



Specifications

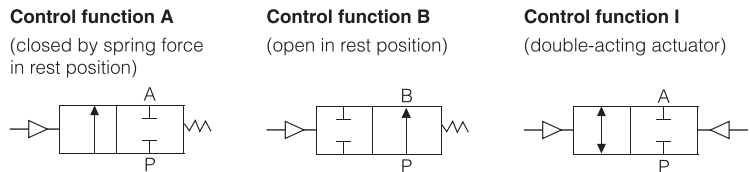
Model/Specifications	DN15	DN20	DN25	DN32	DN40	DN50
Control function	3/2-way normally closed(NC) (port 1)					
Actuator material	PA Actuator /S.S. actuator /Aluminum actuator					
Valve body material	S.S304 /316 /316L					
Nominal pressure	PN16(body)					
Operating method	Plunger pilot					
Ambient and fluid	Water, alcohol, oils, fuels, hydraulic fluid, alkaline solutions, salt solution, organic solutions, hot water, steam					
Viscosity	Max.600mm ² /s					
Media temperature	-10~180°C					
Ambient temperature	PA Actuator: -10~60°C S.S. Actuator /Aluminum actuator: -10~140°C					
Installation	As required, preferably with actuator in upright position					
Control medium	Neutral gases, air					
Packing gland (With silicone grease)	PTFE V-rings with spring compensation					
Seat seal	PTFE/FPM/NBR					
Stem seal	PTFE/FPM					
Piston seal	FPM/NBR					
Mini.pilot pressure (bar)	4.5	4.5	4.5	5.0	5.2	5.2
Port size	G1/2"	G3/4"	G1"	G1 1/4"	G1 1/2"	G2"
Nominal diameter (mm)	13	18	24	31	35	45
Kv (m ³ /h)	1 → 2	7	9	16	30	35
	2 → 3	5	6	11	21	35

Product feature

3/2-way Seat Valve
Pneumatically Operated, for medium up to +180°C, threaded port & tri-clamp connection DN 15-50

1. For mixing or distributing mediums;
2. Controlled by a pilot valve;
3. Flow optimized body in stainless steel;
4. Long service life and maintenance-free operation.

Symbol



Ordering code

TV100		P	015	NC	S	1 × 63mm
Model			Nominal diameter	Control function	Acting type	Versions(standard)
TV100	3/2-way seat valve threaded ends		15 G1/2"	NO Normally open	S Single acting	1 version 1
TV200	3/2-way seat valve tri-clamp ends		20 G3/4"	NC Normally closed (standard)	D Double acting	2 version 2
			25 G1"			3 version 3
			32 G1 1/4"			
			40 G1 1/2"			
			50 G2"			
				Body material		
				Blank S.S 304 (standard)		
				4 S.S 316		
				5 S.S 316L		

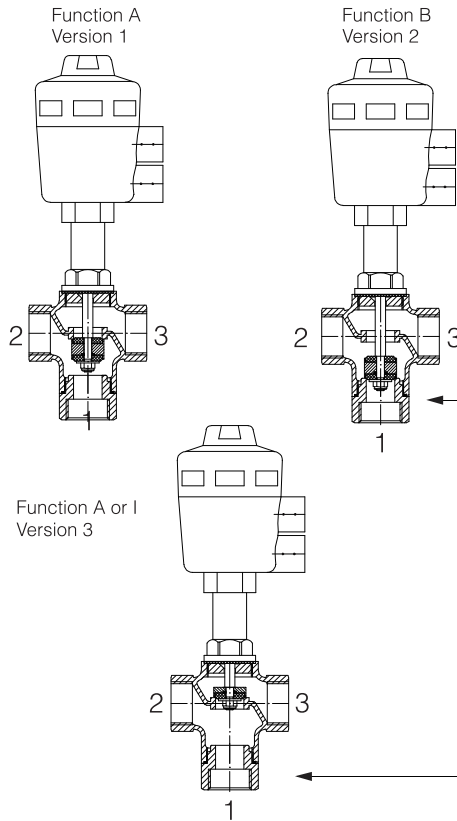
Actuator size

Port size	Standard actuator size (mm)		
	PA	S.S.	AL
DN15	40,50	40,50	40,50
DN20	50,63,80	50,63,90	50,63,80
DN25	50,63,80	50,63,90	50,63,80
DN32	63,80,100	63,90	63,80,100
DN40	63,80,100	63,90	63,80,100
DN50	63,80,100	63,90	63,80,100

TV100 Series 3-way seat valve consists of a pneumatically operated actuator and a 3-way valve body. The actuator is available in three different materials, PA, aluminum or stainless steel, depending on the ambient temperature and customer requirements. Materials available for the valve body are stainless steel 304, 316 and 316L. Interchanging of pressure and service ports enables different fluidic circuit functions, such as mixing or distributing mediums.

The flow-optimized valve body of TV100 allows excellent flow rates. The tried and tested self-adjusting gland secures a high level of tightness and thus ensures reliable operation over years. The 3-way valve TV100 is controlled by a pilot valve. It can be equipped easily with an electrical position indicator. For the user, the compact TV100 is often an economical alternative to two single shut-off valves.

