

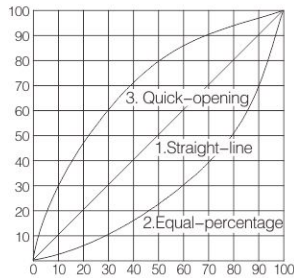
Proportional Control Angle Seat Valve



Advantages

- 1. Convenient to adjust and easy to operate.
- 2. Stable operation with vibration resistance.
- 3. The unique design of adjustable seat establishes a proportional linear relationship between open/close state of the valve with the flow rate, achieving precise flow adjustment.

Control Output Chart



By selecting characteristic curve of the positioner, the controlled valve can output to straight-line, equal-percentage, quick-opening and other custom characteristics.

Technical Specification

- Connection type: Threaded, Welded, Tri-clamp, Flange
- Medium temperature: -10°C — +180°C (PTFE Normal temperature)
+25°C — +220°C (PTFE High temperature)
- Medium temperature: 0 — +60°C
- Operating pressure: Refer to Angle Seat Valve Single-acting NC (enter below seat) data sheet.
- Control pressure: 4—7bar (58—102psi)
- Control power: 24VDC ± 10%
- Valve set signal: 0/4—20mA or 0—5/10V
- Power consumption: <5W
- Input Signal Impedance: 240 Ω at 0/4—20mA, 21K Ω under 0—5/10V
- Simulated Output signal: Max load is 560 Ω at 0/4—20mA, Max current is 10mA under 0—5/10V
- Protection: IP65
- Leakage class: DIN EN 12266 Class A

Function Principle

Positioner receives 4—20mA electrical signals from control system and converts them into air signals to control the valve and make precise flow adjustment using the adjustable seat.

