



## Model 400

### Hand-Held Needle Valve Dispensing Systems

- Material flow adjustment on valve for precise control over dispensing volumes
- Lightweight, wand-style valve body for easy and comfortable handling
- Shot-to-shot consistency (when used with the DVC-345 controller)
- Able to dispense from pressurized cartridges, bottles, and pails (requires appropriate reservoir hardware)
- Compatible with most standard fluid packages and delivery systems

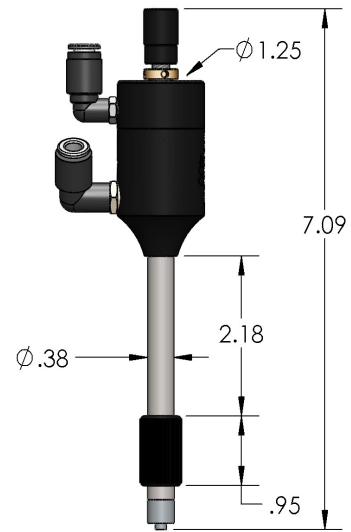
The Dymax Model 400 pneumatic, normally closed needle valve is designed to deliver precise dots or very fine beads of low- to medium-viscosity fluids. The valve's design is compact and lightweight, making it easy and comfortable to handle. Air pressure retracts the valve's needle assembly from the seat allowing fluid to flow from the valve fluid inlet to the dispensing tip. When the air pressure is eliminated, the spring returns the needle back to its position, closing the fluid path and ending the dispense cycle. Accurate, repeatable dispensing can be achieved by utilizing the valve's material flow adjustment to control the shot volume.

The Model 400 is available in several system packages, paired with the Dymax DVC-345 bench-top valve controller and material reservoirs of various styles and sizes. Additional accessories, like a valve stand and various style dispense tips, are also available for this system.



# Specifications

Specifications	
Valve Type	Pneumatic needle valve, normally closed
Valve Construction Materials, Wetted Parts	SS, Delrin®, Teflon®, Silicone
Operating Air Pressure	80-100 psi (5.5 – 6.9 bar)
Activation	DVC-345 valve controller or 2-position, 4-way solenoid valve
Maximum Fluid Pressure	80 psi (5.5 bar)
Electrical Supply (Controller)	110/220 VAC
Valve Air Inlet Thread	10-32
Valve Fluid Inlet Tread	1/8" (3.2 mm) NPT
Valve Dimensions (H x D)	7.09" x 1.25" (3.22 cm x 0.57 cm)
Valve Weight	0.35 lbs (0.16 kg)
Valve Warranty	1 year from purchase



## Available System Packages

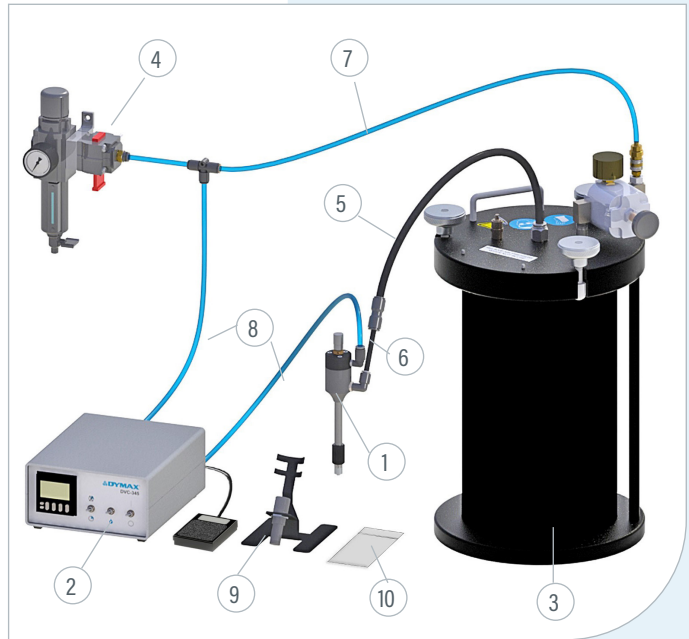
Systems Include:

- Model 400 Handheld Needle Valve
- Selected Reservoir for Fluid Package Used
- DVC-345 Digital Valve Controller
- Air Filter/Regulator - 0-100 psi (0-6.9 bar)
- Controller Air Line Kit
- Fluid Line Kit - 6 ft of Black 1/4" (6.3 mm) OD tubing and 3/8" - 1/4" (9.5 mm - 6.3 mm) reducer and two 3/8" - 1/4" (9.5 mm - 6.3 mm) stem fitting inserts
- Valve Stand
- Reservoir Air Line Kit
- Fluid Line Kit - 6 ft of black 3/8" (9.5 mm) OD tubing
- Dispensing Tip Kit for Low Viscosity Fluids
- Air Precision Regulator - Includes three pressure gauges:
  - 0-30 psi (0-2 bar) for very low- to medium-viscosity materials
  - 0-60 psi (0-4.1 bar) for medium-viscosity materials
  - 0-100 psi (0-6.9 bar) for high-viscosity materials