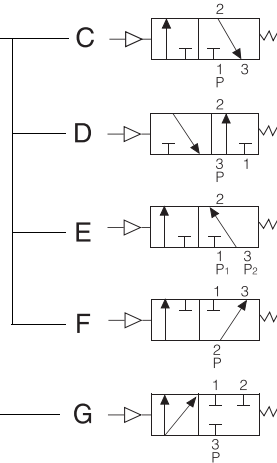
Connections for fluidic circuit functions C, D, E, F and G



Actuator with control function A
When de-energised, port connection 1 is closed with spring

Fluidic circuit function	Connection-port		
	1	2	3
C	P	A	R
D	R	A	P
E	P1	A	P2
F	A	P	B
G	A	B	P

A, B service port
P, P1, P2 pressure port
R exhaust port



When de-energised, pressure port 1 closed, service port 2 exhausted.

When de-energised, pressure port 3 connected to service port 2, exhaust port 1 closed

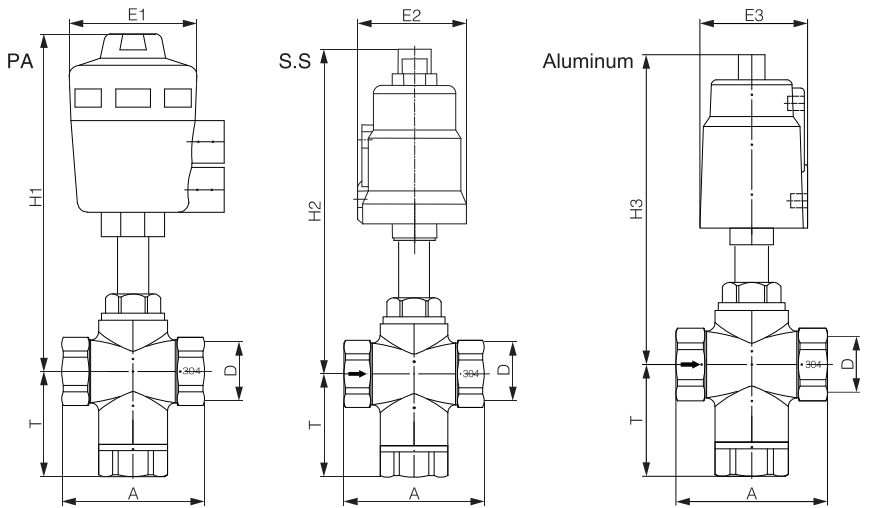
Mixer valve
When de-energised, pressure port 3 connected to service port 2, pressure port 1 closed

Distributor valve 1
When de-energised, pressure port 2 connected to service port 3, service port 1 closed

Distributor valve 2
When de-energised, pressure port 3 connected to service port 2 closed, service port 1 closed

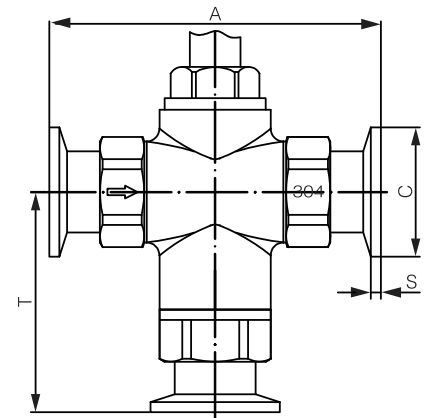
Dimensions

3/2-way Seat Valve Threaded Ends



PA Actuator 3/2-way seat valve S.S. Actuator 3/2-way seat valve Aluminum actuator 3/2-way seat valve

3/2-way Seat Valve Tri-Clamp Ends



Type	A	C	S	T
DN 15	116	50.5	3.5	78
DN 20	116	50.5	3.5	78
DN 25	130	50.5	3.5	88
DN 32	146	50.5	4.5	108
DN 40	146	64	4.5	108
DN 50	205	64	4.5	120

Type	Actuator size	Port size	A	D	T	H1	H2	H3	E1	E2	E3
DN 15	50	G1/2"	76	G1/2"	58	185	188	188	63	63	65
	50	G3/4"	76	G3/4"	58	185	188	188	63	63	65
DN 20	63	G3/4"	76	G3/4"	58	224	223	218	80	76	77
	50	G1"	90	G1"	68	188	191	191	63	63	65
DN 25	63	G1"	90	G1"	68	227	226	221	80	76	77
	63	G1 1/4"	120	G1 1/4"	85	238	237	232	80	76	77
DN 32	80	G1 1/4"	120	G1 1/4"	85	255	257	247	100	101	96
	63	G1 1/2"	120	G1 1/2"	85	239	238	233	80	76	77
DN 40	80	G1 1/2"	120	G1 1/2"	85	256	258	248	100	101	96
	63	G2"	150	G2"	93	256	255	250	80	76	77
DN 50	80	G2"	150	G2"	93	273	275	265	100	101	96