

Type-G Flanged Diaphragm Valves

1.0 Scope:

All requirements are for Type-G Flanged Diaphragm Valves and accessories.

2.0 Materials:

U-PVC – Conforming to ASTM D1784 Cell Classification 12454 A

Polypropylene – Conforming to ASTM D4101 Cell Classification PP0210B67272

PVDF – Conforming to ASTM D3222-91A Cell Classification Type II

EPDM – Ethylene Propylene Diene Terpolymer Rubber

PTFE – Teflon® Polytetrafluoroethylene

3.0 Valves:

Diaphragm valves shall be Type-G Flat Faced Flanged design. The valves shall come standard with position indicator, travel stop, and bonnet O-ring sealing arrangement. The valve shall be Weir type, round body/bonnet sealing design, and threaded style diaphragm/compressor connection. All PTFE diaphragms shall be 3-layer style with PTFE wetted diaphragm, PVDF gas barrier and EPDM Backing cushion. The PVDF Gas Barrier shall be between the EPDM and PTFE layers and prevent against gas migration outside of the valve.

3.1 Operators

Type-G 8" – 10" Handwheel standard operator (Red Color)

3.2 Approved Manufacturer

Valves shall be provided by Asahi/America, Inc. of Lawrence, MA with no approved equals. Manufacturer must be ISO-9001 certified.

3.3 Pressure vs. Temperature

Valves shall have a pressure rating of: PVC/EPDM 45 psi at 70° F size 8" & 10"

PVC/PTFE 30 psi at 70° F size 8" & 10"

PP or PVDF/EPDM 75 psi at 70° F size 8"
60 psi at 70° F size 10"

PP or PVDF/PTFE 60 psi at 70° F size 8" & 10"

4.0 Accessories:

4.1 Stem Extensions

Stem extensions where required should be designed, built and provided by the Asahi/America, Inc., and be 1 of 2 styles:

Style DV-A Two piece extension with outer housing 100% sealed free standing design.

Style DV-B Single piece extension either free standing or supported design

4.2 Actuation

Actuation where required should be designed, built and provided by Asahi/America, Inc., and be either pneumatic (Century Instrument) or electric (Rotork Controls) type. All actuation accessories to be provided and installed by Asahi/America, Inc. in accordance with manufacturer's requirements.

4.3 Optional Diaphragm Materials

Where required we can offer 3-Layer PTFE/PVDF/EPDM diaphragms, and EPDM diaphragms.

4.4 Operating Nuts

Where required 2" square operating nuts can be installed in place of valve handwheel.
Materials of construction – Anodized Aluminum.

4.5 Chain Operators

Where required for overhead applications, chain operators manufactured by Babbitt Steam may be installed on Type-G diaphragm valves. Chain must be weldless loop style chain supplied from Babbitt Steam.

Materials of construction: Chain Operator – Cast Iron
Chain – Hot Galvanized steel, others by request.

5.0 Installation Procedures:

All valve joints shall be Flanged and shall be prepared in accordance with the requirements put forth in the Type-72 (G) Operation & Maintenance manual. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.