

WATER INJECTION PUMP MANUFACTURE

All series of products of our company have mutual characteristics in advanced design, modern structure, stable run, convenient maintenance, safe and reliable sealing, long life in easy-wear parts, high volumetric efficiency, etc. On the base of existing series of products, tailor-made product with special specification can be provided to the users.

Our primary reciprocating pump offerings are the 3W and 5W Series pumps. These pumps are horizontal reciprocating pumps offered in either a triplex or quintuplex configuration. All are available as plunger pumps, and many are also available piston pumps. These pumps are outstanding performers and extremely cost effective. They feature conservative pressure ratings and slow speed operation for enhanced durability.



Standard Materials of Construction

Standard materials of construction for key components are provided below for material groups A-F. Many options are available, particularly for valves, packing, plungers, and o-ring seals, to meet the needs of special fluids, temperatures, and other requirements.

Material Group A: 1045 Carbon Steel

Fluid Cylinder	1045 Carbon Steel with Nickel-Boron Coating
Stuffing Box	420 Stainless Steel Adjusting
Nut	Aluminum Bronze Throat
Bushing	Aluminum Bronze Packing Follower
Ring	Aluminum Bronze
Lantern Gland	Aluminum Bronze (if applicable) Top
Cover	420 Stainless Steel
Front Cover	420 Stainless Steel (if applicable)
Plunger	Tungsten-Carbide on Steel Base Fluid End
Studs	Alloy Steel, Nickel-Boron Coated Fluid End
Nuts	Alloy Steel, Nickel-Boron Coated
O-Rings	HNBR Rubber
Packing	Braided Teflon-Kevlar
Valve Assembly ¹	17-4 Stainless Steel

Material Group B: 4140 Alloy Steel

Fluid Cylinder	4140 Alloy Steel
Stuffing Box	420 Stainless Steel Adjusting
Nut	Aluminum Bronze Throat
Bushing	Aluminum Bronze Packing Follower
Ring	Aluminum Bronze
Lantern Gland	Aluminum Bronze (if applicable) Top
Cover	420 Stainless Steel
Front Cover	420 Stainless Steel (if applicable)
Plunger	Tungsten-Carbide on Steel Base Fluid End
Studs	Alloy Steel, Nickel-Boron Coated Fluid End
Nuts	Alloy Steel, Nickel-Boron Coated
O-Rings	HNBR Rubber
Packing	Braided Teflon-Kevlar
Valve Assembly ¹	17-4 Stainless Steel

Material Group C: Nickel Aluminum Bronze

Fluid Cylinder	C955 Nickel Aluminum Bronze
Stuffing Box	316 Stainless Steel Adjusting
Nut	Aluminum Bronze Throat
Bushing	Aluminum Bronze Packing Follower
Ring	Aluminum Bronze
Lantern Gland	Aluminum Bronze (if applicable) Top
Cover	316 Stainless Steel
Front Cover	316 Stainless Steel (if applicable)
Plunger	Tungsten-Carbide on 304 SS Base Fluid End
Studs	Alloy Steel, Nickel-Boron Coated Fluid End
Nuts	Alloy Steel, Nickel-Boron Coated
O-Rings	HNBR Rubber
Packing	Braided Teflon-Kevlar
Valve Assembly ¹	17-4 Stainless Steel

Material Group D: 420 Stainless Steel

Fluid Cylinder	420 Stainless Steel Stuffing
Box	316 Stainless Steel Adjusting
Nut	Aluminum Bronze Throat
Bushing	Aluminum Bronze Packing Follower
Ring	Aluminum Bronze
Lantern Gland	Aluminum Bronze (if applicable) Top
Cover	420 Stainless Steel
Front Cove	420 Stainless Steel (if applicable)
Plunger	Tungsten-Carbide on Steel Base Fluid End

Studs	Alloy Steel, Nickel-Boron Coated Fluid End
Nuts	Alloy Steel, Nickel-Boron Coated
O-Rings	HNBR Rubber
Packing	Braided Teflon-Kevlar
Valve Assembly ¹	17-4 Stainless Steel

Material Group E: 304 Stainless Steel

Fluid Cylinder	304 Stainless Steel Stuffing
Box	316 Stainless Steel Adjusting
Nut	Aluminum Bronze Throat
Bushing	Aluminum Bronze Packing Follower
Ring	Aluminum Bronze
Lantern Gland	Aluminum Bronze (if applicable) Top
Cover	2205 Stainless Steel
Front Cover	2205 Stainless Steel (if applicable)
Plunger	Tungsten-Carbide on 304 Steel Base Fluid End
Studs	Alloy Steel, Nickel Boron Coated
Fluid End Nuts	Alloy Steel, Nickel Boron Coated
O-Rings	NBR Rubber
Packing	Braided Teflon-Kevlar
Valve Assembly ¹	17-4 Stainless Steel

Material Group F: 316 Stainless Steel

Fluid Cylinder	316L Stainless Steel Stuffing
Box	316 Stainless Steel Adjusting
Nut	Aluminum Bronze Throat
Bushing	Aluminum Bronze Packing Follower
Ring	Aluminum Bronze
Lantern Gland	Aluminum Bronze (if applicable) Top
Cover	316 Stainless Steel
Front Cover	316 Stainless Steel (if applicable)
Plunger	Tungsten-Carbide on 304 Steel Base Fluid End
Studs	Alloy Steel, Nickel-Boron Coated
Fluid End Nuts	Alloy Steel, Nickel-Boron Coated
O-Rings	HNBR Rubber
Packing	Braided Teflon-Kevlar
Valve Assembly ¹	17-4 Stainless Steel

Material Group G: 2205 Duplex Stainless Steel

Fluid Cylinder	2205 Duplex Stainless Steel Stuffing
Box	2205 Stainless Steel Adjusting
Nut	Aluminum Bronze
Throat Bushing	Aluminum Bronze
Packing Follower Ring	Aluminum Bronze
Lantern Gland	Aluminum Bronze (if applicable) Top
Cover	2205 Stainless Steel
Front Cover	2205 Stainless Steel (if applicable)
Plunger	Tungsten-Carbide on 304 Steel Base Fluid End
Studs	Alloy Steel, Nickel-Boron Coated
Fluid End Nuts	Alloy Steel, Nickel-Boron Coated
O-Rings	HNBR Rubber
Packing	Braided Teflon-Kevlar
Valve Assembly ¹	17-4 Stainless Steel

Note:1. Valve materials are typical, however consult YaLong for detailed information if required.

