

1500 Series Intelligent Electropneumatic Valve Positioner

- Electrical waterproof connectors
- LED display
- Easy to start-up



1500 series intelligent electropneumatic valve positioner is designed for integral pneumatic control valve, particularly suitable for angle seat valves and diaphragm valves.

The product is easy to operate. It can easily be operated via the keypad.

The positioner adjusts the valve position quickly and accurately through detecting the position sensor signal.

Technical data	
Material	PC、PA6-GF30、SI
Power supply	24V DC $\pm 10\%$
Set-point signal	4 – 20 mA
Input resistance for set-point signal	140 Ω
Control medium	neutral gases, air DIN ISO 8573-1 Solid particle size and density Class 3 Dew point Class 3 Oil content Class 3
Dust concentration	
Particle density	
Pressure condensation point	
Oil concentration	
Ambient temperature	0-60°C
Pneumatic connection	Plug-in hose connector G1/4(internal $\Phi 6\text{mm}$)
Electrical connection	M12 3-pins B-coded (cable $\varnothing$ 4-6mm) M12 4-pins D-coded (cable $\varnothing$ 4-6mm)
Supply pressure	3~7 bar, specific values depending on the actuator
Air flow rate	17 l/min(input pressure of 0.6Mpa) 95 l/min(input pressure of 0.6Mpa ,only single-acting)
Stroke control range	Line 5-50mm Angle 90°
Installation	As required, Preferably with actuator in upright position, Screw
Protection class	IP67
Power consumption	<5W
Linearity & Hysteresis	Linearity: $\leq 0.5\%$,Hysteresis: $\leq 0.5\%$

