Divert seat valve + Mixing proof valve
+ Tank bottom valve

HY-FLOW

0.6

Divert seat valve

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Applications

- The divert seat valve is applied to the food-processing industry, beverage, pharmaceutical and fine chemicals industries.

Operating principles

- Seat valves are operated automatically by a single-acting or a double-acting pneumatic actuator. By supplying compressed air, the shaft is moved to place the valve in the "open" or "closed" position.
- The 180o rotation of the pneumatic cylinder to realize the interchange of normally open and normally closed.

Materials

- Parts in contact with medium: AISI 316L, AISI 304
- Other parts in stainless steel: AISI 304
- Gasket: EPDM according to FDA 1 77,2600
- Internal surface finish: Ra<0.8 μ m
- External surface finish: Sandblast or mirror polish

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Seal Features:
Sterile, no dead
Elastic compression, friction-free, longevity by approximately 3.000.000 times
Vacuum and high temperature 150℃ not falling the spool

Design and features

- ◆Compact and robust design.
- ◆Size: DN25/1" to DN 100/4"
- ◆Normally closed (NC) in the standard version.
- ◆The valve can be changed (180°)to normally open (NO) by simply reversing the position of the pneumatic actuator
- ◆Hygienic design according to 3A standard
- ◆360° adjustable body
- ◆Easy assembly / disassembly of internal parts by loosening a clamp fastener
- ◆Standard weld connection (mm or inch)

Techical specifications

- ◆Size: DN25-DN100/1"-4"
- ◆Working temperature: -10℃ to 120℃ (EPDM) 14° F to 248° F, 140℃/284° F (SIP, max. 30min)
- ◆Max. Working pressure: 10bar 145PSI
- ◆Compressed air pressure: 5-7bar
- ◆Air connecitons: G1/8" (BSP)

Options

- ◆Gaskets: FPM (viton (R)) in compliance with FDA 177.2600
- ◆Connections: DIN, SMS, RJT,IDF
- ◆Double-acting pneumatic actuator
- ◆External position sensor
- ◆Steam barrier (if shaft sterilisation is required)
- ◆Body jacket insulation
- ◆Valve position regulator
- ◆Double stop actuator
- ◆Diaphragm type valve cavity
- ◆C-TOP control unit
- ◆Surface finish: Ra≤0.5 μ m
- ◆Manual operated.

Divert seat valve

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Valve position can be adjusted divert seat

Technical features:
Use wrench to realize flow control,at low cost

Valve position regulator

Control wrench

Diaphragm type divert seat valve

Technical features:
The valve has the standard function of divert seat valve, PTFE diaphragm isolates valve inside and outside, diaphragm damage can be seen through leakage detective.

Leakage detector tube

Leakage detection

Aseptic divert seat valve

Technical features:
The valve has the standard function of divert seat valve Equipped with a stem that can be sterilized by cleaning fluid and steam, Ensure the stem be completely cleaned.

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Jacketed type insulation divert seat valve

Technical features:
Jacketed shell, so as to achieve the best of heat transmission. Can protect easy solidified sensitive medium, For example chocolate, margarine or similar medium keep flowing situation.

The heating medium interface G1/2"

Double stop pneumatic divert seat valve

Technical features:
Adjust regulator can reduce actuator operation moving speed, preventing plug from shocking with valve body.

Double stop regulator

Thin film pneumatic divert seat valve

Technical features:
Diaphragm type pneumatic reversal valve, directional valve with standard all functions and features.
Technical aclvantages of valve:
Under higher pressure, actuator height is shorter, can resist water hammer, sids mounted positioner.

Divert seat valve

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Electric divert seat valve

The electric reversing valve torque, journey, adaptive function, open and can be adjusted freely Shut down the direction of the electric reversing valves in the valve switch type and external regulation two design.

Pneumatic divert seat valve + sensor

Pneumatic divert seat valve + positioner

1"–4", DN25–DN100
Valve adjust the flow of divert seat valve
Input/Output signals 0–4/20mA
DC24V
Protective IP67

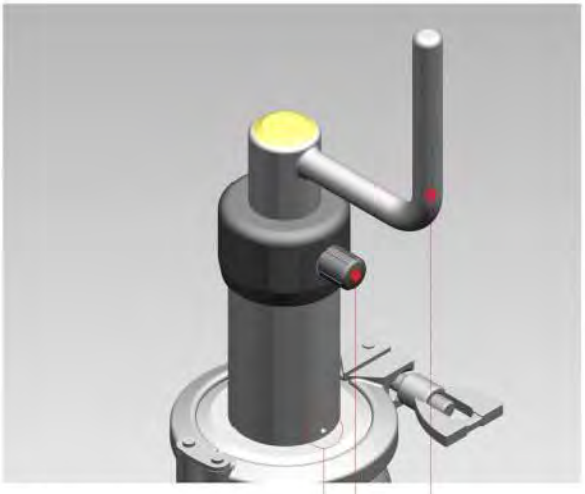
Pneumatic divert seat valve + control unit

1"–4", DN25–DN100
DC24V
Protective Ip67
Output signals 0–4/20mA and DC24V

Pneumatic divert seat valve + mini control unit

1"–1.5", DN25–DN40
DC24V
Protective Ip67
Output signals 0–4/20mA and DC24V

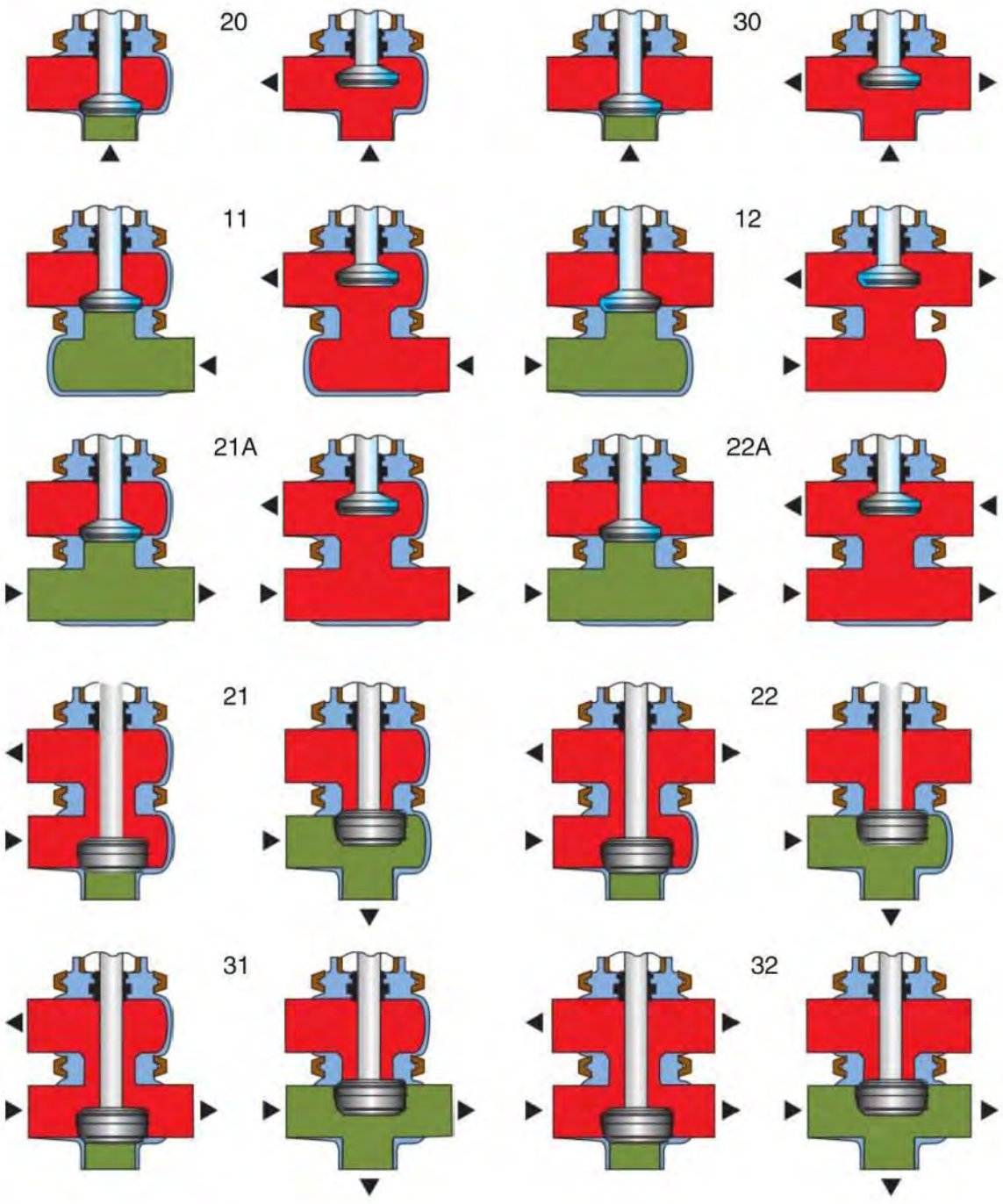
HY-FLOW



Spinner hand wheel
When the flow control function better adjusted to the appropriate valve position, the position of the safety lock