2. YaLong reserves the right to modify the materials shown on this list without notice

Triplex Water Injection Pump

The Model 3ZW75 is an internally gear reduced, single acting triplex plunger pump rated at 41HP in continuous duty services and up to 66 HP in intermittent duty. This versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas

Specifications

	Continuous	Intermittent
Rated Power	41 HP	66 HP
Max. Speed.....	350 RPM	460 RPM
Minimum Speed.....	90 RPM	90 RPM
	US Customary	Metric
Stroke Length	2.953 IN	75 MM
Rated Rod Load.....	5500LB	2500 KG
Pump Weight	945 LB	430 KG
Oil Capacity	17.4GAL	16.5L
Maximum Fluid Temp.	180°F	82°C
Gear Reduction Ratio	3.15:1	
Mechanical Efficiency	87%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 400 RPM. Additional plunger sizes are available.

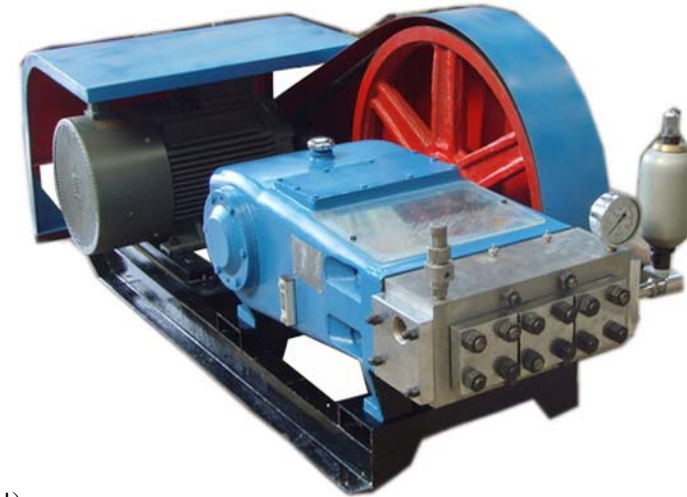
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				350 RPM				450 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
14	0.551	0.035	0.009		162.485	23566	3.15	0.832	28.531	0.189	7.00	1.849	63.403	0.420	12.25	3.236	110.956	0.735	15.75	4.161	142.657	0.945
16	0.630	0.045	0.012		124.403	18043	4.05	1.070	36.683	0.243	9.00	2.378	81.518	0.540	15.75	4.161	142.657	0.945	20.25	5.350	183.416	1.215
20	0.787	0.071	0.019		79.618	11548	6.39	1.688	57.818	0.383	14.20	3.751	128.618	0.852	24.85	6.565	225.081	1.491	31.95	8.440	289.390	1.917
30	1.181	0.159	0.042		35.386	5132	14.31	3.780	129.675	0.859	31.80	8.401	288.032	1.908	55.65	14.701	504.055	3.339	71.55	18.902	648.071	4.293
38	1.496	0.255	0.067		22.055	3199	22.95	6.063	207.872	1.377	51.00	13.473	461.938	3.060	89.25	23.577	808.391	5.355	114.75	30.314	1039.360	6.885
40	1.575	0.283	0.075		19.904	2887	25.47	6.728	230.667	1.528	56.60	14.952	512.660	3.396	99.05	26.166	897.155	5.943	127.35	33.642	1153.485	7.641
50	1.969	0.442	0.117		12.739	1848	39.78	10.509	360.342	2.387	88.40	23.353	800.692	5.304	154.70	40.868	1401.211	9.282	198.90	52.544	1801.557	11.934
70	2.953	0.865	0.229		6.499	943	77.85	20.566	705.134	4.671	173.00	45.702	1566.965	10.380	302.75	79.978	2742.188	18.165	389.25	102.829	3525.671	23.355

Triplex Water Injection Pump

The Model 3W80 is a single acting triplex plunger pump rated at 47 HP in continuous duty services and up to 66 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	47 HP	66 HP
Max. Speed.....	320 RPM	450 RPM
Minimum Speed.....	90 RPM	75 RPM
	US Customary	Metric
Stroke Length	3.15 IN	80 MM
Rated Rod Load.....	6 172LB	2800 KG
Pump Weight	1435 LB	652 KG
Oil Capacity	12.7 QT	12 L
Maximum Fluid Temp.	180°F	82°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 370 RPM. Additional plunger sizes are available.

Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				350 RPM				450 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
16	0.630	0.048	0.013		139.331	20208	4.32	1.141	39.099	0.259	9.60	2.536	86.953	0.576	16.80	4.438	152.168	1.008	21.60	5.706	195.644	1.296
18	0.709	0.061	0.016		110.089	15967	5.49	1.450	49.666	0.329	12.20	3.223	110.503	0.732	21.35	5.640	193.380	1.281	27.45	7.252	248.631	1.647
20	0.787	0.075	0.020		89.172	12933	6.75	1.783	61.139	0.405	15.00	3.963	135.864	0.900	26.25	6.935	237.762	1.575	33.75	8.916	305.694	2.025
25	0.984	0.118	0.031		57.070	8277	10.62	2.806	96.162	0.637	23.60	6.234	213.759	1.416	41.30	10.910	374.079	2.478	53.10	14.028	480.959	3.186
40	1.575	0.301	0.080		22.293	3233	27.09	7.156	245.310	1.625	60.20	15.903	545.268	3.612	105.35	27.831	954.218	6.321	135.45	35.782	1226.852	8.127
55	2.165	0.570	0.151		11.791	1710	51.30	13.552	464.655	3.078	114.00	30.116	1032.566	6.840	199.50	52.702	1806.991	11.970	256.50	67.760	2323.274	15.390
80	3.150	1.206	0.319		5.573	808	108.54	28.673	983.052	6.512	241.20	63.718	2184.693	14.472	422.10	111.507	3823.213	25.326	542.70	143.367	4915.560	32.562
95	3.740	1.700	0.449		3.952	573	153.00	40.418	1385.813	9.180	340.00	89.819	3079.584	20.400	595.00	157.183	5389.272	35.700	765.00	202.092	6929.064	45.900

