

| BioBundle Configurations | | | | | | | | |
|--|--------------------------------|-----------------------------|--------------------------------|-----------------------------|--------------------------------|-----------------------------|---------------------------------|------------------------------|
| Component | 1 liter Cell Culture BioBundle | 1 liter Microbial BioBundle | 3 liter Cell Culture BioBundle | 3 liter Microbial BioBundle | 7 liter Cell Culture BioBundle | 7 liter Microbial BioBundle | 15 liter Cell Culture BioBundle | 15 liter Microbial BioBundle |
| Fermentor Headplate | 6 ports [†] | 6 ports [†] | 18 ports | 18 ports | 18 ports | 18 ports | 18 ports | 18 ports |
| Total vessel volume | 1.25 L | 1.25 L | 3.2 L | 3.2 L | 7 L | 7 L | 16 L | 16 L |
| Vessel working volume | 900 ml | 900 ml | 2.7 L | 2.7 L | 5.2 L | 5.2 L | 12 L | 12 L |
| Vessel minimum working volume | 350 ml | 350 ml | 0.47 L | 0.47 L | 2 L | 2 L | 2.5L | 2.5L |
| Lipseal stirrer | • | • | • | • | • | • | • | • |
| Marine impeller | • | | • | | • | | • | |
| 6-bladed turbine impeller | | 2 each | | 2 each | | 2 each | | 2 each |
| Motor, speed controller, cable (watts) | 100 | 100 | 100 | 100 | 100 | 140 | 100 [‡] | 1000 |
| Liquid addition bottle | 1 each, 0.5 L | 2 each, 0.5 L | 1 each, 0.5 L | 2 each, 0.5 L | 1 each, 0.5 L | 2 each, 0.5 L | 1 each, 1 L | 2 each, 1 L |
| Filters | 3 each | 2 each | 3 each | 2 each | 3 each | 2 each | 3 each | 2 each |
| Sparger pipe | | • | | • | | • | | • |
| Sparger pipe with porous nozzle | • | | • | | • | | • | |
| Septum holder | • | • | • | • | • | • | • | • |
| Air outlet condenser | • | • | • | • | • | • | • | • |
| Air overlay pipe | • | • | • | | • | | • | |
| Sample pipe | • | • | • | • | • | • | • | • |
| Heat Exchanger | • | • | | • | | • | | • |
| Thermometer pocket | • | • | • | • | • | • | • | • |
| Reagent inlet assembly w/ 3 pipes | • | • | • | • | • | • | • | • |
| Baffles, 3 each | • | • | | • | | • | | • |
| Blind plug for 6 mm ports | | | 3 each | | | | | |
| Blind plug for 10 mm ports | | | 2 each | 2 each | 6 each | 1 each | 6 each | 1 each |
| Blind plug for 12 mm ports | | | 2 each | 2 each | 2 each | 2 each | 2 each | 2 each |
| Blind plug for 18 mm ports | | | 1 each | | 1 each | 1 each | | |
| Blind plug for 27 mm ports | | | | | | | 1 each | 1 each |
| pH sensor, holder, cable | • | • | • | • | • | • | • | • |
| Dissolved O ₂ sensor, holder, cable | • | • | • | • | • | • | • | • |
| Temperature sensor | • | • | • | • | • | • | • | • |
| Level/foam sensor, cable | | • | | • | | • | | • |
| ADI 1010 BioController | • | • | • | • | • | • | • | • |
| Power unit for controller | • | • | • | • | • | • | • | • |
| PC config software for controller | • | • | • | • | • | • | • | • |
| BioConsole, ADI 1025 | • | • | • | • | • | • | • | • |
| Rotameter for air | 100 ml/min | 1 L/min | 500 ml/min | 5 L/min | 1 L/min | 10 L/min | 5 L/min | 50 L/min |
| Rotameter for oxygen | | 100 ml/min | | 500 ml/min | | 500 ml/min | | 5 L/min |
| Rotameter for carbon dioxide | 50 ml/min | | 100 ml/min | | 100 ml/min | | 500 ml/min | |
| Gas selection manifold | • | • | • | • | • | • | • | • |
| Control valve for rotameter | 2 each | 2 each | 2 each | 2 each | 2 each | 2 each | 2 each | 2 each |
| Fixed speed pump, pump head, tubing | 1 each | 3 each | 1 each | 3 each | 1 each | 3 each | 1 each | 3 each |
| Heating blanket | • | • | • | • | • | • | • | • |
| Control valve for chill water | | • | | • | | • | | • |
| Startup kit | •† | •† | •† | •† | •† | •† | •† | •† |

∞ The fermentor headplate contains the following non-removable components:

- Thermometer pocket
- Inoculation pipe
- Air overlay pipe
- Sample pipe
- Sparger pipe
- Heat exchanger with two baffles

† The startup kit consists of the following items:

- 24 assorted o-rings for port assemblies
- 2 o-rings for stirrer assembly
- 5 rubber septa for septum holder
- 2 clamping rings for pH holder
- 6 lipseals for stirrer assembly
- Allen key, 1.5 mm
- Reducer, male-male, 1/8" - 3/16"
- 25 cable ties
- 2 headplate o-rings
- T-connector, 3/16" x 3/16" x 3/16"
- 3 reducers, male-male, 1/16" - 3/16"
- T-connector, 1/8" x 1/8" x 1/8"
- 6 tubing clamps
- 12.5 feet tubing, norprene, ID = 0.12"
- 12.5 feet tubing, norprene, ID = 0.19"
- 1.5 m silicone tubing for headplate ring

‡ P100 motor includes a 6:1 gear reduction box to provide higher torque capability.