794-TC Series Auger Valve

Auger valve system for precise fluid application of TIM



The 794-TC valve is designed to make precise, repeatable deposits and patterns of thermal interface materials.

Part #	Description
7363512	794-TC valve, high flow (double pitch), brush motor, 0.10 mm (0.004") gap — recommended for fluids with large particles <40 μm
7364566	794-TC valve, high flow (double pitch), brush motor, 0.15 mm (0.006") gap — recommended for fluids with large particles <40 μm
7364621	794-TC valve, ultra high flow (single pitch), brush motor, 0.15 mm (0.006") gap — recommended for applications needing higher flow output for thermal interface materials (TIM)

The 794-TC Series auger valve system is designed to make precise, repeatable deposits and patterns of thermal interface materials (TIM) or other highly abrasive pastes. Its robust tungsten carbide (TC) auger screw and fluid body liner resist wear from highly abrasive pastes to ensure long valve life.

The 794-TC auger valve is available in several auger screw gap sizes to ensure best valve performance based on TIM particle size. The TC auger assembly can be easily replaced to change the gap size as needed.

The 794-TC is supplied with a tip adapter retaining nut to accept standard Nordson EFD tapered and general purpose tips. A specialty configuration is available to accept precision DL Technology tips.

Features

- Tungsten carbide wetted parts for long valve life
- Fast, tool-free release of wetted parts
- Adjustable flow rate
- Adjustable auger speed
- Low maintenance design

Benefits

- · Accurate, consistent dispensing
- Wear-resistant tungsten carbide wetted parts for higher production output
- Robust tungsten carbide auger screw and fluid body to ensure long valve life







Specifications

Item	Specification
Size	61.0L x 32.0DIA mm (2.40L x 1.25DIA")
Weight	470 g (16.6 oz)
Auger speed (dry)	170-400 rpm based on voltage input
Auger pitch	High flow (double pitch), ultra high flow (single pitch)
Input voltage	10-24 VDC (<10% ripple)
Maximum acceleration	2.0 g (0.07 oz)
Maximum continuous current	240 mA (Time delay fuse recommended)
Maximum fluid pressure	2.0 bar (30 psi)
Fluid inlet	1/8" ID tubing supplied for connection
Mounting	10-32, low profile
Luer lock tip adapter assembly	303 stainless steel
Fluid inlet tube	303 stainless steel
Fluid cartridge liner	Tungsten carbide
Auger	Tungsten carbide
Approvals	China RoHS
Warranty	1 year, limited

All stainless steel parts are passivated.

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-TC 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.

A special adapter assembly is available for use with precision DL Technology tips.

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.

Thermal Inferface Materials

Nordson EFD synthetic-based, silicone-free thermal interface materials provide an ideal thermal solution by ensuring reliable heat transfer over a longer time than most industrial thermal interface materials. Visit www.nordsonefd.com/ThermalCompound for details or to request a free sample.

ValveMate 7194 Controller

The ValveMate 7194 controller series regulates TIM 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





For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com.

Globa

800-556-3484; +1-401-431-7000 info@nordsonefd.com

Europe

00800 7001 7001 infoefd.europe@nordsonefd.com

Asia

China: +86 (21) 3866 9006; china@nordsonefd.com India: +91 80 4021 3600; india@nordsonefd.com Japan: +81 03 5762 2760; japan@nordsonefd.com Korea: +82-31-736-8321; korea@nordsonefd.com SEAsia: +65 6796 9522; sin-mal@nordsonefd.com

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