

DUAL DISPLAY, PROGRAMMABLE, DIGITAL PRESSURE SWITCH & TRANSMITTER

FEATURES

- Dual eng. Unit for compound pressure measurement
- 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
- Easy operation by front keys
- Explosion proof Ex d IIC T6

APPLICATIONS

- A wide range of application in ;**
- Chemical & petrochemical process
- Food & drug process controls
- Hydraulic & pneumatic equipments
- Machines tools & automatic machinery
- LPG & LNG transmission & storage controls
- Automation system & plant engineering
- Water treatment
- Pump & motor controls

GENERAL DESCRIPTION

KP-70 series Microprocessor based digital pressure transmitter is a signal conditioned, media-isolated high precision device that can be used for wide variety of applications. It is a water resistant, compact field case for complete protection from harsh environments even in explosive area.

A compact field case and 4 digit LED local display make it easy to control process and adjust the value for measuring range, damping, zero & span.

They are available as absolute and relative pressure types with either 2-wire current or 3-wire voltage output.

The pressure to be measured acts through thin corrosion resistant stainless steel 316L diaphragm on a piezoresistive silicon measuring element. The transmitting medium of pressure is oil. The measuring element



TECHINICAL DATA

Input

Measuring Principle	Piezo-resistive Silicon Sensor
Pressure Reference	Gauge, Absolute, Vacuum & Compound
Measuring Ranges(bar)	Gauge : 0~0.1, 0.2, 0.5, 1, 2, 3, 4, 5, 8, 10, 15, 20, 25, 35, 50, 100, 200, 350 Absolute : 0~1, 2, 5, 10, 20, 50, 100, 200, 350 Vacuum : -1~0 Compound : -760mmHg~1, 2, 3, 5, 10, 20, 35, 50, 100, 200, 350 Note) Other ranges are available on request.
Over Pressure Limit	3 × 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	750ohm at 24V
Influence of Excitation	0.01% FSO/V
Damping Adjustment	0.0~9.9/sec
Range Turn-down	Max. 3 : 1 of span

Performance Specifications

Accuracy	±0.25% FSO ±0.5% FSO for sealed diaphragm
Non-linearity	±0.100% FSO typical
Repeatability	±0.015% FSO typical
Pressure Hysteresis	±0.010% FSO typical
Long Term Stability	±0.3% FSO over 6 months
Operating Temperature	-40~125 °C
Temperature Compensated	0~82 °C
Thermal Sensitivity Shift	±0.2% FSO typical
Thermal Zero Shift	±0.2% FSO typical

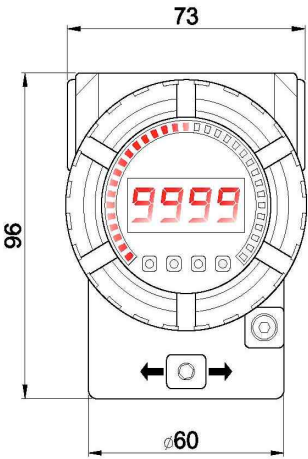
Physical Specifications

Process Connection	Thread Type : PT, NPT, PF Thread Size : 1/4", 3/8", 1/2", 3/4" 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 316 Note) Wetted part teflon lining on request
Enclosure Rating	IP67 Ex d IIB T6

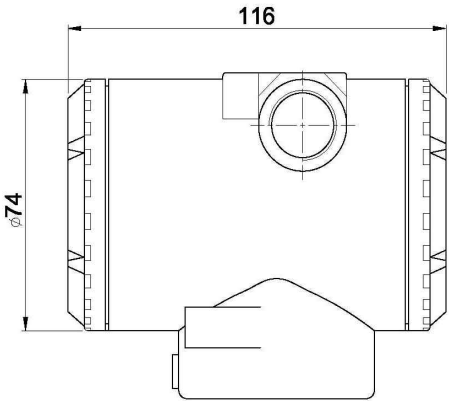
DIMENSION

Terminal Head

Front View

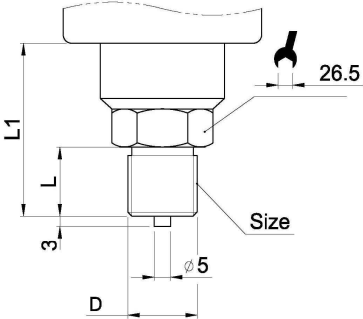


Side View



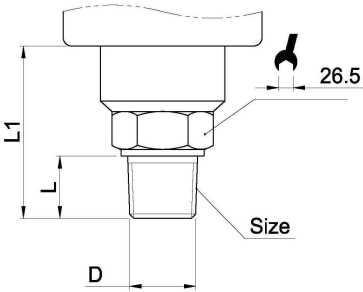
Wetted Parts

PF Connection



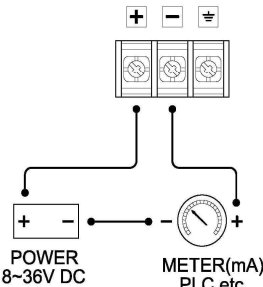
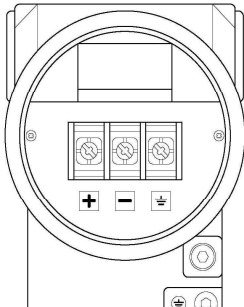
size	D	L	L1
PF1/2	20.9	20.0	50.0
PF3/8	16.6	18.0	48.0
PF1/4	13.1	16.0	46.0

PT Connection



size	D	L	L1
PT1/2	20.9	18.0	50.0
PT3/8	16.6	16.0	48.0
PT1/4	13.1	14.0	46.0

Electrical Connection



ORDERING INFORMATION

Model			Order Code
			KP-70
Enclosure Rating	W	: Weather Proof	W
	E	: Explosion Proof	
Pressure reference	R	: Gauge pressure	R
	A	: Absolute pressure	
	V	: Vacuum	
	C	: Compound pressure	
Process connection type	A	: NPT	B
	B	: PT	
	C	: PF	
	X	: Others available on request	
Process connection size	1	: 1/4"	3
	2	: 3/8"	
	3	: 1/2"	
	X	: others on request	
Measuring range	110	: -1~0	117
	124	: 0~250	
	111	: 0~0.1	
	125	: 0~350	
	112	: 0~0.2	
	126	: -1~1	
	113	: 0~0.5	
	127	: -1~2	
	114	: 0~1	
	128	: -1~5	
	115	: 0~2	
	129	: -1~10	
	116	: 0~5	
	130	: -1~15	
	117	: 0~10	
	131	: -1~20	
	118	: 0~15	
	132	: -1~25	
	119	: 0~20	
	133	: -1~35	
	120	: 0~25	
	134	: -1~50	
	121	: 0~35	
	135	: -1~100	
	122	: 0~50	
	136	: -1~250	
	123	: 0~100	
	137	: -1~350	
Unit	A	: kgf/cm ² or mmHg+kgf/cm ²	A
	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
	1	: 4~20mA DC, 2-wire	
	2	: 1~5V DC, 3-wire(Optional)	
	x	: Other outputs available on request	
Option	1	: None	1
	x	: Sealed diaphragm, Refer to data sheet No.0416	

Note 1) Other ranges are available on request.
2) Please mark "abs." for absolute pressure.

Specifications subject to change without notice.



성지테크(압력/온도/유량/레벨)

TEL: 02-6335-8006~7