PUMP MODEL

TRIPLEX PLUNGER PUMP
RRP 24 T

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

Working Pressure
Upto 5,000 psig

Displacement
3187 bpd (92.95 gpm)
at 1660 psig
984 bpd (28.69gpm)
At 5000 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 24 TH)

SPECIFICATIONS

	ENGLISH		METRIC		MAINTENANCE FEATURES
Pump size(max .Plunger Dia x Stroke)	Inches	2¼ x 4	mm	57 x 102	• Horizontal design • Large power end access covers and doors • Outside access forbearing adjustment • Separate crosshead–plunger shank construction • Open frame cradles • Removable stuffing boxes
Standard Plunger Sizes	Inches 1-1/4,1-3/8,1-1/2, 1-5/8, 1-3/4, 1-7/8, 2, 2-1/8 and 2-1/4		mm 32, 35, 38, 41, 44,48, 51, 54 and 57		
Rated bhp at 450rpm	hp	100	Kw	75	
Hydrostatic Test Pressure: Discharge	psi	7500	kPa	51710	
Suction	psi	412.5	kPa	2844	
Maximum Working Pressure: Discharge	psi	5000	kPa	34474	
Suction	psi	275	kPa	1896	
Two Suction Connection: Pipe Size	Inches	3", Sch-160	mm	76, Sch-160	
Two Discharge Connection: Pipe Size	Inches	2", Sch-160	mm	51, Sch-160	
Crank Shaft Extension: Diameter	Inches	3.750	mm	95	
Length	Inches	7½	mm	191	
Keyway (Width x Depth)	Inches	7/8 x 7/16	mm	22 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	1700	Kg	771	
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)
1¼ - 1½	32 – 38	2¼	57
1⅝ - 1⅞	41 – 48	2⅝	67
2 - 2¼	51 – 57	3	76

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
1¼	1.2272	0.0637	5000	219	6.39	328	9.57	437	12.75	546	15.93	656	19.13	765	22.31	874	25.49	984	28.70
1⅜	1.4849	0.0771	4445	265	7.73	397	11.58	529	15.43	661	19.28	793	23.13	926	27.01	1058	30.86	1190	34.71
1½	1.7671	0.0918	3735	315	9.19	472	13.77	629	18.35	787	22.95	944	27.53	1102	32.14	1259	36.72	1416	41.30
1⅝	2.0739	0.1077	3182	370	10.79	554	16.16	739	21.55	923	26.92	1108	32.32	1293	37.71	1478	43.11	1662	48.48
1¾	2.4053	0.1249	2744	429	12.51	643	18.75	857	25.00	1071	31.24	1285	37.48	1499	43.72	1714	49.99	1928	56.23
1⅞	2.7612	0.1434	2390	492	14.35	738	21.53	984	28.70	1229	35.85	1475	43.02	1721	50.20	1967	57.37	2213	64.55
2	3.1416	0.1632	2101	560	16.33	839	24.47	1119	32.64	1399	40.80	1679	48.97	1958	57.11	2238	65.28	2518	73.44
2⅛	3.5466	0.1842	1861	632	18.43	948	27.65	1263	36.84	1579	46.05	1895	55.27	2211	64.49	2527	73.70	2843	82.92
2¼	3.9761	0.2065	1660	708	20.65	1062	30.98	1416	41.30	1770	51.63	2125	61.98	2479	72.30	2833	82.63	3187	92.95
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
32	7.9173	0.2413	34474	35	0.41	52	0.60	69	0.80	87	1.01	104	1.20	122	1.41	139	1.61	156	1.81
35	9.5799	0.2920	30647	42	0.49	63	0.73	84	0.97	105	1.22	126	1.46	147	1.70	168	1.94	189	2.19
38	11.4009	0.3475	25751	50	0.58	75	0.87	100	1.16	125	1.45	150	1.74	175	2.03	200	2.31	225	2.60
41	13.3802	0.4078	21942	59	0.68	88	1.02	117	1.35	147	1.70	176	2.04	206	2.38	235	2.72	264	3.06
44	15.5179	0.4730	18919	68	0.79	102	1.18	136	1.57	170	1.97	204	2.36	238	2.75	272	3.15	306	3.54
48	17.8139	0.5430	16481	78	0.90	117	1.35	156	1.81	195	2.26	235	2.72	274	3.17	313	3.62	352	4.07
51	20.2683	0.6178	14485	89	1.03	133	1.54	178	2.06	222	2.57	267	3.09	311	3.60	356	4.12	400	4.63
54	22.8810	0.6974	12831	100	1.16	151	1.75	201	2.33	251	2.91	301	3.48	351	4.06	402	4.65	452	5.23
57	25.6521	0.7819	11445	113	1.31	169	1.96	225	2.60	281	3.25	338	3.91	394	4.56	450	5.21	507	5.87
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