Combinations

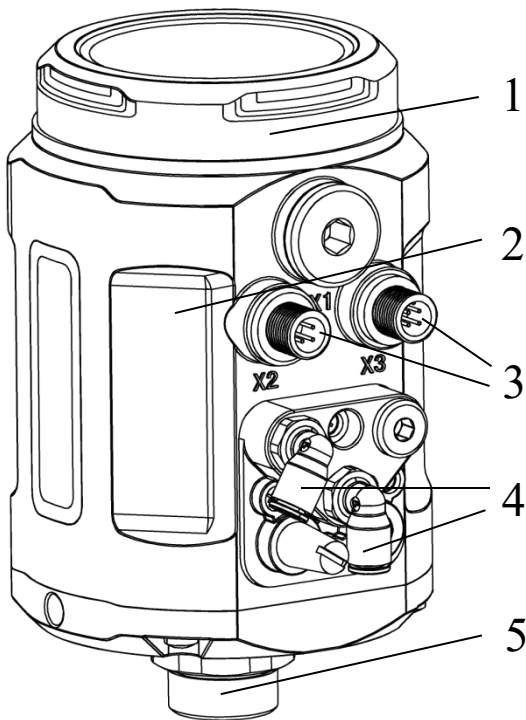


Diaphragm control valve



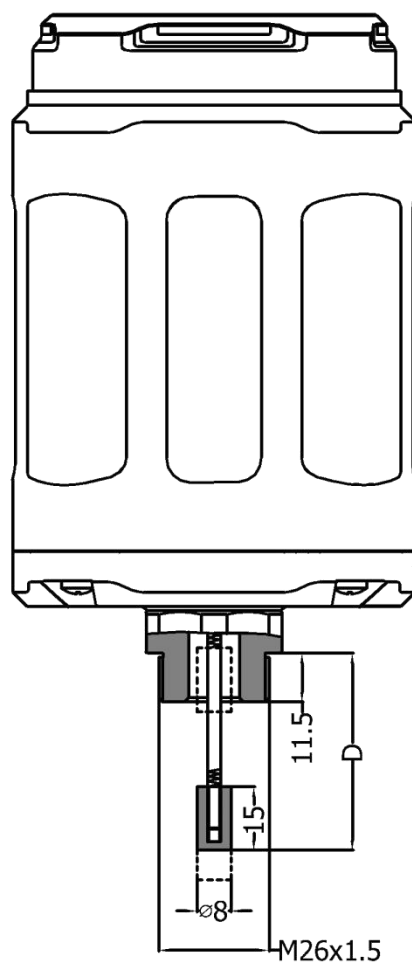
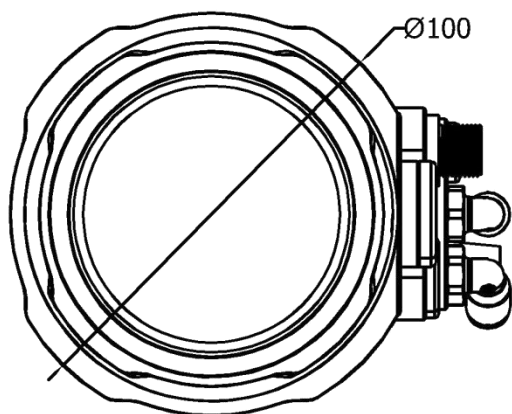
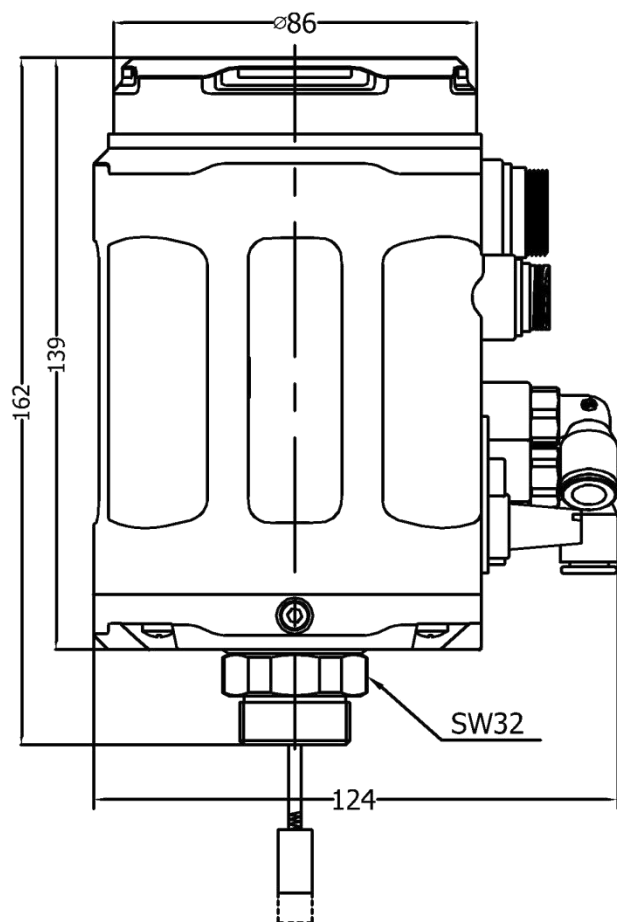
Angle seat control valve

Structure



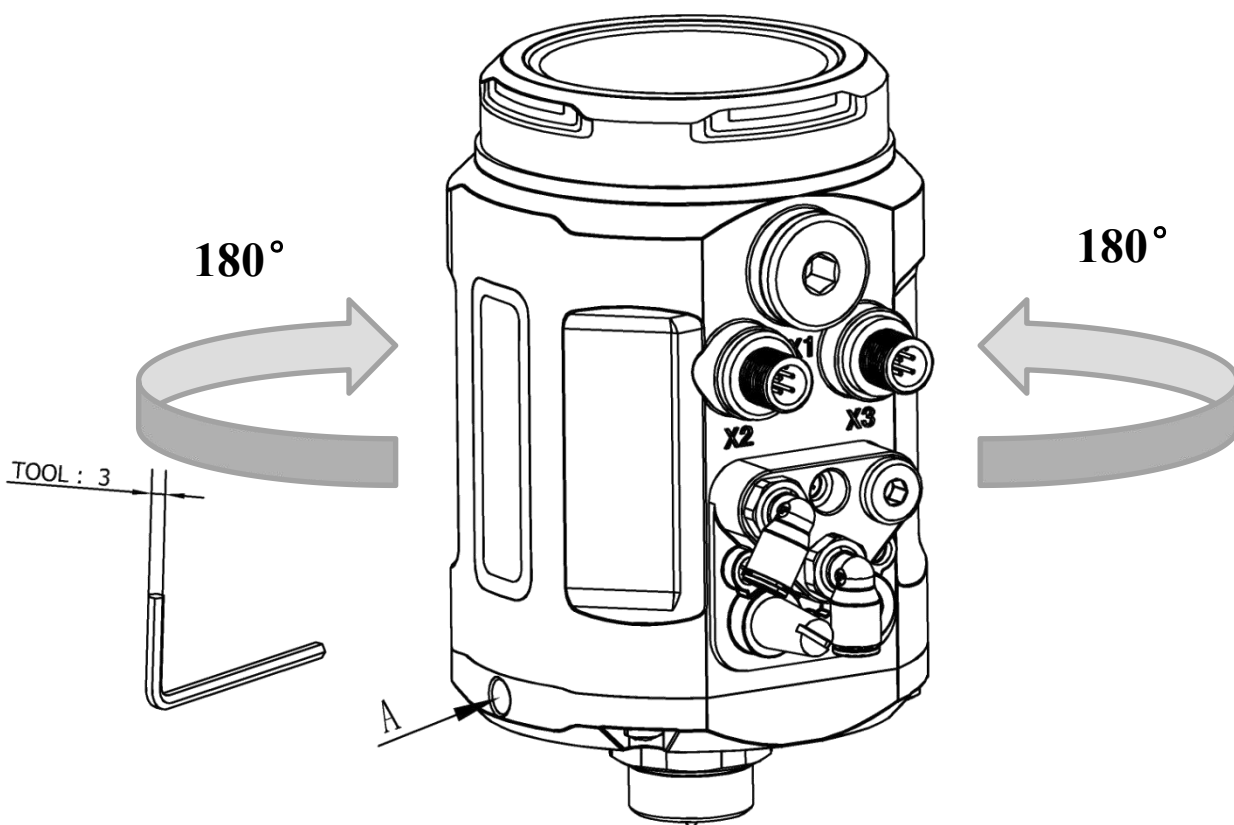
1. Protective cover
2. Main body casing
3. Electrical connection
4. Pneumatic connection
5. Actuator connection

