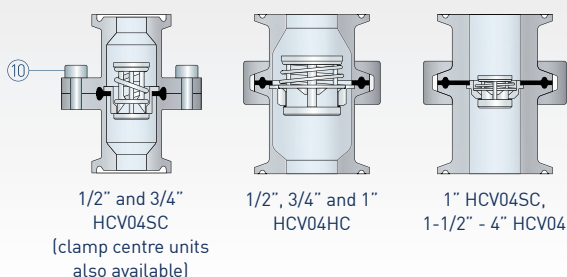
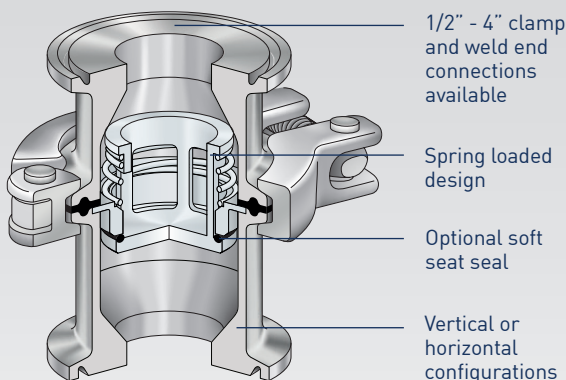


# HCV04 CHECK VALVE



## HCV04

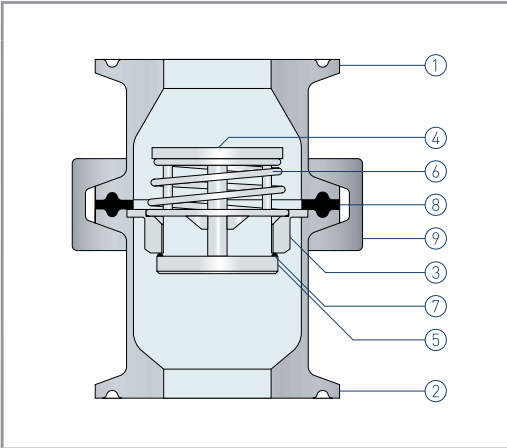
The HCV04 range is ideally suited to steam, condensate and process fluid applications. Standard valves have metal-metal seating and a choice of 8 or 35 mbar opening pressure. A range of soft seat options are also available. Wetted surfaces on all valves are finished to 0.5 microns Ra. 1/2" to 1" valves are available in either standard or high capacity configuration. The HCV04 is also suitable for use as an anti-vacuum valve or pressure relief device.

<b>P Pressure Rating</b>	Up to 10 barg
<b>T Temperature Rating</b>	Up to 200°C with metal-metal seating Up to 200°C with Viton, Silicone or Perlast seat seal Up to 150°C with EPDM seat seal
<b>U Connections</b>	1/2" - 4" ASME BPE clamp fittings DN8 - DN50 DIN and ISO clamp fittings
<b>W Wetted Parts</b>	316L stainless steel*
<b>S Seal Material</b>	Body seal - PTFE-Viton envelope Standard valves have metal-metal seating Optional body and seat seal combinations - EPDM, Viton, Silicone or Perlast
<b>M Opening Pressure</b>	8 or 35 mbar
<b>Surface Finish</b>	Wetted surfaces - 0.5 microns Ra (SF1) External surfaces - 0.8 microns Ra
<b>Options</b>	Eccentric connections DIN and ISO clamp and weld end connections ASME BPE weld end connections Low ferrite stainless steel (WN1.4435) Clamped body joint - 1/2" and 3/4" HCV04SC models Bolted body joint - 1/2" - 4" HCV04 models Electropolished finish (SF4)
<b>C Certification</b>	Certificate of conformity Material certification FDA Elastomer compliance certificate USP Elastomer compliance certificate Certified 'Animal Derived Ingredient' free

### ★ Features

- Ideally suited to steam and condensate applications
- Wide range of connection types and sizes
- Optional finishes available - SF1 and SF4
- Concentric and eccentric versions available
- Easy to maintain

\*Spring is 316 S11 stainless steel



1/2" and 3/4" HCV04SC models have a bolted body joint as standard.

Part	Description
1	Inlet body 316L stainless steel
2	Outlet body 316L stainless steel
3	Cartridge valve body 316L stainless steel
4	Cartridge valve piston 316L stainless steel
5	Cartridge valve head 316L stainless steel
6	Cartridge valve spring 316 stainless steel
7	Optional seat seal EPDM, Viton, Silicone or Perlast
8	Body seal* PTFE-Viton envelope, EPDM, Viton or Silicone
9	Body clamp 304 stainless steel
10	Body screw** Stainless steel

\*The standard body seal for a metal-metal seated valve is a PTFE-Viton envelope gasket. Other seal materials are available upon request. For soft seated valves, the body seal is typically matched to the seat seal material. Valves with Perlast seat seal will have a PTFE-Viton body seal.

