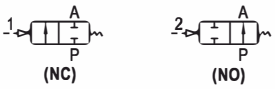
Angle seat valve(2/2 way)

AirTAC

2J Series

Symbol



Product feature

1. Air piloted and can be used non electric, inflammable and explosive environment. The start-up pressure is low; and the high pressure could be controlled by the low pressure.
2. The accessories such as the noumenon and slide bar are made of stainless steel, which are of excellent rustproof quality. The seals are made of Teflon and can be applied extensively in areas with high temperature and strong corrosive liquids.
3. The structure of valve is angles at 45° degrees with streamline inner chamber design . The reduced tunnel resistance allows liquid to run more smoothly thus achieving high flow. Filtration core are added at inlet port to prevent the entrance of impurities and extend life span of the seals.
4. Actuator is fitted with visual position indicator. This allows for visual checking and adjustment of flowrate.
5. Control point is made of metal insert. Mounting plate can beused to for NAMUR value.
6. The actuator part can be rotated at 360° degrees and is easily installed.

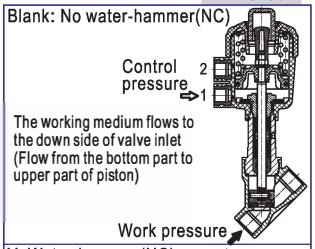
Ordering code

2J S K 150 15 Q50 G

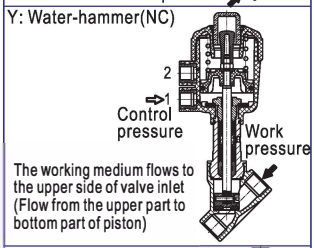
Model
2J: Angle seat valve(2/2 way)

Valve body meterial
S: SUS316L
W: SUS304

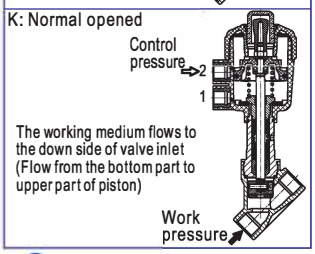
Acting type
Blank: No water-hammer(NC)



Y: Water-hammer(NC)



K: Normal opened



Thread type
G: G
T: NPT

Size of actuator
Q40: Φ40mm
Q50: Φ50mm
Q63: Φ63mm
Q80: Φ50mm

Port size

Orifice size	Port size
150	10: 3/8"
	15: 1/2"
200	20: 3/4"
250	25: 1"
320	32: 1

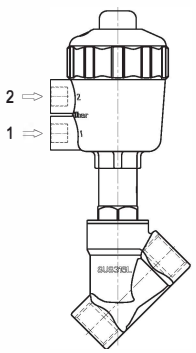
Orifice size
150: Φ15mm
200: Φ20mm
250: Φ25mm
320: Φ32mm

Specification

Model\Item	Port		Actuator size(mm)	Orifice size(mm)	Kv	Min.pilot pressure(bar)	Max. differentia pressure(bar)	Weight (kg)
2JS150	-10	3/8"	40	15	4.4	4.8	13	0.8
	-15	1/2"						0.7
2JW150	-10	3/8"	50		4.8	4.3	16	0.8
	-15	1/2"						0.7
2JS200 2JW200	-20	3/4"	40	20	7.9	4.8	6.5	0.9
			50		8	4.3	11	0.95
			63		10	4.2	16	1.6
2JS250 2JW250	-25	1"	63	25	19	4.2	11	1.9
			80		20	5.0	16	2.5
2JS320 2JW320	-32	1¼"	63	32	27	4.2	6	2.5
			80		28	5.0	15	3.0
2JSK150 2JWK150	-10	3/8"	40	15	4.4	For details, please refer to normally-opened-type fluid pressure – control pressure curve	16	0.8
	-15	1/2"						0.7
	-10	3/8"	50		4.8		16	0.8
	-15	1/2"						0.7
2JSK200 2JWK200	-20	3/4"	40	20	7.9		16	0.9
			50		8		16	0.9
2JSK250 2JWK250	-25	1"	50	25	14.5		16	1.2
			63		19		16	1.6
2JSK320 2JWK320	-32	1¼"	63	32	27		16	2.2
			80		28		16	2.4
2JSY150 2JWY150	-10	3/8"	40	15	4.4	For details, please refer to normally-closed-water-hammer-type fluid pressure – control pressure curve	16	0.8
	-15	1/2"						0.7
	-10	3/8"	50		4.8		16	0.8
	-15	1/2"						0.7
2JSY200 2JWY200	-20	3/4"	40	20	7.9		16	0.9
			50		8		16	0.9
2JSY250 2JWY250	-25	1"	50	25	14.5		16	1.3
			63		19		16	1.7
2JSY320 2JWY320	-32	1¼"	63	32	27		16	2.3

