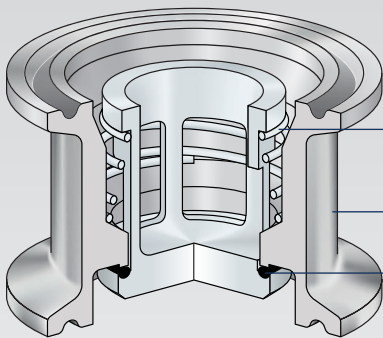


# HCV05 CHECK VALVE



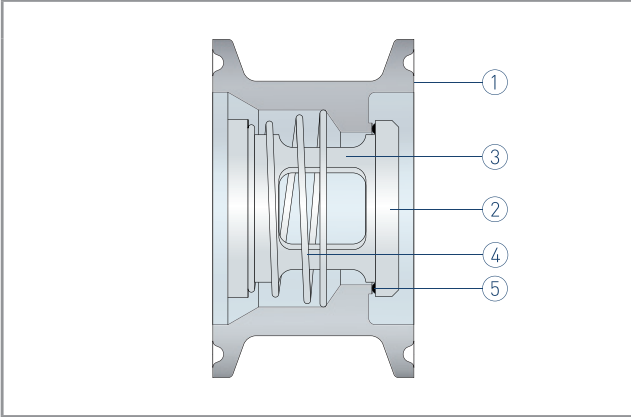
- Spring loaded design
- Compact design
- Soft seat options

## HCV05

The HCV05 is a one-piece non-maintainable valve intended for steam, condensate and process fluid applications. Standard valves have metal-metal seating and a choice of 8 or 35 mbar opening pressure. A number of soft seat seal options are also available. The HCV05 is also suitable for use as an anti-vacuum valve or pressure relief valve 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>I Connections</b>	1/2" - 6" ASME BPE clamp fittings DN8 - DN50 DIN clamp fittings DN8 - DN40 ISO clamp
<b>Wetted Parts</b>	316L stainless steel*
<b>Seal Material</b>	Standard valves have metal-metal seating Optional seat seal - EPDM, Viton, Silicone or Perlast
<b>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>	Alternate end connections Low ferrite stainless steel (WN1.4435), C22 and other alloys Electropolished finish (SF4)
<b>C Certification</b>	Certificate of conformity Material certification FDA elastomer compliance certificates USP elastomer compliance certificates Certified 'Animal derived ingredient' free
<b>★ Features</b>	<ul style="list-style-type: none"> <li>• Short face-face dimension ideal for confined installations</li> <li>• Ideally suited to steam and condensate duties</li> <li>• All surfaces meet SF1 or SF4 criteria</li> <li>• Full range of ASME BPE, DIN and ISO sizes</li> <li>• Maintenance free design</li> </ul>

\*Spring is 316 S11 stainless steel



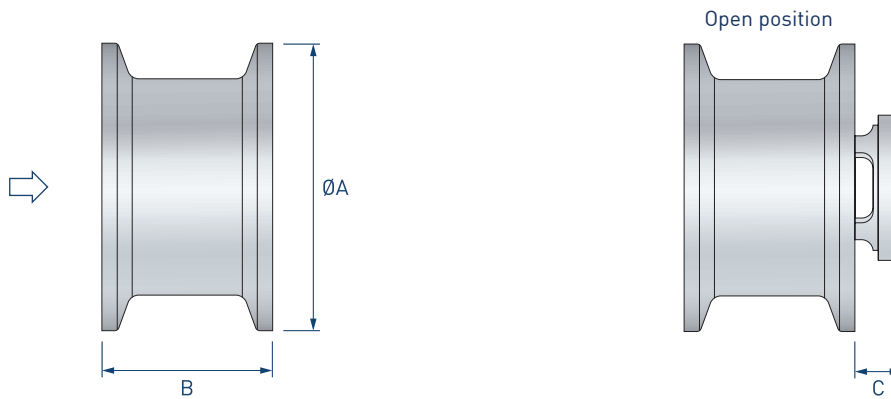
Part	Description
1	Body 316L stainless steel
2	Valve head 316L stainless steel
3	Piston 316L stainless steel
4	Spring 316 stainless steel
5	Optional seat seal* EPDM, Viton, Silicone or Perlast

\*All seal options are FDA and USP compliant. EPDM seals are USP 121°C compliant.

