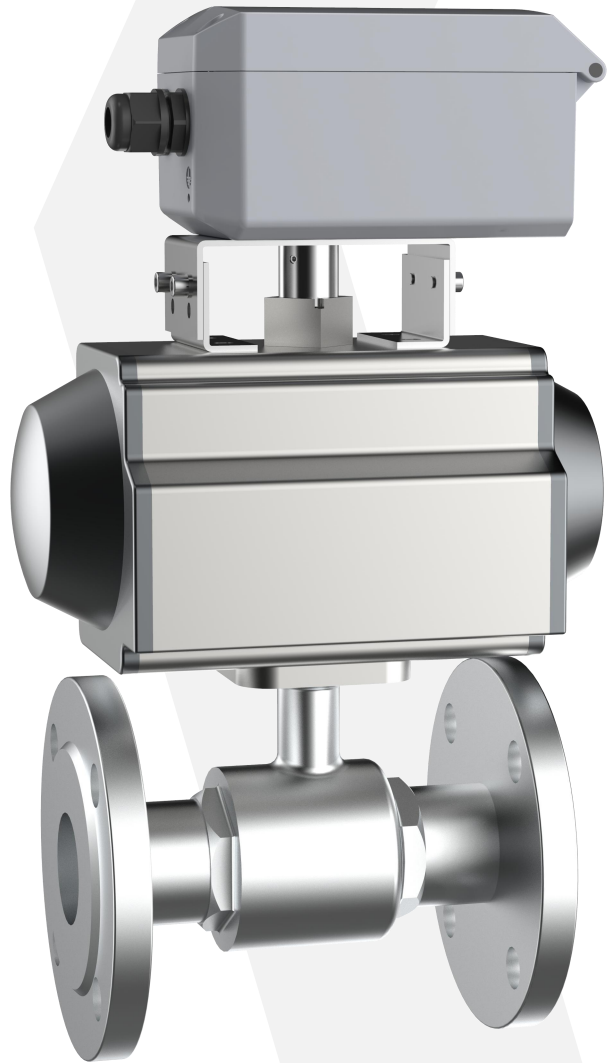




IP5500 Series Intelligent Valve Positioner

Brief Introduction

Brief introduction

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 $\pm 10\%$

> Set-point Signal

- Current: 4-20mA DC

> Stroke Range

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

> Ambient Temperature

- 0°C ~ + 50°C

> 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: $\leq 0.5\%$
- Hysteresis: $\leq 0.5\%$

