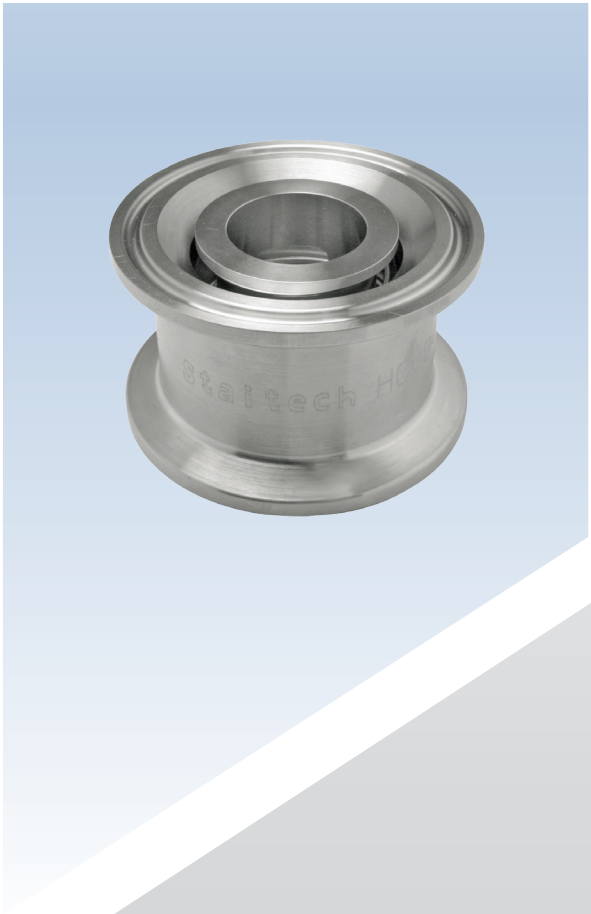
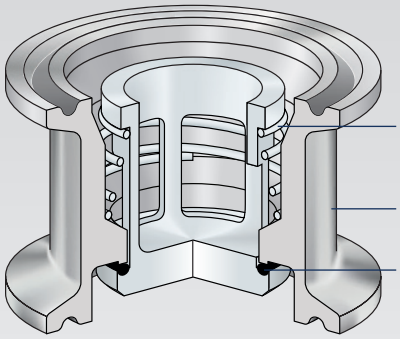
HCV05 CHECK VALVE





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.

Pressure Rating	Up to 10 barg
Temperature Rating	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
Connections	1/2" - 6" ASME BPE clamp fittings DN8 - DN50 DIN clamp fittings DN8 - DN40 ISO clamp
Wetted Parts	316L stainless steel*
Seal Material	Standard valves have metal-metal seating Optional seat seal - EPDM, Viton, Silicone or Perlast
Opening Pressure	8 or 35 mbar
Surface Finish	Wetted surfaces - 0.5 microns Ra (SF1) External surfaces - 0.8 microns Ra
Options	Alternate end connections Low ferrite stainless steel (WN1.4435), C22 and other alloys Electropolished finish (SF4)
Certification	Certificate of conformity Material certification FDA elastomer compliance certificates USP elastomer compliance certificates Certified 'Animal derived ingredient' free

Features

- Short face-face dimension ideal for confined installations
- Ideally suited to steam and condensate duties
- All surfaces meet SF1 or SF4 criteria
- Full range of ASME BPE, DIN and ISO sizes
- Maintenance free design

*Spring is 316 S11 stainless steel

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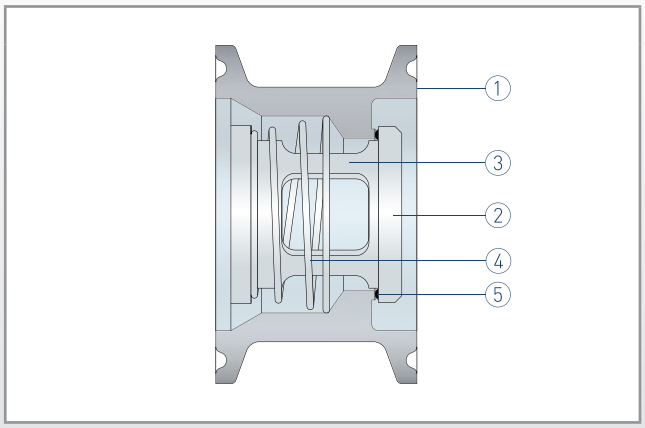

Part		Description
1	Body	316L stainless steel
2	Valve head	316L stainless steel
3	Piston	316L stainless steel
4	Spring	316 stainless steel
5	Optional seat seal*	EPDM, Viton, Silicone or Perlast

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

		Effect on opening pressure due to valve orientation (mbar)			
	Flow	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

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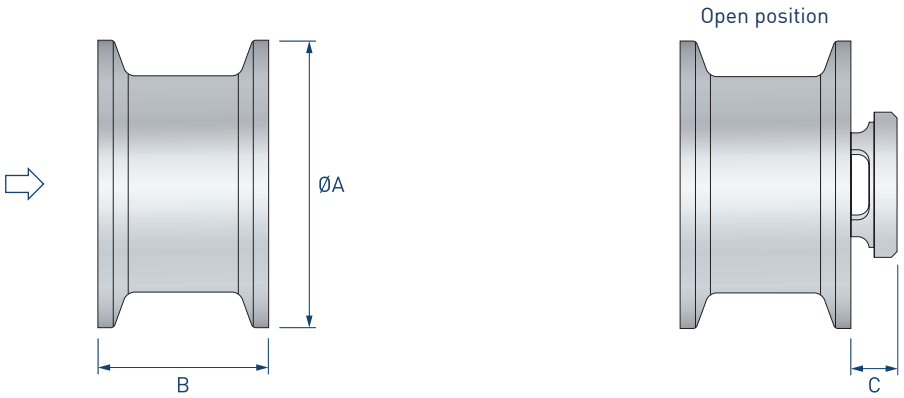


