CHECK VALVE  •  WAFER TYPE  •  DUAL DISC
ASME CLASS 150  •  DUCTILE IRON BODY  •  NSF COATING

MODEL: CV 41A-DI
Body: Ductile Iron
Seats: Buna, Viton & EPDM
Discs: Stainless Steel & Aluminum Bronze

FEATURES

◊ COMPLIES WITH API 594 DIMENSIONS
THE CV41A-DI MEETS API 594 ASME CLASS 125 FACE-TO-FACE DIMENSIONS. THIS ALLOWS THE CV41A-DI TO BE A NATURAL REPLACEMENT FOR OUTDATED CAST IRON VALVES WHILE ACHIEVING THE SUPERIOR MATERIAL BENEFITS OF DUCTILE IRON.

◊ NSF APPROVED COATING
THE BODY OF THIS VALVE IS PROVIDED WITH A DURABLE EPOXY COATING. THIS COATING OFFERS HIGH-BUILD EDGE PROTECTION AND EXCELLENT CORROSION RESISTANCE. THIS COATING IS CERTIFIED BY NSF INTERNATIONAL IN ACCORDANCE WITH NSF/ANSI STANDARD 61.

◊ DUCTILE IRON BODY
DUCTILE IRON BODY MAINTAINS THE ANTI-CORROSIVE PROPERTIES OF CAST IRON WHILE ACHIEVING A YIELD STRENGTH COMPARABLE TO CARBON STEEL. DUCTILE IRON ALSO OFFERS HIGHER PRESSURE/TEMPERATURE RATINGS THAN CAST IRON.

◊ COST EFFICIENT DESIGN
LOW WEIGHT AND SHORT LAYING LENGTH PRODUCE SAVINGS IN INITIAL COST, SPACE REQUIREMENTS, AND INSTALLATION WHEN COMPARED TO FULL-BODY, SWING-TYPE CHECK VALVES.

◊ MINIMAL HEAD LOSS
CONTOUR OF BODY PROVIDES A SHORT AND STRAIGHT FLOW PATH THAT GENERATES VERY LITTLE TURBULENCE. ADDITIONALLY, THE SPRING-LOADED DISCS ARE DESIGNED WITH VERY LOW CRACKING PRESSURE WHICH REDUCES THE AMOUNT OF ENERGY REQUIRED TO OPEN THE VALVE.

◊ QUICK CLOSURE TO REDUCE WATER HAMMER
SHUT-OFF IS ACHIEVED VIA THE FULLY AUTOMATIC, SPRING-ASSISTED DISCS THAT CLOSE NEAR ZERO FLOW VELOCITY. THE LIGHTWEIGHT, SPLIT DISC DESIGN CREATES A POSITIVE SHUTOFF PRIOR TO FLOW REVERSAL AND HELPS TO KEEP SLAMMING AND SURGES TO A MINIMUM.

APPLICATIONS

BUNA-N PROPERTIES: MOST WIDELY USED ELASTOMER. GOOD FOR MOST PETROLEUM OILS AND FLUIDS, SILICONE GREASES AND OILS, AND COLD WATER. EXCELLENT COMPRESSION SET, TEAR, AND ABRASION RESISTANCE. POOR WEATHER RESISTANCE AND MODERATE HEAT RESISTANCE. NOT RECOMMENDED FOR SEVERE OZONE-RESISTANT APPLICATIONS.

VITON PROPERTIES: OFFERS A BROAD RANGE OF CHEMICAL RESISTANCE AND EXCELLENT HEAT RESISTANCE. GOOD MECHANICAL PROPERTIES AND COMPRESSION SET RESISTANCE. OFTEN USED IN APPLICATIONS WHERE NOTHING ELSE WILL WORK. FAIR LOW TEMPERATURE RESISTANCE AND LIMITED HOT-WATER RESISTANCE AND SHRINKAGE.

EPDM PROPERTIES: PROBABLY THE MOST WATER RESISTANT RUBBER AVAILABLE. IT HAS GOOD RESISTANCE TO MILD ACIDS, ALKALIS, SILICONE OILS/GEASES, KETONES, ALCOHOLS AND OTHER POLAR SOLVENTS. IT IS NOT RECOMMENDED FOR USE WITH PETROLEUM OILS, DI-ESTER LUBRICANTS, MINERAL OILS, NON-POLAR SOLVENTS OR AROMATIC FUELS.

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.

TITAN FLOW CONTROL, INC.
YOUR PIPELINE TO THE FUTURE!
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290 Corporate Drive  PO Box 7408  Lumberton, NC 28358

PRESSURE/TEMPERATURE RATING
DI - ASTM A536 - CLASS 150 - 2" ~ 24"

WOG (Non-shock):  250 PSI @ 100 °F

SEAT MATERIAL
TEMPERATURE RANGE

EPDM: -20 ~ 300 °F
BUNA-N: -20 ~ 250 °F
VITON: -40 ~ 400 °F

SPRING MATERIAL
MAXIMUM TEMPERATURE

SS ASTM A182 Gr. 316: 450 °F

CV 41A meets AWWA C518 Face-to-Face Dimensions.
OUTLET SIDE

TITAN FLOW CONTROL, Inc.
290 Corporate Drive
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TITAN Flow Control, Inc.

CHECK VALVE • WAFER TYPE • DUAL DISC
MODEL: CV 41A-DI (Ductile Iron Body)
Buna-N, Viton, or EPDM Seats
Stainless Steel or Bronze Discs

ASME Class 150

Outlet Side

REFERENCED STANDARDS & CODES

CODE DESCRIPTION
API 594 Valve Design and Manufacture
AWWA C518 Face-to-Face Dimensions
ASME B16.34 Valves - Flanged, Threaded, and Welding End
ASME B16.42 Ductile Iron Pipe Flanges and Flanged Fittings
API 598 Valve Inspection and Pressure Test

Ductile Iron Application Notes:
Ductile Iron maintains the anti-corrosive properties of Cast Iron while achieving a yield strength comparable to Carbon Steel. Ductile Iron also offers higher pressure/temperature ratings than Cast Iron.

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.

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. Ductile Iron bodies are NSF coated.
4. Eye Bolt is available on larger sizes only.

Ductile Iron ASME Class 150 has the same bolting pattern as Cast Iron ASME Class 125.

PRESSURE / TEMPERATURE RATINGS (1)

CODE DESCRIPTION
API S94 Valve Design and Manufacture
AWWA CS18 Face-to-Face Dimensions
ASME B16.34 Valves - Flanged, Threaded, and Welding End
ASME B16.42 Ductile Iron Pipe Flanges and Flanged Fittings
API S98 Valve Inspection and Pressure Test

PRESSURE / TEMPERATURE RATING – ASTM A536

Body Material Class 150 (2” ~ 24”)
WOG (Non-shock): 250 PSI @ 100 °F

Seal Plug Buna-N/Viton/EPDM

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10” and lower and a tolerance of ±0.12 in (±3.0 mm) for sizes 12” and larger.

Cracking Pressure (3) psi
≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25

1. The above chart displays the pressure-temperature ratings for the valve's body material per ASME B16.42. Max temperature limits have been added for seat and spring materials.

2. Flow Coefficient

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