Dimensions

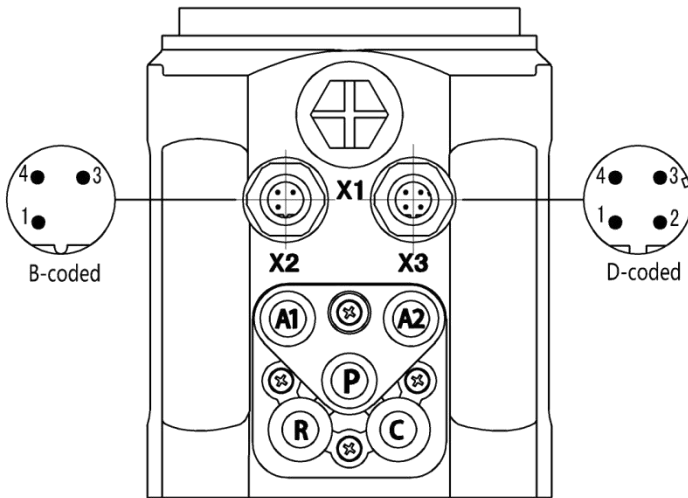


Interface angle adjustment

The angle can be adjusted between the positioner and the valve. If need to adjust the interface angle, relaxing the hexagon screw in place A first. Then adjusting the angle clockwise or counter-clockwise in 180° range. After adjusting the angle, locking the angle by the hexagon screw.



Electrical connections



X2(optional)

Pin	Description	Signal type
1	Analogue signal output +	4 – 20 mA
3	Analogue signal output GND	GND
4	NC	NULL

X3

Pin	Description	Signal type
1	Power supply +	+24 V
2	Power supply GND	GND
3	Set signal input +	4 – 20 mA
4	Set signal input GND	GND

Pneumatic connections

P	Air supply enter(built-in filter, filter size 5 µm)
R	Air exhaust
C	Check valve
A1	Pilot air outlet 1
A2	Pilot air outlet 2

Selection and ordering data

N No feedback signal Y 4-20mA feedback signal	Feedback signal
S Single-acting D Double-acting	Actuator type
S2 Line 5-25 mm S3 Line 25-50 mm S4 Angle 90°	Valve max stroke
Q1 17 l/min Q2 95 l/min	Air flow rate
T1 G1/4 T2 M16 * 1 T3 M22 * 1.5 T4 M26 * 1.5	Thread type
S Safe F Freeze	Power off state for single-acting

