

AIR DIAPHRAGM PUMP

MODEL ADP4TFF

This pump has been developed as a compact yet powerful air operated pump for industrial and commercial applications.

Technical Specification

Name and Model:	Air Diaphragm Pump Model ADP4TFF
Compatibility:	Most of common solvents and aqueous solvents.
Construction:	Reinforced Delrin Body, 4" O.D. Teflon Diaphragm, Stainless Steel internal Parts, Anodized Aluminum Valve Body and Spool.
Operating Pressure:	Compressed Air 20 to 100 psi (1.4 to 7.0 kg/cm ²)
Maximum Air Pressure:	100 psi (7 kg/cm ²)
Air Consumption:	2 cfm (55 liter/minute)
Output:	3.2US Gallons (12 Liters) per minute at 75 psi (5.1 Kg/cm ²)
Priming Vacuum:	7" (175mm) Hg at 75 psi (5.1 Kg/cm ²)
Suction Vacuum:	27" (685mm) Hg at 75 psi (5.1 Kg/cm ²)
Air Inlet:	Quick Connect Fitting for 1/4" Ø O.D. (6.35 mm Ø O.D.) hose
Exhaust:	1/8" NPT Female to 1/4" Ø O.D. Silencer Tube, Maintenance Free
Liquid Inlet:	Hose Barb: 3/8" Ø O.D. (9.5 mm Ø O.D.)
Liquid Outlet:	Hose Barb: 3/8" Ø O.D. (9.5 mm Ø O.D.)
Inlet/Outlet Valves:	Teflon Balls and Stainless Steel Valve Springs
Net Size and Weight:	5.5"L x 4.9"W x 6.5"H (14 cm.L x 12.5 cm.W x 16.5 cm.H), 2.9 lbs. (1.3 kg)
Mounting:	4 Mounting Holes of 1/4" Ø, (6.2mm Ø) in Base Plate

Caution: For liquid containing small solid particles, mount the pump with Diaphragms in horizontal position. Do not apply air pressure in excess of 100 psi (7 kg/cm²)

Note: Use of properly lubricated air will minimize wear of moving parts and prolong service life.

Air Filter and Pressure Regulator must be installed in line to ensure the quality of air supply.

Service

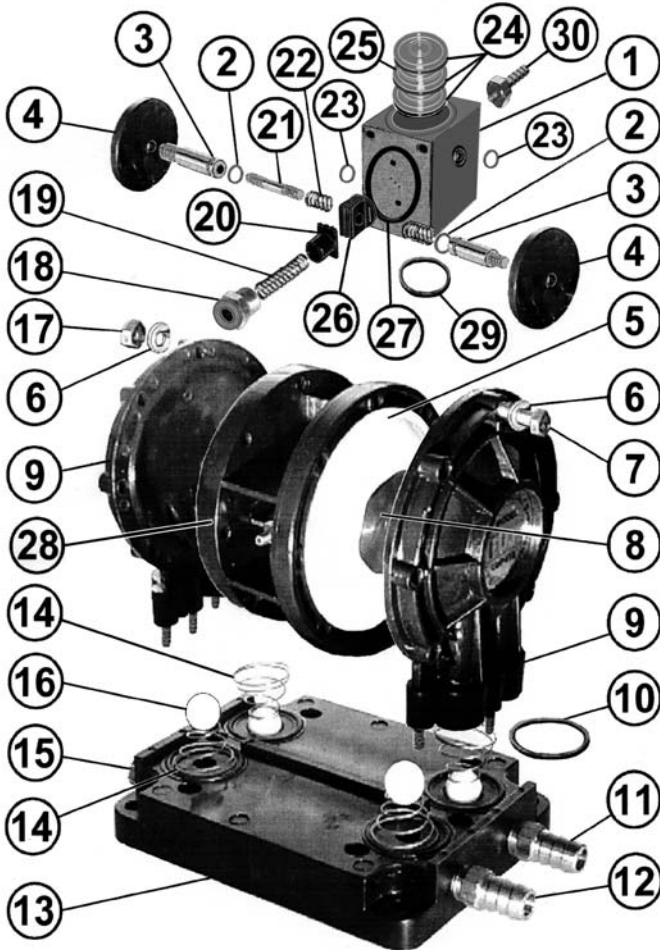
Pump may stop working when excessive amount of water, oil, or other liquid is introduced into the pump by air supply. In most such cases, the pump may be reactivated easily by the following procedures.

Using air Blow Gun, blow air of about 70 psi (5 kg/cm²) into Air inlet Hose Barb (Item No.18) and the end of Exhaust Silencer Tube (#18) alternatively to blow out the water, oil, etc. as much as possible. If the pump does not start, the pump must be repaired or replaced.



Parts and Location

The parts and their location are shown in the illustration and the parts list shown below:



ITEM NO.	PART NO.	DESCRIPTION	Q'TY /UNIT
1	DP120-131	VALVE ASSY, UDP4-TA PUMP	1
2	ZD008E	O-RING, EP	2
3	DP120-107	SHAFT #1 *MC	2
4	DP120-119	DISC HOLDER	2
5	DP120-123	DIAPHRAGM, TEFLON, 4"OD	2
6	DP120-128	WASHER, 250"ID, UDP4-TA	44
7	DP120-125	HEX BOLT, M6X40*PM	16
8	DP120-117	HEX DISC HOLDER	2
9	DP120-103	PUMP HOUSING	2
10	ZD020	O-RING, DIA-PUMP	4
11	Z9125-6A	INLET HOSE BARB, 3/8"H-1/8"MP, BR	1
12	Z9125-6A	OUTLET HOSE BARB, 3/8"H-1/8"MP, BR	1
13	DP120-101	BASE PLATE	1
14	DP120-149	SPRING, CHECK VALVE, UDP4TA	4
15	Z121-A	HEX PLUG, 1/8"MPT, BRASS*GC	2
16	111-758	VALVE BALL, 7/16"OD TEFLON	4
17	DP120-127	HEX NUT, M6*PM, UPD4-TA	22
18	DP120-151	QC FITTING, AIR INLET	1
19	DP120-145	SPRING, LOCKING PISTON	1
20	DP120-113	LOCKING PISTON	1
21	DP120-109	SHAFT #2, CENTER	1
22	DP120-147	SPRING, SHAFT	2
23	ZD010	O-RING, EXHAUST, SIDE, BUNA	2
24	ZD016	O-RING, EXHAUST, BLOCK, UDP4	3
25	DP120-133	SPOOL, VALVE, UDP-4TA	1
26	DP120-111	SWITCH VALVE	1
27	ZD020	O-RING, DIA-PUMP	1
28	DP120-105	CENTER BODY	1
29	ZD025	O-RING, VALVE, UDP4-TA, BUNA	2
30	DP120-810	EXHAUST HOSE AND FITTING ASSY.	1

To overhaul the pump, use Pump Overhaul Kit #1 (Part No. DPKIT-4TA).