

# Conley Swing Check Valves

## RTRP/FRP STANDARD SPECIFICATIONS

### 1.0 SCOPE

1.1 This specification covers requirements for machine made Conley Swing Check Valves for use in fluid transportation systems, in chemical media ranging from water to a broad base of corrosive chemical environments, including slurry applications.

### 2.0 SERVICE RATING

2.1 Continuous temperature service from -50°F to 250°F at 150 psi. Elevated temperature excursions and pressure surges should be addressed with the Conley Technical Committee, due to variation in HDT performance of optional resin systems.

### 3.0 MATERIALS/METHODS OF CONSTRUCTION

3.1 Corrosion Barrier/Inner Liner: Containment Corrosion barrier shall be minimum 60 mil, standard. Nexus reinforced corrosion barrier of premium Epoxy, Vinyl Ester, or Furan resin. Approved Epoxy resins include Dow 331, Ciba-Geigy 6008, 6010, and Shell 828. Approved Vinyl Ester resins include Dow Derakane 8084, 411, 441-400, 470, and 510 series. QuaCorr is an approved supplier of Furan resin.

3.2 Body/Cage Construction: Filament wound cage constructed with alternating layers of E-glass strand and glass cloth, saturated with aromatic amine cured Epoxy resin, oven post-cured at 250°F for seven (7) hours. Exterior layer of valve body "Fiber Forged" to form corrosion/impact/UV light resistant barrier and includes custom colors for line designation.

3.3 Cap/Hanger/Gate/Retainer/Flange Construction - "Fiber Forged" from high performance composite.

3.4 Seat/O-Ring Material:

**Viton Standard**

Hypalon, EPDM, Teflon, BUNA-N optional.

3.5 Pin Material: Teflon.

### 4.0 DESIGN

4.1 Valve flanges shall conform to ANSI B 16.5 bolt hole drilling, flat faced configuration. Valve shall be gravity closed, and able to mount vertically or horizontally without flow restriction. Valve to be serviceable in line through threaded removable cap. Cement socket shall have reinforced socket conforming to standard Conley pipe OD dimensions.

### 5.0 TESTING

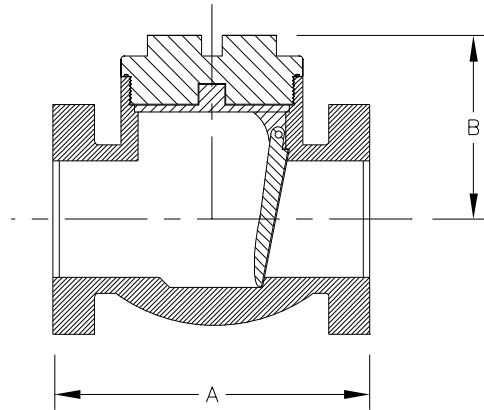
5.1 Every (100%) valve shall be subject to the following Quality Assurance Procedures:

- 1) Resin reactivity and Barcol.
- 2) Batch traceability.
- 3) Corrosion barrier thickness compliance.
- 4) Cage construction compliance.
- 5) Oven post cure monitoring.
- 6) Heat shock from 250°F to 32°F.
- 7) Hydrotesting to 150% of rated pressure, no evidence of leakage for 30 minutes.
- 8) Gate seal pressurized to 7 psi air to 100% bubble tight seal.
- 9) Complete valve traceability.

### 6.0 AVAILABILITY

6.1 AVAILABILITY: Valves meeting this specification are available from this manufacturer.

SIZE NOM.	A	B	WT. LBS.
2	8	4	6
3	9 1/2	5 1/4	13
4	11 1/2	6	24
6	14	8 5/8	53



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SPECIFICATION DRAWING  
SWING CHECK VALVE

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