All seals are FDA and USP compliant. USP seals tested at 121°C are available to special order.

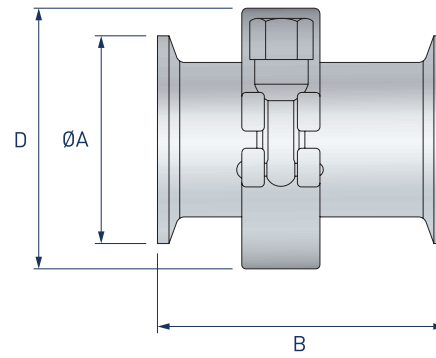
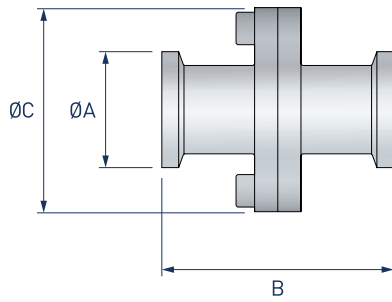
\*\*1/2" and 3/4" SC only see illustration on page 1

	Flow	Effect on opening pressure due to valve orientation (mbar)							
		1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"
08 mbar spring	↔	0	0	0	0	0	0	0	0
	↑	+4	+4	+4	+4	+4	+4	+5	+7
	↓	-4	-4	*	*	*	*	*	*
35 mbar spring	↑	+4	+4	+4	+4	+4	+5	+5	+7
	↓	-4	-4	-4	-4	-4	-5	-5	-7

\*Valves not suitable for orientation with flow downward when fitted with 8 mbar spring as valve may fail to close

**Service Parts** - Body seal (8), seat seal (7) where fitted

1/2" and 3/4" HCV04SC models



Size ASME BPE	ØA	Dimensions (mm)			Drainable in horizontal	Kv(m <sup>3</sup> /h)	Weight (kg)
		B	ØC	D			
1/2" SC	25	50	44	-	×	2	0.15
1/2" HC	25	80	-	60	×	4	0.5
3/4" SC	25	50	44	-	✓	2	0.15
3/4" HC	25	80	-	60	×	4	0.5
1" SC	50.5	70	-	60	✓	4	0.5
1" HC	50.5	70	-	60	×	8	0.5
1-1/2"	50.5	80	-	60	✓	8	0.65
2"	64	80	-	78	✓	18	0.75
2-1/2"	77.5	80	-	120	✓	32	1.1
3"	91	80	-	135	✓	60	1.3
4"	119	80	-	180	✓	109	1.5

### ASME BPE part number ordering key

Product	Size	Connection	Seat seal	Spring
-	-	-	-	-
Standard capacity HCV04SC	1/2" ASME BPE 3/4" ASME BPE 1" ASME BPE	Clamp C Weld W	Metal M EPDM EBKU Viton VBKU	8 mbar 08 35 mbar 35
High capacity HCV04HC	1/2" ASME BPE 3/4" ASME BPE 1" ASME BPE		Silicone SW Perlast PLW	
HCV04	1-1/2" ASME BPE 2" ASME BPE 2-1/2" ASME BPE 3" ASME BPE 4" ASME BPE			

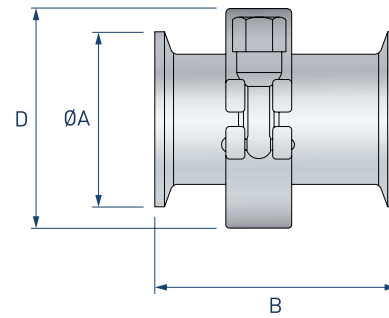
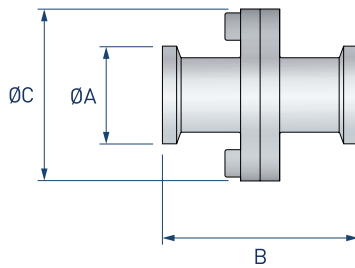
### Example

<b>HCV04</b>	<b>-</b>	<b>150C</b>	<b>-</b>	<b>M</b>	<b>-</b>	<b>08</b>
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### Specification text

Staitech HCV04 check valve manufactured in 316L stainless steel with PTFE-Viton body seal. 1-1/2" ASME BPE clamp connection. Metal-metal seating. 8 mbar spring. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HCV04-150C-M-08). For electropolished finish add suffix '-EP' (HCV04-150C-M-08-EP).

