

#### HCV05 check valve

The HCV05 is a one-piece 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.

#### Operating conditions

Opening pressures: 8 or 35 mbar

Max. operating conditions: 10 barg @ 200°C

Operating temperature range:

Metal-metal seating: 0°C to 200°C

EPDM seat seal: 0°C to 150°C

Viton, Silicone or Perlast seat seal: 0°C to 200°C

#### Standards

- The HCV05 fully complies with the European Pressure Equipment Directive 97/23/EC under the 'Sound Equipment Practice' (SEP) category. In accordance with the standard the product does not carry a CE logo.

- All elastomers used comply with FDA regulation CFR21, paragraph 177, section 2600 and UPS class VI criteria.

- The HCV05 is designed in accordance with the ASME BPE standard where applicable.

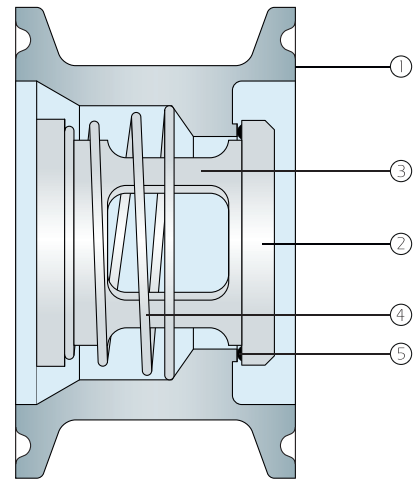
#### Installation

The HCV05 check valve can be installed in any orientation. An arrow marked on the valve body indicates the direction of flow.

#### Maintenance

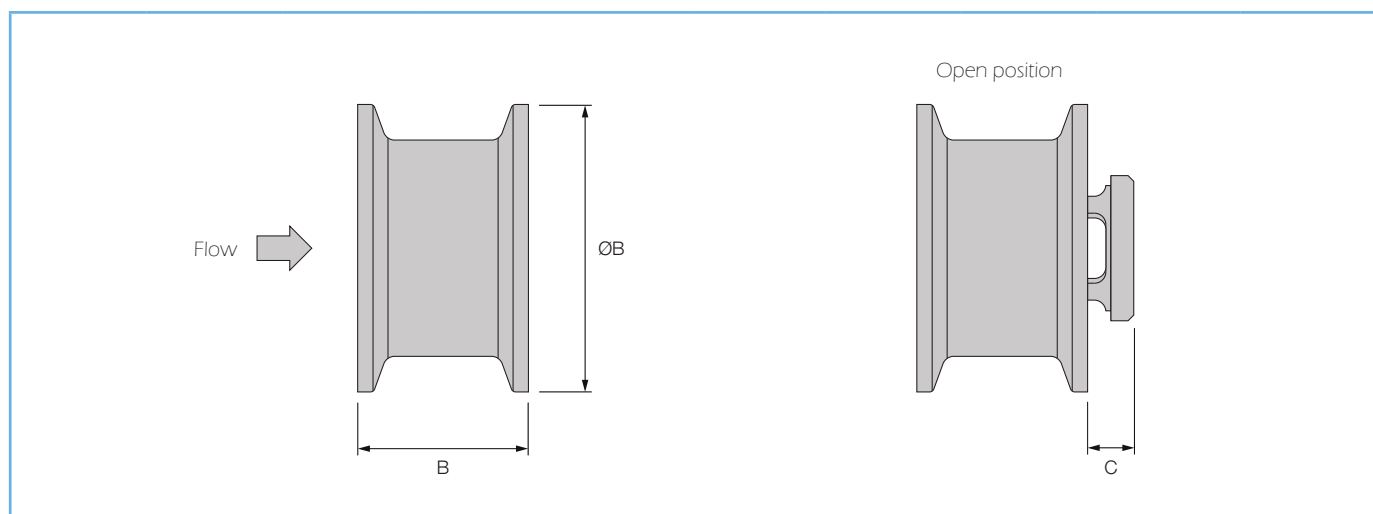
Standard HCV05 valves with metal-metal seating are non-maintainable. The seat seal in soft seated valves can be replaced as follows:

1. Firstly, ensure that any residual pressure has been relieved from the system, and in the case of a liquid system, that the system has been drained.
2. Remove the valve from the pipeline.
3. Remove the seat seal (5) from the head.
4. Fit the replacement seat seal (5) making sure that it is not damaged during the process.
5. Reinstall valve back into the pipeline.



Part		Material
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

Available spares
Seat seal (5)



ASME BPE	ØA	DIN	Dimensions (mm)			B	C	Kv(m <sup>3</sup> /h)	Weight (kg)
			ØA	ISO	ØA				
1/2"	25	DN8 & DN10	25 or 34	DN8 & DB10	25	40	-	2	0.1
3/4"	25	DN15	25 or 34	DN15	25 or 50.5	40	-	2	0.1
1"	50.5	DN20 DN25	25 or 34	DN20	50.5	25	3	4	0.15
1-1/2"	50.5	DN32 DN40	50.5 50.5	DN25 & DN32	50.5 50.5	30	10	8	0.18
2"	64	DN50	64	DN40	64	35	9	18	0.35
2-1/2"	77.5	-	-	-	-	55	12	32	1.3
3"	91	-	-	-	-	60	12	60	1.6
4"	119	-	-	-	-	80	15	109	2.0

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