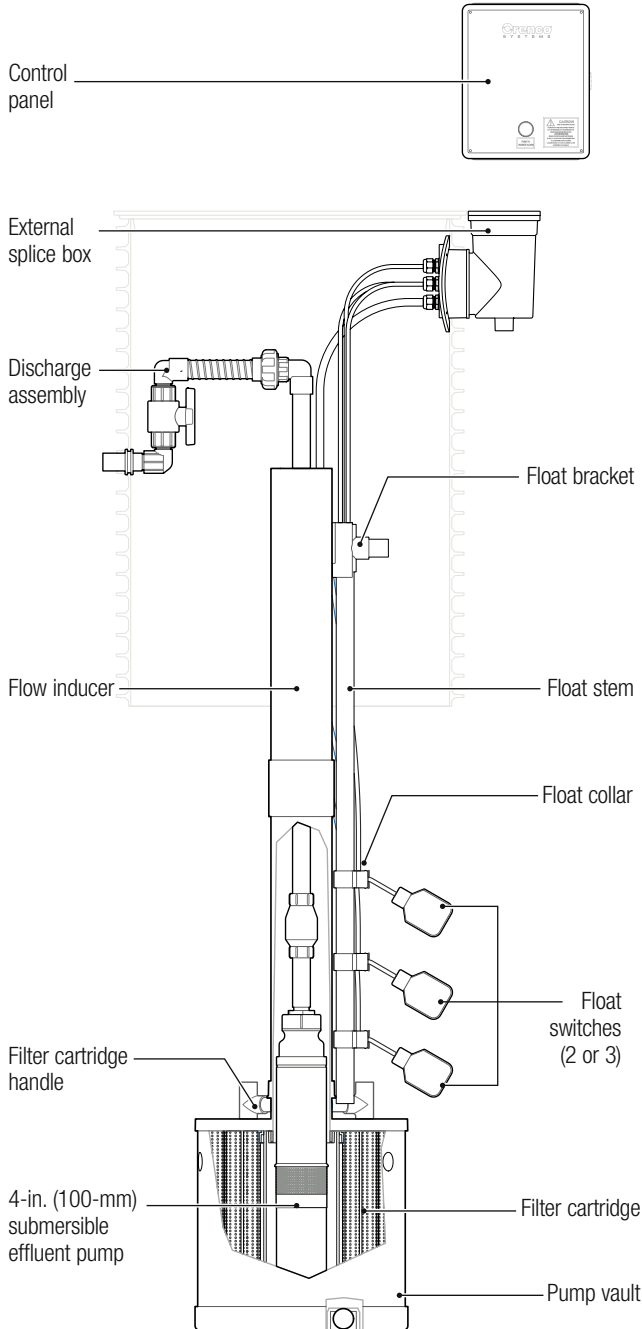


Biotube® EasyPak™ 60-Hz Pump Package



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Applications

The Biotube® EasyPak™ Pump Package is designed to filter and pump effluent from a pump tank to gravity or pressurized dispersal. Its low-profile, submersible design makes it well-suited for applications requiring large reserve volumes and for pumping from near the bottom of a tank.

Packages for on-demand dosing or timed dosing at 10-, 20-, 30-, and 50-gpm (0.6-, 1.3-, 1.9-, and 3.2-L/sec) and 50-Hz applications are available.

General

Orenco's patented* Biotube EasyPak Pump Package makes it simple to select and install the correct pump and controls package for the pump tank.

