



Description

1. Light-weight and compact wafer design.
2. Resilient seats with superior performance and bubble-tight shutoff capability.
3. Homogeneous distribution of load through double springs, more rapid reaction.
4. Flexible in installation position.
5. Reduce pressure loss, improve dynamic response characteristics and eliminate valve.

Selection of possible applications

Hot and cold water system ,Process lines,Sprinkler installations, Heating systems,Steam and condensate lines ,Oil lines,Chemicals Food production,Pharmaceuticals Pulp and paper Ship building , Textiles,Power generation

Selection of possible flow media

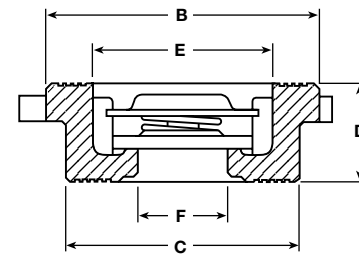
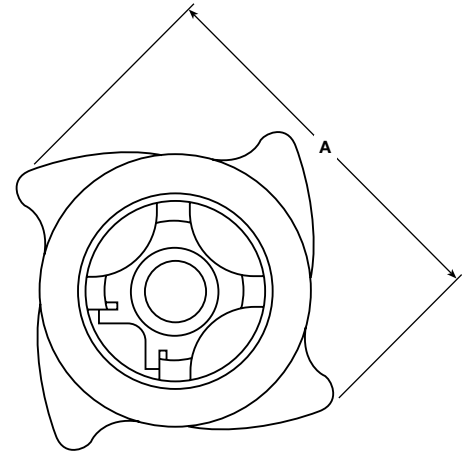
Steam,Water,Oil,etc.

Disc check valve

HCV1 Disc check valve

Dimensions and Weights(mm/kg)

Size	A	B	C	D	E	F	Weights
1/2"/DN15	60.0	43	38	16.0	29.0	15	0.13
3/4"/DN20	69.5	53	45	19.0	35.7	20	0.19
1"/DN25	80.5	63	55	22.0	44.0	25	0.32
1 1/4"/DN32	90.5	75	68	28.0	54.5	32	0.55
1 1/2"/DN40	101.0	85	79	31.5	65.5	40	0.74
2"/DN50	115.0	95	93	40.0	77.0	50	1.25
2 1/2"/DN65	142.0	115	113	46.0	97.5	65	1.86
3"/DN80	154.0	133	128	50.0	111.5	80	2.40
4"/DN100	184.0	154	148	60.0	130.0	100	3.80



Materials

1 Body	Stainless steel	ASTM A216 316L
2 Disc	Stainless steel	ASTM A216 316L
3 Cap	Stainless steel	ASTM A216 316
4 Spring	Stainless steel	ASTM A510 316

Size and connections

DN15-100 EN 1092 PN6, PN10, PN16, PN25 and PN40;
1/2" -4" ASME 150 or 300 flanges.

Opening pressures (mbar)

DN	15	20	25	32	40	50	65	80	100
Up	25	25	25	27	28	29	30	31	33
Hor.	22.5	22.5	22.5	23.5	24.5	24.5	25	25.5	26.5
Down	20	20	20	20	20	20	20	20	20

Kv values

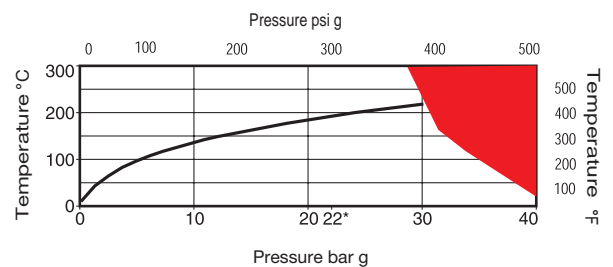
DN	15	20	25	32	40	50	65	80	100
K _v	4.4	6.8	10.8	17	26	43	60	80	113

For conversion: C_v (EN) = K_v x 0.963 C_v (US) = K_v x 1.156

Limits (ISO 6552)

Body design conditions	ANSI class 300/PN40
Maximum allowable pressure	580 psi g/40bar g-122°F/50 °C
Maximum allowable temperature	752°F/400 °C
Maximum operating pressure for saturated steam service	478 psi/33 bar-572°F/300 °C

