Sanitary
single seat valve

Applications:

Single–seat valve Series Applications: DZ3 single–seat valve with very flexible and meets the design of sanitary requirements, mainly used in the area which is no contamination or mixing of the pipeline system, it is a modern and widely–used valve, the main applied to wine, dairy, beverages. pharmaceutical and other industries.

Operating Principles:

DZ3 series of single–seat valve series is remotely operated through compressing air. By controlling the relative position of valve mandril to open or close (shut–off type), or to change the direction of media flow (change–over type).

DZ3 single–seat valve series is equipped with aomi's ZK3 intelligent controller not only can achieve in–time monitoring and timely feedback of signal the single–seat valve of the remote control, but also can achieve real–time of the valve working condition and signal the timely feedback. Also Only can be equipped with the position sensors.

DZ3 single–seat valve series by installing the adapter board burkert company's 1066 controller.

Intelligent Controller

Position Sensor

Actuator function:

- downward movement by pneumatic actuator, spring reset
- up movement by pneumatic actuator, spring reset
- up or downward movement by pneumatic actuator

Intelligent control head

The main primary device from the world famous enterprise, in matches the relief valve, the sealed type electronic device, suits in 10–85 stroke scopes the actuator, the modular design, may achieve the most superior performance–to–price ratio,as the long–distance common control, realizes to the valve active status real–time monitoring as well as the signal prompt feedback.

Actuator

Uses the long life the inflation compensation piston curl, as well as selects the high wear–resisting seal ,cylinder body CNC processing, changes the actuator installment direction, the NC/NO exchange. May use for parts in the stroke at same time and the stroke position feedback ZK3 intelligence controller or the position sensor

Gas fittings

Guides the wrap

PEFE self lubricating guidance set of guidance effect is better

Silencer

Connecting

Holder

The open style support structure reduce valve chest to actuator's heat conduction, is advantageous for the inspection seal*

Bolt

Seal ring

Product contact's seal material quality conforms to FDA 177,2600, the seal material quality has EPDM, SI, NBR, VITON

Clamp

The clamp type connection, is advantageous for the installment and the maintenance

Upper valve body

The fluidity optimizes the valve cavity, had guaranteed the product treating processes' continuity and clean which is more highly effective, valve chest structure is various, the application is more widespread

Seal for Valve stem

Valve stem

valve stem adopt metal stop , enhances the seal life

Seal for Valve stem

Clamp

Down valve body

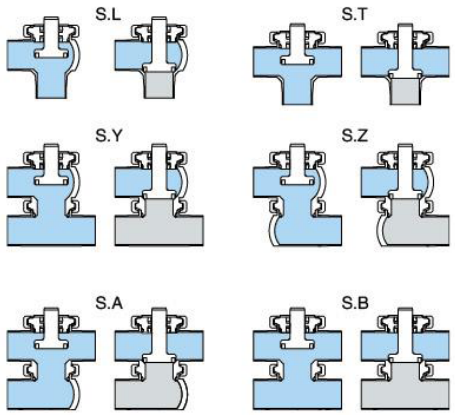
*DZ3 series of single–seat valves :all the diameters are with the identical installation dimensions of valve actuator, so that the access of all the diameter of valve body can match the actuator .and meet different customer requirements of working pressure on valve .

Technical data

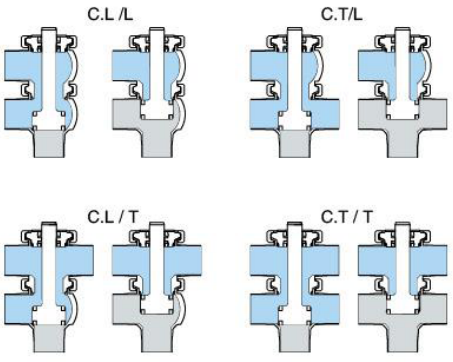
Material	Contact product parts	316L(1.4404)
	non-contact product parts	304(1.4301)
	Provide E N 10204 3.1B certificate	
Seal material	Standard	EPDM
	Option	NBR、FPM、Silicone
	All seal materials comply with FDA 177.2600	
Temperature	Running working temperature	-20~+135℃ (EPDM)
	Sterilization temperature	150℃ (Max 20min)
Pressure	Working pressure	0~5bar(standard)
	Accepting high pressure requirement	
	Control air pressure	5~8bar
Surface treatment	Internal surface	Ra ≤ 0.8μm
	External surface	Grit blasting
Connection	Connection standard	welded end: DIN 11850 series2
		welded end: INCH pipe standard
	Connection method: welding、thread、clamp、flange	
Option	Intelligent controller	24V DC
		1/2 electromagnetism valve
	Position sensor	24V DC
		2 NPN/PNPposition sensor