HY-FLOW

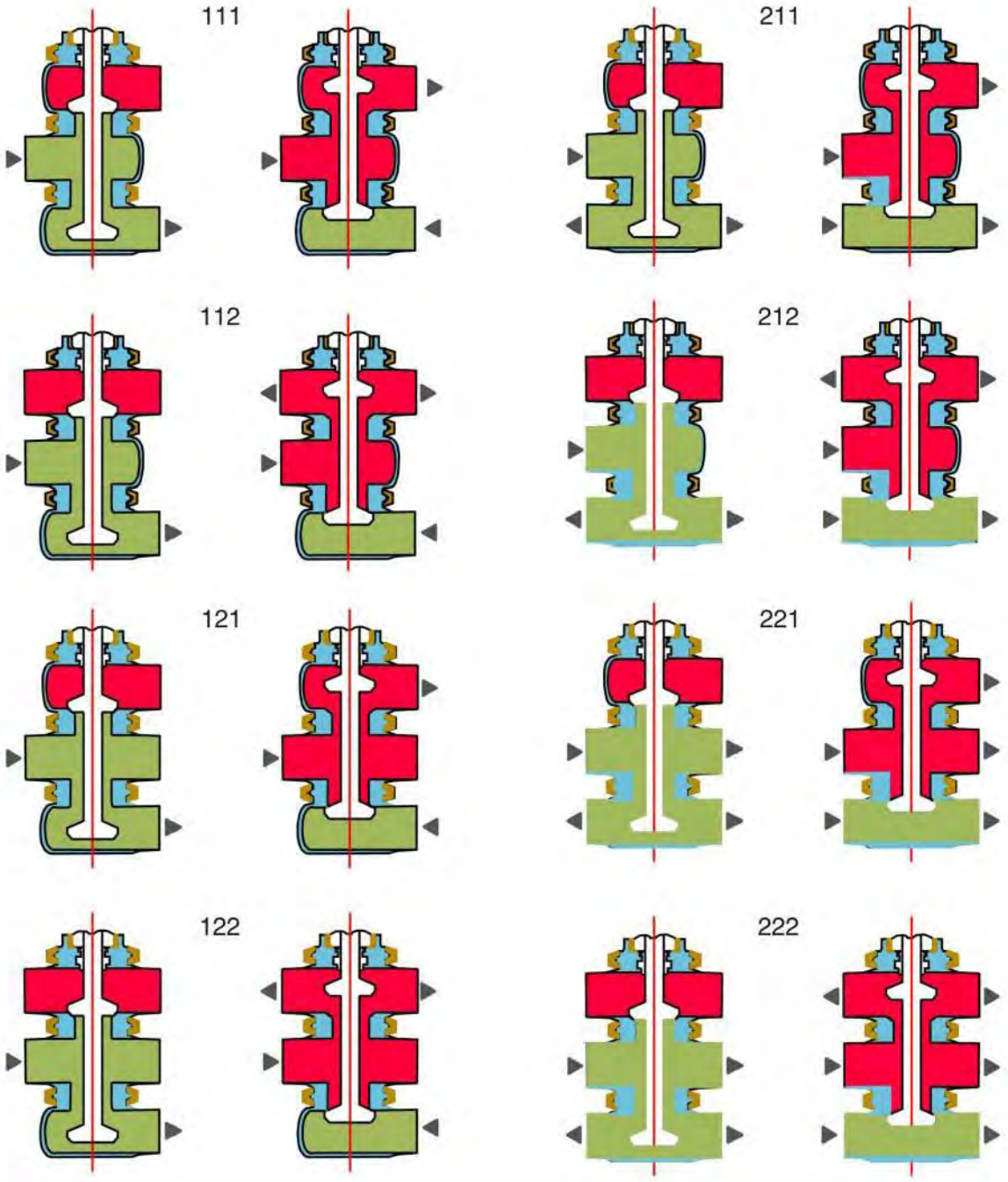
Combination very flexible body



Note: the valve combination is applicable to the valve seat and the external cleaning type anti mixing valve

HY-FLOW

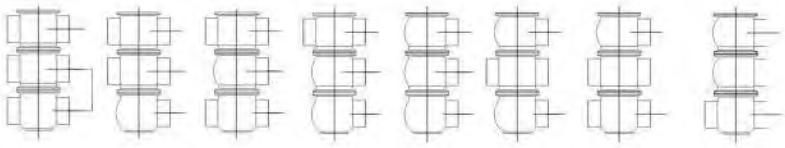
Combination very flexible body



Note: the valve combination is applicable to the valve seat and the external cleaning type anti mixing valve

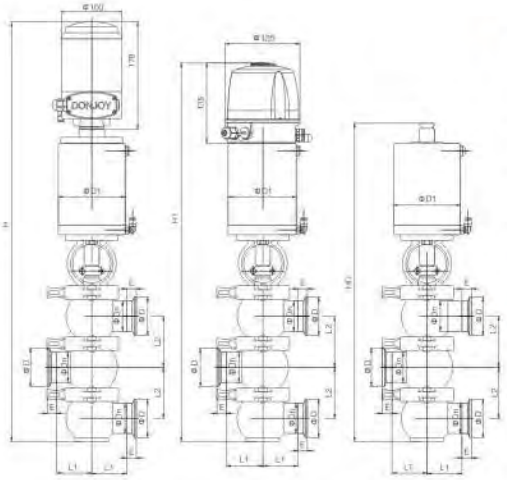
Divert seat valve

HY-FLOW



Air consumption (L/One cycle)

SIZE ΦD1	弹簧/气 Spring/air	气/气 air/air
88	0.12	0.24
113	0.21	0.42
132	0.45	0.90
180	1.00	2.00



NO.VHX103-111 NO.VHX101-111 NO.VHX100Q1-111

DIN Pneumatic Divert Seat Valve

SIZE	H	H1	HD	Dn	D		L2	D1		-	Weight (kg)
								6bar	10bar		
DN40	590	547	428	40	50.5	60	67	88	113	12.7	7
DN50	662	619	504	52	64	70	76	113	132	12.7	9
DN65	758	715	581	70	91	99	105	132	180	12.7	18
DN80	758	715	581	85	106	99	105	132	180	12.7	18
DN100	958	915	785	104	119	114	146	180		15.8	20

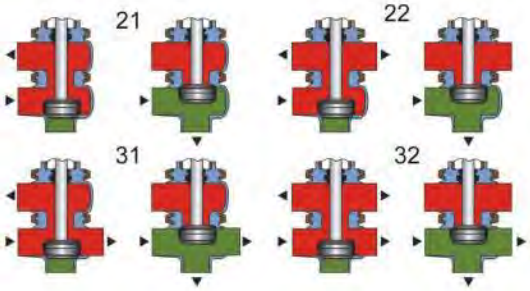
INCH Pneumatic Divert Seat Valve

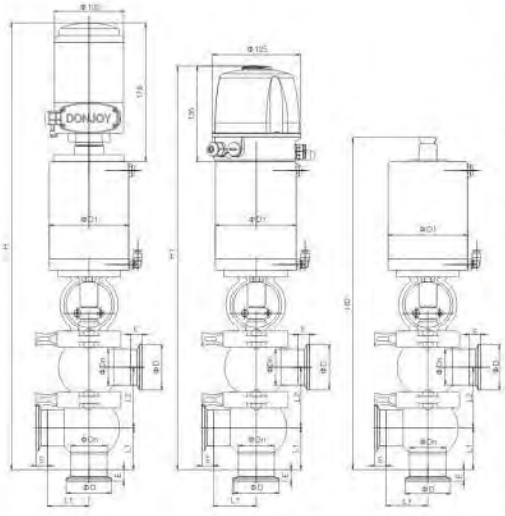
SIZE	H	H1	HD	Dn	D		L2	D1		-	Weight (kg)
								6bar	10bar		
1.5"	590	547	428	38.1	50.5	60	67	88	113	12.7	7
2"	662	619	504	50.8	64	70	76	113	132	12.7	9
2.5"	698	655	528	63.5	77.5	80	88	132	180	12.7	18
3"	758	715	581	76.2	91	99	105	132	180	12.7	18
4"	958	915	785	101.6	119	114	146	180		15.8	20

HY-FLOW

Air consumption (L/One cycle)

SIZE ΦD1	弹簧/气 Spring/air	气/气 air/air
88	0.12	0.24
113	0.21	0.42
132	0.45	0.90
180	1.00	2.00





NO.VHX103Q1-021 NO.VHX101Q1-021 NO.VHX100Q1-021

DIN Pneumatic Divert Seat Valve

SIZE	H	H1	HD	Dn	D	-	L2	D1		-	Weight (kg)
								6bar	10bar		
DN25	543	500	381	28	50.5	50	67	88	113	12.7	6
DN32				34		55				12.7	6
DN40				40		60				12.7	6
DN50	613	570	455	52	64	70	76	113	132	12.7	8
DN65	688	645	511	70	91	99	105	132	180	12.7	15
DN80	688	645	511	85	106	99	105	132	180	12.7	15
DN100	808	765	635	104	119	114	146	180		15.8	17

INCH Pneumatic Divert Seat Valve

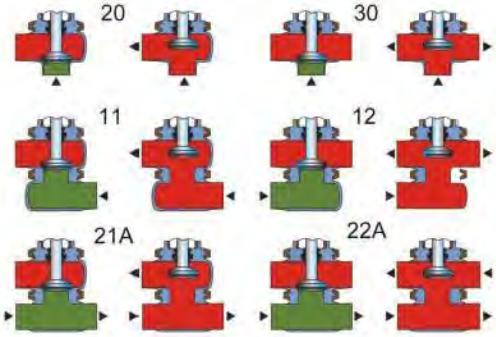
SIZE	H	H1	HD	Dn	D	-	L2	D1		-	Weight (kg)
								6bar	10bar		
1"	543	500	381	25.4	50.5	50	67	88	113	12.7	6
1.25"				31.8		55				12.7	6
1.5"				38.1		60				12.7	6
2"	613	570	455	50.8	64	70	76	113	132	12.7	8
2.5"	642	599	472	63.5	77.5	80	88	132	180	12.7	15
3"	688	645	511	76.2	91	99	105	132	180	12.7	15
4"	808	765	635	101.6	119	114	146	180		15.8	17

