

797PCP Series Progressive Cavity Pump

Volumetric dispensing for industry-leading process control



The 797PCP progressive cavity pump provides best-in-class deposit volume accuracy and repeatability at $\pm 1\%$.

The 797PCP Series pump dispenses an exact, repeatable volume of fluid as small as 0.01 mL per revolution for applications that require extremely consistent process control. Its modular design is based on the progressive cavity principle where its core components — a rotor and stator — form a perfectly sealed metering chamber.

As it rotates, the fluid moves from one sealed cavity to the next, allowing for continuous volumetric dispensing independent of fluid viscosity or changes in viscosity over time. External factors, such as fluctuating fluid pressures and the full-to-empty effect in syringe barrels, do not impact the amount dispensed.

The continuous seal prevents shear, pulsation, and squeezing of the fluid, making the 797PCP ideal for dispensing abrasive pastes and UV-cure materials.

Nordson EFD's 797PCP pump comes in 0.01 mL, 0.05 mL, and 0.15 mL sizes. We also offer a 797PCP-2K pump that precisely meters and applies two-part fluids in highly repeatable deposit volumes.

Features

- Highly precise fluid volume accuracy and repeatability at $\pm 1\%$
- Continuous volumetric dispensing independent of viscosity variation
- Modular design with easy disassembly

Benefits

- Perfectly sealed metering chamber provides market-leading deposit volume assurance for improved process control with minimal fluid waste
- Versatility to continuously dispense any fluid viscosity with low pulsation and shear allows for use in a wide range of applications
- Suck-back feature provides clean cut-off for more accurate dispensing without dripping or drooling
- Modular design allows for easy disassembly and cleaning that reduces production downtime required for maintenance

Part #	Description
7364197	797PCP-0.01 pump, 0.01 mL per revolution, 0.13–1.95 mL per minute flow rate
7364198	797PCP-0.05 pump, 0.05 mL per revolution, 0.59–8.85 mL per minute flow rate
7364199	797PCP-0.15 pump, 0.15 mL per revolution, 1.63–24.50 mL per minute flow rate



more info



Specifications

Item	Specification
Size	PCP-0.01/0.05: 261.4L x 36.0DIA mm (10.29L x 1.42DIA") PCP-0.15: 297.9L x 36.0DIA mm (11.73L x 1.42DIA")
Weight	PCP-0.01/0.05: 550.0 g (1.2 lb) PCP-0.15: 620.0 g (1.4 lb)
Rotor speed	10–150 RPM (depending on maximum motor speed)
Flow rate	PCP-0.01: 0.13–1.95 mL/min PCP-0.05: 0.59–8.85 mL/min PCP-0.15: 1.63–24.50 mL/min
Dispensing volume per revolution	PCP-0.01: 0.009 mL PCP-0.05: 0.047 mL PCP-0.15: 0.139 mL
Repeatability	±1%
Fluid inlet	1/8 NPT
Fluid outlet	Luer fitting
Mounting	M4
Fluid chamber	Anodized aluminum
Rotor	316Ti stainless steel
Stator	FFKM (perfluoroelastomer)
Operating temperature	10–40° C (50–104° F)
Approvals	CE, UKCA, WEEE
Warranty	1 year, limited

7197PCP Controllers

For best results use 797PCP Series pumps with fully integrated Nordson EFD 7197PCP controllers, which provide multiple programming modes — Line, Volume, Weight, or Timed — to meet the unique needs of your application. Advanced features, such as the ability to change the rotor speed when dispensing a line around corners, deliver a high level of process control.



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.

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.



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

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