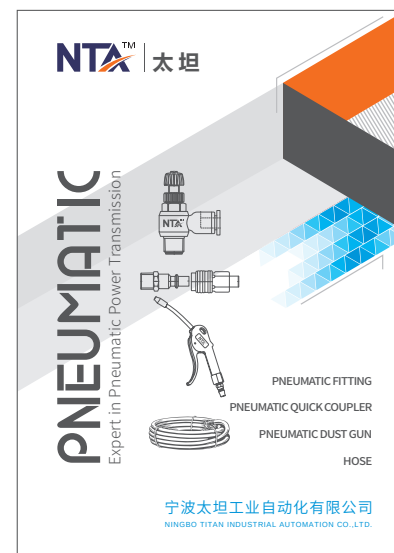
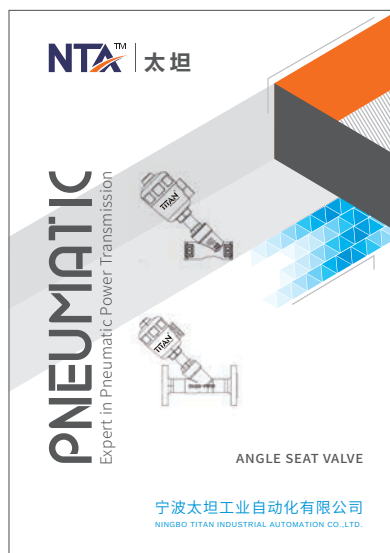
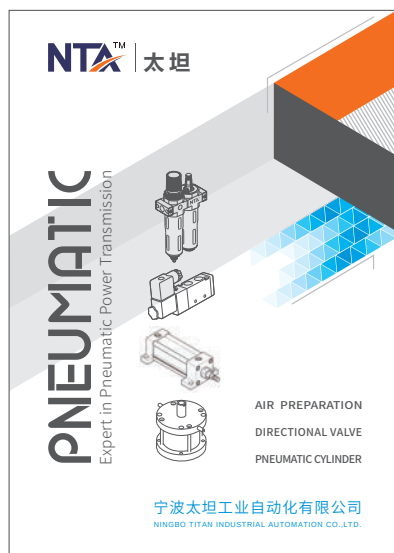




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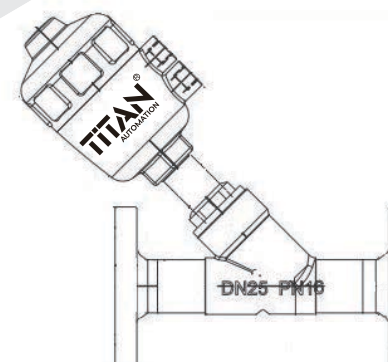
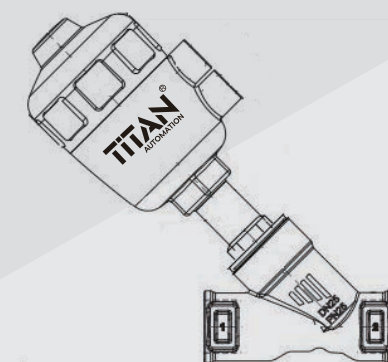
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选型手册/Selection Guide

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ANGLE SEAT VALVE

宁波太坦工业自动化有限公司
NINGBO TITAN INDUSTRIAL AUTOMATION CO.,LTD.



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3/2-way Seat Valve

TTV100 Series 3-way seat valve consists of a pneumatically operated actuator and a 3-way valve body. Available material for the valve body is stainless steel 304, 316 or 316L. Interchanging of pressure and service ports enables different fluidic circuit functions, such as the mixing or distributing of mediums. Thread port or Tri-Clamp connection are optional.

3/2-way Seat Valve

Pneumatically Operated, for medium up to +180° C, threaded port & tri-clamp connection DN 15-50

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

How to Order

TTV100

P

015

NC

S

1 x 63mm

TV100P025NCS1

TV200SO25NCS2

TV200A040NCS3

1

2

3

versions (standard)

1	version 1
2	version 2
3	version 3

Acting Type

S	Single acting	D	Double acting
---	---------------	---	---------------

Body Material

Blank	S.S 304 (standard)
4	S.S 316
5	S.S 316L

Control Function

NO	Normally open
NC	Normally closed (standard)

Nominal Diameter

15	G1/2	20	G3/4
25	G 1	32	G1 1/4
40	G1 1/2	50	G 2

Actuator Material code

P	PA Actuator
S	S.S. Actuator
A	Aluminum Actuator

Model

TV100	3/2-way Seat Valve Threaded Ends
TV200	3/2-way Seat Valve Tri-Clamp Ends

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.

Symbol

Control function A
(closed by spring force in rest position)

Control function B
(open in rest position)

Control function I
(double-acting actuator)

Pneumatically Operated 3-way Seat Valve

Series TTV100/TTV200

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

Function A Version 1

Function B Version 2

Function A or I Version 3

Actuator with control function A

When de-energised, port connection 1 is closed with spring

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

A,B

P,P1,P2

R

service port

pressure port

exhaust port

C

D

E

F

G

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

Ordering chart for valves with port 1 closed by spring action (other versions on request)

Specifications

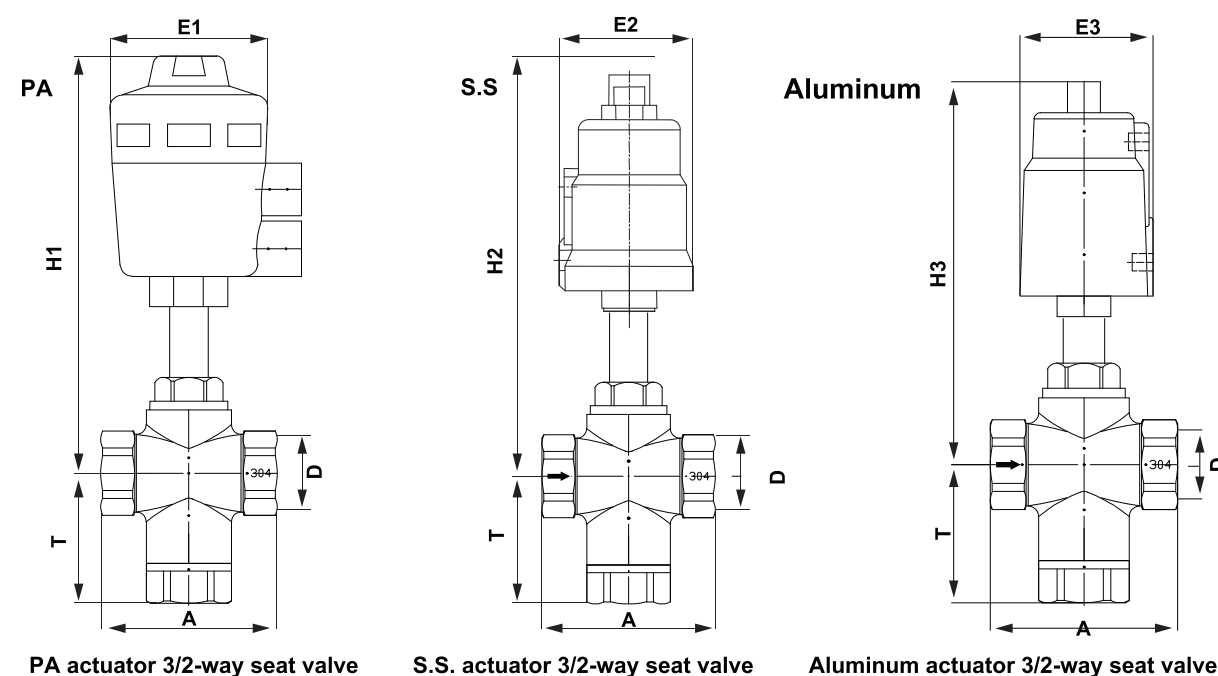
Model /Specifications	DN15	DN20	DN25	DN32	DN40	DN50
Control Function	3/2-way normally closed(NC) (port 1)					
Actuator Material	PA Actuator /S.S. Actuator /Aluminum Actuator					
Valve Body Material	S.S304 /316 /316L					
Nominal Pressure	PN16(body)					
Operating Method	Plunger Pilot					
Ambient and Fluid	Water,alcohol,oils, fuels,hydraulic fluid,alkaline solutions, salt solution,organic solutions, hot water,steam					
Viscosity	Max.600 ² mm /s					
Media Temperature	- 10 ~180℃					
Ambient Temperature	PA Actuator: - 10 ~60℃ S.S. Actuator/Aluminum Actuator: - 10 ~140℃					
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	G 1	G1 1/4	G1 1/2	G 2
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	22

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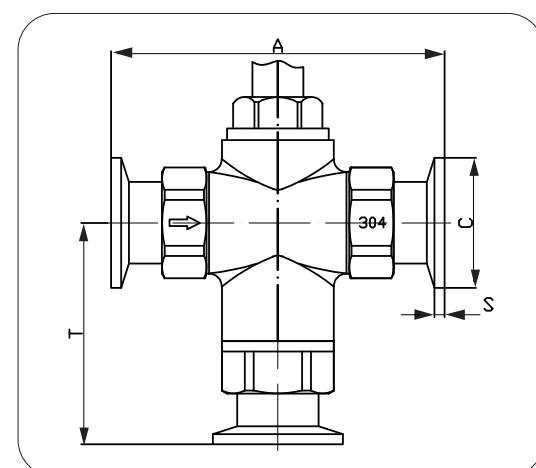
◆ Dimensions [mm]

3/2-way Seat Valve Threaded Ends



Type	Actuator size	Port size	A	D	T	H1	H2	H3	E1	E2	E3
DN 15	50	G 1/2	76	G 1/2	58	185	188	188	63	63	65
DN 20	50	G 3/4	76	G 3/4	58	185	188	188	63	63	65
	63	G 3/4	76	G 3/4	58	224	223	218	80	76	77
DN 25	50	G 1	90	G 1	68	188	191	191	63	63	65
	63	G 1	90	G 1	68	227	226	221	80	76	77
DN 32	63	G 1-1/4	120	G 1-1/4	85	238	237	232	80	76	77
	80	G 1-1/4	120	G 1-1/4	85	255	257	247	100	101	96
DN 40	63	G 1-1/2	120	G 1-1/2	85	239	238	233	80	76	77
	80	G 1-1/2	120	G 1-1/2	85	256	258	248	100	101	96
DN 50	63	G 2	150	G 2	93	256	255	250	80	76	77
	80	G 2	150	G 2	93	273	275	265	100	101	96

◆ 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



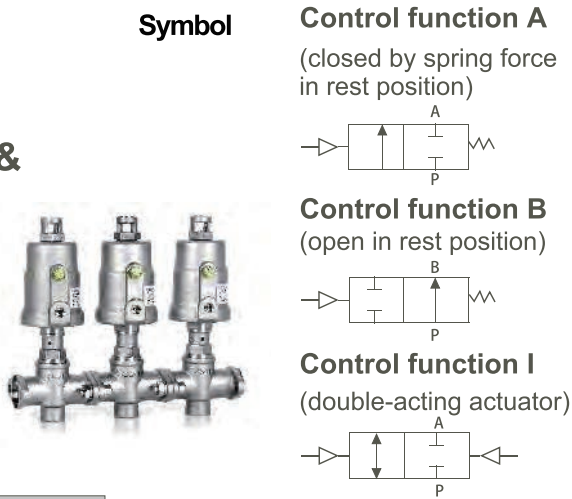
3/2-way-Seat Valve(Manifold valve type)

TTV300 Series 3-way seat valve consists of a pneumatically operated actuator and a 3-way valve body. Materials available for the valve body are stainless steel 304, 316 and 316L. With our full range of compatible accessories, the mini-flange construction of the 3-way valve housing enables an unlimited number of the valves to be chained into linear groups, facilitating the neat and efficient layout of the pipeline system. Interchanging of pressure and service ports enables different fluidic circuit functions, such as mixing or distributing of the mediums. For the user, the integrated valve design guarantees the neat and orderly installation of the equipment system, as well as economical benefits.

Pneumatically Operated 3-way Seat Valve
Series TTV300 (Manifold Valve Type)

3/2-way Seat Valve
Pneumatically Operated, for
medium up to +180° C,
Manifold valve type,threaded port &
Weld ends connection DN 15-25

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



◆ **How to Order**

TTV300 P 015 NC S T x 63mm

Port Connection Type

T	Threaded port
W	Weld end

Acting Type

S	Single acting	DS	Double acting
---	---------------	----	---------------

Body Material

Blank	S.S 304 (standard)
4	S.S 316
5	S.S 316L

Control Function

NO	Normally open
NC	Normally closed (standard)
NA	Liberty

Nominal Diameter

15	G1/2
20	G3/4
25	G 1

Actuator Material Code

P	PA Actuator
S	S.S. Actuator
A	Aluminum Actuator

Model

TV300	3/2-way Seat Valve (Manifold type)
-------	------------------------------------

TV300S015NCSW

TV300S055NCST

◆ TV300 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 and stainless steel, depending on the ambient temperature and customer requirements. Materials available for the valve body are stainless steel 304, 316 and 316L. With our full range of compatible accessories, the mini-flange construction of the 3-way valve housing enables an unlimited number of the valves to be chained into linear groups, facilitating the neat and efficient layout of the pipeline system. Interchanging of pressure and service ports enables different fluidic circuit functions, such as mixing or distributing of the mediums. The flow-optimized valve body of TV300 allows excellent flow rates. The tried and tested self-adjusting gland secures a high level of tightness and thus ensures reliable operation over years. For the user, the integrated valve design guarantees the neat and orderly installation of the equipment system, as well as economical benefits.

◆ **Actuator Size**

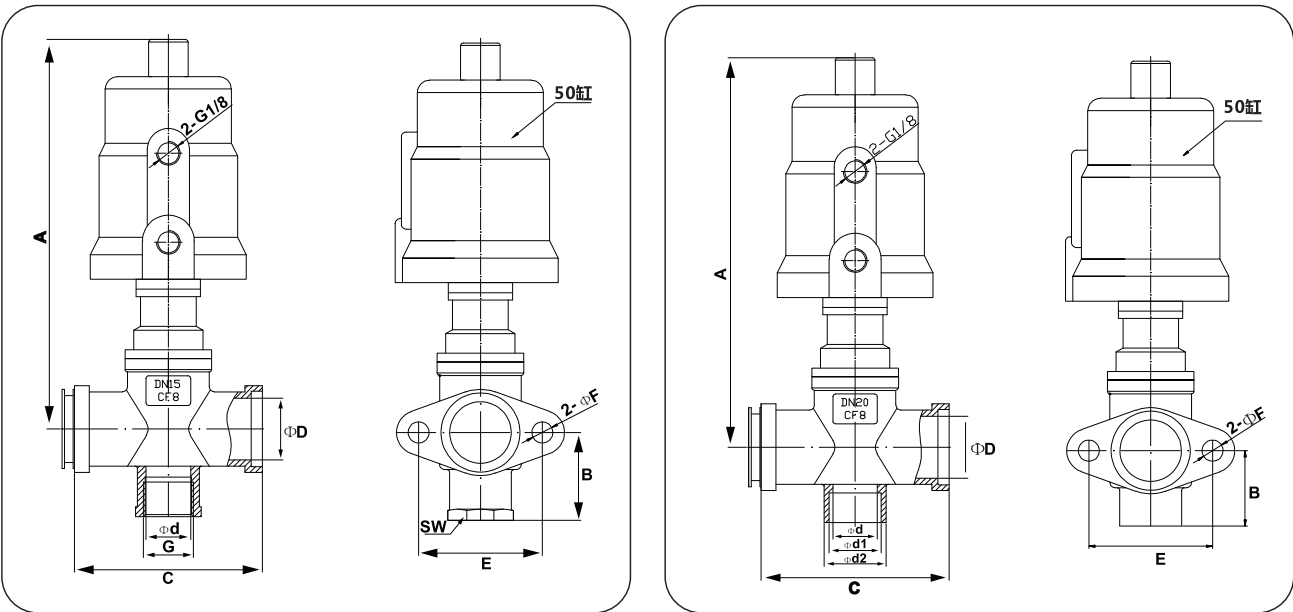
Port Size	Standard Actuator Size (mm)		
	PA	S.S.	AL
DN15	40,50		
DN20	40,50		
DN25	40,50,63		

Pneumatically Operated 3-way Seat Valve
Series TTV300 (Manifold Valve Type)

◆ **Specifications**

Model / Specifications	DN15	DN20	DN25
Control Function	3/2 way normally closed (NC)		
Actuator Material	PA Actuator / S.S. Actuator / Aluminum Actuator		
Valve Body Material	S.S.304 / 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. 600 mm ² /s		
Medium 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		

◆ **Dimensions [mm]**



Threaded Port

Type	DN 15	DN 25
A	50	50
B	35	46
C	76	90
ΦD	Φ25	Φ32
Φd1	Φ18	Φ24
E	50	57
ΦF	Φ8.5	Φ8.5
G	G 1/2	G 1
SW	27	39

Weld Ends

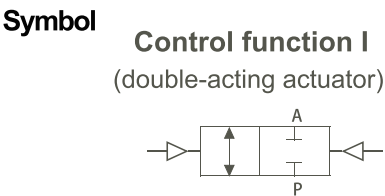
Type	DN 20	DN 25
A	50	50
B	30	36
C	76	90
ΦD	Φ25	Φ32
Φd	Φ18	Φ24
Φd1	Φ21	Φ27
Φd2	Φ25	Φ32
E	50	57
ΦF	Φ8.5	Φ8.5



2/2-way Drain Valve

TDV100/TDV200 series plunger pilot drain valve is operated by a piston actuator, single acting or double acting. Actuators are made of four different materials, applicable to different ambient temperature; 2/2-way stainless steel valve with big flow capacity. Maintenance free, manual switching can be achieved conveniently. Thread port and Tri-Clamp connection are optional.

2/2-way Drain Valve
Pneumatically Operated, for
medium up to +120° C, threaded
Port and Tri-Clamp connection DN 15-50



◆ **How to Order**

TDV100 P 015 NC S x 63mm

Acting Type

S	Single acting	D	Double acting
---	---------------	---	---------------

Body Material

Blank	S.S 304	(standard)
-------	---------	------------

Control Function

NO	Normally open
NC	Normally closed (standard)
Blank	

Nominal Diameter

15	G1/2	20	G3/4
25	G 1	32	G1 1/4
40	G1 1/2	50	G 2

Actuator Material Code

P	PA Actuator
S	S.S. Actuator
A	Aluminum Actuator
C	Aluminum pneumatic Cylinder

Model

DV100	Drain Valve Threaded Ends
DV200	Drain Valve Tri-Clamp Ends

DV100P032NCS

DV100S050NCS

DV200A020NCS

DV200C020NCS

◆ **Actuator Size**

Port Size	Standard Actuator Size (mm)			
	PA	S.S.	AL	C
DN15	40,50	40,50	40,50	25
DN20	50,63,80	50,63,90	50,63,80	25
DN25	50,63,80	50,63,90	50,63,80	32
DN32	63,80	63,90	63,80	40
DN40	63,80	63,90	63,80	50
DN50	63,80	63,90	63,80	63

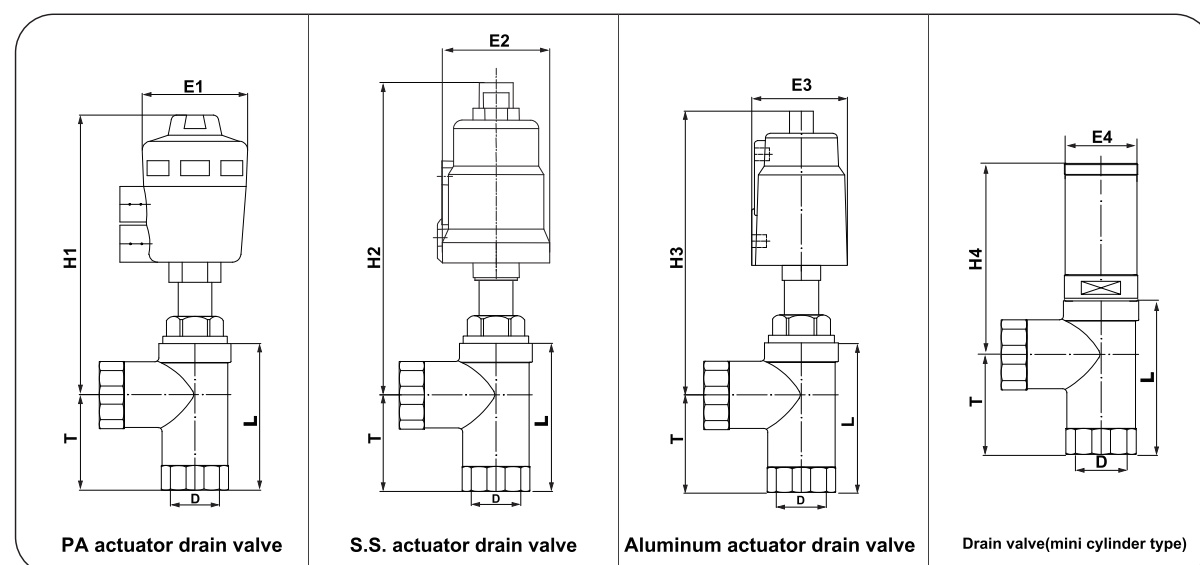
◆ TDV100/TDV200 series plunger pilot drain valve is operated by a piston actuator, either single acting or double acting. Actuators are made of four different materials, applicable to different ambient temperature; 2/2-way stainless steel valve with big flow capacity. Maintenance free, manual switching can be achieved conveniently.

Specifications

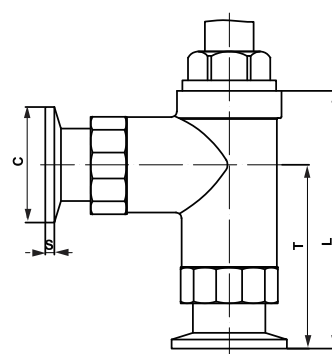
Model /Specifications	DN15	DN20	DN25	DN32	DN40	DN50
Control Function	2/2-way pneumatically operated drain valve					
Actuator Material	PA Actuator/S.S. Actuator/Aluminum Actuator/pneumatic cylinder					
Valve Body Material	S.S304					
Nominal Pressure	PN16(body)					
Operating Method	Plunger Pilot					
Ambient and Fluid	Water,alcohol,oils, fuels,hydraulic fluid,alkaline solutions, salt solution,organic solutions, hot water,steam					
Viscosity	Max.600 mm ² /s					
Medium Temperature	- 10 ~120℃					
Ambient Temperature	PA: - 10 ~60℃ /Aluminum Actuator: -10 ~140℃					
Installation	As required, preferably with actuator in upright position					
Control Medium	Neutral gases,air					
Seat Seal	PTFE/FPM/NBR					
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	G 1	G1 1/4	G1 1/2	G 2
Nominal Diameter (mm)	13	18	24	31	35	45

Dimensions[mm]

2/2 way Drain Valve (Threaded Ends)



2/2 Drain valve (Tri-clamp ends)



Type	D	T	L	E1	E2	E3	E4	H1	H2	H3	H4
DN 15	G 1/2	47	77	63	63	65	32	174	177	177	105
DN 20	G 3/4	47	77	63	63	65	38	174	177	177	115
DN 25	G 1	55	89	63	63	65	46	177	180	180	130
DN 32	G 1-1/4	55	89	80	76	77	56	216	215	210	135
DN 40	G 1-1/2	76	117	80	76	77	56	223	222	217	143
DN 50	G 2	76	133	80	76	77	69	239	238	233	165

Type	L	T	C	S
DN 15	97	67	50.5	3.5
DN 20	97	67	50.5	3.5
DN 25	109	75	50.5	3.5
DN 32	112	78	50.5	4.5
DN 40	140	99	64	4.5
DN 50	160	103	64	4.5



2/2-way Diaphragm Valve

The externally piloted diaphragm valve consists of a pneumatically operated piston actuator, a diaphragm and a 2-way valve housing made of investment cast stainless steel;

The standard material of the actuator is PPS, with its favourable flow characteristics and zero dead volume, the valve housing enables high flow capacities and a variety of applications to be realized

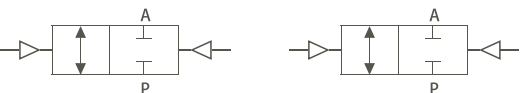
2/2-way Diaphragm Valve, Cast Valve body, weld ends and clamp connection, port connection DN 4-50

- Hermetical separation of fluids from the operating mechanism by diaphragm;
- Zero dead volume;
- Various surface finishes;
- universal accessory program up to control heads;

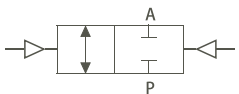
Symbol

Control function A
 (closed by spring force in rest position)

Control function B
 (open by spring force in rest position)



Control function I
 (double-acting actuator)



How to Order



EPV100P040NCS

TDM10 P 015 NC x 63mm

Body Material

Blank	Cast stainless steel 316L/1.4435
-------	----------------------------------

Seal Material

AB	EPDM in food grade
AD	EPDM
EA	PTFE/EPDM
FF	FKM
EU	advanced PTFE/EPDM in two pieces

Control Function

NC	Normally closed by spring action
NO	Normally open by spring action
DA	Double acting

Nominal Diameter

4	/	6	/
8	G 1/4	10	G 3/8
15	G 1/2	20	G 3/4
25	G 1	32	G 1 1/4
40	G 1 1/2	50	G 2

Actuator Material Code

P	PA Actuator
R	PPS Actuator

Model

TDM10	10	Diaphragm valve (tri-clamp)
TDM20	20	Diaphragm valve (weld ends)

Applications

- Water treatment
- Biotechnology
- Food industry

Actuator Size

Port Size	Standard Actuator Size (mm)	
		Connection
DN 4	40	weld
DN 6	40	weld
DN 8	40	weld
DN10	40	weld & tri-clamp
DN15	50,63	weld & tri-clamp
DN20	63,80	weld & tri-clamp
DN25	63,80	weld & tri-clamp
DN32	90,100	weld
DN40	90,100	weld & tri-clamp
DN50	90,100	weld & tri-clamp

The externally piloted diaphragm valve consists of a pneumatically operated piston actuator, a diaphragm and a 2-way valve housing made of investment cast stainless steel;

The standard material of the actuator is PPS, with its favourable flow characteristics and zero dead volume, the valve housing enables high flow capacities and a variety of applications to be realized

Maintenance free, compatible with various accessories, direction indicating, stroke limiting or manual switching can be achieved conveniently.

