

# Accessories for the Agilent Bravo Automated Liquid Handling Platform

### Selection Guide



Example of a Bravo deck layout Components

- 1. Available for an accessory
- 2. Available for an accessory
- 3. Available for an accessory
- 4. Peltier Thermal Station with Custom Plate Nest
- 5. Orbital Shaking Station
- 6. Peltier Thermal Station with Custom Plate Nest
- 7. Magnetic Bead Accessory
- 8. Available for an accessory
- 9. Thermal Station

Figure 1. The Bravo Platform 9-position deck accommodates accessories designed to facilitate applications. The labeled deck image includes a Bravo accessories configuration designed for Next Generation Sequencing sample preparation.

#### Introduction

The Agilent Bravo Automated Liquid Handling Platform provides unparalleled versatility and precision in a compact footprint. With proven high-accuracy pipette heads and a flexible nine-position open deck, it offers the flexibility needed to scale-up applications ranging from serial dilutions to PCR and cell-based assays. A carefully designed group of accessories is at the heart of the Bravo's flexibility, providing the range of tools needed by scientists and engineers to reduce manual intervention and increase throughput and walkway time when automating routine and customized applications. Bravo accessories make it possible to configure any of the nine available deck positions for shaking, heating, cooling, filtration, and more.

The Bravo Automated Liquid Handling Platform is compatible with the following:

- · Agilent designed and tested accessories
- Proven, industry standard accessories customized for use with the Bravo platform
- · User accessories that fit with the Bravo platform open architecture



## **Accessories for the Bravo Automated Liquid Handling Platform**

	Part Number	Description	VWorks <sup>1</sup> Control	Available Deck Positions	Temp Range	3rd-Party Components <sup>2</sup>		
<b>*</b>	Communication, Input/Output, and Integration							
	G5498B#023	Accessories Hub (Central electrical and communication connection point)	Yes	NA <sup>3</sup>	NA	NA		
	G5498B#019	Slot/Shaker Card (1 per device on MTC/STC controllers)	Yes	NA	NA	NA		
	G5498B#002	AC Relay (Powers device on/off)	Yes	NA	NA	NA		
	G5498B#022	LightCurtain (Safety)	Yes	NA	NA	NA		
	G5498B#055	Risers, 146 mm	No	NA	NA	NA		
	16545-101	Gripper Upgrade	Yes	NA	NA	NA		
	Identification							
	G5498B#031	Mirrored Barcode Reader (Requires serial port or accessory hub)	Yes	All	NA	NA		
	Liquid Handling H	Heads						
0000000	Disposable-tip heads (Dispenses fluid into selected wells simultaneously: M x N array, single columns, single rows, or single wells)							
	G5498B#043	384ST 384-Barrel Disposable Tip Pipette Head	Yes	NA	NA	NA		
	G5498B#041	96ST 96-Barrel Disposable Tip Pipette Head	Yes	NA	NA	NA		
	G5498B#042	96LT 96-Barrel Disposable Tip Pipette Head	Yes	NA	NA	NA		
	Fixed-tip (Dispen	ise fluid into all wells simultaneously)						
	G5498B#045	384F50 Fixed Tip, Stainless, 384-Channel 50 μL	Yes	NA	NA	NA		
	G5498B#044	96F50 Fixed Tip, Stainless, 96-Channel 50 μL	Yes	NA	NA	NA		
		raphy, AssayMAP head (Requires G5498B#057, G5498B#058, and G5409-2002						
	G5498B#046	Bravo 96AM Head (For AssayMAP cartridges)	Yes	NA	NA	NA		
	Pin tools							
	G5420B	Pin Tools (Custom engineered for small nL volume transfers)	Yes	NA	NA	V&P Scientific Pin Tool		
	Platepads and In	serts						
	Platepads for mid	croplates						
	G5498B#004	Deck Platepad (Standard on Bravo)	No	All	NA	NA		
	G5498B#005	Deck Platepad, Short (Standard on Bravo SRT)	No	All	NA	NA		
	G5498B#028	Alignment Station (Passive; 384/1536 plates or ST tip boxes)	No	All	NA	NA		
	G5498B#032	Microplate Vacuum Alignment Station (For warped plates)	Yes	All	NA	NA		
	G5498B#027	Agilent Vacuum Pump (ME4C/ME4C NT)	Yes	All	NA	NA		
	Platepads for tip boxes							
	G5409-20025	Deck Platepad, 96AM 250 µL Tip Loading Station (AssayMAP Bravo)	No	All	NA	NA		
	G5498B#029	Tip Loading Station (Bravo SRT)	No	All	NA	NA		
	G5498B#007	200 μL Tip Box (Legacy 200 μL tips Bravo SRT)	No	All	NA	NA		
	G5498B#006	250 µL Tip Box (Bravo SRT)	No	All	NA	NA		
	G5498B#028	Alignment Station (Passive; 384/1536 plates or ST tip boxes)	No	All	NA	NA		
	Inserts	g	140	, ui	147.			
	G5498B#003	Nested Rack Insert (Required when nested tips are used with ST heads)	No	All	NA	NA		
	G5550-17692	Teach Plate, HW1 (Included with all new Bravo platforms)	No	All	NA	NA		
0000000	Reagent Reservo	irs and Tip Wash Stations						
	Auto-filling (All u	ıse pump module, except where indicated)						
	G5498B#053	Auto Filling Reservoir (Reagent)	Yes	All	NA	NA		
	G5498B#052	Tip Wash Station (MicroWash Reservoir, 384-Chimney)	Yes	1, 2, 3	NA	NA		
	G5498B#051	Tip Wash Station (MicroWash Reservoir, 96-Chimney)	Yes	1, 2, 3	NA	NA		
	G5498B#057	96AM Tip Wash Station (Microwash Reservoir AssayMAP Head)	Yes	1, 2, 3	NA	NA		
	G5498B#048	Open Bath Tray (Formerly Open Wash Res., Open Wash Station)	Yes	All	NA	NA		
	Peristaltic pumps for auto-filling reservoirs							
	G5498B#058	Pump Module 2.0 (For ALL autofilling reservoirs and wash stations; required for 96AM Tip Wash Station)	Yes	NA	NA	NA		
	G5498B#001	Pump Module Tubing Kit	NA	NA	NA	NA		
	G5498B#030	Weigh Station (For precise liquid-level control)	Yes	1, 2, 3	NA	NA		
	Manual Filling (Not recommended for tip washing)							
	G5498B#050	Manual Fill Reservoir (Reagent, 384 well)	No	All	NA	NA		
	G5498B#049	Manual Fill Reservoir (Reagent, 96 well)	No	All	NA	NA		

