



ELECTRO PNEUMATIC POSITIONER



■ Design and Features

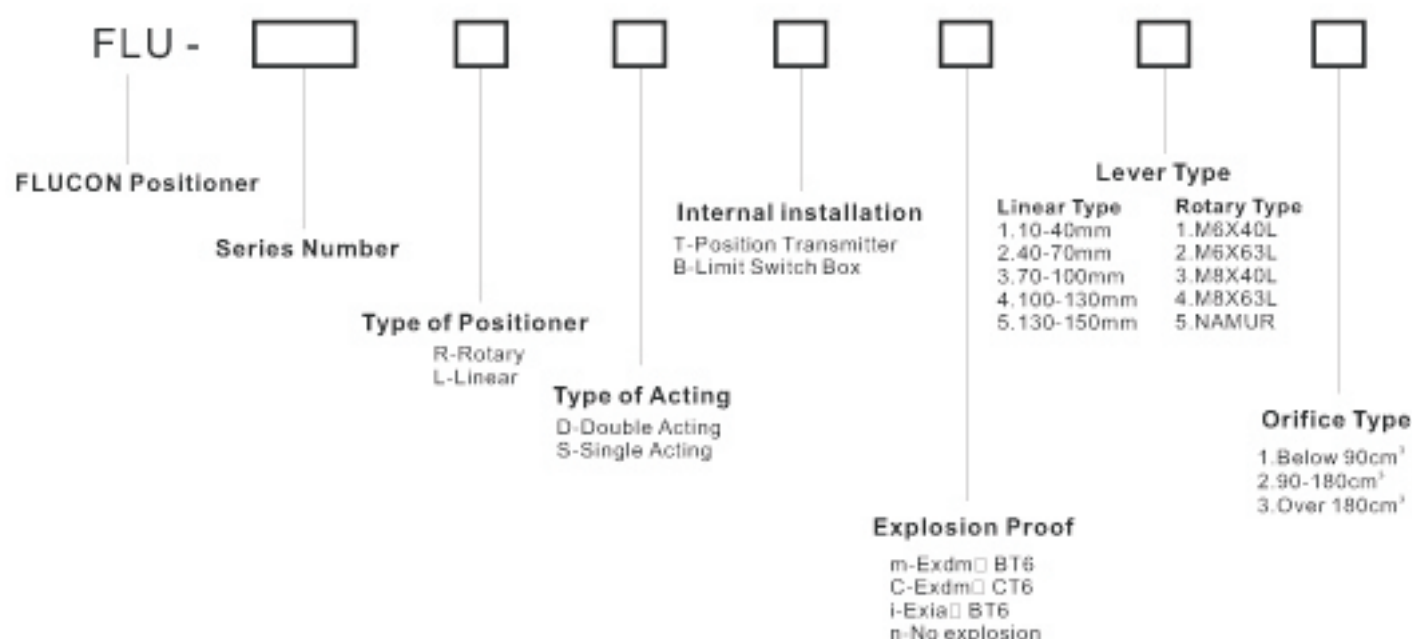
Armed with the design ideas of block structure and Multi-port type, we produced the FLU-1000 series E-P valve positioner which has two types, one is Linear and another is rotary. The Linear one is used for linear operation of pneumatic linear valve actuator. The rotary one is used for rotary pneumatic actuator. They control valve stroke accurately, through pressure air, according to input signal of 4-20mA being input from electrical controller control system.

In addition, the internal position transmitter and/or limit switches are easily to be assembled inside of the positioner in order to senses mechanical position change of stem being on the valve or similar device and converses to current signal of DC 4~20mA outputs for computers or Industry Processing Control System. It is flame proof type attached internally.

The FLU-1000 series E-P valve positioner is provided with following features:

1. There is no resonance in the range of 5~200Hz.
2. Performing ½ Split Control without any other substitutes.
3. Easy to adjust zero and span.
4. Easy to convert from Reverse Action to Direct Action or vice versa.
5. Easy to convert from Spring Return to Double Action actuator or vice versa.
6. Easy Feedback Connection.
7. Fast and accurate response.
8. Low air consumption.
9. Easy to protect from hunting effect by using output orifice in small size of actuator.
10. Easy to install air tubing connection in any direction.