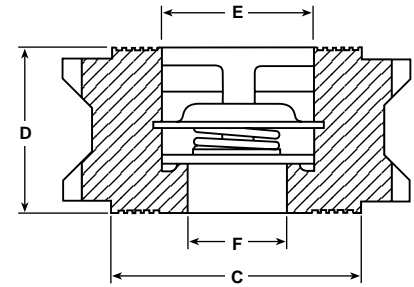
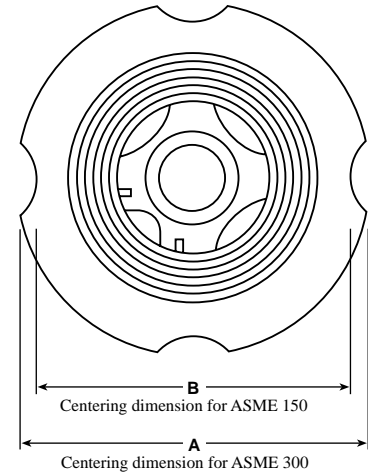
Temperature and Pressure limits



HCV2 Disc check valve

Dimensions and Weights(mm/kg)

Size	A	B	C	D	E	F	Weights
1/2"/DN15	54	47	38	25	22.3	15	0.24
3/4"/DN20	67	57	45	31	27.3	20	0.40
1"/DN25	73	67	55	35	33.1	25	0.54
1½"/DN40	95	86	76	45	49.1	40	1.15
2"/DN50	111	105	95	56	59.1	50	1.83
3"/DN80	149	136	130	71	90.1	80	3.70
4"/DN100	181	174	160	80	111.1	100	5.70



Materials

1 Body	Stainless steel	ASTM A351 CF3M
2 Disc	Stainless steel	ASTM A276 316
3 Cap	Stainless steel	ASTM A276 316
4 Spring	Stainless steel	ASTM A510 316

Size and connections

DN15-100 EN 1092 PN6, PN10, PN16, PN25 and PN40;
1/2" -4" ASME 150 or 300 flanges.

Opening pressures (mbar)

DN	15	20	25	40	50	80	100
Up	25	25	25	28	29	31	33
Hor.	22.5	22.5	22.5	24	24.5	25.5	26.5
Down	20	20	20	20	20	20	20

Kv values

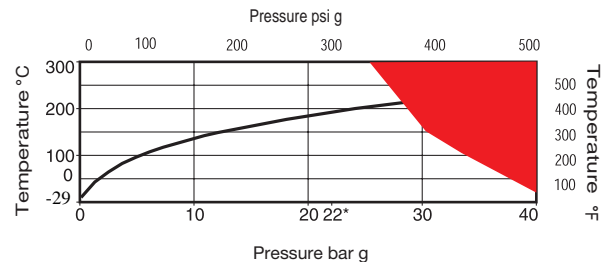
DN	15	20	25	40	50	80	100
K _v	4.4	7.5	12	26	39	84	150

For conversion: C_v (EN) = K_v x 0.963 C_v (US) = K_v x 1.156

Limits (ISO 6552)

Body design conditions	ASME 300
Maximum allowable pressure	696 psi g/48bar g-98°F/37 °C
Maximum allowable temperature	752°F/400°C
Maximum operating pressure	
for saturated steam service	696 psi g/48bar g-98°F/37 °C

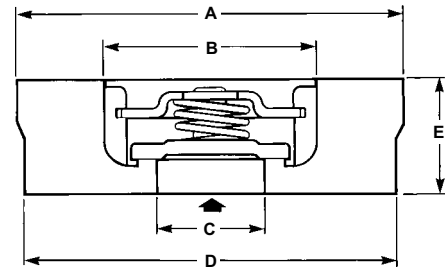
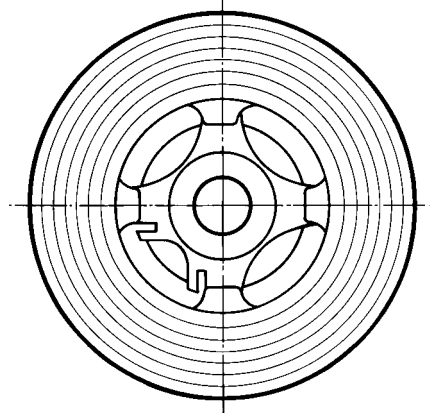
Temperature and Pressure limits



