
Compact Pressure Transmitter With Local Display Model : P624

WISE®

Advantages

- High precision pressure transmitter with local display for industrial applications
- Measuring ranges from 0.1 Kgf/cm² to 350 Kgf/cm²
- Advanced piezoresistive silicon
- Excellent accuracy and long term stability
- Extremely high proofed pressure
- LED 4 digit display with 4~20mA 2-wire current output signal
- Two alarm led display (Low, High)
 - Available alarm mode setting
- Stainless steel enclosure



P624

Applications

The P624 series pressure transmitter is ideal for measurements which require a local display and a need to communicate with remote data acquisition equipment in industrial applications. The 2-wire 4 to 20mA signal can be transmitted over great distance with negligible loss of accuracy

- Bio-chemical industry
- Pharmaceutical industry
- Regulation system of transmission line of LPG and LNG
- Machine tools and automatic machinery
- Flow control and water treatment
- Equipments for chemical and petrochemical industry

Descriptions

P624 series pressure transmitter with local display is a signal conditioned, media-isolated pressure transmitter that can be used for a wide variety of applications. The transmitter offers the convenience and easy installation of a LED display with the full capabilities of a highly accurate 4~20mA 2-wire system design. The 2-wire 4 to 20mA output signal can be transmitted over great distances with negligible loss of accuracy. The stainless steel surfaces make it compatible with a wide variety of gases and liquids and can be protected from harsh environment. It is extremely versatile and suitable for measuring dynamic or static pressure. The transmitters are available as absolute and relative pressure types. The pressure to be measured acts through thin corrosion resistant stainless steel 316L diaphragm on a silicon measuring element. The pressure transmitting on a silicon oil. The measuring element contains diffused piezoresistive resistors which are connected into a Wheatstone bridge. The output signal of this bridge is temperature compensated and converted into a standardized current output signal.

Specification

Input	
Model	P624
Technology	Piezoresistive silicon pressure sensor
Pressure ranges	0~0.1 to 350Kgf/cm ² relative pressure
	0~1 to 350Kgf/cm ² absolute pressure
Pressure reference	Gauge, absolute, and compound
Overload	3 x full scale without damage
Output	
Current output signal	4~20mA DC 2-wire technique
Technology	1~5V DC 3-wire technique
	Other output signal available on request
Local display (Option)	LED 4 digit, Alarm1 Green LED, Alarm2 Red LED
Electrical Specification	
Excitation voltage	12~36V DC
Load resistance max@24V	500 Ω at 24V
Influence of excitation	0.01% FSO/V
Power ripple	\leq 500mV P-P
Reverse polarity	Protected
Shock resistance	No Change in performance after 10Gs for 11ms
Vibration	0.1G (1m/s/s) maximum
Response time(10~90%)	\leq 2 milliseconds
Performance Specification	
Accuracy	$\leq \pm 0.25\%$ FSO
Non-linearity	$\pm 0.100\%$ FSO typical
Repeatability	$\pm 0.015\%$ FSO typical
Pressure hysteresis	$\pm 0.010\%$ FSO typical
Long term stability	$\pm 0.3\%$ FSO over 6months
Cutoff frequency(-3 dB)	\leq 2kHz
Reference temperature	35°C
Operating temperature	-40~125°C
Compensated temperature	0~82°C
Thermal sensitivity shift	$\leq \pm 0.2\%$ FSO in reference to 35°C typical
Thermal zero shift	$\leq \pm 0.1\%$ FSO in reference to 35°C typical
Thermal hysteresis	$\leq \pm 0.2\%$ FSO in reference to 35°C typical
Display (Option)	Principle : 7-Segment red LED, 9mm High
	Range : 4 digit, -1999~9999
Physical Specification	
Process connection	PT 1/4", PT 3/8", PT 1/2" male thread
	PF 1/4", PF 3/8", PF 1/2" male thread, Other connections available on request
	1", 1.5", 2" Clamp, Other connections available on request
Process media	Compatible with stainless steel, 316SS
Materials wetted by process	Diaphragm : Stainless steel, 316LSS
	Housing : Stainless steel, 304SS
	Casket O-ring : Viton (HNBR, CSM, etc)
Enclosure rating	IP65
Influence of mounting position	Under 0.5kgf/cm ² , mounted vertically
Weight	Approx.(00Kg)
Options	Sealed diaphragm with thread connection
	Sealed diaphragm with flange mounting
	Siphon tube
	Sealed diaphragm with capillary

