ALD7 Series Diaphragm Valve



Solenoid Assembly and Installation Instructions

Tools Required

| Part | Size | Tool |
|---------------------------|---|------|
| Open-end wrench | 1/2 in. | 0 |
| Cross-slotted screwdriver | - | |
| Crow's foot (two) | 1/2 in. and 8 mm | |
| Torque wrench | Capable of up to 50 in.·lb (5.6 N·m) | 0 |

⚠ WARNING

Before removing the valve from service, to avoid personal injury, you must:

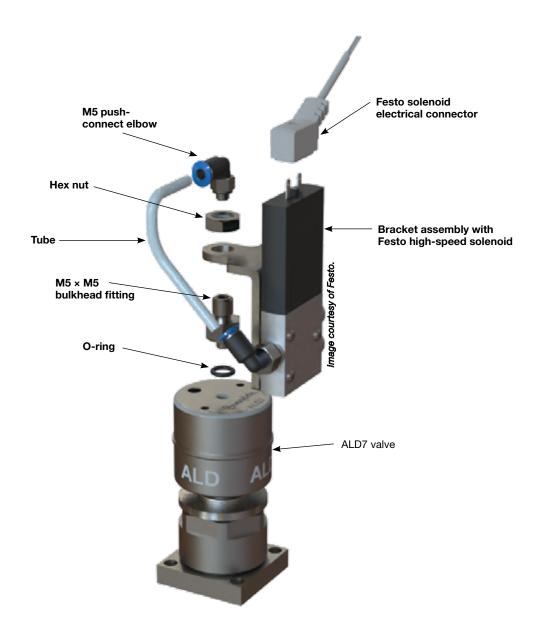
- Depressurize the system
- Cycle the valve
- Purge system to remove any residual system media left in valve

Kit Contents

| Component | Quantity | Description |
|-----------|----------|---|
| | 1 | M5 push-connect elbow (8 mm hex) |
| | 1 | Hex nut (1/2 in. hex) |
| | 1 | M5 × M5 bulkhead fitting (1/2 in. hex) |
| 0 | 1 | O-ring (-010) |
| | 1 | Tube (4 mm × 89 mm) |

| Component | Quantity | Description |
|--------------------------|----------|--|
| Image courtesy of Festo. | 1 | Bracket assembly with Festo [®] high-speed solenoid |
| Image courtesy of Festo. | 1 | Festo solenoid electrical connector |

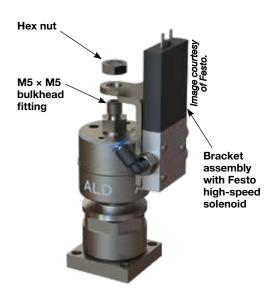
Exploded View



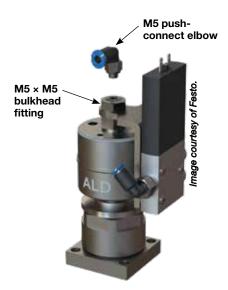
*Bold indicates kit component



 Install the O-ring into the groove of the M5 x M5 bulkhead fitting. Assemble the M5 x M5 bulkhead fitting assembly to the actuator cap and tighten between 5 to 15 in.·lb (0.5 to 1.6 N·m).



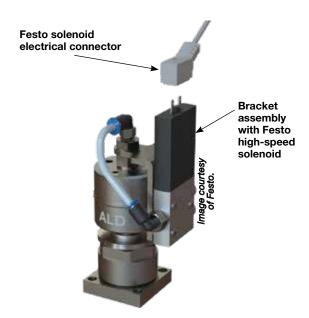
2. Assemble the bracket assembly with Festo high-speed solenoid onto the M5 x M5 bulkhead fitting. Screw on the hex nut and loosely tighten. After orienting the bracket assembly with Festo high-speed solenoid as needed, use a ½ in. back-up wrench on the M5 x M5 bulkhead fitting, and a ½ in. wrench on the hex nut and tighten between 32 to 48 in.·lb (3.6 to 5.4 N·m).



3. Assemble the **M5 push-connect elbow fitting** to the **M5 × M5 bulkhead fitting** using an 8 mm wrench and tighten between 5 to 15 in.·lb (0.5 to 1.6 N·m).

Tube Tube

4. Push the **tube** ends into both fittings until the **tube** is bottomed at both ends. Pull back on each tube end to ensure **tube** connection in the **M5 push-connect elbow fittings**. If **tube** can be removed, pull the flange of the fitting outward and repeat.



5. Assemble the **Festo solenoid electrical connector** to the **bracket assembly with Festo high-speed solenoid** as shown. Use a cross-slotted screwdriver on the center screw until bottomed out.

5. Test valve for proper operation.

Images of solenoid and electrical connector provided courtesy of Festo, which is a registered trademark of Festo SE & Co. KG.

For additional information, see www.swagelok.com.