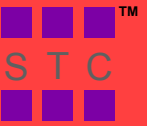


# STC 2KS/2KD Series Stainless Steel Angle Seat Valve

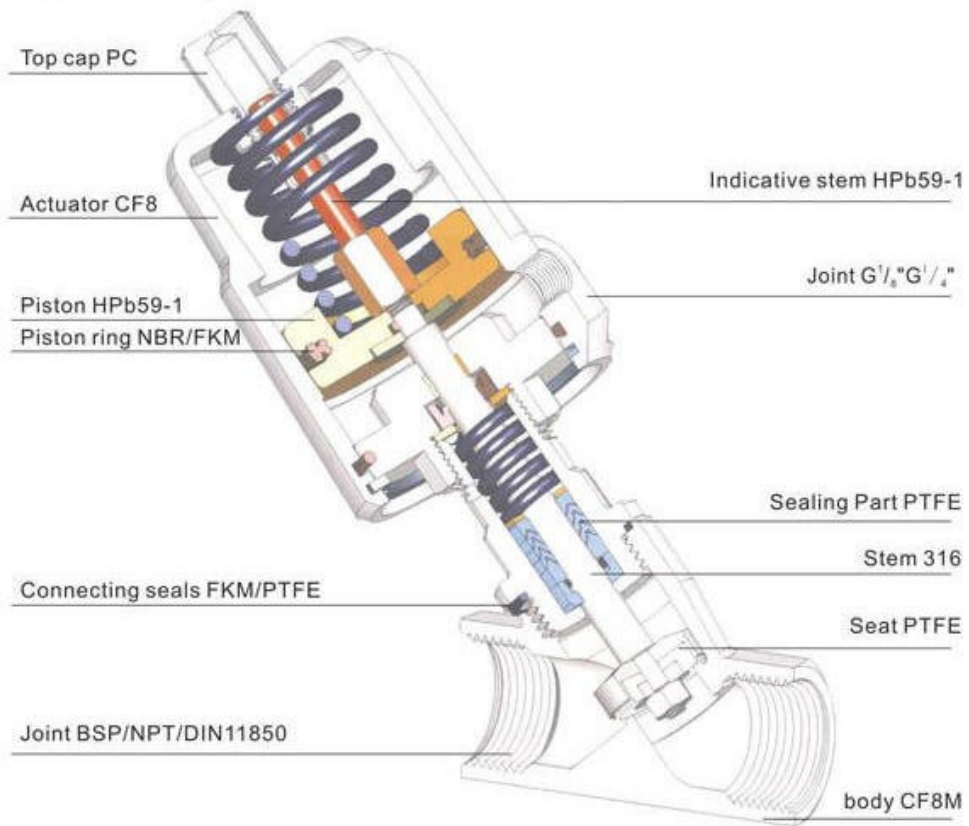


	Single Acting Part No.	Double Acting Part No.	List Price	Port Size (NPT)	Cv
	2KS - 3/8	2KD - 3/8	\$169.73	3/8	4.7
	2KS - 1/2	2KD - 1/2	\$183.90	1/2	4.7
	2KS - 3/4	2KD - 3/4	\$188.58	3/4	9.5
	2KS - 1	2KD - 1	\$231.97	1	18.1
	2KS - 1 1/4	2KD - 1 1/4	\$330.04	1 1/4	23.1
	2KS - 1 1/2	2KD - 1 1/2	\$348.83	1 1/2	32.9
	2KS - 2	2KD - 2	\$4480.91	2	52.8
	2KS - 2 1/2	2KD - 2 1/2	\$581.02	2 1/2	76
	2KS - 3	2KD - 3	\$1431.15	2 1/2	76

Specifications & Features	
Valve Body	Cast 316 Stainless Steel (CF8M)
Actuator	Stainless Steel (Designed for harsh applications)
Seat Seals	PTFE
Stem Seals	PTFE/FKM (Spring loaded self adjusting for long service life)
Piston Seals	PTFE
Service Medium	Air, Gas, Liquid, Oil, Steam, Water (compatible with wetted surfaces)
Operating Pressure	0-240 PSI (0-1.6MPa)
Temperature Range	-5 to 356°F (-20 to 180°C); Option: -40 to 356°F (-40 to 180°C) with low temperature seal;
Ambient Temperature	-5 to 140°F (-20 to 60 °C); Option: -40 to 140°F (-40 to 60°C) with low temperature seal;
Maximum Viscosity	600 mm <sup>2</sup> /s (600 centistokes)
Installation Orientation	Any Orientation
Pilot Controlling Medium	Air, Inert Gas
Controlling Pressure Range	65-120 PSI
Wetted Surfaces	Cast 316 Stainless Steel (CF8M) and PTFE

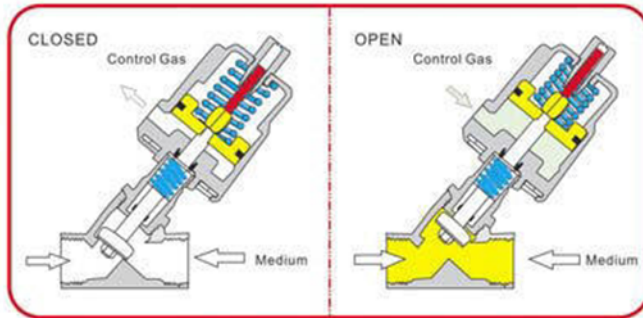


# Valve Components and Materials of Constructions



# Single Acting Angle Seat Valve Technical Data

Single acting(NC)/double acting(NC)



