



# PT ProMax®

## **PROMAX® ELITE SERIES**

### **A PREMIUM TANK FOR THE PREMIUM CONTRACTOR**

- 150 psi maximum working pressure.
- 304 Stainless Steel elbow.
- Eliminator Vortex Technology - Reduces sediment buildup and keeps water fresh.
- Butyl Rubber Parabolic Diaphragm -Prevents rubbing on tank wall or rolling over on itself.
- The ultimate in exterior protection, durable powder coated finish is designed for harsh environments and tested beyond current ASTM automotive standards. The best finish in the tank industry.
- Exclusive No-Weld RUST-GUARD® airflow base design eliminates condensate build-up.
- Two-piece construction (one weld on most models) reduces welds on tanks.
- 5-year warranty.



DESIGNED • ENGINEERED  
& ASSEMBLED IN THE

**USA**

For more information on ProMax Elite or other products, contact:  
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500 Tennessee Waltz Parkway Ashland City, TN 37015  
800-365-4300 [www.wstanks.com](http://www.wstanks.com)

**WATER SYSTEMS**  
An A. O. Smith Company

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PPMBR00208

# Diaphragm Pump Tanks

Pre-pressurized • Lightweight drawn-steel construction • Steel base • 150 psi maximum working pressure

## AIR CHARGE VALVE

- Metal air valve with “O” ring cap seal for added protection
- Projection Welded

## DURABLE ULTRA UV POWDER COAT FINISH

- Provides positive protection against corrosion
- High UV resistance
- Certified to ASTM automotive salt test standards

## BUTYL RUBBER PARABOLIC DIAPHRAGM

- Parabolic Shape Eliminates rubbing the tank wall or rolling over on itself

## DOUBLE DRAW UNIWELD DESIGN

- Allows two piece construction

## INTERIOR POWDER COAT

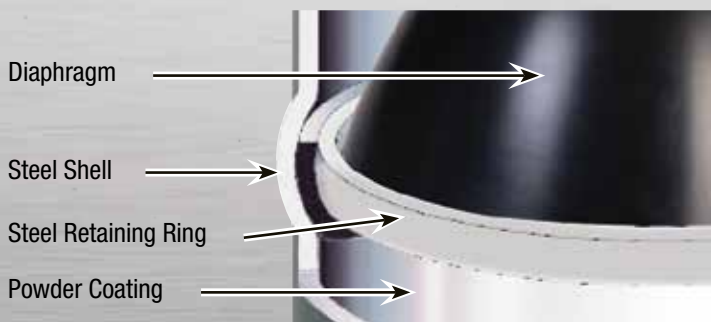
- A consistent powder coat from the inside out through the acceptance fitting eliminates dissimilar metals
- Permanently bonded to shell, eliminates inserts and plastic liners
- Proven protection against internal corrosion

## EXCLUSIVE NO-WELD RUST-GUARD® STEEL BASE

- No-Weld RUST-GUARD® base eliminates condensate

## ELIMINATOR VORTEX TECHNOLOGY

- Vortex swirl keeps water fresh and reduces sediment buildup



## POSITIVE DIAPHRAGM SEAL

Seals diaphragm directly to shell, ensuring permanent separation of water and air.



Certified to  
NSF / ANSI 61

# Diaphragm Pump Tanks

## Sizing

The charts below allow you to easily select the right ProMax Elite Series tank for standard-size pumps between 2-1/2 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 PMXE-36.

Chart 1 – PMXE Series Free-Standing Tank Selection Chart

PUMP GPM	SYSTEM PRESSURE RANGES (PSI)								
	20-40			30-50			40-60		
	MINIMUM RUN TIMES (MINUTES)								
	1	1.5	2	1	1.5	2	1	1.5	2
2.5	PMXE-20	PMXE-36S	PMXE-52	PMXE-36S	PMXE-36S	PMXE-52	PMXE-36S	PMXE-52	PMXE-86*
10	PMXE-36S	PMXE-52	PMXE-86*	PMXE-36S	PMXE-52	PMXE-86*	PMXE-52	PMXE-86*	PMXE-86*
12	PMXE-36S	PMXE-52	PMXE-65	PMXE-52	PMXE-65	PMXE-86*	PMXE-52	PMXE-65	PMXE-119
15	PMXE-52	PMXE-65	PMXE-86*	PMXE-52	PMXE-65	PMXE-119	PMXE-65	PMXE-65	PMXE-119
20	PMXE-65	PMXE-86*	PMXE-119	PMXE-65	PMXE-119	(2)PMXE-86*	PMXE-86*	PMXE-119	(2)PMXE-86*
25	PMXE-86*	PMXE-119	(2)PMXE-86*	PMXE-86*	(2)PMXE-86*	(2)PMXE-86*	PMXE-119	(2)PMXE-86*	(2)PMXE-119
30	PMXE-86*	(2)PMXE-86*	(2)PMXE-86*	PMXE-119	(2)PMXE-86*	PMXE-119	PMXE-119	(2)PMXE-86*	PMXE-119

\*Also available in PMXE-86S (low profile).

