

BackPack™ Valve Actuator

Operating Manual



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Introduction

The BackPack Valve Actuator is simple to use and will operate many millions of cycles without maintenance. Incorporating advanced miniature solenoid technology with actuation speeds as low as 5-6 milliseconds, cycle rates exceeding 80 hertz can be achieved. Fast valve actuation speeds result in extremely small deposit capability.

Direct mounting of the BackPack Valve Actuator pod to the valves actuating air cylinder body improves process variation for better dot-to-dot consistency. BackPack's low profile, compact design provides clearance for optimum center-to-center mounting.

Made of lightweight materials for easy end-of-arm installations, the BackPack Valve Actuator pod can retrofit to all 752V Series and 741V Series model valves. The BackPack Valve Actuator is designed for easy removal and maintenance.

Each BackPack Valve Actuator pod is shipped with a connector cable assembly.

The EFD Pledge

We pledge that you will be completely satisfied with our products. We endeavor to ensure that every EFD product is produced to our no-compromise quality standards.

If you feel that you are not receiving all the support you require, or if you have any questions or comments, I invite you to write or call me personally.

Our goal is to build not only the finest equipment and components, but also to build long-term customer relationships founded on superb quality, service, value and trust.

Jeff Pembroke
Jeff Pembroke, President

Specifications

Electrical input: 24 VDC, 4 Watts
 Air input: 70-90 psi (4.8-6.2 bar)
 Min. actuation time: 5 milliseconds
 Max. actuation time: Continuous ON
 Cycling frequency: 60-80 hertz

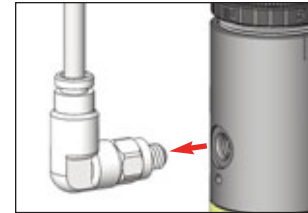
*BackPack Material:
 Housing: Anodized aluminum
 Mounting bolt: 303SS
 O-rings: Buna-n

*BackPack Dimensions: 0.874" deep X 1.05" high x 0.95" wide
 (22.20 mm X 26.7 mm x 24.10 mm)

Weight:
 Backpack only: 52.635 g (1.85 oz)

*Note: Refer to 741V or 752V Installation Guides for complete valve specifications.

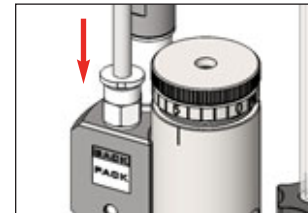
Installing the Backpack Valve Actuator



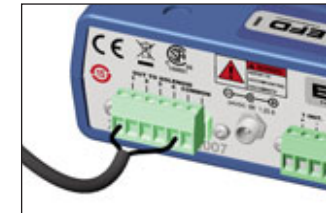
Step 1. Remove actuation air fitting and hose from air cylinder body



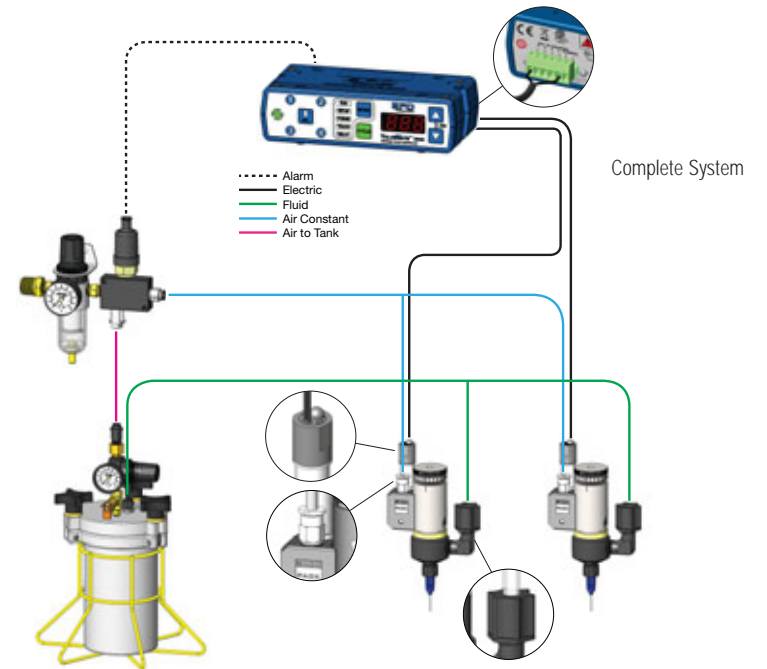
Step 2. Secure Backpack actuator pod to air cylinder inlet opening



Step 3. Connect air input hose (70-90psi) 4.8-6.2 bar into 4mm push-in fitting



Step 4. Interconnect the Backpack to the ValveMate 8000 Controller using the cable supplied



Final Setup Checklist

1. Air pressure to Backpack is set to 70-90 psi (4.8-6.2 bar).
2. Backpack and I/O are wired correctly.
3. Valves and fluid reservoir are properly connected.
4. Valves are set up and dispensing tips installed in accordance with the dispense valve installation guide.
5. Turn ValveMate 8000 power ON. Confirm indicator lamps and LED display are lit.

