

# ElectroForce® BioDynamic® 5100 Series



## Site Preparation Guide

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Circulator



Power



Cooling



Gas



LN<sub>2</sub>



Fluid



Light



Hardware



Software



Temp



Lab



Customer

# Ideal Setup



## IDEAL PLACEMENT AND BENCH MEASUREMENTS

Select a location with adequate floor and ceiling space and a rigid laboratory bench that is level and is in a vibration-free environment. Bench must be rated to support several hundred pounds.



Table width: 1.5 m (5 ft)

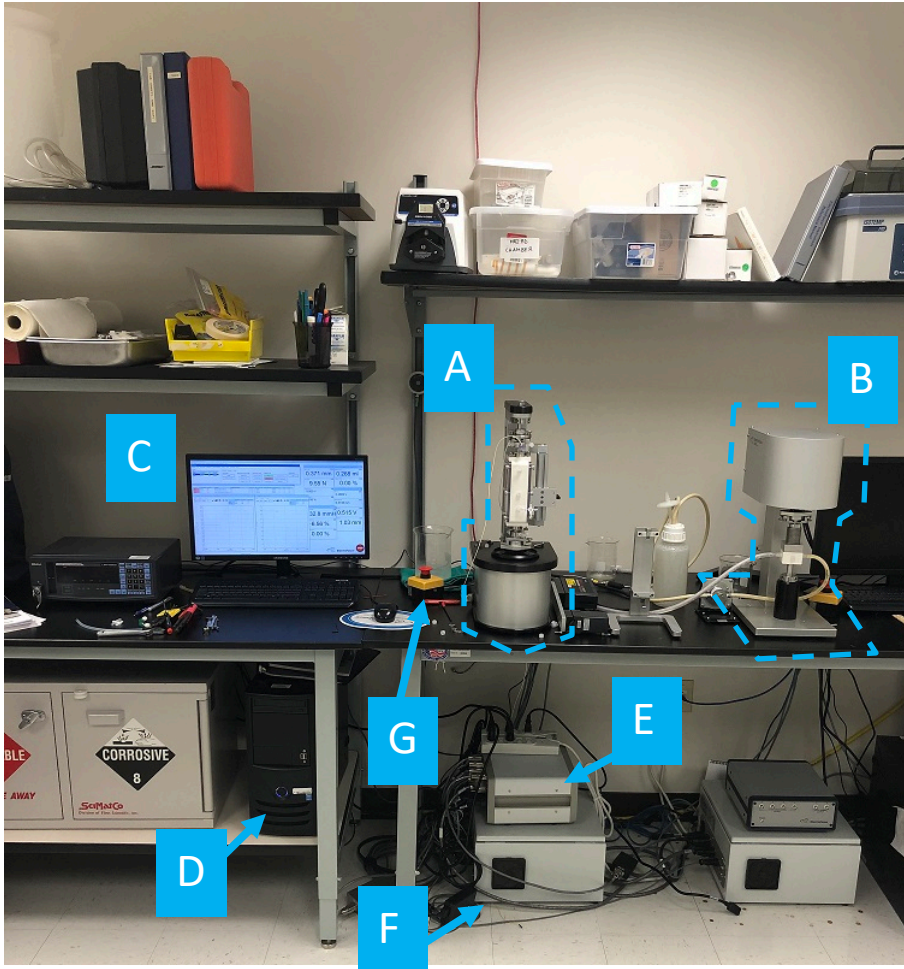
Table depth: 1.2 m (4 ft)

Distance from the wall:  
0.15 m (0.5 ft) min.

# System Components



## MAIN SYSTEM COMPONENTS



- A. Test Instrument – Axial Frame
- B. Test Instrument – Pulsatile Frame
- C. Computer Monitor
- D. Computer Tower
- E. PCI Electronics Box
- F. Power Supply (Axial)
- G. Emergency Stop

# Instrument Measurements



## BIODYNAMIC® 5110 AND 5170 – AXIAL FRAME



Height: 585 mm (23 in)

Width: 287 mm (11.3 in)

Depth: 221 mm (8.7 in)

Weight: 13.6 kg (30 lbs)



