

Dispensing Controllers and Reservoirs

Loctite® brand controllers and reservoirs can be used as the chief components, along with a selection of Loctite® brand parts and accessories, or with your own parts, to create a complete custom dispensing system, designed to meet your specific needs and manufacturing goals. Selection of a Loctite® brand controller and reservoir is based on the adhesive or fluid being used, the package or container the adhesive or fluid is supplied in, and the overall requirements of the manufacturing process.



	Loctite® Integrated Semi-Automatic Controller 0-100 psi	Loctite® Integrated Semi-Automatic Controller 0-15 psi	Loctite® Bond-A-Matic® 3000 Reservoir 0-100 psi	Loctite® Bond-A-Matic® 3000 Reservoir 0-15 psi	Loctite® 2.25 gal Bottle Reservoir	Loctite® Shot Miser™ Reservoir	Loctite® 4 Liter Gravity Feed Reservoir
Item #	97007/97017*	97010/97020*	982723*/982727	982720*/982726	98359	98090	982880
Will Dispense	G, IA, LC, RC, TL	G, IA, LC, RC, TL	G, IA, LC, RC, TL	G, IA, LC, RC, TL	G, IA, LC, RC, TL	G, IA, LC, RC, TL	RC, TL
Viscosity (cP)	Medium to High	Low to Medium	Medium to High	Low to Medium	Low to High	Low to High	Low to Medium
Package Types and Sizes	250 ml/1 lb./1 L / 2 kg bottles, 200 g squeeze tube	250 ml/1 lb./1 L / 2 kg bottles, 200 g squeeze tube	250 ml/1 lb./1 L / 2 kg bottles, 200 g squeeze tube	250 ml/1 lb./1 L / 2 kg bottles, 200 g squeeze tube	250 ml/1 lb./1 L / 2 kg bottles, 200 g squeeze tube	250 ml bottle, 1 lb. bottle, 200 g squeeze tube	-

* With Low Level Sensor

G= Gel Adhesives IA = Instant Adhesives LC= Light Cure/Acrylics RC = Retaining Compounds TL = Threadlockers

	Loctite® Digital Dispense Controller	Loctite® Single Channel Automatic Controller	Loctite® Digital Multi-Function Controller	Loctite® Shot Miser™ Valve Controller
Item #	98023	97123	98024	98079
Independent Channels	1	1	3	1
Number of Dispense Valves	1	2 (dependent)	3 (independent)	1
Advancing Slide	-	97118 - 50 mm 97119 - 100 mm	984691 - 50 mm	-
Rotospray	-	97115	In conjunction with Positive Displacement Pump – 983330	-

Loctite® Integrated Semi-Automatic Dispensers, Items 97007, 97010, 97017, 97020

Loctite® Integrated Semi-Automatic Dispenser is suitable for the application of adhesives or fluids packaged in 200 gram tubes, 250 ml, 1 pound, 1 liter, and 2 kg bottles. Capable of interfacing with hand held applicators and automatic dispense valves, these systems combine both a dispense valve controller and fluid reservoir, saving valuable bench space and cost. These units are available in two different pressure ranges: 0-100 psi (97007/97017), and 0-15 psi (97010/97020). The 97007 and 97017 are suited for high viscosity fluids (>3000 cP) and the 97010 and 97020 are suited for low to medium viscosity fluids (<3000 cP). The systems provide adjustable, digital timing for controlling the dispense time for any single or double acting dispense valve. Each has a timed or a continuous dispense mode. When in the timed mode, dispense time can be set from 0.01-99.9 seconds. These systems are foot switch actuated (unless used with a finger switch actuated applicator such as the Loctite® item number 97116). The 97017 and 97020 offer low-level sensors, and are recommended when dispensing cyanoacrylate adhesives.