Specifications

Model /Specifications		DN 4/6	DN 8	DN10	DN15	DN20	DN25	DN32	DN40	DN50
Control Function		2/2 way normally closed(NC)/opend (open)								
Actuator Material		PA/PPS Actuator								
Valve Body Material		Stainless steel 316L								
Nominal Pressure		PN16(body)								
Pilot Pressure		max.7 bar.								
Diaphragm Materials		EPDM(AB),PTFE/EPDM(EA),EPDM(AD),advanced PTFE/EPDM(EU) and FKM(FF) on request								
Operating Method		Plunger Pilot								
Medium		Neutral Gases and liquids,high purity,sterile,aggressive or abrasive fluids								
Viscosity		up to viscous								
Medium Temperature	EPDM(AB) PTFE/EPDM(EA)	- 10~130℃ (steam sterilisation +140℃ for 60min								
	EPDM(AD) advanced PTFE/ EPDM(EU)	- 5~143℃ (steam sterilisation +150℃ for 60min								
	FKM(FF)	- 0~130℃ (not recommended for steam)								
Ambient Temperature		PA Actuator: - 10~120℃								
Installation		As required, preferably with actuator in upright position								
Control Medium		Neutral gases,air								

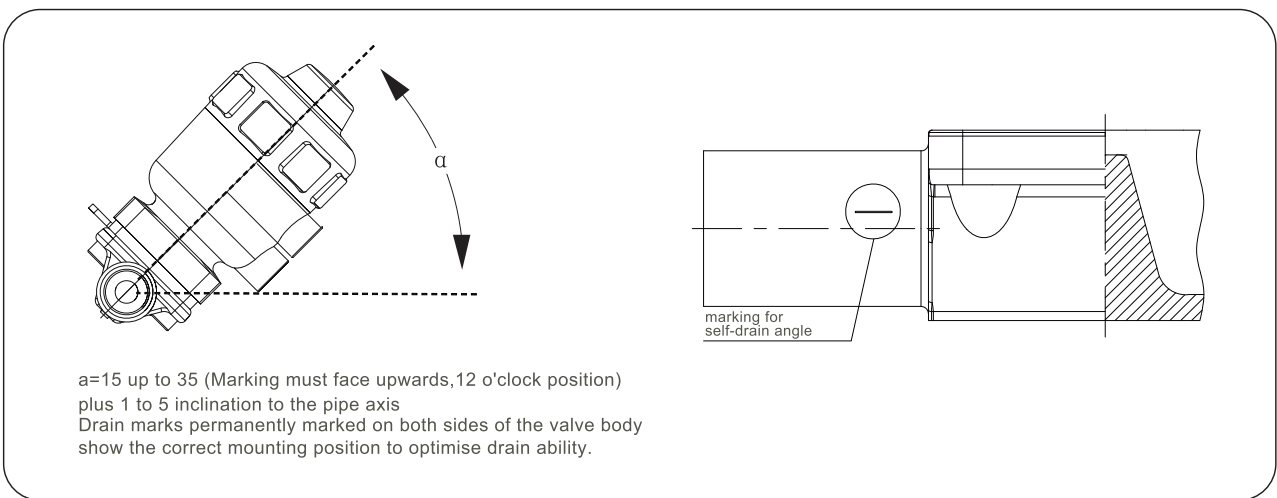
Kv-values

Port Size	DN (mm)	Actuator (mm)	Orifice Diaphragm size (mm)	Kv-value water ¹⁾ (m ³ /h)	Pilot pressure (bar)		Max.operating pressure for seal material (bar)	
					min.	max.	EPDM,FKM	PTFE/EPDM,advanced PTFE/EPDM
/	DN 4/6	40	8	0.8	5.0	7.0	10.0	10.0
1/4"	DN 8	40	8	1.0	5.0	7.0	10.0	10.0
3/8"	DN10	40	8	1.0	5.0	7.0	10.0	10.0
1/2"	DN15	50	15	4.0	5.0	7.0	8.5	5.0
		63	15	4.5	5.0	7.0	10.0	10.0
3/4"	DN20	80	20	7.5	5.0	7.0	10.0	10.0
1"	DN25	80	25	12.0	5.5	7.0	10.0	7.5
1-1/4"	DN32	90	32	30.0	5.5	7.0	6.5	6.0
1-1/2"	DN40	90	40	30.0	5.5	7.0	10.0	10.0
2"	DN50	100	50	51.5	5.5	7.0	4.5	2.5

¹⁾ Measured at+20° , 1bar pressure at valve inlet and free outlet.

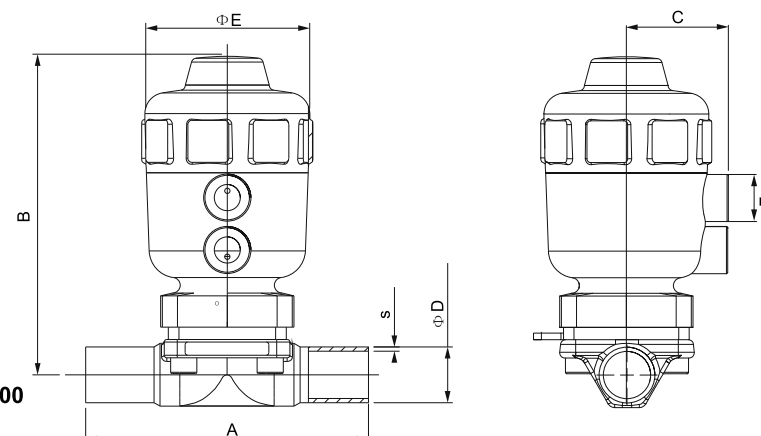
Remark: For low operating pressures we recommend reduced spring versions.

Installation for self-draining operation



◆ Dimensions [mm]

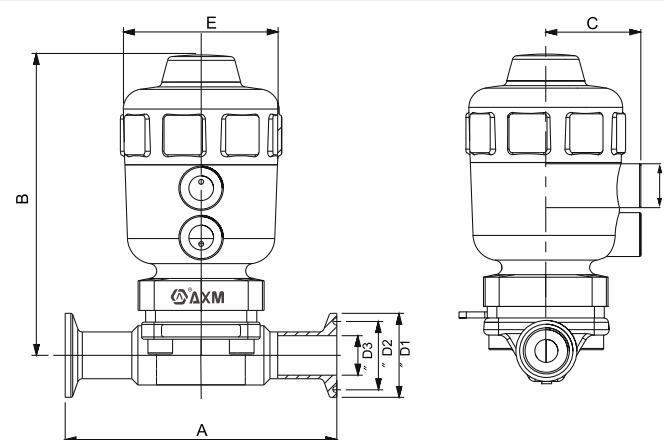
Body with weld ends



Weld ends Specifications :
DN 4 / 6: DIN 11850
DN 8-DN50: EN ISO1127/ISO 4200

Port Size	DN(mm)	Actuator	A	B	C	D	S	E	F
1/4"	DN 4	40	90	100	34	6.0	1.0	53	G 1/8
1/4"	DN 6	40	90	100	34	8.0	1.0	53	G 1/8
3/8"	DN 8	40	90	100	34	13.5	1.6	53	G 1/8
3/8"	DN10	40	90	100	34	17.2	1.6	53	G 1/8
1/2"	DN15	50	110	121	39	21.3	1.6	64	G 1/8
1/2"	DN15	63	110	138	52	21.3	1.6	80	G 1/8
3/4"	DN20	63	119	148	52	26.9	1.6	80	G 1/8
3/4"	DN20	80	119	174	60	26.9	1.6	101	G 1/4
1"	DN25	63	129	157	52	33.7	2.0	80	G 1/8
1"	DN25	80	129	177	60	33.7	2.0	101	G 1/4
1-1/4"	DN32	90	161	203	65	42.4	2.0	115	G 1/4
1-1/4"	DN32	100	161	233	73	42.4	2.0	127	G 1/4
1-1/2"	DN40	90	161	203	65	48.3	2.0	115	G 1/4
1-1/2"	DN40	100	161	233	73	48.3	2.0	127	G 1/4
2"	DN50	90	192	214	65	60.3	2.0	115	G 1/4
2"	DN50	100	192	244	73	60.3	2.0	127	G 1/4

Body with clamp connection



Clamp Specifications :
DN 8-DN10: BS4525
DN 15-DN50: ISO2852

Port Size	DN(mm)	Actuator (mm)	A	B	C	D1	D2	D3	E	F
1/4"	DN 8	40	89	100	34	25	20.22	7.1	53	G 1/8
3/8"	DN10	40	89	100	34	25	20.22	10.3	53	G 1/8
3/8"	DN10	50	110	121	39	34	27.5	16.0	64	G 1/8
1/2"	DN15	63	110	138	52	34	27.5	16.0	80	G 1/8
3/4"	DN20	63	119	148	52	34	27.5	20.0	80	G 1/8
3/4"	DN20	80	119	174	60	34	27.5	20.0	101	G 1/4
1"	DN25	63	129	157	52	50.5	43.5	22.6	80	G 1/8
1"	DN25	80	129	177	60	50.5	43.5	22.6	101	G 1/4
1-1/2"	DN40	90	161	203	65	50.5	43.5	35.6	115	G 1/4
1-1/2"	DN40	100	161	233	73	50.5	40.5	35.6	127	G 1/4
2"	DN50	90	192	214	65	64	56.5	48.6	115	G 1/4
2"	DN50	100	192	244	73	64	56.5	48.6	127	G 1/4



Compact Angle Seat Valve

TEPV100 Series plunger pilot angle seat valve is propelled by a piston actuator, either single acting or double acting.

The valve is suitable for neutral gases or liquids, detergents and solvents; 2/2 way stainless steel valve with big flow capacity;

Widely used in industries such as food, textile, medicine, industrial washing equipment, chemical industry etc.

2/2-way Angle-Seat Valve Pneumatically Operated, for medium up to +120° C,threaded port connection DN 15-50

- High flow rate;
- Long life cycle;
- Deliverable with flow direction below or above seat

◆ How to Order



TEPV100 P 015 NC S x 63mm

Acting Type

S	Single acting	D	Double acting
---	---------------	---	---------------

Body Material

Blank	S.S 304	(standard)
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Control Function

NO	Normally open
NC	Normally closed (standard)

Nominal Diameter

15	G1/2	20	G3/4
25	G 1	32	G1 1/4
40	G1 1/2	50	G 2

Actuator Material Code

P	PA Actuator
S	S.S. Actuator
A	Aluminum Actuator

Model

TEPV100	100 seires Angle Seat Valve
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◆ Actuator Size

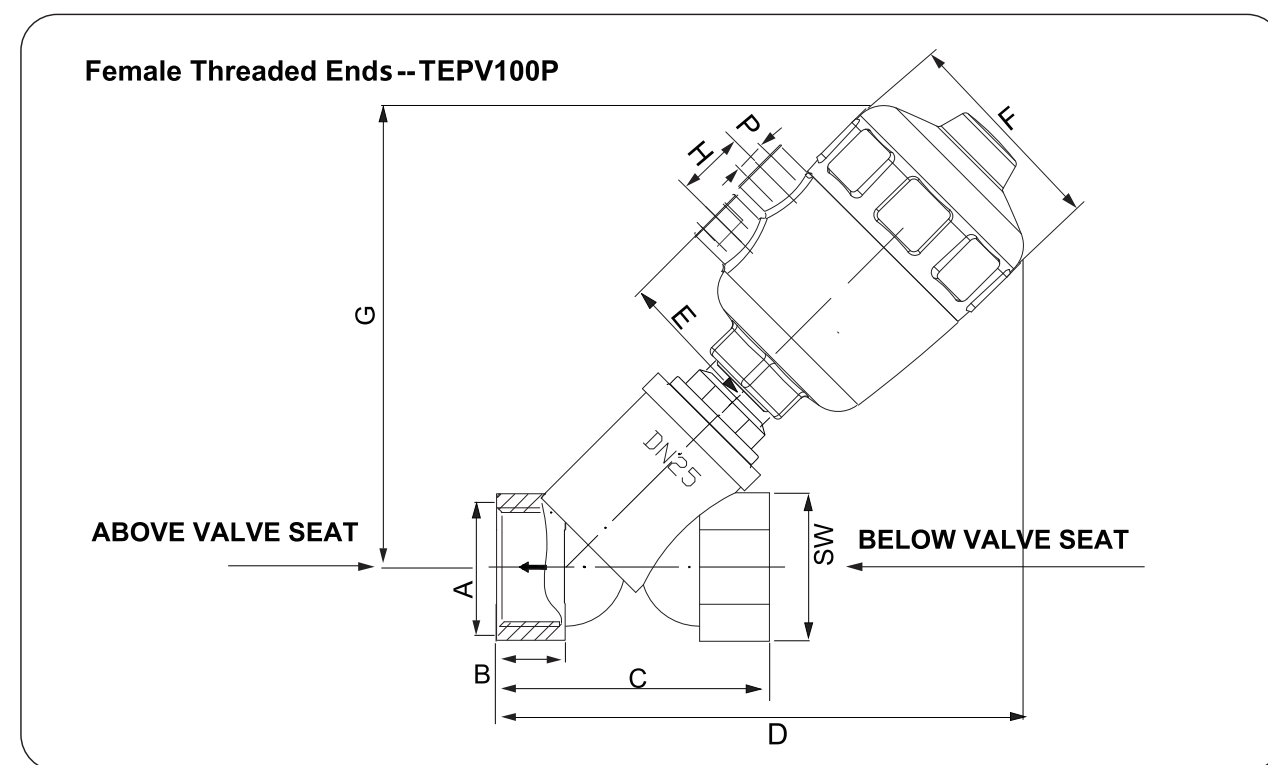
Port Size	Standard Actuator Size (mm)		
	PA	S.S.	AL
DN15	40,50	40,50	40,50
DN20	40,50	40,50	40,50
DN25	50,63,80	50,63,90	50,63,80
DN32	63,80	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80

TEPV100 Series plunger pilot angle seat valve is propelled by a piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature:
The valve is suitable for neutral gases or liquids, detergents and solvents;
2/2 way stainless steel valve with big flow capacity;
Widely used in industries such as food, textile, medicine, industrial washing equipment, chemical industry.etc.

◆ Specifications

Model Specifications	Normal Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC
	Normal Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO
Body/Actuator Material	S.S304 316 /PA,SS,AL						
Operating Method	Plunger pilot						
Ambient and Fluid	Air,Water,Oil(50CTS Bellow)						
Port Size	G1/2	G3/4	G 1	G1 1/4	G1 1/2	G 2	
Nominal Diameter (mm)	13	18	24	31	35	45	
Kv (m ³ /h)	4.2	9	19	33	42	59	
Seat Seal	PTFE/FPM/NBR						
Stem Seal	PTFE/FPM						
Piston Seal	FPM/NBR						
Tempreture of Medium	- 10 ~120!						
Installing	Above/below valve seat						

◆ Dimensions [mm]



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	P	SW
1/2"	DN15	40	G 1/2	14	66	116	30	53	98	20	G 1/8	28
		50	G 1/2	14	66	136	44	64	110	24	G 1/4	28
3/4"	DN20	50	G 3/4	16	68	141	44	64	115	24	G 1/4	32
1"	DN25	50	G 1	20	80	155	44	64	125	24	G 1/4	38
		63	G 1	20	80	171	54	79.5	145	24	G 1/4	38
1-1/4"	DN32	63	G 1-1/4	19	93	182	54	79.5	150	24	G 1/4	47
1-1/2"	DN40	63	G 1-1/2	21	104	194	54	79.5	155	24	G 1/4	56
2"	DN50	63	G 2	25	110	207	54	79.5	165	24	G 1/4	67
		80	G 2	25	110	220	62	101	179	24	G 1/4	67



Series TPV32S consists of 2-way direct acting pneumatic filling valve
Series TPV32P consists of 2-way direct acting angle seat valve;
Series TGV500 external pilot control valve, driven by a piston actuator of single or double action, is superior in its simple construction, sensitive response and reliable operation.

2/2-way Angle-Seat Valve(Filling Valve)
Pneumatically Operated, for
medium up to +180° C,
Stainless Steel Actuator Dia 32mm
Thread port DN 10-20

- Compact style 2/2-way stainless steel valve;
- Movable seat & V type seals ensure reliable and effective performance
- Single acting NC, single acting NO and double acting optional

◆ **How to Order**



TPV32S015

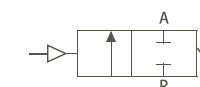
32 mm Actuator							
Order Code	ØA	B	C	D	E	ØF	G
TPV32S010	3/8	54.5	93	110	24	40	34
TPV32S015	1/2	68.5	119	113.5	24	40	34
TPV32S020	3/4	77	129	130.5	24	40	34

- ◆ **Series TPV32S consists of 2-way direct acting pneumatic filling valve available in normally closed or normally open construction. Built for specific applications, these valves come in a straight-through body design made of stainless steel.**

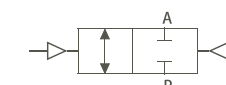
- High flow due to angled seat design
- Anti-waterhammer design(fluid entry under the disc)
- Actuator rotatable through 360°
- Reliable performance, maintenance-free stuffing box

Symbol

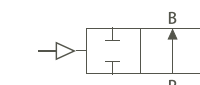
Control function A
(closed by spring force in rest position)



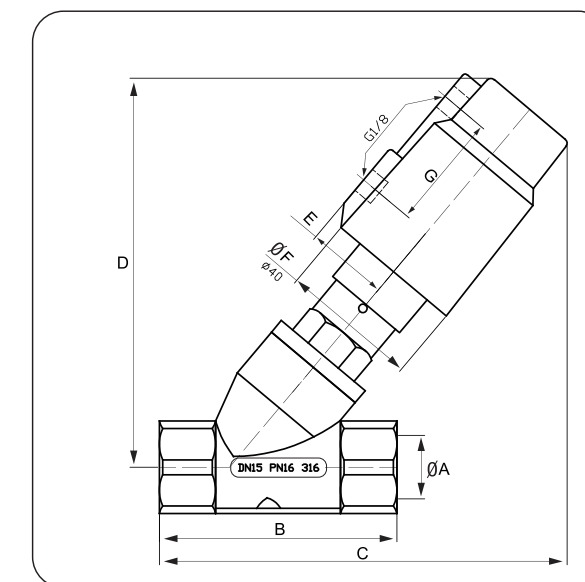
Control function I
(double-acting actuator)



Control function B
(open in rest position)



◆ **Dimensions [mm]**



◆ **Specifications**

Medium temperature: -10°C to 180°C
Pilot fluid temperature range: -10°C to 60°C
Working pressure: 3 bar
Maximum pilot pressure: 6 bar
Pilot fluid: Filtered air
Valve body material: SS304/316/316L
Stuffing box housing material: SS304/316/316L
Stem/Disc material: SS304
Stuffing box packing: PTFE chevrons
Wiper seal: FPM
Disc seal: PTFE
Valve body seal: PTFE

2/2-way Angle Body Multi-Purpose Valves
Pneumatically Operated, for
medium up to +120° C,
32mm PA actuator
Thread port DN 10-20

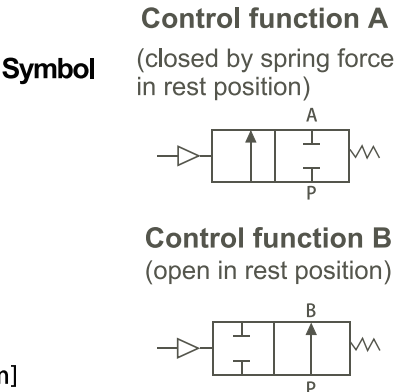
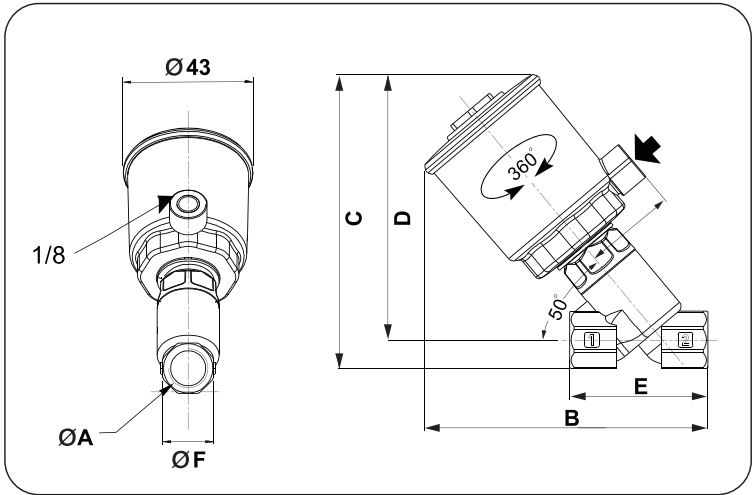
How to Order



TPV32P015NC

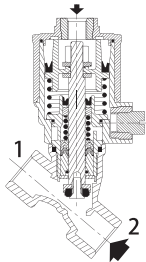
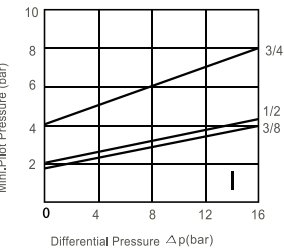
32 mm Actuator						
Order Code	ØA	B	C	D	E	ØF
PV32P010	3/8	92	93	81.5	68	28
PV32P015	1/2	99	97	83.5	68	28
PV32P020	3/4	107	104	88	75	32

Dimensions [mm]

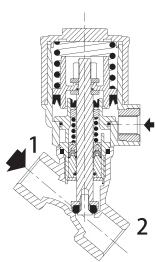
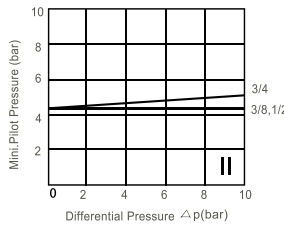


32 mm Actuator Graphs for Steam and Fluids

Normally Open Valve - Entry under Disc



Normally Closed Valve - Entry above Disc



Series TPV32P consists of 2-way direct acting valve available in normally closed or normally open construction. Built for specific applications, these valves come in a straight-through body design made of stainless steel.

- High flow due to angle seat design
- Anti-waterhammer design (fluid entry under the disc)
- Vacuum operation up to 10⁻¹mbar
- Actuator rotatable through 360°
- Reliable performance, maintenance-free stuffing box

Specifications

Ambient temperature range: -10°C to 60°C
Pilot fluid temperature range: -10°C to 60°C
Maximum allowable pressure: 16 bar
Maximum viscosity: 600 cSt (mm²/s)¹⁾
Maximum pilot pressure: 10 bar
Pilot fluid: Filtered air or water
Valve body material: SS304/316/316L
Stuffing box housing material: SS304/316/316L
Stem/Disc material: SS304
Stuffing box packing: PTFE chevrons
Wiper seal: FPM
Disc seal: PTFE
Valve body seal: PTFE
¹⁾ For higher viscosity applications, please consult AXM.

2/2-way Globe Control Valve,
Pneumatically Operated, for
medium up to +150° C, threaded
Port connection DN 15-65

- Classical design, Long life cycle;
- NC, NO or double acting liberty is optional
- Structure in coaxial stop, leakage proof and high flow rate
- Saving energy

How to Order



TGV500A040

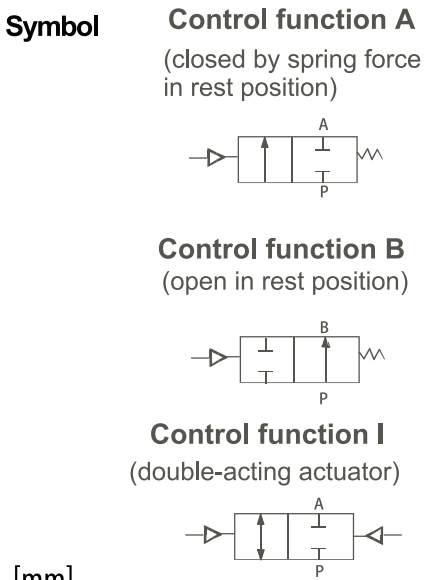
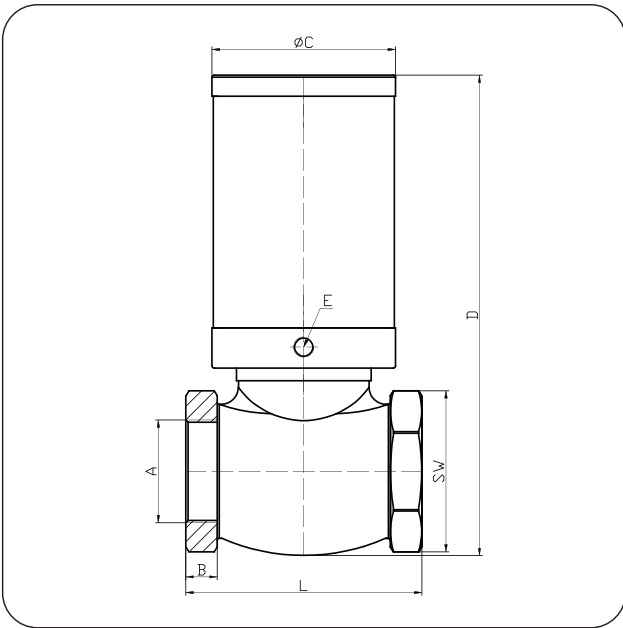
TGV500A (Big Actuator)							
Order Code	A	B	ØC	D	E	L	SW
GV500A015	1/2	12	31	102	G1/8	57	26
GV500A020	3/4	12	38	120	G1/8	67	35
GV500A025	1	12	46	138	G1/8	72	42
GV500A032	1-1/4	16	56	154	G1/8	85	50
GV500A040	1-1/2	16	69	178	G1/8	98	56
GV500A050	2	22	87	229	G1/8	112	68
GV500A065	2-1/2	22	108	260	G1/4	138	84

Actuator Size

Port Size	Standard Actuator Size mm	Big Actuator Size mm
DN15	25	32
DN20	25	32
DN25	32	40
DN32	40	50
DN40	50	63
DN50	63	80
DN65	80	100

TGV500 series external pilot control valve, driven by a piston actuator of single or double action, is superior in its simple construction, sensitive response and reliable operation, etc

Dimensions [mm]



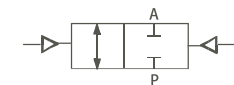
Specifications

Ambient temperature range: -10°C to 60°C
Pilot fluid temperature range: -10°C to 60°C
Maximum allowable pressure: 16 bar
Maximum viscosity: 600 cSt (mm²/s)¹⁾
Ambient and fluid: Air, water, oil and light viscosity fluid
Maximum pilot pressure: 10 bar
Pilot fluid: Filtered air
Valve body material: SS304/316/316L
Stuffing box housing material: Aluminium
Actuator material: Aluminium
Stem/Disc material: SS304
Wiper seal: FPM
Disc seal: PTFE
¹⁾ For higher viscosity applications, please consult AXM.

