

CHECK VALVE

ORDERING INFORMATION

Product Series

VCN	Standard Check Valve(Clamp Body type)
VCU	Union Type Check Valve
VCY	Y-Ball Check Valve
VCA	Air Blow Check Valve
VCP	Insert Check Valve

Connection
*Except VCP

11	Weld/Weld
22	Clamp/Clamp
33	Male/Male
44	Liner/Liner
55	Flange/Flange

ADAPTER Type
* VCA only

A	Air Line Quick Coupler
B	Hose Adaptor
C	TC x Female Adaptor

Body Material

4	SS304
6	SS316L

Seat Seal Material

1	Silicon
2	EPDM
3	Viton
4	NBR

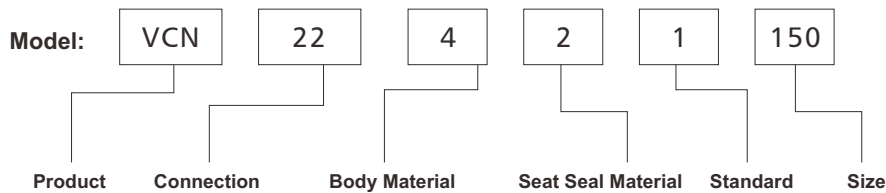
Standard

1	3A
2	DIN 11850
3	SMS

Size

DIN 11850	
025	DN25
032	DN32
...	...
100	DN100
3A	
100	1"
150	1.5"
...	...
400	4"

Ordering Information:



Example: Standard Check Valve, Clamp/Clamp end, SS304 with EPDM seal, 3A, 1.5"

CHECK VALVE

VCN Series

CONCEPT

Sanitary check valve, also known as "non-return valve", is designed for use in process piping installations to prevent reverse flow. VCN series is a spring check valve with different connection ends.



WORKING PRINCIPLE

A check valve opens when the pressure below the valve plug exceeds the pressure above the valve plug and the spring force. The valve close when pressure equalization has been achieved.

