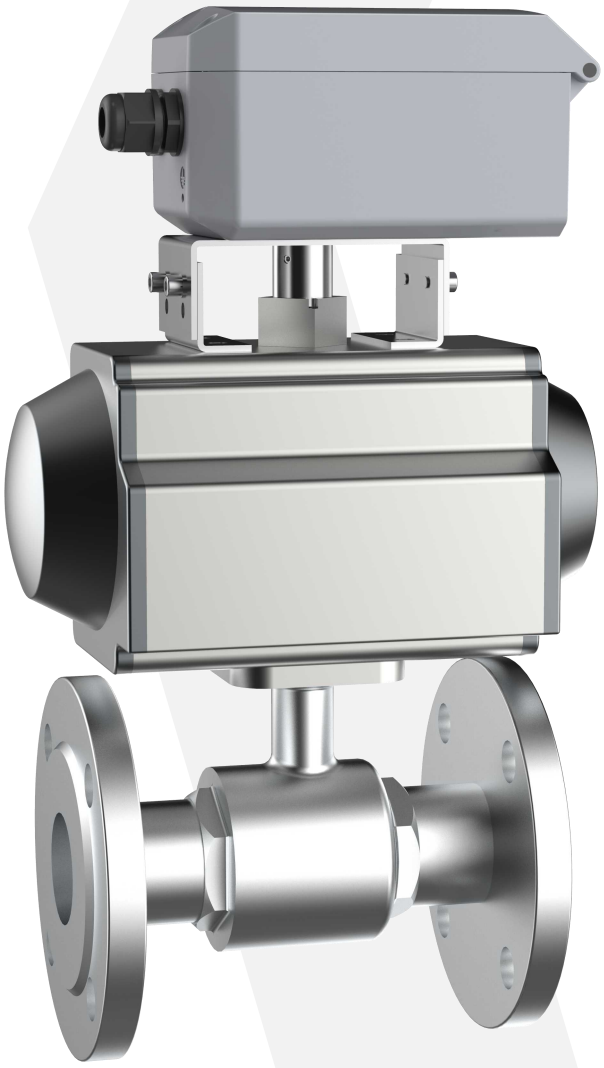
POWERFLOW
Expertise in flow control



IP5500 Series Intelligent Valve Positioner

Brief Introduction

Times New Roman

01 Technical Description

IP5500 Series Intelligent Valve Positioner

IP5500 intelligent valve positioner is mounted on pneumatic control valves. It's used to control air intake and exhaust of the pneumatic actuators to drive the valve position to the set point by calculating both data from 4-20mA DC signal and feedback position.

Enclosure Material
- Aluminum

Power Supply
- 24V DC ±10%

Set-point Signal
- Current: 4-20mA DC

Stroke Range
- Linear Type: 10-100mm
- Rotary Type: 30-100°

Ambient Temperature
- 0℃ ~ + 50℃

Pneumatic Data
- Air quality meets ISO 8573-1 standard
- Pressure range：0.14-0.7MPa
- Solid Particle Size and Density: Class 3
- Pressure Dew Point: Class 3
- Oil Content: Class 3

Vibration Resistance
- 0.15 mm, 10 Hz-60 Hz, 20 cycle/axis
- 20 m/s2, 60 Hz-500 Hz, 20 cycle/axis
- Recommended range for control valve ≤ 20 m/s2, no resonance peak

- **Flow Rate**
  75L/min (Sup=0.14MPa)

