

Safe and Reliable or Costly Mistake?

Your plant availability depends on it.



PARTS COMPARISON

	REPLICATOR = RISK	FISHER = SAFE & RELIABLE
Access to OEM specifications	No	Yes
Materials of construction tested	Not likely	Yes
Local application support	Not likely	Yes
Service and repair capability	Not likely	Yes
Inventory available for quick ship	Not likely	Yes
Product warranty maintained	No	Yes
Plant availability	Lower	Higher



Beware of replicator parts.

You can find replicator parts for Fisher® control valves, actuators, and instruments from a variety of sources. Sure, some replicator parts look like they can do the job and fit into Fisher equipment. But if you buy replicator parts, what are you really getting? Parts that are not ideal for your Fisher equipment.

Why you should care.

While replicator parts may initially cost less, you will pay more in the long run.

Replicator parts typically do not last as long as genuine Fisher parts, so you have to replace them more often. This results in higher costs for additional parts and may cause unplanned downtime impacting your profitability.

Sometimes replicator parts are even produced from wrong or substandard materials. The proper materials of construction—heat treatments, thermal history, NACE processing requirements, proprietary coatings, chemical formulation for non-metallic and composite components—are critical. Using a replicator part made of wrong materials for process fluids may threaten worker safety, cause environmental concerns, damage operating equipment, or cause a plant shutdown.

Replicator parts are not made to the specifications of your Fisher equipment, and it is unlikely that the parts are tested in actual Fisher equipment to verify performance. Poorly performing replicator parts could lead to process inefficiencies. Plus the use of unauthorized replacement parts is not covered by our warranty.

In addition, replicator parts are not made using the material quality controls, manufacturing techniques, tooling, or inspection that are used for genuine Fisher parts.



Field reports.

Reports from our field offices confirm that using replicator parts is simply a bad idea.

- A natural gas power plant rebuilt several Fisher valves using replicator seat rings, plugs, and cages. Within days, the valves began to fail. Emerson's Instrument & Valve Services evaluated the replicator trim and determined that incorrect materials had been used, heat treating was not performed, tolerances were not met, and several essential design features were not incorporated.

- A power utility plant faced problems with valve trim failure on Fisher valves that had been rebuilt by another firm. Emerson's Instrument & Valve Services inspected the valves in the field and discovered that the pin was 45° out of alignment. Service vibration caused the groove pin to work loose allowing the plug to separate from the stem.

- The operators of a co-generation plant replaced trim in a Fisher valve that had been in service for four years. To save initial costs they had a local machine shop manufacture replacement trim. Within two months the replacement valve trim failed in high pressure service causing expensive downtime. The machine shop trim did not meet critical original design specifications.

- A test of genuine Fisher and replicator valve gaskets revealed that the Fisher gaskets were superior in meeting compression requirements, thickness, density, and other critical aspects that affect stack height and ability to seal. In fact, the replicator spiral wound gasket broke during testing at 44% of the Fisher compression requirement.

- A nuclear plant experienced leaks at the bonnet-to-body joint of several Fisher valves. Emerson service technicians found that original gaskets had been replaced with those from a local vendor. The problem was resolved when the valves were rebuilt with genuine Fisher gaskets.



Specially formulated Fisher **O-rings** for spring-and-diaphragm and piston actuators have a solid lubricant dispersed throughout their cross section. As these O-rings wear, new lubricant is exposed, which maintains static and dynamic friction coefficients for consistent, smooth operation.



The standard Fisher easy-e™ **cage, plug, and seat ring** are constructed of hardened stainless steel. Trim parts are engineered, precision manufactured, and tested to provide reliable operation for years to come.

Genuine Fisher parts. No others can match their long

Commonly replicated parts.

Commonly replicated soft parts include actuator diaphragms, O-rings, packing rings, and seals. The plastics and elastomers in these parts are extremely sensitive to formulation and molding techniques.

Imagine what could happen if you installed an O-ring in your valve without the proper chemical formulation. The O-ring could fracture during flexure at low temperature. Or it could be incompatible with the flowing medium, ultimately losing its ability to seal.

For metal parts, precise dimensions and surface finishing are critical. Vary design tolerances of trim sets, seat rings, plug tips, shafts, bearings, and discs by the slightest bit, and performance may suffer significantly.

Long-term advantage.

Genuine Fisher parts comply with international codes, standards, and approvals including ASME, ANSI, ASTM, ISA, CSA, FM, CENELEC, ATEX, CE, TÜV, and FCI. Experience shows their built-in quality results in longer product life and less downtime. Better control valves mean a better process yielding better profits. And with greater safety.

The right part - right now.

Genuine Fisher parts are readily available from an Emerson sales office wherever you are located.

Distribution centers in Asia, Europe, and North America maintain a significant inventory of genuine Fisher parts. The FisherFAST™ program uses that inventory to



Genuine Fisher **packing systems** are engineered and tested to operate in Fisher control valves at various pressures and temperatures. A given packing design has certain characteristics concerning seal performance, service life, and friction. Emerson offers seven Fisher packing selections to help you choose the right solution for your application.

The molded design and formulation for Fisher actuator **diaphragms** is tested to exceed 1,000,000 cycles in our research and test labs. This formulation also results in low-temperature flexibility (-60°F, -51°C) that may not be matched by replicator parts.

-term performance.

provide you the best spare and replacement part deliveries. Options for delivery include same day, next day, seven day, or emergency service.

Also available are convenient spare parts kits that contain the parts typically needed for routine maintenance. They simplify parts inventory management with the use of a single kit number versus individual part numbers.

Local support.

Emerson parts consultants are ready to assist you with your spare parts needs. They have access to the original specification for your control valve, actuator, or instrument (drawings, material specifications, heat treatment information, and any non-destructive testing requirements) even if the device is several decades old.

Call now.

The next time you need parts for your Fisher equipment, contact the Emerson sales office in your area. Highly skilled and experienced applications personnel are ready to help you take advantage of the many benefits of genuine Fisher parts.



Look for this mark on the packaging of genuine Fisher parts.

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