Chart 2 – Drawdown Volume Multiplier (Approximate)

PUMP SHUTOFF PRESSURE (PSI)	PUMP START-UP PRESSURE (PSI)							
	10	20	30	40	50	60	70	80
20	.26							
30	.41	.22						
40		.37	.18					
50		.46	.31	.15				
60			.40	.27	.13			
70			.47	.35	.24	.12		
80				.42	.32	.21	.11	
90				.48	.38	.29	.19	.10
100					.44	.35	.26	.17

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.

Chart 3 – Drawdown in Gallons

MODEL NUMBER	VOLUME (GALS)	20-40	30-50	40-60
PMXE-20	20.0	7.4	6.2	5.4
PMXE-32	32.0	11.5	9.6	8.4
PMXE-36S	36.0	13.3	11.2	9.7
PMXE-52	52.0	19.2	16.1	14.0
PMXE-65	65.0	24.0	20.0	17.5
PMXE-86*	86.0	31.8	26.7	23.2
PMXE-119	119	44.2	37	32.3

\*Also available in PMXE-86S (low profile).

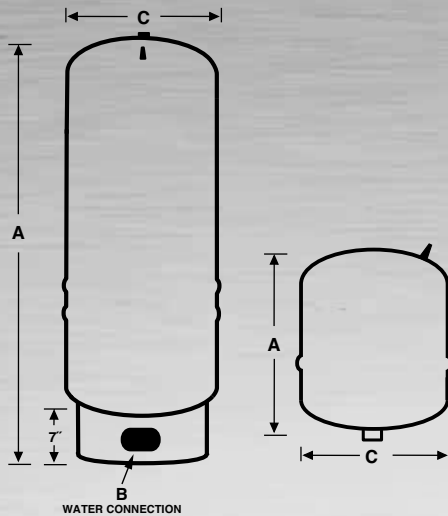
For example, using a 10 GPM pump, a one minute minimum run time, and a 30-50 psi pressure range, the formula is as follows:

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

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 PMXE-36S 36-gallon tank. It provides adequate drawdown at 30-50 psi.

# Diaphragm Pump Tanks

## Volume, Dimension and Weight Specifications

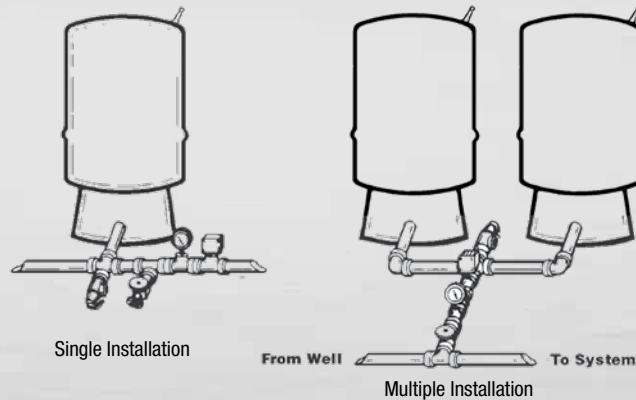


MODEL NUMBER	MAXIMUM WORKING PRESSURE	VOLUME (GALS)	"A" OVERALL HEIGHT (INCHES)	"B" CENTER OF WATER INLET TO BOTTOM OF TANK (INCHES)	"C" DIAMETER (INCHES)	WEIGHT (LBS.)
<b>PMXE Series (Free-Standing)</b>						
PMXE-20	140 PSI	20	32 3/4	2 1/4	15 3/8	30
PMXE-32	140 PSI	32	45 1/2	2 1/4	15 3/8	40
PMXE-36S	150 psi	36	32 5/8	2 1/4	20	45
PMXE-52	150 psi	52	38 5/8	2 1/4	23 3/8	77
PMXE-65	150 psi	65	46.6	2 1/4	23 3/8	87
PMXE-86	150 psi	86	59	2 1/4	23 3/8	105
PMXE-86S	140 psi	86	46	2 1/4	26	116
PMXE-119	125 psi	119.5	61 1/4	2 1/4	26	165

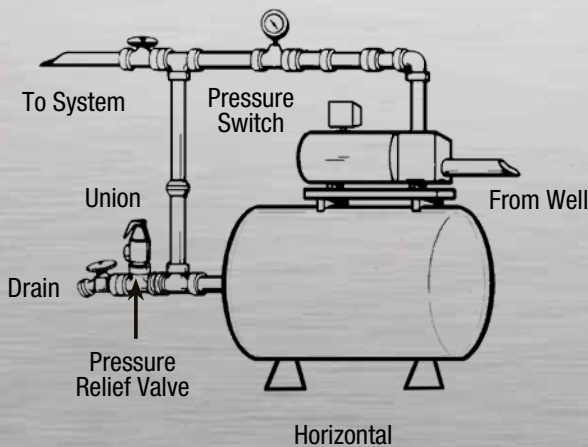
PMXE-20, PMXE-32 and PMXE-36S 1" female connection.  
PMXE-52, PMXE-86 connection 1 1/4" female connection

### PMXE Free-Standing Series

The standard front-entry installation. Gauge, relief valve and pressure switch are installed in front of tank.



### PMXE Horizontal Series with Pump Mounted on Tank



The pump can be mounted on the tank using a universal mounting base. The pump can be attached to the top of a horizontal tank. For installation convenience, the horizontal series is available with pump mount and legs factory installed.

\*Pump mount bracket available. (Part #100290594)

A. O. Smith reserves the right to make product changes or improvements at any time without notice.

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