



TITAN FLOW CONTROL, INC.

## SILENT CHECK VALVE ♦ SINGLE DISC ♦ THREADED ENDS

### 400 WOG ♦ BRASS BODY ♦ BUNA-N SEAT

# MODEL: CV 20-BR

## BRASS BODY BUNA-N SEAT

## FEATURES

- ♦ **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 SHUTOFF PRIOR TO FLOW REVERSAL AND HELPS TO KEEP SLAMMING AND SURGES TO A MINIMUM.
- ♦ **VERSATILE AND ECONOMICAL DESIGN**  
CAN BE INSTALLED IN ANY POSITION (HORIZONTAL OR VERTICAL WITH UPWARD FLOW) - CONSULT FACTORY FOR VERTICAL WITH DOWNWARD FLOW. HEX ENDS ARE PROVIDED FOR QUICK AND EASY INSTALLATIONS.
- ♦ **BUBBLE TIGHT SEAL**  
BY UTILIZING A BUNA-N SEAT AND A PATENTED DISC GUIDE, THE CV 20-BZ IN-LINE CHECK VALVE MAINTAINS A BUBBLE TIGHT SEAL THAT MEETS OR EXCEEDS API 598 LEAKAGE REQUIREMENTS.
- ♦ **MINIMAL HEAD LOSS**  
THE CONTOUR OF BODY AND CHECK MODULE PROVIDE A FLOW PROFILE THAT GENERATES VERY LITTLE TURBULENCE. ADDITIONALLY, THE SPRING-LOADED, CENTER GUIDED DISC IS DESIGNED WITH LOW CRACKING PRESSURE WHICH REDUCES THE AMOUNT OF ENERGY REQUIRED TO OPEN THE VALVE.
- ♦ **DESIGNED FOR LONG SERVICE LIFE**  
HIGHLY ADVANCED MATERIALS COUPLED WITH A PATENTED DISC DESIGN CAN PROVIDE A LONG SERVICE LIFE FOR A WIDE VARIETY OF APPLICATIONS.
- ♦ **NSF/ANSI STANDARD 61 CERTIFIED WITH BUNA-N SEAT**  
APPROVED FOR USE IN DRINKING WATER SYSTEMS.

SIZE RANGE:  
1/4" THROUGH 2"



## TECHNICAL

<b>PRESSURE/TEMPERATURE RATING</b> BRASS CW 617N - UNI EN 12165
WOG (Non-shock): 400 PSI @ 100 °F Max Liquid: Consult Factory Max Steam: Not Recommended
<b>SEAT MATERIAL</b> MAXIMUM TEMPERATURE
Buna-N: 212 °F @ 170 PSI
<b>SPRING MATERIAL</b> MAXIMUM TEMPERATURE
Series 300 Stainless Steel: 400 °F
<b>CHECK MODULE MATERIAL</b> MAXIMUM TEMPERATURE
Polyetherimide: 365 °F

## APPLICATIONS

**MARKETS:** OIL & GAS PRODUCTION, GENERAL INDUSTRY, CHEMICAL INDUSTRY, PETROCHEMICAL INDUSTRY, POWER, FOOD & BEVERAGE INDUSTRIES.

**POLYETHERIMIDE:** PEI IS A HIGH PERFORMANCE THERMOPLASTIC. IT PROVIDES HIGH STRENGTH AND RIGIDITY AT ELEVATED TEMPERATURES, LONG TERM HEAT RESISTANCE, AND OUTSTANDING DIMENSIONAL STABILITY. IT IS INHERENTLY FLAME RETARDANT. PEI CAN RESIST CHEMICALS SUCH AS HYDROCARBONS, ALCOHOLS AND HALOGENATED SOLVENTS.

**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.

*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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**IN-LINE • SILENT CHECKVALVE  
 CENTER GUIDED • THREADED ENDS**

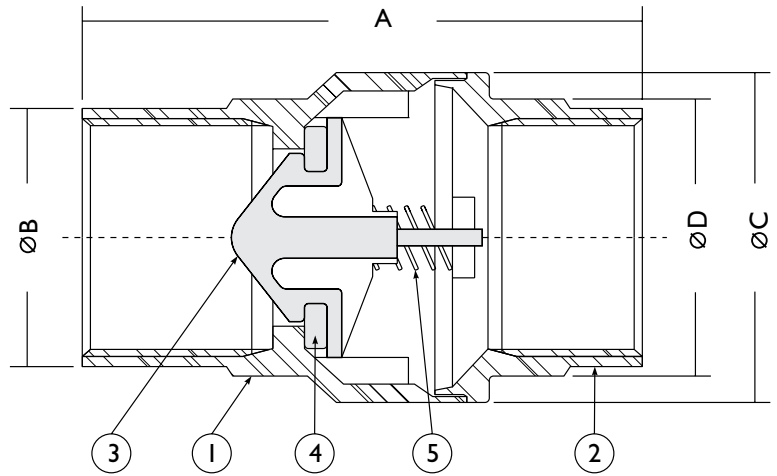
**MODEL: CV 20-BR**

Brass Body • BUNA-N Seat

1/4" ~ 2"  
 400 WOG

**BILL OF MATERIALS (1)**

No.	PART	MATERIAL
1	BODY	Brass CW 617N
2	END CONNECTION	Brass CW 617N
3	CHECK MODULE	POLYETHERIMIDE
4	SEAT (2)	Buna-N
5	SPRING	Series 300 Stainless Steel



**Notes:**

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.

