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# **Electronic Signatures**

Signed by	Meaning of Signature	Server Date (dd-MMM- yyyy HH:mm z)
Gilbert Geoffrey M239620	Management Approval	22-Apr-2021 21:25 CEST
McCormack Dennis M240700	Technical Approval	28-Apr-2021 13:09 CEST
Christopher Seth M292852	Quality Approval	03-May-2021 08:34 CEST



# **Closure Instructions for Container Valves and Fittings**

Per SOP # 20338773

EMD *Electronics* - Haverhill, US

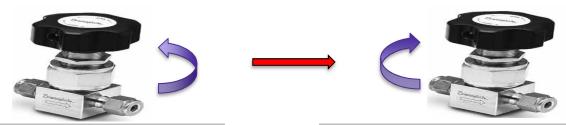


# **Instructions**

- This document provides open and closure instructions for the valves and fittings on containers in which EMD *Electronics* supplies its products.
- Proper closure of fittings and valves is required for safe handling and transport.
- This document may be used to provide training to personnel responsible for the proper closure of valves and fittings used on containers provided by EMD *Electronics*.
- Additional detail on fittings and valves are also available from the original manufacturer of the valve or fitting.
- References are provided at the end of the document.

# **SECTION 1: VALVES**

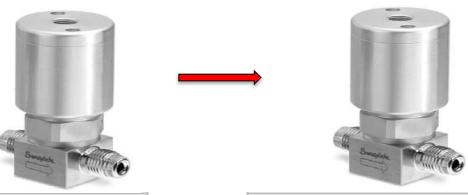
### Swagelok® DS Manual Series Valve



**Open Position:** Turn handle counterclockwise direction

**Closed Position:** Torque handle to 36 inch-pounds in clockwise direction

# Swagelok® DP Pneumatic Series Valve



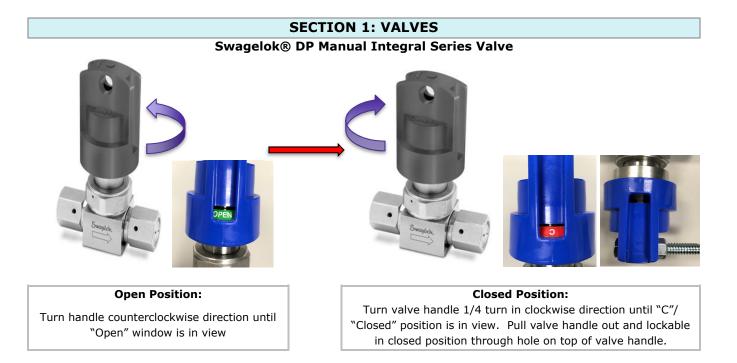
#### **Open Position:**

Apply between 60-120 psig of gas

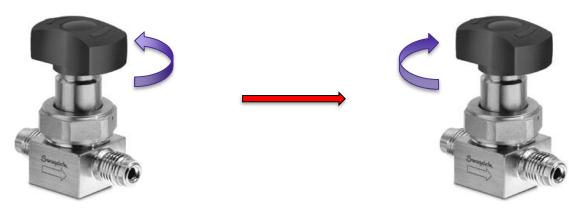
**Closed Position:** Normally close valve

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# **Swagelok® DP Manual Directional Series Valve**



**Open Position:** Turn handle counterclockwise direction

**Closed Position:** Turn valve handle 1/4 turn in clockwise direction

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# **SECTION 1: VALVES**

# Swagelok® HP Pneumatic Series Valve







**Closed Position:** Normally close valve

# AP-Tech® 3550- Pneumatic Series Valve





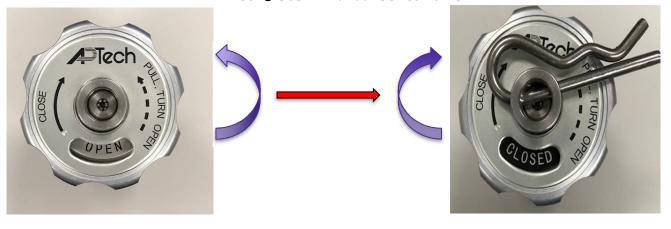


**Closed Position:** Normally close valve



# **SECTION 1: VALVES**

#### AP-Tech® 3657 - Manual Series Valve



#### **Open Position:**

Turn handle counterclockwise direction until "Open" window is in view

#### **Closed Position:**

Pull twist knob clockwise direction until "Closed" window is in view. Use pin to lock in closed position

# Swagelok® DP Toggle Series Valve







#### **Open Position:**

Lift up on handle to open

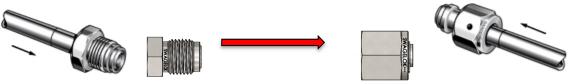
#### **Closed Position:**

Push down on handle to close. Use a resettable combination padlock on valve when in closed position for safety.



# **SECTION 2: FITTINGS**

# Swagelok® VCR (Vacuum Coupling Retainer) Fitting/Container Installation Instruction



Step 1. Male VCR connection or plug





Step 3. Mate two connections together with NEW gasket.



Step 4. Finger tight both connections



Step 5. 1/8 of a turn on stainless steel and nickel gasket



#### **SECTION 2: FITTINGS**

#### Flange top Containers\*

Install or remove bolts in a star pattern with new gasket from container manufacturer. Do not exceed 94 inch-pounds of torque per bolt.



\*Customer must not open or close flange top container at flange without additional instruction from EMD Electronics.

### **REFERENCES**

SWAGELOK® Website: https://www.swagelok.com/en/catalog/Valves/Diaphragm-

Sealed?N=10000273&nrpp=24&language=en&

SWAGELOK® Downloads: https://www.swagelok.com/downloads/WebCatalogs/en/MS-CRD-VCR.PDF

APTECH Website: <a href="http://aptech-online.com/">http://aptech-online.com/</a>

Website: https://www.emdgroup.com/en/expertise/semiconductors/services/container-return.html



For each Effective version, Document owner will raise IT ticket to request upload of new version to this website.

### **APPROVAL**

Review, approvals and signatures for this document will be generated electronically using the EDMS. Print a « CONTROLLED » copy if a hardcopy with signature verification is required

#### **REVISION HISTORY**

The latest effective version content is written in black, standard letters (Verdana, 9 pt.). Changes to the previous effective version content are written in blue, italic letters. A complete document history is available in the EDMS. A summary of revision changes is tabulated below.

Rev #	Description of change		
3.0	Updated from EMD Performance Materials to EMD Electronics		
2.0	<ul> <li>SECTION 1: Valves</li> <li>Added new valve type DP Toggle Series</li> <li>SECTION 2: FITTINGS</li> <li>Removed specific container style and photo of flange top container. This requirement is inclusive of all flange top design types.</li> <li>Added "with new gasket from container manufacturer" to current procedure.</li> <li>REFERENCE SECTION</li> <li>Added EMD website</li> <li>Added requirement to update EMD Website with this procedure after each revision.</li> </ul>		
1.0	Initial form document		

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