

PUMP MODEL

TRIPLEX PLUNGER PUMP RRP 46 T



This six-inch stroke pump is equipped with mono block Forged Steel fluid end, designed to handle various fluid.

Working Pressure

Upto 1,420 psig

Displacement

17003 bpd (495.72 gpm)

at 497 psig

6046 bpd (176.26gpm)

At 1420 psig

NOTE:-THIS PUMP MODEL CAN ALSO BE USED WITH INTERNAL GEAR REDUCTION SYSTEM:-MODEL(RRP 46 TG)

SPECIFICATIONS

	ENGLISH		METRIC		MAINTENANCE FEATURES
Pump size(max Plunger Dia x Stroke)	Inches	4½ x 6	mm	114 x 152	
Standard Plunger Sizes	Inches	3, 3-1/8, 3-1/4, 3-3/8, 3-1/2, 3-5/8, 3-3/4, 3-7/8, 4, 4-1/8, 4-1/4, and 4-1/2	mm	76, 79, 83, 86, 89, 92, 95, 98, 102, 105, 108 and 114	
Rated bhp at 400rpm	hp	160	Kw	119	
Hydrostatic Test Pressure: Discharge	psi	2130	kPa	14685	
Suction	psi	412.5	kPa	2844	
Maximum Working Pressure: Discharge	psi	1420	kPa	9791	
Suction	psi	275	kPa	1896	
Two Flanged Suction Connection: Pipe Size	Inches	6"	mm	152	
ANSI Rating	Class	150	Class	150	
Two Flanged Discharge Connection: Pipe Size	Inches	3	mm	76	
ANSI Rating	Class	600	Class	600	
Crank Shaft Extension: Diameter	Inches	4.495	mm	114	
Length	Inches	8¾	mm	313	
Keyway (Width x Depth)	Inches	1 x ¾	mm	25 x 10	
Rated Plunger Rod Load	Pounds	10000	N	44482	
Oil Capacity (Crank Case)	Gallons	25	Litre	95	
Weight (On wooden shipping skid) (Est.)	Pounds	3575	Kg	1622	

- Horizontal design
- Large power end access covers and doors
- Outside access for bearing adjustment
- Separate crosshead-plunger shank construction
- Open frame cradles
- Removable stuffing boxes

PLUNGER DIA (INCH)	PLUNGER DIA (mm)	STUFFING BOX BORE (INCH)	STUFFING BOX BORE (mm)
3	76	4⅜	105
3¼ - 3½	83 - 89	4⅞	124
3⅝ - 4½	92 - 114	5¼	133

PUMP PERFORMANCE DATA

ENGLISH UNIT

Plgr.Dia (inch)	Plunger Area	Displacement (Gal.PerRev.)	Maximum Pressure (psi)	100 rpm		150 rpm		200 rpm		250 rpm		300 rpm		* 320 rpm		400		
	(Sq.inch)			bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	psi	bpd	gpm
3	7.0686	0.5508	1420	1889	55.10	2834	82.66	3778	110.19	4723	137.75	5668	165.32	6046	176.34	1120	7557	220.41
3 $\frac{1}{8}$	7.6699	0.5977	1300	2050	59.79	3075	89.69	4100	119.58	5125	149.48	6150	179.38	6560	191.33	1033	8200	239.17
3 $\frac{1}{4}$	8.2958	0.6464	1200	2217	64.66	3326	97.01	4434	129.33	5543	161.67	6652	194.02	7095	206.94	955	8869	258.68
3 $\frac{3}{8}$	8.9462	0.6971	1110	2391	69.74	3587	104.62	4782	139.48	5978	174.36	7173	209.21	7651	223.15	885	9564	278.95
3 $\frac{1}{2}$	9.6211	0.7497	1040	2571	74.99	3857	112.50	5143	150.00	6429	187.51	7714	224.99	8229	240.01	825	10286	300.01
3 $\frac{5}{8}$	10.321	0.8042	965	2758	80.44	4138	120.69	5517	160.91	6896	201.13	8275	241.35	8827	257.45	767	11034	321.83
3 $\frac{3}{4}$	11.045	0.8606	905	2952	86.10	4428	129.15	5904	172.20	7380	215.25	8856	258.30	9446	275.51	715	11808	344.40
3 $\frac{7}{8}$	11.793	0.9190	845	3152	91.93	4728	137.90	6304	183.87	7880	229.83	9456	275.80	10086	294.18	671	12608	367.73
4	12.566	0.9792	795	3359	97.97	5038	146.94	6717	195.91	8397	244.91	10076	293.88	10748	313.48	630	13435	391.85
4 $\frac{1}{8}$	13.364	1.0414	745	3572	104.18	5358	156.28	7144	208.37	8930	260.46	10716	312.55	11430	333.38	593	14287	416.70
4 $\frac{1}{4}$	14.186	1.1054	705	3792	110.60	5687	165.87	7583	221.17	9479	276.47	11375	331.77	12133	353.88	560	15166	442.34
4 $\frac{3}{8}$	15.904	1.2393	629	4251	123.99	6376	185.89	8502	247.98	10627	309.95	12752	371.93	13603	396.75	497	17003	495.92
Brake Horse Power Required				50		75		100		125		150		160		160		

