



**Ex** ATEX-approved (flameproof)



Intrinsically safe  
/ Non-explosion proof

### Specifications

	<b>EPL</b>	
	<b>Linear Type (Lever Feedback)</b>	
	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	Rc 1/4 or NPT 1/4	
Electrical Connections	G 1/2 or NPT 1/2	
Protection Class	Ex md IIB T6, Ex md IIC(H2) T6, IP66, Ex ia IIB T6 Eex md IIB T5 for ATEX <b>Ex</b>	
Ambient Temperature	-20 ~ +70 °C	
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 <sup>2</sup> )	
Flow Capacity	80 LPM (Sup. 1.4 kgf/cm <sup>2</sup> )	
Material	Aluminum die-cast	
Weight	3.3 kg (with terminal box) 3.0 kg (without terminal box)	

**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

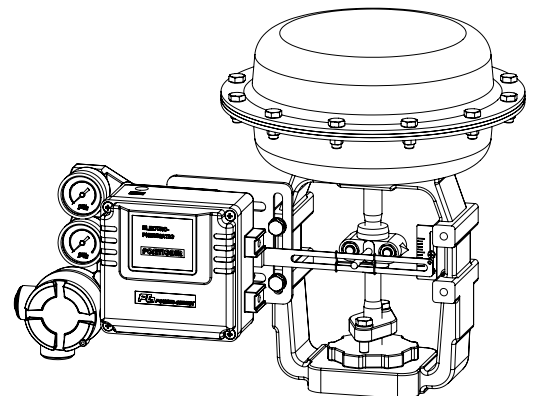
*Robust valve control device giving a confidence in reliable performance and outstanding durability under harsh working environments*

### 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
- ▶ Certified for ATEX **Ex** Eex md IIB T5 (05 ATEX 1076X) by NEMKO in conformance with EN 50014:1997, EN 50018:2000 and EN 50028:1987
- ▶ Certified for EMC (K1046 / E04) in conformance with EN 61000-6-2:2001 and EN 61000-6-4:2001 by RWTUV
- ▶ Certified for Ex md IIB T6 (99-1075-Q1), Ex md IIC T6 (2000-1057-Q1), and Ex ia IIB T6 (2000-1056-Q1) by KOSHA

