

# ALPS 5000 Microplate Heat Sealer

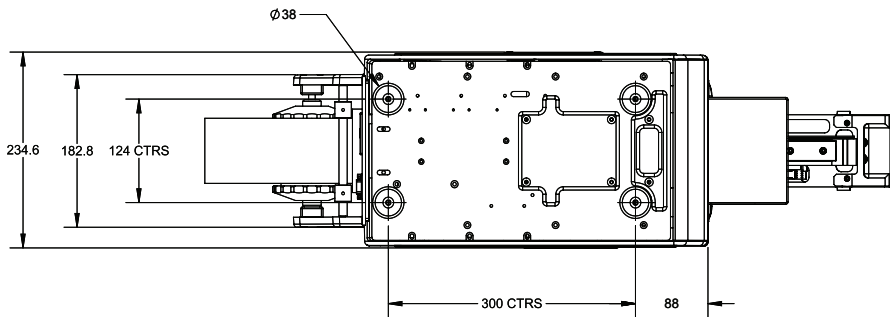
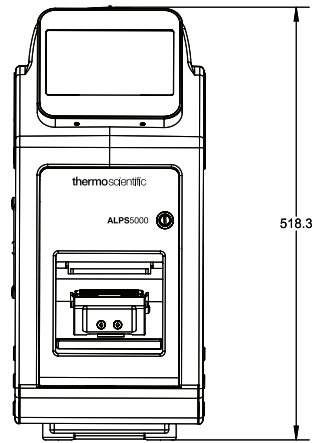
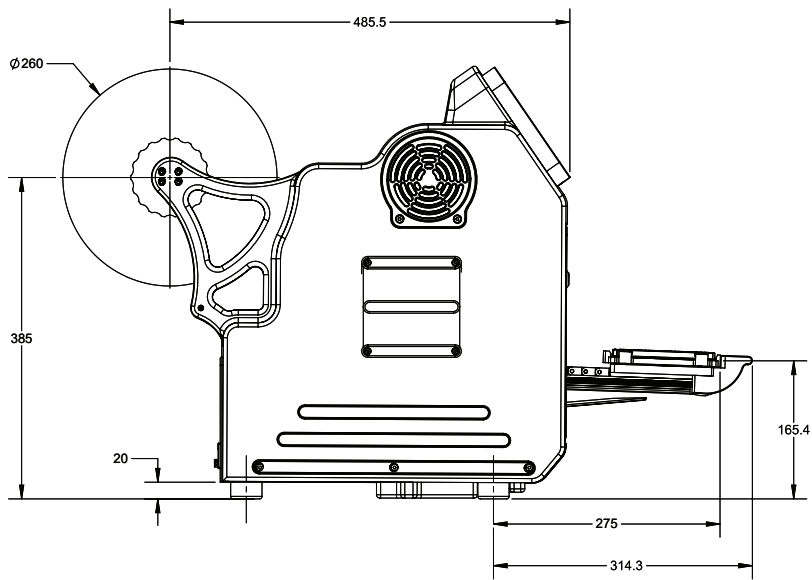
-Fast, reliable and quiet automated plate sealing solution for any lab

The Thermo Scientific™ ALPS 5000™ is the next generation in plate sealing equipment offering fast sealing times, increased process customization and all electric operation improving reliability and reducing noise. The Thermo Scientific ALPS 5000 heat sealer has a compact footprint to conserve precious bench space and top-loaded seals are easily accessible and can be loaded without the aid of a tool. With automated, electrically controlled microplate sealing, seal up to 3 plates per minute in a variety of hand-fed, benchtop or high throughput robotic applications.

Designed with the ability to program sealing time, temperature, pressure, foil length and sealing distance the ALPS 5000 allows for ability to offer complete customization of the sealing process for a wide range of applications. The ALPS 5000 semi-automated sealer is equipped with both on-board touch screen operation, savable protocols for bench top use and an RS232 port and included programming parameters for robotic integration.



