

The 2000 Pump Series is a positive displacement design with a transparent manifold housing for micro fluid dispensing. It is a compact device that is offered with two different full stroke resolutions, a variety of full dispense volumes, and a solenoid valve option. Mechanically, the pump is driven via stepper motor and lead screw. The pump has an integrated home position sensor at the full dispense position. Additional features include a user friendly DB9 electrical connection interface.

Physical

Height
2.61"
Width
1.63"
Length
5.75" (with valve 8.25")
Weight
Up to 0.6kg

Environmental

Operating Temperature
32°F to 131°F (0°C to 55°C)
with valve 50°F to 131°F
(10° to 55°C)
Operating humidity
5 to 95% RH, non-condensing
at 131°F (55°C)
Storage Temperature
13°F to 185°F (-25° to 85°C)
WEEE & RoHS Compliant

Mechanical

Operation
Any orientation
***Mounting Configuration**
See Figure 1
Motor
1.8 Degree Full Step
Two resolutions available
(10,000 and 20,000 half steps)
Pressure
**VAC to 100psig
(50psig w/valve option)
Full Volume Dispense
500ul to 5ml
Valve Type Option
2 way/3 Port Solenoid Valve
1/10 Linear Dispense
Precision: 0.5% CV
Accuracy: 0.5% CV

Electrical Interface

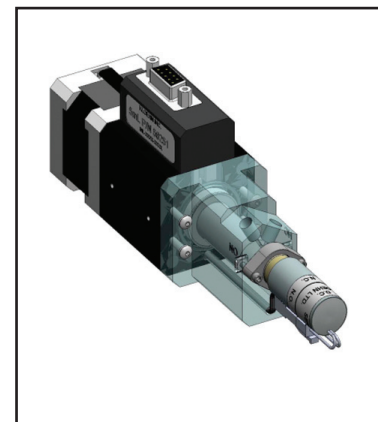
DB9 Female Connector
See Figure 2
Bipolar Solenoid
24V
Optical Sensor
OPB390
NEMA 17 Stepper Motor (4 lead)
CE Certified

Chemical

Wetted Materials
Acrylic, 316 Stainless Steel,
UHMW-PE
**Additional Wetted Materials
(w/ valve Option)**
EPDM, PEEK

Ancillary items:

Operator's Manual P/N 30847; and FAQ.



| Full Dispense Volume 20K Resolution (Half Step) | Positive Displacement Type EPDM Valve & Acrylic Manifold | Positive Displacement Type No Valve & Acrylic Manifold |
|--|---|---|
| 1.0 ml | 56300 | 56301 |
| 2.5 ml | 56250 | 56255 |
| 5.0 ml | 56251 | 56256 |

| Full Dispense Volume 10K Resolution (Half Step) | Positive Displacement Type EPDM Valve & Acrylic Manifold | Positive Displacement Type No Valve & Acrylic Manifold |
|--|---|---|
| 500 µl | 56252 | 56257 |
| 1.0 ml | 56253 | 56258 |
| 2.5 ml | 56254 | 56259 |

* Mounting hardware is not supplied with standard 2000 series. Suggested hardware for thru hole mounting:
Screw 4-40 SHCS L2.00" or M3 x 0.5 SHCS L50mm
** Vacuum pressure: -25inHg maximum at 2750ft elevation (1psia max).

Recommended 35 micron filtration w/ valve option.

Dimensions in. (mm)

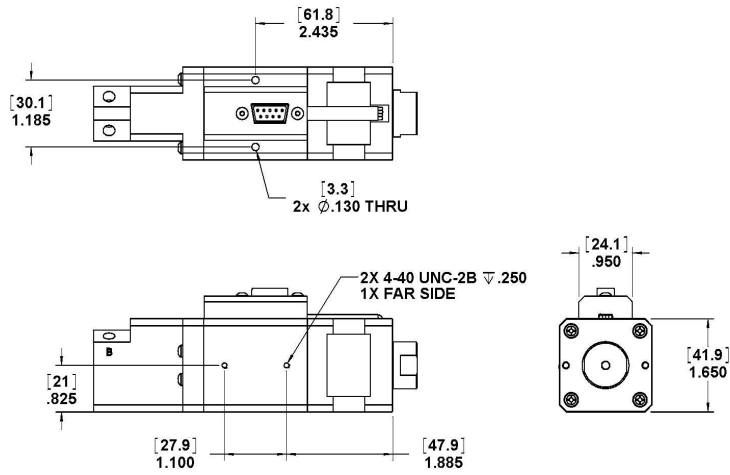


Figure 1: Mounting Details
Inches [Millimeters]
 Shown without valve option

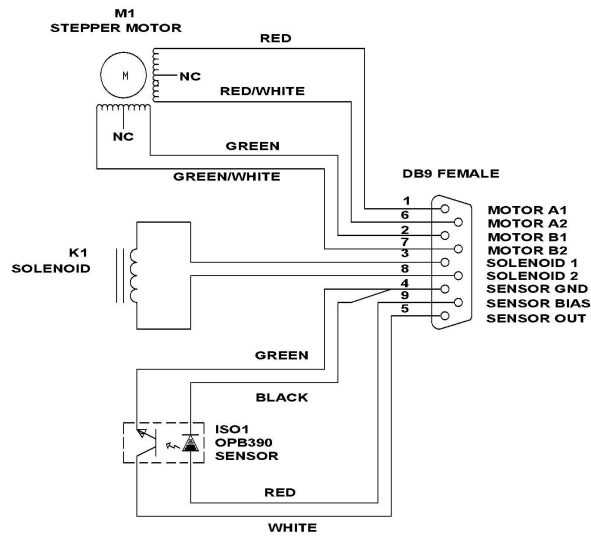


Figure 2: DB 9 Pinout