■ Ordering Symbols and Specifications



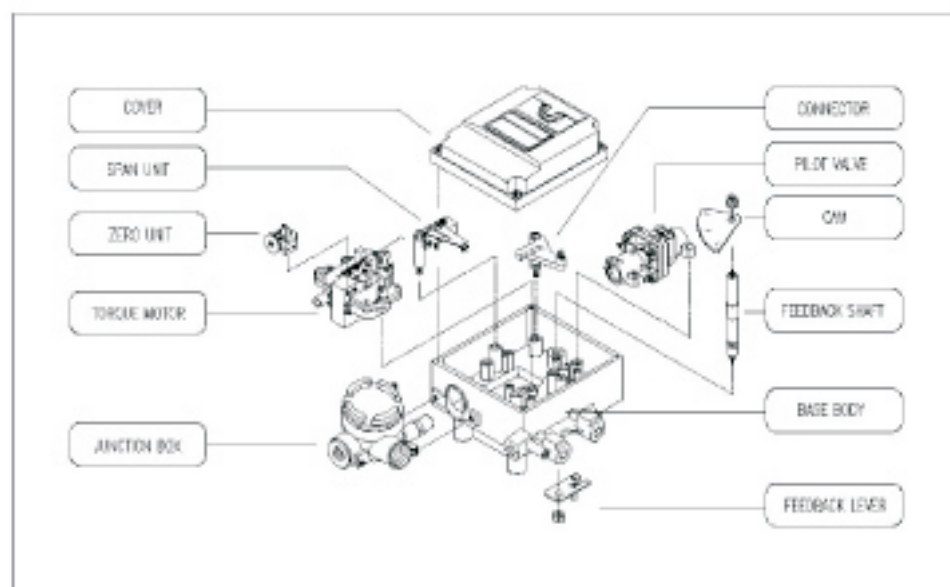
Sample: FLU1000RSBn13 means a rotary, single acting and no explosion FLUCON valve positioner with internal limit switch box. The lever type of the positioner is M6x40L and the orifice type is over 180cm³.



