HCV04 CHECK VALVE



HCV04

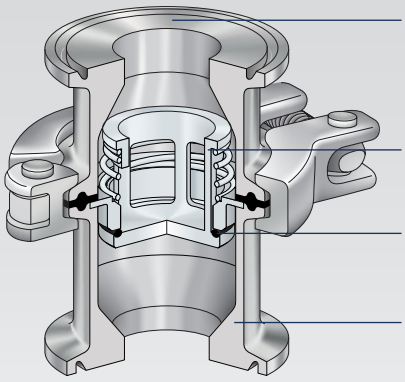
The HCV04 range is ideally suited to steam, condensate and process fluid applications. Standard valves have metal-metal seating and a choice of 8 or 35 mbar opening pressure. A range of soft seat options are also available. Wetted surfaces on all valves are finished to 0.5 microns Ra. 1/2" to 1" valves 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.

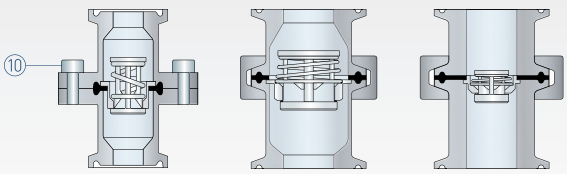
Pressure Rating	Up to 10 barg
Temperature Rating	Up to 200°C with metal-metal seating Up to 200°C with Viton, Silicone or Perlast seat seal Up to 150°C with EPDM seat seal
Connections	1/2" - 4" ASME BPE clamp fittings DN8 - DN50 DIN and ISO clamp fittings
Wetted Parts	316L stainless steel*
Seal Material	Body seal - PTFE-Viton envelope Standard valves have metal-metal seating Optional body and seat seal combinations - 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	Eccentric connections DIN and ISO clamp and weld end connections ASME BPE weld end connections Low ferrite stainless steel (WN1.4435) Electropolished finish (SF4)
Certification	Certificate of conformity Material certification FDA Elastomer compliance certificate USP Elastomer compliance certificate Certified 'Animal Derived Ingredient' free

Features

- Wide range of connection types and sizes
- Optional finishes available - SF1 and SF4
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*Spring is 316 S11 spring steel



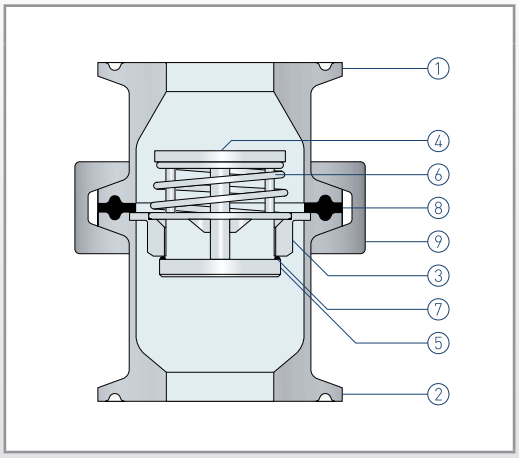


1/2" and 3/4" HCV04SC (clamp centre units also available)

1/2", 3/4" and 1" HCV04HC

1" HCV04SC, 1-1/2" - 4" HCV04

sales@staitech.com / www.staitech.com

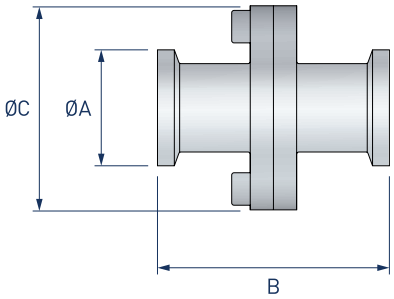


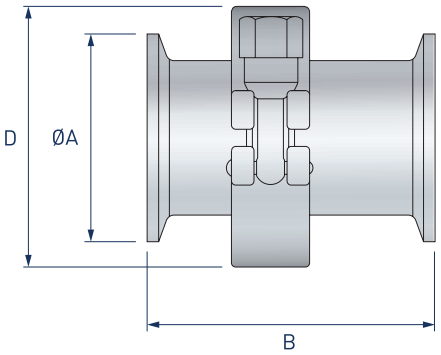
1/2" and 3/4" HCV04SC models have a bolted body joint as standard.

