The 1008A series adjustable port valves should be lubricated on a regular basis. Note that due to the possibility that a grease fitting can leak gas into the atmosphere, the 1008A series valves are no longer supplied with a grease fitting installed. When servicing valves, users must supply their own temporary grease fitting and greasing tools.

Type of Lubrication

1008A adjustable port valves are factory lubricated with lithium based #2 lubricant unless otherwise specified.

Specifications for a typical lithium lubricant are:
- Consistency – #2
- Dropping Point – 393 F
- Base – Lithium.

A few lubricants meeting the above specifications are Factran EP 2 lubricant distributed by BP Oil Co., Shell Oil Alvania #2, and Atlantic Richfield Litholine Industrial Grease #2EP. If some other lubricant is to be used, it is recommended that its specifications match those shown above.

For steam applications (1008A-S & 1010A-S series) Fives North American uses a special silicone lubricant Dow Corning #111 compound. For applications with corrosive gases such as coke oven gas, we recommend lithium #2 complex grease.

Frequency

It is recommended that 1008A series valves are lubricated at least three to four times per year.

Frequency of lubrication depends entirely on the specific application, type, quality and composition of the fluid the valve is being used with, as well as frequency of operation, operating conditions including temperature, pressure and fluid velocity. It is possible that high velocities can carry away some of the lubrication over time. All of these variables need to be considered when determining required lubrication.

Applications using corrosive fluids may require monthly or even weekly lubrication.

When used in steam service, adjustable port valves should be greased at 7 to 10 day intervals.

Lubrication Procedures

**WARNING:** Valves intended for oxygen service (1008A-C, 1010A-C series) use a special synthetic based Molylube PFET-2 lubricant designed specifically to be compatible with oxygen service. See 1008A-C and 1010A-C technical information.

These valves do not come with grease fittings for field lubrication. Users must supply their own temporary grease fitting and greasing tools.

The valve bodies have a ¼” NPT pipe plug that needs to be removed and temporarily replaced with a grease fitting.

When applying the lubrication to the valve core and curtain assembly, the curtain (valve port opening) should be fully closed. Before closing curtain, note existing valve curtain position. A good method of indicating initial curtain position is to count and record the number of turns required on the adjusting screw to fully close the curtain. Turning the adjusting screw back open the same number of turns will set curtain back to its initial position.

To adjust curtain remove adjusting knob cover, slightly loosen packing nut, turn adjusting screw knob clockwise to open curtain or counterclockwise to close curtain (note that on ⅜” and ½” sized valves, turn knob clockwise to close curtain or counterclockwise to open curtain). This raises or lowers the curtain in the core, altering valve port opening.

After application of the lubricant, the valve core should be stroked fully open and closed several times and the curtain should be fully opened and closed before resetting back to the initial position to allow lubricant to be distributed evenly within the valve body.

After servicing, always remove the temporary grease fitting and re-install the pipe plug using proper piping practice (i.e. pipe thread sealant). Always retighten the packing nut and replace the adjusting knob cover.
Storage

Store valves in a dry and cool environment, avoiding moisture and extreme temperature conditions. Valves can be stored for an indefinite period of time before commissioning into service. However, it is always good practice and is highly recommended that before commissioning any valve into service that the valve be thoroughly inspected for proper functionality and adequate lubrication. Valves stored in excess of six months will likely require re-lubrication. To inspect valve, manually adjust the curtain adjusting screw opened and closed. Open and close the core by stroking valve 100% while visually inspecting the internals through the inlet and outlet ports of the valve to assure proper operation and observe adequate lubrication. Address any issues that may be observed before commissioning into service.

Grease and Grease Fittings

Grease fittings and grease are available from Fives North American. Grease comes in a cartridge for insertion into a grease gun, which helps avoid waste and contamination.

To order, specify:

R400-6117-C  14.5 oz. cartridge of lithium based EP2 valve lubricant
R400-6117    one carton of lubricant--30 tubes
R400-4195    ¼" NPT Alemite straight grease fitting
R400-4216    ¼" NPT Alemite 90 degree grease fitting (used on 1008A-U valves with U bracket)

Special lubricants:

R400-6205    5.3 oz. cartridge of Dow Corning #111 compound for use with steam
R400-6205-C  14.1 oz. cartridge of Dow Corning #111 compound for use with steam
R400-6155    14 oz. tube lithium #2 complex grease for use with corrosive gases

WARNING: Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., are inherent with any combustion application. Parts of this product may exceed 160°F in operation and present a contact hazard. Fives North American Combustion, Inc. urges compliance with National Safety Standards and insurance Underwriters recommendations, and care in operation.