



Robust valve control device giving a confidence in reliable performance and outstanding durability under harsh working environments

Features

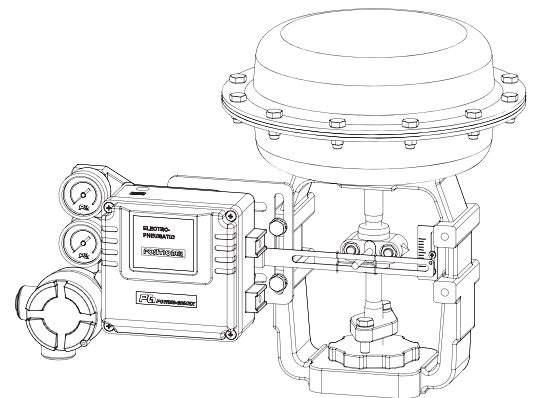
- ▶ Easy maintenance
- ▶ Precise calibration with simple SPAN and ZERO adjustments
- ▶ Simple conversion to direct acting or reverse acting
- ▶ 1/2 split range available
- ▶ Rugged aluminum housing with corrosion-resistant coating
- ▶ Vibration resistant design
- ▶ Stainless steel gauges standard
- ▶ Restricted pilot valve orifice kit for small actuators included
- ▶ KC^s KC-certified flameproof Ex dmb IIB+H₂ T6
- ▶ NEPSI-certified flameproof Ex dmb IIB+H₂ T6
- ▶ IECEx-certified flameproof Ex dmb IIC T6/T5
- ▶ EAC ATEX / TR-CU-certified flameproof Ex dmb IIC T6/T5
- ▶ KC^s KC-certified flameproof Ex dmb IIC T6/T5
- ▶ IECEx-certified intrinsically safe Ex ia IIC T6
- ▶ EAC ATEX / TR-CU-certified flameproof Ex ia IIC T6
- ▶ KC^s KC-certified intrinsically safe Ex ia IIC T6

Specifications

	EPL	
	Linear Type (Lever Feedback)	
	Single	Double
Input Signal	4~20 mA DC (Note. 1)	
Input Resistance	235 ± 15 Ω	
Air Supply	Max. 7.0 bar (100 psi) free of oil, water, and moisture	
Standard Stroke	10 ~ 80mm (Note. 2)	
Pneumatic Connections	PT(Rc) 1/4 or NPT 1/4	
Electrical Connections	PF(G) 1/2 or NPT 1/2	
Protection Class	Ex dmb IIB+H ₂ T6 / Ex dmb IIC T6/T5 Ex ia IIC T6 / IP66	
Ambient Temperature	-20 ~ +70°C (Note. 3)	
Pressure Gauge	Stainless steel	
Output Characteristics	Linear	
Linearity	Within ± 1.0 % F.S	Within ± 1.5 % F.S
Sensitivity	Within ± 0.2 % F.S	Within ± 0.5 % F.S
Hysteresis	Within 1.0 % F.S	
Repeatability	Within ± 0.5 % F.S	
Air Consumption	5 LPM (Sup. 1.4 kgf/cm ²)	
Flow Capacity	80 LPM (Sup. 1.4 kgf/cm ²)	
Material	Aluminum die-cast	
Weight	3.3 kg (with terminal box) 3.0 kg (without terminal box)	

Options

- ▶ Position transmitter (4...20 mA output signal)
- ▶ High temperature (+120 °C)
- ▶ Low temperature (-40 °C)

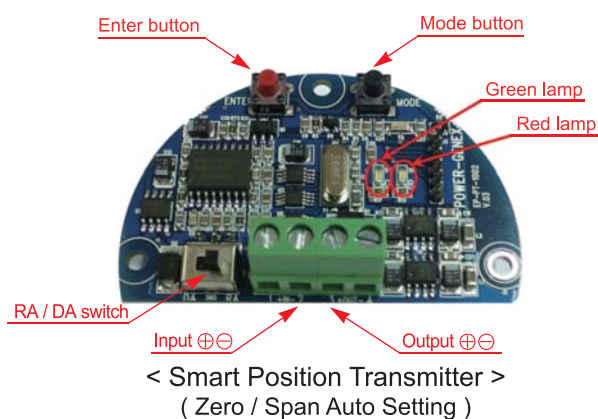
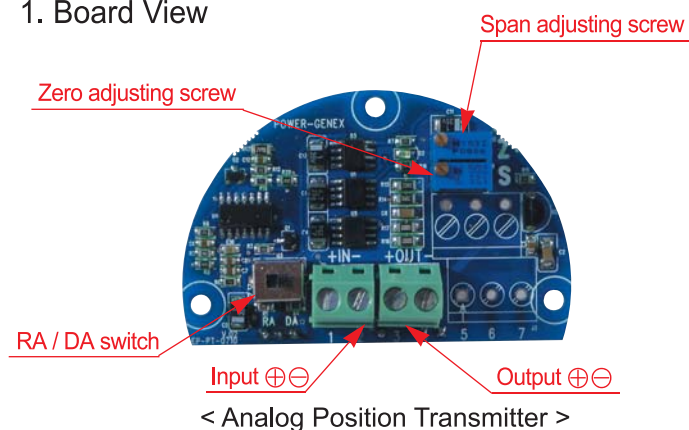


