

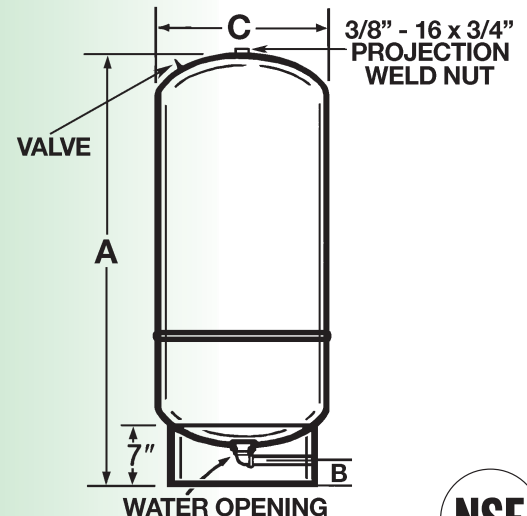
Introducing the PT2000 Series Diaphragm Pump Tanks from A. I. McDermott



- Larger drawdown in key sizes improves pump performance.
- Durable butyl diaphragm for smooth, trouble-free operation.
- Positive diaphragm seal prevents any leakage between water and air chambers.
- Two-layer epoxy coating on water chamber provides maximum protection against corrosion.
 - Metal air valve with “O” ring cap seal for double protection.
 - One-piece airflow base design eliminates condensate build-up.
 - Two-piece construction (up to 86 gallons) reduces welds on tanks.
 - Two-part electrostatic paint application provides a smooth appliance style finish.
- 5-year warranty

Model Number	Volume (Gallons)	“A” Overall Height (Inches)	“B” to Center of Water Inlet (Inches)	“C” Diameter (Inches)	Weight (Pounds)
PT2000 Series Free Standing Diaphragm Pump Tanks (DPT)					
DPT-20	20.0	32-3/4	2-1/4	15-3/8	30
DPT-32	32.0	45-1/2	2-1/4	15-3/8	40
DPT-36	36.0	32-5/8	2-1/4	20	45
DPT-52	52.0	38-5/8	2-1/4	23-3/8	77
DPT-86	86.0	59	2-1/4	23-3/8	105
DPT-119	119.5	61-1/4	2-1/2	26	165

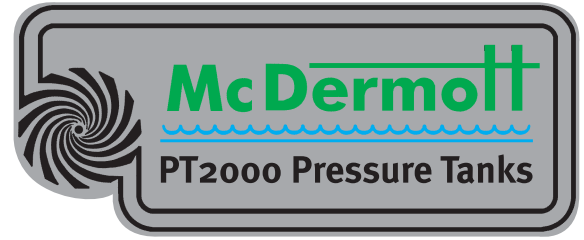
DPT-20, DPT-32, DPT-36 connections are 1” female.
DPT-52, DPT-86, DPT-119 connections are 1-1/4” female.



Made in the U.S.A.



PT2000 Series Diaphragm Pump Tanks



How to size PT2000 Series pressure tanks.

The charts below allow you to easily select the right **PT2000 Series** DPT tank for standard-size pumps between 5 and 30 gallons in capacity and for 20-40 PSI, 30-50 PSI and 40-60 PSI pressure ranges. Minimum run times

shown (from start-up) are 1 minute, 1-1/2 minutes and 2 minutes. For example, for a system that delivers 10 GPM at 30-50 PSI, with a minimum run time of 1 minute, Chart 1 indicates that the proper tank is the DPT-36.

Chart 1 – PT2000 Series Free-Standing Tank Selection Chart

Pump GPM	System Pressure Ranges-PSI								
	20-40			30-50			40-60		
	Minimum Run Times (Minutes)								
	1	1-1/2	2	1	1-1/2	2	1	1-1/2	2
5	DPT-20	DPT-20	DPT-36	DPT-20	DPT-36	DPT-36	DPT-20	DPT-36	DPT-52
7	DPT-20	DPT-36	DPT-52	DPT-36	DPT-36	DPT-52	DPT-36	DPT-52	DPT-86
10	DPT-36	DPT-52	DPT-86	DPT-36	DPT-52	DPT-86	DPT-52	DPT-86	DPT-86
12	DPT-36	DPT-52	DPT-86	DPT-52	DPT-86	DPT-86	DPT-52	DPT-86	DPT-86
15	DPT-52	DPT-86	DPT-86	DPT-52	DPT-86	DPT-119	DPT-86	DPT-86	DPT-119
20	DPT-86	DPT-86	DPT-119	DPT-86	DPT-119	[2]DPT-86	DPT-86	DPT-119	[2]DPT-86
25	DPT-86	DPT-119	[2]DPT-86	DPT-86	[2]DPT-86	[2]DPT-86	DPT-86	[2]DPT-86	[2]DPT-119
30	DPT-86	[2]DPT-86	[2]DPT-86	DPT-119	[2]DPT-86	[2]DPT-119	DPT-119	[2]DPT-119	[2]DPT-119

Chart 2 – Drawdown Volume Multiplier (Approximate)

Pump Shut-Off Pressure-PSI	Pump Start-Up Pressure-PSI							
	10	20	30	40	50	60	70	80
20	0.26							
30	0.41	0.22						
40		0.37	0.18					
50		0.46	0.31	0.15				
60			0.40	0.27	0.13			
70			0.47	0.35	0.24	0.12		
80				0.42	0.32	0.21	0.11	
90				0.48	0.38	0.29	0.19	0.10
100					0.44	0.35	0.26	0.17

Pressures above those listed, exceed maximum tank acceptance volumes.

If proper tank selection cannot be made using Chart 1, follow this procedure. First, find the “drawdown multiplier” by matching the pump start-up and shut-off pressures on Chart 2. For example, the multiplier for a 30-50 PSI pressure range is .31.

Next, insert the pump GPM capacity and desired minimum run time into this formula:

$$\frac{\text{Pump GPM} \times \text{Min. Run Time}}{\text{Multiplier}} = \text{Minimum Tank Volume Required}$$

To assume dependable drawdown volumes, and in keeping with present industry practice, drawdowns are based on Boyle’s Law. For example, using a 10 GPM pump, a one-minute minimum run time, and a 30-50 PSI pressure range, the formula is as follows:

$$\frac{10 \times 1}{.31} = 32.26 \text{ Minimum Tank Volume}$$

Chart 3 – Drawdown in Gallons

Model Number	Volume in Gallons	20-40	30-50	40-60
DPT-20	20.0	7.4	6.2	5.4
DPT-32	32.0	11.5	9.6	8.4
DPT-36	36.0	13.3	11.2	9.7
DPT-52	52.0	19.2	16.1	14.0
DPT-86	86.0	31.8	26.7	23.2
DPT-119	119.5	44.2	37.0	32.3

Then, using Chart 3, select the tank that has a minimum volume that meets or exceeds your minimum volume requirement and supplies adequate drawdown at the required pressure range. Minimum drawdown equals Pump GPM X Minimum Run Time. Therefore, in the above example, select the DPT-36, 36-gallon tank. It provides adequate drawdown at 30-50 PSI.

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WATER SYSTEM PROFESSIONAL**