> Electrical Connection

- NPT 1/2 (default)
- M20 $\times$ 1.5

> Pneumatical Connection

- NPT 1/4 (default)
- G 1/4

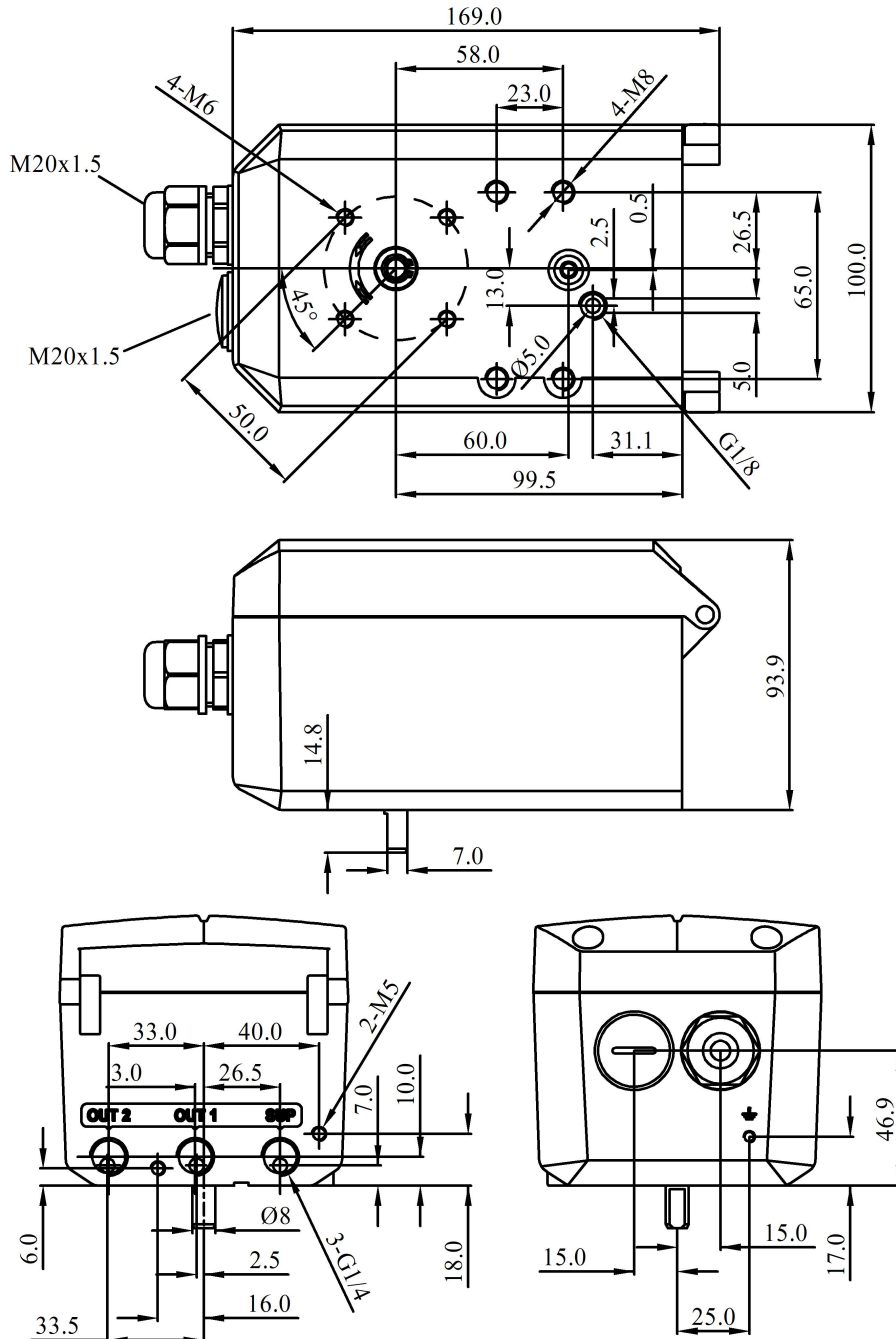
> Protection Class

- IP67/IP69

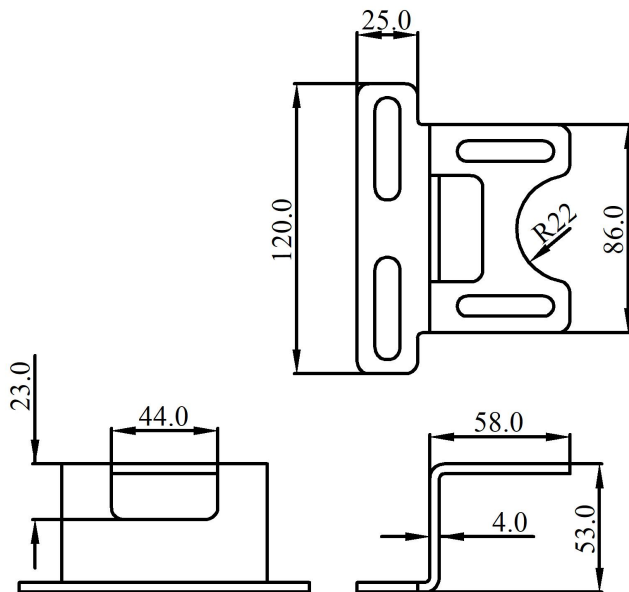
02

Mechanical Dimensions

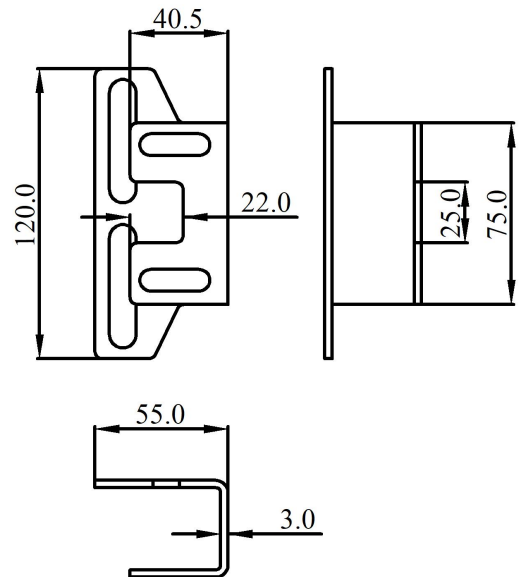
> IP5500 Series Intelligent Valve Positioner Mechanical Dimensions



