

794 Valve

Auger valve system for precise, consistent fluid application.

The 794 Series auger valve system is designed to make precise, repeatable deposits of solder paste.

By integrating screw feed technology with precise control of dispense time, syringe pressure and auger speed, the 794 Series system ensures consistent deposits without damage to the metal alloy particles in the solder paste.

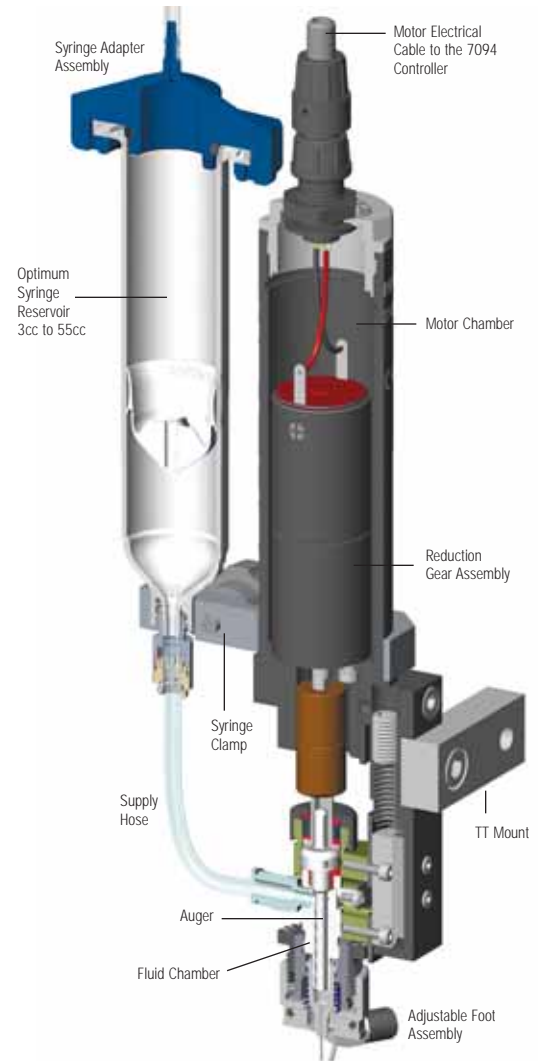
794 Series Auger Valves

The 794 Series auger valves are designed for use with the 7094BL and 7094DC controllers or XYZ dispensing robots like the EFD TT automation system. During operation, air pressure applied to the syringe of solder moves paste into the path of the auger. As the auger rotates, solder paste moves along the threads and out the dispensing tip.

The 7094BL and 7094DC controllers regulate feed pressure so that there is enough pressure to keep the valve primed with solder without forcing it past the auger, and controls dispense time and auger speed.

Features and Benefits

- Accurate, consistent output
- Adjustable flow rate
- I/O interface
- Adjustable auger speed
- 8 pitch or 16 pitch auger
- Two motor-styles – brush or brushless
- Low-maintenance design
- Fast, tool-free latch release of wetted parts
- Sliding head/footed tip components for surface irregularities and to maintain consistent dispense gap height.
- Fixed head version for lines and stripes



Size: 237.4 mm x 31.7 mm diameter
(9.35" length x 1.25")
Weight: 544 grams (19.2 oz)
Fluid chamber: Type 440C hardened stainless steel
Auger: Type 440C hardened stainless steel
"U" cup: Filled PTFE, spring energized
Liquid feed fitting: Type 304SS #10-32x5/32" (push-in optional: polypro)
Auger speed: 250-400 RPM based on voltage input
Auger pitch: 8 and 16 pitch auger
Input Voltage: 12-24 VDC (<10% ripple)
Input Air: 0-30 psi (0-2.07 bar) clean and dry
Maximum Acceleration: 2g

All stainless steel parts are passivated.



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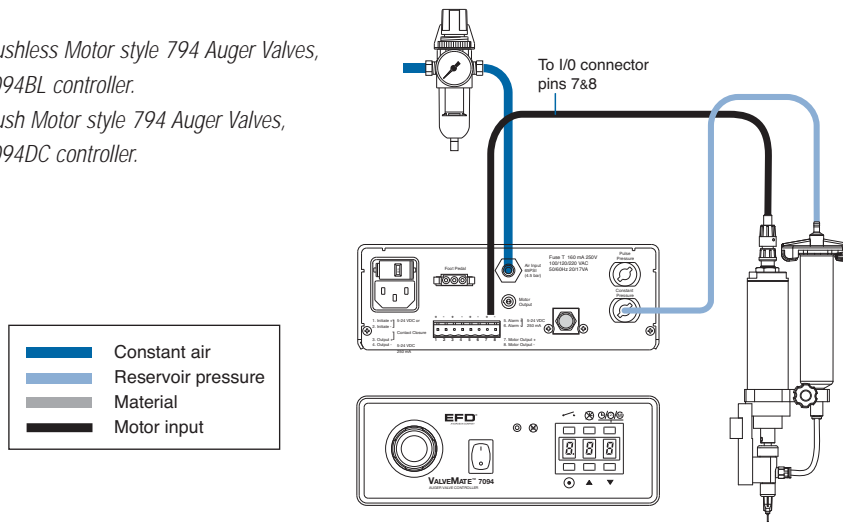
Auger valve systems

The 794 Series auger valves are available in brush and brushless motor configurations. Either configuration can be used with XYZ dispensing robots like EFD's TT automation system.

NOTE:

For Brushless Motor style 794 Auger Valves, use 7094BL controller.

For Brush Motor style 794 Auger Valves, use 7094DC controller.



ValveMate 7094BL and 7094DC Controllers

The ValveMate 7094 controller series regulate solder feed pressure, dispense time and auger speed. It provides motor startup acceleration limits and maximum current overload protection for extended motor life. The precision air pressure regulator ensures that consistent pressure is applied to the material in the syringe barrel.

- Easy deposit size control
- On-the-fly adjustability
- Motor voltage range of 10-24 VDC
- Digital time, pressure, voltage display
- Motor overload/fault detection

Automation: XYZ & XYZR Robot Dispensing Systems

Nordson EFD offers a wide selection of XYZ and XYZR robot systems that are fully compatible with ValveMate valve controller systems. Consistent, accurate, repeatable and complex dispensing applications can be easily performed with EFD robots, with working envelopes that range from 200 x 200 x 50mm to 510 x 510 x 100mm. Scara robot systems are also available for larger, heavier products or inline dispensing applications.

Solder Paste Reservoirs

The 794 Series auger valve can be supplied with solder paste from prefilled syringe barrels or cartridges. Contact EFD's Solder Paste Group for details: www.efdsolder.com.

Dispense Tips

Tip selection is critical to achieve optimum valve performance. In general, use the shortest and least restrictive tip possible to provide the best paste flow.

794 Series valves are packaged with a dispensing tip kit for maximum fluid control. The kit includes smooth-flow tapered tips in sizes from 14 to 22 gauge and 6.35 mm (1/4") precision stainless steel tips in sizes from 14 to 30 gauge, and tip caps.

For Nordson EFD LLC sales and service in over 30 countries, contact Nordson EFD or go to www.nordsonefd.com

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