



Valves made of cast have a great metallurgy manufacturing flexibility and strong variability and have been through the years the most cost-efficient way of manufacture for industrial valves in the global market.

D-LINE® Wafer Check Valves are fully designed to comply with the requirements of standards such as ASME B16.34, API standards and others.

## APPLICATIONS

D-LINE® Wafer Check Valves serve multi-national end users in a wide range of applications in many industries including:

- Water Treatment
- Mining
- Pharmaceutical
- Oil refinery industries
- Chemical & Petrochemical
- Ship building industries
- Food Industries

## DESIGN FEATURES

- Dual check type
- Face to face to per API 594
- Flange dimensions to per ASME B16.5
- Pressure-temperature rating to per ASME B16.34
- Valve design to per API 594
- Dual pressure service ANSI 150/300 (2" - 6")
- INCONEL X-750 Spring
- Metal seat

TEST SPECIFICATION			
TEST ACCORDANCE TO PER API 598			
CLASS	150	300	600
NOMINAL PRESSURE	285 PSI	740 PSI	1440 PSI
SHELL TEST (WATER)	450 PSI	1125 PSI	2225 PSI
SEAT TEST (WATER)	315 PSI	815 PSI	1630 PSI
AIR TEST	80 PSI	80 PSI	80 PSI

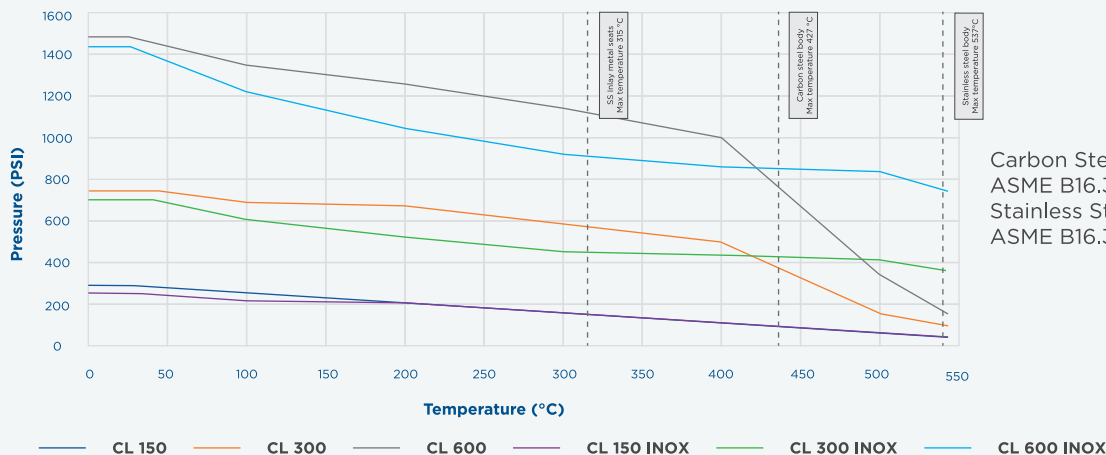
FEATURES	
SIZE	2" - 24"
CLASS	150/300/600
CONNECTION	WAFER
TEMPERATURE C.S. BODY	-29°C to 429°C
TEMPERATURE S.S. BODY	-29°C to 537°C

MARKING BODY	
SIDE 1	NAMEPLATE
	MATERIAL <input type="text"/>
SIDE 2	
	CV42M/CV44M/CV46M
	SIZE CLASS

Pressures applies for carbon steel body, for stainless steel please see graph below.

