# XGZP61xx PRESSURE TRANSMITTER

(MEMS Oil-Filled Series)

## FEATURES

- Absolute or Sealed Gauge Pressure Type
- Pressure Range( 0 ~ 1Mpa···2.5MPa)
- MEMS Silicon Sense Element
- Smart and Exquisite, High Stability
- Anti-overload&Shock&Vibration
- For Non-corrosive Gas or Air or Liquid
- Low Cost for Volume Application

XGZP6162

XGZP6167

## APPLICATIONS

- Household Appliances, like Coffee Machine, Water Machine etc,.
- HVAC, Refrigeration Systems
- Pumps and Compressor
- Industrial Process Control and Monitoring
- Agriculture, Metallurgy, Hydrology, Energy etc,.

## INTRODUCTION

XGZP61xx(MEMS Oil-Filled Series) Pressure transmitter is high performance but low cost products. It is structured by Piezo- resistive MEMS silicon sensor as signal sensing element and the customized ASIC, assort with brass housing or stainless steel housing with standard pressure port(like G1/4) and wire connector.

XGZP61xx(MEMS Oil-Filled Series) Pressure transmitter is integrally temperature compensated and linearity corrected that can meet the requirement of measure and control under most environment. Relying on advanced manufacturing technology, scientific production management system, strict inspection and aging standards, the transmitter is very stable and reliable to meet various requirement in different application fields...

XGZP61xx(MEMS Oil-Filled Series) Pressure transmitter provide standard analog output mode(like 0.5-4.5V or 0.2-2.7V or I2C Interface by request), the OEM service can meet extremely clients application requirement.

## PERFORMANCE PARAMETER

Unless otherwise specified, measurements were taken with a a temperature of 25±1℃ and humidity ranging from 25% ~ 85%RH

| ITEM | | MIN. | TYP. | MAX | UNIT OR NOTE |
|---|---|---|---|---|---|
| Pressure Range[1] | | 0~5...10/16/25 | | | Bar |
| Supply Voltage[2] | | 3 | | 5.5 | Vdc |
| Output Signal[3] | | 0.5 ~ 4.5 / 0.33 ~ 2.97 | | | Vdc |
| Accuracy[4] | | | | ±2.0 | %FSS |
| ESD Protection | | | ±2 | | kV |
| Operating Temp. | | -20 | | 85 | ℃ |
| Storage Temp. | | -40 | | 125 | ℃ |
| Over Pressure[5] | | | 1.5x | | FSS |
| Burst Pressure[6] | | | 2x | | FSS |
| Housing Material | XGZP6162 | Brass | | | Customizable |
| | XGZP6167 | 304 stainless steel | | | Customizable |
| Electrical Port | | Wrie or Cable | | | Length Customizable |
| Pressure Port | | G1/4 | | | Customizable |
| Protection Grade | | IP65 | | | |

1. Pressure Range: ATM Pressure(101.3kPa) is defined as 0 Bar.

2. Over-voltage( > 5.5V)may burn the IC and cause the sensor fail thoroughly.

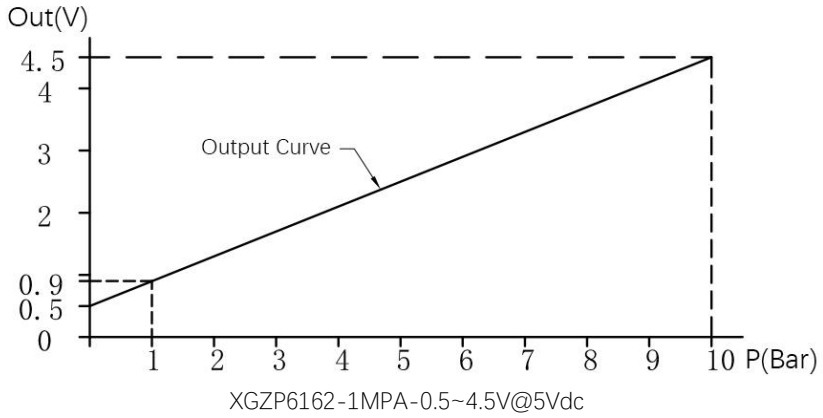
3. 0.5 ~ 4.5Voutput is under 5VDC working voltage and 0.33 ~ 2.97V output is under 3.3VDC voltage. The I2C interface support the working voltage from 3.0~5.5VDC

4. Accuracy: The max. deviation in output from ideal transfer function at any pressure or temperature over the specified ranges, units are in percent of full scale span (%FSS)

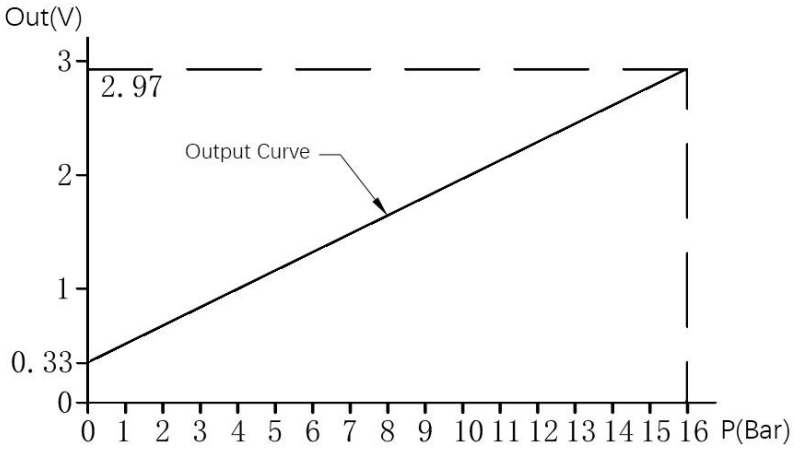
3. Over Pressure: the maximum pressure which may be applied without causing durable shifts of the electrical parameters of the sensing element and remain the specification once pressure is returned to the operating pressure range. The over pressure is not identical according to different specified pressure range. Contact factory for more information.