2/2-way Exhaust Valve for EPS foam machinery Thread port DN 25/40/50/80

- 4-way valve body design;
- Double acting liberty actuator

Symbol
Control function I
(double-acting actuator)



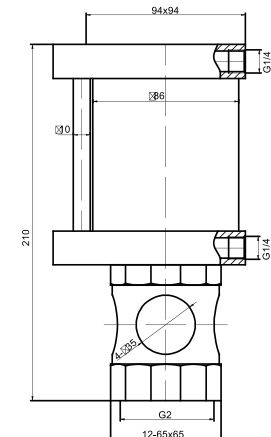
◆ Dimensions [mm]

◆ How to Order

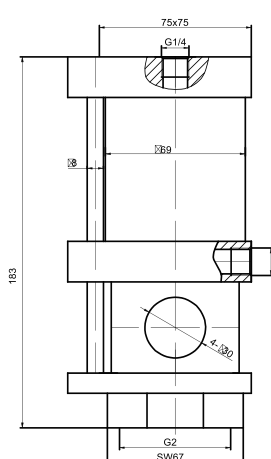
TEV10-50

TEV20-50

TEV10-50



TEV20-50



Exhaust Valve

Series TEV10/20 consists of 2-way direct acting pneumatically operated exhaust valve, specifically designed for EPS foam machinery.

- ◆ Series TEV10/20 consists of 2-way direct acting pneumatically operated exhaust valve, specifically designed for EPS foam machinery, available in normally closed liberty constructions. Built for specific applications, valve body made of stainless steel and controlling actuator made of aluminum alloy.

- ◆ Specifications
 - Medium temperature: -10° C to 120° C
 - Ambient temperature: -10° C to 80° C
 - Working pressure: 0~16 bar
 - Pilot fluid: Filtered air
 - Valve body material: SS304
 - Actuator material: Aluminum alloy
 - Stem/Disc material: SS304
 - Disc seal: PTFE/FPM/NBR
 - Control pressure: 3~8bar
 - Acting type: double acting liberty



Angle Seat Valve(Piston Valve) Series TPV100 (Threaded Ends)

2/2-way Angle-Seat Valve Pneumatically Operated, for medium up to +180° C, threaded port connection DN 10-80

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

◆ How to Order



TPV100S025NCS



TPV100P040NCS

TPV100 P 015 NC S x 63mm

Acting type

S	Single acting	D	Double acting
---	---------------	---	---------------

Body Material

Blank	S.S 304 (standard)
4	S.S 316
5	S.S 316L

Control Function

NO	Normally open
NC	Normally closed (standard)

Nominal diameter

10	G3/8	15	G1/2
20	G3/4	25	G1
32	G1 1/4	40	G1 1/2
50	G2	65	G2 1/2
80	G3		

Actuator Material code

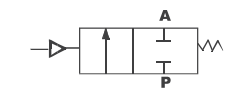
P	PA Actuator
S	S.S. Actuator
A	Aluminium Actuator

Model

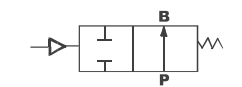
TPV100	100 seires Angle Seat Valve
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Symbol

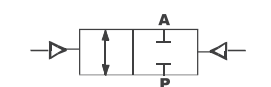
Control function A
(closed by spring force
in rest position)



Control function B
(open in rest position)



Control function I
(double-acting actuator)



◆ Actuator Size

Port Size	Standard Actuator Size mm		
	PA	S.S.	AL
DN10	40,50	40,50	40,50
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	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80
DN65	80,100	90,125	80,100
DN80	100	125	100
DN100	125	125	125

- ◆ TPV100 Series Plunger Pilot angle seat valve is propelled by piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature:
2/2 Way stainless steel valve with big flow capacity
V type seals ensure reliable and effective sealing
Maintenance free, compatible with various accessories,
Direction indicating, stroke limiting or manual switching can be achieved conveniently.

Threaded Ends ,
2/2-way stainless steel Angle Seat Valve with big flow capacity, Pneumatically Operated,
Excellent seat tightness due to PTFE soft sealing ,
for Medium up to +180°C, Port connection DN 10-80

Angle Seat Valve(Piston Valve)
Series TPV100 (Threaded Ends)



Angle Seat Valve(Piston Valve)
Series TPV100 (Threaded Ends)

◆ Pressure Data Sheet

Control Function	Acting type	Flow Direction	Water Hammer	Application
Normally Closed	Single Acting	Upstream	Yes	For compressible medium (such as gas and steam) and liquid of comparatively low pressure
		Downstream	No	For anti water hammer pipeline, bears certain pressure difference
	Double Acting	Upstream	Yes	Reliable performance, bears pressure difference; valve closes automatically in case of an emergency.
		Downstream	No	For pipeline required of better anti water hammer, bears big pressure difference
Normally Open		Upstream	Yes	For pipeline where valve keeps open. double acting & normally open when silencer comes off.
		Downstream	No	For pipeline where valve keeps open, anti water hammer, double acting & normally open when silencer comes off

Water hammer (or, more generally, fluid hammer) is a pressure surge or wave caused when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). A water hammer commonly occurs when a valve . closes suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe. It is also called hydraulic shock. This pressure wave can cause major problems, from noise and vibration to pipe collapse. It is possible to reduce the effects of the water hammer pulses with accumulators, expansion tanks, surge tanks, and other features. Designed to close against the flow. Will not chatter or produce water hammer . Operates smoothly and quietly.

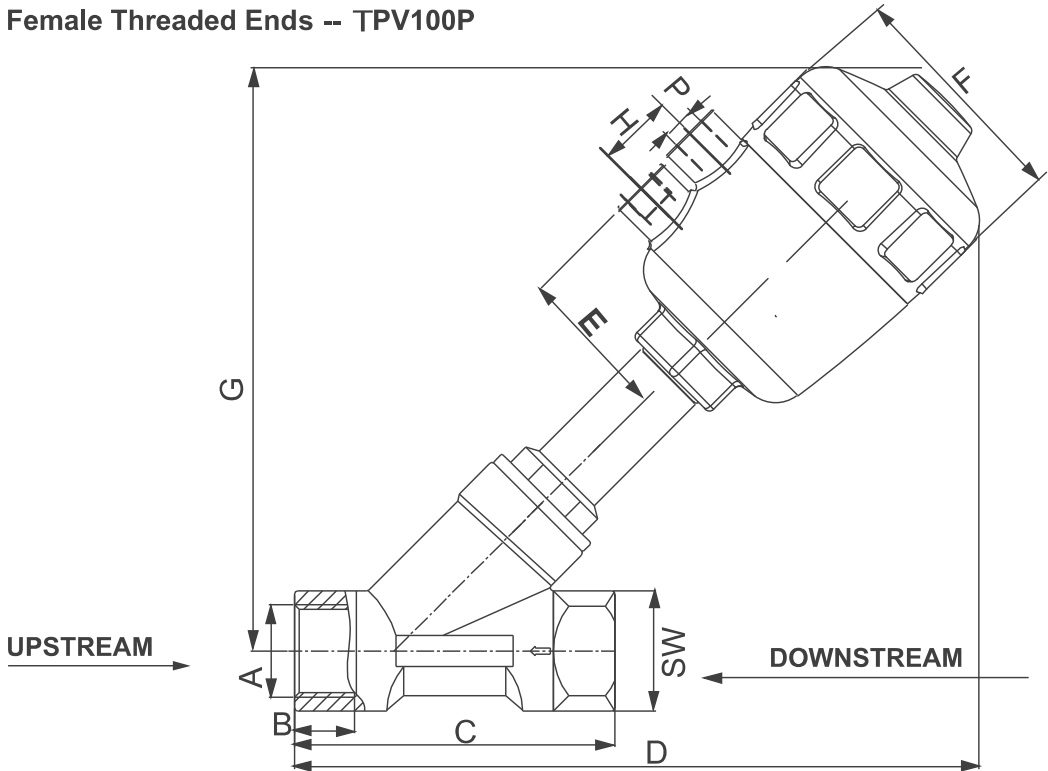
Port Size	DN (mm)	Actuator (mm)	Single Acting Normally Closed				Double Acting Normally Closed				Normally Open					
			Upstream		Downstream		Upstream		Downstream		Upstream		Downstream		Double Acting Assistant Pressure Mpa	Rest Position Pressure Mpa
			Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa		
3/8"	DN10	40	0~1.6	0.3~0.45	0~1.1	0.3	0~1.6	0.3~0.45	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.2
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.3	0~0.1
1/2"	DN15	40	0~1.6	0.3~0.45	0~1.1	0.3	0~1.6	0.3~0.45	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.2
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.1
3/4"	DN20	50	0~1.6	0.3~0.4	0~1.4	0.45	0~1.6	0.3~0.4	0~1.6	≥ 0.3	0~1.6	0~1.2	0~1.6	0.3~0.65	0.3~0.4	0~0.2
		63	0~1.6	0.3~0.38	0~1.4	0.45	0~1.6	0.3~0.38	0~1.6	0.3~0.5	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.35	0~0.35
		80	0~1.6	0.2~0.35	0~1.4	0.4	0~1.6	0.2~0.35	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.4	0~0.5
		90 SS	0~1.6	0.2~0.3	0~1.4	0.35	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4	0~0.4
	1"	DN25	50	0~1.6	0.3~0.45	0~0.75	0.45	0~1.6	0.3~0.45	0~1.3	0.3~0.6	0~1.6	0~0.3	0~1.3	0.3~0.6	0.3~0.4
63			0~1.6	0.3~0.35	0~1.4	0.5	0~1.6	0.3~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.3~0.55	0~0.35
80			0~1.6	0.2~0.3	0~1.4	0.45	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.5
90 SS			0~1.6	0.2~0.25	0~1.4	0.4	0~1.6	0.2~0.25	0~1.6	0.2~0.3	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.4
1-1/4"	DN32	63	0~1.6	0.3~0.5	0~0.06	0.5	0~1.4	0.3~0.5	0~1.4	0.3~0.6	0~1.6	0~1.4	0~1.3	0.35~0.7	0.3~0.5	0~0.4
		80	0~1.6	0.2~0.45	0~1.4	0.6	0~1.6	0.2~0.45	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.5
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.4
1-1/2"	DN40	63	0~1.6	0.3~0.6	0~0.05	0.5	0~1.1	0.3~0.6	0~1.3	0.3~0.7	0~1.6	0~1.4	0~0.6	0.35~0.7	0.3~0.6	0~0.4
		80	0~1.6	0.3~0.55	0~1.4	0.6	0~1.6	0.3~0.55	0~1.6	0.3~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
		63	0~1.0	0.3~0.65	0~0.35	0.5	0~0.9	0.3~0.65	0~0.8	0.35~0.8	0~1.0	0~0.6	0~0.5	0.35~0.7	0.35~0.7	0~0.8
	2"	DN50	80	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.7	0~1.6	0~1.0	0~0.6	0.35~0.7	0.35~0.7
90 SS			0~1.6	0.3~0.5	0~1.1	0.65	0~1.6	0.3~0.5	0~1.6	0.3~0.6	0~1.6	0~1.0	0~1.2	0.35~0.7	0.35~0.7	0~0.4
100			0~1.6	0.25~0.4	0~1.4	0.65	0~1.6	0.25~0.4	0~1.6	0.3~0.6	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.4
125 SS			0~1.6	0.2~0.3	0~1.6	0.65	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.5
2-1/2"	DN65	80	0~1.6	0.3~0.65	0~0.5	0.65	0~1.6	0.3~0.65	0~1.1	0.3~0.7	0~1.6	0~0.5	0~0.75	0.3~0.65	0.35~0.7	0~0.5
		90 SS	0~1.6	0.2~0.6	0~0.7	0.65	0~1.6	0.2~0.6	0~1.6	0.3~0.7	0~1.6	0~1.0	0~1.4	0.3~0.6	0.35~0.7	0~0.4
		100	0~1.6	0.3~0.45	0~0.8	0.65	0~1.6	0.3~0.45	0~1.6	0.3~0.55	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7	0~0.4
		125 SS	0~1.6	0.2~0.7	0~0.9	0.65	0~1.6	0.2~0.7	0~1.6	0.2~0.55	0~1.6	0~1.4	0~1.4	0.3~0.7	0.35~0.7	0~0.5
	3"	DN80	100	0~1.6	0.35~0.6	0~0.5	0.65	0~1.6	0.35~0.6	0~1.6	0.3~0.55	0~1.6	0~0.6	0~0.75	0.35~0.7	0.35~0.7
125 SS			0~1.6	0.2~0.7	0~0.6	0.65	0~1.6	0.2~0.7	0~1.6	0.3~0.65	0~1.6	0~0.7	0~1.2	0.35~0.7	0.35~0.7	0~0.5

◆ Specifications

Model Specification	Normally Closed	P010NC	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC	P080NC
	Normally Open	P010NO	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO	P080NO
Material of Body / Actuator		S.S304 316 /PA								
Operating Method		Plunger Pilot								
Ambient and fluid		Air,Water,Oil,Steam (50CTS Bellow)								
Port size		G3/8	G1/2	G3/4	G 1	G1 1/4	G1 1/2	G 2	G2 1/2	G 3
Nominal Diameter (mm)		13	13	18	24	31	35	45	61	80
Kv (m ³ /h)		3.7	4.2	9	19	33	42	59	90	135
Model Specification	Normally Closed	S010NC	S015NC	S020NC	S025NC	S032NC	S040NC	S050NC	S065NC	S080NC
	Normally Open	S010NO	S015NO	S020NO	S025NO	S032NO	S040NO	S050NO	S065NO	S080NO
Material of Body / Actuator		S.S304 316 /PA								
Seat seal		PTFE/FPM								
Stem seal		PTFE/FPM								
Piston Seal		PTFE/FPM/NBR								
Tempreture of Medium	PTFE	- 10 ~200℃								
	FPM	- 10 ~150℃								
Installing		Downsteam/Upsteam								

◆ Dimensions [mm]

Female Threaded Ends -- TPV100P

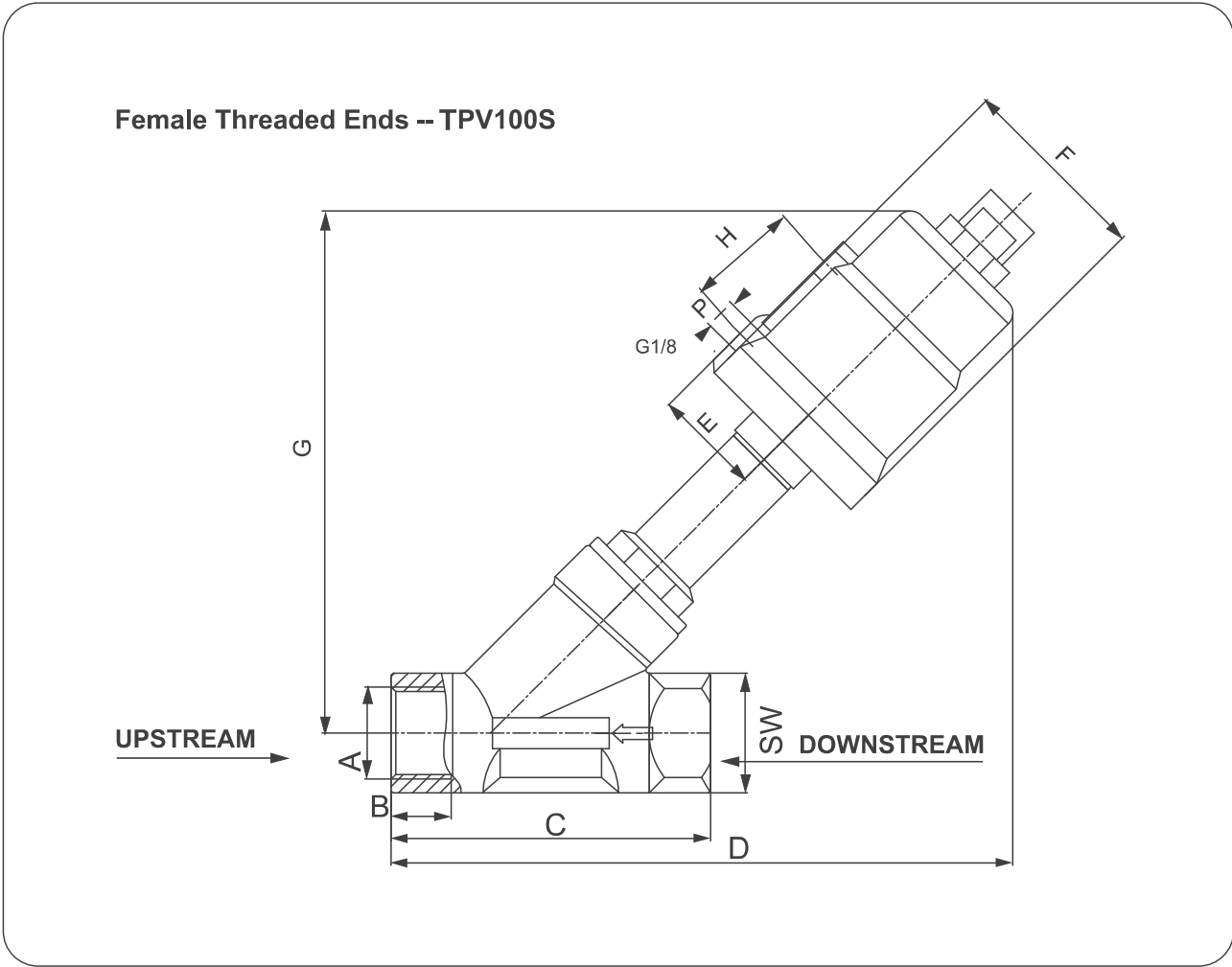


Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	P	SW
3/8"	DN10	40	G3/8	12	65	142	30	53	85	20	G1/8	25
		50	G3/8	12	65	145	44	64	100	24	G1/4	25
1/2"	DN15	40	G1/2	14	76	162	30	53	115	20	G1/8	28
		50	G1/2	14	76	168	44	64	115	24	G1/4	28
3/4"	DN20	50	G3/4	16	92	175	44	64	131	24	G1/4	32
		63	G3/4									
1"	DN25	50	G1	21	103	186	44	64	138	24	G1/4	39
		63	G1	21	103	218	54	79.5	166	24	G1/4	39
1-1/4"	DN32	63	G1-1/4	19	112	228	54	79.5	172	24	G1/4	49
1-1/2"	DN40	63	G1-1/2	21	129	232	54	79.5	174	24	G1/4	56
2"	DN50	63	G2	27	143	252	54	79.5	193	24	G1/4	68
		80	G2	27	143	263	62	101	202	24	G1/4	68
2-1/2"	DN65	80	G2-1/2	28	186	280	62	101	209	24	G1/4	84
3"	DN80	100	G3	34	218	355	71	125	268	30	G1/4	101

Angle Seat Valve(Piston Valve)
Series TPV100 (Threaded Ends)



◆ Dimensions [mm]



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	P	SW
3/8"	DN10	40	G3/8	12	65	144	28	53	105	38	G1/8	25
		50	G3/8	12	65	//	35	56	//	38	G1/8	25
1/2"	DN15	40	G1/2	14	76	157	28	53	113	38	G1/8	28
		50	G1/2	14	76	182	35	56	142	38	G1/8	28
3/4"	DN20	50	G3/4	16	92	189	35	56	152	38	G1/8	32
		63	G3/4	16	92		43	70		44	G1/8	32
1"	DN25	50	G1	21	103	207	35	56	155	38	G1/8	39
		63	G1	21	103	217	43	70	176	44	G1/8	39
1-1/4"	DN32	63	G1-1/4	19	112	222	43	70	177	44	G1/8	49
1-1/2"	DN40	63	G1-1/2	21	129	225	43	70	182	44	G1/8	56
2"	DN50	63	G2	27	143	249	43	70	196	44	G1/8	68
		90	G2	27	143	268	56	94	206	67	G1/4	68
2-1/2"	DN65	90	G2-1/2	28	186	290	56	94	215	67	G1/4	84
3"	DN80	125	G3	34	218	335	73	135	295	67	G1/4	101



Male Threaded +Socket welded,
2/2-way Angle Seat Valve, Pneumatically Operated, for Medium up to +180°C,
Port connection DN 15-65;
Easy to install and maintain;Good replacement of Flange ends valve,
considerably cut the cost of the equipment applied to.



Angle Seat Valve(Piston Valve) Series TPV200 (Male Threaded + Socket welded)

2/2-way Angle-Seat Valve Pneumatically Operated, for medium up to +180° C , male threaded port connection DN 15 - 65

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

◆ How to Order



TPV200P025NCS



TPV200S025NCS

TPV200 P 015 NC S x 63mm

Acting type

S	Single acting	D	Double acting
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Body Material

Blank	S.S 304	(standard)
4	S.S 316	
5	S.S 316L	

Control Function

NO	Normally open
NC	Normally closed(standard)

Nominal diameter

15	G1/2	20	G3/4
25	G 1	32	G1 1/4
40	G1 1/2	50	G2
65	G2 1/2		

Actuator Material code

P	Plastic Actuator
S	S.S. Actuator
A	Aluminium Actuator

Model

TPV200	200 seires Angle Seat Valve
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◆ 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	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80
DN65	80,100	90,125	80,100

◆ TPV200 Series Plunger Pilot angle seat valve is propelled by a piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature:
2/2 Way stainless steel valve with big flow capacity
V type seals ensure reliable and effective sealing
Maintenance free, compatible with various accessories,
Direction indicating, stroke limiting or manual switching can be achieved conveniently.
Easy to install and maintain;
Good replacement of Flange ended valve, considerably cut the cost of the equipment applied to.



Angle Seat Valve(Piston Valve) Series TPV200 (Male Threaded + Socket welded)

◆ Pressure Data Sheet

Control Function	Acting type	Flow Direction	Water Hammer	Application
Normally Closed	Single Acting	Upstream	Yes	For compressible medium (such as gas and steam) and liquid of comparatively low pressure
		Downstream	No	For anti water hammer pipeline, bears certain pressure difference
	Double Acting	Upstream	Yes	Reliable performance, bears pressure difference; valve closes automatically in case of an emergency.
		Downstream	No	For pipeline required of better anti water hammer, bears big pressure difference
Normally Open		Upstream	Yes	For pipeline where valve keeps open, double acting & normally open when silencer comes off.
		Downstream	No	For pipeline where valve keeps open, anti water hammer, double acting & normally open when silencer comes off

Water hammer (or, more generally, fluid hammer) is a pressure surge or wave caused when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). A water hammer commonly occurs when a valve . closes suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe. It is also called hydraulic shock. This pressure wave can cause major problems, from noise and vibration to pipe collapse. It is possible to reduce the effects of the water hammer pulses with accumulators, expansion tanks, surge tanks, and other features. Designed to close againstflow. Will not chatter or produce water hammer . Operates smoothly and quietly.

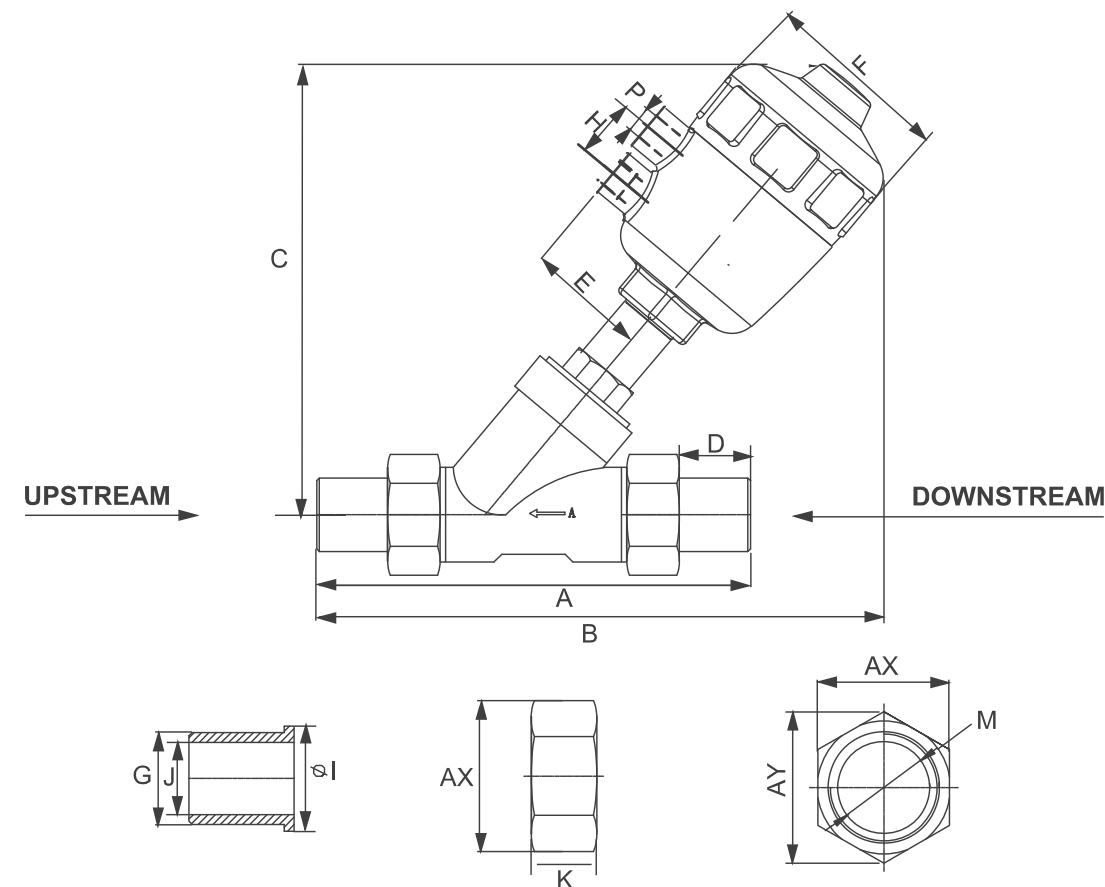
Port Size	DN (mm)	Actuator (mm)	Normally Closed				Normally Closed				Normally Open							
			Upstream		Downstream		Upstream		Downstream		Upstream		Downstream		Double Acting Assistant Pressure Mpa	Rest Position Pressure Mpa		
			Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa				
1/2"	DN15	40	0~1.6	0.3~0.45	0~1.1					≥ 0.3					0.2~0.4	≥ 0.4	0~0.2	
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.1	
3/4"	DN20	50	0~1.6	0.3~0.4	0~1.4	0.45	0~1.6	0.3~0.4	0~1.6	≥ 0.3	0~1.6	0~1.2	0~1.6	0.3~0.65	0.3~0.4	0~0.2		
		63	0~1.6	0.3~0.38	0~1.4	0.45	0~1.6	0.3~0.38	0~1.6	0.3~0.5	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.35	0~0.35		
		80	0~1.6	0.2~0.35	0~1.4	0.4	0~1.6	0.2~0.35	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.4	0~0.5		
		90 SS	0~1.6	0.2~0.3	0~1.4	0.35	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4	0~0.4		
1"	DN25	50	0~1.6	0.3~0.45	0~0.75	0.45	0~1.6	0.3~0.45	0~1.3	0.3~0.6	0~1.6	0~0.3	0~1.3	0.3~0.6	0.3~0.4	0~0.35		
		63	0~1.6	0.3~0.35	0~1.4	0.5	0~1.6	0.3~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.3~0.55	0~0.35		
		80	0~1.6	0.2~0.3	0~1.4	0.45	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.5		
1-1/4"	DN32	63	0~1.6	0.3~0.5	0~0.06	0.5	0~1.4	0.3~0.5	0~1.4	0.3~0.6	0~1.6	0~1.4	0~1.3	0.35~0.7	0.3~0.5	0~0.4		
		80	0~1.6	0.2~0.45	0~1.4	0.6	0~1.6	0.2~0.45	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.5		
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.4		
1-1/2"	DN40	63	0~1.6	0.3~0.6	0~0.05	0.5	0~1.1	0.3~0.6	0~1.3	0.3~0.7	0~1.6	0~1.4	0~0.65	0.35~0.7	0.3~0.6	0~0.4		
		80	0~1.6	0.3~0.55	0~1.4	0.6	0~1.6	0.3~0.55	0~1.6	0.3~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5		
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5		
2"	DN50	63	0~1.0	0.3~0.65	0~0.35	0.5	0~0.9	0.3~0.65	0~0.8	0.35~0.8	0~1.0	0~0.6	0~0.5	0.35~0.7	0.35~0.7	0~0.8		
		80	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.7	0~1.6	0~1.0	0~0.6	0.35~0.7	0.35~0.7	0~0.5		
		90 SS	0~1.6	0.3~0.5	0~1.1	0.65	0~1.6	0.3~0.5	0~1.6	0.3~0.6	0~1.6	0~1.0	0~1.2	0.35~0.7	0.35~0.7	0~0.4		
		100	0~1.6	0.25~0.4	0~1.4	0.65	0~1.6	0.25~0.4	0~1.6	0.3~0.6	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.4		
2-1/2"	DN65	125 SS	0~1.6	0.2~0.3	0~1.6	0.65	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.5		
		80	0~1.6	0.3~0.65	0~0.5	0.65	0~1.6	0.3~0.65	0~1.1	0.3~0.7	0~1.6	0~0.5	0~0.75	0.3~0.65	0.35~0.7	0~0.5		
		90 SS	0~1.6	0.2~0.6	0~0.7	0.65	0~1.6	0.2~0.6	0~1.6	0.3~0.7	0~1.6	0~1.0	0~1.4	0.3~0.6	0.35~0.7	0~0.4		
		100	0~1.6	0.3~0.45	0~0.8	0.65	0~1.6	0.3~0.45	0~1.6	0.3~0.55	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7	0~0.4		
2-1/2"	DN65	125 SS	0~1.6	0.2~0.7	0~0.9	0.65	0~1.6	0.2~0.7	0~1.6	0.2~0.55	0~1.6	0~1.4	0~1.4	0.3~0.7	0.35~0.7	0~0.5		

