

HCV01B CHECK VALVE

Fully machined version of HCV01 with 0.5Ra (SF1) surface finish



HCV01B

The HCV01B check valve is designed to fit between two ASME BPE compliant clamp fittings, sealing on the ID of the tube using FDA/USP compliant O-rings. The compact 316L stainless steel design is suitable for a wide range of duties in steam, liquid and gas service, including pressure relieving and anti-vacuum applications. Valves are available with either metal-metal or soft seat seal. The standard opening pressure for the HCV01B is either 8 or 35 mbar when installed horizontally. As the HCV01B is machined from 316L stainless steel bar, all surfaces are finished to 0.5 microns Ra (SF1). It can also be supplied with electropolished finish (SF4).

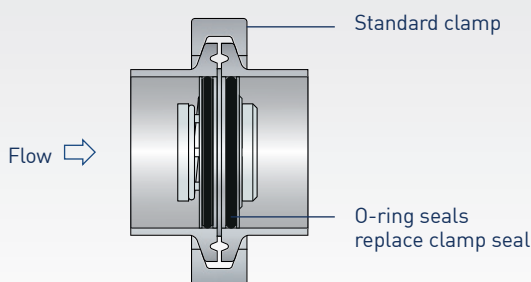
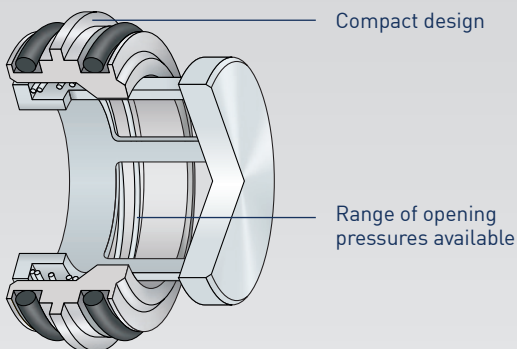
P Pressure Rating	Up to 50 barg
T Temperature Rating	150°C with EPDM seals 200°C with Viton and Silicone seals 200°C with Perlast (PTFE) seals*
Connections	To suit 3/4" - 4" ASME BPE clamp fittings
Wetted Parts	316L stainless steel**
Seal Material	Body seals - EPDM, Viton or Silicone Seat seal - metal-metal, EPDM, Viton or Silicone
Opening Pressure	8 or 35 mbar
Surface Finish	All parts 0.5 microns Ra (SF1)
Options	DIN and ISO sizes Low ferrite stainless steel (WN1.4435) C22 and other alloys Electropolished finish (SF4)
Certification	Certificate of conformity Material certification FDA Elastomer compliance certificate USP Elastomer compliance certificate Certified 'Animal Derived Ingredient' free

★ Features

- Simple to install - fits between ferrules using a standard clamp
- Machined from 316L stainless steel bar
- Integral o-rings eliminate need for clamp seal
- Suitable for steam, liquid and gas applications
- Wide range of spring and seal options

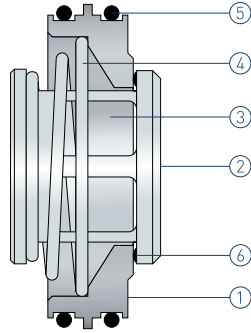
*Perlast is a high performance material with the chemical resistance of PTFE but with sealing properties of a softer elastomer

**Spring is 316 S11 stainless steel



Installed valve

Illustration showing optional seat seal (6) fitted



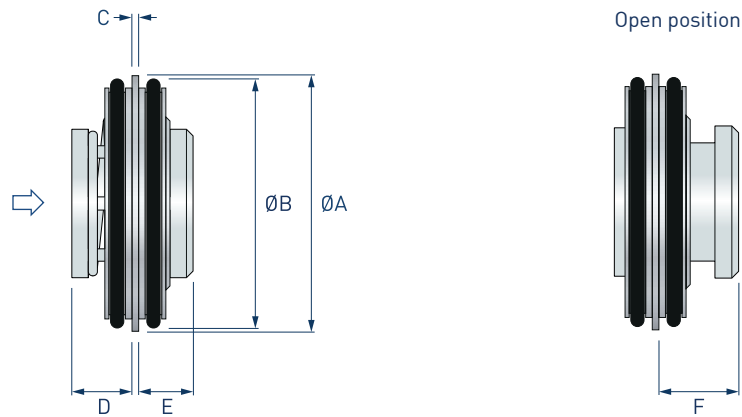
Part	Description
1	Body 316L stainless steel
2	Valve head 316L stainless steel
3	Piston 316L stainless steel
4	Spring 316 stainless steel
5	Body seals EPDM, Viton, Silicone or Perlast
6	Optional seat seal EPDM, Viton, Silicone or Perlast

	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	*	*	*	*	*
35 mbar spring	↑	+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 as valve may fail to close

Service Parts - Seal kit - metal seated valves - 2 body seals (5) per kit
 Seal kit - soft seated valves - 2 body seals (5) per kit and seat seal (6)

HCV01B CHECK VALVE



Size ASME BPE	Dimensions (mm)						Kv(m ³ /h)	Weight (kg)
	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

ASME BPE part number ordering key

Product	Size	Connection	Seal	Spring	Options
HCV01B	3/4" ASME BPE 075	Clamp C	Metal M	8 mbar 08	Electropolishing EP
	1" ASME BPE 100		EPDM - black EBKU	35 mbar 35	
	1-1/2" ASME BPE 150		Viton - black VBKU		
	2" ASME BPE 200		Silicone - white SW		
	2-1/2" ASME BPE 250		Perlast - white P		
	3" ASME BPE 300				
	4" ASME BPE 400				

Example

HCV01B	-	075C	-	M	-	08	-	EP
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Specification text

Staitch HCV01B 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. All parts finished to 0.5 microns Ra (SF1). (HCV01B-075C-M-08). For electropolished finish add suffix '-EP' (HCV01B-075C-M-08-EP).