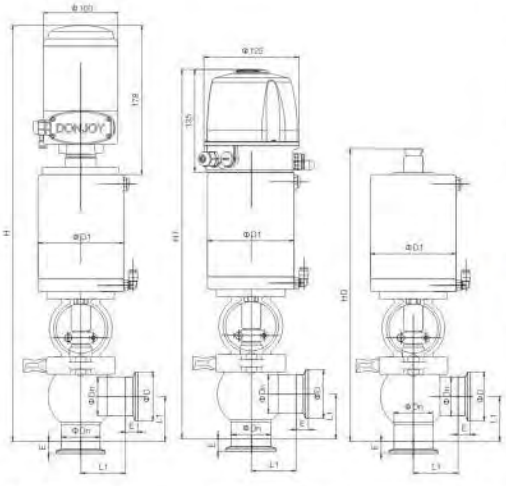
Pneumatic divert seat valve

HY-FLOW

气量消耗(L/循环次)
Air consumption (L/One cycle)

SIZE ΦD1	弹簧/气 Spring/air	气/气 air/air
88	0.12	0.24
113	0.21	0.42
132	0.45	0.90
180	1.00	2.00





NO.VHX103Q1-020 NO.VHX101Q1-020 NO.VHX100Q1-020

DIN Pneumatic Divert Seat Valve

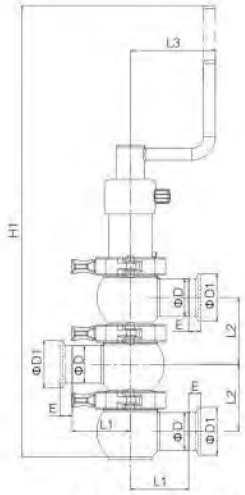
SIZE	H	H1	HD	Dn	D	-	D1 6bar	D1 10bar	-	Weight (kg)
DN25	476	433	314	28	50.5	50	88	113	12.7	5
DN32				34		55			12.7	5
DN40				40		60			12.7	5
DN50	537	494	378	52	64	70	113	132	12.7	7
DN65	583	540	406	70	91	99	132	180	12.7	13
DN80	583	540	406	85	106	99	132	180	12.7	13
DN100	662	619	489	104	119	114	180		15.8	15

INCH Pneumatic Divert Seat Valve

SIZE	H	H1	HD	Dn	D	-	D1 6bar	D1 10bar	-	Weight (kg)
1"	476	433	314	25.4	50.5	50	88	113	12.7	5
1.25"				31.8		55			12.7	5
1.5"				38.1		60			12.7	5
2"	537	494	378	50.8	64	70	113		12.7	7
2.5"	554	511	384	63.5	77.5	80	132	132	12.7	13
3"	583	540	406	76.2	91	99	132	180	12.7	13
4"	662	619	489	101.6	119	114	180	180	15.8	15

HY-FLOW

阀体组合请参照前页阀体组合图



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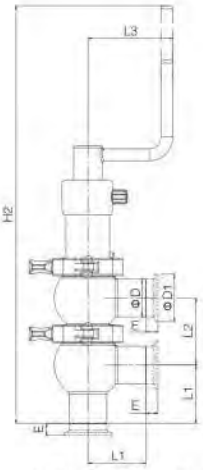

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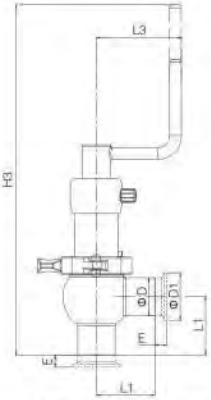


NO.VHX100S1-020

INCH Manual Divert Seat Valve

										1	2	3
SIZE	H1	H2	H3	D	D1	L1	L2	L3	E	Weight (kg)	Weight (kg)	Weight (kg)
1"	–	393	326	25.4	50.5	50	67	86	12.7	4	3	2
1.25"	–	398	331	31.8		55			12.7	4	3	2
1.5"	440	403	336	38.1		60			12.7	4	3	2
2"	489	446	370	50.8	64	70	76	86	12.7	5	4	3
2.5"	526	475	386	63.5	77.5	80	88	86	12.7	8	6	5
3"	579	520	415	76.2	91	99	105	86	12.7	10	8	6
4"	702	576	430	101.6	119	114	146	86	15.8	15	12	9

NO.VHX100S1-020=3; NO.VHX100S1-021=2; NO.VHX100S1-111=1

DIN Manual Divert Seat Valve

										1	2	3
SIZE	H1	H2	H3	D	D1	L1	L2	L3	E	Weight (kg)	Weight (kg)	Weight (kg)
DN25	–	393	326	28	50.5	50	67	86	12.7	4	3	2
DN32	–	398	331	34		55			12.7	4	3	2
DN40	440	403	336	40		60			12.7	4	3	2
DN50	489	446	370	52	64	70	76	86	12.7	5	4	3
DN65	579	520	386	70	91	99	105	86	12.7	10	8	6
DN80	579	520	415	85	106	99	105	86	12.7	10	8	6
DN100	702	576	430	104	119	114	146	86	15.8	15	12	9

NO. VHX100S1-020=3； NO.VHX100SQ-021=2； NO. VHX100S1-111=1

Thin film pneumatic divert seat valve

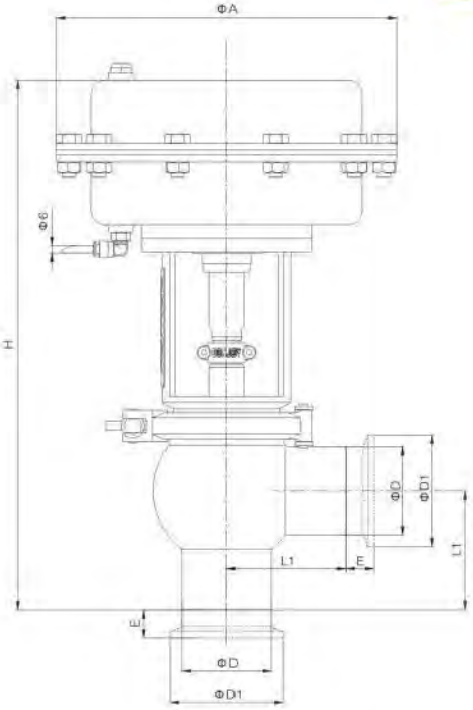
HY-FLOW

Technical features

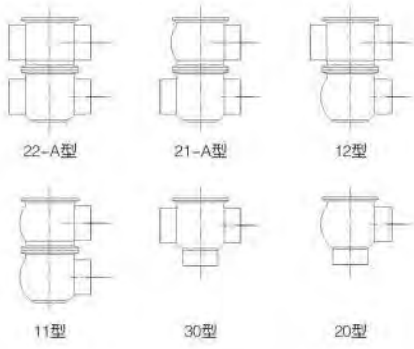
Diaphragm type pneumatic reversal valve, directional valve with standard all functions and features.
Technical aclvantages of valve:
Under higher pressure, actuator height is shorter, can resist water hammer, sids mounted positioner.

Technical specifications

Size: 2"–6", DN50–DN150
Material: 316L/304
Pressure: 10bar, 20bar(
Tempreture: –10℃ to 130℃



NO.vHX600Q1



DIN Pneumatic Divert Seat Valve

SIZE	D	D1	L1	A	E	H	H1
DN50	52	64	70	200	12.7	310	401
DN65	70	91	99	286	12.7	391	507
DN80	85	106	99		12.7	391	507
DN100	104	119	114		15.8	443	560

Mini-type divert seat valve

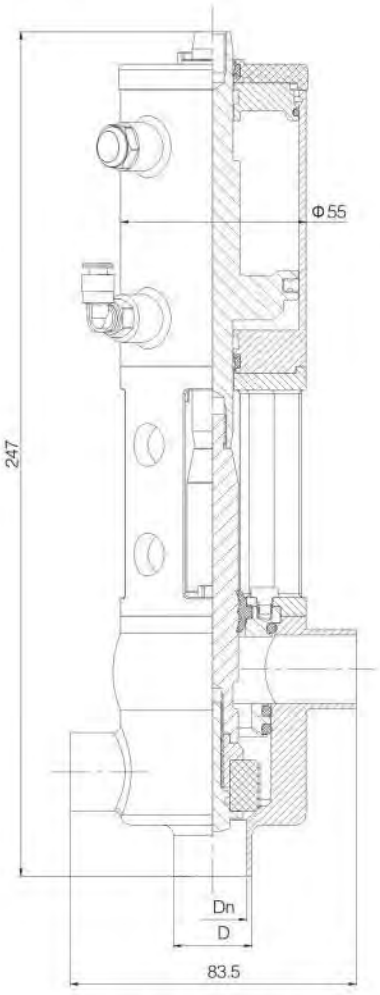
HY-FLOW

Applications

The valve is particularly suitable for filling machine, can replace the traditional rotary valve.