Note : 1) 1/2 split range is available for 4~12mA input signal or 12~20mA input signal
2) Feedback lever can be extended to stroke 80 ~ 150mm

3) Temperature option : up to +120°C without feedback options
up to +85°C with feedback options
up to -40°C without feedback options

Position Transmitter Options (Built-in Type)

1. Board View

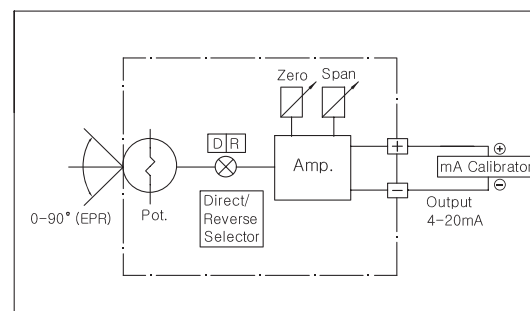


2. Position Transmitter (4-20mA output signal)

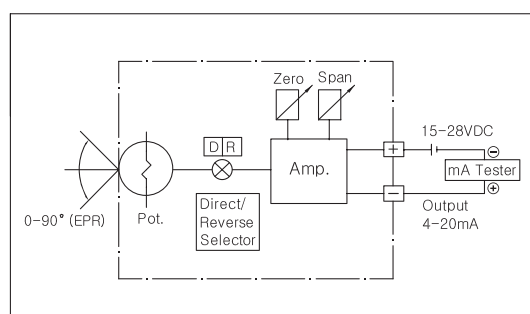
a. Specifications

Power Supply Rating	5.5 - 30 VDC loop power
Recommended Power Supply	24 VDC
Output Signal	4 - 20 mA, 2-wire
Operating Temperature	-20 °C ~ +85 °C
Load Impedance	0 ~ 600 ohms
Max. Output	30 mA DC
Linearity	±1.0 %
Hysteresis	1.0 % of full scale
Repeatability	±0.5 % of full scale
Adjustment	Zero and Span in terminal box

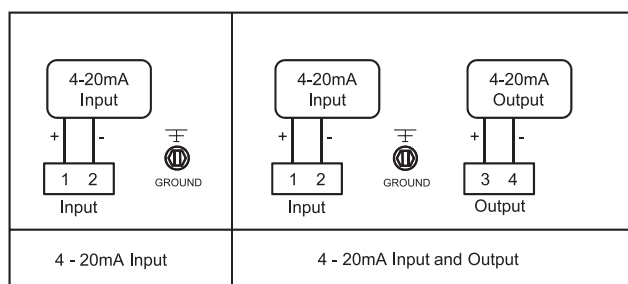
b. with mA calibrator



c. with multimeter

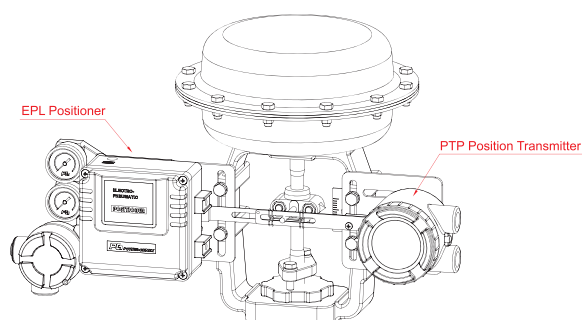


3. Wiring Diagram

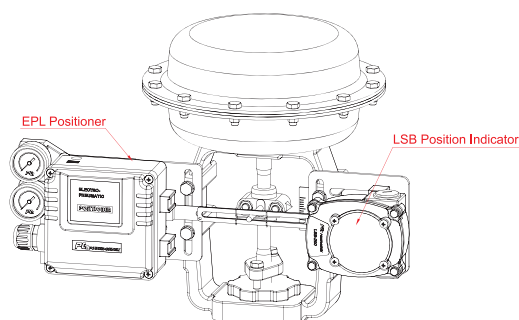


Application for Limit Switches (External Type)

