SILENT CHECK VALVE  GLOBE TYPE  CENTER GUIDED

ASME CLASS 300  DUCTILE IRON  FLANGED ENDS RAISED FACE

MODEL: CV 52-DI
Body: Ductile Iron
Trim: Stainless Steel & Aluminum Bronze

FEATURES

DESIGNED FOR LONG SERVICE LIFE
Ductile iron body maintains the anti-corrosive properties of cast iron while achieving a yield strength comparable to carbon steel. Ductile iron check valves also offer higher pressure and temperature ratings when compared to cast iron check valves of the same class.

MINIMAL HEAD LOSS
Head loss is minimized by the integral straightening vanes that help create laminar flow. A large cross-sectional area also lessens pressure drop across the check valve. Unlike typical conical spring constructions that restrict flow, the new CV 52 has a compression spring coupled with a small stem guide that allows for an unobstructed flow path.

QUICK CLOSURE TO REDUCE WATER HAMMER
Silent shut-off is achieved via the fully automatic, spring assisted disc that closes near zero flow velocity. The lightweight, center guided disc design creates a positive shut-off prior to flow reversal and helps to keep slamming and surges to a minimum.

METAL-TO-METAL SEATS
Precision machined sealing surfaces allow the CV 52-DI to maintain a tight seal that meets or exceeds API 598 leakage requirements. Resilient seats are also available to provide bubble tight seals*.

VERSATILE DESIGN
This valve can be installed in any position (horizontal or vertical with upward flow)*. Certain sizes allow direct mounting of a wafer type butterfly valve to the outlet end without requiring a space flange or spool piece.

TECHNICAL

**PRESSURE/TEMPERATURE RATING (1)**
DUCTILE IRON - ASTM A536 - CLASS 300

WOG (Non-Shock): 640 PSI @ 100 °F

**SEAT MATERIAL TEMPERATURE RANGE**
ALUMINUM BRONZE: -460 ~ 600 °F
STAINLESS STEEL: -325 ~ 1500 °F

**SPRING MATERIAL MAXIMUM TEMPERATURE**
STAINLESS STEEL: 450 °F

1. The above listed temperatures are theoretical and may vary during actual operating conditions.

MARKETS: Oil and gas production, general industry, chemical, petrochemical, power, food and beverage

SERVICE: Pump discharge service in municipal water, irrigation, and industrial class HVAC systems. It is recommended that a Titan FCI strainer be installed ahead of the pump to ensure protection of the check valve and the pump.

PRECAUTIONS: This valve is intended for liquid service that does not exceed 10 ft/sec. It is designed for steady flow conditions and is not recommended for use in reciprocating pump, compressor or other type of physical/thermal shock-load applications. This valve is not recommended for steam service or flow media that contains solids. It should be installed at least five pipe diameters downstream from any turbulence producing components. Flow straighteners may be required in certain applications.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

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YOUR PIPELINE TO THE FUTURE!
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290 Corporate Drive  PO Box 7408  Lumberton, NC 28358
• All valve bodies are epoxy painted.

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer’s discretion.

2. Denotes recommended spare parts.

3. Resilient Seats are available upon request. Please call for details.

1. Dimensions, weights, and flow coefficients are provided for reference only. When required, always request certified drawings.

1. This chart displays the pressure-temperature ratings for the valve’s body material per ASME B16.42-1998.

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1. Ductile Iron check valves offer higher pressure ratings than Cast Iron check valves. For example, Ductile Iron check valves (2” ~ 24”) are rated at 640 PSI WOG (Non-Shock) 640 PSI @ 100 °F. By comparison, Cast Iron check valves (2” ~ 12”) are rated at 500 PSI WOG and (14” ~ 24”) are only rated at 300 PSI WOG.

Ductile Iron Body, Aluminum Bronze Seat and Disc

Ductile Iron Body, Stainless Steel Seat and Disc

Stainless Steel  -325 ~ 1500 °F
Aluminum Bronze  -460 ~ 600 °F

ORDERING CODE

Model Number Description
CV52-DI-B Ductile Iron Body, Aluminum Bronze Seat and Disc

CV52-DI-S Ductile Iron Body, Stainless Steel Seat and Disc

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer’s discretion.

2. Denotes recommended spare parts.

3. Resilient Seats are available upon request. Please call for details.

1. Dimensions, weights, and flow coefficients are provided for reference only. When required, always request certified drawings.

DIMENSIONS AND PERFORMANCE DATA

Ductile Iron ASTM A536
Ductile Iron ASTM A536

ASME Class

CV 52-DI (Ductile Iron)

Dimensions and Performance Data

Pressure-Temperature Ratings

This chart displays the pressure-temperature ratings for the valve’s body material per ASME B16.42-1998.

Referenced Standards & Codes

Pressure/ Temperature Rating

Pressure Class D.I. A536 CLASS 300

Temperature Range Seat

Material: Temperature Range

Aluminum Bronze: -600 ~ 600 °F
Stainless Steel: -325 ~ 1500 °F

Max Temperature Spring

Material: Temperature

Stainless Steel: 450 °F

The listed pressure and temperature ratings for the valve’s body, seat, and spring are theoretical and may vary during actual operating conditions.

Titan FCI makes every effort to ensure the information presented on our literature accurately reflects exact product specifications. However, as product changes occur, there may be short-term differences between actual product specifications and the information contained within our literature. Titan FCI reserves the right to make design and specification changes to improve our products without prior notification. When required, request certified drawings.

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2. Cracking pressure is for horizontal installations only. For vertical installations, please consult factory.