



APPLICATION SOLUTION #105: DeZURIK ECCENTRIC PLUG VALVES FOR DIGESTER GAS SERVICE



DeZURIK Eccentric Plug Valves Provide Positive Shutoff on Digester Gas Service

Application

Digester gas is produced as a by-product of the digestion of sewage sludge. Although the composition differs, typically digester gas is composed of 65-70% methane and 25-30% carbon dioxide. Other combustibles present include hydrogen and hydrogen sulfide.

Typical problems associated with digester gas systems are controlling the formation of hydrogen sulfide corrosive acids and the carry-over of dirty solids in the gas stream. The corrosive acids may pool in low spots in the pipeline and cause problems with downstream equipment. Drip traps and filters installed close to the digester vessel capture the corrosive acids and solids carry-over.

Solutions

The DeZURIK Eccentric Plug Valve provides solutions for all digester gas systems. Straight through port allows for low friction losses. Eccentric action and NBR rubber faced plug provide shutoff even with dirty solids and slimy deposits in the flow. The stainless steel bearings resist corrosion, prevent binding and assure lasting, easy valve operation. No matter what the digester gas composition, DeZURIK has a material combination to meet your needs

- Aluminum body/plug

The DeZURIK aluminum Eccentric Plug Valve provides additional corrosion protection in normal digester gas flows where moderate hydrogen sulfide and moisture are carried over into the piping system.

- 316 stainless steel body/plug

Use 316 stainless steel in severe service for additional internal/external corrosion protection. Provides compatibility with stainless steel piping.

- Soft rubber lined body/plug

Soft rubber lining provides protection against most digester gas applications. The sealed stainless steel bearings protect both top and bottom journals from corrosive acids formed in digester gas.

- Aluminum body/316 stainless steel plug

Where valve installation allows the corrosive moisture to enter the plug journals the use of a 316 stainless steel plug is beneficial.

- Cast iron body/plug

May be used on dry systems.

- Cast iron body/316 stainless steel plug

Use where systems are moderately dry and economics dictate the use of cast iron.

When dealing with a corrosive, combustible gas, safety will dictate the selection of material. This applies to the valves, actuators, pipe and auxiliary equipment. Indicate when ordering a valve for digester gas service for verification of materials and addition of special dry seat test.

For complete information on DeZURIK Eccentric Plug Valves or any of DeZURIK's valves for municipal water and wastewater treatment, visit www.dezurik.com or contact your local DeZURIK representative.

Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

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