MATERIAL

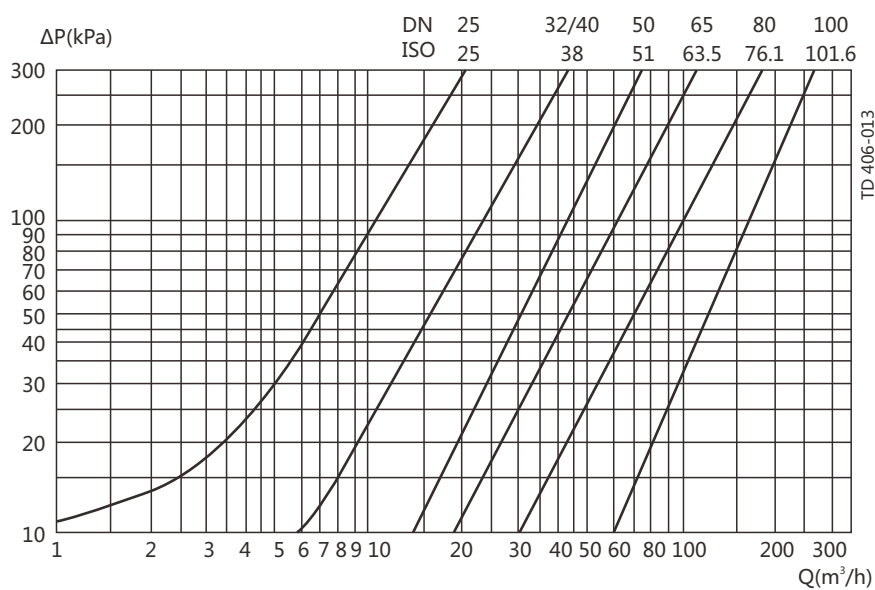
Wetted Parts: SS304 or SS316L

Seal: EPDM, VMQ, FPM

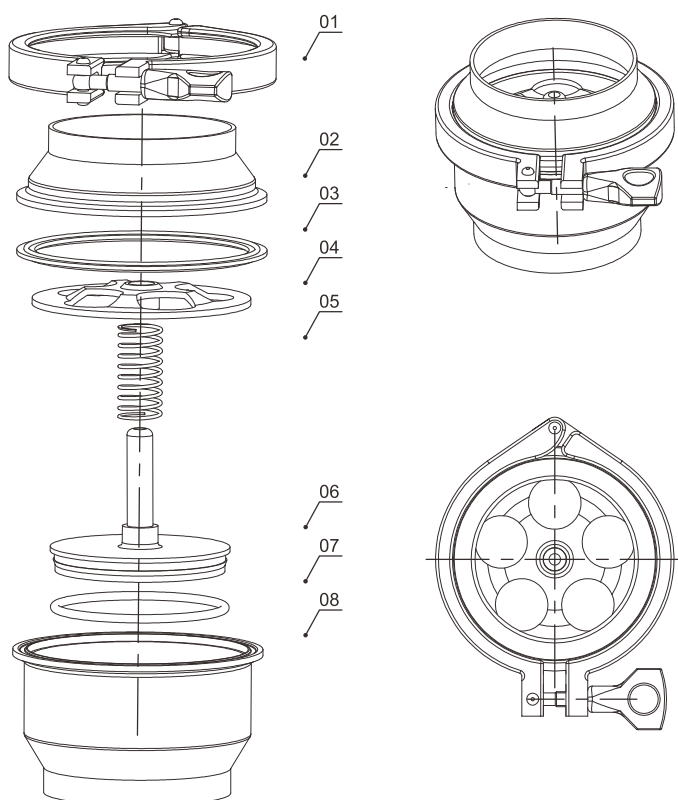
TECHNICAL DATA			
Metal Material	Contact with the product components	304/316L(1.4301/1.4404) Forging	Can provide material inspection report
	Material No contact with the product, components	304/202(1.4301/202)	
Sealing Material	Standard	EPDM	Adopt import sealing materials, which all the meet The FDA 117.2600
	Option	VMQ/FPM	
Pressure	Pressure of work	0~10bar	
Temperature	Working temperature	VMQ:(-50~ +180℃) EPDM: (-20~+135℃) FPM: (-30~+230℃)	
	Sterilization temperature	150℃(MAX 20min)	
Surface Treatment	Inside surface treatment	Ra≥0.4-0.8μm	
	Surface treatment	Ra≥0.8-1.6μm	
Connection	The diameter welding	Welding connection: DIN 11850-2 with 11850-1 / SMS / 3A / ISO Series etc	
	Connection mode: welding, clamp, male and female, flange, etc		
Check valve's volume flow: flow through the valve per unit time of a cross-sectional area of the fluid volume		Volume flow: cubic meters / hour (m³/h) detailed technical data, refer to(on the chart)	

CHECK VALVE

PERFORMANCE CURVE

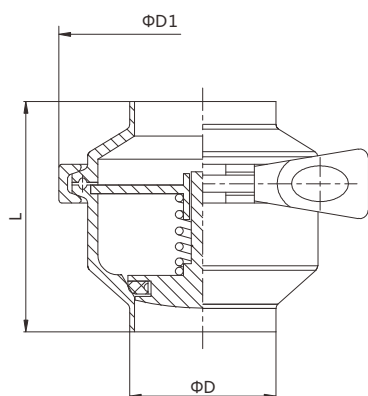


EXPLODE VIEW



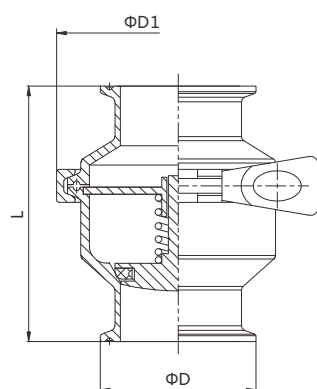
No.	Description
01	Heavy Duty Clamp
02	Valve Cap
03	Body Seal
04	Disc
05	Spring
06	Valve Stem
07	Seat Seal
08	Valve Body

WELD CHECK VALVE



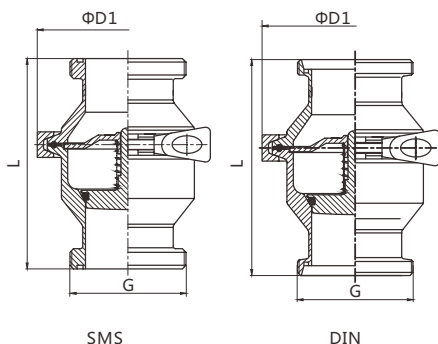
Model No	Size	L	D	D1
VCN11XX1075	3/4"	54	19.1	54
VCN11XX1100	1"	71	25.4	87
VCN11XX1125	1 1/4"	70	31.8	87
VCN11XX1150	1 1/2"	70	38.1	87
VCN11XX1175	45	80	45	100
VCN11XX1200	2"	80	50.8	100
VCN11XX1225	57	90	57	100
VCN11XX1250	2 1/2"	90	63.5	115
VCN11XX1300	3"	100	76.2	128
VCN11XX1350	3 1/2"	100	89	128
VCN11XX1400	4"	106	101.6	164
VCN11XX2015	DN15	54	18	54
VCN11XX2020	DN20	54	22	54
VCN11XX2025	DN25	71	28	87
VCN11XX2032	DN32	70	34	87
VCN11XX2040	DN40	70	40	87
VCN11XX2050	DN50	80	52	100
VCN11XX2065	DN65	90	70	115
VCN11XX2080	DN80	100	85	128
VCN11XX2100	DN100	106	104	164