- **Linearity & Hysteresis**
  - Linearity: ≤ 0.5%
  - Hysteresis: ≤ 0.5%

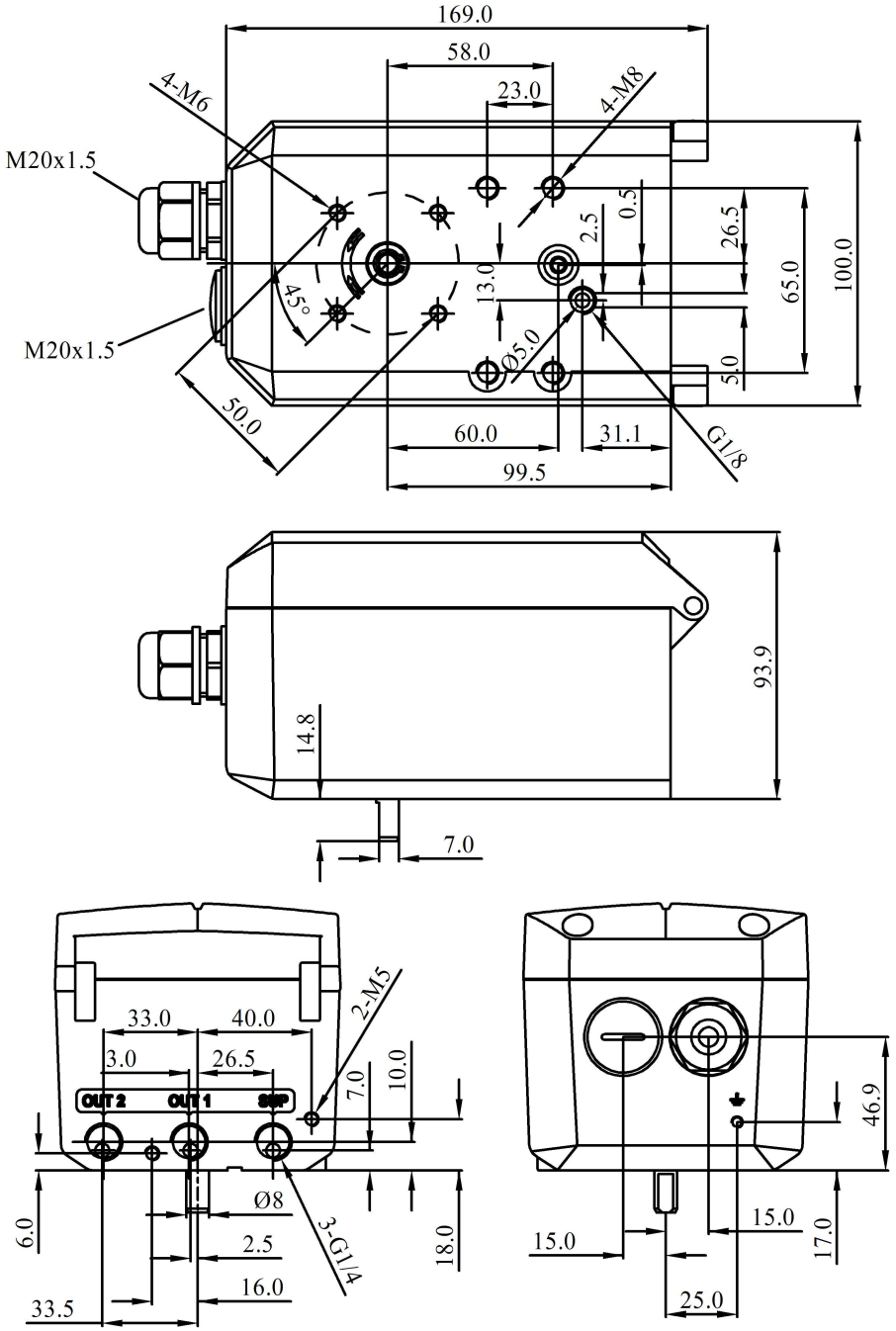
- **Electrical Connection**
  - NPT 1/2 (default)
  - M20 × 1.5