Body type

SHUT-OFF Series

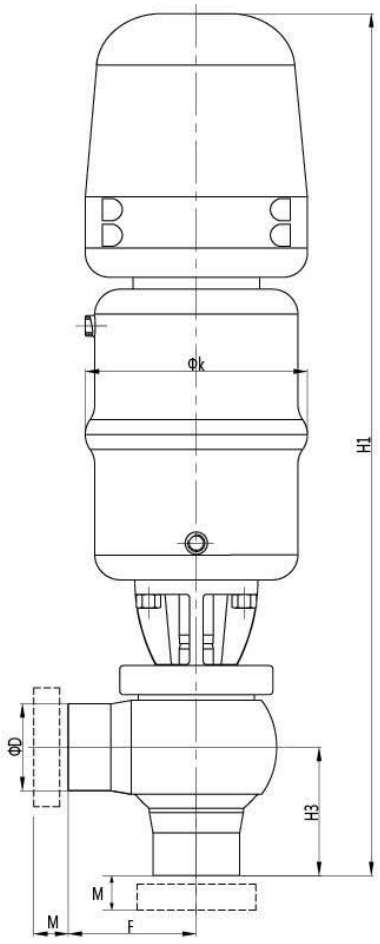


CHANGE-OVER Series

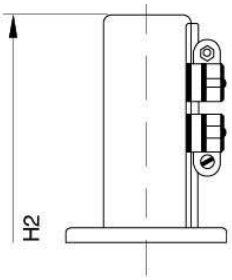


SHUF-OFF Series

single seat valve with intelligent control



single seat valve with position sensor



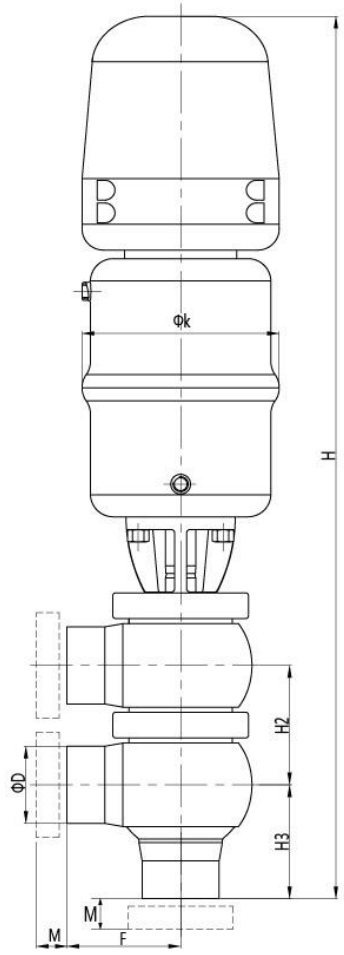
body design

dimensions (mm)

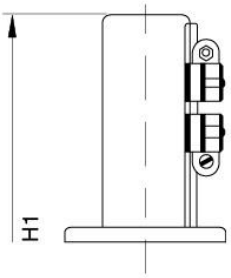
DN	D	K	F	H1	H2	H3	M(clamp)
25	29x1.5	91	55	402	344	55	21.5
32	35x1.5	91	65	463.5	405.5	62.5	21.5
40	41x1.5	91	65	463.5	405.5	62.5	21.5
50	53x1.5	130	75	506.7	448.7	75	21.5
65	70x2.0	130	90	524.4	566.2	90	28
80	85x2.0	195	105	629.2	571.2	105	28
100	104x2.0	195	120	653.7	595.7	120	28
INCH							
1.0"	25.4x1.65	91	55	402	344	55	12.7
1.5"	38.1x1.65	91	65	463.5	405.5	62.5	12.7
2.0"	50.8x1.65	130	75	506.7	448.7	75	12.7
2.5"	63.5x1.65	130	85	522.5	564.2	85	12.7
3.0"	76.2x1.65	195	95	616.2	558.2	95	12.7
4.0"	101.6x2.11	195	120	653.7	595.7	120	15.8