1500	—	N	—	S	—	S2	—	Q1	—	T1	—	S
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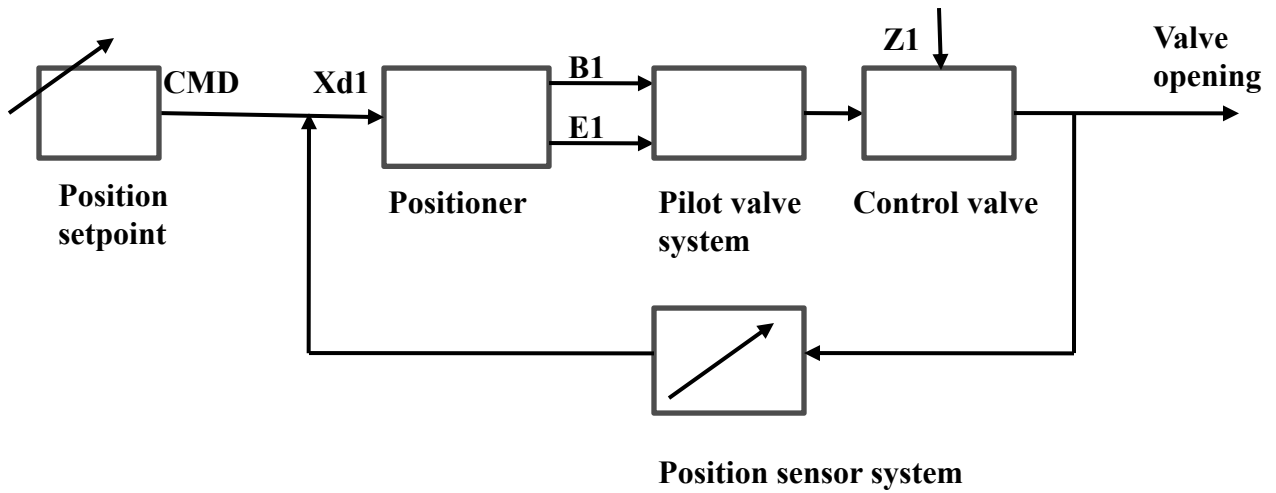
Remark:

In the **air flow rate** option, code Q1 is suggested to match the actuator of 40-100 mm internal gas chamber diameter, code Q2 is suggested to match the actuator of 125-160 mm internal gas chamber diameter. Code **Q2** is only used for **single-acting actuator**, and only in **Freeze** state when power-off. The air flow rates for code Q1 and Q2 are under the condition of 0.6Mpa input pressure.

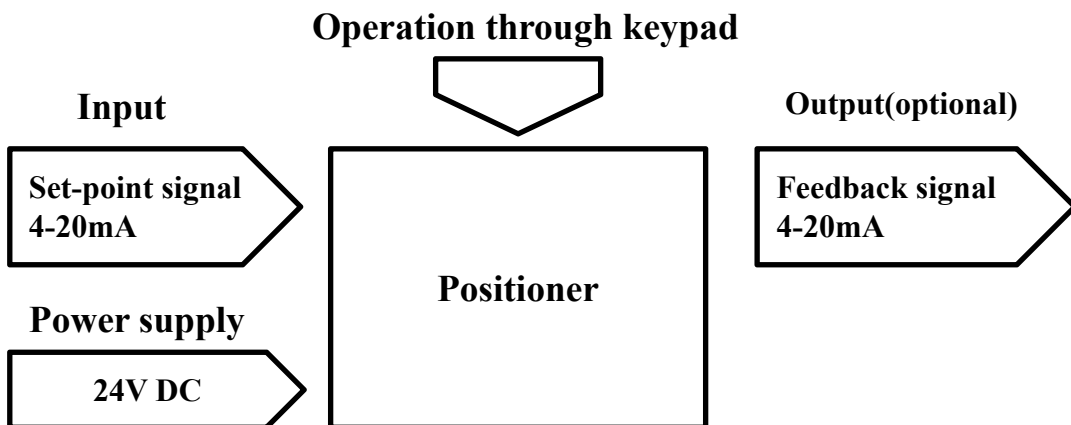
In the **valve max stroke** option, AT actuator range for code S4 is AT50~AT125. For other actuator models, please consult our company. It is no need to select the **thread type** option for code S4.

Power off state for single-acting option is **Safe** by default.

