

The Heated SmartPump™ is a positive pressure pump with a patented high-precision computer actuated valve coupled with a patented precision nozzle. The Heated SmartPump™ can reach temperatures up to 90° C (194° F). SmartPump™ technology was developed to produce flow rates that can be more precisely controlled than any other high-speed dispensing pump of its kind featuring discrete volumetric control down to 100 picoliters. By maintaining constant material pressure and running a customizable computer-controlled valve open and close routine, the SmartPump™ can generate precise starts and stops, maintain a consistent material flow rate, and handle an extreme range of material viscosities.

**SIZE:**

H 219.4 x W 19.8 x D 31.5MM  
(H 8.64 x W 0.78 x D 1.24 IN)

**WEIGHT:**

0.50 KG (1.0 LB)

**MATERIAL INLET:**

10-32

**AIR PRESSURE:**

0-1000 kPa  
(0-150PSI)

**VALVE RESOLUTION:**

0.1 µM

**TEMPERATURE RANGE:**

23°C - 90 °C  
(73°F - 194°F)

**DEAD VOLUME:**

0.2315 ML

**VISCOSITY RANGE:**

0.001-1000 P A-S  
(1-1,000,000 CPS)

**FEATURES:**

- TIGHT VOLUMETRIC CONTROL AS LOW AS 100 PL RESPECTIVELY
- REDUCED LINE WIDTHS (AS SMALL AS 20µM)
- BROAD MATERIAL COMPATIBILITY, INCLUDING HIGH-VISCOSITY MATERIALS
- PRECISE STARTS AND STOPS WITH NO MATERIAL TAILING
- CUSTOMIZABLE ACTUATION ROUTINES PER MATERIAL
- CAN REACH TEMPERATURES UP TO 90° C (194° F)

**STANDARD CERAMIC NTIP SIZE CHART**

(Contact us for larger or custom sizes)

NTIP PART#	I.D. (µM)	O.D. (µM)
900-4000-014	10	25
900-4000-015	15	25
900-4000-002	25	50
900-4000-003	50	75
900-4000-004	50	100
900-4000-005	75	125
900-4000-006	100	150
900-4000-007	125	175

**WETTED PARTS MATERIALS:**

316/316L, VITON,  
FLUOROELASTOMER, BUNA N,  
POLYPROPYLENE, ZIRCONIA,  
ALUMINA, TITANIUM  
NITRIDE,  
TUNGSTEN CARBIDE.  
(DEPENDING ON MATERIAL  
BEING DISPENSED AND  
COMPATIBILITIES)

