

D-LINE DUO CHECK VALVES ARE DESIGN FROM THE STANDARDS INDUSTRIES TO THE HEAVIEST-REQUIRED INDUSTRIES SUCH AS:

WATER & WASTE WATER, PULP & PAPER, CHEMICAL & PETROCHEMICAL, POWER, MINING, PETROLEUM AND OIL & GAS.

D-LINE DUO CHECK VALVES 2"-6" ARE DUAL PRESSURE SERVICES TO ANSI CLASS 150 & 300. THE SAME D-LINE VALVE CAN BE INSTALLED IN EITHER CLASS 150 OR 300 FLANGES.



8" CV44M-SS

DESIGN FEATURES

EFFICIENT DESIGN

LOW WEIGHT AND SHORT LAYING LENGTH PRODUCES SPACE REQUIREMENTS, AND AN EASY INSTALLATION COMPARED TO FULL-BODY, SWING-CHECK VALVES.

FUGITIVE EMISSION DESIGN

THE RETAINER-LESS BODY DESIGN ELIMINATES POTENTIAL LEAK PATHS TO THE ENVIRONMENT SO THERE ARE NO BODY EMISSIONS.

MINIMAL HEAD LOSS

CONTOUR OF BODY PROVIDES A SHORT AND STRAIGHT FLOW PATH THAT GENERATES VERY LITTLE TURBULANCE. 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.

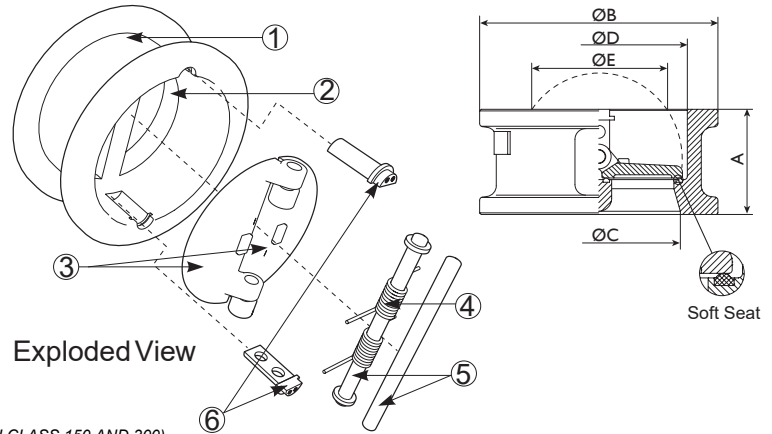
RESILIENT AND METAL SEATS:

BOARD, LAPPED SURFACE (METAL) MEETS OR EXCEEDS API 598 TEST REQUIREMENTS. RESILIENT SEATS (BUNA/VITON) ENSURE A BUBBLE TIGHT SEAL. **BUNA-N SEAT** IS THE MOST WIDELY USED ELASTOMER. GOOD FOR MOST PETROLEUM OILS & 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 SEAT** 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.

PRESSURE-TEMPERATURE RATINGS (NON-SHOCK)		SEAT MATERIAL RATINGS		SPRING MATERIAL RATING
CS ASTM A-216 GR. WCB	740 PSI @ 100°F	VITON	-40 TO 400 °F	INCONEL X750 1000 °F
SS ASTM A-351 GR. CF8M	720 PSI @ 100 °F	BUNA	-20 TO 250 °F	

BILL OF MATERIAL (1)

NO.	DESCRIPTION	CV44-CS (3)	CV44-SS
1	BODY	ASTM A-216 GR. WCB	ASTM A-351 GR. CF8M
2	SEAT	METAL/VITON/BUNA-N(4)	METAL OR VITON
3	DISC (2)	ASTM A-351 GR. CF8M	ASTM A-351 GR. CF8M
4	SPRING (2)	INCONEL X-750	INCONEL X-750
5	SHAFT /STOP PIN	ASTM A-276 GR. 316	ASTM A-276 GR. 316
6	PIN CAP	ASTM A-105	ASTM A-351 GR. CF8M



*ILLUSTRATIONS ARE REPRESENTATIVE OF SERIES CV44 8" THROUGH 24"

*WAFFER STYLES SIZES 2" THROUGH 6" ARE SCALLOPED FOR DUAL PRESSURE SERVICE (ANSI CLASS 150 AND 300)

1-. BILL OF MATERIAL REPRESENTS STANDARD MATERIALS. EQUIVALENT OR BETTER MATERIALS MAY BE SUBSTITUTED AT THE MANUFACTURER'S DISCRETION.

