

BUTTERFLY VALVE

# AWWA C504 Butterfly Valve

REF **EFC-326** ISSUED 05 Jun 2026

## SPECIFICATIONS

Size	<b>DN350–DN4000</b>
Pressure	<b>CLASS 75B–CLASS 250B</b>
End connection	<b>flanged (ASME B16.1) / flanged (ASME B16.5) / flanged (AWWA C207) / flanged (EN 1092) / grooved (Victaulic)</b>
Face-to-face	<b>EN 558-1 / ISO 5752 series 14, EN 558-1 / ISO 5752 series 13</b>
Temperature	<b>0°C to 80°C</b>
Media	<b>drinking water, sea water, TSE water, low-corrosive liquid</b>

## ACTUATION

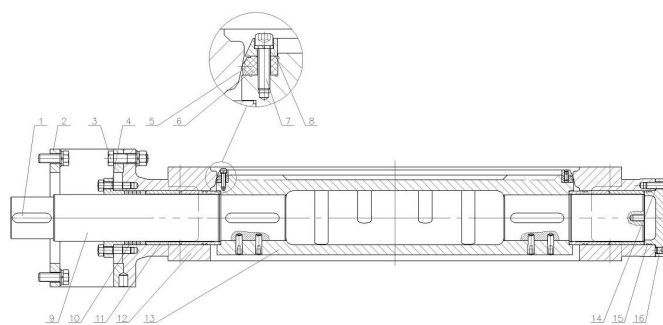
- manual gearbox — handwheel or chainwheel
- electric actuator — via gearbox with ISO 5210 top works — ISO 5210
- electric actuator — direct mount
- hydraulic cylinder
- pneumatic cylinder

## STANDARDS

Design	<b>AWWA C504, EN 593, BS5155, DIN3354</b>
Test	<b>AWWA C504</b>

## APPROVALS & CERTIFICATIONS

- WRAS (Fusion bonded epoxy coating for potable water)
- NSF (Fusion bonded epoxy coating for potable water)



## COATINGS & LINING

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- Fusion bonded epoxy coating, non-toxic, WRAS/NSF approved for potable water

## APPLICATIONS

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- Drinking water
- Sea water
- Cooling water
- TSE water
- Desalination
- Low-corrosive liquids

## MATERIALS

body	<b>Ductile Iron</b>	disc	<b>Ductile Iron</b>
shaft	<b>Stainless Steel</b>	body seat	<b>Stainless Steel</b>
disc seal ring	<b>Rubber</b>	o ring	<b>Rubber</b>
packing	<b>PTFE</b>	shaft bearing	<b>Stainless Steel</b>
shaft bush	<b>Aluminium Bronze</b>	packing gland	<b>Ductile Iron</b>
shaft cover	<b>Ductile Iron</b>	retainer ring	<b>Stainless Steel</b>
key	<b>Stainless Steel</b>	yoke	<b>Carbon Steel</b>
seat	<b>Stainless Steel</b>	stem	<b>Stainless Steel</b>

## FEATURES

- Body with minimum shell thickness per AWWA C504 standard
- Flat face flange ends
- Solid single disc or lattice disc for larger sizes
- 360° uninterrupted seal ring secured with retainer ring for bidirectional service up to full rated pressure
- Disc seal ring adjustable and replaceable without special tools
- Two-piece stub-type shaft of SS630
- Body seat ring stainless steel welded and micro-finished
- Aluminium bronze shaft bush in both body trunnions, maintenance free
- Multiple O-rings on bearing bush and V-type shaft packing for shaft sealing
- V-type shaft packing and extended top bracket for online adjustment and replacement of shaft packing without gearbox disassembly
- Disc to shaft connection by SS630 taper pins
- Cycle tested per AWWA C504 requirements
- Leakage rate Class A (zero leakage) bidirectional, 100% tested before delivery
- Optional shaft locking device
- Optional rubber lining (ebonite lining)
- Optional extended bonnet
- Double-offset (double eccentric) butterfly valve design
- Extended shaft arrangement visible — shaft protrudes below body for bottom bearing access
- Gear operator (worm gearbox) mounted on top of valve
- Flanged end connections
- Streamlined disc design noted in diagram callout
- Shaft designed to be isolated from flow medium
- Bearings referenced in sectional diagram
- Sectional cross-section (index 4/10) shows 16 numbered component parts including body, disc, shaft, seals and fasteners

## OPTIONS & NOTES

- Other materials such as carbon steel, st. steel, duplex SS, al-bronze are available on request.

- Victaulic grooved ends or other type of connection ends are also available.
- Two piece, stub-type shaft of corrosion resistant material SS630, other materials available as request.
- Disc to shaft connection by SS630 taper pins. Other methods available as request.
- The material solution of Aluminum bronze/nickel aluminum bronze (such as ASTM B148 C95400/C95500/C95800 body & disc and nickel-copper alloy (such as Monel k500 etc.) shaft is available for desalination of sea water project.