Contents

Safety ........................................................................................................................................... 3

Using Safe Operating Pressures ................................................................................................. 3
Operating Specifications .............................................................................................................. 3

Configuration Overview ............................................................................................................. 4

Key System Connections ........................................................................................................... 5

Dispensing Tips .......................................................................................................................... 6

System Configurations ............................................................................................................... 7

A - Systems Using a Cartridge Retainer ....................................................................................... 8
Packaged Components .............................................................................................................. 8
Assembled System ..................................................................................................................... 9

B - Systems Using a Bottle Drop-In Tank .................................................................................. 10
Packaged Components ............................................................................................................. 10
Assembled System ................................................................................................................... 11
Installing the Fluid Line to the Reservoir ................................................................................ 12

C - Systems Using a 10-Gallon Pressure Tank ......................................................................... 13
Packaged Components ............................................................................................................. 13
Assembled System ................................................................................................................... 14
Installing the Fluid Line to the Reservoir ................................................................................ 15
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 = 110V power receptacle (customer supplied)
Configuration Overview

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

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.

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

Figure 2. Controller Connections, Rear Panel

Figure 3. High-Precision Regulator Connections

Figure 4. Filter Regulator
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 485 dispensing valve. Either tip kit can be used depending on the exact viscosity and application.

**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>
<th>Color</th>
<th>Description</th>
</tr>
</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>
<tr>
<td>P3247</td>
<td>Red</td>
<td>25 GA Tapered Tip</td>
</tr>
</tbody>
</table>

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. 13-15)
A - Systems Using a Cartridge Retainer

Packaged Components

- **Controller Air Line Kit** (T16786)
- **Reservoir Air Line Kit** (T16799)
- **System User Guide** (T17736)
- **3/8” OD Fluid Line Kit** (T16787)
- **Fluid Line Kit, 1/4” OD** (T16793)
- **DVC-345 Controller** (T11146)
- **Filter Regulator** (T16307)
- **High-Precision Regulator** (T16629)
- **Model 485 Needle Valve** (T17617)
- **Lab Stand, 24” [61 cm]** (T15279)
- **Mounting Assembly** (T16857)
- **Cartridge Reservoirs**
  - 6 oz (T15257)
  - 12 oz (T14085)
  - 20 oz (T15223)
Assembled System

User Supplied Items

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Spare Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-100 psi air supply, ( \frac{3}{4} ) NPT male fitting</td>
<td>( \frac{1}{4}'' ) male to ( \frac{1}{4}'' ) quick-disconnect fitting</td>
</tr>
<tr>
<td>110V power receptacle</td>
<td></td>
</tr>
</tbody>
</table>
B - Systems Using a Bottle Drop-In Tank

Packaged Components
## Assembled System

<table>
<thead>
<tr>
<th>User Supplied Items</th>
<th>Spare Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-100 psi air supply, ¼ NPT male fitting</td>
<td>¼&quot; male to ¼&quot; quick-disconnect fitting</td>
</tr>
<tr>
<td>110V power receptacle</td>
<td></td>
</tr>
</tbody>
</table>
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

- **T16786**
  - Controller Air Line Kit

- **T11146**
  - DVC-345 Controller

- **T17617**
  - Model 485 Needle Valve

- **T16857**
  - Mounting Assembly

- **T15279**
  - Lab Stand, 24" [61 cm]

- **T16787**
  - 3/8" OD Fluid Line Kit

- **T16789**
  - Reservoir Air Line Kit

- **T16793**
  - Fluid Line Kit, 1/4" OD

- **T17736**
  - System User Guide

- **T16864**
  - 10-Gallon Pressure Tank

- **T16307**
  - Filter Regulator

**Packaged Components**

Model 485 Dispensing Systems User Guide
Assembled System

User Supplied Items

<table>
<thead>
<tr>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-100 psi air supply, ¼ NPT male fitting</td>
</tr>
<tr>
<td>110V power receptacle</td>
</tr>
</tbody>
</table>

Spare Parts

<table>
<thead>
<tr>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>¼&quot; male to ¼&quot; quick-disconnect fitting</td>
</tr>
</tbody>
</table>
Installing the Fluid Line to the Reservoir

Tube to be flush with the bottom of the lid tube

15-Liter Pail