CV31B SERIES

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

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

D-LINE ARE OFFERED IN DIFFERENT MATERIALS TO MEET THE DIFFERENT REQUIREMENTS TO SATISFY THE MANY INDUSTRIES IN THE MARKET.

3”

FEATURES

ECONOMICAL DESIGN
D-LINE CHECK VALVES HAVE AN APPROPIATE DESIGN THAT MAKES THEIR LAYING LEGHT SHORTH AND THEIR WEIGHT LOW TO PRODUCE SAVINGS IN INITIAL COSTS, SPACE REQUIREMENTS, AND INSTALLATION MANAGEMENTS.

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

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

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

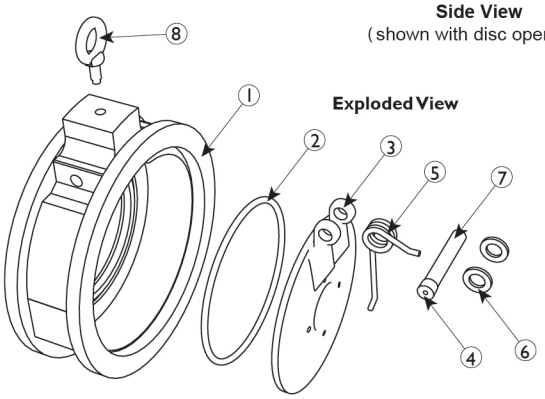
RESILENT SOFT SEAT
BUNA-N SEAT IS THE MOST WIDELY USED ELASTOMER. GOOD FOR MOST PETROLEUM OILS & FLUIDS, SILICONE GREASE AND OILS, AND COLD WATER. EXCELLENT COMPRESSION SET, TEAR AND ABRASION RESISTANCE. POOR WEATHER RESISTANCE AND MODERATE HEAT RESISTANCE. NOT RECOMMENDED FOR SEVERE OZONE-RESISTANT APPLICATIONS.

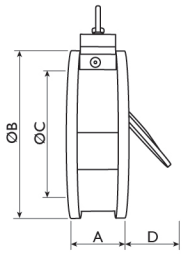
PRESSURE-TEMPERATURE RATINGS (NON-SHOCK)		SEAT MATERIAL RATINGS		SPRING MATERIAL RATING
DI ASTM A-536 CLASS 150	250 PSI @ 100°F	BUNA	-20 TO 250 °F	SERIE 300 SS: 450 °F

CV31B SERIES

BILL OF MATERIALS (1)

NO.	DESCRIPTION	CV31B SERIES
1	BODY(3)	DUCTILE IRON ASTM A-536
2	SEAT	BUNA-N
3	DISC	STAINLESS STEEL 316
4	SPRING(2)	SERIES 300 STAINLESS STEEL
5	SHAFT/STOP	SERIES 300 STAINLESS STEEL
6	NPT PLUG	COMMERCIAL STEEL
7	EYE-BOLT	COMMERCIAL STEEL





ILLUSTRATIONS ARE REPRESENTATIVE OF THE CV31B-SERIES

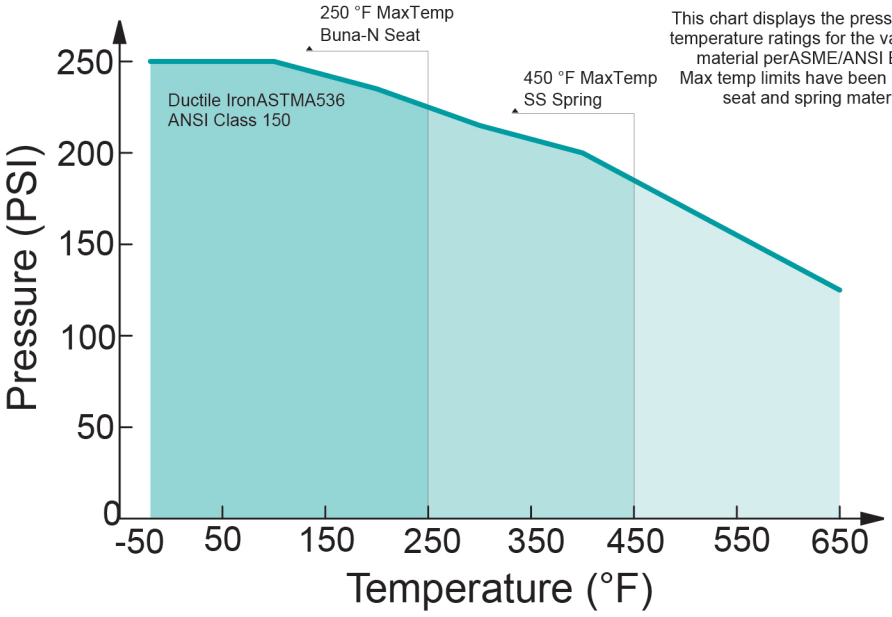
1-. BILL OF MATERIAL REPRESENTS STANDARD MATERIALS. EQUIVALENT OR BETTER MATERIALS MAYBE SUBSTITUTED AT THE MANUFACTURER'S DISCRETION.
2-. DENOTES RECOMMENDED SPARE PARTS.
3-. DI BODY IS EPOXY PAINTED.

DIMENSIONS & PERFORMANCE DATA (1)

SIZE IN	SIZE MM	A(2) FACE TO FACE	ØB OVERALL DIAMETER	ØC INLET DIAMETER	D DISC MAX TRAVEL	WEIGHT (KG)	CRACKING PRESSURE (3)	FLOW COEFFICENT(CV)
2"	50	2.12	4.00	1.31	0.75	1.90	≤ .25	62
2 1/2"	65	2.38	4.88	1.85	1.00	3.30	≤ .25	109
3"	80	2.62	5.25	2.06	0.80	4.00	≤ .25	166
4"	100	2.62	6.88	3.00	1.87	6.00	≤ .25	318
5"	125	3.25	7.75	3.75	3.30	8.40	≤ .25	471
6"	150	3.75	8.75	4.75	2.70	14.50	≤ .25	720
8"	200	5.00	11.00	6.44	3.00	22.70	≤ .25	1384
10"	250	5.50	13.38	7.63	4.62	36.20	≤ .25	2298
12"	300	7.12	16.13	9.50	4.00	57.10	≤ .25	4153

1-. DIMENSIONS WEIGHTS ARE FOR REFERENCE ONLY. ALL DIMENSIONS ARE EXPRESSED IN INCHES.
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.

PRESSURE - TEMPERATURE RATINGS



This chart displays the pressure versus temperature ratings for the valve's body material perASME/ANSI B16.42. Max temp limits have been added for seat and spring materials.

REFERENCES STANDARDS & CODES

CODE	DESCRIPTION
ANSI/API 594	VALVE DESIGN & MANUFACTURE
ASME B16.42	VALVE PRESSURE-TEMPERATURE RATINGS
ANSI/ASME B16.5	FLANGE DIMENSIONS
ANSI/API 594	VALVE FACE TO FACE DIMENSION
API 598	VALVE INSPECTION & PRESSURE TEST
MSS SP-6	STANDARD FINISHES FOR CONNECTING-END FLANGES
MSS SP-25	STANDARD MARKING SYSTEM FOR VALVES
MSS SP-55	QUALITY STANDARD FOR VALVE CASTINGS