

Flange connection

#### 105 Series Main Dimension (Tri-clamp Connection)

Size	Actuator (mm)	Q	к	А	L	ФС	ФД	Фф
DN15	50	1/8"	221	221	80	20.5	34	15
Davino	50	1/8"	243	239	100	05	50.5	40
DN20	63	1/8"	258	256	130	25	50.5	19
DN25	50	1/8"	239	251	100	00	50.5	27
DINZS	63	1/8"	261	269	130	33	50.5	21
DNIGO	63	1/8"	269	281	110	0.7	50.5	
DN32	90	1/8"	319	311	146	37	50.5	31
DN40	90	1/8"	319	321	160	40	64	34
	90	1/8"	331	331				
DN50	125AL	1/4"	382	379	175	53	64	45
DN65 Square bonnet	125AL	1/4"	416	414	278	75	91	65
Saugra Bonnet	125AL	1/4"	438	414	290	89.5	106	78.5

## 105 Series Main Dimension (Flange Connection)

Size	Actuator (mm)	Q	К	А	L	ФР	ΦN	ФМ	н	С	ФЕ	n−ΦF
DN15	50	1/8"	237	232	130	95	45	16	14	2	65	4-14
DN20	50	1/8"	237	252	150	105	56	19	14	2	75	4-14
DN25	50	1/8*	267	257	160	115	65	26	14	2	85	4-14
DN25	63	1/8"	268	272	160	115	65	26	14	2	85	4-14
DAIGO	63	1/8*	281	272	180	140	78	31	16	2	100	4-18
DN32	90	1/8"	329	297	180	140	/8	31	16	2	100	4-18
DN40	90	1/8*	334	317	200	150	84	38	16	3	110	4-18
DN50	90	1/8"	339	344	000	405	400	54	40	3	405	4.40
	125AL	1/4"	394	385	230	165	100	54	16	3	125	4-18
DN65 Square bonnet	125AL	1/4"	414	430	290	185	120	71	18	3	145	4-18
Square bonnet	125AL	1/4"	439	435	310	200	135	84	20	3	160	8-18
DN100 Square bonnet	125AL	1/4"	467	482	350	215	155	96	20	3	180	8-18



## **Technical Specification**

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

## Advantages

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

## 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.

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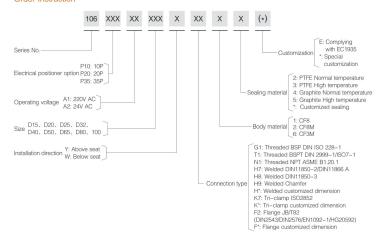


#### Pressure Data Sheet

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
DAIGE	0.4	10P	0-1.2	0-1.6
DN25	24	20P	0-1.6	0-1.6
DAIGO	0.4	10P	0-0.5	0-1.2
DN32	31	20P	0-1.6	0-1.6
		10P	0-0.3	0-0.9
DN40	35	20P	0-1.4	0-1.6
		35P	0-1.6	0-1.6
		10P	1-	0-0.5
DN50	45	20P	0-0.6	0-1.1
		35P	0-1.5	0-1.6
		20P	1-	0-0.6
DN65	61	35P	0-0.7	0-1.1
Daloo		20P	-	0-0.3
DN80	80	35P	0-0.3	0-0.6
DN100	90	35P	-	0-0.4

Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

#### Order Instruction







#### **Function Principle**

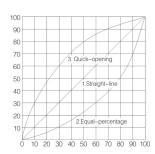
Positioner receives 0/4–20mA(0–5/10V) electrical signals from control system and converts them into air signals to control the valve and make precise flow adjustment using the adjustable seat.

#### Attention

- Ensure that the inlet pressure of P port is sufficient and has been opened.
- Ensure that there is no leakage in the air supply pipeline, especially when there are changes in the air supply.
- Ensure that the power supply wiring is correct.
- Ensure that the signal source input mode matches and there is no interference.
- Ensure that the contro valve takes protective measures to avoid water droplets and causing disfunction in operation panel.
- While installation, if the valve body needs to be removed, please adjust to the zero point again after installation.
- It is recommended that the signal to be 4-20mA to reduce the interference when signal value is low.
- It is recommended to use shielding wire for the signal line.
- Make sure the positioner is waterproof.

# Control Output Chart

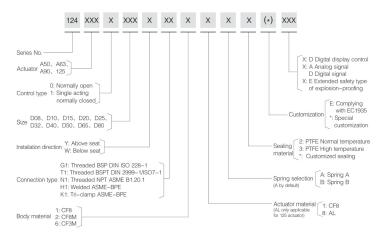
By selecting characteristic curve of the positioner, the controlled valve can output to straight-line, equal-percentage, quick-opening and other custom characteristics.