◆ Specifications

Model	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC
Specification	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO
Material of Body / Actuator		S.S304 316 /PA						
Operating Method		Plunger Pilot						
Ambient and fluid		Air,Water,Oil,Steam (50CTS Bellow)						
Port size		G1/2	G3/4	G 1	G1 1/4	G1 1/2	G 2	G2 1/2
Nominal Diameter mm		13	18	24	31	35	45	61
Kv (m³/h)		4.2	9	19	33	42	59	90
Model	Normally Closed	S015NC	S020NC	S025NC	S032NC	S040NC	S050NC	S065NC
	Normally Open	S015NO	S020NO	S025NO	S032NO	S040NO	S050NO	S065NO
Material of Body / Actuator		S.S304 316 /PA						
Seat seal		PTFE/FPM						
Stem seal		PTFE/FPM						
Piston Seal		PTFE/FPM/NBR						
Tempreture of Medium	PTFE	- 10 ~200℃						
	FPM	- 10 ~150℃						
Installing		Downsteam/Upsteam						

◆ Dimensions [mm]

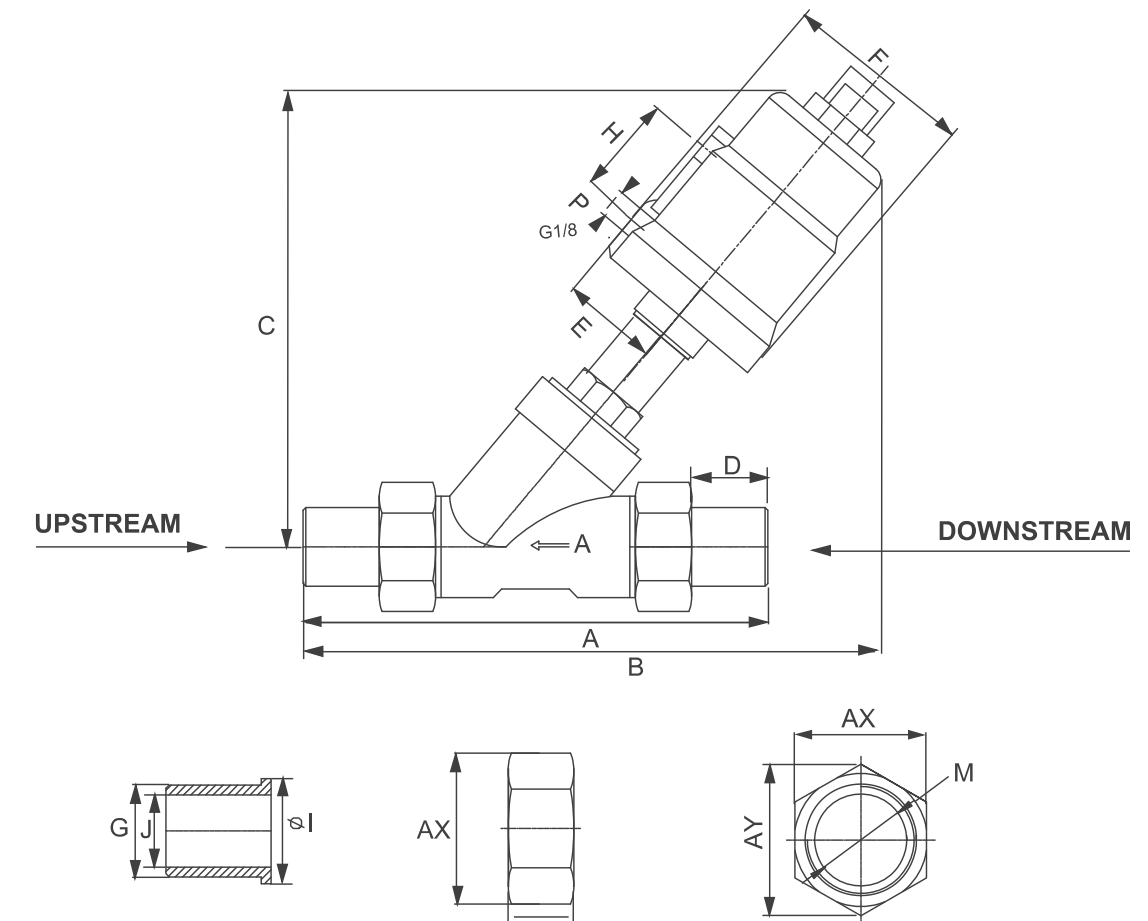
Male Threaded + Socket welded -- TPV200P



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	J	K	M	P	AX	AY
1/2"	DN15	40	135	184	115	22	30	53	18	20	12.5	17	19	G 1/8	27	31
		50	135	190	115	22	44	64	18	24	12.5	17	19	G 1/4	27	31
3/4"	DN20	50	150	200	131	25	44	64	22	24	18	19	22.3	G 1/4	31	35
1"	DN25	50	170	205	138	29	44	64	28	24	22.5	20.5	28.3	G 1/4	40	45.5
		63	170	247	166	29	54	79.5	28	24	22.5	20.5	28.3	G 1/4	40	45.5
1-1/4"	DN32	63	185	257	172	29	54	79.5	35.5	24	30	21	35.5	G 1/4	49	56
1-1/2"	40	63	208	263	174	31	54	79.5	43.5	24	38	23	43.5	G 1/4	54	62
2"	50	63	236	288	193	35.5	54	79.5	54.5	24	47.5	24	55	G 1/4	54	62
		80	236	299	202	35.5	62	101	54.5	24	47.5	24	55	G 1/4	69	79
2-1/2"	65	80	250	312	209	32	62	101	72.5	24	62.5	28.5	73	G 1/4	90	101

◆ Dimension [mm]

Male Threaded + Socket welded -- PV200S



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	J	K	M	P	AX	AY
1/2"	DN15	40	135	179	113	22	28	53	18	38	12.5	17	19	G 1/8	27	31
		50	135	194	142	22	35	56	18	38	12.5	17	19	G 1/8	27	31
3/4"	DN20	50	150	224	152	25	35	56	22	38	18	19	22.3	G 1/8	31	35
1"	DN25	50	170	236	155	29	35	56	28	38	22.5	20.5	28.3	G 1/8	40	45.5
		63	170	246	176	29	43	70	28	44	22.5	20.5	28.3	G 1/8	40	45.5
1-1/4"	DN32	63	185	251	177	29	43	70	35.5	44	30	21	35.5	G 1/8	49	56
1-1/2"	40	63	208	256	182	31	43	70	43.5	44	38	23	43.5	G 1/8	54	62
2"	50	63	236	284	196	35.5	43	70	54.5	44	47.5	24	55	G 1/8	54	62
		90	236	303	206	35.5	56	94	54.5	67	47.5	24	55	G 1/4	69	79
2-1/2"	65	90	250	322	215	32	56	94	72.5	67	62.5	28.5	73	G 1/4	90	101

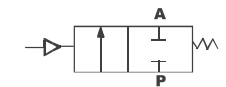
Angle Seat Valve(Piston Valve) Series TPV300 (Weld Ends)



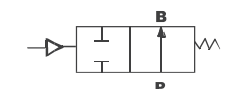
2/2-way Angle-Seat Valve Pneumatically Operated, for medium up to +180° C, with Weld ends port connection DN 10-80

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

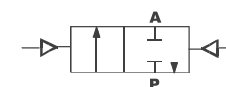
Symbol **Control function A**
(closed by spring force
in rest position)



Control function B
(open in rest position)



Control function I
(double-acting actuator)



◆ How to Order



TPV300P025NCS x63



TPV300S025NCS

TPV300 P 015 NC S x 63mm

Acting type

S	Single acting	D	Double acting
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Body Material

Blank	S.S 304	(standard)
4	S.S 316	
5	S.S 316L	

Type of actuation

NO	Normally open
NC	Normally closed (standard)

Nominal diameter

15	G1/2	20	G3/4
25	G1	32	G1 1/4
40	G1 1/2	50	G2
65	G2 1/2		

Actuator Material code

P	Plastic Actuator
S	S.S. Actuator
A	Aluminium Actuator

Model

TPV300	300 seires Angle Seat Valve
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◆ 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	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80
DN65	80,100	90,125	80,100

- ◆ TPV300 Series Plunger Pilot angle seat valve is propelled by piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature:

2/2 Way stainless steel valve with big flow capacity

V type seals ensure reliable and effective sealing

Maintenance free, compatible with various accessories,
Direction indicating, stroke limiting or manual switching
can be achieved conveniently.

Weld Ends,

2/2-way stainless steel Angle Seat Valve with big flow capacity,
Pneumatically Operated,Excellent seat tightness due to PTFE soft sealing,
for Medium up to +180°C,Port connection DN 15-65

◆ Pressure Data Sheet

Control Function	Acting type	Flow Direction	Water Hammer	Application
Normally Closed	Single Acting	Upstream	Yes	For compressible medium (such as gas and steam) and liquid of comparatively low pressure
		Downstream	No	For anti water hammer pipeline, bears certain pressure difference
	Double Acting	Upstream	Yes	Reliable performance, bears pressure difference; valve closes automatically in case of an emergency.
		Downstream	No	For pipeline required of better anti water hammer, bears big pressure difference
Normally Open		Upstream	Yes	For pipeline where valve keeps open. double acting & normally open when silencer comes off.
		Downstream	No	For pipeline where valve keeps open, anti water hammer, double acting & normally open when silencer comes off

Water hammer (or, more generally, fluid hammer) is a pressure surge or wave caused when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). A water hammer commonly occurs when a valve closes suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe. It is also called hydraulic shock. This pressure wave can cause major problems, from noise and vibration to pipe collapse. It is possible to reduce the effects of the water hammer pulses with accumulators, expansion tanks, surge tanks, and other features.

Designed to close against the flow. Will not chatter or produce water hammer. Operates smoothly and quietly.

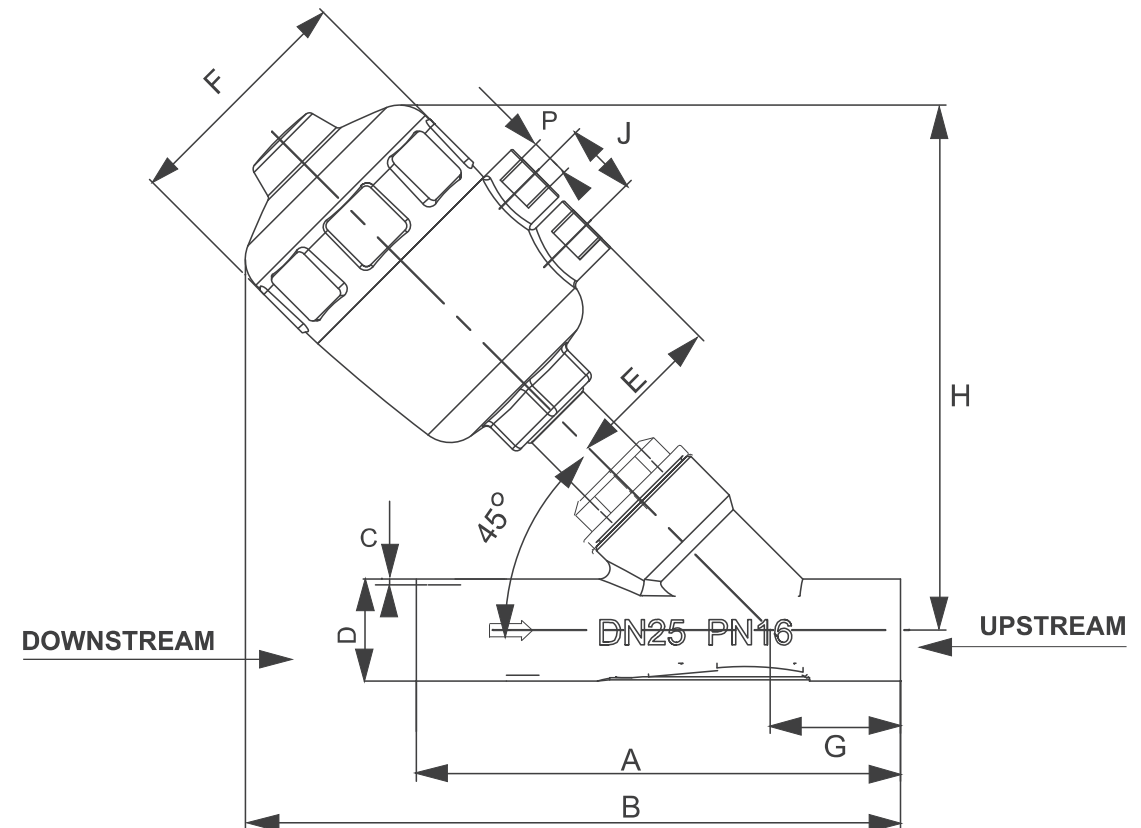
Port Size	DN (mm)	Actuator (mm)	Normally Closed				Normally Closed				Normally Open							
			Upstream		Downstream		Upstream		Downstream		Upstream		Downstream		Double Acting Assistant Pressure Mpa	Rest Position Pressure Mpa		
			Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa				
1/2"	DN15	40	0~1.6	0.3~0.45	0~1.1										0.2~0.4	≥ 0.4	0~0.2	
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.1	
3/4"	DN20	50	0~1.6	0.3~0.4	0~1.4	0.45	0~1.6	0.3~0.4	0~1.6	0.3	0~1.6	0~1.2	0~1.6	0.3~0.65	0.3~0.4		0~0.2	
		63	0~1.6	0.3~0.38	0~1.4	0.45	0~1.6	0.3~0.38	0~1.6	0.3~0.5	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.35		0~0.35	
		80	0~1.6	0.2~0.35	0~1.4	0.4	0~1.6	0.2~0.35	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.4		0~0.5	
		90 SS	0~1.6	0.2~0.3	0~1.4	0.35	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4		0~0.4	
		50	0~1.6	0.3~0.45	0~0.75	0.45	0~1.6	0.3~0.45	0~1.3	0.3~0.6	0~1.6	0~0.3	0~1.3	0.3~0.6	0.3~0.4		0~0.35	
1"	DN25	63	0~1.6	0.3~0.35	0~1.4	0.5	0~1.6	0.3~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.3~0.55		0~0.35	
		80	0~1.6	0.2~0.3	0~1.4	0.45	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55		0~0.5	
		90 SS	0~1.6	0.2~0.25	0~1.4	0.4	0~1.6	0.2~0.25	0~1.6	0.2~0.3	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55		0~0.4	
1-1/4"	DN32	63	0~1.6	0.3~0.5	0~0.06	0.5	0~1.4	0.3~0.5	0~1.4	0.3~0.6	0~1.6	0~1.4	0~1.3	0.35~0.7	0.3~0.5		0~0.4	
		80	0~1.6	0.2~0.45	0~1.4	0.6	0~1.6	0.2~0.45	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55		0~0.5	
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55		0~0.4	
1-1/2"	DN40	63	0~1.6	0.3~0.6	0~0.05	0.5	0~1.1	0.3~0.6	0~1.3	0.3~0.7	0~1.6	0~1.4	0~0.65	0.35~0.7	0.3~0.6		0~0.4	
		80	0~1.6	0.3~0.55	0~1.4	0.6	0~1.6	0.3~0.55	0~1.6	0.3~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7		0~0.5	
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7		0~0.5	
2"	DN50	63	0~1.0	0.3~0.65	0~0.35	0.5	0~0.9	0.3~0.65	0~0.8	0.35~0.8	0~1.0	0~0.6	0~0.5	0.35~0.7	0.35~0.7		0~0.8	
		80	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.7	0~1.6	0~1.0	0~0.6	0.35~0.7	0.35~0.7		0~0.5	
		90 SS	0~1.6	0.3~0.5	0~1.1	0.65	0~1.6	0.3~0.5	0~1.6	0.3~0.6	0~1.6	0~1.0	0~1.2	0.35~0.7	0.35~0.7		0~0.4	
		100	0~1.6	0.25~0.4	0~1.4	0.65	0~1.6	0.25~0.4	0~1.6	0.3~0.6	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7		0~0.4	
		125 SS	0~1.6	0.2~0.3	0~1.6	0.65	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7		0~0.5	
2-1/2"	DN65	80	0~1.6	0.3~0.65	0~0.5	0.65	0~1.6	0.3~0.65	0~1.1	0.3~0.7	0~1.6	0~0.5	0~0.75	0.3~0.65	0.35~0.7		0~0.5	
		90 SS	0~1.6	0.2~0.6	0~0.7	0.65	0~1.6	0.2~0.6	0~1.6	0.3~0.7	0~1.6	0~1.0	0~1.4	0.3~0.6	0.35~0.7		0~0.4	
		100	0~1.6	0.3~0.45	0~0.8	0.65	0~1.6	0.3~0.45	0~1.6	0.3~0.55	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7		0~0.4	
		125 SS	0~1.6	0.2~0.7	0~0.9	0.65	0~1.6	0.2~0.7	0~1.6	0.2~0.55	0~1.6	0~1.4	0~1.4	0.3~0.7	0.35~0.7		0~0.5	

◆ Specifications

Model Specification	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC
	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO
Material of Body / Actuator		S.S304 316 /PA						
Operating Method		Plunger Pilot						
Ambient and fluid		Air,Water,Oil,Steam (50CTS Bellow)						
Port size		G1/2	G3/4	G 1	G1 1/4	G1 1/2	G 2	G2 1/2
Nominal Diameter mm		13	18	24	31	35	45	61
Kv (m ³ /h)		4,2	9	19	33	42	59	90
Model Specification	Normally Closed	S015NC	S020NC	S025NC	S032NC	S040NC	S050NC	S065NC
	Normally Open	S015NO	S020NO	S025NO	S032NO	S040NO	S050NO	S065NO
Material of Body / Actuator		S.S304 316 /PA						
Seat seal		PTFE/FPM						
Stem seal		PTFE/FPM						
Piston Seal		PTFE/FPM/NBR						
Tempreture of Medium	PTFE	- 10 ~200℃						
	FPM	- 10 ~150℃						
Installing		Downstream/Upstream						

◆ Dimensions [mm]

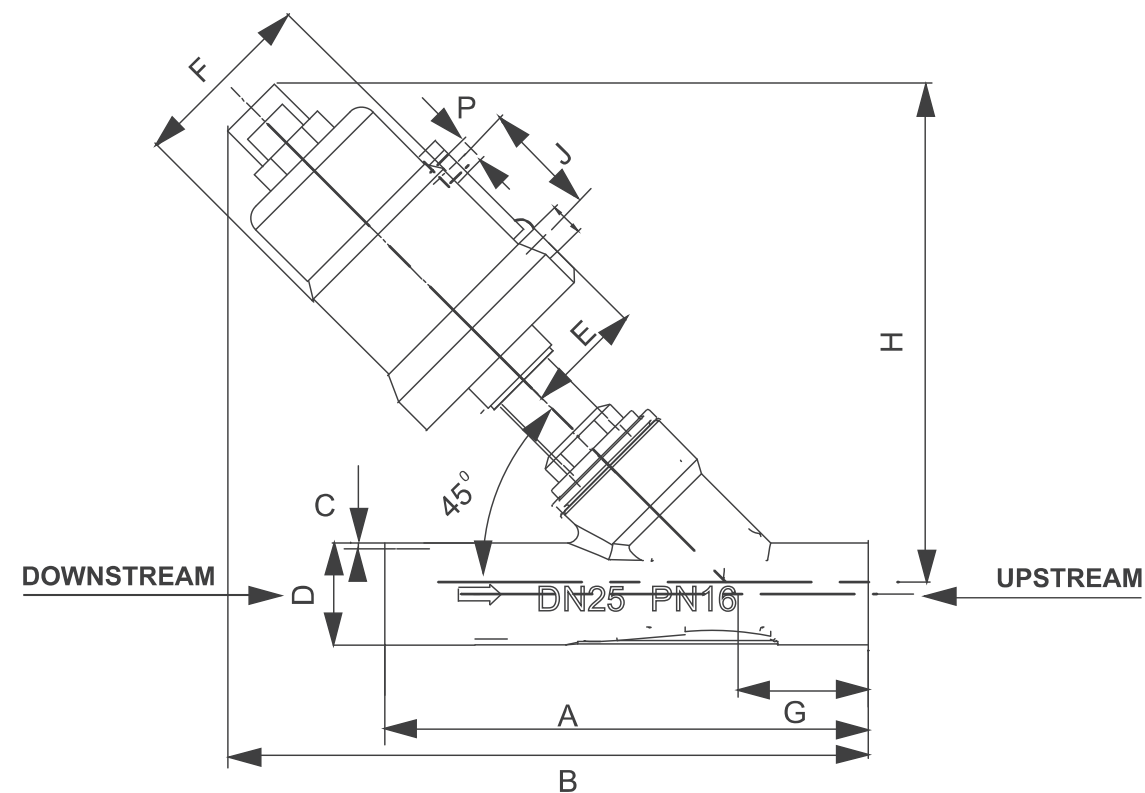
Weld Ends -- TPV300P



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	J	P
1/2"	DN15	40	100	142	3	21	30	53	18	115	20	G 1/8
		50	100	150	3	21	44	64	18	115	24	G 1/4
3/4"	DN20	50	117	170	3	27	44	64	30	131	24	G 1/4
1"	DN25	50	130	175	3	34	44	64	30	138	24	G 1/4
		63	130	200	3	34	54	79.5	30	166	24	G 1/4
1-1/4"	DN32	63	145	207	3	42	54	79.5	30	172	24	G 1/4
1-1/2"	DN40	63	160	207	4	48	54	79.5	30	174	24	G 1/4
2"	DN50	63	190	227	4	60	54	79.5	30	193	24	G 1/4
		80	190	235	4	60	62	101	30	202	24	G 1/4
2-1/2"	DN65	80	230	255	5	76	62	101	40	209	24	G 1/4

◆ Dimensions [mm]

Weld Ends -- TPV300S



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	J	P
1/2"	DN15	40	100	135	3	21	28	53	18	117	38	G 1/8
		50	100	152	3	21	35	56	18	134	38	G 1/8
3/4"	DN20	50	117	174	3	27	35	56	30	144	38	G 1/8
1"	DN25	50	130	177	3	34	35	56	30	147	38	G 1/8
		63	130	188	3	34	43	70	30	158	44	G 1/8
1-1/4"	DN32	63	145	197	3	42	43	70	30	167	44	G 1/8
1-1/2"	DN40	63	160	197	4	48	43	70	30	167	44	G 1/8
2"	DN50	63	190	216	4	60	43	70	30	186	44	G 1/4
		80	190	235	4	60	56	94	30	205	67	G 1/8
2-1/2"	DN65	80	230	255	5	76	56	94	40	215	67	G 1/4



Flange Ends

2/2-way stainless steel Angle Seat Valve with big flow capacity, Pneumatically Operated, Excellent seat tightness due to PTFE soft sealing, for Medium up to +180°C, Port connection DN 15-100.

2/2-way Angle-Seat Valve Pneumatically Operated, for medium up to +180° C, with Flange ends port connection DN 15 - 100

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

◆ How to Order



TPV400P025NCS



TPV300S032NCS

TPV400 P 015 NC S x 63mm

Acting type

S	Single acting	D	Double acting
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Body Material

Blank	S.S 304	(standard)
4	S.S 316	
5	S.S 316L	

Type of actuation

NO	Normally Open
NC	Normally Closed (standard)

Nominal diameter

	15	G1/2
20	G3/4	G1
32	G1 1/4	G1 1/2
50	G2	G2 1/2
80	G3	G4

Actuator Material code

P	Plastic Actuator
S	S.S. Actuator
A	Aluminium Actuator

Model

TPV400	400 seires Angle Seat Valve
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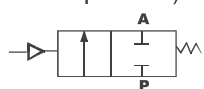
◆ Actuator Size

Port Size	Standard Actuator Size mm		
	PA	S.S.	AL
DN10	40,50	40,50	40,50
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	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80
DN65	80,100	90,125	80,100
DN80	100	125	100
DN100	125	125	125

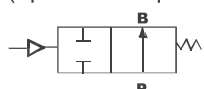
- ◆ Flange Specification DIN2576(GB/T82.1)
- ◆ TPV400 Series Plunger Pilot angle seat valve is propelled by a piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature:
2/2 Way stainless steel valve with big flow capacity
V type seals ensure reliable and effective sealing
Maintenance free, compatible with various accessories,
Direction indicating, stroke limiting or manual switching can be achieved conveniently.