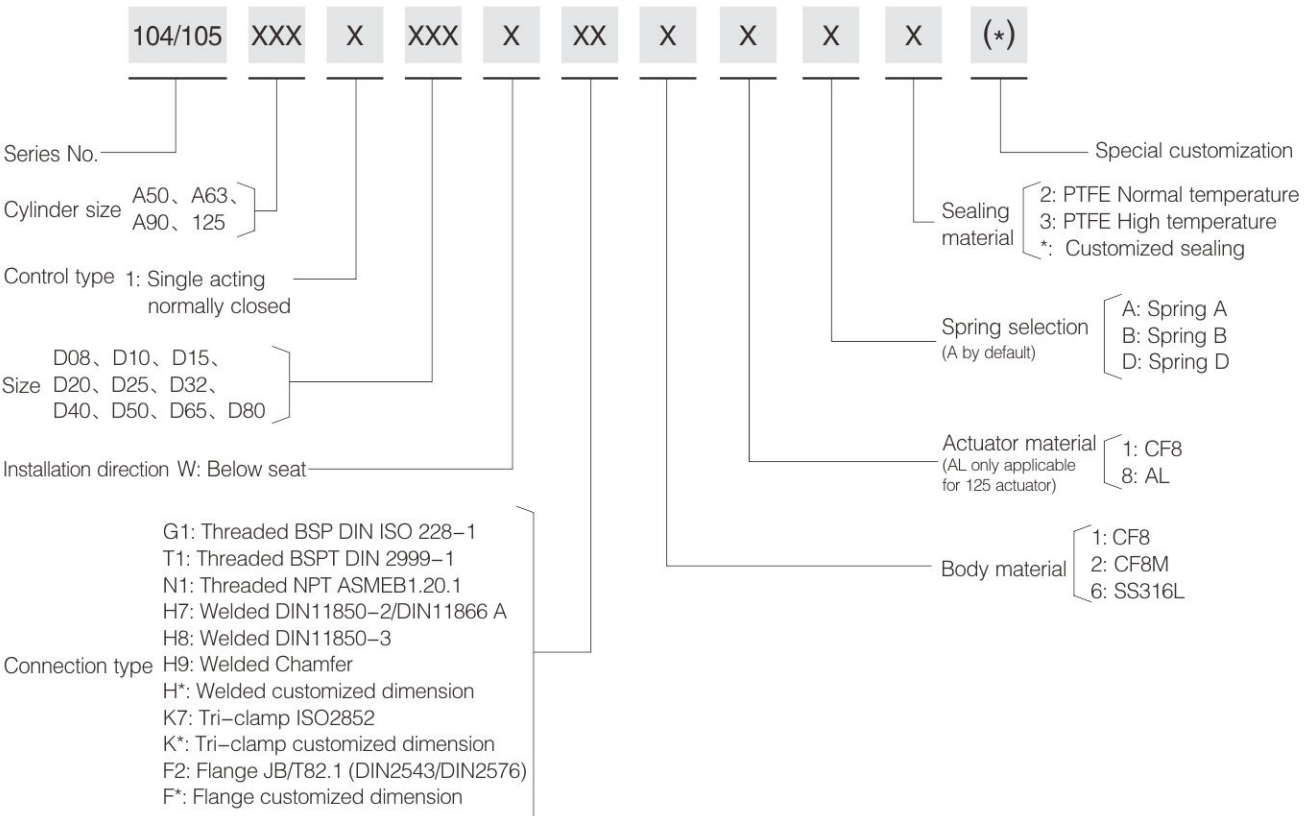
Attention

- If the valve body needs to be taken off during installation, please recalibrate the zero-point. Keep the positioner upright at all time.
- To ensure the exact adjustment, please install the valve in below seat direction.
- Please ensure water proof of the positioner.

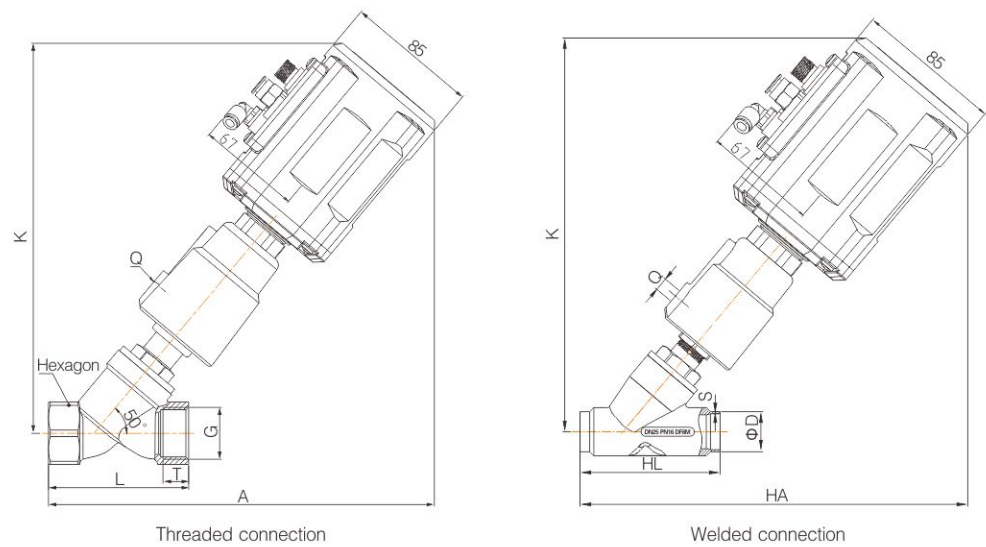
Single Acting, Normally Closed (NC) Pressure Data Sheet

Size	Orifice (mm)	Kv (m³/h)	Actuator (mm)	Max. ΔP (MPa)	Max Control Pressure (MPa)
DN8	13	2.2	50A	1.6	0.45
			63A	1.6	0.50
DN10	13	3.2	50A	1.6	0.45
			63A	1.6	0.50
DN15	13	3.2	50A	1.6	0.45
			63A	1.6	0.50
DN20	18	6.6	50A	1.4	0.45
			63A	1.6	0.50
DN25	24	11.4	63A	1.3	0.50
			63A	0.6	0.50
DN32	31	18.3	90B	1.6	0.40
			63A	0.5	0.50
DN40	35	21.3	90A	1.6	0.60
			90B	1.1	0.40
			90A	1.0	0.60
			90B	0.7	0.40
DN50	45	40.4	125A	1.6	0.55
			125B	1.3	0.45
			125D	1.1	0.40
			90A	0.5	0.60
DN65	61	46.8	125A	0.9	0.55
			125B	0.6	0.45
DN80	80	84.0	125A	0.5	0.55