HCV3 Disc check valve

Dimensions and Weights(mm/kg)

Size	A	B	C	D	E	Weights
1/2"/DN15	52.5	29	15	51	16	0.25
3/4"/DN20	62.5	36	20	61	19	0.40
1"/DN25	72.0	44	25	70	22	0.55
1 1/4"/DN32	83.5	54	32	82	28	0.85
1 1/2"/DN40	93.5	65	40	92	32	1.10
2"/DN50	108.0	76	50	107	40	1.80
2 1/2"/DN65	128.0	98	65	127	46	2.60
3"/DN80	143.0	111	80	142	50	3.30
4"/DN100	165	130	100	165	60	5.50



Materials

1 Body	Stainless steel	ASTM A351 CF8M
2 Disc	Stainless steel	ASTM A276 316
3 Cap	Stainless steel	ASTM A276 316
4 Spring	Stainless steel	ASTM A510 316

Size and connections

DN15-100 EN 1092 PN6, PN10, PN16, PN25 and PN40;
1/2" -4" ASME 150 or 300 flanges.

Opening pressures (mbar)

DN	15	20	25	32	40	50	65	80	100
Up	25	25	25	27	28	29	30	31	33
Hor.	22.5	22.5	22.5	23.5	24.5	24.5	25	25.5	26.5
Down	20	20	20	20	20	20	20	20	20

Kv values

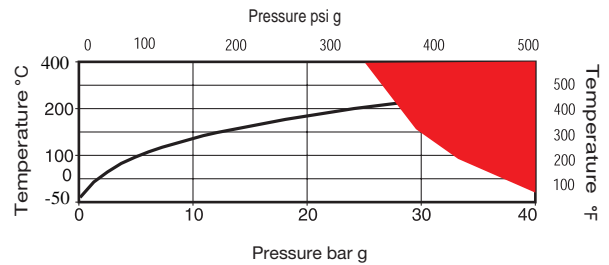
DN	15	20	25	32	40	50	65	80	100
K _v	4.4	6.8	10.8	17	26	43	60	80	113

For conversion: C_v (EN) = K_v x 0.963 C_v (US) = K_v x 1.156

Limits (ISO 6552)

Body design conditions	ANSI class 300/PN40
Maximum allowable pressure	580 psi g/40bar g-122 °F/50 °C
Maximum allowable temperature	752 °F/400 °C
Maximum operating pressure for saturated steam service	478 psi/33 bar-572 °F/300 °C

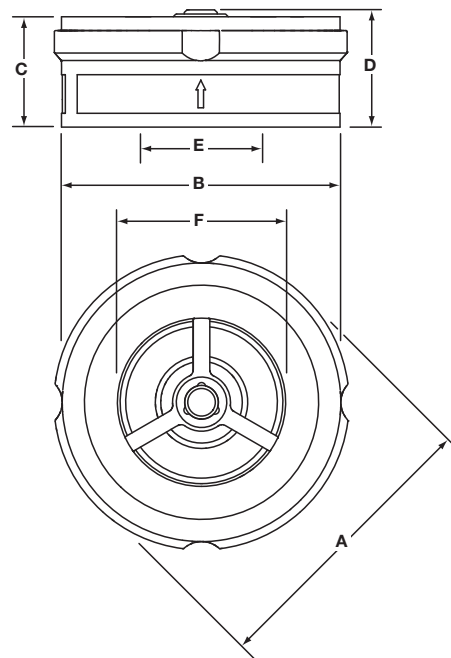
Temperature and Pressure limits



HCV4 Disc check valve

Dimensions and Weights(mm/kg)

Size	A	B	C	D	E	F	Weights
1"/DN25	2.8	2.8	0.9	0.9	1.0	1.3	0.9
1½"/DN40	3.6	3.4	1.2	1.3	1.6	1.9	1.8
2"/DN50	4.2	4.0	1.8	1.7	2.0	2.4	3.0
3"/DN80	5.6	5.2	2.0	2.1	3.1	3.5	5.6



Materials

1 Body	Stainless steel	ASTM A351 CF8M
2 Disc	Stainless steel	ASTM A276 316L
3 Cap	Stainless steel	ASTM A276 316L
4 Spring	Stainless steel	ASTM A510 316

Size and connections

DN15-100 EN 1092 PN6, PN10, PN16, PN25 and PN40;
1/2" -4" ASME 150 or 300 flanges.