CLAMP CHECK VALVE



Model No	Size	L	D	D1
VCN22XX1050	1/2"	64	25.2	54
VCN22XX1075	3/4"	64	25.2	54
VCN22XX1100	1"	96	50.5	87
VCN22XX1125	1 1/4"	95	50.5	87
VCN22XX1150	1 1/2"	95	50.5	87
VCN22XX1200	2"	105	64	100
VCN22XX1250	2 1/2"	115	77.5	115
VCN22XX1300	3"	124	91	128
VCN22XX1400	4"	137	119	164
VCN22XX2015	DN15	64	34	54
VCN22XX2020	DN20	64	34	54
VCN22XX2025	DN25	114	50.5	87
VCN22XX2032	DN32	113	50.5	87
VCN22XX2040	DN40	113	50.5	87
VCN22XX2050	DN50	128	64	100
VCN22XX2065	DN65	146	91	115
VCN22XX2080	DN80	156	106	128
VCN22XX2100	DN100	162	119	164

THREAD CHECK VALVE



Model No	Size	L	G	D1
VCN33XX3075	3/4"	92	RD34*1/8"	54
VCN33XX3100	1"	109	RD40*1/6"	87
VCN33XX3125	1 1/4"	116	RD48*1/6"	87
VCN33XX3150	1 1/2"	116	RD60*1/6"	87
VCN33XX3200	2"	126	RD70*1/6"	100
VCN33XX3250	2 1/2"	144	RD85*1/6"	115
VCN33XX3300	3"	154	RD98*1/6"	128
VCN33XX3400	4"	176	RD132*1/6"	164
VCN33XX2015	DN15	88	RD34*1/8"	54
VCN33XX2020	DN20	92	RD44*1/6"	54
VCN33XX2025	DN25	115	RD52*1/6"	87
VCN33XX2032	DN32	116	RD58*1/6"	87
VCN33XX2040	DN40	112	RD65*1/6"	87
VCN33XX2050	DN50	124	RD78*1/6"	100
VCN33XX2065	DN65	140	RD95*1/6"	115
VCN33XX2080	DN80	150	RD110*1/4"	128
VCN33XX2100	DN100	166	RD130*1/4"	164

UNION TYPE CHECK VALVE VCU Series

CONCEPT

Sanitary check valve, also known as "non-return valve", is designed for use in process piping installations to prevent reverse flow. VCU series is a spring check valve with different connection ends.

WORKING PRINCIPLE

A check valve opens when the pressure below the valve plug exceeds the pressure above the valve plug and the spring force. The valve close when pressure equalization has been achieved.