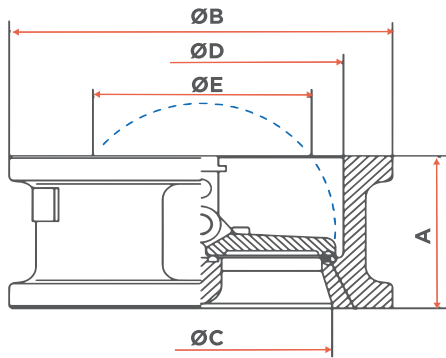
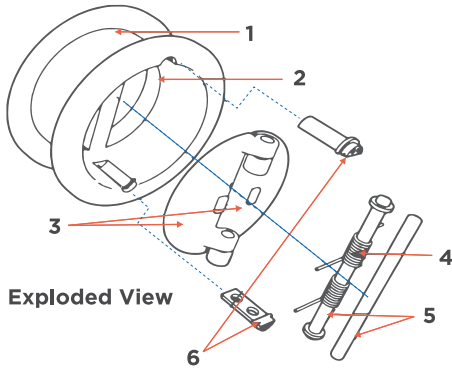
## PRESSURE - TEMPERATURE RATING

These are conservative guide for general service. Previous experience in process or new development may permit applications



# DIMENSIONS

## CLASS 150



VALVE MATERIAL LIST			
No.	DESCRIPTION	CV42M-CS	CV42M-SS
1	BODY	ASTM A-216 GR. WCB	ASTM A-351 GR. CF8M
2	SEAT	METAL	METAL
3	DISC	ASTM A-351 GR. CF8M	ASTM A-351 GR. CF8M
4	SPRING	INCONEL X-750	INCONEL X-750
5	SHAFT / STOP IN	ASTM A-276 GR. 316	ASTM A-276 GR. 316
6	CAP	ASTM A-105	ASTM A-351 GR. CF8M
7	EYE BOLT	CARBON STEEL	CARBON STEEL

\*Illustrations are representative of series CV42 8" & up

\*Wafer Styles sizes 2" through 6" are scalloped for dual pressure service (ANSI Class 150 and 300)

VALVE DIMENSIONS, PERFORMANCE DATA & WEIGHTS										
MODEL	SIZE		A	B	C	D	F	WEIGHT (KG)	CRACKING PRESSURE (PSI)	FLOW COEFFICIENT (CV)
CV42M-CS/SS-09	2"	DN50	2.38	2.00	2.16	4.33	0.94	2.50	≤ 0.25	62
CV42M-CS/SS-10	2-1/2"	DN65	2.62	2.50	2.67	5.04	1.69	3.60	≤ 0.25	110
CV42M-CS/SS-11	3"	DN80	2.88	3.00	3.23	5.31	2.63	4.50	≤ 0.25	175
CV42M-CS/SS-12	4"	DN100	2.88	4.00	4.25	7.05	3.54	7.00	≤ 0.25	350
CV42M-CS/SS-14	6"	DN150	3.87	6.52	6.38	9.81	5.31	16.30	≤ 0.25	850
CV42M-CS/SS-15	8"	DN200	5.00	8.00	8.66	10.91	7.13	23.30	≤ 0.25	1500
CV42M-CS/SS-16	10"	DN250	5.75	10.00	10.63	13.27	8.82	39.90	≤ 0.25	2400
CV42M-CS/SS-17	12"	DN300	7.12	12.00	12.60	16.02	10.47	59.40	≤ 0.25	3700
CV42M-CS/SS-18	14"	DN350	7.25	13.26	13.78	17.64	11.81	80.70	≤ 0.25	5400
CV42M-CS/SS-19	16"	DN400	7.50	15.24	15.75	20.15	14.29	109.70	≤ 0.25	8250
CV42M-CS/SS-20	18"	DN450	8.00	17.24	17.24	21.54	15.87	125.10	≤ 0.25	10400
CV42M-CS/SS-21	20"	DN500	8.62	19.50	19.50	23.78	18.03	164.20	≤ 0.25	14200
CV42M-CS/SS-23	24"	DN600	8.75	23.42	23.42	28.15	22.28	209.60	≤ 0.25	23000