Features

- Equipped with a 0 to 15 psi, or a 0 to 100 psi adjustable pressure regulator
- Easy-to-read pressure gauge
- Continuous or timed dispense mode from 0.01 to 99.9 seconds
- Available with low-level sensor
- Drip funnel for reservoir lid during product changeover

Theory of Operation

The Loctite® Integrated Semi-Automatic Controller is connected to an external pneumatic supply, and regulates the adjusted dispensing pressure during the selected dispensing time. An uncovered bottle of adhesive is placed directly into the integrated reservoir, and the reservoir lid is clamped in place. It is then pressurized using clean, filtered dry air. Air within the reservoir will push down on the liquid in the bottle and force it through the product feed line to the dispensing valve. When a low-level condition is detected, the system will disable to prevent air from infiltrating the feed line and dispense valve.



Typical Fluids Handled

Cyanoacrylate Adhesives Anaerobic Adhesives
Acrylic Adhesives

Technical Specifications

Power Input:	90-260 VAC, 47-63 Hz
Air Input:	30 psi minimum
Air Output:	97007/97017: 0-100 psi 97010/97020: 0-15 psi
Overall Size:	13.2" H x 13.8" W x 9.1" D
Reservoir Size:	4.75" diameter x 9.75" H
Weight:	16.5 lbs. (7.5 kg)

List of Loctite® Brand Parts Supplied

- | | |
|--|-----------------|
| (1) Power Cord | (1) Foot Switch |
| (3) Drip Cups | (1) Manual |
| (1) Integrated Semi-Automatic Controller | |

Additional Information

For Spare Parts and Accessories, see pages 55-56.
For Dispense Tips, see page 54.

Loctite® Single Channel Automatic Controller, Item 97123

The Loctite® Single Channel Automatic Controller is a multifunction system capable of operating one or two dispense valves, while controlling peripheral equipment such as advancing slides and rotorspray units. The front panel keyboard and LED display allow for easy programming of process functions, resulting in a high level of dispensing accuracy. Reservoir pressure, dispense time, advance slide delays and rotorspray operation can all be individually programmed with the controller. This system can also be integrated into fully automatic production lines using the PLC interface.

Features

- Fully programmable independent controller with permanent software set-up
- Front mounted keyboard and multilingual display for easy system programming and dispense valve control
- Digital pressure readout for precise electronic pressure regulation and monitoring of reservoir and valve dispensing
- Digital time display and control of valve dispensing
- Capable of controlling one or two dispense valves with advancing slide and rotorspray unit

Theory of Operation

Operator pre-programming determines which devices are to be used for a particular application. Once a particular set-up is selected, valve pressure, open time, and advancing slide timing can all be adjusted to meet a specific dispensing need. The rotorspray speed is not adjustable and the controller will only turn this on/off at the proper time in the dispense cycle. The amount of dispensed adhesive is controlled by adjustment of air pressure, valve open time, and the size of the dispensing needle.

Technical Specifications

Power Supply:	90-260 VAC; 47-63 Hz
Air Input/Air Output:	58-116 psi (4-8 bar)/1-100 psi (0.1- 7 bar)
Dimensions:	9" H x 5.7" W x 10.2" D
Weight:	6.5 lbs. (3 kg)



Options

986632	Loctite® Low Level Interface Cable for Loctite® Bond-A-Matic® 3000 Reservoirs (982720 or 982723)
98118	Loctite® Advancing Slide (50 mm Stroke)
97119	Loctite® Advancing Slide (100 mm Stroke)
97211	Loctite® In-Line Flow Monitor
97115	Loctite® Electric Rotorspray

List of Loctite® Brand Parts Supplied

- | | |
|--------------------------|---------------------------------|
| (1) Automatic Controller | (1) Pneumatic Tubing, 6 mm O.D. |
| (1) Power Cord | (1) Manual |

Typical Fluids Handled

All Fluids

Additional Information

For Spare Parts and Accessories, see pages 55-56.
For Dispense Tips, see page 54.

