

# Specifications

	XCell ATF® 4	XCell ATF® 6	XCell ATF® 10
<b>Process parameters</b>			
<b>XCell™ Controller model</b>	C410:4	C410:6	C410:10
<b>Bioreactor working volume   Suspension culture</b>	10 - 50 L	50 - 200 L	200 - 1000 L
<b>XCell ATF® pump rate</b>			
Nominal maximum	10 L/min	20 L/min	90 L/min
Recommended minimum	3 L/min	5 L/min	20 L/min
Recommended maximum for scale-up	L/min	17 L/min	80 L/min
<b>Filtration rate (Perfusion   CFB)</b>			
Nominal maximum	50 L/day 2.08 L/hour 0.035 L/min	200 L/day 8.33 L/hour 0.14 L/min	1000 L/day 42 L/hour 0.69 L/min
Ratio (Maximum XCell ATF® rate ÷ Filtration rate)	230	122	115
<b>Filtration rate (Media exchange   Clarification)</b>			
Maximum	16 L/hour 0.26 L/min	60 L/hour 1 L/min	250 L/hour 4.2 L/min
Ratio (Maximum XCell ATF® rate ÷ Filtration rate)	31	20	19
<b>Filter effective surface area</b>			
Repligen	0.77 m <sup>2</sup>	2.5 m <sup>2</sup>	11 m <sup>2</sup>
<b>Pump displacement volume</b>			
Minimum	0.38 L	1.2 L	6.1 L
Maximum	0.45 L	1.5 L	6.9 L
<b>Physical dimensions and weights</b>			
<b>Overall XCell ATF® unit</b>			
Height	21 in (53 cm)	41.6 in (105.7 cm)	45 in (114 cm)
Width	8 in (19 cm)	19 in (48.3 cm)	22 in (55.9 cm)
Nominal footprint	0.13 m <sup>2</sup>	0.23 m <sup>2</sup>	0.31 m <sup>2</sup>
Weight (with stand and liquid hold-up)	20 lbs (9.1 kg)	55 lb (25 kg)	154 lb (70 kg)
<b>Filter housing height</b>	14 in (36 cm)	25 in (63 cm)	24 in (62 cm)
<b>XCell™ Controller</b>	C410:4	C410:6	C410:10
<b>E-Box measurements:</b>			
Height		24 in (61 cm)	
Width		24 in (61 cm)	
Depth		9 in (24 cm)	
Weight		75 lb (34 kg)	
<b>P-Box measurements:</b>			
Height	16 in (41 cm)	17 in (43.2 cm)	16 in (41 cm)
Width	15 in (38 cm)	15 in (38 cm)	15 in (38 cm)
Depth	9.5 in (24 cm)	8 in (20.3 cm)	9.5 in (24 cm)
Weight	28 lb (12.7 kg)	28 lb (12.7 kg)	33 lb (15 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.

Revised 12/1/2017



repligen.com

© Repligen Corporation. All rights reserved. All trademarks are the property of their respective owners.

**REPLIGEN**  
INSPIRING ADVANCES IN BIOPROCESSING

# Specifications

	XCell ATF® 4	XCell ATF® 6	XCell ATF® 10
<b>Connections and operations</b>			
<b>Bioreactor port (Nominal ID)</b>	diptube (10 mm) ING1 (15.5 mm)	1 in TC (0.88 in) 1.5 in TC (1.375 in) ING1	2x 1 in TC (0.88 in) 1.5 in TC (1.375 in) 2x ING2
<b>XCell ATF® connection   Tri-clamp (TC)</b>	1/2 in	1 in	1 ½ in
<b>Filtrate connection   Tri-clamp (TC)</b>	3/8 in	1/2 in	1/2 in
<b>Maximum sterilization temperature</b>	253° F (123° C)	253° F (123° C)	253° F (123° C)
<b>Utility requirements</b>			
<b>Compressed air</b>			
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	20 L/min	40 L/min	100 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)
<b>Vacuum</b>			
Required 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	20 L/min	40 L/min	100 L/min
Required peak flow	40 L/min	60 L/min	200 L/min
Tube quick-fitting CPC (OD) or tri-clamp	3/8 in (9.5 mm)	3/8 in (9.5 mm)	3/4 in (19.1 mm)
<b>Steam</b>			
Minimum nominal Tri-clamp connection pressure	N/A	30 psig 3/8 in	30 psig 3/8 in
<b>Electrical</b>			
Power input	110/240 VAC, 60/50 Hz, single phase		
Peak current	2.5 Amps		
Average current	1.3 Amps		
<b>Materials of construction (MOC)</b>			
<b>MOC of product contact components</b>			
SS XCell ATF® SU XCell ATF®	EPDM, Polysulfone, Silicone, Viton®, Polyester, PTFE and 316 L SS (Ra 20 µin, 0.51 µm) EPDM, Polycarbonate, Polysulfone, Silicone, Viton®, Polyester, PTFE		
<b>MOC of non-product contact components</b>			
Enclosure	Powder coated 304 Stainless steel		
Tri-clamps	Stainless steel		
Device stand	Stainless steel		
XCell ATF® to Controller (A2C) tubing kit	Polyurethane, Stainless steel		
316 Liters SS (process contact) Surface finish (Ra)	20 µin (0.51 µm)		

**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.**

