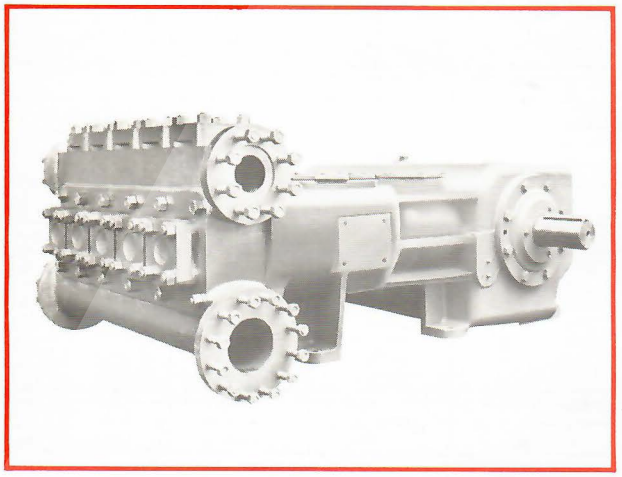
A-546 Quintuplex



Specifications

		English		Metric
Pump Size (Max. Plunger Dia. x Stroke)	inches	4¼ x 6	mm	108 x 152
Standard Plunger Sizes	inches	3, 3⅛, 3¼, 3⅜, 3½, 3⅝, 3¾, 3⅞, 4, 4⅛, and 4¼	mm	76, 79, 83, 86, 89, 92, 95, 98, 102, 105, and 108
Rated bhp at 360 rpm	hp	267	kW	199
Maximum Working Pressure: Discharge	psi	1420	kPa	9791
Suction	psi	720	kPa	4964
Two Flanged Suction Connections: Pipe Size	inches	6	mm	152
ANSI Rating	class	300	class	300
ANSI Facing		Flat Face		Flat Face
Two Flanged Discharge Connections: Pipe Size	inches	4	mm	102
ANSI Rating	class	600	class	600
ANSI Facing		Large Recess		Large Recess
Crankshaft Extension: Diameter	inches	4.495	mm	114
Length	inches	7¾	mm	197
Keyway (Width x Depth)	inches	1 x ⅜	mm	25 x 10
Pinion Shaft Extension (If Gear Unit Supplied):				
(For Belt or Chain Drive) Diameter	inches	4.495	mm	114
Length	inches	8¾	mm	222
Keyway (Width x Depth)	inches	1 x ½	mm	25 x 13
(For Direct Drive) Diameter	inches	3.375	mm	86
Length	inches	4½	mm	114
Keyway (Width x Depth)	inches	⅞ x 7/16	mm	22 x 11
Accessory Gear Units Reduction Ratios		2.698:1		2.698:1
		3.680:1		3.680:1
		5.500:1		5.500:1
		7.316:1		7.316:1
		9.500:1		9.500:1
Rated Plunger Load	pounds	10000	N	44480
Oil Capacity: Crankcase	gallons	32	litres	121
Gear Unit	gallons	—	litres	—
Weight: Pump Only				
(On Wood Shipping Skids) (Est.)	pounds	6340	kg	2876
Gear Unit (Est.)	pounds	2219	kg	1007

Plunger Diameter		Stuffing Box Bore	
Inches	mm	Inches	mm
3 - 3⅛	76 - 79	4⅛	105
3¼ - 3½	83 - 89	4⅞	124
3⅝ - 4¼	92 - 108	5¼	133

Performance Data

(Volumes Indicated are Displacement of Noncompressible Fluid)