Features	Benefits
Fast Sealing of Multiple Plate Heights	<ul style="list-style-type: none"> <li>• Increase productivity and throughput sealing up to 3 plates per minute</li> <li>• Seal plates from 8 mm to 46 mm in height with no height adapters required</li> <li>• Compatible with high throughput automated applications</li> <li>• No expensive vacuum cups to maintain or replace</li> </ul>
Touchscreen Control and Parameter Customization	<ul style="list-style-type: none"> <li>• Precise control over sealing parameters to ensure repeatability</li> <li>• Easily integrated into automation or robotics workflow</li> <li>• 15 saved protocols to customize and recall for efficient flexibility</li> <li>• Customize, sealing time and temperature, force or distance of the seal and length of foil applied</li> </ul>
Electrically Driven with Tool Free Loading	<ul style="list-style-type: none"> <li>• No internal or external air source, vacuum source, or peristaltic pump required</li> <li>• Reduced risk of contamination inherent in pneumatically driven sealers</li> <li>• Quieter operation when compared to pneumatically controlled systems</li> <li>• Tool free loading makes reloading foil simple and repeatable</li> </ul>



### Thermo Scientific ALPS 5000 Specifications

<b>Dimension (WxDxH)</b>	235 mm (W) x 506 mm (D) x 518 mm (H)
<b>Weight</b>	25 kg
<b>Speed</b>	30 seconds per plate
<b>Power Supply</b>	110-240 V AC, 50-60 Hz
<b>Air Requirement</b>	N/A
<b>Air Input Pressure</b>	N/A
<b>Vacuum Source Requirement</b>	N/A
<b>Sealing Temperature Range</b>	Ambient to 199 °C
<b>Operating Temperature Range</b>	15 °C to 40 °C
<b>Operating Humidity Range</b>	10-80% Non Condensing
<b>Sealing Plate Height</b>	8 mm to 46 mm
<b>Foil Length per plate</b>	119 mm - 128 mm
<b>Sealing Time</b>	0.5 to 9.9 seconds

### Purchasing Information for ALPS 5000

Catalog No.	Description	Qty.
AB-5000	ALPS 5000	1 Each

Seals						
Cat. No.	Description	Characteristics	Compatible Plate Material	Sealing Conditions	Seal Integrity Range Applications	Applications
AB-3559	Thermo-Seal	Foil laminate; very strong seal, can be pierced with a single pipette tip or Pierce Plate (see ordering information below); good solvent resistance; recommended for use with DMSO	PP	1.5 to 2.5 seconds at 165 °C to 175 °C	-80 °C to 120 °C	Long term storage including storage at low temperatures; transportation and high temperature applications such as PCR, including use in waterbath thermal cyclers
AB-3738	Easy Pierce	Foil material; easily pierced; peelable bond that can be removed by hand; second seal can be applied over existing seal; recommended for use with DMSO	PP, PE	0.5 to 3.0 seconds at 165 °C to 175 °C	-80 °C to 80 °C and up to 120 °C with cycler lid pressure	Well suited for 384-well formats where piercing is a useful method for sample retrieval; second seal can be applied over existing seal; suitable for PCR with screw-down lid
AB-3720	Easy Pierce 20 µm	Thin foil material; easily pierced; peelable bond that can be removed by hand; good solvent resistance; recommended for use with DMSO	PP, PE	0.5 to 2.0 seconds at 165 °C to 175 °C	-80 °C to 80 °C and up to 120 °C with cycler lid pressure	Well suited for 384-well formats where piercing is a useful method for sample retrieval; suitable for PCR with screw-down lid
AB-3739	Easy Peel	Foil laminate; difficult to pierce; peelable bond that can be easily removed by hand, but forms weld with PE plates; can be removed and new seal applied several times; some solvent resistance and suitable for DMSO use below 4 °C	PP, PE, COC	1.5 to 2.5 seconds at 165 °C to 170 °C	-200 °C to 90 °C and up to 120 °C with cycler pressure	Ideal for long term storage at low temperatures; seal can be applied, removed and a new seal applied several times; suitable for PCR with screw-down heated lid thermal cyclers only
AB-3797	Clear Seal	Thin polymer material; able to be pierced; peelable seal when layered; good optical clarity; some solvent resistance	PP, PS, PE	1.5 seconds at 170 °C	-80 °C to 80 °C and up to 120 °C with cycler pressure	Suitable for fluorescence and colorimetric applications; suitable for PCR applications with screw-down or clip-down heated lid thermal cyclers only
AB-3799	Clear Seal Diamond	Thin polymer material; peelable seal; good optical clarity; some solvent resistance	PP, PS, PE, COC	1.5 to 3.0 seconds at 170 °C	-80 °C to 120 °C	Ideal for fluorescence and colorimetric applications; suitable for PCR applications with screw-down or clip-down heated lid thermal cyclers only

Plate Sealing Settings Guide		
Plate Material	Temperature Setting	Time Setting
Polypropylene	150 °C - 175 °C	0.5-2.0 seconds
Polystyrene	145 °C - 165 °C	0.5-2.0 seconds
Polyethylene	150 °C - 170 °C	0.5-2.0 seconds

Find out more at [thermofisher.com/samplestorage](https://www.thermofisher.com/samplestorage)

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