Operation and maintenance

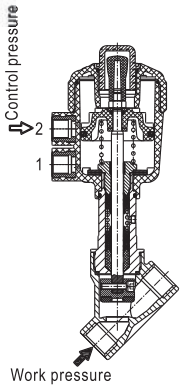
1. Before using, please verify that if the working status of product is identical with data in catalogue, and it should not exceed the limits.
2. Before the pressure releasing and cooling of system, no maintenance, examination and installation of product should be conducted.
3. For the normally-closed-type , when its valve is disassembled, due to the pre-pressure of the relatively large spring power in controller, the "1" hole should be opened for ventilation in advance so to make sure the piston could be completely moved to the position, then rotate the screw thread between the valve and the connection bar, direct rotation is forbidden, otherwise the disassembling would not be conducted in result of the scuffing of screw thread.
4. If maintenance of actuator part is needed, special tools should be used for disassembling and installation, while disassembling, the loading spring could cause damage. If the customer can not conduct the maintenance, please return the valve to manufacturer for maintenance.



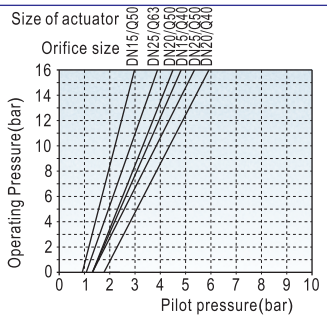
Back
2J

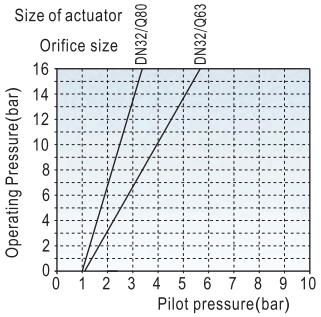
Fluid pressure — control pressure curve

Normal opened

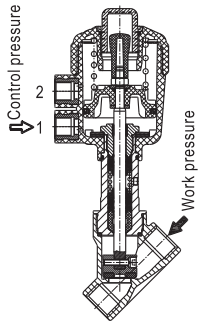


The working medium flows to the down side of valve inlet

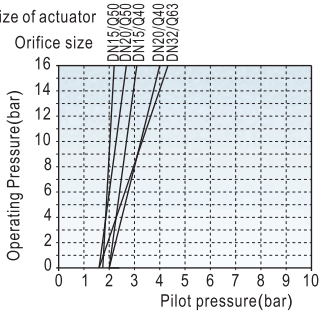


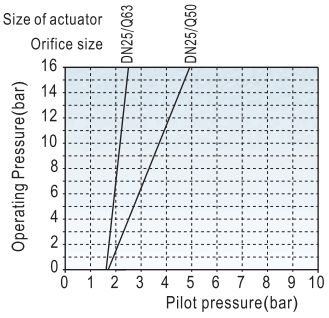


Water-hammer(NC)



