Maintenance of MAXON Shut-Off Valves

Valve Inspection

MAXON valves are designed for use with most clean fluids and gases. If foreign debris or corrosive constituents are present in the fuel line, it may be necessary to inspect the valve for proper operation on a regular basis. Under normal applications with clean fluids, an annual leak inspection is adequate. See leak testing procedure on Valve Technical Data page 10-35.1-1 for recommended procedures.

MAXON shut off valves typically open in 2.5 seconds to 14 seconds depending upon model and variation. Closing cycles are rapid at < 0.1 seconds. During inspection, observe characteristic opening and closing action of the valve. Should operation ever become slow or hindered, remove valve from service and contact MAXON for instructions or replacement.

Recommended general inspection items:

- Verify opening and closing operation of the valve.
- Take note that all valve covers and gaskets are in place and tight.
- Inspect landed wires on the valve terminal block. Ensure that all connections are tight and wiring is not frayed.
- Open side cover plate and verify that no water, debris, or foreign material has entered the valve.
- Verify free operation and electrical continuity of all position switches.
- Perform leakage check annually or as required by the authority having jurisdiction for your installation and/or applicable code or as determined by IEC 61508 assessment of your safety instrumented systems.

General Maintenance

All MAXON shut-off valves are designed for long-life with little maintenance under heavy cycling. They are endurance tested far in excess of various worldwide approval agencies including CE, FM, UL, and CSA. Every MAXON valve is operationally pre-tested and meets the requirements of ANSI / FCI 70-2 Class VI seat leakage upon shipment.

Lubrication

Valve bodies require no lubrication for most clean, dry fuel applications. Contact MAXON for details for gases with solvent properties or for special applications.

Actuator (electric and pneumatic) components require no field lubrication and should never be oiled.

Valve Cycling

In some applications, MAXON valves may remain in a powered condition (open for normally-closed or closed for normally-open) for lengthy periods of time (ex. 6 to 12 months at a time). Under these conditions, an annual cycling period is recommended. For installations using IEC assessments of safety instrumented systems, consult the calculated proof test intervals for the appropriate times between proof tests.

- To complete this procedure, shut off the process gas or fluid and complete an approved safety lockout of all associated systems
- With systems controls or auxiliary power, cycle MAXON valve 10 to 15 times.
- After cycling, perform a leak test check to ensure integrity of the valve seating surfaces.
- Remove any auxiliary power and return system to a safe start condition.



WARNING: Do not attempt field repair of valve body or actuator. Any unauthorized alteration by untrained personnel voids all warranties and may create hazardous conditions.



Maintenance contact information

Always include valve serial number and nameplate information for positive identification.

Address inquiries to:

Maxon Corporation Muncie, IN 47302 Phone (765) 284-3304 Fax (765) 286-8394 www.maxoncorp.com

