# Swing Check Valves

# 1.0 Scope:

All requirements are for PVC, Polypropylene, & PVDF Swing Check Valves and accessories.

#### 2.0 Materials:

HI-PVC (Hi Impact) Conforming to ASTM D1784 Cell Classification 12454A IZOD Impact strength rating of 10 – 15 Kilojoule/M<sup>2</sup>
PP Conforming to ASTM D4101 Cell Classification PP0210B67272
PVDF Conforming to ASTM D3222 Cell Classification Type II
FKM – Viton® Fluorocarbon Rubber
EPDM – Ethylene Propylene Diene Terpolymer Rubber
PTFE – Teflon® Polytetrafluoroethylene

#### 3.0 Valves:

Swing Check Valves shall be PVC, PP, or PVDF body with FKM, EPDM, or PTFE seals and shall incorporate a single disc design suitable for horizontal or vertical applications. Valves shall have a top entry bonnet for maintenance purposes. Valves shall be flat faced flanged end type conforming to ANSI B16.5 bolt pattern for 150 lb flanges.

# 3.1 Approved Manufacturer

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

# 3.2 Pressure vs. Temperature

Valves shall have a pressure rating of:

**EPDM/FKM/PTFE Seals**150 psi at 70° F sizes 3/4" – 3"
100 psi at 70° F sizes 4" - 6"
70 psi at 70° F size 8"

#### 4.0 Accessories:

## 4.1 External SS spring or External Lever & Weight option

Shall be designed, built and installed by Asahi/America, Inc. To be used for swing check valves in Vertical Installations to minimize water hammer or off the discharge side of the pump to minimize chattering and assist in closing.

## 5.0 Installation Procedures:

All valve joints shall be prepared using flanged connections. The bolt diameters and torque values should be in accordance with the requirements put forth in the Swing Check Valve Operation & Maintenance manual. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.