P860
Oxygen/nitrogen analyzer

P860 series nitrogen purity analyzer is an on-line analyzer. It adopts a new type of intelligent detection instrument which combines the advanced ion current sensor and single chip computer in the world. It can be used to detect the oxygen concentration in nitrogen-oxygen mixture and provide a display of the oxygen concentration value,or a display of the nitrogen concentration value after calculating the nitrogen concentration value by using the oxygen concentration value (N_2%=100-O_2%).

Product Features

- A new type of long-life ion flow sensor has high sensitivity and fast response speed.
- The value of nitrogen concentration can be calculated according to the oxygen concentration,and the corresponding display can be provided.
- Alarm function:When the concentration of oxygen/nitrogen deviates from the alarm value,the alarm will be sent out and the alarm switch signal will be output.The alarm value can be set arbitrarily in the full range.
- Analog output:Isolated 4-20 mA current signal output.

Model Specifications

Display mode	model	Measuring range
Display of oxygen concentration	P860-3O	1000ppm~21.0% O_2
	P860-4O	100ppm~21.00% O_2
	P860-5O	10ppm~21.000% O_2
Display of nitrogen concentration	P860-3N	79.0%~99.9% N_2
	P860-4N	79.00%~99.99% N_2
	P860-5N	79.000%~99.999% N_2

Corresponding sensor type of analyzer:

P860-3N	OLZL04
P860-3O	OLZL04
P860-4N	OLZL03
P860-4O	OLZL03
P860-5N	OLZL02
P860-5O	OLZL02

Applications

- Air separation industry;
- Chemical and smelting industries;
- Detection of oxygen concentration in high temperature furnace;
- Detection of oxygen concentration in protective gas of semiconductor;
- Cultivation of plants and animals,determination of oxygen concentration in processing and storage of vegetables and food;
- Determination of oxygen concentration in family,ship, underground command center,tunnel,deep well,civil air defense engineering, city tunnel,etc.

Technical Specifications

Sensor principle: Ion flow oxygen sensor
Accuracy: 10ppm~100ppm O_2 ±5%FS
10ppm~2% O_2 ±2%FS
10ppm~21% O_2 ±1.5%FS
Stability: ±2%FS/7d
Response time: T_{90}≤20s
Measuring method: gas inlet type
Gas flow rate: 400-600ml/min
Sample gas pressure: atmospheric conditions±10% (Gas outlet should be atmospheric conditions)
Environment temperature: 0~45°C
Environment humidity: <80%RH
Analog output: Programmable 4-20 mA Current Output (External Load < 500 Ω)
Relay contact point capacity: 24VDC,0.2A
Power supply: 220VAC±10%,50/60Hz or 24VDC
Analyzer power consumption: <10VA
Sensor life: more than 2 years (normal use)
Instrument life: more than 5 years (normal use)
Packing box size: L×W×H=230mm×230mm×150mm
Installation size: L×W×D=51mm×76mm×167mm

Order Information

- Pressure of the measured gas:positive pressure,micro pressure or negative pressure;
- Sample gas should not contain the following substances:
  1.Corrosive gases,such as HF,Cl_2,HCl,etc.
  2.Toxic substances,such as Si,Pb,P,etc.
  3.Reductive components and hydrocarbons,such as ethanol;
  4. Impurities,such as dust.

Instructions

Principle:please refer to page 46 of this sample book;