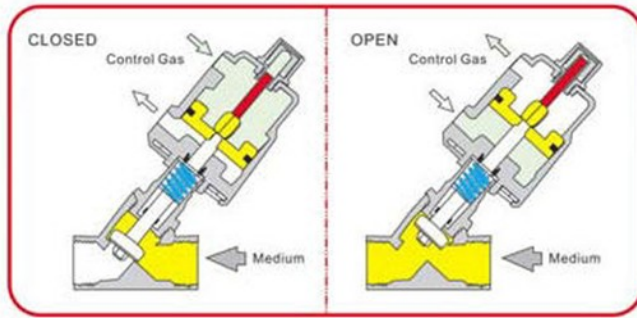
Part No.	Port (NPT)	Standard	Orifice (mm)	Actuator (mm)	Cv	Bi-directional Flow*		Temperature**	Pilot Control Pressure
						Inlet Above Seat Pressure @ 180 °C	Inlet Below Seat Pressure @ 180 °C		
2KS-3/8	3/8"	DN10	13	50	4.7	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI
2KS-1/2	1/2"	DN15	13	50	4.7	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI
2KS-3/4	3/4"	DN20	18	50	9.5	0-240 PSI (0-1.6MPa)	0-180 PSI (0-1.2MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI
2KS-1	1"	DN25	24	63	18.1	0-240 PSI (0-1.6MPa)	0-150 PSI (0-1.0MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI
2KS-1 1/4	1 1/4"	DN32	31	63	23.1	0-240 PSI (0-1.6MPa)	0-90 PSI (0-0.6MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI
2KS-1 1/2	1 1/2"	DN40	35	80	32.9	0-240 PSI (0-1.6MPa)	0-150 PSI (0-1.0MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI
2KS-2	2"	DN50	45	80	52.8	0-240 PSI (0-1.6MPa)	0-90 PSI (0-0.6MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI
2KS-2 1/2	2 1/2"	DN65	65	125	76	0-240 PSI (0-1.6MPa)	0-90 PSI (0-0.6MPa)	-5 to 356°F (-20 to 180°C)**	65-120 PSI

\* Use under-seat flow to minimize hammering effect; use above-seat flow to maximize valve response time.

\*\* Temperature -5 to 356°F (-20 to 180°C); Option: -40 to 356°F (-40 to 180°C) with low temperature seal.

# Double Acting Angle Seat Valve Technical Data

Close with flow direction (double acting)



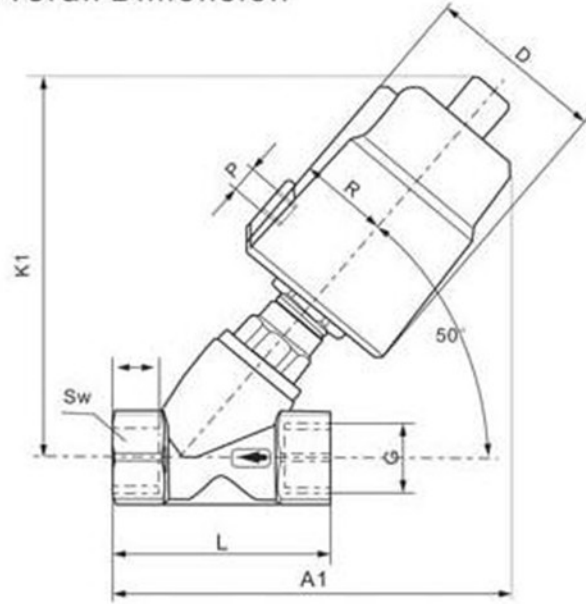
## 2KD Series Double Acting Stainless Steel Air Actuated Angle Seat Valve

Part No.	Port	Standard	Orifice (mm)	Actuator Diameter (mm)	Cv	Bi-directional Flow*		Media Temperature	Pilot Control Pressure
	(NPT)					Inlet Above Seat Pressure @ 180 °C	Inlet Below Seat Pressure @ 180 °C		
2KD-3/8	3/8"	DN10	13	50	4.7	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI
2KD-1/2	1/2"	DN15	13	50	4.7	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI
2KD-3/4	3/4"	DN20	18	50	9.5	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI
2KDS-1	1"	DN25	24	63	18.1	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI
2KD-1 1/4	1 1/4"	DN32	31	63	23.1	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI
2KD-1 1/2	1 1/2"	DN40	35	80	32.9	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI
2KD-2	2"	DN50	45	80	52.8	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI
2KD-2 1/2	2 1/2"	DN65	65	125	76	0-240 PSI (0-1.6MPa)	0-240 PSI (0-1.6MPa)	-5 to 356°F (-20 to 180°C)	65-120 PSI

\* Use under-seat flow to minimize hammering effect; use above-seat flow to maximize valve response time.