6. Burst Pressure: the maximum pressure which may be applied without causing damage to the sensing die or leaks; The sensor should not be expected to recover function after exposure to any pressure beyond the burst pressure. The over pressure is not identical according to different specified pressure range. Contact factory for more information.

## OUTPUT CURVE



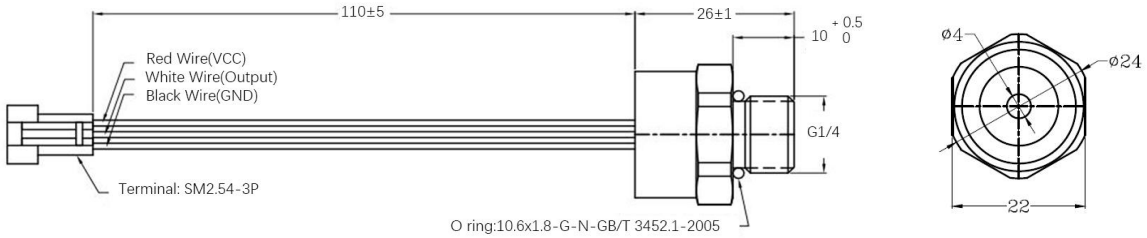

XGZP6162-1MPA-0.5~4.5V@5Vdc



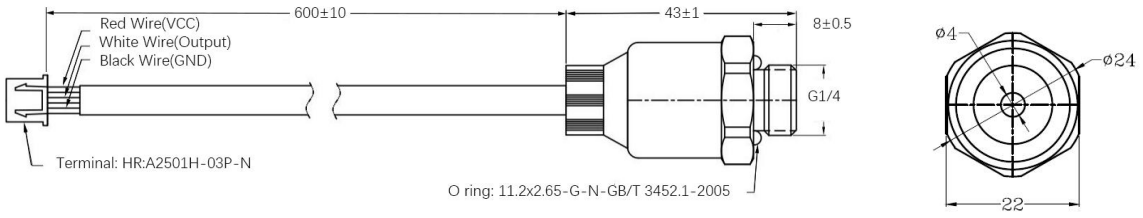

XGZP6167-1.6MPA-0.33~2.97V@3.3Vdc

## DIMENSION (Unit:mm)

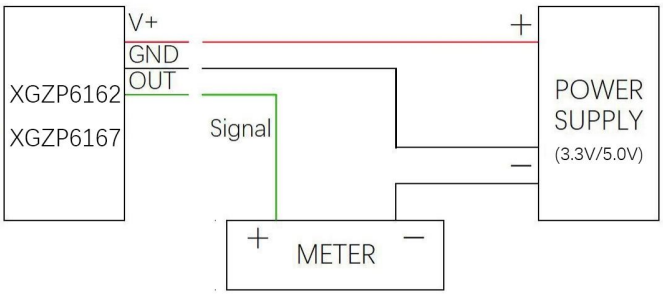
XGZP6162 Series




XGZP6167 Series



## APPLICATION CIRCUIT




## ORDER GUIDE

XGZP61 62 B2 6 102 B 011

- 011: Cable/Wire Length(011: 11CM 045:45CM 060:60CM 100:100CM ----)
- B: Pressure Unit(B: Bar)
- 102: Pressure Range(102:10 162:16 252:25 ----)
- 6: Pressure Port(6:G1/4 ----)
- B2: Electrical Connection(B1:Cable B2:Wire ----)
- 62: Output Type(62: 0.5~4.5V 67: 0.33~2.97V ----)
- XGZP61: Product Model

Note: Custom requirement or parameter(e.g pressure range, output etc,.), consult with CFSensor on Part Number

## NOTE

Contact CFSensor for I2C protocol(code) and other information that not shown on the document

## 【 SAFETY NOTES 】

Using these sensors products may malfunction due to external interference and surges, therefore, please confirm the performance and quality in actual use. Just in case, please make a safety design on the device (fuse, circuit breaker, such as the installation of protection circuits, multiple devices, etc.), so it would not harm life, body, property, etc even a malfunction occurs.

To prevent injuries and accidents, please be sure to observe the following items:

- The driving current and voltage should be used below the rated value.
- Please follow the terminal connection diagram for wiring. Especially for the reverse connection of the power supply, it will cause an accident due to circuit damage such as heat, smoke, fire, etc.
- In order to ensure safety, especially for important uses, please be sure to consider double safety circuit configuration.
- Do not apply pressure above the maximum applied pressure. In addition, please be careful not to mix foreign matter into the pressure medium. Otherwise, the sensor will be discarded, or the media will blew out and cause an accident.
- Be careful when fixing the product and connecting the pressure inlet. Otherwise, accidents may occur due to sensor scattering and the blowing out of the media.
- Because Pressrue sensor body is sold, please be careful not to hurt your body when using it.

## 【 WARRANTY 】

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. CFSensor reserves the right to make changes without further notice to any product herein. CFSensor makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does CFSensor assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. CFSensor does not convey any license under its patent rights nor the rights of others.

## 【 CONTACT 】

CFSensor

22F/14Bldg High-Tech Park High-Tech Area Wuhu P.R.C.241000

Tel/Fax:+86 18226771331 Email:INFO@CFSensor.com

North America II Europe II Southeast Asia II Middle East II Latin America