Size ASME BPE	Dimensions (mm) ØA	B	C	Kv(m³/h)	Weight (kg)
1/2"	25	40	-	2	0.1
3/4"	25	40	-	2	0.1
1"	50.5	25	3	4	0.15
1-1/2"	50.5	30	10	8	0.18
2"	64	35	9	18	0.35
2-1/2"	77.5	55	12	32	0.3
3"	91	60	12	60	0.6
4"	119	80	15	109	2.0
6"	167	120	15	190	4.5

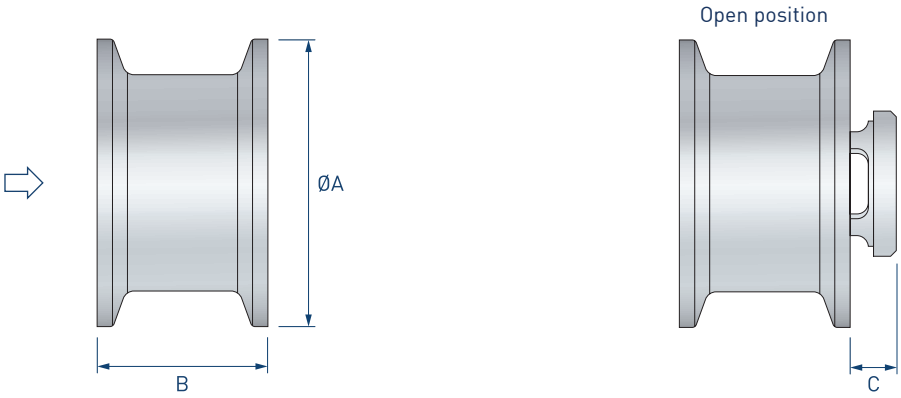
ASME BPE part number ordering key

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

Specification text

Staitech **HCV05 check valve** manufactured in 316L stainless steel. **1/2" ASME BPE clamp** connection. **Metal-metal seating. 8 mbar spring.** Wetted sufaces 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).

HCV05 CHECK VALVE



Size DIN	Dimensions (mm) ØA	B	C	Kv(m³/h)	Weight (kg)
DN8 & DN10	25 or 34	40	-	2	0.1
DN15	25 or 34	40	-	2	0.1
DN20 **DN25**	25 or 34	25	3	4	0.15
DN32 **DN40**	50.5 50.5	30	10	8	0.18
DN50	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**		Metal **M**		8 mbar **08**		Electropolishing **EP**
					34.0-8.0		EPDM - black **EBKU**		35 mbar **35**		
				DIN DN10	**25.0-10.0**		Viton - black **VBKU**				
					34.0-10.0		Silicone - white **SW**				
				DIN DN15	**25.0-15.0**		Perlast - white **PLW**				
					34.0-15.0						
				DIN DN15	**25.0-16.0**						
					34.0-16.0						
				DIN DN20	**34.0-20.0**						
					50.5-20.0						
				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**						

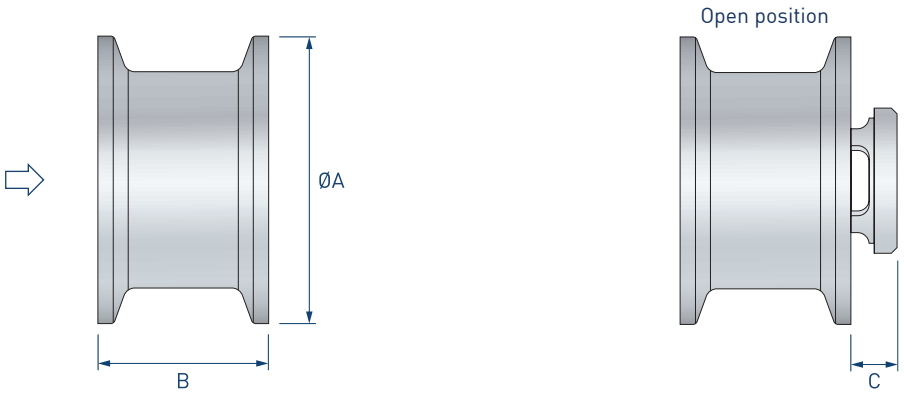
Example

HCV05	-	**C**	-	**34.0-8.0**		-	**M**	-	**08**	-	**EP**

Specification text

Staitech **HCV05 check valve** manufactured in 316L stainless steel. **DIN DN8 clamp** connection. **Metal-metal seating. 8 mbar spring.** Wetted sufaces 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).

HCV05 CHECK VALVE



Size ISO	Dimensions (mm) ØA	B	C	Kv(m³/h)	Weight (kg)
DN8 & DN10	25	40	-	2	0.1
DN15	34 or 50.5	40	-	2	0.1
DN20	50.5	25	3	4	0.15
DN25 & DN32	50.5 50.5	30	10	8	0.18
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	**34.0-18.1**		Viton - black **VBKU**				
					50.5-18.1		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**

Specification text

Staitech **HCV05 check valve** manufactured in 316L stainless steel. **ISO DN8 25mm clamp** connection. **Metal-metal seating. 8 mbar spring.** Wetted sufaces 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).