Design features

- ◆Seal-in-one piece design
- ◆Meet high-frequency on/off
- ◆No dead angle designed to meet the requirements of 3A-85-00
- ◆Seal FDA 177.2600
- ◆Connection standard, clamp, weld, thread, DIN, SMS, ISO
- ◆Mini-type divert seat valve



SIZE	Dn	D
Φ19	16	19
DN20	19	22
	20	23

NO.MINI-VHX100Q1

Pneumatic globe valve + cleaning ball

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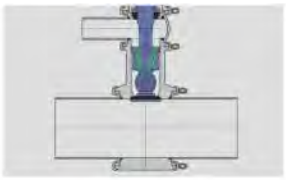
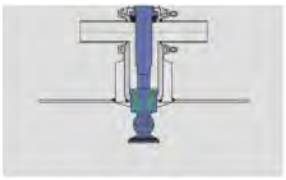
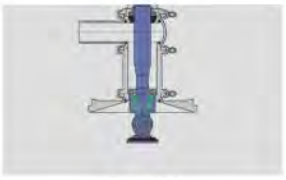
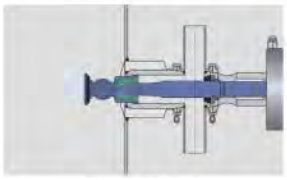
Technical features

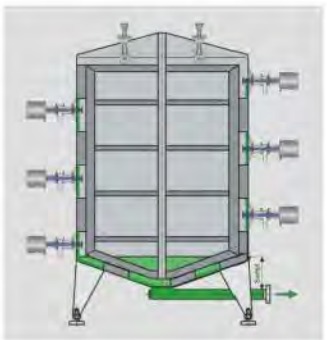
The flushing valve, mainly solved by cleaning ball long soak in the medium forming bacteria and dead easy contamination media. When the valve is opened to clean and maintain the cleaning medium is not in contact with the ball is closed, thus avoiding the dead angle.

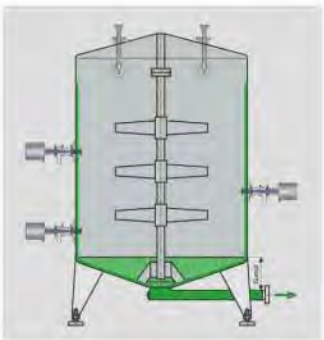


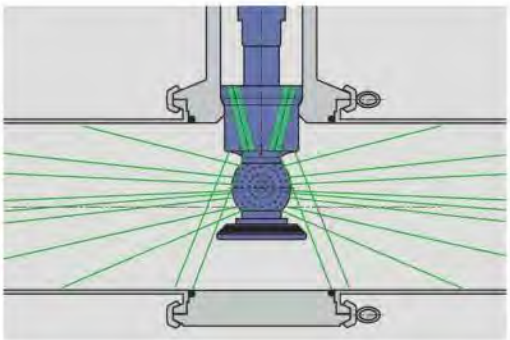












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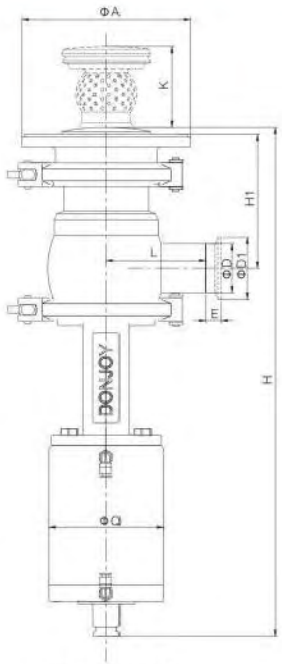


NO.VHX800Q1

DIN Pneumatic Divert Seat Valve

SIZE	D	D1	Q	A	L	H1	H	K	E
DN25	28	50.5	88	130	70	98	433	53	12.7
DN40	41	50.5	88	130	80	104	443	53	12.7
DN50	52	64	113	150	80	111	476	53	12.7

INCH Pneumatic Divert Seat Valve

SIZE	D	D1	Q	A	L	H1	H	K	E
1"	25.4	50.5	88	130	70	98	433	53	12.7
1.5"	38.1	50.5	88	130	80	104	443	53	12.7
2"	50.8	64	113	150	80	111	476	53	12.7

Tank bottom valve

HY-FLOW

Applications

The tank bottom seat valve is a pneumatically operated single seat valve,assembled at the bottom of tank,used in diary,food processing, beverage,pharmaceutical and fine chemical industries.

Operationg principle

- ◆Operated by Air/Spring, Air/Air
- ◆Compressed air push shaft to open and close valve
- ◆Valve structure: Valve seat opens construction inside so that it can avoid pushing when pipeline is over pressure

- ◆Parts in contact with the product: AISI 316L,AISI 304
- ◆Other parts: AISI 304
- ◆Gaskets (Standard): EPDM according to FDA 177.2600
- ◆Internal surface finish: Ra≤0.8 μ m
- ◆External surface finish: Mirror polish

HY-FLOW

Design and features

- 3A sanitary design
- Complete discharge system avoids retention
- Normally closed valve (closed by spring)–standard version
- Normally open valve (opened by spring) by a 180 degree rotating of the pneumatic actuator
- The valve seat opens into the tank to avoid accidental openings
- 360° adjustable body, even after welding the flange to the tank
- Open lantern for visual inspection of the shaft sealing
- Easy disassembly by loosening the clamp
- Connections: clamp

Options

- Manual
- Steam sterilized (if shaft sterilisation is required).
- C–TOP control unit.
- Internal surface finish: Ra≤0.5 μ m
- Gaskets: NBR or FPM
- Connections: DIN, Clamp, SMS, RJT, IDF...Flang
- Double and single acting actuator
- Air/Spring, Air/Air

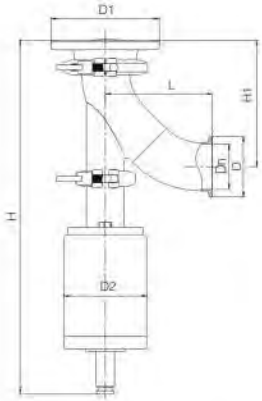
Technical specifications

- Size: DN25–DN100 1"–4"
- Working temperature: –10℃ to+120℃ (EPDM) 14° F 248° F +140(SIP, max.30 min) 248° F
- Max. Working pressure: 10bar/145PSI
- Compressed air pressure: 6–8bar/87–116PSI
- Air supply connections: G1/8"(BSP)

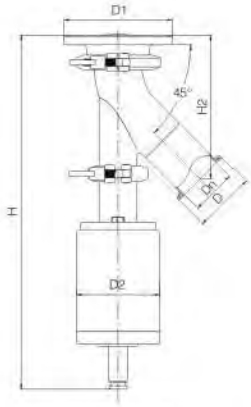
Elbow tank bottom valve

Air consumption (L/one cycle)

SIZE ΦD1	弹簧/气 Spring/air	气/气 Air/air
88	0.12	0.24
113	0.21	0.42
132	0.45	0.90
180	1.00	2.00



NO.VKD310Q1



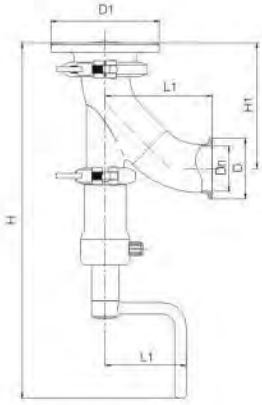
NO.VKD410Q1

INCH

SIZE	Dn	D	D1	D2	H	H1	H2	L
1.5"	35.1	50.5	115	88	374.5	140	152	142
2"	47.8	64	115	88	374.5	133.5	152	114
2.5"	59.5	77.5	130	113	432	155.5	168	133.5
3"	72.2	91	150	113	453	179	186	152

DIN

SIZE	Dn	D	D1	D2	H	H1	H2	L
DN40	37	50.5	115	88	374.5	140	152	142
DN50	49	64	115	88	374.5	133.5	152	114
DN65	66	91	150	113	432	155.5	168	133.5
DN80	81	106	150	113	453	179	186	152



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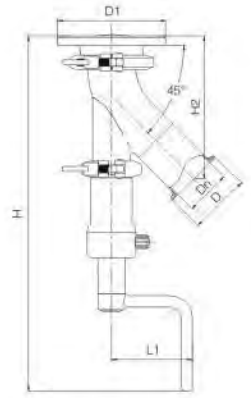


NO.VKD410S1

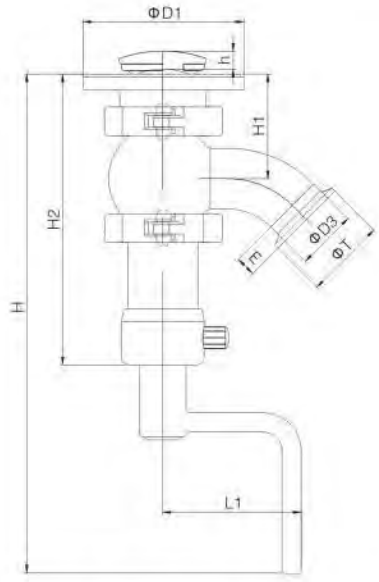
INCH

SIZE	Dn	D	D1	H	H1	H2	L	L1
1.5"	35.1	50.5	115	376.5	140	152	142	86
2"	47.8	64	115	376.5	133.5	152	114	86
2.5"	59.5	77.5	130	400	155.5	168	133.5	86
3"	72.2	91	150	424	179	186	152	86

DIN

SIZE	Dn	D	D1	H	H1	H2	L	L1
DN40	37	50.5	115	376.5	140	152	142	86
DN50	49	64	115	376.5	133.5	152	114	86
DN65	66	91	150	400	155.5	168	133.5	86
DN80	81	106	150	424	179	186	152	86