		System Part Numbers Based on Fluid Package Used					
Valve Only	Complete System Without Reservoir	Cartridge Drop-In			Large Bottle Drop-In	Pail Drop-In	Mini Ram Pump
		6 oz [160 mL]	12 oz [300 mL]	20 oz [550 mL]	Up to 1 Gallon	Up to 15 Liters Straight or Taper	Up to 3.8 Liters
T17384	T17838	T17704	T17705	T17706	T17707	T17708	T17840

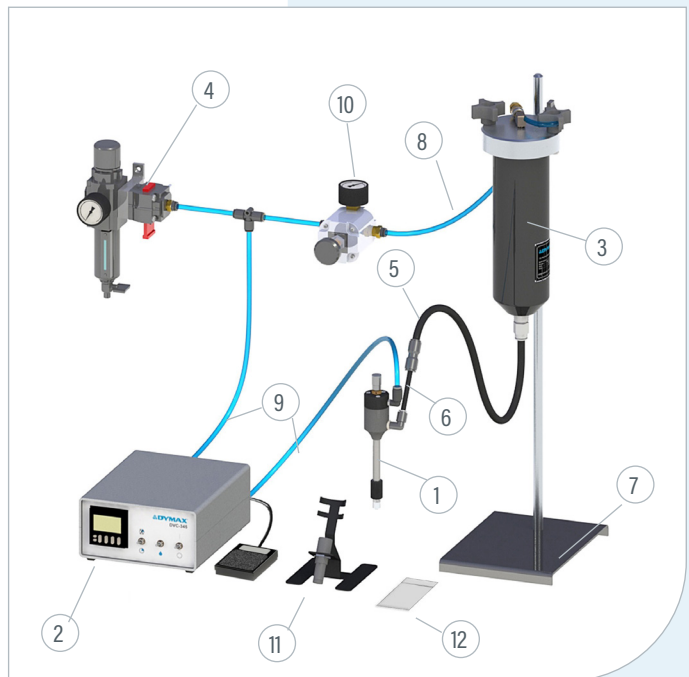
Item	Part Number	Description
1	T17384	Model 400 Needle Valve
2	T11146	Model 345 Valve Controller
3	T17004	Bottle Drop-In Tank Assembly with High-Precision Regulator
4	T16307	Filter Regulator with Air On/Off Toggle, 25 Micron
5	T16787	6 Ft of Fluid Line Kit - Black 3/8" (9.5 mm) OD PE
6	T16793	6 Ft of Fluid Line Kit - Black 1/4" (6.3 mm) OD PE
7	T16789	Reservoir Airline Kit
8	T16786	Controller Airline Kit
9	T15466	Valve Stand
10	P3424	Tip Kit for Low Viscosity Fluids

Representative Model 400 Dispensing System (T17707 with Bottle Drop-in Reservoir Shown Below)



Item	Part Number	Description
1	T17384	Model 400 Needle Valve
2	T11146	DVC-345 Valve Controller
3	T15223	20 oz. Cartridge Retainer Assembly
4	T16307	Filter Regulator with Air On/Off Toggle, 25 Micron
5	T16787	6 Ft of Fluid Line Kit - Black 3/8" (9.5 mm) OD PE
6	T16793	6 Ft of Fluid Line Kit - Black 1/4" (6.3 mm) OD PE
7	T15279	24" Lab Stand
8	T16789	Reservoir Airline Kit
9	T16786	Controller Airline Kit
10	T16629	High-Precision Regular
11	T15466	Valve Stand
12	P3424	Tip Kit for Low Viscosity Fluids

Representative Model 400 Dispensing System (T17706 with Cartridge Reservoir Shown Below)





[www.dymax.com](http://www.dymax.com)

#### Americas

USA | +1.860.482.1010 | [info@dymax.com](mailto:info@dymax.com)

#### Europe

Germany | +49 611.962.7900 | [info\\_de@dymax.com](mailto:info_de@dymax.com)  
Ireland | +353 21.237.3016 | [info\\_ie@dymax.com](mailto:info_ie@dymax.com)

#### Asia

Singapore | +65.67522887 | [info\\_ap@dymax.com](mailto:info_ap@dymax.com)  
Shanghai | +86.21.37285759 | [dymaxasia@dymax.com](mailto:dymaxasia@dymax.com)  
Shenzhen | +86.755.83485759 | [dymaxasia@dymax.com](mailto:dymaxasia@dymax.com)  
Hong Kong | +852.2460.7038 | [dymaxasia@dymax.com](mailto:dymaxasia@dymax.com)  
Korea | +82.31.608.3434 | [info\\_kr@dymax.com](mailto:info_kr@dymax.com)