

Don't Gamble with your Sample

Keofitt Aseptic Sampling Valve

Working principle

The Keofitt Aseptic Sampling Valve is designed for sterilization before and after each sampling.

Open valve: Sampling

The manual valve is opened by rotating the handle (adjustable valve) or by activating the lever (on/off valve). The stem and the membrane are then retracted, allowing liquid to pass.

Closed valve: Sterilizing

Using the reverse procedure the built-in spring closes the valve, keeping the channel between the hose pieces open for sterilization. If using steam a small pressure relief valve (optional) on the outlet is recommended.

Standard Design

The Keofitt Aseptic Sampling valve consists of three parts, a valve body, a valve head and a membrane. The rubber membrane is placed on the stem of the valve head and works as a stretchable plug. The valve bodies and valve heads are interchangeable.

The valve is available in two sizes:

- M4 valve for low viscosity products like water, beer, wine and liquid milk.
- W9 for high viscosity products like fruit yoghurt, syrup and ice cream.

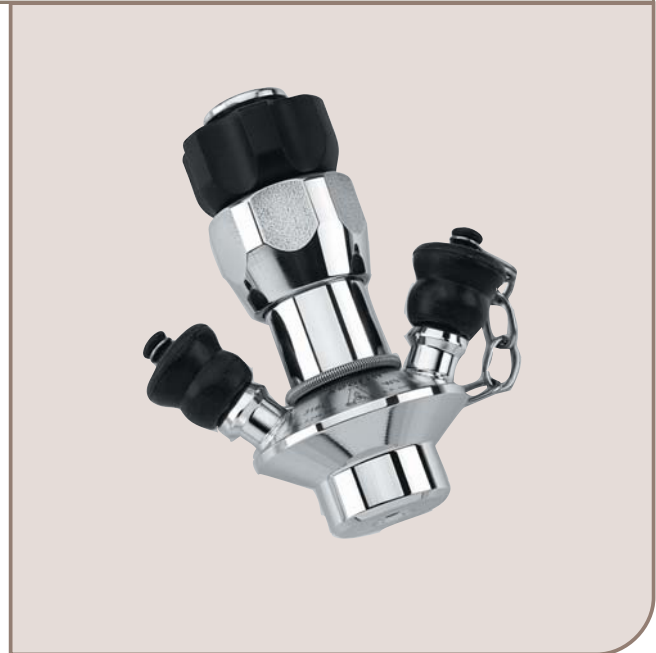
W9 valve is available with micro ports, to enable sampling by hyperdermic needle.

Valve bodies:

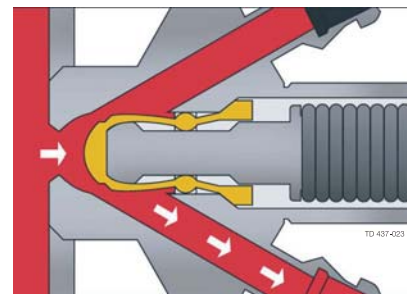
- Type T: Tank (welding).
- Type P: Pipe (welding).
- Type C: Clamp.
- Type S: Socket (threaded).

Valve heads:

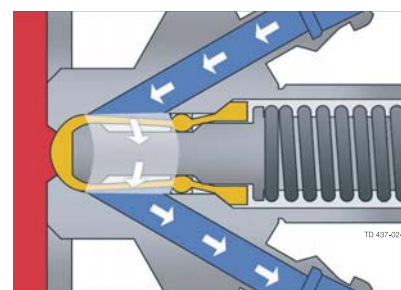
- Type H: Turning handle.
 - Type K: Removable key.
 - Type Q: Quick lever.
 - Type N: Manually and pneumatically operated.
 - Type B: Turning handle (for pressure up to 12 bar).
- The valve is authorized to use the 3A symbol.



Keofitt Aseptic Sampling Valve.



a. Open valve, Sampling.



b. Closed valve, Sterilizing.