Symbol

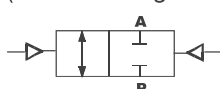
Control function A
(closed by spring force in rest position)



Control function B
(open in rest position)



Control function I
(double-acting actuator)



◆ Pressure Data Sheet

Control function	Acting type	Flow Direction	Water Hammer	Application
Normally Closed	Single Acting	Upstream	Yes	For compressible medium (such as gas and steam) and liquid of comparatively low pressure
		Downstream	No	For anti water hammer pipeline, bears certain pressure difference
	Double Acting	Upstream	Yes	Reliable performance, bears pressure difference; valve closes automatically in case of an emergency.
		Downstream	No	For pipeline required of better anti water hammer, bears big pressure difference
Normally Open		Upstream	Yes	For pipeline where valve keeps open, double acting & normally open when silencer comes off.
		Downstream	No	For pipeline where valve keeps open, anti water hammer, double acting & normally open when silencer comes off

Water hammer (or, more generally, fluid hammer) is a pressure surge or wave caused when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). A water hammer commonly occurs when a valve closes suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe. It is also called hydraulic shock. This pressure wave can cause major problems, from noise and vibration to pipe collapse. It is possible to reduce the effects of the water hammer pulses with accumulators, expansion tanks, surge tanks, and other features.

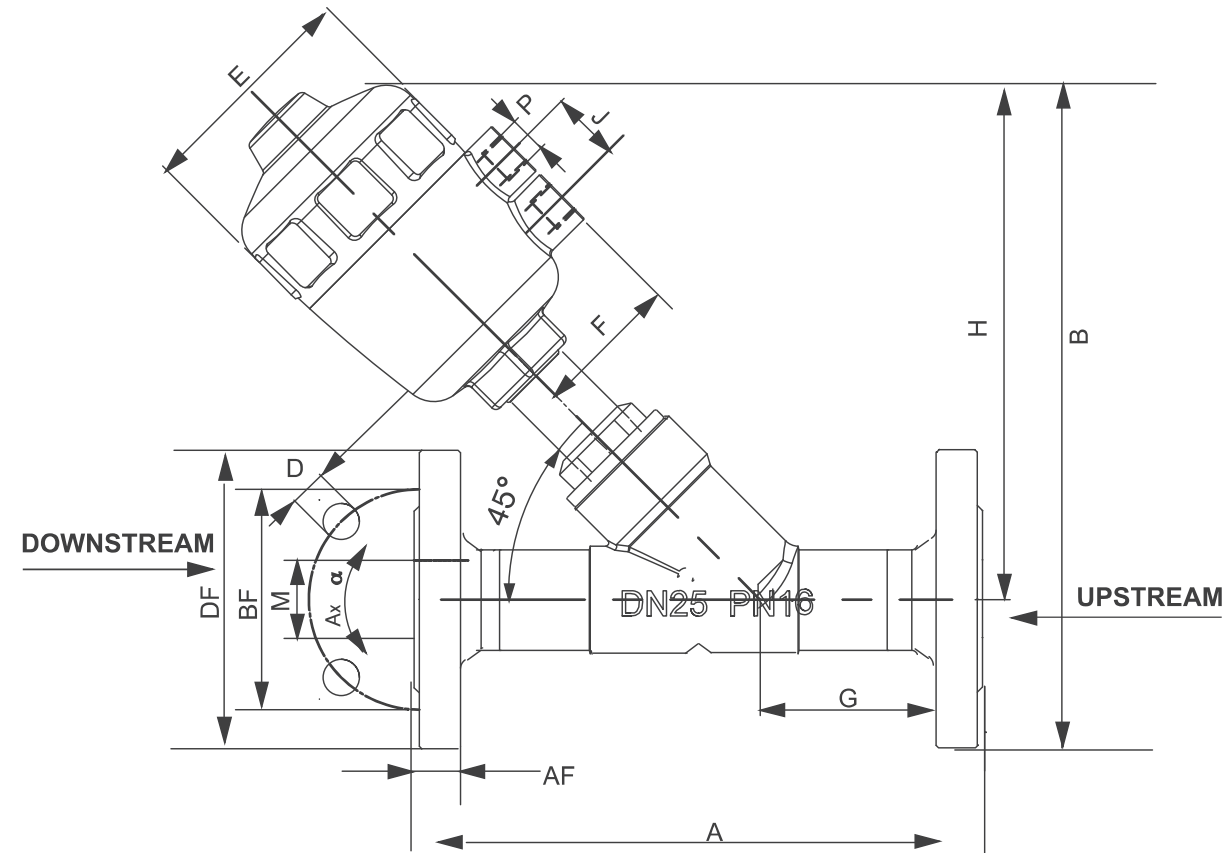
Designed to close againstflow. Will not chatter or produce water hammer . Operates smoothly and quietly.

Port Size	DN (mm)	Actuator (mm)	Single Acting Normally Closed				Double Acting Normally Closed				Normally Open				Double Acting Assistant Pressure	Rest Position Pressure Mpa
			Upstream Press. Range	Upstream Control Press.	Downstream Press. Range	Downstream Control Press.	Upstream Press. Range	Upstream Control Press.	Downstream Press. Range	Downstream Control Press.	Upstream Press. Range	Upstream Control Press.	Downstream Press. Range	Downstream Control Press.		
1/2"	DN15	40	0~1.6	0.3~0.45	0~1.1	0.3	0~1.6	0.3~0.45	0~1.6	0.3~0.35	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.2
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	0.3~0.35	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.1
3/4"	DN20	50	0~1.6	0.3~0.4	0~1.4	0.45	0~1.6	0.3~0.4	0~1.6	0.3~0.35	0~1.6	0~1.6	0~1.6	0.3~0.65	0.3~0.4	0~0.2
		63	0~1.6	0.3~0.38	0~1.4	0.45	0~1.6	0.3~0.38	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.35	0~0.35
		80	0~1.6	0.2~0.35	0~1.4	0.4	0~1.6	0.2~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4	0~0.5
		90 SS	0~1.6	0.2~0.3	0~1.4	0.35	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4	0~0.4
1"	DN25	50	0~1.6	0.3~0.45	0~0.75	0.45	0~1.6	0.3~0.45	0~1.3	0.3~0.6	0~1.6	0~1.6	0~1.6	0.3~0.6	0.3~0.4	0~0.35
		63	0~1.6	0.3~0.35	0~1.4	0.5	0~1.6	0.3~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.3~0.55	0~0.35
		80	0~1.6	0.2~0.3	0~1.4	0.45	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.5
1-1/4"	DN32	90 SS	0~1.6	0.2~0.25	0~1.4	0.4	0~1.6	0.2~0.25	0~1.6	0.2~0.3	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.4
		63	0~1.6	0.3~0.5	0~0.06	0.5	0~1.4	0.3~0.5	0~1.4	0.3~0.6	0~1.6	0~1.4	0~1.3	0.35~0.7	0.3~0.5	0~0.4
		80	0~1.6	0.2~0.45	0~1.4	0.6	0~1.6	0.2~0.45	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.5
1-1/2"	DN40	90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.4
		63	0~1.6	0.3~0.6	0~0.05	0.5	0~1.1	0.3~0.6	0~1.3	0.3~0.7	0~1.6	0~1.4	0~0.65	0.35~0.7	0.3~0.6	0~0.4
		80	0~1.6	0.3~0.55	0~1.4	0.6	0~1.6	0.3~0.55	0~1.6	0.3~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
2"	D N50	90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
		63	0~1.0	0.3~0.65	0~0.35	0.5	0~0.9	0.3~0.65	0~0.8	0.35~0.8	0~1.0	0~0.6	0~0.5	0.35~0.7	0.35~0.7	0~0.8
		80	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.7	0~1.6	0~1.0	0~0.6	0.35~0.7	0.35~0.7	0~0.5
		90 SS	0~1.6	0.3~0.5	0~1.1	0.65	0~1.6	0.3~0.5	0~1.6	0.3~0.6	0~1.6	0~1.0	0~1.2	0.35~0.7	0.35~0.7	0~0.4
2-1/2"	DN65	100	0~1.6	0.25~0.4	0~1.4	0.65	0~1.6	0.25~0.4	0~1.6	0.3~0.6	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.4
		125 SS	0~1.6	0.2~0.3	0~1.6	0.65	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.5
		80	0~1.6	0.3~0.65	0~0.5	0.65	0~1.6	0.3~0.65	0~1.1	0.3~0.7	0~1.6	0~0.5	0~0.75	0.3~0.65	0.35~0.7	0~0.5
		90 SS	0~1.6	0.2~0.6	0~0.7	0.65	0~1.6	0.2~0.6	0~1.6	0.3~0.7	0~1.6	0~1.0	0~1.4	0.3~0.6	0.35~0.7	0~0.4
3"	DN80	100	0~1.6	0.3~0.45	0~0.8	0.65	0~1.6	0.3~0.45	0~1.6	0.3~0.55	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7	0~0.4
		125 SS	0~1.6	0.2~0.7	0~0.9	0.65	0~1.6	0.2~0.7	0~1.6	0.2~0.55	0~1.6	0~1.4	0~1.4	0.3~0.7	0.35~0.7	0~0.5
		100	0~1.6	0.35~0.6	0~0.5	0.65	0~1.6	0.35~0.6	0~1.6	0.3~0.55	0~1.6	0~0.6	0~0.75	0.35~0.7	0.35~0.7	0~0.4
4"	DN100	125 SS	0~1.6	0.2~0.7	0~0.6	0.65	0~1.6	0.2~0.7	0~1.6	0.3~0.65	0~1.6	0~0.7	0~1.2	0.35~0.7	0.35~0.7	0~0.5
		125	0~1.6	0.2~0.7	0~0.6	0.65	0~1.6	0.2~0.7	0~1.6	0.3~0.65	0~1.6	0~0.7	0~1.2	0.35~0.7	0.35~0.7	0~0.5

Model Specification	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC	P080NC	P100NC
	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO	P080NO	P100NO
	Normally Closed	S015NC	S020NC	S025NC	S032NC	S040NC	S050NC	S065NC	S080NC	S100NC
	Normally Open	S015NO	S020NO	S025NO	S032NO	S040NO	S050NO	S065NO	S080NO	S100NO
Material of Body / Actuator		S.S304 316 /PA								
Seat seal		PTFE/FPM								
Stem seal		PTFE/FPM								
Piston Seal		PTFE/FPM								
Tempreture of Medium	PTFE	- 10 ~200℃								
	FPM	- 10 ~100℃								
Installing		Downstream/Upsteam								
Operating Method		Plunger Pilot								
Ambient and fluid		Air,Water,Oil.Steam (50CTS Bellow)								
Port size		G1/2	G3/4	G1	G1 1/4	G1 1/2	G2	G2 1/2	G3	G4
Nominal Diameter mm		13	20	25	32	40	50	65	80	100
Kv (m³/h)		4.2	8	19	27.5	42	55	90	115	200
Pressure Range Mpa		0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6
Min.Control Pressure Mpa		0.3	0.35	0.35	0.35	0.35	0.35	0.35	0.40	0.40
Executor Dimension mm		40/50	50	50/63	63	63	63/80/90	80/90	100/125	125

◆ Dimensions [mm]

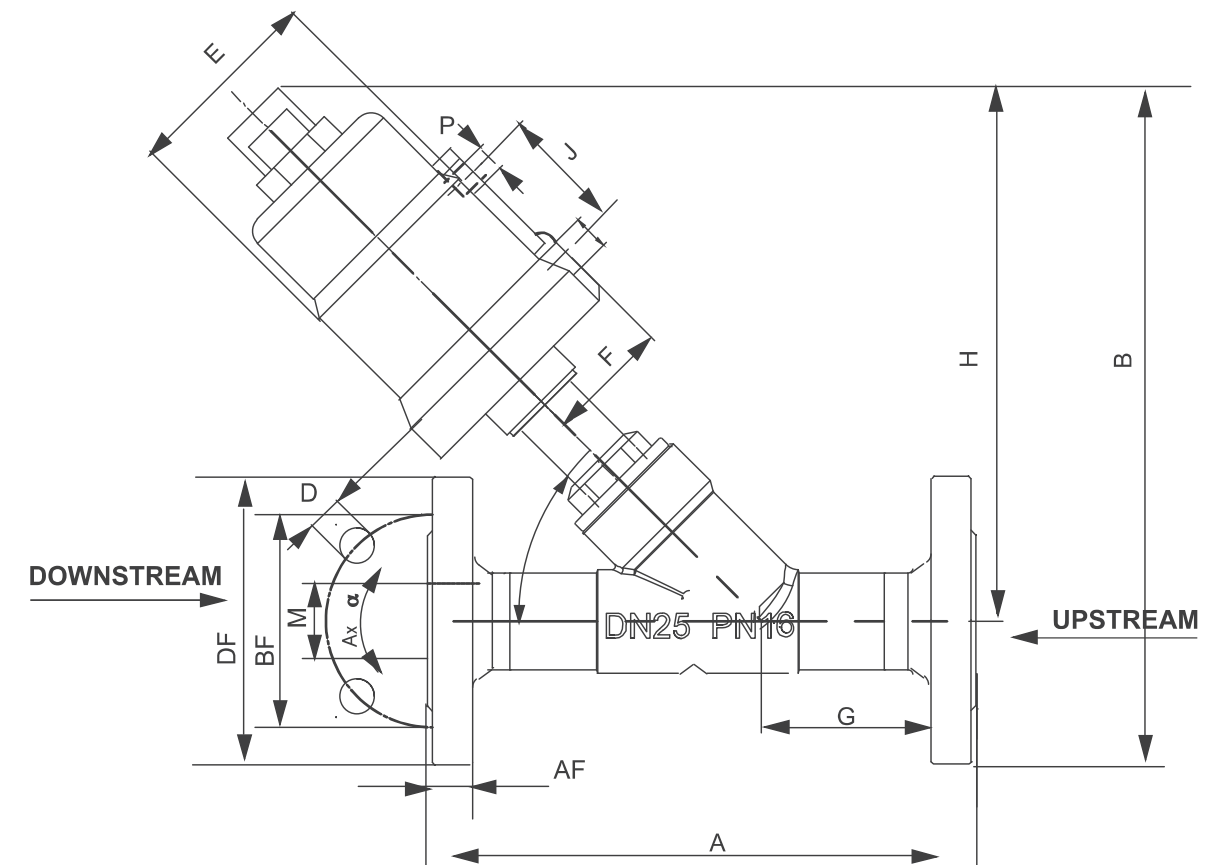
Flange Ends --TPV400P



Port Size	DN (mm)	Actuator (mm)	A	B	D	E	F	G	H	J	M	P	AF	BF	DF
1/2"	DN15	50	130	165	14	64	44	24	115	24	15	12	15	65	95
3/4"	DN20	50	130	185	14	64	44	25	131	24	18	12	15	75	102
1"	DN25	50	140	195	14	64	44	30	138	24	25	12	15	85	114
		63	140	225	14	79.5	54	30	166	24	25	12	15	85	114
1-1/4"	DN32	63	150	240	18	79.5	54	30	172	24	30	12	17	100	133
1-1/2"	DN40	63	180	245	18	79.5	54	45	174	24	36	12	17	110	143
2"	DN50	63	195	275	18	79.5	54	50	193	24	47	12	17	125	158
		80	195	285	18	101	62	50	202	24	47	12	17	125	158
2-1/2"	DN65	80	230	300	18	101	62	55	209	24	68	12	18	145	180
3"	DN80	100	240	365	18	125	71	70	268	30	80	12	20	160	194
4"	DN100	125	265	420	18	158	93	90	314	30	100	12	20	180	215

◆ Dimensions [mm]

Flange Ends --TPV400S



Port Size	DN (mm)	Actuator (mm)	A	B	D	E	F	G	H	J	M	P	AF	BF	DF
1/2"	DN15	50	130	190	14	56	35	24	142	38	15	G 1/8	15	65	95
3/4"	DN20	50	130	203	14	56	35	25	152	38	18	G 1/8	15	75	102
1"	DN25	50	140	215	14	56	35	30	155	38	25	G 1/8	15	85	114
		63	140	235	14	70	43	30	176	44	25	G 1/8	15	85	114
1-1/4"	DN32	63	150	245	18	70	43	30	177	44	30	G 1/8	17	100	133
1-1/2"	DN40	63	180	245	18	70	43	45	182	44	36	G 1/8	17	110	143
2"	DN50	63	195	274	18	70	43	50	196	44	47	G 1/8	17	125	158
		80/90	195	295	18	94	56	50	206	67	47	G 1/4	17	125	158
2-1/2"	DN65	80/90	230	305	18	94	56	55	215	67	68	G 1/4	18	145	180
3"	DN80	125	240	395	18	135	73	70	295	67	80	G 1/4	20	160	194
4"	DN100	125	265	445	18	135	73	90	332	67	100	G 1/4	20	180	215

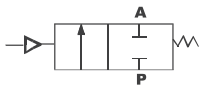
Angle Seat Valve(Piston Valve)
Series TPV500 (Tri-Clamp Ends)



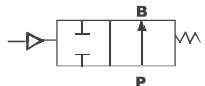
2/2-way Angle-Seat Valve
Pneumatically Operated, for
medium up to +180° C, with Tri-Clamp Ends
port connection DN 15 - 65

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

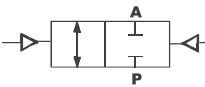
Symbol Control function A
(closed by spring force
in rest position)



Control function B
(open in rest position)



Control function I
(double-acting actuator)



◆ How to Order



TPV500S040NC4S



TPV500P040NC4S

TPV500 P 015 NC S x 63mm

Acting type			
S	Single acting	D	Double acting
Body Material			
Blank	S.S 304 (standard)		
4	S.S 316		
5	S.S 316L		
Type of actuation			
NO	Normally Open		
NC	Normally Closed (standard)		
Port code			
		15	G1/2
20	G3/4	25	G1
32	G1 1/4	40	G1 1/2
50	G2	65	G2 1/2
Actuator Material code			
P	Plastic Actuator		
S	S.S. Actuator		
A	Aluminium Actuator		
Model			
TPV500	500 seires Angle Seat Valve		

◆ 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	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80
DN65	80,100	90,125	80,100

◆ Clamp specification :ISO 2852-1993
ISO/JIS is also available

◆ TPV500 Series Plunger Pilot angle seat valve is propelled by a piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature:

2/2 Way stainless steel valve with big flow capacity
V type seals ensure reliable and effective sealing

Maintenance free, compatible with various accessories,
Direction indicating, stroke limiting or manual switching
can be achieved conveniently.

Tri-Clamp Ends

2/2-way stainless steel Angle Seat Valve with big flow capacity,
Pneumatically Operated, Excellent seat tightness due to PTFE soft sealing,
for Medium up to +180°C,Port connection DN 15-65.

◆ Pressure Data Sheet

Control Function	Acting type	Flow Direction	Water Hammer	Application
Normally Closed	Single Acting	Upstream	Yes	For compressible medium (such as gas and steam) and liquid of comparatively low pressure
		Downstream	No	For anti water hammer pipeline, bears certain pressure difference
	Double Acting	Upstream	Yes	Reliable performance, bears pressure difference; valve closes automatically in case of an emergency.
		Downstream	No	For pipeline required of better anti water hammer, bears big pressure difference
Normally Open		Upstream	Yes	For pipeline where valve keeps open, double acting & normally open when silencer comes off.
		Downstream	No	For pipeline where valve keeps open, anti water hammer, double acting & normally open when silencer comes off

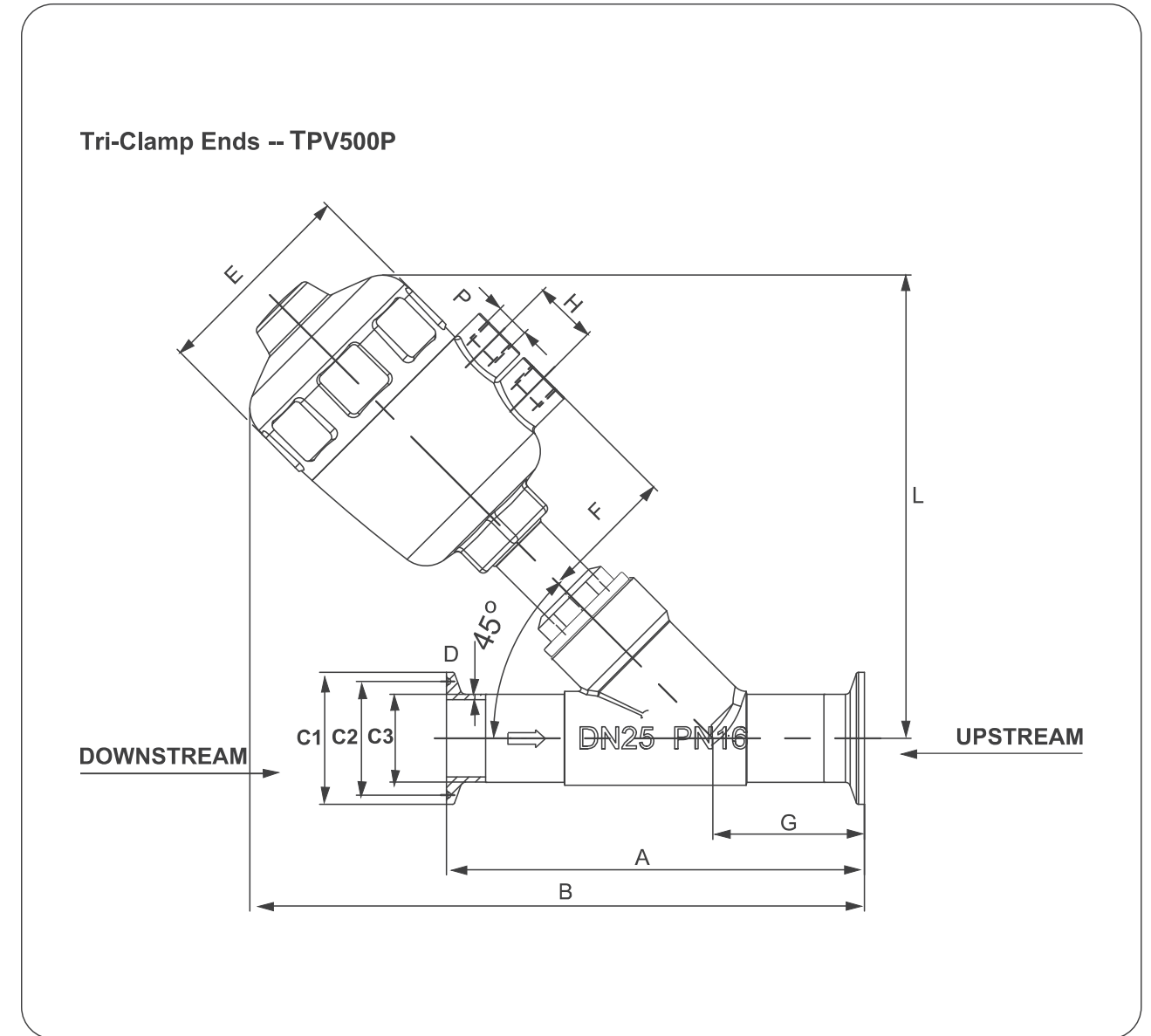
Water hammer (or, more generally, fluid hammer) is a pressure surge or wave caused when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). A water hammer commonly occurs when a valve . closes suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe. It is also called hydraulic shock. This pressure wave can cause major problems, from noise and vibration to pipe collapse. It is possible to reduce the effects of the water hammer pulses with accumulators, expansion tanks, surge tanks, and other features. Designed to close against the flow. Will not chatter or produce water hammer . Operates smoothly and quietly.