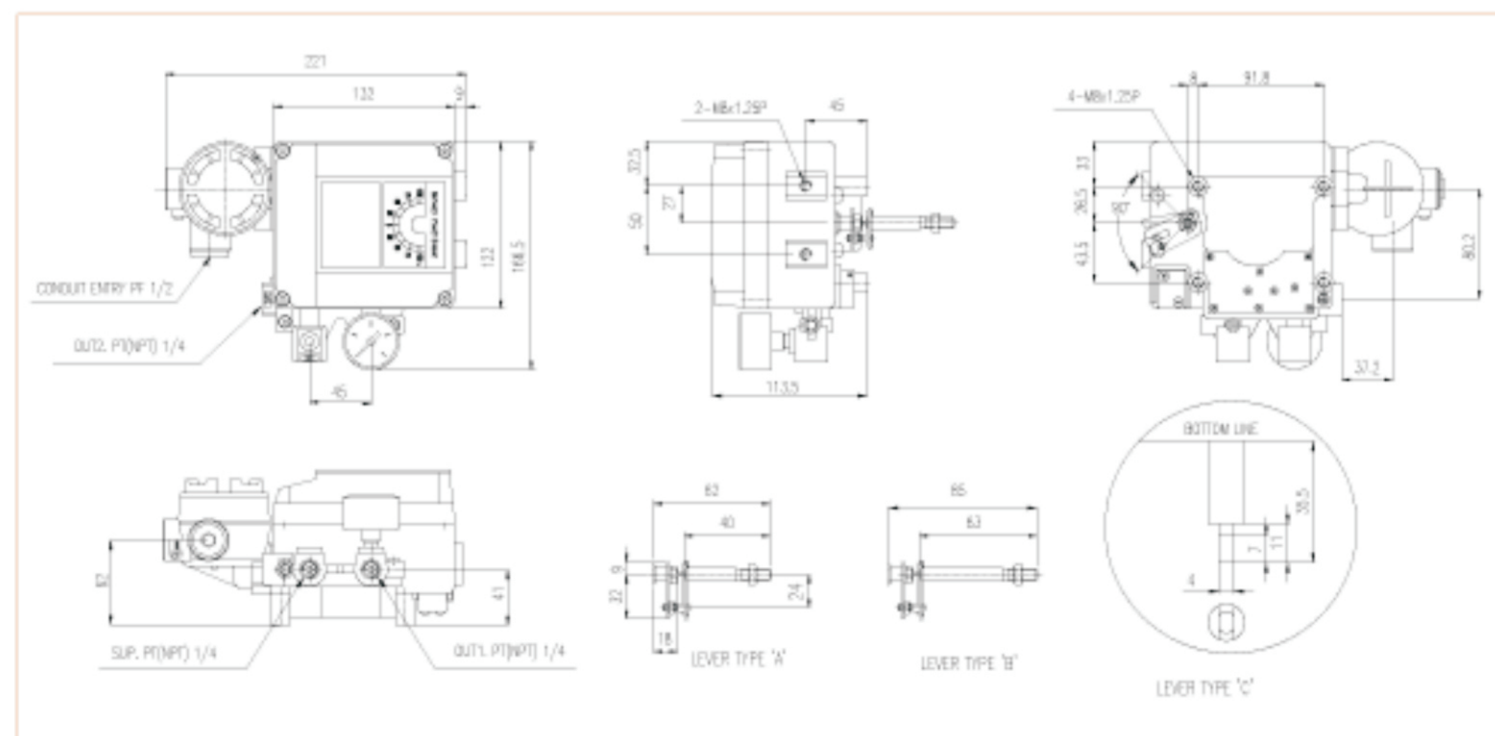
■ Technical Data

FLU-1000 Positioner		Internal Position Transmitter(optional)	
Description	Technical Data	Description	Technical Data
Input signal	4-20mADC(5-15mADC)	Input type	2Wire
Impedance	250±15Ω	Input Signal	0°-90°
Supply pressure	1.4~7kgf/cm ² (20~100psi)	Output Signal	4-20mA DC
Stroke	Rotary: 0° - 90° Linear: 10-150mm	Load Resistance	0~600 Ohm
Air connection	G(NPT)1/4	Noise Range	50mVp.p
Gauge connection	G(NPT)1/8	Adjustable Range	Zero : ±10% Span : 60~110%
Conduit	G(NPT)1/2	Protection	IP66
Explosion Proof	Exdm II B(C)T6, Exia II BT6, Non-Explosion	Linearity	±1%
Protection	IP66	Sensitivity	±0.2%
Ambient temperature	-20℃~70℃	Hysteresis	0.002
Linearity	±1%F.S. ±2%F.S.	Supply Voltage	15~30V DC
Hysteresis	±1%F.S.	Explosion Proof	Non-Explosion
Sensitivity	±0.2%F.S. ±0.5%F.S.	Internal Mechanical Switches(optional)	
Repeatability	±0.5%	Description	Technical Data
Air consumption	3LPM(Sup=1.4kgf/cm ² ,20psi)	Supply Voltage	ZIPPY, 5A125-250VAC
Flow capacity	80LPM(Sup=1.4kgf/cm ² ,20psi)	Internal Proximity Sensors(optional)	
Material	Aluminum alloy	Description	Technical Data
weight	2.7kg(6lb) 2.8kg(6.2lb)	Supply Voltage	(DC 24V (10-30VDC), ≤150mA)