Triplex Water Injection Pump

The Model 3ZW80 is an internally gear reduced, single acting triplex plunger pump rated at 90 HP in continuous duty services and up to 160 HP in intermittent duty. This versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas

Specifications

	Continuous	Intermittent
Rated Power	90 HP	160 HP
Max. Speed.....	335 RPM	400 RPM
Minimum Speed.....	90 RPM	80 RPM
	US Customary	Metric
Stroke Length	3.15 IN	80 MM
Rated Rod Load.....	11 750LB	5340 KG
Pump Weight	2,000 LB	910 KG
Oil Capacity	10GAL	38 L
Maximum Fluid Temp.	180°F	82°C
Gear Reduction Ratio	3.0:1	
Mechanical Efficiency	87%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 400 RPM. Additional plunger sizes are available.

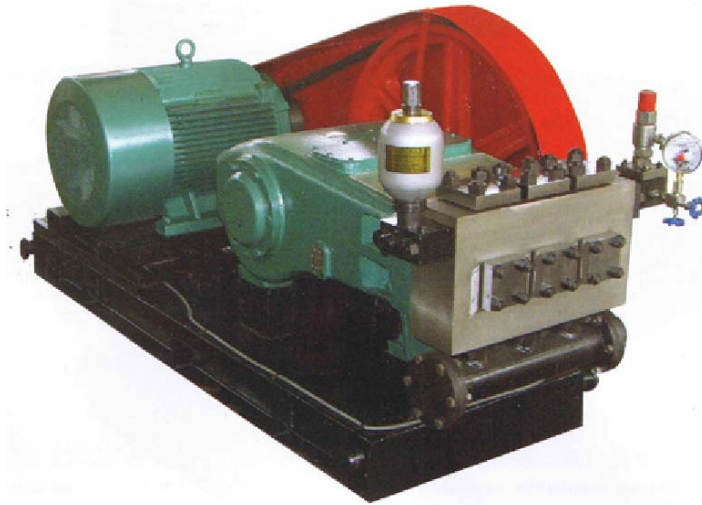
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				350 RPM				450 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
18	0.709	0.061	0.016		208.382	208.382	5.49	1.450	49.666	0.329	12.20	3.223	110.503	0.732	21.35	5.640	193.380	1.281	27.45	7.252	248.631	1.647
20	0.787	0.075	0.020		168.790	168.790	6.75	1.783	61.139	0.405	15.00	3.963	135.864	0.900	26.25	6.935	237.762	1.575	33.75	8.916	305.694	2.025
25	0.984	0.118	0.031		108.025	108.025	10.62	2.806	96.162	0.637	23.60	6.234	213.759	1.416	41.30	10.910	374.079	2.478	53.10	14.028	480.959	3.186
40	1.575	0.301	0.080		42.197	42.197	27.09	7.156	245.310	1.625	60.20	15.903	545.268	3.612	105.35	27.831	954.218	6.321	135.45	35.782	1226.852	8.127
55	2.165	0.570	0.151		22.319	22.319	51.30	13.552	464.655	3.078	114.00	30.116	1032.566	6.840	199.50	52.702	1806.991	11.970	256.50	67.760	2323.274	15.390
80	3.150	1.206	0.319		10.549	10.549	108.54	28.673	983.052	6.512	241.20	63.718	2184.693	14.472	422.10	111.507	3823.213	25.326	542.70	143.367	4915.560	32.562

Triplex Water Injection Pump

The Model 3W100 is a single acting triplex plunger pump rated at 69 HP in continuous duty services and up to 103 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	69 HP	103 HP
Max. Speed.....	335 RPM	400 RPM
Minimum Speed.....	100 RPM	80 RPM
	US Customary	Metric
Stroke Length	3.973 IN	100 MM
Rated Rod Load.....	7 050LB	3200 KG
Pump Weight	2520 LB	1,150 KG
Oil Capacity	27.5 QT	26 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 370 RPM. Additional plunger sizes are available.

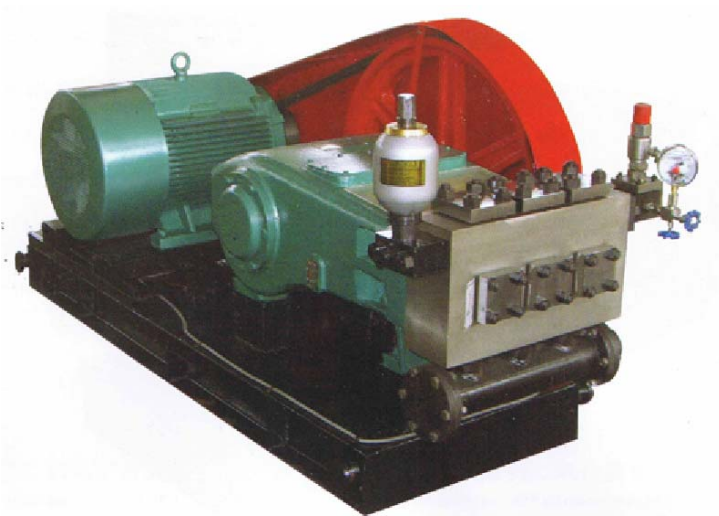
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				300 RPM				400 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
20	0.787	0.094	0.025		101.911	14781	8.46	2.235	76.688	0.508	18.80	4.966	170.283	1.128	28.20	7.450	255.424	1.692	37.60	9.933	340.566	2.256
25	0.984	0.147	0.039		65.223	9460	13.23	3.495	119.862	0.794	29.40	7.767	266.293	1.764	44.10	11.650	399.440	2.646	58.80	15.533	532.587	3.528
36	1.417	0.305	0.081		31.454	4562	27.45	7.252	248.631	1.647	61.00	16.115	552.514	3.660	91.50	24.172	828.770	5.490	122.00	32.229	1105.027	7.320
45	1.772	0.477	0.126		20.131	2920	42.93	11.341	388.873	2.576	95.40	25.202	864.095	5.724	143.10	37.803	1296.143	8.586	190.80	50.404	1728.190	11.448
56	2.205	0.739	0.195		12.999	1885	66.51	17.570	602.481	3.991	147.80	39.045	1338.713	8.868	221.70	58.567	2008.070	13.302	295.60	78.090	2677.427	17.736
70	2.756	1.154	0.305		8.319	1207	103.86	27.437	940.783	6.232	230.80	60.971	2090.494	13.848	346.20	91.457	3135.741	20.772	461.60	121.942	4180.988	27.696
90	3.543	1.908	0.504		5.033	730	171.72	45.364	1555.341	10.303	381.60	100.808	3456.380	22.896	572.40	151.213	5184.570	34.344	763.20	201.617	6912.760	45.792
100	3.937	2.355	0.622		4.076	591	211.95	55.991	1919.758	12.717	471.00	124.425	4266.130	28.260	706.50	186.638	6399.194	42.390	942.00	248.851	8532.259	56.520

