# HCV03 CHECK VALVE



## HCV03

The HCV03 check valve is designed to fit between two ASME BPE compliant clamp fittings, with a moulded seal profile replacing the standard joint gasket. The valve is suitable for a wide range of duties in liquid and gas service, including pressure relieving and anti-vacuum applications. A number of soft seat seal and spring options are also available. Valve construction materials are FDA compliant.

**Pressure and Temperature**

Max pressure (bar)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3/4" - 2" | 3.8 | 3.8 | 2.3 | 1.7 | 1.4 | 1.2 | 1.2 |
| 2-1/2" - 4" | 1.4 | 1.4 | 0.9 | 0.6 | 0.5 | 0.4 | 0.35 |
| Max temp (°C) | 0 | 38 | 65 | 90 | 121 | 150 | 205 |

**Connections** To suit 3/4" - 4" ASME BPE clamp fittings

**Wetted Parts**
Body - PTFE
Spring - 316 stainless steel

**Seal Material**
Body seal - PTFE (Integral with valve body)
Seat seal - PTFE (Integral with valve body) or EPDM

**Opening Pressure** 8 or 35 mbar

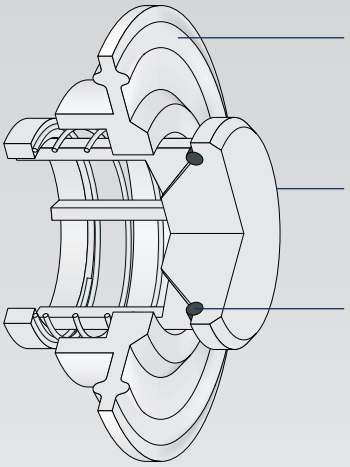
**Surface Finish**
All parts are moulded PTFE with an approximate finish of 1.0 micron Ra

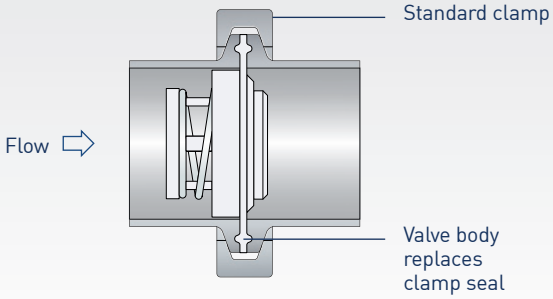
**Options**
100 or 240 mbar opening pressure
Viton and Kalrez seat seals
PTFE coated spring
Clamp with tab to indentify presence

**Certification**
Certificate of conformity
FDA elastomer compliance certificates
Certified 'Animal derived ingredient' free

**Features**

- Simple to install - fits between two standard ferrules - no additional seal required
- PTFE construction with stainless steel spring - optional PTFE coated springs available
- Low pressure loss in all sizes
- Optional soft seats for bubble-tight shut off



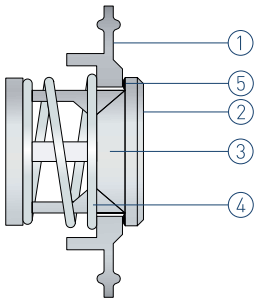




Installed valve

sales@staitech.com / www.staitech.com

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Illustration showing optional seat seal (5) fitted




| Part | | Description |
|---|---|---|
| 1 | Body | PTFE |
| 2 | Valve head | PTFE |
| 3 | Piston | PTFE |
| 4 | Spring* | 316 stainless steel |
| 5 | Optional seat seal** | EPDM |

*PTFE coated spring is also available
**Seat seal is FDA compliant

| | | Effect on opening pressure due to valve orientation (mbar) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Flow | 3/4" | 1" | 1-1/2" | 2" | 2-1/2" | 3" | 4" |
| 08 mbar spring | ↔ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ↑ | +4 | +4 | +4 | +4 | +4 | +5 | +7 |
| | ↓ | -4 | -4 | * | * | * | * | * |
| Other 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

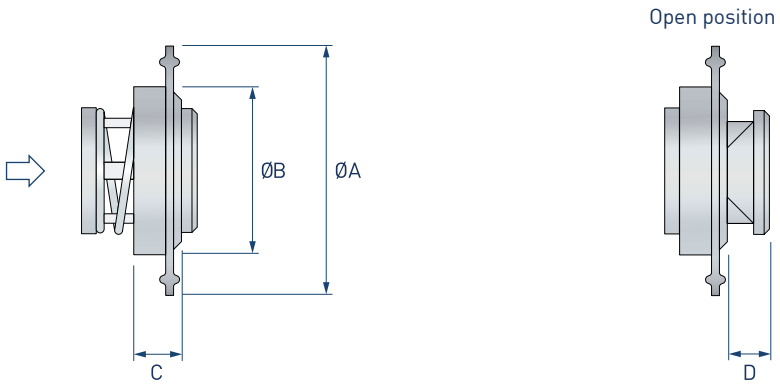
**Service Parts** - The HCV03 is a non-maintainable design

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# HCV03 CHECK VALVE




| Size ASME BPE | Dimensions (mm) ØA | ØB | C | D | Kv(m³/h) | Weight (grams) |
|---|---|---|---|---|---|---|
| **3/4"** | 25 | 14.9 | 14.0 | 15.5 | 2 | 16 |
| **1"** | 50.5 | 21.6 | 14.0 | 17.5 | 4 | 17 |
| **1-1/2"** | 50.5 | 34.0 | 14.0 | 23.1 | 8 | 30 |
| **2"** | 64 | 46.7 | 14.5 | 24.9 | 18 | 50 |
| **2-1/2"** | 77.5 | 59.7 | 15.2 | 24.6 | 32 | 65 |
| **3"** | 91 | 72.1 | 16.3 | 40.1 | 65 | 145 |
| **4"** | 119 | 96.6 | 19.8 | 48.0 | 120 | 320 |

**ASME BPE part number ordering key**

| Product | | Size | | Connection | | Seat seal | | Spring | |
|---|---|---|---|---|---|---|---|---|---|
| | - | | | | - | | - | | |
| HCV03 | | 3/4" ASME BPE | **075** | Clamp **C** | | PTFE **T** | | 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** | | | | | | | | | |
| **HCV03** | **-** | **075C** | | | **-** | **EBK** | **-** | **08** | |

**Specification text**

Staitech **HCV03 check valve**. PTFE construction with 316 stainless steel spring. **3/4" ASME BPE clamp** connections. **EPDM seat seal. 8 mbar spring.** (HCV03-075C-EBK-08)

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