Opening pressures (psi/mbar)

DN	DN25	DN40	DN50	DN80
Up	0.36 (25)	0.41 (28)	0.42 (29)	0.45 (31)
Hor.	0.33 (22.5)	0.36 (24.5)	0.36 (24.5)	0.37 (25.5)
Down	0.29 (20)	0.29 (20)	0.29 (20)	0.29 (20)

Kv values

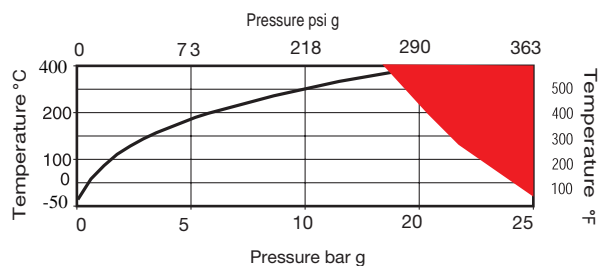
Size	DN25	DN40	DN50	DN80
K _v	10.8	26	43	80

For conversion: C_v (EN) = K_v x 0.963 C_v (US) = K_v x 1.156

Limits (ISO 6552)

Body design conditions	ANSI class 300/PN25
Maximum allowable pressure	363 psi g/25bar g-122 °F/50 °C
Maximum allowable temperature	752 °F/400 °C
Maximum operating pressure	
for saturated steam service	319 psi/22 bar-572 °F/300 °C

Temperture and Pressure limits



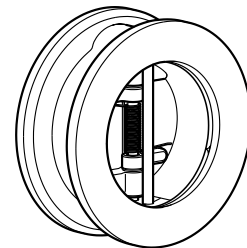
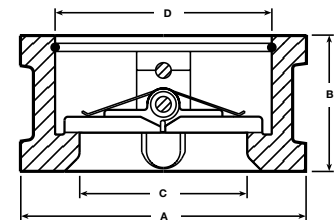
SHCV3 Disc check valve

Dimensions and Weights(mm/kg)

Size	ASME 150 A	ASME 300 A	B	C	D	ASME 150 Weights	ASME 300 Weights
2"	105	111	60	40	57.0	2.7	2.7
3"	137	149	73	51	87.0	6.8	6.8
4"	175	181	73	89	113.0	8.6	8.6
6"	222	251	98	140	166.0	17.0	25.0
8"	279	308	127	171	206.5	31.0	36.0
10"	340	362	146	235	260.0	52.0	64.0
12"	410	422	181	260	300.0	97.0	98.0

Materials

1	Body	Carbon steel	ASTM A216 WCB/A351 CF8M
2	Plate	Austenitic stainless steel	ASTM A351 CF8M
3	Hinge/stop pin	Austenitic stainless steel	AISI 316
4	Coil spring	Nickel alloy	Inconel-X
5	Pin	Austenitic stainless steel	316
6	Clips	Austenitic stainless steel	316
7	Ring	Austenitic stainless steel	316
8	Pin Fixture	Austenitic stainless steel	316
9	Soft seat	Fluoroelastomer (optional)	Fluoroelastomer



Size and connections

DN50-300 EN 1092PN16, PN25,PN40andPN50;
ASME (ANSI) B 16.5 class 150 and 300

Opening pressures (mbar)

Up	DN50	DN80	DN100	DN150	DN200	DN250	DN300
Hor.	30	30.0	26	27	16	16	17
Down	48	45.5	43	43	39	40	46

Kv values

DN	50	80	100	150	200	250	300
K _V	40	111	226	611	1 188	2 205	3 299

For conversion: C_v (EN) = K_v x 0.963 C_v (US) = K_v x 1.156

Limits (ISO 6552)

Body design conditions	ANSI class 300/PN50
Maximum allowable pressure	725 psi g/50bar g-122 °F/50 °C
Maximum allowable temperature	752 °F/400 °C

Temperture and Pressure limits