Triplex Water Injection Pump

The Model 3W100A is a single acting triplex plunger pump rated at 106 HP in continuous duty services and up to 141 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	106 HP	141 HP
Max. Speed.....	300 RPM	400 RPM
Minimum Speed.....	90 RPM	75 RPM
	US Customary	Metric
Stroke Length	4.0 IN	100 MM
Rated Rod Load.....	8 800LB	4000 KG
Pump Weight	2380 LB	1,080 KG
Oil Capacity	48 QT	45 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 370 RPM. Additional plunger sizes are available.

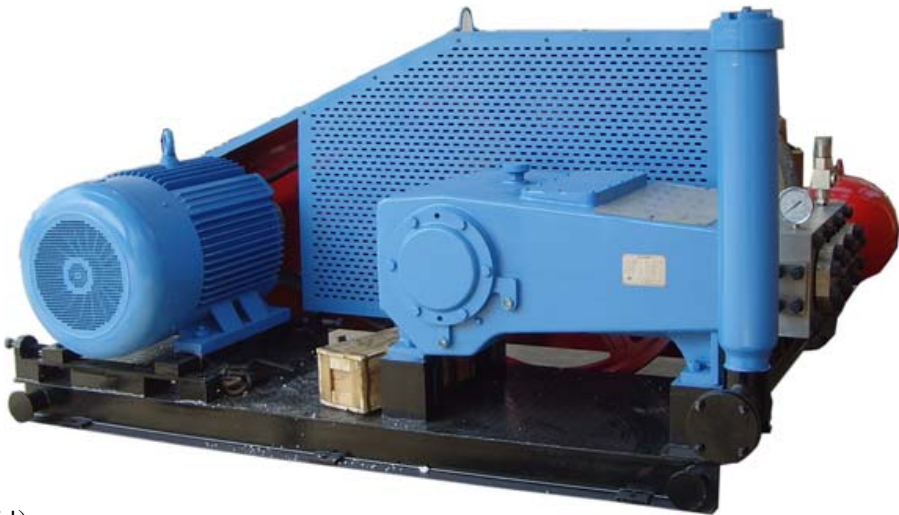
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				300 RPM				400 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
18	0.709	0.092	0.024		157.270	22810	8.28	2.187	75.027	0.497	18.40	4.861	166.660	1.104	27.60	7.291	249.990	1.656	36.80	9.722	333.320	2.208
20	0.787	0.113	0.030		127.389	18476	10.17	2.687	92.086	0.610	22.60	5.970	204.702	1.356	33.90	8.955	307.053	2.034	45.20	11.941	409.404	2.712
25	0.984	0.177	0.047		81.529	11825	15.93	4.208	144.318	0.956	35.40	9.352	320.639	2.124	53.10	14.028	480.959	3.186	70.80	18.703	641.278	4.248
40	1.575	0.452	0.119		31.847	4619	40.68	10.747	368.493	2.441	90.40	23.881	818.807	5.424	135.60	35.822	1228.211	8.136	180.80	47.762	1637.614	10.848
55	2.165	0.855	0.226		16.845	2443	76.95	20.328	696.982	4.617	171.00	45.174	1548.850	10.260	256.50	67.760	2323.274	15.390	342.00	90.347	3097.699	20.520
80	3.150	1.809	0.478		7.962	1155	162.81	43.010	1474.728	9.769	361.80	95.578	3277.040	21.708	542.70	143.367	4915.560	32.562	723.60	191.155	6554.079	43.416
95	3.740	2.550	0.674		5.646	819	229.50	60.628	2078.719	13.770	510.00	134.728	4619.376	30.600	765.00	202.092	6929.064	45.900	1020.00	269.456	9238.752	61.200

Triplex Water Injection Pump

The Model 3W125A is a single acting triplex plunger pump rated at 124 HP in continuous duty services and up to 150 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	124 HP	150 HP
Max. Speed.....	315 RPM	375 RPM
Minimum Speed.....	100 RPM	80 RPM
	US Customary	Metric
Stroke Length	4.921 IN	125 MM
Rated Rod Load.....	10 580LB	4800 KG
Pump Weight	3750 LB	1,700 KG
Oil Capacity	48 QT	45 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 350 RPM. Additional plunger sizes are available.

