

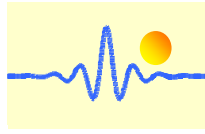
## **User's Guide and Warranty Services**

### **1. Use Notes**

- 1.1 The transducers should only be used in environments having no conductive dust, corrosive or explosive gases. Standard protection measures should be considered to take when a transducer is used in environments with strong electromagnetic interference. For instance input wires and induction apertures should be shielded, and output wires should be as shorter as possible.
- 1.2 The operating temperature range of the transducers is given in the data sheets of the transducers if the user doesn't have any special requirements.
- 1.3 The electric specifications of AC transducers are only applied to 50Hz AC systems if the doesn't have any special requirements.
- 1.4 The transducers have been calibrated before delivery. Please don't adjust the input and output relation of the sensor. Please contact us if you need any readjustment.
- 1.5 Do not remove or destroy the label on the transducer.

### **2. Installation Notes**

- 2.1 Please check the part number on the label of the products carefully before use.
- 2.2 Make sure to connect the inputs, outputs and power supply correctly and properly before power on. The power supply, input signal and the output signal for three isolation products cannot be commonly grounded.
- 2.3 The voltage of power supply must be in conformity with that shown on the label of the product. Its deviation cannot be larger than 5%, and the ripple should be  $\leq 0.4\%$ . It is highly suggested that the common output of the power supply is connected to ground.
- 2.4 Generally, the load resistance of transducers with current output must be not higher than  $250\Omega$ , and a long term open of the sensor output is not allowed. For transducers with voltage or frequency output, their output load resistance must be  $\geq 2K\Omega$ . After a transducer is powered on its output load resistance is not allowed to be  $\ll 2k\Omega$  and a short circuit output is not allowed. The output load must be passive device.
- 2.5 For more precise measurement, it is suggested to recalibrate the transducer by using a high precise instrument after the transducer is powered on for 15 minutes. Please ensure that the terminal screws are tightened securely and reliably before measuring the output signal on the output terminals of the transducer with the instrument directly.
- 2.6 When two or more transducers are mounted together, please keep a space more than 10mm between adjacent units. The rail width is 35mm for DIN rail mounting, and M3 screws for panel mounting.
- 2.7 The damage of power supply is usually caused by improper use. If transducers use a common power supply together with other devices, such as relay, pulse interferences caused by other devices may damage the power supply.
- 2.8 The small-signal transducers, whose AC voltage input is  $\leq 10V$  or AC/DC current input is  $\leq 2A$  or DC voltage input is  $\leq 1V$ , should be installed far away from strong electromagnetic interference and cannot use one power supply commonly with electromagnetic valve,



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circuit breaker or relay. The signal wires of small-signal transducers cannot be trussed together with the electromagnetic devices in order to reduce the influence to the stability of small-signal transducers.

- 2.9** The damages of the output terminals are usually caused by strong electrical interference. The wiring should be designed carefully. If signal wires of transducers are laid near to the cords of power units, the strong spurious noises may damage the output terminal of transducers.

### **3. Troubleshooting**

#### **3.1 There is no output signal when input signal is applied and power is on**

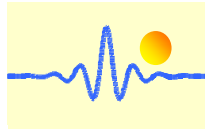
- Cut off power supply and check if all connections are correct, the terminals and wires are connected properly, the screws of terminal are tightened securely and reliably.
- Check if the power supply and input meets the requirements shown on the label, and the polarity of DC input is connected correctly.
- Check whether the load resistance mentioned in **2.4** above is satisfied.
- Make sure above mentioned everything is OK, then power on. If the problem still exists please contact us.
- Check if only one wire passes through the window of the sensor. If two wires with different current direction pass through the window the input current is compensated to zero. In this case the output is zero.
- Check if the power supply is applied to the corresponding terminal of the sensor. Please check your cable if no power supply on the terminal of the sensor.

#### **3.2 There is an unusual output or an output with bad accuracy.**

- Check and correct everything according to that mentioned in **3.1** above.
- Use a digital multimeter, whose accuracy is better than the transducer, to measure the voltage of power supply and input to check if the values meet the requirements shown on the label.
- Check the environment and associated application to learn if it meets the requirements stipulated in **1.2, 1.3, 2.4** and **2.6** mentioned above.
- Make sure above mentioned everything is OK, then power on. If the problem still exists please contact us.

#### **3.3 The output signal jumps or drifts up and down quickly**

- Check and correct everything according to that mentioned in **3.1** above.
- Check the voltage and ripple of power supply.
- Check the input signal to learn whether it jumps, or its amplitude is outside the measure range of the transducer.
- Check the environment and associated application to see whether it meets the requirements stipulated in **1.2, 1.3, 2.4** and **2.6** above or not..
- Make sure abovementioned everything is OK, then power on. If the problem still exists please contact us



### **3.4 The product has no output when it works for some time.**

- Use the handle of a screwdriver to flip the enclosure of the transducer gently to check if there is poor connection or less screwed.
- Check the voltage of power supply whether is correct or not and input whether meets the requirement shown on the label or not.
- Check the output load to learn whether it meets the requirements stipulated in **2.4** above or not.
- Make sure above mentioned everything is OK, then power on. If the problem still exists please contact us.

### **Warranty Term**

ChenYang Technologies GmbH & Co. KG warrants its products against defects in workmanship and materials under normal use and service for a period of 24 Months from the shipping date. All obligations and liabilities under this warranty are limited to repairing or replacing at our option.

The warranty is extended only to the original purchaser. The warranty shall not apply to any products or parts which have been damaged on account of improper installation, improper connections, misuse, neglect, accident or abnormal conditions of operation. Any attempt to tamper with the products as evidenced by disruption of warranty sticker and/or unauthorised repair/modification of the products shall render this warranty null and void.

### **Warranty Services**

1. We also warrant repair of our products against the defects due to improper use during the warranty term. The customer should pay the freight fee in this case.
2. After the 24 Months warranty period the customer should pay for repairing costs and the freight fee etc.

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### **For further product information:**

<http://www.chenyang.de>

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