Fig. 1. Principle.

Dimensions (mm)

| Pos. | M4 | | W9 | |
|------------|--------------|--------------|------------|-------------|
| | mm | inch | mm | inch |
| A | 70 | 2.76" | 90 | 3.54" |
| B | 4 | 0.16" | 9 | 0.35" |
| C | 5 | 0.2" | 8 | 0.31" |
| D (Tank) | 28 | 1.1" | 28 | 1.1" |
| D (Pipe) | *25 | *0.98" | *25 | *0.98" |
| D (Clamp) | 25 | 0.98" | 50 | 1.97" |
| | (1/2" Clamp) | (1/2" Clamp) | (1" Clamp) | (1" Clamp) |
| D (Socket) | M28x1.5 | M1.1"x0.06" | M28x1.5 | M1.1"x0.06" |
| E | 47 | 1.85" | 68 | 2.68" |

* only for DIN

Materials

- Valve body: Stainless steel AISI 316L (1.4404).
- Valve head: Stainless steel 301, 303, 316L, PEHD/black, PTFE.
- Membrane: Silicone rubber. EPDM rubber. PTFE

Technical data

Pressure

- Max. working pressure 87 psi (6 bar).
- Max. working pressure:
- M4 Type B: 174 psi (12 bar)
- W9 Type B: 218 psi (15 bar)

Temperature

- Temperature range: 33.8°F - 266°F.
- Max. sterilization temperature,
- dry steam 29 psi (2 bar) 249.8°C

Steam must be dry, since condensate will damage the membrane. It is recommended that the membrane be changed every 100 samples/sterilizations or depending on working conditions or experience.

| Valve | Viscosity |
|-------|-------------|
| M4 | 0-100 cP |
| W9 | 0-1000 cP |
| W15 | 0-50000 cP |
| W25 | 0-250000 cP |

Options

- A. Key ring for valve head, type K.
- B. Valve head for pneumatic and manual operation, type N ("A" dimension increases).
- C. Valve head, type B (blocking) without spring, to be used if risk of pressure shocks (handle is white).
- D. For various accessories please see Ordering Leaflet.

Ordering

Please state the following when ordering:

- Please state the following when ordering:
- Valve size, M4 or W9.
- Type of valve body.
- Type of valve head.
- Accessories.
- Other options.

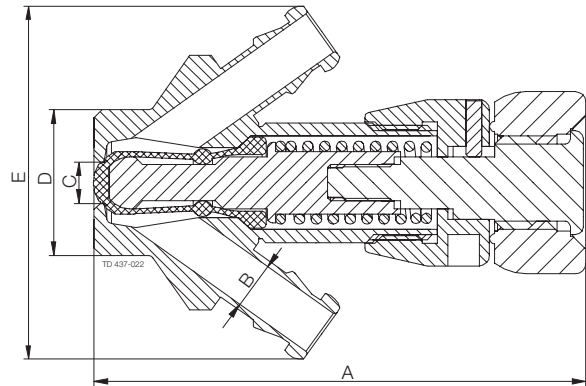
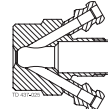


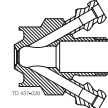
Fig. 2. Dimensions.

Valve bodies:

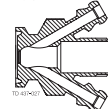
Type T: Tank (welding)



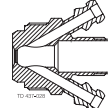
Type P: Pipe (welding)



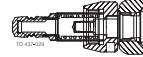
Type C: Clamp



Type S: Socket (threaded)



Type H: Turning handle

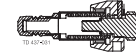


Valve bodies/Valve heads:

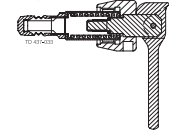
Type B: Turning handle



Type P/Type K: Removable key



Type C/Type Q: Quick lever



Type S/Type N: Pneumatic and manual

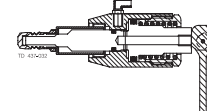


Fig. 3. Valve bodies and valve heads (interchangeable).