

BACKSTOP® Diaphragm Type Thermal Expansion Tanks

AC SERIES (ASME) SUBMITTAL

Lit.# BSACSUB-810

TYPE: PRE-PRESSURIZED THERMAL EXPANSION TANKS FOR RESIDENTIAL WATER SYSTEMS

MODELS: AC-101; AC-102; AC-103-S; AC-104-S; AC-105-S; & AC-106-S

Job _____	Arrow Rep. _____	
Unit Tag No. _____	Order No. _____	Date _____
Engineer _____	Submitted By _____	Date _____
Contractor _____	Approved By _____	Date _____

MATERIALS:

Shell: Carbon Steel
 System Connection: Stainless Steel
 Coating: Epoxy
 Diaphragm: Heavy Duty Butyl Rubber
 Liner Material: Food Grade Polypropylene
 Factory Pre-set Pressure: 35 PSI

OPERATING LIMITATIONS:

Maximum Design Pressure: 150 PSI (1035 kPa)
 Maximum Design Temperature: 200° F (93° C)



APPLICATION:

BackStop® AC (ASME) Series Tanks are fixed diaphragm type pre-charged thermal expansion tanks. They are designed to absorb the expansion forces and control the pressure in potable water systems. The water is separated using the heavy duty diaphragm preventing tank corrosion and waterlogging

Model No.	Volume (liter)	Volume (gal.)	Height	Diameter	Sys. Conn.	Wt. (lbs.)
AC-101	8	2	12-1/2"	8"	3/4"	5
AC-102	18	4.5	15"	11"	3/4"	9
AC-103-S	55	14	19-7/8"	15-1/2"	1"	19
AC-104-S	80	20	27"	15-1/2"	1"	27
AC-105-S	128	32	46-1/2"	15-1/2"	1-1/4"	43
AC-106-S	176	44	35-1/2"	22"	1-1/4"	52

S denotes stand models.

SCHEDULE:

Model Number	Tank Volume Gallons	Acceptance Volume Gallons	Tagging Information	Quantity
AC-101	2	1.0		
AC-102	4.5	2.4		
AC-103-S	14	5.6		
AC-104-S	20	8		
AC-105-S	32	12.8		
AC-106-S	44	17.5		

SPECIFICATIONS:

Furnish and install as shown on plans a _____ gallon _____" diameter x _____" (high) pre-charged steel expansion tank with a fixed butyl diaphragm. The tank shall have a top NPT system connection and a .301" - 32 charging valve connection (standard tire valve) to facilitate the on-site charging of the tank to meet system requirements. The tank must be constructed and stamped in accordance with Section VIII of the ASME Boiler and Pressure Vessel Code.

Each tank shall be BackStop® model number _____ or approved equal.