

ALD7A Series Diaphragm Valve

Swagelok®

Solenoid Assembly and Installation Instructions

Tools Required

Part	Size	Tool
Open-end wrench	1/2 in.	
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)	

⚠ WARNING

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

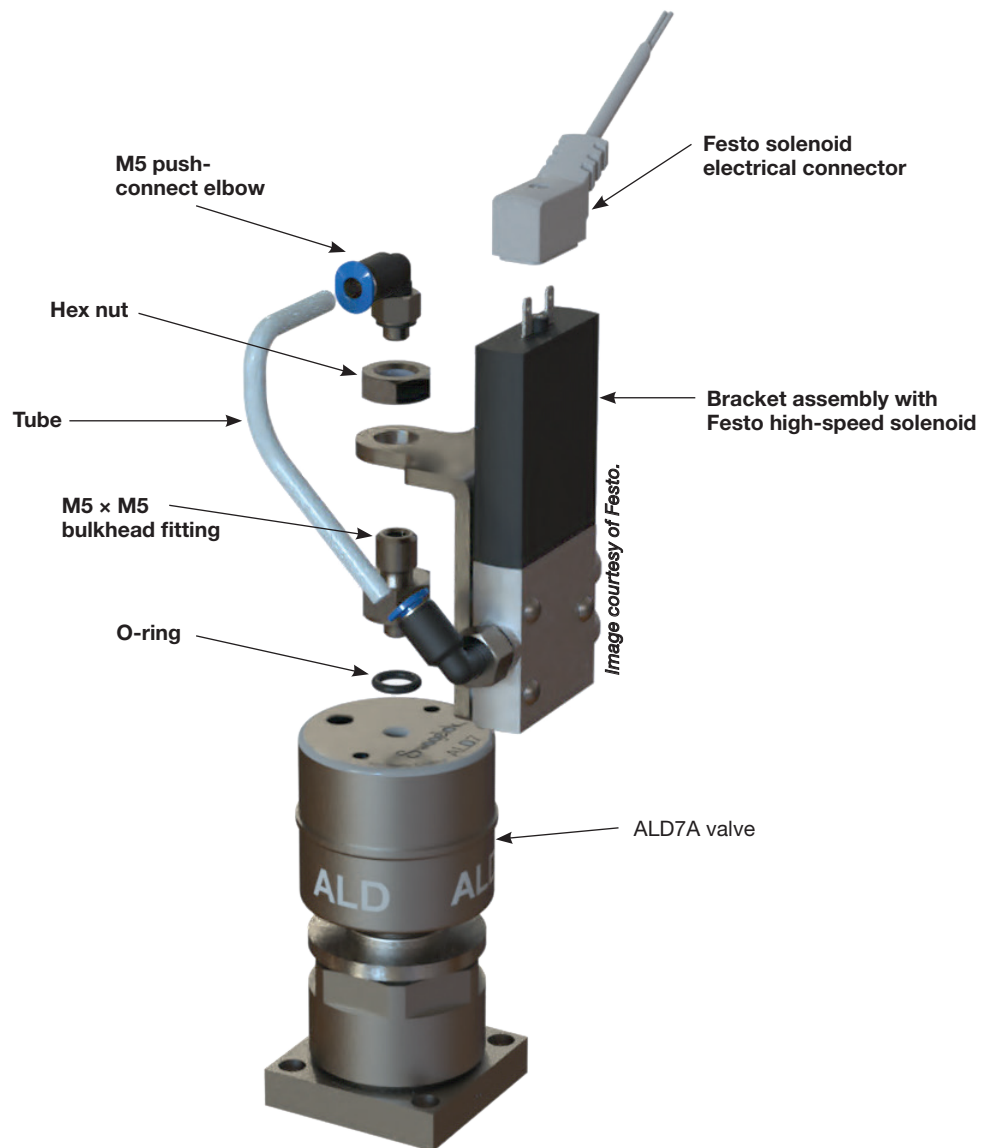
- Depressurize the system
- Cycle the valve
- Purge system to remove any residual system media left in valve

Kit Contents

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

Component	Quantity	Description
 <i>Image courtesy of Festo.</i>	1	Bracket assembly with Festo® high-speed solenoid
 <i>Image courtesy of Festo.</i>	1	Festo solenoid electrical connector