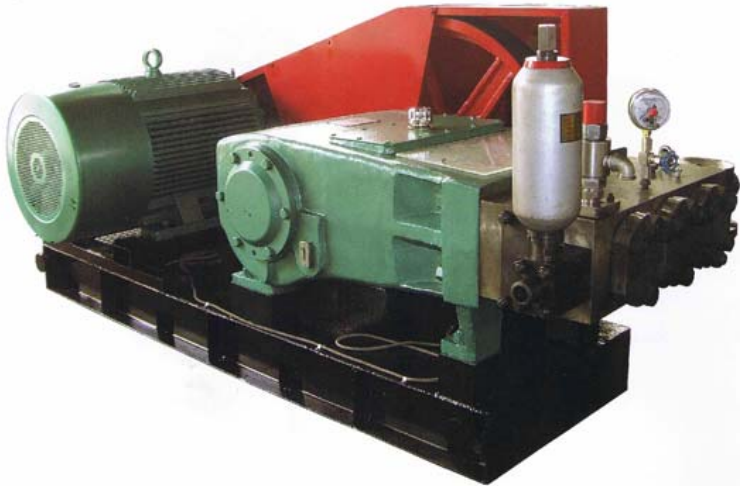
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				300 RPM				375 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
20	0.787	0.118	0.031		152.866	22171	10.62	2.806	96.162	0.637	23.60	6.234	213.759	1.416	35.40	9.352	320.639	2.124	44.25	35.4	400.799	2.655
30	1.181	0.265	0.070		67.941	9854	23.85	6.301	216.024	1.431	53.00	14.001	480.053	3.180	79.50	21.002	720.079	4.770	99.38	79.5	900.174	5.963
40	1.575	0.471	0.124		38.217	5543	42.39	11.198	383.891	2.543	94.20	24.885	853.226	5.652	141.30	37.328	1279.839	8.478	176.63	141.3	1599.874	10.598
50	1.969	0.736	0.194		24.459	3547	66.24	17.499	599.915	3.974	147.20	38.886	1333.279	8.832	220.80	58.329	1999.918	13.248	276.00	220.8	2499.898	16.560
61	2.402	1.095	0.289		16.433	2383	98.55	26.034	892.626	5.913	219.00	57.854	1983.614	13.140	328.50	86.781	2975.422	19.710	410.63	328.5	3719.352	24.638
84	3.307	2.077	0.549		8.666	1257	186.93	49.382	1693.167	11.216	415.40	109.737	3762.527	24.924	623.10	164.606	5643.791	37.386	778.88	623.1	7054.814	46.733
105	4.134	3.245	0.857		5.546	804	292.05	77.152	2645.272	17.523	649.00	171.448	5878.382	38.940	973.50	257.172	8817.574	58.410	1216.88	973.5	11022.04	73.013
125	4.921	4.600	1.215		3.913	568	414.00	109.368	3749.846	24.840	920.00	243.039	8332.992	55.200	1380.00	364.559	12499.49	82.800	1725.00	1380	15624.36	103.500

Triplex Water Injection Pump

The Model 3W150A is a single acting triplex plunger pump rated at 195 HP in continuous duty services and up to 240 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	195 HP	240 HP
Max. Speed.....	280 RPM	350 RPM
Minimum Speed.....	100 RPM	80 RPM
	US Customary	Metric
Stroke Length	6.0 IN	150 MM
Rated Rod Load.....	16 530LB	7500 KG
Pump Weight	5511 LB	2,500 KG
Oil Capacity	14GAL	55 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 350 RPM. Additional plunger sizes are available.

Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				300 RPM				375 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
25	0.984	0.307	0.081		112.102	16259	27.63	7.299	250.292	1.658	61.40	16.220	556.137	3.684	92.10	24.330	834.205	5.526	115.13	30.414	1042.832	6.908
30	1.181	0.442	0.117		77.849	11291	39.78	10.509	360.342	2.387	88.40	23.353	800.692	5.304	132.60	35.029	1201.038	7.956	165.75	43.787	1501.297	9.945
35	1.378	0.601	0.159		57.195	8295	54.09	14.289	489.865	3.245	120.20	31.754	1088.724	7.212	180.30	47.630	1633.085	10.818	225.38	59.539	2041.432	13.523
40	1.575	0.785	0.207		43.790	6351	70.65	18.664	639.919	4.239	157.00	41.475	1422.043	9.420	235.50	62.213	2133.065	14.130	294.38	77.767	2666.406	17.663
55	2.165	1.484	0.392		23.162	3359	133.56	35.283	1209.793	8.014	296.80	78.407	2688.296	17.808	445.20	117.610	4032.444	26.712	556.50	147.012	5040.554	33.390
70	2.756	2.404	0.635		14.299	2074	216.36	57.156	1959.763	12.982	480.80	127.014	4354.894	28.848	721.20	190.521	6532.341	43.272	901.50	238.152	8165.426	54.090
86	3.386	3.629	0.959		9.473	1374	326.61	86.282	2958.363	19.597	725.80	191.737	6574.006	43.548	1088.70	287.605	9861.009	65.322	1360.88	359.508	12326.34	81.653
95	3.740	4.428	1.170		7.763	1126	398.52	105.278	3609.605	23.911	885.60	233.951	8021.411	53.136	1328.40	350.927	12032.12	79.704	1660.50	438.659	15040.15	99.630

Triplex Water Injection Pump

The Model 3W175A is a single acting triplex plunger pump rated at 240 HP in continuous duty services and up to 290 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	240 HP	290 HP
Max. Speed.....	245 RPM	300 RPM
Minimum Speed.....	100 RPM	80 RPM
	US Customary	Metric
Stroke Length	6.89 IN	175 MM
Rated Rod Load.....	19 840LB	9000 KG
Pump Weight	5730 LB	2,600 KG
Oil Capacity	20GAL	75 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Consult for continuous service speeds in excess of 300 RPM. Additional plunger sizes are available.

