# PRODUCT SPECIFICATIONS

## LINESEAL III® BUTTERFLY VALVES

### General
Butterfly valves shall be manufactured in accordance with the latest revision of AWWA C504, Class 150B and conform to NSF Standard 61. The manufacturer shall have produced AWWA butterfly valves for a minimum of five years.

### Valve Body
Valve bodies shall be constructed of ASTM A126, Class B cast iron for flanged valves. Flanged valves shall be fully faced and drilled in accordance with ANSI Standard B16.1, Class 125. Laying length and minimum body thickness shall be in accordance with AWWA C504.

### Valve Seats
**Bonded Seat (3” – 20”):** Rubber body seats shall be of one piece construction, simultaneously molded and bonded into a recessed cavity in the valve body. Seats may not be located on the disc or be retained by segments and/or screws.

**E-LOK® Seat (24” and larger):** E-Lok seats shall be constructed of Buna-N rubber and suitable for bidirectional shutoff at rated pressure. Seats shall be retained in the valve body by mechanical means without retaining rings, segments, screws or hardware of any kind in the flow stream. Seats shall be a full 360 degrees circumference and replaceable without dismantling actuator, disc or shaft and without removing valve from the line.

### Valve Bearings
Valve bearings shall be of a self-lubricating, nonmetallic material to effectively isolate the disc-shaft assembly from the valve body. Metal-to-metal thrust bearings in the flow stream are not allowed.

### Valve Disc
3” thru 24” disc shall be a lens-shaped design and 30” and larger flow-through design to afford minimal pressure drop and line turbulence.

Materials of construction shall be:
- 3”-6” — ASTM A351 gr. CF8M stainless steel disc
- 8”-20” — ASTM A126, Class B cast iron disc with a stainless steel type 316 edge
- 24” and larger — ASTM A536 (65-45-12) ductile iron disc with a stainless steel type 316 edge

Discs shall be retained by stainless steel pins which extend through the full diameter of the shaft to withstand the specified line pressure up to valve rating and the torque required to operate the valve. Disc stops located in the flow stream are not allowed.
Valve Shafts
Valve shafts shall be of stainless steel type 304. At the operator end of the valve shaft, a shaft seal utilizing “V” type chevron packing shall be utilized. “O” ring and/or “u” cup packing is not allowed.

For 24” and larger, shafts shall be two-piece, stub-type and keyed for actuator connection. Shaft diameters shall meet minimum requirements established by the latest revision of AWWA Standard C504 for their class, where applicable. Shaft seals shall be of a design allowing replacement without removing the valve shaft.

Painting
All surfaces of the valve interior shall be clean, dry and free from grease before painting. The valve interior and exterior, except for disc edge, rubber seat and finished portions shall be evenly coated with an NSF61 approved 2-part liquid epoxy. Minimum dry film thickness shall be 8 Mils minimum.