This document provides detailed information on the EasyPak pump vault and effluent filter cartridges. For more information on other EasyPak components, see the following Orenco technical documents:

- *S-Series Simplex Control Panels* (NTD-CP-S-1)
- *MVP Simplex Control Panel* (NTD-CP-MVP-1)
- *External Splice Box* (NTD-SBEX-1)
- *Splice Boxes* (NTD-SB-SB-1)
- *Discharge Assemblies* (NTD-HV-HV-1)
- *PF-Series Submersible Effluent Pumps: 1-Phase, 60-Hz, 4-inch (100-mm)* (NTD-PU-PF-1)
- *PVA-Series 4-in. (100-mm) Submersible Effluent Pumps* (NTD-PU-PVA-1)

*U.S. Patents #4,439,323 and #5,492,635 (additional U.S. and international patents pending)

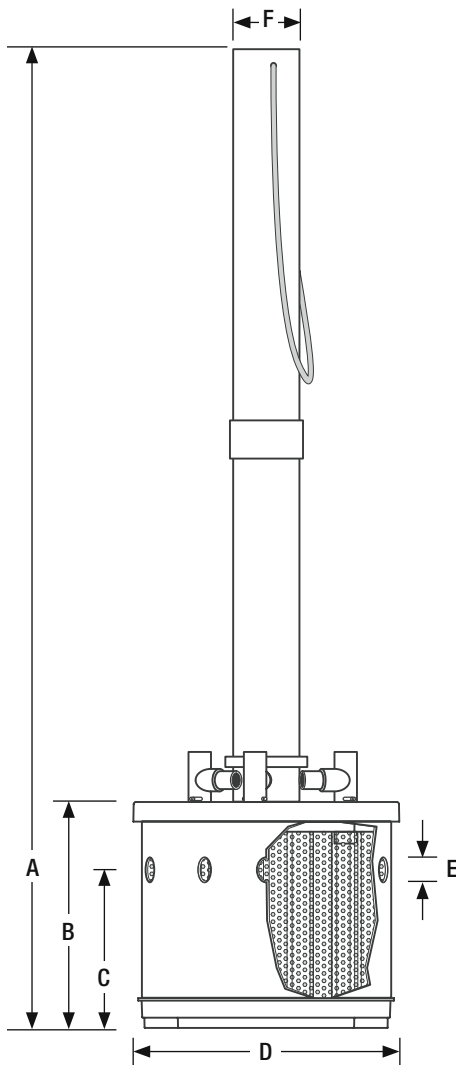
EasyPak™ Pump Vault

Materials of Construction

Vault body	PVC
Vault top	ABS
Vault base	Fiberglass
Flow inducer	PVC
Lifting strap	Hollow-braided poly

Dimensions, in. (mm)

A - Overall height (adjustable)	64 (1625)
B - Vault height	15 (380)
C - Inlet hole center height	12 (305)
D - Vault diameter	15.75 (400)
E - Inlet hole diameter (8 total)	1.38 (35)
F - Flow inducer diameter, nominal	4 (100)



EasyPak™ pump vault

Biotube® Filter Cartridge

Materials of Construction

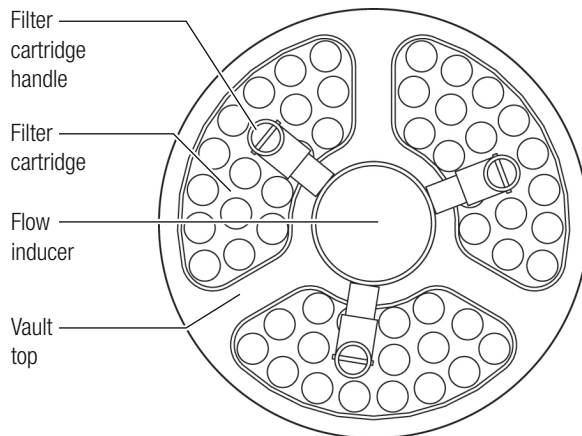
Filter tubes	Polypropylene
Cartridge end plates	Polyurethane
Handle	PVC

Dimensions, in. (mm)