MATERIAL

Valve Body: SS304/ SS316L

Spring: SS304/ SS316L

Valve Seat Seal: EPDM(VMQ or FPM) per FDA 21 CFR 177.2600

Body Seal: EPDM(VMQ or FPM) per FDA 21 CFR 177.2600

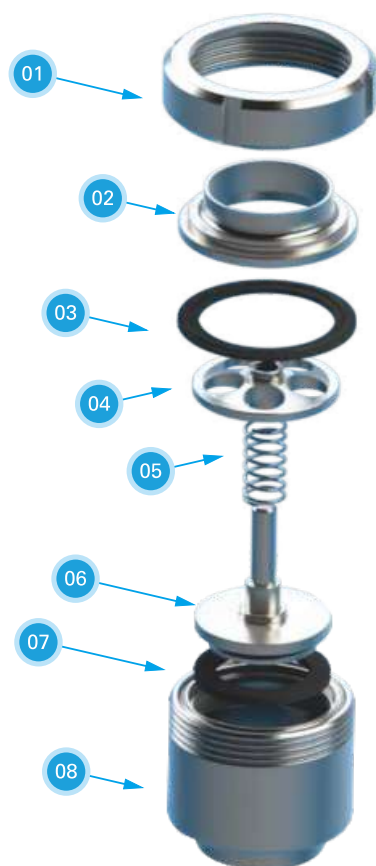
TECHNICAL SPECIFICATIONS

Size: 1"-4" or DN25-DN100

Max.Working Temperature: -10°C to 120°C



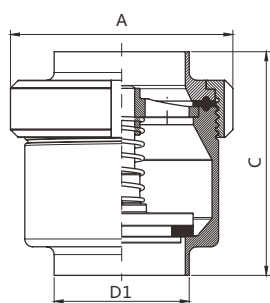
EXPLODED VIEW



Item	Name	Material	QTY
1	Nut	SS304	1
2	Valve Cap	SS304/ SS316L	1
3	Body Seal	EPDM*	1
4	Valve Disc	SS304/ SS316L	1
5	Spring	SS304/ SS316L	1
6	Valve Stem	SS304/ SS316L	1
7	Seat Seal	EPDM*	1
8	Valve Body	SS304/ SS316L	1

* Seal material available in EPDM, VMQ, FPM or on request

VCU CHECK VALVE



Model No	Size	A	C	D1
VCU11XX1100	1"	64	68	25.4
VCU11XX1125	1 1/4"	64	68	31.8
VCU11XX1150	1 1/2"	71	76	38.1
VCU11XX1200	2"	86	86	50.8
VCU11XX1250	2 1/2"	108	102	63.5
VCU11XX1300	3"	145.3	120	76.2
VCU11XX1400	4"	64	68	101.6
VCU11XX2025	DN25	64	68	28
VCU11XX2032	DN32	71	76	34
VCU11XX2040	DN40	86	86	40
VCU11XX2050	DN50	100	102	52
VCU11XX2065	DN65	112	110	70
VCU11XX2080	DN80	123	120	85
VCU11XX2100	DN100	143.5	135	104

Y BALL CHECK VALVE VCY Series

CONCEPT

When liquid flows through the valve, the ball is forced into the branch of the valve allowing full fluid flow. When the liquid stops, equalizing the pressure, the ball drops back into the seat, preventing backflow. Should reverse flow occur, the differential pressure will cause the ball to seal firmly against the seat preventing leakage.



DESIGN FEATURES

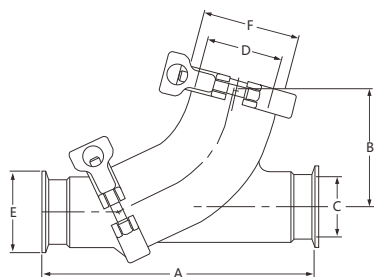
- Two piece construction for easier alignment during installation
- ID and OD polished to 3A standards
- All metal contact surfaces of 316L stainless steel construction
- PTFE ball
- Field serviceable without special tools

TECHNICAL DATA

Max. Temperature: +120°C

Max. Pressure: 10 Bar

DRAWING



Model No	Size	A	B	C	D	E	F
VCY22651150	1 1/2"	190.5	83.8	34.5	47.5	50.5	64
VCY22651200	2"	215.9	99	47.2	59.2	64	77.5
VCY22651250	2 1/2"	254	114.3	60.2	72.9	77.5	91
VCY22651300	3"	292.1	134.6	72.9	97.3	91	119

AIR BLOW CHECK VALVES

VCA Series

CONCEPT

VCA Air Blow Check Valve is designed to evacuate lines of product or CIP solution and for air agitation of product in tanks and other vessels. It also helps to protect pipelines against corrosion – air drying of lines permits formation of protective oxide film



WORKING PRINCIPLE

Filtered air enters adapter (A) and exerts pressure on the valve plug assembly (B) causing it to move forward and unseat. The filtered air passes through the valve and around the valve plug assembly (B) entering the pipeline or tank. When the air pressure entering the adapter (A) is shut-off the valve plug assembly is returned to its normally closed position by return spring, preventing any product or CIP solution backflow.

DESIGN AND FEATURES

- The air blow check valve can be used in any position: horizontal or vertical
- Fail Safe Operation – backflow of product or CIP solution prevented by simple air to open, spring to close operation
- Easy Assembly/Disassembly – Tri-Clamp connections permit quick disassembly and assembly for replacing Filter Media, cleaning or inspection.
- Remotely Controlled – can be remotely controlled by controlling the supply of air to the valve.
- Rugged Construction – type 316 stainless steel is standard. Spherical plug assembly is bonded EPDM rubber.
- Choice of Quick Coupler, 1" Hose Barb, or 3 /8", 1/2" Female NPT air line adapters.