\*Weight is estimated

\*All dimensions are expressed in inches

\*Cracking pressure is for horizontal installations only

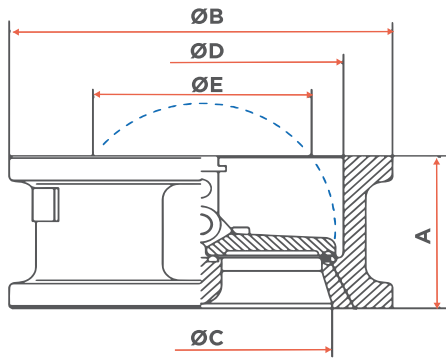
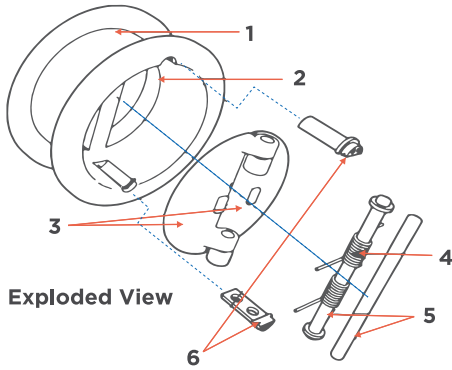
\*Face to face values have a tolerance of +0.06 in for sizes 10" & lower, for sizes 12" & up+ .12 in



Scan the QR CODE to see our available studs and gasket.

# DIMENSIONS

## CLASS 300



VALVE MATERIAL LIST			
No.	DESCRIPTION	CV44M-CS	CV44M-SS
1	BODY	ASTM A-216 GR. WCB	ASTM A-351 GR. CF8M
2	SEAT	METAL	METAL
3	DISC	ASTM A-351 GR. CF8M	ASTM A-351 GR. CF8M
4	SPRING	INCONEL X-750	INCONEL X-750
5	SHAFT / STOP IN	ASTM A-276 GR. 316	ASTM A-276 GR. 316
6	CAP	ASTM A-105	ASTM A-351 GR. CF8M
7	EYE BOLT	CARBON STEEL	CARBON STEEL

\*Illustrations are representative of series CV44 8" & up  
 \*Wafer Styles sizes 2" through 6" are scalloped for dual pressure service (ANSI Class 150 and 300)

VALVE DIMENSIONS, PERFORMANCE DATA & WEIGHTS										
MODEL	SIZE		A	B	C	D	E	WEIGHT (KG)	CRACKING PRESSURE (PSI)	FLOW COEFFICIENT (CV)
CV44M-CS/SS-09	2"	DN50	2.38	4.33	2.00	2.19	0.75	2.50	≤ 0.25	62
CV44M-CS/SS-10	2-1/2"	DN65	2.62	5.04	2.56	2.68	1.69	3.60	≤ 0.25	110
CV44M-CS/SS-11	3"	DN80	2.88	5.78	3.13	3.25	2.38	4.50	≤ 0.25	175
CV44M-CS/SS-12	4"	DN100	2.88	7.05	4.00	4.25	3.56	7.00	≤ 0.25	350
CV44M-CS/SS-14	6"	DN150	3.87	9.81	6.52	6.38	5.31	16.30	≤ 0.25	850
CV44M-CS/SS-15	8"	DN200	5.00	12.00	8.00	8.69	7.13	29.90	≤ 0.25	1500
CV44M-CS/SS-16	10"	DN250	5.75	14.13	10.00	10.63	8.75	46.30	≤ 0.25	2400
CV44M-CS/SS-17	12"	DN300	7.12	16.56	12.00	12.63	10.44	70.80	≤ 0.25	3700
CV44M-CS/SS-18	14"	DN350	8.75	19.00	13.25	13.75	11.81	107.00	≤ 0.25	5400
CV44M-CS/SS-19	16"	DN400	9.12	21.13	15.75	15.75	14.19	137.00	≤ 0.25	8250
CV44M-CS/SS-20	18"	DN450	10.38	23.38	17.25	17.25	15.81	176.00	≤ 0.25	10400
CV44M-CS/SS-21	20"	DN500	11.50	25.59	19.50	19.50	17.81	244.90	≤ 0.25	14200
CV44M-CS/SS-23	24"	DN600	12.50	30.38	23.44	23.44	21.63	303.90	≤ 0.25	23000

