160		150		140		130		120		110		100	
			9.4	1365	10.5	1540	12.1	1750	13.9	2010	16.1	2740	22.5	3260	22.5	3260	27.2	3945
	KW	HP	Displacement(L/S)(gal./s)															
170	379	515	36.75	9.71	32.56	8.6	28.61	7.56	24.93	6.59	21.49	5.68	18.31	4.84	15.39	4.07	12.72	3.36
165	373	500	35.67	9.42	31.6	8.35	27.77	7.34	24.19	6.39	20.86	5.51	17.77	4.7	14.93	3.94	12.34	3.26
150	334	455	32.43	8.57	28.73	7.59	25.25	6.67	21.99	5.81	18.96	5.01	16.16	4.27	13.58	3.59	11.22	2.96
140	312	424	30.27	8	26.81	7.08	23.56	6.22	20.53	5.42	17.7	4.68	15.08	3.98	12.67	3.35	10.47	2.77
130	290	394	28.11	7.43	24.9	6.58	21.88	5.78	19.06	5.04	16.44	4.34	14	3.7	11.77	3.11	9.73	2.57
120	267	364	25.94	6.85	22.98	6.07	20.2	5.34	17.6	4.65	15.17	4.01	12.93	3.42	10.86	2.87	8.98	2.37
110	245	333	23.78	6.28	21.07	5.57	18.52	4.89	16.13	4.26	13.91	3.67	11.85	3.13	9.96	2.63	8.23	2.17
1			0.2162	0.057	0.1915	0.051	0.1683	0.044	0.1466	0.039	0.1264	0.033	0.1077	0.028	0.0905	0.024	0.0748	0.02

SPECIFICATION SERIES F-800

Stroke /min	Rated Power		Liner diameter(mm)& Pressure Mpa(psi)															
			170(6 3/4")		160(6 1/4")		150 (6")		140(5 1/2")		130(5 ")		120(4 3/4")		110(4 1/2")		100(4")	
			13.6	2000	15.4	2250	17.5	2570	20.1	2950	23.3	3420	27.3	4015	32.5	4780	34.3	5000
	KW	HP	Displacement(L/S)(gal./s)															
160	636	853	41.51	10.97	36.77	9.71	32.32	8.54	28.15	7.44	24.27	6.41	20.68	5.46	17.38	4.59	14.36	3.79
150	596	800	38.92	10.28	34.47	9.11	30.3	8	26.39	6.97	22.96	6.07	19.39	5.12	16.29	4.3	13.47	3.56
140	557	747	36.32	9.59	32.17	8.5	28.28	7.47	24.63	6.51	21.24	5.61	18.1	4.78	15.21	4.02	12.57	3.32
130	517	693	33.73	8.91	29.88	7.89	26.26	6.94	22.87	6.04	19.72	5.21	16.81	4.44	14.12	3.73	11.67	3.08
120	477	640	31.13	8.22	27.58	7.29	24.24	6.4	21.11	5.58	18.21	4.81	15.51	4.1	13.03	3.44	10.77	2.85
110	437	587	28.54	7.54	25.28	6.68	22.22	5.87	19.35	5.11	16.69	4.41	14.22	3.76	11.95	3.16	9.87	2.61
1			0.2594	0.069	0.2298	0.061	0.202	0.053	0.1759	0.046	0.1517	0.04	0.1293	0.034	0.1086	0.029	0.0898	0.024