Loctite® Digital Dispense Controller, Item 98023

The Loctite® Digital Dispense Controller provides digitally timed dispense control for all Loctite® brand automatic dispense valves, controlling the air supply to a remote reservoir and the pneumatic opening of a dispense valve. Dispense time can be set from 0.01 - 99.9 seconds. It is readily compatible with low-level sensors on Loctite® brand reservoirs and the 300 ml cartridge pusher. This unit comes with a foot switch, a power cord, fitting kit, and instruction manual.

Features

- Push buttons allows user to set the dispense time
- Pneumatic output provides air pressure to a fluid pressure reservoir
- Fluid Low Level Indicator and output to allow protocol with plant PLC
- Fully modular for use with the Loctite® Bond-A-Matic® Reservoir or 300 ml Cartridge Pusher and any dispensing valve

Theory of Operation

The Loctite® Digital Dispense Controller, when used with a Loctite® Dispense Valve and Reservoir, provides a complete pressure-time or positive displacement dispensing system, depending on the type of reservoir used. This unit is ideal for manufacturing workstations.

Technical Specifications

Electrical Utilities:	115 VAC, 60 Hz, 2 amps
Air Input:	60 –100 PSIG filtered (40 micron), dry air @ 1 CFM (minimum)
Size:	8" H x 8" W x 8" D
Weight:	10 lbs.



Typical Fluids Handled

All fluids

List of Loctite® Brand Parts Supplied

- (1) Digital Dispense Controller
- (1) Foot Switch Assembly
- (1) Power Cord
- (1) Manual

Additional Information

For Spare Parts and Accessories, see pages 55-56.

Loctite® Digital Multi-Function Controller, Item 98024

The Loctite® Digital Multi-Function Controller utilizes the latest in microprocessor technology to create a user friendly, multi-function control module for workstation applications. The unit consists of a logic controller, a user interface keypad, three 4-way solenoid valves, and two dry-contact relays, all interconnected to provide on/off digital timing and interface logic for up to three independent pneumatic or electric devices. Typical control functions for this system are dispensing valves, advancing mechanisms, motorized rotating fixtures, turntables, and Rotospray systems. This unit comes ready to interface with Loctite® brand reservoirs, low-level sensors, two-hand anti-tie-down start switches, and part-present sensors.

Features

- Keypad with LCD display to program the on/off times of multiple devices in 10 millisecond increments
- Interface connections for reservoir low-level sensors, parts present sensors, electrical motors, indicator lights, foot switch, anti-tie-down switches, etc.
- Emergency Stop button on the top of the user interface
- Fully modular for optimum system configuration

Theory of Operation

The Loctite® Digital Multi-Function Controller, when used with a Loctite® Dispense Valve and Reservoir, provides a complete dispense system. The controller provides digital timing control for any Loctite® brand Automatic Dispense Valve, Advancing Slide, Turntables, and Rotospray systems. Dispense time range is from 0.01 to 99.9 seconds in 10 millisecond increments for precise and repeatable dispensing.

Technical Specifications

Electrical:	Input voltage: 115 VAC, 60 Hz, 2 amps Internal voltage: 24 DC Volts
Air Input:	60 –100 PSIG, filtered, dry air @ 1 CFM (minimum)
Size:	8" H x 8" W x 12" D
Weight:	10 lbs.

Typical Fluids Handled

All fluids



List of Loctite® Brand Parts Supplied

- (1) Digital Multi-Function Controller
- (1) Foot Switch Assembly
- (1) Power Cord
- (1) Connector Kit
- (1) Manual

Options

- 984691 Loctite® Advancing Slide (see photo below)
- 984727 Loctite® Anti-Tie-Down Switch Set (see photo below)
- 984724 Loctite® Cable Connector Plug Kit

Additional Information

For Spare Parts and Accessories, see pages 55-56.

These popular accessories are for use with the Loctite® Digital Multi-Function Controller, and come ready to plug in. The Loctite® Advancing Slide (984691) will accept the mounting bracket for any Loctite® brand automatic dispense valve and provide 2 inches of linear movement for the valve. The Loctite® Two-Hand Anti-Tie-Down Switch Set (984727) provides the industry standard in operator safety and minimal fatigue via optically triggered start switches.