Order Instruction



Proportional Control Angle Seat Valve



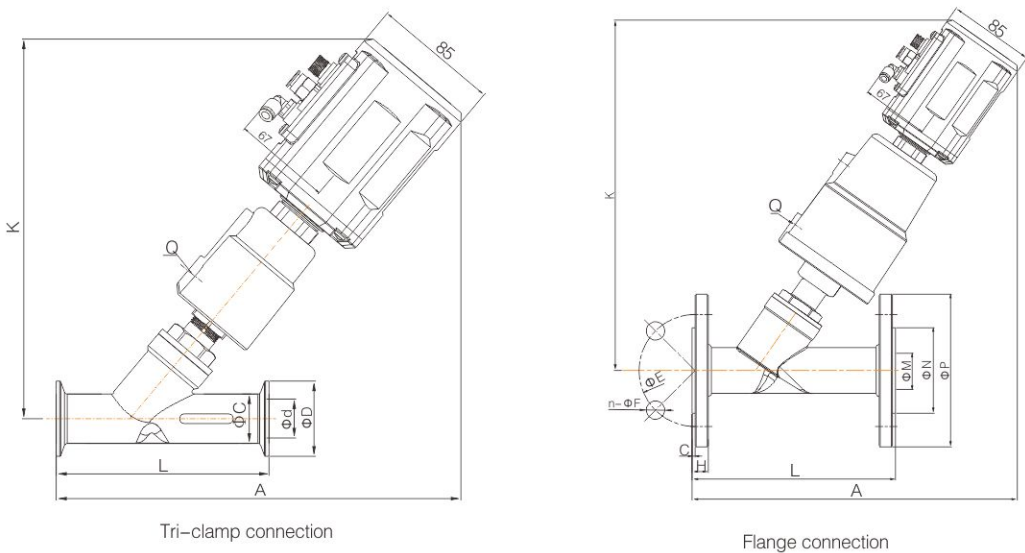
Main Dimension (Threaded connection)

Size	Actuator (mm)	Q	K	A	L	G	Hexagon	T
DN8	50	1/8"	240	235	68	1/4"	27	12
	63	1/8"	253	247				
DN10	50	1/8"	240	235	68	3/8"	27	12
	63	1/8"	253	247				
DN15	50	1/8"	240	235	68	1/2"	27	15
	63	1/8"	253	247				
DN20	50	1/8"	247	240	75	3/4"	32	16
	63	1/8"	260	251				
DN25	50	1/8"	251	250	90	1"	40	17
	63	1/8"	273	267				
DN32	63	1/8"	285	285	116	1 1/4"	50	21
	90	1/8"	335	315				
DN40	90	1/8"	335	315	116	1 1/2"	56	21
DN50	90	1/8"	344	330	138	2"	69	22
	125AL	1/4"	402	373				
DN65 Square bonnet	125AL	1/4"	432	388	178	2 1/2"	85	26
DN80 Square bonnet	125AL	1/4"	457	408	210	3"	100	27

Main Dimension (Welded connection)

Size	Actuator (mm)	Q	K	HA	HL	DIN11850-2		DIN11850-3	
						ΦD	S	ΦD	S
DN15	50	1/8"	240	228	70	19	1.5	20	2
	63	1/8"	253	240					
DN20	50	1/8"	247	235	82	23	1.5	24	2
	63	1/8"	260	246					
DN25	50	1/8"	251	250	100	29	1.5	30	2
	63	1/8"	273	270					
DN32	63	1/8"	285	281	125	35	1.5	36	2
	90	1/8"	335	312					
DN40	90	1/8"	335	315	130	41	1.5	42	2
	90	1/8"	334	330					
DN50	125AL	1/4"	402	375	155	53	1.5	54	2
	125AL	1/4"	402	375					
DN65 Square bonnet	125AL	1/4"	432	428	270	70	2	-	-
DN80 Square bonnet	125AL	1/4"	457	428	284	85	2	-	-

Note: * designates design dimension (the actual dimension may vary)



Main Dimension (Tri-clamp connection)

