

ROTATING RIGHT

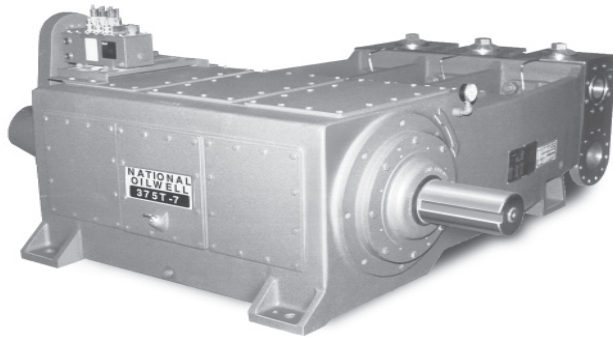
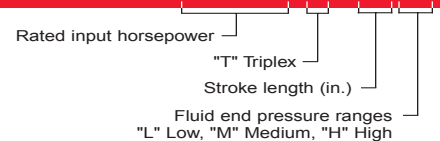
NATIONAL OILWELL 375T-7 TECHNICAL DATA SHEET



Triplex Plunger Pump

Formerly J-375

375T-7



This 7" stroke pump is designed for a variety of fluid transfer applications operating at low, medium or high pressures.

Field Connections in. (mm)

Pump Model	Discharge Connection Size	Suction Connection Size
375T-7L	6 (152.4) API-2000# RTJ	10 (254) ANSI-150 F.F.
375T-7M	4 (101.6) ANSI-1500 RTJ	6 (152.4) ANSI-300 F.F.
375T-7H	3 (76.2) ANSI-2500 RTJ	6 (152.4) ANSI-300 F.F.

Dimensions

Pump Type	Length	Width	Height
375T-7L	87-1/4"	79-11/16"	29"
375T-7M	88-1/2"	79-11/16"	29"
375T-7H	100"	79-11/16"	29"

Pump Specifications

Pump Size (Max. Plunger Diameter x Stroke) in. (mm)5 x 7 (127 x 178)
 Rated BHP At 286 RPM (Kw)375 (280)
 Rated Plunger Load (Kg)22,200 (10,070)

Maximum Working Pressure: PSI (kPa)

"L" Model Discharge Pressure 1,550 (10,686)
 "M" Model Discharge Pressure 3,150 (21,716)
 "H" Model Discharge Pressure..... 5,000 (34,473)

Crankshaft Extension: in. (mm)

Diameter6 (152.4)
 Length10-3/16 (258.9)
 Keyway (Width x Depth).....1-1/2 x 3/4 (38.1 x 19.0)

Oil Capacity: Gallons: (L)

Crankcase22 (83.6)

Weight: Pump Only On Wood Shipping Skids - Lbs. (Kg)10,500 (4,763)

Standard Equipment

- Aluminum Bronze Fluid End
- Aluminum Bronze Valve Covers
- Aluminum Bronze or Stainless Steel Stuffing Boxes
- Bronze Stuffing Box Internals
- Ceramic or Tungsten Carbide Plungers
- General Service or Kevlar Plunger Packing
- Stainless Steel Intermediate Rods
- Fluid King Spherical Valves
- Double Extended Crankshaft
- Oil Level Dipstick
- Crankcase Breather

Optional Equipment

- Alternate Fluid End Materials
- Alternate Fluid End Valve Styles
- Custom Designs For Specialized Applications

Accessories

- Packing Lubricator
- Pulsation Dampeners
- Relief Valves
- Valve Service Kit
- Complete Unitization Services

Quick Maintenance Features

- Horizontal Design
- Large Power End Covers
- Easy Bearing Access
- Separate Crosshead/Plunger Construction
- Open Frame Construction
- Removable Stuffing Boxes

Continuous Duty Performance Data (Volumes Indicated Are Displacement of Incompressible Fluid)