DN8SC and DN10SC models



Size DIN	Dimensions (mm)				Kv(m <sup>3</sup> /h)	Weight (kg)
	ØA	B	ØC	D		
DN8SC & DN10SC	34	50	44	-	2	0.15
	25	50	44	-	2	0.15
DN10HC	34	80	-	60	4	0.5
	25	80	-	60	4	0.5
DN15	34	80	-	60	4	0.5
	25	80	-	60	4	0.5
DN20	34	80	-	60	4	0.5
DN25SC	50.5	70	-	60	4	0.5
DN25HC	50.5	70	-	60	8	0.5
DN32	50.5	70	-	60	8	0.5
DN40	50.5	80	-	60	8	0.65
DN50	64	80	-	78	18	0.75

Note - larger sizes available upon request

### DIN part number ordering key

Product	Connection		Size	Seat seal		Spring		Options
Standard capacity HCV04SC	Clamp C	-	DIN DN8 34.0-8.0	Metal M	-	8 mbar 08	-	Electropolishing EP
	Weld W	-	25.0-8.0	EPDM - black EBKU	-	35 mbar 35	-	
		-	DIN DN10 34.0-10.0	Viton - black VBKU	-		-	
		-	25.0-10.0	Silicone - white SW	-		-	
		-		Perlast - white PLW	-		-	
High capacity HCV04HC	Clamp C	-	DIN DN10 34.0-10.0		-		-	
	Weld W	-	25.0-10.0		-		-	
HCV04	Clamp C	-	DIN DN15 34.0-15.0		-		-	
			25.0-15.0		-		-	
	Weld W	-	DIN DN20 34.0-20.0		-		-	
			25.0-20.0		-		-	
			DIN DN25 50.5-25.0		-		-	
			DIN DN32 50.5-32.0		-		-	
		DIN DN40 50.5-38.0		-		-		
		DIN DN50 64.0-50.0		-		-		

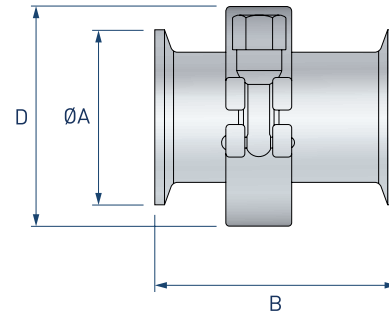
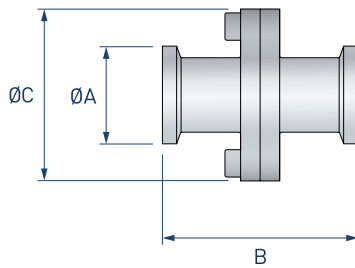
### Example

HCV04SC	-	C	-	34.0-8.0	-	M	-	08	-	EP
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### Specification text

Staitech HCV04SC check valve manufactured in 316L stainless steel with PTFE-Viton body seal. DIN DN8 clamp connection. Metal-metal seating. 8 mbar spring. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. [HCV04-C-34.0-8.0-M-08]. For electropolished finish add suffix '-EP' (HCV04-C-34.0-8.0-M-08-EP).

DN8SC and DN10SC models



Size ISO	Dimensions (mm)				Kv(m <sup>3</sup> /h)	Weight (kg)
	ØA	B	ØC	D		
<b>DN8SC &amp; DN10SC</b>	25	50	40	-	2	0.15
<b>DN8HC &amp; DN10HC</b>	25	70	-	60	4	0.15
<b>DN15</b>	34	70	-	60	4	0.5
	50.5	70	-	60	4	0.5
<b>DN20SC</b>	50.5	70	-	60	4	0.5
<b>DN20HC</b>	50.5	70	-	60	8	0.5
<b>DN25</b>	50.5	70	-	60	8	0.5
<b>DN32</b>	64	80	-	78	8	0.65
<b>DN40</b>	40	80	-	78	18	0.75

### ISO part number ordering key

Product	Connection		Size		Seat seal		Spring	
	-	-			-	-		
Standard capacity HCV04SC	Clamp	C	ISO DN8	25.0-10.3	Metal	M	8 mbar	08
	Weld	W	ISO DN10	25.0-14.0	EPDM	EBKU	35 mbar	35
			ISO DN20	50.5-23.7	Viton	VBKU		
High capacity HCV04HC	Clamp	C	ISO DN8	25.0-10.3	Silicone	SW		
	Weld	W	ISO DN10	25.0-14.0	Perlast	PLW		
			ISO DN20	50.5-23.7				
HCV04	Clamp	C	ISO DN15	34.0-18.1				
	Weld	W	ISO DN15	50.5-18.1				
			ISO DN20	50.5-23.7				
			ISO DN25	50.5-29.7				
			ISO DN32	64.0-38.4				
			ISO DN40	64.0-44.3				

### Example

<b>HCV04HC</b>	-	<b>C</b>	-	<b>25.0-10.3</b>	-	<b>M</b>	-	<b>08</b>
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### Specification text

Staitech HCV04HC check valve manufactured in 316L stainless steel with PTFE-Viton body seal. ISO DN8 clamp connection. Metal-metal seating. 8 mbar spring. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HCV04HC-C-25.0-10.3-M-08). For electropolished finish add suffix '-EP' (HCV04HC-C-25.0-10.3-M-08-EP).