1) With explosion proof PTP-L

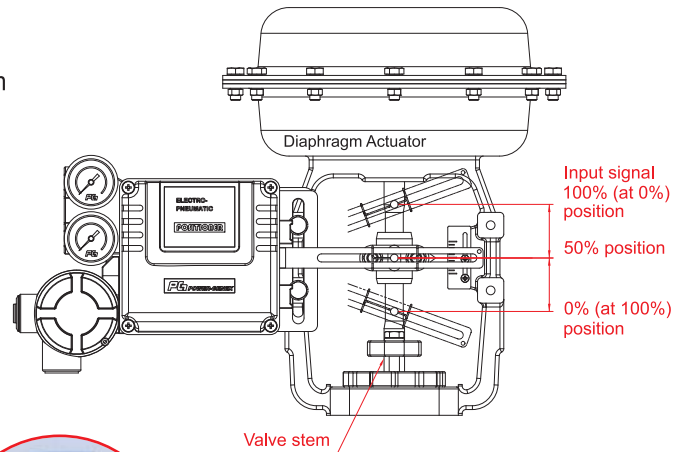


2) With non-explosion proof LSB-200

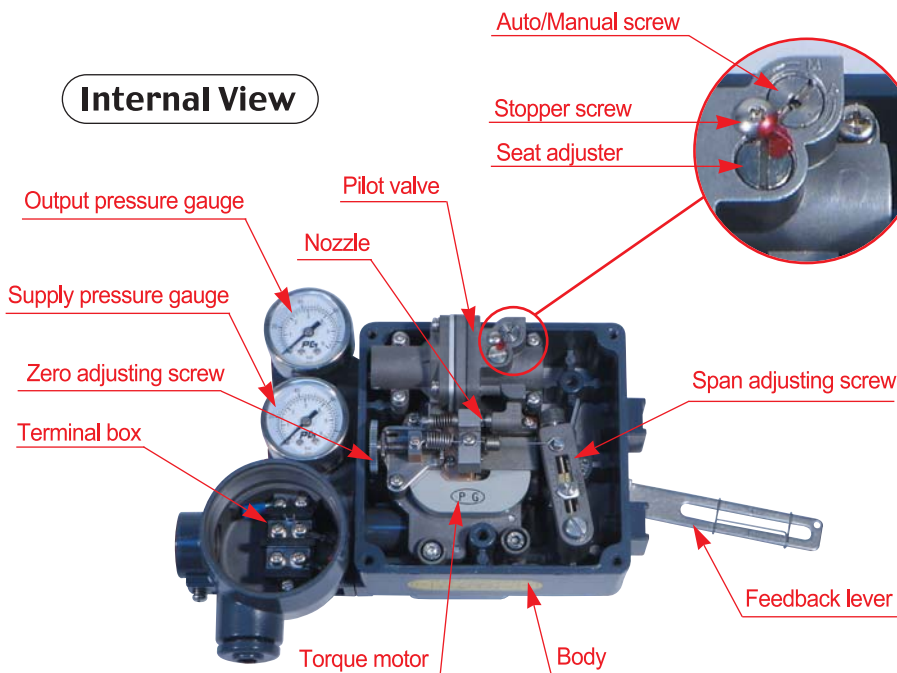


Mounting

1. Install the EPL positioner so that the angle between the valve stem and the feedback lever can be 90° at 12mA input signal (50%) as shown to the right.
2. The operating angle of the EPL feedback lever is minimum 10° to maximum 30° .



Internal View



Air Connections

Direct Acting (DA)

As the input signal increases, Valve stem moves downwards Actuator : DA Connection : out 1	OUT1 is plugged Span adjusting lever normal position
As the input signal increases, Valve stem moves downwards Actuator : DA Connection : out 2	OUT2 is plugged Span adjusting lever normal position
As the input signal increases, Valve stem moves downwards	Span adjusting lever normal position

Reverse Acting (RA)

As the input signal increases, Valve stem moves upwards Actuator : RA Connection : out 2	OUT1 is plugged Span adjusting lever normal position
As the input signal increases, Valve stem moves upwards Actuator : RA Connection : out 1	OUT2 is plugged Span adjusting lever normal position
As the input signal increases, Valve stem moves upwards	Span adjusting lever normal position

How to Order

EPL

Protection
Class

Feedback
Lever

Pressure
Gauge
(SUP. OUT)

Pilot
Valve
Orifice

Position
Feedback

Connection
Threads

Operating
Temp.

Mounting
Bracket

Description	Code
Protection Class :	F : KC / NEPSI flameproof Ex dmb IIB+H ₂ T6 A : KC flameproof Ex dmb IIC T6/T5 D : IECEx / ATEX / TR-CU flameproof Ex dmb IIC T6/T5 I : IECEx / ATEX / TR-CU / KC intrinsically safe Ex ia IIC T6 W : Weatherproof to IP66
Feedback Lever :	A : Stroke 10 ~ 40mm B : Stroke 10 ~ 80mm C : Stroke 80 ~ 150mm
Pressure Gauge :	1 : 6 bar (90 psi) 2 : 10 bar (150 psi)
Pilot Valve Orifice :	S : Standard (Actuator volume over 180cm ³) M : Small orifice (φ1.0 or φ0.7) (Actuator volume over 90 ~ 180cm ³)

Description	Code
Position Feedback : (only for weatherproof type)	N : None (standard) O : Analog position transmitter (4 ~ 20mA output signal) S : Smart position transmitter (4 ~ 20mA output signal)
Connection Threads : (pneumatic - electrical)	3 : PT(Rc) 1/4 - PF(G) 1/2 (standard) 4 : NPT 1/4 - NPT 1/2 5 : PT(Rc) 1/4 - M20 x 1.5
Operating Temperature : (only for weatherproof type)	T : 70°C (standard) H : 120°C (without position feedback option) 85°C (with position feedback option) L : -40°C (without position feedback option)
Mounting Bracket :	N : None L : IEC 60534-6-1

Dimensions