- **Pneumatical Connection**
  - NPT 1/4 (default)
  - G 1/4

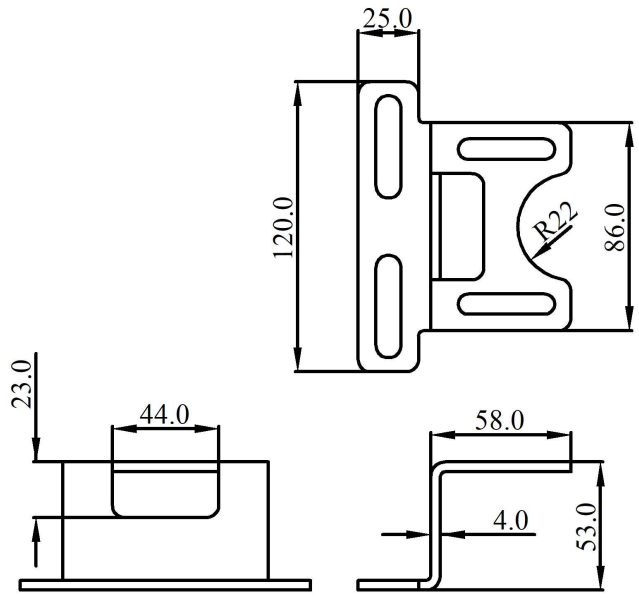
- **Protection Class**
  - IP69K

02 Mechanical Dimensions

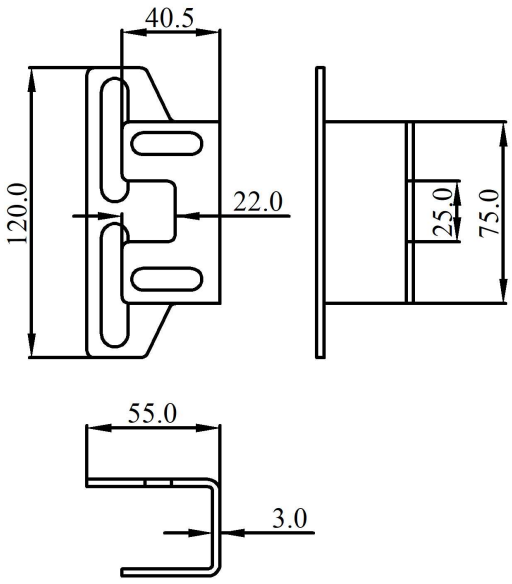
› IP5500 Series Intelligent Valve Positioner Mechanical Dimensions



