PUMP MODEL

TRIPLEX PLUNGER PUMP
RRP 44 T

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

Working Pressure

Upto1,500 psig

Displacement

10,076bpd (293.76gpm)
at 525 psig
3,552 bpd (103.56gpm)
at1,500 psig

NOTE:-THIS PUMP MODEL CAN ALSO BE USED WITH EXTERNAL LUBRICATION SYSTEM TO INCREASE THE PUMP CAPACITY UPTO 125 HP WITH SAME PLUNGER DIA: (MODEL RRP 44 TH)

SPECIFICATIONS

	ENGLISH		METRIC		MAINTENANCE FEATURES
Pump size(max .Plunger Dia x Stroke)	Inches	4x 4	mm	102 x 102	
Standard Plunger Sizes	Inches	2-3/8, 2-1/2, 2-5/8, 2-3/4, 2-7/8, 3, 3-1/4, 3-1/2, 3-3/4 and 4	mm	60, 64, 67, 70, 73, 76, 83, 89, 95,and 102	• Horizontal design
Rated bhp at 450rpm	hp	100	Kw	75	• Large power end access covers and doors
Hydrostatic Test Pressure: Discharge	psi	2250	kPa	15513	
Suction	psi	412.5	kPa	2844	• Outside access for bearing adjustment
Maximum Working Pressure: Discharge	psi	1500	kPa	10342	
Suction	psi	275	kPa	1896	• Separate crosshead–plunger shank construction
Two Suction Connection: Pipe Size	Inches	6”, Sch-40	mm	152, Sch-40	
Two Discharge Connection: Pipe Size	Inches	3”, Sch-160	mm	76,Sch-160	• Open frame cradles
Crank Shaft Extension: Diameter	Inches	3.750	mm	95	
Length	Inches	7½	mm	191	• Removable stuffing boxes
Keyway (Width x Depth)	Inches	7/8x7/16	mm	28 x 11	
Accessory Gear Units Reduction Ratios		2.596:1		2.596:1	
		3.109:1		3.109:1	
		3.947:1		3.947:1	
		6.192:1		6.192:1	
Rated Plunger Rod Load	Pounds	6600	N	29358	
Oil Capacity (Crank Case)	Gallons	10	Litre	38	
Gear Unit (Capacity Varies with Gear Ratio)	Gallons		---		
Weight (On wooden shipping skid)(Est.)	Pounds	1705	Kg	773	
Gear Unit (weight Varies with Gear Ratio) (Est.)	Pounds	575	Kg	261	

PLUNGER DIA (INCH)	PLUNGER DIA (mm)	STUFFING BOX BORE (INCH)	STUFFING BOX BORE (mm)
2⅜ - 2⅝	60 - 67	3⅜	86
2¾ - 3	70 - 76	3¾	95
3¼ - 3½	83 - 89	4¼	108
3¾ - 4	95 - 102	4¾	121

PUMP PERFORMANCE DATA

ENGLISH UNIT

Plgr.Dia (inch)	Plunger Area (Sq.inch)	Displacement (Gal.PerRev.)	Maximum Pressure (psi)	100rpm		150rpm		200rpm		250rpm		300rpm		350rpm		400rpm		450rpm	
				bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm
2⅜	4.4301	0.2301	1500	789	23.01	1184	34.52	1579	46.03	1973	57.53	2368	69.04	2763	80.55	3157	92.05	3552	103.56
2½	4.9087	0.2550	1340	875	25.50	1312	38.25	1749	51	2187	63.75	2624	76.5	3061	89.25	3499	102	3936	114.75
2⅝	5.4119	0.2811	1215	964	28.11	1446	42.17	1929	56.23	2411	70.28	2893	84.34	3375	98.40	3857	112.45	4339	126.51
2¾	5.9396	0.3085	1110	1058	30.85	1587	46.28	2117	61.71	2646	77.14	3175	92.56	3704	107.99	4233	123.42	4762	138.85
2⅞	6.4918	0.3372	1015	1157	33.72	1735	50.59	2313	67.45	2892	84.31	3470	101.17	4049	118.03	4627	134.89	5205	151.76
3	7.0686	0.3672	930	1259	36.72	1889	55.08	2519	73.44	3149	91.80	3778	110.16	4408	128.52	5038	146.88	5668	165.24
3¼	8.2958	0.4309	795	1478	43.09	2217	64.64	2956	86.19	3695	107.74	4434	129.28	5174	150.83	5913	172.38	6652	193.93
3½	9.6211	0.4998	685	1714	49.98	2571	74.97	3429	99.96	4286	124.95	5143	149.94	6000	174.93	6857	199.92	7714	224.91
3¾	11.045	0.5737	595	1968	57.37	2952	86.06	3936	114.75	4920	143.44	5904	172.12	6888	200.81	7872	229.50	8856	258.19
4	12.566	0.6528	525	2239	65.28	3359	97.92	4478	130.56	5598	163.20	6717	195.84	7837	228.48	8956	261.12	10076	293.76
Brake Horse Power Required				22		33		44		56		67		78		89		100	

METRIC UNIT

Plgr.Dia (mm)	Plunger Area (cm^2)	Displacement (L / Rev.)	Maximum Pressure (kPa)	100rpm		150rpm		200rpm		250rpm		300rpm		350rpm		400rpm		450rpm	
				m^3/d	L/s	m^3/d	L/s	m^3/d	L/s	m^3/d	L/s	m^3/d	L/s	m^3/d	L/s	m^3/d	L/s	m^3/d	L/s
60	28.581	0.8712	10342	125	1.45	188	2.18	251	2.9	314	3.63	376	4.36	439	5.08	502	5.81	565	6.53
64	31.669	0.9653	9239	139	1.61	208	2.41	278	3.22	347	4.02	417	4.83	486	5.63	556	6.44	625	7.24
68	34.915	1.0642	8377	153	1.77	230	2.66	306	3.55	383	4.43	460	5.32	536	6.21	613	7.09	690	7.98
70	38.320	1.1680	7653	168	1.95	252	2.92	336	3.89	420	4.87	505	5.84	589	6.81	673	7.79	757	8.76
73	41.882	1.2766	6998	184	2.13	276	3.19	368	4.26	460	5.32	551	6.38	643	7.45	735	8.51	827	9.57
76	45.604	1.3900	6412	200	2.32	300	3.48	400	4.63	500	5.79	600	6.95	701	8.11	801	9.27	901	10.43
82	53.521	1.6313	5481	235	2.72	352	4.08	470	5.44	587	6.8	705	8.16	822	9.52	940	10.86	1057	12.24
90	62.071	1.8919	4723	272	3.15	409	4.73	545	6.31	681	7.88	817	9.46	954	11.04	1090	12.61	1226	14.19
95	71.258	2.1719	4102	313	3.62	469	5.43	625	7.24	782	9.05	938	10.86	1095	12.67	1251	14.48	1407	16.29
102	81.071	2.4711	3620	356	4.12	534	6.18	712	8.24	890	10.3	1068	12.36	1245	14.41	1423	16.47	1601	18.53
Kilo-watt Input				17		25		33		41		50		58		66		75	

ENGLISH AND METRIC

Gear Unit Pinion Shaft r / min at Gear Ratios of:									
	2.596:1	260	389	519	649	779	909	1038	1168
	3.109:1	311	466	622	777	933	1088	1244	1399
	3.947:1	396	592	789	987	1184	1381	1579	1776
	6.192:1	619	929	1238	1548	1858	2167	2477	2786