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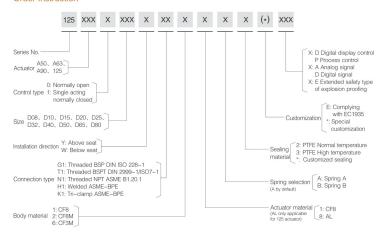


#### Order Instruction





#### Order Instruction

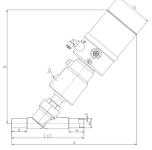


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# **ESG**®

# **Proportional Control Angle Seat Valve**





5 Series Threaded connection

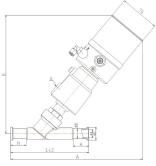
125 Series Welded connection

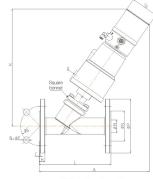
# 125 Series Main Dimension (Threaded connection)

Size	Actuator (mm)	Q	К	А	L	G	sw	т	
DNB	50	1/8"	229	224	- 65	1/4"	27	12	
DINB	63	1/8"	244	236	65	1/4	21	12	
DN10	50	1/8"	229	224	- 65	3/8"	27	14	
DIVIO	63	1/8"	244	236	65	3/0	21	14	
DN15	50	1/8"	229	224	- 65	1/2"	27	16	
DIVID	63	1/8"	244	236	65	1/2	21	10	
DN20	50	1/8"	232	229	- 75	3/4"	32	18	
DINZU	63	1/8"	246	239	/5	3/4	32	10	
DN25	50	1/8"	235	235	90	41	40	20	
DINZS	63	1/8"	259	254	50	'	40	20	
DNIOO	63	1/8"	270	271	110	11/4"	50	22	
DN32	90	1/8"	312	304	110	11/4	30	22	
DN40	90	1/8"	312	308	120	11/2"	56	24	
DN50	90	1/8"	319	326	150	2	69	26	
DINOU	125AI	1/4"	374	372	150	2	-69	26	

# 125 Series Main Dimension (Welded connection)

Size	Actuator	Q	к	A	L	н	ASME BPE		
Size	(mm)	u	K A		L	п	ФD	S	
DN15	50	1/8"	230	247	135	30	12.7	1.65	
DN15	63	1/8"	246	259	135	30	12.7	1.00	
Dation	50	1/8"	229	251	145	30	19.05	1.65	
DN20	63	1/8"	242	264	145	30	19.05	1.00	
DN25	50	1/8"	236	258	152	30	25.4	1.65	
DN25	63	1/8"	259	276	152	30	25.4	1.00	
DN40	90	1/8"	309	329	182	30	38.1	1.65	
DN50	90	1/8"	319	339	210	30	50.8	1.65	
	125AL	1/4"	374	386	210	30	30.6	1.65	
DN65 Square bonnet	125AL	1/4"	417	386	230	26	63.5	1.65	
DN80 Square bonnet	125AL	1/4"	436	436	310	26	76.2	1.65	





125 Series Tri-clamp connection

125 Series Flanged connection

# 125 Series Main Dimension (Tri-clamp connection)

Size	Actuator	Q	к	А	L	ASME BPE					
Size	(mm)	_ u	Ι .	A		D	В	d	Н		
DMIS	50	1/8"	230	251	130	25	12.7	9.4	30		
DN15	63	1/8"	246	262	130	25	12.7	9.4	30		
DNIGO	50	1/8"	229	254	150	25	19.05	15.75	30		
DN20	63	1/8"	244	263	150	2.0	19.05	15.75	30		
DNOS	50	1/8"	236	261	160	50.5	25.4	22.1	30		
DN25	63	1/8"	259	281	160	30.3	25.4	22.1	30		
DN40	90	1/8"	309	336	200	50.5	38.1	34.8	30		
DN50	90	1/8"	319	351	230	64	50.8	47.5	30		
	125AL	1/4"	374	396	230	04	30.6	47.5	30		
Square bonnet	125AL	1/4"	417	416	290	77.4	63.5	60.2	26		
Square honnet	125AL	1/4"	439	437	315	91	76.2	72.9	26		

# 125 Series Main Dimension (Flanged connection)

Size	Actuator (mm)	Q	К	А	L	ФР	ΦN	ФМ	н	С	ΦЕ	n-⊕F
DN15	50	1/8"	237	232	130	95	45	16	14	2	65	4-14
DN20	50	1/8*	237	252	150	105	56	19	14	2	75	4-14
DATE	50	1/8"	267	257	100	115	65	26	14		85	4-14
DN25	63	1/8"	268	272	160	115	65	26	14	2	85	4-14
DN32	63	1/8"	281	272	180		78	31	16	_	100	4-18
DINOZ	90	1/8"	329	297	180	140	7.6	31	16	2	100	4-18
DN40	90	1/8"	327	307	200	150	84	38	16	3	110	4-18
DNIEG	90	1/8"	334	336	000	405	400		40		405	4.40
DN50	125AL	1/4"	394	385	230	165	100	54	16	3	125	4-18

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# Single Acting, Normally closed (NC) -Enter Below Seat

