Honeywell

Closed Heating System Tanks, Diaphragm Expansion Tanks

TK300 AND XPS SERIES

PRODUCT DATA





APPLICATION

The Honeywell diaphragm expansion tank is designed to provide for the expansion of water in a closed hot water heating or solar system. Maximum operating temperature is 240° F (116° C); maximum operating pressure is 100 psi (689 kPa). The tank is precharged at 12 psi (83 kPa). The diaphragm separates the air cushion from the water and prevents absorption of the air cushion by water, thus avoiding water logging. The Honeywell expansion tank maintains pressure in the system and utilizes the smallest possible space.

INSTALLATION

Honeywell recommends installing the expansion tank by screwing it into the 1/2 in. connection on the bottom of a Honeywell Air Eliminator or Air purger located on the main hot water supply pipe close to the boiler. The installation of a Honeywell Air Eliminator assures automatic removal of all air and microbubbles from the system. However, the Honeywell expansion tanks may also be screwed into any convenient connection. The tank should be installed in a vertical position. Series XPS tanks are provided with a stand for floor mounting. Pipe the tank connection to the inlet side of the circulating pump.

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OPERATION

After the Honeywell expansion tank is installed on the system, fill the system and establish circulation, the Honeywell Air Eliminator will automatically vent the air from the system. Operate the boiler to bring the system temperature up to the high-limit shut-off temperature, observe the system pressure to assure that it does not exceed the relief valve setting. If the system pressure is too high, reduce to the desired pressure by drawing a small amount of water from the system or by installing the next larger Honeywell expansion tank. Do not release air from the tank. Air charge in tank should equal the setting of the reducing valve, 12 psi (83 kPa) standard.

SERVICE

If the system pressure is too high, check the pressure reducing valve (fill valve) for a malfunction (i.e. dirt on the valve seat). Check to see if the Honeywell expansion tank has lost air by reducing the system pressure to zero and reading the tank pressure with a tire gage. Check for possible tankless heater leak by shutting off water supply to fill valve, reducing system pressure and observing pressure increase which would indicate a leak. If the relief valve drips water after excess system pressure condition has been corrected, flush relief valve by quickly raising the lever several times. If dipping continues after flushing replace relief valve.

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Product Number	Total Volume in Gal. (liter)	Maximum Accepted Volume in Gal. (liter)	Diameter in inches (mm)	Length in inches (mm)	Connection Size
TK300-15	2.0 (7.6)	1.0 (3.8)	8 (203)	12 5/8 (321)	1/2" M
TK300-30	4.4 (16.7)	2.5 (9.5)	11 (279)	15 1/2 (394)	1/2" M
TK300-60	7.6 (28.7)	2.5 (9.5)	11 (279)	23 (584)	1/2" M
TK300-90	14 (53.0)	11.5 (43.5)	15 3/8 (391)	21 (533)	1/2" M
XPS-030V	14 (53.0)	11.3 (42.8)	15 3/8 (391)	23 7/8 (606)	1" F
XPS-040V	20 (75.7)	11.3 (42.8)	15 3/8 (391)	31 5/8 (803)	1" F
XPS-060V	32 (121.1)	11.3 (42.8)	15 3/8 (391)	46 1/2 (1181)	1" F
XPS-090V	44 (166.6)	34 (128.7)	22 (559)	36 (914)	1 1/4" F
XPS-110V	62 (234.7)	34 (128.7)	22 (559)	46 3/4 (1187)	1 1/4" F
XPS-160	86 (325.5)	46 (174.1)	26 (660)	47 1/4 (1200)	1 1/4" F
Connections: M = male NPT; F = female NPT					

ORDERING INFORMATION

When purchasing replacement and modernization products from your TRADELINE® wholesaler or distributor, refer to the TRADELINE® Catalog or price sheets for complete ordering number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

- 1. Your local Honeywell Automation and Control Products Sales Office (check white pages of your phone directory).
- 2. Honeywell Customer Care
 - 1885 Douglas Drive North Minneapolis, Minnesota 55422-4386

In Canada—Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Toronto, Ontario M1V 4Z9.

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