	Flow	Effect on opening pressure due to valve orientation (mbar)			
		1/2"	3"	4"	6"
8 mbar spring	↔	0	0	0	0
	↑	+4	+4	+5	+8
	↓	*	*	*	*
35 mbar spring	↑	+5	+5	+5	+8
	↓	-5	-5	-6	-8

\*Valve will hang open when installed vertically with the flow in a downward direction.

**Service Parts** - Standard valves with metal-metal seating are non-maintainable  
 A replacement seal (5) is available for soft seated valves in sizes 3/4" - 6". 1/2" soft seat seal valves are non-maintainable



Size ASME BPE	Dimensions (mm)			Kv(m <sup>3</sup> /h)	Weight (kg)
	ØA	B	C		
1/2"	25	40	-	2	0.1
3/4"	25	40	-	2	0.1
1"	50.5	25	3	4	0.15
1-1/2"	50.5	30	10	8	0.18
2"	64	35	9	18	0.35
2-1/2"	77.5	55	12	32	0.3
3"	91	60	12	60	0.6
4"	119	80	15	109	2.0
6"	167	120	15	190	4.5

### ASME BPE part number ordering key

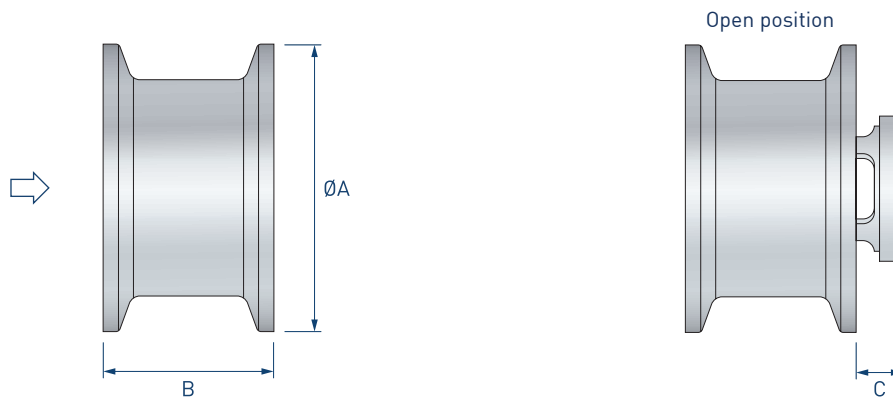
Product	Clamp size	Connection	Seat seal	Spring	Options
-	-	-	-	-	-
HCV05	1/2" ASME BPE 3/4" ASME BPE 1" ASME BPE 1-1/2" ASME BPE 2" ASME BPE 2-1/2" ASME BPE 3" ASME BPE 4" ASME BPE 6" ASME BPE	050 075 100 150 200 250 300 400 600	Clamp C Metal M EPDM - black EBKU Viton - black VBKU Silicone - white SW Perlast - white PLW	8 mbar 08 35 mbar 35	Electropolishing EP

### Example

HCV05	-	050C	-	M	-	08	-	EP
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### Specification text

Staitech HCV05 check valve manufactured in 316L stainless steel. 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. (HCV05-050C-M-08). For electropolished finish add suffix '-EP' (HCV05-050C-M-08-EP).