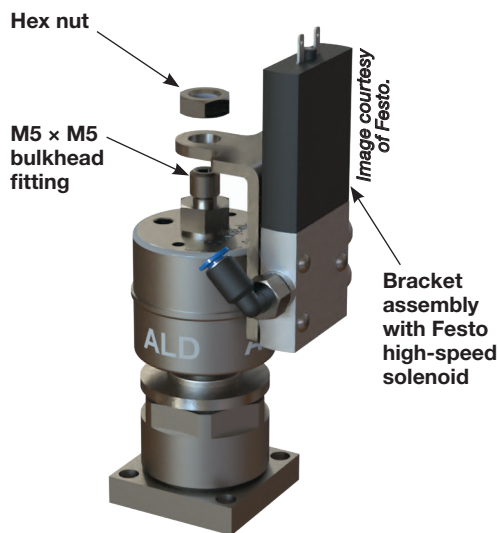
Exploded View



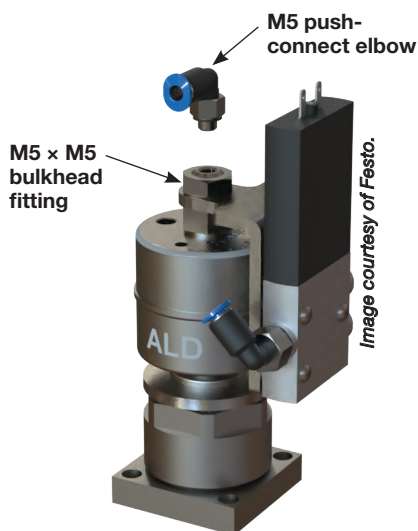
***Bold indicates kit component**



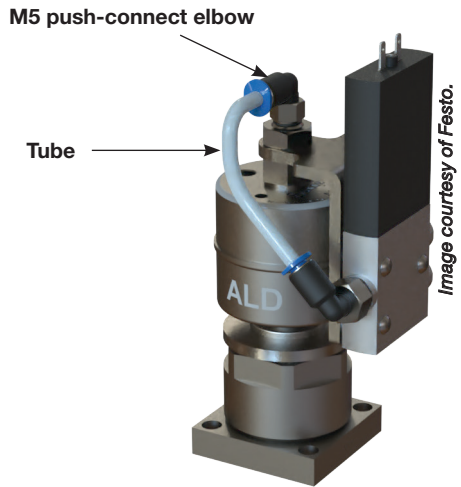
1. Install the **O-ring** into the groove of the **M5 x M5 bulkhead fitting**. Assemble the **M5 x M5 bulkhead fitting** assembly to the actuator cap and tighten between 5 to 15 in.-lb (0.5 to 1.6 N·m).



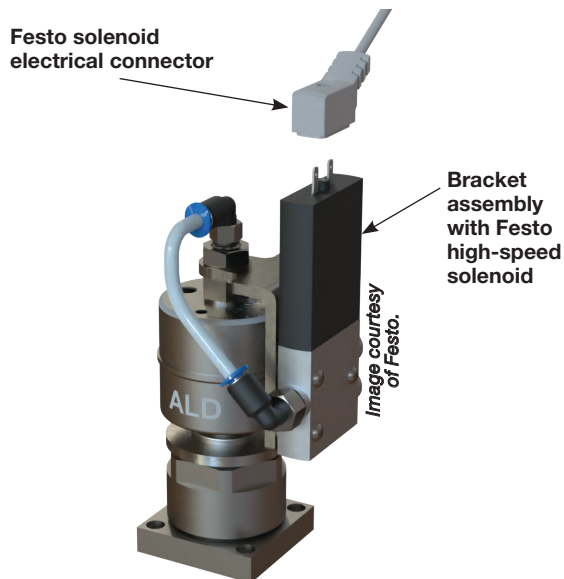
2. Assemble the **bracket assembly with Festo high-speed solenoid** onto the **M5 x M5 bulkhead fitting**. Screw on the **hex nut** and loosely tighten. After orienting the **bracket assembly with Festo high-speed solenoid** as needed, use a ½ in. back-up wrench on the **M5 x M5 bulkhead fitting**, and 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 x M5 bulkhead fitting** using an 8 mm wrench and tighten between 5 to 15 in.-lb (0.5 to 1.6 N·m).



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 swagelok.com.