	Part Number	Description	VWorks <sup>1</sup> Control	Available Deck Positions	Temp Range	3rd-Party Components <sup>2</sup>		
	Separation							
	G5498B#039	<b>Vacuum Filtration Station Without Valves</b> (For use with Agilent vacuum pump, sold separately)	Yes	1, 2, 3	NA	Millipore MultiScreen HTS Vacuum Manifold		
	G5498B#040	Vacuum Filtration Station With Valves (For use with customer-supplied house or 3rd party vacuum pump)	Yes	1, 2, 3	NA	Millipore MultiScreen HTS Vacuum Manifold		
	G5498B#027	Agilent Vacuum Pump (ME4C NT VARIO)	Yes	NA	NA	Vacuubrand ME4C/ME4C NT Vario		
	G5498B#008	Magnetic Bead Accessory	NA	All	NA	NA		
0000	Shaking and Temperature Control							
*	Controllers for Heating/Cooling/Shaking (Requires heating/cooling/shaking platepad)							
	G5498B#016	Controller, Heating/Cooling/Shaking (For 1 device)	Yes	NA	NA	INHECO STC Single TEC Controller		
	G5498B#015	Controller, Heating/Cooling/Shaking (For up to 6 devices)	Yes	NA	NA	INHECO MTC Multi TEC Controller		
	Platepad for Shal	king (With self-contained controller featuring VWorks speed control; does no	ot require G5	498B#019)				
	G5498B#033	Orbital Shaking Station	Yes	All	NA	INHECO Teleshake 2 mm Amplitude		
	G5498B#034	Orbital Shaking Station, High Speed	Yes	All	NA	INHECO Teleshake 3 mm Amplitude (High speed)		
	Platepad for Shal	king and Heating						
	G5498B#009	Heating Shaking Station (Requires G5498B#016 or G5498B#015, and G5498B#019)	Yes	All	RT to 95 °C	INHECO Teleshake 95		
	Platepad for Heat	•						
	G5498B#018	Heating Station (Requires G5498B#016 or G5498B#015, and G5498B#019)	Yes	All	RT to 110 °C	INHECO HeatPac		
	Platepad for Heating/Cooling (Use Generic Nest for 14.4 mm tall plates and Custom Nest is for specialized plates; requires 146 mm risers)							
	G5498B#035	Peltier Thermal Station (Includes Generic Nest, G5498B#016, and G5498B#019)	Yes	4, 6	4 to 110 °C	INHECO CPAC Ultraflat HT2TEC		
	G5498B#021	Peltier Thermal Station (Includes Generic Nest and G5498B#019; requires G5498B#016 or G5498B#015)	Yes	4, 6	4 to 110 °C	INHECO CPAC Ultraflat HT2TEC		
	G5498B#017	Custom Plate Nest for Thermal Station (Use with G5498B#12 or G5498B#013)	NA	NA	NA	NA		
	G5498B#012	Insert, Deepwell Plate (Use with G5498B#017)	NA	NA	NA	NA		
	G5498B#013	Insert, PCR Plate (Use with G5498B#017)	NA	NA	NA	NA		
	Recirculating Hea					0.11.0		
	G5498B#024	Chiller, Peltier, 400 watt (Required for G5498B#036, G5498B#037, and G5498B#038)	No	NA	5 to 50 °C	Solid State Cooling Systems ThermoCube		
	Platepads for Heating/Cooling							
	G5498B#036	<b>Thermal Station</b> (Recirculator-based; short-side connectors; use with G5498B#024)	No	4, 5, 6, 7, 8, 9	See Chiller	NA		
	G5498B#037	<b>Thermal Station</b> (Recirculator-based; long-side connectors; use with G5498B#024)	No	1, 2, 3	See Chiller	NA		
	G5498B#038	Thermal Station, 3-Position (Recirculator-based; use with G5498B#024)	No	1, 4, 7, and 3, 6, 9	See Chiller	NA		
2/	Trash, Disposable	Тір						
	G5498B#056	Deck Position Trash (Requires customer-supplied collector)	No	4, 6	NA	NA		