Port Size	DN (mm)	Actuator (mm)	Normally Closed				Normally Closed				Normally Open				Double Acting Assistant Pressure Mpa	Rest Position Pressure Mpa
			Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa	Press. Range Mpa	Control Press. Mpa		
1/2"	DN15	40	0~1.6	0.3~0.45	0~1.1					≥ 0.3				0.2~0.4	≥ 0.4	0~0.2
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.1
3/4"	DN20	50	0~1.6	0.3~0.4	0~1.4	0.45	0~1.6	0.3~0.4	0~1.6	≥ 0.3	0~1.6	0~1.2	0~1.6	0.3~0.65	0.3~0.4	0~0.2
		63	0~1.6	0.3~0.38	0~1.4	0.45	0~1.6	0.3~0.38	0~1.6	0.3~0.5	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.35	0~0.35
		80	0~1.6	0.2~0.35	0~1.4	0.4	0~1.6	0.2~0.35	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.4	0~0.5
		90 SS	0~1.6	0.2~0.3	0~1.4	0.35	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4	0~0.4
1"	DN25	50	0~1.6	0.3~0.45	0~0.75	0.45	0~1.6	0.3~0.45	0~1.3	0.3~0.6	0~1.6	0~0.3	0~1.3	0.3~0.6	0.3~0.4	0~0.35
		63	0~1.6	0.3~0.35	0~1.4	0.5	0~1.6	0.3~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.3~0.55	0~0.35
		80	0~1.6	0.2~0.3	0~1.4	0.45	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.5
		90 SS	0~1.6	0.2~0.25	0~1.4	0.4	0~1.6	0.2~0.25	0~1.6	0.2~0.3	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.4
1-1/4"	DN32	63	0~1.6	0.3~0.5	0~0.06	0.5	0~1.4	0.3~0.5	0~1.4	0.3~0.6	0~1.6	0~1.4	0~1.3	0.35~0.7	0.3~0.5	0~0.4
		80	0~1.6	0.2~0.45	0~1.4	0.6	0~1.6	0.2~0.45	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.5
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.4
		63	0~1.6	0.3~0.6	0~0.05	0.5	0~1.1	0.3~0.6	0~1.3	0.3~0.7	0~1.6	0~1.4	0~0.65	0.35~0.7	0.3~0.6	0~0.4
1-1/2"	DN40	80	0~1.6	0.3~0.55	0~1.4	0.6	0~1.6	0.3~0.55	0~1.6	0.3~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
		63	0~1.0	0.3~0.65	0~0.35	0.5	0~0.9	0.3~0.65	0~0.8	0.35~0.8	0~1.0	0~0.6	0~0.5	0.35~0.7	0.35~0.7	0~0.8
		80	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.7	0~1.6	0~1.0	0~0.6	0.35~0.7	0.35~0.7	0~0.5
2"	DN50	90 SS	0~1.6	0.3~0.5	0~1.1	0.65	0~1.6	0.3~0.5	0~1.6	0.3~0.6	0~1.6	0~1.0	0~1.2	0.35~0.7	0.35~0.7	0~0.4
		100	0~1.6	0.25~0.4	0~1.4	0.65	0~1.6	0.25~0.4	0~1.6	0.3~0.6	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.4
		125 SS	0~1.6	0.2~0.3	0~1.6	0.65	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.5
		80	0~1.6	0.3~0.65	0~0.5	0.65	0~1.6	0.3~0.65	0~1.1	0.3~0.7	0~1.6	0~0.5	0~0.75	0.3~0.65	0.35~0.7	0~0.5
2-1/2"	DN65	90 SS	0~1.6	0.2~0.6	0~0.7	0.65	0~1.6	0.2~0.6	0~1.6	0.3~0.7	0~1.6	0~1.0	0~1.4	0.3~0.6	0.35~0.7	0~0.4
		100	0~1.6	0.3~0.45	0~0.8	0.65	0~1.6	0.3~0.45	0~1.6	0.3~0.55	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7	0~0.4
		125 SS	0~1.6	0.2~0.7	0~0.9	0.65	0~1.6	0.2~0.7	0~1.6	0.2~0.55	0~1.6	0~1.4	0~1.4	0.3~0.7	0.35~0.7	0~0.5

◆ Specifications

Model Specification	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC
	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO
Material of Body/ Actuator		S.S304 316 /PA						
Operating Method		Plunger Pilot						
Ambient and fluid		Air,Water,Oil,Steam (50CTS Bellow)						
Port size		G1/2	G3/4	G1	G1 1/4	G1 1/2	G2	G2 1/2
Nominal Diameter mm		13	18	24	31	35	45	61
Kv (m ³ /h)		4.2	9	19	33	42	59	90
Model Specification	Normally Closed	S015NC	S020NC	S025NC	S032NC	S040NC	S050NC	S065NC
	Normally Open	S015NO	S020NO	S025NO	S032NO	S040NO	S050NO	S065NO
Material of Body / Actuator		S.S304 316 /PA						
Seat seal		PTFE/FPM						
Stem seal		PTFE/FPM						
Piston Seal		PTFE/FPM/NBR						
Tempreture of Medium	PTFE	- 10~200℃						
	FPM	- 10~150℃						
Installing		Downsteam/Upstream						

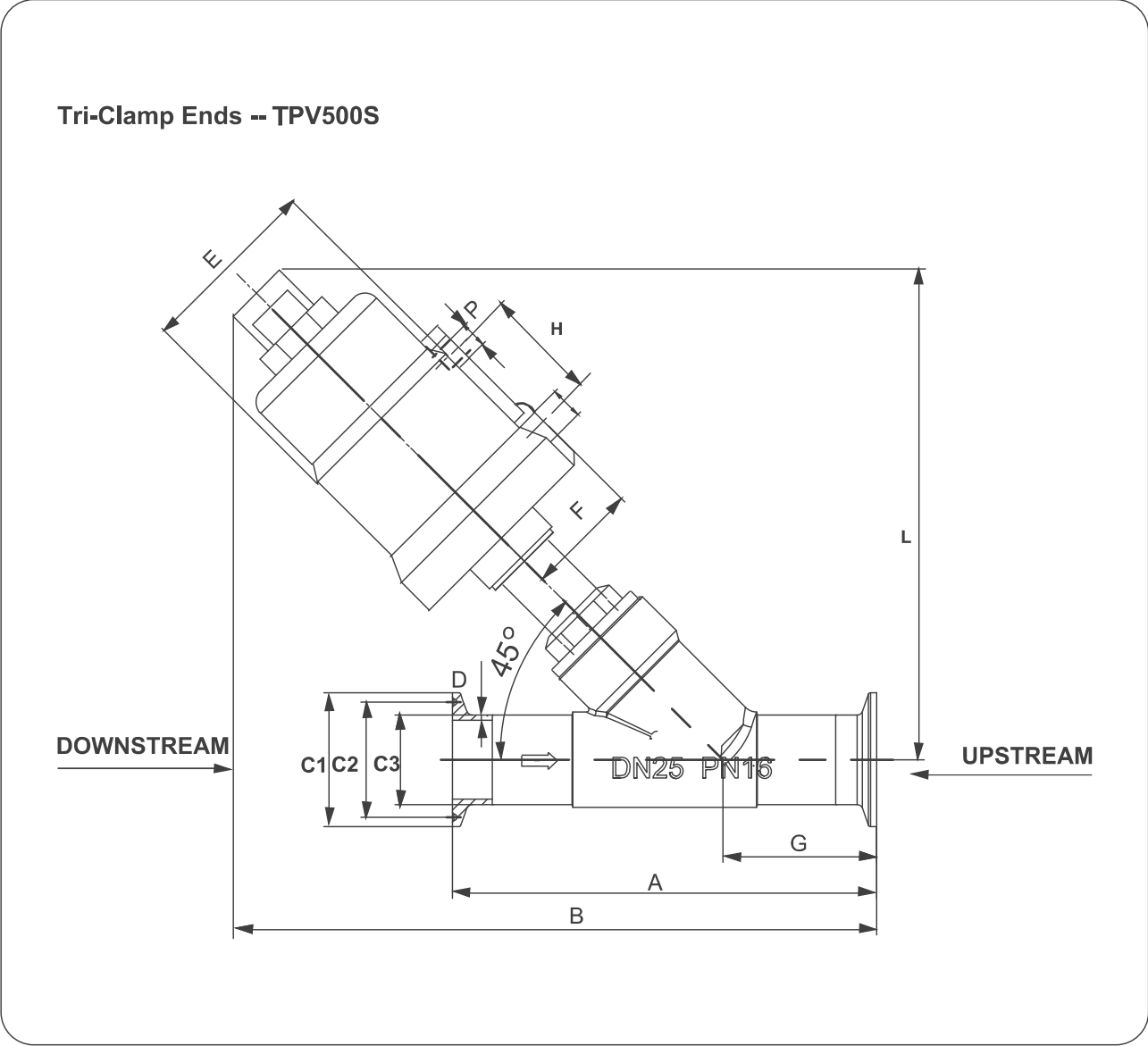
◆ Dimensions [mm]



Port Size	DN (mm)	Actuator (mm)	A	B	C1	C2	C3	D	E	F	G	L	H	P
1/2"	DN15	50	133	188	50.5	43.5	20.5	2	64	44	49	115	24	G1/4
3/4"	DN20	50	143	195	50.5	43.5	25.5	2.4	64	44	56.5	131	24	G1/4
1"	DN25	50	143	206	50.5	43.5	31.3	2.4	64	44	58	138	24	G1/4
		63	143	238	50.5	43.5	31.3	2.4	79.5	54	58	166	24	G1/4
1-1/4"	DN32	63	153	248	50.5	43.5	38.3	2.4	79.5	54	57.5	172	24	G1/4
1-1/2"	DN40	63	182	252	64	56.5	47.2	2.6	79.5	54	69	174	24	G1/4
2"	DN50	63	200	272	64	56.5	55.5	2.6	79.5	54	77.5	193	24	G1/4
		80	200	283	64	56.5	55.5	2.6	101	62	77.5	202	24	G1/4
2-1/2"	DN65	80	232	310	91	83.5	68	2.6	101	62	90	209	24	G1/4

Angle Seat Valve(Piston Valve)
Series TPV500(Tri-Clamp Ends)

◆ Dimension [mm]



Port Size	DN (mm)	Actuator (mm)	A	B	C1	C2	C3	D	E	F	G	L	H	P
1/2"	DN15	50	133	202	50.5	43.5	20.5	2	56	35	49	142	38	G1/8
3/4"	DN20	50	143	209	50.5	43.5	25.5	2.4	56	35	56.5	152	38	G1/8
1"	DN25	50	143	227	50.5	43.5	31.3	2.4	56	35	58	155	38	G1/8
		63	143	237	50.5	43.5	31.3	2.4	70	43	58	176	44	G1/8
1-1/4"	DN32	63	153	242	50.5	43.5	38.3	2.4	70	43	57.5	177	44	G1/8
1-1/2"	DN40	63	182	245	64	56.5	47.2	2.6	70	43	69	182	44	G1/8
2"	DN50	63	200	269	64	56.5	55.5	2.6	70	43	77.5	196	44	G1/8
		80/90	200	289	64	56.5	55.5	2.6	94	56	77.5	206	67	G1/4
2-1/2"	DN65	8090	232	320	91	83.5	68	2.6	94	56	90	215	67	G1/4



Gunmetal Body
2/2-way Gunmetal Body Angle Seat Valve with big flow capacity, Pneumatically Operated, Excellent seat tightness due to PTFE soft sealing ,for Medium up to +180°C, Port connectionDN 15-65. which makes our valves applicable in high air tightness ,The specific gunmetal material fuses zinc as a key element, industry and highly resistant tp corrosion in ai, sea water, fresh water and steam.

2/2-way Angle-Seat Valve Pneumatically Operated, for medium up to +180° C, Gunmetal Body female thread,port connection DN 15 - 65

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

◆ How to Order



TPV600P032NCS



TPV600P040NCS

TPV600 P 015 NC S x 63mm

Acting type

S	Single acting	D	Double acting
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Type of actuation

NO	Normally Open
NC	Normally Closed (standard)

Nominal diameter

		15	G1/2
20	G3/4	25	G1
32	G1 1/4	40	G1 1/2
50	G2	65	G2 1/2

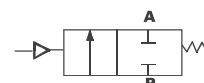
Actuator Material code

P	PA Actuator
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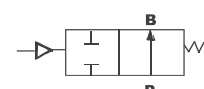
Model

TPV600	600 seires Angle Seat Valve
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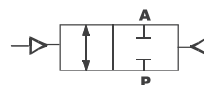
Symbol Control function A
(closed by spring force
in rest position)



Control function B
(open in rest position)



Control function I
(double-acting actuator)



◆ Actuator Size

Port Size	Standard Actuator Size mm
	PA
DN15	40,50
DN20	50,63,80
DN25	50,63,80
DN32	63,80
DN40	63,80
DN50	63,80
DN65	80,100

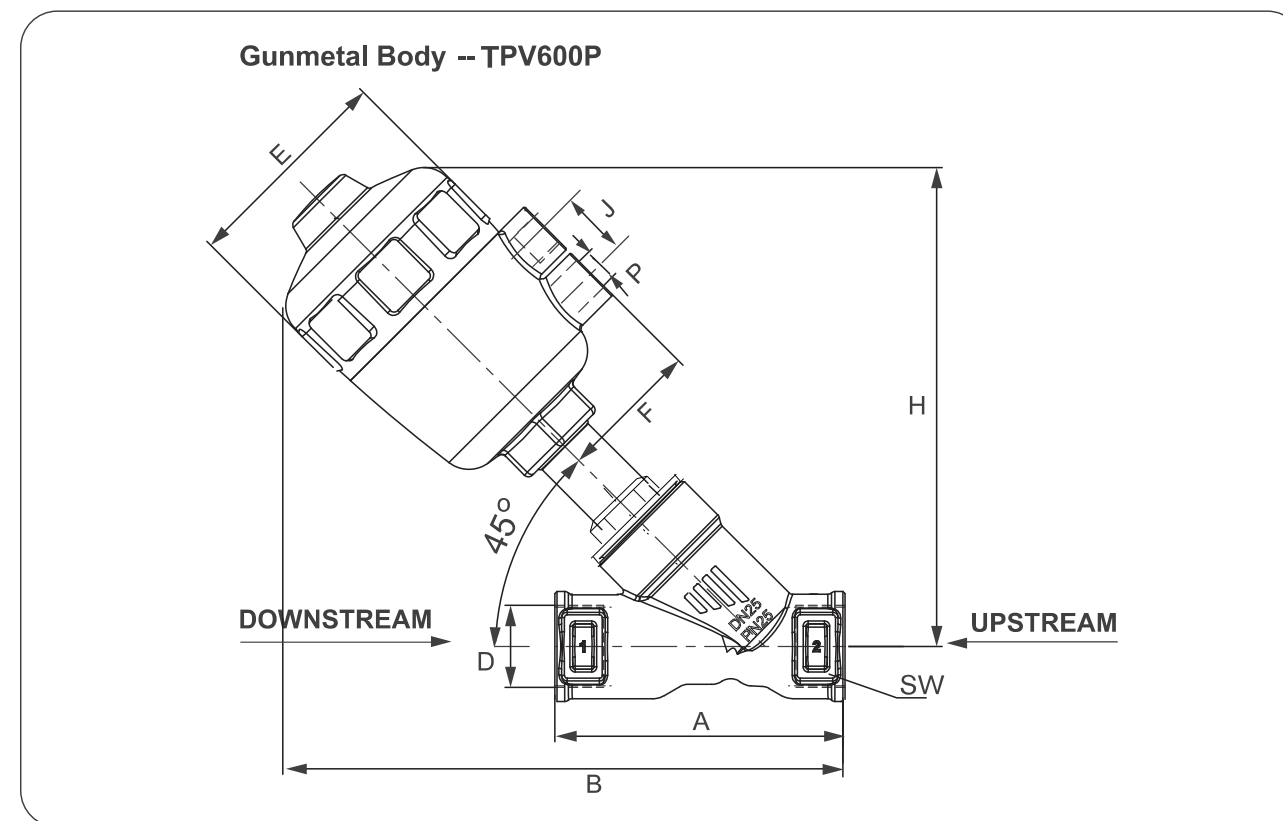
- ◆ TPV600 Series Plunger Pilot angle seat valve is propelled by a piston actuator, either single acting or double acting. 2/2 Way gunmetal valve body with big flow capacity V type seals ensure reliable and effective sealing Maintenance free, compatible with various accessories, Direction indicating, stroke limiting or manual switching can be achieved conveniently. Easy to install and maintain;

- ◆ The specific gunmetal material fuses zinc as a key element, which makes our valves applicable in high air tightness industry and highly resistant to corrosion in air, sea water, fresh water and steam.

◆ Specifications

Model Specification	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC
	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO
Material of body / Actuator	Gunmetal Body/PA							
Operating Method	Plunger Pilot							
Ambient and fluid	Air,Water,Oil,Steam (50CTS Bellow)							
Port size		G1/2	G3/4	G1	G1 1/4	G1 1/2	G2	G2 1/2
Nominal Diameter mm		13	20	25	32	40	50	65
Kv (m³ /h)		4.2	8	19	27.5	42	55	90
Seat seal	PTFE/FPM							
Stem seal	PTFE/FPM							
Piston Seal	PTFE/FPM/NBR							

◆ Dimensions [mm]



Port Size	DN (mm)	Actuator (mm)	A	B	D	E	F	H	P	J	SW
1/2"	DN15	40	88	139	G1/2	30	53	115	G1/8	20	27
		50	88	163	G1/2	44	64	140	G1/4	24	27
3/4"	DN20	50	96	171	G3/4	44	64	144	G1/4	24	34
1"	DN25	50	108	181	G1	44	64	152	G1/4	24	41
		63	108	206	G1	54	80	177	G1/4	24	41
1-1/4"	DN32	63	112	219	G1-1/4	54	80	183	G1/4	24	50
1-1/2"	DN40	63	133	222	G1-1/2	54	80	188	G1/4	24	55
		80	154	249	G2	54	80	204	G1/4	24	70
2"	DN50	63	154	249	G2	54	80	204	G1/4	24	70
		80	154	270	G2	62	101	225	G1/4	24	70
2-1/2"	DN65	80	191	275	G2-1/2	62	101	239	G1/4	24	85

2/2-way Angle-Seat Valve

Pneumatically Operated, for medium up to +180° C, Polished Actuator port connection DN 15 - 65

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

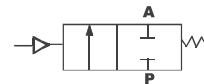
◆ How to Order



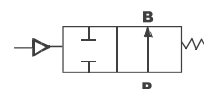
TPV700S025NCS

TPV700 S 015 NC S x 63mm

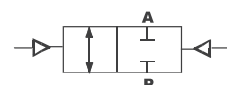
Symbol **Control function A**
(closed by spring force in rest position)



Control function B
(open in rest position)



Control function I
(double-acting actuator)



Acting type

S	Single acting	D	Double acting
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Body Material

Blank	S.S 304	(standard)
4	S.S 316	
5	S.S 316L	

Type of actuation

NO	Normally Open
NC	Normally Closed (standard)

Port code

		15	G1/2
20	G3/4	25	G1
32	G1 1/4	40	G1 1/2
50	G2	65	G2 1/2

Actuator Material code

S	S.S. Actuator
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Model

TPV700	700 seires Angle Seat Valve
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◆ Actuator Size

Port Size	Standard Actuator Size mm
	S.S.
DN10	40,50
DN15	40,50
DN20	50,63,80
DN25	50,63,90
DN32	63,80
DN40	63,80
DN50	63,80
DN65	80,100

- ◆ TPV700 Series Plunger Pilot angle seat valve is propelled by a piston actuator, either single acting or double acting. The actuator is one punch formed with stainless steel plate, surface polished, thus more appealing, applicable to different working temperature: 2/2 Way stainless steel valve with big flow capacity V type seals ensure reliable and effective sealing Maintenance free, compatible with various accessories, Direction indicating, stroke limiting or manual switching can be achieved conveniently.

2/2-way Angle seat valve

Pneumatically Operated,for medium up to +150°C, threaded port connection, DN 15-50

- Classic design, Long life cycle
- NC and NO is optional
- Structure in coaxial stop,leakage proof and high flow rate
- Saving energy.

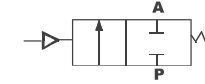
◆ How to Order



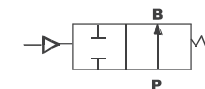
TPV800A020NC

TPV800 A 015 NC S H

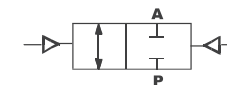
Symbol **Control function A**
(closed by spring force in rest position)



Control function B
(open in rest position)



Control function I
(double-acting actuator)



Sealing Require

H	High Temperture
Blank	Normal (standard)

Acting type

S	Single acting
D	Double acting (standard)

Control Function

NO	Normally open
NC	Normally closed (standard)
NA	Liberty state

Port Code

15	G1/2	20	G3/4
25	G1	32	G1 1/4
40	G1 1/2	50	G2

Actuator & stem Material code

S	S.S.
A	Aluminium

Model

TPV800	800 series anglse seat Valve
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Construction

Seal Material: PTFE (NBR, FKM and EPDM on request)
Liquid and gaseous media that do not attack the housing and seal materials

Media

Control Medium Air

Temperature range

Medium temperature: -10 to 80°C with NBR seal -10 to 150°C (PTFE,FKM)

Ambient temperature: -10 to 60°C

Standard Version: Aluminium actuator,S.S actuator on require

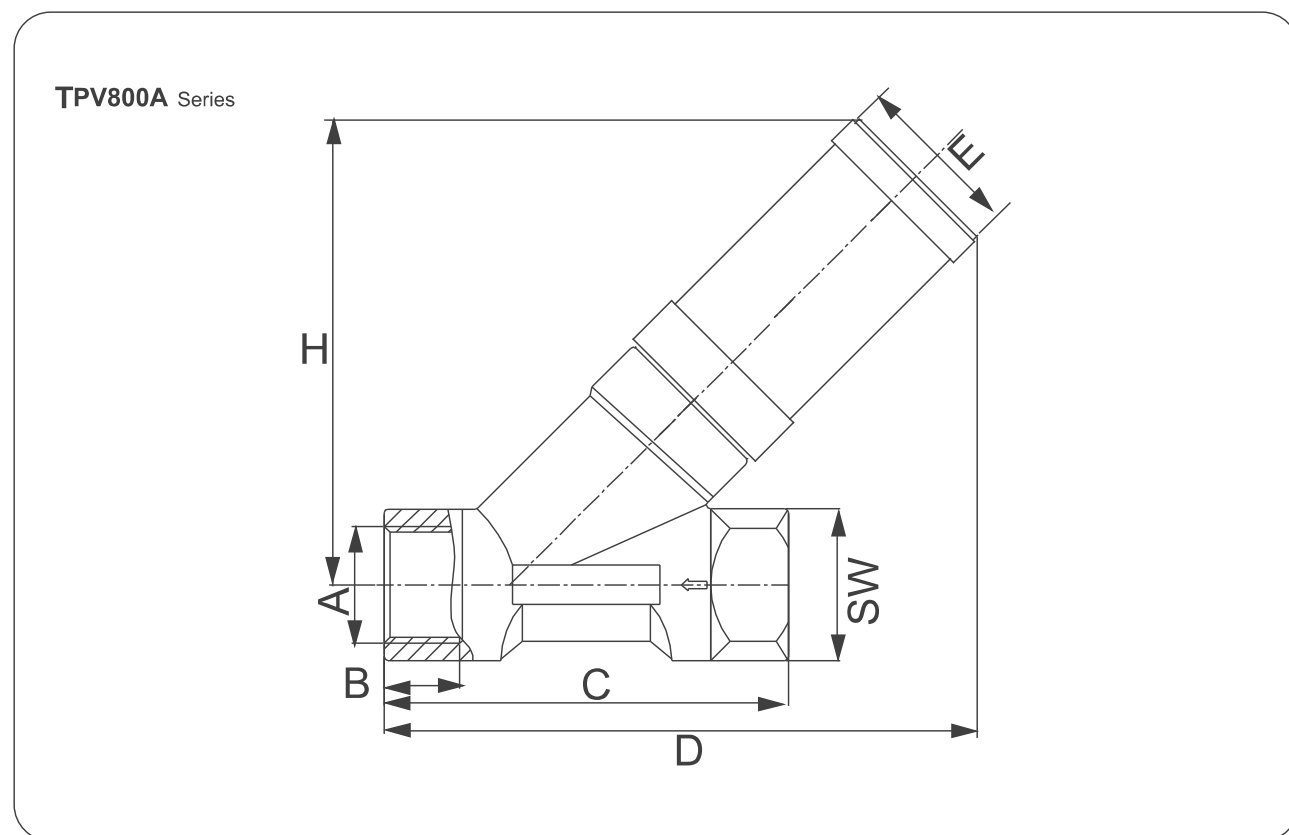
Applications

Food, packaging, petrochemical, metallurgican, spraying, vehicles, printing and dyeing machinery etc.;

◆ Specifications

Model Specification	Normally Closed	015NC	020NC	025NC	032NC	040NC	050NC
	Normally Open	015NO	020NO	025NO	032NO	040NO	050NO
Material of Body	S.S304/316/316L for body, Aluminium for stem and actuator,S.S is optional.						
Operating Method	Plunger Pilot						
Ambient and fluid	Air,Water,Oil,Liquefied gas, Free-running viscosity liquid						
Port size		G1/2	G3/4	G1	G1 1/4	G1 1/2	G2
Nominal Diameter mm		13	16	22	32	35	45
Kv (m ³ /h)		4	5	10	20	33	42
Pressure Range Mpa		0~0.8	0~0.8	0~0.8	0~0.8	0~0.8	0~0.8
Min.Control Pressure Mpa		0.30	0.30	0.32	0.30	0.35	0.32
Medium Temp.	NBR FOR -10~80°C and EPDM, VITON FOR -10~150°C						

◆ Dimensions [mm]



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	H	SW
1/2"	DN15	25	G1/2"	14	76	109	30	98	27
3/4"	DN20	32	G3/4"	16	92	115	37	100	32
1"	DN25	32	G 1"	21	103	127	37	104	40
1-1/4"	DN32	40	G1-1/4"	19	112	168	45	160	50
1-1/2"	DN40	50	G1-1/2"	21	129	129	55	160	56
2"	DN50	63	G 2"	27	143	143	68	160	68

2/2-way Angle-Seat Valve

Pneumatically Operated, for medium up to +120° C,

Stainless steel Actuator Dia 27mm

female threaded port connection, DN15

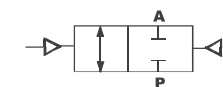
- Design compact style 2/2-way Stainless steel valve;
- Movable seat & V type seals ensure reliable and effective performance
- Valve in Y type installation and horizontal installation is optional;
- Double acting NC and double acting liberty is optional

◆ How to Order



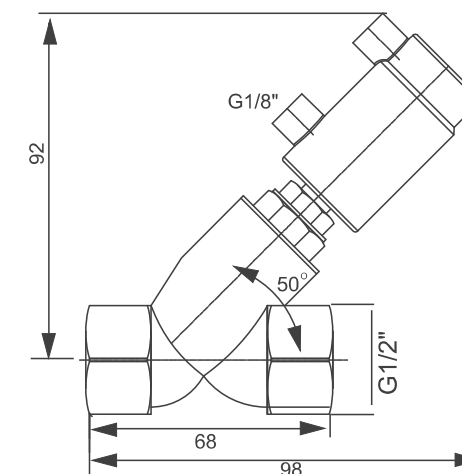
Symbol

Control function I
(double-acting actuator)

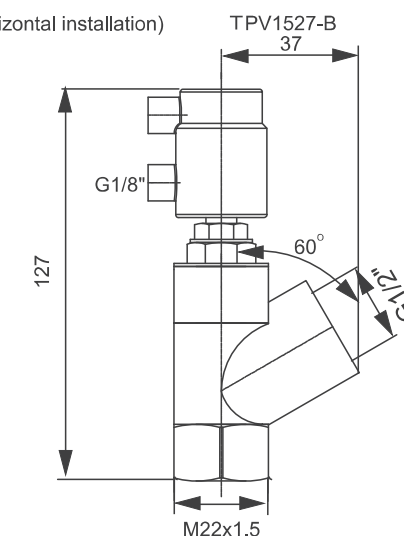


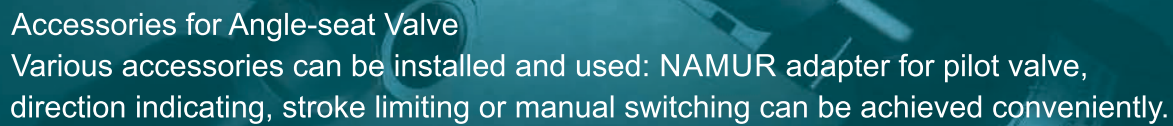
◆ Dimensions [mm]

Y-type Filling valve TPV1527-A



Filling valve (horizontal installation)



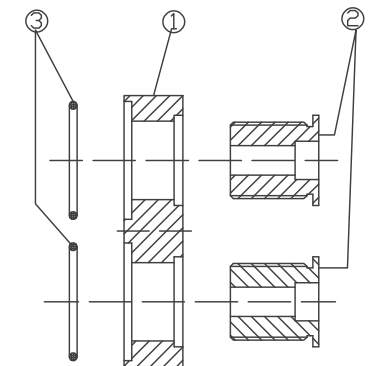


- ▶ Namur interface allows easy installation of pilot valve to actuator
- ▶ Increased operational reliability when using the NAMUR pilot valves Types 5/2 way 4M310-08