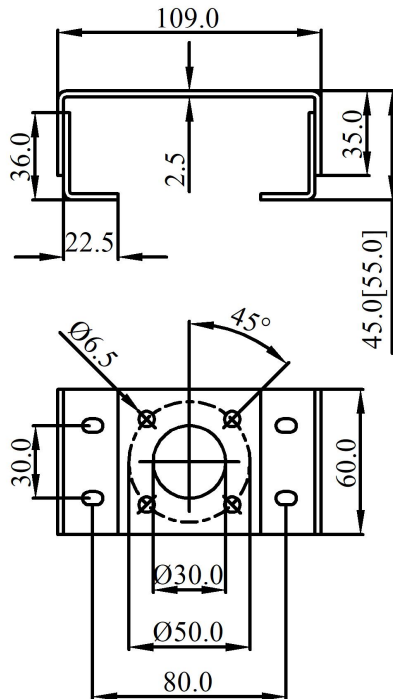
› Linear Mounting Bracket



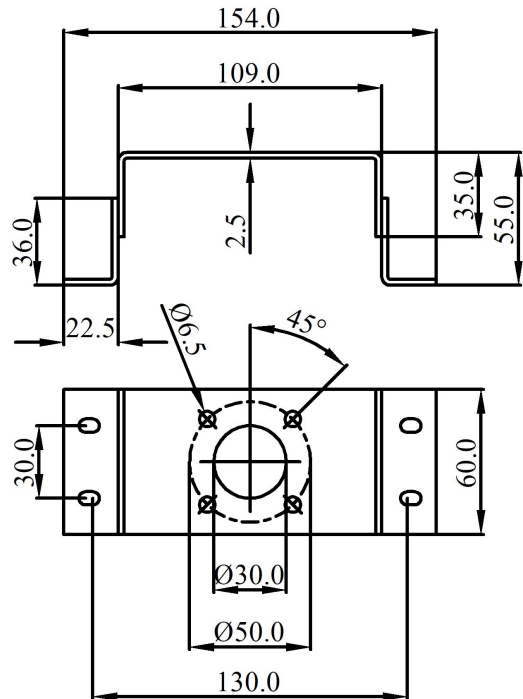
› Remote Linear Mounting Bracket



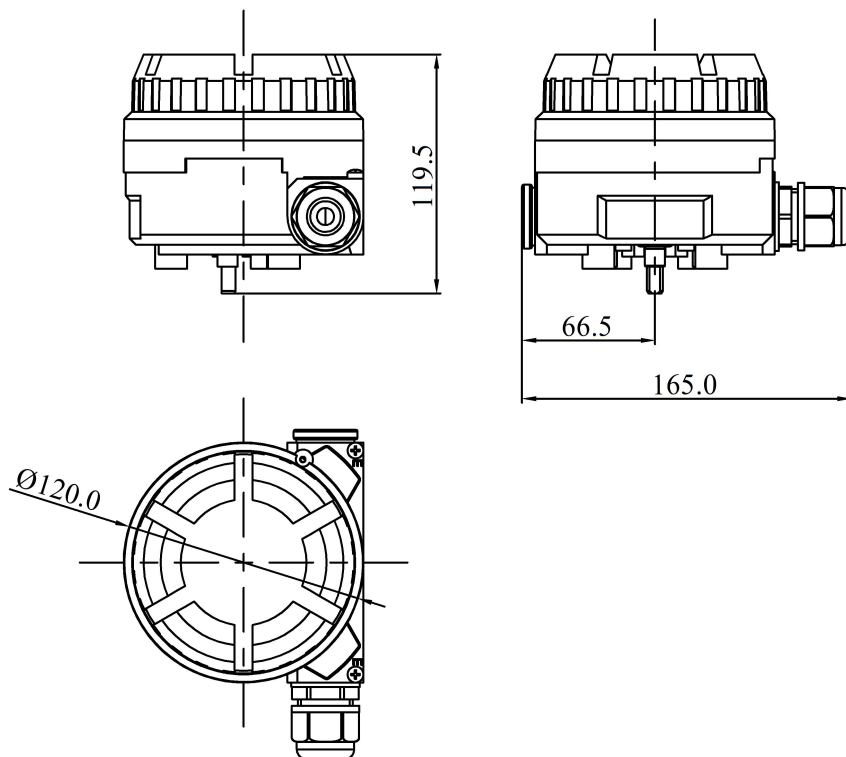
› Rotary Mounting Bracket - Form 1