Size	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range △ P(MPa)	Control pressure (MPa)
DN4	4	0.52	50A	0-1.6	≥0.45
DN6	6	1.1	50A	0-1.6	≥0.45
			50A	0-1.4	≥0.45
DN8	13	2.2	63A	0-1.6	≥0.50
			63B	0-1.6	≥0.30
			50A	0-1.4	≥0.45
DN10	13	3.3	63A	0-1.6	≥0.50
			63B	0-1.6	≥0.30
			50A	0-1.4	≥0.45
DN15	13	3.3	63A	0-1.6	≥0.50
			63B	0-1.6	≥0.30
			50A	0-1.4	≥0.45
DN20	18	6.7	63A	0-1.6	≥0.50
			63B	0-1.6	≥0.30
			50A	0-0.8	≥0.45
DN25	24	11.4	63A	0-1.3	≥ 0.50
			63B	0-0.7	≥0.30
DN32		40.0	63A	0-0.6	≥ 0.50
DN32	31	18.3	90B	0-1.3	≥0.45
			63A	0-0.5	≥ 0.50
DN40	35	24.5	90A	0-1.6	≥ 0.60
			90B	0-1.1	≥0.45
			90A	0-1.0	≥ 0.60
DN50			90B	0-0.7	≥0.45
DINSU	45	40.4	125A	0-1.6	≥ 0.55
			125B	0-1.1	≥0.45
			90A	0-0.5	≥0.60
DN65	61	46.8	125A	0-0.9	≥ 0.55
			125B	0-0.6	≥0.45
DN80	80	84.0	125A	0-0.5	≥ 0.55

Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

Single Acting, Normally Closed (NC)-Enter Above Seat (Please pay attention to the selection of spring. 6325, 6332 and 6340 need a customized positioner.)

Size	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range △ P(MPa)	Control pressure (MPa)
DN15	13	3.3	50A	0-1.6	≥0.45
DNID	13	3.3	63B	0-1.6	≥ 0.30
DN20	18	6.7	50A	0-1.6	0.45-0.55
DINZU	18	0.7	63B	0-1.6	0.30-0.40
DN25	24	11.4	63B	0-1.6	0.30-0.45
DN32	31	18.3	63B	0-1.6	0.30-0.60
DINOZ	31	10.3	90B	0-1.6	≥ 0.45
DN40	35	24.5	63B	0-1.6	0.30-0.70
DN40	35	24.5	90B	0-1.6	0.45-0.50
DATES	45		90B	0-1.6	0.45-0.70
DN50	45	40.4	125A	0-1.6	0.30-0.35
DN65	61	46.8	90B	0-0.9	0.45-0.70
DINOS	01	40.8	125A	0-1.6	0.30-0.55
DN80	80	84.0	125A	0-1.2	0.30-0.70
DN100	90	95.0	125A	0-1.0	0.30-0.70

Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

## Single Acting, Normally Open(NO)-Enter below Seat

Size	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range △ P(MPa)	Control pressure (MPa)
DN15	13	3.3	50K	0-1.6	0.30-0.40
DN20	18	6.7	50K	0-1.6	0.30-0.50
	0.4		50K	0-1.3	0.30-0.60
DN25	24	11.4	63K	0-1.6	0.30-0.50
DN32	31	18.3	63K	0-1.3	0.30-0.60
DN40	35	21.3	90K	0-1.6	0.30-0.40
DN50	45	40.4	90K	0-1.6	0.30-0.55
	61	40.0	90K	0-1.0	0.30-0.70
DN65	61	46.8	125K	0-1.6	0.30-0.65
DN80	80	84.0	125K	0-1.0	0.30-0.70

Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

# Opening (%) - Kv value (m³/h) chart of proportional angle seat valve

Size	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
DN4	0.02	0.04	0.07	0.11	0.14	0.19	0.26	0.35	0.43	0.52
DN6	0.04	0.08	0.14	0.22	0.33	0.43	0.57	0.75	0.93	1.1
DN8	0.53	0.83	1.14	1.53	1.91	2.2	2.2	2.2	2.2	2.2
DN10	0.53	0.83	1.14	1.53	1.91	2.26	2.58	2.84	3.05	3.3
DN15	0.53	0.83	1.14	1.53	1.91	2.26	2.58	2.84	3.05	3.3
DN20	1.48	2	2.57	3.27	4.16	5.06	5.65	6.08	6.43	6.7
DN25	1.37	2.98	4.39	5.94	7.14	8.27	9.03	9.98	10.82	11.4
DN32	3.79	6.74	9.07	11.17	12.12	13.36	15.35	16.37	17.63	18.3
DN40	3.78	6.85	9.39	12.44	15.4	17.46	20.55	22.02	23.54	24.5
DN50	8.64	15.49	21.67	27.02	29.98	32.93	35.45	37.38	39.52	40.4
DN65	7.53	11.34	15.31	17.83	19.4	21.84	27.3	33.4	40.54	46.8
DN80	9.84	11.18	16.53	22.66	29.82	35.73	48.37	60.21	70.69	84
DN100	12.54	14.56	25.32	36.75	45.6	54.38	62.5	72.8	84.23	95

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