



The HCV01 check valve is designed to fit between two ASME BPE compliant clamp fittings, sealing on the ID of the tube using FDA approved EPDM O-rings. The compact 316 stainless steel design is suitable for a wide range of duties in steam, liquid and gas service, including pressure relieving and anti-vacuum applications. Standard valves have metal-metal seating. A number of soft seat seal and spring options are also available.

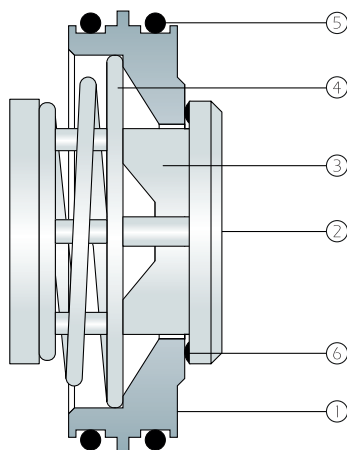


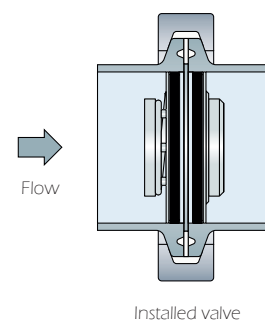
Illustration showing optional seat seal (6) fitted

- P Pressure Rating**  
Up to 50 barg
- T Temperature Rating**  
Up to 135°C or 205°C with alternate seals
- L Connections**  
To suit 3/4" - 4" ASME BPE clamp fittings
- S Seal Material**  
Body seal - EPDM  
Seat seal - metal-metal or EPDM
- M Opening Pressure**  
8, 35, 100 or 240 mbar
- W Surface Finish**  
Body and valve head - 0.5 microns Ra  
Piston surfaces - 1.2 microns Ra
- ✓ Options**  
Alternative spring ranges  
Viton, Aflas or Kalrez body and seat seals  
USP Class VI compliant seals

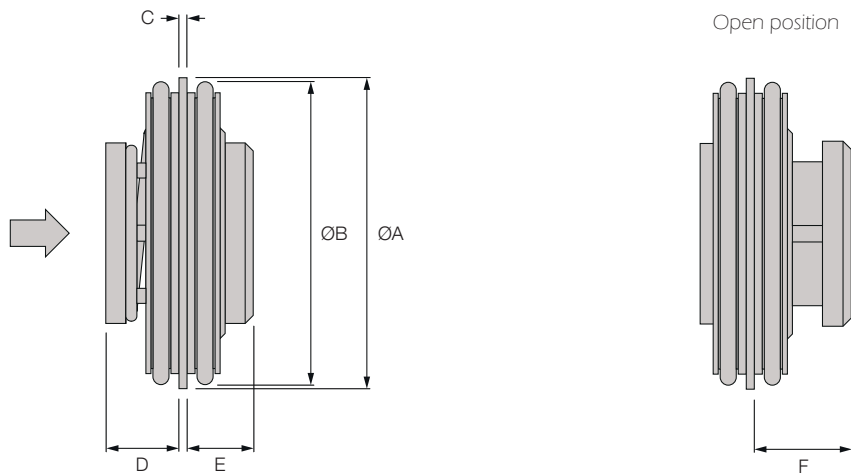
- C Available Certification**
  - CofC** Certificate of Conformity
  - MTR's** Material Certification
  - FDA** FDA Elastomer compliance certificates\*
  - USP** USP Elastomer compliance certificates
  - ADI** Certified 'Animal Derived Ingredient' free

\*Standard seals are FDA compliant only

Part	Description
1	Body 316L stainless steel
2	Valve head 316L stainless steel
3	Piston 316 stainless steel
4	Spring 316 stainless steel
5	Body seals EPDM
6	Optional seat seal EPDM



### HCV01



	Size	Dimensions (mm)						Kv (m <sup>3</sup> /h)	Weight (kg)
	ASME BPE	ØA	ØB	C	D	E	F		
	3/4"	19.0	15.8	1.6	7.1	11.2	19.8	2	0.01
	1"	25.4	22.1	1.6	7.6	13.5	22.6	4	0.03
	1-1/2"	38.1	34.8	1.6	16.0	13.5	26.9	8	0.1
	2"	50.8	47.5	1.6	16.7	16.8	35.3	18	0.2
	2-1/2"	63.5	60.2	1.6	22.4	17.5	39.6	32	0.3
	3"	76.2	72.9	1.6	31.8	19.0	50.0	60	0.3
	4"	101.6	97.4	1.6	41.4	22.4	61.2	90	1.1

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

\*Valves not suitable for orientation with flow downward when fitted with 8 mbar spring



#### Packaging

Individually bagged



#### Service Parts

Seal kit comprising part 5 (2 off per set)

Note - valves with soft seat seal are non-maintainable as the seat seal is captive



#### Specification

See product selector sheet for specification and ordering detail

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Specifications subject to change without notice. HCV01-TB - 05/18



- Spring loaded design
- Maximum operating pressure (PMO) - 50 barg
- Maximum operating temperature - upto 135°C or 205°C with alternate seals
- 3/4" - 4" ASME BPE clamp connection
- Alternative spring ranges
- EPDM seat seal option

### ASME BPE part number ordering key

Product	Size	Connection	Seat seal	Spring	
HCV01	-	-	-	-	
	3/4" ASME BPE	075	Clamp C	Metal M	8 mbar 08
	1" ASME BPE	100		EPDM EBK	35 mbar 35
	1-1/2" ASME BPE	150			100 mbar 100
	2" ASME BPE	200			240 mbar 240
	2-1/2" ASME BPE	250			
	3" ASME BPE	300			
	4" ASME BPE	400			

### Example

HCV01	-	075C	-	M	-	08
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### Specification text

Staitech HCV01 check valve manufactured in 316L stainless steel with EPDM compliant body seals. 3/4" ASME BPE clamp connections. Metal-metal seating. 8 mbar opening pressure. Body and valve head finished to 0.5 microns Ra with piston surfaces finished to 0.8 microns Ra. (HCV01-075C-M-08). For electropolished finish add suffix 'EP' (HCV01-075C-M-08-EP).

### Customer reference number:

Tag number	Part number	Quantity

### Available certification (tick as required)

<input type="checkbox"/>	<b>CofC</b> Certificate of conformity	<input type="checkbox"/>	<b>USP</b> USP elastomer compliance certificates
<input type="checkbox"/>	<b>MTR's</b> Materials certification	<input type="checkbox"/>	<b>ADI</b> Certified 'Animal Derived Ingredient' free
<input type="checkbox"/>	<b>FDA</b> FDA elastomer compliance certificates		