



Proportional Control Angle Seat Valve

135 Series
Micro Flow Control Valve



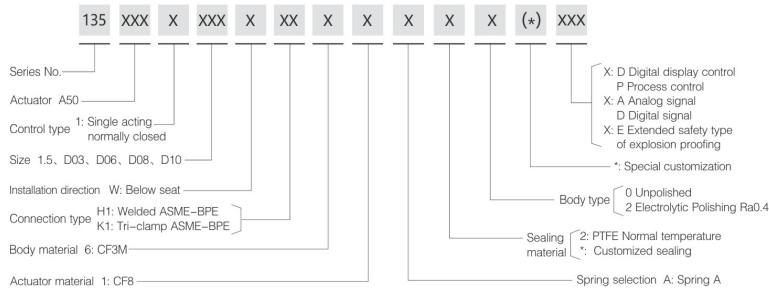
Technical Specification

- Operating pressure: 0–10bar (0–145psi)
- Control pressure: 4–7bar (58–116psi)
- Seal material: PTFE
- Applicable fluid: Water, Neutral gas or Liquid, Organic solvent, Acid and lye
- Fluid temperature: –10°C — +150°C
- Ambient temperature: –10°C — +60°C
- Control type: Single acting normally closed
- Connection type: Tri-clamp, Welded

Advantages

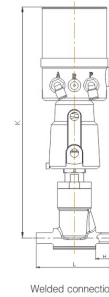
Bellows are used to isolate the medium and meet the requirements of harsh working conditions.

Order Instruction

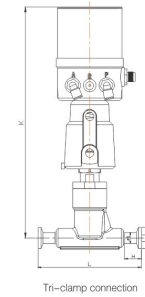


Function Principle

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 low adjustment using the bellows adjustable seat. Diaphragm is arranged between the valve body and the bonnet to isolate the medium in place of the stem packing. Valve stays closed(open) by spring force in its normal state. When piston is actuated by compressed air, valve becomes opened (Closed).



Welded connection



Tri-clamp connection

135 Series Main Dimension (Welded connection)

Size	Actuator (mm)	K	L	H	ASME BPE	
					D	S
DN1.5/3/6	50	275	90	16	12.7	1.65
DN8/10	50	275	90	16	19.05	1.65

135 Series Main Dimension (Tri-clamp connection)

Size	Actuator (mm)	K	L	ASME BPE			
				D	B	d	H
DN1.5/3/6	50	275	122	25	12.7	9.4	20
DN8/10	50	275	122	25	19.05	15.75	20

Single Acting, Normally Closed (NC)-Enter Below Seat Pressure Selection Table

Size	Orifice (mm)	Flow value Kv(m ³ /h)	Actuator (mm)	Differential pressure range ΔP(MPa)	Control pressure (MPa)
BPE–DN1.5	1.5	0.09	50A	0–1.0	≥0.45
BPE–DN3	3	0.26	50A	0–1.0	≥0.45
BPE–DN6	6	0.8	50A	0–1.0	≥0.45
BPE–DN8	8	1.43	50A	0–1.0	≥0.45
BPE–DN10	10	2.16	50A	0–1.0	≥0.45

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%
BPE–DN1.5	0.011	0.021	0.032	0.043	0.054	0.073	0.082	0.085	0.089	
BPE–DN3	0.025	0.059	0.1	0.13	0.16	0.19	0.21	0.23	0.24	0.26
BPE–DN6	0.03	0.075	0.156	0.247	0.332	0.442	0.53	0.63	0.726	0.8
BPE–DN8	0.05	0.15	0.26	0.39	0.53	0.73	0.98	1.27	1.42	1.43
BPE–DN10	0.1	0.26	0.42	0.61	0.82	1.08	1.45	1.8	2.03	2.16