Size DIN	Dimensions (mm)			Kv(m <sup>3</sup> /h)	Weight (kg)
	ØA	B	C		
<b>DN8 &amp; DN10</b>	25 or 34	40	-	2	0.1
<b>DN15</b>	25 or 34	40	-	2	0.1
<b>DN20 DN25</b>	25 or 34	25	3	4	0.15
<b>DN32 DN40</b>	50.5 50.5	30	10	8	0.18
<b>DN50</b>	64	35	9	18	0.35

### DIN part number ordering key

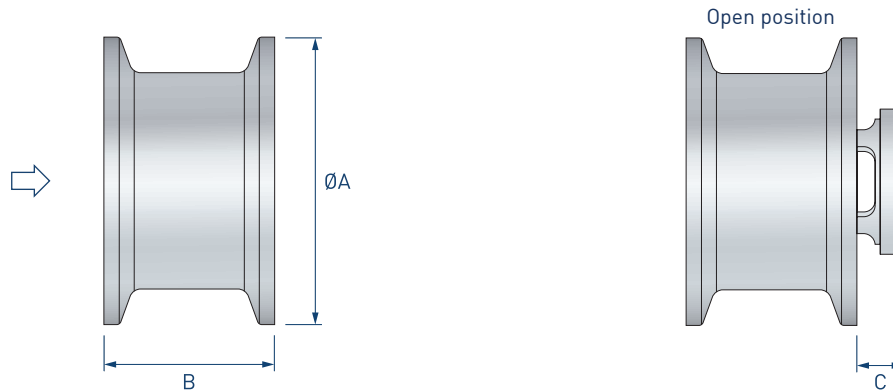
Product	Connection		Size	Seat seal		Spring		Options	
HCV05	-	Clamp C	DIN DN8 25.0-8.0 34.0-8.0	Metal M	-	8 mbar 08	-	Electropolishing EP	
			DIN DN10 25.0-10.0 34.0-10.0	EPDM - black EBKU		35 mbar 35			
			DIN DN15 25.0-15.0 34.0-15.0	Viton - black VBKU					
			DIN DN15 25.0-16.0 34.0-16.0	Silicone - white SW					
			DIN DN20 34.0-20.0 50.5-20.0	Perlast - white PLW					
			DIN DN25 50.5-25.0 50.5-26.0						
			DIN DN32 50.5-32.0						
			DIN DN40 50.5-38.0						
			DIN DN50 64.0-50.0						

### Example

<b>HCV05</b>	-	<b>C</b>	-	<b>34.0-8.0</b>	-	<b>M</b>	-	<b>08</b>	-	<b>EP</b>
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### Specification text

Staitech HCV05 check valve manufactured in 316L stainless steel. 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. (HCV05-C-34.0-8.0-M-08). For electropolished finish add suffix '-EP' (HCV05-C-34.0-8.0-M-08-EP).



Size ISO	Dimensions (mm)			Kv(m <sup>3</sup> /h)	Weight (kg)
	ØA	B	C		
DN8 & DN10	25	40	-	2	0.1
DN15	25 or 50.5	40	-	2	0.1
DN20	50.5	25	3	4	0.15
DN25 & DN32	50.5	30	10	8	0.18
	50.5				
DN40	64	35	9	18	0.35

### ISO part number ordering key

Product	Connection		Size		Seat seal		Spring		Options	
HCV05	-	Clamp C	ISO DN8	25.0-10.3	Metal	M	8 mbar	08	-	Electropolishing EP
			ISO DN10	25.0-14.0	EPDM - black	EBKU	35 mbar	35		
			ISO DN15	25.0-18.1	Viton - black	VBKU				
				34.0-18.1	Silicone - white	SW				
			ISO DN20	50.5-23.7	Perlast - white	PLW				
			ISO DN25	50.5-29.7						
			ISO DN32	64.0-38.4						
			ISO DN40	64.0-44.3						

### Example

HCV05	-	C	-	25.0-10.3	-	M	-	08	-	EP
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### Specification text

Staitech HCV05 check valve manufactured in 316L stainless steel. ISO DN8 25mm clamp connection. Metal-metal seating. 8 mbar spring. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HCV05-C-25.0-10.3-M-08). For electropolished finish add suffix '-EP' (HCV05-C-25.0-10.3-M-08-EP).