

PUMP MODEL

TRIPLEX PLUNGER PUMP RRP 23 TW



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

Working Pressure
Upto 2,290 psig

Displacement
3280 bpd (95.62 GPM)
at 970 psig
664 bpd (19.36 gpm)
at 2290 psig

SPECIFICATIONS				
	ENGLISH		METRIC	
Pump size (max .Plunger Dia x Stroke)	Inches	2½ X 3	mm	64 x 76
Standard Plunger Sizes	Inches	1-1/8,1-1/4,1-3/8,1-1/2,1-5/8, 1-3/4, 1-7/8, 2, 2-1/8, 2-1/4, 2-3/8 and 2-1/2	mm	29, 32, 35, 38, 41, 44, 48, 51, 54 ,57, 60 and 64
Rated bhp at 500 rpm	hp	60	Kw	45
Hydrostatic Test Pressure: Discharge	psi	3435	kPa	23683
Suction	psi	637.5	kPa	4395
Maximum Working Pressure: Discharge	psi	2290	kPa	15789
Suction	psi	425	kPa	2930
Two Threaded Suction Connection: (Pipe Tap)	Inches	2½	mm	64
Two Discharge Connection: Pipe Tap	Inches	2"	mm	51
Crank Shaft Extension: Diameter	Inches	2.995	mm	76
Length	Inches	4 ¾	mm	121
Keyway (Width x Depth)	Inches	¾ x 3/8	mm	19 x 10
Accessory Gear Units Reduction Ratios		3.54:1		3.54:1
		3.95:1		3.95:1
		4.45:1		4.45:1
Rated Plunger Rod Load	Pounds	4750	N	21129
Oil Capacity (Crank Case)	Gallons	2½	Litres	9
Gear Unit (Horizontally Mounted)	Gallons	1½	Litres	6
Weight (On wooden shipping skid) (Est.)	Pounds	860	Kg	390
Gear Unit (Weight Varies with Gear Ratio) (Est.)	Pounds	175	Kg	79

- Horizontal design
- Large power end access covers and doors
- Outside access forbearing adjustment
- Separate crosshead –plunger shank construction
- Open frame cradles
- Removable stuffing boxes
- These pumps have wing type guide valve for crude oil application.

PLUNGER DIA (INCH)	PLUNGER DIA (mm)	STUFFING BOX BORE (INCH)	STUFFING BOX BORE (mm)
1⅛ - 1⅝	29 - 41	2¼	57
1¾ - 2½	44 - 64	3	76

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		350 rpm		400 rpm		450 rpm		500 rpm	
	(Sq.inch)			bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm
1½	0.9940	0.0387	2290	133	3.88	199	5.80	266	7.76	332	9.68	399	11.64	465	13.56	531	15.49	598	17.44	664	19.37
1¼	1.2272	0.0478	2290	164	4.78	246	7.18	328	9.57	410	11.96	492	14.35	574	16.74	656	19.13	738	21.53	820	23.92
1½	1.4849	0.0579	2290	198	5.78	298	8.69	397	11.58	496	14.47	595	17.35	695	20.27	794	23.16	893	26.05	992	28.93
1½	1.7671	0.0688	2290	236	6.88	354	10.33	472	13.77	590	17.21	708	20.65	827	24.12	945	27.56	1063	31.00	1181	34.45
1½	2.0739	0.0808	2290	277	8.08	416	12.13	554	16.16	693	20.21	831	24.24	970	28.29	1109	32.35	1247	36.37	1386	40.43
1¼	2.4053	0.0937	1980	321	9.36	482	14.06	643	18.75	804	23.45	964	28.12	1125	32.81	1286	37.51	1446	42.18	1607	46.87
1½	2.7612	0.1076	1720	369	10.76	553	16.13	738	21.53	922	26.89	1107	32.29	1291	37.65	1476	43.05	1660	48.42	1845	53.81
2	3.1416	0.1224	1510	420	12.25	630	18.38	840	24.50	1050	30.63	1259	36.72	1469	42.85	1679	48.97	1889	55.10	2099	61.22
2½	3.5466	0.1382	1340	474	13.83	711	20.74	948	27.65	1185	34.56	1422	41.48	1659	48.39	1896	55.30	2133	62.21	2370	69.13
2¼	3.9761	0.1549	1200	531	15.49	797	23.25	1063	31.00	1328	38.73	1594	46.49	1860	54.25	2125	61.98	2391	69.71	2657	77.46
2½	4.4301	0.1726	1070	592	17.27	888	25.90	1184	34.53	1480	43.17	1776	51.80	2072	60.43	2368	69.07	2664	77.67	2960	86.30
2½	4.9087	0.1912	970	656	19.13	984	28.70	1312	38.27	1640	47.83	1968	57.40	2296	66.97	2624	76.53	2952	86.06	3280	95.62
Brake Horse Power Required				12		18		24		30		36		42		48		54		60	

METRIC UNIT

Plgr.Dia (mm)	Plunger Area	Displacement (L / Rev.)	Maximum Pressure (kPa)	100 rpm		150 rpm		200 rpm		250 rpm		300 rpm		350 rpm		400 rpm		450 rpm		500 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	m³/d	L/s	m³/d	L/s	m³/d	L/s
29	6.413	0.1466	15789	21	0.24	32	0.37	42	0.49	53	0.61	63	0.73	74	0.86	84	0.97	95	1.10	106	1.23
32	7.9173	0.1810	15789	26	0.30	39	0.45	52	0.60	65	0.75	78	0.90	91	1.05	104	1.20	117	1.35	130	1.50
35	9.5799	0.2190	15789	32	0.37	47	0.54	63	0.73	79	0.91	95	1.10	110	1.27	126	1.46	142	1.64	158	1.83
38	11.4009	0.2606	15789	38	0.44	56	0.65	75	0.87	94	1.09	113	1.31	131	1.52	150	1.74	169	1.96	188	2.18
41	13.3802	0.3059	15789	44	0.51	66	0.76	88	1.02	110	1.27	132	1.53	154	1.78	176	2.04	198	2.29	220	2.55
44	15.5179	0.3547	13652	51	0.59	77	0.89	102	1.18	128	1.48	153	1.77	179	2.07	204	2.36	230	2.66	255	2.95
48	17.8139	0.4072	11859	59	0.68	88	1.02	117	1.35	147	1.70	176	2.04	205	2.37	235	2.72	264	3.06	293	3.39
51	20.2683	0.4633	10411	67	0.78	100	1.16	133	1.54	167	1.93	200	2.31	234	2.71	267	3.09	300	3.47	334	3.87
54	22.881	0.5231	9238	75	0.87	113	1.31	151	1.75	188	2.18	226	2.62	264	3.06	301	3.48	339	3.92	377	4.36
57	25.6521	0.5864	8274	84	0.97	127	1.47	169	1.96	211	2.44	253	2.93	296	3.43	338	3.91	380	4.40	422	4.88
60	28.5815	0.6534	7377	94	1.09	141	1.63	188	2.18	235	2.72	282	3.26	329	3.81	376	4.35	423	4.90	470	5.44
64	31.6692	0.7240	6688	104	1.20	156	1.81	208	2.41	261	3.02	313	3.62	365	4.22	417	4.83	469	5.43	521	6.03
Kilo-watt Input				9		13		18		22		27		31		36		40		45	

ENGLISH AND METRIC

Gear Unit Pinion Shaft r / min at Gear Ratios of:	3.54:1	354	531	708	885	1062	1239	1416	1593	1770
	3.95:1	395	593	790	988	1185	1383	1580	1778	1975
	4.45:1	445	668	890	1113	1335	1558	1780	2003	2225