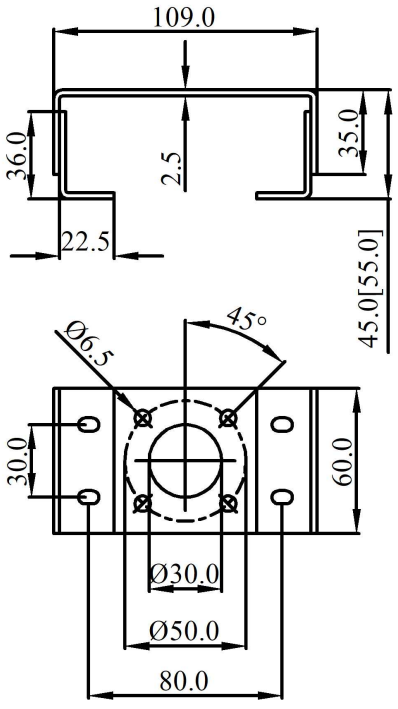
Linear Mounting Bracket



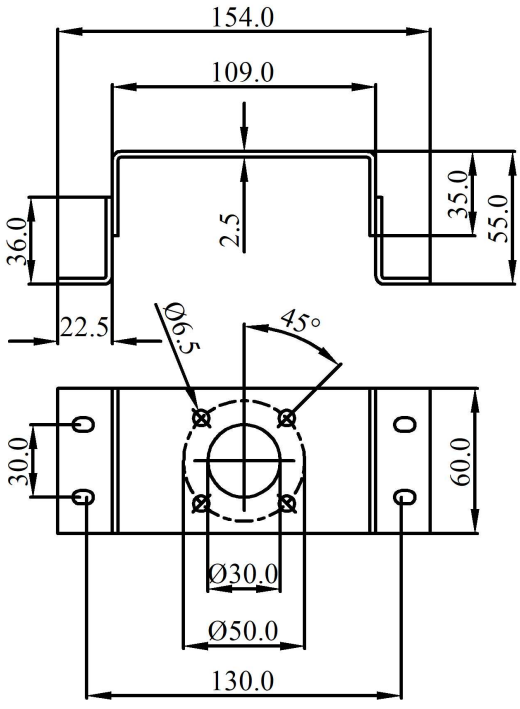
Remote Linear Mounting Bracket



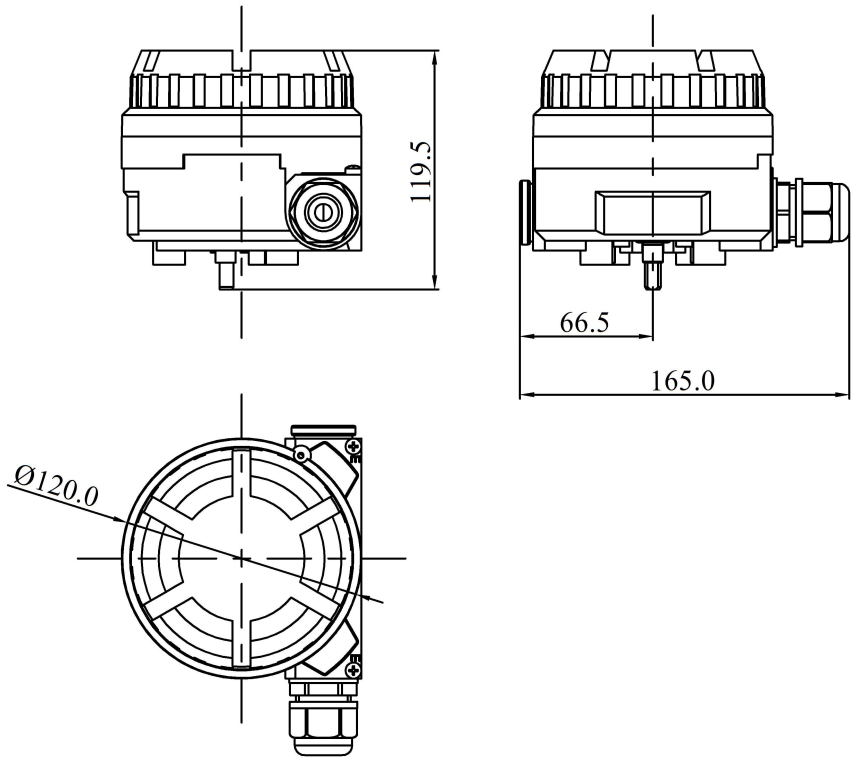
Rotary Mounting Bracket - Form 1



Rotary Mounting Bracket - Form 2

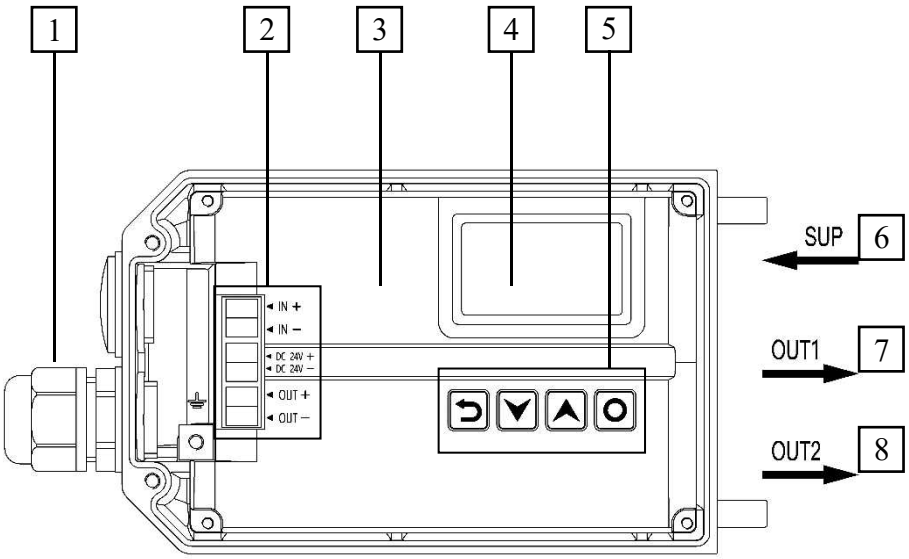


Dimensions of Remote Type Sensor



03 Product Structure

IP5500 Series Intelligent Valve Positioner Product Structure



1 Electrical Cable Access

2 Electrical Wiring Position

3 Shell

4 LCD Screen

5 Buttons

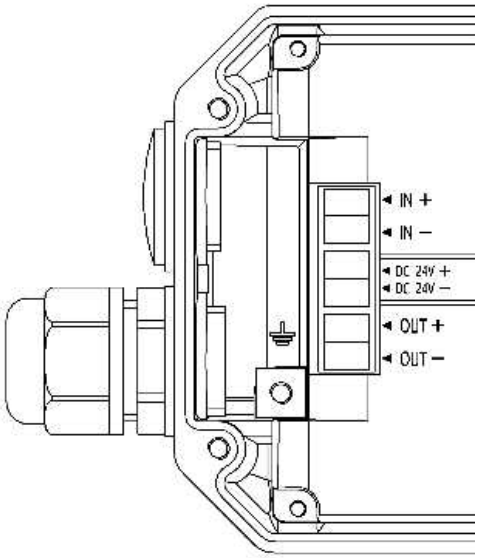
6 Air Supply

7 Pilot Air Outlet 1

8 Pilot Air Outlet 2

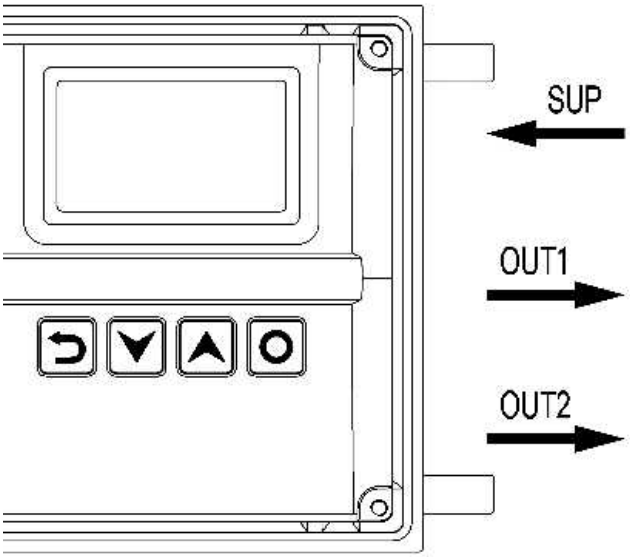
04
Electrical & Pneumatic Connections