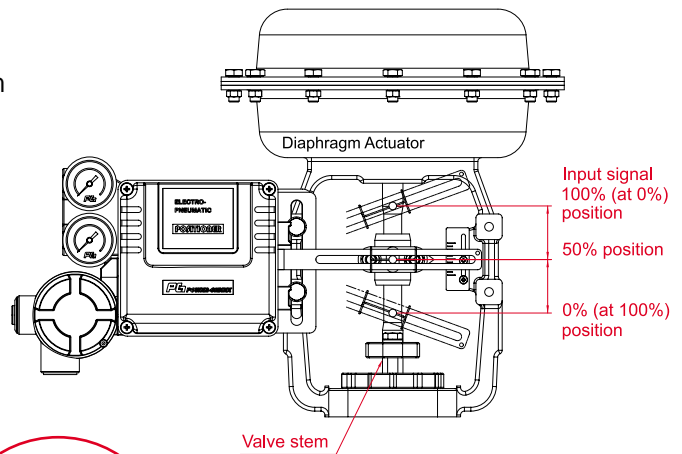
### Options

- ▶ Position transmitter (4...20 mA output signal)
- ▶ High temperature

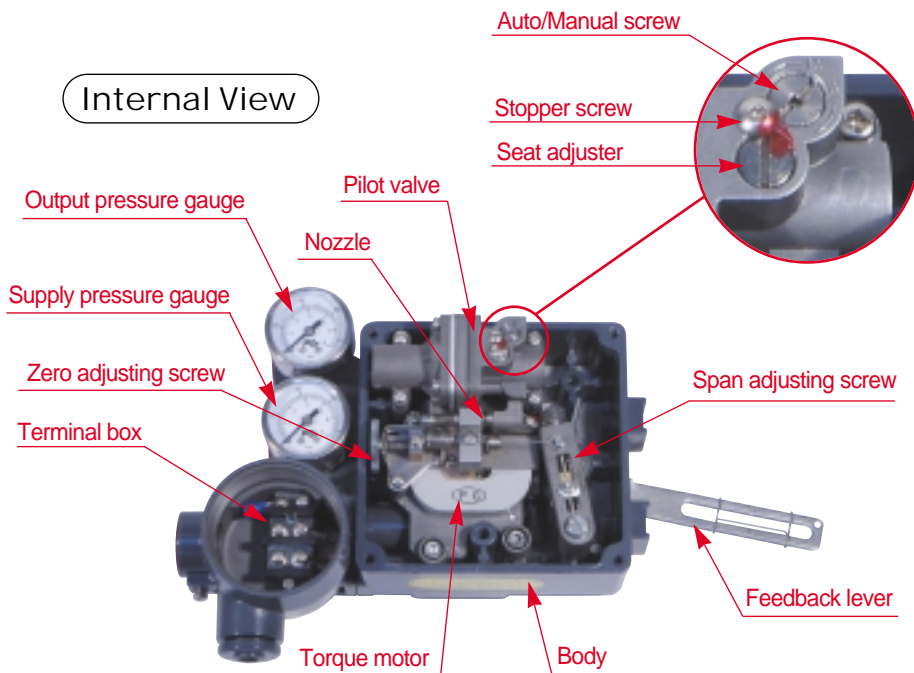


## Mounting

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

### Reverse Acting (RA)

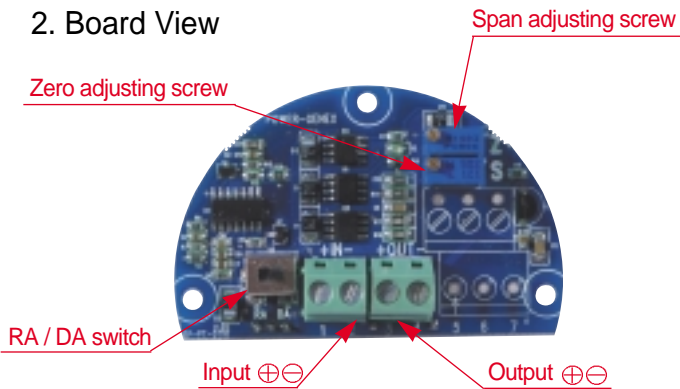
As the input signal increases, Valve stem moves downwards Actuator : RA Connection : out 2	<p>OUT1 is plugged</p> <p>Span adjusting lever normal position</p>
As the input signal increases, Valve stem moves downwards Actuator : RA Connection : out 1	<p>OUT2 is plugged</p> <p>Span adjusting lever normal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

## Position Transmitter Options (Built-in Type)

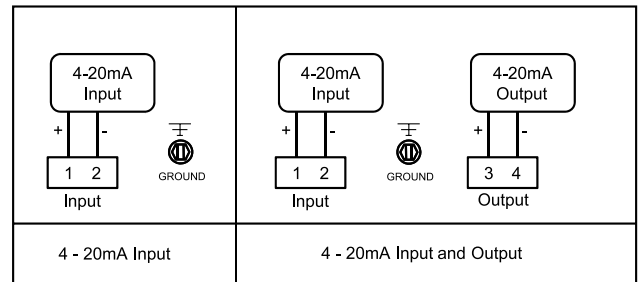
### 1. Specifications

Power Supply Rating	5.5 - 30 VDC loop power
Recommended Power Supply	24 VDC
Output Signal	4 - 20 mA, 2-wire
Operating Temperature	-20° - 70 °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