HY-FLOW



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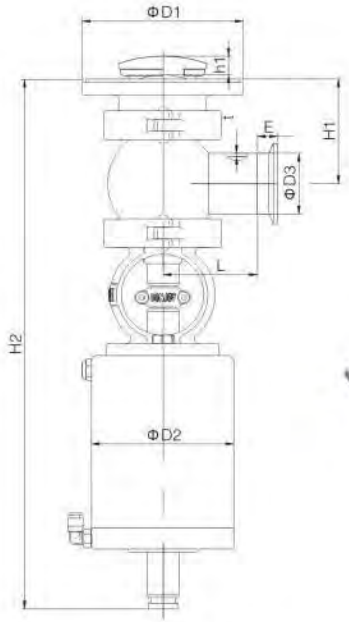


NO.VKD110Q1

Tank bottom valve flange connection (DIN)

SIZE	D1	D2	D3	H	H1	H2	h	h1	L	T	t	-
1 1/2"	100	88	38.1	328	65	330	12	15	60	50.5	1.5	12.7
2"	115	88	50.8	360	66.5	365	37	22	70	64	1.5	12.7
2 1/2"	130	113	63.5	364	75	404	26	25	80	77.5	2.0	12.7
3"	150	113	76.2	385	87.5	432	28	25	99	91	2.0	12.7
3,5"	150	113	76.2	385	87.5	432	28	25	99	91	2.0	12.7
4"	195	132	101.6	438	107.5	474	45	40	114	119	2.0	15.8

Tank bottom valve flange connection (DIN)

SIZE	D1	D2	D3	H	H1	H2	h	h1	L	T	t	-
DN40	100	88	40	328	65	330	12	15	60	50.5	1.5	12.7
DN50	115	88	52	360	66.5	365	37	22	70	64	1.5	12.7
DN65	150	113	70	385	87.5	432	28	25	99	91	2.0	12.7
DN80	150	113	85	385	87.5	432	28	25	99	106	2.0	12.7
DN100	195	132	104	438	107.5	474	45	40	114	119	2.0	15.8

Mixproof double seat valve (IS-C series)

HY-FLOW

Applications

- 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 leakage detector can be self cleaned through seat lifting.
- The mixproof valve is applied to food-processing industries, especially in the beverage and diary industries.

Operating principles

- Lift type mixing proof valve is remotely operated through compressed air. It is normally closed before running.
- The mixing proof valve is constructed with two independent plugs, which will form a leakage chamber that interlinks to atmosphere under normal working status. When occasional failure of the medium leakage happen, medium will flow into the chamber and be discharged at the out port.
- The leakage chamber is closed when the valve is operating. So medium can flow through one pipeline to another. This valve can be clean in place. Many options of CIP and SIP combinations are available to users. (Refer to cleaning sterilization function options)
- Clean system can clean the upper, lower stem and leakage chamber. Which ensures the valve to be high hygienic. Effectively cleaning system makes the fluid that special for CIP clean in place directly wash all the inside valve body. The cleaning system commoner, it will take shorter time. Another beneficial of the high cleaning system is that the lift type mixing proof valve can be applied to aseptic processing. If user's steam into CIP pipeline, the system will constitute a shield that can isolate air.

HY-FLOW

Design and features

- Size: DN40–1.1/2" to DN100–4"
- Valves with normally closed pneumatic actuator
- Forged spherical bodies
- Judge whether the gasket is broken by observing whether the liquid flows out on the bottom of the valve
- Easy disassembly by releasing the clamp
- Weld connection (mm or inch)
- Balanced design
- Max. Operating pressure: 10bar
- Min. Operating pressure: Absolute vacuum
- Working temperture: –10℃ to 130℃ (140℃ for short periods or sterilisation)
- Compressed air pressure: 5.5bar–7bar
- Air supply connections: R1/8"(BSP)

Mixproof double seat valve (IS-C series)

HY-FLOW

Materials

- Parts in contact with the media: AISI 316L
- Other stainless steel parts: AISI 304
- Internal surface finish: Ra≤0.8 μ m
- Gasket (standard): EPDM in compliance with FDA 177.2600

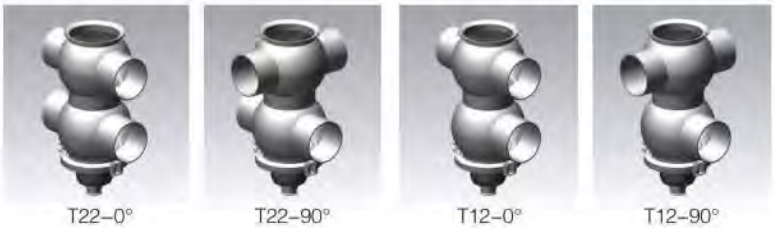
Options

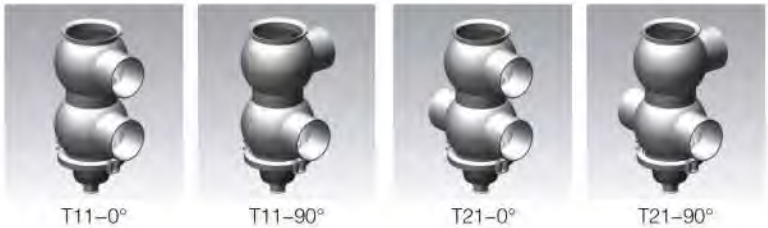
- Gaskets: NBR and FPM (Viton).
- Connections: DIN, SMS, RJT...
- Control C-top: electric connection, AS-I bus connection
- Surface finish: Ra≤0.4 μ m
- Body combination (see chart 1)

Body combination diagram (Figure 1)

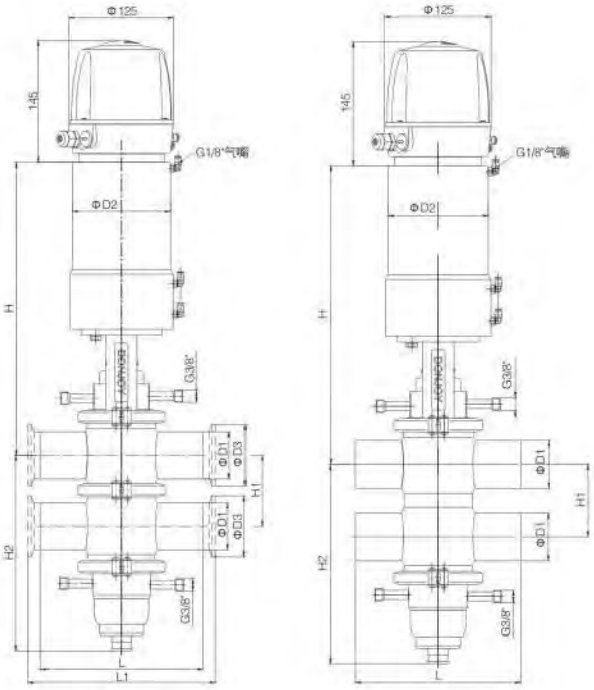
Clamped body combination

One-piece valve body





HY-FLOW



Clamp body
NO.VFT101Q1-41022-0°

One-piece valve body
NO.VFT101Q1-42022-0°

(INCH) Mixing proof valve

SIZE	D1	D2	D3	H1	H2	H	焊接 welding	卡箍 clamp
							L	L1
1.5"	38.1	118	50.5	70	204	356.5	160	185.4
2"	50.8	118	64	80	224	356.5	160	185.4
2½"	63.5	133	77.5	96	263.5	396	220	245.4
3"	76.2	133	91	110	281.5	404	220	245.4
4"	101.6	168	119	130	338.5	455.5	254	285.6

(DN) Mixing proof valve

SIZE	D1	D2	D3	H1	H2	H	焊接 welding	卡箍 clamp
							L	L1
DN40	40/41	118	50.5	70	204	356.5	160	185.4
DN50	52/53	118	64	80	224	356.5	160	185.4
DN65	70	133	91	96	265.5	396	220	245.4
DN80	85	133	106	110	283.5	404	220	245.4
DN100	104	168	119	130	338.5	455.5	254	285.6

Mixproof double seat valve (IS-C series)

HY-FLOW

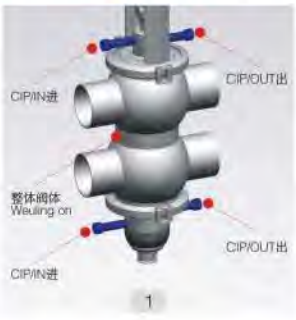
Whole valve body

One-piece valve body's advantage is that there is no connection between the upper and lower valve body seal contact with the liquid, inlet and outlet direction is not rotating (do specify when order!)

Clamp valve body connection

Advantage of clamp valve body connection, is arbitrary 360 ° rotation of the inlet and outlet fluid direction.

