

**Submer Depth And Level  
Programmable,  
Digital Level Transmitter**

**2-wire Loop-powered**

**Model : PR-L70**



**PR-L70**

**Excellent accuracy & long term stability**  
**LED 4-digit & bar-graph display**  
**Programmable digital pressure transmitter**  
**Damping adjustable**  
**Zero & span adjustable**  
**5 : 1 range turn-down**  
**3 mode display units**  
**Easy operation by front keys**  
**A wide range of applications in ;**

**Food & drug process controls**  
**Automation system & plant engineering**  
**Water treatment**  
**Pump & motor controls**

**GENERAL DESCRIPTION**

PR-L70 Series Digital Pressure Transmitter는 Microprocessor를 내장한 고기능의 수위측정기기로 산업현장에서 다양한 용도로 사용할 수 있다. 특히 내장된 Piezoresistive silicon sensor는 안정적이고 정밀하며 내구성이 뛰어나다. 수위측정 범위도 매우 넓다.

또한 본 기기는 현장에서 Digital LED로 측정 값을 표시함과 동시에 원거리에서도 현재 값을 확인할 수 있도록 LED Bar-graph를 내장하였다. 측정값은 4~20mA 전류 값으로 전송하여 실시간으로 현장 감시가 가능하며 현장 지시없이 독립적으로 2Wire 방식 전송도 가능하다.

본 기기는 전면부의 조작키를 이용하여 사용자가 원하는 값을 조정할 수 있다. 즉 측정범위, Damping, Zero & Span, 표시사양등을 쉽게 조정할 수 있도록 설계되었다.

## TECHINCAL DATA

### Input

Measuring Technology	Piezo-resistive Silicon Sensor
Pressure Reference	Gauge, Absolute, Vacuum & Compound
Pressure Range(bar)	Gauge : 0~0.1, 0.2, 0.5, 1, 2, 3, 4, 5, 8, 10, 15 Absolute : Vacuum : -1~0 Compound : -1~1, 2, 3, 5, 10 <b>Note) Other ranges are available on request.</b>
Over Pressure Safety	2 x Full scale without damage

### Output

Output Signal	4~20mA DC, 2-wire Analog output signal Other output signal available on request
Local Display	4 Digits, 7-segment digital LED Bar graph(Red)
Unit Display	3 Mode(Engineering Unit, %, Current Output Value)
Electrical Connection	1/2"PF Female

### Electrical Specifications

Excitation Voltage	18~36V DC
Load Resistance max. @24V	700ohm at 24V
Influence of Excitation	0.01% FSO/V
Damping Adjustment	0.0~9.9/sec
Range Turn-down	Max. 5 : 1 of span

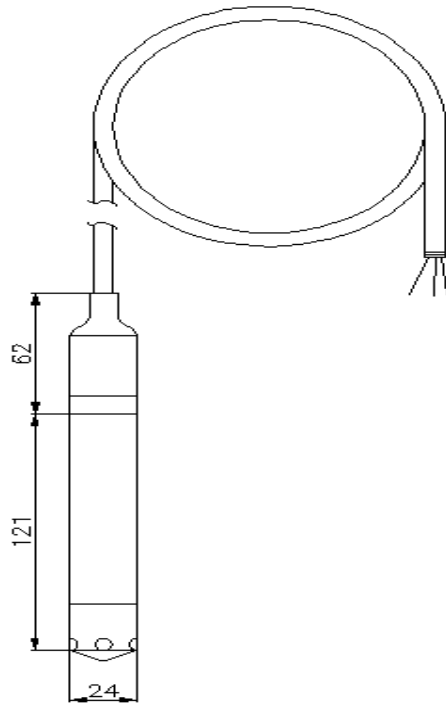
### Performance Specifications

Accuracy	±0.25% FSO
Non-linearity	±0.200% FSO typical
Repeatability	±0.150% FSO typical
Pressure Hysteresis	±0.150% FSO typical
Long Term Stability	±0.3% FSO over 6 months
Operating Temperature	-40~125℃
Temperature Compensated	0~82℃
Thermal Sensitivity Shift	±0.2% FSO typical
Thermal Zero Shift	±0.2% FSO typical

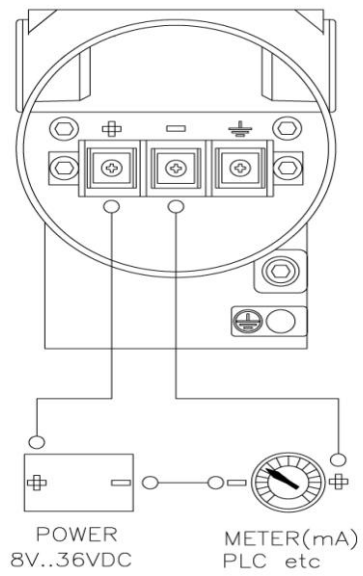
### Physical Specifications

Process Connection	Thread Type : PT, NPT, PF Thread Size : 1/4" Flange Type : JIS, ANSI, DIN(Flate or "I" flange)
Process Media	Gases & liquids compatible with stainless steel 316
Materials	Case : ALDC Diaphragm : Stainless steel 316L Wetted parts : Stainless steel Note) Wetted part teflon lining on request
Enclosure Rating	IP65

## DIMENSION



## Electrical Connection(wiring)



# ORDERING INFORMATION

## Base Model

PR-L70

### Enclosure Rating

W : Weather Proof

### Process Connection Type

A : NPT  
 B : PT  
 C : PF  
 X : Other types of connection available on request

### Process Connection Size

1 : 1/4"  
 2 : 3/8"  
 3 : 1/2"  
 X : others on request

### Range

110	: -1~0	126	: -1~1
111	: 0~0.1	127	: -1~2
112	: 0~0.2	128	: -1~5
113	: 0~0.5	129	: -1~10
114	: 0~1	130	: -1~15
115	: 0~2	131	: -1~20
116	: 0~5	132	: -1~25
117	: 0~10	133	: -1~35
118	: 0~15	134	: -1~50
119	: 0~20	135	: -1~100
120	: 0~25	136	: -1~250
121	: 0~35	137	: -1~350
122	: 0~50		
123	: 0~100		
124	: 0~250		
125	: 0~350		

### Unit

A : kgf/cm<sup>2</sup> or mmHg+kgf/cm<sup>2</sup>  
 B : mmHg  
 C : bar  
 D : psi  
 E : Mpa  
 F : Kpa  
 X : Other calibration unit available on request

### Output Signal

0 : None-output(Only digital gauge)  
 1 : 4~20mA DC, 2-wire  
 2 : 1~5V DC, 3-wire(Optional)

### Option

1 : None  
 x : Sealed diaphragm,

PR-L70	W	B	3	117	A	1	1
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Note 1) Other ranges are available on request.

Note 2) Please mark "abs." for absolute pressure.