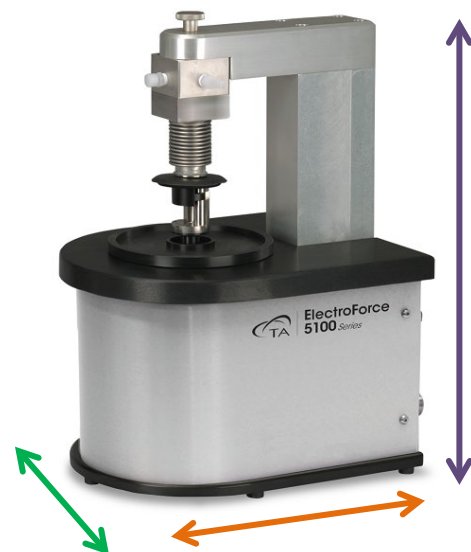
## BIODYNAMIC 5170 AND PULSATILE ONLY – PULSATILE FRAME

Height: 373 mm (14.7 in)

Width: 287 mm (11.3 in)

Depth: 221 mm (8.7in)

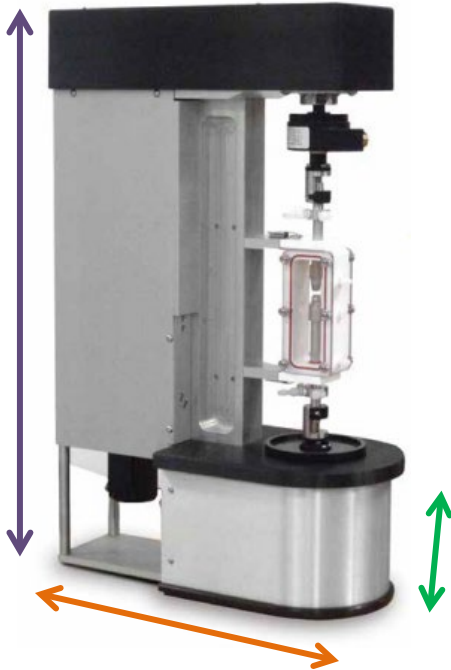
Weight: 11.3 kg (25 lbs)



# Instrument Measurements



## BIODYNAMIC® 5115 AND 5175 – TORSION FRAME



Height: 729 mm (28.7 in)

Width: 461 mm (18.2 in)

Depth: 221 mm (8.7in)

Weight: 31.8 kg (70 lbs)



## POWER SUPPLY

Height: 230 mm (9 in)

Width: 405 mm (16 in)

Depth: 510 mm (20 in)



Weight: 27 kg (60 lbs)



# Utility Requirements



## POWER

Item	Requirement
Instrument Power	<ul style="list-style-type: none"> <li>• 104–132V, 50/60 Hz, 15A</li> <li>• 207–250V, 50/60 Hz, 10A</li> <li>• Neutral to Ground (NG) voltage max 0.5 volt</li> <li>• Safety ground per local regulation</li> </ul>
PCI Box Power	<ul style="list-style-type: none"> <li>• 104–120V, 50/60 Hz Hz, 1.25 A</li> <li>• 207–230V, 50/60 Hz Hz, 0.8 A</li> </ul>
UPS (Optional)	<ul style="list-style-type: none"> <li>• 104–120V, 50/60 Hz, 1A</li> <li>• 207–230V, 50/60 Hz, 0.5A</li> </ul>
Power cords provided	<ul style="list-style-type: none"> <li>• 5-15 plug for 120V systems</li> <li>• 6-20P plug for 230V systems</li> <li>• International: Line power cord provided is based on country</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  6-20P         </div> <div style="text-align: center;">  5-15         </div> </div>



**Use power cords with plugs appropriate for your circuit.**



Supply voltages lower than indicated may result in a degradation of performance.



Ensure that the mains assigned do not also supply power to noise generating equipment nearby, such as motors, welders, transformers, etc.



An independent heavy GROUND wire must be provided through the power hookup. Improper grounding may cause severe damage for which the supplier will not accept responsibility. All power strips must be fully grounded and carry the ground through to the sockets into which the computer is plugged.

# Utility Requirements



## MISCELLANEOUS

Item	Requirement
Operating temperature	18°C (64°F) to 30°C (86°F)
Flow Loop	18°C (64°F) to 40°C (104°F)
Relative humidity	40–65% (non-condensing)





# TA Instruments Offices

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<http://www.tainstruments.com>.

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