



I Application

The Mixproof valve is a completely hygienic double sealing valve. This system allows for the simultaneous processes in the two bodies of the valve by providing interface between the two fluids, preventing the possibility of product contamination. The leakage chamber and the leakage detector can be cleaned by "cavity spray".

Manifolding is one of the applications of these valves in the food-processing industries, especially in the beverage and dairy industries.

I Operating principle

When the valve is open the fluid can pass from one body to the other.

Once the valve is closed, the double seat creates an annular chamber that isolates the bodies sealing them with double seals. It allows a CIP operation providing an interface between the two fluids, preventing the possibility of product contamination.

Due to the leakage detector any leak of a seat seal is detected by the appearance of liquid at the bottom of the valve.

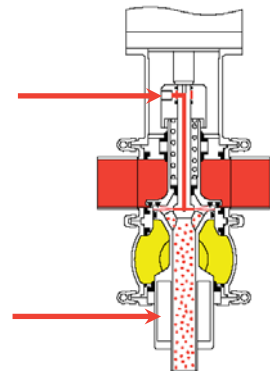
The leakage chamber and the leakage detection system are usually cleaned by CIP without interruption of the main process.

The area between the seats is cleaned by the introduction of the CIP fluid from an external source. Nozzles situated near the base of the lower poppet direct jets of CIP fluid onto the leakage chamber wall. The fluid is released down the drain tube.

The valve is balanced providing protection against overpressure and hydraulic shock up to 30bar.

Cavity Spray

CIP connection for cleaning of the chamber.



Leakage detection. Any leak of a seat seal is detected by the appearance of liquid. During the CIP process of the cavity area the product drains down the leakage detector.



I Design and features

Available from DN40 - 1 1/2" to DN100 - 4".

Valves with normally closed pneumatic actuator.

Forged spherical bodies.

Compact design.

Angular orientation 360°C.

Open lantern allows visual inspection of the sealing.

Easy disassembly by releasing the clamp.

Weld connections (mm or inches).

Balanced design.



I Materials

Parts in contact with the media	AISI 316L
Other stainless steel parts	AISI 304
Internal surface finish	$Ra \leq 0,8 \mu m$
Gasket (standard)	EPDM in compliance with FDA 177.2600

I Options

- Gaskets: NBR and FPM (Viton®).
- Connections: DIN, SMS, Clamp, RJT...
- Control box C-TOP.
- Surface finish $Ra 0,4 \mu m$.
- Mixed body sizes: combinations of bodies with different diameters.
- Heating jacket.
- DSO option designed for the CIP circuits.
- Routing valve, with three bodies.



I Technical specifications

Max. operating pressure	10bar (for DN4"-DN100 valves - max 5bar)
Min. operating pressure	Absolute vacuum
Working temperature	-10°C to 120°C (140°C for short periods or sterilisation)
Compressed air pressure	5,5bar - 7bar
Air supply connections	R1/8" (BSP)

I General dimensions

	Valve size O.D.	Body dimensions (mm)					Actuator dimensions (mm)			
		A	B	ø C	ø D (drain tube)	E	ø F	G	Stroke	
weld inch	1 1/2"	63	85	126	25,4	94	142	496	15	
	2"	76	85	131	25,4	111	142	502	25	
	2 1/2"	87,5	100	170	38,1	134	219	529	35	
	3"	100	100	170	38,1	140	219	523	35	
	4"	124,5	119	202	50,8	165	219	536	45	
weld mm	DN 40	66	85	126	25,4	94	142	497	15	
	DN 50	78	85	131	25,4	111	142	503	25	
	DN 65	93	100	170	38,1	131	219	532	35	
	DN80	108	100	170	38,1	136	219	527	35	
	DN 100	127	119	202	50,8	164	219	537	45	

