

# Biotube® Pump Vault Installation

## Biotube® PV and PVU Pump Vaults

There are two styles of Biotube® pump vaults, the PV-Style and the PVU-style. PV-style pump vaults come with support pipes. PVU-style pump vaults can be configured in two ways:

**Standard** — Placed in the tank opening, resting on PVC support pipes.

**Earless** — Placed in the tank opening, resting on the bottom of the tank.

### Step 1: Prep Vault for Installation

**Step 1a:** Detach and remove the float switch assembly from the float bracket.

**Step 1b:** Remove any loose items from the vault.

**Step 1c:** Measure the tank opening diameter.

- PV-style: minimum diameter is 16 in. (406 mm).
- PVU-style: minimum diameter is 19 in. (483 mm).

**Step 1d:** For a standard PVU-style vault, check the diameter of the access riser.

- If the access riser's diameter is 30 in. (762 mm), measure the support pipes.
- If the support pipes aren't 24 in. long (600-mm), replace them with 1-in. diameter (25-mm) Schedule 80 PVC pipes that are 24-in. long (600-mm) .

**Step 1e:** Fully seat the Biotube® filter into the pump vault.

### Step 2: Lower Vault into Position

**Step 2a:** Lower the vault into position.

- If the tank is full of liquid, fill the vault with water from a hose to help sink the vault and prevent material from entering it through the inlet holes.

**Step 2b:** Make sure the vault is fully seated.

- “Standard” vaults sit in the tank opening; support pipes rest on the tank opening.
- “Earless” vaults sit in the tank opening; vault bottom rests on the tank bottom.

**Step 2c:** Reattach the float assembly after the vault is installed.

- Use NIN-MF-1, *Float Switch Assembly Installation Instructions*.

**Step 2d:** Position the vault in the riser to avoid interfering with plumbing or wiring.

- The penetration for the pump discharge in the access riser wall will determine the overall position of the vault.

### Step 3: Install Handle Extension, if Necessary

If necessary, install an extension on the filter cartridge handle to bring it to within 6 inches (150 mm) below the top of the riser.

**Step 3a:** Measure and cut an appropriate length of 1-inch (25-mm) PVC pipe.

**Step 3b:** Use PVC cement to glue the extension into the cartridge handle's tee.