CHANGE-OVER SERIES

single seat valve with intelligent control



single seat valve with position sensor



body design

C.L / L

C.T / L

C.L / T

C.T/ T

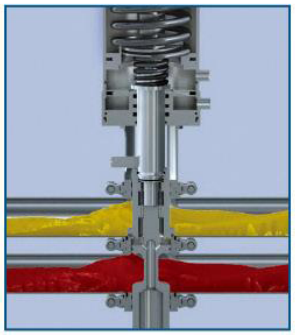
dimensions (mm)

DN	D	K	F	H	H1	H2	H3	M(clamp)
25	29x1.5	91	65	452.3	394.3	50.3	55	21.5
32	35x1.5	91	65	529.5	471.5	66	62.5	21.5
40	41x1.5	91	65	529.5	471.5	66	62.5	21.5
50	53x1.5	130	75	585.3	527.3	78.6	75	21.5
65	70x2.0	130	90	618.7	560.7	94.3	90	28
80	85x2.0	195	105	739.5	581.5	110.3	105	28
100	104x2.0	195	120	792	724	128.3	120	28
INCH								
1.0"	25.4x1.65	91	65	452.3	394.3	50.5	55	12.7
1.5"	38.1x1.65	91	65	529.5	471.5	66	62.5	12.7
2.0"	50.8x1.65	130	75	585.3	527.3	78.6	75	12.7
2.5"	63.5x1.65	130	85	613	555	90.5	85	12.7
3.0"	76.2x1.65	195	95	719.2	661.2	103	95	12.7
4.0"	101.6x2.11	195	120	792	724	128.3	120	15.8

sanitary double seat mix-proof valve

Sanitary double seat mix-proof valve

Opening



Parallel Working

Applications:

Double seat mix–proof valve application : used for protection mixing products in brewing , dairy and drink .etc

Operating Principles:

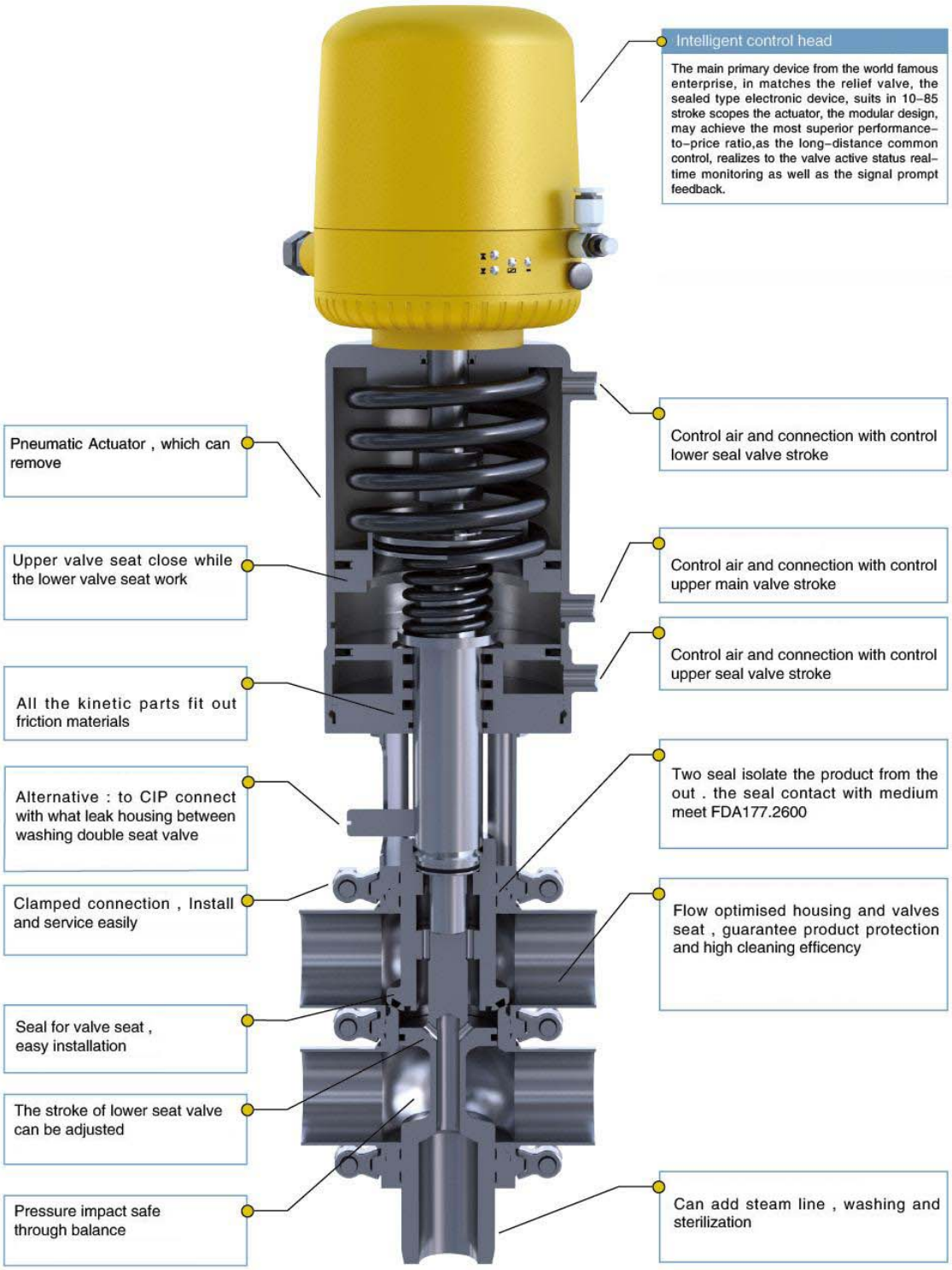
FH6/FH8 Basic double seat mix–proof valve is controled through compressed air . The valve is a normally closed (NC) valve.
The double seat valve has two divided seals of valve disc . it has a interlinked cavity of leak between two seal at working . while it happen leaking , the products will inpour the cavity and flow away from exit .it will not caused pollution and mixing . the leaking cavity closed while the valve working .it is impossible to overflow for the products .so the products can be transported from one pipe to another . also the valve can be washing CIP .

double seat valve withZK3 intelligent control head . not only achieved remote control , and monitoring under working . can setting only transducer .

double seat valve can be controled with 1066 controller from Burkert company through setting adapter plate .

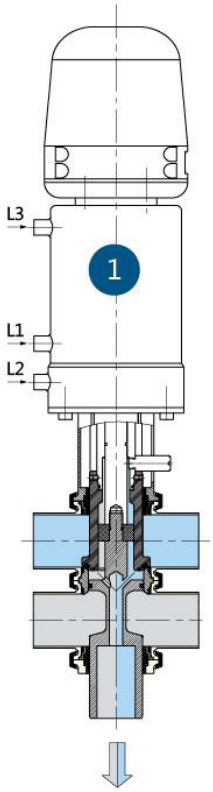
Intelligent Controller

Position Sensor


Intelligent control head
The main primary device from the world famous enterprise, in matches the relief valve, the sealed type electronic device, suits in 10–85 stroke scopes the actuator, the modular design, may achieve the most superior performance–to–price ratio,as the long–distance common control, realizes to the valve active status real–time monitoring as well as the signal prompt feedback.
Pneumatic Actuator , which can remove
Control air and connection with control lower seal valve stroke
Upper valve seat close while the lower valve seat work
Control air and connection with control upper main valve stroke
All the kinetic parts fit out friction materials
Control air and connection with control upper seal valve stroke
Alternative : to CIP connect with what leak housing between washing double seat valve
Two seal isolate the product from the out . the seal contact with medium meet FDA177.2600
Clamped connection , Install and service easily
Flow optimised housing and valves seat , guarantee product protection and high cleaning efficency
Seal for valve seat , easy installation
The stroke of lower seat valve can be adjusted
Pressure impact safe through balance
Can add steam line , washing and sterilization