 <sup>1 -</sup> Agilent VWorks Automation Control Software.
 2 - Agilent Bravo Platform accessories may contain 3rd-party components which have been customized and optimized for use with the Bravo Platform, and which are supported by Agilent.
 3 - NA = Not applicable.

# Applications Enabled by Bravo Accessories

Bravo Platform accessories are carefully designed tools that deliver the flexibility and versatility you need to automate a wide range of key applications. The table below shows a selection of applications that are enabled using Bravo Platform accessories. For complete configurations tailored to your application, contact Agilent.

## Agilent Bravo Platform Consumables

A complete range of pipette tips is also available for use with Bravo Platform accessories. Visit www.agilent.com/lifesciences/pipettetips for more information.

Research Area	Application	Bravo Platform Accessories
Genomics	NGS sample prep	Peltier Thermal Stations Orbital Shaking Station Magnetic Bead Accessory Thermal Station Chiller, Peltier 400 watt
	CGH	96-Barrell Disposable Tip Pipette Head Manual Fill Reagent Reservoir
Proteomics	LC/MS sample prep	Vacuum Filtration Station Vacuum Pump Gripper
	AssayMAP Bravo	Pump Module 2.0 96AM Tip Wash Station 96AM Tip Loading Station 96AM Head, for AssayMAP Cartridges
ADME and Toxicology	Cytochrome P450 screening	Orbital Shaking Station Gripper
BioPharma	Screening	Mirrored Barcode Reader Autofilling Reservoirs with Weigh Pad Pump Module 2.0
Cell Biology	Colony inoculation and replica plating	Pin Tool
	Cell viability	Orbital Shaking Station

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