Electrical Connections



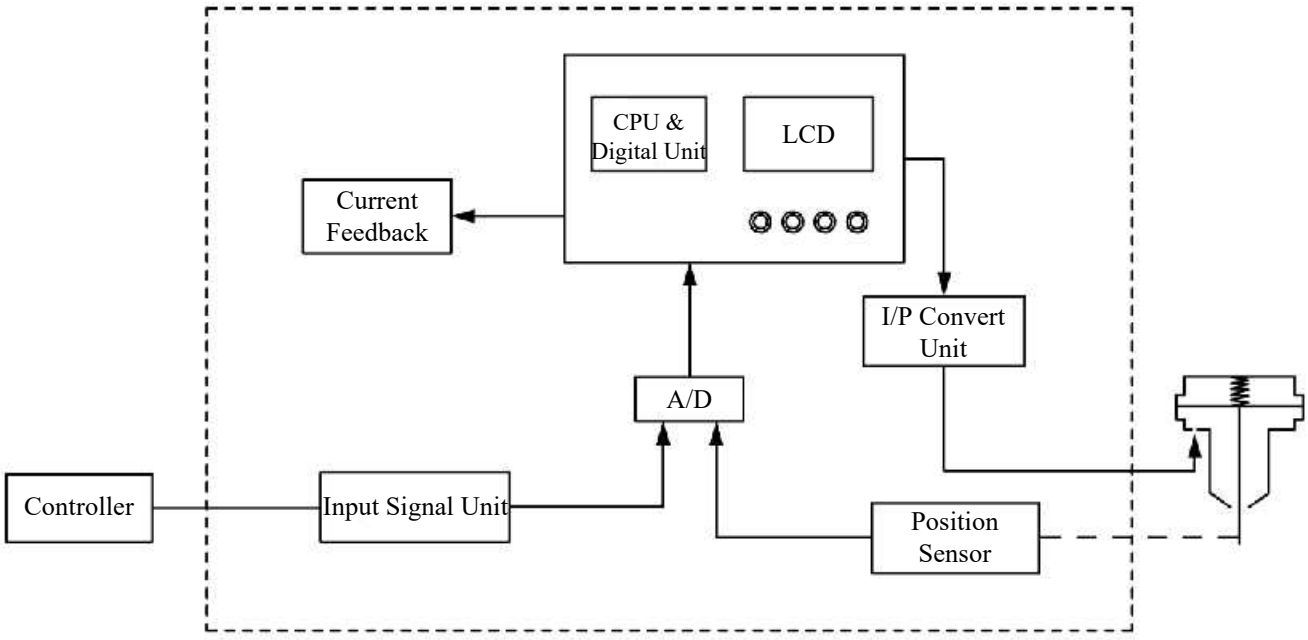
- IN+: 4-20 mA input signal +
- IN-: 4-20 mA input signal -
- DC 24V +: Power supply DC 24V +
- DC 24V -: Power supply DC 24V -
- OUT +: 4-20 mA feedback signal +
- OUT -: 4-20 mA feedback signal -

Pneumatic Connections



- SUP: Air supply enter
- OUT1: Pilot air outlet 1
- OUT2: Pilot air outlet 2

05 Principle Block Diagram



Additional Software Functions

- Calibrating the input signal
- Calibrating the set-point signal
- Tight closing function
- Stroke limit function
- Characteristic curve selection and settings
- Selection of signal direction.
- Selection of stroke direction.
- Reset function

06 Selection and Ordering Data