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 Silcone
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

1/2" and 3/4" HCV04SC models





Size ASME BPE	Dimensions (mm) ØA	B	ØC	D	Drainable in horizontal	Kv(m³/h)	Weight (kg)
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

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

sales@staitech.com / www.staitech.com

heleon group +31 (0)187 890 900 info.pharma@heleon-group.com www.heleon-group.com

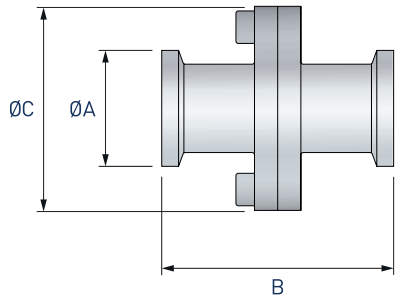
HCV04 ASME BPE connections - ordering code								
Product		**Size**		**Connection**		**Seat seal**		**Spring**
	-				**-**		**-**	
Standard capacity		1/2" ASME BPE	**050**	Clamp **C**		Metal **M**		8 mbar **08**
HCV04SC		3/4" ASME BPE	**075**	Weld **W**		EPDM **EBKU**		35 mbar **35**
		1" ASME BPE	**100**			Viton **VBKU**		
High capacity		1/2" ASME BPE	**050**			Silicone **SW**		
HCV04HC		3/4" ASME BPE	**075**			Perlast **PLW**		
		1" ASME BPE	**100**					
HCV04		1-1/2" ASME BPE	**150**					
		2" ASME BPE	**200**					
		2-1/2" ASME BPE	**250**					
		3" ASME BPE	**300**					
		4" ASME BPE	**400**					
Example								
HCV04	**-**	**150C**			**-**	**M**	**-**	**08**

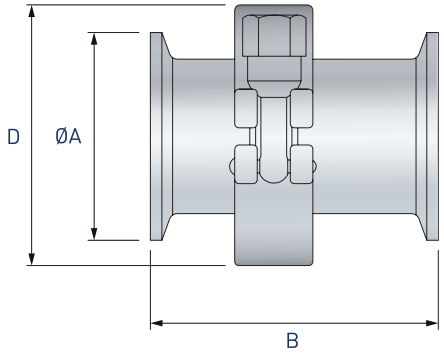
Specification text

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 sufaces 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).

Staitech
Unit 6, Canal Iron Works, Hope Mill Lane,
Brimscombe, Stroud, GL5 2SH, UK
T. +44 (0) 1453 882736 / sales@staitech.com / www.staitech.com

DN8SC and DN10SC models





Size DIN	Dimensions (mm) ØA	B	ØC	D	Kv(m³/h)	Weight (kg)
DN8SC &DN10SC	34 25	50 50	44 44	- -	2 2	0.15 0.15
DN10HC	34 25	80 80	- -	60 60	4 4	0.5 0.5
DN15	34 25	80 80	- -	60 60	4 4	0.5 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

Size ISO	Dimensions (mm) ØA	B	ØC	D	Kv(m³/h)	Weight (kg)
DN8SC & DN10SC	25	50	40	-	2	0.15
DN8HC & DN10HC	25	70	-	60	4	0.15
DN15	34 50.5	70 70	- -	60 60	4 4	0.5 0.5
DN20SC	50.5	70	-	60	4	0.5
DN20HC DN25	50.5 50.5	70 70	- -	60 60	8 8	0.5 0.5
DN32	64	80	-	78	8	0.65
DN40	40	80	-	78	18	0.75

Note - larger sizes available upon request
Note - for DIN and ISO ordering codes consult Staitech

HCV02 DIN connections - ordering code

Product		Connection		Size		Seat seal		Spring
	-		-		-		-	
Standard capacity		Clamp C		DIN DN8	34.0-8.0	Metal M		8 mbar 08
HCV04SC		Weld W			25.0-8.0	EPDM EBKU		35 mbar 35
				DIN DN10	34.0-10.0	Viton VBKU		
					25.0-10.0	Silicone SW		
				DIN DN15	34.0-15.0	Perlast PLW		
					25.0-15.0			
				DIN DN20	34.0-20.0			
					25.0-20.0			
High capacity		Clamp C		DIN DN10	34.0-10.0			
HCV04HC		Weld W			25.0-10.0			
				DIN DN15	34.0-15.0			
					25.0-15.0			
				DIN DN20	34.0-20.0			
					25.0-20.0			
HCV04		Clamp C		DIN DN15	34.0-15.0			
		Weld W			25.0-15.0			
				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**

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 sufaces 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).

HCV02 ISO connections - ordering code

Product		Connection		Size		Seat seal		Spring
	-		-		-		-	
Standard capacity		Clamp C		ISO DN8 25.0-10.3		Metal M		8 mbar 08
HCV04SC		Weld W		ISO DN10 25.0-14.0		EPDM EBKU		35 mbar 35
				ISO DN20 50.5-23.7		Viton VBKU		
High capacity		Clamp C		ISO DN8 25.0-10.3		Silicone SW		
HCV04HC		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								
HCV04HC	-	**C**	-	**25.0-10.3**	-	**M**	-	**08**

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 sufaces 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).