

■ *What are the benefits of a plastic actuator?*

1. The plastic actuator is capable of withstanding most standard caustic wash-down chemicals.
2. The plastic actuator eliminates the need for both the sealing gasket and the separate Belleville springs under each mounting screw.

■ *Is the plastic actuator resistant to caustic washes?*

Yes. The polyethersulfone material is resistant to most standard caustic wash solutions. Please contact your factory technical service representative for further information.

■ *In what sizes are the current aluminum pneumatic actuators available?*

The aluminum pneumatic actuator remains available for all current DR series radial diaphragm valve sizes. The 1 1/2 and 2 inch size valves are available with aluminum actuators only. There are no current plans to provide a plastic actuator for these valve sizes.

■ *Can the plastic actuator be fitted to DR bodies with existing aluminum actuators?*

The plastic pneumatic actuator only can be fitted to a 1 in. and under stainless steel DR valve body. It cannot be fitted to a fluoropolymer DR valve body.

■ *How do you replace an aluminum actuator with a plastic actuator?*

Depressurize the system and remove the existing actuator and diaphragm according to the service instructions (MS-CRD-0081). Discard the elastomer gasket installed between the actuator and valve body. Install either a new or existing diaphragm and the plastic actuator onto the valve body according to the service instructions. Use the new fasteners and flat washer included with the actuator kit.

■ *Are there any differences in ratings between the plastic and aluminum actuators?*

1. The maximum actuation pressure for the plastic actuator is 100 psig (6.8 bar).
2. The maximum actuation pressure for the aluminum actuator is 120 psig (8.2 bar).
3. The plastic actuator is rated to a maximum ambient temperature of 190°F (87°C).
4. The aluminum actuator is rated to a maximum ambient temperature of 280°F (137°C) and is tolerant to 375°F (190°C).

■ *Is the plastic actuator suitable for steaming applications?*

Yes, a DR valve with a plastic actuator may be used for steam-in-place (SIP) and steam isolation applications with an internal media temperature up to 280°F (137°C).

■ *What is the response time to close the pneumatically actuated valves? What is the minimum actuation pressure?*

All sizes (1/2 to 1 in.) close in less than one second when under zero internal pressure. The minimum actuation pressure is 70 psig (4.8 bar).

■ *Is the plastic actuator constructed of FDA-compliant materials?*

Yes. To be FDA compliant, a material must comply with FDA requirements per the Code of Federal Regulations (CFR). Polyethersulfone (PES) complies with CFR Title 21, Section 177-2440. All lubricants used are also FDA compliant.

■ *Is the plastic actuator user-serviceable?*

No, the plastic actuators are not user serviceable, and no maintenance parts for the actuator are available. Only complete actuator kits are available.

■ *What switch options are available with the plastic pneumatic actuator?*

Both Westlock® mechanical and proximity switches (designators M1, M2, M3, M4) are available for use with the plastic pneumatic actuator. The Swagelok one-position indicator (designator M) that is currently available with the aluminum actuator is not available with the plastic actuator.

■ *How do I order a plastic pneumatic actuator?*

To order a stainless steel DR series diaphragm valve with a plastic pneumatic actuator, add a **P** designator to the end of the valve ordering number. See the *Swagelok Radial Diaphragm Valve* catalog for ordering numbers.

Example: One-valve configuration with one pneumatic actuator:

6LV-DR81ATETE-CP

Example: Two-valve configuration with two different pneumatic actuators:

6LV-DR82CSESESE-CDP

NOTE: The P designator on any DR series valve with 1/2, 3/4, or 1 in. pneumatic actuator(s) denotes that all the pneumatic actuators will be provided in the plastic material. Manual actuators and those pneumatic actuators not available in plastic will be provided in aluminum.

For two-valve configurations, if both actuators are available in plastic but one is desired in plastic and the other in aluminum, the product is a special and is given a process sheet number.