EPL



(flameproof)



Intrinsically safe
/ Non-explosion proof

Specifications

	EPL	
	Linear Type (Lever Feedback)	
	Single	Double
Input Signal	4~20 mA DC (Note. 1)	
Input Resistance	235±15 <i>Q</i>	
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 $_{ m IIB}$ T6, Ex md $_{ m IIC}$ (H ₂) T6, IP66, Ex ia $_{ m IIB}$ T6 Eex md $_{ m IIB}$ T5 for ATEX $\langle \vec{\epsilon}_{\bf x} \rangle$	
Ambient Temperature	-20 ~ +70 ℃	
Pressure Gauge	Stainless Steel	
Output Characteristics	Linear	
Linearity	Within $\pm 1.0 \%$ F.S	Within $\pm 1.5 \%$ F.S
Sensitivity	Within ±0.2 % F.S	Within $\pm 0.5 \%$ 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/ cni)	
Material	Aluminum die-cast	
Weight	3.3 kg (with terminal box) 3.0 kg (without terminal box)	

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

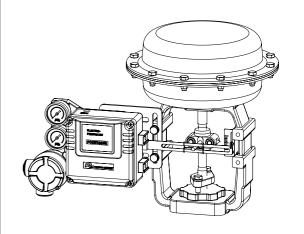
Robust valve control device giving a confidence in reliable performance and outstanding durability under harsh working environments

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 IB 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

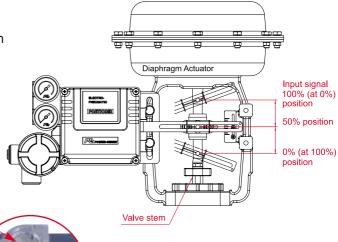
- ▶ Position transmitter (4...20 mA output signal)
- High temperature



(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°.





Stopper screw
Seat adjuster
Pilot valve

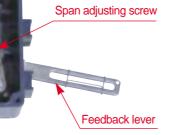
Auto/Manual screw

Supply pressure gauge

Output pressure gauge

Zero adjusting screw

Terminal box

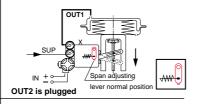


Air Connections

Direct Acting (DA)

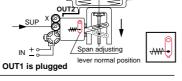
Torque motor

As the input signal increases, Valve stem moves downwards Actuator : **DA** Connection : out 1

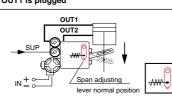


Body

As the input signal increases, Valve stem moves downwards Actuator : **DA** Connection : out 2

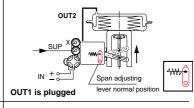


As the input signal increases, Valve stem moves downwards

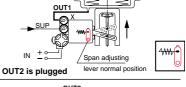


Reverse Acting (RA)

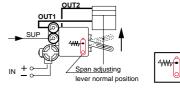
As the input signal increases, Valve stem moves downwards Actuator : **RA** Connection : out 2



As the input signal increases, Valve stem moves downwards Actuator : **RA** Connection : out 1



As the input signal increases, Valve stem moves downwards



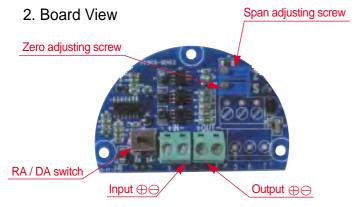




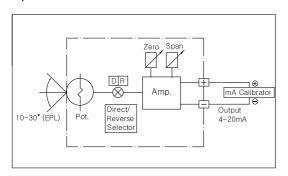
Position Transmitter Options (Built-in Type)

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 ℃
Load Impedance	0 ~ 600 ohms
Max. Output	30 mA DC
Linearity	<u>+</u> 1.0 %
Hysteresis	1.0 % of full scale
Repeatability	± 0.5 % of full scale
Adjustment	Zero and Span in terminal box

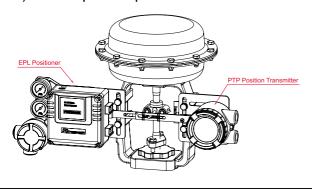


- 4. Measuring 4 -20mA Output Signal
- 1) With mA calibrator

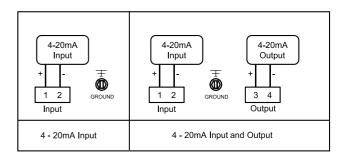


(Application for Limit Switches (External Type)

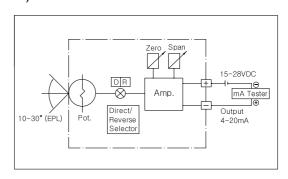
1) With explosion proof PTP-L



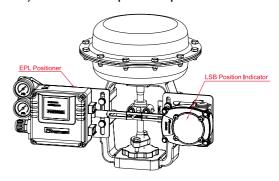
3. Wiring Diagram



2) With multimeter



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

Description	Code
Protection Class:	F: Flameproof Ex md IIB T6 D: Flameproof Ex md IIC T6 A: Flameproof Eex md IIB T5 ATEX (Ex) I: Intrinsic safety (Ex ia IIB T6) W: Weatherproof to IP66
Feedback Lever:	A : Stroke 10 ~ 40 mm B : Stroke 10 ~ 80 mm C : Stroke 80 ~ 150 mm
Pressure Gauge:	1 : 6 bar (90 psi) 2 : 10 bar (150 psi)
Pilot Valve Orifice:	S: Standard (Actuator volume over 180 cril) M: Small orifice (\$\phi\$1.0 or \$\phi\$0.7) (Actuator volume 90~180 cril)

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

Dimensions

