

## SECTION 230923.11 – CONTROL VALVES

- A. Control valve and actuator shall be provided and delivered from a single manufacturer as a complete assembly.
- B. The manufacturer shall warrant all components for a period of 5 years, except where noted, from the date of production with the first two years unconditional.

### 1.1 BUTTERFLY-STYLE CONTROL VALVES

- A. Manufactured, brand labeled or distributed by Belimo.
- B. Commercial-Grade Butterfly Valves **NPS 2 (DN 50)** through **NPS 24 (DN 600)**:
  - 1. Materials:
    - a. Body:
      - 1) Ductile iron.
    - b. Disc:
      - 1) 304 stainless
    - c. Shaft
      - 1) 420 stainless
    - d. Seat:
      - 1) EPDM
    - e. Shaft Bushing:
      - 1) Reinforced PTFE
  - 2. End Fitting: ANSI Class 150
  - 3. Media: chilled water, hot water, 60% glycol.
  - 4. Performance:
    - a. Media temperature: - 22°F to 250°F.
    - b. Body pressure: 232 psi cold working pressure (CWP)
    - c. Close-off Pressure: **NPS 2 (DN 50)** through **NPS 12 (DN 300)** 200 psi, **NPS 14 (DN 350)** through **NPS 24 (DN 600)** 150 psi.
    - d. Maximum Velocity: 12 FPS
    - e. Leakage: 0% flow
    - f. Flow characteristic: 2-way (modified equal percentage), 3-way (linear)
  - 5. Bidirectional Three-way valve arrangement: Two 2-way butterfly valves in a cast iron Tee configuration cross-linked to ensure proper flow orientation.