



# FDO Outlet Assembly

## Assmann Molded In Full Drain Outlet *Patent No. US 8,348,090 B2*

Assmann Corporation of America offers an FDO (Full Drain Outlet) outlet assembly. This outlet provides the ability to fully drain your tank without the need for mechanically installed nozzles. The full drain assembly should be utilized where heavy solids or salts can accumulate in the bottom of the tank thus creating difficult maintenance work. This assembly virtually eliminates the need for confined space entry.

The assembly utilizes a metallic molded in insert. This insert is available in 316 Stainless steel, Titanium and Hastelloy C-276. These material variations allow us to store virtually any chemical in our tank.

Also unique about the FDO assembly is the fully replaceable polyethylene flange adapter. This also provides the ability to replace the flange in the event of chemical or mechanical damage without having to replace the entire vessel.

Along with this new innovation Assmann Corporation is now molding modular polyethylene tank stands. These stands elevate the polyethylene tank 12" from grade. This provides the ability to fully drain the tank without the installation of expensive concrete pads. The tank can be drained and the stand is easily disassembled to allow the tank to be relocated to a different site. This stand is 100% chemical resistant and is suitable for all corrosive environments.

Assmann tested this stand to over 300,000 lbs. of crush force.



**Designed for tanks of 2,500 gallons and larger  
Helps eliminate difficult maintenance work**



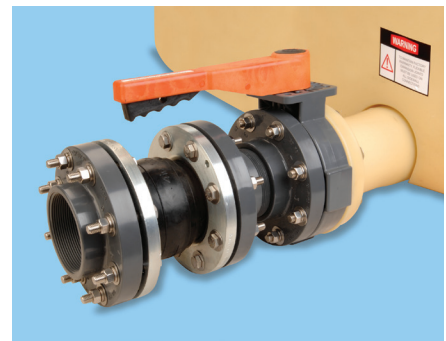
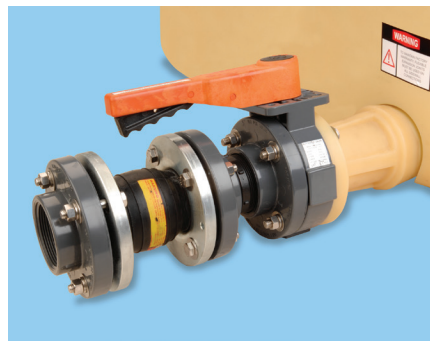
Certificate Number:  
DAS 90024930/39/Q Rev:001

## Technical Data

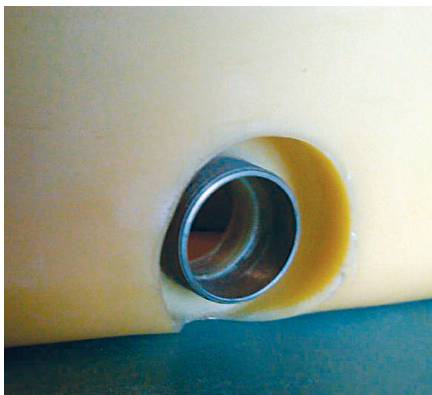
Assmann's Full Drain Outlet connection is available in two configurations providing the ability to configure the tank for ease installation and lower maintenance costs.

**FDO Complete:** This complete assembly comes with the "molded-in" full drain connection, polyethylene flange adapter, butterfly valve and flexible expansion joint. This assembly will be ready for installation. Some of the benefits to this configuration:

- Molded in full drain connection is recessed into tank wall to avoid damage during transit and installation.
- Polyethylene flange adapter makes an easy transition from metal to plastic and is fully replaceable giving you the ability to extend tank life.
- Full drain connection can be located at any point around the diameter of the tank.
- Lightweight butterfly valve and flexible expansion joint meet Assmann's installation & use guidelines.



**3" FDO (left) and 4" FDO (right) with flanged coupling, butterfly valve, and flexible expansion joint.**



**FDO:** This assembly comes with the "molded-in" full drain connection terminating in a male national pipe thread. This configuration allows you to install the tank without elevating the tank. Some of the benefits of this configuration:

- Full drain connection can be located at any point around the diameter of the tank.
- Tank outlet is recessed into the tank wall to avoid installation or transit damage.
- Metallic national pipe thread connection, no special adapters or bolts required.



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