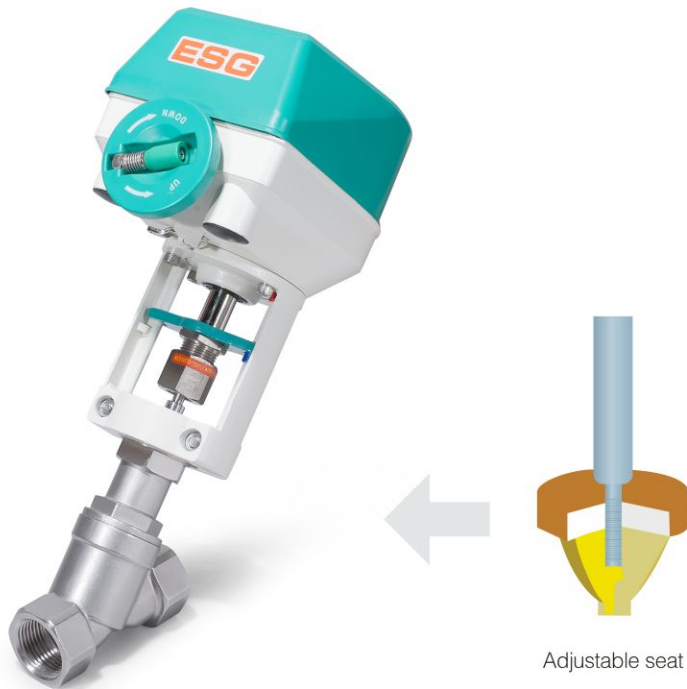
Size	Actuator (mm)	Q	K	A	L	ΦC	ΦD	Φd
DN15	50	1/8"	237	235	80	19	34	15
DN20	50	1/8"	259	253				
	63	1/8"	274	270	130	25	50.5	19
DN25	50	1/8"	255	265	130	32	50.5	27
	63	1/8"	277	283				
DN32	63	1/8"	285	295	146	37	50.5	31
	90	1/8"	335	325				
DN40	90	1/8"	335	335	160	40	64	33
DN50	90	1/8"	347	345	175	53	64	45
	125AL	1/4"	398	393				
DN65 Square bonnet	125AL	1/4"	432	428	278	75	91	66
DN80 Square bonnet	125AL	1/4"	454	428	290	89	106	78

Main Dimension (Flange connection)

Size	Actuator (mm)	Q	K	A	L	ΦP	ΦN	ΦM	H	C	ΦE	n-ΦF
DN15	50	1/8"	255	245	130	95	45	16	14	2	65	4-14
DN20	50	1/8"	255	265	150	105	56	19	14	2	75	4-14
DN25	50	1/8"	285	270	160	115	65	26	14	2	85	4-14
	63	1/8"	286	285								
DN32	63	1/8"	299	285	180	140	78	31	16	2	100	4-18
	90	1/8"	347	310								
DN40	90	1/8"	352	330	200	150	84	38	16	3	110	4-18
DN50	90	1/8"	357	357	230	165	100	49	16	3	125	4-18
	125AL	1/4"	412	398								
DN65 Square bonnet	125AL	1/4"	432	443	290	185	120	66	18	3	145	4-18
DN80 Square bonnet	125AL	1/4"	457	448	310	200	135	78	20	3	160	8-18

Proportional Control Angle Seat Valve

106 Series
Electrical Proportional
Control Angle Seat Valve



Pressure Data Sheet

Size	Orifice	Actuator	Pressure range (enter below seat) MPa	Pressure range (enter above seat) MPa
DN15	13	10P	0-1.6	0-1.6
DN20	18	10P	0-1.6	0-1.6
DN25	24	10P	0-1.2	0-1.6
		20P	0-1.6	0-1.6
DN32	31	10P	0-0.5	0-1.2
		20P	0-1.6	0-1.6
		35P	0-1.6	0-1.6
DN40	35	10P	0-0.3	0-0.9
		20P	0-1.4	0-1.6
		35P	0-1.6	0-1.6
DN50	45	10P	-	0-0.5
		20P	0-0.6	0-1.1
		35P	0-1.5	0-1.6
DN65	61	20P	-	0-0.6
		35P	0-0.7	0-1.1
DN80	80	20P	-	0-0.3
		35P	0-0.3	0-0.6
DN100	90	35P	-	0-0.4

Function Principle

Electrical positioner controls the angle seat valve's open/close state through 4-20 mA or 0-10V DC signals. It achieves precise flow adjustment using the adjustable seat within the valve and may allow manual control.

Attention

- If the valve body needs to be taken off during installation, please recalibrate the zero-point. Keep the positioner upright at all time.
- To ensure accurate adjustment, please install the valve in below seat direction.
- Please ensure water proof of the positioner.

Advantages

1. Convenient and easy to use
2. Operates steadily under vibration to achieve precise flow control

Technical Specification

- Voltage: 220V AC or 24V AC
- Control Power: 4-20mA or 0-10V DC
- Medium Temperature: -15℃ — +50℃
- Connection type: Threaded, Welded, Flange, Tri-clamp
- Positioner: Electrical motor control
- Protection: IP54
- Leakage class: DIN EN 12266 Class A

Order Instruction

