

### How Does it Work?

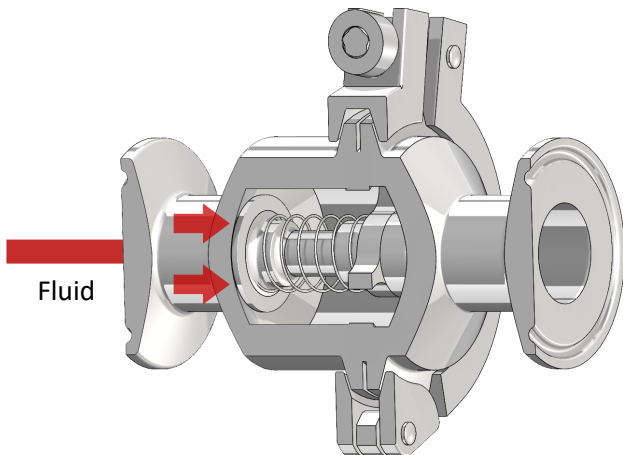
#### Concentric Sanitary Check Valves

This document explains the basic functionality of a Valworx concentric sanitary tri-clamp check valve.

Check valves are designed to passively prevent back flow. They do not require any external energy source or manual user intervention to operate. Check valves open when upstream pressure is sufficient to overcome the spring force holding the disc closed. This is called the “cracking pressure”. When the upstream pressure falls below the cracking pressure, the disc re-seats, closing the valve. Downstream reverse pressure further seats the disc. See product data sheet for individual cracking pressures, as well as further detailed specifications.

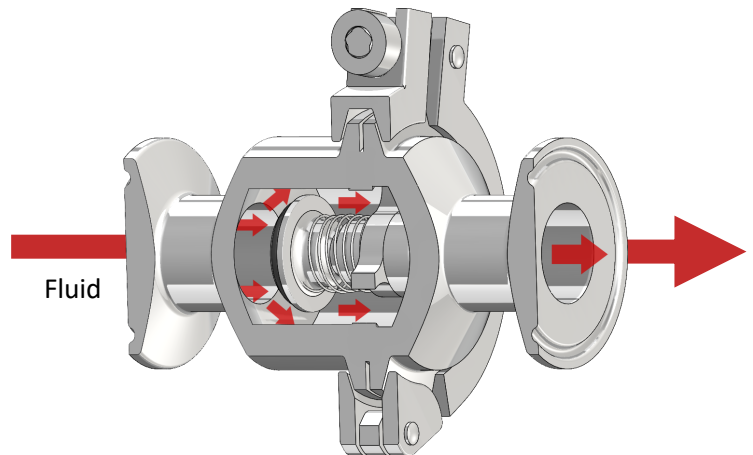
Sanitary check valves are intended for use with non-particulate, free-flowing media - typically in applications where backflow would not be desirable, such as the food, beverage and pharmaceutical industries.

#### Valve Closed

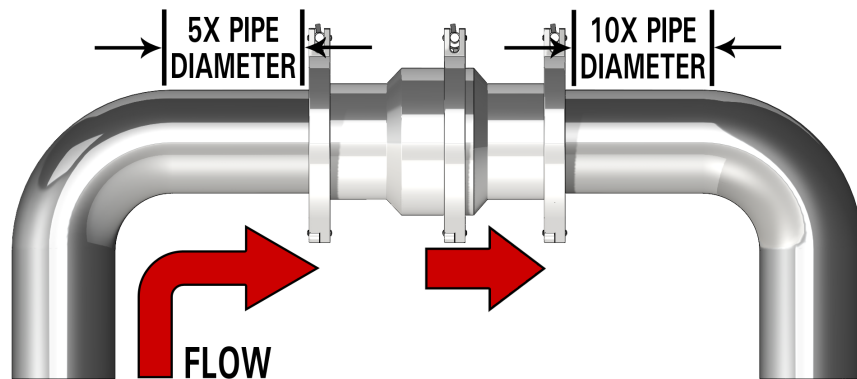


Valve remains normally closed.

#### Valve Open



Valve OPENS when the fluid pressure exceeds the cracking pressure and compresses the spring, thus unseating the disc and allowing fluid to pass through the valve.



Check valves work best with laminar fluid flow. To ensure laminar flow, the valve should be installed with a straight pipe run of 5x Nominal Pipe Diameter (NPD) upstream, and 10x NPD downstream. The valve may be installed close to the inlet of an isolation valve, provided the isolating valve is full port and normally open.