English Units

Plunger Dia. In.	Plunger Area Sq. In.	BPD Per RPM	GPM Per RPM	Max. Press. PSI	100 RPM*		150 RPM		200 RPM		225 RPM		250 RPM		275 RPM		286 RPM	
					BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM
375T-7L																		
4 1/4	14.1863	44.2354	1.2897	1550	4424	128.97	6635	193.45	8847	257.93	9953	290.17	11059	322.42	12165	354.66	12651	368.84
4 1/2	15.9044	49.5927	1.4459	1399	4959	144.59	7439	216.88	9919	289.17	11158	325.32	12398	361.46	13638	397.61	14183	413.51
4 3/4	17.7206	55.2560	1.6110	1256	5526	161.10	8288	241.64	11051	322.19	12433	362.47	13814	402.74	15195	443.01	15803	460.74
5	19.6350	61.2255	1.7850	1133	6123	178.50	9184	267.75	12245	357.00	13776	401.63	15306	446.25	16837	490.88	17510	510.51
375T-7M																		
3	7.0686	22.0412	0.6426	3150	2204	64.26	3306	96.39	4408	128.52	4959	144.59	5510	160.65	6061	176.72	6304	183.78
3 1/4	8.2958	25.8678	0.7542	2682	2587	75.42	3880	113.12	5174	150.83	5820	169.69	6467	188.54	7114	207.39	7398	215.69
3 1/2	9.6212	30.0005	0.8747	2313	3000	87.47	4500	131.20	6000	174.93	6750	196.80	7500	218.66	8250	240.53	8580	250.15
3 3/4	11.0447	34.4393	1.0041	2015	3444	100.41	5166	150.61	6888	200.81	7749	225.91	8610	251.02	9471	276.12	9850	287.16
4	12.5664	39.1843	1.1424	1771	3918	114.24	5878	171.36	7837	228.48	8816	257.04	9796	285.60	10776	314.16	11207	326.73
375T-7H																		
2 1/2	4.9088	15.3064	0.4463	4533	1531	44.63	2296	66.94	3061	89.25	3444	100.41	3827	111.56	4209	122.72	4378	127.63
2 3/4	5.9396	18.5207	0.5400	3747	1852	54.00	2778	80.99	3704	107.99	4167	121.49	4630	134.99	5093	148.49	5297	154.43
3	7.0686	22.0412	0.6426	3150	2204	64.26	3306	96.39	4408	128.52	4959	144.59	5510	160.65	6061	176.72	6304	183.78
Brake Horsepower Required:					131		197		262		295		328		361		375	

Metric Units

Plunger Dia. mm	Plunger Area Sq. cm.	M ³ /D Per RPM	L/Min Per RPM	Max. Press. kPa	100 RPM*		150 RPM		200 RPM		225 RPM		250 RPM		275 RPM		286 RPM	
					M ³ /D	L/Min.	M ³ /D	L/Min.	M ³ /D	L/Min.	M ³ /D	L/Min.	M ³ /D	L/Min.	M ³ /D	L/Min.	M ³ /D	L/Min.
375T-7L																		
108	91.5246	7.0330	4.8814	10686	703	488.14	1055	732.21	1407	976.27	1582	1098.31	1758	1220.34	1934	1342.38	2011	1396.07
114	102.6089	7.8847	5.4725	9646	788	547.25	1183	820.88	1577	1094.51	1774	1231.32	1971	1368.14	2168	1504.95	2255	1565.15
121	114.3266	8.7852	6.0975	8657	879	609.75	1318	914.62	1757	1219.50	1977	1371.94	2196	1524.37	2416	1676.81	2513	1743.88
127	126.6777	9.7342	6.7562	7813	973	675.62	1460	1013.43	1947	1351.25	2190	1520.15	2434	1689.06	2677	1857.96	2784	1932.28
375T-7M																		
76	45.6040	3.5043	2.4322	21716	350	243.22	526	364.84	701	486.45	788	547.25	876	608.06	964	668.87	1002	695.62
83	53.5213	4.1127	2.8545	18493	411	285.45	617	428.18	823	570.90	925	642.26	1028	713.63	1131	784.99	1176	816.39
89	62.0721	4.7698	3.3106	15945	477	331.06	715	496.58	954	662.11	1073	744.87	1192	827.64	1312	910.40	1364	946.82
95	71.2562	5.4755	3.8004	13890	548	380.04	821	570.06	1095	760.08	1232	855.08	1369	950.09	1506	1045.10	1566	1086.91
102	81.0737	6.2299	4.3240	12208	623	432.40	934	648.60	1246	864.80	1402	972.90	1557	1081.00	1713	1189.10	1782	1236.66
375T-7H																		
64	31.6694	2.4336	1.6891	31253	243	168.91	365	253.36	487	337.81	548	380.04	608	422.26	669	464.49	696	483.07
70	38.3200	2.9446	2.0438	25829	294	204.38	442	306.56	589	408.75	663	459.85	736	510.94	810	562.03	842	584.51
76	45.6040	3.5043	2.4322	21716	350	243.22	526	364.84	701	486.45	788	547.25	876	608.06	964	668.87	1002	695.62
Kilowatts Required:					98		147		196		220		244		269		280	

Volume is based on 100% volumetric efficiency. Brake horsepower is based on 90% mechanical efficiency.

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