

Specifications

| | XCell ATF® 2 | XCell ATF® 4 |
|---|--|--|
| Process parameters | | |
| XCell™ Controller model | C24:2 | C24:4 |
| Bioreactor working volume | | |
| Suspension culture | 2 - 10 L | 10 - 50 L |
| Microcarrier culture | 5 - 15 L | 10 - 20 L |
| XCell ATF® pump rate | | |
| Nominal maximum | 1.3 L/min | 10 L/min |
| Recommended minimum | 0.3 L/min | 3 L/min |
| Recommended maximum for scale-up | 0.9 L/min | 8 L/min |
| Filtration rate (Perfusion CFB) | | |
| Nominal maximum | 10 L/day 0.42 L/hour 0.007 L/min | 50 L/day 2.08 L/hour 0.035 L/min |
| Ratio (Maximum XCell ATF® rate ÷ Filtration rate) | 130 | 230 |
| Filtration rate (Media exchange Clarification) | | |
| Maximum | 3 L/hour 0.043 L/min | 16 L/hour 0.26 L/min |
| Ratio (Maximum XCell ATF® rate ÷ Filtration rate) | 21 | 31 |
| Filter effective surface area | | |
| Repligen standard | 1.4 ft² (0.115 m²) | 8.3 ft² (0.77 m²) |
| Pump displacement volume | | |
| Minimum | 0.085 L | 0.38 L |
| Maximum | 0.115 L | 0.48 L |
| Physical dimensions and weights | | |
| Overall XCell ATF® unit | | |
| Height | 30 in (75 cm) | 21 in (53 cm) |
| Width | 5 in (13 cm) | 8 in (19 cm) |
| Nominal footprint | 0.43 ft² (0.04 m²) | 1.40 ft² (0.13 m²) |
| Weight (with stand and liquid hold-up) | 4.5 lbs (2 kg) | 20 lbs (9.1 kg) |
| Filter housing height | 24 in (61 cm) | 14 in (36 cm) |
| XCell™ Controller enclosure | | |
| Height | 13 in (33 cm) | 13 in (33 cm) |
| Depth (bottom) | 12 in (31 cm) | 12 in (31 cm) |
| Width (controller only) | 9 in (23 cm) | 9 in (23 cm) |
| Weight | 19 lbs (8.6 kg) | 19 lbs (8.6 kg) |

DISCLAIMER: All process values are general recommendations. For additional details, please refer to the appropriate XCell™ Controller User Guide or contact your local Repligen representative.



Specifications

| | XCell ATF® 2 | XCell ATF® 4 | XCell ATF® 4 (GMP) |
|---|---|-------------------------------------|-------------------------------|
| Process connections and operations | | | |
| Bioreactor port (Nominal ID) | diptube (10 mm) | diptube (10 mm), ING1 (15.5 mm) | |
| XCell ATF® connection Tri-clamp (TC) | 3/8 in | 1/2 in | 1/2 in |
| Filtrate connection Tri-clamp (TC) | 3/8 (HB) in (9.5 (HB) mm) | 3/8 in | 3/8 in |
| Maximum sterilization temperature | 253° F (123° C) | 253° F (123° C) | 253° F (123° C) |
| Utility requirements | | | |
| Compressed air | | | |
| Pressure | 40 - 90 psig (2.8 - 6.2 barg) | 40 - 90 psig (2.8 - 6.2 barg) | 40 - 90 psig (2.8 - 6.2 barg) |
| Required nominal flow | 5 L/min | 15 L/min | 15 L/min |
| Tube quick-fitting CPC (OD) | 1/4 in (6.4 mm) | 1/4 in (6.4 mm) | 1/4 in (6.4 mm) |
| Vacuum | | | |
| Pressure (at maximum flow) | -12.5 psig (-0.86 barg) | -12.5 psig (-0.86 barg) | -12.5 psig (-0.86 barg) |
| Required average flow | 5 L/min | 20 L/min | 20 L/min |
| Required peak flow | 10 L/min | 40 L/min | 40 L/min |
| Tube quick-fitting CPC (OD) or tri-clamp | 3/8 in (9.5 mm) | 3/8 in (9.5 mm) | 3/8 in (9.5 mm) |
| Steam | | | |
| Minimum nominal Tri-clamp connection | N/A | | |
| Electrical | | | |
| Power input | 110/240 VAC, 60/50 Hz, single phase | 110/240 VAC, 60/50 Hz, single phase | |
| Peak current | 1.3 Amps | 2.5 Amps | |
| Average current | 0.8 Amps | 1.3 Amps | |
| Materials of construction (MOC) | | | |
| MOC of product contact components | | | |
| SS XCell ATF® | EPDM, Polysulfone, Silicone, Viton®, Polyester, PTFE and 316L SS (Ra 20 µin, 0.51 µm) | | |
| SU XCell ATF® | EPDM, Polycarbonate, Polysulfone, Silicone, Viton®, Polyester, PTFE | | |
| Process contact parts: | diaphragm, "O" rings, gaskets, tubing, valves, filters | | |

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