

# 794 Auger Valve

Auger valve system for precise, consistent fluid application



794 Auger Valve dispensing EFD solder paste.

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.

The 794 Series auger valves are designed for use with ValveMate™ 7194 controllers and EFD's automated dispensing systems. 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 VM7194 controller regulates 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

Part #	Description
7029742	8 pitch, brushless motor, and fixed head
7029745	8 pitch, brush motor, and fixed head
7029746	16 pitch, brush motor, and fixed head



more info

## Specifications

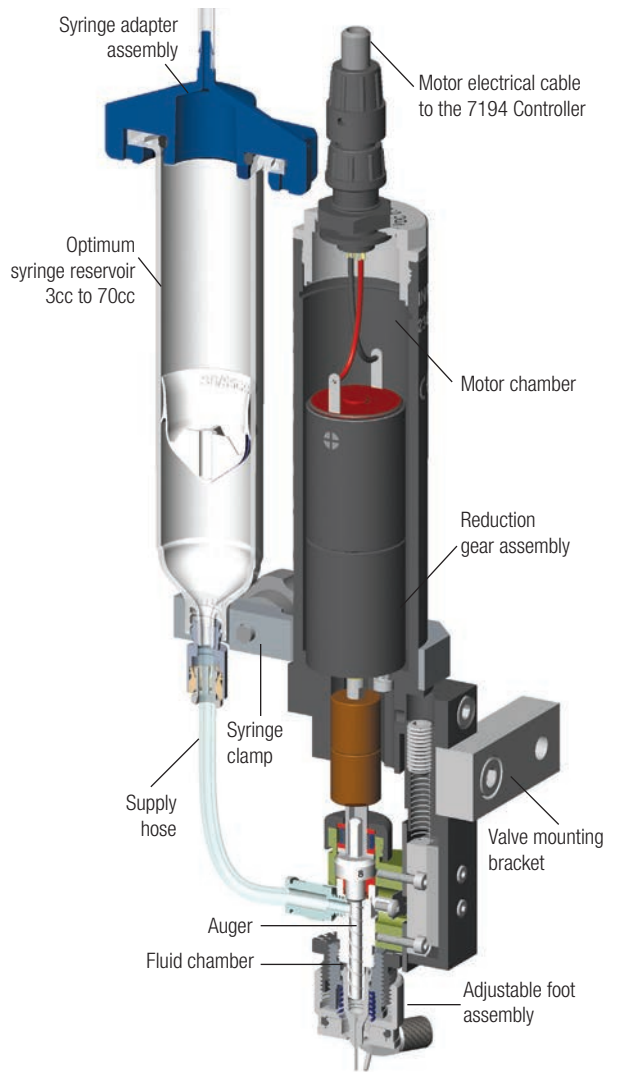
Item	Product
Size	237.4 mm length x 31.7 mm diameter (9.35 x 1.25")
Weight	544.0 g (19.2 oz)
Auger speed (dry)	250–500 RPM based on voltage input
Auger pitch	8, 16
Input voltage	12–24 VDC (<10% ripple)
Maximum acceleration	2.0 g (0.07 oz)
Maximum continuous current	SR & FR — 240 mA SB & FB — 670 mA (Time delay fuse recommended)
Input air pressure	0–2.07 bar (0–30 psi)
Maximum fluid pressure	2 bar (30 psi)
Fluid inlet	304 stainless steel, #10-32 UNF x 5/32" (Optional push-in fitting: polypropylene)
Mounting	10-32, low profile
Fluid body	440C hardened stainless steel
Auger	440C hardened stainless steel
Approvals	China RoHS
Warranty	1 year, limited

All stainless steel parts are passivated.

## ValveMate 7194 Controller

The ValveMate 7194 controller series regulates 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
- Motor voltage range of 10–24 VDC
- Digital time, pressure, voltage display
- Motor overload / fault detection



## Automated Dispensing Systems

Nordson EFD automated dispensing systems deliver market-leading repeatability and accuracy in fluid placement and positioning. Specialized dispensing software simplifies setup and programming. Optimize dispensing results with features such as laser height sensing and smart vision CCD cameras.

## Solder Paste

Nordson EFD's comprehensive line of ISO-certified solder paste solutions include high quality printing and dispensing soldering pastes that meet the most stringent application requirements. Visit [www.nordsonefd.com/SolderPlusPaste](http://www.nordsonefd.com/SolderPlusPaste) for details or to request a free sample.

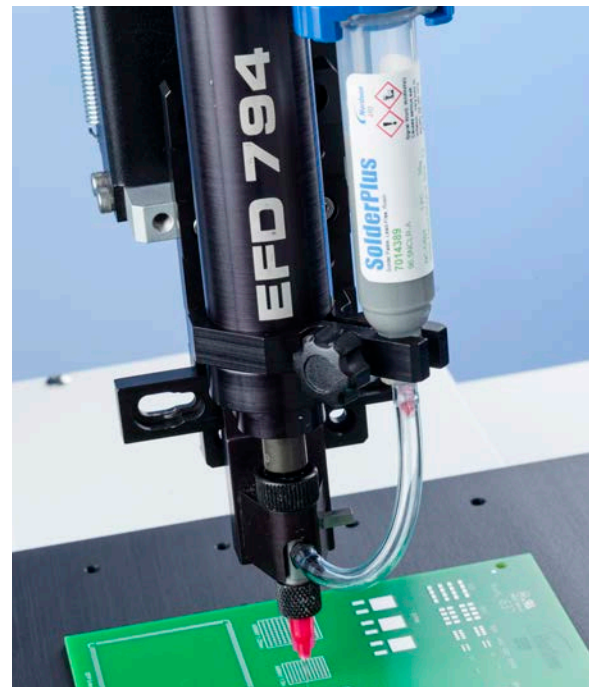
## Dispense Tips

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 SmoothFlow™ tapered tips in sizes from 14 to 22 gauge, 6.35 mm (1/4") precision stainless steel tips in sizes from 14 to 30 gauge, and tip caps.



794 auger valve and robot dispensing solder onto a fire detector.



794 auger applies solder onto a printed circuit board.

## Request a Process Evaluation

Contact Nordson EFD to configure a precision dispense system that meets your specific needs, with:

- A complimentary process evaluation by experienced fluid dispensing experts.
- Samples processed for customer evaluation and approval prior to purchase.

800-556-3484; [info@nordsonefd.com](mailto:info@nordsonefd.com)

## Connect with us



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to [www.nordsonefd.com](http://www.nordsonefd.com).

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