



TITAN FLOW CONTROL, INC.

SILENT CHECK VALVE ♦ SINGLE DISC ♦ THREADED ENDS

400 WOG ♦ BRASS BODY ♦ BUNA-N SEAT

MODEL: CV 20-BZ

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" TROUGH 2"



TECHNICAL

PRESSURE/TEMPERATURE RATING
BRASS CW 617N - UNI EN 12165

WOG: 400 PSI @ 100 °F
Max Liquid: Consult Factory
Max Steam: Not Recommended

SEAT MATERIAL
MAXIMUM TEMPERATURE

Buna-N: 212 °F @ 170 PSI

SPRING MATERIAL
MAXIMUM TEMPERATURE

Series 300 Stainless Steel: 400 °F

CHECK MODULE MATERIAL
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 CHECK VALVE
CENTER GUIDED • THREADED ENDS**

MODEL: CV 20-BZ

Brass Body • BUNA-N Seat

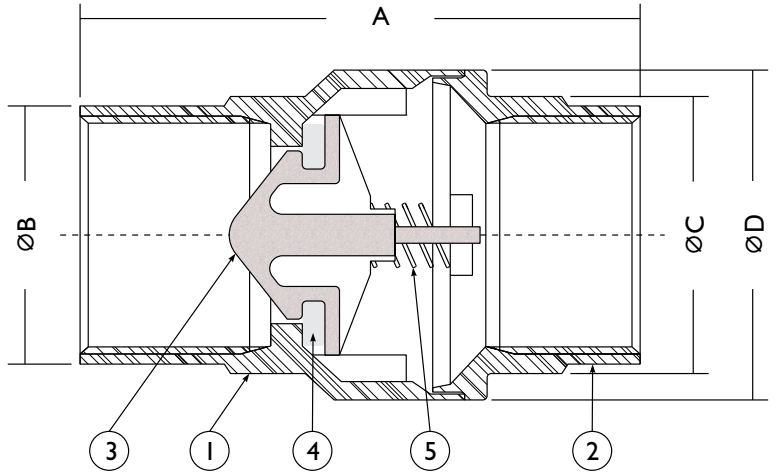
1/4" ~ 2"
400 WOG

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⁾

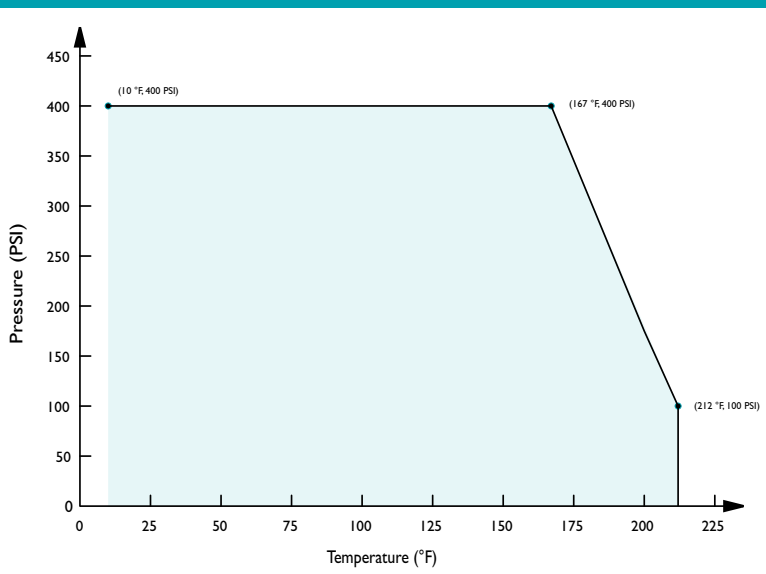
SIZE	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	mm	8	10	15	20	25	32	40	50
A DIMENSION FACE TO FACE	in	2.32	2.32	2.32	2.56	2.76	2.93	3.17	3.37
	mm	59	59	59	66	71	75	81	86
ØB DIMENSION END DIAMETER	in	.98	.98	.98	1.20	1.48	1.87	2.10	2.68
	mm	25	25	25	31	38	48	54	69
ØC DIMENSION BODY DIAMETER	in	1.35	1.35	1.35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



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 (Water, Oil, Gas): 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.