› Rotary Mounting Bracket - Form 2

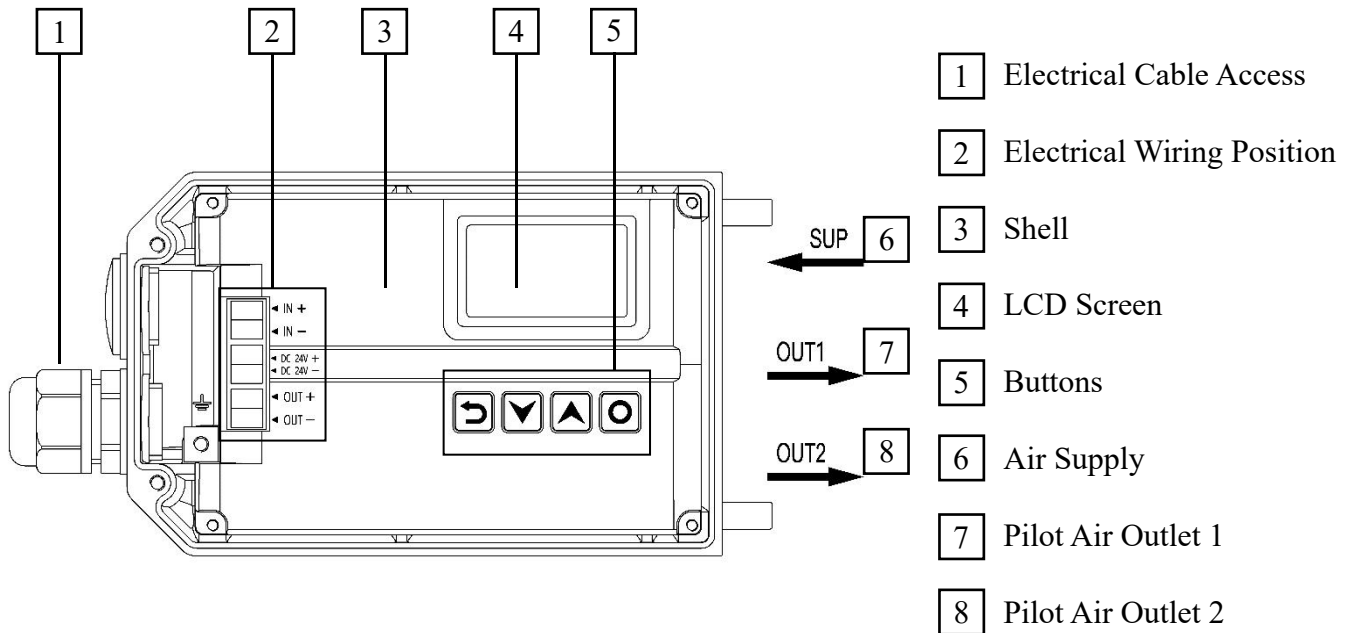


> Dimensions of Remote Type Sensor



03 Product Structure

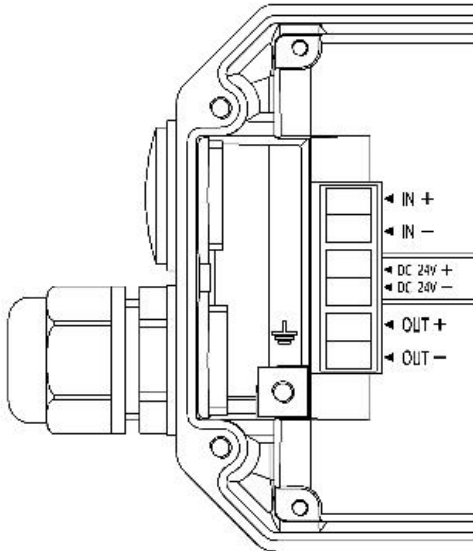
> IP5500 Series Intelligent Valve Positioner Product Structure