2-. DENOTES RECOMMENDED SPARE PARTS.

3-. CARBON STEEL BODIES ARE EPOXY PAINTED

4-. METAL SEAT IS STAINLESS STEEL INLAY.

DIMENSIONS & PERFORMANCE DATA (1)

SIZE IN	MM	A(2) FACE TO FACE	ØB OVERALL DIAMETER	ØC INLET DIAMETER	ØD OUTLET DIAMETER	ØE(4) MINIMUM BORE DIAMETER	WEIGHT (KG)	CRACKING PRESSURE (3)(PSI)	FLOW COEFFICIENT (CV)
2"	50	2.38	4.33	2.00	2.16	0.94	2.50	≤ .25	62
2 1/2"	65	2.62	5.04	2.50	2.67	1.73	3.60	≤ .25	110
3"	80	2.88	5.78	3.00	3.23	2.36	4.50	≤ .25	175
4"	100	2.88	7.05	4.00	4.25	3.54	7.00	≤ .25	350
5"	125	3.38	8.43	5.00	5.12	4.45	10.60	≤ .25	550
6"	150	3.87	9.81	6.52	6.38	5.31	16.30	≤ .25	850
8"	200	5.00	12.00	8.00	8.66	7.13	29.90	≤ .25	1500
10"	250	5.75	14.15	10.00	10.63	8.82	46.30	≤ .25	2400
12"	300	7.12	16.55	12.00	12.60	10.48	70.80	≤ .25	3700
14"	350	8.75	19.02	13.26	13.46	11.81	107.00	≤ .25	5400
16"	400	9.12	21.18	15.24	15.75	14.30	137.00	≤ .25	8250
18"	450	10.38	23.38	17.50	18.25	15.87	176.90	≤ .25	10400
20"	500	11.50	25.70	19.00	19.50	17.87	244.90	≤ .25	14200
24"	550	12.50	30.40	23.42	24.00	21.73	303.90	≤ .25	23000

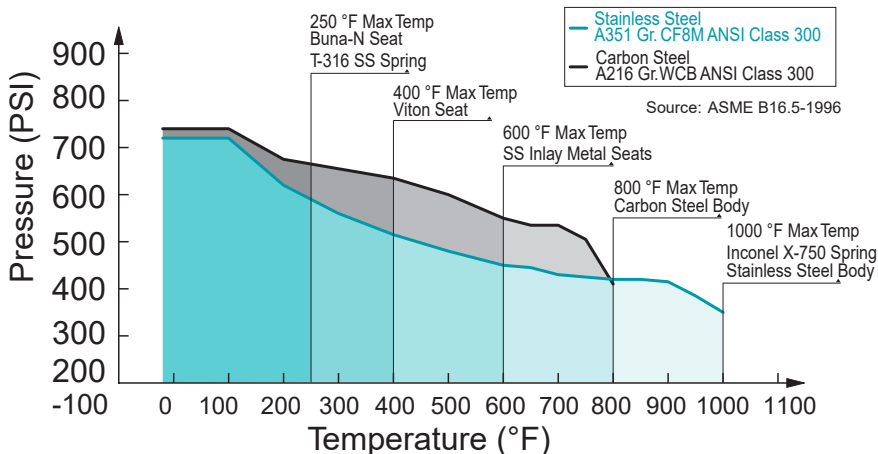
1-. DIMENSIONS ARE EXPRESSED IN INCHES AND WEIGHTS ARE EXPRESSED IN KG AND FOR REFERENCE ONLY. WHEN REQUIRED CERTIFIED DRAWINGS.

2-. FACE TO FACE VALUES HAVE A TOLERANCE OF ±0.06 IN FOR SIZES 10" & LOWER, FOR SIZES 12" & UP ±.12 IN.

3-. CRACKING PRESSURE IS FOR HORIZONTAL INSTALLATIONS ONLY FOR VERTICAL INSTALLATIONS CONSULT FACTORY.

4-. MINIMUM BORE DIAMETER INDICATES THE MINIMUM INTERNAL DIAMETER OF THE ADJACENT PIPE.

PRESSURE - TEMPERATURE RATINGS (1)



REFERENCES STANDARDS & CODES

CODE	DESCRIPTION
ANSI/API 594	VALVE DESIGN & MANUFACTURE
ASME B16.34	VALVE PRESSURE-TEMPERATURE RATINGS
ANSI/ASME B16.5	FLANGE DIMENSIONS
ANSI/API 594	VALVE FACE TO FACE DIMENSION
API 598	VALVE INSPECTION & PRESSURE TEST