Loctite® Shot Miser™ Valve Controller, Item 98079

This low cost Loctite® Shot Miser™ Valve Controller will provide both manual and timed control for any Loctite® brand automatic dispense valve (except 97116). It is designed for all single component products with viscosities ranging from 1 to 80,000 cPs. The operating manual and all controls are in both English and Spanish.

Features

- Electro-pneumatic timer/controller for dispense valve
- Timed and continuous dispense modes
- Multiple range, adjustable timer (0.1 sec to 99 minutes)
- Foot switch actuated
- Rugged all-steel enclosure, with flat top and bottom for easy stacking
- Directly interfaces with any Loctite® brand automatic dispense valve (except 97116)

Technical Specifications

Input voltage/cycles:	115 VAC, 50/60 Hz
Fuse:	1 Amp, 250 VAC, 5 mm x 20 mm, Fast Acting
Size:	3.9" H x 6.1" W x 6.9" D
Weight:	3.5 lbs.



List of Loctite® Brand Parts Supplied

(1) Shot Miser™ Valve Controller	(1) Power Cord
(1) Foot Switch	(1) Manual

Additional Information

For Spare Parts and Accessories, see pages 55-56.

Loctite® 2.25 Gallon Pressure Reservoir, Item 98359

The Loctite® 2.25 Gallon Pressure Reservoir is designed to be used with Loctite® brand pressure-time dispense systems. The reservoir's heavy, deep-drawn one-piece steel tank will accommodate up to 2 kg packages. The tank comes equipped with a pressure regulator, gauge, safety relief valve, and 1/4" product feed line connector.

Features

- Rugged construction
- 0 - 60 psi Regulator
- Pressure safety relief valve
- 1/4" NPT air line, and 1/4" product feed line connectors

Technical Specifications

Pressure Range:	0 - 60 psi
Capacity:	2.25 Gallons
Size:	18.5" H x 12.7" Dia.
Weight:	17 lbs.



List of Loctite® Brand Parts Supplied

(1) 2.25 Gallon Pressure Reservoir
(1) Manual

Additional Information

For Spare Parts and Accessories, see pages 55-56.

Loctite® Shot Miser™ 1 Liter Reservoir, Item 98090

The low cost Loctite® Shot Miser™ 1 Liter Reservoir is designed for all single component products with viscosities ranging from 1 to 80,000 cPs. The reservoir will accept 50 ml, 250 ml, and 1 pound product bottles. The operating manual and all controls are in both English and Spanish.

Features

- 1-liter Internal capacity reservoir, directly accepts product bottles listed above
- Easy to read, 0 - 100 psi pressure regulator
- Pressure/vent valve and hand-tight knobs for easy, no tool bottle changeover
- 1/4" product feed line connector

Technical Specifications

Pressure Range:	0 - 100 psi
Capacity:	1 liter
Size:	13.25" H x 8.5" Dia.
Weight:	8.5 lbs.



List of Loctite® Brand Parts Supplied

(1) Shot Miser™ 1 Liter Reservoir	(1) 6' Product Supply Tube
(1) Anti-bubbler Adapter and Sleeve	(1) Spring Guard
(1) Manual	

Additional Information

For Spare Parts and Accessories, see pages 55-56.

Loctite® Bond-A-Matic® 3000 Reservoirs, Items 982720, 982721, 982723, 982724, 982726, 982727

Loctite® Bond-A-Matic® 3000 Reservoirs can be used in any dispensing application. These units have either a 0-15 psi pressure regulator for low viscosity (<3000 cP) or 0-100 psi pressure regulator for medium to high viscosity (>3,000 cP) fluids. Reservoirs can be ordered equipped with a low level sensor that sends an electronic signal to the Loctite® Digital Dispense Controller (98023), Loctite® Digital Multi-Function Controller (98024), or Loctite® Single Channel Automatic Controller (97123), halting dispensing and notifying the operator that the package needs to be changed. If low level sensing is not required, use the Loctite® Bond-A-Matic® 3000 Reservoirs (982726/982727) without low-level sensors. The reservoirs will accommodate 250 ml, 1 liter, 1 lb., 2 kg bottles, and 200 g tubes. A dispense valve will also be required when using these reservoirs.