**DIMENSIONS AND PERFORMANCE DATA (1)**

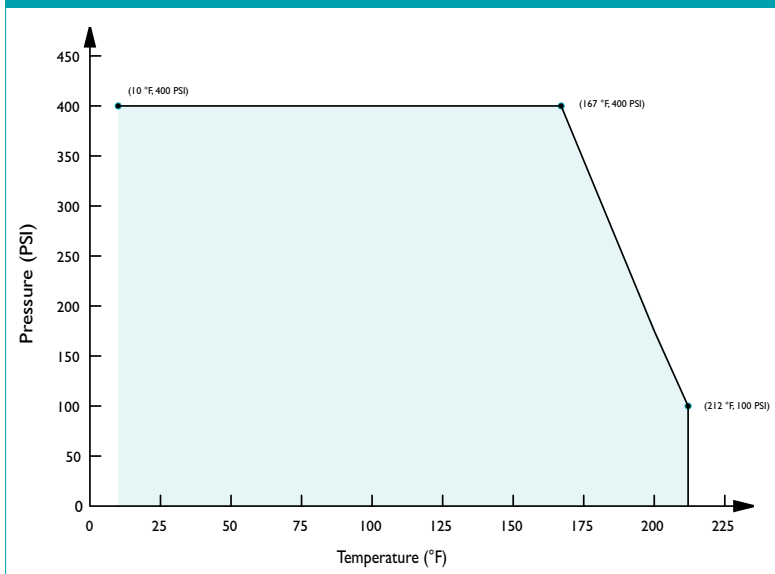
SIZE	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	mm	8	10	15	20	25	32	40	50
<b>A DIMENSION</b> FACE TO FACE	in	2.32	2.32	2.32	2.56	2.76	2.93	3.17	3.37
	mm	59	59	59	66	71	75	81	86
<b>ØB DIMENSION</b> END DIAMETER	in	.98	.98	.98	1.20	1.48	1.87	2.10	2.68
	mm	25	25	25	31	38	48	54	69
<b>ØC DIMENSION</b> BODY DIAMETER	in	1.35	1.35	1.35	1.65	1.92	2.40	2.87	3.46
	mm	35	35	35	42	49	61	73	88
<b>ØD DIMENSION</b> OCTAGONAL ENDS	in	.98	.98	.98	1.22	1.50	1.89	2.12	2.64
	mm	25	25	25	31	39	49	54	68
<b>ASSEMBLED WEIGHT</b>	lb	.22	.37	.32	.49	.68	1.13	1.61	2.28
	kg	.1	.2	.1	.2	.3	.5	.7	1.0
<b>Flow Coefficient</b>	C <sub>v</sub>	4.55	4.55	6.07	10.97	16.92	27.42	39.09	60.68
<b>Cracking Pressure (2)</b>	psi	≤ .5	≤ .5	≤ .5	≤ .5	≤ .5	≤ .5	≤ .5	≤ .5

**Additional Notes:**

1. End connection is female to female per ANSI B 1.20.1.
2. Perfect sealing both at high and low pressures with wide temperature range: +10 ~ 210 °F
3. Low cracking pressure, approximately 1/2 PSI.
4. Low profile designed to minimize head loss.
5. High technology materials to ensure best resistance in any condition.

1. Dimensions, weights, and flow coefficients are provided for reference only. When required, always request certified drawings.
2. This listed valve cracking pressure only applies to horizontal installations. For vertical installations, cracking pressure is higher. Please consult factory.

**PRESSURE-TEMPERATURE RATINGS - CV 20-BR**



**REFERENCED STANDARDS & CODES**

CODE	DESCRIPTION
ANSI B1.1	Unified Inch Screw Threads
ANSI B1.20.1	Pipe Threads - General Purpose
ANSI B16.15	Cast Bronze Threaded Fittings

**PRESSURE - TEMPERATURE RATING**

**Body Material - BRASS CW 617N - UNI EN 12165 - 400 WOG**  
 WOG (Non-shock): 400 PSI @ 100 °F  
 Max Liquid: Consult Factory  
 Max Steam: Not Recommended

**SEAT TEMPERATURE RATING**

Seat Material	Maximum Temperature
Buna-N:	212 °F @ 170 PSI

**SPRING TEMPERATURE RATING**

Spring Material	Maximum Temperature
Series 300 Stainless Steel:	400 °F

**CHECK MODULE TEMPERATURE RATING**

Check Module Material	Maximum Temperature
Polyetherimide:	365 °F

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.