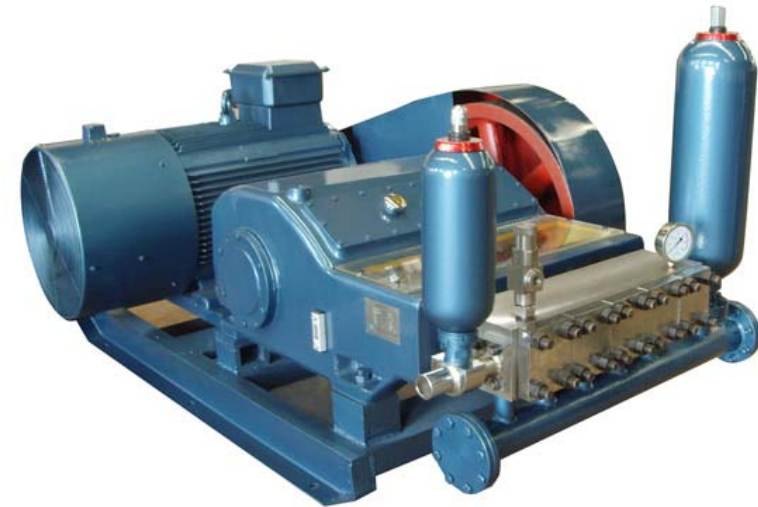
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				150RPM				270 RPM				310 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
25	0.984	0.429	0.113		112.102	16259	38.61	10.200	349.774	2.317	64.35	17.000	582.857	3.861	115.83	30.599	1049.172	6.950				
30	1.181	0.618	0.163		77.849	11291	55.62	14.693	503.754	3.337	92.70	24.489	839.640	5.562	166.86	44.080	1511.412	10.012	191.58	50.610	1735.285	11.495
35	1.378	0.841	0.222		57.195	8295	75.69	19.995	685.509	4.541	126.15	33.325	1142.616	7.569	227.07	59.986	2056.679	13.624	260.71	68.873	2361.467	15.643
40	1.575	1.099	0.290		43.790	6351	98.91	26.129	895.948	5.935	164.85	43.549	1493.145	9.891	296.73	78.388	2687.692	17.804	340.69	90.001	3085.773	20.441
55	2.165	2.078	0.549		23.162	3359	187.02	49.406	1693.922	11.221	311.70	82.343	2823.254	18.702	561.06	148.217	5081.917	33.664	644.18	170.175	5834.755	38.651
70	2.756	3.366	0.889		14.299	2074	302.94	80.029	2743.849	18.176	504.90	133.381	4573.182	30.294	908.82	240.086	8231.698	54.529	1043.46	275.654	9451.304	62.608
86	3.386	5.080	1.342		9.473	1374	457.20	120.780	4141.135	27.432	762.00	201.300	6901.891	45.720	1371.60	362.340	12423.40	82.296	1574.80	416.019	14263.91	94.488
95	3.740	6.199	1.638		7.763	1126	557.91	147.385	5053.386	33.475	929.85	245.641	8422.209	55.791	1673.73	442.154	15160.01	100.424	1921.69	507.658	17405.84	115.301

Quintuplex Water Injection Pump

The Model 5W90 is a single acting quintuplex plunger pump rated at 200 HP in continuous duty services and up to 250 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	200 HP	250 HP
Max. Speed.....	350 RPM	420 RPM
Minimum Speed.....	100 RPM	75 RPM
	US Customary	Metric
Stroke Length	3.5 IN	89 MM
Rated Rod Load.....	13 007LB	5900 KG
Pump Weight	3,306 LB	1,500 KG
Oil Capacity	25 GAL	95 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Positive crankcase lubrication is required on speeds less than 150RPM. Consult for continuous service speeds in excess of 350 RPM. Additional plunger sizes are available.

Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				300 RPM				375 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
25	0.984	0.307	0.081		112.102	16259	27.63	7.299	250.292	1.658	61.40	16.220	556.137	3.684	92.10	24.330	834.205	5.526	115.13	30.414	1042.832	6.908
30	1.181	0.442	0.117		77.849	11291	39.78	10.509	360.342	2.387	88.40	23.353	800.692	5.304	132.60	35.029	1201.038	7.956	165.75	43.787	1501.297	9.945
35	1.378	0.601	0.159		57.195	8295	54.09	14.289	489.865	3.245	120.20	31.754	1088.724	7.212	180.30	47.630	1633.085	10.818	225.38	59.539	2041.432	13.523
40	1.575	0.785	0.207		43.790	6351	70.65	18.664	639.919	4.239	157.00	41.475	1422.043	9.420	235.50	62.213	2133.065	14.130	294.38	77.767	2666.406	17.663
55	2.165	1.484	0.392		23.162	3359	133.56	35.283	1209.793	8.014	296.80	78.407	2688.296	17.808	445.20	117.610	4032.444	26.712	556.50	147.012	5040.554	33.390
70	2.756	2.404	0.635		14.299	2074	216.36	57.156	1959.763	12.982	480.80	127.014	4354.894	28.848	721.20	190.521	6532.341	43.272	901.50	238.152	8165.426	54.090
86	3.386	3.629	0.959		9.473	1374	326.61	86.282	2958.363	19.597	725.80	191.737	6574.006	43.548	1088.70	287.605	9861.009	65.322	1360.88	359.508	12326.34	81.653
95	3.740	4.428	1.170		7.763	1126	398.52	105.278	3609.605	23.911	885.60	233.951	8021.411	53.136	1328.40	350.927	12032.12	79.704	1660.50	438.659	15040.15	99.630

Quintuplex Water Injection Pump

The Model 5W175 is a single acting quintuplex plunger pump rated at 245 HP in continuous duty services and up to 292 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	245 HP	292 HP
Max. Speed.....	315 RPM	375 RPM
Minimum Speed.....	100 RPM	75 RPM
	US Customary	Metric
Stroke Length	4.921 IN	125 MM
Rated Rod Load.....	12 125LB	5500 KG
Pump Weight	6350 LB	2,900 KG
Oil Capacity	35 GAL	132 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Positive crankcase lubrication is required on speeds less than 150RPM. Consult for continuous service speeds in excess of 310 RPM. Additional plunger sizes are available.