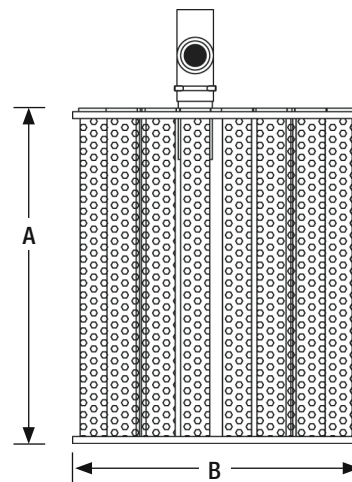
A - Cartridge height	12 (305)
B - Cartridge width	10.3 (262)

Performance

Number of filter cartridges	3
Biotube® mesh opening, in. (mm)	0.125 (3)
Total filter flow area, ft ² (m ²)	4.5 (0.4)
Total filter surface area, ft ² (m ²)	14 (1.3)
Maximum flow rate, gpm (L/sec)	75 (4.7)



Filter cartridges in vault, top view



Biotube® filter cartridge, front view

Product Code Diagram

BEP - - - - -

Discharge assembly; details:

- SD1 = HV100BCFCX; field-cut, 1-in. PVC, ball valve, check valve, flow control, 10-gpm pumps only
- SD2 = HV100BCX; field-cut, 1-in. PVC, ball valve, check valve, 10- or 20-gpm pumps
- SD3 = HV125BCX; field-cut, 1.25-in. PVC, ball valve, check valve, 30-gpm pumps
- SD4 = HV200BCX; field-cut, 2-in. PVC, ball valve, check valve, 50-gpm pumps
- CW1 = HV100BCFCX + HVCW100-KIT; field-cut, 1-in. PVC, ball valve, check valve, flow control, 10-gpm pumps only
- CW2 = HV100BCX + HVCW100-KIT; field-cut, 1-in. PVC, ball valve, check valve, 10- or 20-gpm pumps
- CW3 = HV125BCX + HVCW125-KIT; field-cut, 1.25-in. PVC, ball valve, check valve, 30-gpm pumps
- CW4 = HV200BCX + HVCW200-KIT; field-cut, 2-in. PVC, ball valve, check valve, 50-gpm pumps
- DB1 = HV100B-DB; field-cut, 1-in. PVC, ball valve, drainback, 10- or 20-gpm
- DB2 = HV125B-DB; field-cut, 1.25-in. PVC, ball valve, drainback, 30-gpm
- DB3 = HV200B-DB; field-cut, 2-in. PVC, ball valve, drainback, 50-gpm

Splice box options:

- SX = External splice box
- SB = Internal splice box

Float switch & pump cord lengths, ft (m):

- 10 = 10 (3)
- 20 = 20 (6)

Control panel; float switches:

- | | |
|-------------------------|------------------------------|
| S11 = S1; 3P | M11 = MVP-S1DM; 3P |
| S12 = S1ETMCT; 3P | M12 = MVP-S1DMHT; 3P |
| S13 = S1HR; 2P | M13 = MVP-S1DMHTSA; 3P |
| S14 = S1PTRO; 2BN | M14 = MVP-S1DMHTMTSGR-NC; 3P |
| S15 = S1PTROETMCT; 2BN | M15 = MVP-S1DM(DEMAND); 3P |
| S16 = S1RO; 3PN | M21 = MVP-S2DM; 3P |
| S17 = S1ROETMCT; 3PN | M22 = MVP-S2DMHT; 3P |
| S18 = S1ROETMCTSA; 3PN | M23 = MVP-S2DMHTSA; 3P |
| S19 = S1ROMTSGR-NC; 3PN | |

Submersible effluent pump:

- P08 = PF200511; 20 gpm (1.3 L/sec), 1/2 hp (0.37 kW), 120V
- P90 = PVA100511; 10 gpm (0.6 L/sec), 1/2 hp (0.37 kW), 120V
- P91 = PVA300511; 30 gpm (1.9 L/sec), 1/2 hp (0.37 kW), 120V
- P92 = PVA500511; 50 gpm (3.2 L/sec), 1/2 hp (0.37 kW), 120V

Biotube® EasyPak™