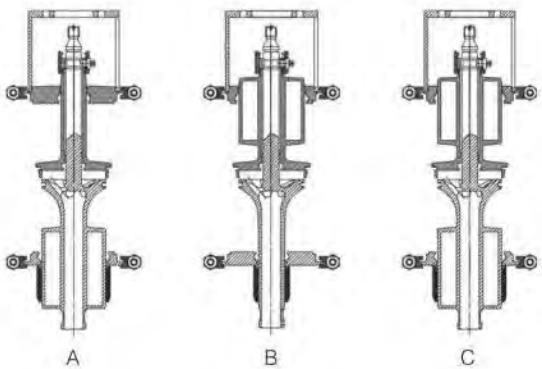
Cleaning/sterilization Parts for options



1. Unique ultraclean(upper and lower stem cleaning / sterilization + seat lift cleaning)
2. The lower stem cleaning/sterilization + Seat lift cleaning
3. The upper stem cleaning/sterilization + Seat lift cleaning
4. Seat lift cleaning (basic)

Pressure balance design selection

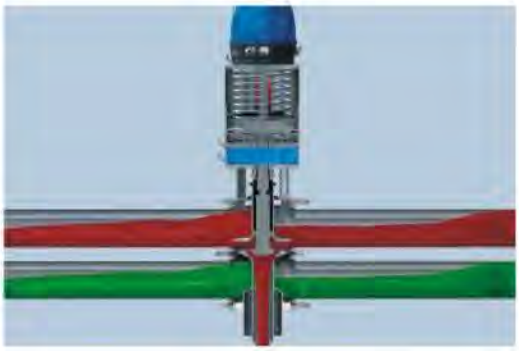
A.Upper Stem Balance
B.Lower Stem Balance
C.Upper and Lower Stem Balance



HY-FLOW

- Valve closed
- The lower seat remains close by main spring.
- Upper seat remains close by intermediate spring and product pressure.
- Media protected by double seals.
- Interspace open to atmosphere.

- Valve open
- Main piston raised by air pressure to main actuator connection.
- Motion transmitted through central shaft to the lower seat.
- Lower seat engages on upper seat.
- Leakage path to atmosphere closes.
- Valve fully opens.

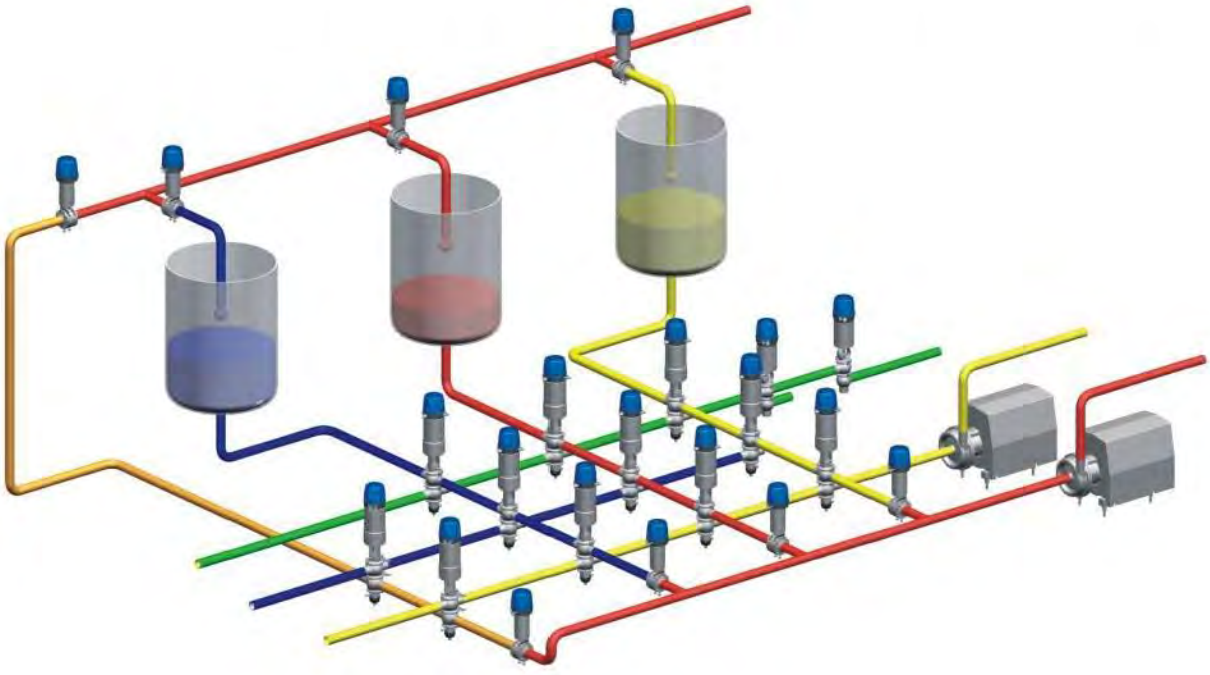


- Upper Seat Clean
- Lower piston pulsed by air pressure to bottom air connection.
- Motion transmitted through outer shaft to the upper seat.
- Lower seat positively held closed by main spring.
- Fluid in upper body passes to atmosphere over seat seal and through interspace.

- Lower seat Clean
- Upper piston is pushed by air pressure to top limit.
- Motion transmitted through central shaft to the lower seat.
- Pressure simultaneously applied above main piston.
- Upper seat positively held closed.
- Fluid in lower body passes to atmosphere over seat seal and through interspace

Mixing proof valve typical applications

HY-FLOW



Manifold

HY-FLOW

Applications

- The manifold can be assembled by containers with various functions together. It can improve working efficiency of system and control the whole production process. The manifold can choose any flexible hose pipe and jet deviator to change the flexure automatically. The kind of automatic operation is safe, flexible and effective. One set of manifold can served to multi pipelines. Meanwhile other containers are filled in or empty, operator can clean up any one of them. The liquid won't be polluted.
- Widely used in dairy, juice, beverage, brewery, wine, food processing, cosmetic, pharmacy industries.

materials

- Parts in contact with the medium: AISI 316L
- Other parts: actuators, skid and drain tray, control panel AISI 304
- Gaskets in contact with medium: EPDM

Operating principles

- According operation function, these valves should be connected with containers and working pipelines(such as filling pipes,drainage pipes and CIP cleaning pipes). The operation is automatic, not manual to avoid any risks of accidents.

HY-FLOW

Other variants

- Connections: weld, clamp, SMS, RJT, IDF, flanges
- Gaskets: viton(R), NBR
- Dimensions of valves(different valve bodies)
- Orbital welding
- Pressure tests(PED)
- Actuator pressure up to 10 bar

Control system

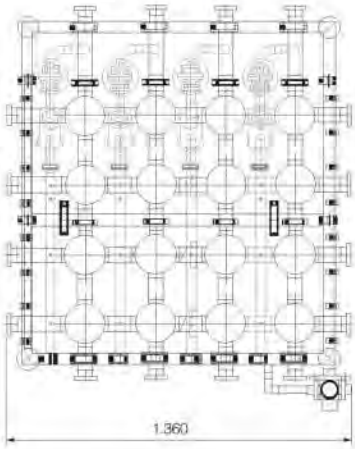
- With a simple C-TOP on every pneumatic actuator (solenoids and sensors)
- With a C-TOP of AS-I field bus
- Without C-TOP, solenoids are installed in the control panel and sensors on the pneumatic actuator
- PLC control
- The states of the valves can be displayed on the control panel

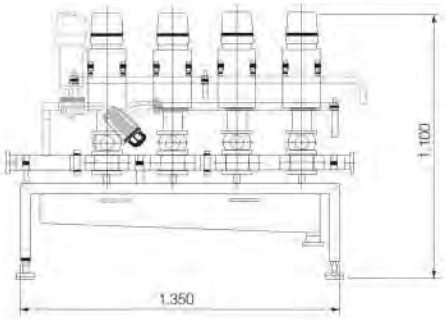
Technical specifications

- Max.temperature(EPDM gaskets)120℃
- Pneumatic actuator 5 bar
- C-TOP with 1 solenoid valve +2 sensors for the cavity spray mixing proof valve
- C-TOP with 3 solenoid valves +2 sensors for the Seat Lift mixing proof valve
- Sizes: DN40, DN50, DN65, DN80 and Dn100
- CIP line for the Cavity Spray system DN25 with an angle filter
- Matrix:from 4 up to 48 valves