Electrical connection

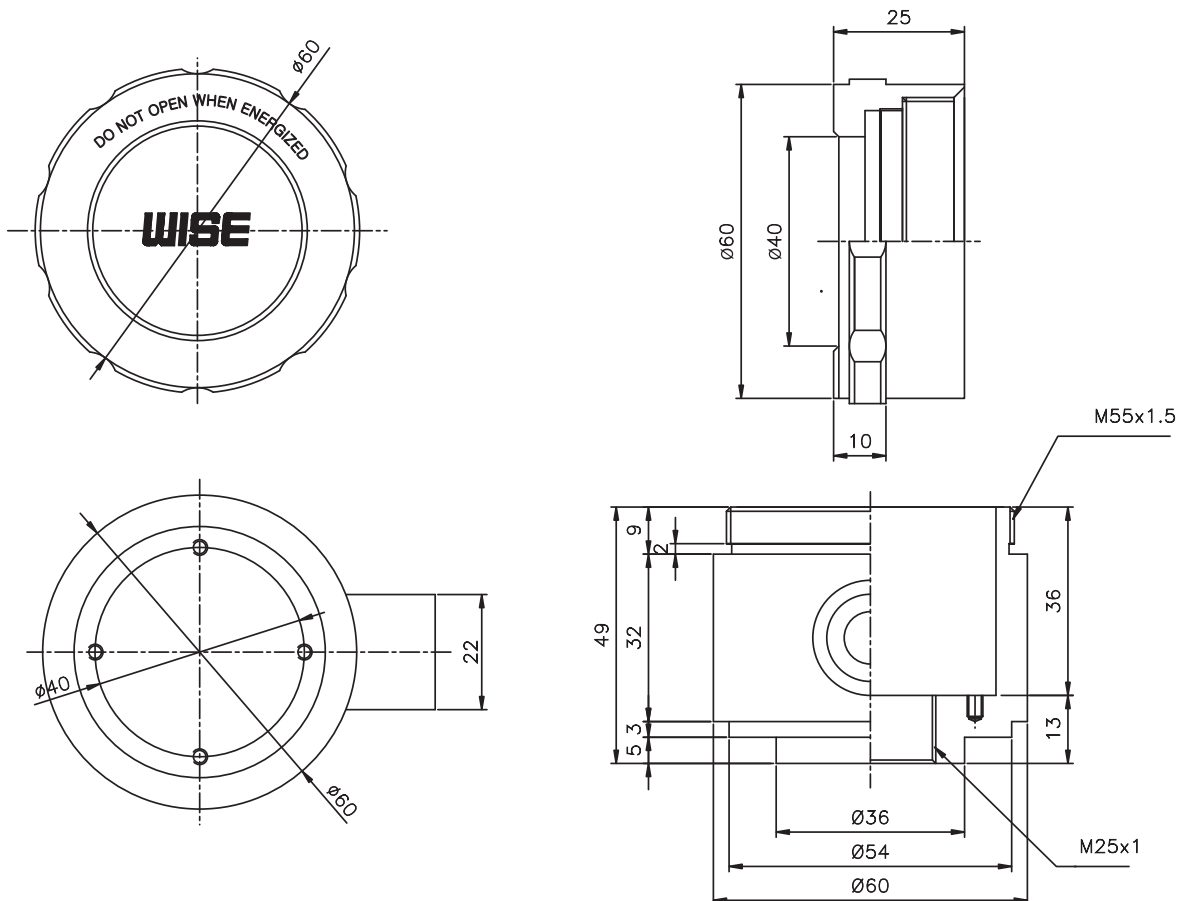


- ① 24V +, Loop Power
- ② 24V -, Loop Power GND
- ③ TEST+, mA+
- ④ Zero Adjustable VR
- ⑤ Span Adjustable VR
- ⑥ Display Connector

Front panel description - Display Type



Dimension(mm)



Ordering Information

Compact Pressure Transmitter with Local Display

P624									Piezoresistive silicon sensor
	N								Non display type
	D								LED display type
		R							Relative pressure
		A							Absolute pressure
			M						Male thread
			F						Female thread
				T					PT thread as standard
				N					NPT thread
				F					PF thread
				X					Other process connections available on request
					1				1/4"
					2				3/8"
					3				1/2"
					X				Other units available on request
					01				Measuring range 0~0.1 Kgf/cm ²
					02				0~0.2
					03				0~0.5
					04				0~1
					05				0~2
					06				0~5
					07				0~10
					08				0~20
					09				0~35
					10				0~50
					11				0~100
					12				0~200
					13				0~300
					xx				Other calibration ranges available on request
						M			Calibration in mmH ₂ O
						K			Calibration in Kgf/cm ²
						A			Calibration in MPa
						B			Calibration in bar
						P			Calibration in psi
						X			Other units available on request
						A1			4~20mA, DC, 2-wire output
						A2			4~20mA, DC, 4-wire output
						B1			1~5V, DC, 3-wire output
						B2			0~5V, DC, 3-wire output
						B3			0~10V, DC, 3-wire output

P624	D	R	C	L	3	07	K	A1	Sample ordering code
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Specifications subject to change without notice