SPECIFICATION SERIES F-1000

Stroke/min	Rated		Liner diameter(mm)& Pressure Mpa(psi)													
	Power		170		160		150		140		130		120		110	
			16.4	2378	18.5	2682	21.1	3060	24.2	3509	28	4060	32.9	4770	34.3	4973
	KW	HP	Displacement(L/S)(gal./s)													
150	799	1072	43.24	11.42	38.3	10.12	33.66	8.89	29.33	7.75	25.29	6.68	21.55	5.69	18.1	4.78
140	746	1000	40.36	10.66	35.57	9.4	31.42	8.3	27.37	7.23	23.6	6.23	20.11	5.31	16.9	4.46
130	692	929	37.47	9.9	33.2	8.77	29.18	7.71	25.43	6.72	21.91	5.79	18.67	4.93	15.69	4.14
120	639	857	34.59	9.14	30.64	8.09	26.93	7.11	23.46	6.2	20.23	5.34	17.24	4.55	14.48	3.83
110	586	786	31.71	8.38	28.09	7.42	24.69	6.52	21.51	5.68	18.54	4.9	15.8	4.17	13.28	3.51
100	533	714	28.83	7.62	25.53	6.74	22.44	5.93	19.55	5.16	16.86	4.45	14.36	3.79	12.07	3.19
1			0.2883	0.076	0.2553	0.067	0.224	0.059	0.1955	0.052	0.1686	0.045	0.1436	0.038	0.1207	0.032

SPECIFICATION SERIES F-1300

Stroke/min	Rated Power		Liner diameter(mm)& Pressure Mpa(psi)											
			180		170		160		150		140		130	
			18.7	2720	21	3050	23.7	3440	27	3915	31	4495	34.5	5000
	KW	HP	Displacement(L/S)(gal./s)											
130	1050	1408	50.4	13.32	44.97	11.88	39.83	10.52	35.01	9.25	30.5	8.06	26.3	6.95
120	969	1300	46.54	12.29	41.51	10.97	36.77	9.71	32.32	8.54	28.15	7.44	24.27	6.41
110	889	1192	44.66	11.8	38.05	10.05	33.71	8.91	29.62	7.82	25.81	6.82	22.25	5.88
100	808	1083	38.78	10.24	34.59	9.14	30.64	8.1	26.93	7.11	23.46	6.2	20.23	5.34
90	727	975	34.9	9.22	31.13	8.22	27.58	7.29	24.24	6.4	21.11	5.58	18.21	4.81
1			0.3878	0.102	0.3459	0.091	0.306	0.081	0.2693	0.071	0.2346	0.062	0.2023	0.053

SPECIFICATION SERIES F-1600

Stroke/min	Rated Power		Liner diameter(mm)& Pressure Mpa(psi)											
			180		170		160		150		140		130	
			23.6	3345	25.9	3750	29.2	4235	33.2	4820	35.1	5000	34.5	5000
	KW	HP	Displacement(L/S)(gal./s)											
130	1293	1733	50.42	13.32	44.97	11.88	39.83	10.52	35.01	9.25	30.5	8.06	26.3	6.95
120	1193	1600	46.54	12.29	41.51	10.97	36.77	9.71	32.32	8.54	28.15	7.44	24.27	6.41
110	1094	1467	44.66	11.8	38.05	10.05	33.71	8.91	29.62	7.82	25.81	6.82	22.25	5.88
100	994	1333	38.78	10.24	34.59	9.14	30.64	8.1	26.93	7.11	23.46	6.2	20.23	5.34
90	895	1200	34.9	9.22	31.13	8.22	27.58	7.29	24.24	6.4	21.11	5.58	18.21	4.81
1			0.3878	0.102	0.3459	0.091	0.306	0.081	0.2693	0.071	0.2346	0.062	0.2023	0.053

SPECIFICATION SERIES F-2200

Stroke/min	Rated Power		Liner diameter(mm)& Pressure Mpa(psi)									
			230		220		210		200		190	
			19	2760	20.8	3015	22.8	3310	25.1	3645	27.9	4040
	KW	HP	Displacement(L/S)(gal./s)									
105	1640	2200	77.65	1231	71.05	1126	64.73	1026	58.72	931	52.99	840
90	1406	1886	66.56	1055	60.9	965	55.49	880	50.33	798	45.42	720
80	1250	1676	59.16	938	54.13	858	49.32	782	44.74	709	40.37	640
70	1094	1467	51.76	820	47.36	751	43.16	684	39.14	620	35.33	560
60	937	1257	44.37	703	40.6	644	36.99	586	33.55	532	30.28	480
50	781	1048	36.97	586	33.83	536	30.83	489	27.96	443	25.23	400
1			0.7395	11.72	0.6766	10.72	0.617	9.772	0.5592	8.863	0.5047	8