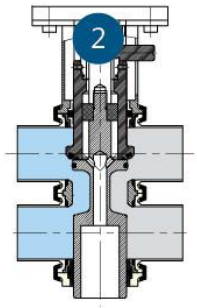
FH6 SEAT LIFT

Basic function of FH6 series



① Valve position "CLOSED"

- Control air pressure 0 bar on connection L 1 (main stroke)
- Control air pressure 0 bar on connection L 2 (pulse stroke of top valve disk)
- Control air pressure 0 bar on connection L 3 (pulse stroke of bottom valve disk)
- Separation of two hostile media
- Leakages, if any, are guided outwards through the leakage room in a depressurized state

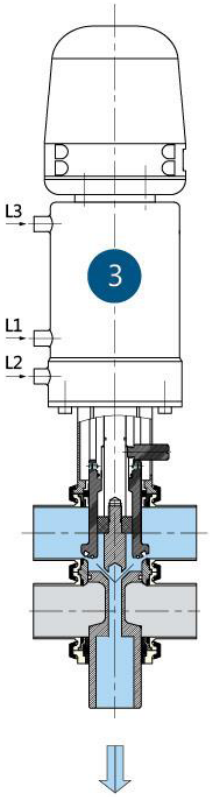


② Valve position "OPEN"

- Control air pressure 6 bar on connection L 1
- Bottom valve will lift and close the leakage room
- Both valve disks in "open" position
- Top and bottom rail will open in relation to each other

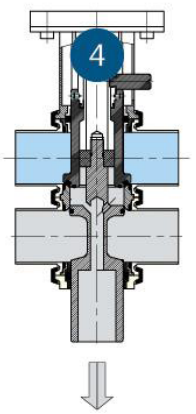
③ Cleaning the upper valve housing / valve seat

- Control air connection 6 bar on connection L 2
- Top valve disk is lifted during cleaning proc-ess (adjustable stroke pulse) Set stroke pulse in accordance
- Valve seat, valve disk seals or clearance and leakage exhaust pipe are cleaned



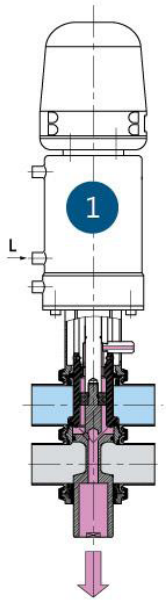
④ Cleaning of the lower seat via valve housing

- Control air pressure 6 bar on connection L 3
- Bottom valve disk is lifted during cleaning procedure
- Valve seat, valve disk seals or clearance and leakage exhaust pipe are cleaned



FH8 CAVITY SPRAY VALVE

Basic function of FH8 series

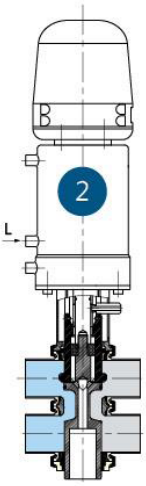


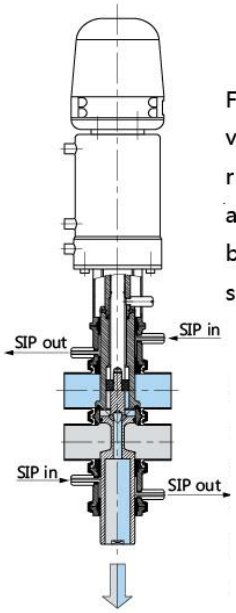
①Valve position "CLOSED"

- Control air pressure 0 bar connection
- Separation of two hostile media
- Leakages, if any, are guided outwards through the leakage room in a depressurized state

②Valve position ,OPEN "

- Control air pressure 6 bar connection L
- Bottom valve will lift and close the leakage room
- Both valve disks in "open" position
- Top and bottom rail will open in relation to each other