Features

- User-friendly design
- Can accommodate a variety of Loctite® brand product packages
- Available with optional low-level sensor
- All pneumatic operation

Theory of Operation

Operation of this unit is easy. An operator will place a bottle of product in the reservoir and tighten the three handles on the cover. The unit is then pressurized to the appropriate setting for optimal flow control. The product is dispensed through an applicator, which when actuated, allows material to flow. Flow rate of the product is dependent on the valve selected.

Technical Specifications

Air Output:	982720 0-15 psi w/24 VDC low-level sensor, for low viscosity
	982721 0-15 psi w/110 VAC low-level sensor, for low viscosity
	982723 0-100 psi w/24 VDC low-level sensor, for high viscosity
	982724 0-100 psi w/110 VAC low-level sensor, for high viscosity
	982726 0-15 psi no low-level sensor, for low viscosity
	982727 0-100 psi no low-level sensor, for high viscosity
Electrical:	24 VDC or 110 VAC (external supply required for sensors only)
Size:	12.875" H x 9.875" W x 13.25" D
Weight:	18 lbs. unfilled



Typical Fluids Handled

Cyanoacrylate Adhesives	Silicone Adhesives
Light Cure Adhesives	Anaerobic Adhesives

List of Loctite® Brand Parts Supplied

- (1) Bond-A-Matic® 3000 Reservoir with ¼" Tank Fitting
- (1) ¼" Feed Line and Spring Strain Relief
- (1) Anti-Bubble Tip and Sleeve
- (1) Tube of Silicone Grease
- (1) Manual
- (1) Squeeze Tube Adapter and Nut/Ferrule (982723, 982724 & 982727 only)
- (1) ¾" Tank Fitting and Spring Strain Relief (982723, 982724 & 982727 only)

Options

Any Loctite® Brand Dispensing Valve

Additional Information

For Spare Parts and Accessories, see pages 55-56.

Loctite® 4 Liter Gravity Feed Reservoir, Item 982880

The Loctite® 4 Liter Gravity Feed Reservoir is a continuous flow, gravity fed reservoir capable of holding up to four liters of material. The reservoir has translucent sides so that the level of material can be seen easily, and a flip type lid with a large diameter for easy filling. The reservoir opening is designed to hold Loctite® brand products in one liter packages in position for draining.

Features

- For use with low to medium viscosity product feeding a dispensing system
- Feeds up to four Positive Displacement Pumps
- Contamination-free
- "Refill on the Fly" without stopping operation
- Low level sensing options for integration with other controls
- Visual level capability

Theory of Operation

The reservoir is intended to be mounted above the point of use, thus allowing material to flow by gravity to a dispense pump. Material is poured into the reservoir and replenished as required without stopping the operation.

Technical Specifications

Dimensions:	7 ⁹ / ₁₆ " W x 8 ⁷ / ₁₆ " D x 12 ³ / ₄ " H (19 ⁹ / ₁₆ " H with lid up)
Size of Reservoir:	Four liters maximum
Weight of Assembly:	4.5 lbs. empty
Low Level Sensor:	Available as an option in 24 VDC or 120 VAC

Typical Fluids Handled

Anaerobic Retaining Compounds
Anaerobic Threadlockers



List of Loctite® Brand Parts Supplied

- (1) Manual
- (1) 4 Liter Gravity Feed Reservoir
- (1) Wall Mounting Bracket
- (1) Reservoir Casement
- (1) Sensor Mounting Bracket
- (1) Parts Kit Containing:
 - (3) Reservoir Plugs
 - (4) Male Elbow Fittings
 - (1) Tube of Loctite® 565™ PST® Thread Sealant

Options

982716 AC Level Sensor Kit
982702 DC Level Sensor Kit

Additional Information

For Spare Parts and Accessories, see pages 55-56.