Technical Data

Mounting for NAMUR-Adapter

- 1 Plate
- 2 Hollow screw
- 3 O-rings



◆ How to Order

TNAA

1

Code

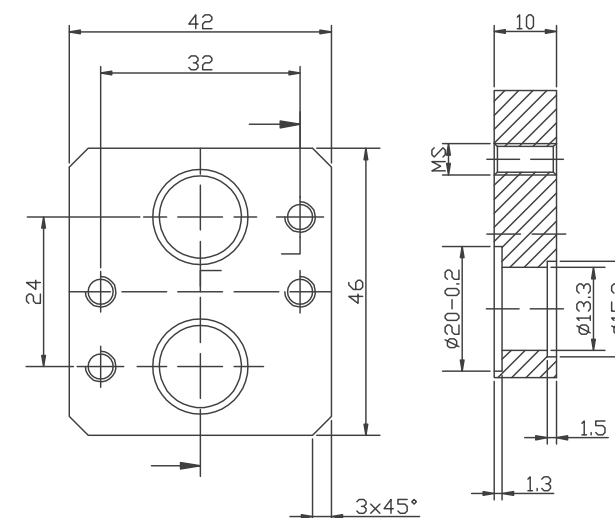
1	Adapter for actuators: 50/63/80mm
2	Adapter for actuators: 100/125mm

— Model

TNAA	NAMUR-Adapter
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◆ **Dimensions [mm]**

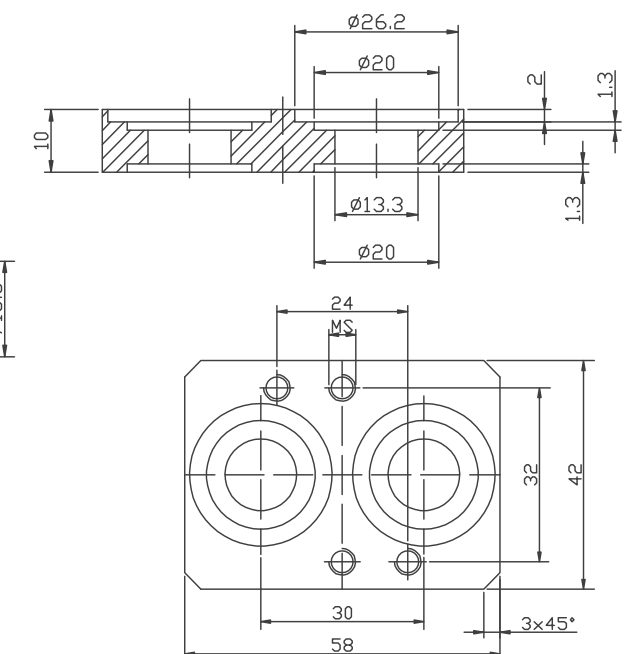
Adapter for actuators: 50mm, 63mm, 80mm



Version 1

Namur-Adapter for **stroke actuator**
 Ø 50 to 80 for angle seat and globe valve
 Ø 63 to 100 for diaphragm valve
 NAMUR adapter for **rotary actuator**
 Ø 63 on request

Adapter for actuators: 100mm, 125mm



Version 2

Namur-Adapter for **stroke actuator**
 Ø 100 and 125 for angle seat and globe valve
 Ø 125 for diaphragm valve
 NAMUR adapter for **rotary actuator**
 Ø 100



**2/2-way Angle-Seat Valve for medium up to +180°C, NAMUR type Actuator connection is available on customer request
DN 15-65**

- NAMUR direct connections on piloting head, direct coupling with solenoid valve
- NC and NO universal actuators with modular universal accessory program up to control heads

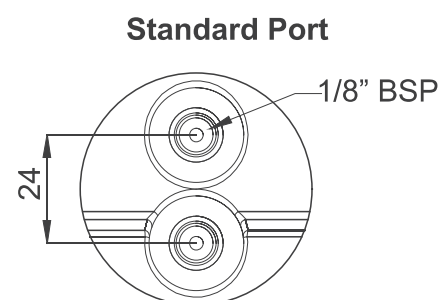
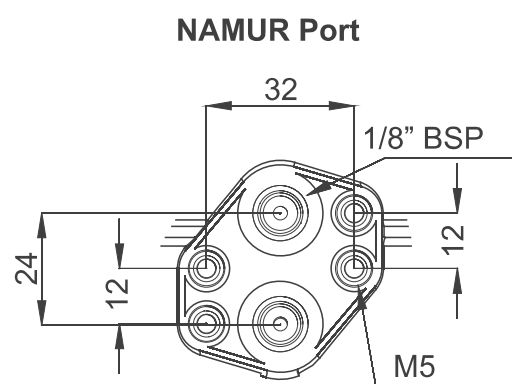


◆ NAMUR type Actuator

- Namur interface allows easy installation of pilot valve to actuator
- Increased operational reliability when using the NAMUR pilot valves Type 4M310-08/10

◆ Actuator

Port Size	Standard Actuator	
	PA	
DN15	50	Available
DN20	50,63,80	Available
DN25	50,63,80	Available
DN32	63,80	
DN40	63,80	
DN50	63,80	
DN65	80,100	



2/2-way Angle-Seat Valve for medium up to +180° C, With Valve Positioner Electronic-pneumatic Valve Positioner and Intelligent valve positioner is optional connection is available on customer request DN15-100

- Intelligent Valve Positioner series 1400 is optional;
- Intelligent Valve Positioner series 1500 is optional;
- Electronic-pneumatic Valve Positioner series 1500 is optional;
- For solenoid valve details requirement, Pls contact ACME sales department.

- Compact stainless steel design
- Electrical waterproof connectors
- LCD with backlight
- Easy to start-up
- Rich additional software functions;



Series 1400

- ◆ A positioner is a device put into a valve to ensure that it is at a correct position of opening as per the control signal. A normal converter only sends the opening/closing request to valve but can not confirm its position. Our positioner has a pneumatic feedback controller. Controlled external supply air/liquid to positioner provides power to positioner to position a valve.



Series 1500



Series TYT-1000

- ◆ TYT-1000 electric pneumatic positioner is used for rotary operation of pneumatic rotary valve actuators by means of electrical controller or control systems with an analog output signal of 4 to 20 MA or split ranges; YT-1000 electric valve localizer that is incompatible with actuators, and receipt 4~20mA DC current signal from controller or control system, then transfer into air pressure what transfer to the actuator which connect with it , in order to control value position.

Angle Seat Valve(Piston Valve) Series TPVE (Solenoid Valve)



2/2-way Angle Seat Valve for medium up to +180°C, With Solenoid Valve connection is available on customer request DN 10-100

- 2/3 way solenoid valve can be used in single acting angle seat valve;
- 2/5 way solenoid valve can be used in double acting angle seat valve;
- EX-proof coils is optional
- For solenoid valve details requirement, Pls check catalogue page-Solenoid Valve.

◆ Ex-proof coils is available.



◆ 2/5 way solenoid valve can be used in double acting angle seat valve;
NAMUR-Adapter for Pilot valve ;
Valve Model: 4V210-08/4V310-08



◆ 2/3 way solenoid valve can be used in double acting angle seat valve;
Valve Model: 4V210-08/4V310-08



◆ 2/5 way solenoid valve can be used in double acting angle seat valve;
copper tubing & LOK-fittings is as the accessories.
Valve Model: 4V210-08/4V310-08



◆ 2/3 way solenoid valve can be used in double acting angle seat valve;
Valve Model: 3V210-08 & 3V310-08

Angle Seat Valve(Piston Valve) Series TPVS (Proximity Switch for Position Feedback)



Single Switch



Double Switch

2/2-way Angle-seat Valve for medium up to +180° C, With Proximity Switch for Position Feedback Connection is available on customer request DN15-100

- NC and NO universal actuators with proximity switch up to control heads
- Switch can be easily installed on the actuator;
- Switch signal can be transmitted to PLC etc to show the valve on or off.

◆ Technical Data

- ▶ Voltage: 6-36V DC (direct current)
90-250V AC (alternating current)
- ▶ Protection class: IP65- IP67
- ▶ Detection distance: 3~5mm
- Ambient temperture: -25 ~70°C

Series TPVM (Manual Override for Stroke Limiting) With Manual Override for Stroke Limiting Connection is available on customer request DN15-100

- Adjust piston position,limits stroke and regulate flow volume of the Valve
- Applicable for all series of angle seat valve,and works as emergency override in cases when the controlling air source suffers no mechanical (solenoid valve) failure.

◆ Specifications

- ▶ The hand wheel for PA actuator works on valves in normally closed condition, functioning as stroke limiter, flow regulator and emergency valve-opener (lack of pilot fluid,machinery damaged, lock of piloting signal)
- ▶ The hand wheel for stainless steel actuators works as valves in normally open condition, functioning as emergency valve-closer.
- ▶ For detected application and slection advice,PLS contact sales department.



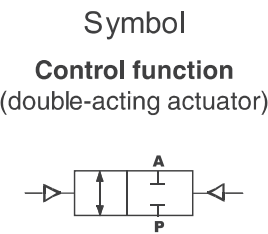


Globe Control Valve,Pneumatically Operated

Series TGV100

2/2-way Globe Control Valve ,
Pneumatically Operated,for
medium up to +150°C, threaded
port connection, DN 15-65

- High flow rate
- Long life cycle
- NC and NO universal actuators with modular universal accessory program up to control heads
- Simple conversion of the circuit function



◆ How to Order



TGV100P025NC

TGV100

P

015

NC

D

x

63mm

Acting type

D	Double acting
---	---------------

Body Material

Blank	S.S 304 (standard)
4	S.S 316
5	S.S 316L

Control Function

NO	Normally open
NC	Normally closed (standard)

Port code

		15	G1/2
20	G3/4	25	G1
32	G1 1/4	40	G1 1/2
50	G2	65	G2 1/2

Actuator Material code

P	PA Actuator
S	S.S. Actuator
A	Aluminium Actuator

Model

TPV100	100 seires Angle Seat Valve
--------	-----------------------------

Construction

Seal Material: PTFE (NBR, FKM and EPDM on request)

Media

Liquid and gaseous media that do not attack the housin gand seal materials

Control Medium Air

Temperature range

Medium temperature: -10 to 80°C with NBR seal -10 to 150°C (PTFE,FKM)

Ambient temperature: -10 to 60°C

Standard version PA actuator,S.S actuator on request

Control Valve
T type 2/2-way Globe Control Valve , Pneumatically Operated,
for Medium up to +150°C,threaded Port connection DN 15-65.

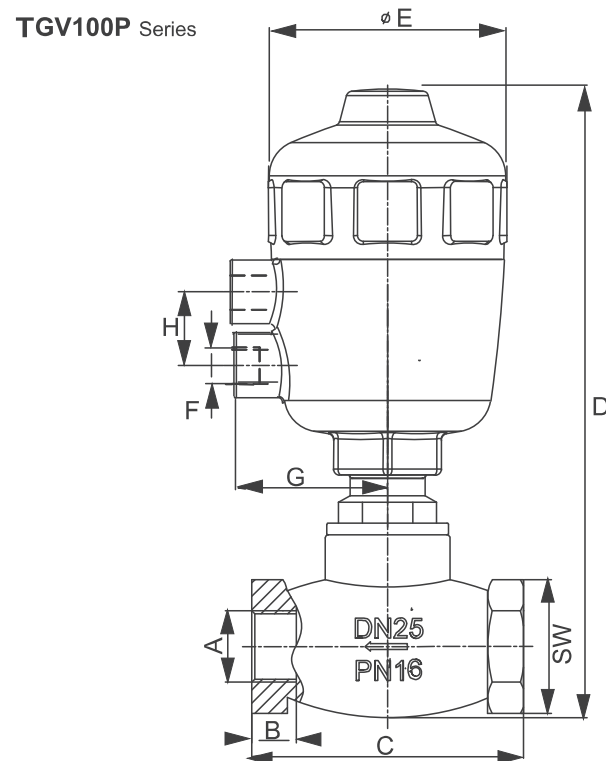
Applications

Food, packaging, petrochemical, metallurgican, spraying, vehicles, printing and dyeing machinery etc.:

◆ Specifications

Model Specification	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC
	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO
Material of Body/ Actuator	S.S304 316 /PA							
Operating Method	Plunger Pilot							
Ambient and fluid	Air,Water,Oil,Steam (50CTS Bellow)							
Port size	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2	G2 1/2	
Nominal Diameter mm	13	20	25	32	40	50	65	
Kv (m ³ /h)	4.2	8	19	27.5	42	55	90	
Pressure Range Mpa	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	
Min.Control Pressure Mpa	0.30	0.30	0.35	0.35	0.35	0.32	0.32	
Executor Dimension mm	40/50	50	50 / 63	63	63	63/80	80	

◆ **Dimensions [mm]**



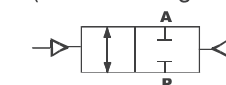
Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	F	G	H	SW
1/2"	DN15	40	G1/2"	12	57	148	53	G1/8"	32	20	26
		50	G1/2"	12	57	161	64	G1/4"	45	24	26
3/4"	DN20	50	G3/4"	12	67	170	64	G1/4"	45	24	35
1"	DN25	50	G 1"	12	72	173	64	G1/4"	45	24	42
		63	G 1"	12	72	193	80	G1/4"	50	24	42
1-1/4	DN32	63	G1-1/4"	16	85	212	80	G1/4"	50	24	50
1-1/2	DN40	63	G1-1/2"	16	98	222	80	G1/4"	50	24	56
2"	DN50	63	G2"	22	112	233	80	G1/4"	50	24	68
		80	G2"	22	112	258	101	G1/4"	58	24	68
2-1/2	DN65	80	G2-1/2"	22	138	265	101	G1/4"	58	24	84

**2/2-way Globe Control Valve ,
Pneumatically Operated, for
medium up to +150°C, polished
actuator, threaded
port connection, DN 15-65**

- High flow rate
- Long life cycle
- Simple conversion of the circuit function

Symbol

Control function
(double-acting actuator)



◆ How to Order



GV200S025NC

TGV200	S	015	NC		D	x	63mm
--------	---	-----	----	--	---	---	------

— **Acting type**

D	Double acting
---	---------------

— Body Material

Blank	S.S 304 (standard)
4	S.S 316
5	S.S 316L

- **Control Function**

NO	Normally open
NC	Normally closed (standard)

— **Port code**

		15	G1/2
20	G3/4	25	G1
32	G1 1/4	40	G1 1/2
50	G2	65	G2 1/2

— **Actuator Material code**

S	S.S Actuator
---	--------------

Model

TGV200	200 seires Globe Control Valve
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Construction

Seal Material: PTFE (NBR, FKM and EPDM on request)

Liquid and gaseous media that do not attack the housing and seal materials

Media

Control Medium	Air
----------------	-----

Temperature range

Medium temperature: -10 to 80°C with NBR seal -10 to 150°C (PTFE,FKM)

Ambient temperature: -10 to 60°C

Standard Version: Aluminium actuator, S.S actuator on require

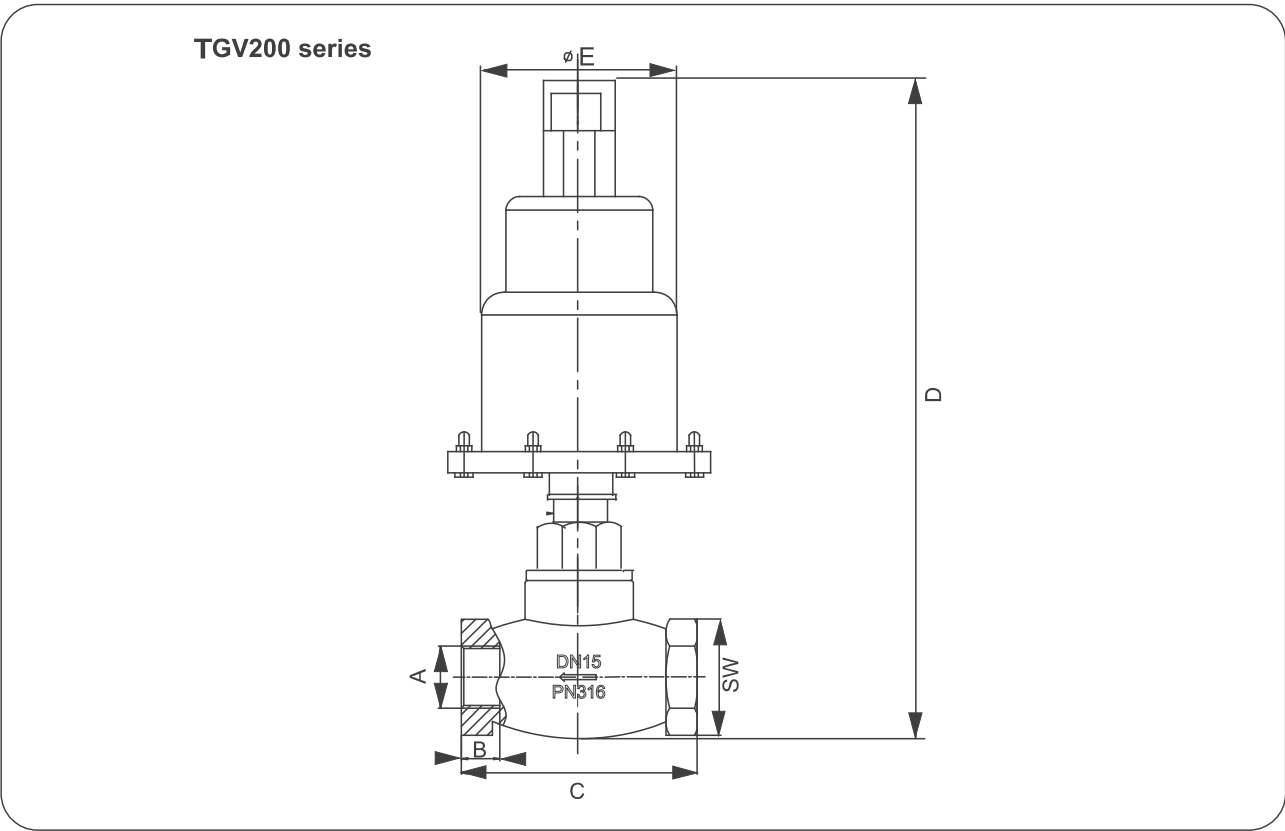
Applications

Food, packaging, petrochemical, metallurgican, spraying, vehicles, printing and dyeing machinery etc.;

◆ Specifications

Model Specification	Normally Closed	015NC	020NC	025NC	032NC	040NC	050NC	065NC
	Normally Open	015NO	020NO	025NO	032NO	040NO	050NO	065NO
Material of Boday/ Actuator	S.S304 316 /PA							
Operating Method	Plunger Pilot							
Ambient and fluid	Air,Water,Oil,Steam (50CTS Bellow)							
Port size	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2	G2 1/2	
Nominal Diameter mm	13	20	25	32	40	50	65	
Kv (m ³ /h)	4.2	8	19	27.5	42	55	90	
Pressure Range Mpa	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	
Min.Control Pressure Mpa	0.30	0.30	0.35	0.35	0.35	0.32	0.32	
Executor Dimension mm	40/50	50	50 /63	63	63	63/80	80	

◆ Dimensions

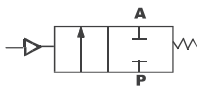


Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E	SW
1/2"	DN15	40	G1/2"	12	57	153	42.5	26
		50	G1/2"	12	57	162	52.5	26
3/4"	DN20	50	G3/4"	12	67	175	52.5	35
1"	DN25	50	G1"	12	72	180	52.5	42
		63	G1"	12	72	210	66	42
1-1/4	DN32	63	G1-1/4"	16	85	226	66	50
1-1/2	DN40	63	G1-1/2"	16	98	235	66	56
2"	DN50	63	G2"	22	112	250	66	68
		80	G2"	22	112	272	83	68
2-1/2"	DN65	80	G2-1/2"	22	138	304	83	84

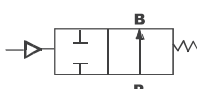
2/2-way Globe Control Valve, Pneumatically Operated,for medium up to +150° C,threaded port connection, DN 15-50

- Classic design, Long life cycle
- NC and NO is optional
- Structure in coaxial stop, leakage proof and high flow rate
- Saving energy

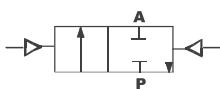
Symbol **Control function A**
(closed by spring force in rest position)



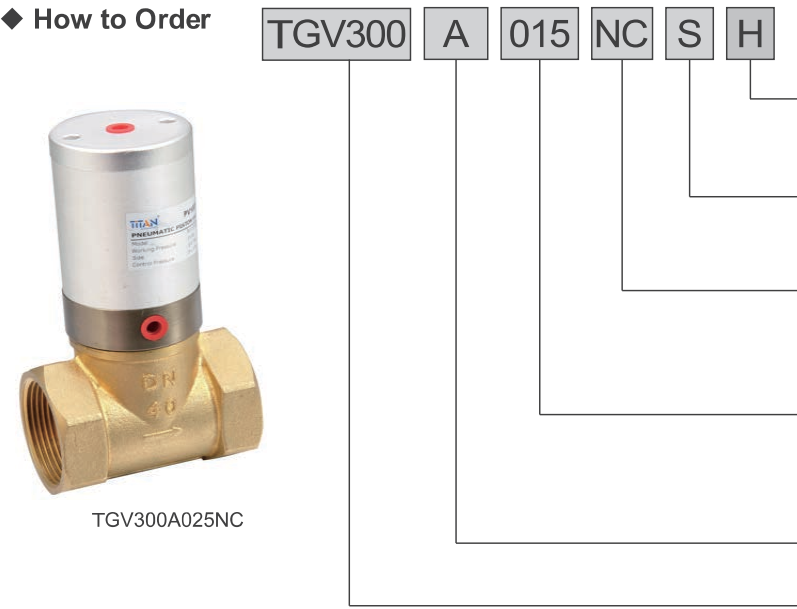
Control function B
(open in rest position)



Control function I
(double-acting actuator)



◆ How to Order



Sealing Require

H	High Temperture
Blank	Normal (standard)

Acting type

S	Single acting
D	Double acting (standard)

Control Function

NO	Normally open
NC	Normally closed (standard)
NA	Liberty state

Port Code

15	ZG1/2	20	ZG3/4
25	ZG1	32	ZG1 1/4
40	ZG1 1/2	50	ZG2

Style

A	Right Angle Stop Valve
---	------------------------

Model

TGV300	Pneumatic Stop Valve
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Construction

Seal Material: PTFE (NBR, FKM and EPDM on request)

Liquid and gaseous media that do not attack the housing and seal materials

Media

Control Medium Air

Temperature range

Medium temperature: -10 to 80°C with NBR seal

Ambient temperature: -10 to 150°C (PTFE,FKM)

Standard Version: Aluminium actuator,S.S actuator on require

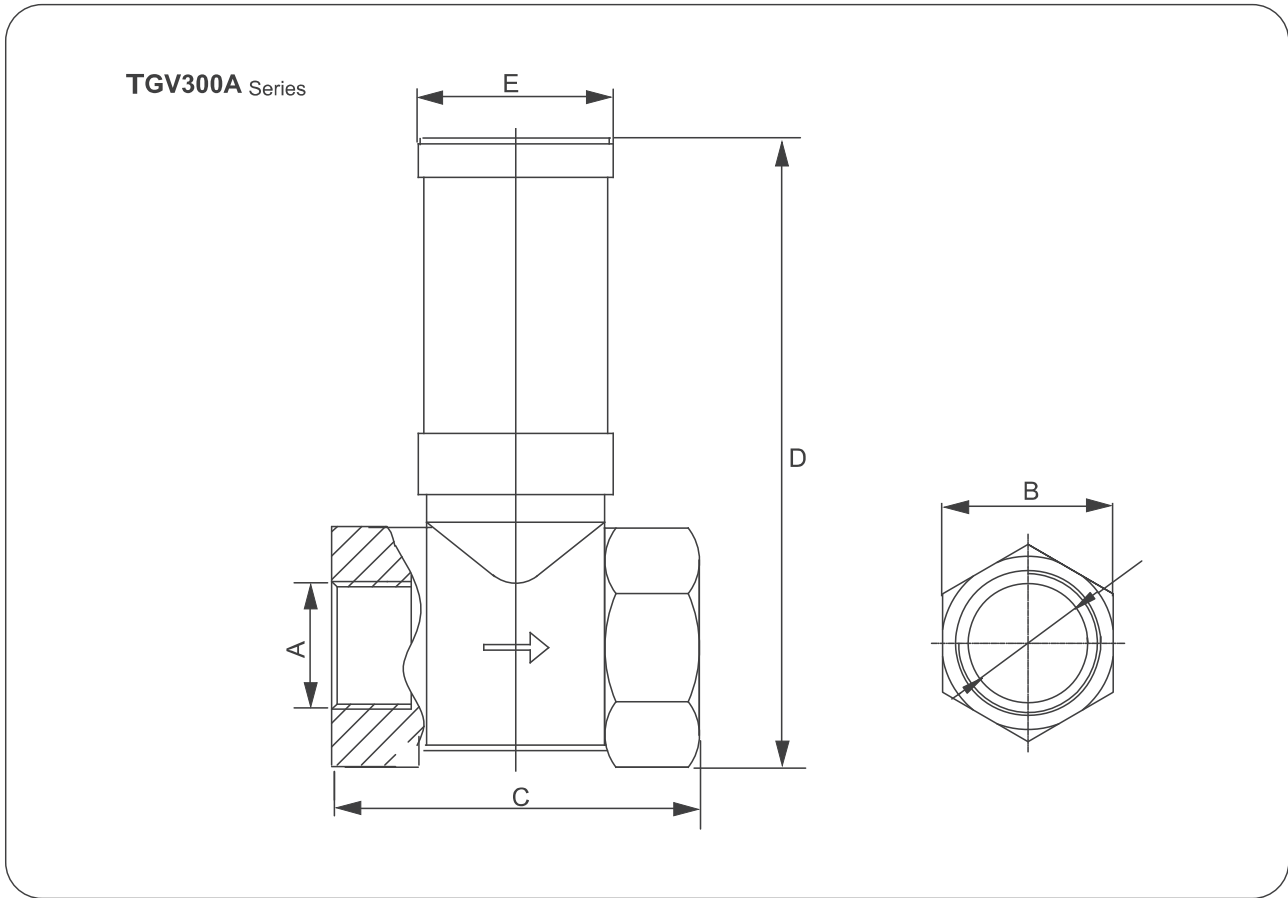
Applications

Food, packaging, petrochemical, metallurgican, spraying, vehicles, printing and dyeing machinery etc.;

◆ Specifications

Model	Normally Closed	A015NC	A020NC	A025NC	A032NC	A040NC	A050NC
Specification	Normally Open	A015NO	A020NO	A025NO	A032NO	A040NO	A050NO
Material of Body	Brass for body, Aluminium for stem and actuator						
Operating Method	Plunger Pilot						
Ambient and fluid	Air,Water,Oil,Liquefied gas, Free-running viscosity liquid						
Port size		G1/2	G3/4	G1	G1 1/4	G1 1/2	G2
Nominal Diameter mm		13	16	22	32	35	45
Kv (m³/h)		4	5	10	20	25	40
Pressure Range Mpa		0~0.8	0~0.8	0~0.8	0~0.8	0~0.8	0~0.8
Min.Control Pressure Mpa		0.30	0.30	0.32	0.30	0.35	0.32
Meduim Temp.	NBR FOR -10~80℃ and EPDM, VITON FOR -10~150℃						

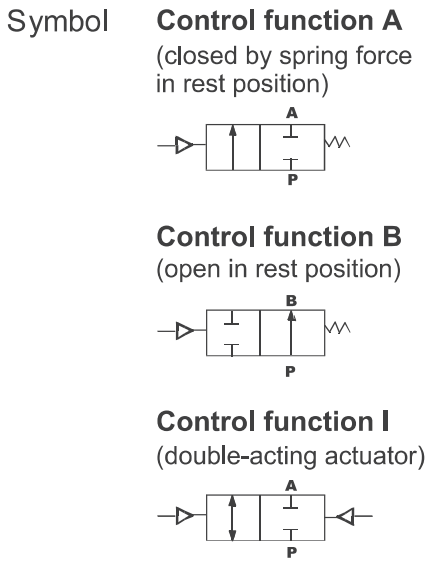
◆ Dimensions [mm]



Port Size	DN (mm)	Actuator (mm)	A	B	C	D	E
1/2"	DN15	25	G1/2"	26	46	96	30
3/4"	DN20	32	G3/4"	32	54	108	37
1"	DN25	32	G1"	34	66	118	37
1-1/4"	DN32	40	G1-1/4"	53	80	162	45
1-1/2"	DN40	50	G1-1/2"	54	80	162	55
2"	DN50	63	G2"	66	105	180	68

2/2-way Piston Controlled Flat-seat Valve
Pneumatically Operated, for
medium up to +180° C,
Big Port with Weld & Flange ends
DN 80-100

- Compact style 2/2-way piston controlled valve with flat-seat housing;
- Flange ends and Weld ends optional;
- Valve body material 304/316 optional;
- Upstream & downstream in flow direction optional



◆ How to Order

TGV400 P 080 NC S W

Connection

W	weld ends
F	Flange ends

Acting type

S	Single acting	D	Double acting
---	---------------	---	---------------

Body Material

Blank	S.S 304 (standard)
4	S.S 316
5	S.S 316L

Control Function

NO	Normally open
NC	Normally closed (standard)

Port code

80	G3	100	G4'
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Actuator Material code

P	PA Actuator
S	S.S Actuator

Model

TGV400	400 seires Globe Control Valve
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◆ Specifications

Port Size	Upsteam DN80-100		
Material of body	Casting S.S 304/316		
Material of Actuator	PA (S.S actuator is required)		
Sealing	PTFE (NBR,FPM EPDM be required)		
Ambient and fluid	Air,Water,Oil,(50CTS Bellow), steam, alcohol,fuel,saline solution,aqueous alkali, organic solvent		
Viscosity	Max.600mm²/s		
Packing glands seal	PTFE		
Medium Tempreture	-10 to +180℃ with PTFE seal		
Ambient Tempreture PA actuator Actuator size below 125mm	-10 to +60℃		
Installing			
Operating Medium	Neutral gas, Air		
Max.Pressure of Pilot Valve			
Actuator size 100mm	PA	10 bar	
Actuator size 125mm	PA	7 bar	

- ◆ Installation in any orientation but preferably with the actuator above

- ◆ **TGV400 Series Plug or Pilot ag le seat valve is propelled by a piston actuator, either single acting or double acting.**
Applicable to different working temperature:
2/2 Way stainless steel valve with big flow capacity
Actuator material adopts PA or S.S.(special conditions)
V type seals ensure reliable and effective sealing
Maintenance free, compatible with various accessories,direction indicating, stroke limiting or manual switching can be achieved conveniently.