# Angle Seat Valve Dimensions

## ★ Overall Dimension



Single Acting	Double Acting	2KS/2KD Series Stainless Steel Air Actuated Angle Plunger Valve Dimensions (unit=mm)														
		Part No.	Part No.	Port (NPT)	Standard	Orifice (mm)	Actuator	Cv	D	R	P (G)	K1	A1	L	T	SW
		2KS-3/8	2KD-3/8	3/8"	DN10	13	50	4.7	60	35	1/8	126	133	68	12	26.6
		2KS-1/2	2KD-1/2	1/2"	DN15	13	50	4.7	60	35	1/8	126	133	68	15	26.6
		2KS-3/4	2KD-3/4	3/4"	DN20	18	50	9.5	60	35	1/8	131	137	75	16	32
		2KS-1	2KD-1	1"	DN25	24	63	18.1	77	43	1/8	165	174	90	17	39.5
		2KS-1 1/4	2KD-1 1/4	1 1/4"	DN32	31	63	23.1	77	43	1/8	175	188	116	21	50
		2KS-1 1/2	2KD-1 1/2	1 1/2"	DN40	35	80	32.9	98	52	1/4	187	204	116	21	55.3
		2KS-2	2KD-2	2"	DN50	45	80	52.8	98	52	1/4	195	218	138	22	70

# Air Actuated Angled Valve

## Model 2KS, 2KD

### Installation Guide

**Note:**

- This valve is designed to be controlled by air flow only. Any kind of COMPATIBLE fluid may flow through the main valve.
- Fluid can flow either way through the valve, but it is optimal to have flow enter from the higher port (above seat). To have flow enter from the lower port (below seat ) will reduce water hammering.

**Warning:** When tightening any connections to the valve, do not use the actuator as leverage. Doing so may damage the joint between the actuator and the valve.

**Connection to fluid supply:**

1. Connect the fluid supply and outlet to the lower ports.
2. Connect the controlling air supply to the ports on the actuator. For double acting valves, air supplied to the bottom port will open the valve, and top port will close the valve.

**Operational Note:** The pin on the top of the actuator acts as the position indicator for the valve. The pin pops up when the valve is open.

**Reference Figures:**

**Figure 1:** 2KS-1/2. Single actuator port, and two valve ports shown.



**Figure 2:** 2KD-1/2. Both actuator ports and valve ports shown.

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All shipments are F.O.B. 892 Commercial Street, Palo Alto, CA 94303, USA. Most orders are shipped via UPS Standard Ground unless instructions accompany order. Outside the UPS zones, shipment will be made Best Way. The responsibility for goods delay, lost or damaged in transit rests with the carrier and purchaser. Purchaser may purchase shipping insurance to cover lost or damaged products caused by shipping.

### **RETURN OF MERCHANDISE:**

No merchandise is accepted for return 30 days after delivery date. No credit allowed on merchandise shipped as ordered and returned without obtaining an authorization number IN ADVANCE. A 20% restocking charge applies to all returns, and transportation charges must be fully pre-paid. We will pay **ground** transportation charges on re-sent or returned merchandise due to STC's error.

**Shortages & Mis-Shipments:** Any shortages or mis-shipment must be reported within 15 days.

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Blanket order can be canceled 90 days before scheduled ship date. There will be a 10% charge if a blanket order is cancel within 90 days of scheduled ship date, and a 20% charge if cancel within 60 days. Regular order for non-custom parts can be canceled any time before the order is shipped. For custom parts, a 30% down payment is required either at the time of order or 90 days prior to scheduled ship date, whichever comes later.

### **Remittances should be sent to:**

Sizto Tech Corporation, 892 Commercial Street, Palo Alto, CA 94303, USA

Credit Card Payments: Visa, MasterCard, Discover, or American Express Accepted

**International Customers:** Advance Payment Required via Bank Wire, Cashier's Check or Approved Credit Card.

**Credit Application:** To establish a net 30 day account, please mail or fax three trade references with complete mailing addresses and account numbers.

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Sizto Tech Corporation (STC) only warrants this product to be free from defects in materials and workmanship at the time of shipment. This limited warranty expires one year after delivery to the end-user. STC's entire obligation to the Purchaser for breach of this limited warranty shall be limited to replacement of the defective product or refund of the original purchase price of this product, at STC's option. Purchaser has thirty (30) days to return the goods after STC has agreed to accept the return. All freight charges on returned material shall be paid by the Purchaser. STC's limited warranty shall not apply, however, to the product that have been subjected to misuse, alteration, accident or negligence during handling or storage.

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All implied warranties, which may arise by implication of law or application of course of dealing or usage of trade, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose are expressly excluded. There are no warranties, which extend beyond the description of the faced hereof. The end user is solely responsible for the suitability and fitness of this product selected for a particular application.

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You warrant, represent and agree: (1) to comply with all laws; (2) that our sale and shipment of the product will not, by export thereof, your legal status or otherwise, cause us to violate any law; and (3) to indemnify us against any losses from a failure by you or a third party to comply with law or these terms and conditions, or from use of the product.

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