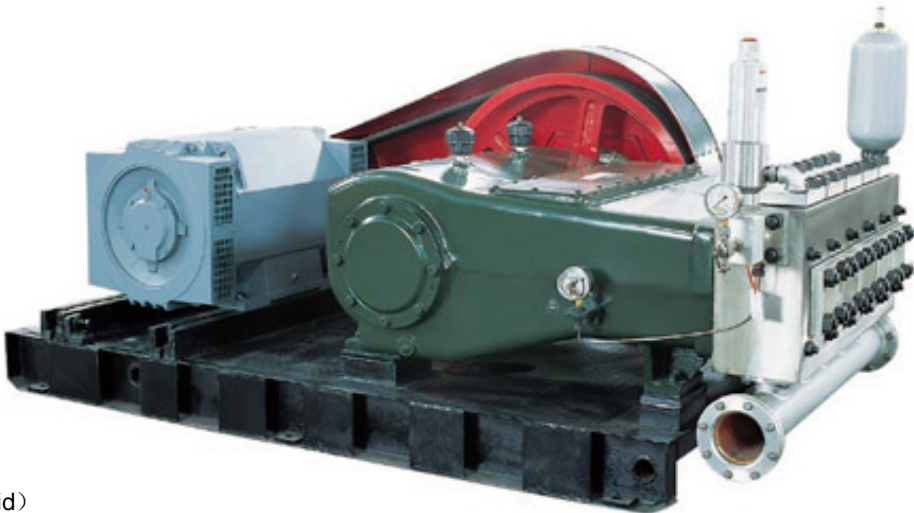
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				200RPM				300 RPM				375 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
25	0.984	0.307	0.081		112.102	16259	27.63	7.299	250.292	1.658	61.40	16.220	556.137	3.684	92.10	24.330	834.205	5.526	115.13	30.414	1042.832	6.908
30	1.181	0.442	0.117		77.849	11291	39.78	10.509	360.342	2.387	88.40	23.353	800.692	5.304	132.60	35.029	1201.038	7.956	165.75	43.787	1501.297	9.945
35	1.378	0.601	0.159		57.195	8295	54.09	14.289	489.865	3.245	120.20	31.754	1088.724	7.212	180.30	47.630	1633.085	10.818	225.38	59.539	2041.432	13.523
40	1.575	0.785	0.207		43.790	6351	70.65	18.664	639.919	4.239	157.00	41.475	1422.043	9.420	235.50	62.213	2133.065	14.130	294.38	77.767	2666.406	17.663
55	2.165	1.484	0.392		23.162	3359	133.56	35.283	1209.793	8.014	296.80	78.407	2688.296	17.808	445.20	117.610	4032.444	26.712	556.50	147.012	5040.554	33.390
70	2.756	2.404	0.635		14.299	2074	216.36	57.156	1959.763	12.982	480.80	127.014	4354.894	28.848	721.20	190.521	6532.341	43.272	901.50	238.152	8165.426	54.090
86	3.386	3.629	0.959		9.473	1374	326.61	86.282	2958.363	19.597	725.80	191.737	6574.006	43.548	1088.70	287.605	9861.009	65.322	1360.88	359.508	12326.34	81.653
95	3.740	4.428	1.170		7.763	1126	398.52	105.278	3609.605	23.911	885.60	233.951	8021.411	53.136	1328.40	350.927	12032.12	79.704	1660.50	438.659	15040.15	99.630

Quintuplex Water Injection Pump

The Model 5W175 is a single acting quintuplex plunger pump rated at 180 HP in continuous duty services and up to 360 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	180 HP	360 HP
Max. Speed.....	270 RPM	310 RPM
Minimum Speed.....	100 RPM	75 RPM
	US Customary	Metric
Stroke Length	6.89 IN	175 MM
Rated Rod Load.....	12 125LB	5500 KG
Pump Weight	7716 LB	3,400 KG
Oil Capacity	44 GAL	165 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Positive crankcase lubrication is required on speeds less than 150RPM. Consult for continuous service speeds in excess of 300 RPM. Additional plunger sizes are available.

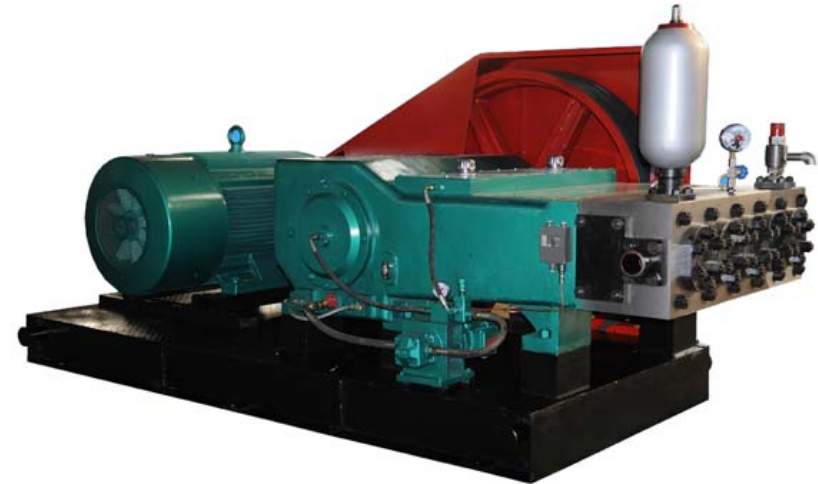
Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				150RPM				270 RPM				310 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
25	0.984	0.429	0.113		112.102	16259	38.61	10.200	349.774	2.317	64.35	17.000	582.857	3.861	115.83	30.599	1049.172	6.950				
30	1.181	0.618	0.163		77.849	11291	55.62	14.693	503.754	3.337	92.70	24.489	839.640	5.562	166.86	44.080	1511.412	10.012	191.58	50.610	1735.285	11.495
35	1.378	0.841	0.222		57.195	8295	75.69	19.995	685.509	4.541	126.15	33.325	1142.616	7.569	227.07	59.986	2056.679	13.624	260.71	68.873	2361.467	15.643
40	1.575	1.099	0.290		43.790	6351	98.91	26.129	895.948	5.935	164.85	43.549	1493.145	9.891	296.73	78.388	2687.692	17.804	340.69	90.001	3085.773	20.441
55	2.165	2.078	0.549		23.162	3359	187.02	49.406	1693.922	11.221	311.70	82.343	2823.254	18.702	561.06	148.217	5081.917	33.664	644.18	170.175	5834.755	38.651
70	2.756	3.366	0.889		14.299	2074	302.94	80.029	2743.849	18.176	504.90	133.381	4573.182	30.294	908.82	240.086	8231.698	54.529	1043.46	275.654	9451.304	62.608
86	3.386	5.080	1.342		9.473	1374	457.20	120.780	4141.135	27.432	762.00	201.300	6901.891	45.720	1371.60	362.340	12423.40	82.296	1574.80	416.019	14263.91	94.488
95	3.740	6.199	1.638		7.763	1126	557.91	147.385	5053.386	33.475	929.85	245.641	8422.209	55.791	1673.73	442.154	15160.01	100.424	1921.69	507.658	17405.84	115.301

Quintuplex Water Injection Pump

The Model 5W175A is a single acting quintuplex plunger pump rated at 300 HP in continuous duty services and up to 446 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	300 HP	446 HP
Max. Speed.....	260 RPM	310 RPM
Minimum Speed.....	100 RPM	75 RPM
	US Customary	Metric
Stroke Length	6.89 IN	175 MM
Rated Rod Load.....	14 850LB	6750 KG
Pump Weight	7716 LB	3,400 KG
Oil Capacity	44 GAL	165 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Pump equipped with positive crankcase lubrication. Consult for continuous service speeds in excess of 270 RPM. Additional plunger sizes are available.