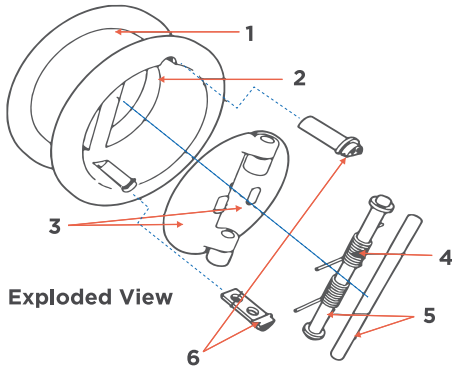
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 \*All dimensions are expressed in inches  
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 \*Face to face values have a tolerance of +0.06 in for sizes 10" & lower, for sizes 12" & up + .12 in



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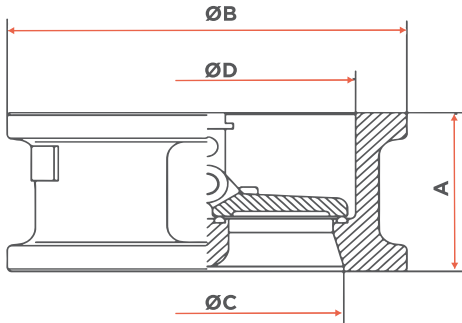
# DIMENSIONS

## CLASS 600



VALVE MATERIAL LIST			
No.	DESCRIPTION	CV46M-CS	CV46M-SS
1	BODY	ASTM A-216 GR. WCB	ASTM A-351 GR. CF8M
2	SEAT	METAL	METAL
3	DISC	ASTM A-351 GR. CF8M	ASTM A-351 GR. CF8M
4	SPRING	INCONEL X-750	INCONEL X-750
5	SHAFT / STOP IN	ASTM A-276 GR. 316	ASTM A-276 GR. 316
6	CAP	ASTM A-276 GR. 316	ASTM A-276 GR. 316
7	EYE BOLT	CARBON STEEL	CARBON STEEL

\*Illustrations are representative of series CV46 8" & up



VALVE DIMENSIONS, PERFORMANCE DATA & WEIGHTS									
MODEL	SIZE		A	B	C	D	WEIGHT (KG)	CRACKING PRESSURE (PSI)	FLOW COEFFICIENT (CV)
CV46M-CS/SS-09	2"	DN50	2.38	4.31	2.00	2.19	3.00	≤ 0.25	45
CV46M-CS/SS-10	2-1/2"	DN65	2.62	5.06	2.56	2.69	6.00	≤ 0.25	95
CV46M-CS/SS-11	3"	DN80	2.88	5.81	3.00	3.25	5.00	≤ 0.25	140
CV46M-CS/SS-12	4"	DN100	3.13	7.50	4.00	4.25	9.00	≤ 0.25	200
CV46M-CS/SS-14	6"	DN150	5.34	10.38	6.00	6.50	26.00	≤ 0.25	580
CV46M-CS/SS-15	8"	DN200	6.50	12.50	7.88	8.25	49.00	≤ 0.25	1350
CV46M-CS/SS-16	10"	DN250	8.38	15.69	9.84	10.06	94.00	≤ 0.25	1850
CV46M-CS/SS-17	12"	DN300	9.00	17.94	11.81	11.81	136.00	≤ 0.25	2500
CV46M-CS/SS-18	14"	DN350	10.75	19.31	13.19	13.19	191.00	≤ 0.25	4800
CV46M-CS/SS-19	16"	DN400	12.00	22.13	15.16	15.16	284.00	≤ 0.25	5520
CV46M-CS/SS-20	18"	DN450	14.25	24.00	17.13	17.13	372.00	≤ 0.25	7500
CV46M-CS/SS-21	20"	DN450	14.50	26.75	19.19	19.19	460.00	≤ 0.25	10300
CV46M-CS/SS-23	24"	DN600	17.25	30.94	23.03	23.03	767.00	≤ 0.25	11100

\*Weight is estimated

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