



Hydro-pneumatic Tank Option

Domestic water booster systems have long periods of no flow or leak loads when the pump system could be completely shut off. NAMCO suggests the use of ESS to accomplish this shut down. A storage tank in which water is stored and used to satisfy the low flow and leak load of the system while maintaining a constant pressure can provide substantial savings. The following formula will calculate your savings.

Energy Saving Calculation

Leak Load Period x .8 x Savings per Hour = Annual Savings

$$\begin{aligned} & \text{_____ Hours} \times .8 \times \text{_____ HP} \times .7457 \text{ KW/HP} \times \text{_____ \$/KWHR} \\ & = \$ \text{_____ /Year} \times \text{_____ Years} \\ & = \$ \text{_____ Total Savings} \end{aligned}$$

Low Flow Periods for One Year (8760 hours)	
Type of Use:	
Office Low Flow Period	5.616
hrs	
Apartments Low Flow Period	3.640
hrs	
Hotel Low Flow Period	2.912
hrs	
School Low Flow Period	7.336
hrs	
Dormitories Low Flow Period	3.806
hrs	
Off Time Factor (= .8) or as required	
Cost of Electricity (x .7457 Kw/hp	
Use 1/2 the nameplate horsepower of the	
lead	
pump Motor for no flow power consumption.	

Tank Construction

- Bladder type for permanent separation of air and water. Water expands into bladder, air precharge on shell side.

Tank Specifications

- Shell- fabricated Steel Designed and constructed per ASME Section VIII
- Bladder- Heavy duty Butyl removable for inspection
- Working Pressure- 125 psig (862 Kpa)(150, 250, 350, psig optional)

- Operating Temperature- 240° (116°C) Max.

Tank and Acceptance Volume gallon	Tank Diameter in inches	Tank Height in inches	Shipping Weight in Lbs.
10	12	12½	60
13	14	25½	80
23	16	37	115
35	20	38	160
48	20	49	195
66	24	49	250
79	24	54	265
106	28	55	345
119	30	54	380
145	30	67	410
211	36	66	535
264	36	84½	795
317	36	97	805
370	36	108	960
422	48	80½	1290
528	48	93½	1385