

Single Use Bioreactors

Applikon offers two types of single-use bioreactors:

AppliFlex, bioreactors from 10 to 50 liter based on mixing by rocking motion and Bio-One, stirred tank bioreactors in the range of 50 to 2000 liter total volume.

Both systems are unique in their accurate measurement and control of important process parameters. Both systems can be equipped with re-usable sensors and/or fluorophor pH and Dissolved Oxygen sensors. The Appliflex bioreactor range consists of a 10-liter, 20-liter and 50-liter bioreactor bag. The control system (pH, Dissolved Oxygen, temperature, mixing) is the standard Applikon ez-Control. Bio-One uses the Hy-Clone 50, 100, 250, 500, 1000 and 2000 liter bioreactors in combination with our ez-Control or i-Control process controllers. Systems are supplied turnkey and fully documented. All systems go through standard IQ/OQ and FAT procedures before they are delivered and installed at the customers site. The qualified Applikon technical support team can take care of the installation and will be your first point of contact for any questions. Our delivery includes the bioreactor, the controller, sensors, actuators, temperature control system, supervisory software and validation documentation. Our well trained sales consultants are able to advise you on the complete configuration of your single use bioreactor system.

Features

- Simple operation
- OPC compliant controller
- Accurate process control
- Classic and single-use (fluorophor) sensors for measurement of pH, Dissolved Oxygen
- Accurate control of pH, DO, temperature, mixing
- Data logging & SCADA (21CFR part 11) available
- Turn-key delivery
- IQ/OQ/FAT and SAT for the complete system
- Fully documented delivery eases validation
- One point of contact for the complete system
- Qualified support and service

Applications

- Cell culture
- Batch
- Fed Batch
- Perfusion





Specifications

	Appliflex		Bio-One		
Total volume	10 L, 20 L, 50 L		66 L, 120 L, 316 L, 660 L, 1320 L, 2700 L		
Working volume	5 L, 10 L, 25 L		50 L, 100 L, 250 L, 500 L, 1000 L, 2000 L		
Sensors	Fluorophor pH	Fluorophor Dissolved Oxygen	Gel filled sterilizable pH	Sterilizable Polarographic Dissolved Oxygen	Temperature
Measuring range	5.5 ... 8.5 pH	0 ... 100% O ₂ saturation	0 ... 12 pH	0 ... 100% O ₂ saturation	0 ... 150°C
Accuracy	± 0.1 pH	± 0.4%	± 0.1 pH	± 2%	0.1°C
Measuring temperature range	0 - 40°C	0 - 40°C	0 - 80°C	0 - 60°C	0 .. 150°C
Maximum temperature	45°C	45°C	135°C	135°C	150°C
Sensor life time	2 weeks @ 1 measurement per minute	6 months	> 1 year	> 1 year	> 1 year
	3.5 weeks @ 1 measurement per 2 minutes				