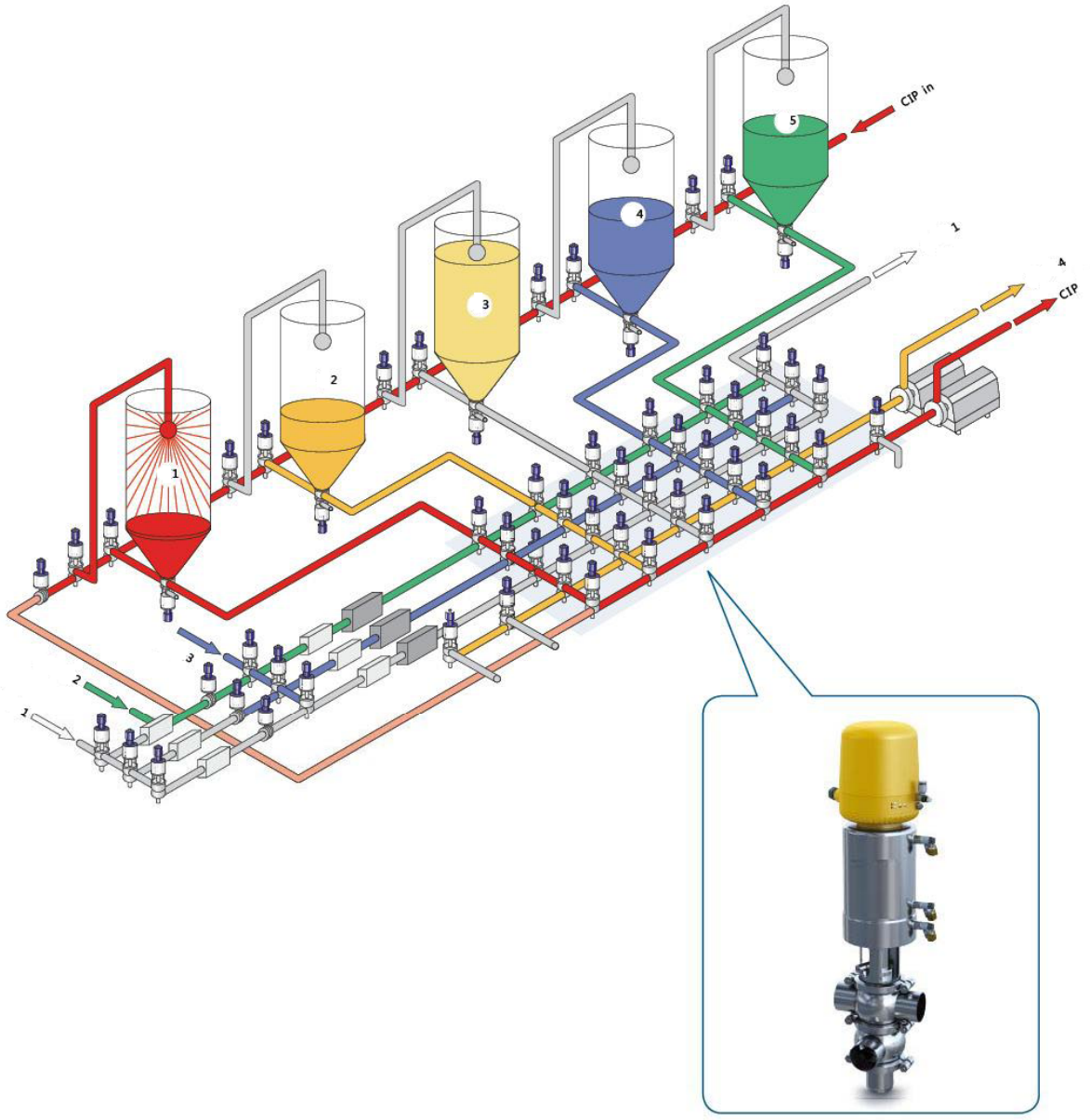




FH6-SP/FH8-SP double seat valve series : to meet the higher requirement for sanitary fluid area . it add SIP sterilization basis on FH6/FH8 basis double seat mix-proof valve

Sanitary double seat mix-proof valve

double seat valves matrix are sure the factory sanitary and aseptic requirements . the factory has capability to establish automatic and more way system . the valves matrix can achieve operation for the modern production technics and washing circulate . using workshop in maximum and optimizing economy . double seat valve make sure protection the product mixing . see details of photo .