ENGLISH UNITS

Plgr. Dia. In.	Plgr. Area (Sq. In.)	Displacement Gal. Per Rev.	Max. Pressure psi	100 rpm		150 rpm		200 rpm		250 rpm		300 rpm		*320 rpm		360 rpm		
				bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	bpd	gpm	psi	bpd	gpm
3	7.0686	.9180	1420	3149	91.80	4723	137.70	6297	183.60	7872	229.50	9446	275.40	10076	293.76	1250	11335	330.48
3⅛	7.6699	.9961	1300	3417	99.61	5125	149.41	6833	199.22	8542	249.02	10250	298.83	10933	318.75	1150	12300	358.59
3¼	8.2958	1.0774	1200	3695	107.74	5543	161.60	7391	215.47	9238	269.34	11086	323.21	11825	344.76	1060	13303	387.85
3⅜	8.9462	1.1618	1110	3985	116.18	5978	174.28	7970	232.37	9963	290.46	11955	348.55	12752	371.79	980	14346	418.26
3½	9.6211	1.2495	1040	4286	124.95	6429	187.42	8572	249.90	10714	312.37	12857	374.85	13715	399.84	920	15429	449.82
3⅝	10.321	1.3403	965	4597	134.03	6896	201.05	9195	268.07	11493	335.09	13792	402.10	14712	428.91	850	16551	482.52
3¾	11.045	1.4344	905	4920	143.44	7380	215.16	9840	286.87	12300	358.59	14760	430.31	15744	459.00	800	17712	516.37
3⅞	11.793	1.5316	845	5253	153.16	7880	229.74	10507	306.32	13133	382.90	15760	459.48	16011	490.11	750	18912	551.37
4	12.566	1.6320	795	5598	163.20	8397	244.80	11196	326.40	13994	408.00	16793	489.60	17913	522.24	705	20152	587.52
4⅛	13.364	1.7356	745	5953	173.56	8930	260.34	11906	347.12	14883	433.90	17859	520.68	19050	555.39	660	21431	624.81
4¼	14.186	1.8424	705	6319	184.24	9479	276.36	12639	368.47	15798	460.59	18958	552.71	20222	589.56	625	22750	663.25
Brake Horsepower Required				84		126		168		210		250		267		267		

METRIC UNITS

Plgr. Dia. mm	Plgr. Area cm²	Displacement L/rev.	Max. Pressure kPa	100 r/min.		150 r/min.		200 r/min.		250 r/min.		300 r/min.		*320 r/min.		360 r/min.		
				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	3.4750	9791	501	5.79	751	8.69	1001	11.58	1252	14.48	1502	17.38	1602	18.53	8618	1802	20.85
79	49.4832	3.7706	8963	543	6.28	815	9.43	1086	12.57	1358	15.71	1630	18.85	1738	20.11	7929	1956	22.62
83	53.5210	4.0784	8274	587	6.80	881	10.20	1175	13.59	1469	16.99	1763	20.39	1880	21.75	7308	2115	24.47
86	57.7171	4.3979	7653	634	7.33	950	11.00	1267	14.66	1584	18.33	1901	21.99	2027	23.42	6757	2281	26.39
89	62.0717	4.7299	7171	681	7.88	1022	11.82	1363	15.77	1703	19.71	2044	23.65	2181	25.23	6343	2453	28.38
92	66.5845	5.0736	6653	731	8.46	1096	12.68	1462	16.91	1827	21.14	2193	25.37	2339	27.06	5861	2631	30.44
95	71.2557	5.4298	6240	782	9.05	1173	13.57	1564	18.10	1956	22.62	2347	27.15	2503	28.96	5516	2816	32.58
98	76.0853	5.7977	5826	835	9.66	1253	14.49	1670	19.33	2088	24.16	2506	28.99	2546	30.92	5171	3007	34.79
102	81.0732	6.1778	5481	890	10.30	1335	15.44	1780	20.59	2225	25.74	2670	30.89	2848	32.95	4861	3204	37.07
105	86.2194	6.5700	5137	946	10.95	1420	16.42	1893	21.90	2366	27.37	2839	32.85	3029	35.04	4551	3407	39.42
108	91.5240	6.9742	4861	1005	11.62	1507	17.44	2009	23.25	2512	29.06	3014	34.87	3215	37.20	4309	3617	41.84
Kilowatt Required				63		94		125		157		186		199		199		

ENGLISH AND METRIC

Gear Unit Pinion Shaft r/min. at Gear Ratios of:								
	2.698:1	270	405	540	675	809	863	971
	3.680:1	368	552	736	920	1104	1178	1325
	5.500:1	550	825	1100	1375	1650	1760	1980
	7.316:1	732	1097	1463	1829	2195	2341	2634
	9.500:1	950	1425	1900	2375	2850	3040	3420

*Pump speeds in excess of 320 rpm require specific approval of the manufacturer. Viscosity, temperature, velocities and other fluid properties or characteristics combined with the inherent mechanical efficiencies of pumps may result in less than optimum operations. We have applied this conservatism to assure you total performance.