Plgr.Dia.		LPR	GPR	BPD per RPM	Max.Pres.		90 RPM				150RPM				260 RPM				310 RPM			
mm	in				MPa	PSI	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h	LPM	GPM	BPD	M³/h
25	0.984	0.429	0.113		137.580	19954	38.61	10.200	349.774	2.317	64.35	17.000	582.857	3.861	111.54	29.466	1010.224	6.692				
30	1.181	0.618	0.163		95.541	13857	55.62	14.693	503.754	3.337	92.70	24.489	839.640	5.562	160.68	42.447	1455.405	9.641	191.58	50.610	1735.285	11.495
35	1.378	0.841	0.222		70.194	10181	75.69	19.995	685.509	4.541	126.15	33.325	1142.616	7.569	218.66	57.764	1980.595	13.120	260.71	68.873	2361.467	15.643
40	1.575	1.099	0.290		53.742	7795	98.91	26.129	895.948	5.935	164.85	43.549	1493.145	9.891	285.74	75.485	2588.058	17.144	340.69	90.001	3085.773	20.441
55	2.165	2.078	0.549		28.426	4123	187.02	49.406	1693.922	11.221	311.70	82.343	2823.254	18.702	540.28	142.727	4893.670	32.417	644.18	170.175	5834.755	38.651
70	2.756	3.366	0.889		17.548	2545	302.94	80.029	2743.849	18.176	504.90	133.381	4573.182	30.294	875.16	231.194	7926.910	52.510	1043.46	275.654	9451.304	62.608
86	3.386	5.080	1.342		11.626	1686	457.20	120.780	4141.135	27.432	762.00	201.300	6901.891	45.720	1320.80	348.920	11963.28	79.248	1574.80	416.019	14263.908	94.488
95	3.740	6.199	1.638		9.528	1382	557.91	147.385	5053.386	33.475	929.85	245.641	8422.209	55.791	1611.74	425.778	14598.44	96.704	1921.69	507.658	17405.839	115.301
110	4.331	8.311	2.196		7.106	1031	747.99	197.599	6774.934	44.879	1246.65	329.331	11291.66	74.799	2160.86	570.841	19572.27	129.652				

Quintuplex Water Injection Pump

The Model 5W175B is a single acting quintuplex plunger pump rated at 600 HP in continuous duty services and up to 670 HP in intermittent duty. This smooth running, versatile pump is offered with a variety of material and design options that make it ideal for general industrial, reverse osmosis, and typical applications involved in the production of oil and natural gas.

Specifications

	Continuous	Intermittent
Rated Power	600 HP	670 HP
Plunger pump Max. Speed.....	275 RPM	310 RPM
Piston pump Max.Speed	150RPM	180RPM
Minimum Speed.....	90 RPM	75 RPM
	US Customary	Metric
Stroke Length	6.89 IN	175 MM
Rated Rod Load.....	23148LB	10800 KG
Pump Weight	8378 LB	3,800 KG
Oil Capacity	44 GAL	165 L
Maximum Fluid Temp.	200°F	95°C
Mechanical Efficiency	90%	



Performance Ratings (Volumes indicated are displacement of incompressible fluid)

*Flows are based on 100% volumetric efficiency. Pump equipped with positive crankcase lubrication. Consult for continuous service speeds in excess of 275 RPM. Additional plunger sizes are available.

Plgr.Dia.		Flow RPM		Max.Press.		Pump speed=90rpm			Pump speed =150rpm			Pump speed=275rpm			Pump speed=310rpm		
mm	in	LPR	GPR	MPa	Psi	LPM	GPM	M3/h	LPM	GPM	M3/h	LPM	GPM	M3/h	LPM	GPM	M3/h
35	1.38	0.8	0.22	109.2	15833	75.7	20.0	4.54	126.2	33.3	7.57	231.4	61.1	13.88	260.8	68.9	15.65
40	1.57	1.1	0.29	83.6	12122	98.9	26.1	5.93	164.9	43.5	9.89	302.2	79.8	18.13	340.7	90.0	20.44
55	2.17	2.1	0.55	44.2	6412	187.0	49.4	11.22	311.7	82.3	18.70	571.4	150.9	34.28	644.1	170.2	38.65
70	2.76	3.4	0.89	27.3	3958	302.9	80.0	18.17	504.9	133.4	30.29	925.6	244.5	55.53	1043.4	275.6	62.60
86	3.39	5.1	1.34	18.1	2622	457.2	120.8	27.43	762.0	201.3	45.72	1397.0	369.1	83.82	1574.8	416.0	94.49
95	3.74	6.2	1.64	14.8	2149	557.9	147.4	33.47	929.9	245.6	55.79	1704.7	450.3	102.28	1921.7	507.7	115.30
100	3.94	6.9	1.81	13.4	1939	618.2	163.3	37.09	1030.3	272.2	61.82	1888.9	499.0	113.33	2129.3	562.5	127.76
110	4.33	8.3	2.20	11.1	1603	748.0	197.6	44.88	1246.7	329.3	74.80	2285.6	603.8	137.13	2576.5	680.6	154.59
120	4.72	9.9	2.61	9.3	1347	890.2	235.2	53.41	1483.7	391.9	89.02	2720.0	718.5	163.20	3066.2	810.0	183.97
130	5.12	11.6	3.07	7.9	1148	1044.7	276.0	62.68	1741.2	460.0	104.47						
140	5.51	13.5	3.56	6.8	990	1211.6	320.1	72.70	2019.4	533.5	121.16						

MODEL: 3W80