Technical data

Material	Contact product parts	316L(1.4404)
	non-contact product parts	304(1.4301)
	Provide E N 10204 3.1B certificate	
Seal material	Standard	EPDM
	Option	NBR\FPM\Silicone
	All seal materials comply with FDA 177.2600	FDA 177.2600
Temperature	Running working temperature	-20~+135℃ (EPDM)
	Sterilization temperature	150℃ (Max 20min)
Pressure	Working pressure	0~5bar
	Accepting high pressure requirement	
	Control air pressure	6~8bar
Surface treatment	Internal surface	Ra ≤ 0.8μm
	External surface	Grit blasting
Connection	Connection standard	welded end: DIN 11850 series2
		welded end: INCH pipe standard
	Connection method: welding、thread、clamp、flange	
Option	Intelligent controller	24V DC
		1/3 electromagnetism valve
	Position sensor	24V DC
		2/3/4 NPN/PNP position sensor

Body type

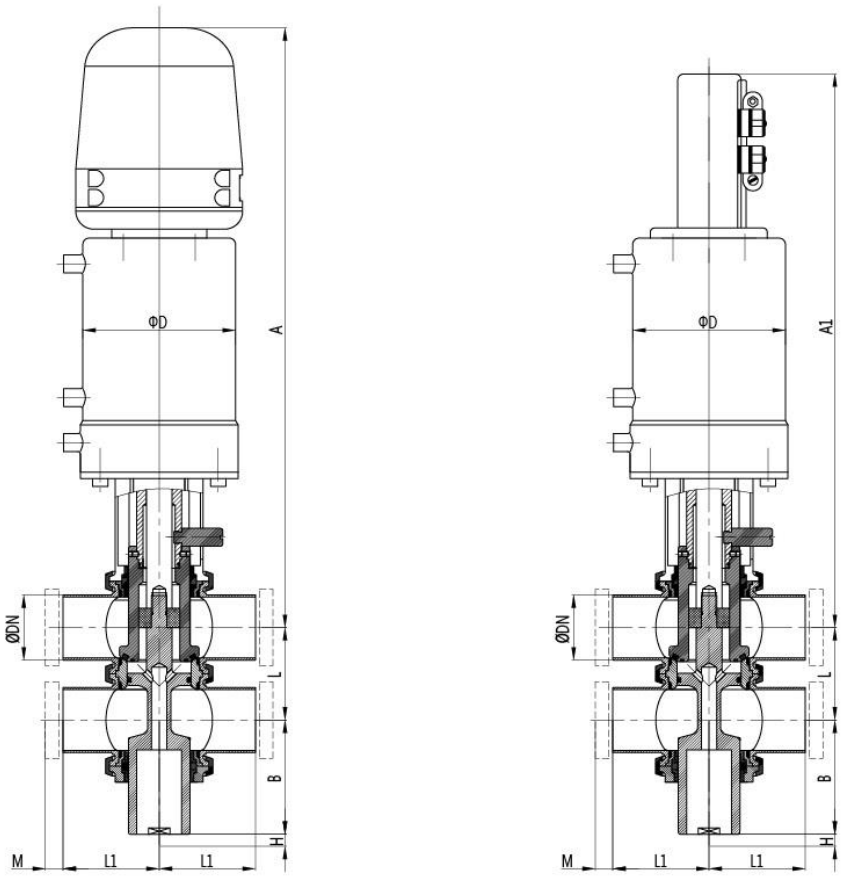
Type1

Type2

Type3

Type4

Sanitary double seat mix-proof valve



dimensions (mm)

DN	A	A1	B	L	L1	D	DN	Stroke	M(Clamp)
DN40	443.6	385.6	90	63.2	65	83	41×1.5	33.5	21.5
DN50	469.5	411.5	100	74.5	85	123	53×1.5	38	21.5
DN65	477	419	115	92	100	123	70×2.0	38	28
DN80	623.5	565.5	140	111	125	173	85×2.0	55	28
DN100	633.3	575.3	150	130	150	173	104×2.0	55	28
INCH									
1.5"	442	384	90	60	65	83	38.1×1.65	33.5	12.7
2.0"	468	410	100	72	85	123	50.8×1.65	38	12.7
2.5"	474	416	110	86.8	100	123	63.5×1.65	38	12.7
3.0"	632	574	135	102.9	125	173	76.2×1.65	55	12.7
4.0"	632	574	150	127.6	150	173	101.6×2.11	55	15.8