## Type-14/15 Diaphragm Valves for use with Sodium Hypochlorite



The Type-14/15 diaphragm valves can be equipped with a three-layer PTFE diaphragm.

When a diaphragm valve is used in sodium hypochlorite service, PTFE is typically the diaphragm material of choice. The Type-14/15 PTFE diaphragm consists of three un-bonded layers. The primary or wetted layer is PTFE, the middle layer is a PVDF gas barrier, and the top cushion is EPDM. The PVDF gas barrier prevents the migration of gas, which permeates the PTFE wetted layer. This added protection provides for longer valve life.

## **Standard Features**

- PVC or CPVC construction valve
- Three-layer PTFE/PVDF/EPDM diaphragm
- Flanged configuration eliminates all cemented joints
- Alternately, the true union valve can be equipped with Chem Proline® end connectors for use in Asahi/America's piping material of choice for sodium hypochlorite service – Consult Sales or Engineering to learn more about Chem Proline® piping systems
- Supported up to a 20% concentration of sodium hypochlorite



## 3-Layer Diaphragm

PTFE Diaphragm

**PVDF Gas Barrier** 

**EPDM Backing Cushion** 

## Sample Specification

All Type-14/15 diaphragm valves for use with sodium hypochlorite up to 20% concentration shall be of solid thermoplastic construction (PVC or CPVC) for body and bonnet with molded flanged ends or true union ends. The molded flanged or Chem Proline® ends provide for no cemented joints. The valves shall come standard with a position indicator, travel stop (to prevent overtightening) and bonnet O-ring sealing arrangement. The valve shall be weir type with a square bonnet body sealing design and bayonet connection diaphragm (1/2" - 2") or round bonnet body sealing design and threaded stud diaphragm connection (2-1/2" - 6"). All PTFE diaphragms shall be supplied with a PVDF gas barrier between the layers of EPDM and PTFE. The PVDF gas barrier prevents against the migration of gas through the PTFE membrane and attacking the EPDM backing cushion. All hardware shall be 304 stainless steel type and non-wetted. The face-to-face dimensions shall conform to Type G. PVC conforming to ASTM D1784 Cell Classification 12454A, CPVC conforming to ASTM D1784 Cell Classification 23567A and PVDF conforming to ASTM D3222 Cell Classification Type II. Valves shall be rated to 150psi sizes 1/2" through 4", 100psi size 5", and 70psi size 6" for PTFE diaphragms at 70° F, as manufactured by Asahi/America, Inc.