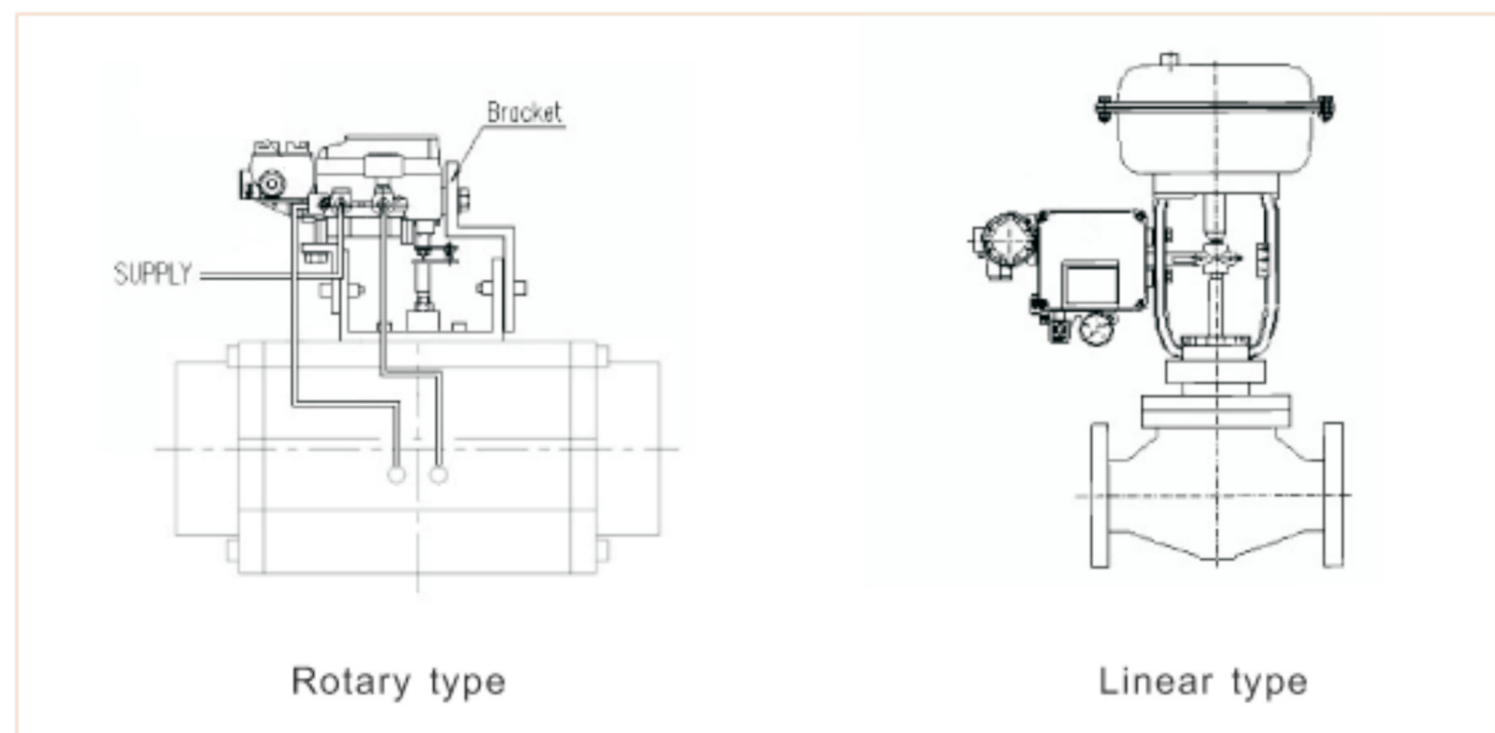
■ Structure



■ Dimensions



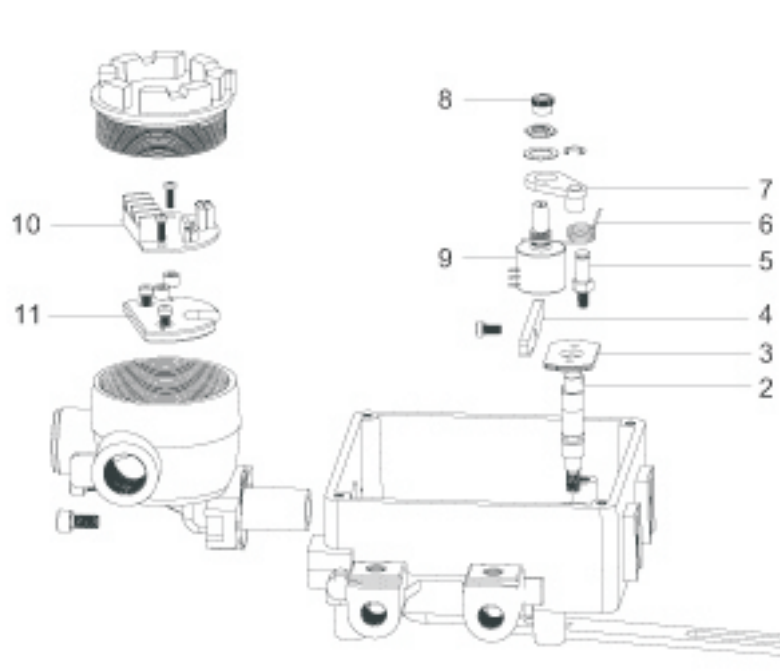
■ Mounting and Installation





—Assembly and Part List

Linear type



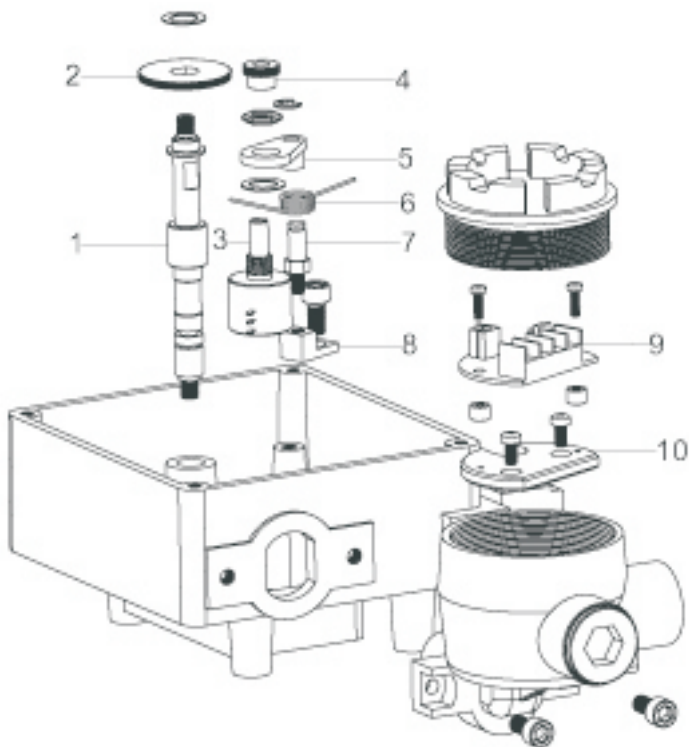
No.	Name of part
1	Feedback lever
2	Shaft
3	Big Brass Gear
4	SS. baffle
5	Hexagonal shaft
6	Spring
7	Brass connector
8	small Brass Gear
9	potentiometer
10	Position transmitter PCB
11	Aluminum plate

Remark: the rest units are standard bolt and nut, the hexagonal shaft is installed on the body, and the hole would be made separately.

Rotary type

No.	Name of part
1	Shaft
2	Big Brass Gear
3	potentiometer
4	small Brass Gear
5	Brass connector
6	Spring
7	Hexagonal shaft
8	Brass block connector
9	Position transmitter PCB
10	Aluminum plate

Remark: the rest units are standard bolt and nut.