04

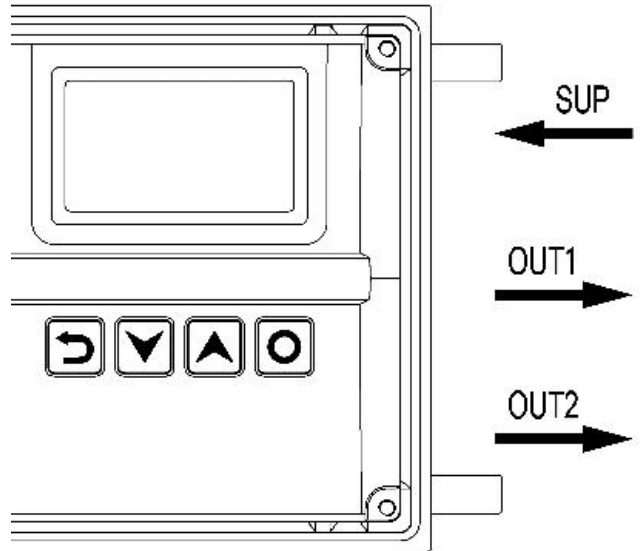
Electrical & Pneumatic Connections

> 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 -

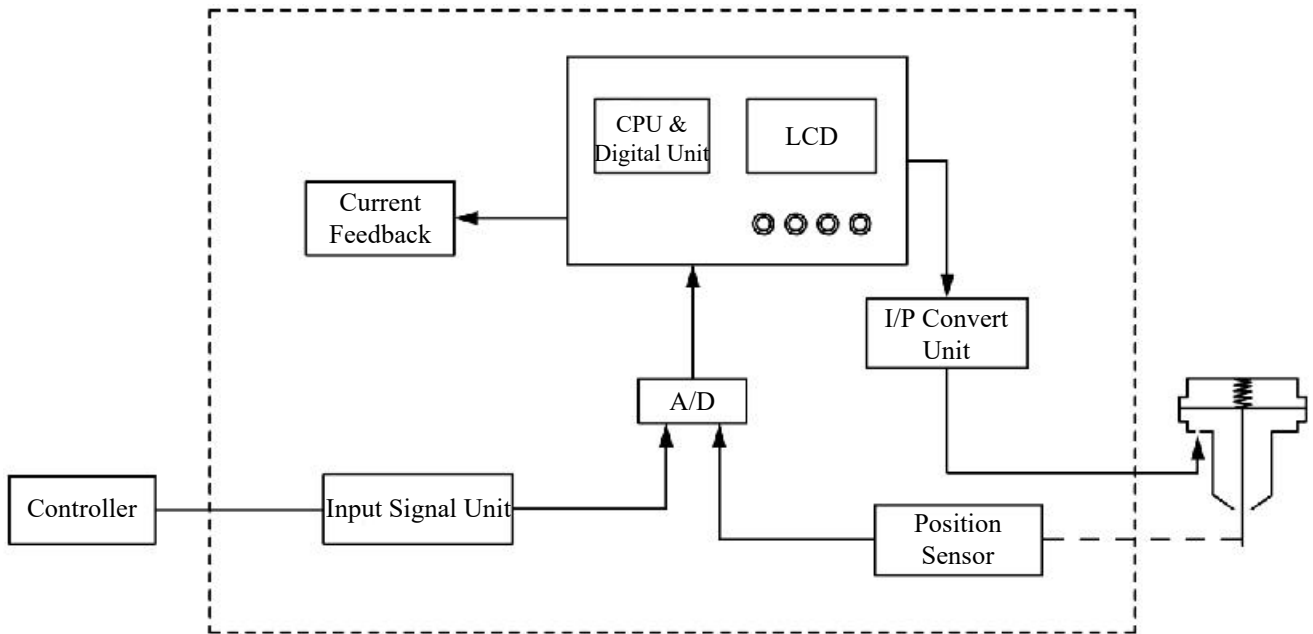
> Pneumatic Connections



- 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

L	Normal Linear	Stroke Type
FL	Remote Linear	
R	Normal Rotary	
FR	Remote Rotary	