METRIC UNIT

Plgr.Dia (mm)	Plunger Area	Displacement L / Rev.)	Maximum Pressure (kPa)	100rpm		150 rpm		200 rpm		250 rpm		300 rpm		* 320 rpm		400 rpm		
	(cm²)			m³/d	L/s	m³/d	L/s	m³/d	L/s	m³/d	L/s	m³/d	L/s	m³/d	L/s	kpa	m³/d	L/s
76	45.6037	2.0850	9791	300	3.47	451	5.22	601	6.96	751	8.69	901	10.43	961	11.12	7722	1201	13.90
79	49.4832	2.2625	8963	326	3.77	489	5.66	652	7.55	815	9.43	978	11.32	1043	12.07	7122	1304	15.09
83	53.5210	2.4469	8274	352	4.07	529	6.12	705	8.16	881	10.20	1058	12.25	1128	13.06	6584	1410	16.32
86	57.7171	2.6388	7653	380	4.40	570	6.60	760	8.80	950	11.00	1140	13.19	1216	14.07	6102	1521	17.60
89	62.0717	2.8379	7171	409	4.73	613	7.09	818	9.47	1022	11.83	1226	14.19	1308	15.14	5688	1635	18.92
92	66.5845	3.0442	6653	438	5.07	658	7.62	877	10.15	1096	12.69	1316	15.23	1403	16.24	5288	1754	20.30
95	71.2557	3.2577	6240	469	5.43	704	8.15	939	10.87	1173	13.58	1408	16.30	1502	17.38	4930	1877	21.72
98	76.0853	3.4788	5826	501	5.80	752	8.70	1002	11.60	1253	14.50	1503	17.40	1604	18.56	4626	2005	23.21
102	81.0732	3.7067	5481	534	6.18	801	9.27	1068	12.36	1335	15.45	1602	18.54	1709	19.78	4344	2136	24.72
105	86.2194	3.9421	5137	568	6.57	852	9.86	1136	13.15	1420	16.44	1704	19.72	1817	21.03	4089	2271	26.28
108	91.5240	4.1844	4861	603	6.98	904	10.46	1206	13.96	1507	17.44	1808	20.93	1929	22.33	3861	2411	27.91
114	102.6083	4.6913	4337	676	7.82	1014	11.74	1352	15.65	1690	19.56	2027	23.46	2163	25.03	3434	2703	31.28
Kilowatt Required				37		56		75		94		112		119		119		

*PUMP SPEEDS INCREASE IN EXCESS OF 320 RPM REQUIERES SPECIFIC APPROVAL OF THE MANUFACTURER, VISCOSITY, TEMPERATURE, VELOCITIES AND OTHER FLUID PROPERTIES OR CHARACTERISTICS COMBINED WITH THE INHERENT MECHANICAL EFFICIENCIES OF PUMP MAY RESULT IN LESS THAN OPTIMUM OPERATIONS. WE HAVE APPLIED THIS CONSERVATISM TO ASSURE YOU TOTAL PERFORMANCE.