TECHNICAL DATA

Temperature Range: -0°C to + 121°C

Air Pressure: Min. 1 Bar

MATERIAL

Wetted Steel Parts: SS316L

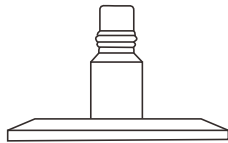
Other Steel Parts: SS304

Wetted Seals: EPDM per FDA 177.2600

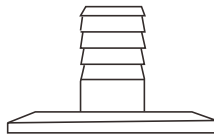
Other Seals: FPM per FDA 177.2600

CHECK VALVE

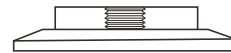
VARIETY OF ADAPTERS AVAILABLE



"A" ADAPTER
With Air Line Quick Coupler

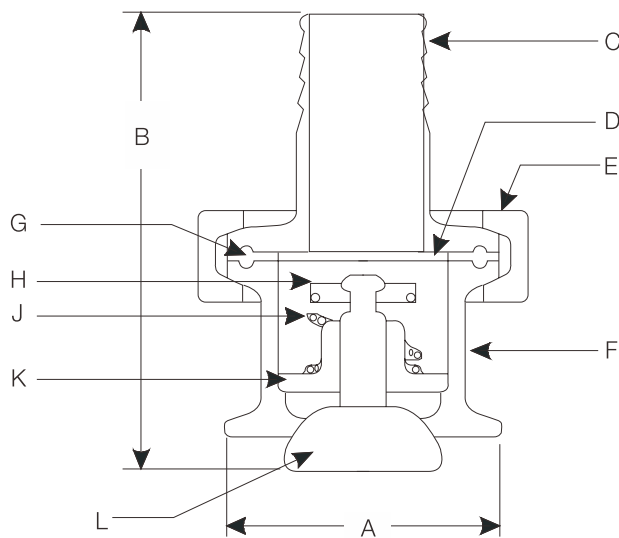


"B" ADAPTER
With 1" ID Rubber Hose



"C" ADAPTER
With 3/8" or 1/2" NPT Female Connection

DIMENSIONS(inches)



Item	Description
C	Adaptor
D	Filter Disc
E	Clamp
F	Valve Body
G	Perforated Disc
H	Washer
J	Spring
K	Stem Guide
L	Plug Assembly

Model No	Size	A	B		
			"A" adaptor	"B" adaptor	"C" adaptor
VCA2A621150	1.5"	50.5	63.5	123.8	50.8
VCA2A621200	2"	64	63.5	123.8	50.8
VCA2A621250	2.5"	77.5	63.5	123.8	50.8
VCA2A621300	3"	91	63.5	123.8	50.8
VCA2A621400	4"	119	63.5	123.8	50.8

INSERT CHECK VALVE

VCP Series

CONCEPT

Insert Check Valve VCP Series are for use with new or existing sanitary ferrules. The SC design seals on the ID of ferrules with replaceable food grade seals (Standard is FDA EPDM), the valve fits 3A Clamp fittings, Q-Line and S-Line fittings and others with ID dimensions equal to the "F" dimensions listed below (ferrules not included). The compact SC design fits inside a single fitting and requires no additional space in the line. Its size makes it extremely economical when compared to full-bodied valves.



TECHNICAL DATA

Temperature Range: -0°C to + 121°C

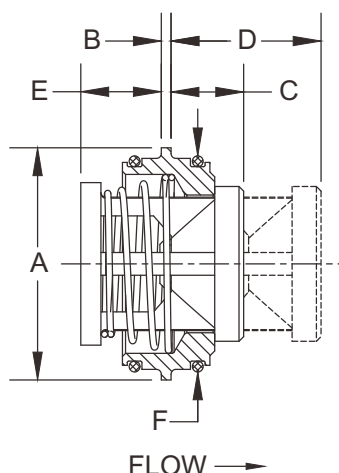
Air Pressure: Min. 1 Bar

MATERIAL

Wetted Steel Parts: SS316L

Spring: SS316L

Wetted Seals: EPDM per FDA 177.2600



Model No	Size	A	B	C	D	E	F
VCP621075	3/4"	19.05	1.65	11	19	7	15.75
VCP621100	1"	25.4	1.65	12.5	22	7.5	22.1
VCP621150	1.5"	38.1	1.65	12.5	26	16	34.8
VCP621200	2"	50.8	1.65	15.5	35	16	47.2
VCP621250	2.5"	63.5	1.65	16.5	39	22	60.2
VCP621300	3"	76.2	1.65	19	50	32	72.9
VCP621400	4"	101.6	1.65	22	61	41	97.2