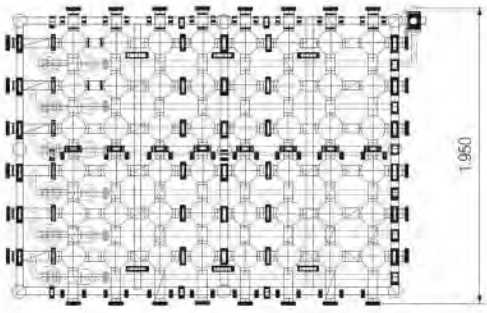
Examples of A Standard Manifold

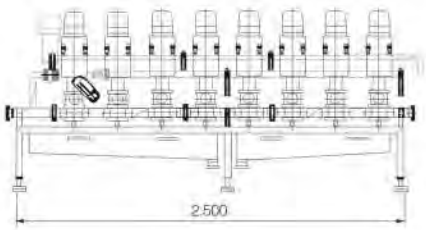
Manifold 4×4



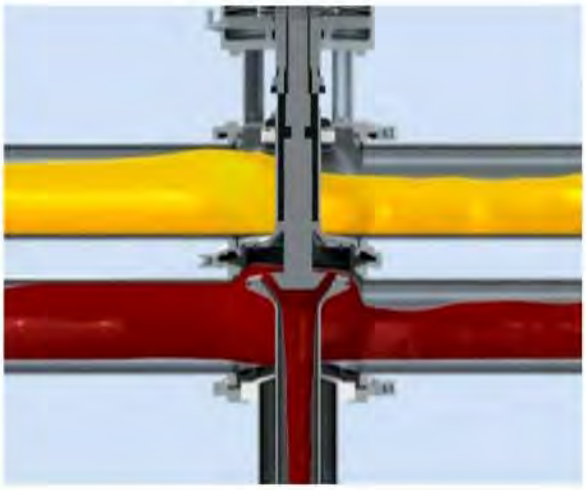


Manifold 8×6

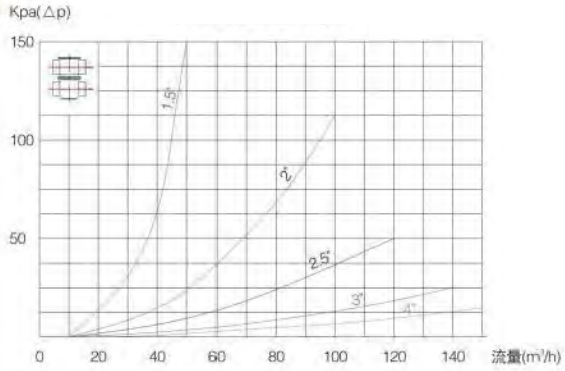


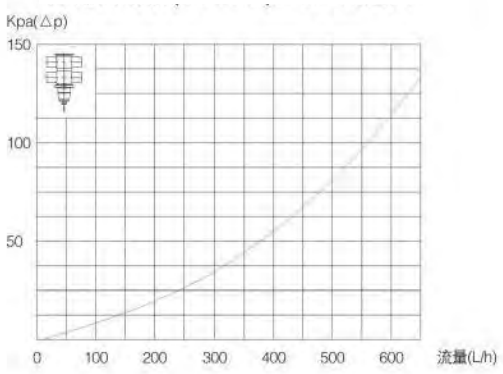


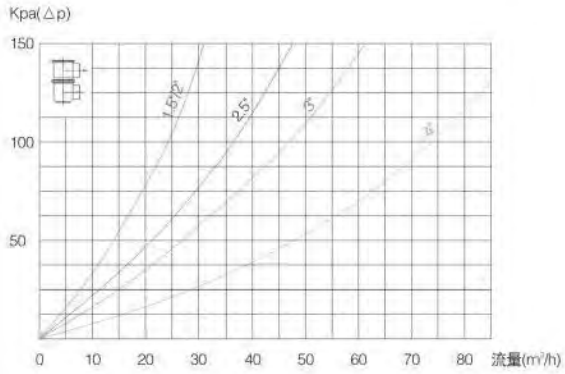
HY-FLOW

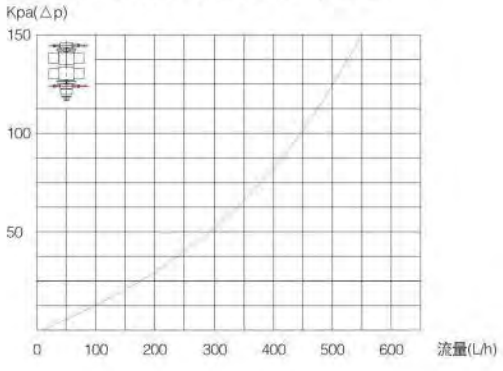


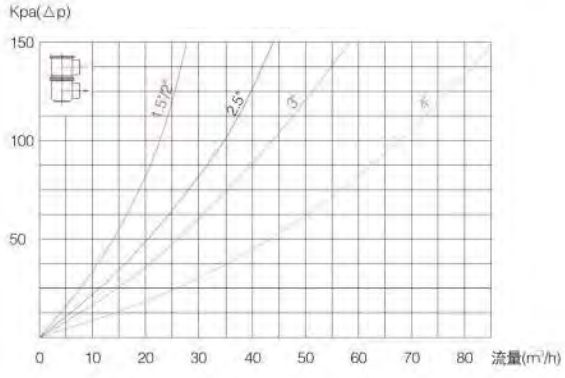
Seat lift type pressure drop – flow chart









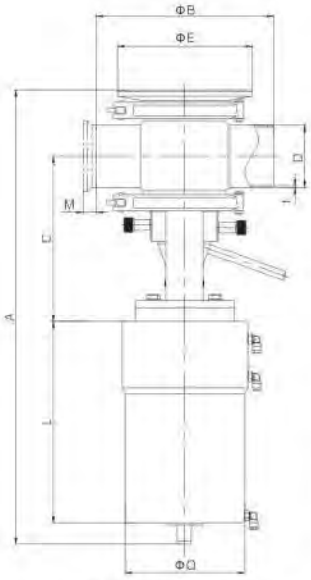


Mixing proof tank bottom valve

HY-FLOW

Operating principles

The concept of this double seat valve is characterized by excellent flexibility and easy operation. The typical design let you feel the most perfect body assembled and equipment in all mixproof tank bottom valve.This mixing proof is remotely operated through compressed air. The mixing proof valve is constructed with two independent plugs, which will form a leakage chamber that interlinks to atmosphere under normal working status. When occasional failure of the medium leakage happen, medium will flow into the chamber and be discharged at the out port, here it will see if any conk out or seat seal detected, preventing the possibility of products contamination due to leakage and conk out. When the valve is open, the leakage chamber is closed.

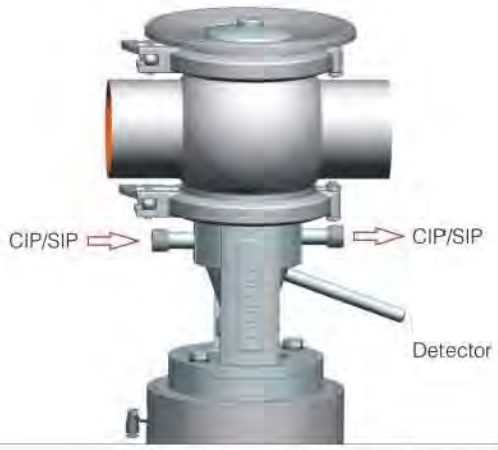


NO.VFT200Q1-21020

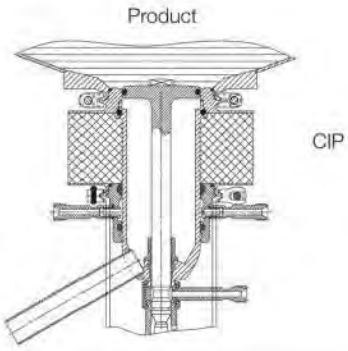
SIZE	A	B	C	D	I	E	Q	L	M
1.5"	460	160	161	38.1	1.5/1.65	130	120	216	12.7
2"	460	160	161	50.8	1.5/1.65	130	120	216	12.7
2.5"	505	198	180	63.5	2/1.65	150	133	226	12.7
3"	526	198	193	76.2	2/1.65	150	133	226	12.7
4"	600	254	230	101.6	2	195	168	246	15.8

SIZE	A	B	C	D	I	E	Q	L	M
DN40	460	160	161	40	1.5	130	120	216	12.7
DN50	460	160	161	52	1.5	130	120	216	12.7
DN65	505	198	178	70	2	150	133	226	12.7
DN80	526	198	193	85	2	150	133	226	12.7
DN100	600	254	230	104	2	195	168	246	15.8

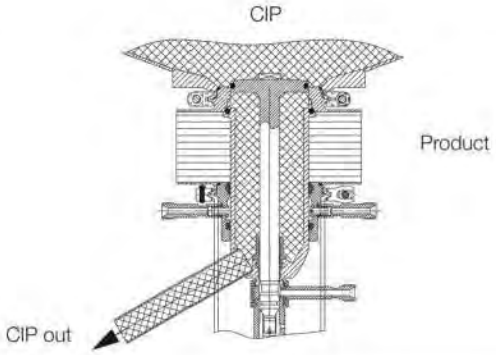
HY-FLOW



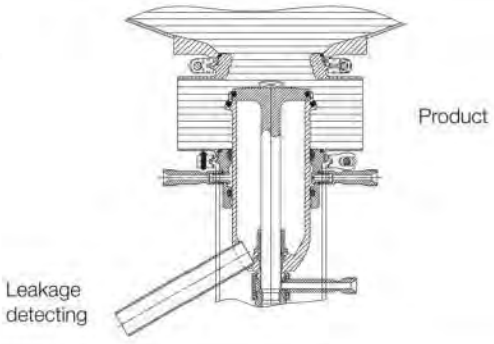
Closed valve



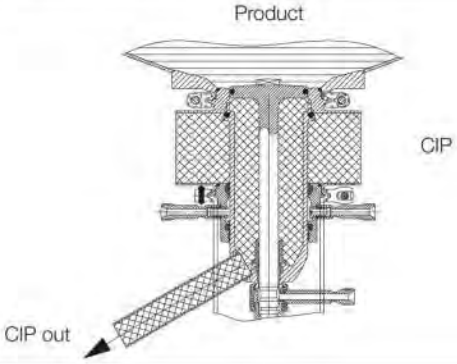
Seat lift cleaning with tank plug (optional)



Open valve



Seat lift cleaning with balanced plug



Mixing proof valve(E-C series)

HY-FLOW

Applications

The external supply CIP mixing proof valve is designed to meet when there are two different product flows through the same only valve, both guarantee to prevent fluid mixing and convenient for monitoring the working condition.

Operating principles

- ◆Remotely control through compressed air this valve is normally closed(NC). This valve is companied with two small Pneumatic valves(Normally open). One for monitoring, Another one for CIP.
- ◆Plue(upper stem inside of a changever valve) has two seals. Which form a leakage chamber between each other. The leakage medium flow into the chamber, discharges through detector valve. Supply air to actuator can make the valve clean in place(see figure 2).
- ◆Under cleaning, fluid folw directly to the plug. This valve is unsensitive to water hammer effect.