### 2. Board View

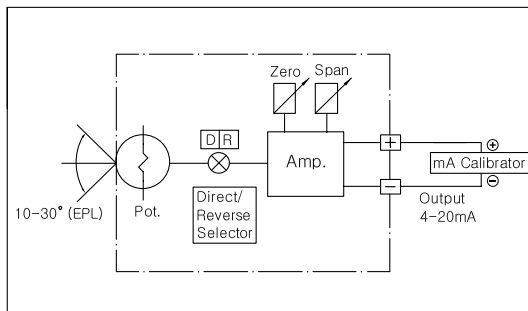


### 3. Wiring Diagram

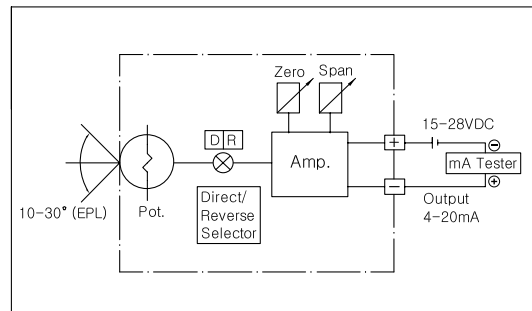


### 4. Measuring 4 - 20mA Output Signal

#### 1) With mA calibrator

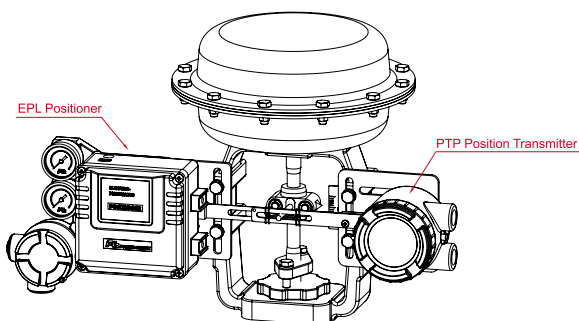


#### 2) With multimeter

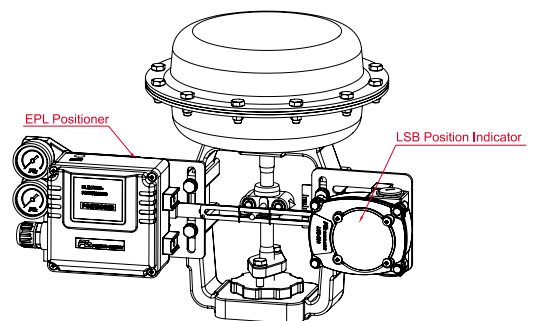


## Application for Limit Switches (External Type)

### 1) With explosion proof PTP-L




### 2) With non-explosion proof LSB-200



## How to Order

**EPL** —

Protection Class	Feedback Lever	Pressure Gauge (SUP. OUT)	Pilot Valve Orifice	Position Feedback	Connection Threads	High Temp	Mounting Bracket
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Description	Code
<b>Protection Class:</b>	F : Flameproof Ex md IIB T6 D : Flameproof Ex md IIC T6 A : Flameproof Eex md IIB T5 ATEX  I : Intrinsic safety (Ex ia IIB T6) W : Weatherproof to IP66
<b>Feedback Lever:</b>	A : Stroke 10 ~ 40 mm B : Stroke 10 ~ 80 mm C : Stroke 80 ~ 150 mm
<b>Pressure Gauge:</b>	1 : 6 bar (90 psi) 2 : 10 bar (150 psi)
<b>Pilot Valve Orifice:</b>	S : Standard (Actuator volume over 180 $\text{cm}^3$ ) M : Small orifice ( $\phi 1.0$ or $\phi 0.7$ ) (Actuator volume 90~180 $\text{cm}^3$ )

Description	Code
<b>Position Feedback: (Only for weatherproof type)</b>	N : None (standard) O : Position transmitter (4~20 mA output signal)
<b>Connection Threads: (pneumatic - electrical)</b>	3 : Rc 1/4 - G 1/2 (standard) 4 : NPT 1/4 - NPT 1/2 5 : Rc 1/4 - M20 x 1.5
<b>High Temperature: (only for weatherproof type)</b>	T : 70 °C (standard) H : 120 °C (without position feedback option) 85 °C (with position feedback option)
<b>Mounting Bracket:</b>	N : None L : DIN / IEC 534

## Dimensions

