Model 826 Dispensing Systems

Systems User Guide
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Safety

Using Safe Operating Pressures

Pressurizing the components in the dispensing system beyond the maximum recommended pressure can result in the rupturing of components and serious personal injury. To minimize the risk of rupturing components and injury, do not exceed the maximum operating pressure of the components in your fluid dispensing system.

Operating Specifications

- Recommended compressed air supply pressure to air filter/regulator = 80 to 100 psi (5.5 to 6.9 bar)
- Recommended pressure setting at air filter/regulator = 75 psi (5.2 bar)
- Maximum pressure setting at air filter/regulator = 100 psi (6.9 bar)
- Power required = 100-240V, 50-60 Hz power receptacle (customer supplied)
Configuration Overview

1. Controls

Dymax valves and digital controller provide precise and consistent actuation.
- Pneumatic function
- Footswitch, manual, or PLC controlled
- Easy to operate
- Manual or timed dispense mode

2. Dispensing Valve & Accessories

Dymax dispensing valves for handheld and bench-top applications deliver precision solutions for low- to high-viscosity materials. Various style tips and accessories are also available.

3. Reservoirs

Dymax carries a variety of material reservoirs to accommodate most dispensing applications.
- Range of volumes from 6 oz. cartridges to 10-gallon pressure tanks
- Easy change-over and control
Key System Connections

NOTE: Figures 1-4 apply to all systems.

Figure 1. Valve Air & Material Connections

Air in from controller
Fluid in from reservoir

Air in from filter regulator
Air out to reservoir

Figure 2. Controller Connections, Rear Panel

Air out to valve
Foot switch input
Power supply input
Air in from filter regulator

Figure 3. High-Precision Regulator Connections

Supply air in
Air to controller and high-precision regulator for reservoir

Figure 4. Filter Regulator

Air in from filter regulator
Air in from reservoir
Dispensing Tips

A variety of both needle and taper dispense tips in various lengths, gauges, and shapes are available from Dymax. Tip selection is critical when precision is required and the length, shape, and size of the tip used will define the shape of the fluid deposit and the performance of your dispense system.

The following tips are included with this system, and are recommended for use with the Model 826 dispensing valve.

**P3424** Dispensing Tip Kit for Low-Viscosity Materials (<500 cP)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3171</td>
<td>Purple</td>
<td>21 GA Needle Tip</td>
</tr>
<tr>
<td>P3172</td>
<td>Orange</td>
<td>23 GA Needle Tip</td>
</tr>
<tr>
<td>P3233</td>
<td>Pink</td>
<td>20 GA Tapered Tip</td>
</tr>
<tr>
<td>P3247</td>
<td>Red</td>
<td>25 GA Tapered Tip</td>
</tr>
</tbody>
</table>

**P3423** Dispensing Tip Kit for Medium- to High-Viscosity Materials (>500 cP)

<table>
<thead>
<tr>
<th>Part #</th>
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</thead>
<tbody>
<tr>
<td>P3169</td>
<td>Amber</td>
<td>15 GA Needle Tip</td>
</tr>
<tr>
<td>P3170</td>
<td>Green</td>
<td>18 GA Needle Tip</td>
</tr>
<tr>
<td>P3232</td>
<td>Green</td>
<td>18 GA Tapered Tip</td>
</tr>
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<td>P3247</td>
<td>Red</td>
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For assistance in optimal tip selection, contact Dymax Application Engineering. Visit [www.dymax.com/dispensing_tips](http://www.dymax.com/dispensing_tips) to see Dymax’s dispensing tip selection.
System Configurations

A  Systems Using a Cartridge Retainer (p. 8-9)

B  Systems Using a Bottle Drop-In Tank (p. 10-12)

C  Systems Using a 10-Gallon Pressure Tank (p. 12-15)
A - Systems Using a Cartridge Retainer

Packaged Components

- **T11146** DVC-345 Controller
- **T16786** Controller Air Line Kit
- **T16789** Reservoir Air Line Kit
- **T17586** Model 826 Valve
- **T15451** Mounting Assembly
- **T15279** Lab Stand, 24”[61 cm]
- **T16793** Fluid Line Kit, 1/4” OD
- **T16307** Filter Regulator
- **T16629** High-Precision Regulator
- **T16787** 3/8” OD Fluid Line Kit
- **T16790** Cartridge Reservoirs
  - 6 oz **T15257**
  - 12 oz **T14085**
  - 20 oz **T15223**
- **T15257** System User Guide
Assembled System

User-Supplied Items | Spare Parts
---|---
80-100 psi air supply, ¼ NPT male fitting | Dispense tips
100-240V power receptacle | Fluid line kits
B - Systems Using a Bottle Drop-In Tank

Packaged Components
Assembled System

**User-Supplied Items**

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<td>100-240V power receptacle</td>
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**Spare Parts**

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<td>Fluid line kits</td>
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Installing the Fluid Line to the Reservoir

Tube length from top of fitting: 14.5"
End of tubing must be cut at an angle.

1-Liter Bottle

1-Gallon Bottle
C - Systems Using a 10-Gallon Pressure Tank

Packaged Components

- T16864 10-Gallon Pressure Tank
- T11146 DVC-345 Controller
- T17736 System User Guide
- T16786 Controller Air Line Kit
- T16787 3/8” OD Fluid Line Kit
- T16789 Reservoir Air Line Kit
- T16793 Fluid Line Kit, 1/4” OD
- T15279 Lab Stand, 24”[61 cm]
- T16307 Filter Regulator
- T15451 Mounting Assembly
- T15279 Lab Stand, 24”[61 cm]
- T16786 Controller Air Line Kit
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- T16789 Reservoir Air Line Kit
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- T15451 Mounting Assembly
Assembled System

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<td>100-240V power receptacle</td>
<td>Fluid line kits</td>
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- 80-100 psi air supply, ¼ NPT male fitting
- 100-240V power receptacle
Installing the Fluid Line to the Reservoir

Tube to be flush with the bottom of the lid tube

15-Liter Pail
Please note that most dispensing system applications are unique. Dymax does not warrant the fitness of the product for the intended application. Any warranty applicable to the product, its application and use is strictly limited to that contained in Dymax standard Conditions of Sale published on our website. Dymax recommends that any intended application be evaluated and tested by the user to ensure that desired performance criteria are satisfied. Dymax is willing to assist users in their performance testing and evaluation. Data sheets are available for valve controllers or pressure pots upon request.