Installation of the valve (Notes)

Installation in any orientation but preferably with the actuator above.

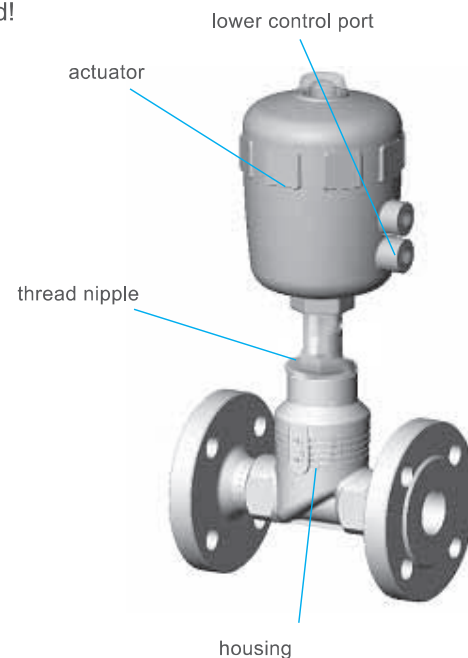
Clean piping from contamination!

Clean piping from contamination!

Before attaching the valve housing, make sure the piping is aligned!

If the housing is to be welded on, make absolutely sure that the actuator is removed beforehand.

Devices with Approval DIN EN 161: According to DIN EN 161 "Automatic Shut-off Valves for Gas burners and Gas appliances", a dirt trap must be connected upstream of valve. The dirt trap must prevent the penetration of a 1 mm test mandrel. In order to maintain approval,also with stainless steel housing, the user is requested to install such a dirt trap upstream of the valve.



Procedure:

1. Remove the pneumatic supply and the electrical connection (if a pilot valve is attached.)

Control function A:

Pressurize the lower control port of actuator with compressed air (6 bar), so that the valve disk is lifted from the valve seat and is not damaged.

Control function B and I:

No compressed air must be applied.

3. Remove the actuator in the open valve position by unscrewing the threaded nipple from the housing.
4. Before reinstalling the actuator (in the open valve position), grease the nipple thread with stainless steel lubricant.
5. Replace the graphite seal.

ATTENTION! For special applications such as for oxygen and analysis,use only the approved lubricants.

6. After tightening the threaded nipple, align the control ports by turning the actuator.

ATTENTION! During this operation, the valve must be in the open position.

NOTE For applications in aggressive media, we recommend attaching all free pneumatic connections to a pneumatic hose whose other end lies in a neutral atmosphere.

Pneumatic Installation

Control medium: air

a) Direct connection to the piston control valve

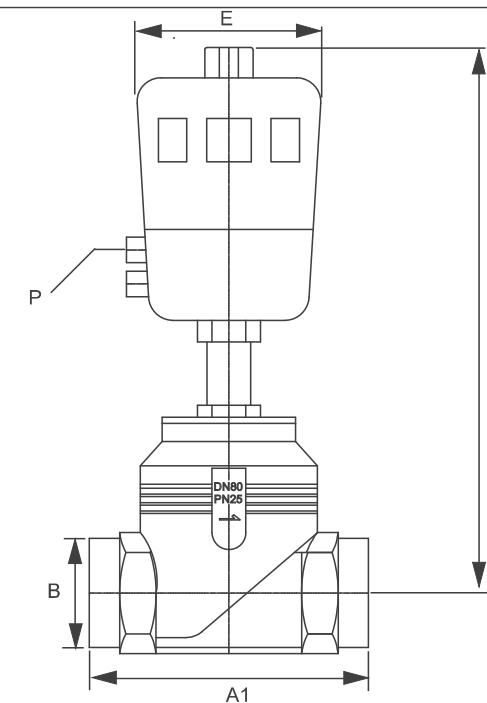
- With control function A, at the lower connection of actuator with G1/4" thread.
- With control function B, at the upper connection of actuator with G1/4" thread
- With control function I, at the upper and lower connection of actuator with G1/4" thread.

b) Connection via pilot valves

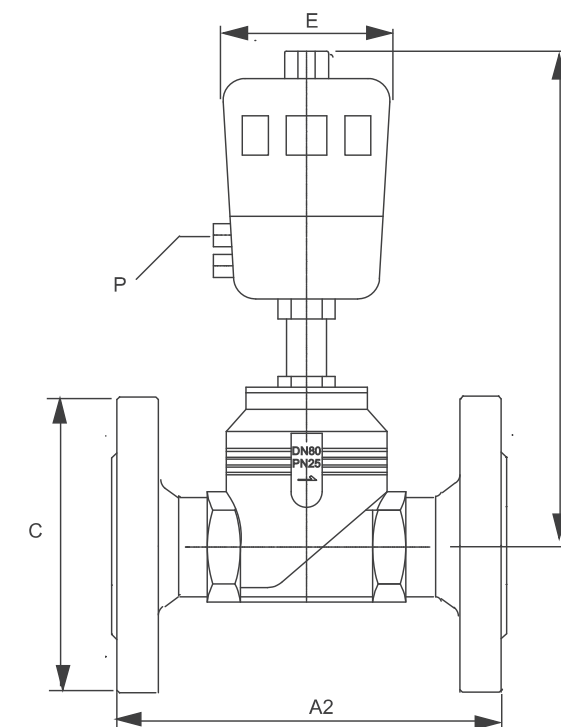
- Mount the solenoid valve Type 4M410-15 with NAMUR Adapter and banjo bolt on the actuator for double acting control functions.
- Mount the solenoid valve Type 3V1-06 with banjo bolt on the respective control port of the actuator.

◆ Dimensions [mm]

Weld Ends
TGV400P-W



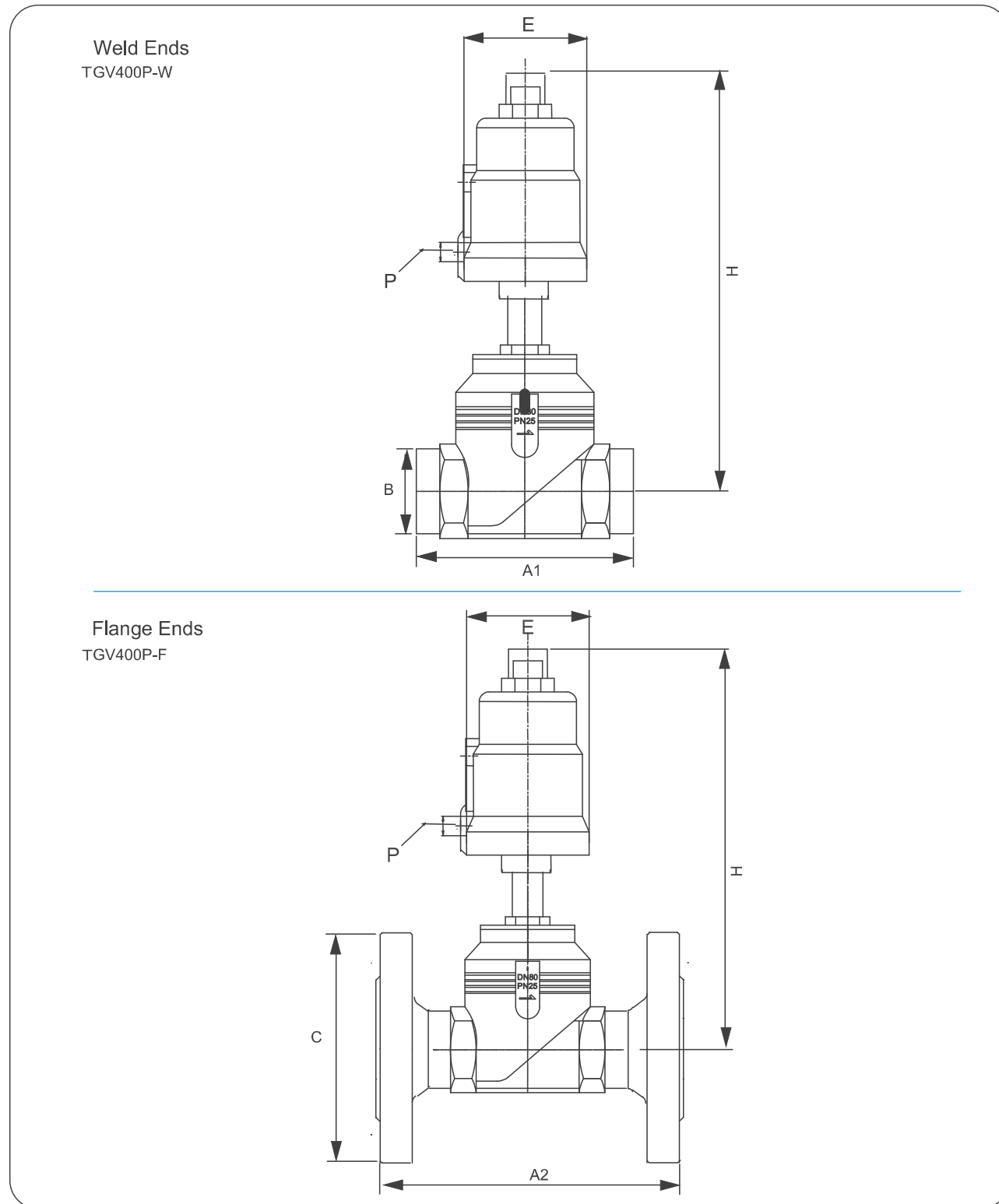
Flange Ends
TGV400P-F



Model	port size	Actuator size (mm)	A1	A2	B	C	E	H	P
TGV400P080W	3"	100(125 optional)	230		91		100:127,125:157	100:410,125:440	G1/4"
TGV400P100W	4"	125	260		117		157	450	G1/4"
TGV400P080F	3"	100(125 optional)		310		192	100:127,125:157	100:410,125:440	G1/4"
TGV400P100F	4"	125		350		215	157	450	G1/4"

TITAN[®] Flat-seat Valve, Pneumatically Operated Series TGV400 (Big Port)

◆ Dimensions [mm]



Model	port size	Actuator size (mm)	A1	A2	B	C	E	H	P
TGV400S080W	3"	90(125 optional)	230		91		90: 94, 125:135	90:355, 125:365	G1/4"
TGV400S100W	4"	125	260		117		135	365	G1/4"
TGV400S080F	3"	90(125 optional)		310		192	90:94 ,125:135	90:355,125:365	G1/4"
TGV400S100F	4"	125		350		215	135	365	G1/4"

Y type Manual Angle Seat Valve Series TMV100



Y type Manual Angle Seat Valve



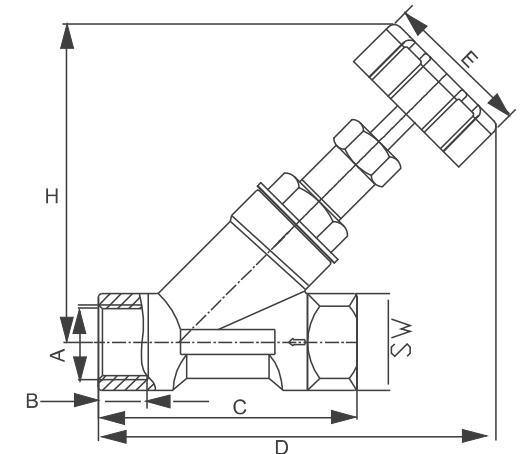
TMV100-025

2/2-way Angle Seat Valve, manually operated, for medium up to +180° C, DN15-50

- Compact industrial design with long service life;
- Adjustable flow rates;
- Stainless steel valve body;
- excellent seat tightness due to PTFE soft sealing;

- ◆ TMV100 Series Manually-operated angle seat valve are delivered as standard with threaded or weld end port connection, There are 2 types function which is optional: usually MV100 is used only for On/Off function, control a defined flow is required with Model MV100A

Swivel plate type:
Parabolic plug
it can be used to control a defined flow.



◆ Specifications

Model Specification	Specification
Mateial of body	CF8/CF8M
Port Size	DN10-DN50
Seat seal	PTFE
Temp. of Medium	- 20 ~180°C
Installing	see following
Ambient and fluid	Air,Water,Oil,Steam,gas Organic solvent, acidic solution, weakly alkaline solution
Flow direction	Any flow direction (TMV100A must be below seat)

◆ Dimensions [mm]

Port Size	A	B	C	D	E	H	SW
DN10	G3/8	12	65	125	50	96	25
DN15	G1/2	14	76	125	50	105	28
DN20	G3/4	16	92	127	50/63	121	32
DN25	G1	21	103	137	63	128	39
DN32	G1-1/4	19	112	164	63	162	49
DN40	G1-1/2	21	129	167	63	165	56
DN50	G2	27	143	181	63	173	68

Note:Installation in any orientation but preferably with the handwheel above

T type Manual Right Globe Control Valve

Globe Control Valve



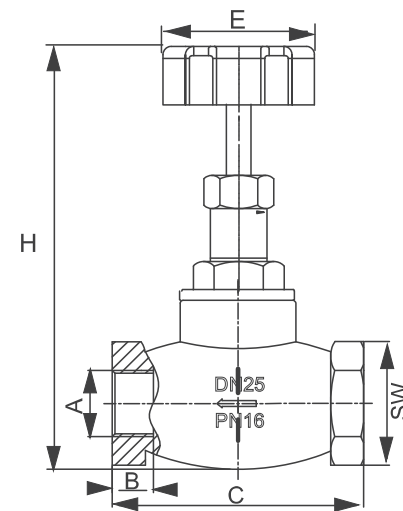
TMV200-025

2/2-way Globe Control Valve
manually operated, for
medium up to **+180° C**,
DN15-50

- Compact industrial design with long service life;
- Adjustable flow rates;
- Stainless steel valve body;
- excellent seat tightness due to PTFE soft sealing;

- ◆ **TMV200 Series Manually-operated globe control valve** are delivered as standard with threaded end port connection, There are 2 types function which is optional: usually MV200 is used only for On/Off function, control a defined flow is required with Model MV200A

Swivel plate type:
Parabolic plug
it can be used to control a defined flow.



◆ Specifications

Model Specification	Specification
Mateial of body	CF8/CF8M
Port Size	DN10-DN50
Seat seal	PTFE
Temp. of Medium	-20 ~180°C
Installing	see following
Ambient and fluid	Air,Water,Oil,Steam,gas Organic solvent, acidic solution, weakly alkaline solution
Flow direction	Any flow direction (TMV200A must be below seat)

◆ Dimensions [mm]

Port Size	A	B	C	E	H	SW
DN15	G1/2"	12	57	50	114	26
DN20	G3/4"	12	67	50	127	35
DN25	G 1"	12	72	50/63	135	42
DN32	G1-1/4"	16	85	63	152	50
DN40	G1-1/2"	16	98	63	262	56
DN50	G 2"	22	112	63	273	68

Note:Installation in any orientation but preferably with the handwheel above



Check Valve

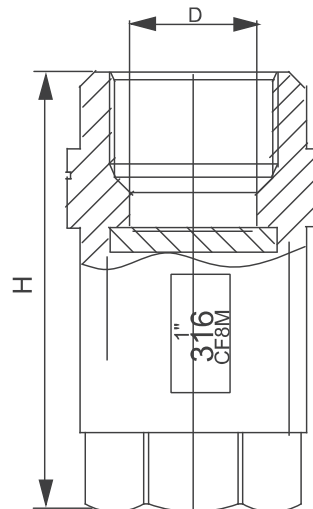
2PC Spring Vertical lift Check Valve, Female Swing Check Valve,
Y Spring Vertical Lift Check Valve and Y-Swing Check valve optional.

2PC Spring Vertical lift Check Valve Series TCV100

2PC Spring Vertical lift Check Valve



TCV100-025



Note: Make a reference before place order

◆ Specifications

Model Specification	Specification
Nominal Pressure	PN1.6, 2.5, 4.0, 6.4Mpa
Strength test Press	PT2.4, 3.8, 6.0, 9.6Mpa
High P. test Press.	1.8, 2.8, 4.4, 7.1Mpa
Meduim Temp.	- 20~180℃
Gasket material	PTFE
Ambient and fluid	-C water, oil, gas
	-P Nitric acid (Material CF8)
	-R Acetic acid (Material CF8M)

Note:Select suitable products in terms of working medium (see details in specifications).

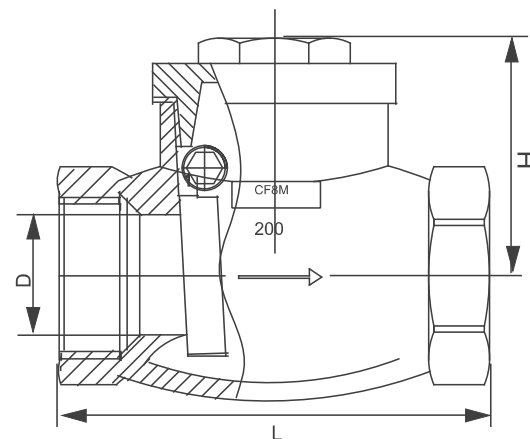
◆ Dimensions [mm]

Port Size	H	D
DN10	56	11
DN15	61	14
DN20	68	18
DN25	82	24
DN32	91	31
DN40	106	38
DN50	121	47
DN65	126	64

Swing Check Valve



Female Swing Check Valve Series TCV200



◆ Specifications

Model Specification	Specification
Nominal Pressure	PN1.6, 2.5, 4.0, 6.4Mpa
Strength test Press	PT2.4, 3.8, 6.0, 9.6Mpa
High P. test Press.	1.8, 2.8, 4.4, 7.1Mpa
Meduim Temp.	- 20~180℃
Gasket Material	PTFE
Ambient and fluid	-C water, oil, gas
	-P Nitric acid (Material CF8)
	-R Acetic acid (Material CF8M)

Note:Select suitable products in terms of working medium (see details in specifications).

◆ Dimensions [mm]

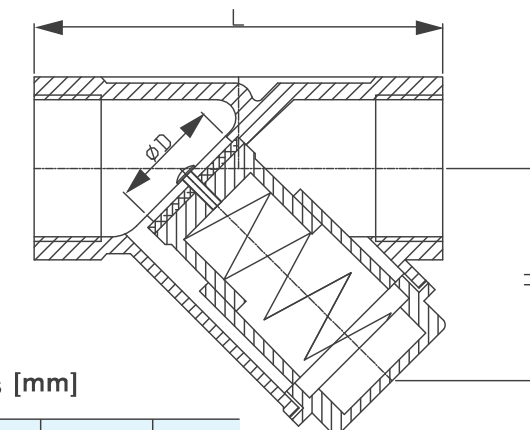
Port Size	H	L	D
DN15	44	64	15
DN20	49	78	25
DN25	58	88	24
DN32	62	102	30
DN40	71	117	37
DN50	76	136	46
DN65	90	163	63
DN80	102	183	73

Y- Spring Vertical Lift Check Valve Series TCV300

Y Spring Vertical Lift Check Valve



Port Size
TCV300-025



◆ Specifications

Model Specification	Specification
Nominal Pressure	PN1.6, 2.5, 4.0, 6.4Mpa
Strength test Press	PT2.4, 3.8, 6.0, 9.6Mpa
High P. test Press.	1.8, 2.8, 4.4, 7.1Mpa
Meduim Temp.	- 20~180℃
Gasket material	PTFE
Ambient and fluid	-C water, oil, gas
	-P Nitric acid (Material CF8)
	-R Acetic acid (Material CF8M)

Note:Select suitable products in terms of working medium (see details in specifications).

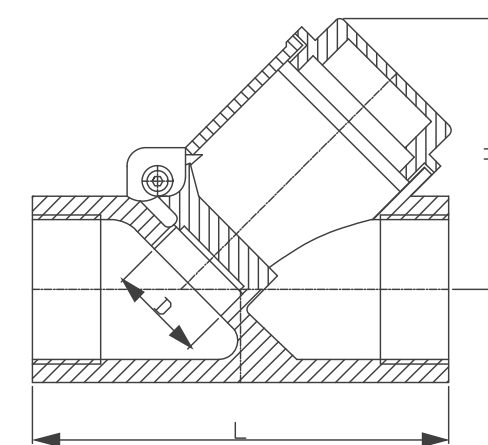
◆ Dimensions [mm]

Port Size	H	L	D
DN15	44	64	15
DN20	52	75	20
DN25	60	86	25
DN32	64	102	32
DN40	70	118	40
DN50	88	134	48

Y - Swing Check Valve



Y - Swing Check Valve Series TCV400



◆ Specifications

Model Specification	Specification
Nominal Pressure	PN1.6, 2.5, 4.0, 6.4Mpa
Strength test Press	PT2.4, 3.8, 6.0, 9.6Mpa
High P. test Press.	1.8, 2.8, 4.4, 7.1Mpa
Meduim Temp.	- 20~180℃
Gasket material	PTFE
Ambient and fluid	-C water, oil, gas
	-P Nitric acid (Material CF8)
	-R Acetic acid (Material CF8M)

Note:Select suitable products in terms of working medium (see details in specifications).

◆ Dimensions [mm]

Port Size	H	L	D
DN15	44	67	12
DN20	53	80	20
DN25	57	90	23
DN40	78	122	37
DN50	93	144	46

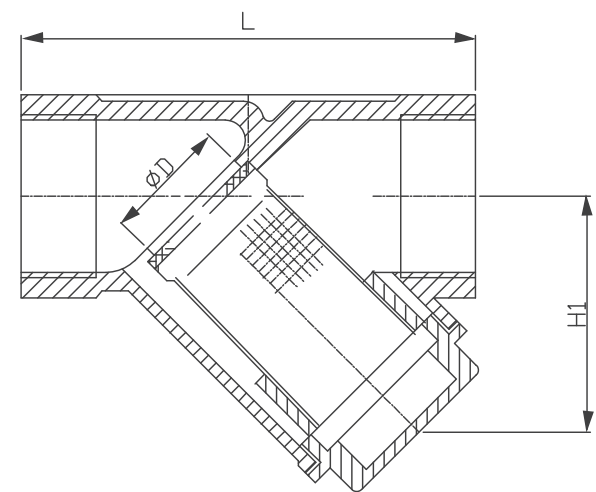


Y-Type Strainer Series TSV100

Y-type Strainer



TSV100-025



A economical Y-type strainer with a stainless steel screen ideally suited for water applications to protect meters, pumps, valves and other pipeline equipment.

◆ Features & Benefits

- Y-type.
- Economical & efficient.
- Easily removable stainless steel screen for cleaning.

◆ Specifications

Model Specification		Specification
Nominal Pressure		PN1.6, 2.5, 4.0, 6.4Mpa
Strength test Press		PT2.4, 3.8, 6.0, 9.6Mpa
High P. test Press.		1.8, 2.8, 4.4, 7.1Mpa
Meduim Temp.		- 20 ~180℃
Gasket		PTFE
Filter screen Material		S.S304
Ambient and fluid	-C	water, oil, gas
	-P	Nitric acid (Material CF8)
	-R	Acetic acid (Material CF8M)

Note:Select suitable products in terms of working medium (see details in specifications).

◆ Dimensions [mm]

Port Size	H	D
DN10	56	11
DN15	61	14
DN20	68	18
DN25	82	24
DN32	91	31
DN40	106	38
DN50	121	47
DN65	126	64

EXPERT IN PNEUMATIC POWER TRANSMISSION