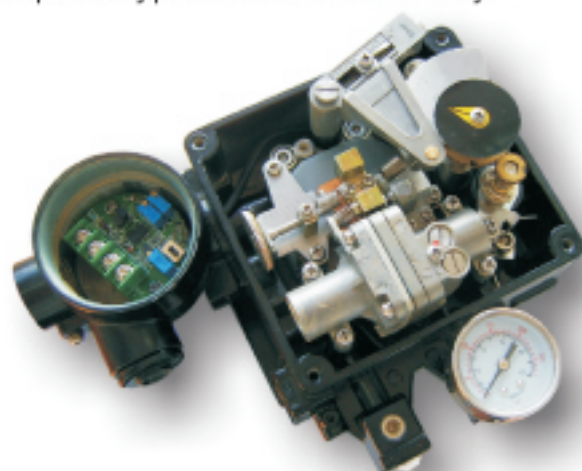


INTRODUCTION OF CNK Position Transmitter(pt)

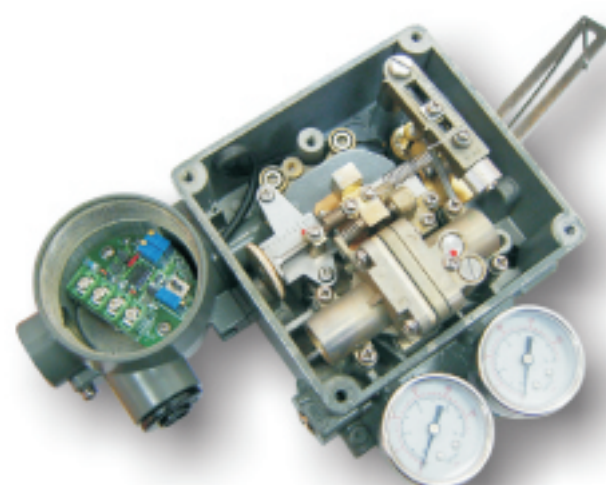
Electronic Position Transmitter is designed for Industry Automation, which is easily to be assembled inside of the CNK-1000 series valve positioner. Electronic Position Transmitter (specially for valve positioner) senses mechanical position change of stem being on the valve or similar device and converses to current signal of DC 4~20mA output for computers or Industry Processing Control System. It is flame proof type attached internally.

—Technical Date

Item.Type	Technical Date
Connection Type	2Wire
Input Signal	0~90°
Output Signal	4~20mA DC
Load Resistance	0~600 Ohm
Supply Voltage	15~30V DC
Noise Range	50mV pp
Ambient Temp	-20°C~60°C (-4~140°F)
Linearity	±1% F.S
Hysteresis	±0.2 F.S
Sensitivity	±0.2% F.S

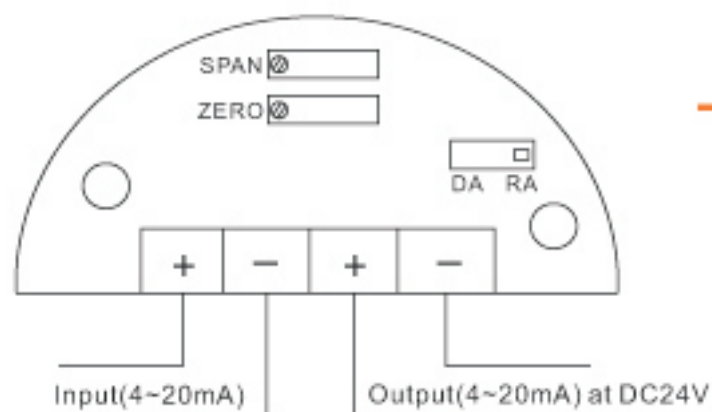


Rotary type



Linear type

—Wiring Instruction



—Adjust Instruction

- A.ZERO Adjustment
Clockwise adjustment enlarging electric current
- B.SPAN Adjustment
Clockwise adjustment enlarging electric current

■ Packing Condition



Model	N.W. (kg)	G.W. (kg)	Meas (mm)
<i>FLU-1000LD(S)n(i)</i>	2.80	3.33	270x200x170
<i>FLU-1000LD(S)m</i>	2.80	3.25	270x200x170
<i>FLU-1000RD(S)n(i)</i>	2.60	4.00	270x200x170
<i>FLU-1000RD(S)m</i>	2.75	4.20	270x200x170