Note: The ValeMate 8000 is not equipped with an ON / Off switch and remains in ON condition as long as input power supply voltage is maintained.

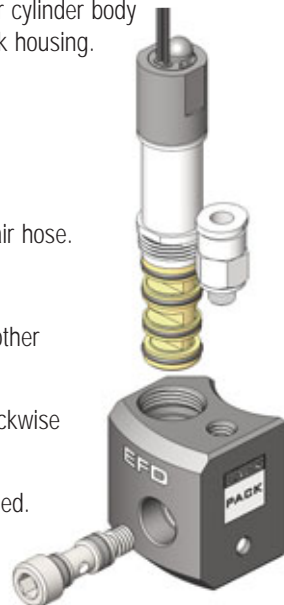
BackPack Disassembly and Reassembly Procedures

BackPack removal from valve.

1. Loosen mounting screw to release Backpack from valve air cylinder body
Caution: Don't fully remove mounting screw from Backpack housing.
Be careful not to lose mounting screw face seal O-ring.

Replace Bullet Valve

1. Remove spiral wrap (if used) around Backpack wires and air hose.
2. Unplug air line from Backpack.
3. Disconnect solenoid cable wires from ValveMate 8000 or other control device.
4. Engage wrench flats on bullet valve and rotate counter-clockwise to remove. When loose, pull bullet valve up to release.
5. Replace bullet valve by rotating clockwise until fully tightened.
6. Reconnect wires and air line to Backpack.

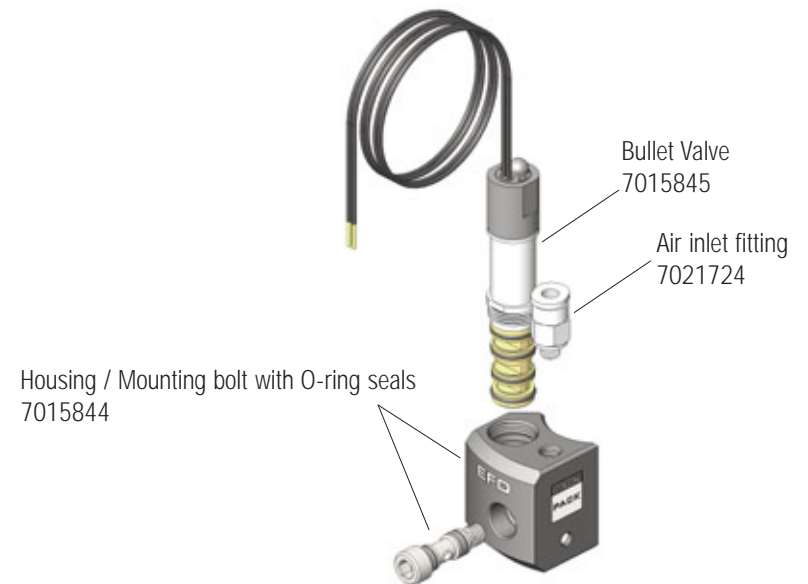


Troubleshooting Guide

Trouble	Solution
BackPack Valve Actuator won't cycle	Confirm main air supply is ON
	Inspect cable wires for loose connection or damage
	Replace bullet valve
Air leakage from Backpack housing	Check if housing is loose. Retighten.
	Check mounting bolt for damaged O-ring seals. Replace
	Check bullet valve O-rings for damage
Cable wires are broken at solenoid bullet valve	Replace bullet valve

If trouble cannot be corrected, or if you need further assistance, **please contact us.**

Replacement Parts



For Nordson EFD LLC sales and service in over 30 countries, contact Nordson EFD or go to www.nordsonefd.com

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BACKPACK-MAN-01



This equipment is regulated by the European Union under WEEE Directive (2002/96/EC). See www.nordsonefd.com for information about how to properly dispose of this equipment.

EFD ONE YEAR LIMITED WARRANTY

All components of EFD Dispense Valves are warranted for one year from date of purchase to be free from defects in material and workmanship (but not against damage caused by misuse, abrasion, corrosion, negligence, accident, faulty installation or by dispensing material incompatible with equipment) when the equipment is installed and operated in accordance with factory recommendations and instructions. EFD will repair or replace free of charge any part of the equipment thus found to be defective, on authorized return of the part prepaid to our factory during the warranty period.

In no event shall any liability or obligation of EFD arising from this warranty exceed the purchase price of the equipment. This warranty is valid only when oil-free, clean, dry, filtered air is used.

EFD makes no warranty of merchantability or fitness for a particular purpose. In no event shall EFD be liable for incidental or consequential damages.