Standard design

Two optional designs: One valve body(stop reversing)
Three valve bodies(divert seat valve)

HY-FLOW

Materials

- Parts in contact with the media: AISI 316L
- Other stainless steel parts: AISI 304
- Internal surface finish: Ra≤0.8 μ m
- Gasket (standard): EPDM in compliance with FDA 177.2600

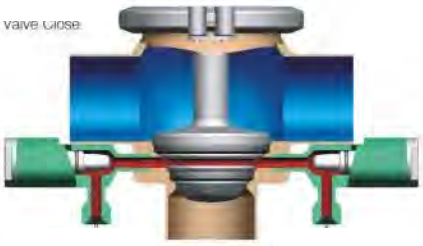
Options

- Gaskets: NBR and FPM (Viton(R)
- Connections: DIN, SMS, RJT...
- Control box C-TOP: electric connection, AS-I bus connection
- Surface finish: Ra≤0.4 μ m

Design and features

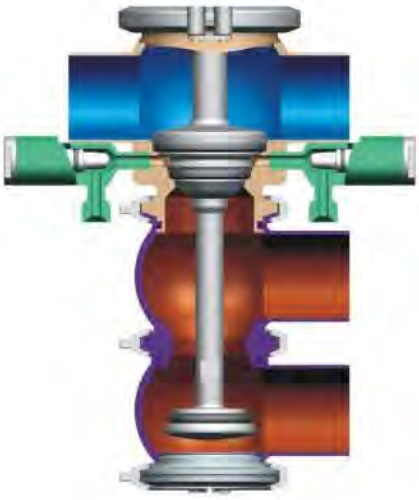
- Available from DN40-1.1/2" to DN100-4"
- Valves with normally closed pneumatic actuator
- Forged spherical bodies
- Compact design
- Angular orientation 360°

Mixing valve working schematic diagram



1) CIP inlet
2) CIP outlet
A. Stop reversing valve closed: leakage cavity cleaning.
Work /cleaning

B. Stop reversing valve open: the body and leakage cavity cleaning.



C. Reversing valve closed: the upper body to undertake cleanness.

HY-FLOW

Body Combinations

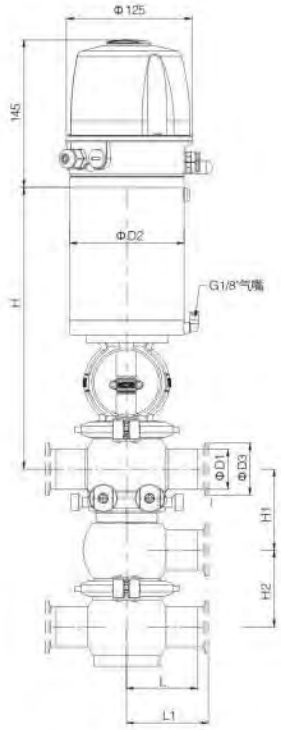

P30 P20 P112 P111


P12 P11 P12I P122

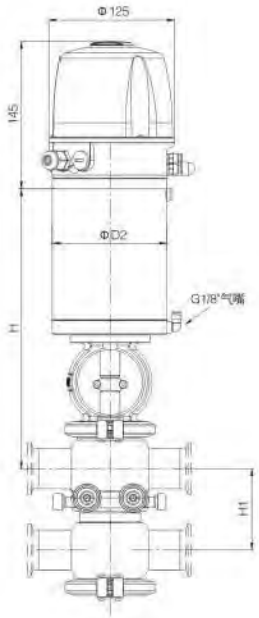

P21 P22 P211 P212


P221 P222

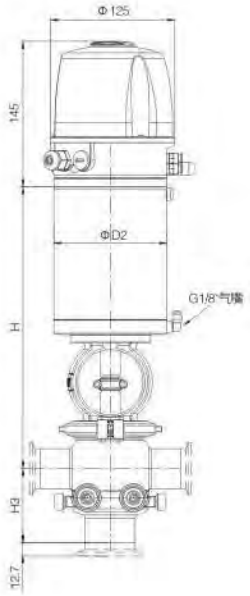
HY-FLOW



NO.VFP101Q1-21212



NO.VFP101Q1-21022



NO.VFP101Q1-21030

(INCH)

SIZE	D1	D2	D3	H1	H2	H3			H	焊接 welding	卡箍 clamp	d
						一位	二位	三位		L	L1	
1.5"	38.1	113	50.5	93.5	76.5	80	137	214	280.5	80	92.7	12
2"	50.8	113	64	102	76.5	80	148	224	280.5	80	92.7	12
2½"	63.5	132	77.5	109.5	88.5	99	159.5	248	290	99	111.7	12
3"	76.2	132	91	127	105.5	99	188	293.5	290	99	111.7	12
4"	101.6	180	119	163.5	146	114	246	392	385.5	114	129.8	12

DN)

SIZE	D1	D2	D3	H1	H2	H3			H	焊接 welding	卡箍 clamp	d
						一位	二位	三位		L	L1	
DN40	40	113	50.5	93.5	76.5	80	137	214	280.5	80	92.7	12
DN50	52	113	64	102	76.5	80	148	224	280.5	80	92.7	12
DN65	70	132	91	127	105.5	99	188	293.5	290	99	111.7	12
DN80	85	132	106	127	105.5	99	188	293.5	290	99	111.7	12
DN100	104	180	119	163.5	146	114	246	392	385.5	114	129.8	12

HY-FLOW

Valve position can be adjusted

Technical features:
Flow controlling by wrench,Low cost.

Valve position regulator

Control wrench

Aspetic mxing proof valve(with PTFE diaphragm)

Technical features:
The valve has the same function of mixing proof valve
PTFE diaphragm isolates the inside and outside
Diaphragm's damage can be seen at leakage chamber through the leakage detecting tube.

Leakage bin

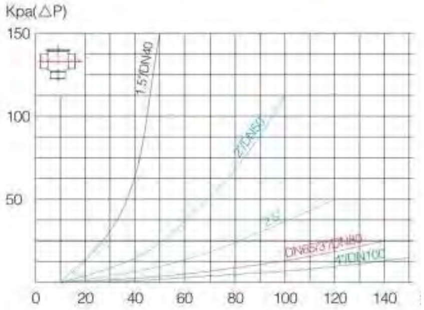
Leakage detector tube

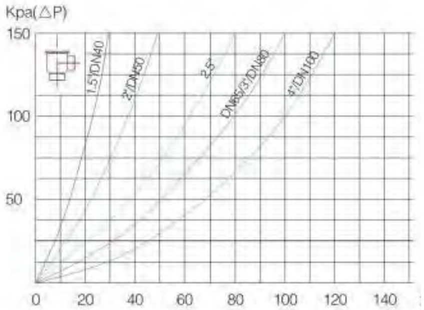
Aseptic mixing proof valve

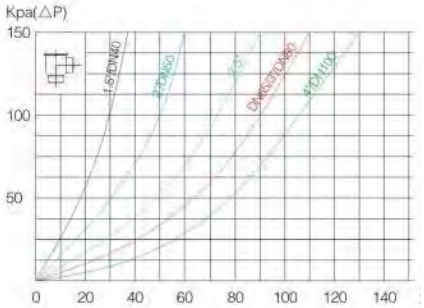
Technical features:
The valve has the same function of mixing proof valve
Equipped with a stem that can be sterilized by cleaning fluid and steam. Ensure the stem be completely cleaned.

Flow rate curve of mixing proof valve

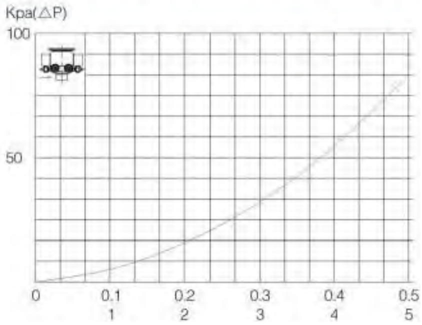
Single seat prevent mixing valve pressure drop – flow chart





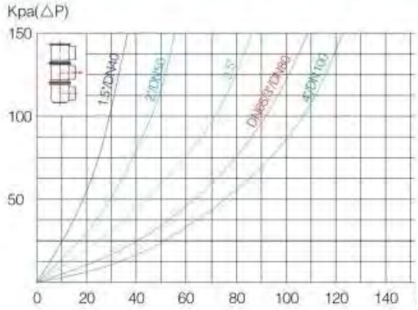


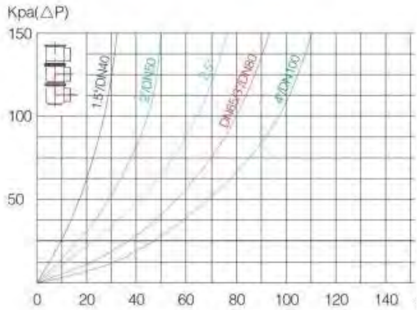
CIP (Clean in place) cavity pressure drop – flow and

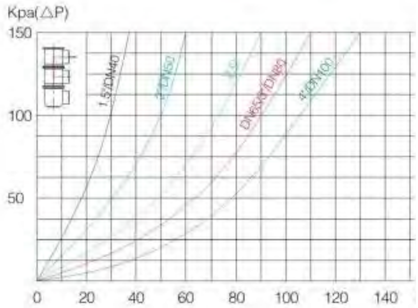


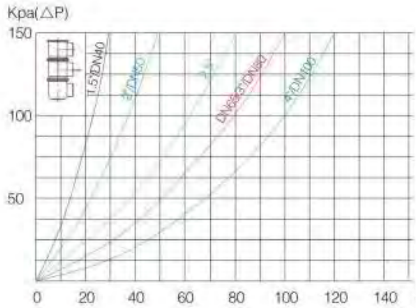
Description: test conditions based on, water,water, temperature 20 ° ,
measurement accord with VDI2173

Reversing type anti mixed valve pressure drop – flow chart









Description: test conditions based on, water,water, temperature 20 ° ,
measurement accord with VDI2173