The working medium flows to the upper side of valve inlet

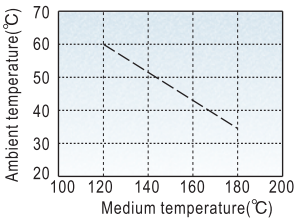




Ambient and medium temperature

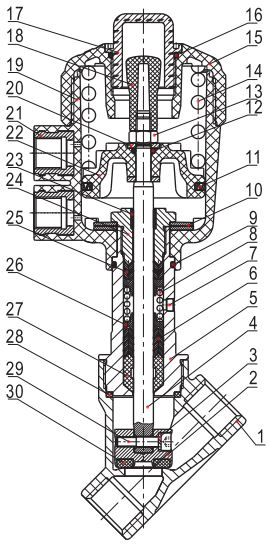
Control medium	Air. neutral air(to be filtered by 40 μ m filter element)
Max. control pressure	Size of actuator Φ40, 50, 63: 10bar
	Size of actuator Φ80: 7bar
Medium①	air, liquid, vacuum, steam
Viscosity limit	600mm²/s below
Temperatur②	-20~+180℃
Ambient temp③	-10~+60℃

Note: ① The water-hammer-type can be used for air, or steam only, and can not be used for liquid.
② Dew point: −20℃ or less.
③ Relationship of working medium temperature and ambient temperature is shown in following figure.



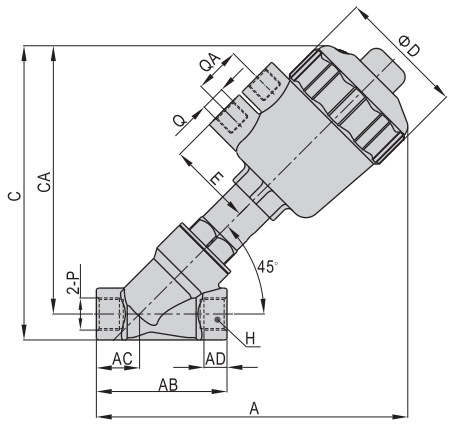
Inner structure

2JS150-Q50



No.	Item	Material
1	Body	Stainless steel
2	Piston	Stainless steel
3	Spring washer	Spring steel
4	Piston rod	Stainless steel
5	Pitman	Stainless steel
6	V-seals	PTFE
7	Filter core	Bronze
8	Spring	Spring steel
9	O-ring	NBR
10	Bellville spring	Spring steel
11	O-ring	NBR
12	O-ring	NBR
13	Hexagon nut	steel
14	Spring	Spring steel
15	Top cover	PA6
16	O-ring	NBR
17	Transparent cap	Plastic
18	Indicative	Plastic
19	Cylinder body	PA6
20	Washer	SPCC
21	Built-in nut	Brass nickel-plate
22	Piston	PA6
23	DU dry bearing	Wear resistant material
24	Connect nut	Brass
25	O-ring	Viton
26	Spring holder	PTFE
27	Guide sleeve	PTFE
28	Seal washer	PTFE
29	Screw	Stainless steel
30	Seal washer	PTFE

Dimensions



Orifice size(DN)	Size of actuator	A	AB	AC	AD	C	CA	ΦD	E	H	Port size(P)	Q	QA
15	Φ40	153	68	22.5	12	144	130	56	33	27	3/8"	1/8"	24
	Φ50	162				153	140	66	44		1/2"	1/4"	
20	Φ40	161	78	27	14	150	134	56	33	33	3/4"	1/8"	
	Φ50	170				160	143	66	44			1/4"	
	Φ63	200				189	172	82	51			1/4"	
25	Φ50	176	90	28		168	147	66	44	40	1"	1/4"	
	Φ63	205				197	176	82	51			1/4"	
	Φ80	221				213	193	102	60			1/4"	
32	Φ63	220	110	35	18	210	185	82	51	50	1 1/4"	1/4"	
	Φ80	237				227	202	102	60			1/4"	