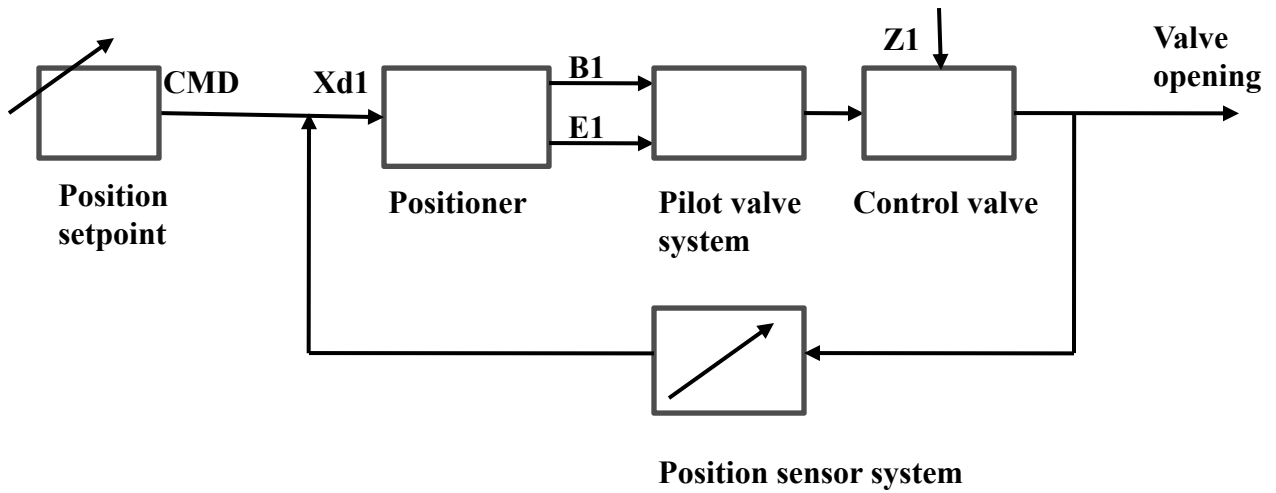
Signal flow diagram



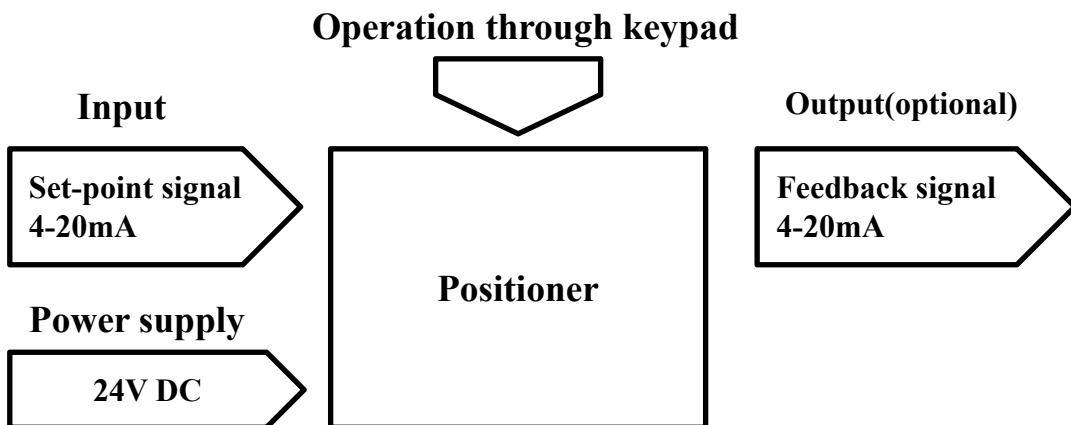
Schematic diagram



Signal flow diagram



Schematic diagram



Function comparison for all types

FUNCTION	1600	1601	1500
Process control	×	√	×
4-20mA signal input	√	√	√
4-20mA signal output	○	○	○
Autotune	√	√	√
Valve position manual adjustment	√	√	√
Sealing function	√	√	√
Dead band setting	√	√	√
4-20mA input signal error detection	√	√	√
Factory setting	√	√	√
Characteristic curve setting	√	√	×
Direction of set-point value	√	×	×
Valve stroke range limiting	√	√	×
Safety position setting	√	√	×
Binary signal input/output	○	○	×
Input signal calibration	√	√	×
Speed setting of manual adjustment	√	√	×
Code protection	√	√	×

√	YES
×	NO
○	optional