AirFree® Technology

Price and performance (fluid deposit repeatability) are the first consideration when choosing a fluid dispensing system. Fishman AirFree® technology provides unparalleled performance, the lowest deployment cost and the lowest total cost of ownership when compared to other fluid dispensing systems. The result is an excellent return on total investment while generating significant profits over the systems life.

Total Cost of Ownership

AirFree® Technology Adds Profits When Replacing Air Driven Systems

Cost of ownership, Air vs. AirFree®, one fluid dispenser

SmartDispenser®
Medium Dot Any Viscosity

Use this model for dispense volumes between .00045 & 30cc, ideal for medium dot dispensing and medium to short bead dispensing. For use with industrial grade Genius® reservoirs and dispense tips.
MDAV-LT Medium Dot Any Viscosity

<table>
<thead>
<tr>
<th>BARREL SIZE</th>
<th>3CC</th>
<th>5CC</th>
<th>10CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN. VOL. (CC)</td>
<td>0.0045</td>
<td>0.0079</td>
<td>0.0131</td>
</tr>
<tr>
<td>MAX. VOL. (CC)</td>
<td>3.0</td>
<td>5.0</td>
<td>10.0</td>
</tr>
<tr>
<td>MIN. RATE (CC/SEC)</td>
<td>0.011</td>
<td>0.020</td>
<td>0.033</td>
</tr>
<tr>
<td>MAX. RATE (CC/SEC)</td>
<td>0.267</td>
<td>0.477</td>
<td>0.783</td>
</tr>
<tr>
<td>MAX. BACKOFF (STEPS)</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
</tbody>
</table>

The SmartDispenser® MDAV-LT (3-10cc) comes with 3-10cc Dispense Gun and 3, 5, 10cc Retaining Rings.

BARREL SIZE | 30CC |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN. VOL. (CC)</td>
<td>0.00257</td>
</tr>
<tr>
<td>MAX. VOL. (CC)</td>
<td>30.0</td>
</tr>
<tr>
<td>MIN. RATE (CC/SEC)</td>
<td>0.064</td>
</tr>
<tr>
<td>MAX. RATE (CC/SEC)</td>
<td>1.543</td>
</tr>
<tr>
<td>MAX. BACKOFF (STEPS)</td>
<td>500</td>
</tr>
<tr>
<td>MAX. DELAY (SEC)</td>
<td>9.99</td>
</tr>
</tbody>
</table>

The SmartDispenser® MDAV-LT (30cc) comes with 30cc Dispense Gun and 30cc Retaining Rings.

Genius® Dispensing Components deliver advanced dispensing performance

Fishman’s dispensing system components are designed specifically for industrial use, achieving optimized performance from AirFree® dispensing systems.

**Barrel Reservoirs** (available in 4 sizes)
- Thickwall design eliminates flexing
- Precision molded zero degree taper assures smooth flow
- Disposable design eliminates need for cleaning PosiLok™ Pistons
- Enclosed chambers protect workforce from contacting assembly fluid.

**PosiLok™ Pistons**
- AirFree® design featuring patented positive lock piston attachment for positive displacement dispensing
- Precision molded for smooth flow and uniform advance
- Engineered to allow trapped air to escape while sealing in vapors and fluid Dispensing tips (available in 3 styles)

**Dispensing Tips** (available in 5 styles)
- Ergonomic Surlock™ design locks securely to the barrel with a simple twist
- Multiple sizes and lengths available to satisfy any dispensing application

Fishman Corporation manufactures in a Certified Silicone-Free environment, achieving close tolerance precision in an industrial grade system. Contact our Fluid Dispensing specialists to take advantage of our experience with thousands of successful applications and to pick the right components for your specific application needs. For free samples, go to www.fishmancorp.com/samples.
What makes the SmartDispenser® so smart?
The combination of 3 powerful platforms.

AIR-FREE MANUFACTURING
• One program – worldwide
• Closed-loop feedback
• 6-10X more repeatable than pneumatics
• Volume base numeric dispensing
• Positive displacement via stepper motor
• Firmware proven for over a decade
• Eliminates expensive air compressor
• Designed to integrate into automation systems using PLCs

WINDOWS 7 NETWORKING
• SD Device to MES System Networking
• Remote programming and lock out
• Real-time production data
• Live Video feed
• Auto e-mail of unauthorized program changes
• On screen work instruction (audio option)
• Connectivity between SmartDispensers® Desktop, Laptop and Smartphone.
• Video/audio training and tutorials

SMARTPHONE FUNCTIONALITY
• Touch screen
• Finger gesturing controls
• MES Networking Apps
• Custom Manufacturing Apps

SPECIFICATIONS
Usage: Indoor use
Altitude: Up to 2000m
Temperature: 0° to 40° C
Humidity: 50% relative humidity at 40° C
Mains Supply
Voltage Fluctuations: Not to exceed ±10%
Installation
Overvoltage: Category II
Pollution: Degree 2, Class 1
Input Voltage: 100-240 VAC 47-63Hz
Max Inrush Current: 3.2A-1.8A
Output Voltage: 5.0VDC
Output Power: 4.6W
Fuse Rating: 1.0A/250 VAC
Initiate Circuit: Foot Pedal (dry contact) finger switch
Drive Motor: MDAV-LT .375 Degree 96 Steps/Rev
Axial Movement: MDAV-LT .024 Axial Pitch .00025”/Step
Control Circuitry: CMOS microprocessor
Interface: Touch Screen or Keyboard/Mouse
Minimum Dispense Volume: 0.00045ml

CONTROL UNIT
Size: 5.6 x 9.9 x 6.3in (14.23 x 25.15 x 16cm)
Weight: 4.7lbs (2.13 kg)

GUN
Length: 7in (17.8cm)
Weight: 6oz (170.1 gr)
Cable Length: 3 feet (91.5cm)